



CHINA MINMETALS
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DEVELOPMENT Ltd. >>

Iron Ore Supply and Demand in the New Economic Environment

WANG JIONGHUI

China Minmetals Corporation

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I . Macro-Economic Environment

II . Demand for Iron Ore

III . Iron Ore Supply

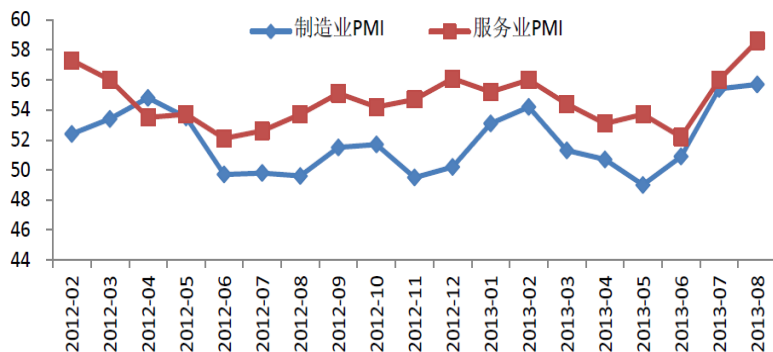
IV . Iron Ore Pricing Mechanism

V . New Trends in Iron Ore Supply and Demand



Global Economic Environment

JP Morgan shows the August Global Manufacturing Purchasing Managers' Index (PMI) at 51.7, a clear increase in activity. Economies in developed countries consolidated further, while manufacturing in emerging economies rebounded to expand again. The September reduction in quantitative easing (QE) is expected to influence global economic recovery in the short term.

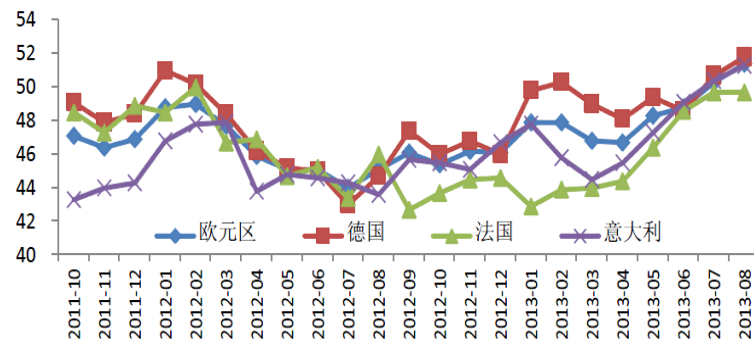


数据来源: IFIND

美国制造业与服务业 PMI 走势

US Economy Recovery Speeding Up

However, August economic data began to anticipate the Fed's late September cut in QE, which is expected to have a negative impact on the U.S. economic recovery in the short term.



数据来源: IFIND

欧元区制造业 PMI 走势

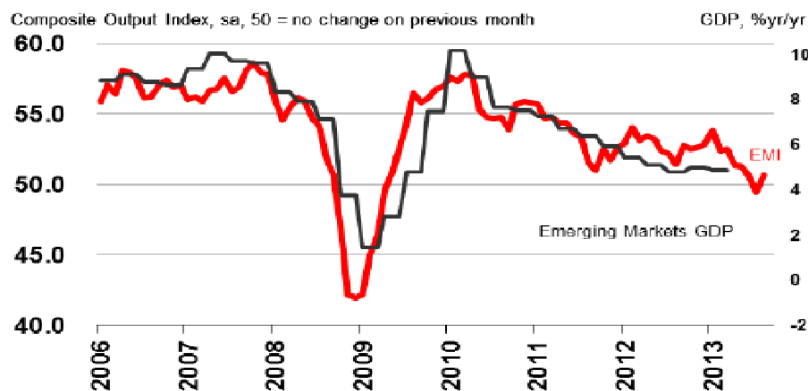
EU Economy Recovering Well

The Euro-zone's Q2 GDP increased by 0.3% over Q1, which ended a 1.5-year recession. However, vulnerable economies in some member countries will be a drag on economic growth to a certain degree.



Global Economic Environment

Emerging economies continue to face a grim situation, with the spillover risk of the late US exit from QE exit. Governments still face the pressure of an imbalance in international payments caused by substantial capital outflow and sharp currency depreciation. With high domestic inflation, real economic growth will still be restrained.



