

DIRECTORATE FOR SCIENCE, TECHNOLOGY AND INDUSTRY

**RECENT STEEL MARKET DEVELOPMENTS**

**Prepared for the OECD Special Meeting  
at High-Level on Steel Issues**

**held on 28-28 June 2004**

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### **Steel consumption**

World steel demand has increased steadily since 1999, but this increase has been accelerating since 2002 and represents around 50 million tonnes more per year. In 2003, world steel consumption increased by 6.6% compared to 2002, and further increases by 6% in 2004 and 5% in 2005 are expected.

This strong surge in steel consumption is the result of the dramatic acceleration of domestic steel demand in China where steel consumption that had been growing by an average 2.6% a year over the period 1995 to 2000 has increased by some 25% a year since 2001 and is expected to continue to grow at a very rapid pace also in 2004 and 2005. In comparison, steel consumption in the rest of the world declined by 4.2% in 2001 and since then has grown at an annual rate of 2.1%.

In the OECD area, steel consumption declined by 0.5% in 2003 compared to 2002, reflecting an 8.9% decrease in North America that offset a 2.6% increase in Europe and a 4.5% increase in the Asian-Pacific area. For 2004, with better economic conditions in the area, steel consumption in the OECD is expected to grow by close to 3%, with the North American market catching most of the increase (+5.7%) and more moderate growth in Europe (+2.0%) and Asia (+1.3%). This trend is expected to continue also in 2005.

Outside the OECD in 2003, while steel consumption declined in Africa, it increased by 4.8% in the other Asian economies and by 7.2% in the NIS. Similar developments are expected to take place in 2004, but probably at a lower pace and the trend should continue in 2005.

### **Steel Trade**

World trade in steel in volume increased in 2003 by 2.6% compared with 2002 and reached a new record level at 247 million tonnes (excluding intra-EU trade). World trade in steel accounted for 29.0% of world steel consumption in 2003. Steel exports from the OECD area remained at the 2002 level of 120 million tonnes while imports declined 7.9% from the 2002 level. Most of the exports were redirected to China. China steel imports in 2003 jumped by 48.0% over the 2002 level and reached an unprecedented 43.0 million tonnes.

In 2004, world steel trade is expected to increase, by a further 1.2%. As a result of growing demand, Chinese steel imports should remain at the very high level reached in 2003 and could even increase slightly. Similarly, steel imports in the OECD will pick up and exports should decline modestly. Exports of steel from the NIS are expected to continue to grow, for the sixth year in a row, and should pass 70 million tonnes, representing 28.6% of world exports.

## **Crude steel production**

World crude steel production followed the same developments as consumption and reached a new record level of 964 million tonnes. In 2004, for the first time in history steel production is expected to pass the 1 billion tonnes level and should reach 1 016 million tonnes, a 5.3% increase over 2003. This trend will continue in 2005 when production could reach 1 065 million tonnes.

As with consumption, this is mainly the result of the very rapid expansion of steel production in China. Steel production in China increased by 93 million tonnes between 2000 and 2003, at an annual growth rate of 20%. In the rest of the world, crude steel production decreased by 3% in 2001 and since then increased at an annual rate of 3.2%.

In the OECD area, steel production increased by 1.6% in 2003 and is expected to increase at a similar rate in 2004 and in 2005 when production will pass the 500 million tonne mark. Production in the NIS increased by 6.1% in 2003 and should continue to increase by 6% in 2004. In the rest of the world, after the 6% growth recorded in 2003, steel production should not grow by more than 2% this year and in 2005.

## **Prices, capacity and raw materials**

In spite of the good developments in the steel market worldwide, problems have arisen. Steel prices have increased substantially and the industry is now profitable. However, the margins have been reduced due to the dramatic increase in prices of raw materials and transportation. There are also some risks of shortages for scrap and coke.

The important increases in prices of most steel products at the beginning of 2004 have created problems for many steel consuming industries. While prices for raw materials have been declining since May of this year, they are expected to remain at relatively high levels for the rest of this year.

Together with the increase in raw material prices, transportation prices also increased dramatically. Charter rates for large vessels increased fourfold in one year, from 17 000 \$/day in January 2003 to 68 000 \$/day in early 2004. However, recently these freight rates started declining and may continue to do so in light of the restrictions on lending introduced by the Chinese Government to slow growth.

In recent years, the gap between capacity and production has been reduced. This reduction has been particularly important in the OECD area, where steelmaking capacity has recorded a net reduction of 41.5 million tonnes, or 6.7%; a further net reduction of some 15 million tonnes is expected by 2005. In the NIS, most of the obsolete inefficient excess capacity has been closed. However, with increasing domestic demand and a high level of exports, some new capacity is expected to come on stream in the near future.

In the non-OECD area, capacity increases are taking place in Brazil, India and the Middle East. But of course, at world level, China is the country that is expanding its capacity more quickly. Even if in recent weeks the Chinese Government has decided to reduce, delay or stop the construction of new steel plants, capacity is expected to increase by some 100 million tonnes between 2003 and 2005.

Of course such an increase in capacity leads to increasing demand for raw materials.

Most of the developments in the steel market and particularly all price movements are now closely linked to developments taking place in China. Some raw materials markets are more sensitive than others. This is particularly the case for steel scrap and metallurgical coke.

Coke consumption is increasing rapidly and prices of metallurgical coke jumped from 143 \$/tonne in 2003 to some 440 \$/t at the beginning of 2004. Several steel plants in the world and recently in India and Ukraine were obliged to cut production as blast furnaces were idled because of coke shortages.

Iron ore prices increased by some 20% in the first months of 2004 but should continue to rise as demand from China is declining and the return to almost normal prices can be expected quite soon.

On the contrary, steel scrap prices skyrocketed between July 2003 and February 2004; in some countries increases of over 180% occurred. As from April 2004 scrap prices declined by 17.6% from the peak and by mid May a further decrease of 50 \$/tonne was recorded as demand was lower. However, it is expected that scrap prices will remain in the near future at a higher price levels than in previous years. Compared to the low price level of October 2001, the level reached in January February was 750% higher).

Tensions and difficulties in raw material markets may well last until the end of 2005, by which time adjustments made by suppliers will likely help to ease the difficulties.

