

Metal Bulletin

Middle East Iron and Steel Conference
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When will the good times return?

Fall out of construction spend on steel demand



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Hatch Beddows

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- **Hatch, Hatch Consulting, and Hatch Beddows**
- Objective
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Our organisation

- Hatch supplies business, process and technology consulting, design and engineering and construction, operations and project management to the mining and metals, energy and infrastructure industries worldwide
- Established 1955 and employee owned
- 9000 highly skilled people serving clients worldwide
- US\$20BN of projects now under management in 80 countries

Our values

- Safety
- Quality
- Innovation
- Sustainable development
- Effective risk management

We deliver unprecedented and sustained results for our clients

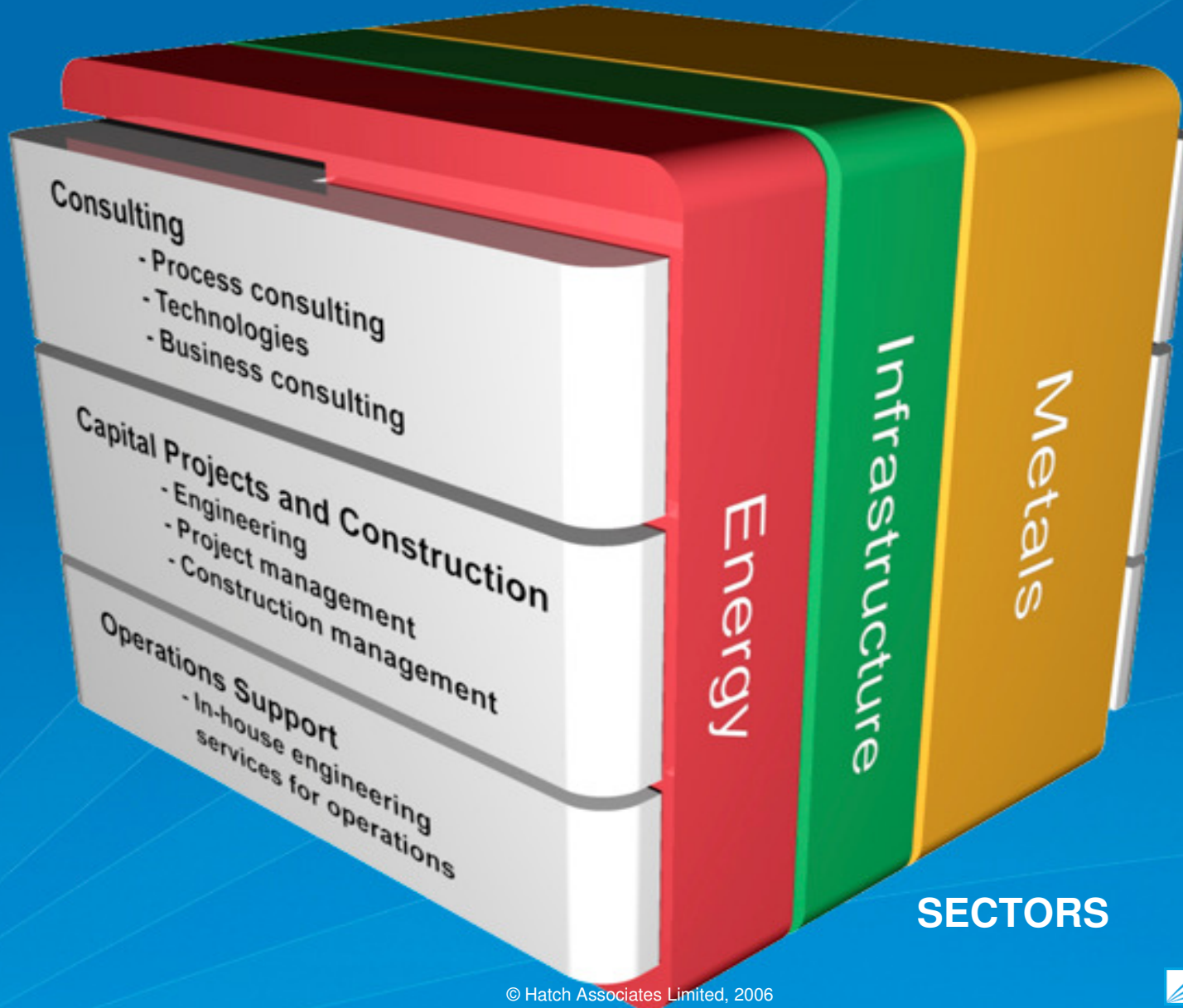
Global reach and resources



(Yellow indicates regional hub)

