

Analysis of China's Iron & Steel Industry development

By Zheng Yuchun

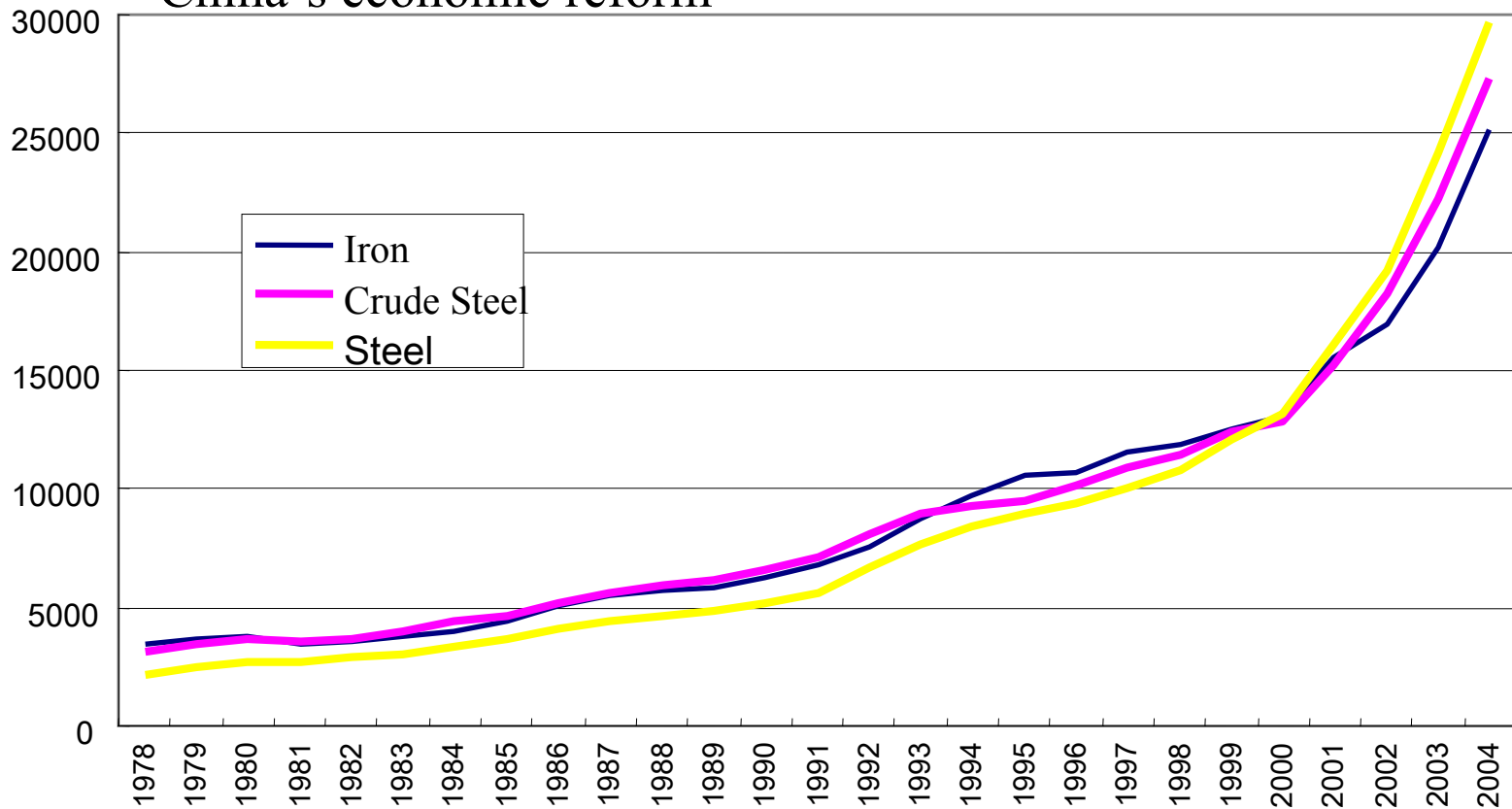
World Metal

China's iron & steel output grows very fast in the new millennium

The average growth

	iron & steel	steel
1980 - 1989	6.59%	7.89%
1990 - 1999	8.97%	13.94%
2000 - 2004	22.46%	25.22%

The output of China's iron, crude steel and steel since China's economic reform



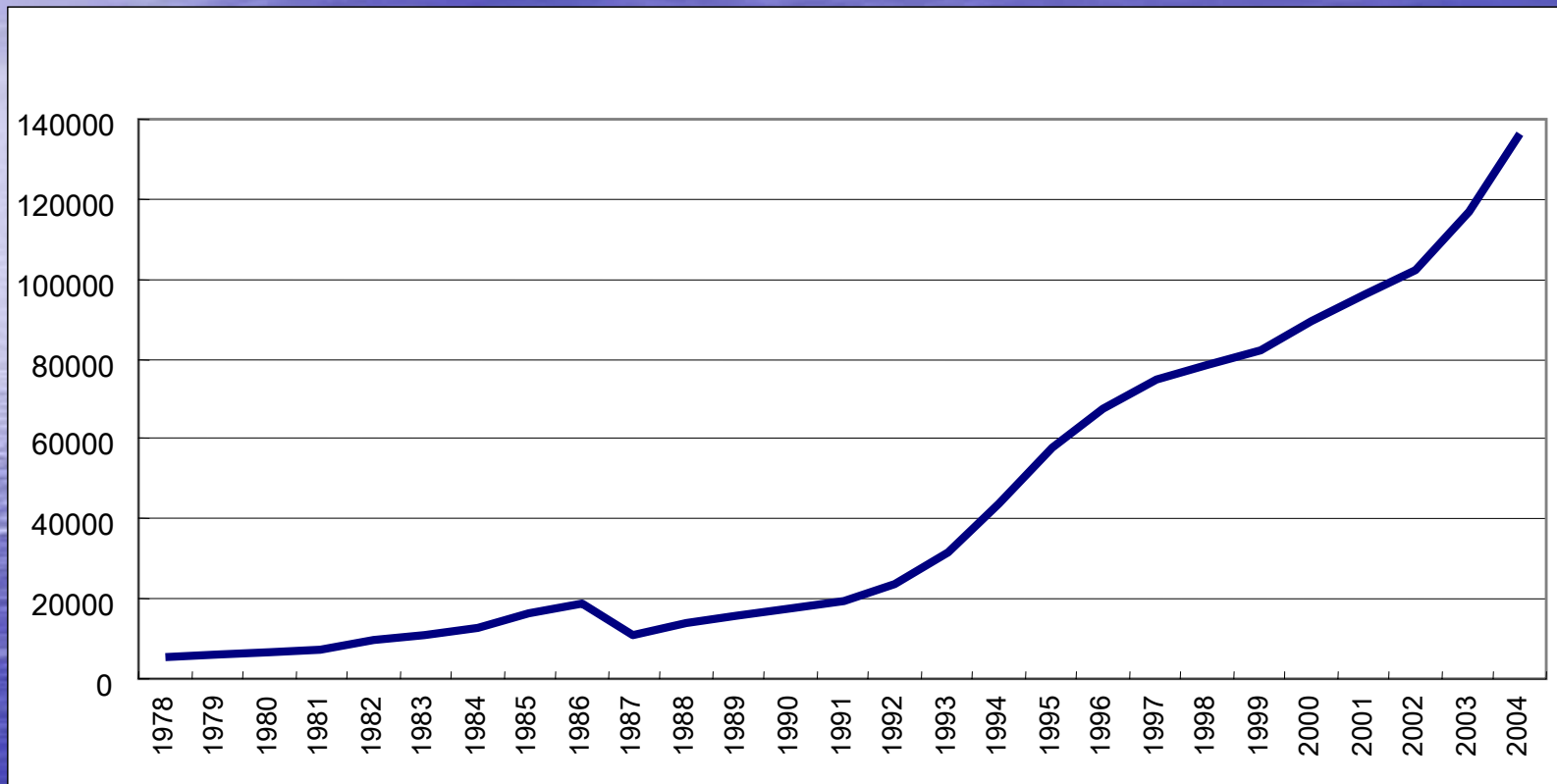
After entering the 21st century, China's iron & steel output grows faster obviously.

The strong demand drives the development of China's iron & steel industry

In 2004, China's GDP reached 13.65 trillion RMB, with growth rate of 9.5%, the highest since 1997.

From 1994 to 2004, the iron & steel output increased by 2.95 times.

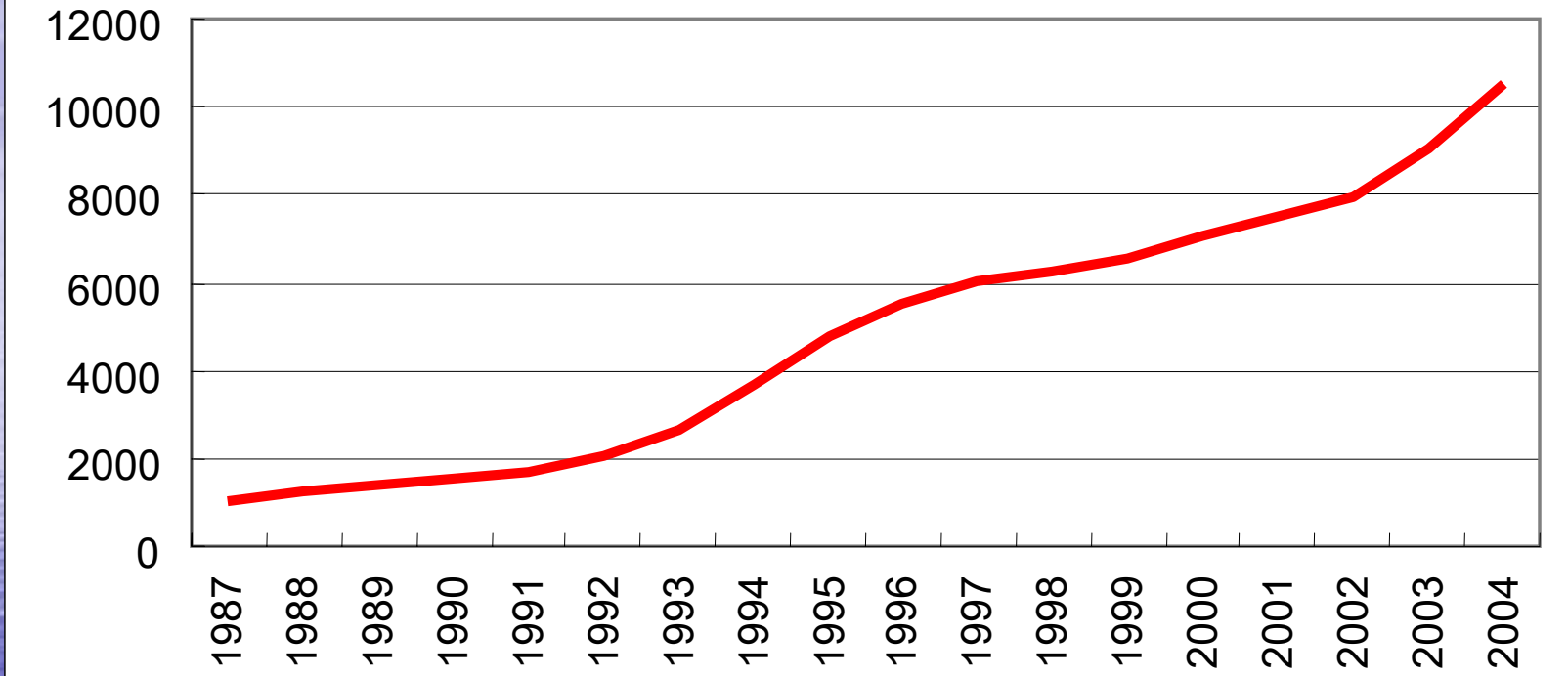
The growth of China's GDP since the opening and reform in China



The increasing demand is the essential incentive for the development of China's iron & steel industry

Along with the economic development, China's average income is growing fast, which brings the growth of consumption demand. In particular, the increase of the urban people's income and growth of real estate industry brought by the urbanization are the important impetuses for steel product demand.

