

The Iron Ore Market

Relativity and Time

(abridged version)



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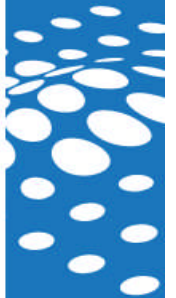
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The Iron Ore Market – *Relativity and Time*



Steel after the crisis



Iron Ore trade



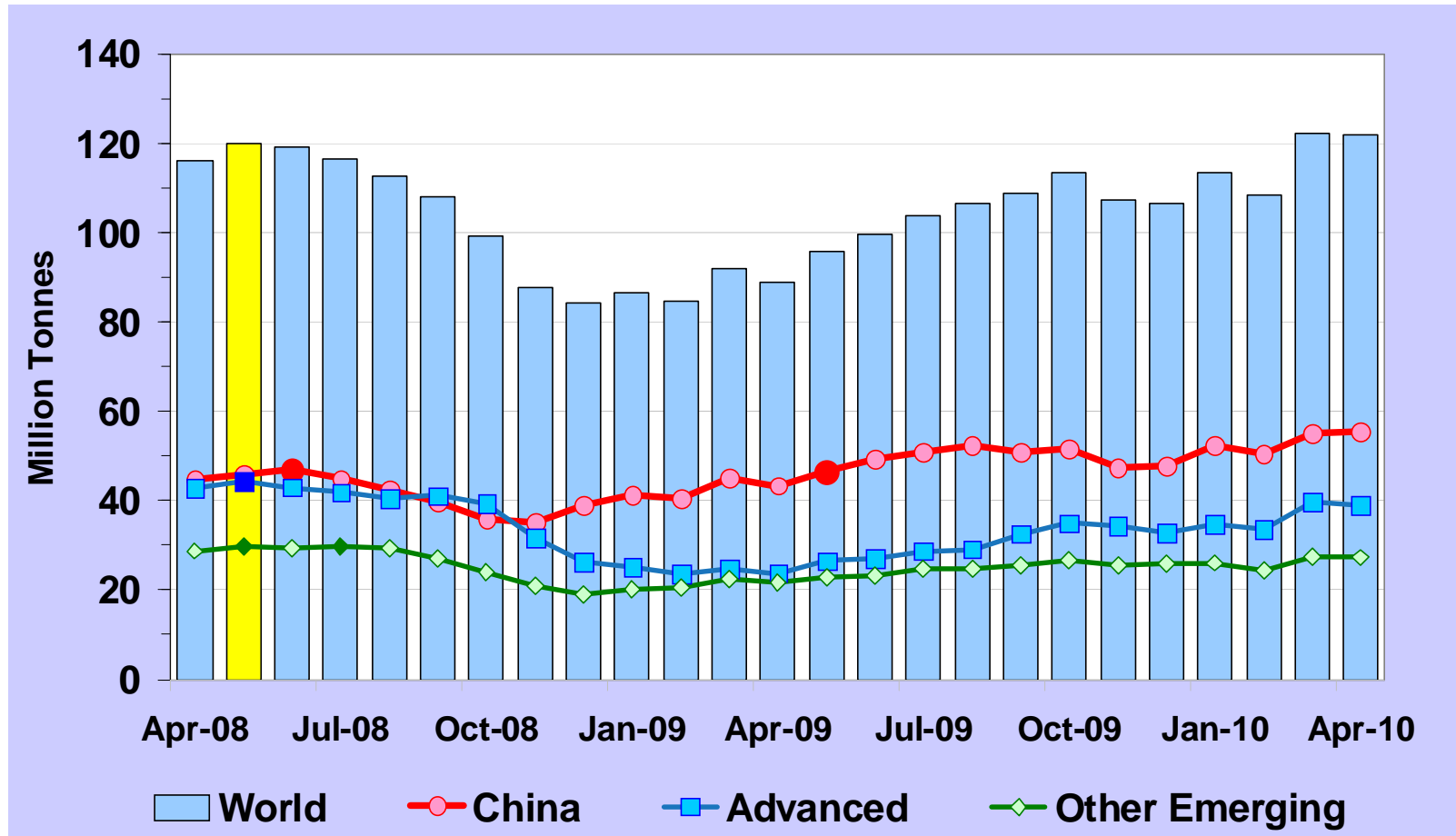
The state of supply



A new price environment

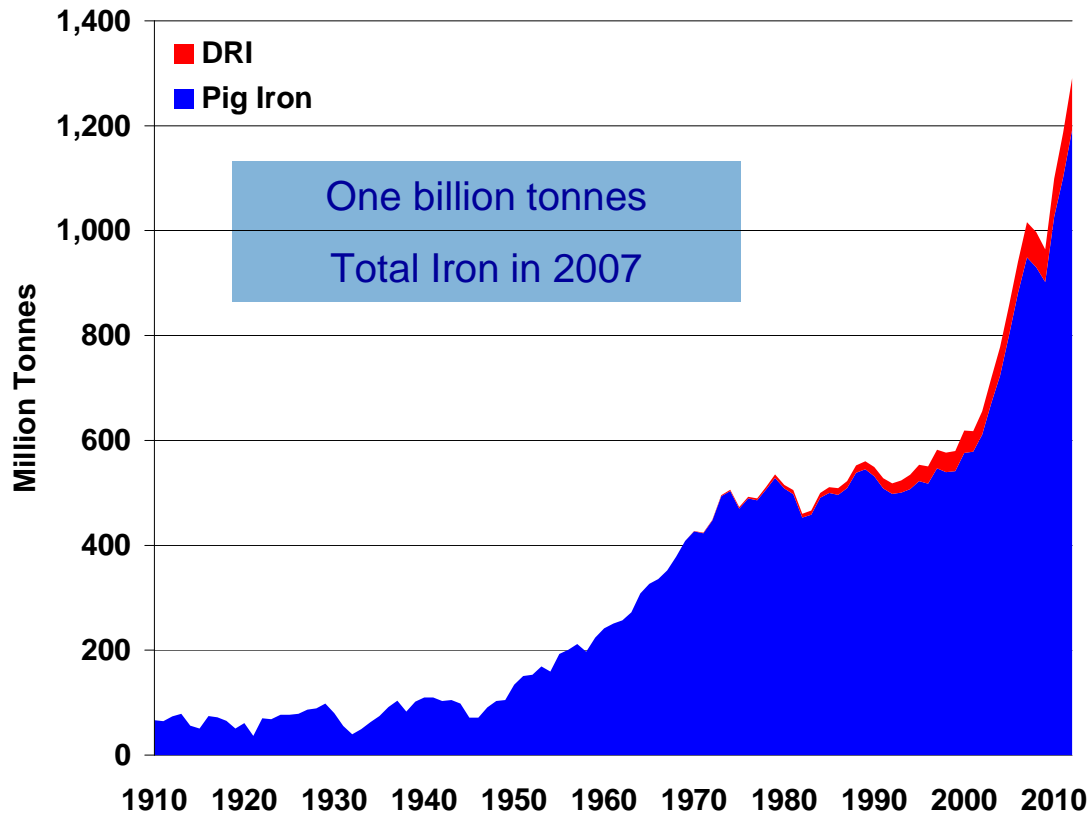


Steel production back to pre-crisis peak levels



References: World Steel Association, Metalitics analysis

Primary Iron back over one billion tonnes in 2010



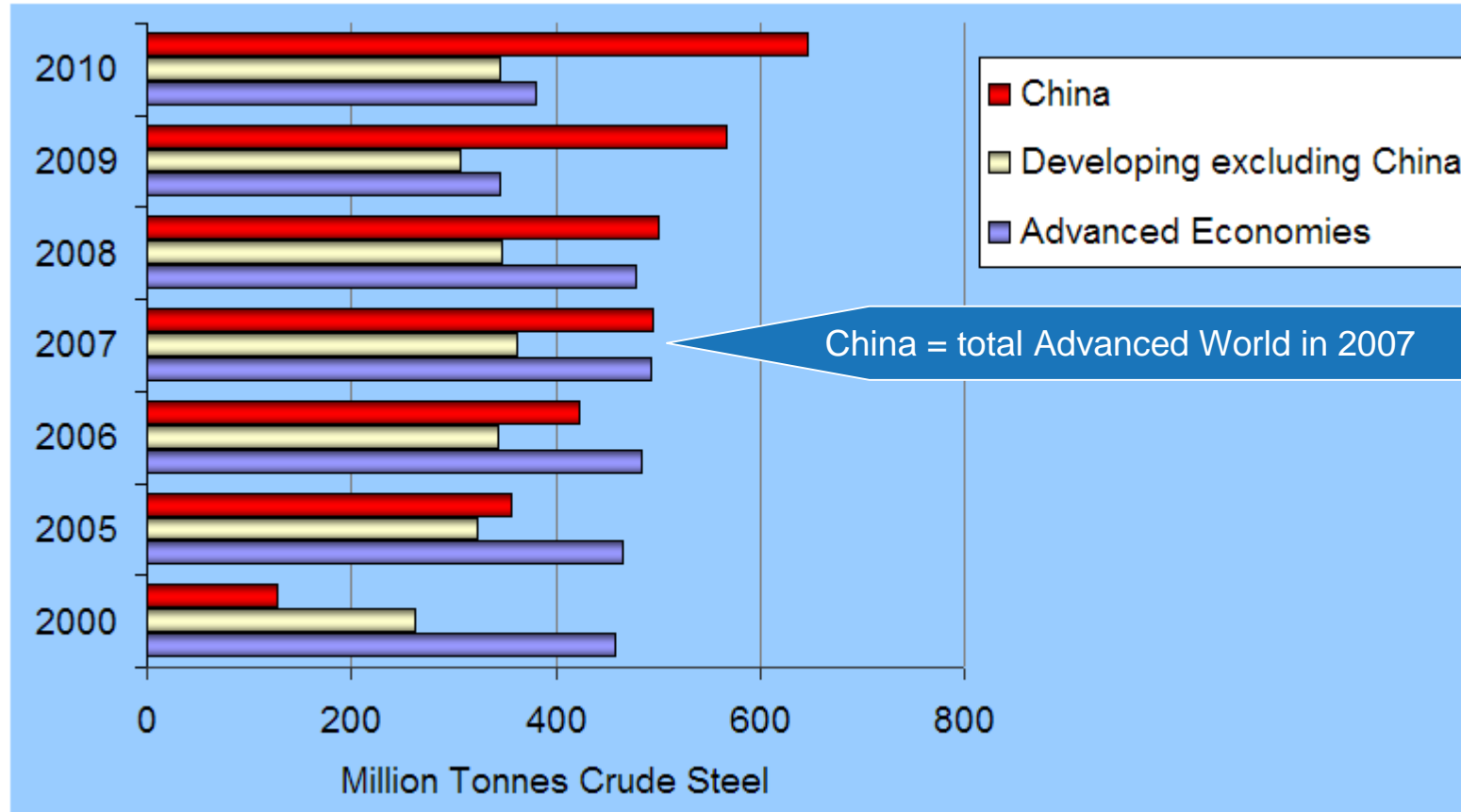