HATCH
Hatch services and sectors

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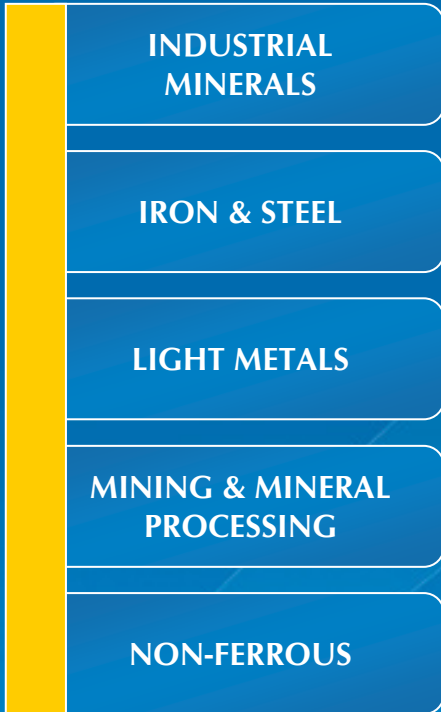


SECTORS

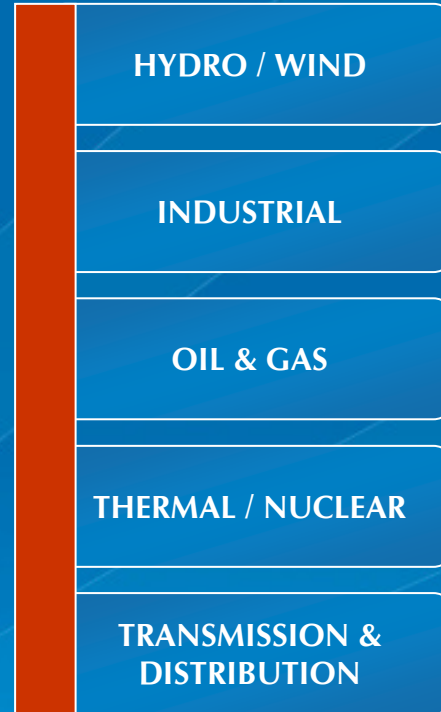
HATCH

Hatch business units

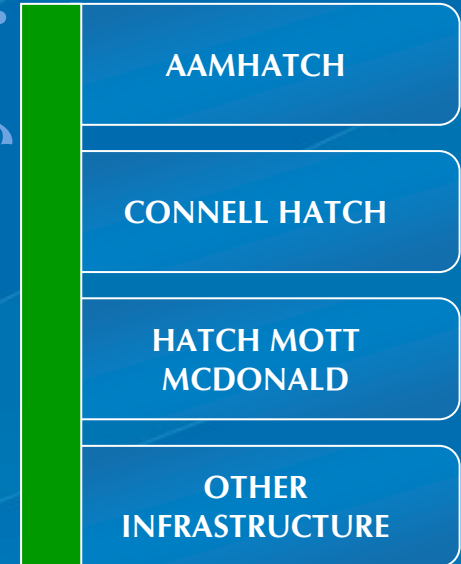
metals



energy



infrastructure



Hatch Consulting is the leading management consultancy dedicated to the metals and mining industries

- **Hatch Consulting** is the world's leading management consultancy specialising in the steel, metals and mining industries and provides high level support services, ranging from corporate and business strategy development through strategic market studies to implementation of new technologies, management and operating practices
- Hatch Consulting is organised into specialised practices by industry and service, combining to provide precise solutions, expertly delivered to the exact needs of each individual client
 - **Hatch Beddows** is the strategy and market development practice, specialising in steel and related industries, and providing strategy development and implementation services
 - **Investment and Business Planning** (IBP) provides economic, environmental and technical evaluations of minerals properties and processing facilities, due diligence, pre-feasibility and feasibility studies and related investment planning and appraisal services
 - **Performance and Risk Management** provides high performance management, asset performance enhancement and optimisation, process and facilities benchmarking, and risk management services
- **Hatch Corporate Finance** (HCF), a FSA-regulated joint venture company, provides corporate financial advisory and transaction execution services

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This paper evaluates the effect of current economic crisis on construction spend and steel demand

- This paper has been written with the following objectives :
 - After the 'stronger for longer' run, how did we come to this situation?
 - How has the economic crisis effected construction spend and steel demand?
 - Is there a way out of the situation? What does the future hold?

