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Development Research Center of the State Council

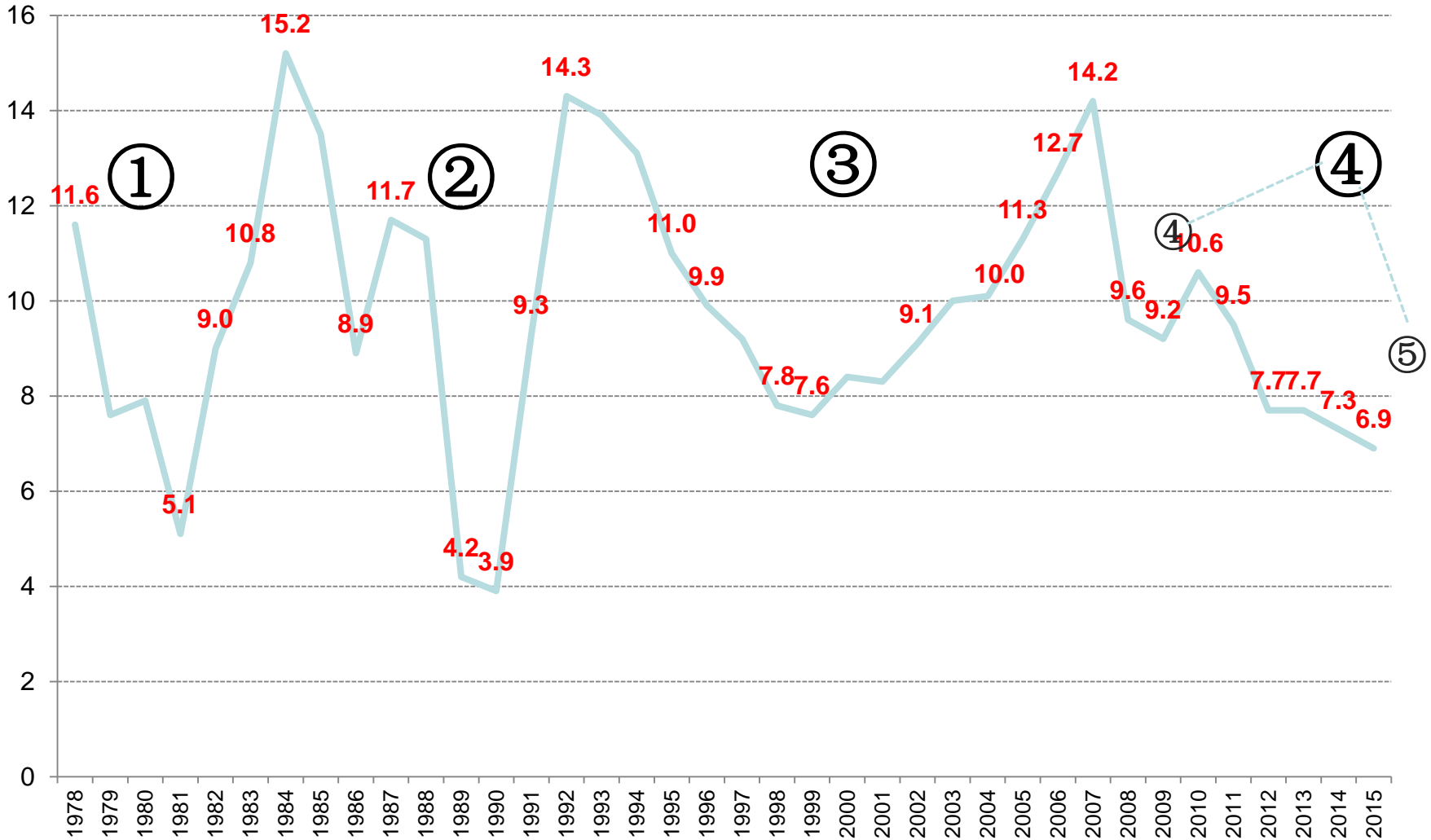
Drivers of China's Economic Growth in the Late Stage of Industrialization