## Recent Steel Market Statistics and Outlook

### APPARENT STEEL CONSUMPTION

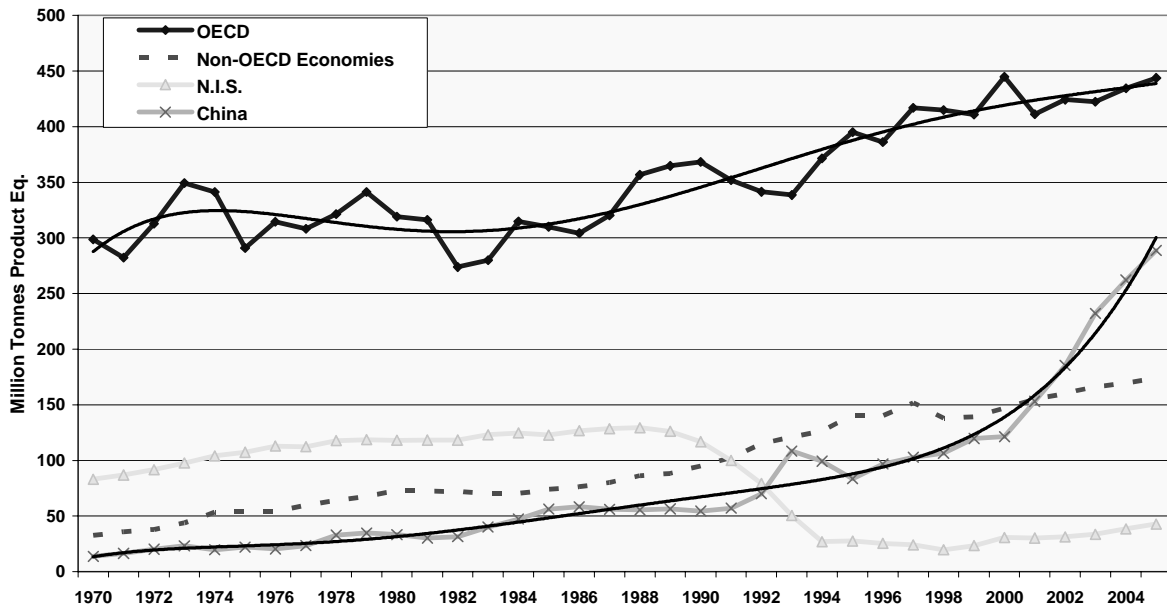
Million tonnes product equivalent

	1998	1999	2000	2001	2002	2003	2004	2005	
USA	118.40	112.30	117.05	100.18	104.44	92.18	98.54	102.70	USA
Canada	16.87	15.78	17.69	14.52	15.53	15.12	16.18	16.66	Canada
Mexico	9.21	9.24	13.46	12.16	13.09	13.91	13.48	13.70	Mexico
North America	144.48	137.32	148.20	126.86	133.06	121.21	128.20	133.06	North America
EU(15)	143.33	140.50	147.04	141.94	141.92	145.41	146.74	148.50	EU(15)
Other Europe	29.95	26.74	30.96	28.35	29.12	30.00	32.13	33.78	Other Europe
Total Europe	173.28	167.24	178.00	170.29	171.04	175.41	178.87	182.28	Total Europe
Japan	67.07	66.49	75.13	70.53	69.49	72.52	72.96	71.95	Japan
Korea	23.83	33.55	37.88	37.70	43.67	44.73	45.69	47.67	Korea
Australia &N-Z	6.34	6.22	5.64	5.88	7.11	8.47	8.75	8.93	Australia &N-Z
Pacific area	97.24	106.26	118.65	114.11	120.27	125.72	127.40	128.55	Pacific area
Total OECD	415.00	410.82	444.85	411.26	424.37	422.34	434.47	443.89	Total OECD
Brazil	14.74	12.82	16.14	15.64	15.43	15.37	15.80	15.40	Brazil
OECD Steel Commit.	429.74	423.64	460.99	426.90	439.80	437.71	450.27	459.29	OECD Steel Commit.
Other Latin America	27.44	24.53	28.37	27.68	26.59	27.63	28.82	29.22	Other Latin America
India	12.70	11.71	12.23	12.04	11.16	12.26	13.02	13.82	India
Asean(5)	20.67	20.21	21.32	21.61	20.81	23.82	24.74	25.60	Asean(5)
Oth Asia	16.63	23.15	23.98	25.20	28.35	28.38	29.35	30.32	Oth Asia
Total Asia	29.70	29.43	32.26	29.32	33.54	34.49	34.79	35.70	Total Asia
South Africa	67.00	72.79	77.56	76.13	82.70	86.69	88.88	91.62	South Africa
Other Africa	3.77	3.63	3.85	3.95	5.19	4.44	4.54	4.82	Other Africa
Total Africa	7.15	6.83	7.64	8.79	9.97	9.96	9.76	9.95	Total Africa
Middle East	10.92	10.46	11.49	12.74	15.16	14.40	14.30	14.77	Middle East
Other non-OECD Eco	41.81	40.94	51.06	51.00	51.81	51.74	53.24	53.24	Other non-OECD Eco
Non OECD mkt eco	32.48	31.35	29.45	38.32	35.84	37.41	37.44	38.47	Non OECD mkt eco
CEEC(2)	123.10	126.31	130.73	139.23	144.86	150.76	153.64	158.68	CEEC(2)
Rusia	137.84	139.13	146.87	154.87	160.29	166.13	169.44	174.08	Rusia
Ukraine	2.97	2.20	3.63	3.05	3.12	3.28	3.62	3.96	Ukraine
Other NIS	12.41	16.19	20.22	19.87	20.57	20.81	21.85	23.60	Other NIS
N.I.S.	1.85	2.06	3.40	3.83	4.73	5.97	7.77	8.86	N.I.S.
CEECs & NIS	2.28	2.80	3.44	3.42	2.84	3.46	5.16	6.30	CEECs & NIS
China	16.54	21.05	27.06	27.12	28.14	30.24	34.78	38.76	China
Total WORLD	19.51	23.25	30.69	30.17	31.26	33.52	38.40	42.72	Total WORLD
China	106.42	119.64	121.23	153.00	185.37	232.14	262.09	288.68	China
Total WORLD	678.77	692.84	743.64	749.30	801.29	854.13	904.40	949.38	Total WORLD

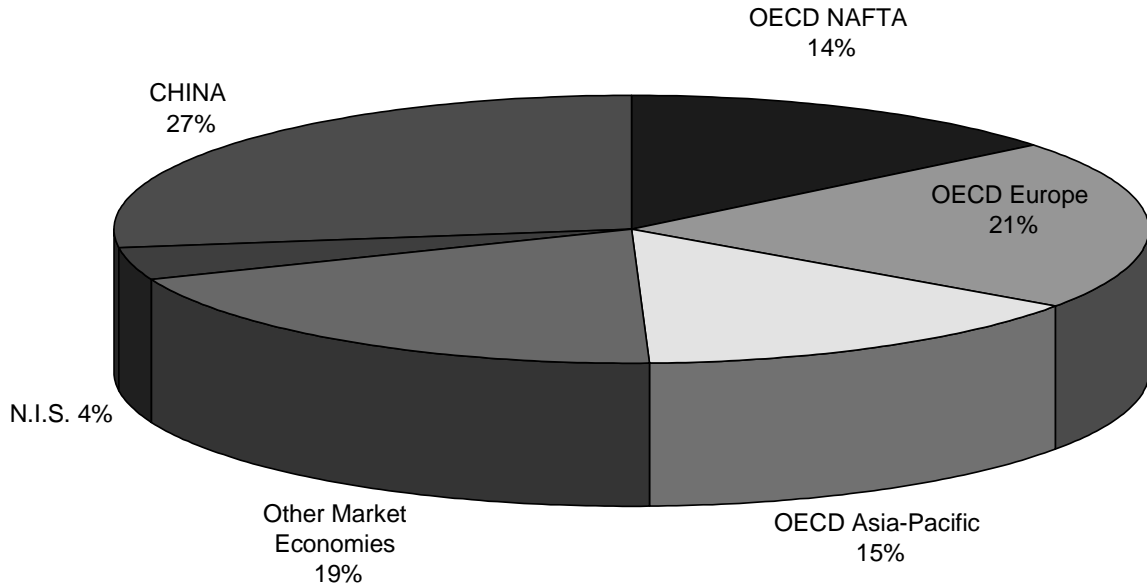
### Recent Steel Market Statistics and Outlook

