

WORLD MARKET FOR STEEL - perspective



Ivan Kaic

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fnsteel

Who am I? (Ivan Kaić)

Born 1978 in
Sarajevo, fm
Yugoslavia

Today in Linköping,
Sweden

My private
psychologist and
partner in life **Linda**

Maximilian & Viktor

Grad. 2003 Master of
Science in Metallurgy

Mining - Boliden

Production - SSAB

Sales & Strategy -
Outokumpu

Sales - Fnsteel

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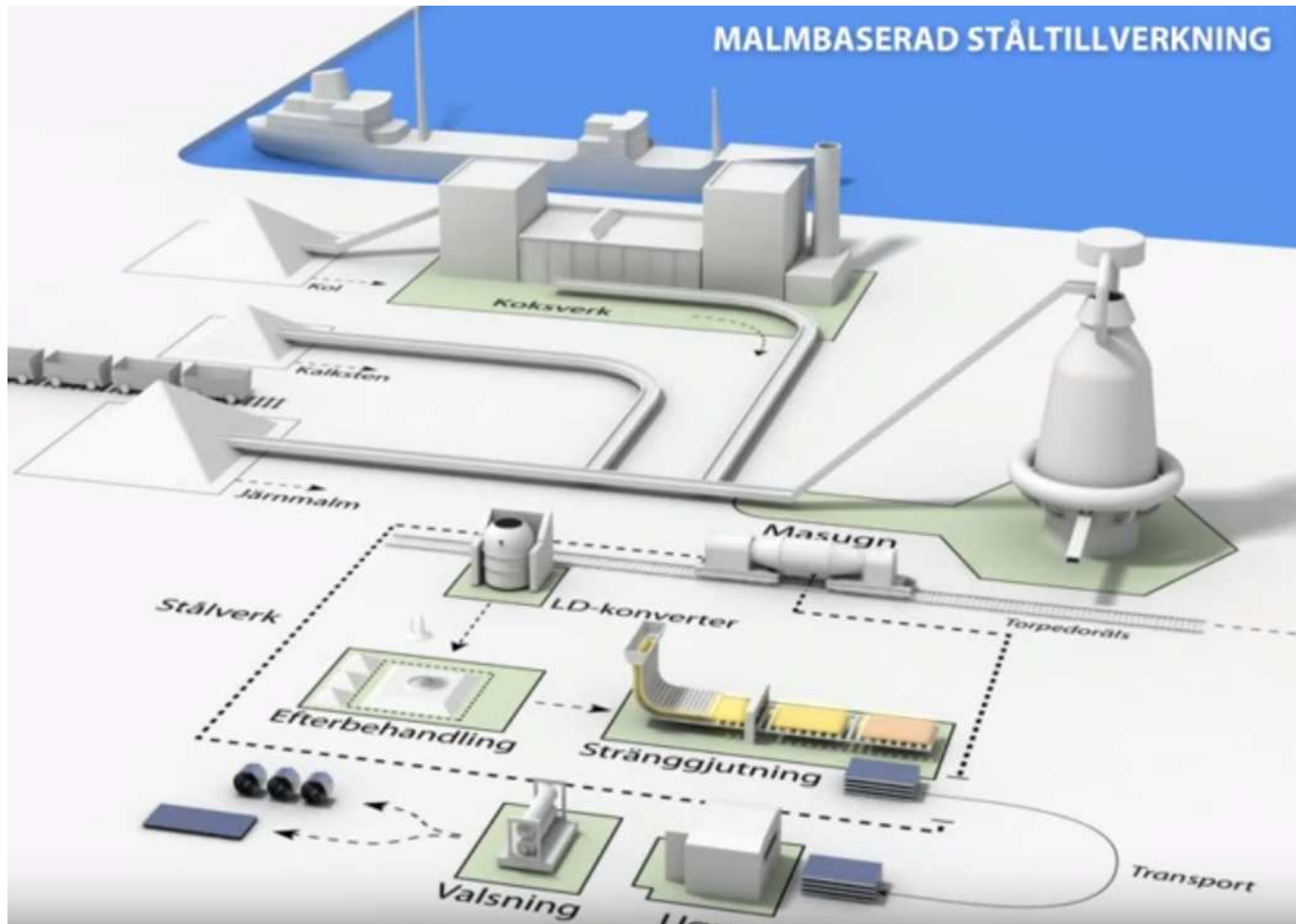
Steel Production Route

