Ratings

CRISIL
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Haircuts worth Rs 2.4 lakh crore

That's what banks may need to resolve the top 50 stressed accounts

July 2017

Analytical contacts

Pawan Agrawal
Chief Analytical Officer – CRISIL Ratings
Email: pawan.agrawal@crisil.com

Ramesh Karunakaran
Director – Rating Criteria and Product Development
Email: ramesh.karuanakaran@crisil.com

Ankit Dhawan
Senior Rating Analyst – Rating Criteria and Product Development
Email: ankit.dhawan@crisil.com

Somasekhar Vemuri
Senior Director – Rating Criteria and Product Development
Email: somasekhar.vemuri@crisil.com

Chaitali Nehulkar
Associate Director - Rating Criteria and Product Development
Email: chaitali.nehulkar@crisil.com

India's banking sector is currently under stress with non-performing assets (NPAs) rising to Rs 8 lakh crore as on March 31, 2017, or 9.4% of total outstanding loans, from Rs.6.1 lakh crore as of March 31, 2016.

The government and the Reserve Bank of India (RBI) have taken many steps and offered various resolution tools such as the corporate debt restructuring (CDR), strategic debt restructuring (SDR), the 5:25 scheme, and the Scheme for Sustainable Structuring of Stressed Assets (S4A) – all to little or no avail.

The unwillingness of banks to take it on the chin through haircuts has meant the can has been kicked down the road, which has, in turn, resulted in debt ballooning to unsustainable levels.

The government then recently promulgated an ordinance empowering the RBI to issue directives for a faster and optimum resolution of stressed assets so that they become viable. The focus now is on optimum level of debt reduction and potential transfer of assets to a different management that can bring in the resources needed to scale up cash flows.

In this study, CRISIL has estimated the level of haircuts required for 50 large stressed assets with cumulative debt of over Rs 4.3 lakh crore – representing about half of the gross NPAs of banking sector. The analysis shows these 50 large stressed assets may have to take haircuts of ~60% at an aggregate level, to arrive at sustainable level of debt. CRISIL has classified the haircuts into four categories – marginal (<25%), moderate (25-50%), aggressive (50-75%), and deep (>75%). The economic value method has been applied to arrive at the sustainable level of debt.

Summary of average haircuts by sector

	No of companies analysed	Average haircut	Proportion of stressed debt of Rs. 4.3 lakh crore
Construction	17	Aggressive	~25%
Power	11	Moderate	~15%
Metals	7	Aggressive	~30%
Other sectors #	15	Aggressive	~30%
Total	**50**	**60% (Aggressive)**	**100%**

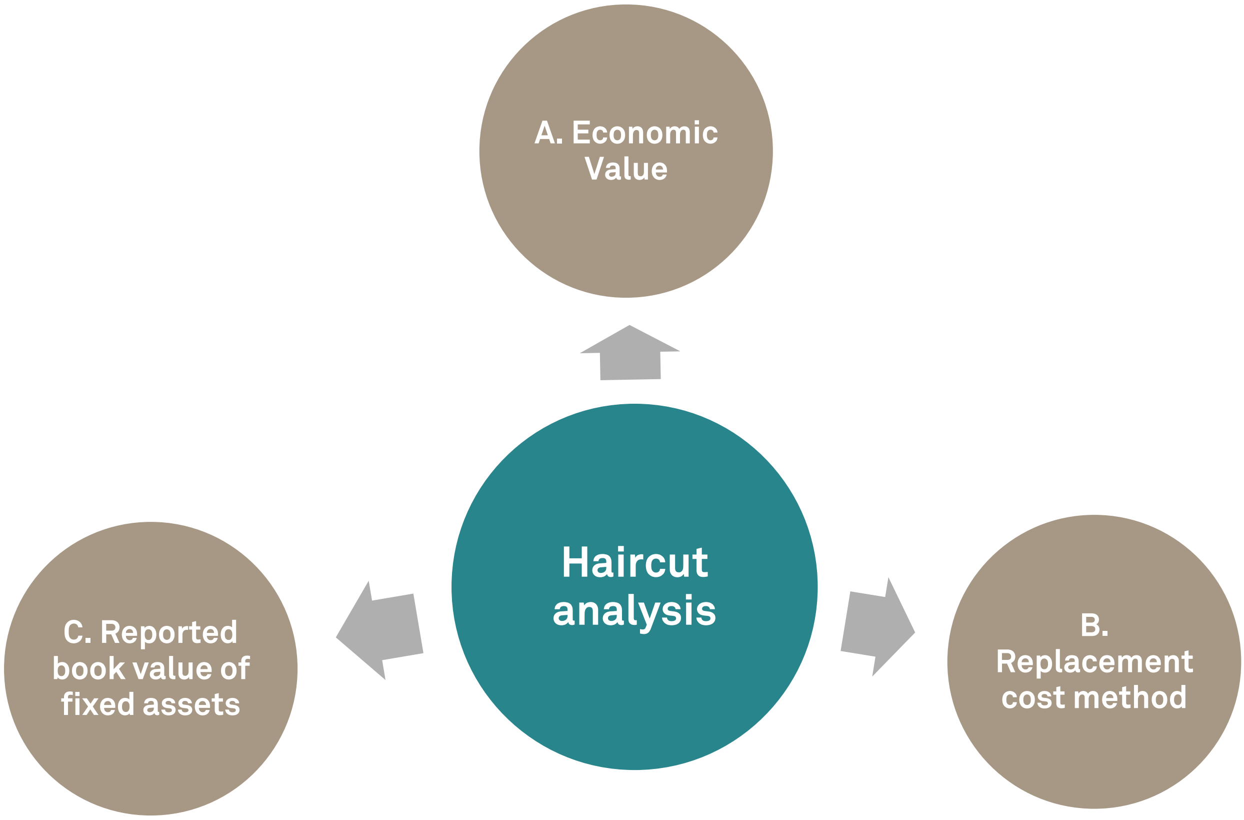
 # Other sectors include gems & jewellery, shipping, real estate, food products, textiles and real estate
Source: CRISIL

