Large Diameter Linepipe Market: Update and Outlook

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MBR – who we are

- Established in 1991 and part of the Metal Bulletin group, MBR provides independent market analysis of the global metals & mining industry.

- We use a global network of analysts, economists, and contributors to provide monthly publications, special in-depth studies and consultancy services in carbon steels, stainless steels, base metals and emerging markets.

- Over the last 4-5 years, MBR has gained expertise in the steel tube and pipe markets through consultancy and our *Welded Steel Tube & Pipe Monthly* and *Seamless Steel Tube & Pipe Monthly* reports. In October, we launched the new *American Tube & Pipe Monthly.*

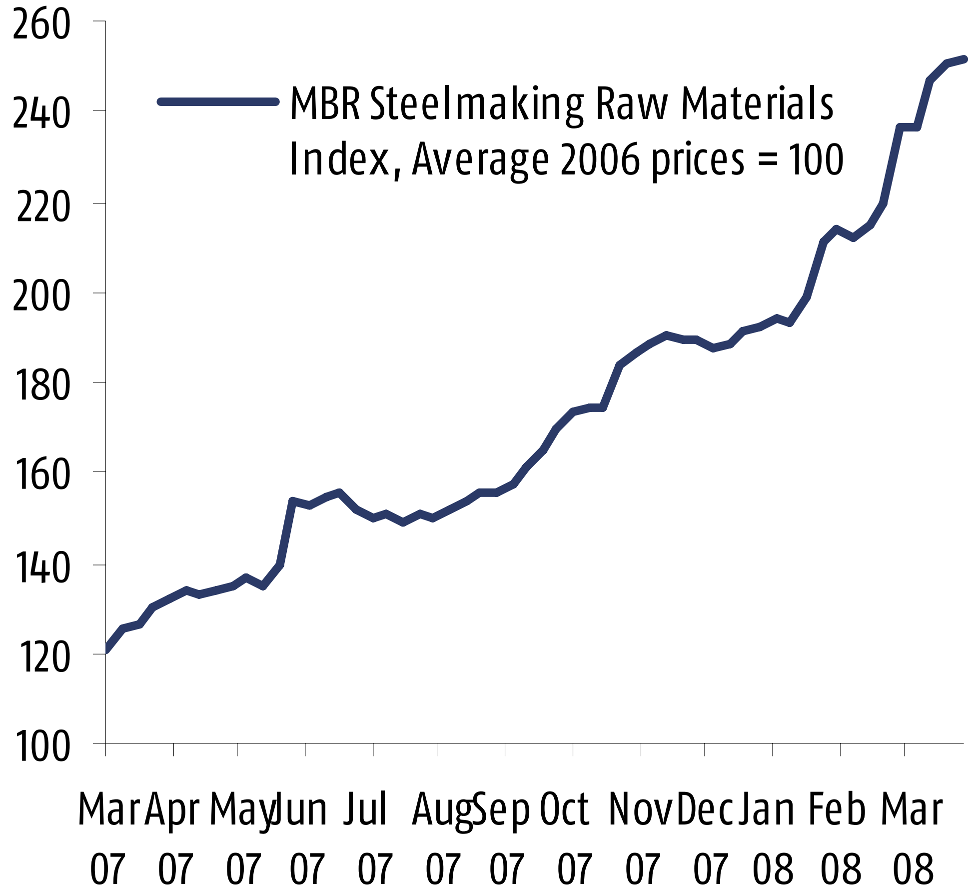
Presentation Structure

- Steel Market Overview
- Trends / Topics In Global Line Pipe Market
- Supply / Demand Considerations
- Pricing Trends & Forecast
- Summary Observations

Steel market conditions

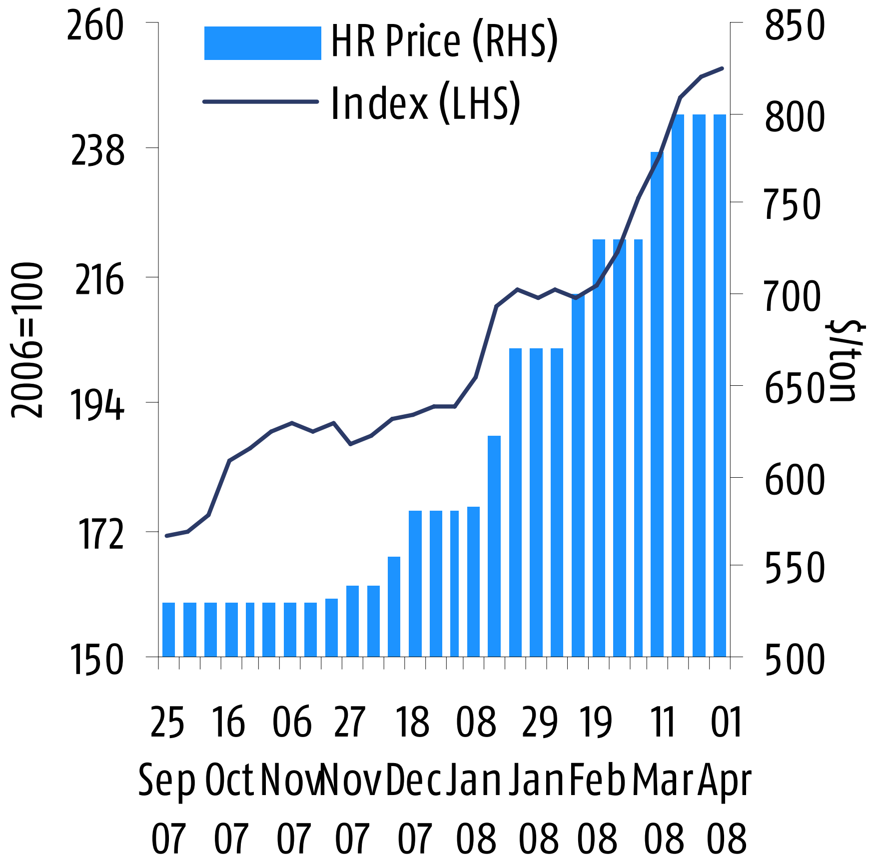
- Rising raw material costs are a global problem for steelmakers… which trickles down to tube makers/buyers
  - Iron ore: FY2008 Benchmark contracts up 71%
  - Coking coal/coke: seeing significant cost increases
  - US Scrap: as much as $150-200/l.ton higher than December 2007
  - Ferro-alloys, energy, electricity, freight: all rising
- Consolidation
  - Financing concerns *expected* to slow rate of consolidation in 2008, but we are heading toward a few 100m tpy producers
- Prices rising and becoming more volatile
  - Futures contracts promise to minimize risk, but mills are resistant
    - DGCX – rebar mini contract launched in 2007
    - NYMEX – 2008 launch (?)
    - LME – 2008 launch (?)