References: USGS, Abare, Midrex, IISI, Metalytics

Compound Annual Growth Rates

Period	Pig Iron	DRI
1910-20	-0.8%	-
1920-30	2.7%	-
1930-40	3.2%	-
1940-50	2.0%	-
1950-60	6.1%	-
1960-70	5.9%	-
1970-80	1.8%	24.6%
1980-90	0.5%	9.5%
1990-95	-0.3%	12.0%
1995-00	2.0%	6.6%
2000-05	6.8%	5.8%
2005-10	5.1%	5.1%

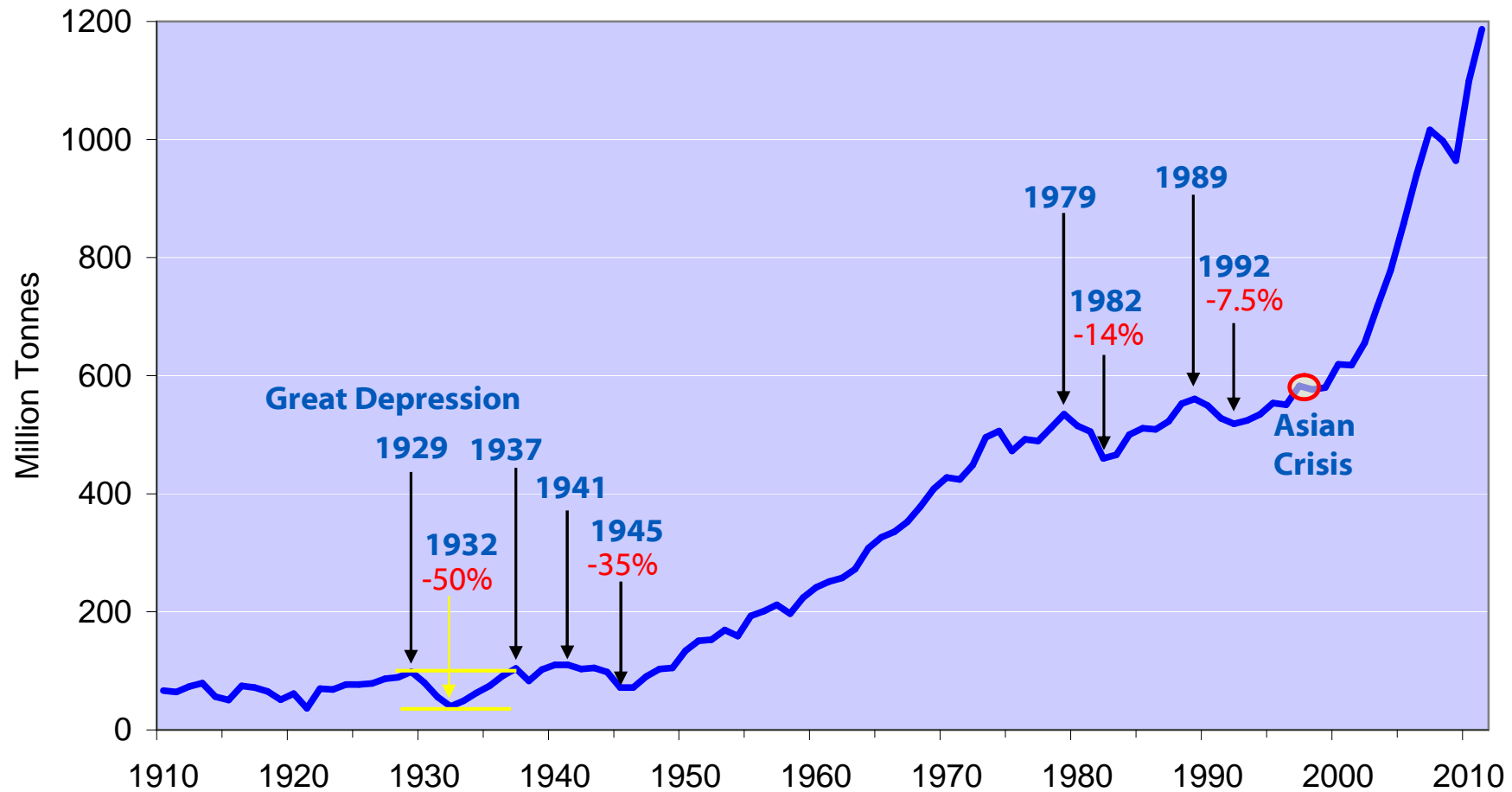
Pig Iron underpins total iron ore demand growth – DRI increases demand for high-grade ore

The GFC boosted China's dominance of world steel production



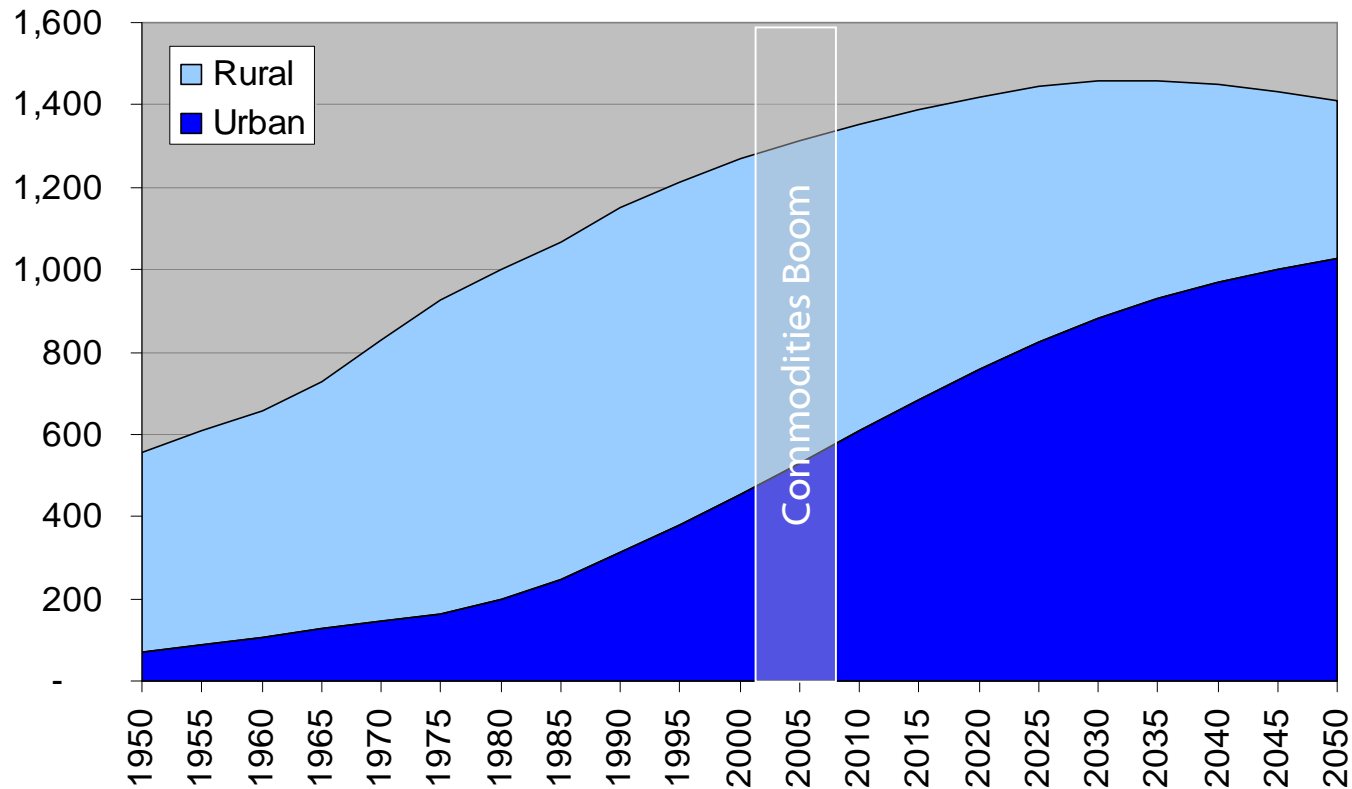
China jumps from 38% of world production in 2008 to 47% in 2009