The intensity of haircut required on these assets is the manifestation of the challenges faced by them in the current business environment. Many of these assets may not be viable anymore, therefore, cosmetic restructuring may not suffice. While banks may have already provisioned for a part of these exposures, CRISIL's analysis indicates that an incremental provisioning of about 20 per cent may be required. Banks need to be adequately capitalized to absorb such losses. This could help fuel the credit growth (which has touched historic lows) and support the next leg of economic growth.

Determining the haircuts

Various methodologies have been adopted to arrive at the haircut appropriate for a given corporate. These methodologies have been adopted keeping in mind sector specific nuances, as well as to triangulate the estimates.

Methodologies for determining/benchmarking the required haircut on stressed debt



A. **Economic value based methodology was used to arrive at haircut for 50 stressed assets**

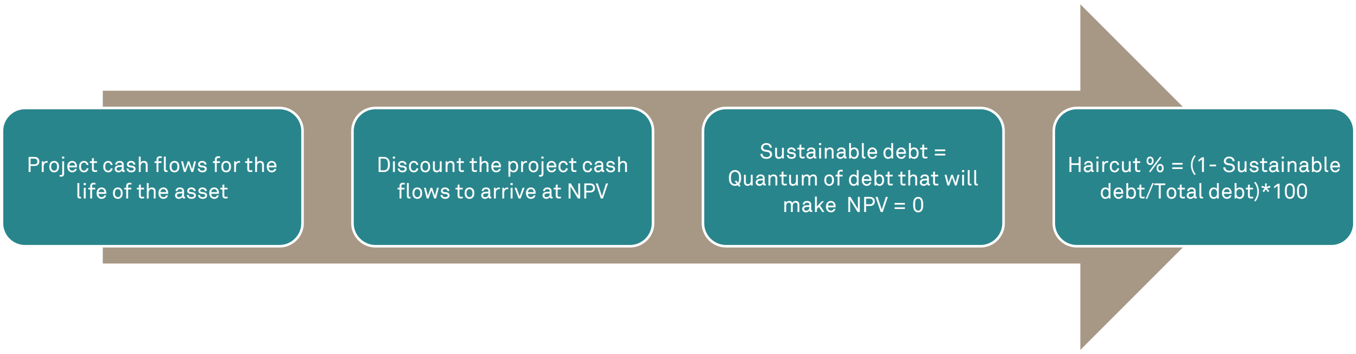
CRISIL analysed the debt in the 50 stressed companies using the economic value based approach. This methodology tries to ascertain the consideration that a potential buyer will be willing to pay for an asset either based on steady state cash flows or on the basis of potential realisation through sale of investments. Appropriate, sector-specific valuation multiples such as EV/EBITDA or discounted cash flow method have been used to arrive at the enterprise value. The assumption in this approach is that lenders are unlikely to leave any residual of the enterprise value for the equity stakeholders.