MBR's raw materials index



- Up 31% in 2008

HR prices vs. Raw Materials Index



HR price up 38% since the start of the year

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Plate prices vs. Raw Materials Index

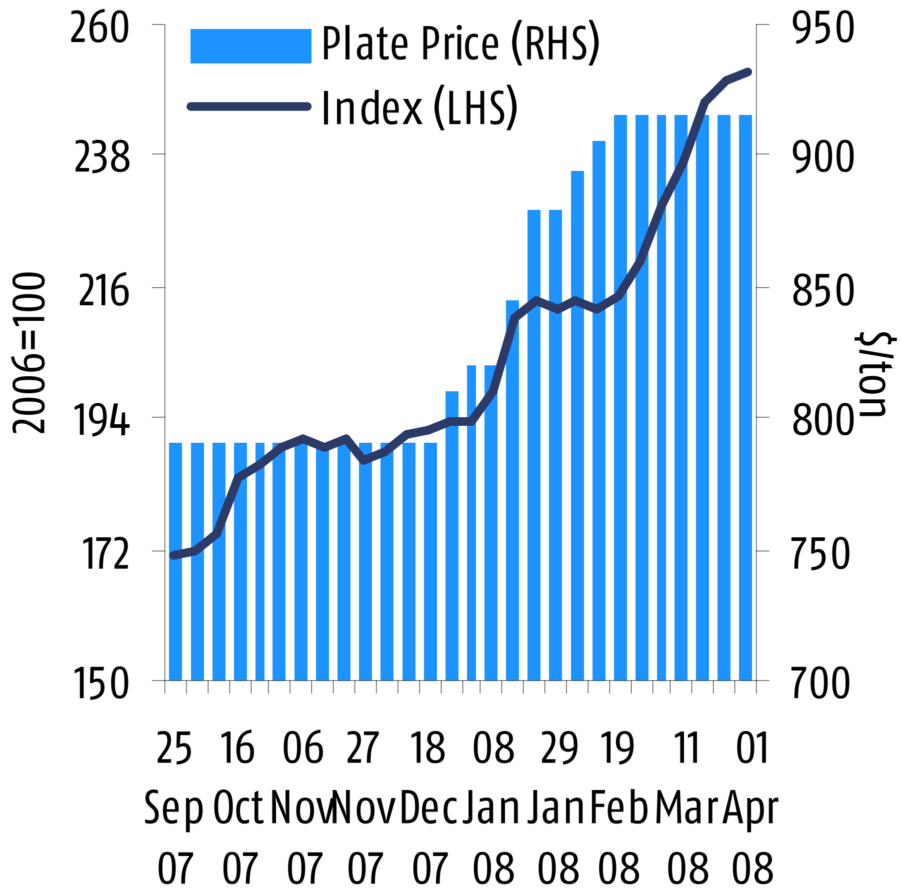
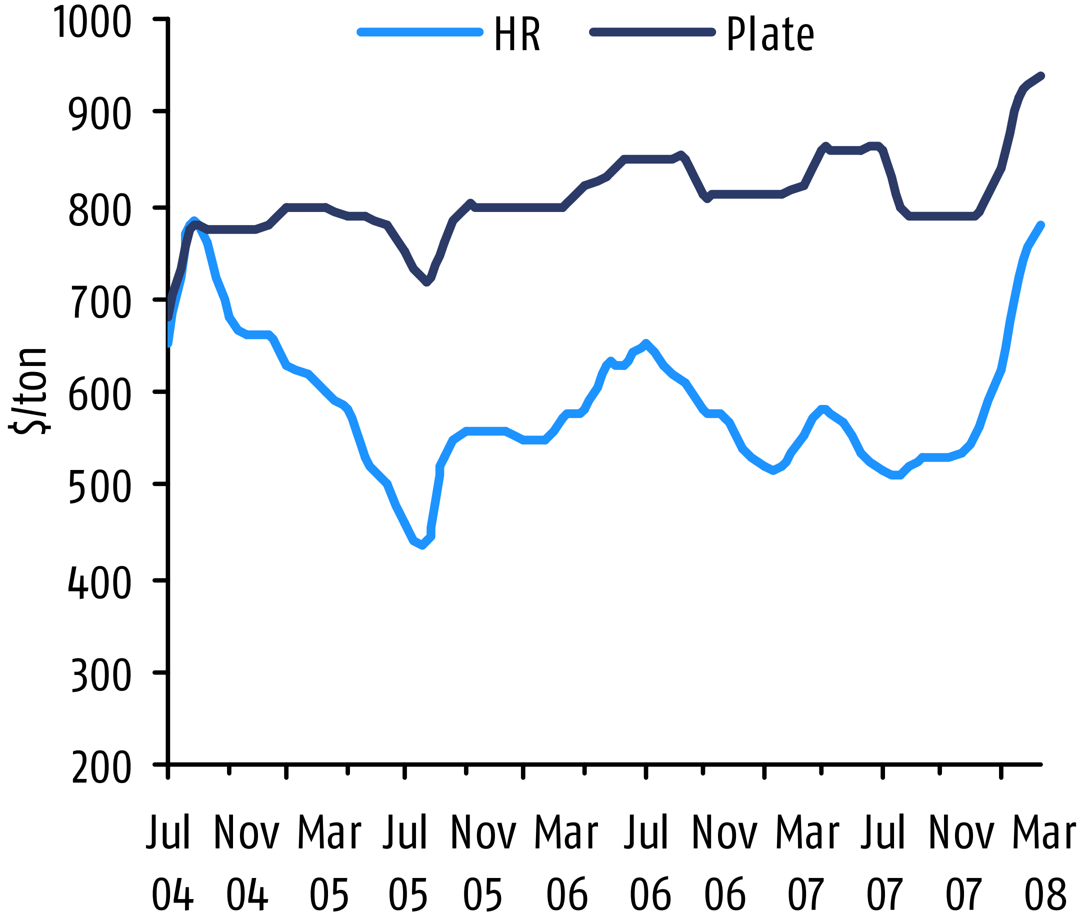


