



Asia's CAPEX Pickup in a Trio of Sectors

MIRAE ASSET LENS

Mirae Asset Global Investments (Hong Kong) Asia Pacific Investment / Research
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In the past few months we have started to see encouraging signs of recovery in investments across the region. We believe that for now, the bulk of these investments has been driven by government spending in infrastructure. However, we think that once corporates start to gain more confidence, a renewed capital expenditures (CAPEX) cycle will commence.

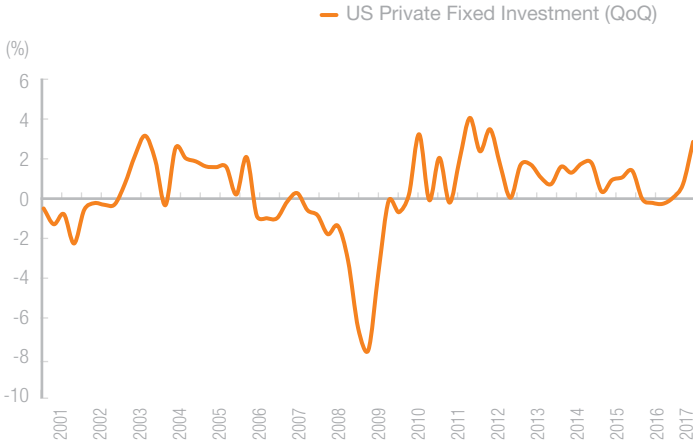
We believe corporate sectors in the major economies are in a CAPEX conducive stage in which revenues are growing, while wage cost pressure is lagging. This is the case in major

economies, such as the US, where the labor market slack has largely been absorbed. Indeed, private fixed investments in the US and industrial production of G-7 countries are on the upswing as indicators suggest that the corporate sector has gained some pricing power at a time when wage gains are taking a breather.

We handpicked a few of the sectors featuring clearer signs of an early recovery and where we believe most of the present opportunities exist, from a short and long term perspective.

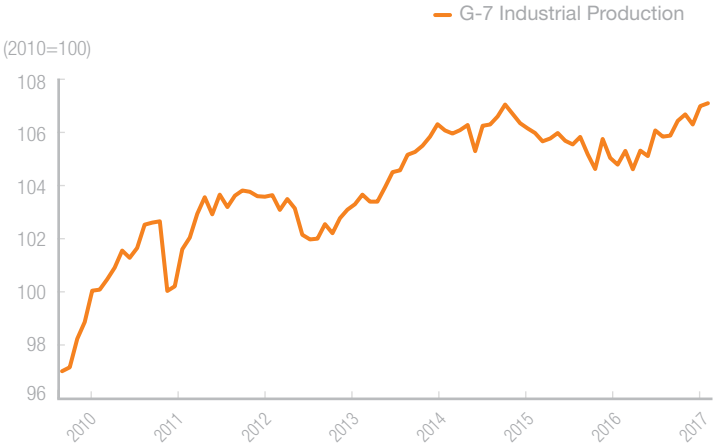
US Private Investment Timeline

Source: Bureau of Economic Analysis, Mirae Asset Global Investments (2017)



Production Output of Major Economies

Source: OECD (2017), Industrial Production (indicator) (Accessed June 2017)





Downstream CAPEX Cyclical Recovery and Impact to Korean Engineering, Procurement, and Construction (EPC) Players

