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Manganese Ore and Alloys: Development over last year

***IMnI 30th Annual Conference
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***Presented by
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◆ Overview - Steel Industry x Mn Alloys

- ◆ Consumption
- ◆ Supply
- ◆ Costs
- ◆ Prices
- ◆ Conclusion



Mn Alloys consumption expected to grow 10,5 % up to 2010

Steel Production

2003 / 2002 ↑ 6,2%

3 months

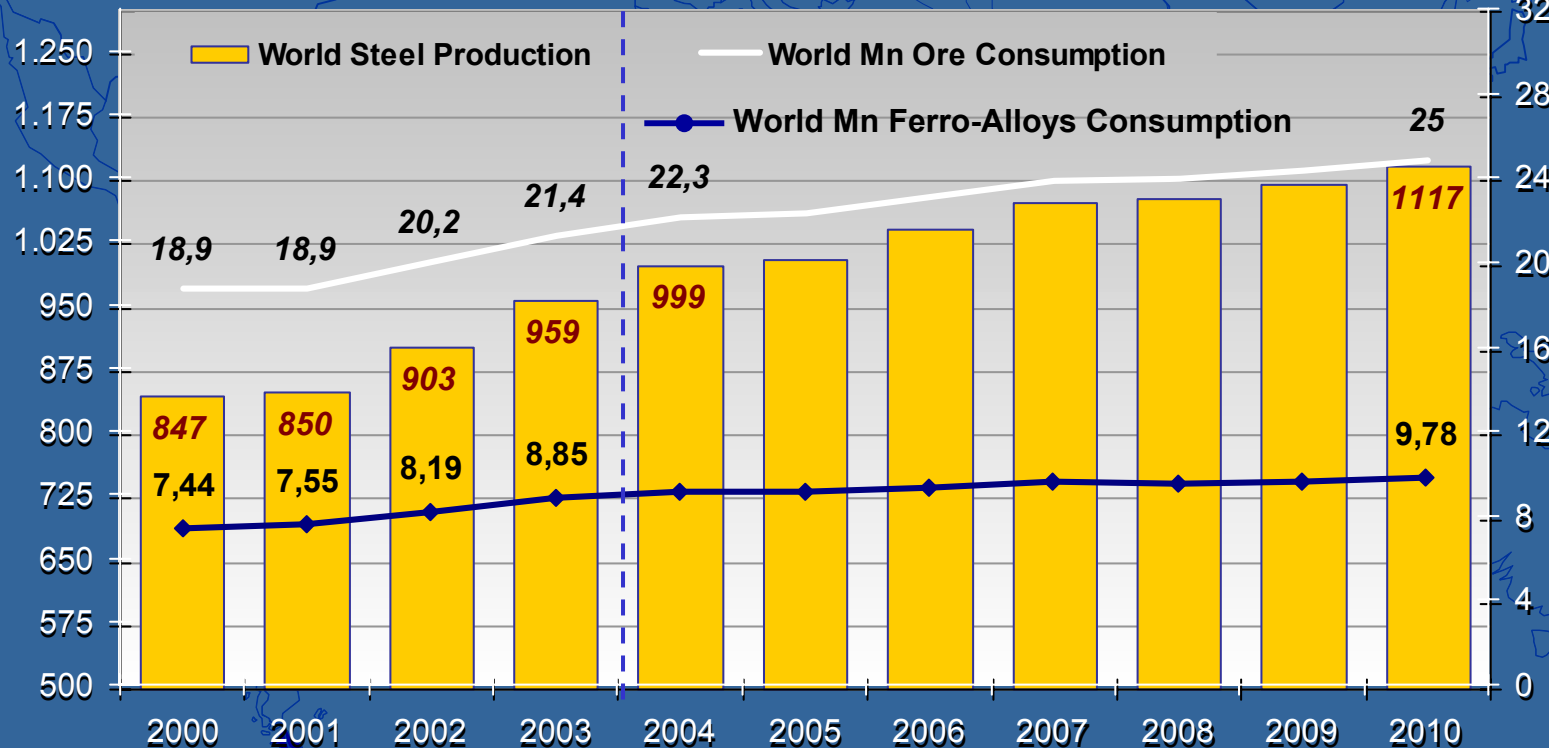
Q1 2004 / Q1 2003 ↑ 8,7%

2010 / 2003 ↑ 16,5%

Steel Production x Consumption of Manganese Ore x Mn Ferro-Alloys

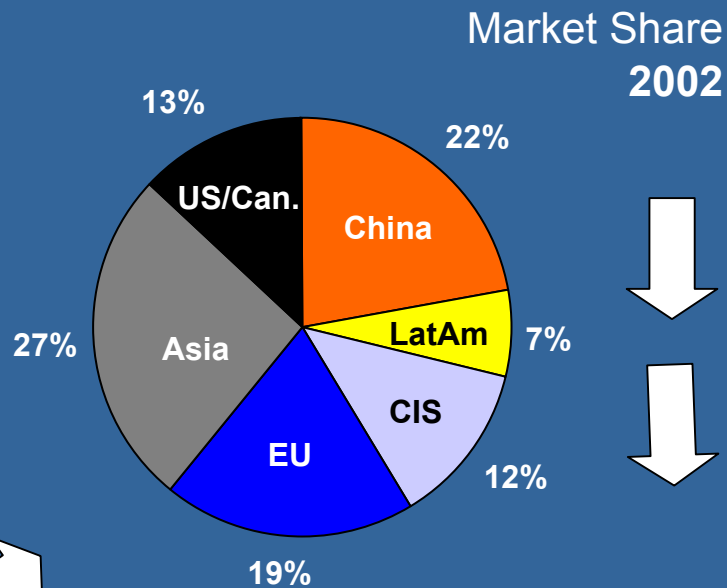
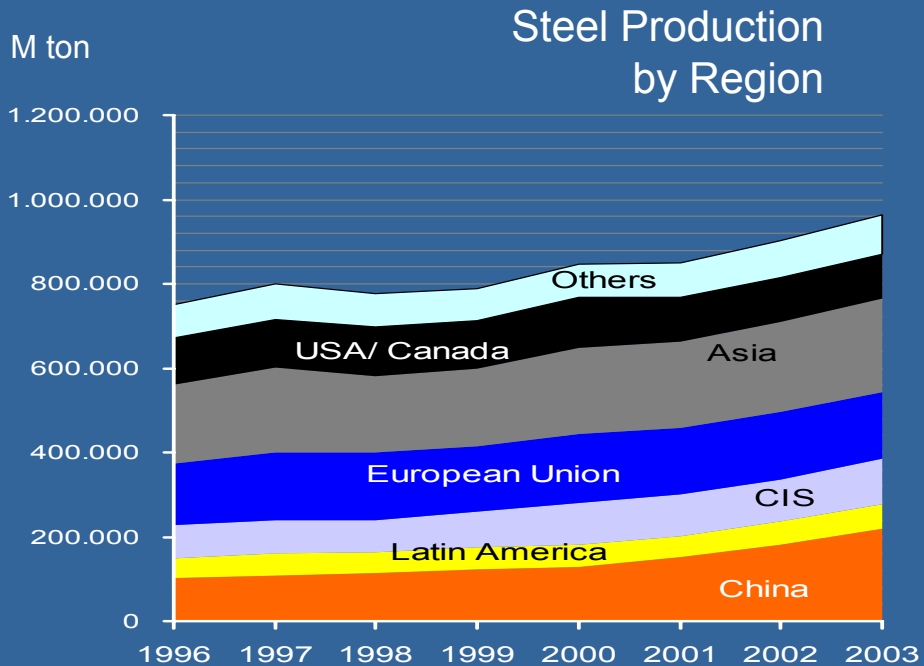
Steel
M t

