INVESTMENT MEMORANDUM

TO: McIntire Investment Institute

FROM: Edmond Darmawan

SUBJECT: Mittal Steel

DATE: November 28, 2005

Current Price Company : Mittal Steel : \$27.50 Ticker · MT Market Cap : \$19.64 B Investment Enterprise Value : \$26.49 B : Long Period : short – long term 52-week range : 22.11 - 45.38

Investment Thesis:

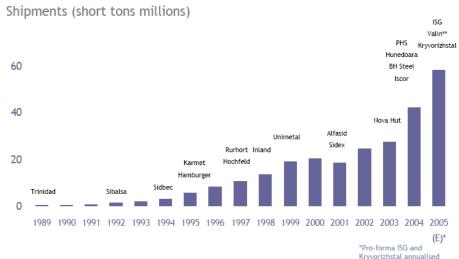
"Mittal Steel is leading the consolidation of the steel industry and its current stock price reflects only the value of its current position in a previously very volatile steel industry. It is already trading at a discount relative to the steel industry and other competitors due to its limited float. Mittal is one of the fastest growing, profitable, and cost-efficient companies with very little analyst coverage. The quickening pace of the consolidation of the steel industry and Mittal's strategy of selective growth in emerging markets makes it a very attractive investment in the short term as well as the long term."

Overview

Mittal Steel was formed in 2004 through the merger of International Steel Group (ISG) and Ispat International. Mittal is currently the largest and most global steel producer in the world. It has facilities in 16 countries and employs over 160,000 people. Mittal is one of the fastest growing steel companies and is the leading acquirer in a consolidating steel industry. It has capabilities in every aspect of steel making at all levels of the value chain. Mittal is also the most fully vertically integrated steel

company.

Mittal Steel has a 5000 strong customer base in 120 countries. Its product portfolio consists of high-quality/high-grade finished and semi-finished steel products. It manufactures both long and flat products. Flat products are made into steel products used in petrochemicals,



*unconsolidated

construction, mining, shipbuilding, general engineering, automotive, white goods and appliances. Flat products are made into a wide range of high-grade finished products such as wire rod, tubes and pipes. Mittal also produces coated steel products.

The company as operation facilities in Central and North America, Western Europe, Central & Eastern Europe, Africa and Asia. It has a major presence in North America, Western Europe, and Africa. Mittal has a dominant position in Eastern Europe.

Lakshmi Mittal, the chairman and owner of the company owns approximately 75% of the company's stock and his family controls 88% of Mittal Steel. The company's CFO and president is Aditya Mittal, Lakshmi Mittal's 30-year-old son. Corporate, investment bankers, steel industry veterans and diplomats hold top senior positions in the company.

Mittal Steel is undervalued

Mittal should be trading at a premium based on its cost and technological leadership. It is also the largest, most diversified and global steel producer in the world. Despite these advantages, the stock trades at a discount due to its relatively limited float.

In October 2005, Mittal completed a Shelf Registration Statement with the SEC, allowing them to issue debt securities and common stock up to \$3 billion, which would improve Mittal stock's liquidity by 16%.

It is very likely that Mittal will issue new shares in the medium term to finance acquisitions due to the increasing speed of the consolidation of the steel industry. Arcelor, the second largest steel producer in the world recently announced a \$5.8 B allowance for acquisitions. Russia's third largest steel producer will have an initial public offering in early 2006 that will fetch around \$10.3 B. Mittal's recent acquisition of Kryvorizhtal, one the of most efficient mills in the world, at \$5.2 B will put more pressure on Mittal's credit facilities and cash flows. With China launching major privatization efforts after the Olympics in 2006, Mittal and other competitors will be presented with many acquisitive opportunities in the fragmented Chinese steel industry.

Mittal's current stock price does not reflect its growth potential in the near to medium term and does not account for the structural change of the steel industry or Mittal's leadership in it.