Crude steel production	Million tonnes								Crude steel production
	1998	1999	2000	2001	2002	2003	2004	2005	
USA	98.7	97.4	101.8	90.1	92.2	90.4	91.0	95.5	USA
Canada	15.8	16.1	16.5	15.2	15.9	15.8	16.1	16.3	Canada
Mexico	14.2	15.3	15.6	13.3	14.1	15.2	14.7	14.8	Mexico
EU(15)	159.9	155.2	163.4	158.5	158.7	160.3	163.2	166.5	EU(15)
other Europe	39.1	36.6	39.9	39.3	41.0	44.3	47.4	47.6	other Europe
Japan	93.6	94.2	106.4	102.9	107.8	110.5	109.8	108.0	Japan
Korea	39.9	41.0	43.1	43.9	45.4	46.3	47.3	49.2	Korea
Australia & N-Z	9.7	9.0	7.8	7.9	8.3	8.4	8.9	8.9	Australia & N-Z
North America	128.7	128.9	133.9	118.6	122.2	121.4	121.8	126.6	North America
Europe	199.0	191.8	203.2	197.8	199.7	204.7	210.6	214.1	Europe
Pacific area	143.2	144.2	157.4	154.6	161.4	165.2	166.1	166.2	Pacific area
Total OECD	470.8	464.9	494.5	471.0	483.3	491.2	498.5	506.8	Total OECD
Brazil	25.8	25.0	27.9	26.7	29.6	31.2	32.2	31.5	Brazil
other Latin America	11.5	10.7	12.6	11.8	12.6	13.3	13.4	13.4	other Latin America
Latin America	37.2	35.7	40.5	38.6	42.2	44.4	45.7	44.9	Latin America
India	23.5	24.3	26.9	27.3	28.8	31.8	32.8	33.9	India
ASEAN(5)	7.8	8.3	9.6	9.9	10.6	11.2	12.0	12.7	ASEAN(5)
Other Asia	18.2	16.7	18.2	18.8	19.7	20.3	19.2	19.5	Other Asia
total other Asia	49.5	49.3	54.8	56.0	59.1	63.3	64.0	66.1	total other Asia
Middle East	13.1	13.7	14.7	16.3	17.7	18.6	19.4	20.4	Middle East
Other Africa	1.1	1.4	1.4	1.4	1.5	1.4	1.3	1.4	Other Africa
South Africa	8.0	7.9	8.5	8.8	9.1	9.5	9.3	9.5	South Africa
Total Africa	9.1	9.2	9.9	10.2	10.6	10.9	10.6	10.9	Total Africa
Non-OECD economies	108.9	107.9	119.8	121.1	129.6	137.1	139.7	142.3	Non-OECD economies
CEEC(2)	8.6	6.2	6.8	7.0	7.4	7.6	7.9	8.0	CEEC(2)
Russia	43.8	51.5	59.4	59.0	59.8	62.7	64.6	67.2	Russia
Ukraine	24.5	27.5	31.8	33.1	34.1	36.9	39.3	39.9	Ukraine
Other NIS	6.2	7.2	8.1	8.1	7.8	8.4	10.7	12.5	Other NIS
N.I.S.	74.4	86.1	99.3	100.1	101.6	108.0	114.6	119.5	N.I.S.
NIS & CEEC	83.0	92.4	106.1	107.1	109.0	115.6	122.5	127.5	NIS & CEEC
China	114.6	124.0	127.2	150.9	181.6	220.1	255.0	288.7	China
World	777.4	789.1	847.6	850.0	903.4	964.1	1015.6	1065.4	World

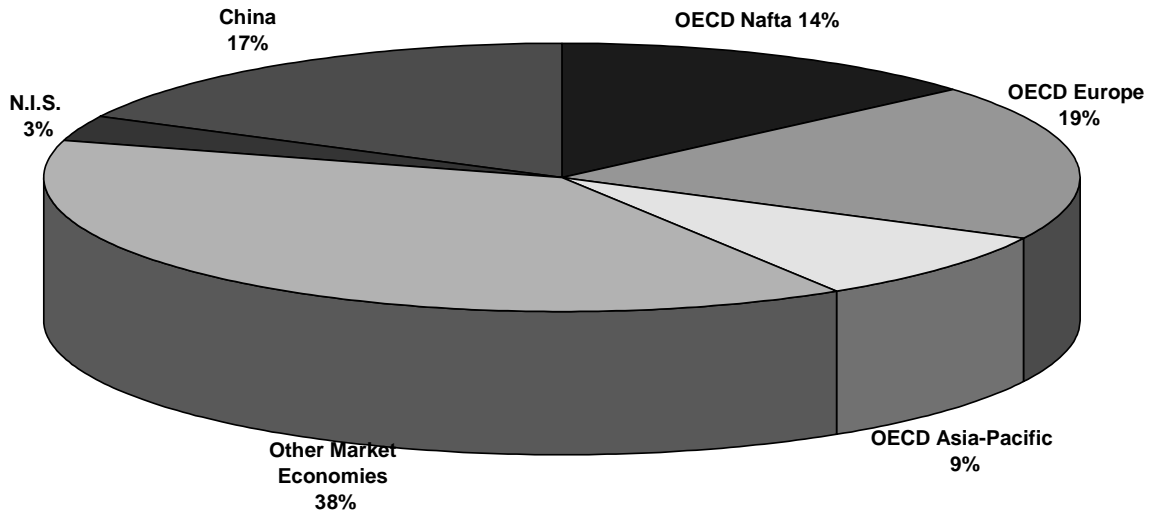
### World Apparent Steel Consumption by Area



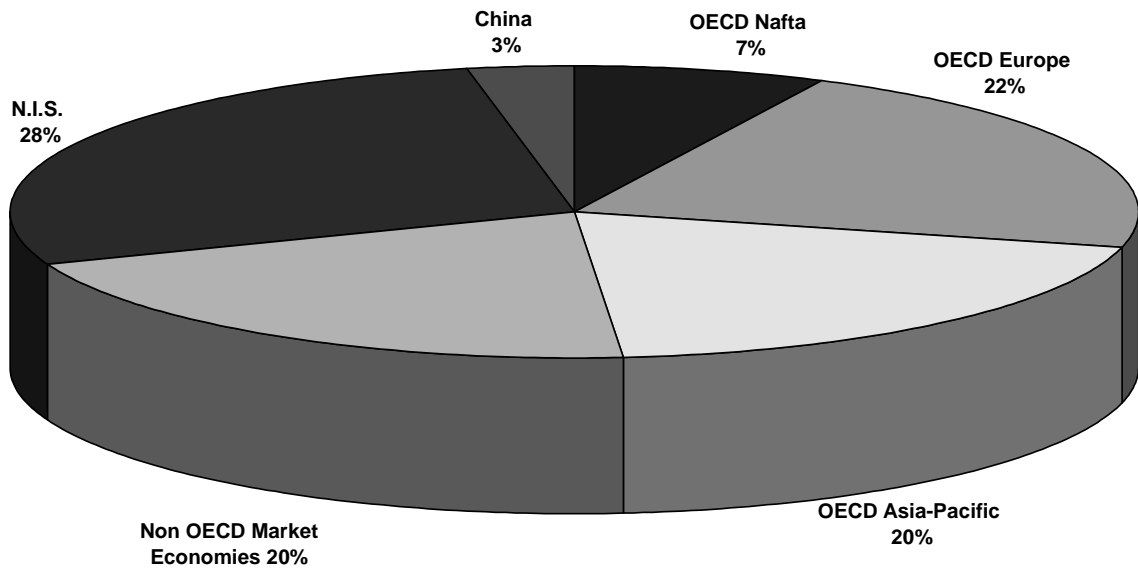
### World Apparent Steel Consumption in 2003