Iron Ore based

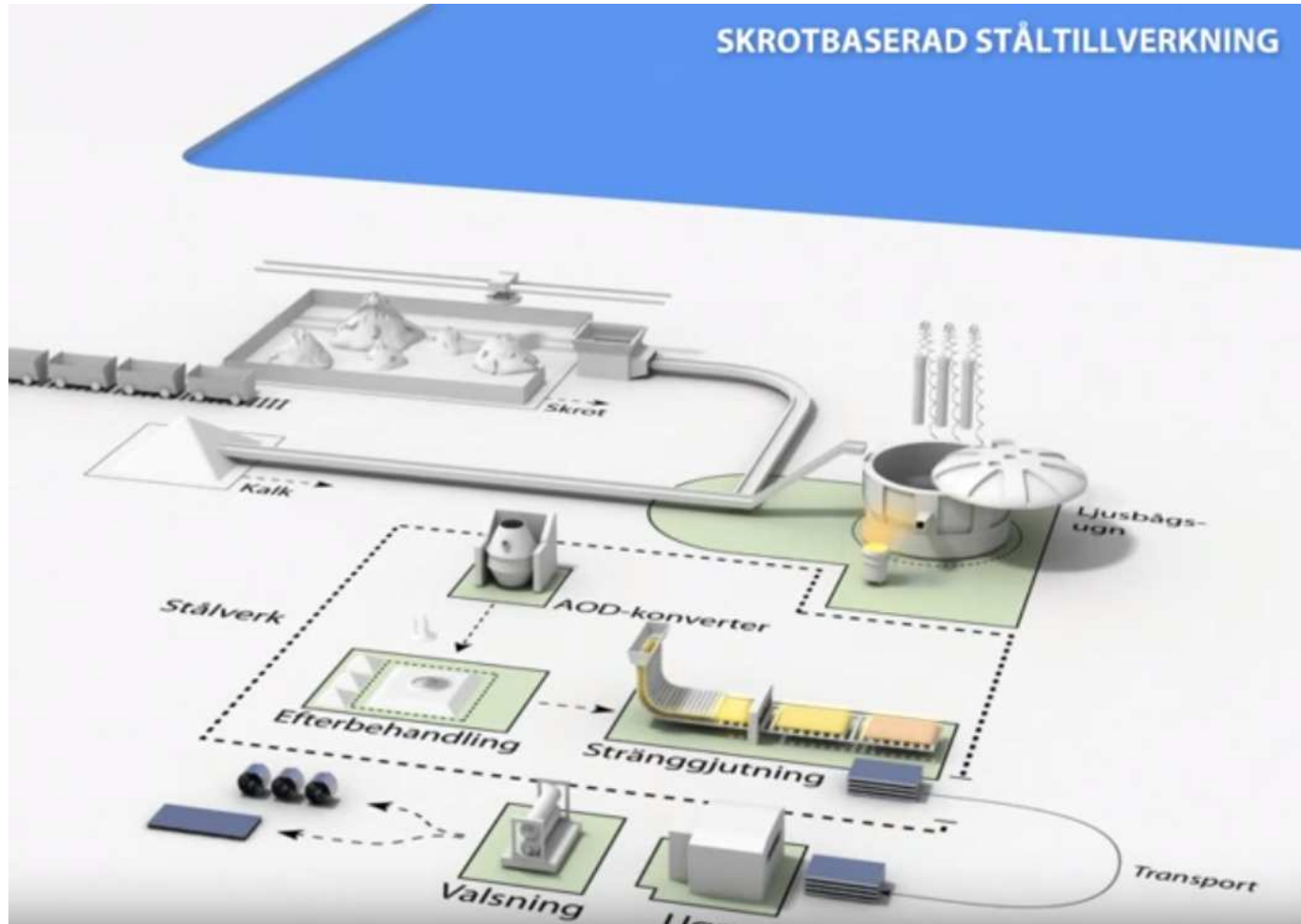


Scrap based



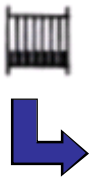
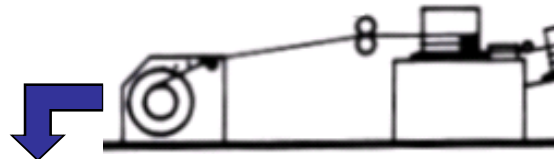
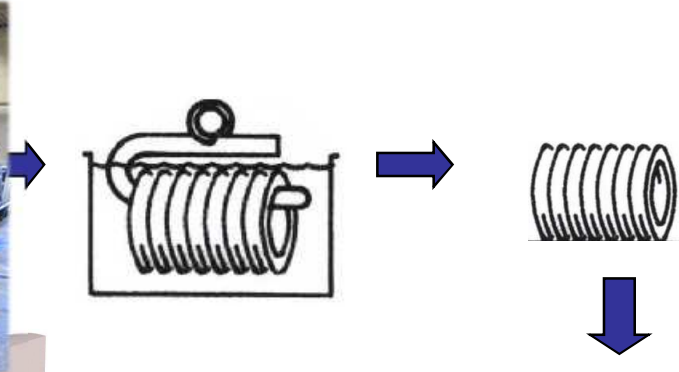


SKROTBASERAD STÅLTILLVERKNING

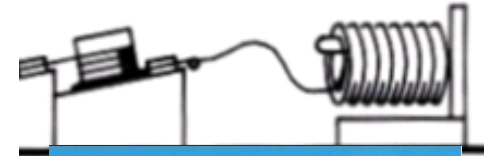
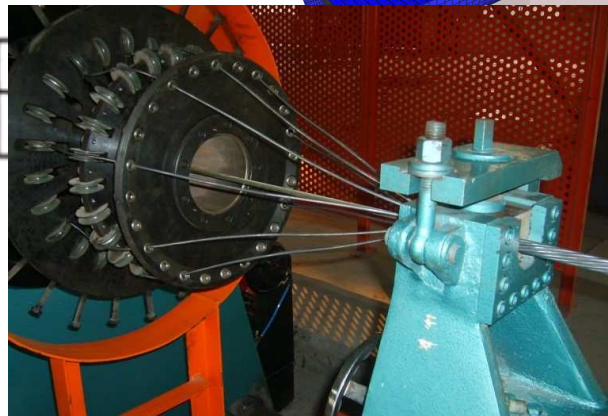
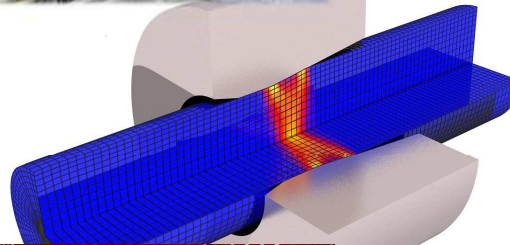


Pc-strand manufacturing process

Wire rod



Strand



Coil

Coil



laboratory Testing

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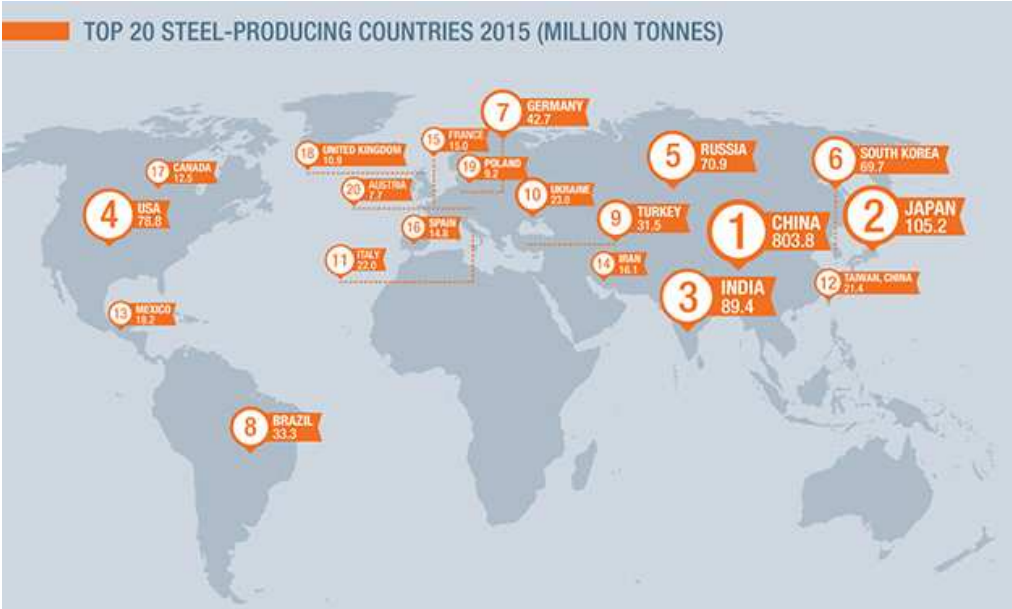
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Exponential-Growth



Who is to blame?!