Mn Ore and
Ferro-Alloys
M t

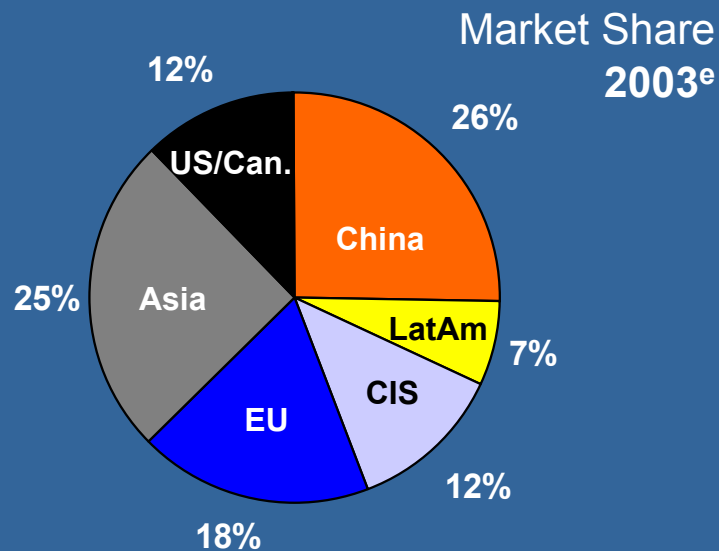
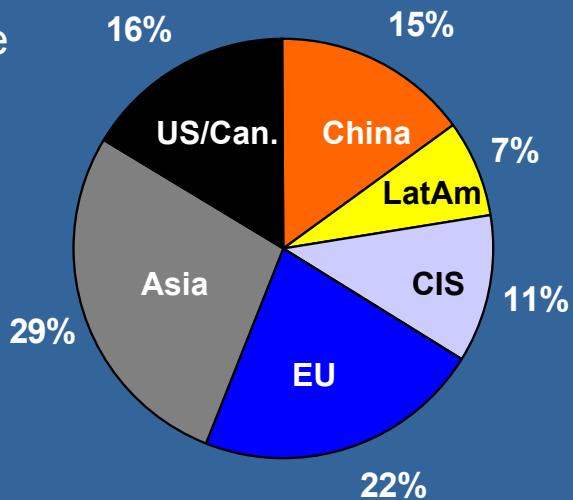