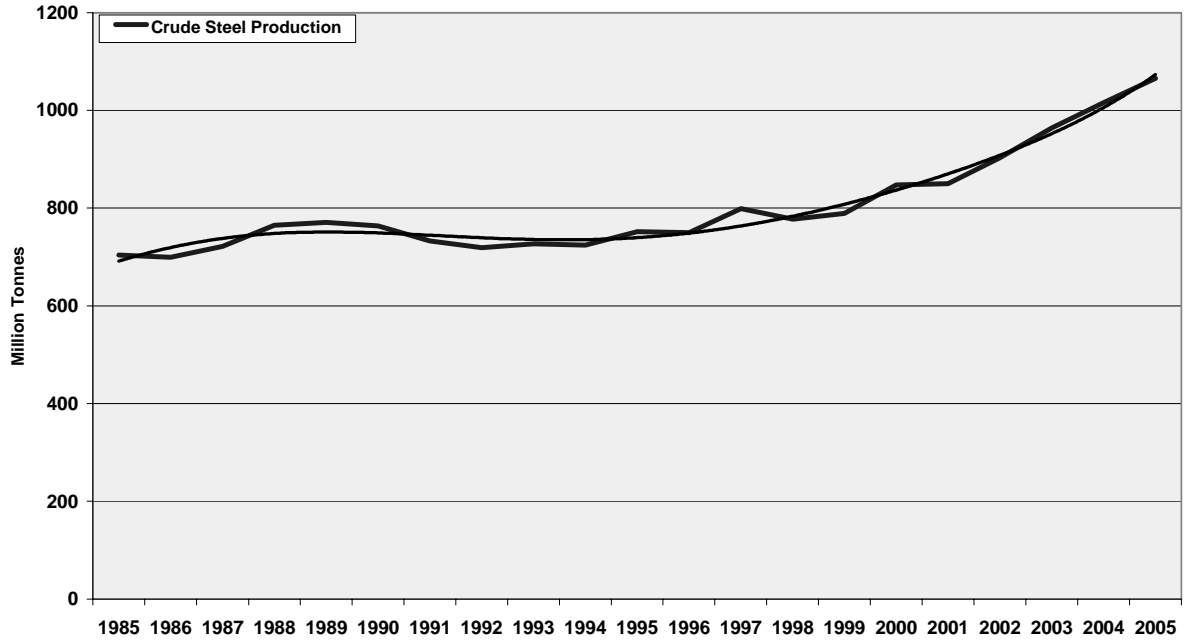
### World Steel Imports in 2003



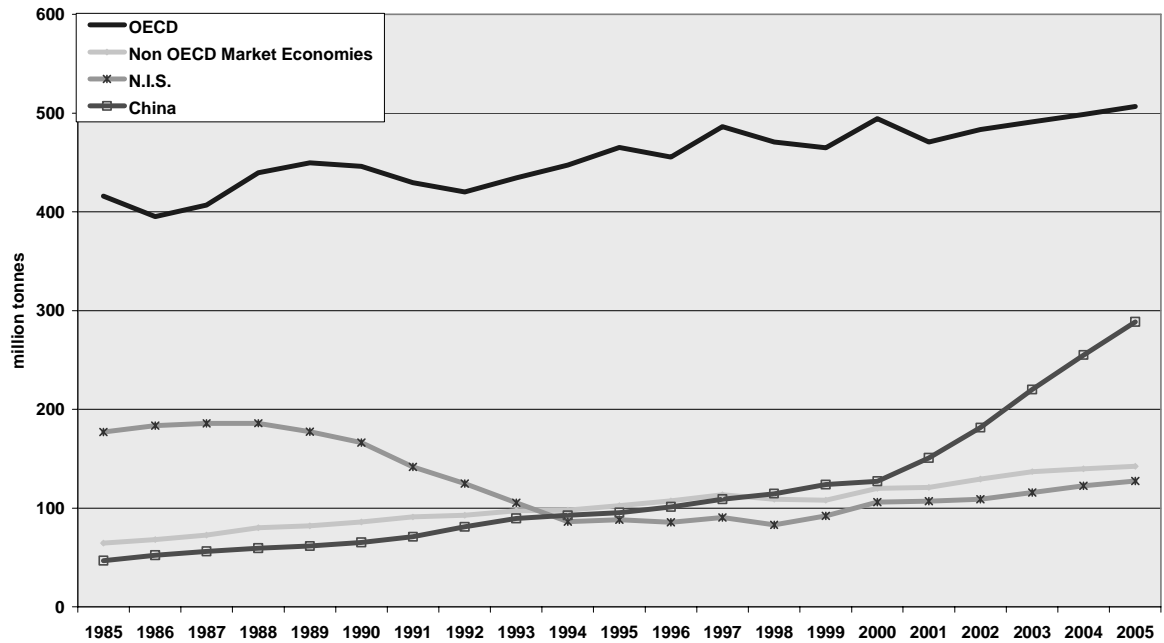
### World Steel Exports in 2003



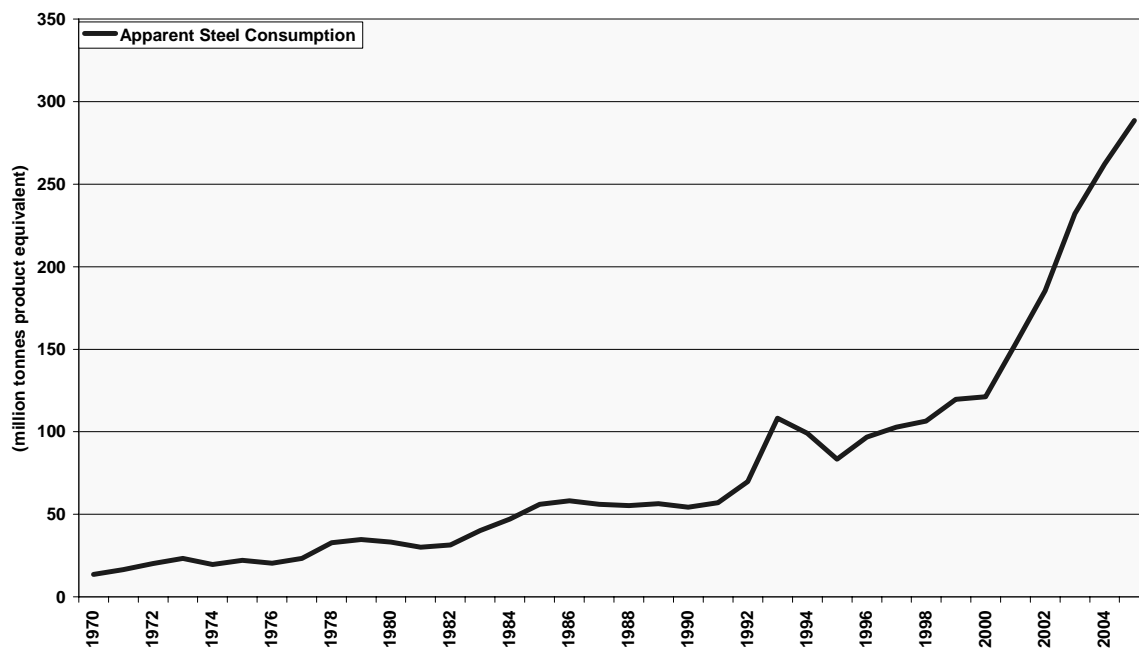
### World Crude Steel Production



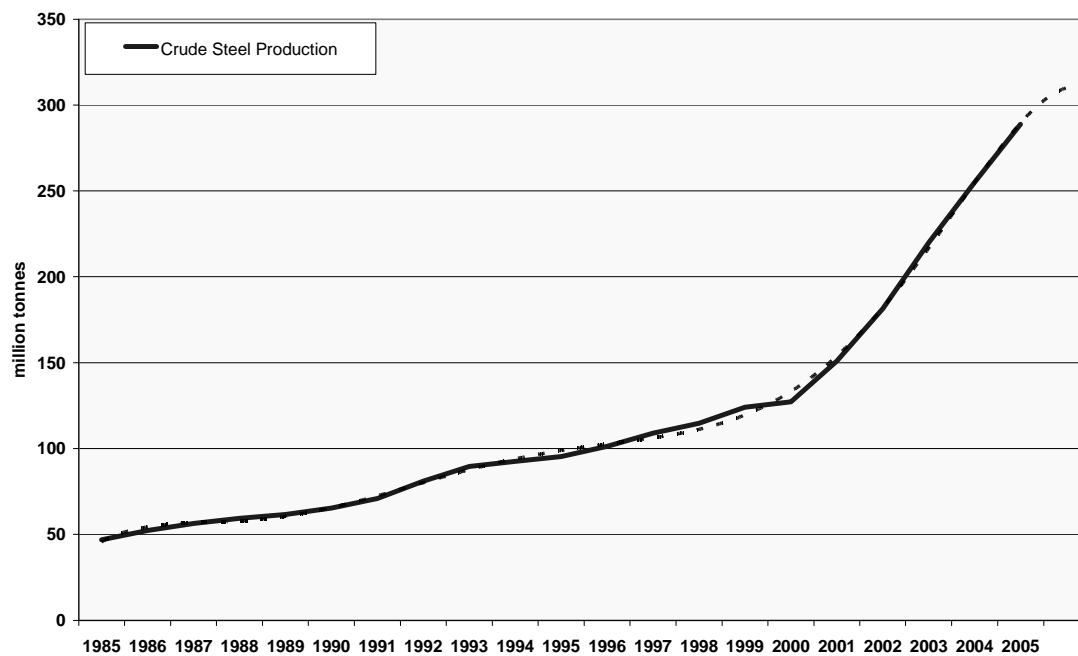
### World Crude Steel Production by area