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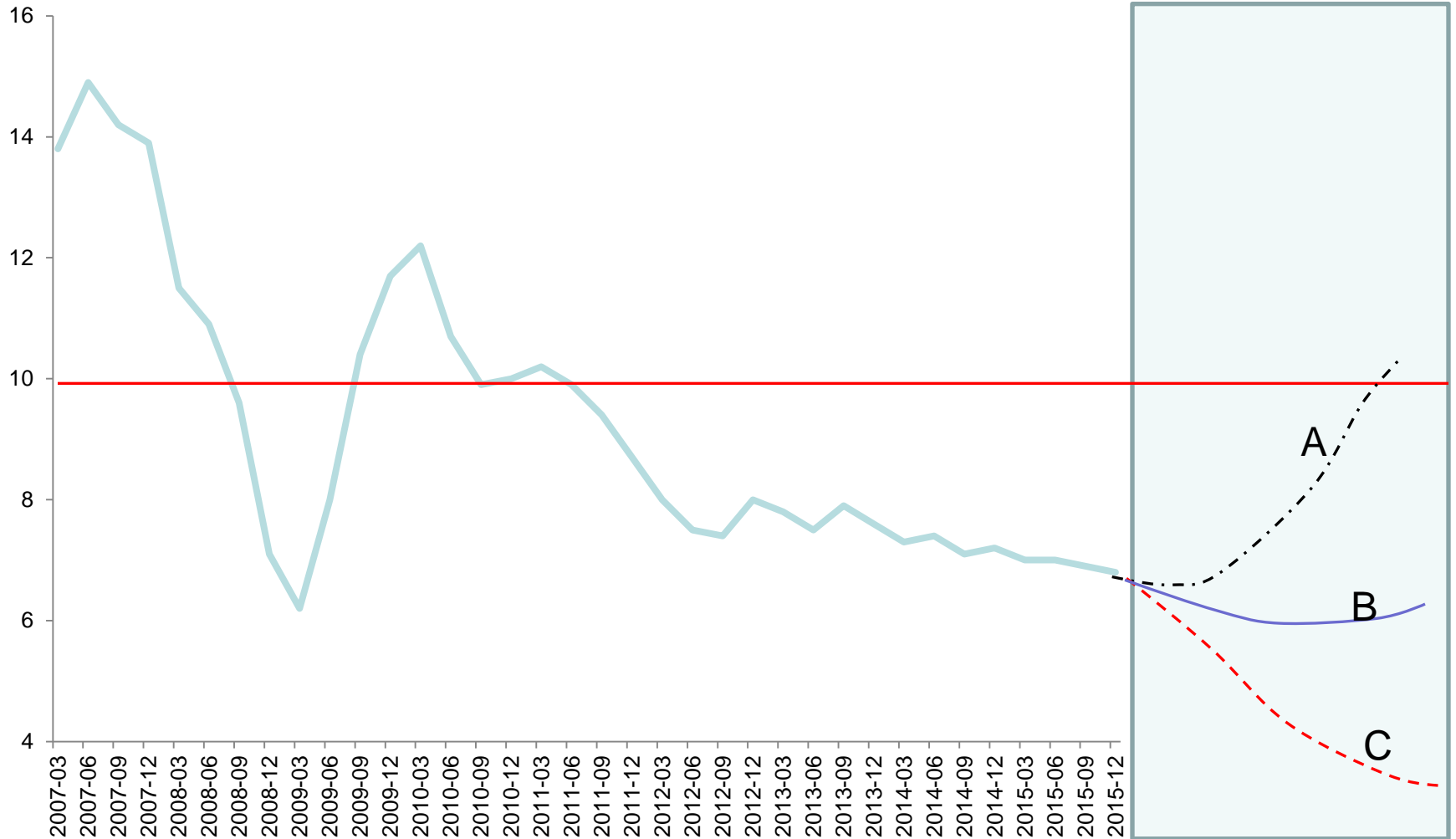
Tokyo, Japan

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How to look at the current position and future trend ?