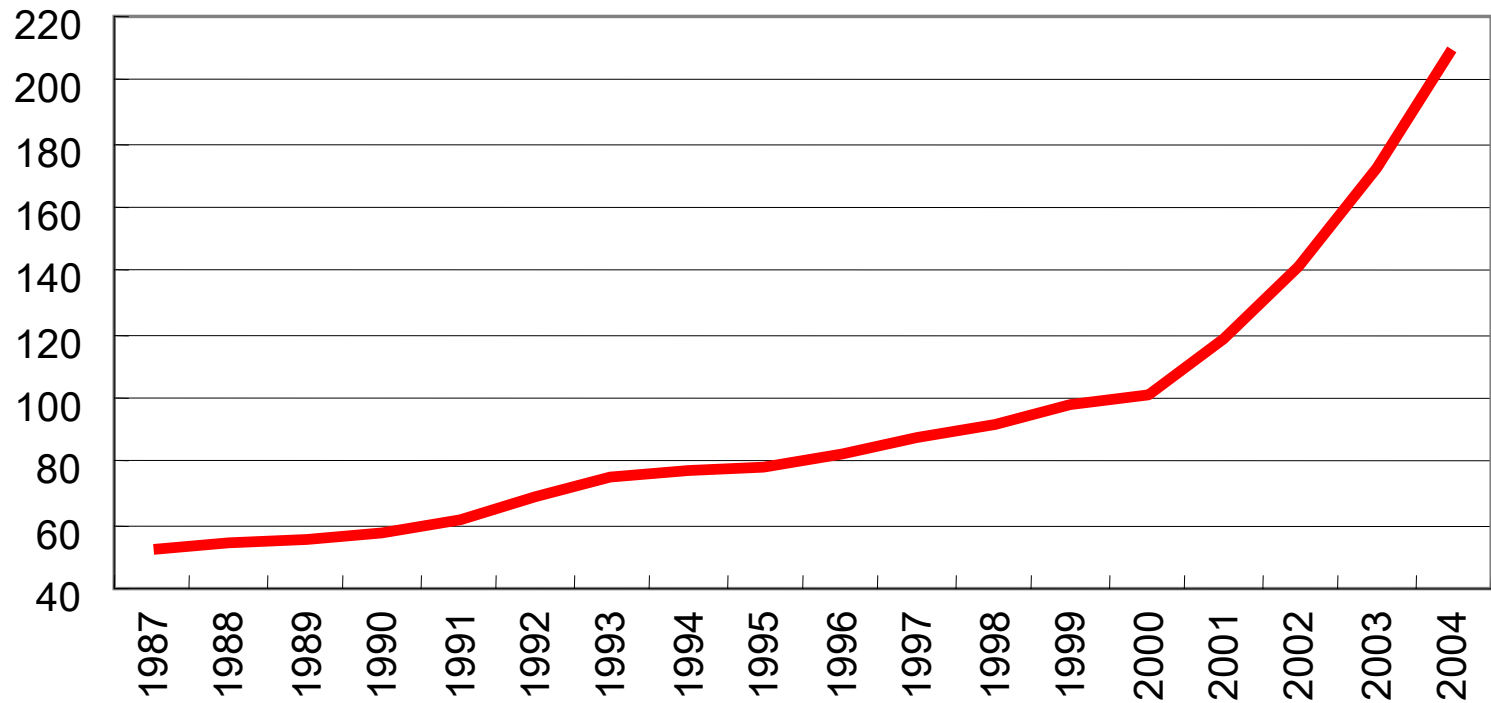
China Per Capita GDP from 1987 to 2004



2003 per capita GDP - USD 1092

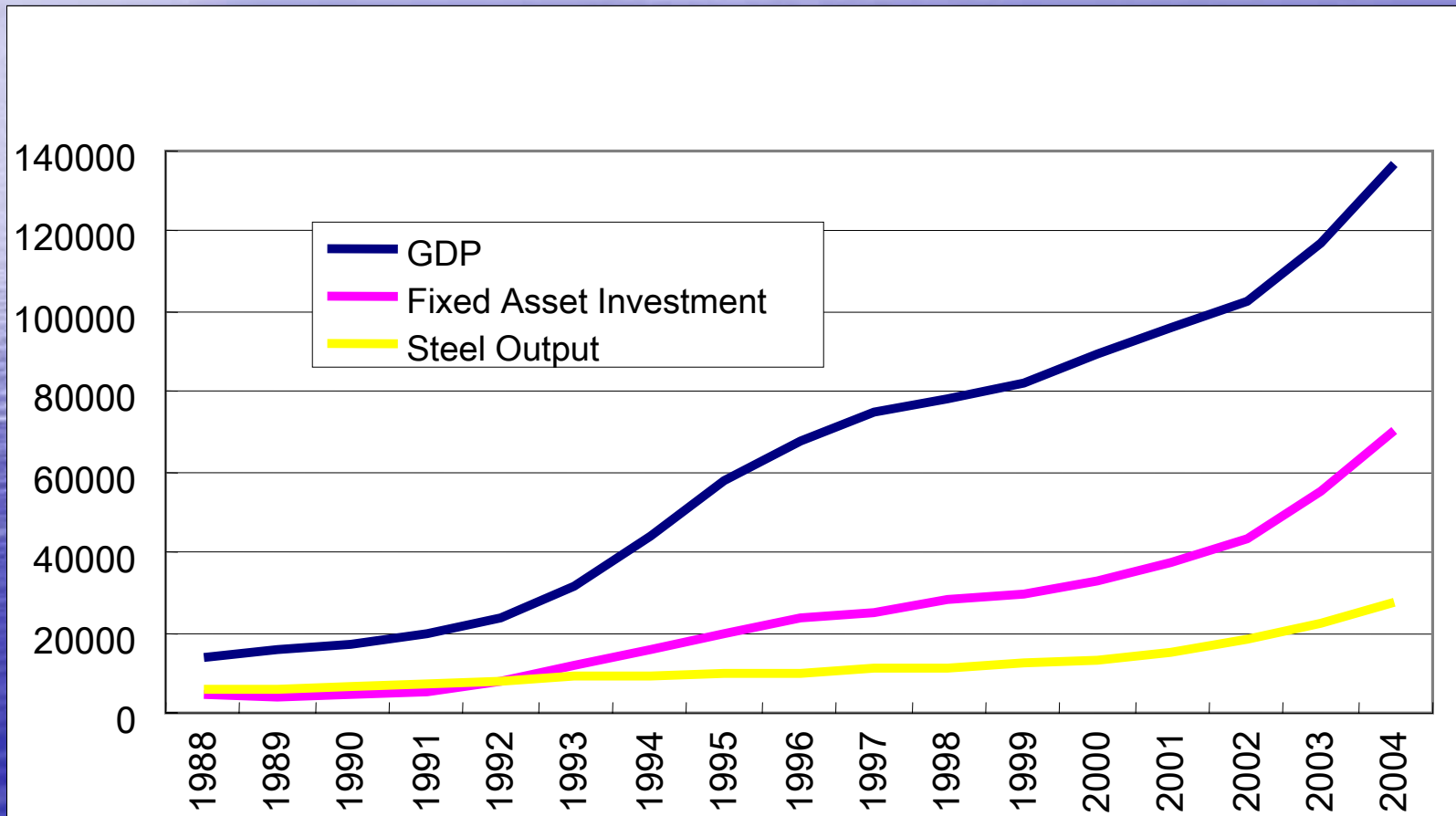
2004 per capita GDP - USD 1270

The per capita steel consumption in China from 1987 to 2004



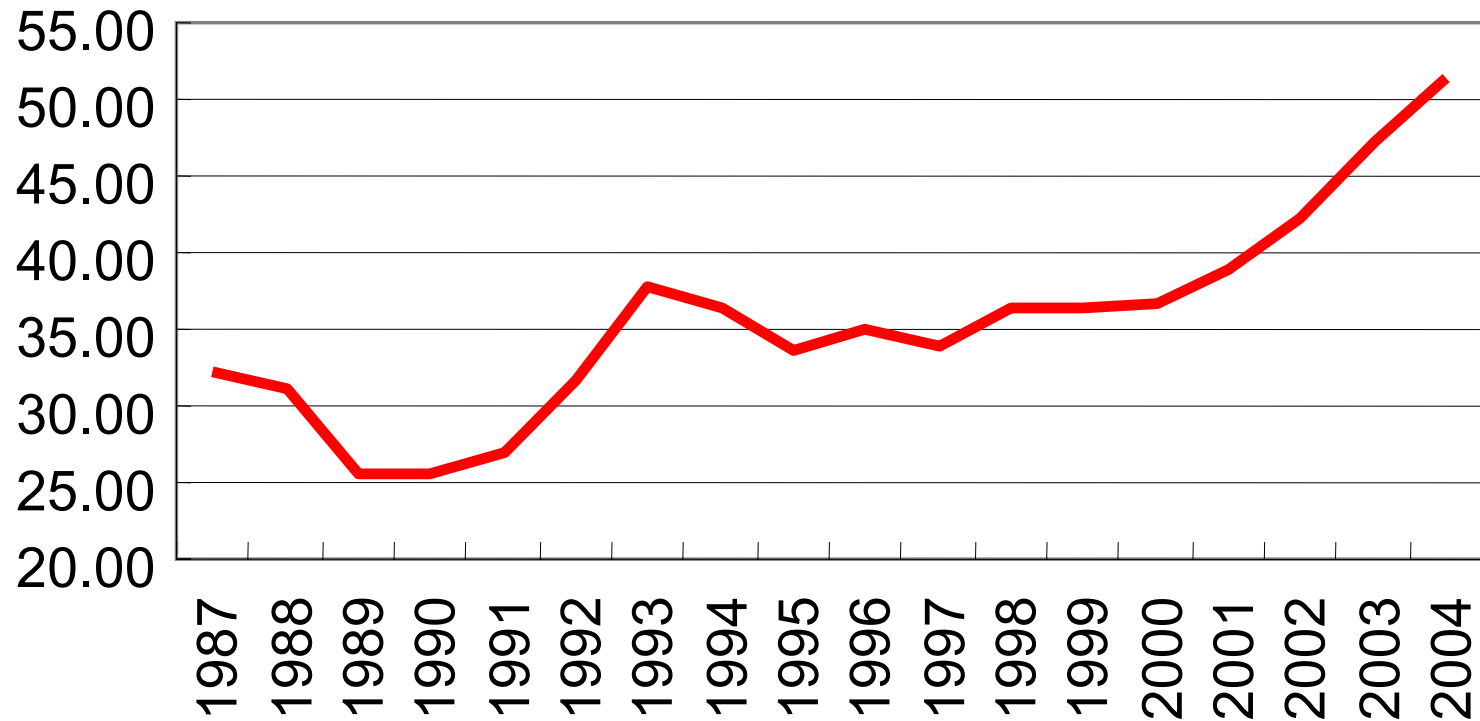
The per capita steel consumption amounted to 210kg in 2004.

Since 1990's, the influence of GDP and fixed asset investment on steel output have increased obviously.



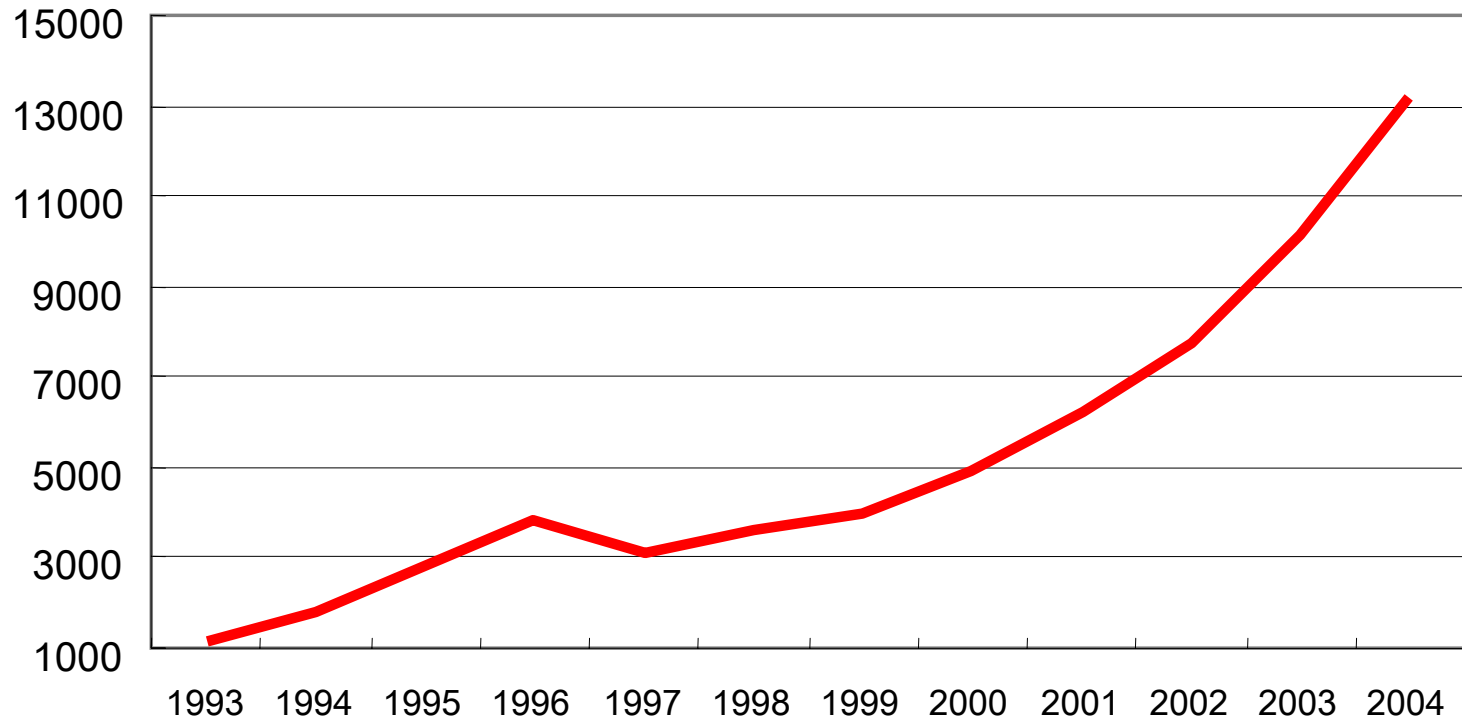
- Fixed asset investment played a very important role.
- In 2004, the total fixed asset investment amounted to 7 trillion RMB, an increase of 25.8% from 2003.
- In 2004, the investment on real estate industry reached 1.32 trillion RMB, an increase of 28.10% from 2003.

The proportion of fixed asset investment in GDP



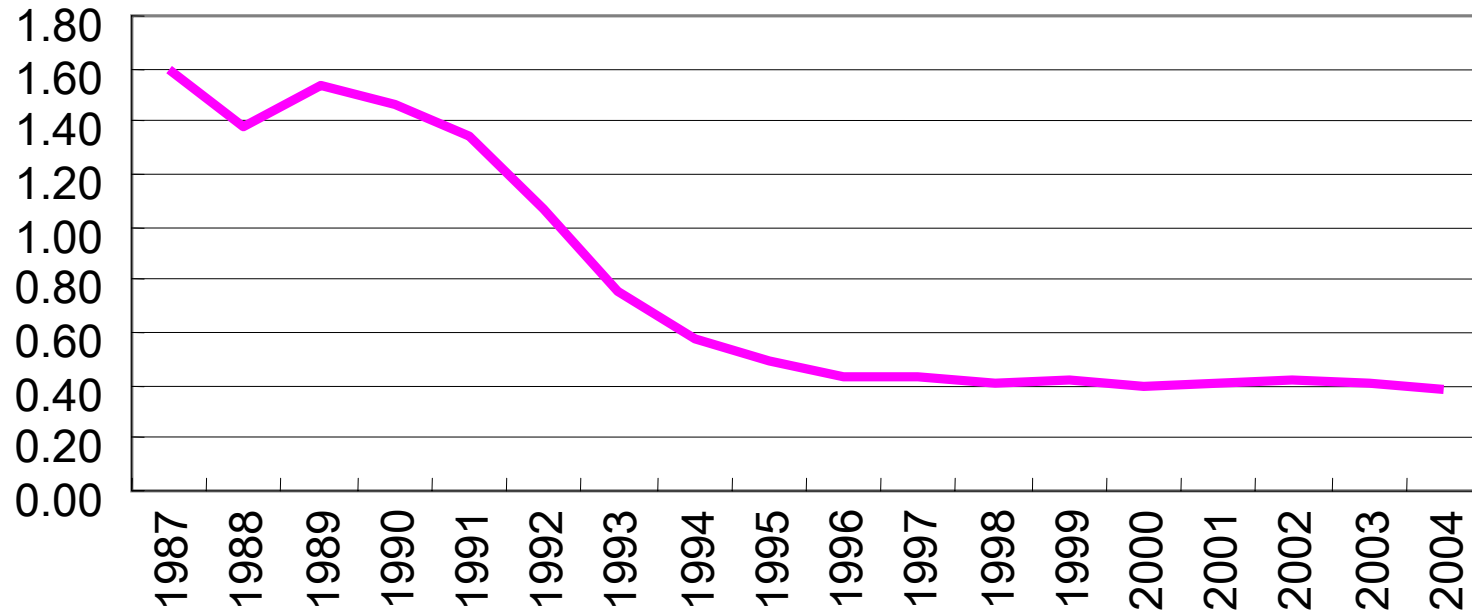
The proportion of fixed asset investment in GDP is over 50% in 2004.