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The subprime crisis has very rapidly morphed into a larger economic shock on a global scale

- There were several macroeconomic factors which contributed over the years to building the current economic crisis. A number of the macro economic factors were introduced as incentives to grow the economy
 - Increase in liquidity specifically in the US due to loose monetary policy post 2001
 - US government deficits due to tax cuts
 - Growing foreign exchange reserves from China, India, Middle East and other natural resource rich countries. A large share of these funds invested in US dollar denominated government bonds
 - Allowing investment banking to fall outside the regulatory net
 - The development of Asian capital markets was not rapid enough in relation to the growing savings and deposits
 - Allowing conflicts of interest with credit rating agencies and banks to continue

In an increasingly globally connected capital markets, the contagion spread with a multiplier effect

- As a result of this vicious mix of macroeconomic factors, bad incentive and policy mistakes, the following started:
 - Recognition and spread of toxic assets in the financial system
 - Decline in asset values and equity values of banks
 - Increased bankruptcy and fire sales of assets
 - Severe reduction in appetite for risk taking by banks
 - Collapse of interbank and money market

The balance sheets of banks and financial institutions contracted due to massive write offs and decline in their equity values

- When the subprime crisis unfolded in July 2007, it appeared to be a short term correction of the way risk was perceived and priced. It was expected that capital markets would revert back to normal in a few months time.
- As the contagion spread across different countries and the 'decoupling theory' was busted, the balance sheets of banks and financial institutes contracted due to massive write offs and reduction in equity values.
- This put severe pressure on banks' risk taking, borrowing and lending capabilities forcing them to quickly move to a 'severe caution' mode.
- Restrictions in lending quickly gave way to catastrophic conditions in the capital markets.
- According to JP Morgan's analysis, the cost of insuring against potential defaults of US treasury bonds has increased from previous 1 or 2 bps to an all time high of 14 or 16 bps. *This challenges the conventional assumptions that US treasury borrowings are the most risk free assets.*

It could take at least a year for the banks to work recapitalise and regain confidence before we see a better lending environment

- The decline in equity values has made it difficult for banks and financial institutions to raise new capital.
- Investors are very wary or even fearful of new capital raising by banks. Therefore any new capital raising has become more expensive and difficult.
- There is a huge information asymmetry between banks on quality of assets on their balance sheets. Therefore the fear and distrust among banks to lend to each other is still very high.
- Securing funds for banks and lending by banks still remains a huge challenge.
- Lending norms by banks are being tightened for all industries as it is best way to mitigate risk in the current situation.
- *At this point in time, it appears that it could take another 9 -12 months for the banks for to work through the off balance sheet manipulations, recapitalize and regain confidence.*