The relativities of world blast furnace production



References: USGS, Abare, WSA, Metalytics

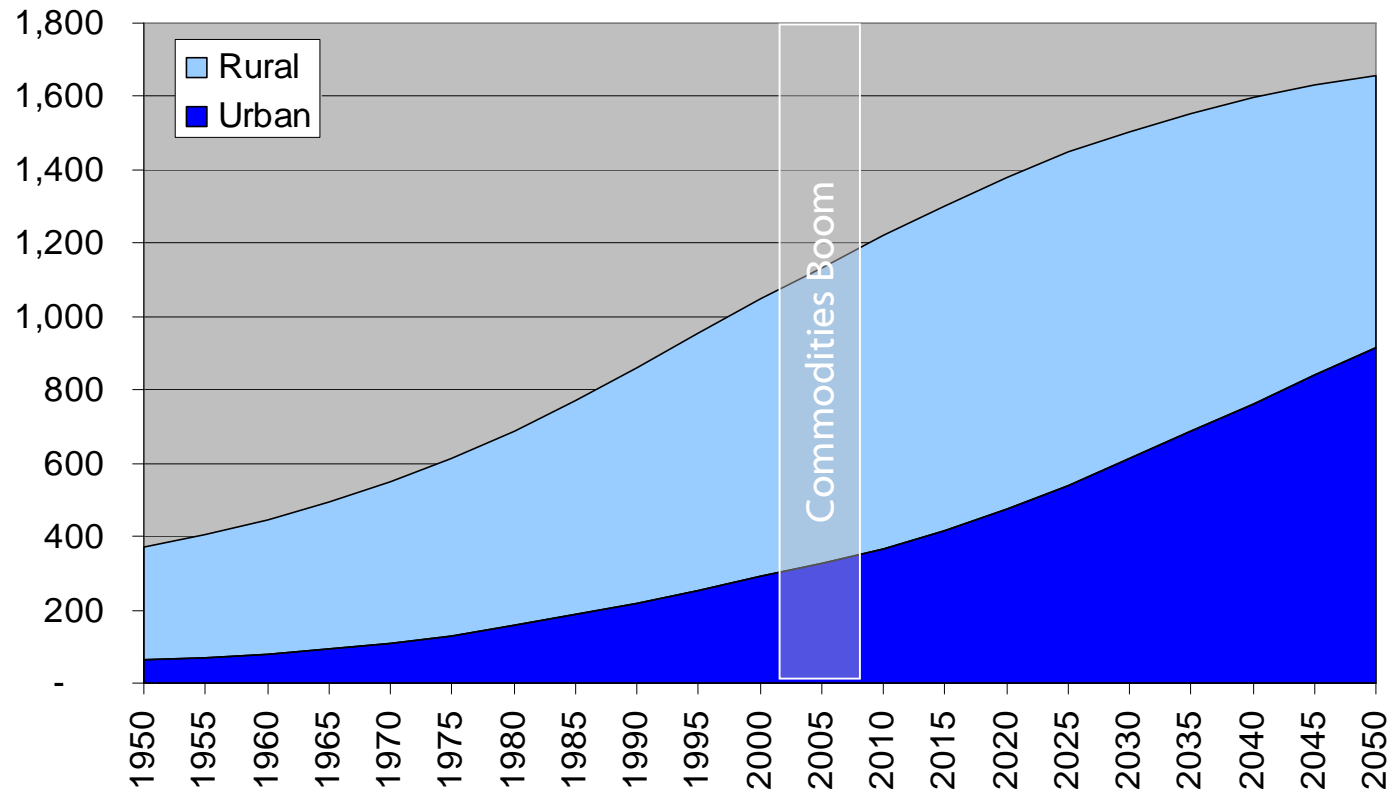
Chinese population migration



Reference: UN Population Division

Decades of continuing Urbanisation

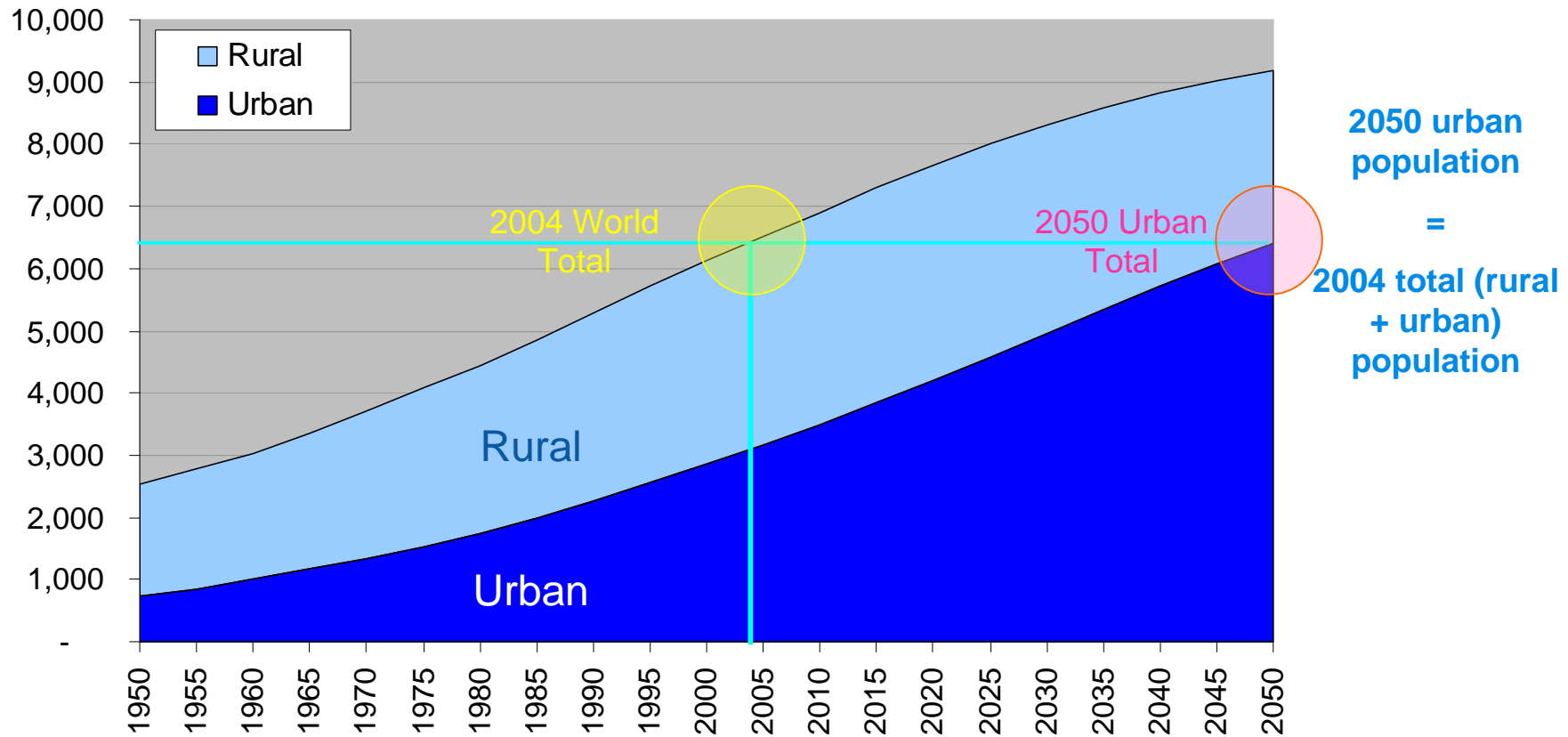
India following in the distance