1. **Multiples method:** This method was used to calculate haircut for corporates, after arriving at steady state operating performance of the company. Any investments in subsidiaries or associate companies were duly considered. This method was utilized for sectors such as metals and construction.

Process highlighting the multiples method

2. **Cash flow method:** This method was used in case of infrastructure assets (e.g., power, road SPVs), where cash flows could be plotted over the entire life of the asset with reasonable accuracy.

Process highlighting the cash flow method



The estimates from economic value approach were further triangulated (wherever possible) through following two approaches:

B. **Replacement cost method –** Haircut using this method is arrived at, by comparing the existing debt levels with the replacement cost of the asset as of today. However, the key issue with a replacement cost method is that it ignores the discounting factor that is applicable in the case of distressed assets. The discounting factor indicates the riskiness and uncertainties associated with scaling up the cash flows of the particular asset. The extent of discount may also factor additional funds that may be required over the medium term to streamline the operations and resolve working capital related issues.

C. **Benchmarking with fixed assets –** The debt can be benchmarked with reported book value of the fixed assets. Pitfalls of this method, however, are that the cost structure may have changed over time, and may not be applicable for businesses with deep working capital related issues.

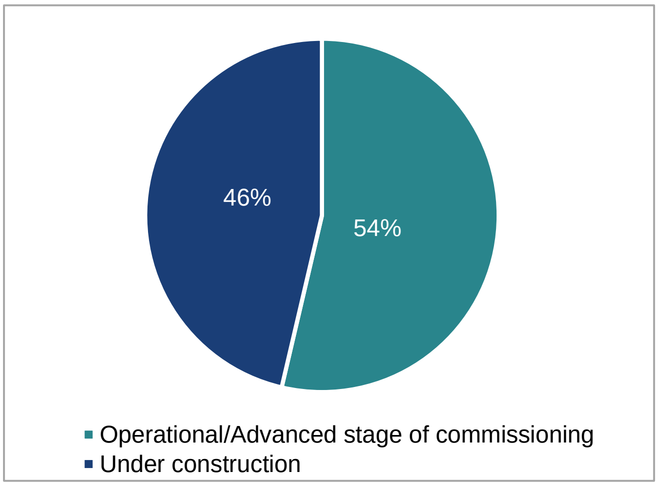
Power sector

CRISIL analysed 11 power companies with a total capacity of 13 GW. These account for aggregate debt of about Rs 68,000 crore, 15% of the stressed debt analysed by CRISIL. Most of these assets are thermal power plants with 48% of the debt in under-construction projects.

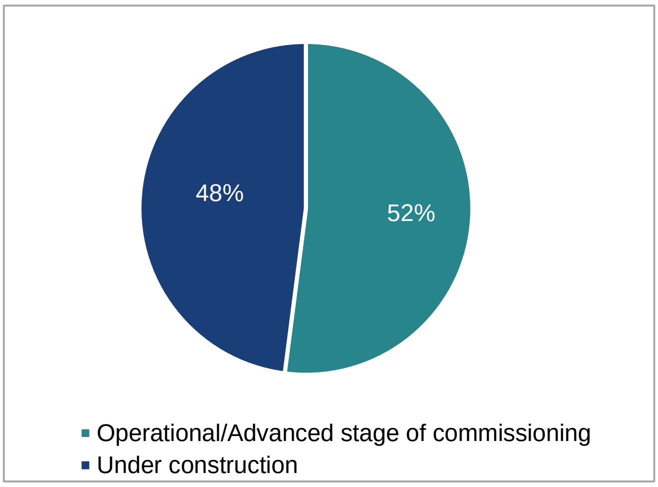
The operational projects were impacted on account of various issues such as lack of long term offtake agreements, limited domestic coal availability restricting plant load factors (PLFs), tariff-related disputes and weak financial health of distribution companies exacerbating counterparty risks. In case of gas-based power plants, the availability of gas or lack thereof resulted in closure of capacities or running at extremely low PLFs of less than 30%.

The under-construction projects suffered on account of major cost and time over-runs (as high as 50% of original project cost in some cases) – due to reasons such as delayed clearances and unfavourable forex movement. Delayed commissioning resulted in cancellation of power purchase agreements (PPAs) in some cases, while fuel supply issues on account of low supply, cancellation of coal blocks impacted the viability of some power projects. With investment appetite drying up for the sector, the projects were stranded on account of lack of funds.