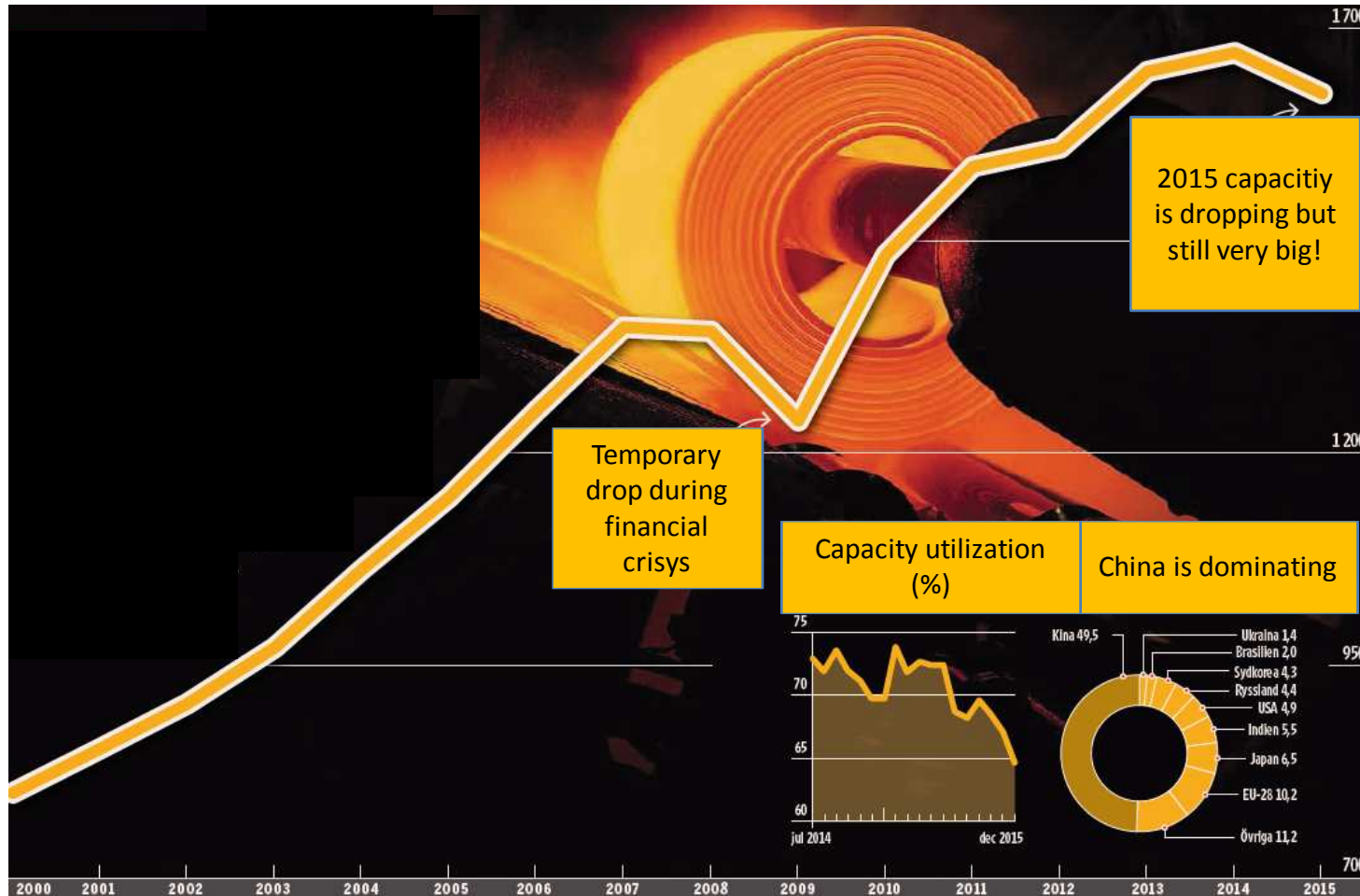


Top steel-producing companies in 2015 (million tonnes)

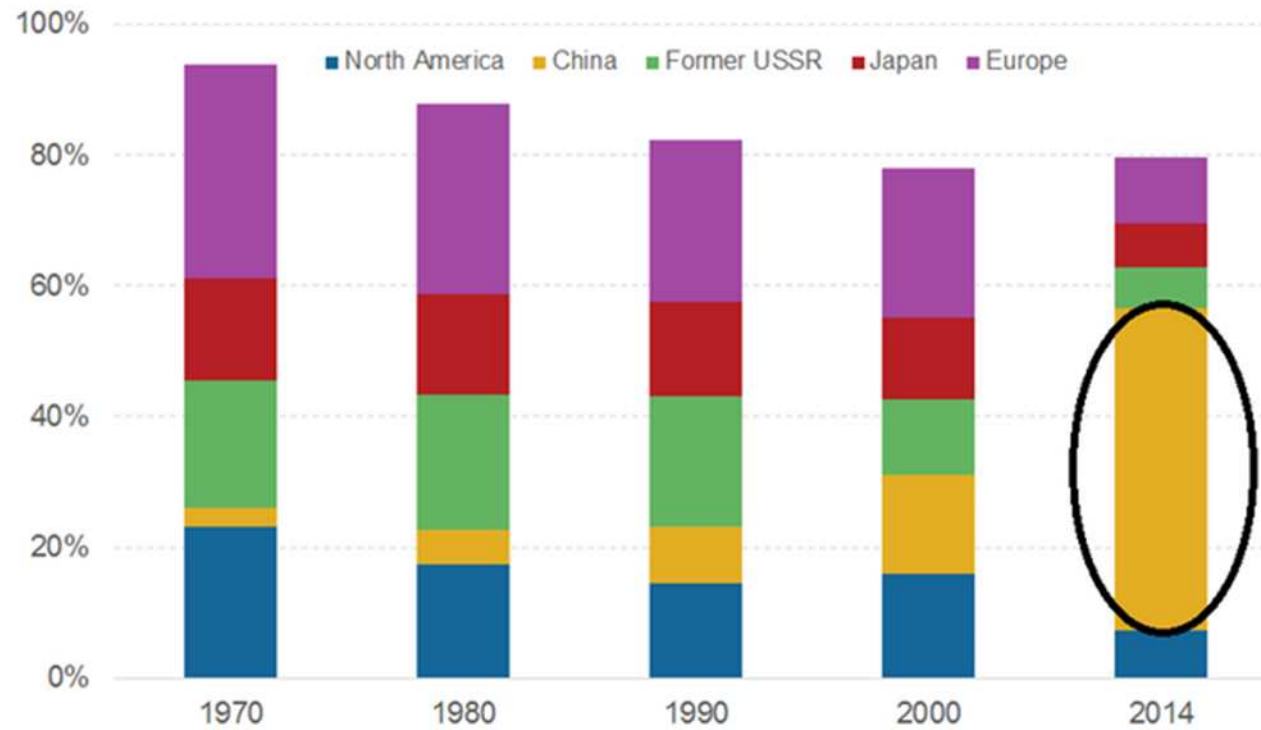
Ranking	Companies	Tonnage 2015
1	ArcelorMittal	97.136
2	Hesteel Group	47.745
3	Nippon Steel and Sumitomo Metal Corporation (NSSMC)	46.374
4	POSCO	41.975
5	Baosteel Group	34.938
6	Shagang Group	34.214
7	Ansteel Group	32.502
8	JFE Steel Corporation	29.825
9	Shougang Group	28.553
10	Tata Steel Group	26.314

Source: worldsteel

Trend Change in 2016?



Breakup of Global Steel Production



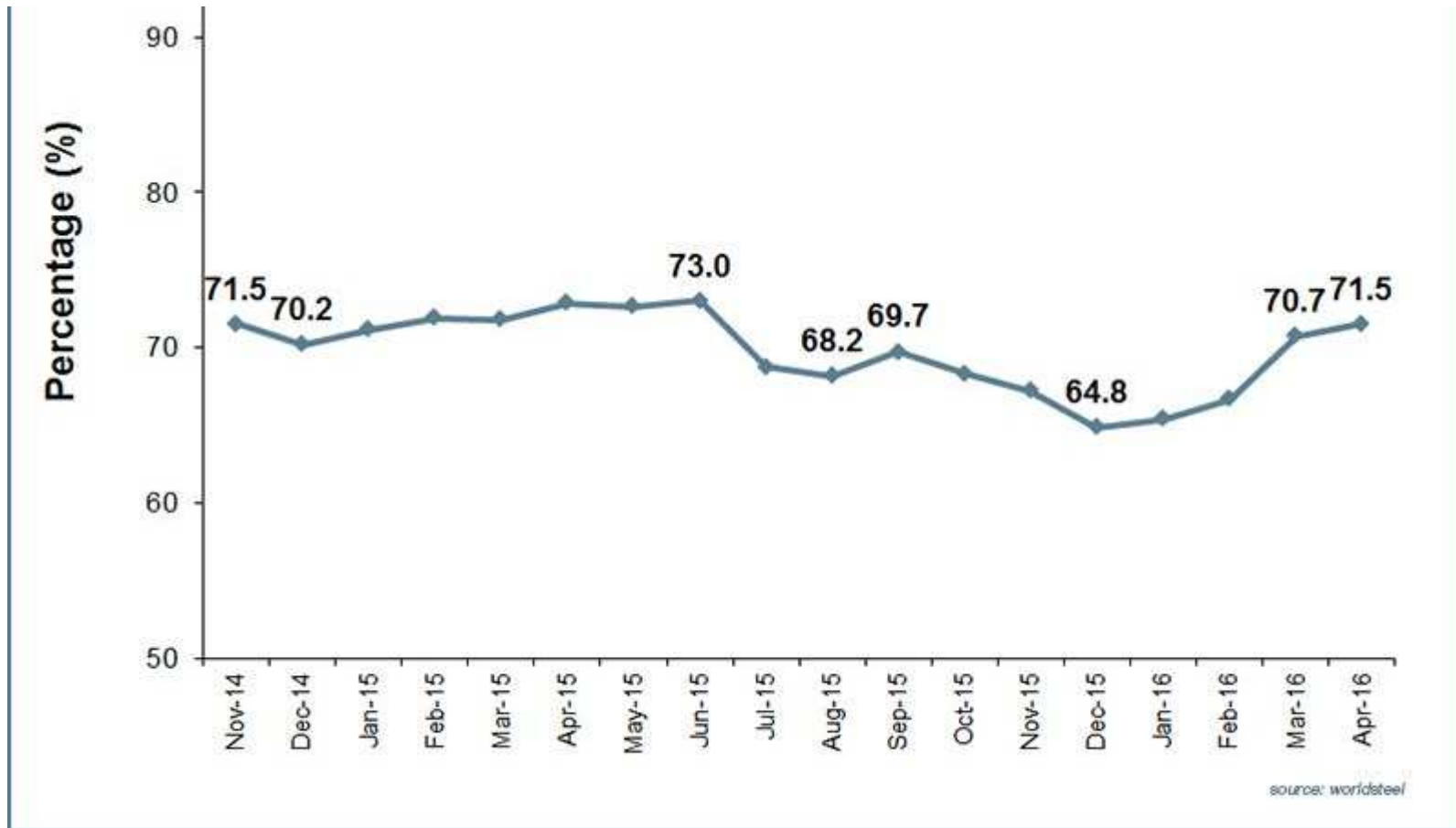
In 1970, Europe includes both eastern and western Europe. From 1980 onwards, data is for the European Union