Reference: UN Population Division

About 15 years behind China

World Urbanisation will drive steel demand for decades

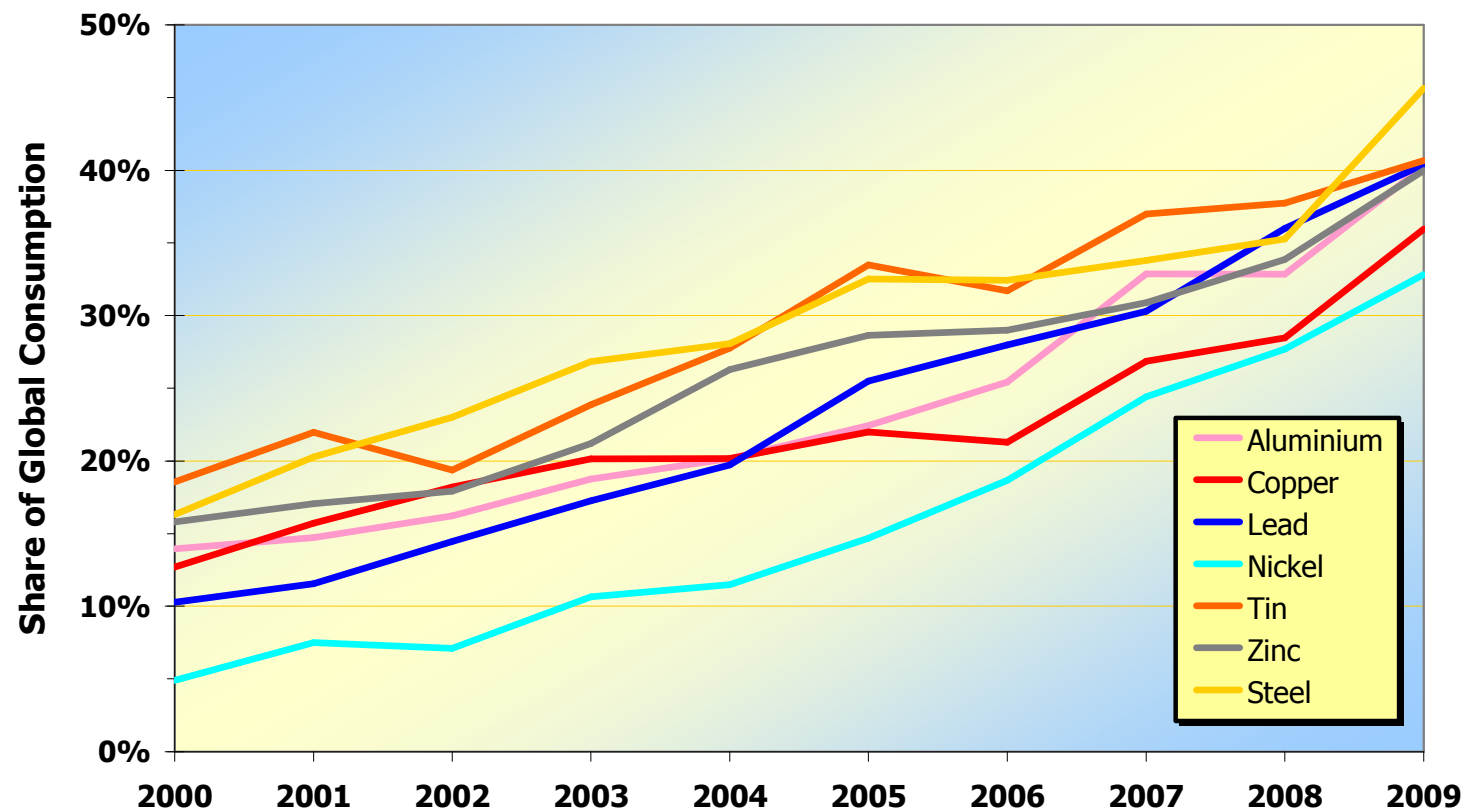


Reference: UN Population Division

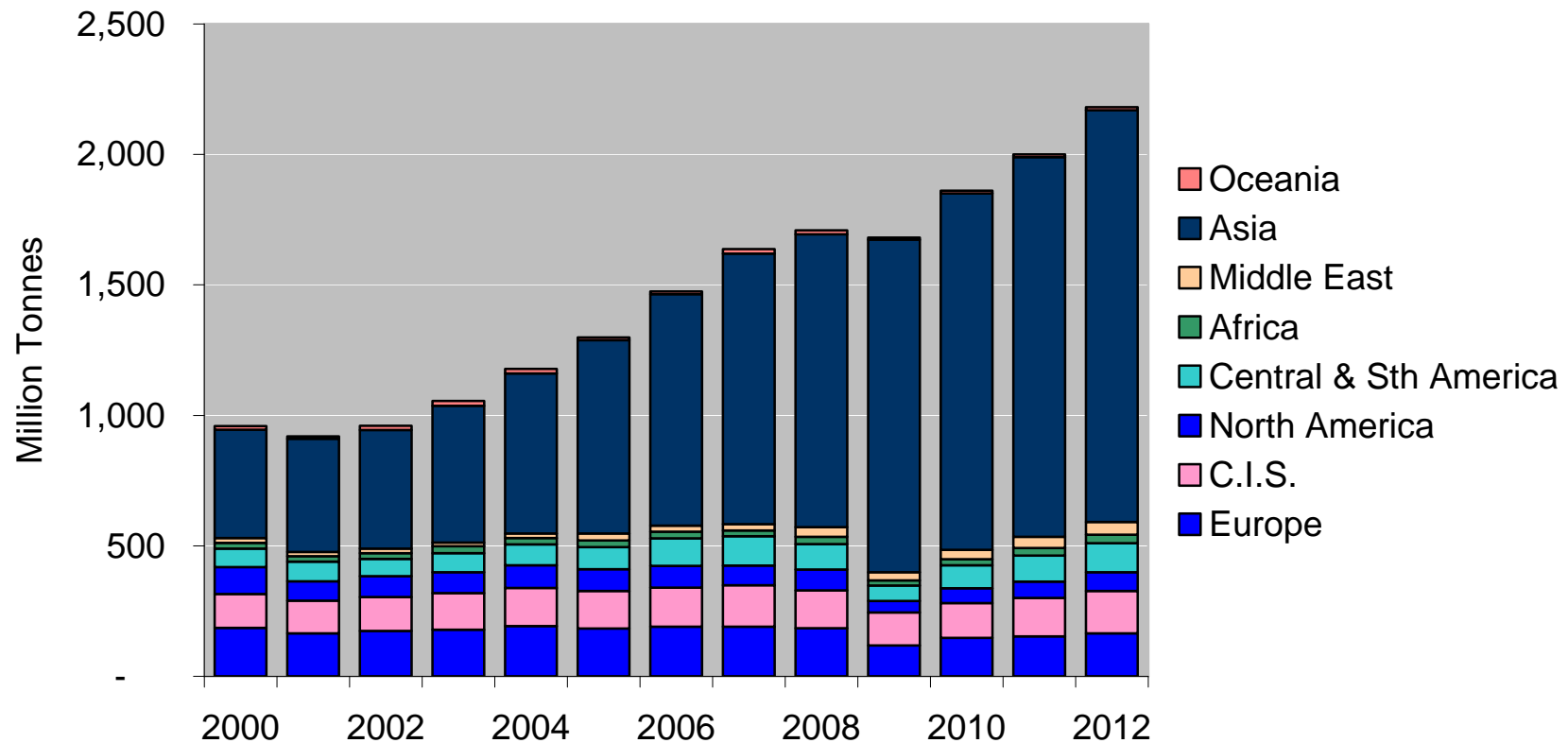
World urban population increasing by one billion 2005-2020