Capacity -wise (13 GW) break-up



Debt-wise (Rs 68,000 crore) break-up



Source: CRISIL

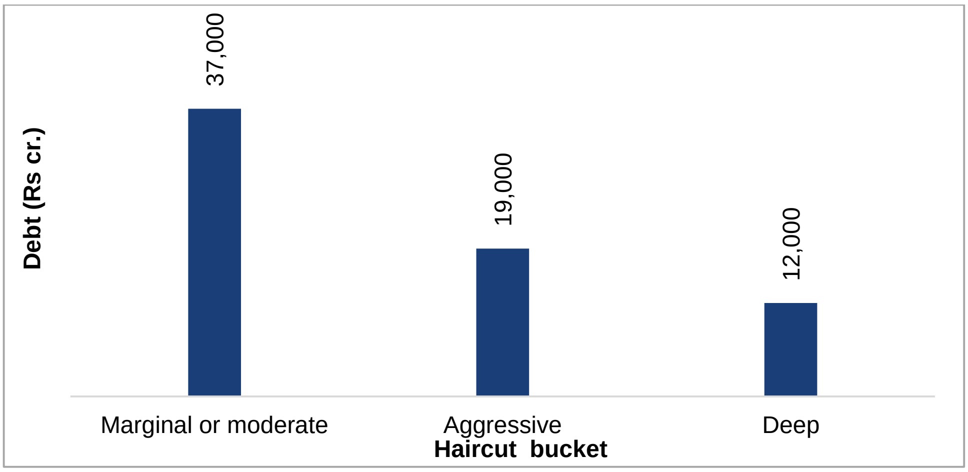
CRISIL used cash flow method with following assumptions to analyse the extent of haircut:

- Fuel supply issues in case of coal based power plants will be resolved with the aid of government support thereby removing uncertainties on this aspect
- Offtake arrangement would be in place for majority of the capacity, over the medium term, supported by improvement in the financial health of discoms on account of implementation of UDAY scheme
- PLF levels for thermal power plants will reach 70% over the long term, supported by expected gradual improvement in demand

Extent of haircut:

Distribution of haircut has been captured in the chart below. Debt-weighted average haircut works in the range of 25%-50%, i.e. the moderate bucket.

Haircut distribution – power sector



Source: CRISIL

- Already operational projects, with PPA and fuel supply agreement (FSA) for at least part of the capacity, would require lesser haircut
- Deep haircut will be required for gas based projects where there is no visibility of fuel supply; these projects could potentially face total write-off in the absence of any resolution

CRISIL benchmarked the extent of haircut with that of replacement cost to assess whether it led to a different estimate than what is suggested by the cash flow approach

Benchmarking with replacement cost per MW		
Total capacity analysed	GW	13
Total debt	Rs cr	68,000
Debt per MW [A]	Rs cr/MW	5.2
Cost per MW	Rs cr/MW	7.4
Cost per MW for commissioning new coal based plant	Rs cr/MW	6.0
Debt per MW assuming 70:30 funding [B]	Rs cr/MW	4.2
Haircut basis replacement cost [1 – B/A]	%	~20%

Source: Annual reports and CRISIL

The estimated hair-cut on the basis of replacement cost works out at 20%, lower than the moderate haircut estimated as per cash flow method. This is on account of the following:

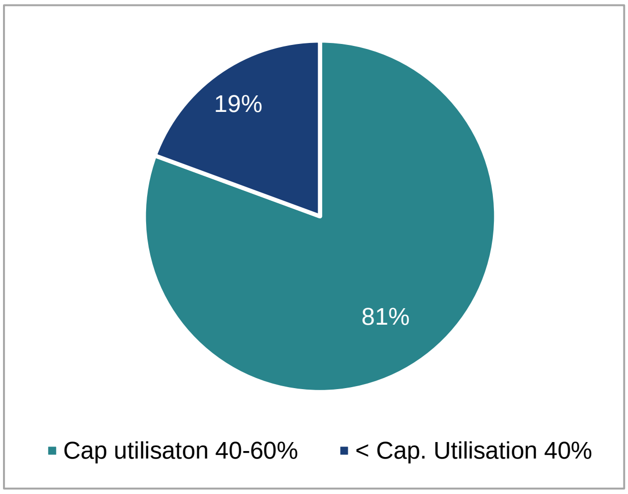
- Replacement cost method does not factor in the lack of PPA and FSA for these projects, an aspect that will take some time to resolve fully
- Besides, most of these projects would require fund infusion for project completion as well as to kick start operations
- If these assets were to acquired by a new management, there needs to be some economic value left on the table, therefore, replacement cost method may not be appropriate

Metals sector

CRISIL analysed seven companies from metals sector with a total capacity of 23.9 million tonne. Around 50% of this capacity was added in the recent past. The new capacities witnessed significant execution challenges, pressure on volumes, low capacity utilisation and weak prices. Cancellation of coal mines also impacted some of the capacities.