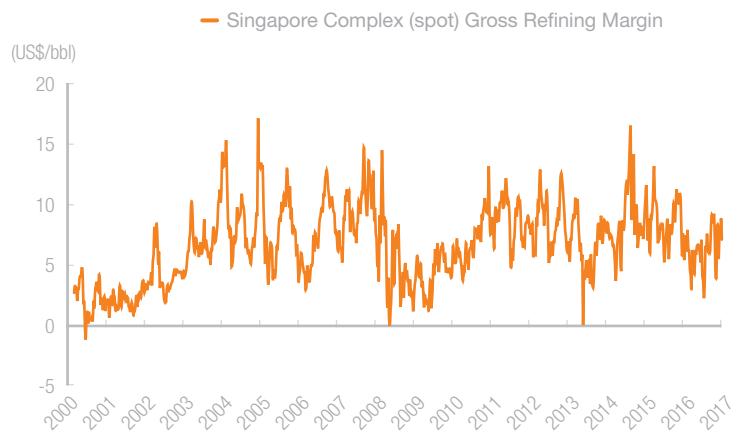
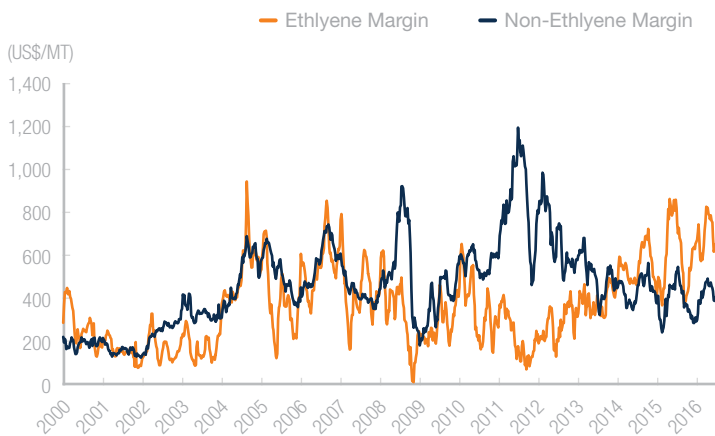
In the past five years, private sector CAPEX globally has been slowing down sharply as corporate confidence in a broad economic recovery reached new lows. However, we observed that in a few sectors, such as oil & gas downstream (final portion of the value chain involving processing, selling, and distributing), this prolonged

chronic lack of investment has driven margins up to new highs.

When looking at past events of a similar margin pickup magnitude, we detect that peaking gross refining margins and petrochemical spreads generally trigger new CAPEX cycles in the sector. As irrational as it may sound, the issue for oil & gas downstream companies is that they tend to move briskly, in sync and along with the cycle, setting off multi-year booms and busts in industry profitability.

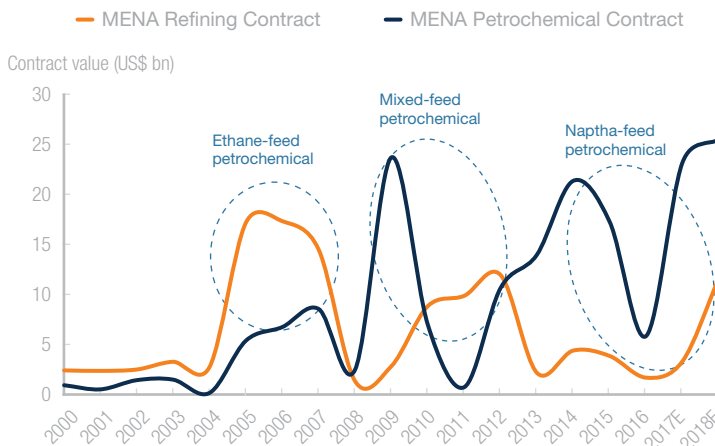
Middle East and North Africa Downstream Hydrocarbon Investment Cycle

Source: Macquarie Research (April 2017)



MENA Refining and Petrochemical Contract Trends

Source: Macquarie Research (April 2017)



It is rare to see companies in the downstream sector taking anti-cyclical contrarian investment decisions and expanding capacity during a downturn, when EPC companies' backlogs are low and capacity expansion becomes cheaper. Although this may be the best time to seize a structural advantage through cheap expansion, most investors seem to lose confidence in the sector's long-term demand during the trough.