China accounts for at least one third of world consumption of the major metals

China's Growing Importance as a Metal Consumer



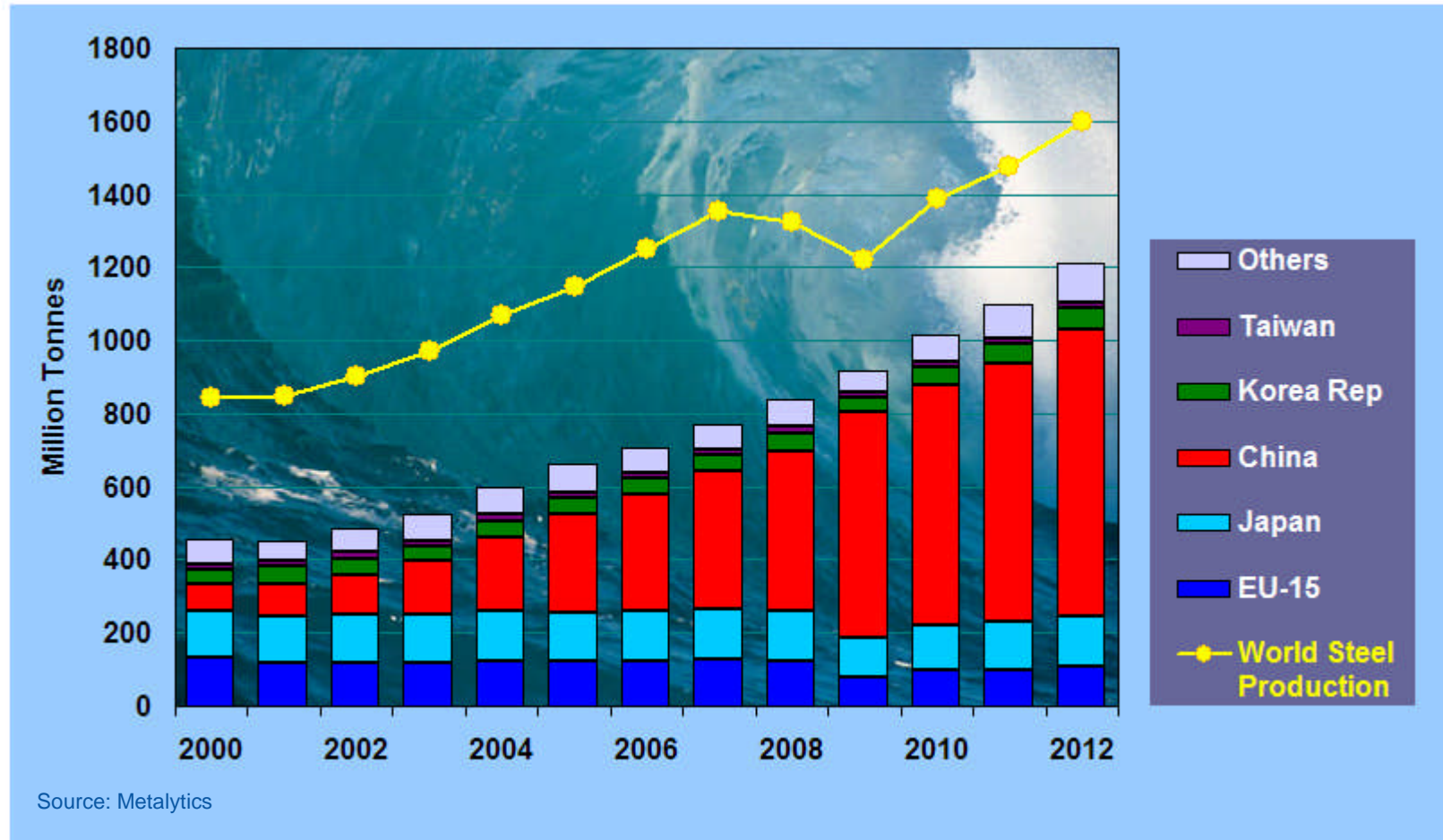
World iron ore consumption



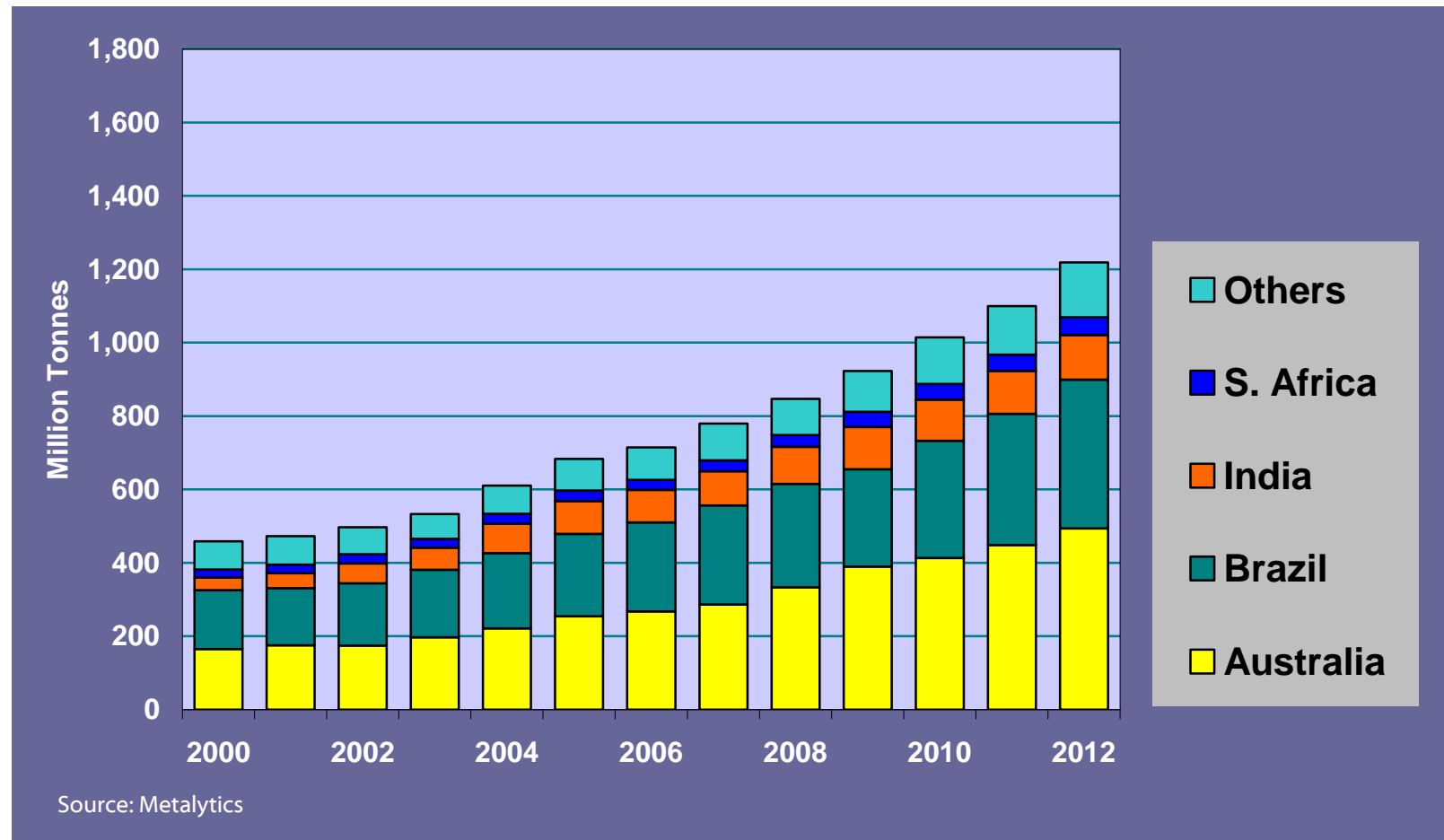
Source: Metalytics

Chinese demand softened the impact of “The Great Recession”