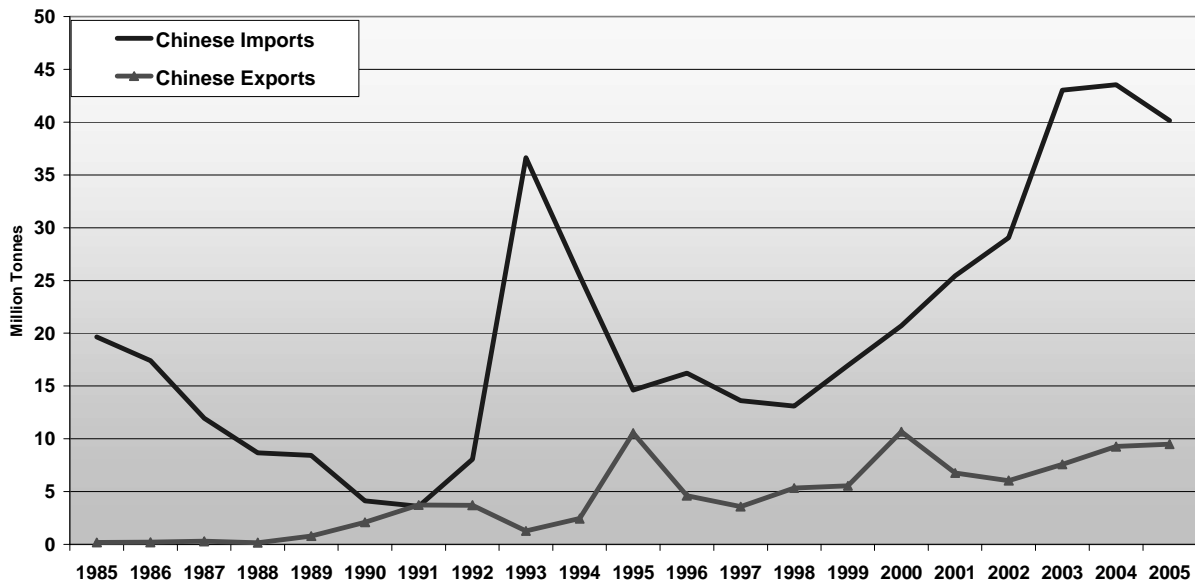
### China's Apparent Steel Consumption



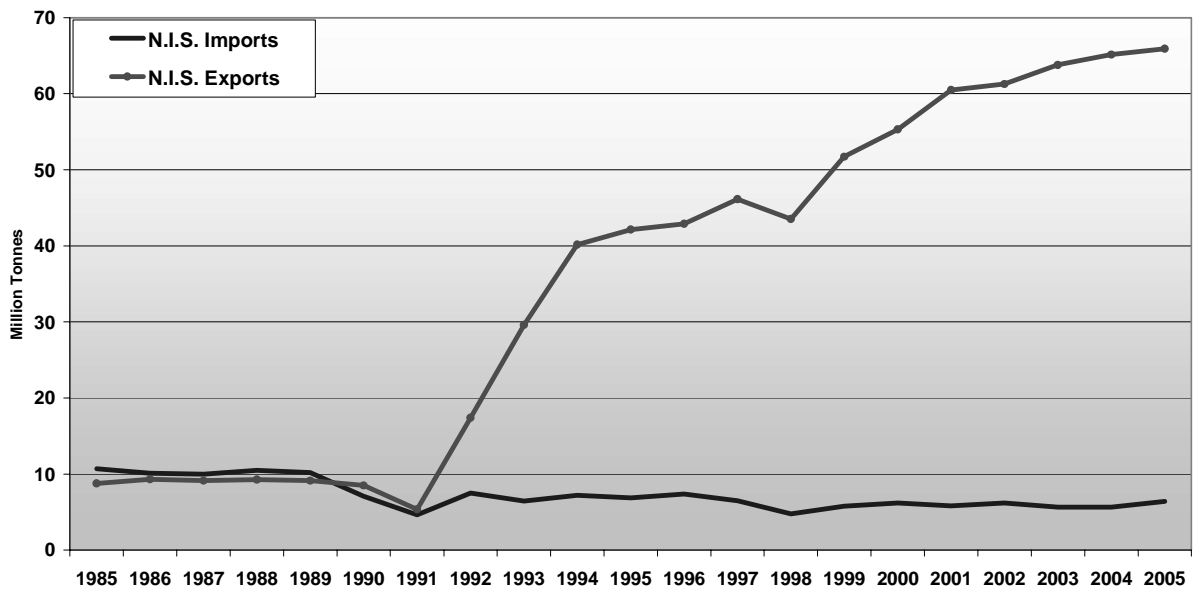
### China's Crude Steel Production



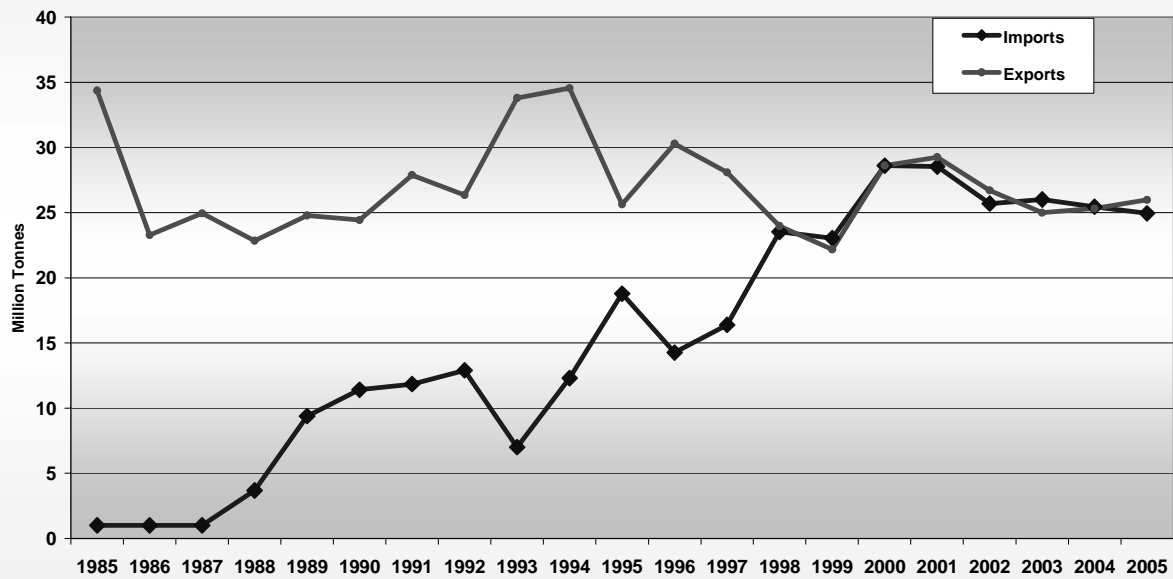