数据来源: 汇丰银行

汇丰新兴市场主要国家综合产出指数



数据来源: StockQ

MSCI 新兴市场指数走势

A modest lift in manufacturing

Financial markets remain under pressure



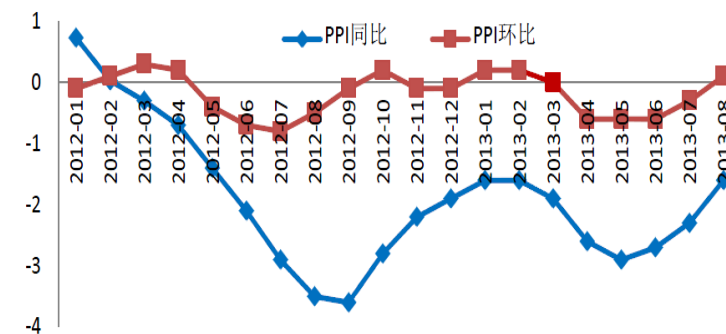
Chinese Economic Environment

In August, the domestic economy began to improve. Manufacturing expansion accelerated. Inflation remained low. Investment, consumption and export appeared positive. Industrial management continued to improve, with a 10.4% increase. The global economy improved continuously in tandem with China's stable growth policy, and the medium-term outlook is positive.



制造业 PMI 变动 (%)

Obvious lift in PMI,
improved business indexes



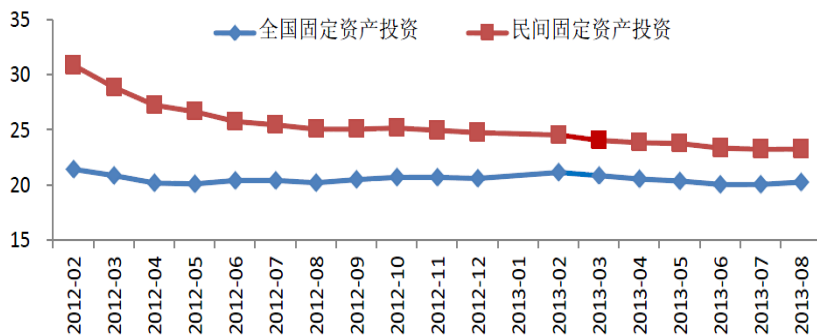
数据来源: IFIND

PPI 变动趋势 (%)

Early recovery in Producer
Price Index (PPI)



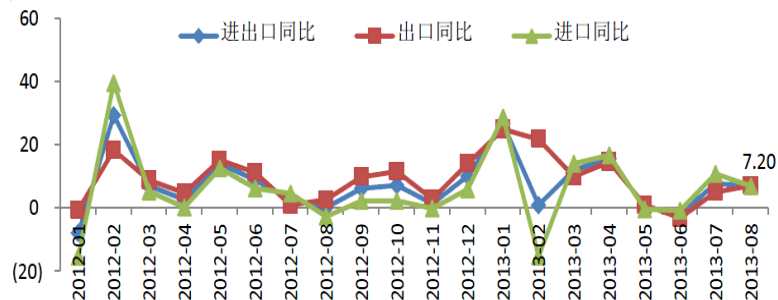
Chinese Economic Environment



数据来源: IFIND

固定资产投资累计增速 (%)

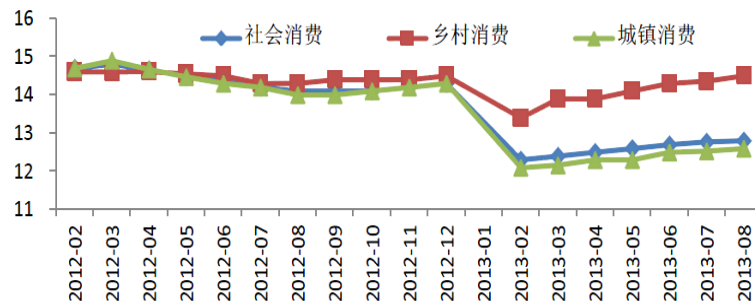
Investment speeds up slightly, a cause for cautious optimism



数据来源: IFIND

我国对外贸易增速 (%)

Foreign trade remains on a positive, optimistic trend



数据来源: IFIND

社会消费累计增速 (%)