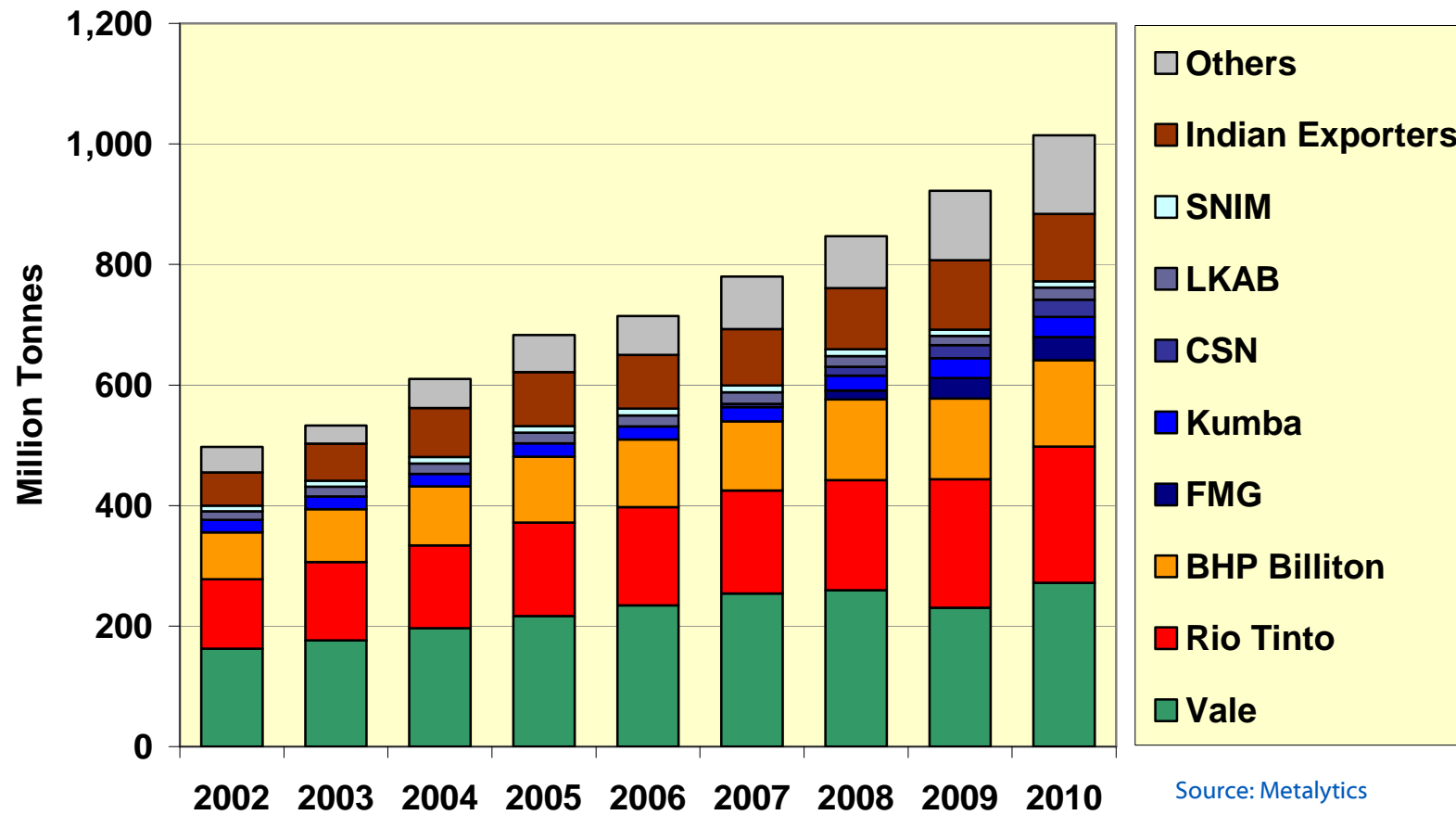
Seaborne trade is buoyed by China



Two countries dominate iron ore seaborne supply

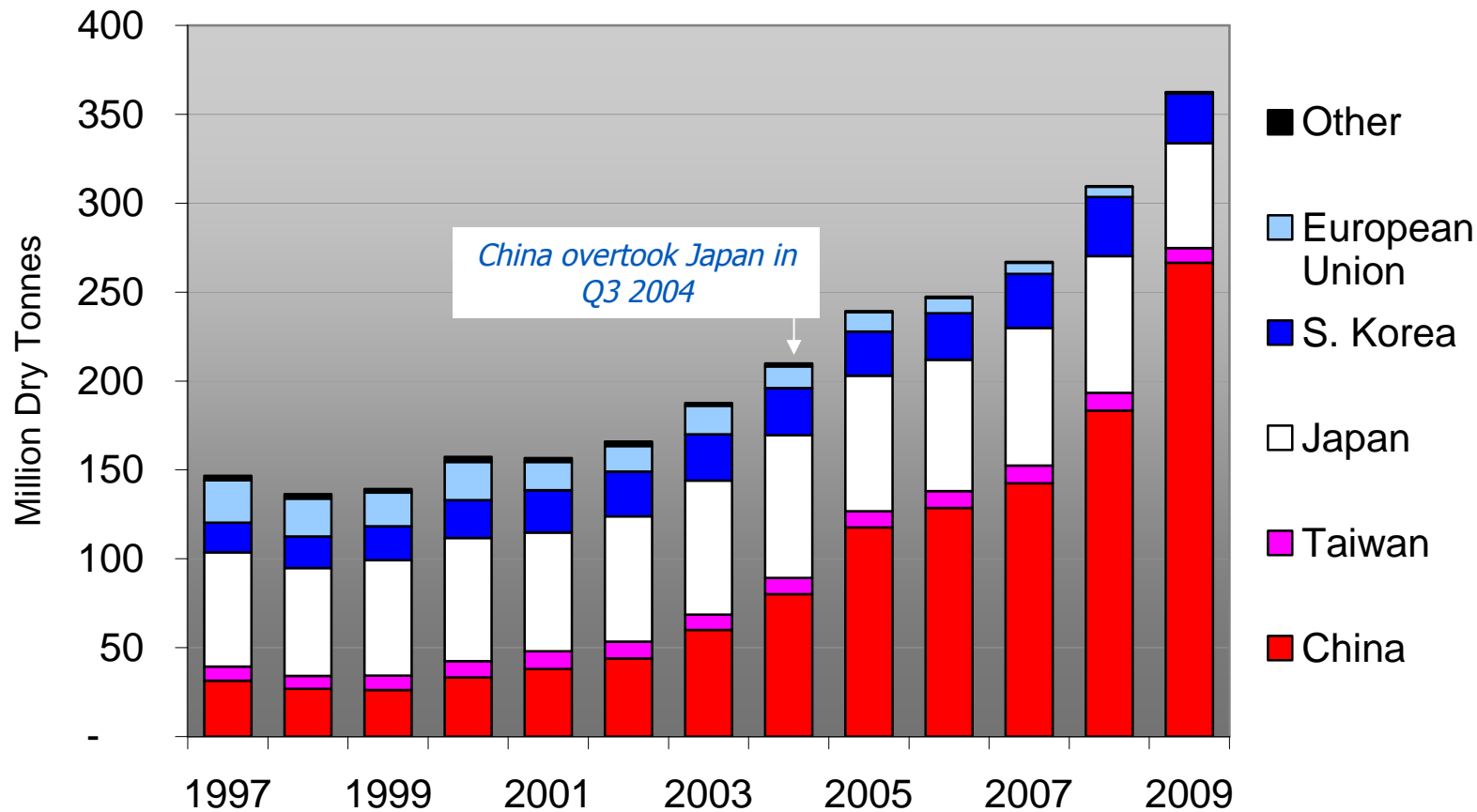


The 'Big 3' dominate seaborne iron ore trade



New players and Chinese diversification of sourcing have reduced The Big 3's share