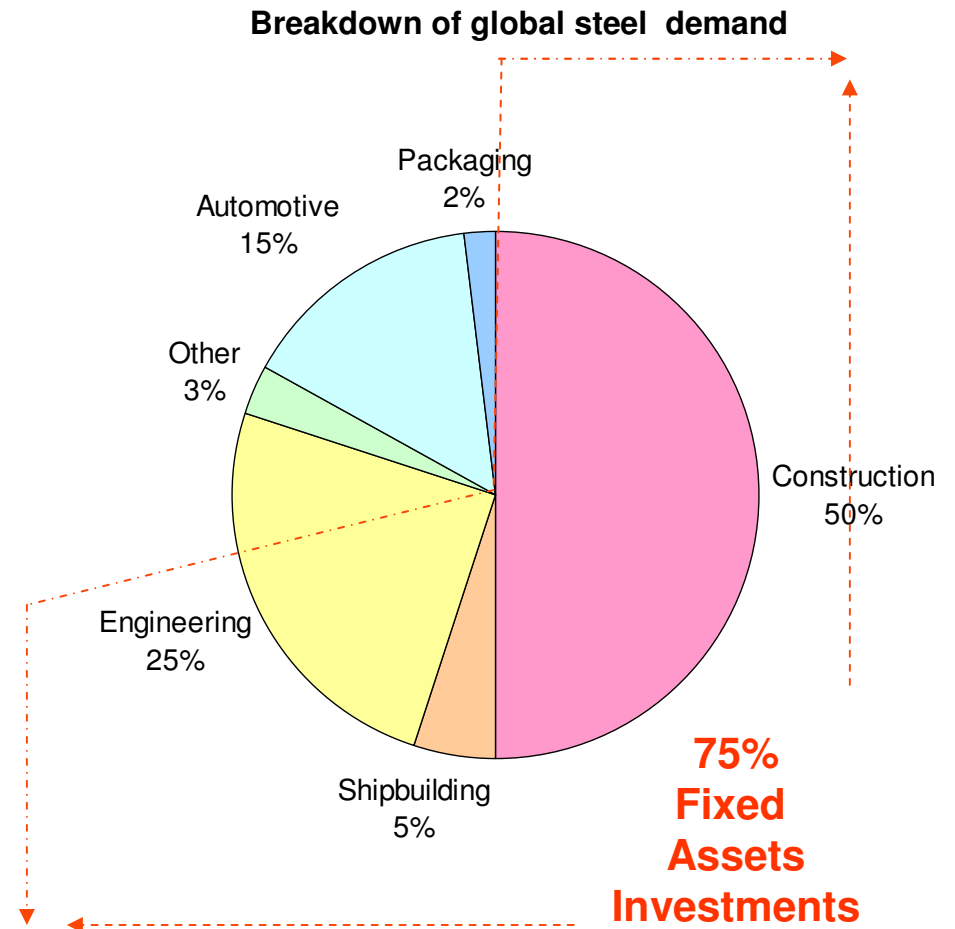
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FALL OUT OF CONSTRUCTION SPEND ON STEEL DEMAND

75% of the global steel demand is driven by FAI. When bank lending for FAI is constrained, steel demand declines

- About 75% of the global steel demand is driven by fixed assets investment (FAI)
- Fixed assets investments includes construction, shipbuilding, engineering and machine building. FAI, in turn, is contingent on support of financing from capital markets.
- The influence of automotive sector on steel demand is over rated despite it accounting for only 15% of the total demand.
- When lending for fixed assets investments is constrained, steel demand also declines.
- Many users and processors of steel are small and medium enterprises and have no long term financing facilities. They depend on short term financing such as supplier credit or bank overdrafts. When short term financing is constrained, it puts severe pressure on business activity.



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Although the GCC remains resilient, it is not fully insulated from the global credit crisis and the construction sector has been negatively influenced by reduction in financing

- In the GCC, bulk of the construction projects are financed by project financing.
- Until very recently, securing financing for construction projects in the GCC has been easy. In fact, the challenge to a project sponsor was on the execution of the project such as cost over runs, labour, material costs, engineering resources and securing feedstock.
- Today the scenario is dramatically different!!! The GCC is not fully insulated to the effects of the global financial crisis.
 - Finance is more expensive
 - Finance is more scarce
 - There is greater competition for finance, especially when international banks syndicate

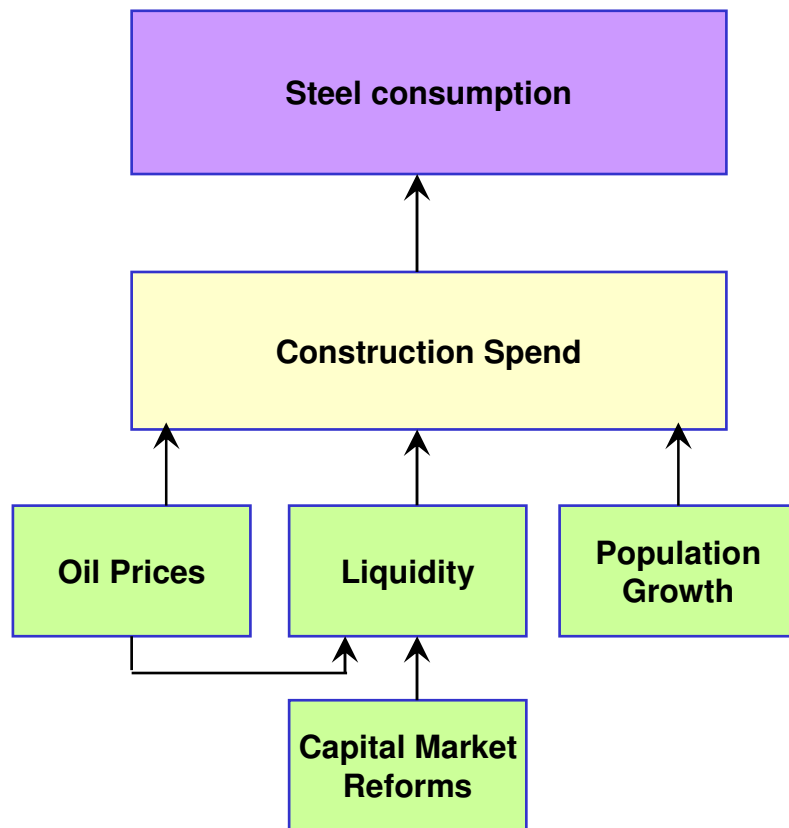
Given the scale of construction projects planned in the GCC and the prevailing lending environment, many projects may be delayed due to difficulties in raising finances