Market Realist[®]

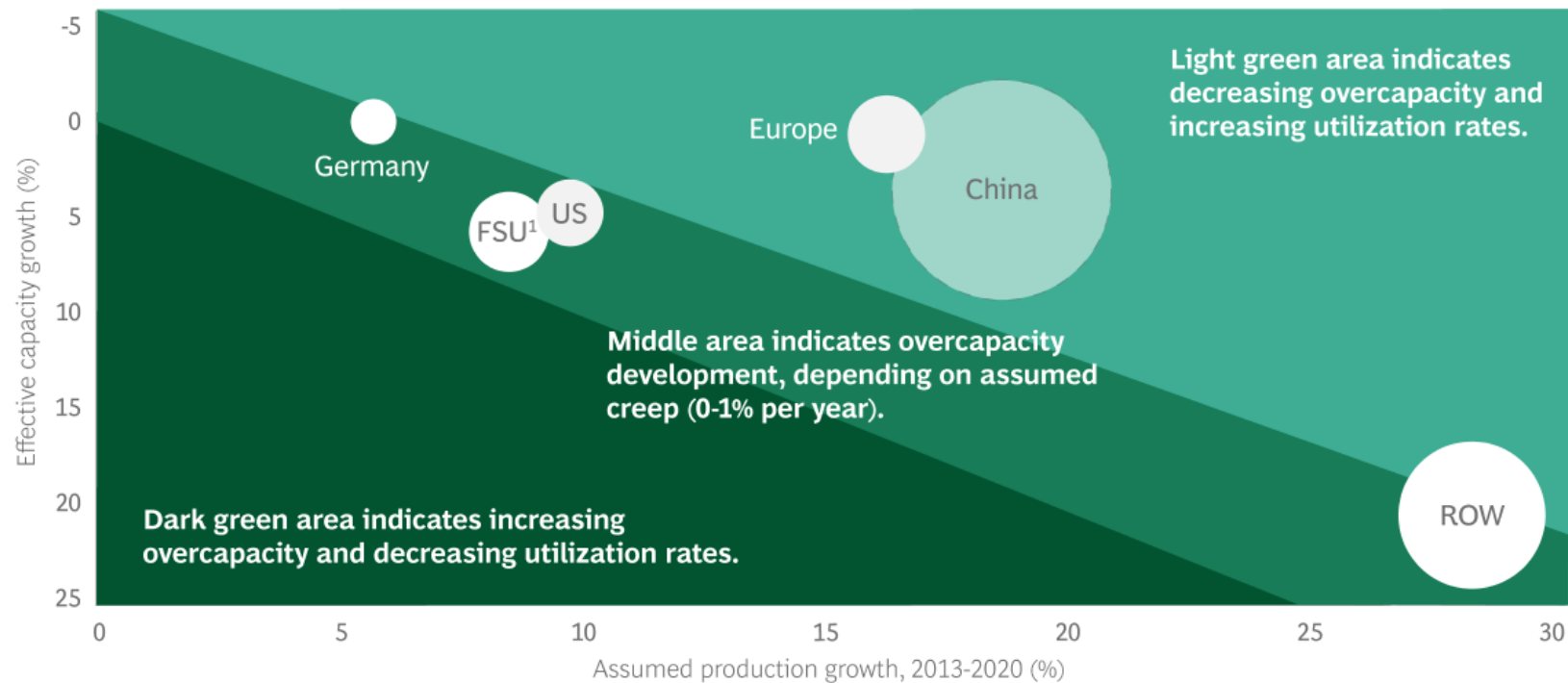
Source: World Steel Association

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Utilization is back on lowest levels again

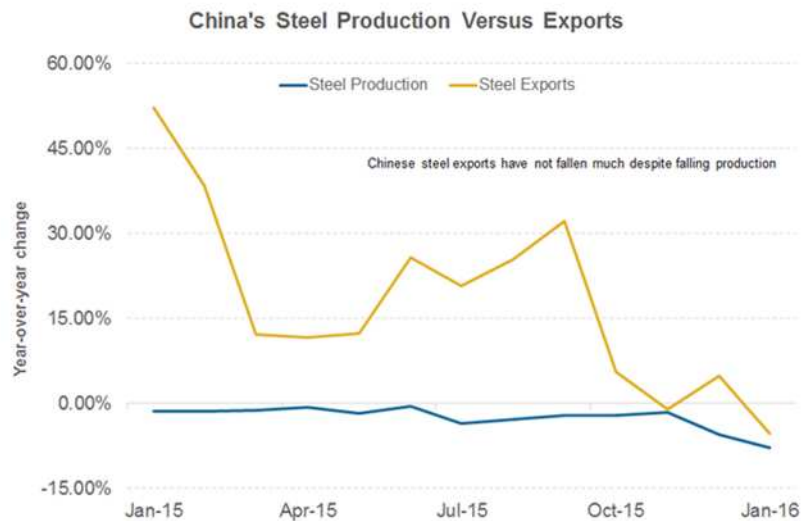


Overcapacity will decline in most regions where demand outpaces capacity additions



Source: BCG analysis.
1. FSU is nations of the former Soviet Union.

Capacity cuts



Market Realist^Q

Source: National Bureau of Statistics, China

- There are currently a number of trade suits pending against China
 - It could be a significant, positive development for the steel market
- As a result of bad profitability China to cut production capacity by 100 to 150 million tons over five years
 - 1,8 million jobs can be lost
 - China PMI is below 50 for twelve months in a row
 - Dept that are own to Chinese banks?