China powers Australia's iron ore export growth

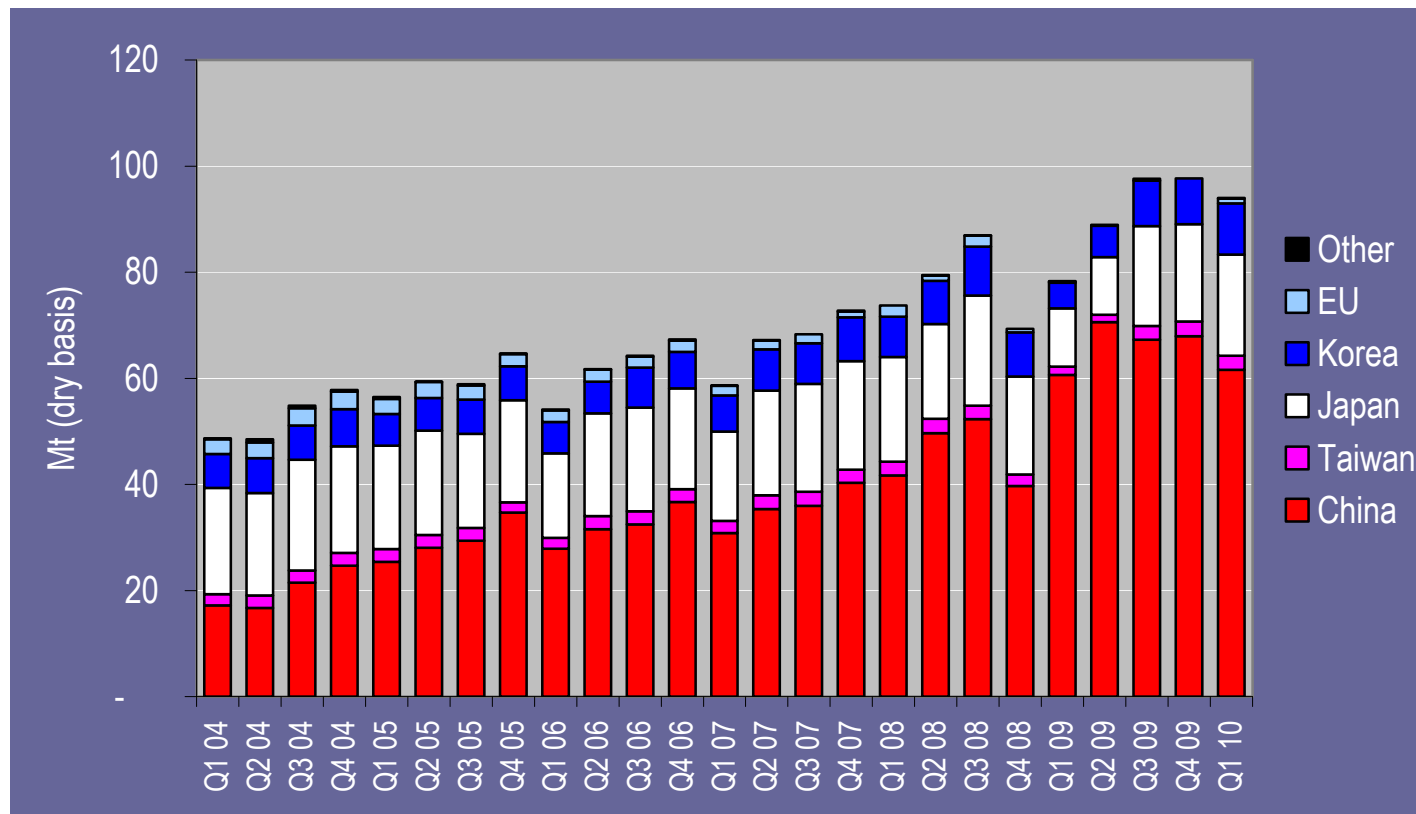


2010 exports (Jan-Apr annualised) => 382Mt, China 270Mt

References: Abare, Tex Report, Metalitics

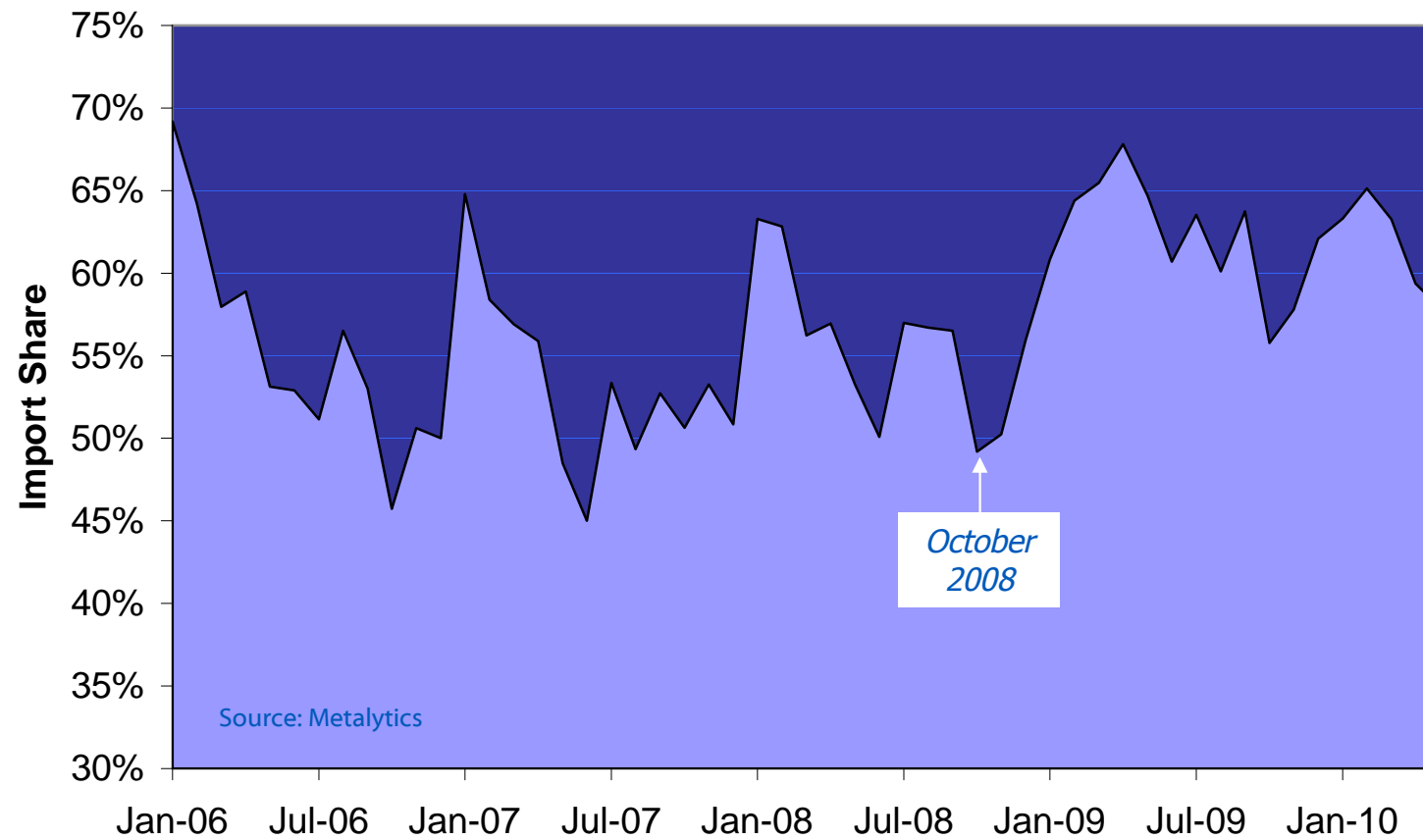


Australian exports – into and out of crisis

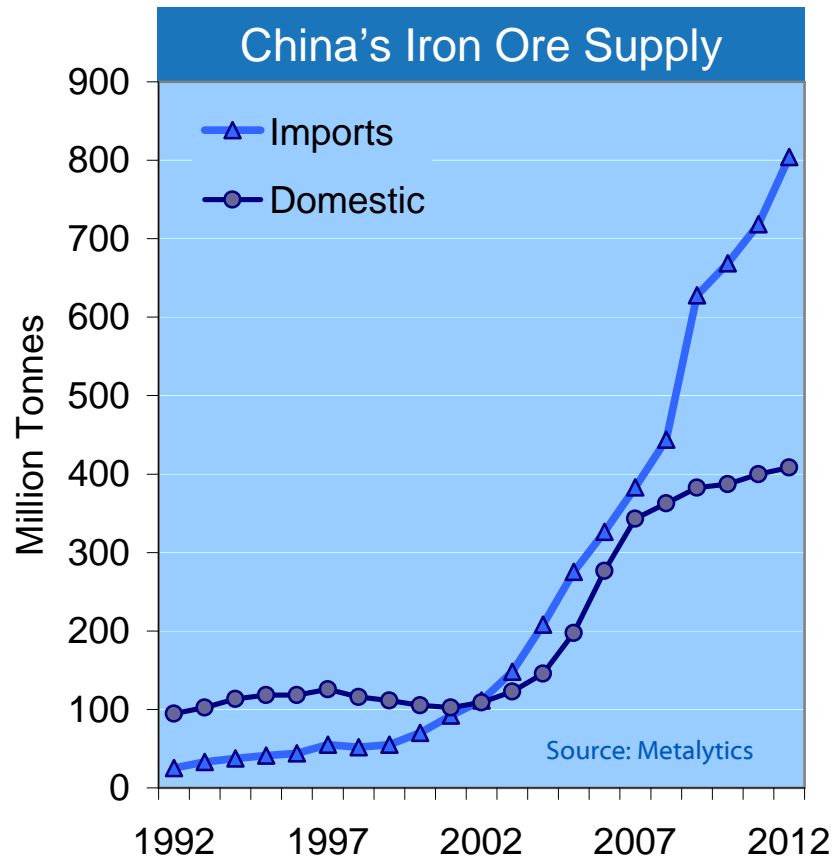


References: Abare, Metalytics

Import share of saleable ore supply in China



China Iron Ore market phases



1990s

Imports supplement domestic supply

Early 2000s

Imports overtake domestic under rapid steel industry expansion

Mid-2000s

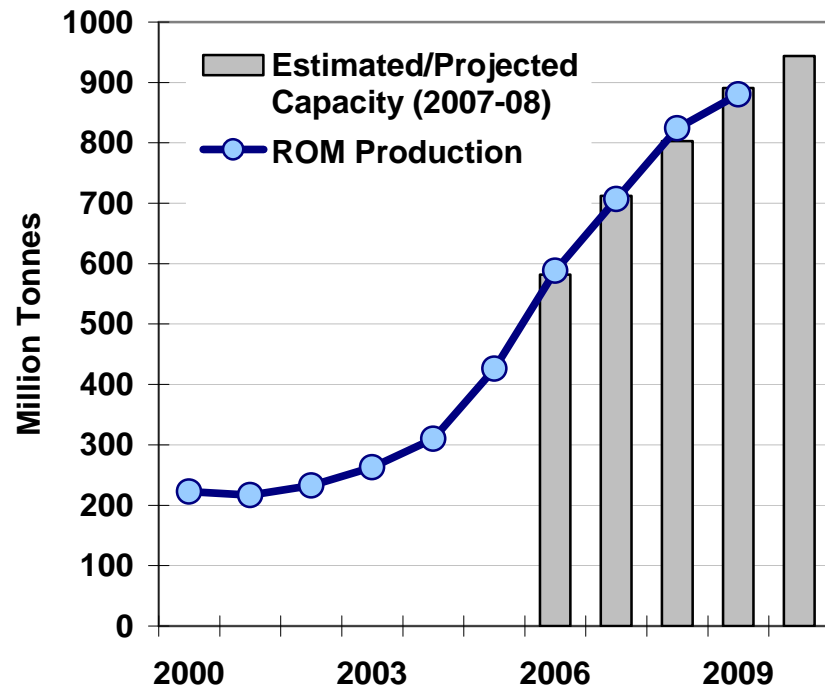
- Explosion of domestic output under unprecedented price rises
- Attempt to reduce or delay rising import dependence