As refining and petrochemical projects have multi-year commissioning periods, the margin recovery period – we think we are in one now – usually lasts for a few years while expansion projects are being built. Confidence in the sector starts to take

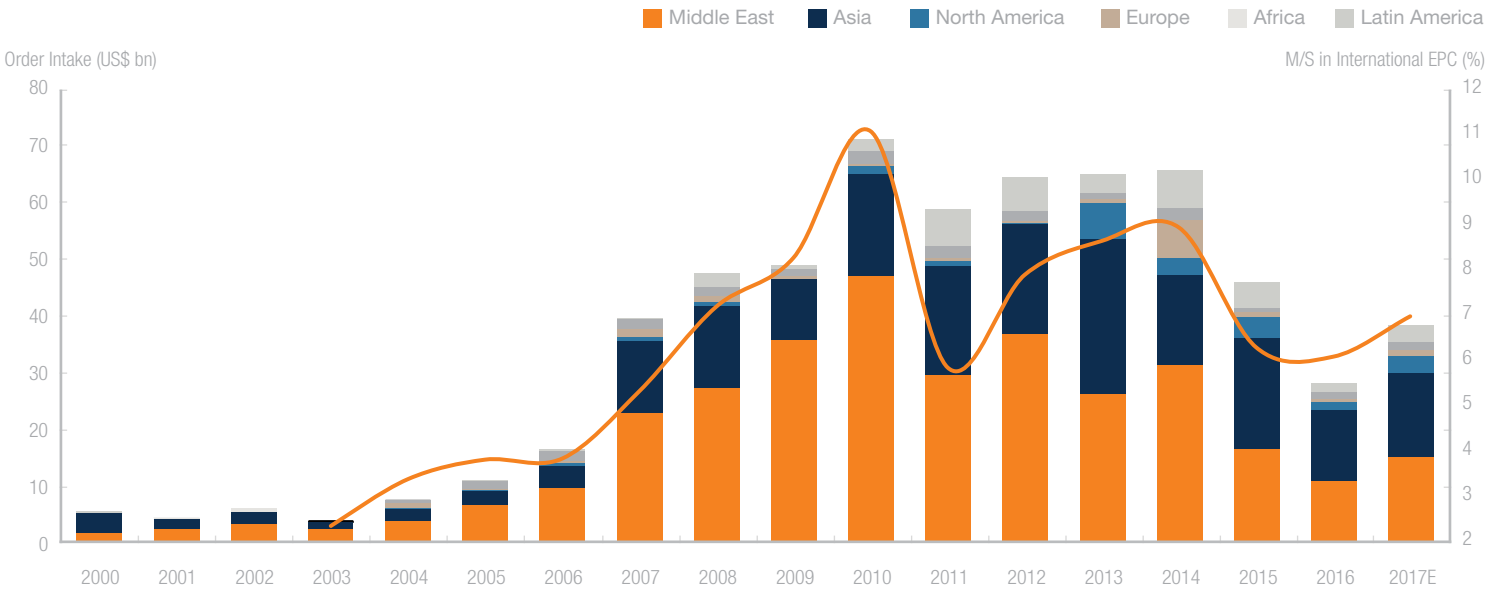
root and more players announce expansion plans, driving the cycle upward. After the new capacity is delivered and ramped up, the market becomes oversupplied and the sector faces a new bust.

We believe at this moment of the cycle, many downstream players

are still hesitating to expand capacity. However, as gross refining margins and petrochemical spreads are sustained, orders to EPC companies will materialize. Therefore, we believe that EPC companies possessing a downstream focus, strong sector know-how and track record are set for a re-rating as orders recover.

Korean E&C Companies' Order Intake by Geography

Source: Macquarie Research (April 2017)



One caveat we would make for the Middle East downstream CAPEX recovery is that it might be delayed depending on oil price performance. Expansions in the region are largely funded by state backed corporations and oil price plays a large role as it is the source of funds.

Machinery Capital Stock Recovery in China

Another sector related to CAPEX recovery where we see encouraging signs is in construction machinery in China. As

a result of China's meaningful infrastructure package in 2008 and 2009 to counter the effects of the global financial crises, machinery sales in the country soared.