Investment on real estate



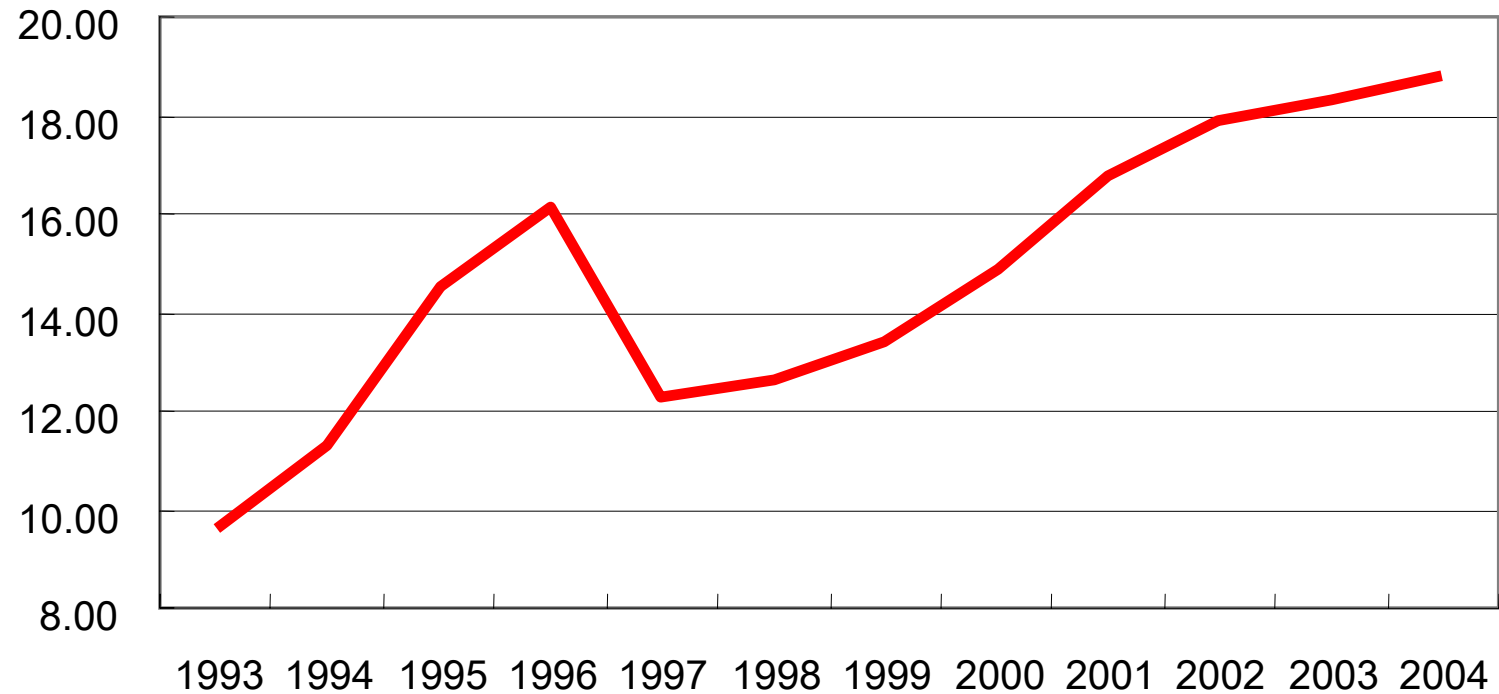
Fixed asset investment, in particular the real estate investment is the main accelerator for China's iron & steel industry development.

Steel consumption intensity in fixed asset investment



In recent 10 years, the steel consumption intensity remains at 4000mt steel for 100million RMB fixed asset investment.

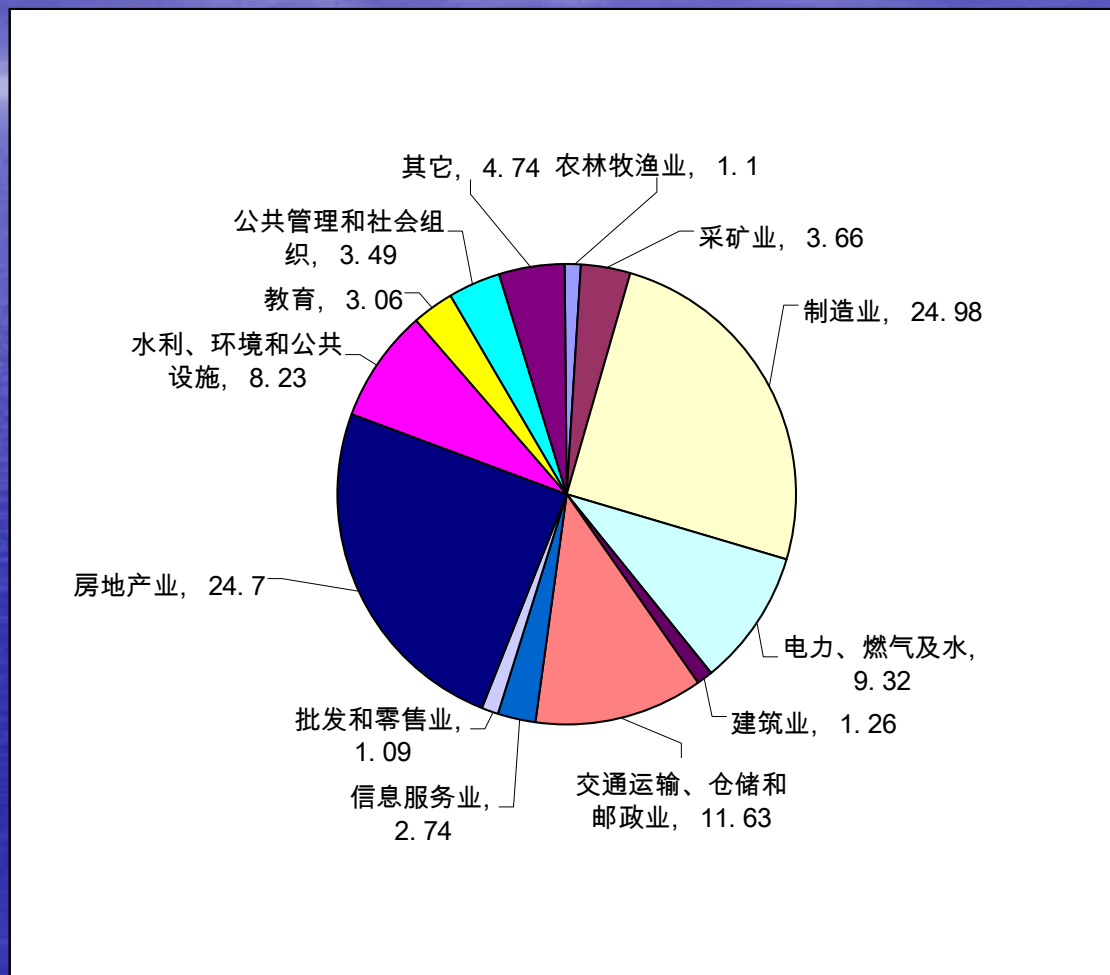
The ratio of real estate investment in total fixed asset investment



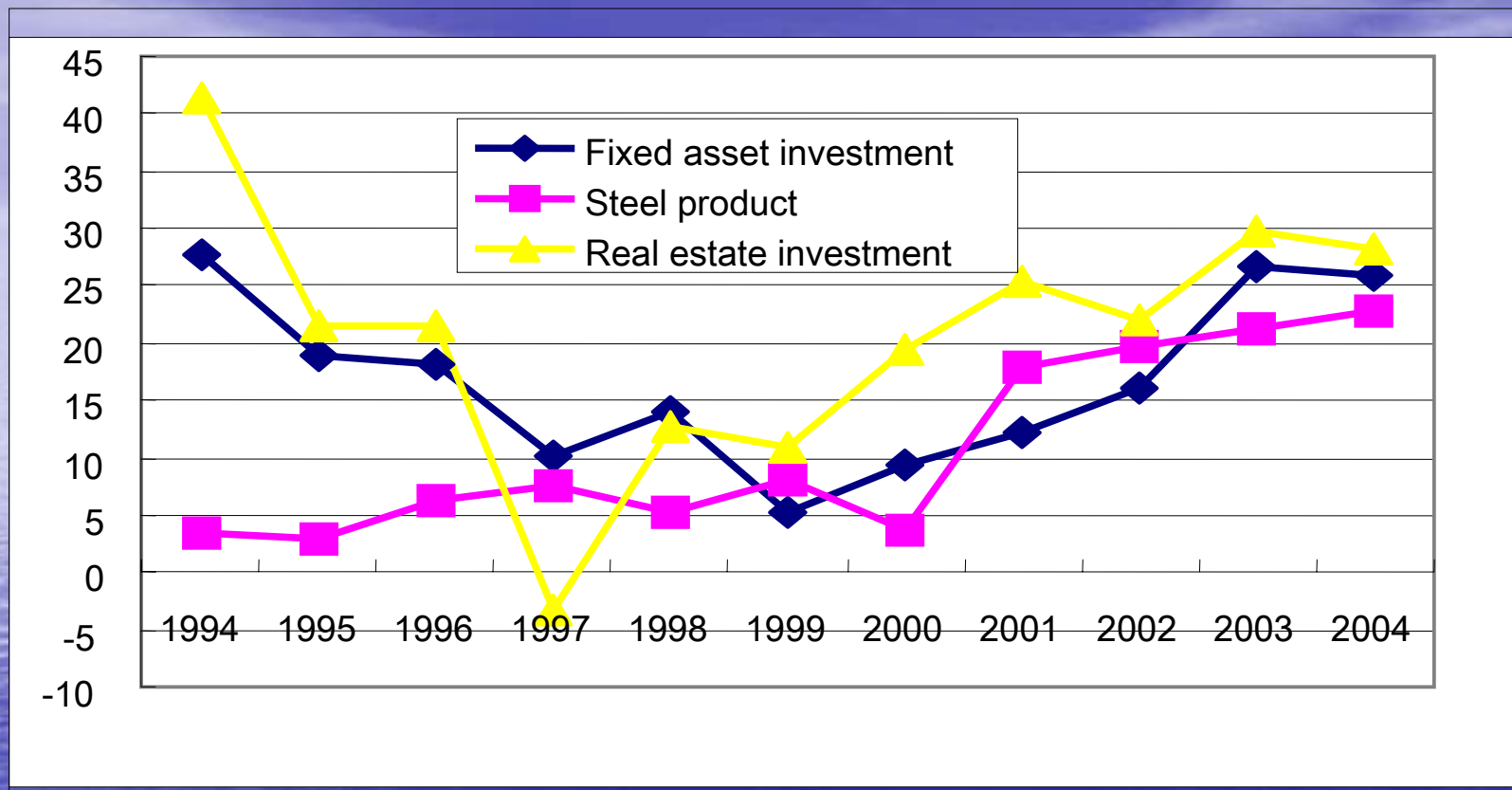
The ratio of real estate investment in total fixed asset investment increases continually in recent years.

The fixed asset investment in different industries in 2004

- Manufacture and real estate account for half of investment.
- These two industries are both giant consumers of steel product.
- The top 3 industries in manufacture, by investment amount, are iron & steel industry, chemical industry and non-metallic mineral industry.



The growth of steel product, fixed asset investment and real estate investment

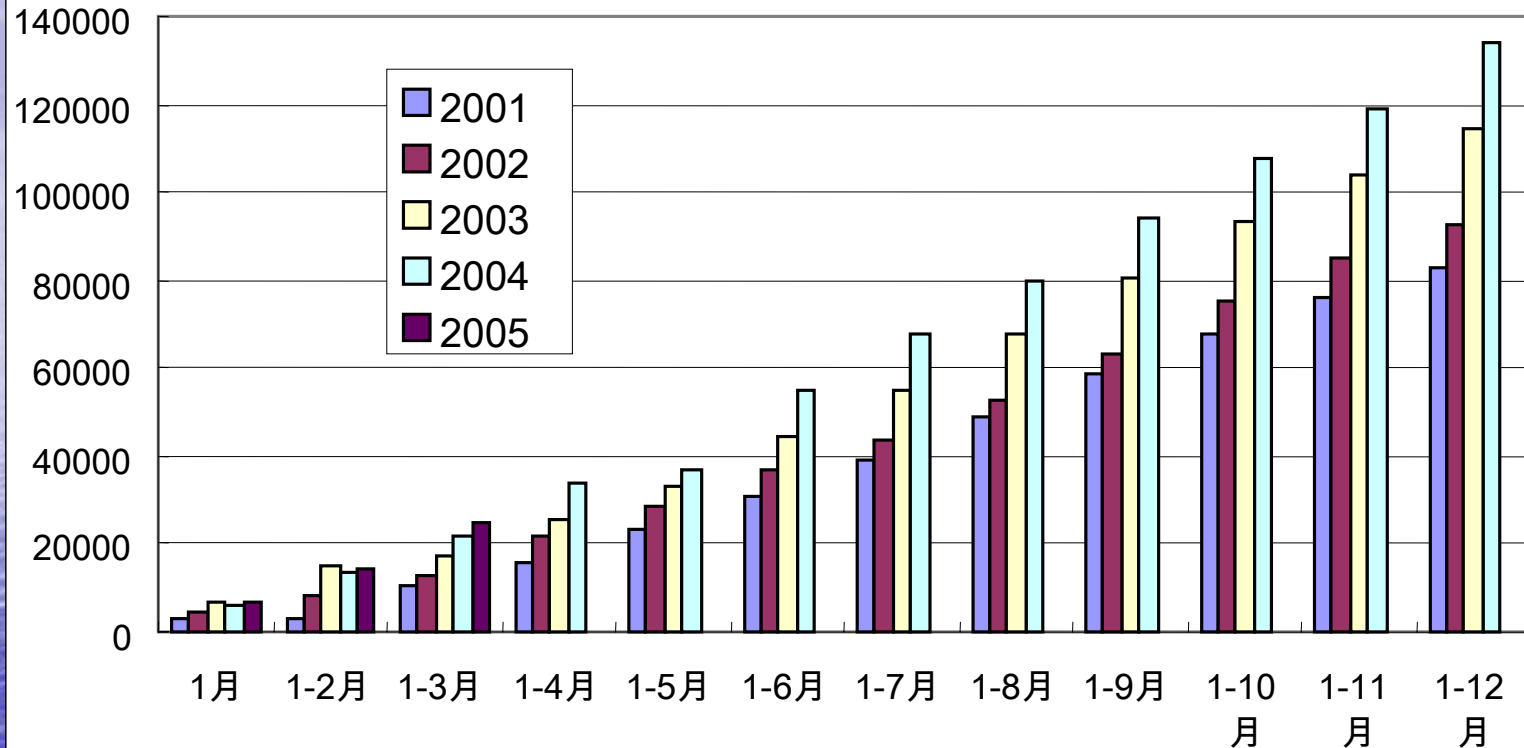


Under the macro-control policy, the growth rate of fixed asset investment and real estate investment decreased by 0.9 % and 1.6 % respectively, but the steel output still increased by 1.45 %.