- Higher equity component required from project sponsors
- Equity values of listed real estate companies have fallen, thereby reducing their capacity to raise funds.
- There is a general slowdown in lending to construction industry in the GCC. Given the scale of construction projects (US\$ 1 trillion +) planned in the GCC and the prevailing lending environment, many projects may be delayed due to difficulties in raising finances.
- The biggest risk in financing is likely to be faced by small and mid-sized industrial, commercial and residential projects.

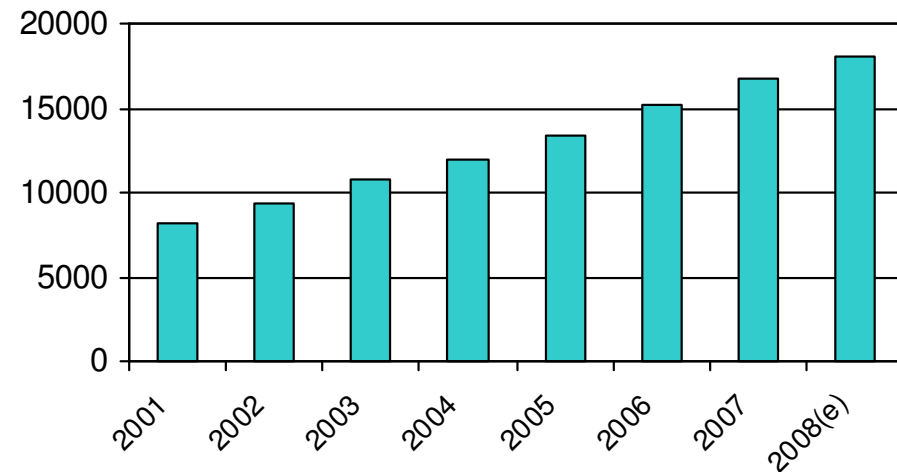
FALL OUT OF CONSTRUCTION SPEND ON STEEL DEMAND

The fundamentals driving steel consumption in the GCC have not changed. Steel consumption grew even when oil prices were below \$50/barrel between 2001 and 2005!

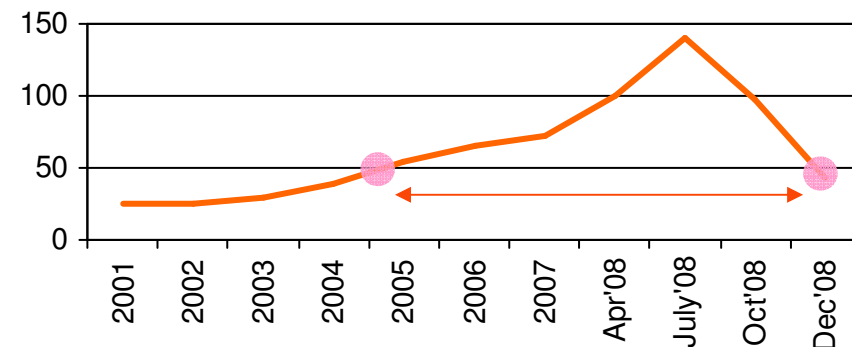
Underlying drivers for steel consumption in GCC



Finished steel consumption in GCC (Kt)



Crude oil prices- Brent (US\$/bl)



In the next year or two, expect growth rates to be benign due to restricted lending to construction sector

- But not all is lost in the GCC!
- The governments in the region have been largely proactive and have injected liquidity into the banking system.
- The windfall oil export revenues have been used to significantly reduce governments debts.
- The GCC governments are expected to continue their strong support for large infrastructure, power and water projects.
- The crisis also presents a number of opportunities which could revive construction activity
 - Lower steel (-60%) and cement prices (-25%)
 - Engineering resources more easily available
- The lending to construction sector is likely to be restricted over the next year or two and *therefore steel demand growth rates will be benign.*