Plate price up 12% since the start of the year

Steel market conditions, plate

- Plate seeing continuing growth in global demand (~3%/year)
  - Energy (linepipe, rigs, wind)
  - Shipbuilding (Asia, especially)
  - Heavy equipment/transportation (railcars and barges)
  - Infrastructure
- Tight supplies for heavy plate for pipemaking
  - 10-11m tonnes produced compared to 88m total plate in 2006
  - Historically dominated by EU (<3.5m vs. 13m) and Japan (2m vs. 13m) , China entering mkt. (2m vs. 38.5m)
  - Few producers in North America (greater capacity from Mittal, Ipsco, etc)
  - Difficult for plate mills to switch between API plate and other industrial plate
- Prices for pipemaking plate and coil
  - Prices increasing, but less volatility compared to other flat products
  - Margins remain buoyed by demand and producers can pass rising feedstock costs to buyers – the Q2 price increases are starting to work into the market

Plate vs. HR prices



*Spot commodity prices. Plate and coil for API pipe production will carry a premium to commodity steel.

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Large diameter linepipe market overview

- Strong market globally, characterized by long lead times (6-18 months in USA, 12+ months in Europe/Russia)
  - Ipsco, Berg – longer than others
  - Increasing demand from N. Europe, Asia and North America
- Growing/New entrants in this market:
  - Russia, India, Iran, UAE
- Demand/output of higher grades growing (X80-X120)
  - Meeting strict requirements of offshore/deep-sea projects
    - outside of NA
- North America: onshore requirements – LSAW *and* spiral
  - Natural gas, LNG

ERW market overview

- 2006 production was about 11m tonnes
- Unconsolidated market, becoming consolidated
- USA has higher production of ERW pipe than LSAW or HSAW, due to the wide use of ERW pipe for the OCTG market here
- Emerging market producers account for 45-50% of global production
- Major exporters to the USA include South Korea and China

Asia: increasing production

- Chinese LD linepipe production estimated at ~2-3m tpy
  - Not all API grade; used for water transmission pipe
- Production growing rapidly
  - Baosteel producing X120 LSAW
  - These mills will look to gain market share in supplying to Asian projects, thus freeing up capacity (Japan, S. Korea, Europe) for other projects (USA, Latin America, Russia)
- China averaged 63,000 tpm in net exports in 2007
- Tax rebates for all non-API grade welded pipe have been eliminated – API linepipe and OCTG rebates remain
- US duties of 31% remain on Japanese large OD linepipe
  - Exports 11,000 tpm on average to USA

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Middle East: developing internal supply sources to meet demand