Overview - Steel Industry x Mn Alloys



Market Share 1996

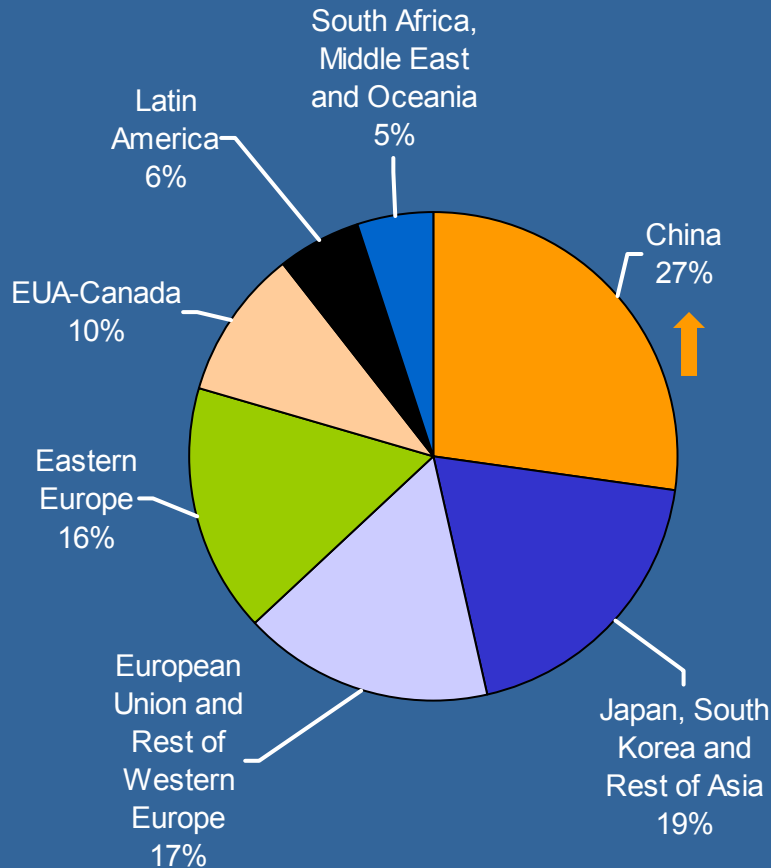


Note: World Crude Steel Production – IISI 103 19/01/2004

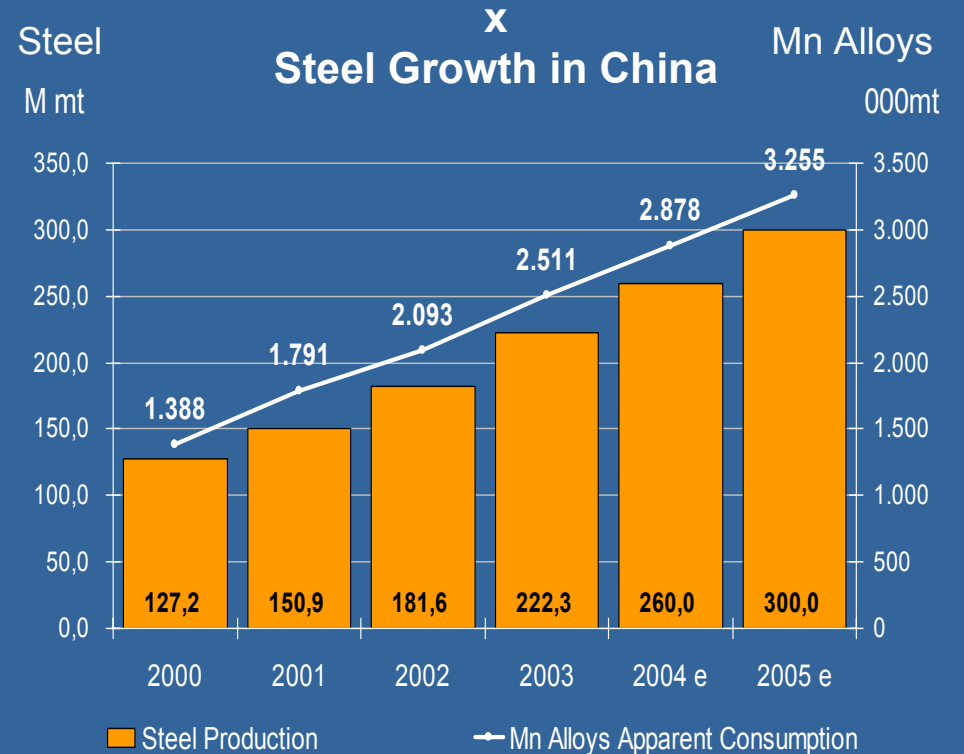


China Mn Alloys consumption is expected to grow by 30 % up to 2005

Mn Alloys Apparent Consumption by Region - 2003



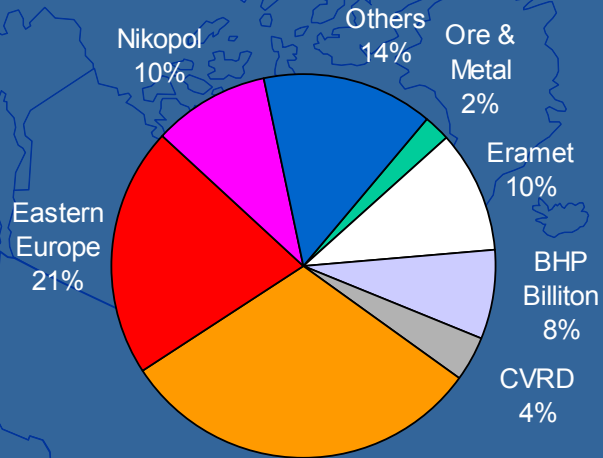
Mn Alloys Apparent Consumption



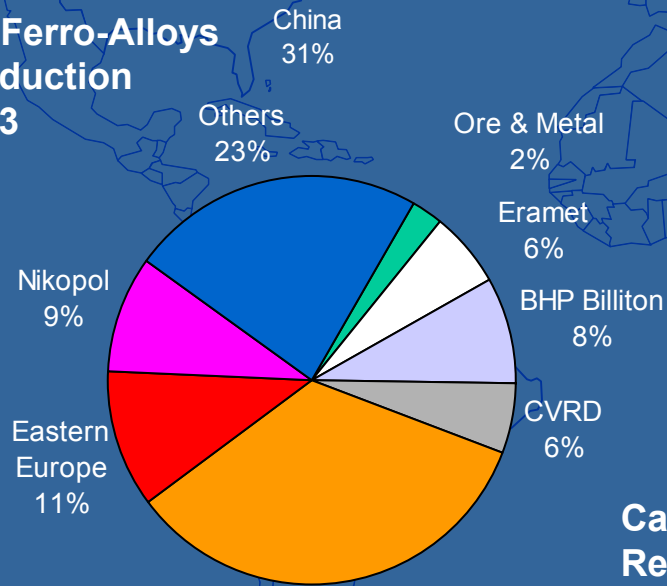
▲ Mn Alloys Apparent Consumption in China 2005^e / 2002 ↑ 55,6%