Consumption improves slightly, accelerating pressure remains



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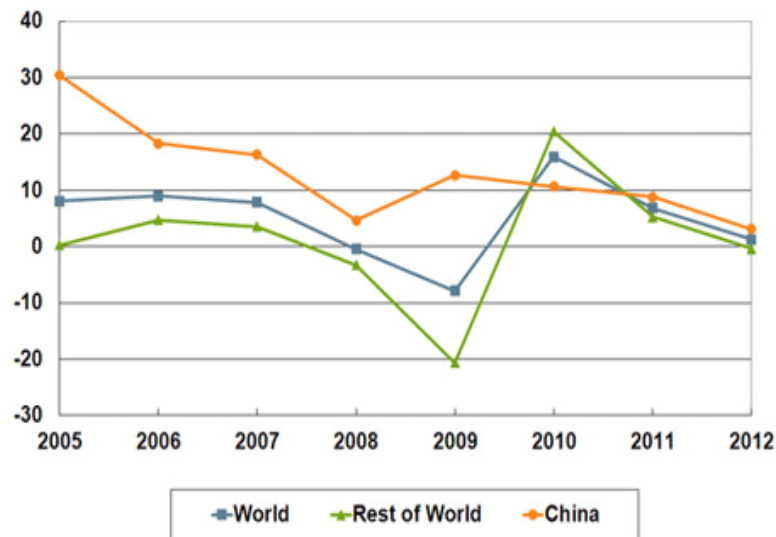
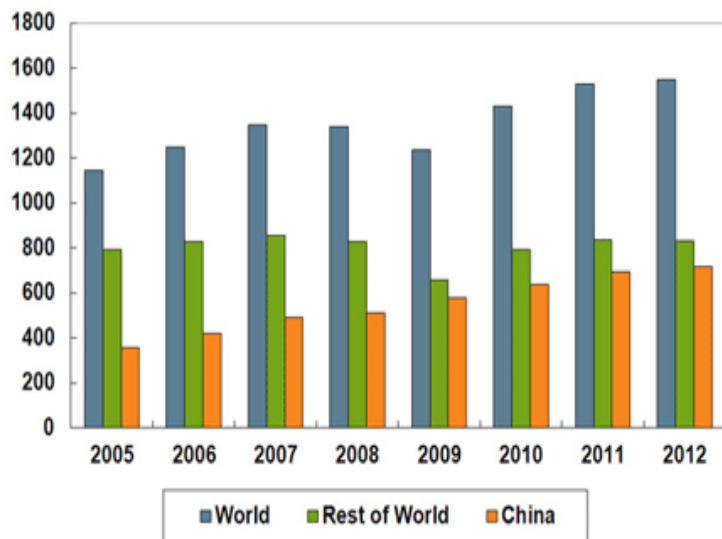
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1. Global Demand for Iron Ore



数据来源：国际钢铁协会

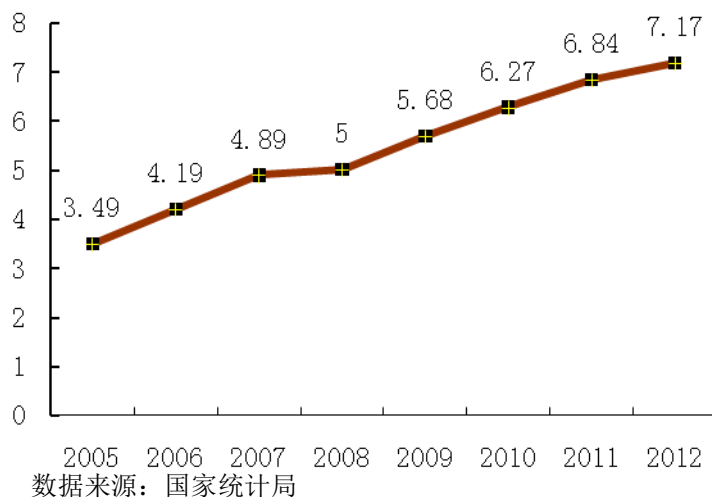
World Crude Steel Output
(in millions of tons)

Growth Rate of World Crude Steel Output (%)

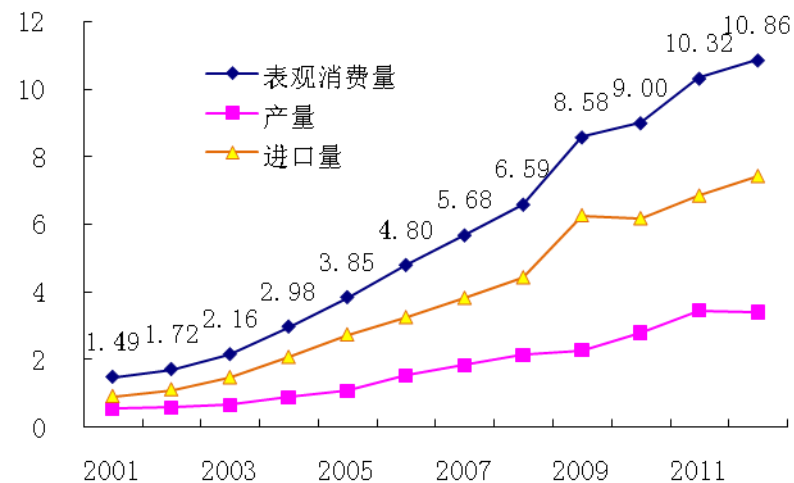
In recent years, world crude steel output has kept increasing, driving sharply increased demands for iron. However, with slowing growth of emerging economies, represented by China, world crude steel output and growth in demand for iron have also slowed down.