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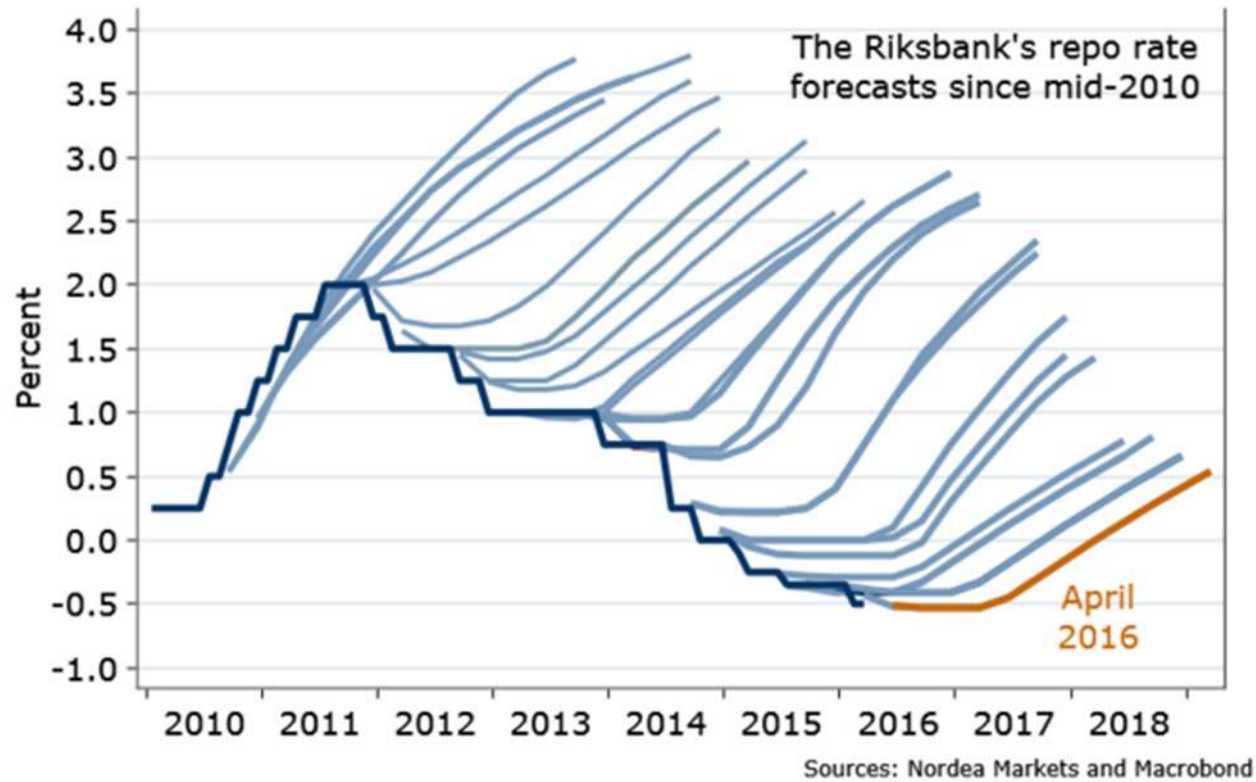
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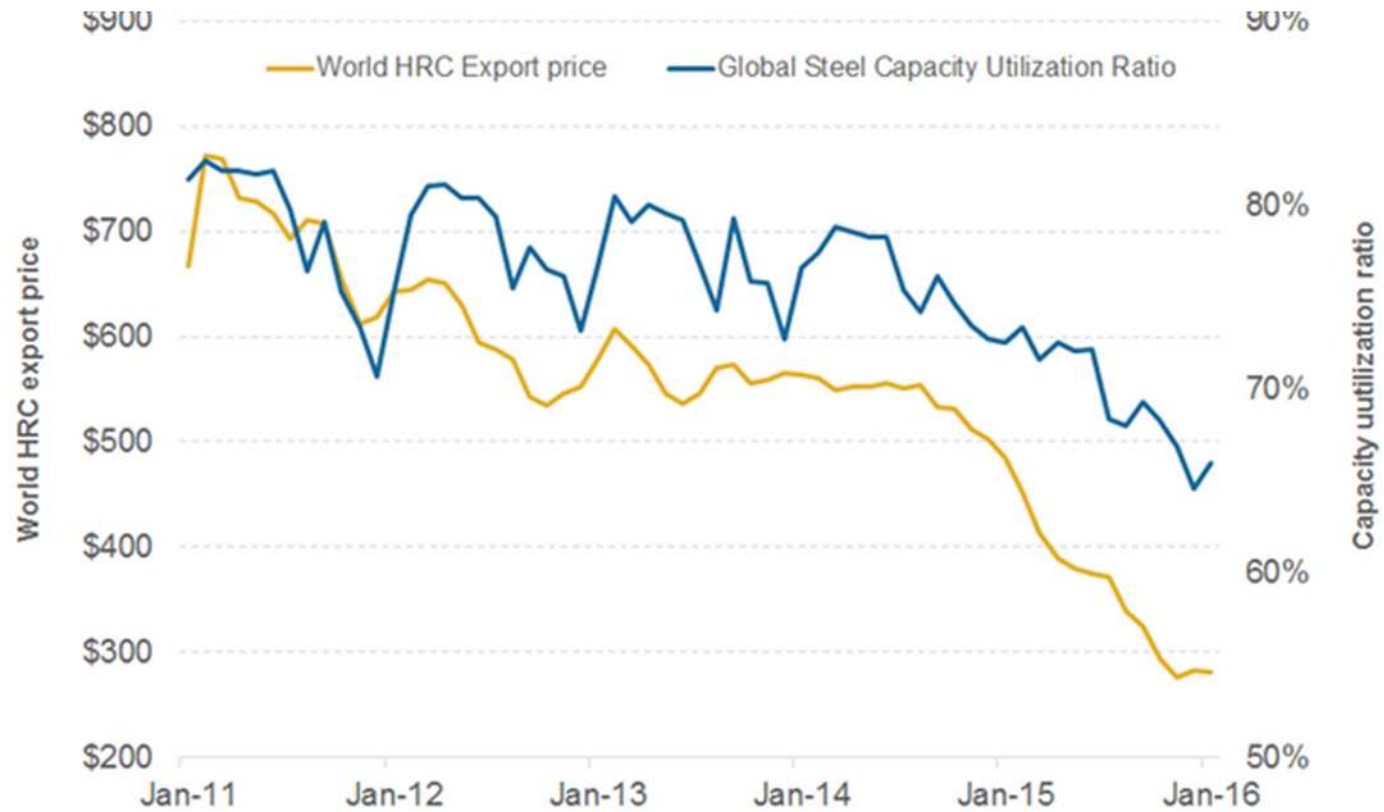
Where is the steel price heading???



Where are we really heading? (Swedish central bank forecasts)