Mn Ferro-Alloys Production 2002



Mn Ferro-Alloys Production 2003



Capacity Reduction

2002

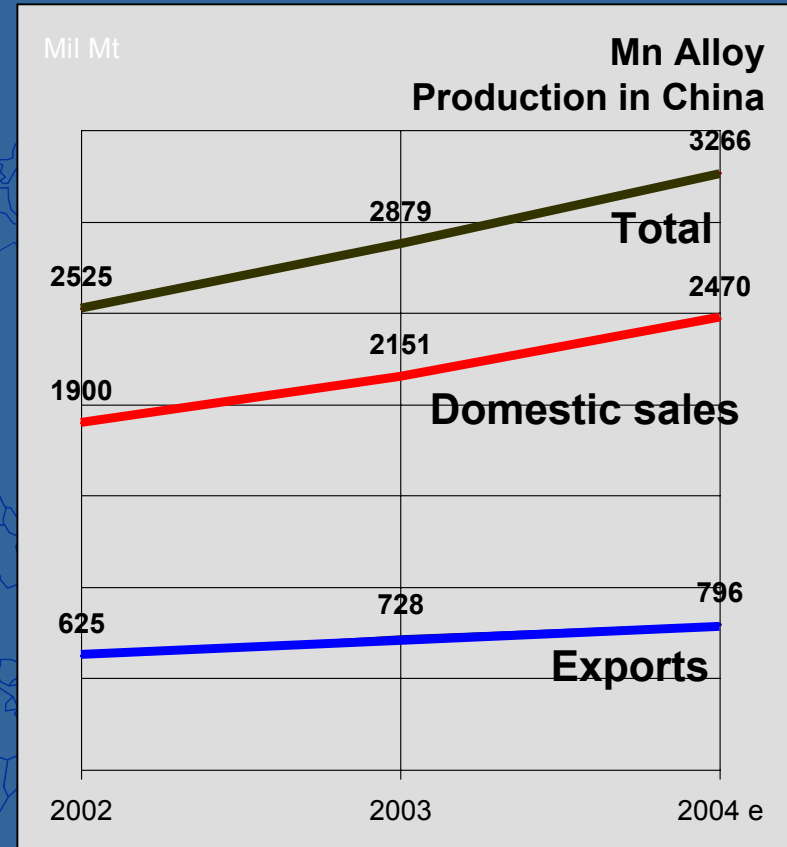
Highlanders 100 kt/y
Shaoxing 80 kt/y

2003

SFPO (France) 350 kt/y

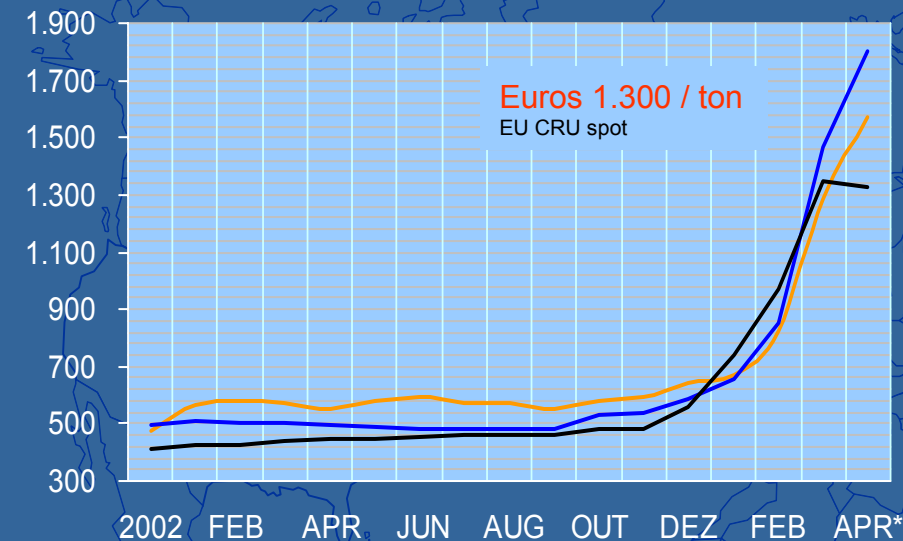
2004

RDME 30 kty





US\$ / t HC FeMn Prices

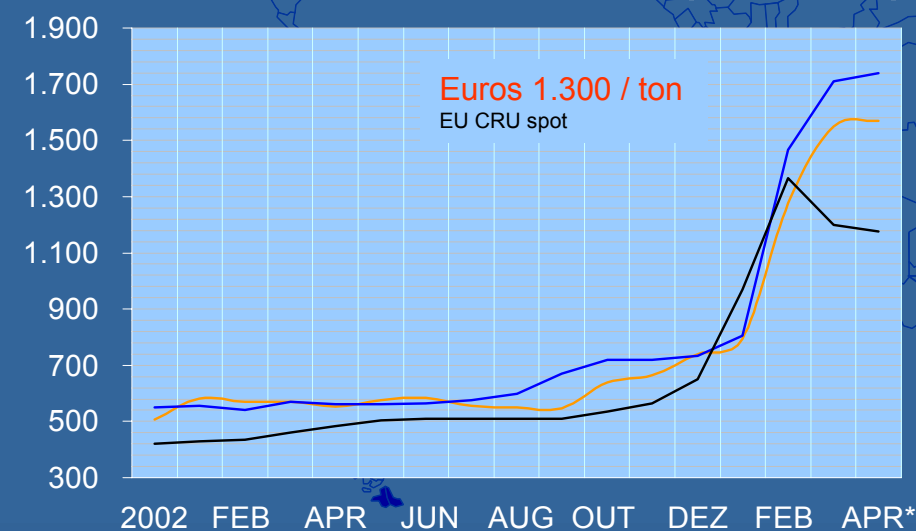