2. Chinese Demand for Iron Ore



Chinese Crude Steel Output
(hundreds of millions of tons)



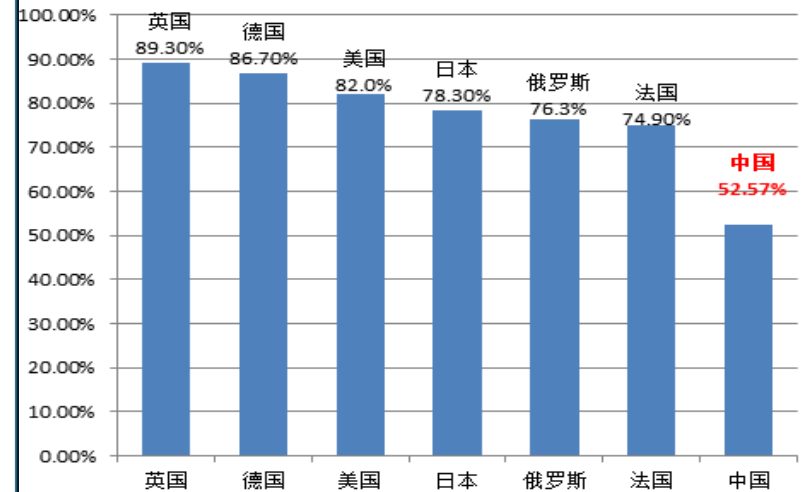
Chinese Demand for iron
(hundreds of millions of tons)

Chinese demand for iron continues to grow, while domestic output fails to meet the demand. In 2012, China consumed 1.086 billion tons, of which 0.744 billion tons was imported. **Dependence on imported iron ore is as high as 70%.**



3. China's Urbanization Accelerates

China has been urbanizing for over 30 years since economic reform began; however, it has just entered its golden age. Developed countries have been urbanizing for over a century. China's urbanization rate in 2012 was 52.57%. China's urban population is double that of the US and a quarter higher than the total in the 27 EU countries combined.

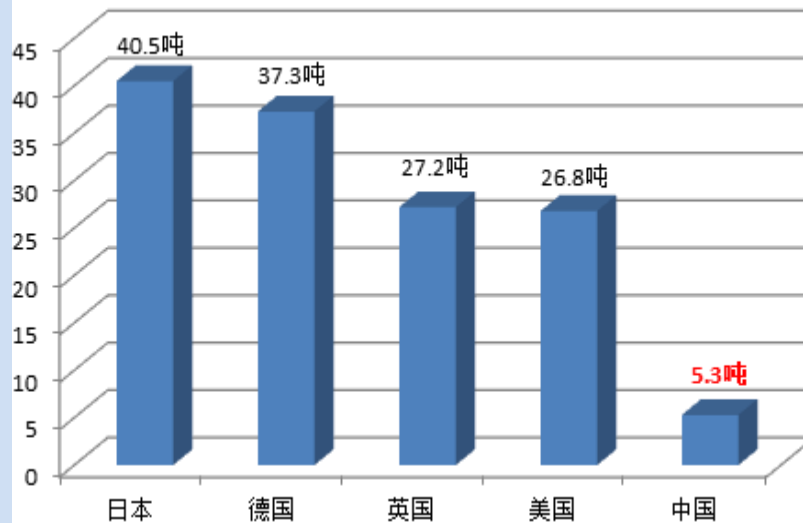


目前主要国家城镇化率

With the reform of the Chinese household registration system, China's urbanization is expected to accelerate in the coming decade. This means that large-scale urban construction of housing and public infrastructure will continue, driving continued high demand for crude steel and iron.



4. High Potential of Steel Consumption Per Capita



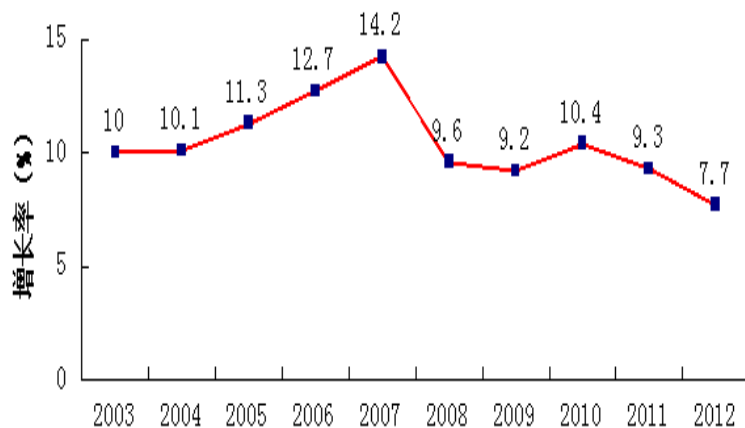
Country	Japan	Germany	GB	US	PRC
Cumulative steel consumption (per capita) in major countries	40.5	37.3	27.2	26.8	5.3

**Cumulative steel consumption (per capita)
in major countries**

The large gap between China and other major countries also represents major potential. China's output of crude steel and iron ore will continue to increase in the next decade.