	Mittal Steel	Nucor Corporation	Industry: Steel & Iron				
Backward P/E	4.37x	7.89x	7.91x				
Forward P/E	5.5x<	10x<	10x<				
Price/Book	1.91	2.41	3				
EV/EBITDA	3.24	3.741					
EBITDA margin (2005)	18%						
Share Price	\$27-28	\$63-65					
@ 15 % discount to	\$53 (+89%)						
Nucor*							
52-week High	\$44 (+57%)						
Market Cap	19.63 billion	10.09 billion					
Dividend	0.4	0.6					
Sales (9-month, 2005)	\$34 billion	\$9 billion	·				

Mittal has a sustainable low-cost position in the market

Mittal has a key advantage against competitors because it is vertically integrated and because of its low-cost production base strategy. Volatile raw material costs such as iron ore, coal and coke significantly influence the profitability of steel makers. Between 2004 and 2005, iron ore price increase of over 71% was one of the major drivers of the drastic downturn in the steel industry. Mittal Steel was able to weather the increase in raw material costs because of its vertical integration. Compared to Western European producers, Mittal has a \$100 per ton per facility cost advantage (the average selling price of a finished product is around \$400)

Currently, Mittal is 100%, 78%, 60% and 40% self sufficient in DRI (direct reduced iron), coke, iron ore, and coal respectively. It has the capability and is already developing plants targeted at making Mittal self-sufficient of coke by 2010. Mittal recently signed a memorandum of understanding (MoU) with the government of Liberia to develop iron ore mines and begin shipments by 2007. The company is already developing iron ore extraction mines in current sites and will be 83% self-sufficient by 2010 even after factoring expected growth. Finally, Mittal signed a development agreement with the government in India which granted Mittal access to India's richest coal deposit.

Mittal leads the industry in margins and return. 80% of Mittal's production base is considered a low-cost base. The cost of an employee in a low-cost base is equivalent 10% of one in a high-cost base. Mittal's efficient purchasing, selling, general and administrative expenses only represent less than 4% of sales. These margins allow Mittal to be have the highest ROA of any Fortune 500 company in 2004 and the second highest ROIC (return on invested capital) of 25%. Even with drastic increases in energy and raw material costs in the third quarter of 2005, Mittal's low-cost selective acquisition-based strategy allowed it to maintain a 15% ROIC.

Mittal has a solid platform for robust growth based in emerging markets

Mittal Steel has the least amount of diversifiable risk in the Steel industry because of its diverse operational and client base. Most importantly, Mittal's growth is driven by the growth of emerging markets or developing countries. Mittal has the ability to apply its expertise and efficiency to cheap, low-cost steel mills around the world to turn them around into high-profit mills. This strategy has saved Mittal \$260 million due to synergies since 2004 and will save Mittal more than \$450 million by 2007.

Mittal's client base gives it the least risk in the market. It is the only steel producer with shipments to all continents in the world. In 2005, 45%, 33% and 22% of Mittal's shipments were to the Americas, Europe and Asia-Africa respectively. Moreover, 60% of Mittal's revenue came from and 65% of shipments were made to emerging markets. Over 45% of its production facilities are in emerging markets.

This diversified risk proved to be crucial in the third quarter of 2005 where prices dropped and raw material costs increased significantly in Europe and North America. During this quarter, Mittal's shipments to Asia and Africa increased by 17.2% and operating margins were maintained at historical levels of 28%. This is very promising relative to industry-wide production cuts in Europe and America.

Mittal's diplomatic ties and political connections allow it to acquire steel producing assets cheaply from the recent trend of governments privatizing their industrial sectors. The merger between ISG and Ispat allowed for an exchange in best practices and steel production know-how to turn around lackluster plants at low costs. Please refer to exhibit 1 for an illustration of Mittal's most recent large successful turnarounds.