### Chinese Steel Trade



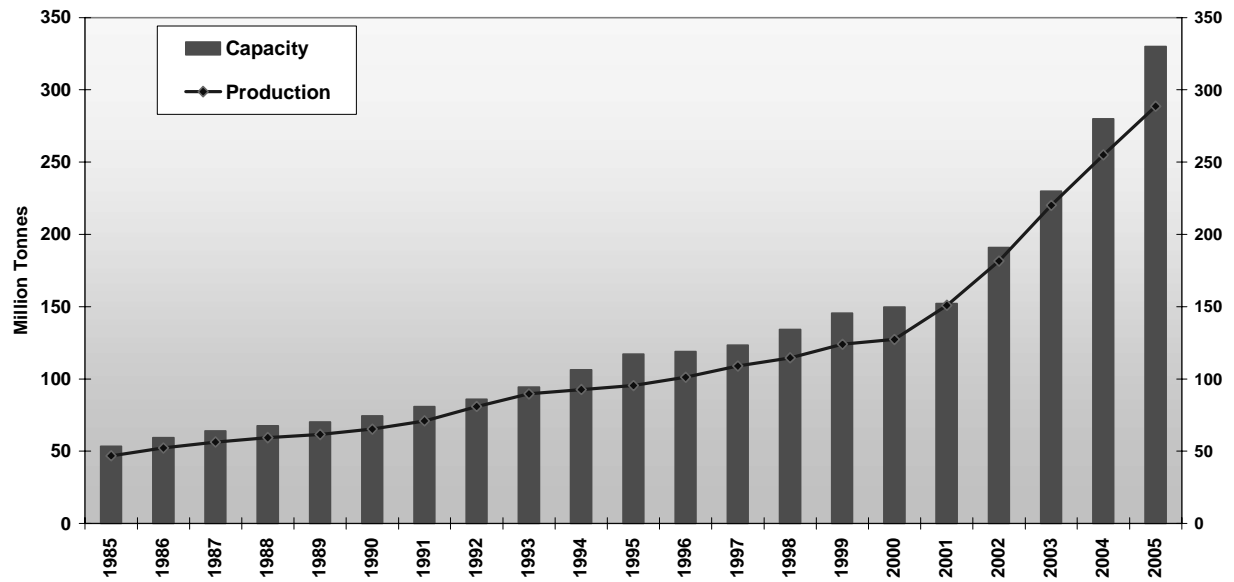
### N.I.S. Steel Trade

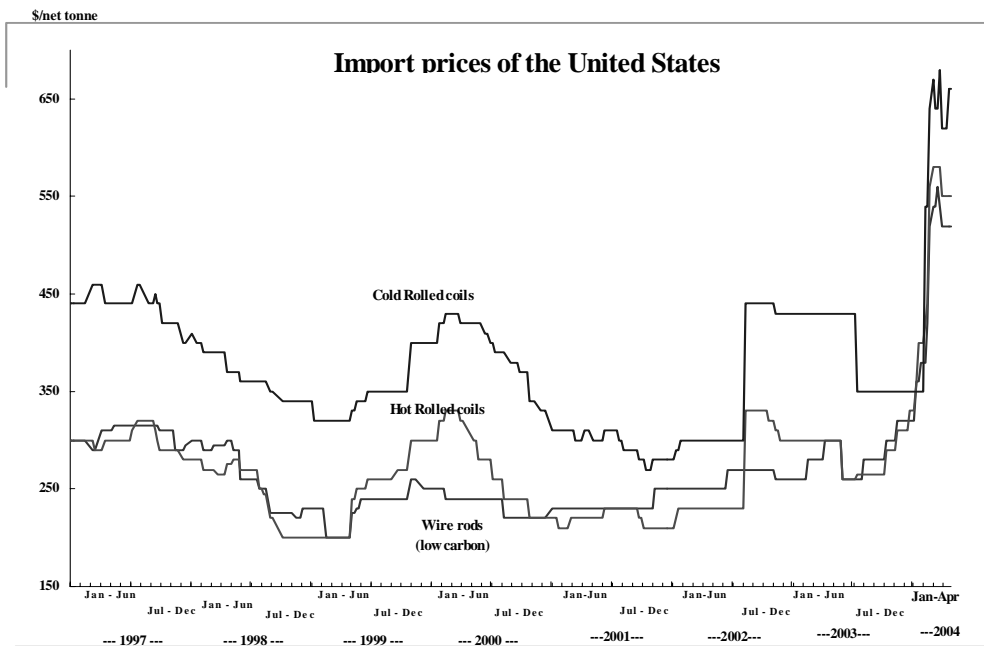


### EU(15) Steel Trade (with 3rd