The rapid development of downstream industry enhance the development of China's iron & steel industry.

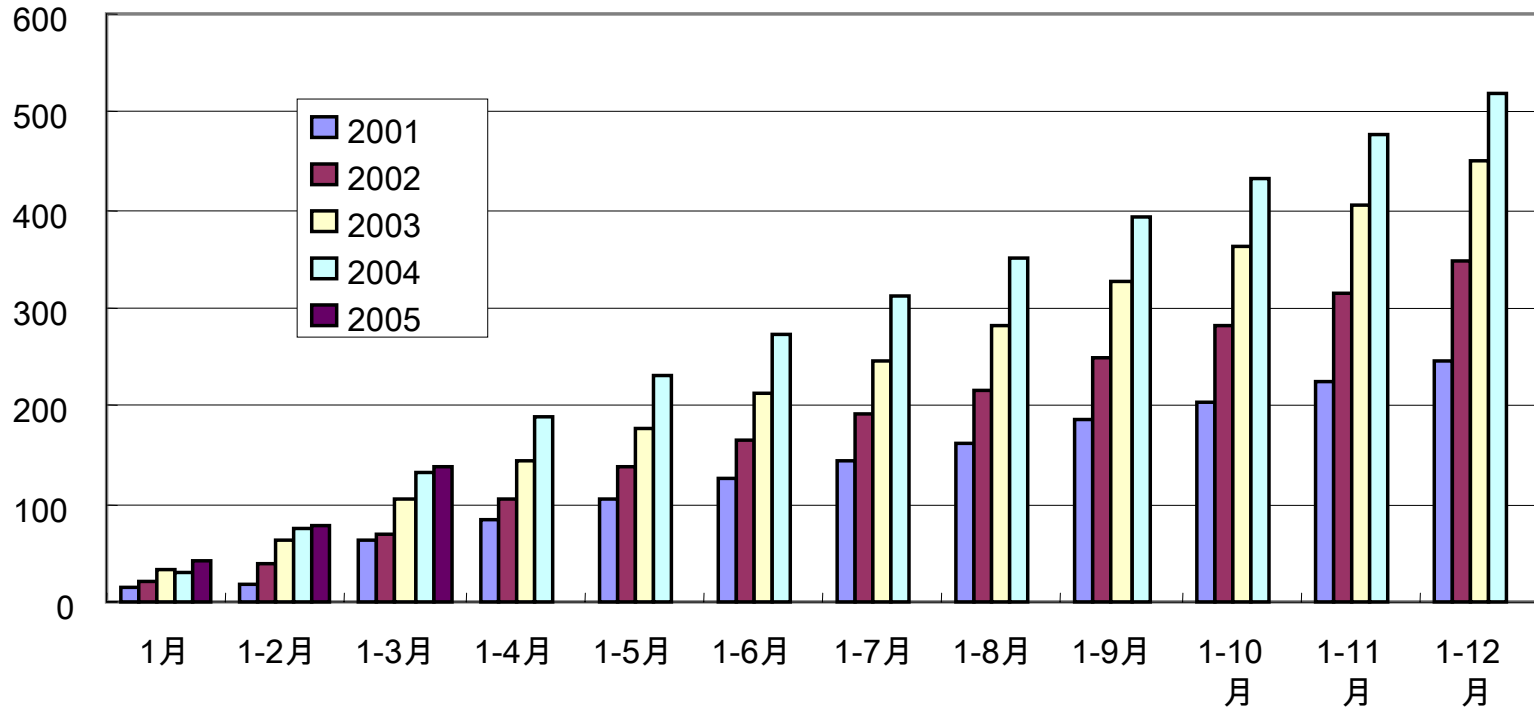
- Now China is becoming the world workshop.
- The economic development also improved the development of energy, transportation and raw materials industries which are the bottlenecks for the further development.

The production of China's industrial boiler in past 10 years



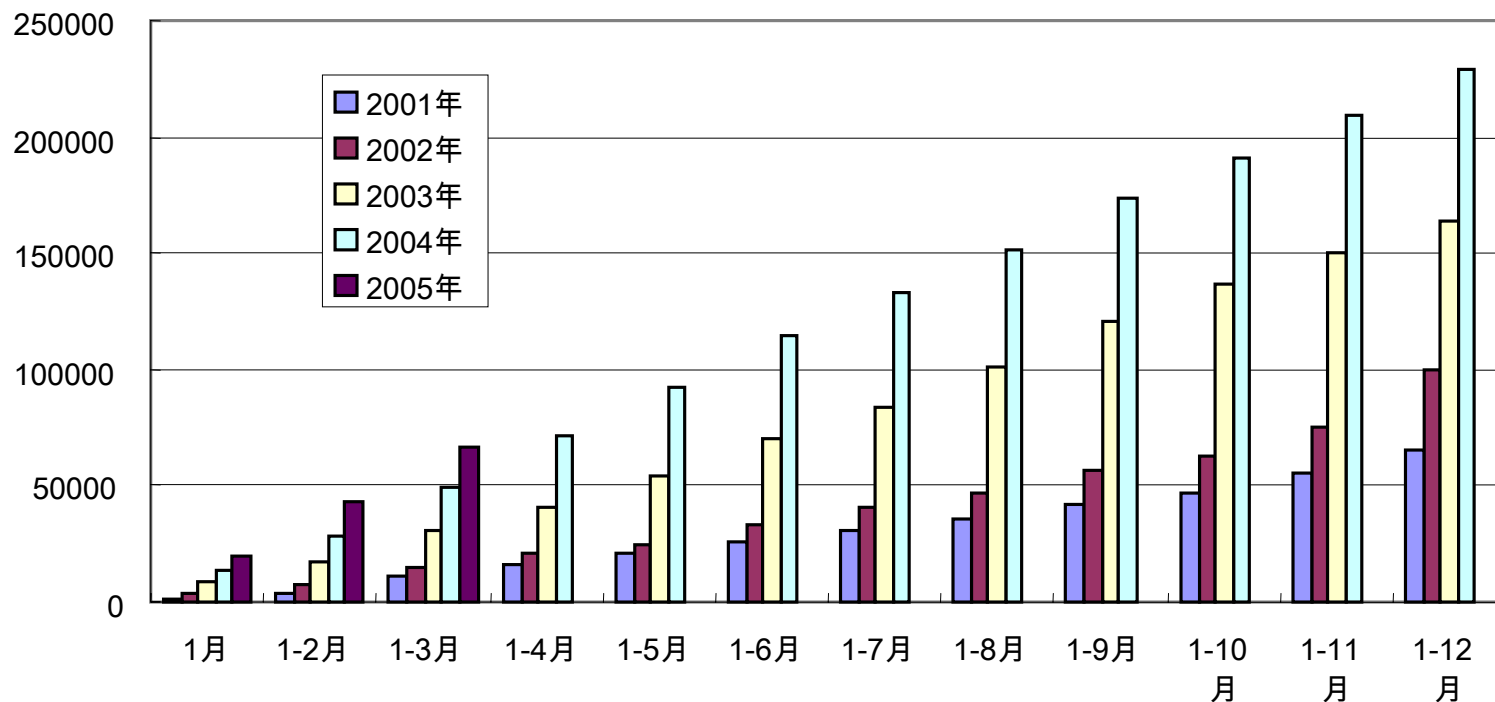
	2004	2001 – 2004 (average)
Growth	16.95%	15.37%

The automobile production growth



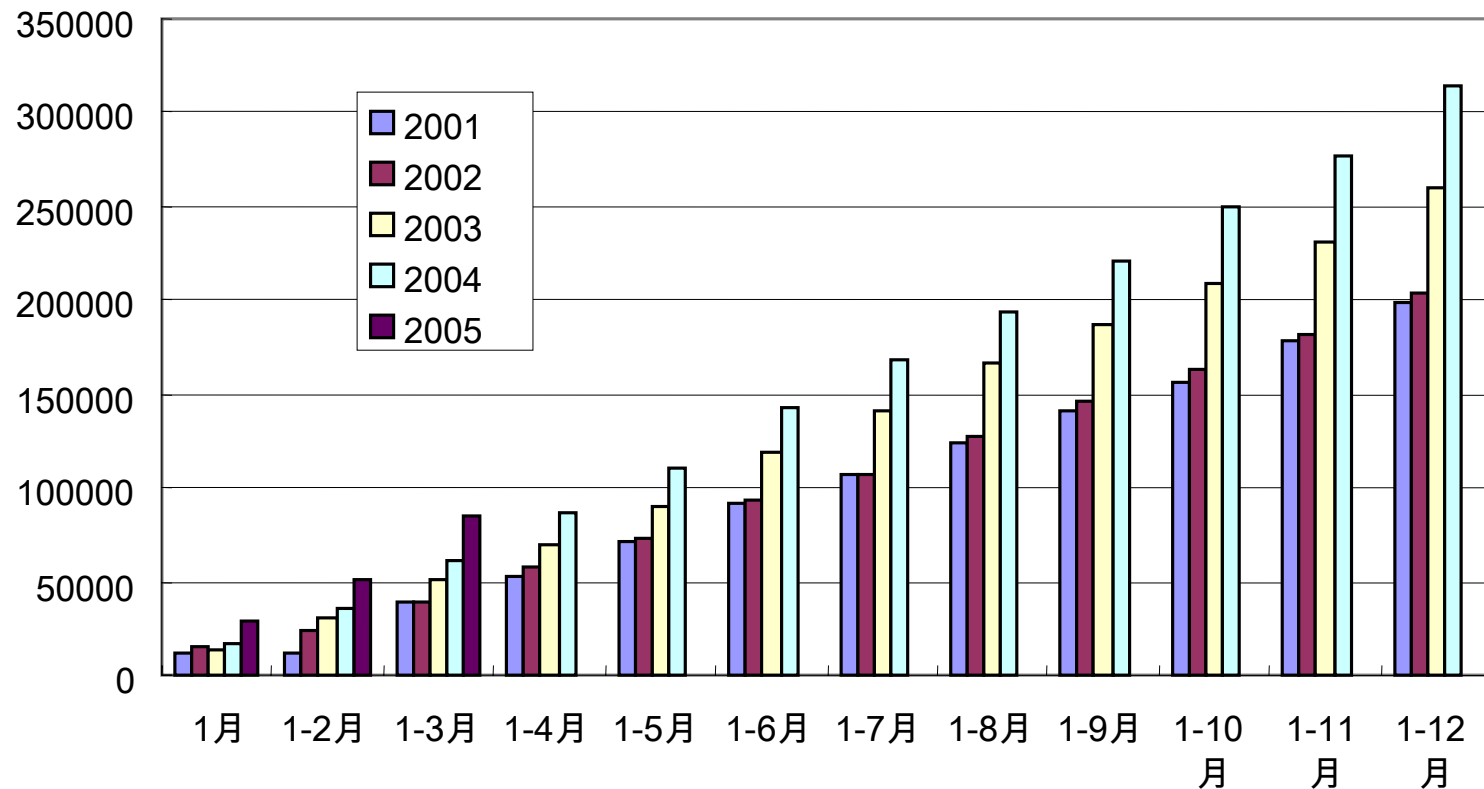
	2003	2001-2004 (average)
Growth	15.57%	27.66%

The growth of Metallurgical equipment production



	2004	2003	2001 – 2004 (average)
Growth	39.44%	64.13%	62.96%

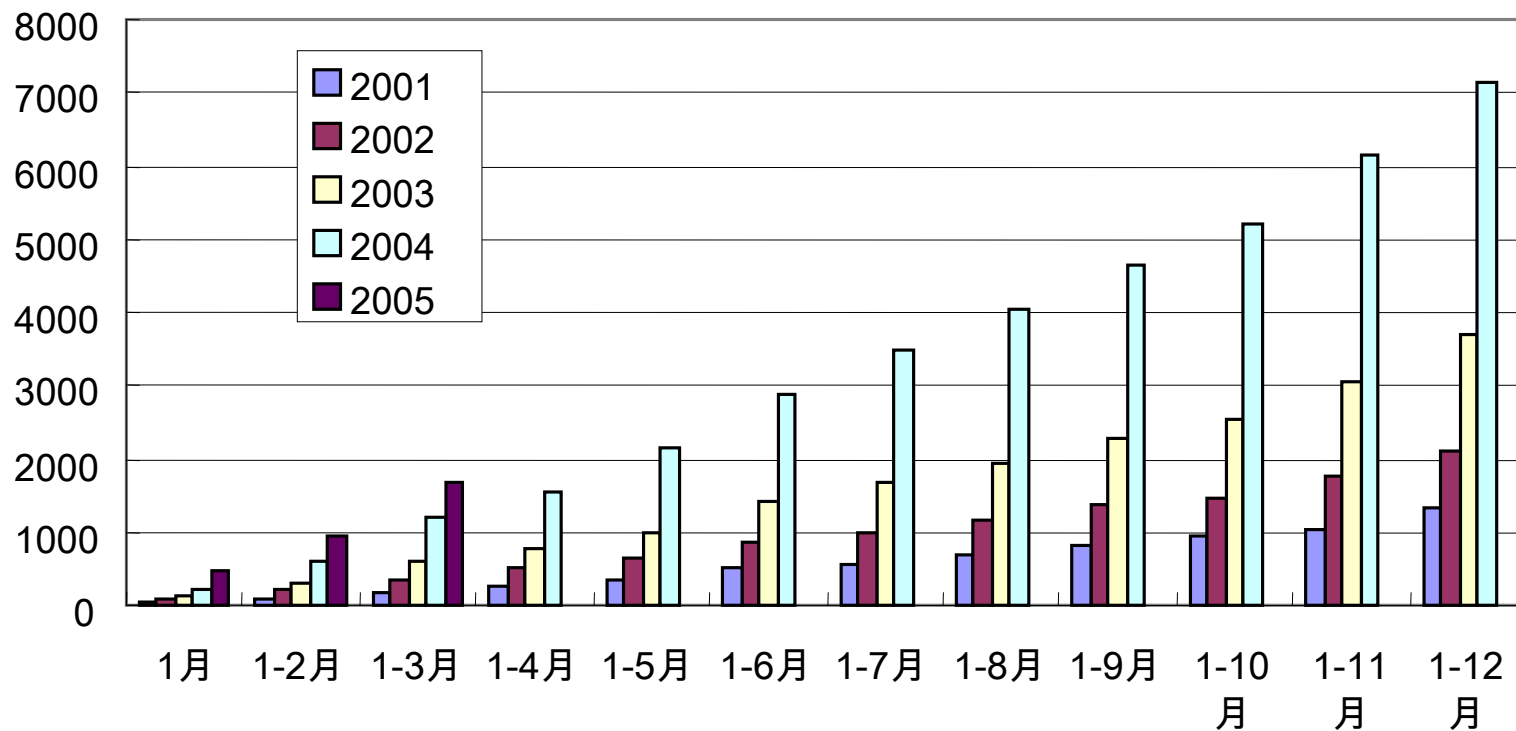
The growth of chemical equipment production