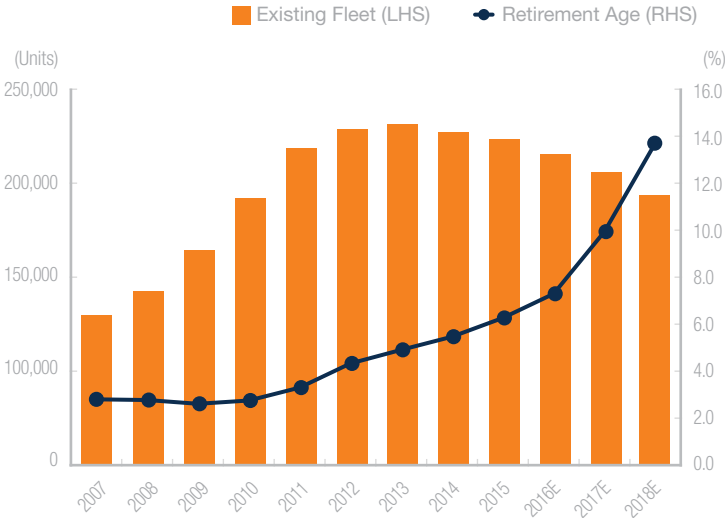
The lifespan of construction machinery ranges from around 8 to 10 years on average, signifying that most of the machinery sold in these years should reach retirement age between now and the next 1-3 years. Even under conservative assumptions, wherein only part of the machinery stock is to be replaced, we forecast a meaningful cyclical recovery in sales that has already started.

One important point to bear in mind when assessing Chinese machinery players is that during the previous boom, sales practices were particularly aggressive, leaving many of them with high inventories of used machinery that were returned as

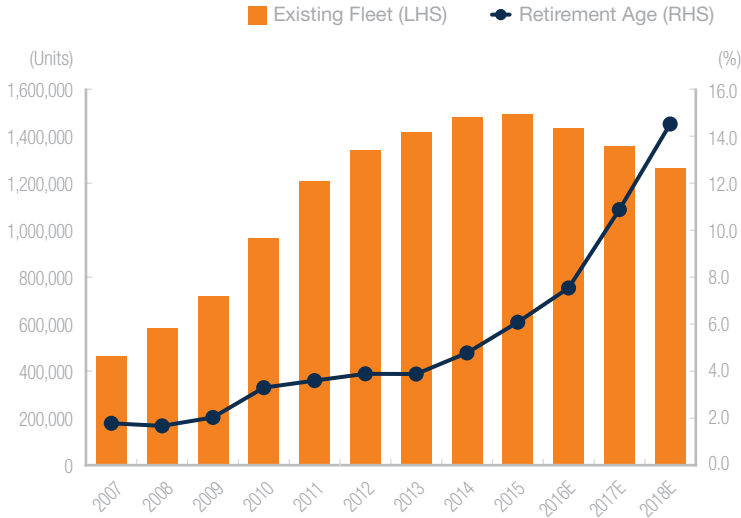
collateral. Hence, although sales figures have been robust, we have yet to detect a sharp margin pickup, which will likely happen after low-margin second-hand machinery units have been off-loaded into the market.

Crane Fleet Stock and Retirement Age

Source: Credit Suisse, China Construction Machinery Yearbook (2017)



Excavator Fleet Stock and Retirement Age



Another important driver for construction machinery is that investment growth accelerated to 23% in 2017 Q1, up from 17% at the end of 2016. Real estate new starts rose by low double digits, despite various curtailment measures from local governments and moreover, utilization hours of construction equipment continue to improve. Demand has been moving from early cycle excavators to mid-cycle cranes and late cycle concrete machinery. In our view, these demand shifts should reveal new investment opportunities in the medium-term.