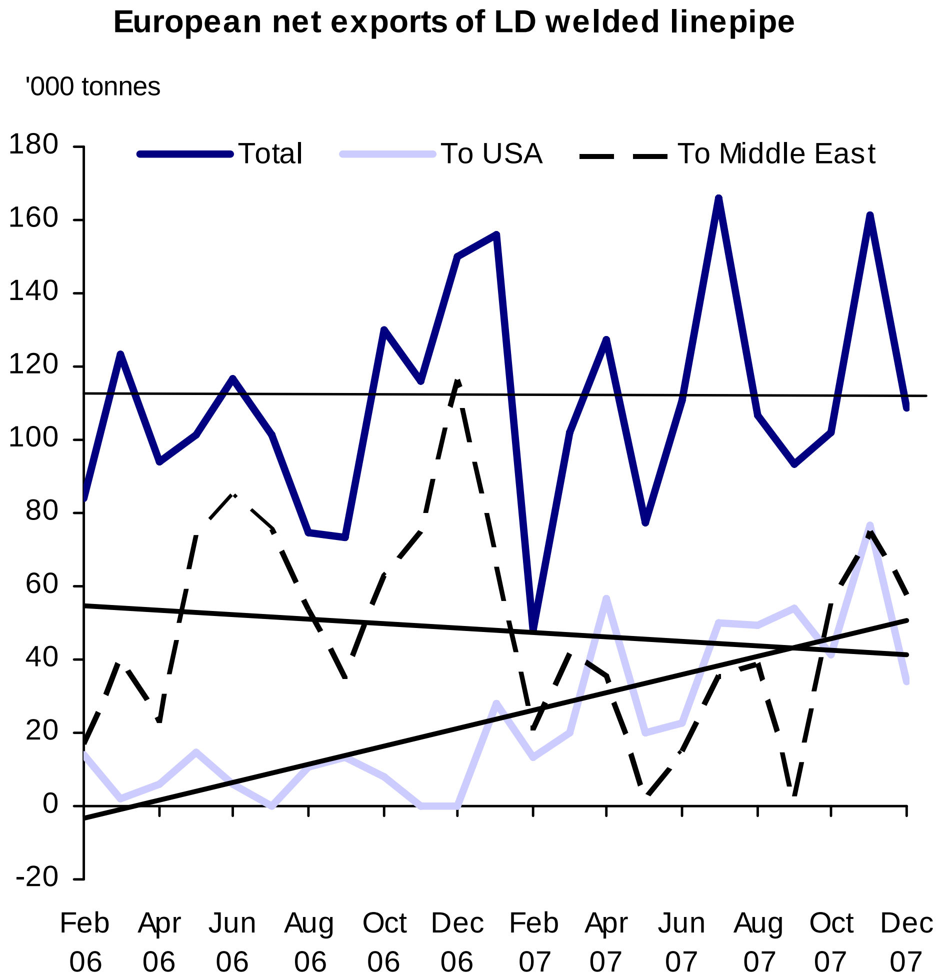
Middle East linepipe producers

Company	Location	Capacity (000 tonnes)	Dimensions	Type	Start-up	2007 output (est.)*
Kuwait Pipe	Kuwait	130	6-80"	Spiral	1966	100
Hyo Jong	Qatar	150	26-140"	Spiral	2002	120
Arabian Pipe	Saudi	300	16-48"	UOE	2006	180
Arabian Pipe	Saudi	350	6-20"	ERW	2000	280
Group 5 Pipe	Saudi	75	20-120"	Spiral	2001	60
National Pipe	Saudi	360	20-84"	Spiral	1999	300
National Pipe	Saudi	200	20-64"	RB	2004	150
Saudi Steel Pipe	Saudi	160	0.5-16"	ERW	1980	120
Adpico	UAE	250	0.25-6"	ERW	2005	120
Adpico	UAE	500	8-24"	ERW	2007	50
Nova Industries	UAE	50	1-6"	ERW	2008	0
PSL	UAE	75	16-80"	Spiral	2007	20

* linepipe only
Source: MBR

Middle East linepipe self-sufficiency is freeing up capacity in Europe and India

Europe: beginning to export more to NA

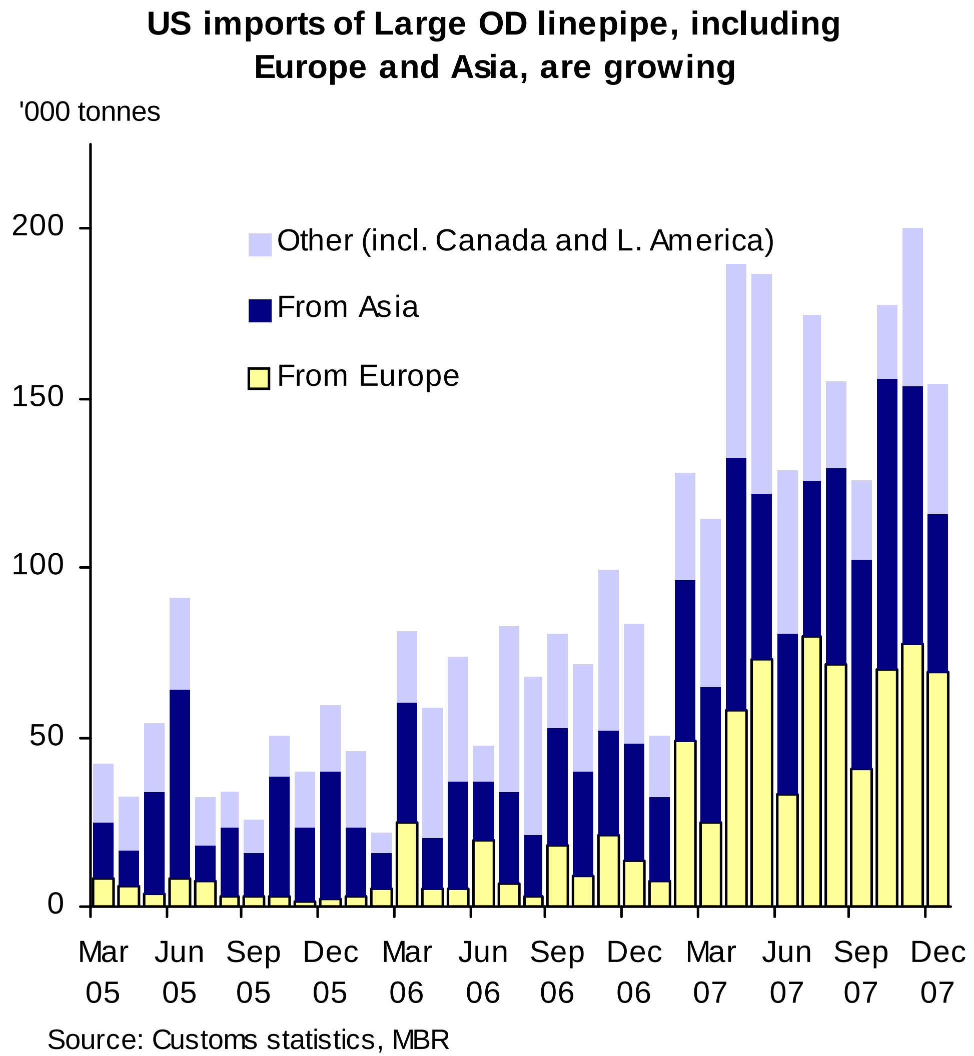


Source: Customs statistics, MBR

- Europipe, Corinth, RIVA, Corus
- Capacity in the EU27: just under 4m tpy of welded large OD linepipe
- Major trading partners: Middle East, USA, Russia and Asia
- Middle East capacity increasing and we see a decline in exports to this region…
- …as exports to USA increased last year
- Net exports average 113,000 tpm in 2006-07