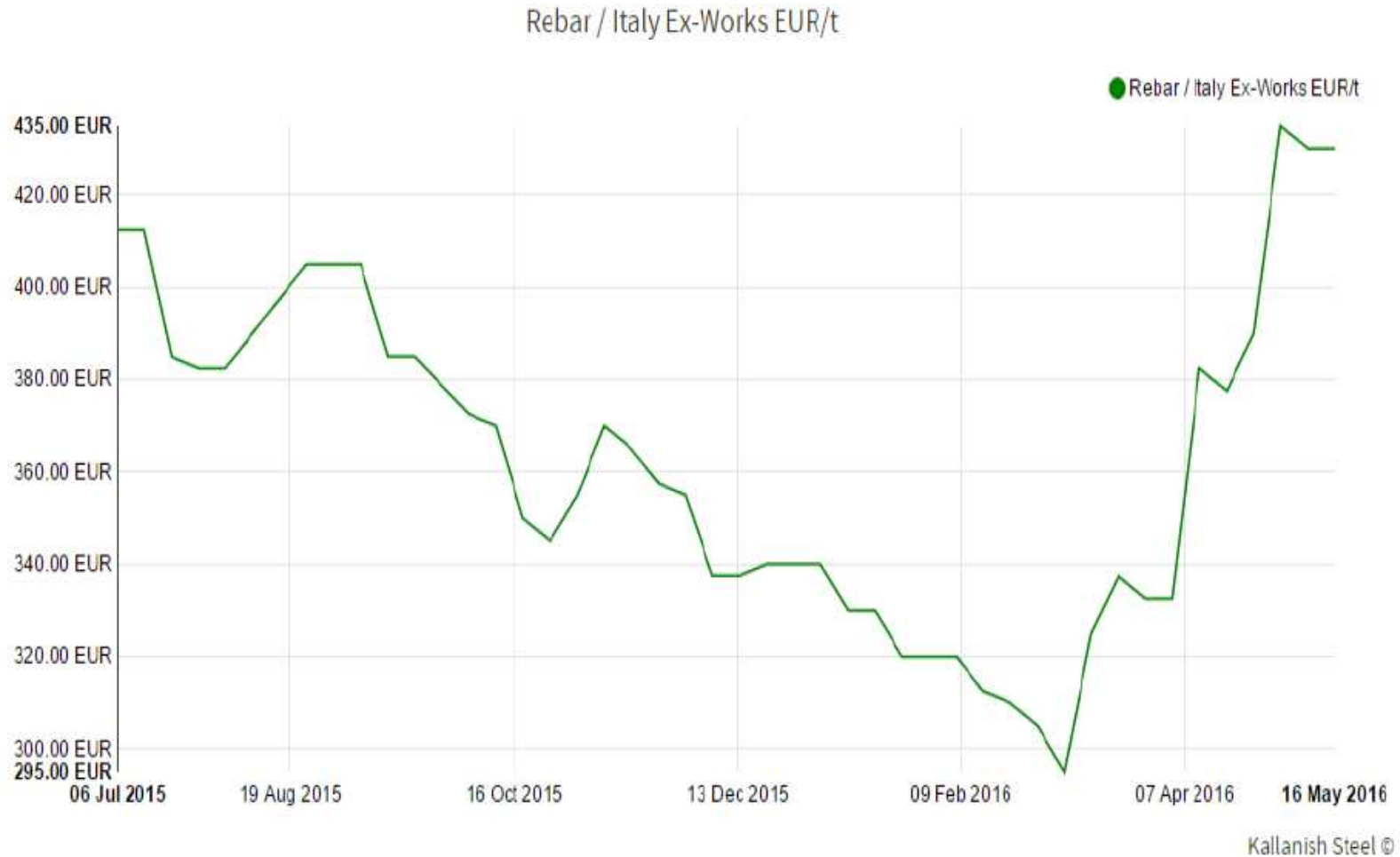
Capacity utalization vs HRC price



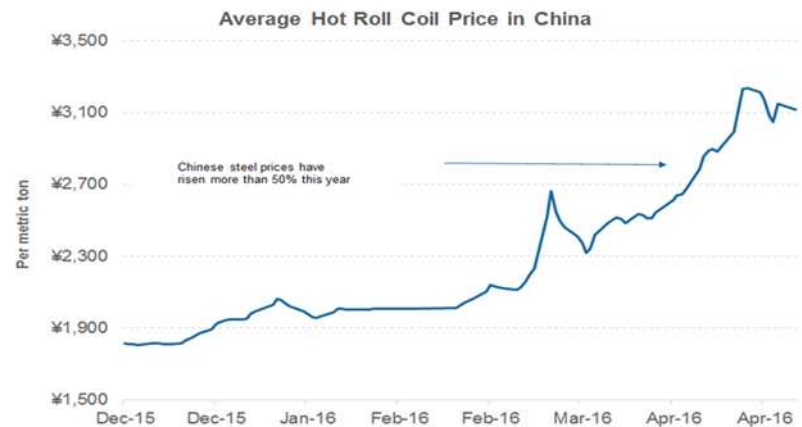
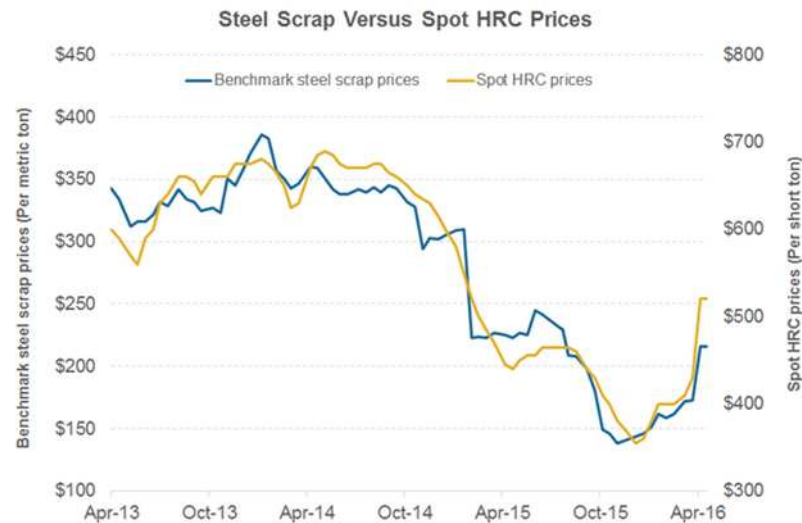
Market Realist[®]

Source: World Steel Association, SteelBenchmarker

So what is happening lately?



Prices are soaring but what could change the momentum?



Market Realist

Source: Antaika

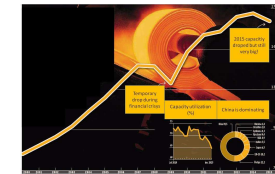
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- Inventory restocking and better market settlement (incl trade restrictions) has led to rush to buy steel
- rising steel scrap prices have ensured that steel buyers don't resist paying more for steel products
- Increasing trading restrictions and better-than-expected demand from the construction sector has boosted Chinese prices
- the hanging sword of global overcapacity could continue to threaten any major and sustainable rise in the steel ???

China is the key

➤ Production has grown over demand

- Chinese Production from 150 → 800m tons in 15 years
- Chinese Capacity from 200 → 1200m tons in 15 years
- BIG Overcapacity when China growth slows down



➤ Not acting according to market rules

- 300 CISA members and the half of them is making losses today
- Big exports to US and EU → anti dumping measures
 - "Trade without fairness is not trade, it's war."

➤ Development forward

- Accept losses or change strategy?
- Transferring wealth from China → help competitiveness for others?!

➤ Signs that worst is behind us...

- Planning to cut production by 100-150m tons in 5 years
- Closing of all steel "zombie" companies already started
- Can India save the steel market?