Late 2000s Forward

Global sourcing and investment strategy – Domestic supply supplements imports

China still pushing domestic production

Chinese Iron Ore Production

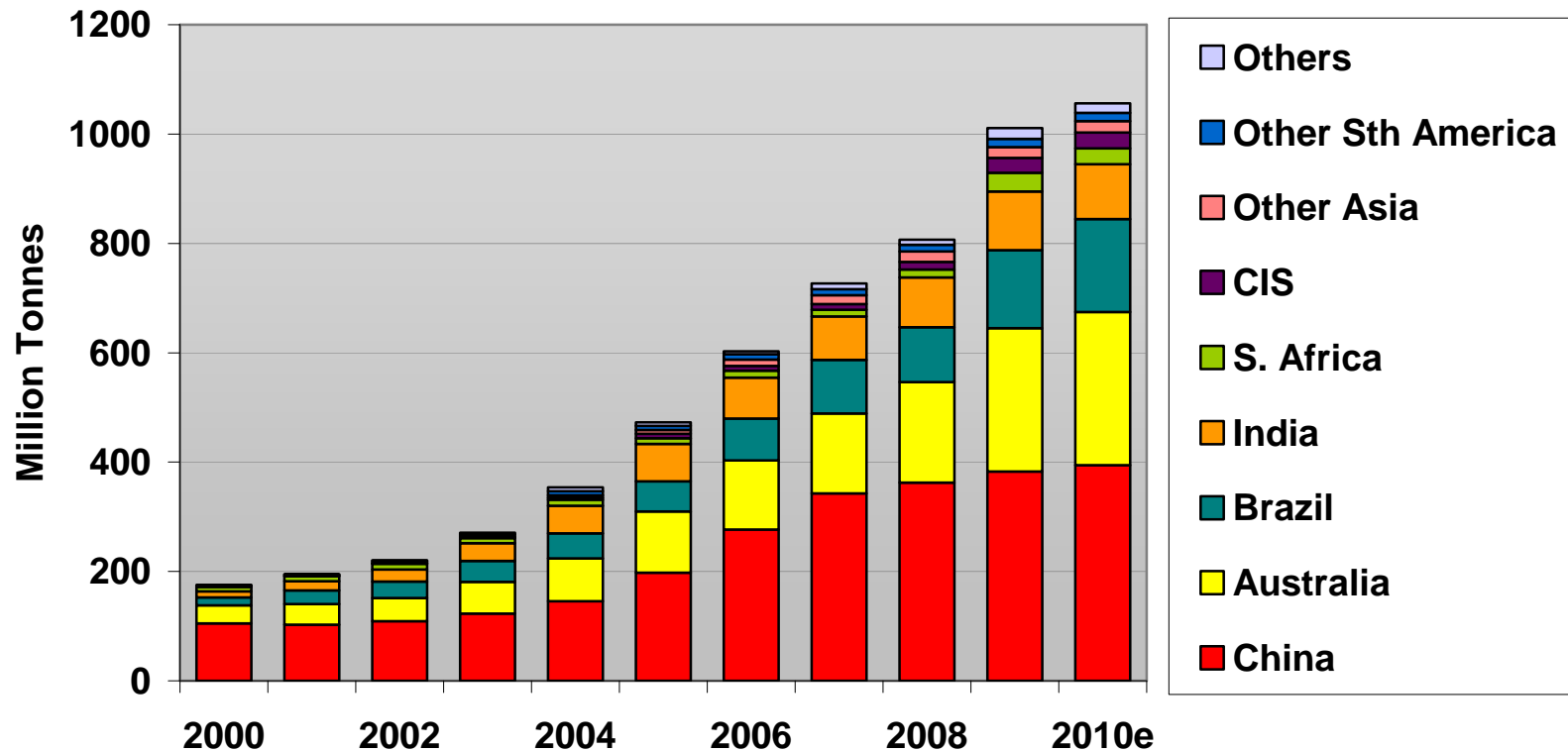


References:
UNCTAD, Tex Report, China Metallurgical Newsletter,
Beijing HL Consulting, China NBS, Metalytics

- Rapid growth 2004-2008
- High cost operations attracted by high prices
- Actual production tracking or beating projections
- Five out of last 12 months at over 1Bt ROM annual rate
- Investment in Ferrous mining & processing Jan-Apr 2010 US\$2.22bn, up 18.5% y-o-y

Capacity ROM (Mt)	2008	2009	2010
2007 projection	785	871	930
2008 projection	803	891	944
Actual (annualised)	824	880	889 (Jan-Apr)

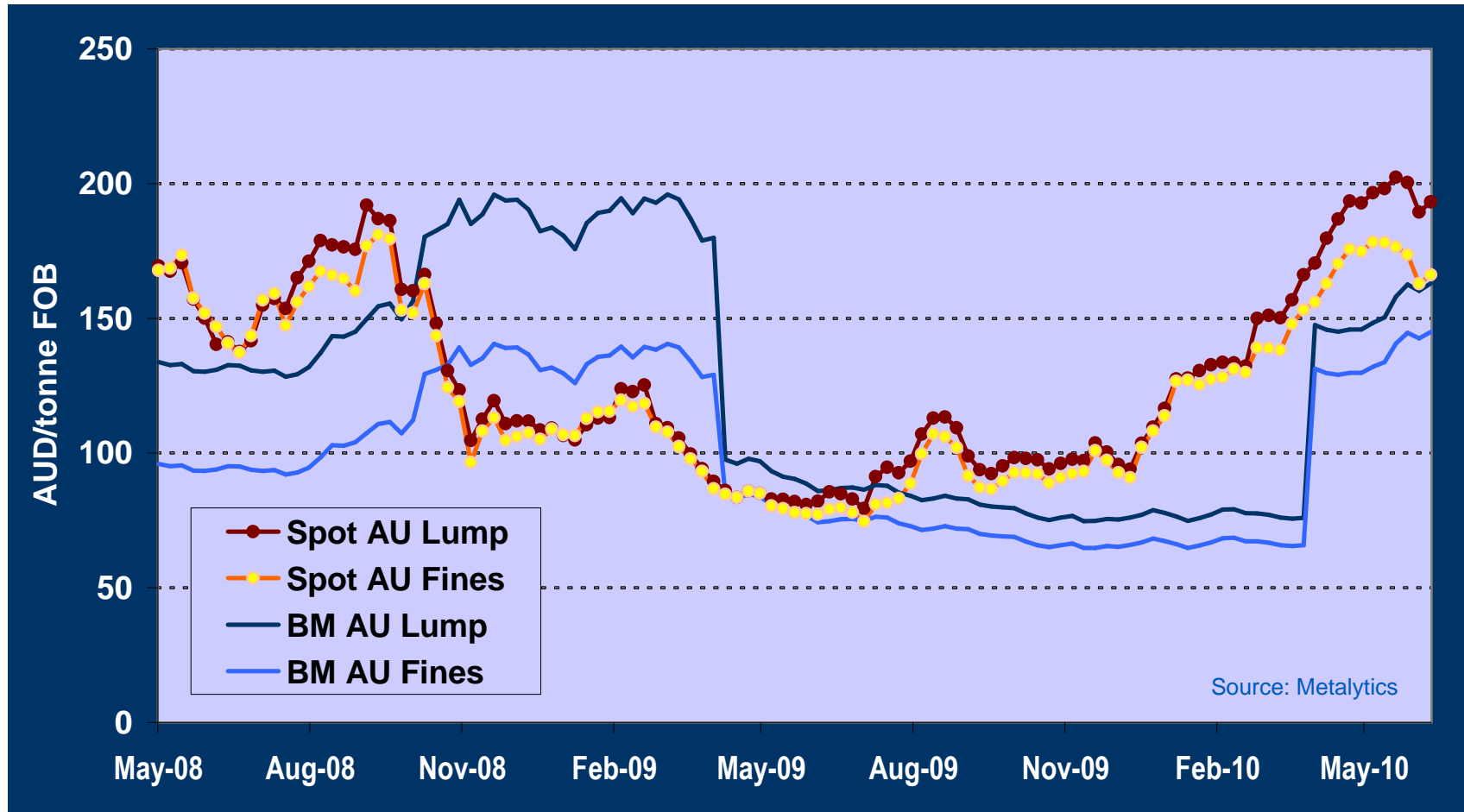
China's iron ore sources – opportunity in diversity



Imports from more than 40 countries

References: UNCTAD, Tex Report, Metalitics

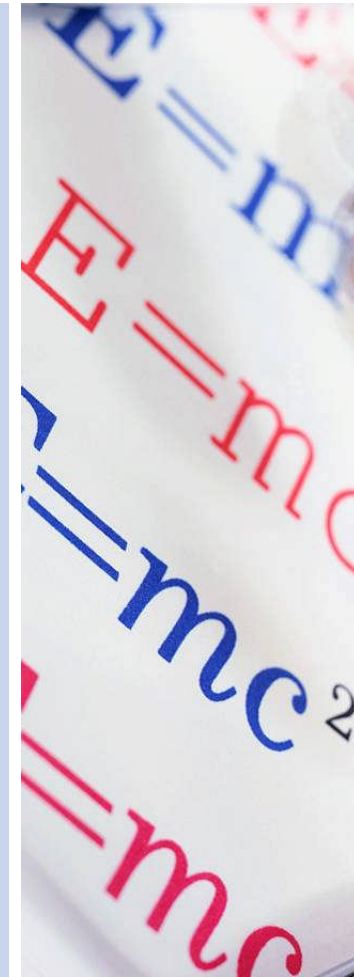
Spot, benchmark, and the A\$



References: Umetal, Tex Report, RBA

In the end – it's all relative!

- ❑ Steel is back –
 - ❑ China has taken up the slack and become dominant
- ❑ Steel has a long way to grow
 - ❑ Despite economic downturns
- ❑ Blast furnace iron growth rates remain strong – even with the GFC
- ❑ GFC represents a pause in global iron ore consumption growth
- ❑ Seaborne trade has maintained an upward path
- ❑ Australia is in the box seat
- ❑ The Big Three remain dominant, but others are taking share
- ❑ China dependent on imports for growth
 - ❑ Diverse sources open opportunities
 - ❑ Australia's iron ore growth rides on China
- ❑ The capex for new iron ore capacity continues to grow as we look forward
- ❑ Pricing transparency has led to greater opacity
- ❑ Annual average prices forecast to rise for the next few years with quarterly (or monthly) volatility
 - ❑ High cost producers will continue to be attracted



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