North America: US imports of large OD pipe have been rising

Despite the weakening dollar and high freight charges, US large OD linepipe imports increased through 2007



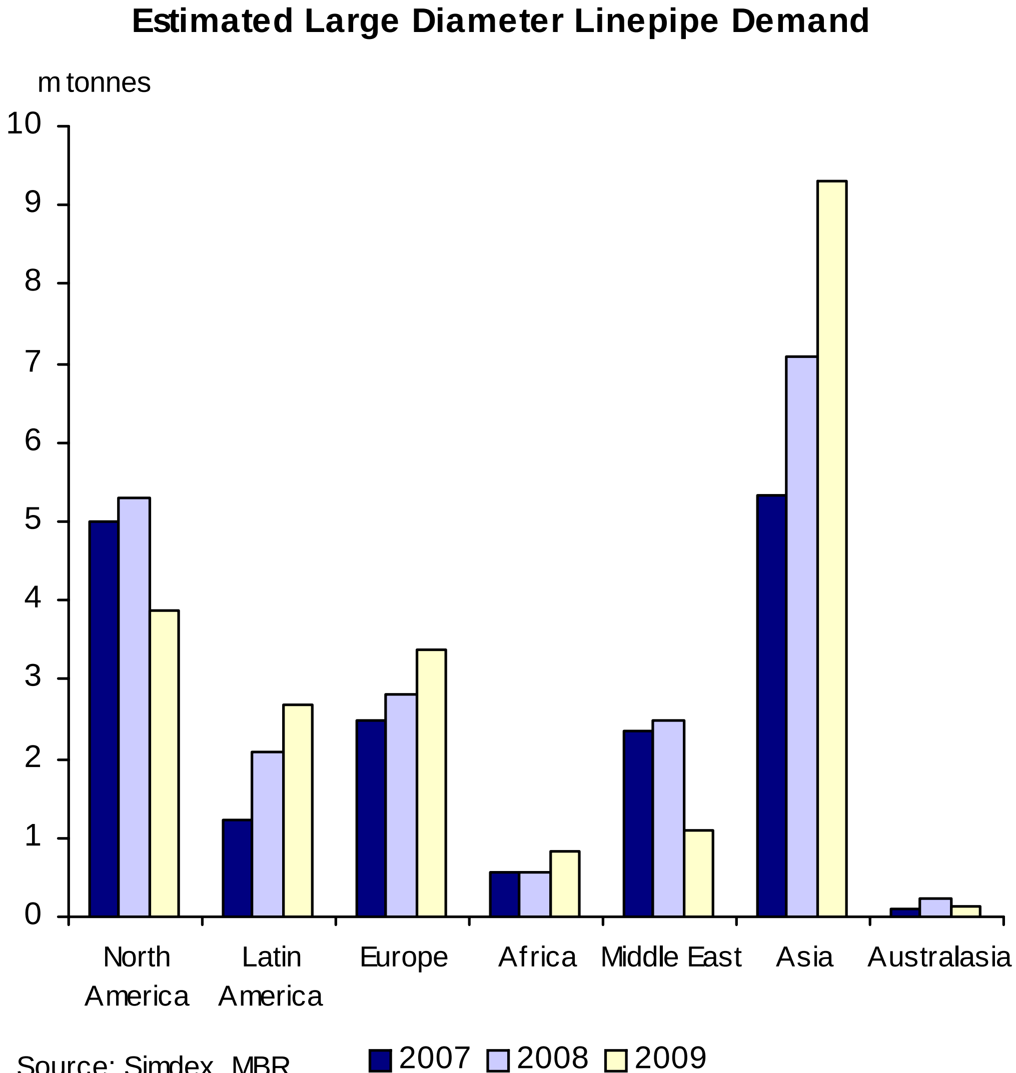
New linepipe capacity in North America eyes production cost savings

New North American linepipe capacity ('000 tons)

Company	Location	Type	Capacity	Diameters	Start
Canada					
Ipsco-expansion	Regina, SK	Spiral	200	24-60"	Q1 2008
USA					
Berg Spiral Pipe	Mobile, AL	Spiral	180	24-60"	Q4 2008
PSL	Bay St. Louis, MI	Spiral	300	24-60"	Q3 2008
Man Industries	Little Rock, AR	Spiral	300	20-100"	Q1 2009
United Spiral Pipe	Pittsburg, CA	Spiral	300	24-64"	Q2 2009
Stupp Corp	Baton Rouge, LA	Spiral	180	24-60"	Q2 2009
Welspun	Little Rock, AR	Spiral	300	24-60"	mid-2008
Total			**1,760**		

Note that all new capacity is Spiral, utilizing high-quality HR coil rather than plate.