Products shortage had a strong impact on prices, especially Q4/03

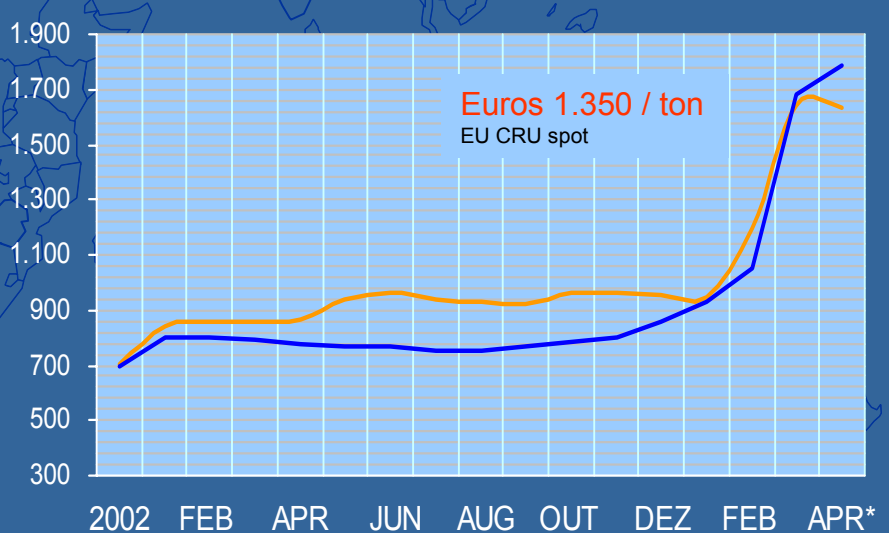
- Japan CRU spot – Chinese import**
Cif, CRU estimate of average price for Chinese material imported into Japan.
- USA CRU spot – import**
CRU estimate of US import prices fob warehouse.
- EU CRU spot**
Delivered, CRU estimate of average price for spot transactions to major consumes in Europe.