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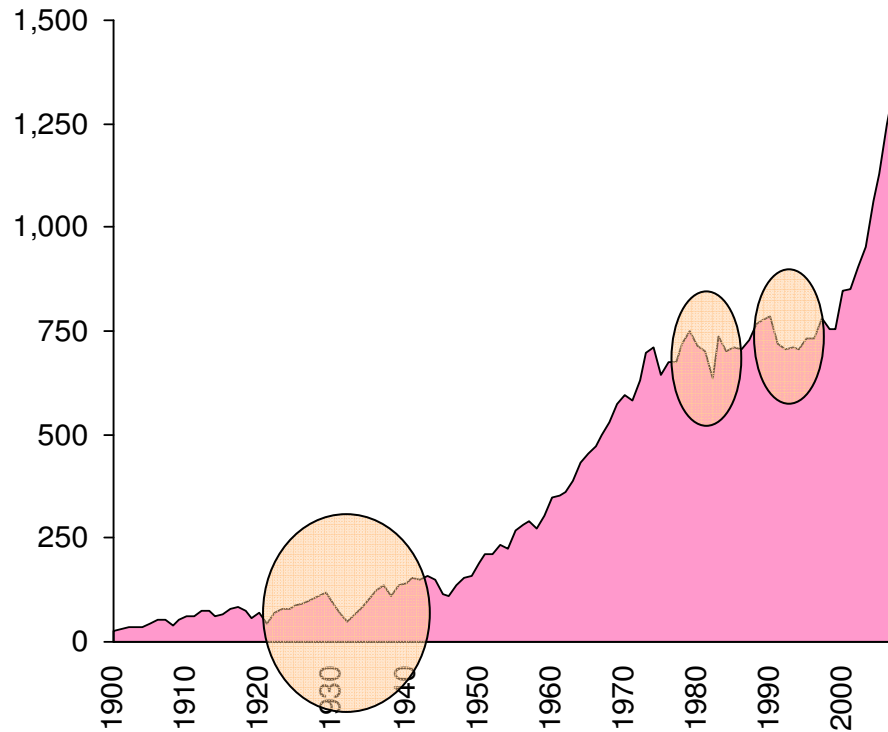
Do we see hope from this point forward for the global steel industry?

- So the big question before us is :
 - Where do we go from here?
 - Can we ever get back to the good times?

FALL OUT OF CONSTRUCTION SPEND ON STEEL DEMAND

During the worst years of depression, global steel demand fell 58% from peak levels and it took 7 years to recover back to its original levels in 1929

Global steel demand (1900-2007), Mt



Anatomy of previous steel cycles

Period	% decline in steel demand	No: of years to regain pre-trough demand
1929-1937	-58%	7
1979-1988	-15%	9
1991-2000	-10%	10

FALL OUT OF CONSTRUCTION SPEND ON STEEL DEMAND

Due to a more consolidated industry structure and closure of marginal iron ore mines, it is likely we will see a price recovery ahead of a demand recovery

- There are number of positives for the steel industry currently
- Steel industry structure
 - Improving consolidation
 - Production is being cut very rapidly
 - More private ownership
 - Better pricing discipline amongst steel producers.
- With possible iron price decline in 2009, many marginal ore producers in China could be closed. Therefore this could put a floor on iron ore prices, which thereby puts a floor on steel prices.
- *Therefore it is likely we will see a price recovery ahead of demand recovery.*