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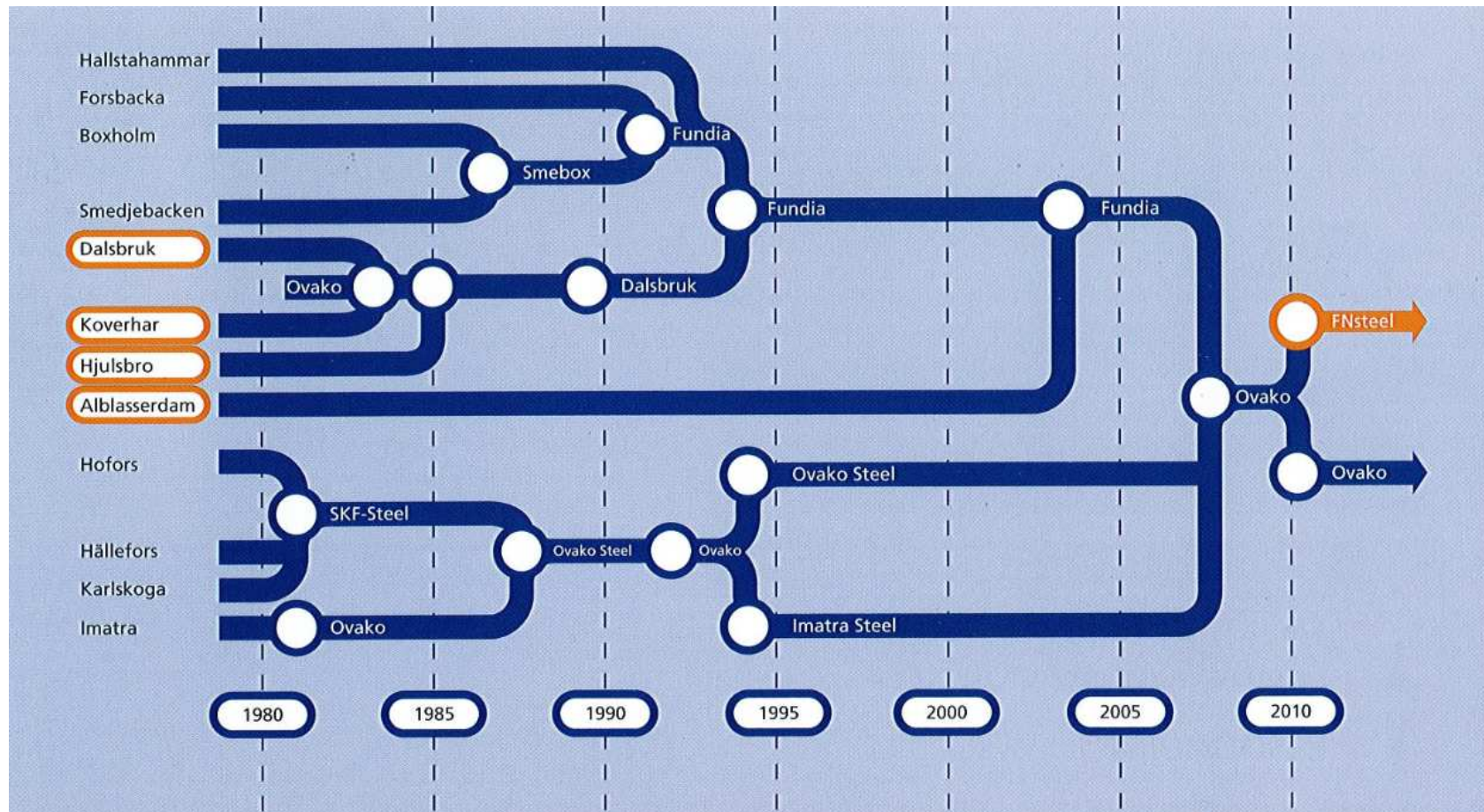
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Long History 1686-



Fnsteel Companies

LEGAL COMPANIES

FNsteel BV

Rolling mill and wire processing in Alblasterdam in the Netherlands.

FNsteel Hjulsbro AB and FNsteel Dalwire Oy Ab

Produces PC-strand in Sweden and Finland.



Division PC strand consists of 2 plants



Production of PC-strand

⚙️ Production 30 000 t/y

👤 Personnel 45



Production of PC-strand

⚙️ Production 15 000 t/y

👤 Personnel 25

PC strand product range

Specification prEN 10138

Strand code	Diameter d mm	Cross-sectional area S_n mm ²	Nominal mass M g/m	Tensile strength R_m MPa	Characteristic value of max. force F_m kN	Characteristic value of 0,1% proof force $F_{p0.1}$ kN
3-wire strands						
Y1860S3 6.5	6.5	21,2	166	1860	39,4	33,9
Y1860S3 6.9	6.9	23,4	183	1860	43,5	37,4
Y1860S3 7.5	7.5	29,0	227	1860	53,9	46,4
Y1860S3 8.6	8.6	37,4	292	1860	69,6	59,9
7.wire strands						
Y1770S7 9.3	9.3	52,0	406	1770	92,0	79,1
Y1770S7 12.5	12.5	93,0	726	1770	165	142
Y1770S7 15.3	15.3	140	1093	1770	248	213
Y1770S7 15.7	15.7	150	1172	1770	266	229
Y1860S7 8.0	8.0	38,1	297	1860	70,7	60,8
Y1860S7 9.3	9.3	52,0	406	1860	96,7	83,2
Y1860S7 9.6	9.6	55,0	430	1860	102	87,7
Y1860S7 12.5	12.5	93,0	762	1860	173	149
Y1860S7 12.9	12,9	100	781	1860	186	160
Y1860S7 15.3	15.3	140	1093	1860	260	224
Y1860S7 15.7	15.7	150	1172	1860	279	240

Prestressing segments



Precast Concrete industri

- Hollowcore slabs
- Beams
- Columns



Civil engineering (Posttensioning)

- Bridges
- Viaducts
- Ground ancors



Mining industry (Rock Bolting)