Source: CRU International Bulk ferroalloys (April / 2004)

US\$ / t SiMn Prices (65% Mn)



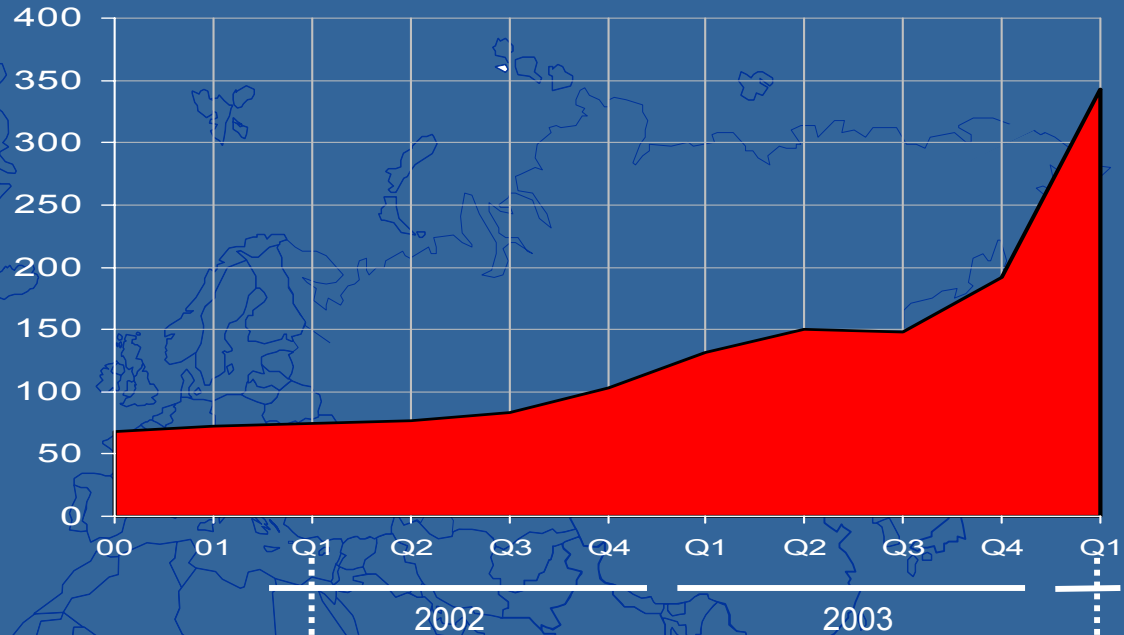
US\$ / t MC FeMn Prices (78% Mn)





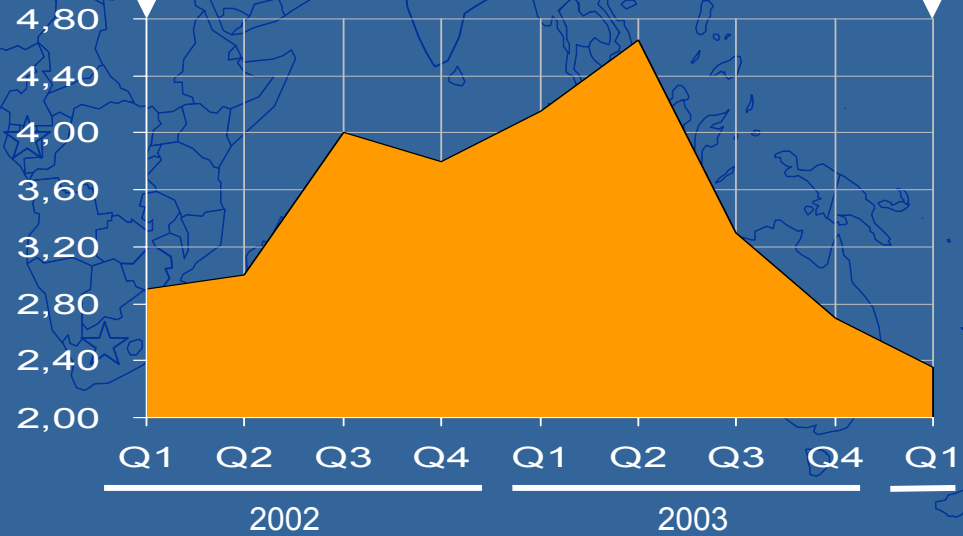
Coke prices are at very high levels...