Three possible ways



Comprehensive judgment, our economy can not be U-shaped, but can not be V-shaped , but the L-shaped trend. '

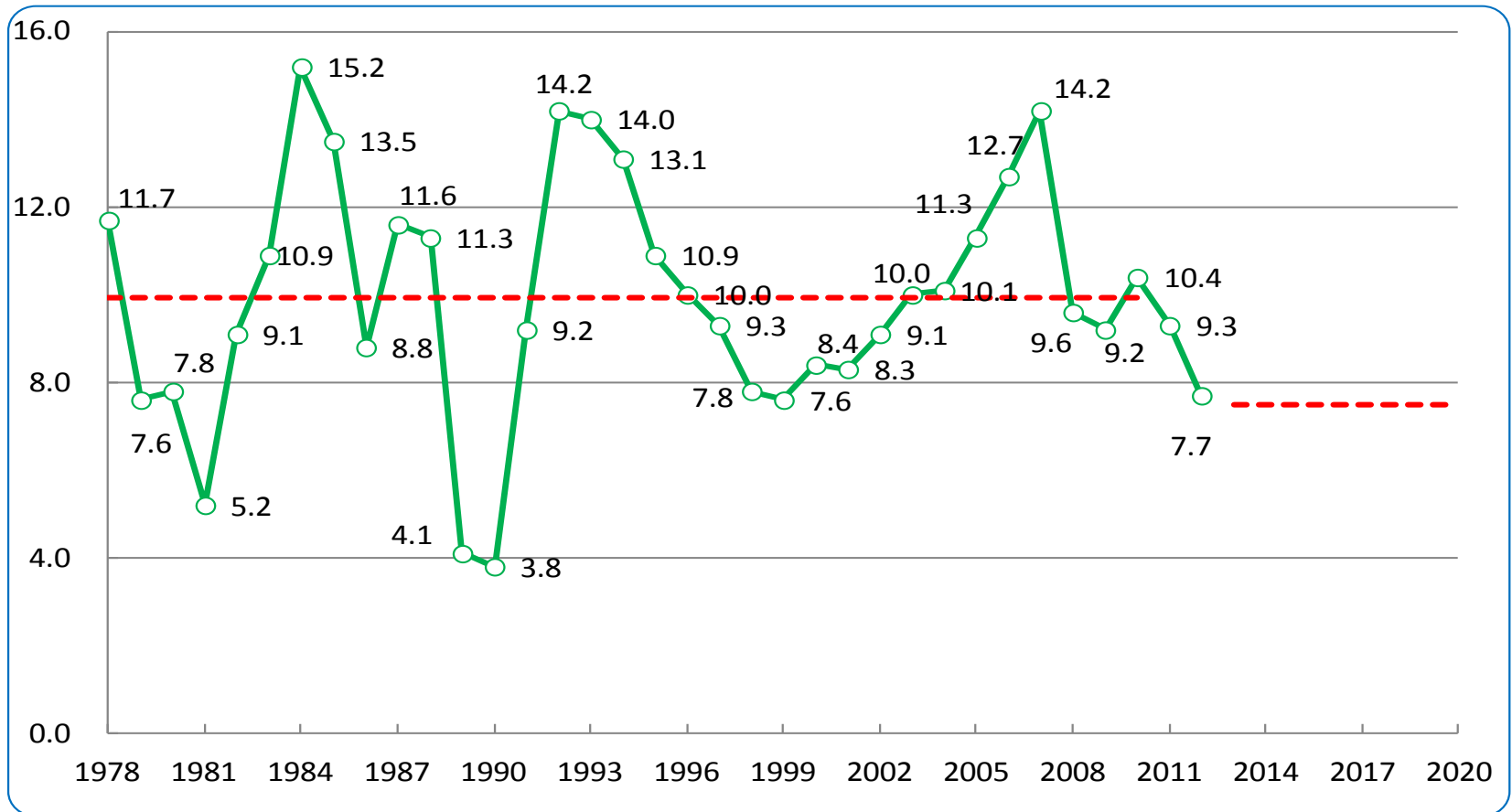
May 9, the People's Daily, Authoritative analysis of 'authority'.

- (1) Where we are now?
- (2) Where is the bottom of L shaped ?