2004
Growth 20.34%

2001 – 2004(average)
14.41%

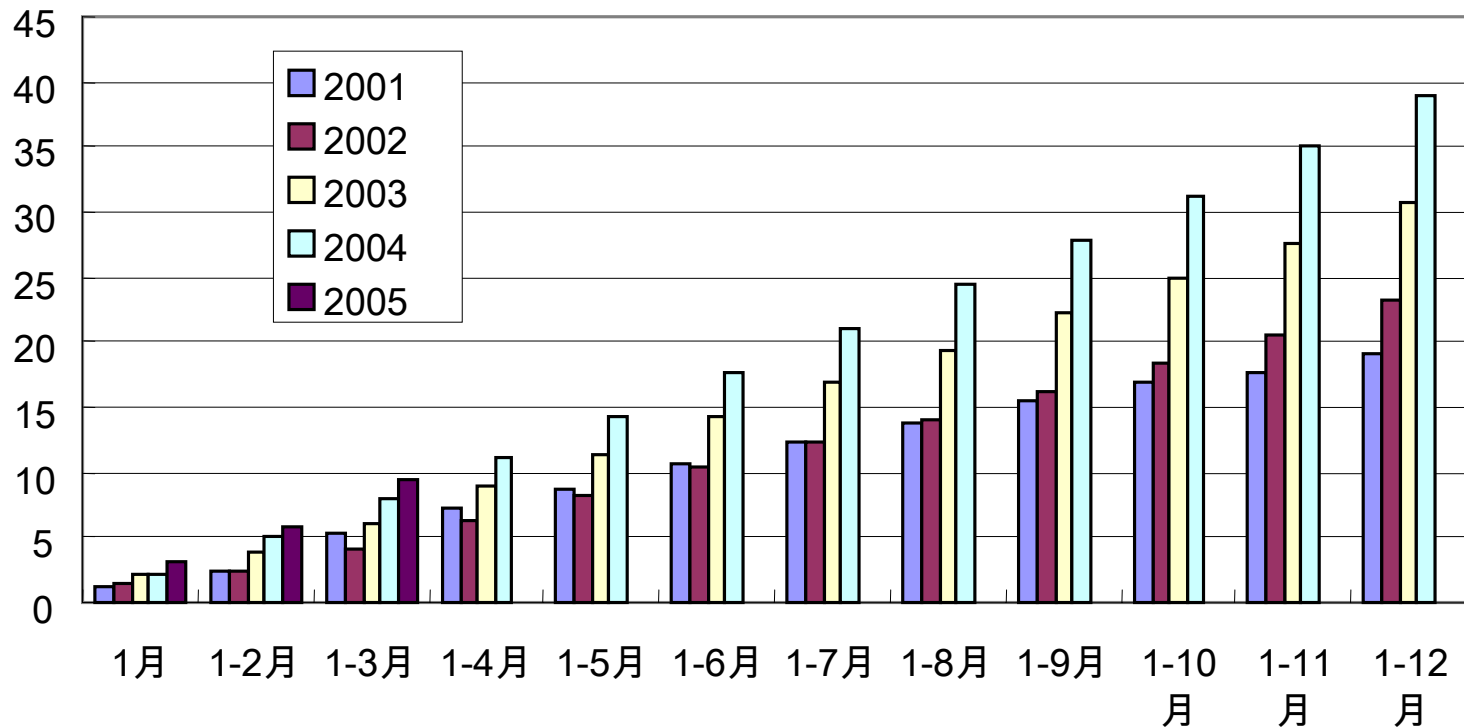
The growth of generation equipment production



2004
Growth 92.88%

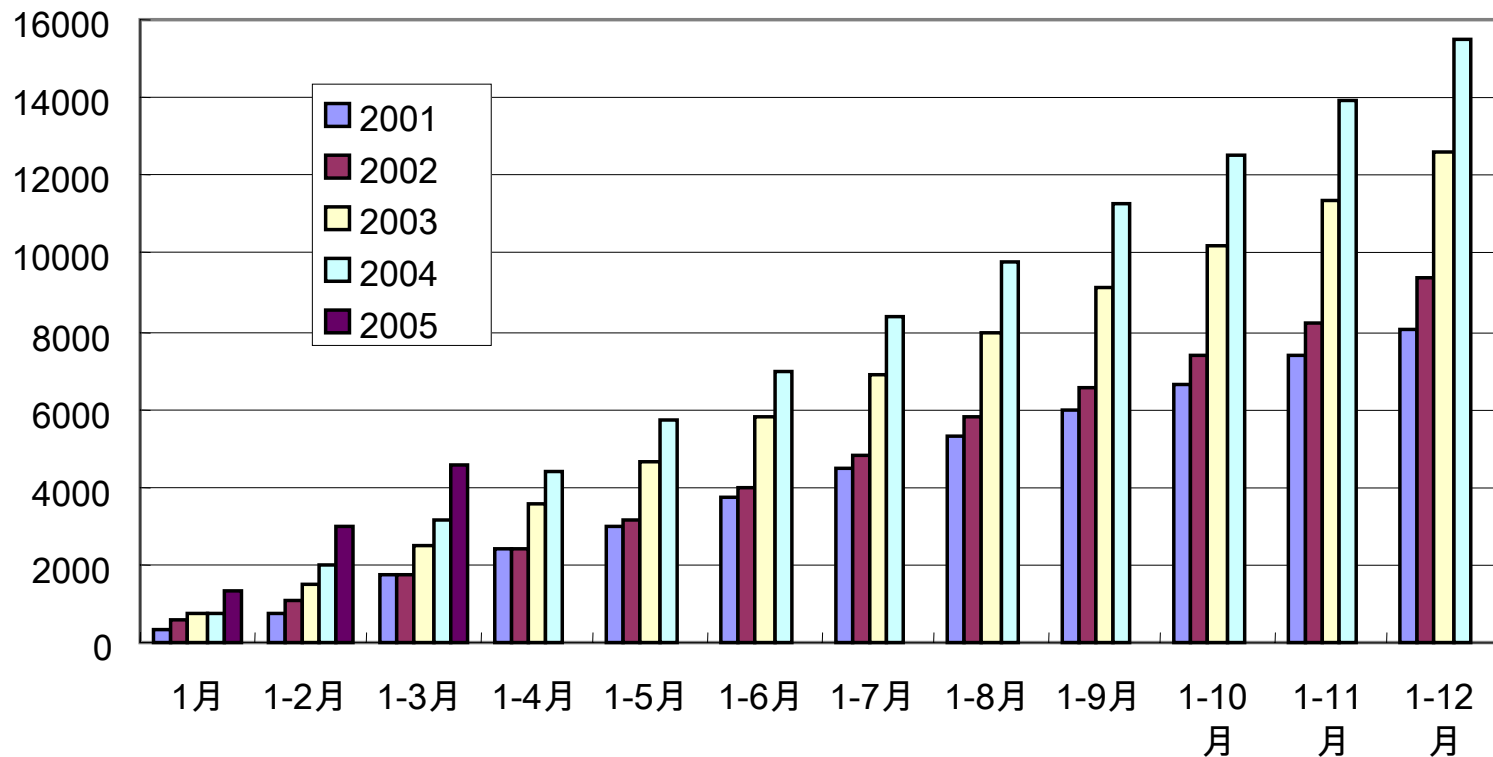
2003
74.49%

The growth of metal cutting machine tools production



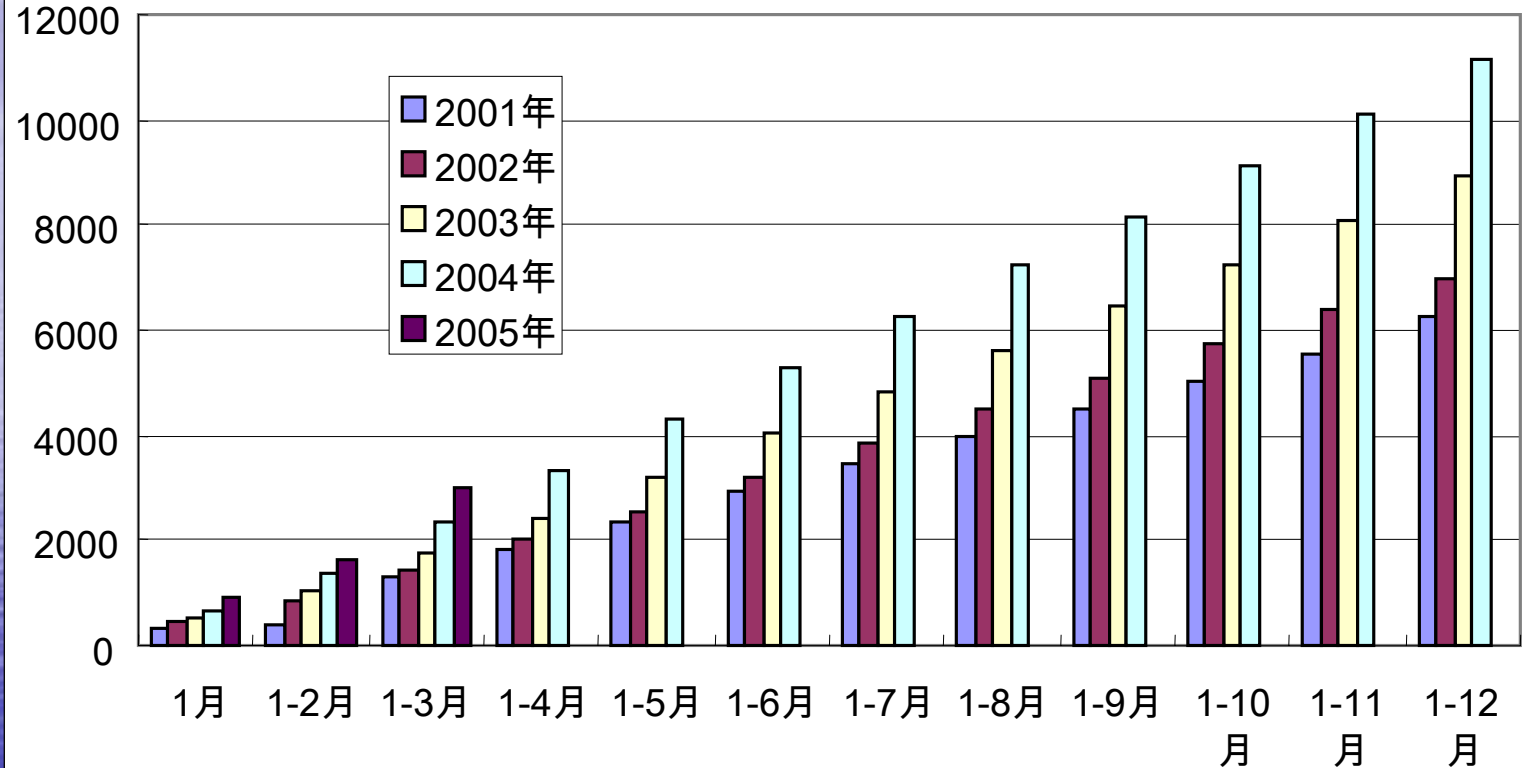
	2004	2003	2001 – 2004(average)
Growth	26.88%	32.34%	25.68%

The growth of electric tools production



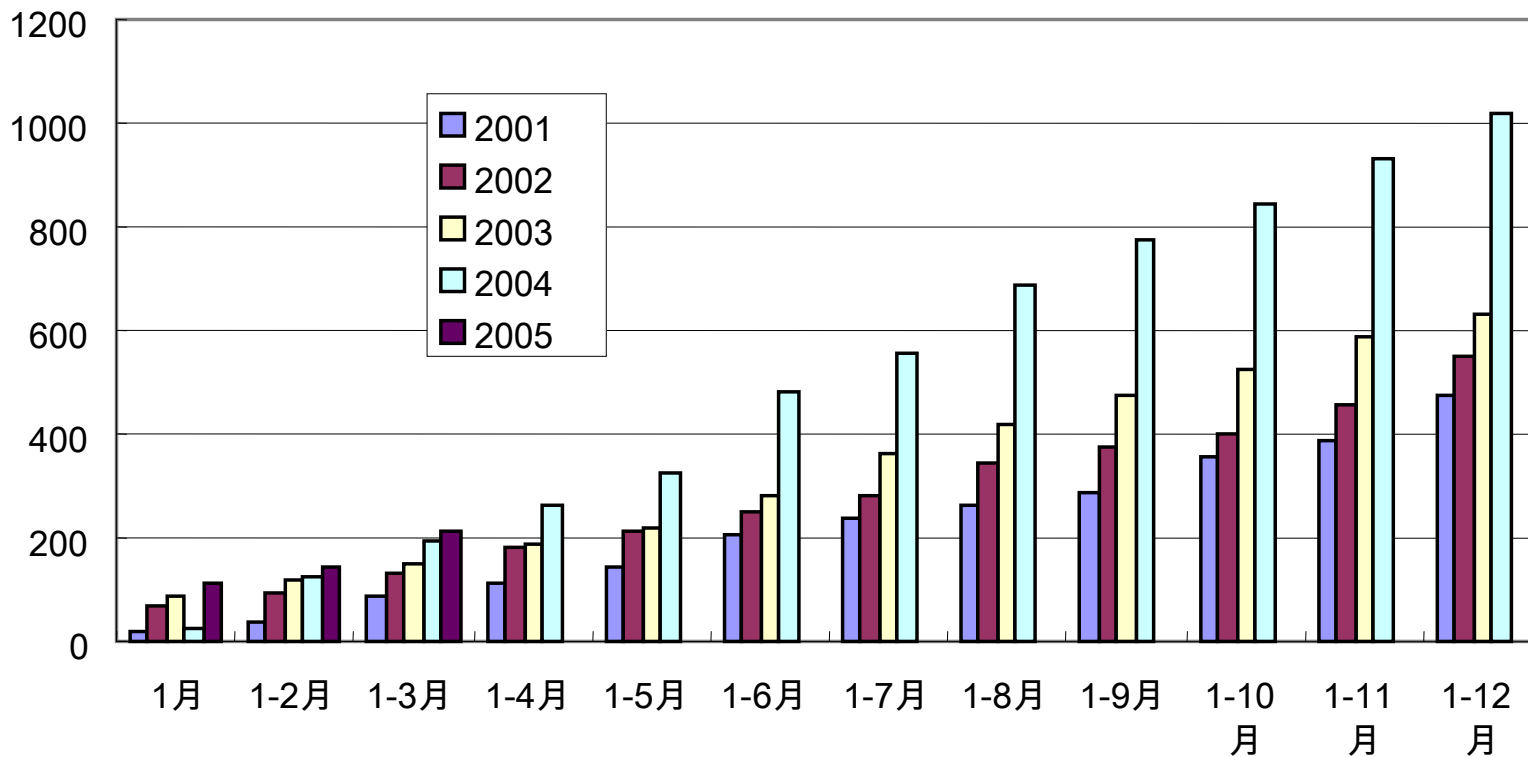
	2004	2003	2001 – 2004(average)
Growth	22.47%	35.33%	23.27%