The outlook in the steel industry is especially positive for Mittal Steel

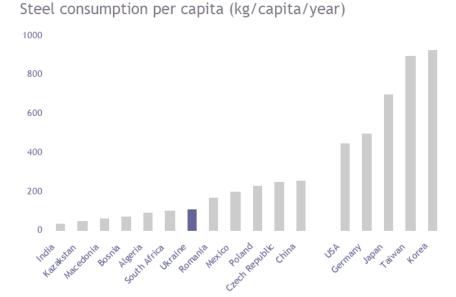
Mittal has developed a strong presence in emerging markets that will drive growth of steel consumption in the near to medium term. The exhibit below illustrates that growth in steel consumption will be driven by the emerging markets.

- In October 2005 Mittal became the first foreign company to penetrate the Chinese Steel industry through a 37.14% stake in China's 8th largest steel maker for \$338 M.
- In November, 2005 Mittal signed an agreement with the government of India to develop a Greenfield project in India's richest coal and iron ore deposit, in Jhakhand, for a 12 milion ton facility. This investment is estimated to require \$9 billion over the next 5 years. This facility will meet the demand of the market in India.
- In November 2005, Mittal won a bid for Ukraine's most efficient and largest steel mill, Kryvorizhtal for \$4.8 billion. Kryvorizhtal is almost self-sufficient in raw materials and is the largest producer of Long products in Europe.
- In 2005, Mittal South Africa became the third most profitable company in South Africa and dominates the African steel-making market.
- Mittal is finalizing a strategic acquisition in three Canadian steel-making outlets to secure leadership in the North American market.

The top 10 producers have doubled in size in the past 10 years. This has resulted in a new pricing level in the steel industry as confirmed by rising steel prices in the 4th quarter of 2005 despite oversupply from China. Consolidation in the steel industry has enhanced the industry's ability to balance inventory levels and production with demand. Therefore, price levels are less volatile and companies are able to minimize cash flow fluctuations due to the cyclicality of the market.

There is a solid long-term potential in the industry for Mittal Steel. Under several plausible scenarios of GDP and population growth, the increase in steel consumption from the BRIC countries alone wills double global steel consumption in 40-50 years. 60% of Mittal's revenue

comes from emerging markets.



Mittal Steel has a consistent cash flow generating capability

Mittal's business model is diversified and consistent in generating cash for the company despite market cyclicality. The company invests heavily in itself and is able to finance current accounts through equity. It has an excellent debt-payback policy because its strong relationships with creditors allow Mittal to obtain very competitive credit terms.

Statement	of Cach	flowe

Statement of Cash nows				
(millions of dollars)	2002	2003	2004	2005 (9 month)
Operating Activities:				
Net Income	595	1,182	4,701	3,193
Net cash from operating activities	539	1,438	4,611	3,894
Investing Activities:				
Net cash from investing activities	(360)	(814)	(801)	(2,616)
Financing Activities:				
Proceeds from payable to bank	3,400	2,646	2,258	1,988
Proceeds from long-term debt	214	146	1,261	3,299
Payments of payable to bank	(2,360)	(3,636)	(2,738)	(2,379)
Payments of long-term debt	(244)	(266)	(2,302)	(2,862)
Dividends paid	-	(164)	(763)	(2,097)
Cash and cash equivalents	395	760	2,495	1,834

Mittal's business model mitigates the near and long term threats in the market

Upstream and downstream integration and a Continuous Improvement Program give Mittal a sustainable cost-leadership position in the market. Upstream integration in coal, coke, iron ore, and energy will give Mittal the ability to minimize the cash flow effect of volatile commodity markets. Downstream integration allows Mittal to apply its product, distribution, and sales expertise to lackluster plants with large undeveloped potential to profitability. Vertical integration and Mittal's Continuous Improvement Program with 5% annual productivity growth gives Mittal the ability to sustain cost-leadership in the short-long term. Although China's domestic steel consumption growth single-handedly drove the steel prices up in 2004 and drove prices down in 2005 due to excessive production, China does not have a low-cost base as most of its mills cannot sustain prices below \$400 per ton. China does not have any iron ore which is a key ingredient in steel making. The Chinese government is pushing for consolidation in the domestic market which will result in production cuts and an opportunity for Mittal to further penetrate the Chinese market. Competitors are already playing catch-up because of their lack of knowledge and vertical integration. Mittal's continuous development and focus on value-added investments in the company ensure Mittal's cost and technological leadership in the market in the short – medium term.