countries)

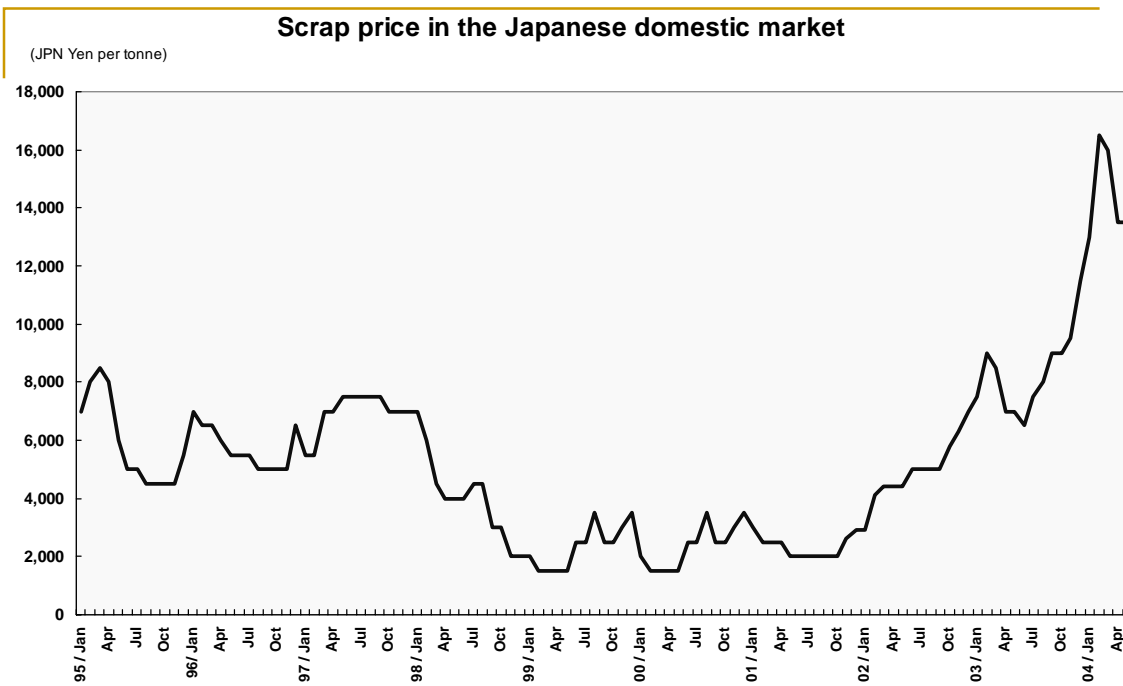


### Crude Steel Capacity and Production in China

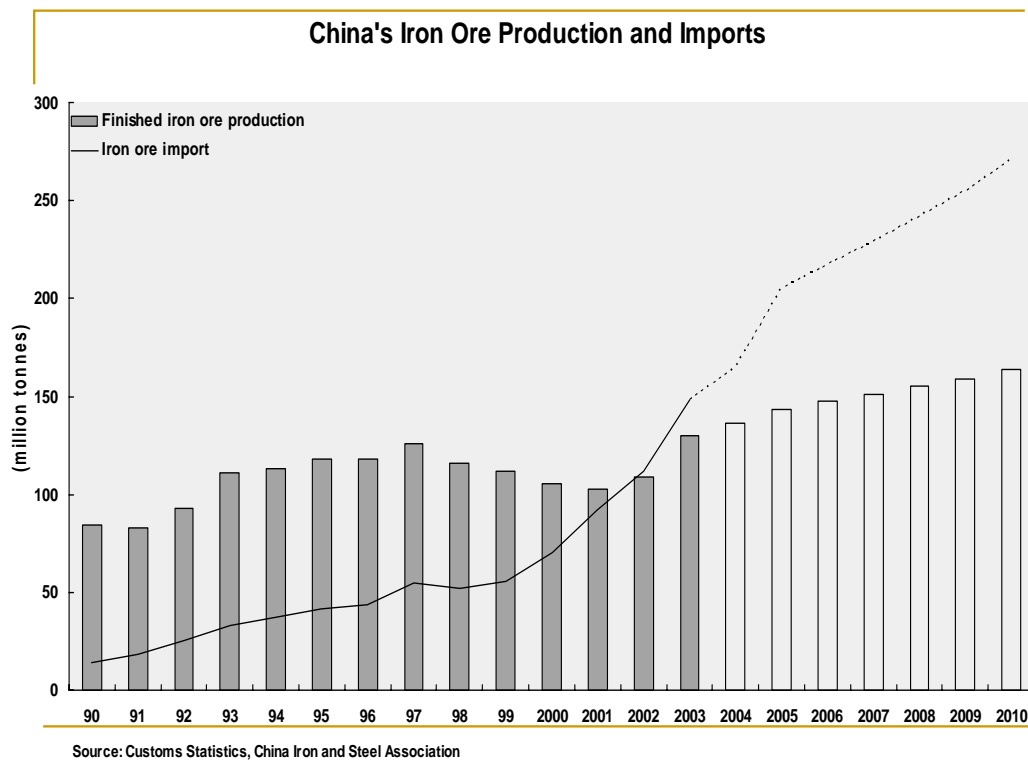
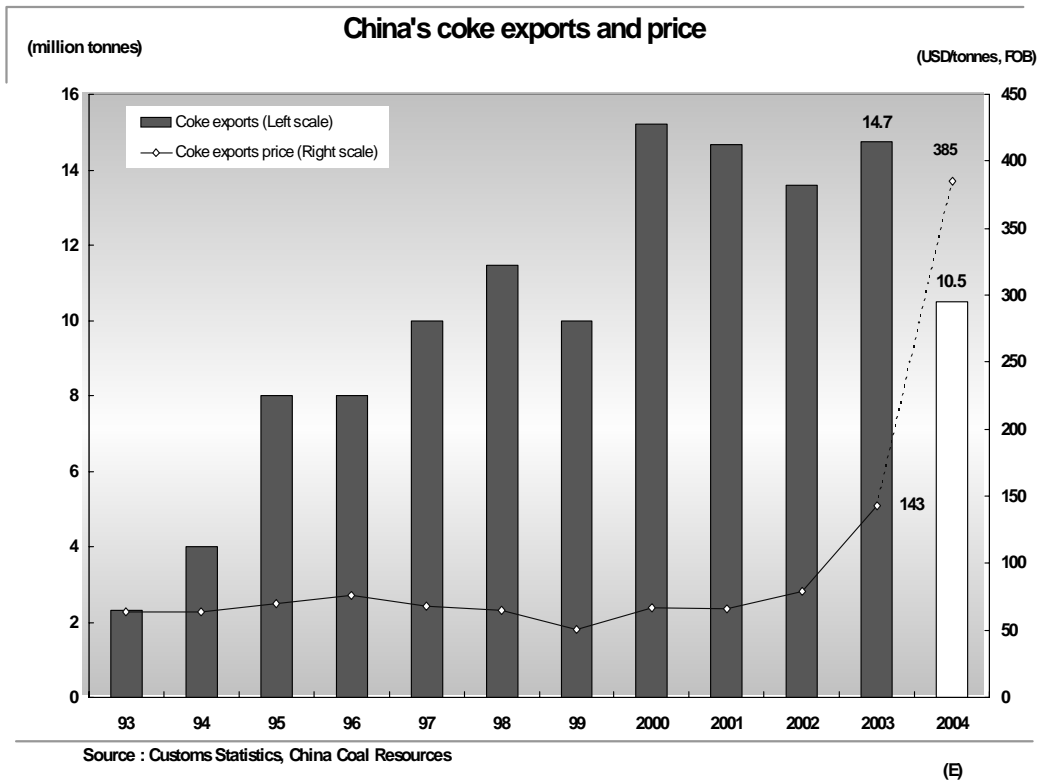