the growth of alternator production



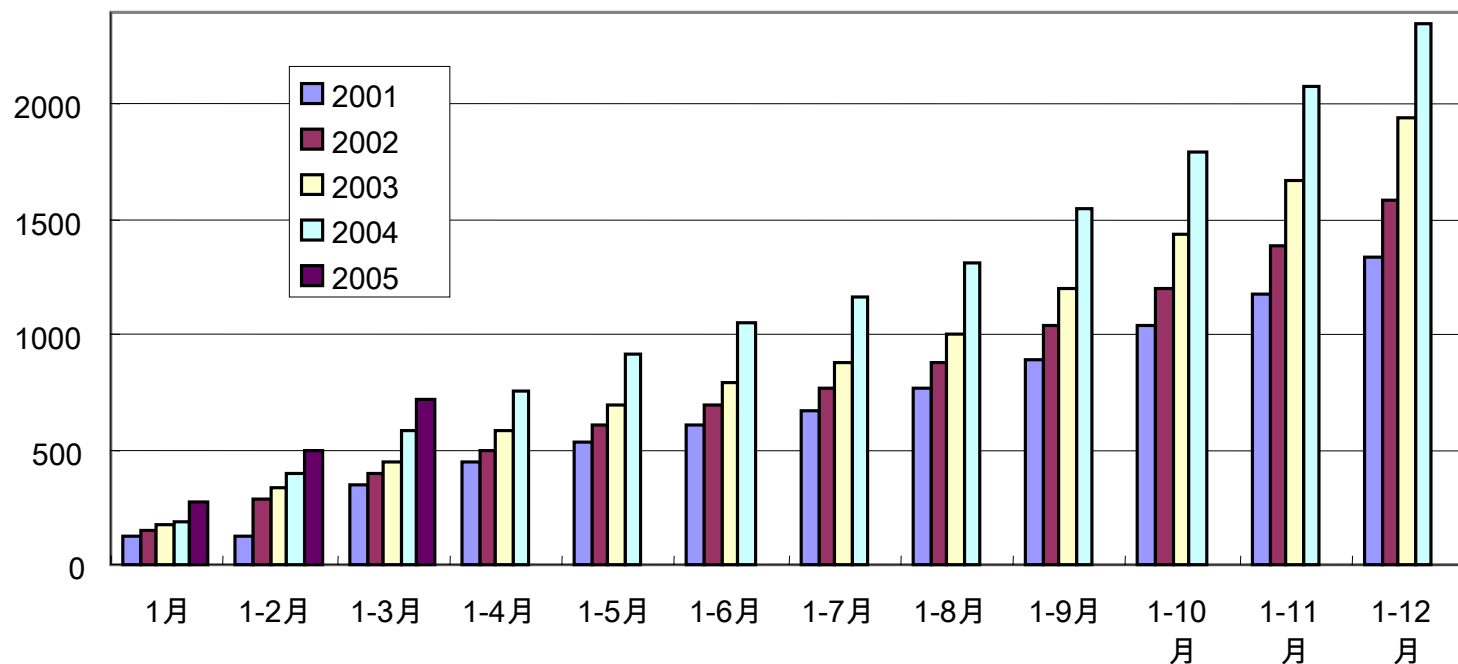
	2004	2003	2001 – 2004(average)
Growth	25.33%	27.34%	19.62%

The growth of civil watercraft production



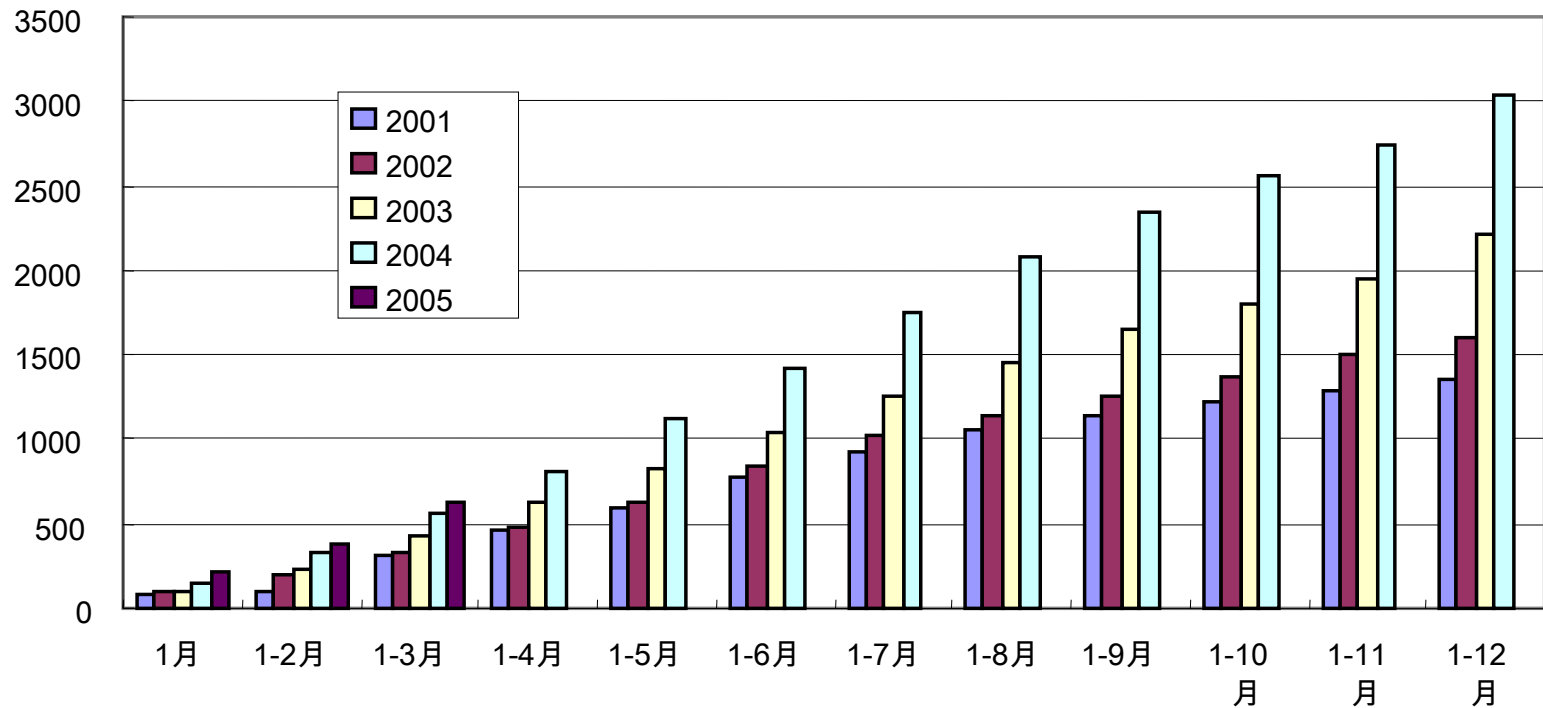
	2004	2003	2001 – 2004(average)
Growth	61.30%	15.49%	28.55%

The growth of family washing machine production



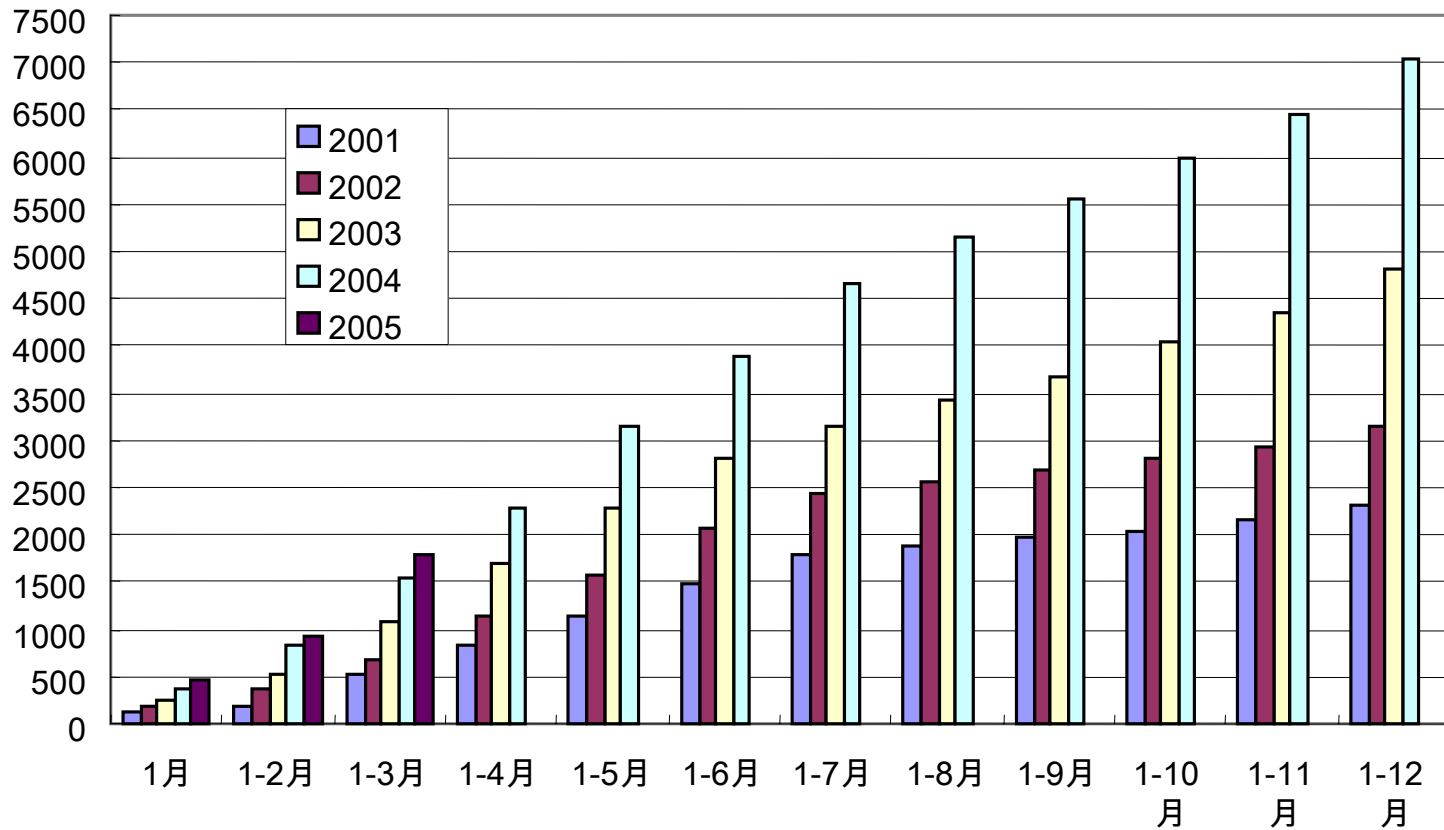
2004	2003	2001 – 2004(average)
Growth 20.91%	22.41%	19.01%

The growth of family refrigerator production



	2004	2003	2001 – 2004(average)
Growth	37.41%	38.07%	31.21%

The growth of air conditioner production



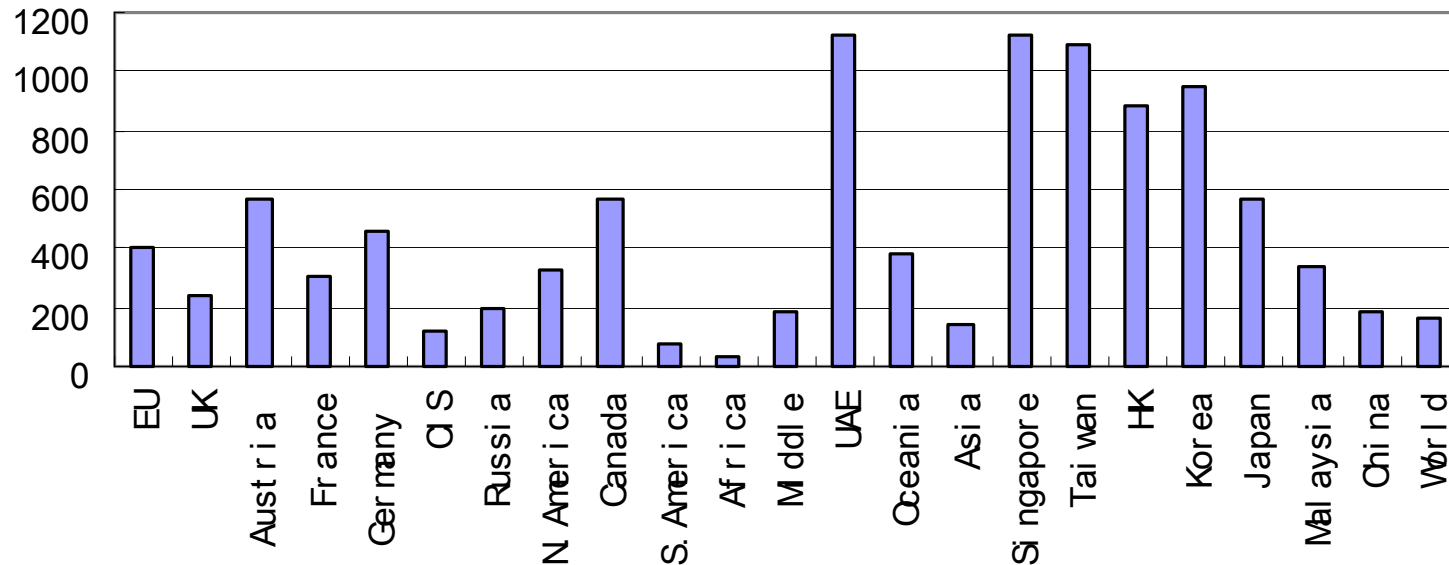
	2004	2003	2001 – 2004(average)
Growth	46.62%	53.50%	51.17%

In the long run, China's iron & steel industry will have a great prospect

- **China's economy will maintain high speed growth in a long period**
- **The three main factors propelling the steel demand will be fixed asset investment, consumption and export**
- **With the growing economy in middle and west areas, the construction of infrastructure in these regions will be the new focus in the next stage**
- **Along with the growth of average GDP, the domestic consumption will increase continually.**
- **China will play the role of world workshop for quite a long time.**

steel consumption in main countries and areas in 2002

kg/ per capita



Although China's steel output will be over 300 million tons, the average consumption is only slightly higher than the world average level, far behind the level in developed countries. For each 1kg increase in per capita consumption, the total steel output will increase by 1.3 million tons.