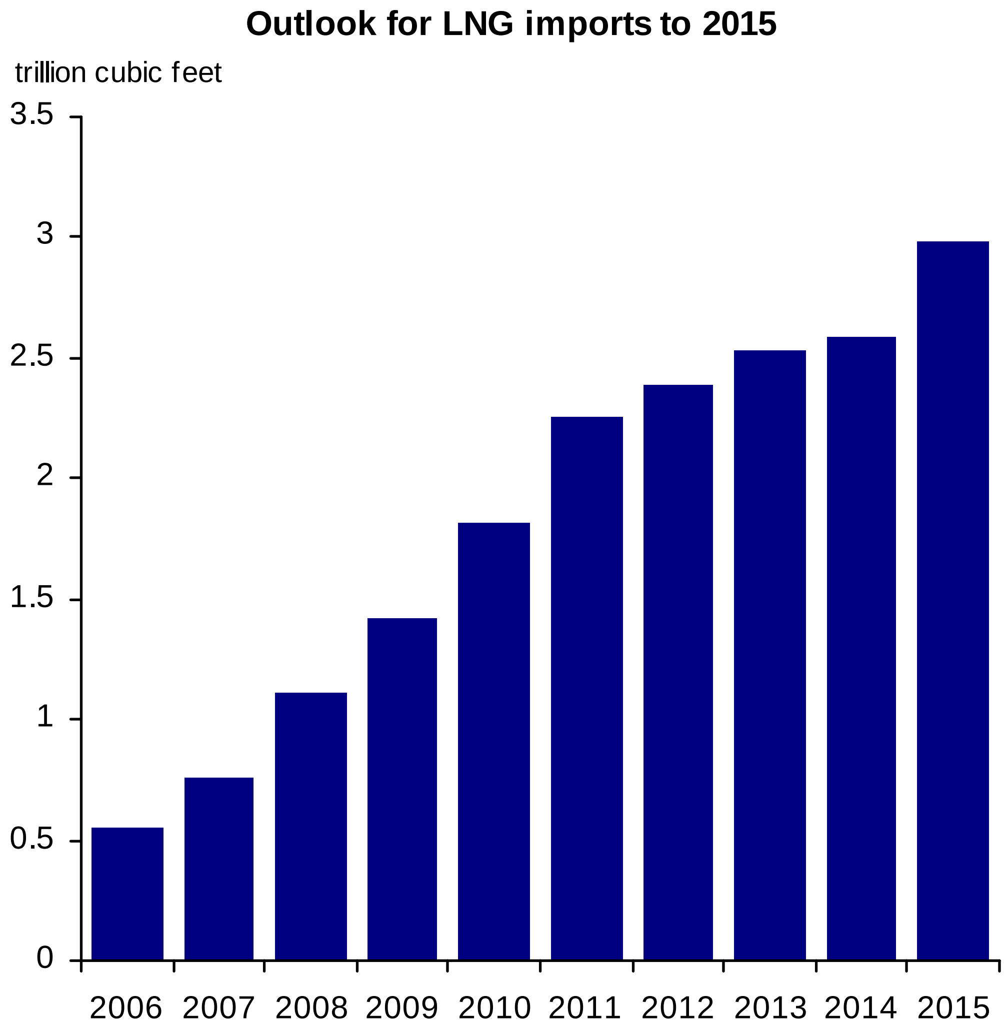
Global large OD linepipe demand outlook



Source: Simdex, MBR

- Based on known projects
- High costs could result in the shelving or delay of projects
- World demand - Average over 19m tpy demand in 2007-09 (2006 output was just over 17m tonnes)
- North America - Majority onshore
  - natural gas pipelines (HSAW)
  - Replacement and maintenance of existing lines
- Russia/Europe - Nordstream, Transneft, from Siberia, from Middle East
- Asia (China/India) - Infrastructure, from central Asia/Russia

LNG: A wildcard



Source: EIA, MBR

- LNG imports are expected to grow six-fold through 2015, sparking demand for infrastructure construction
- 5.8Bcfd of existing LNG capacity
- 36.6Bcfd has been approved
    - Bahamas
    - Hackberry, LA
    - Sabine, LA
    - Corpus Christi, TX
    - Pascagoula, MS
    - Offshore LA, Boston
- 25Bcfd proposed

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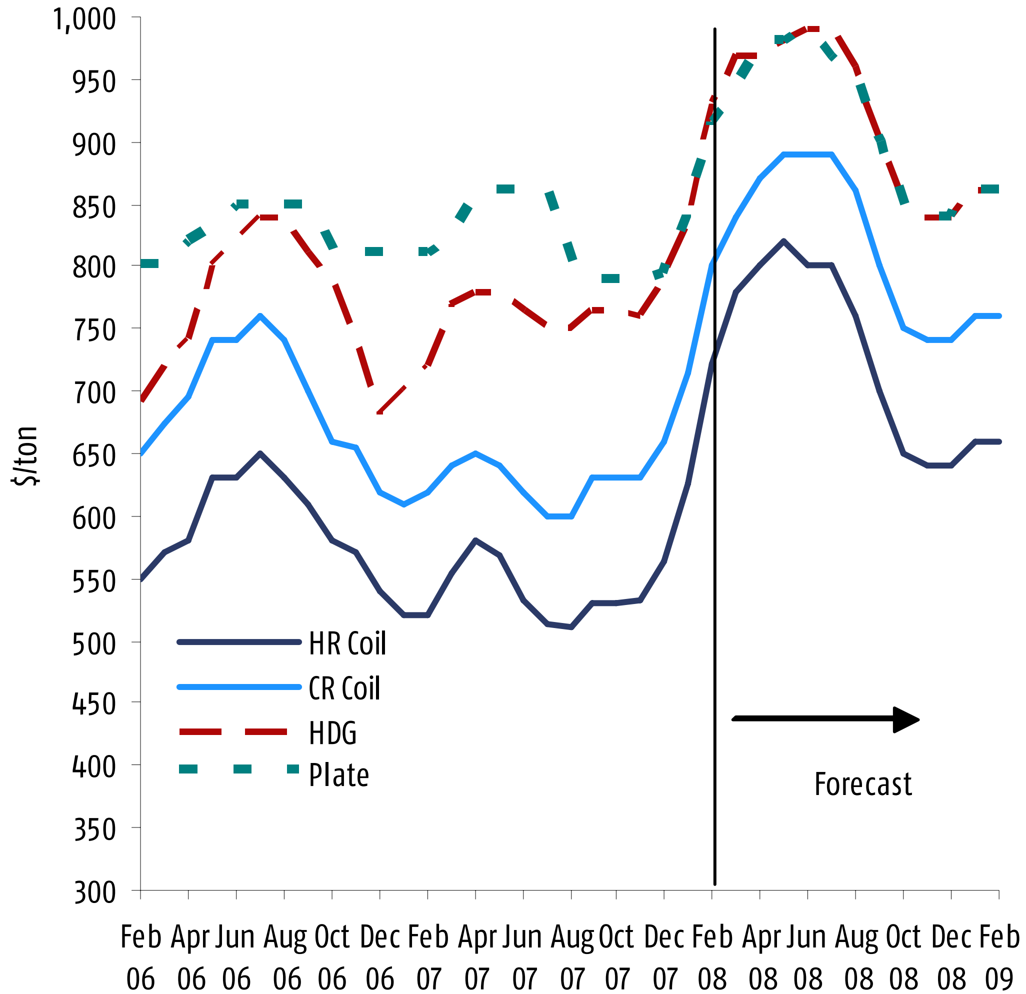
North American steel price forecast