\$/tonne fob China



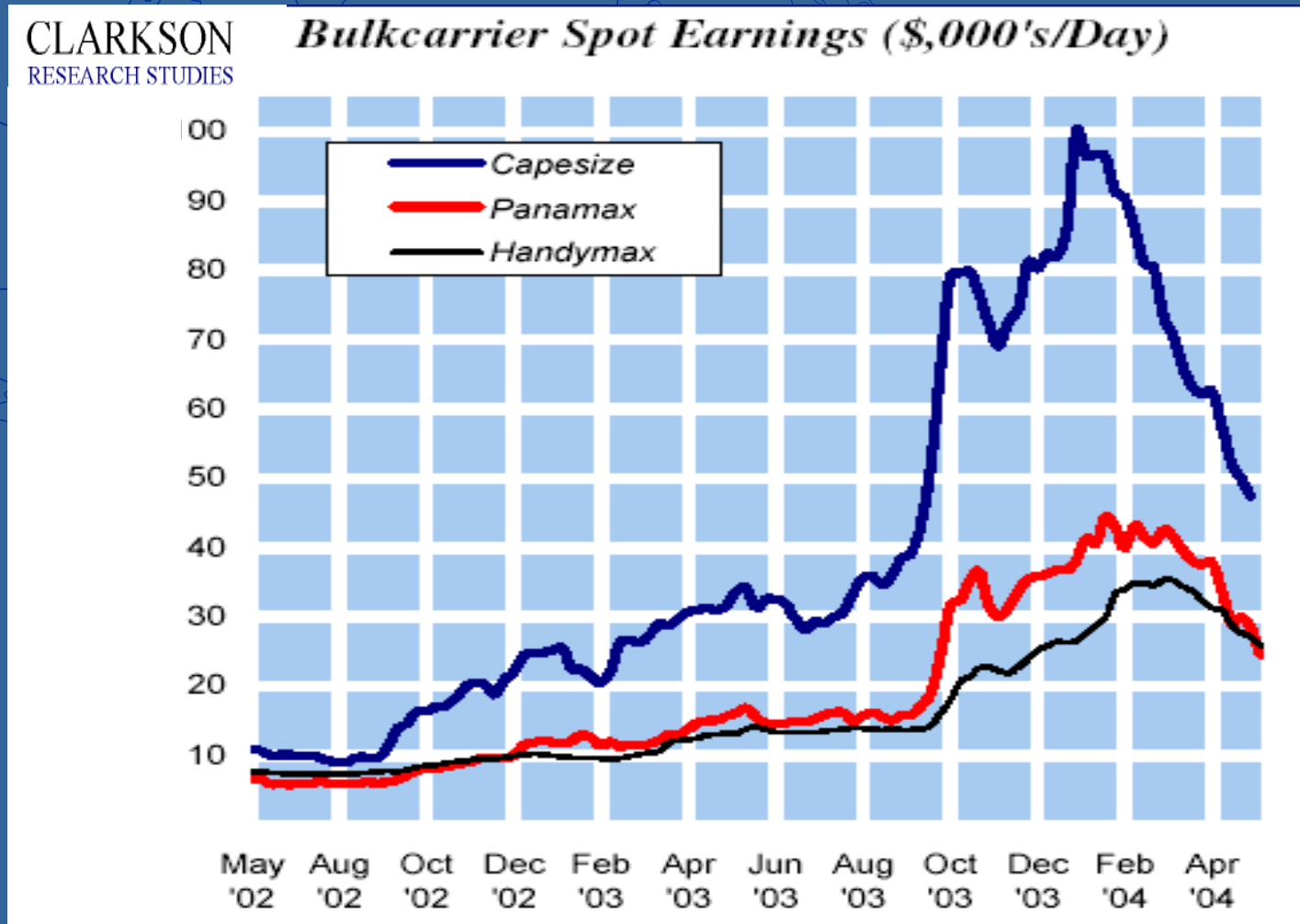
... as Chinese coke exports continued to fall

million tonnes





Ocean freight rate has impacted both raw material and product logistics costs





Mn Alloys in 2003:

Demand x Supply

- Growth in steel demand
- Power shortage hit Chinese SiMn supplies;
- Plant closures (temporary & permanent)

Cost Side

- Freight prices rising to fresh heights;
- Coke prices at record levels;



Mn alloys prices on the rise!

Many Q1 2004 contracts had prices concluded on a month-by-month basis, reflecting the price volatility.

2004 PRICES WILL PROBABLY STABILISE AT HIGHER LEVELS COMPARED WITH THE PAST



**AN “ABNORMAL” MARKET IS NOT WHEN
PRICES HIT RECORD LOWS OR HIGHS .
IT IS WHEN IT DOES NOT RESPOND TO THE
BALANCE OF SUPPLY AND DEMAND.**