India Mining CAPEX Recovery

India’s metals and mining CAPEX decreased sharply post FY 2014, after averaging USD 9.6 bn a year between FY 2010-FY 2014, as companies had high hopes that commodity prices would stay strong and took a bet on access to such a captive market, where demand was expected to boom.¹ However, that period was followed by a sharp commodity price correction and many regulatory headwinds in India. Companies’ balance

¹ CLSA, Mirae Asset Global Investments (2017)



sheet leverage went beyond comfortable levels, forcing most of them to reduce CAPEX levels to the minimum required and to focus almost exclusively on ramping up expansions made in the previous cycle. This drove aggregate CAPEX down by over 51% to USD 4.7 bn.²

However, in the past year, sector fundamentals have ameliorated in line with the commodity price recovery. In the Indian market, the government has increased import protections for several sectors, such as steel, serving to provide further support. Amid such a backdrop, some companies, such as Hindalco, took the opportunity to raise equity, strengthening their balance sheet and cash flow situation. Hence, many players have regained confidence in the sector and resumed investments with a focus on high-return projects that demonstrate appealing return profiles compared to the last cycle. In the next CAPEX round, most

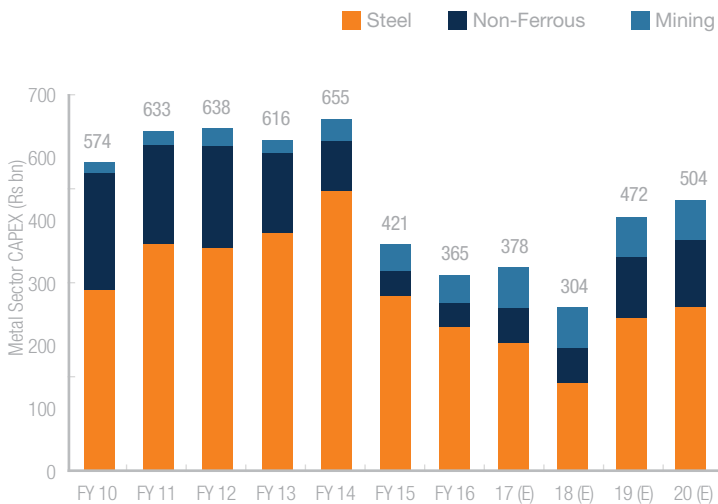
projects should be brownfield, implying superior returns with less probable delays.

For the non-ferrous sector, which includes companies such as Vedanta and Hindalco, the improvement in balance sheet is already being reflected in their future plans. For steel, we believe the supply and demand dynamics should only improve significantly post FY 2019, when CAPEX plans should normalize. As it takes around three to four years to build a steel plant, if we see new capacity construction by FY 2019, it will only be commissioned by FY 2022-2023, meaning that we should see a sustainable cycle in the coming years.

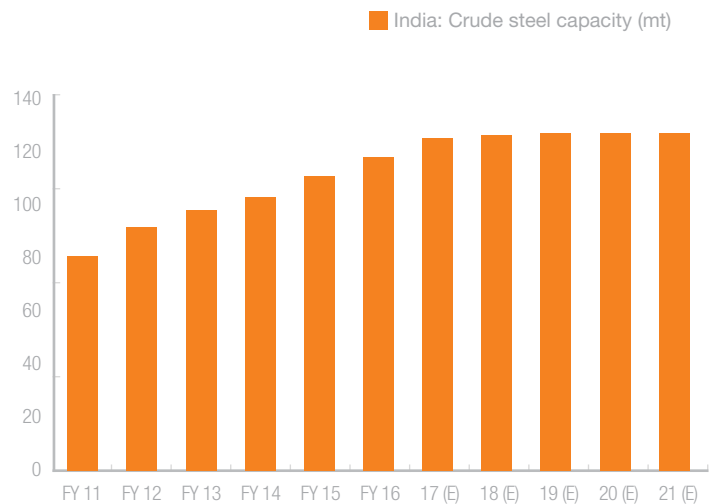
India Metals Sector CAPEX

Source: CLSA (April 2017)

* Metals sector capex data is a combined spend of Tata Steel, JSW Steel, SAIL, JSPL, Bhushan, Essar, RINL, Hindalco, Vedanta (excluding Cairn), Nalco, Coal India, and NMDC



Indian Steel Industry Capacity Additions



² Ibid



Manufacturing and Automation CAPEX Progress in China – Structural Recovery

Last and most importantly, we have recently witnessed green shoots in the way of manufacturing CAPEX and factory equipment demand, which is not directly linked to the commodity rally. Two most significant aspects to recognize here are whether this pickup is the beginning of a sustainable recovery and whether China is on course in making achievements in its manufacturing agenda (see [“Mirae Asset LENS Issue 7: Part I Automation in China”](#)).