5. China's GDP will continue to grow slightly faster



China's GDP Growth in Recent years

IMF forecast of China's GDP
Growth Rate in 2013

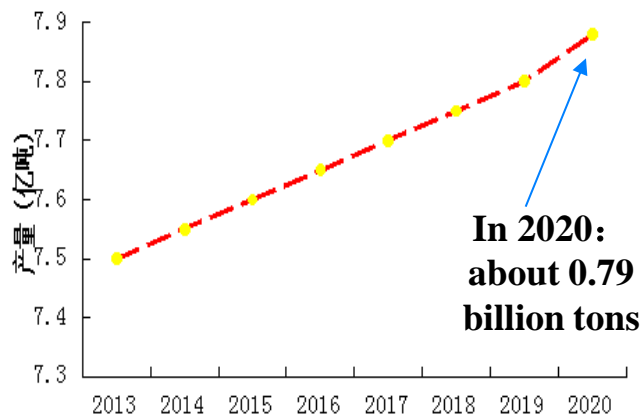
7.75%

According to research by the World Steel Association, for countries in the middle or late stages of industrialization, steel consumption continues to grow, but the growth rate slows down to slightly below the growth rate of GDP.

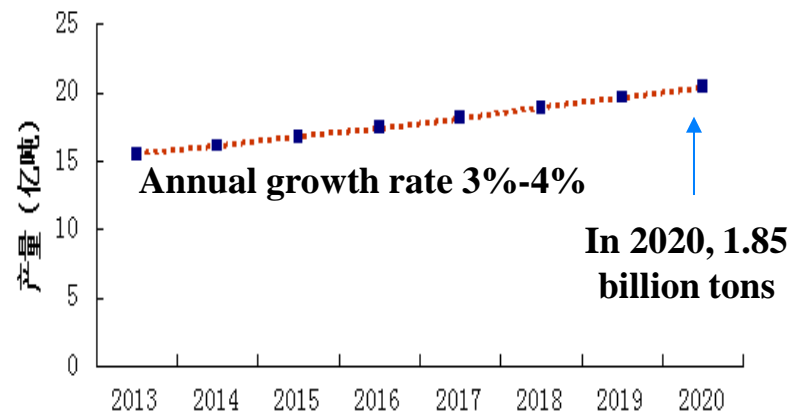
Currently China is in the mid-to late stage of industrialization. GDP growth is expected to be 7-8% in next few years. Demand for iron and steel continues to grow, but the pace of growth is declining.



6.Outlook on Future Demand for Iron



Predicted Demand for Steel in China



Predicted World Demand for Steel

World steel consumption will increase by 2.9% in 2013 and 3.2% in 2014.
(Source: World Steel Association)

Annual growth rate of world steel consumption will be 3%-4% in 2011-2020.(Source:HIS Global insight and forecast)

In 2020, demand for iron is predicted to reach 2.6 billion tons (Source: McKinsey & Co). Although growth rates decline, total quantity remains strong.



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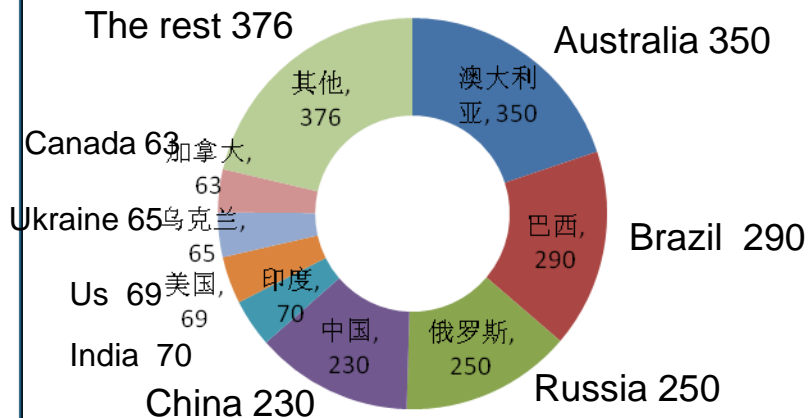
Abundant Reserves, Uneven Distribution, Industry Concentration

Rich Iron Resources. 2012 world iron reserves were 170 billion tons; at today's consumption rate, this is an 80-year supply.

Iron resources are unevenly distributed, mainly in Australia, Brazil, Russia, China and India.

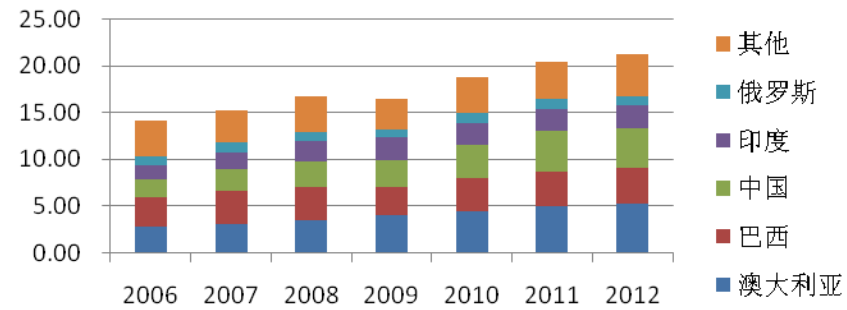
Iron ore quality is quite different.