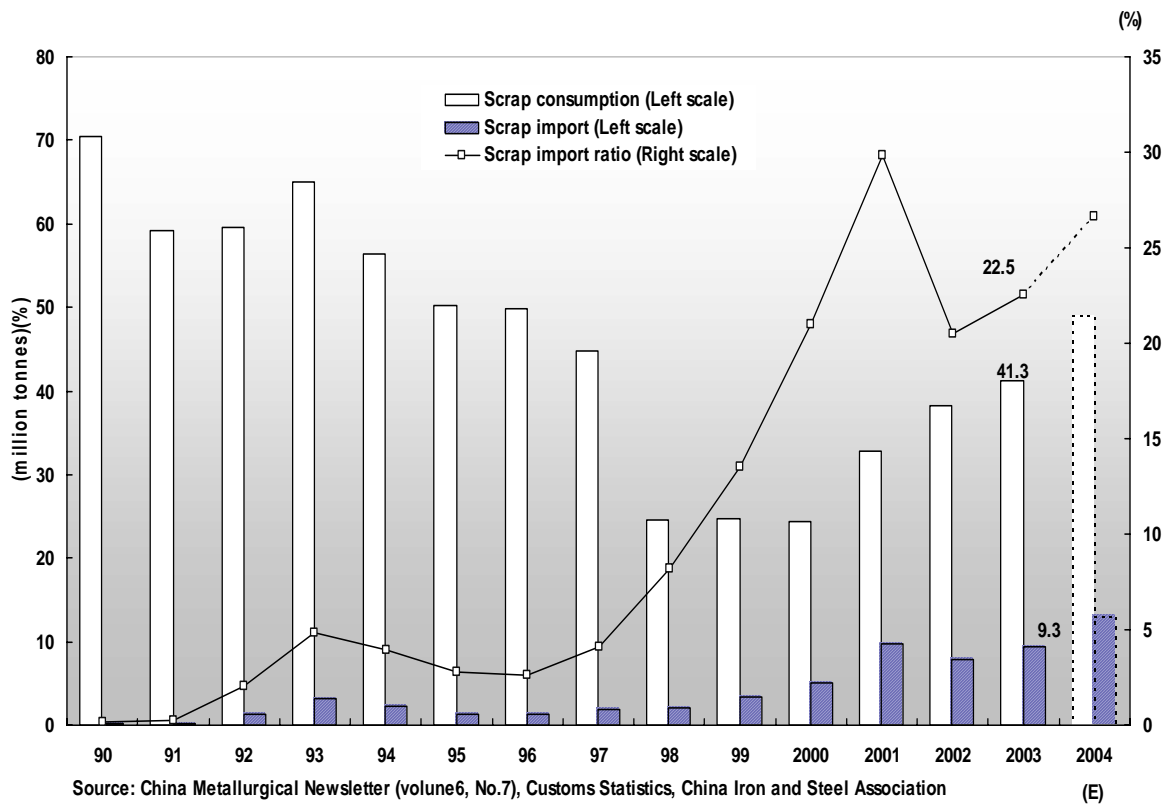
Source: Metal Bulletin

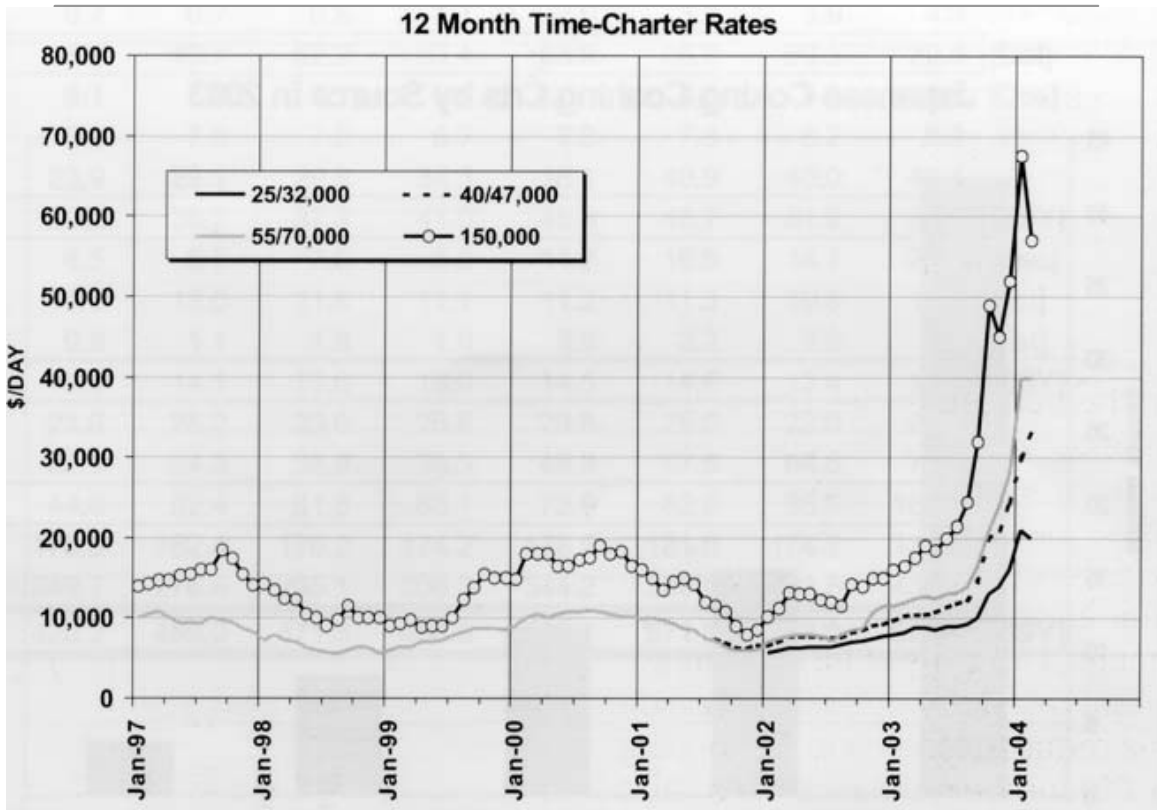


Source: The Japan Metal Daily



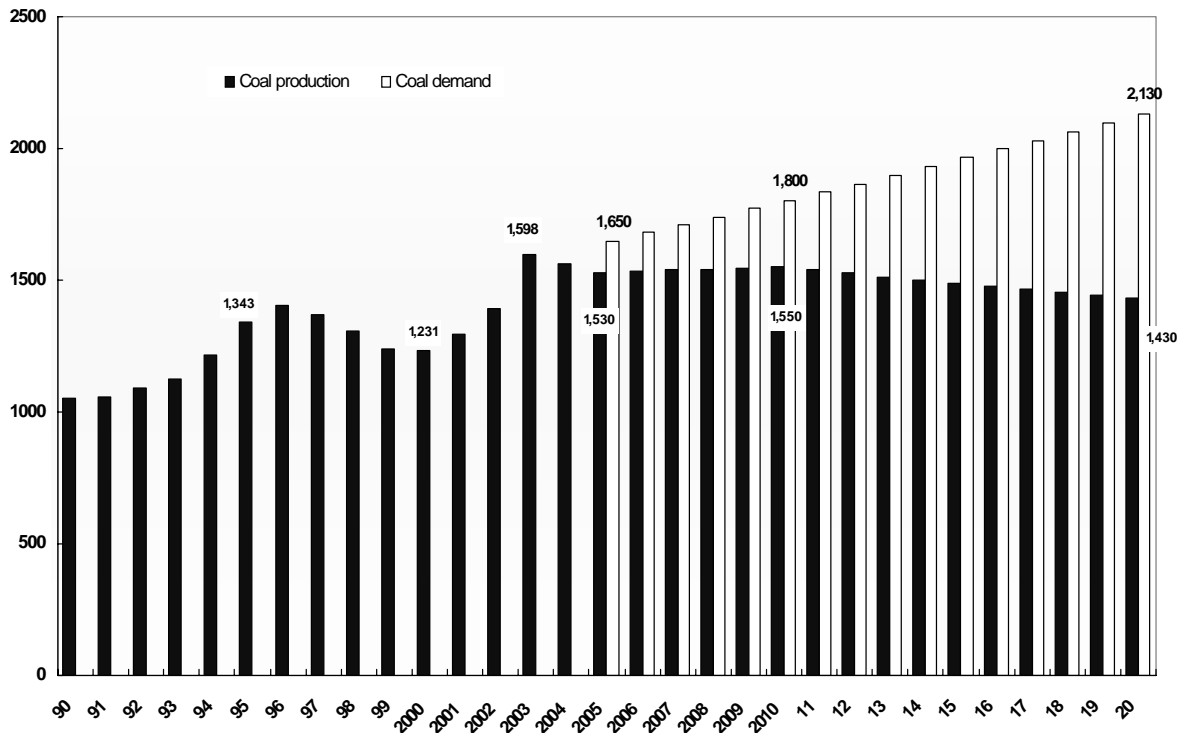
## China's Scrap Consumption and Imports





(million tonnes)

### Forecast for China's coal demand and production



Source : IEA "Coal Information 2003", China Coal Industrial Development Research Centre