How India Ratings Uses Commodity Prices in its Projections

Special Report

This report updates and replaces *How India Ratings Uses Commodity Prices in its Projections, dated 16 November 2012.*

Rating Through the Cycle

Projected Commodity Price Required: In assessing a commodity company's credit rating, India Ratings undertakes projections of its operational and financial profile using various assumptions including contemporary market-based forward price indications for the near term, and a "mid-cycle commodity price" thereafter.

The mid-cycle commodity price created by India Ratings is expected to be conservative, and unsurprisingly, is typically below consensus estimates.

Profile That Survives Cycle: The purpose of India Ratings' forecasts is not to predict the actual commodity price, but to provide a range of foreseeable operational and financial profiles commensurate with a rating, which is expected to survive the inherent cyclicality of the sector including its commodity price fluctuations.

Resultant Stable Ratings: As a result, India Ratings aims to assign cyclical companies ratings which have enough headroom to enable them to remain broadly stable during the sector's inherent cyclical peaks and troughs, not assigning ever-changing, pro-cyclical ratings. More stability in ratings is also enhanced by limiting higher ratings in certain sectors given India Ratings' assessment of the sector's risk profile.

Approach For Cycle-Surviving Capital: India Ratings acknowledges that this approach to rating through the cycle is different to other credit indicators such as shorter-sighted cash bond, CDS, or equity prices. It is, however, an appropriately conservative approach for debt given that rated debt, as a form of long-dated capital, will often experience at least one cycle before repayment.

Approach For Company Ratings: Although the general principles of India Ratings' forward-looking projections are applicable to all rated companies, this report concentrates on issues relating to commodity companies, which are used to volatile commodity prices.

Annex I shows how India Ratings' rating-through-the-cycle approach is also applicable to less cyclical corporates.

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Rating Through the Cycle – The Overall Framework

As demonstrated in the sector-specific credit factor reports, the starting point for rating through the cycle is to assign a rating range consistent with the risk profile of the sector. This is captured in the "Sector Risk Profile" attributes. The "Company-Specific Traits", including scale and diversity (geographical and by product), demonstrates how these characteristics can enable the rating to vary within that range and for some sectors, migrate higher than the sector cap (typically by up to one to two notches). The Financial Profile's building blocks serve a similar purpose.

Inputs that affect commodity prices include

- demand and supply
- geographic considerations
- forex
- production costs
- feed stock input prices
- speculative investor participation in pricing
- demographic changes

Consequently, it is unlikely that the final rating will be vulnerable to material downgrade due to inherent sector cyclicality, as framed by the foreseeable sector risk profile, and given the mid-cycle commodity price assumptions used in projections.

In India Ratings' experience, rating changes are more frequently driven by changes in strategic direction, including large M&A, operational under- or over-performance, movements in cost position or disproportionate capex. The role of commodity price changes would most frequently be as an influence which exacerbated the impact of one of the above developments, rather than being the proximate cause of a rating action on its own merits.

Commodity Price Assumptions for Years 1-2, and 3-4

Where commodity producers' performance is dependent on unhedged commodity price risk, India Ratings may use current market-based commodity price indications for the next one to two years in its forecasts. Acknowledging that many market forces across the globe define commodity prices, India Ratings uses near-term prices as informed by sector knowledge, information from management meetings with rated entities in the same sector, consensus forecasts, and its own house view. These near-term price assumptions are expected to be conservative and, unsurprisingly, are typically below consensus estimates.

For the remaining two to four years, or year 5 time-horizon of the forecast period for the rated entity, India Ratings will revert towards a "mid-cycle commodity price". Current and prospective trends that feed into India Ratings' mid-cycle commodity price include updated recent market phenomena. These may include rebased feedstock prices and costs of production/reserves, informed by current and future supply and demand dynamics and market signals of target prices. Target prices can be overt, such as from industry bodies, or gleaned by India Ratings from management meetings and business plans.

In both cases (near-term and year 2 to 5), projected price levels adopted by India Ratings will be more conservative than market consensus. By using a sustainable price level, India Ratings is also assessing the sustainable profitability and cash flow generation of the group, removing the impact of cyclical price movements.

Mid-Cycle Commodity Price – Known as a "Long-Term Average" and "Price Deck"

The terms used, "long-term average price" and "price deck" are basically the same – a conservative price assumption, informed by historical levels and behaviour but updated for current and prospective trends.

Price

India Ratings uses mid-cycle prices for commodity companies. When rating companies with single commodities, the above approach is a lot easier to undertake. For larger diversified groups, like large chemical companies with many derivatives, pricing intelligence is not generally available and price volatility is typically mitigated by factors such as product and geographical diversification and value-added features. These diversified entities' forecasts focus on the company's markets with their individual reporting lines and their regional exposure and may only make conservative assumptions on divisional pricing and volume trends for the next one to two years.

Applicable Criteria

Corporate Rating Methodology

For these companies' remaining year 3 and 4, India Ratings will revert to a mid-price more weighted to an updated long-term average commodity price and volume growth rates with adjustments for company-specifics.