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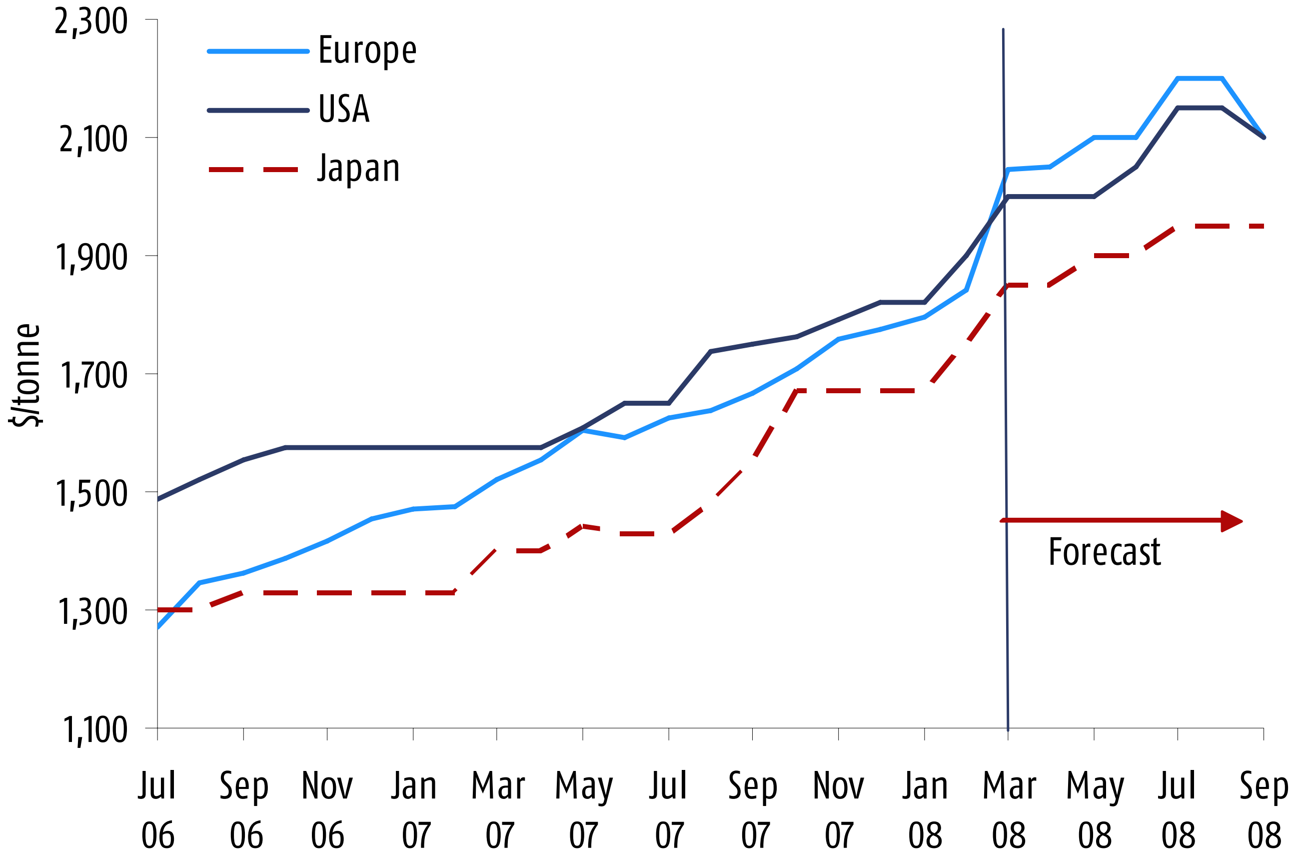
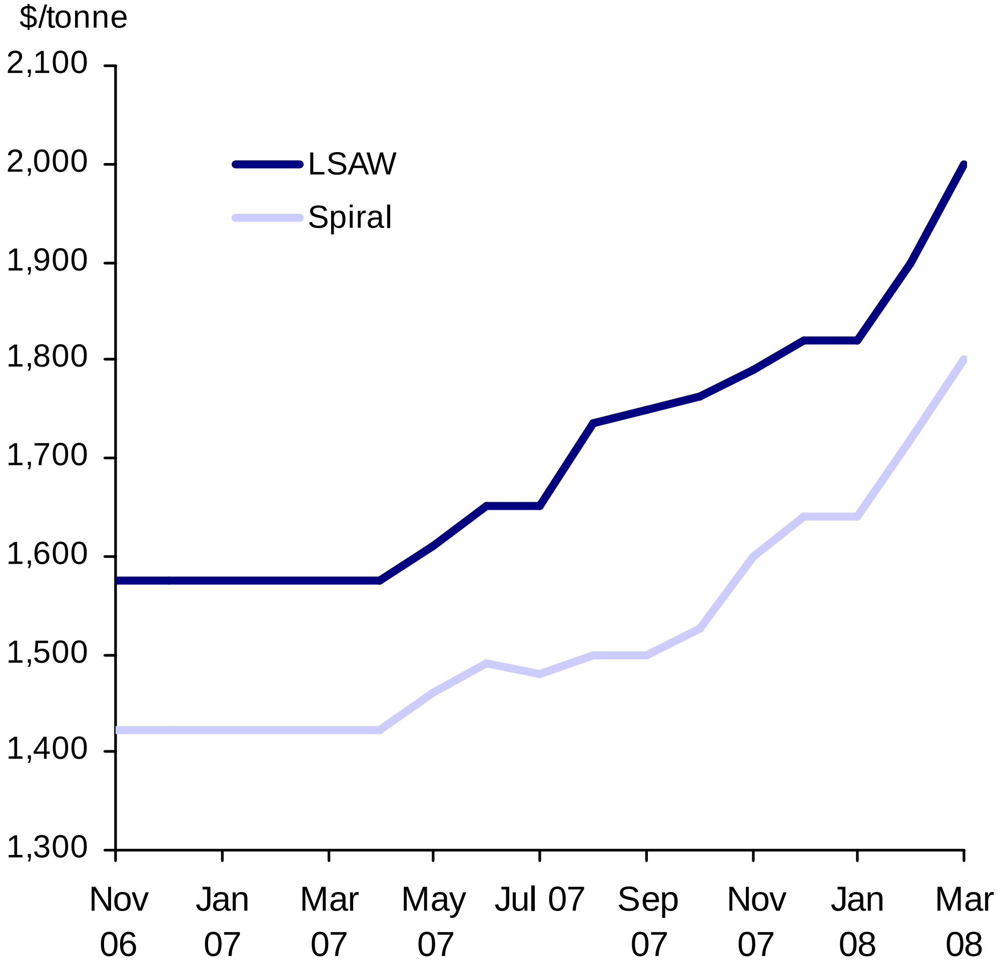
Global LSAW pipe prices, grade API 5L X65