New Normal: The New Logic of China Economic Policy

Two basic Points of New Normal

Growth Speed: from high speed to a medium-to-high one



Two basic Points of New Normal

Growth Driver Changes

Shifting from focusing on quantity and speed to quality and efficiency

Shifting from stressing production expansion to improving productivity

Shifting from growth being driven by conventional engines to increasingly driven by new ones

Growth Drivers: Three Different Perspectives

Economic growth drivers can be approached from the perspective of **the aggregate supply and demand balance**. Keynes (1936) , Mundell (1963) and Fleming (1962)

Growth drivers can be analyzed with **the factors of production** . Solow (1956) and Swan (1956), Schumpeter (1934), Romer (1986) and Lucas (1988)

Viewed from the angle of development economics, the drivers of economic growth lie in the continuous **industrial and technological upgrading**. Kuznets (1973, 1981), Chenry (1986), Lin(2012)

Criterion of Different Industrialization Stage

| Basic indicators | Pre-industrial times | Industrialization | | | Post-industrial times |
|---|----------------------|-----------------------------|-------------------------|-----------------------|-----------------------|
| | | Early stage | Middle stage | Late stage | |
| GDP per capita of 2010 (USD) | 827 to 1654 | 1654 to 3308 | 3308 to 6615 | 6615 to 12398 | Above 12398 |
| Output shares of the agriculture, industry, and services sectors | $A > I$ | $A > 20\%$, and $A < I$ | $A < 20\%$, $I > S$ | $A < 10\%$ $I > S$ | $A < 10\%$ $I < S$ |
| Value added of manufacturing to the total of goods-producing sectors (Industrial structure) | Below 20% | 20% to 40% | 40% to 50% | 50% to 60% | Above 60% |
| Primary industry employment (Employment structure) | Above 60% | 45% to 60% | 30% to 45% | 10% to 30% | Below 10% |
| Urbanization rate (Spatial structure) | Below 30% | 30% to 50% | 50% to 60% | 60% to 75% | Above 75% |

Data source: Chen Jiagui et al.(2012)

China's Industrialization Stage

- Pre-industrial times: 1949-1969
- Early stage of industrialization: 1970-2000
- Middle stage of industrialization: 2001 to about 2012
- Late stage of industrialization: Since 2013

China's Growth Drivers

From the perspective of **aggregate demand**, investment has been contributing more to economic growth, and export plays an important role.

| Year | Stage of Industrialization | Consumption | Capital formation | Export |
|-----------|-----------------------------------|-------------|-------------------|--------|
| 1981-1985 | | 61.5 | 35.5 | 3.1 |
| 1986-1990 | Early stage of industrialization | 46.4 | 24.9 | 28.6 |
| 1991-1995 | | 43.1 | 40.8 | 16.0 |
| 1996-2000 | | 57.1 | 23.0 | 20.0 |
| 2001-2005 | Middle stage of industrialization | 28.1 | 35.6 | 36.3 |
| 2006-2012 | | 39.4 | 45.1 | 15.5 |
| 2013-2014 | Late stage of industrialization | 46.8 | 50.4 | 2.7 |

As traditional comparative advantages weakening, the space for export growth has become relatively small

China's Export Growth Rate and Export Dependency Unit: %

| Year | Stage of Industrialization | Average GDP growth rate (nominal) | Average export growth rate (nominal) | Export dependence |
|-----------|-----------------------------------|-----------------------------------|--------------------------------------|-------------------|
| 1981-1985 | | 24.4 | 14.7 | 7.9 |
| 1986-1990 | Early Stage of industrialization | 29.8 | 15.7 | 12.3 |
| 1991-1995 | | 33.1 | 26.6 | 18.3 |
| 1996-2000 | | 10.6 | 10.3 | 18.6 |
| 2001-2005 | Middle stage of industrialization | 24.9 | 13.3 | 26.6 |
| 2006-2011 | | 10.9 | 16.3 | 26.3 |
| 2013-2014 | Late stage of industrialization | 5.5 | 9.2 | 24.4 |