Watch closely the impact of state related industry policies

- **The State Iron & Steel Industry Development Policy (approved by Standing Committee of State Council on 20th April, 2005.)**
 1. **The size of iron & steel industry should be rationally controlled to meet the need of economic and social development.**
 2. **Strengthen the effort of adjusting and restructuring iron & steel industry.**
 3. **Optimise the structure of the iron & steel industry and benefit the economic development.**
 4. **Upgrade the iron & steel industry technology by improvement and innovation.**

Watch closely the impact of state related industry policies (continued)

- 5. Further develop the recycling economy to lower the energy and material consumption and enhance the comprehensive material utilization.**
- 6. To utilize the domestic and international resources to establish stable resource supply system of the iron & steel industry.**
- 7. Raise the iron consumption efficiency and encourage new substitute material development.**
- 8. Deepen the mechanism reform of iron & steel industry to perfect related regulation and industry policies.**

Watch closely the impact of state related industry policies (continued)

- Ten measures to promote the iron & steel industry sustainable development (National Development & Reform Commission on 29th April)
 1. Rationally adjust the iron & steel industry production size.
 2. Greatly enhance the concentration of iron & steel industry.
 3. Actively adjust iron & steel industry layout.
 4. Quickly optimise the iron & steel products structure.
 5. Strengthen the innovation capability of iron & steel enterprises.

Watch closely the impact of state related industry policies (continued)

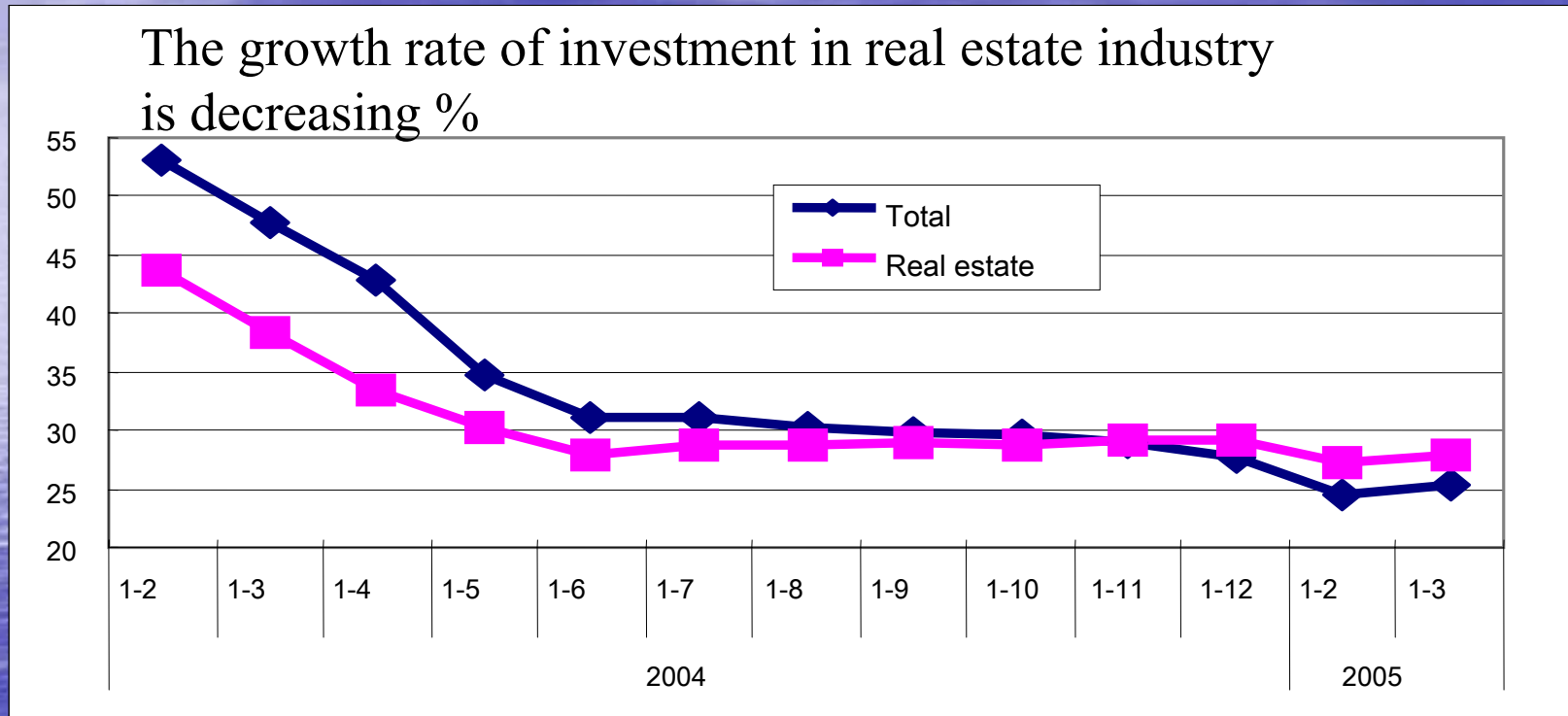
6. Speed up the development of recycling economy.
7. Rationally use the international resources.
8. Raise the efficiency of iron utilization.
9. Continue the mechanism restructure reform of iron & steel industry.
10. Improve the macro control of iron & steel industry.

The iron & steel industry development of China should target on meeting the domestic market demand, while the import & export remain as complementary supply of different products.

Watch closely the impact of state related industry policies (continued)

- Over heated investment industry
- Loan restriction
- Cancelling the export refunding for billet
- Iron ore import license
- Reducing the export refunding to some iron products
- Import duty is imposed

In short term, the iron & steel industry faces challenges



The effect of macro control is emerging. The investment on fixed assets is reducing. Especially the growth of the real estate industry is slowed down due to recently implemented policies that aimed at cooling down the overheated real estate industry.

In short term, the iron & steel industry faces challenges (continued)

In the first quarter, the growth of the output volume of most industry products decreased compared with that of last year.

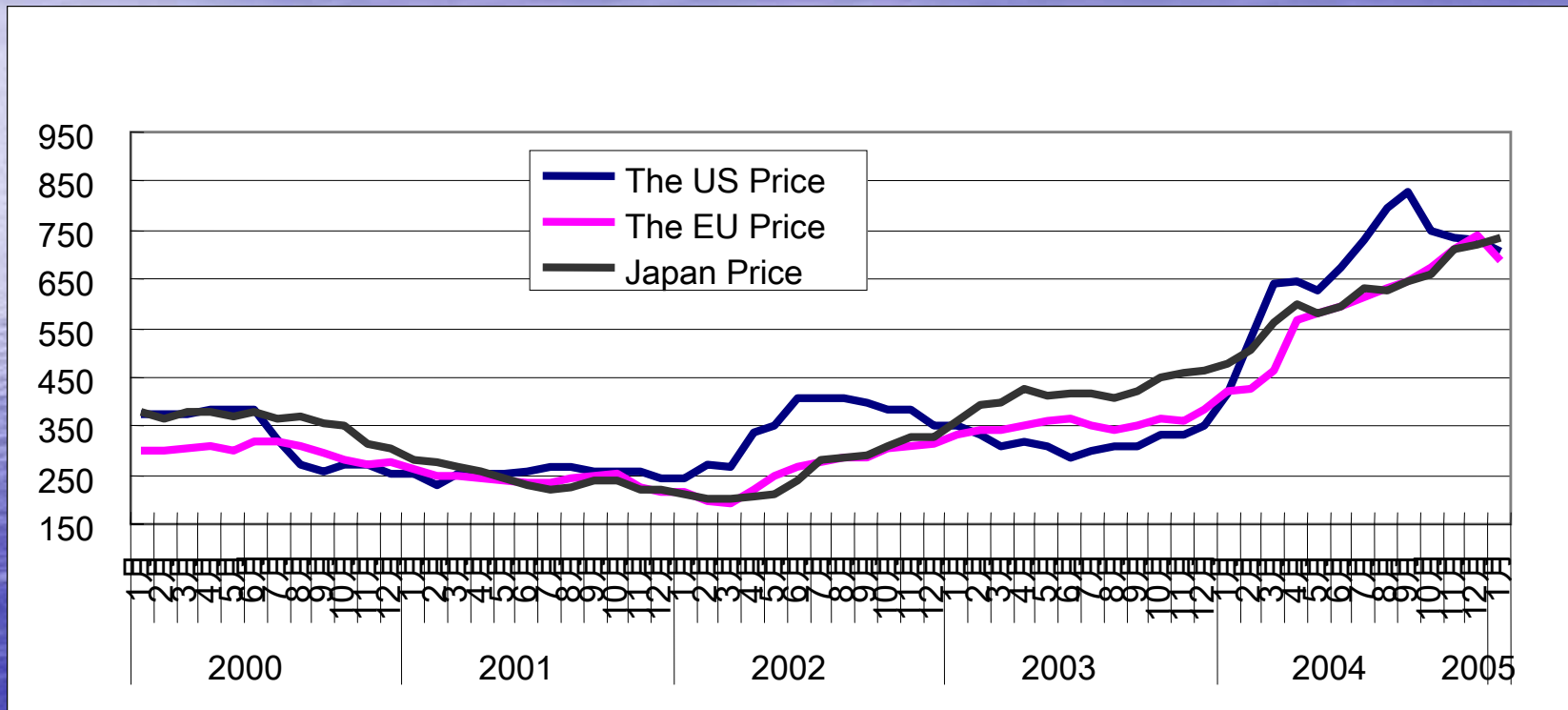
For example (growth rate)

	Q1 2005	Q1 2004	Q1 2003
Automobile	3.77%	26.88%	50.98%
Generator	38.87%	102.56%	64.68%
Refrigerator	11.15%	30.36%	
Air conditioner	17.03%	43.94%	54.99%
Cement	-4.44%	20.58%	

In short term, the iron & steel industry faces challenges (continued)

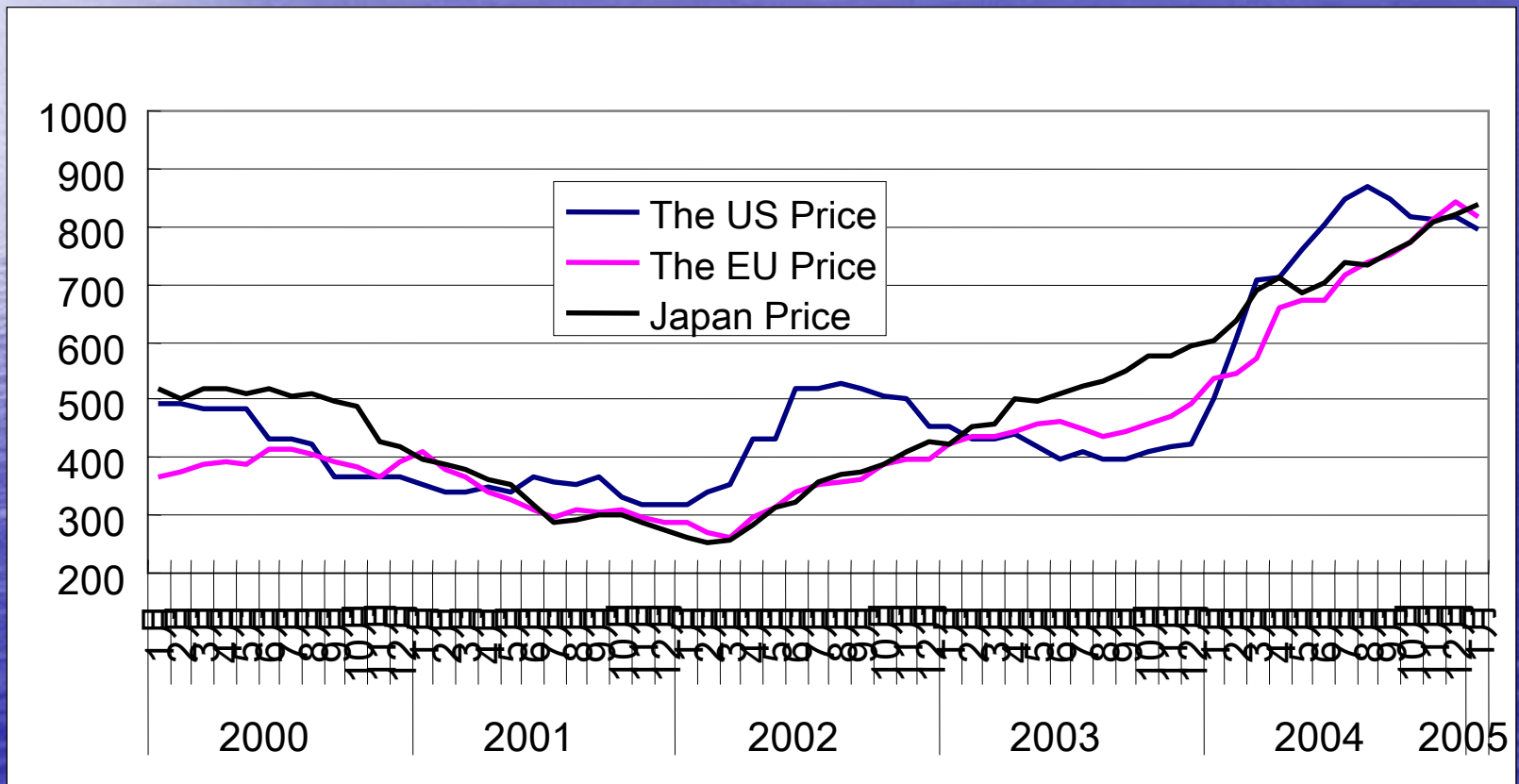
- The projects constructed in previous two years have been finished and in operation this year.
- According to the anticipation of Iron & Steel Association, there will be another 40 million tons production capacity growth in this year.
- In the first quarter, the output of crude steel was 78 million tons, a growth of 25.20% compared from last year; pig iron 73 million tons, a growth of 27.32% ; steel product 83 million tons, a growth of 22.39%.