US LSAW vs. HSAW prices: The gap is narrowing and we believe pricing is even closer than our benchmark



Source: MBR

- MBR understands that spiral (HSAW) mills are offering prices similar to LSAW due to market forces.
- HSAW production costs tend to run at a discount to LSAW
    - HR coil vs. plate
    - Lower capital costs
    - Quicker/ease of throughput

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US linepipe supply/demand balance

Supply-demand balance for large diameter (>16") linepipe in the USA

	2005	2006	2007	2008	2009	2010
Domestic Output (000 tons)						
Seamless (US Steel)	30	30	30	30	30	30
AISI ERW & Spiral (Evraz Oregon)	31	69	90	120	120	120
AISI SAW (Berg Pipe)	114	114	125	125	125	125
non-AISI SAW (Jindal)	160	190	220	300	350	350
non-AISI ERW & Spiral (Stupp, NW etc.)	360	370	385	685	1,185	1,885
of which water transmission pipe	*285*	*285*	*285*	*285*	*285*	*285*
Total output	**695**	**773**	**850**	**1,260**	**1,810**	**2,510**
Imports (000 tons)	562	898	1,750	1,000	700	450
Exports (000 tons)	37	50	60	60	120	300
Apparent supply (000 tons)	**1,220**	**1,621**	**2,540**	**2,200**	**2,390**	**2,660**
Apparent supply excl.water (000 tons)	**935**	**1,336**	**2,255**	**1,915**	**2,105**	**2,375**
Planned oil and gas pipeline (kms)	10,980	15,580	17,350	25,300	16,500	15,000
Apparent consumption ton per km (for market to balance)	85	86	130	76	128	158
Pipeline required to equal estimated supply (kms)	**10,980**	**15,580**	**17,350**	**25,300**	**24,765**	**27,941**
Planned pipeline shortfall compared to supply (kms)	**0**	**0**	**0**	**0**	**-8,265**	**-12,941**

Source: AISI, MBR, Simdex

- There is potential for over-supply and falling prices after this year if all the planned new capacity comes to fruition.
- The average rate (tons/km) was ~85 in 2005-06, but increased to 130 in 2007 (larger OD pipes, inventory)
- At 85 t/km, oversupply would be 700,000 tons in 2009 and 1.1m in 2010

Welded Large OD outlook

- Short term (6-12 months) – definite demand for more capacity
  - Today's long lead times will shrink, but prices will be upheld due to market balance and high substrate prices
  - Expanding capacity in North America will meet demand now satisfied by overseas pipe
  - Steelmaking costs are rising and will remain high
- Medium term (12-24 months) – strong growth in demand will give way to slower growth in demand
  - End to price surges and more stable pricing
- Longer term (beyond 2010) – potential for over-capacity
  - USA – we could see over-supply as soon as 2009-10
  - Globally and USA - plate capacity to rise, lower market prices
  - LSAW to HSAW premium to fall=competitive pressure
  - Prices to fall
    - Closures of inefficient capacity
    - Potential consolidation
    - Specialization in LSAW production (higher grades)
  - China? Excess capacity will always target exports

Thank you for your time!

If you have any questions regarding this presentation or AMMR/MBR's research capability in any steel product sectors, please do not hesitate to contact me:

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