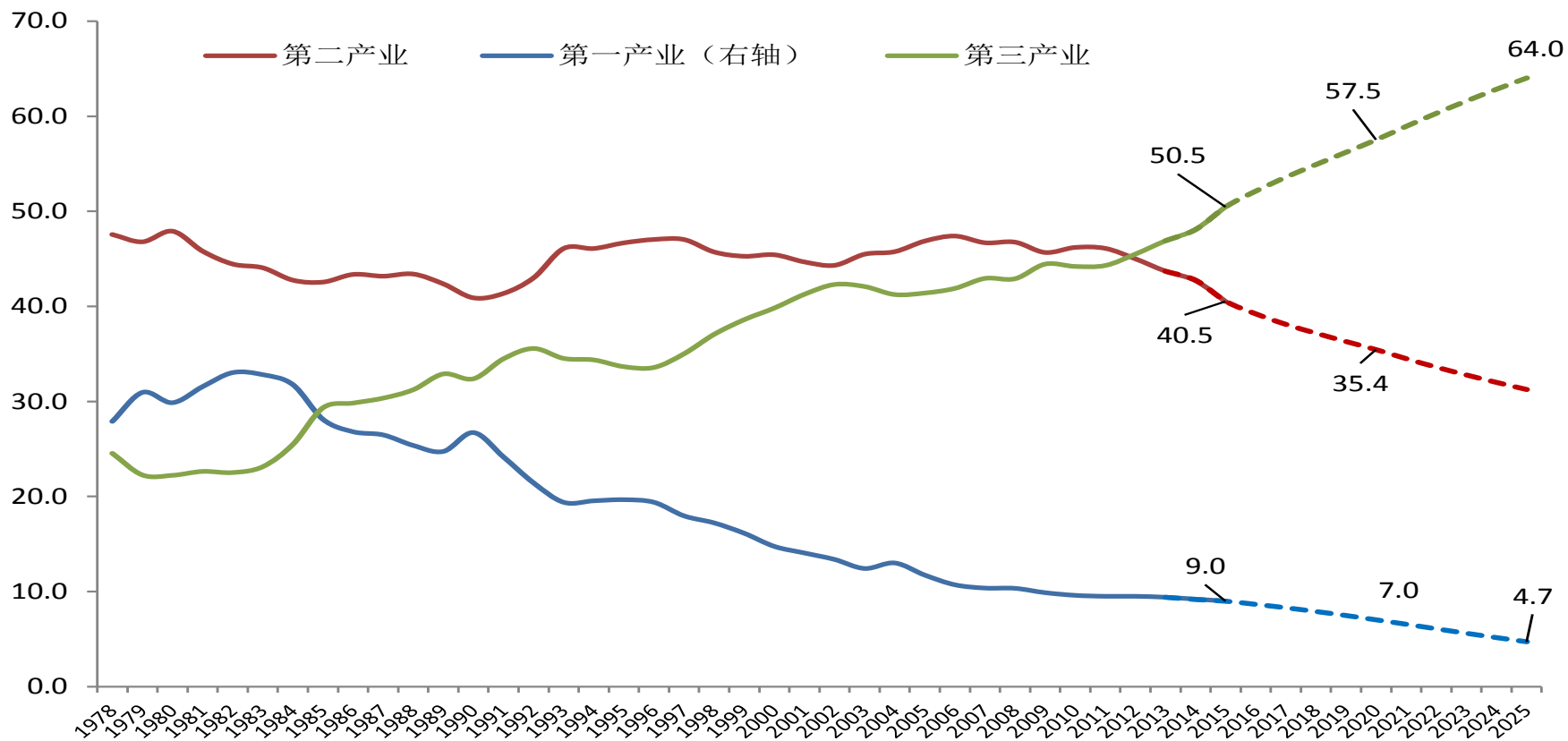
Data source: Wind Info

From the factors of production, **inputs and economic efficiency** have been playing important roles.

| Time period | Stage of industrialization | Growth Rate | | | | Contribution | | |
|-------------|-----------------------------------|-------------|---------------|-------------|------|----------------|--------------------|------------|
| | | GDP | capital stock | labor force | TFP | capital growth | labor force growth | TFP growth |
| 1978-1985 | Early stage of industrialization | 9.9 | 7.3 | 3.3 | 3.9 | 55.8 | 13.1 | 31.1 |
| 1986-1990 | | 7.9 | 7.0 | 2.6 | 2.8 | 61.0 | 18.0 | 21.0 |
| 1991-1995 | | 12.3 | 9.4 | 1.2 | 6.2 | 46.8 | 3.9 | 49.3 |
| 1996-2000 | | 8.6 | 10.6 | 1.1 | 2.3 | 68.6 | 6.0 | 25.4 |
| 2001-2005 | Middle stage of industrialization | 8.3 | 10.4 | 1.2 | 2.0 | 70.3 | 6.2 | 23.5 |
| 2006-2012 | | 10.4 | 12.6 | 0.6 | 2.5 | 76.9 | 2.2 | 20.9 |
| 2013-2014 | Late stage of industrialization | 7.7 | 13.3 | 0.4 | -0.5 | 104.7 | 1.8 | -6.5 |