70% of world output is from 4 countries: Australia, Brazil, China and India.



数据来源：Mineral Commodity Summaries

2012 World Distribution of Iron (in hundreds of millions of tons)



Source : Mineral Commodity Summaries

Distribution of Iron Output (in hundreds of millions of tons)



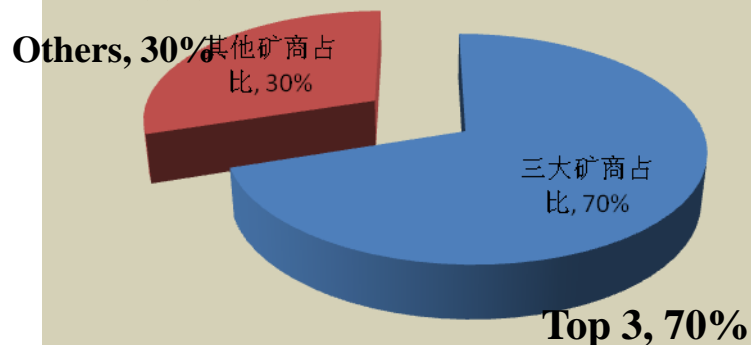
Supply is Highly Concentrated

Top 3: Vale, Rio Tinto and BHP control 70% of world seaborne iron ore trade volume.

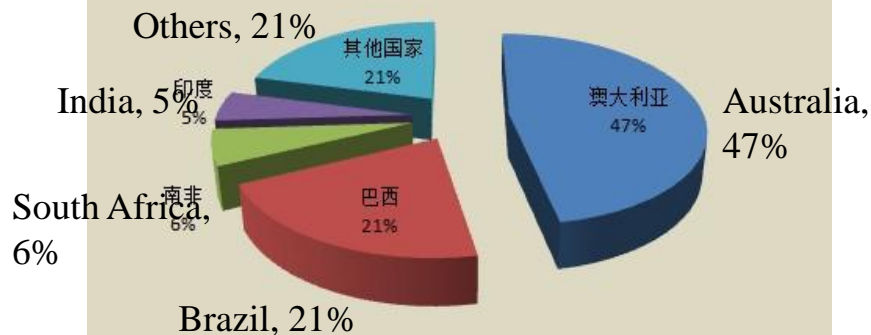
60% of world iron ore trade volume is sold to China

China's iron ore imports come mainly from Australia, Brazil, South Africa and India, together accounting for 79% of total imports.

Supply Structure of World Seaborne Trade



China's Iron Import Sources, 2012





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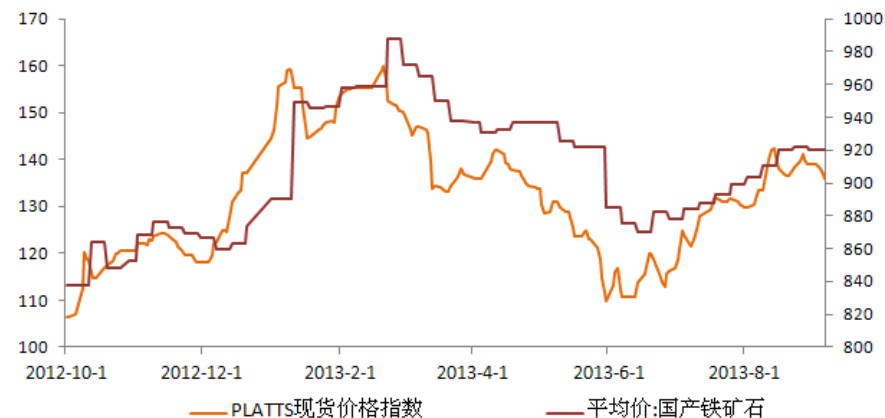
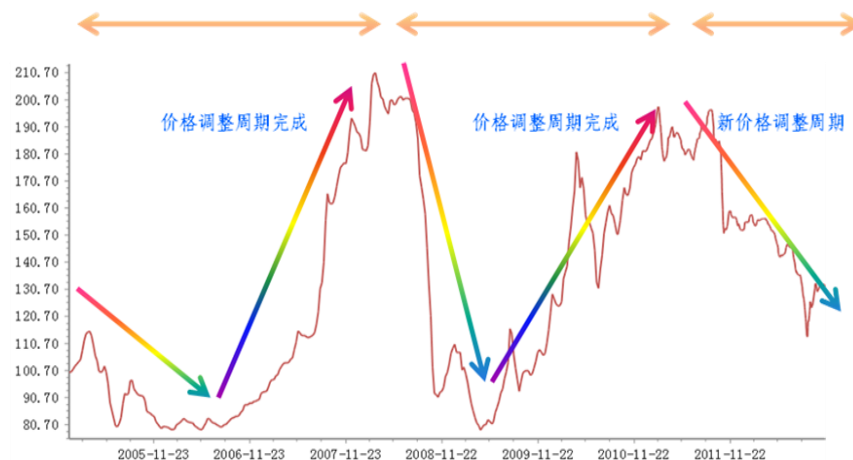
Iron Ore Prices

Since 2005, world iron prices have experienced 2 dramatic cycles.