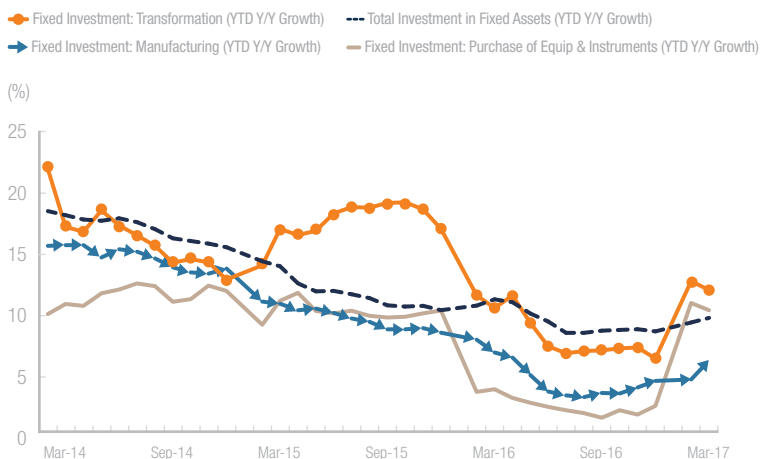
In March, we saw a reasonable rebound in manufacturing CAPEX and growth in a wide range of factory equipment. March data is

more relevant because it excludes Chinese New Year seasonality. More specifically, equipment grew by nearly 10% in the first quarter of the year, up from 2.1% for full year 2016. Still according to the data, machine tools, packing machinery, electric motors and industrial robots are all showing strong signs of recovery.

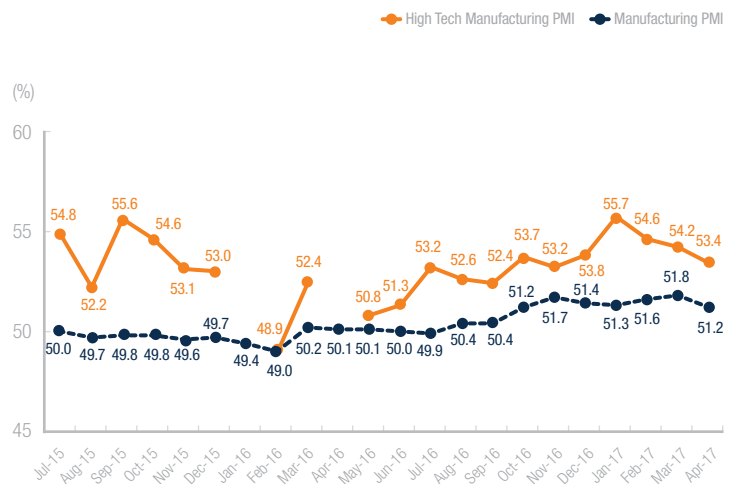
Regarding China’s manufacturing upgrade push; we also continued to see good progress. We noticed that high tech manufacturing PMI (53.4 in April 2017) and growth have clearly outpaced the overall industrial sector manufacturing PMI (51.2 in the same period). Apart from the manufacturing sector, macro data also continues to improve. PMI, PPI, electricity consumption, etc. are all recovering from last year’s lows.

Fixed Asset Investments: Transformation and Purchase of Equipment

Source: National Bureau of Statistics of China, Bernstein Analysis (2017)



China PMI: High-Tech Manufacturing vs. General



Investing in the Green Shoots

We view these budding signs of a CAPEX recovery in EPC & machinery, mining, and automation manufacturing as early indicators on a new cycle in the region. Whereas the previous sequence was characterized more by greenfield projects, this

one appears tilted towards brownfield investments that normally offer higher rates of return and fewer delays. While not all players in these sectors will succeed, our on-the-ground research helps to reveal the likely beneficiaries of these newfound developments.



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