Data source: calculated based on Penn World Table, version 8.0; data from 2012 to 2013 are calculated by the author

The changing trend of the industrial structure



Changes in contributions of economic sectors as observed from the perspective of economic restructuring

| | Stage of industrialization | Agriculture | Industry | Construction | Transport & postal services | Wholesale & retail | Accommodation & catering | Finance | Real estate | Other service industries |
|------|----------------------------|-------------|----------|--------------|-----------------------------|--------------------|--------------------------|---------|-------------|--------------------------|
| 1992 | Early stage | 8.4 | 57.6 | 6.9 | 4.5 | 4.9 | 3.1 | 3.5 | 4.4 | 6.8 |
| 1996 | | 9.6 | 58.5 | 4.4 | 6.4 | 4.3 | 1.3 | 4.1 | 0.8 | 10.6 |
| 2000 | | 4.4 | 57.6 | 3.2 | 6.4 | 6.2 | 2.1 | 3.8 | 1.5 | 14.7 |
| 2001 | Middle stage | 5.1 | 42.1 | 4.5 | 6.6 | 9.0 | 2.0 | 3.2 | 5.5 | 21.9 |
| 2007 | | 3.0 | 44.0 | 6.7 | 4.7 | 11.4 | 1.5 | 7.2 | 8.1 | 13.4 |
| 2012 | | 5.7 | 40.6 | 8.2 | 4.2 | 12.5 | 2.0 | 6.9 | 3.0 | 17.0 |
| 2013 | Late stage | 5.2 | 37.9 | 8.5 | 4.5 | 12.9 | 1.4 | 7.3 | 4.9 | 17.3 |
| 2014 | | 5.6 | 35.4 | 8.4 | 4.6 | 12.7 | 1.8 | 8.2 | 1.8 | 21.5 |

Data source: calculated based on data from China Statistical Yearbook

Innovation oriented economic structure

The innovation oriented economic structure is the economic structure or social reward structure which is conducive to the innovative factors to **the productive activities** rather than the **unproductive activities** (Baumol, 1990) .

Murphy, Shleifer & Vishny (1991) differentiate **the Productive sector and the Rent-seeking sector**.

Three key issues

(1) A rational social reward structure.

(2) A strong vertical mobility of the enterprise.

(3) Create a market environment for fair competition

Economic ecology

Adair Turner, former Chairman of the UK Financial Services Authority (FSA), once said, “There is a negative social externality of debt creation: debt can be a form of economic pollution.

Economic ecology implies the feature of once destroyed, hard to recover. All ecological environments have their fragility.

A good economic ecology is accompanied with less economic pollution; vise versa..

Economic pollution: Monetary Disease, Debt Disease, Bubble Disease and Profit Disease.

Irving Fisher defines the declined price level or deflation as monetary disease.

To sustain the institutional reformability and comprehensively deepen the structural reform which result in political-economic pollution are the important approaches to treat pollution and optimize ecology.

There's an old saying in China, diseases come on horseback, but go away on foot.

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 First Three Quarters |
|--|------|------|------|------|------|---------------------------------|
| Financial enterprise income tax | 4022 | 5491 | 6276 | 7529 | 8572 | 7634 |
| Industrial enterprise income tax | 7162 | 7349 | 7422 | 7837 | 7425 | 5843 |
| Financial enterprise income tax /Industrial enterprise income tax | 56% | 75% | 85% | 96% | 115% | 131% |

Business Income Tax (100 million yuan)

Data Source: Ministry of Finance

•Thomson Reuters Names 2015 Top 100 Global Innovators

41 Japanese Companies, Ranking First.

CB Insights:

Unicorn company (Valued at more than \$1 billion)

At the end of 2015, no Japanese company on the list.

Create a Market Environment for Fair Competition

- Setting up a unified and open market system for orderly competition
- Reforming the SOEs
- Strengthening the protection of intellectual property rights

Thanks !