First time: Oct 2006—Mar 2008, China's iron ore import spot price increased by over 140%; April 2008—Apr 2009, dropped by + 60%.

Second time: May 2009—Aug 2011, increased by +150%; Sep 2011—Aug 2012, dropped by + 40%.

From the 2nd half of 2012, iron ore prices have fluctuated wildly within a wider band.

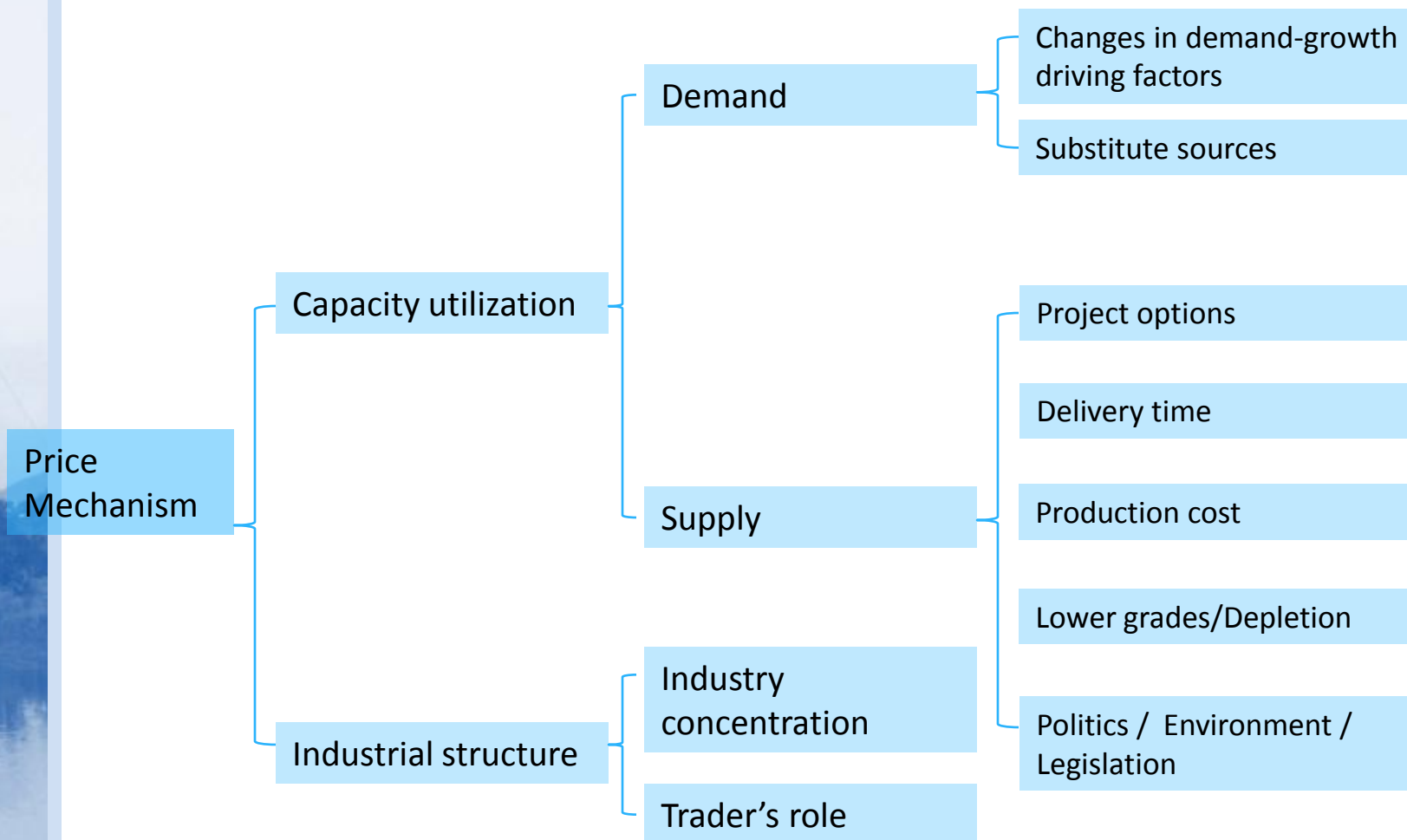


数据来源:

Fe Price Trend

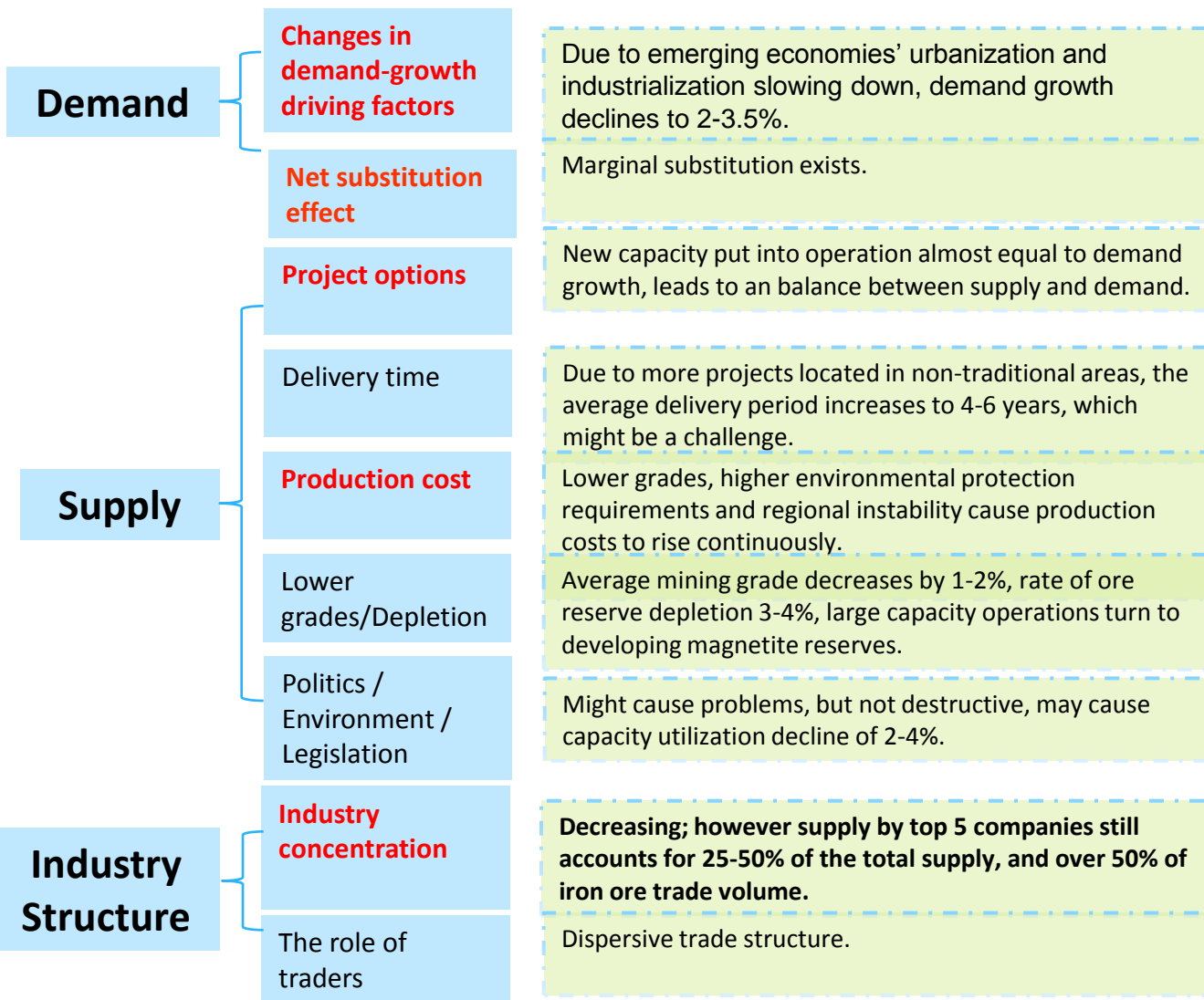


Driving Factors of Iron Ore Prices





Factors Driving Future Iron Ore Prices





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1. Iron ore prices will stabilize in the long term

Although many factors can affect iron ore prices, we believe that the development of emerging economies and the structural pattern of iron ore supply will keep iron ore prices at a certain level. In this situation, windfall profits or very low prices will not happen, and the partial marginal production cost (MPC) will be the benchmark lowest price.



2. The current structure of iron ore supply will engender the gradual formation of a few major sources of supply

As new iron ore projects are put into production in the future, the supply from some areas will gradually increase, causing the building of several industrial clusters.

However, the production costs of iron ore will vary due to differences in the quantity and quality of resources, infrastructure, industrial standards, labour laws and the investment environment in each area.



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3. The gradual evolution of iron ore from a commodity to a tradable financial product

In September 2013, the China Securities Regulatory Commission (CSRC) approved the launch of iron ore futures trading, the beginning of this gradual evolution.

Iron ore futures trading provides risk management tools to industry sectors, but will pose the challenge of developing a new talent pool.

Iron ore futures trading will also reduce price manipulation and improve price transparency and fairness.

It will be worth exploring how to use pricing mechanisms to attract the participation of iron ore suppliers.



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Thank you!