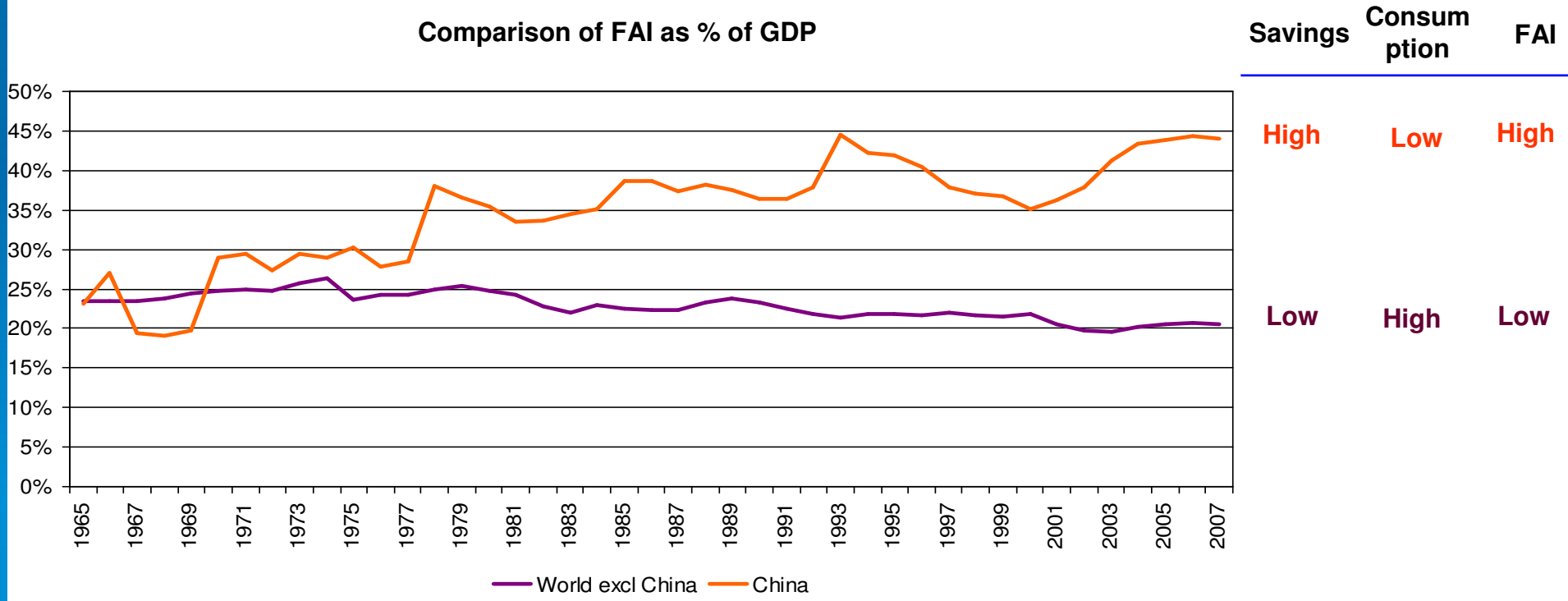
Production cuts announced by steel producers

Producer	Country	Cut	Period
Arcelor Mittal	Kazakhstan	25-30%	Q4,2008
	Ukraine	50%	Q4,2008+ 2009
	Poland	15%	Q4,2008-Q22009
	Romania	50%	Q4,2008+ 2009
	Brazil	30%	Q4,2008+ 2009
Severstal	Russia	25%	Q4,2008
	US	30%	Q4,2008
MMK	Russia	15%	Q4,2008+H12009
Evraz	Russia	25%	Q4,2008
Baoshan	China	20%	Q4,2008
Anshan	China	20%	Q4,2008
Tata Corus	UK	20%	Q4,2008+Q1 2009
JSW	India	20%	Q4,2008

Source : SBB, MB, AME, steelguru.com, company reports, Hatch Beddows

FALL OUT OF CONSTRUCTION SPEND ON STEEL DEMAND

For the steel demand to revive, the low FAI in the developed countries will need to be increased from its current levels of 21% of GDP



- If we exclude China, then FAI as % of world GDP has actually declined in the last two decades. While in the 1960s and 1970s it was 25%, in the current decade it is only 21%.
- For construction spend and steel demand to revive globally, the current state of FAI in the world excl. China will need to be reversed, especially the developed countries.

Source: World Bank

There are early signs of hopes. China plans to continue spending on infrastructure while US plans \$1trillion stimulus to renew infrastructure

- We are seeing some early signs of hope!
- In the US, the new President-elect Barack Obama plans a \$1 trillion dollar stimulus to invest in highways, bridges, roads, public transport and power networks.
- The Indian government plans \$4 billion stimulus to stimulate growth in the economy, a part of which will be invested in infrastructure.
- The Chinese government intends to continue spending on infrastructure such as railway, roads, airports and health infrastructure. The government intends to follow this up with a looser monetary policy and perhaps more interest rate cuts.
- However, it is not likely that these will translate into steel demand in the short term.
- These strategic initiatives taken by the government could take two years before it driving a steel demand recovery.

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