Volume

Changes in commodity prices are also a function of changes in demand, thus India Ratings' projections for companies will also include volume assumptions which may vary according to the reasons behind price dynamics. This part of the assessment will involve wider macroeconomic conditions including foreseeable commodity demand from emerging market countries, geographical demand relative to the company's facilities taking into account transport costs for the commodity and cost of extraction or production in certain regions. Increasingly, India Ratings considers the dynamics of stockpiling (if any), capacity additions (supply-driven market imbalances), as well as input from the rated company's individual characteristics.

Capex

Stock-Piling

- Stock-piling distorts commodity pricing by altering supply and demand dynamics, often for a short period
- Where stock-piling is covert, and the timing of its reversal is unknown, pricing can deviate significantly from fundamentals, but only for a period
- For a corporate, unwinding stock-piling enhances cashflow, building up stock causes a cash outflow

In India Ratings' cash flow analysis of commodity companies, capex can be a significant amount, and in practice, will vary according to commodity prices. Companies will defer or bring forward projects according to commodity price assumptions and the duration of their expected peaks or troughs. India Ratings acknowledges the need to adjust management indications of capex relative to the agency's conservative mid-cycle commodity price.

If near-term capex is committed (contractually, or is expedient to help maintain the company's competitive edge), then India Ratings will use such cash outflows in its base case. Where management has the ability to flex capex, India Ratings will adjust planned spend for its more conservative commodity price.

Forex

For some commodity-related companies, notably oil, where their cost base (either through offshore sourcing or through effective cost-linkage) is predominantly in the currency of the international commodity (US dollar), fluctuations in forex relative to the function currency of the operating cost base are minimal. For certain sectors, however, such as mining companies where manpower is a large cost, or aluminium which is power intensive, domestic currency costs may predominate. In turn, these companies' forex risk may result in reduced profitability if the currency mismatch is unhedged. India Ratings would be more concerned about the real-time cash flow effects of such forex mismatches, and the effect upon the rating, rather than reported results' translation risk.

India Ratings would assess the currency and commodity relationships, and relate the currency of the company's cash flow to the functional currency of its financial obligations.

Inflation

India Ratings does not adjust its forward prices for consumer price inflation, consistent with its approach in forecasting more broadly to project forward in nominal terms.

Remaining Inputs

Other positive and negative inputs can be applied to both the near-term and long-term (years 2-5 or 3-5) deck price or long-term average. These can include the elements listed in Figure 1.

Figure 1

India Ratings Assumptions on Other Income Statement or Cash flow Features

	Foreseeable pricing yr 1, or yrs 1-2	Mid-cycle commodity price yrs 2-5, or 3-5.
Turnover	Instrument hedging or mitigating natural hedging. Contract-base turnover	
Opex	Modelling the foreseeable opex cost base, also given understanding of the variable and fixed cost base. Degree of vertical integration. Ability to pass cost increases on to end-price. Cost of production relative to peers and near-term pricing.	Modelling the foreseeable opex cost base, also given understanding of the variable and fixed cost base. Degree of vertical integration. Ability to pass cost increases on to end-price. Cost of production relative to peers and pricing assumptions.
Working capital	Modelling of working-capital requirements given turnover assumptions. Market reaction: stocking or destocking.	
Capex	Committed and scheduled capex requirements given foreseeable turnover.	Committed and reprofiled capex given stronger/weaker assumptions behind turnover. If not committed expenditure, would capex on new reserves or production facilities be justifiable, given assumptions behind commodity price? Other non-committed capex is scaled back in line with underlying cash flow and borrowing assumptions.
Dividend payout and share buyback	Management track record and intentions.	Management track record and likely policy given resultant profit.
Debt	Free cash flow (FCF) available for debt reduction as a result of above cash flow, including working-capital inflows/outflows.	

Source: Ind-Ra

Issuer Response is Key for Impact of Large Commodity Price Swings in Near Term

The fact that India Ratings rates through the cycle does not mean that a sharp change in commodity prices has no potential to affect ratings. In addition to potentially (though not always) prompting a reflection by India Ratings on the level of its price deck, the commodity price obviously has a direct influence on the cash generated, and potentially retained for the most recently completed financial period.

If the actual commodity price proves to be above the mid-cycle commodity price, India Ratings would assess if the company is reinvesting this upswing's profits internally (capex, expansion, addressing operating cost issues, or M&A appetite, debt reduction), or externally (dividend or share buyback). If the company has used this headroom to fundamentally rebase the group's financial profile to an improved sustainable level, the rating may change to reflect this improvement.

If the actual commodity price should prove to be below the mid-cycle commodity price, India Ratings would assess if the company can revert to a credit profile consistent with the rating within one to two years (the time horizon for a rating outlook). India Ratings would also seek to understand management's preparations for the economic downturn. If the company has been more permanently adversely affected, the rating would be rebased consistent with the resultant credit profile. Particularly important under such a scenario would be an assessment of the company's liquidity to see if it can ride through the cyclical trough.