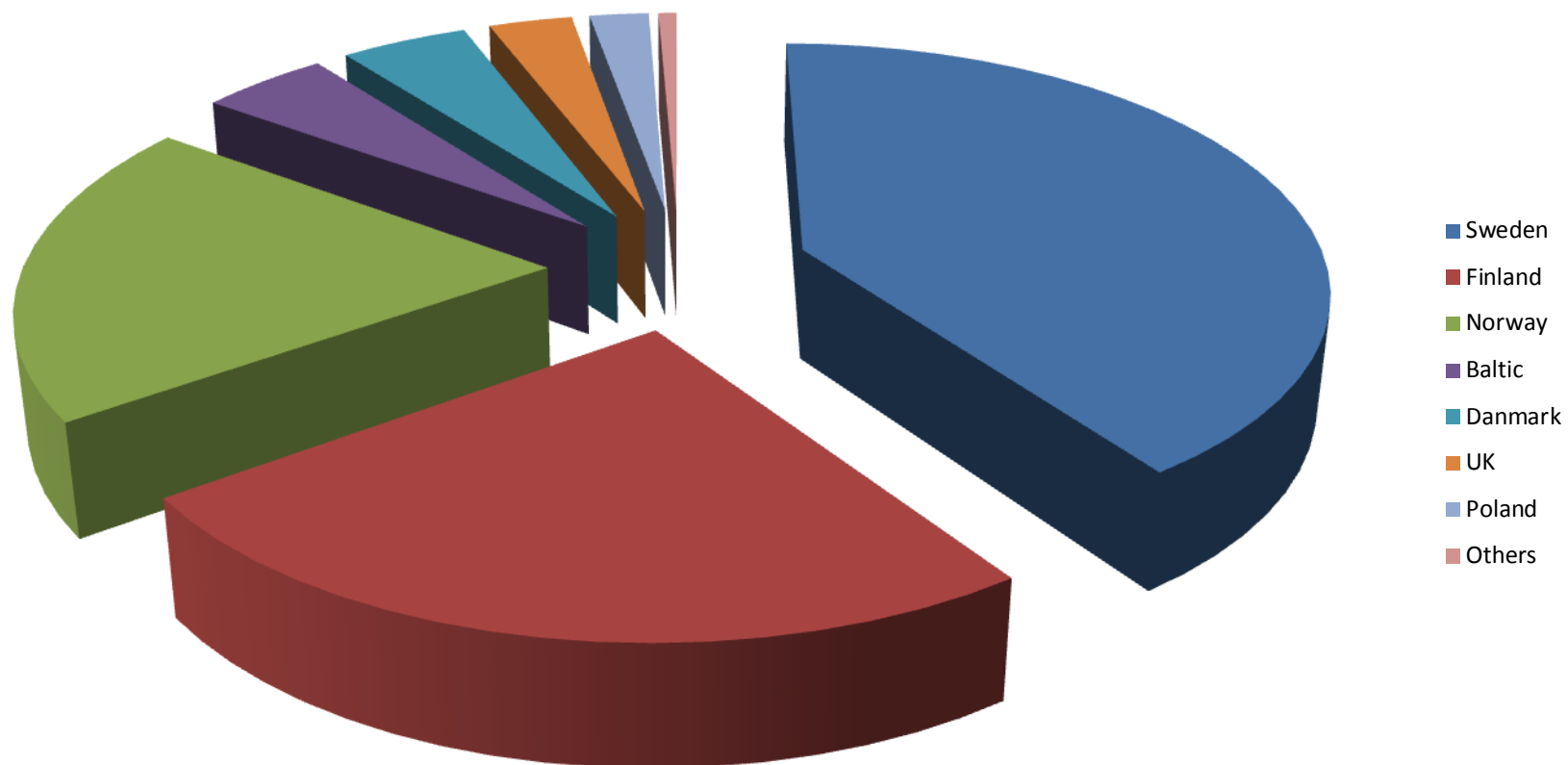
- Rock Bolting



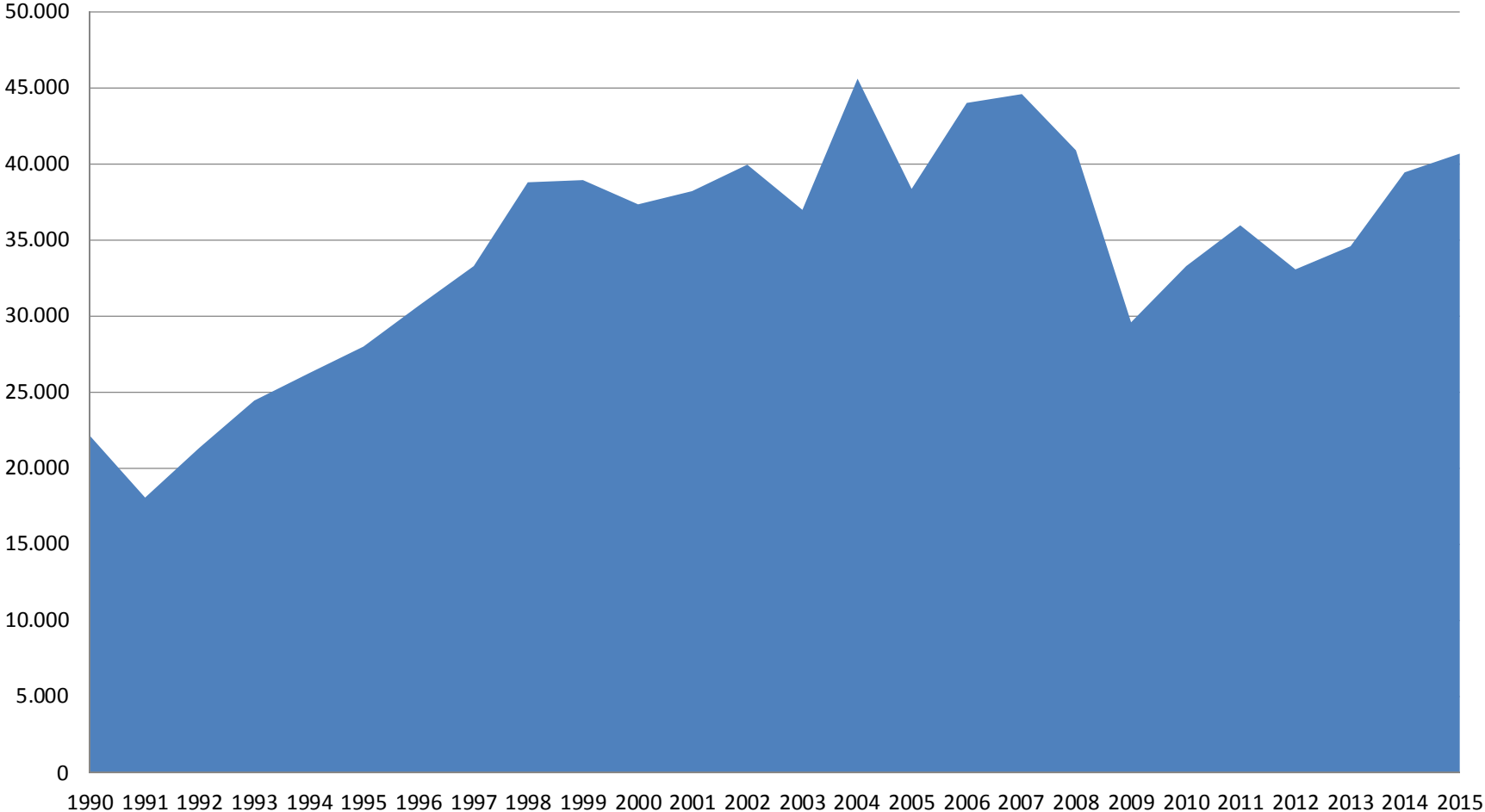
Railway Slippers

- Slippers

Northeastcentric Sales



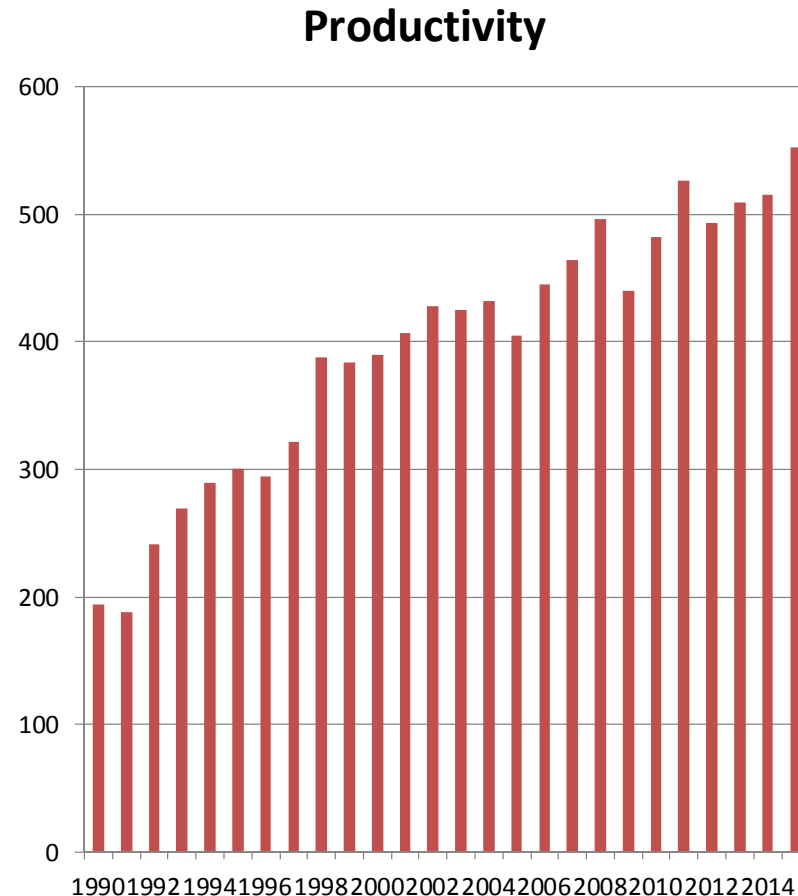
Volume development 1990-2015



Fnsteel Strengths and why you should buy from us! 😊

- ✓ Flexibility
- ✓ Delivery time/performance
- ✓ Reliability
- ✓ Quality
- ✓ Product range in PC-strand
- ✓ Enviromentaly friendly

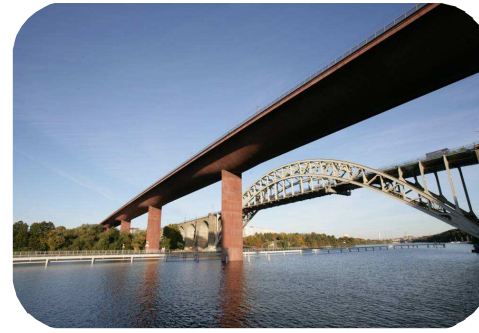
(EPD <http://www.environdec.com/en/Detail/epd810>.)



Some references



Clarion Hotel
Stockholm



Årsta Bridge
Stockholm



Friends arena
Stockholm



Kemi Mine
Finland

Q&A

Thank you for listening!

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