Professor O.W. Broome reiterated Professor R.S. Kemp's findings from his 2-week research visit to China and was told by Chinese contacts that the 2006 Olympics will be China's grand opening to the world stage. This will have large global economic implications and open up China's largely government-owned businesses to the world market.

Mittal's Competitive Advantage (A summary of conversation with Mrs. Do Hyun-An)

Mittal's cost position. Mittal steel has an upstream integration strategy, and as a consequence has achieved a high rate of self-sufficiency in raw materials such as Iron ore, coke, and DRI (direct reduced iron). This unique raw material position allows us to have less volatile cost and earning. In addition, Mittal steel is operating in emerging markets where labor cost per employee is around 5,000 USD, which is a significant advantage comparing to competitors.

Mittal's technological advantage. Mittal steel operates two R&D centers – one in Chicago focusing on flat products, and the other in France focusing on long products. Our technology leadership is translated to the market leadership position in the high-end markets in the US – for example, white goods, automobile market, etc. Mittal has a unique technological advantage in DRI process, which represents a large portion of production.

Mittal's cash flow. With the credit facility for Kryvorizhstal acquisition, we expect our debt gearing will increase and it will move up our interest payment, Libor + 50bp. Therefore, net impact would be 4% of USD 3.5 Billion. However, with our strong cash flow in the coming years, we will be able to lower down the debt level in the medium term.

Mittal's main concern. Mittal steel has been growing through acquisitions. As we see in the last few months, other competitors seem to imitate our growth strategy in terms of acquisition and also upstream integration. There seem to be more competition in acquisition market. The biggest concern, in fact, is 'undisciplined small producers' who destroy overall profitability of the steel industry – this threat is coming mainly from the Chinese protected market where the government is pushing for consolidation and a shake off after for 2006.

Value-Added-Research

Mittal Steel Contacts:

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Analyst Report:

MetallicAsia (November 2005), Merrill Lynch Global Securities Research and Economics Group.

Industry Analyst:

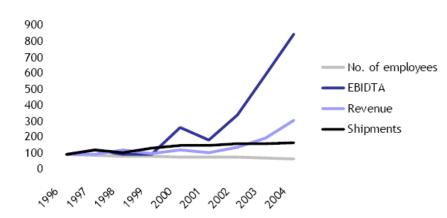
Sal Tharani, Goldman Sachs (+1 212 357 0695, sal.tharani@gs.com)

Pending Answers:

A Senior Manager at Mittal Steel (by end of the week) Professor Gayle Erwin (University of Virginia) – on valuation (by Tuesday, November 29)

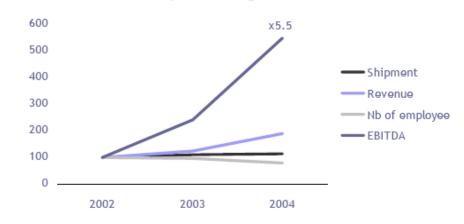
- 1) Termitau Steel Mill
- -Leading exporter to Central Asia
- -Most competitive steel plant in the world because of a 80% sufficiency in raw material and energy costs
- -Potential to expand into consumer-orientated steel products

Mittal Steel Temirtau key data changes (base 100 in 1996)



2) Ostrava Steel Mill
-serving domestic markets
-can access Mittal Steel's
global marketing, sales and
distribution

Mittal Steel Ostrava key data change (base 100 in 2002)



Mittal Steel Poland key data change (base 100 in 2003)

- 3) Mittal Steel Poland -Fully integrated stable plant operation: coke making, blast furnaces, liquid steel, long products mill, flat products mill, tube mills (70-80% for domestic market)
- -can expand to regional shipments