Figure 2

One-Off Commodity Price Variances Can Impact Ratings – But Rarely Do

Impact	Surplus	Deficit
Positive	Applied to deleveraging of a material scale in rating terms, leading to a sustainable rebasing of leverage. Applied to addressing deficiencies or operational improvement in operating cost base, thereby increasing the entity's cost- competitiveness.	No positive implications likely.
Neutral	Split between deleveraging and higher shareholder returns.	Shareholder returns or discretionary investment reduced to offset, or financial headroom at current rating shrinks.
Negative	Returned to shareholders where limited or no headroom exists at current rating levels.	Incremental debt raised to offset deficit.

Company reactions are samples, not an exhaustive list, and the ultimate rating impact would depend on broader analysis and on levels of financial headroom at the current rating level
Source: Ind-Ra

The reality is that deficits are rarely of a scale to prompt a liquidity threat for anything other than the weakest of issuers rated by India Ratings. Equally, surpluses are rarely applied entirely to deleveraging for efficiently financed companies. Where deleveraging does occur, the scale would need to be material to the rating, which is unlikely from a single year's cash flow and also represent a sustainable rebasing of the leverage position, rather than a temporary low point.

As a result, in the vast majority of cases, the issuer's response dictates a broadly neutral impact on ratings.

Comparing the Sector Risk Profile of Oil & Gas with Miners, and with Chemical Companies

At face value, the oil and gas sector has similar characteristics to the mining and chemical sectors. They are both cyclical sectors with volatile commodity prices, both provide an essential commodity, no single participant can claim to be a price-setter, and in mining mineral reserves have to be found and developed. Integrated oil companies are rated higher due to the broader value chain attached to these entities.

Additional factors broadly supporting higher ratings for the oil sector include the factors listed below.

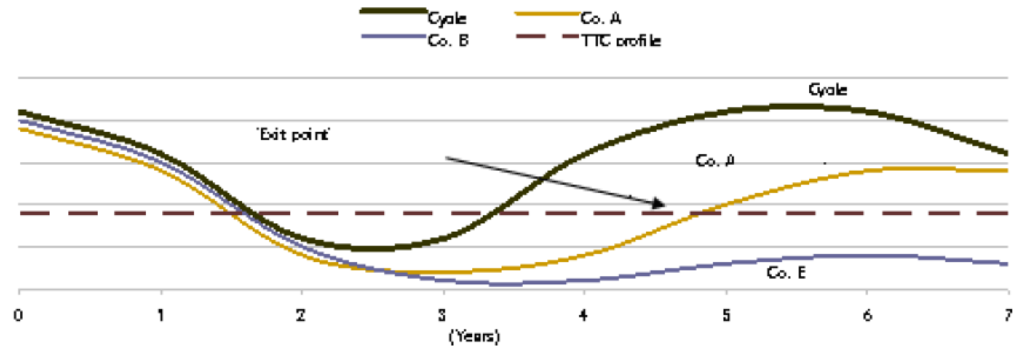
- India Ratings believes there is a greater element of scarcity value in the price of oil
- Oil and gas products are more fundamental to the economy: industrial output – and in many areas heat and power – cannot continue without oil or gas, thus there is less downside risk
- Oil and gas products lend themselves less to stockpiling or storage than other mined or chemical commodities
- Oil and gas prices and volumes are supported by better-managed supply and less volatile demand

Furthermore, these same factors support stronger relative investor and bank-lending appetite for the oil and gas sector, which aids liquidity and deepens funding opportunities relative to other mined commodities.

Appendix I: Forward-Looking Approach Also Used for Less Cyclical Corporates

Figure 3

Rating Through the Cycle



Source: Ind-Ra

Rating through the Cycle Chart Illustrates Two Highly-Stylised Examples

Company A suffers through the recession, but is forecast to regain its through-the-cycle profile, represented by the dotted line, by the "exit point" 18 to 24 months after the recession trough. The dotted line represents parameters (quantitative and qualitative) consistent with a particular rating level. Company B, on the other hand, suffers more significantly during the recession, and is unable to respond as effectively. This may be because of lower rebased ongoing cash flow expectations, or the assumption of significant new leverage to offset cash shortfalls during the recession. It may alternatively, or additionally, be the result of a fundamental shift in the business model, risks during the recession, or transformational changes in market demand.

Company B will typically see its rating lowered to match a lower credit profile, which would be represented, in a stylised manner, by a parallel but lower dotted line illustrating the through-the-cycle profile of a lower rating. A subsequent alteration to company B's profile, for example, from unanticipated free cash flow (FCF) that repays debt, could serve, in part, to "bend" the trajectory of company B. If company B's decline had previously been forecast to be largely financial in nature, this might allow it to regain its previous rating level.

Not included in the chart are the fortunes of company C, which encounters a liquidity problem during the downturn and does not reach the exit point – the line on the chart would thus discontinue in year 3 in this stylised example.

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