World HRC Steel Price Trend (USD/MT)

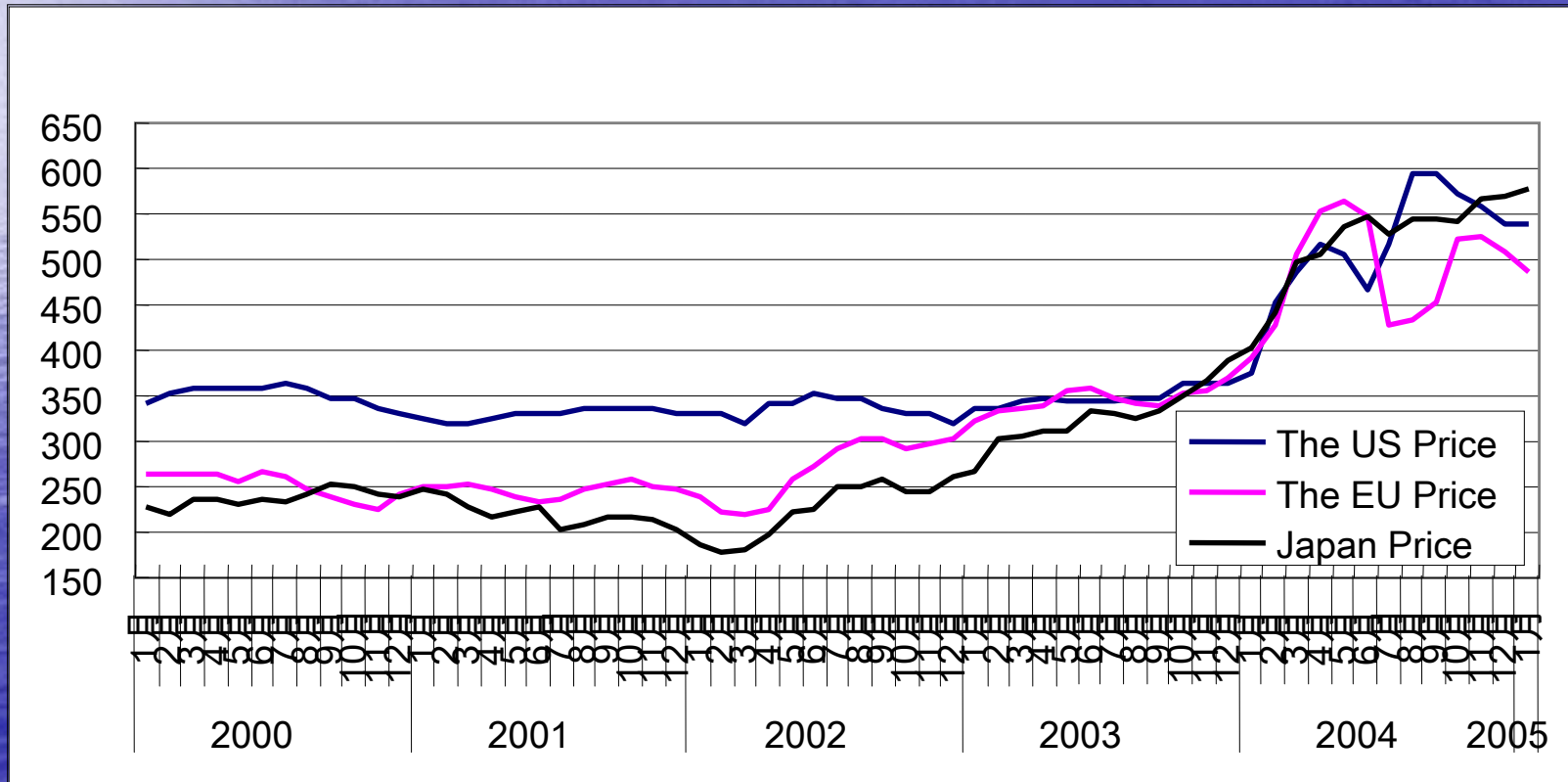


The international iron and steel price is dropping now. Some companies are cutting their output. (Source: MBR)

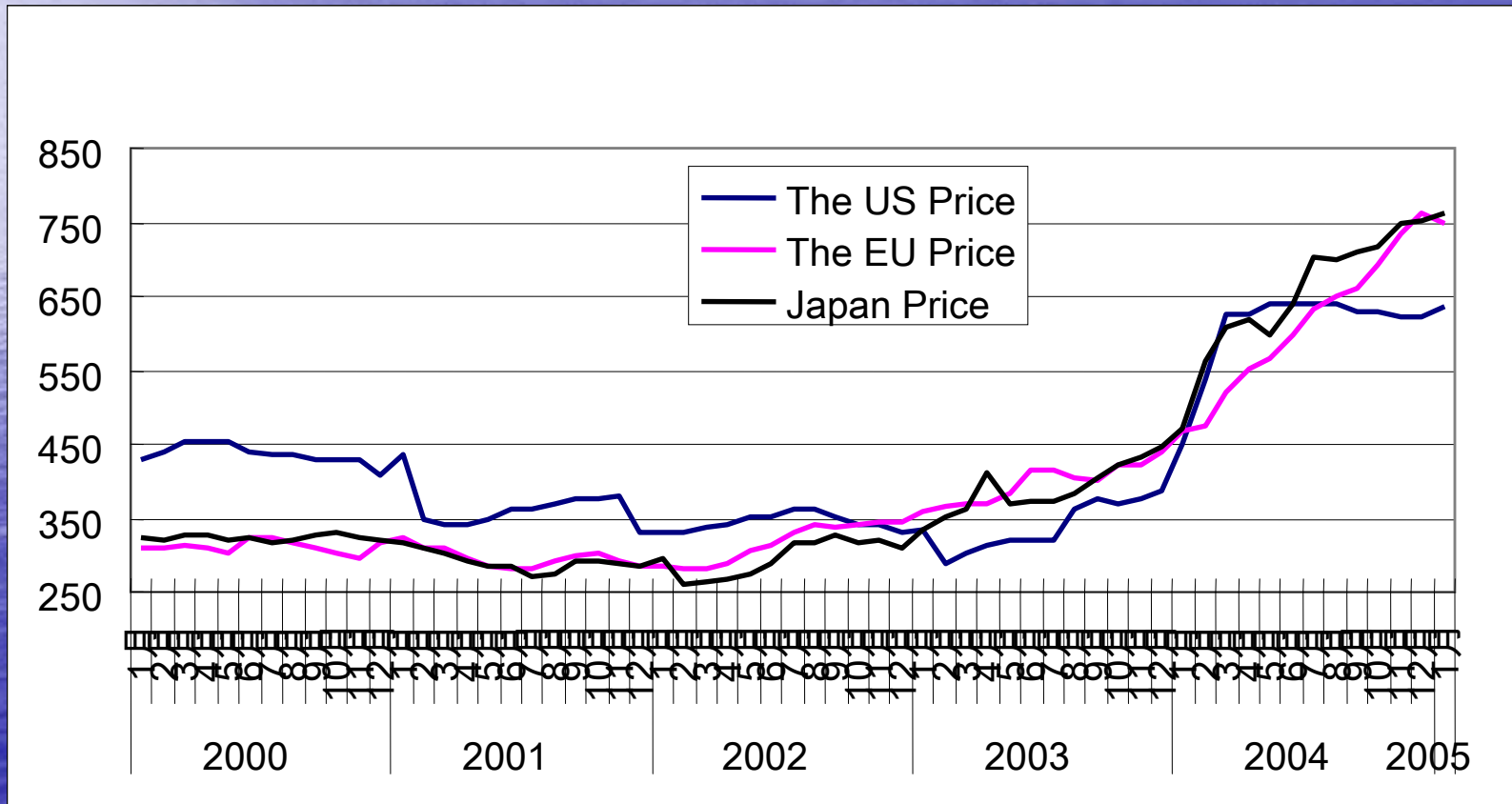
World CRC Price Trend (USD/MT)



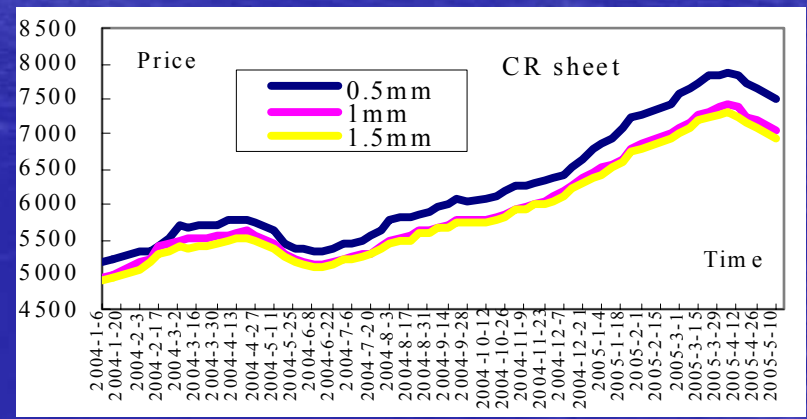
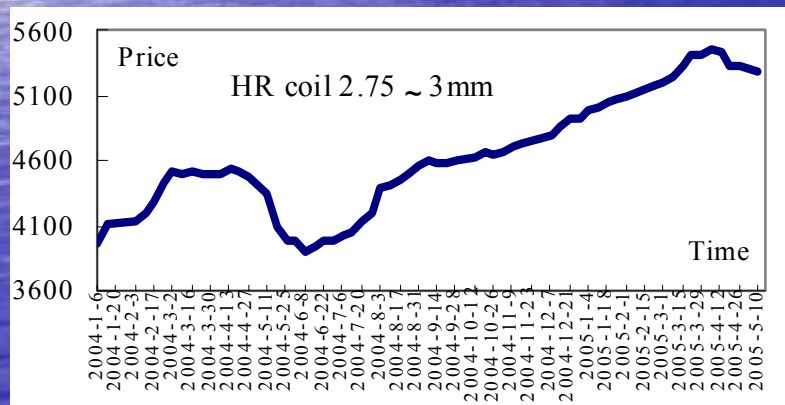
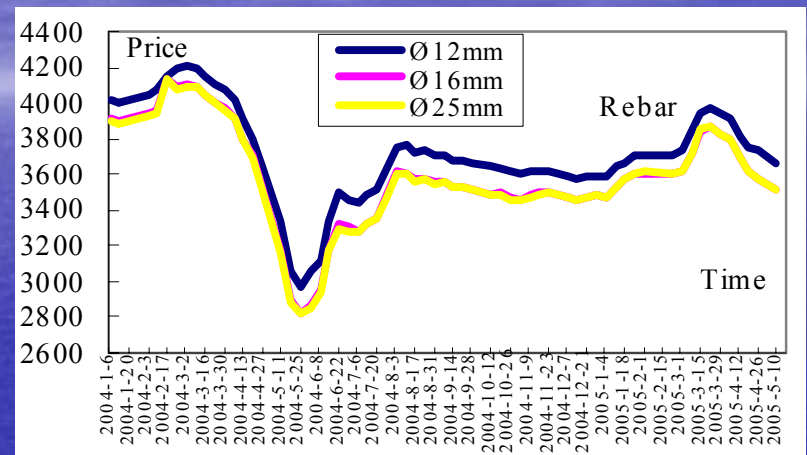
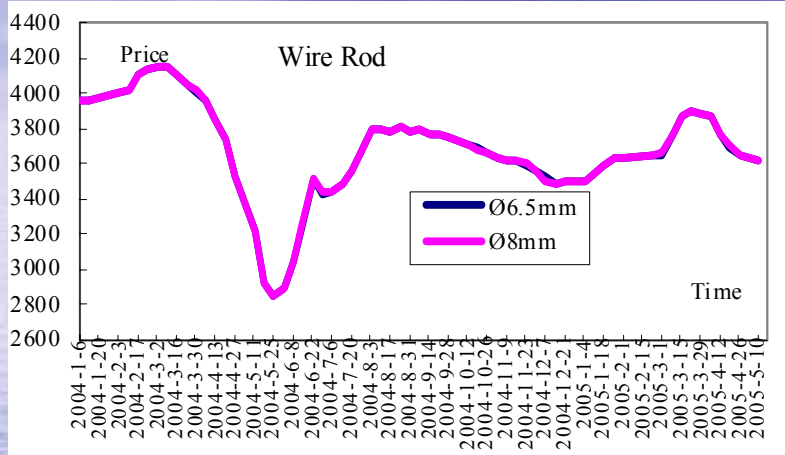
World Rebar Price Trend (USD/MT)



World Section Steel Price Trend (USD/MT)



In short term, the iron & steel industry faces challenges (continued)



The domestic steel price is also dropping. And a series of export control policies have been implemented. (Source: China Metals Weekly)

In short term, the iron & steel industry faces challenges (continued)

But, the domestic demand for iron and steel is still very strong.

- In Q1, the investment on fix assets grew by 25.3%**
- In Q1, the investment on real estate also grew by 27.8%**
- In Q1, the average income of rural residents reached 967 RMB, a 15.9% increase. At the same time, the average disposable income of urban residents reached 2938 RMB, a 11.3% increase.**
- In Q1, the total retail volume in urban areas grew 14.7%, while that of rural area grew 11.7%.**
- In Q1, the total export volume is 155.9 billion USD, an increase of 34.9% and the total import volume is 139.3 billion USD, an increase of 12.2%.**

Conclusions

- Presently, China's iron & steel industry faces the following problems:
 1. The impact from macro control on fixed assets investment
 2. The pressure from increasing output
 3. The impact from price decline in the international market
 4. The increase of production cost
- In the long run, China's iron and steel industry still has vast growth space for the following reasons:
 1. The China's economy will remain a fast growth in the near future
 2. The urbanisation of rural areas in China and the infrastructure construction of western areas
 3. The growth of average income will enhance consumption capability
 4. China will remain the position of world workshop

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- Note: data from China Statistic Bureau except noted

The background is a vertical gradient of blue, transitioning from a lighter, hazy blue at the top to a deeper, more saturated blue at the bottom. On the left side, there is a bright sun flare that creates a horizontal band of white and light blue light across the middle of the image. The overall effect is serene and clean.

**Thanks for your
attention**