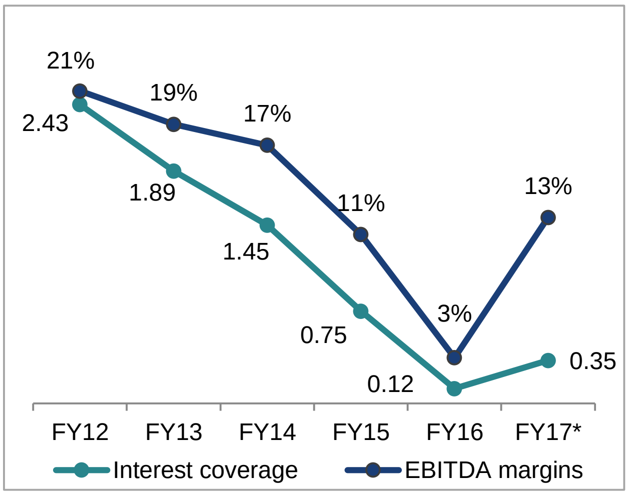
The chart below highlights the extent of capacity utilisation in the debt analysed. In addition, the assets also suffered from intense working capital related issues leading to high level of working capital debt and cash flow issues. Debtor days amounted to 400; inventory days – 950 and payables – 947 leading to a current ratio of 0.63 time. Working capital issues also impacted the volumes when there was a demand uptick last fiscal. A combination of high debt and weak operating margins resulted in sub-par interest coverage (*refer chart below*), resulting in an inability to service even the interest cost.

Break-up of debt (Rs 125,000 crore) by capacity utilisation
Total capacity: 23.9 million tonne



Source: Annual reports and CRISIL

Trends in EBITDA margins and interest coverage



**Based on analysis of companies for which results for FY17 were available*

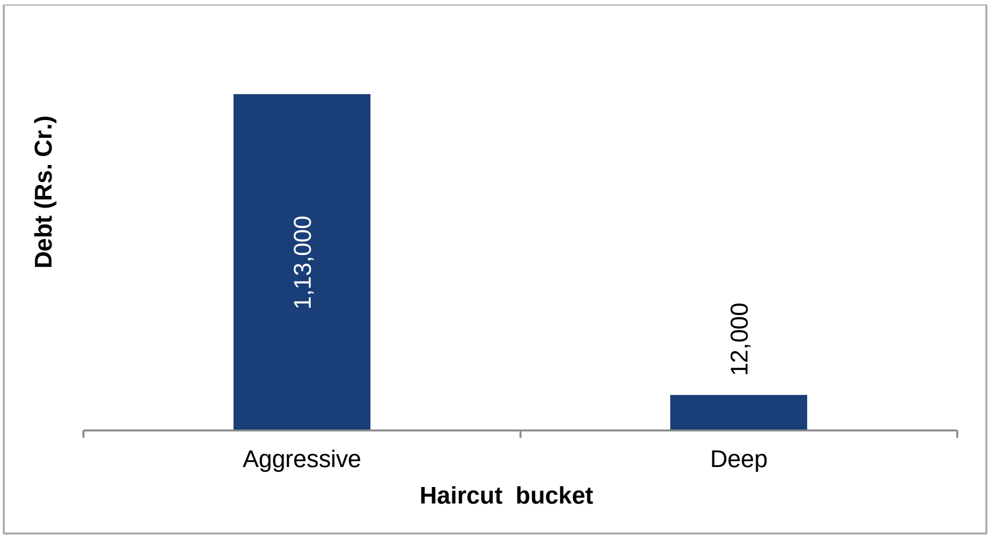
CRISIL analysed the extent of haircut on the basis of following assumptions:

- Supportive government policies aiding realisations to continue over the medium term
- Capacity utilisation levels will improve gradually and reach a level of around 75% over the medium term
- Working capital has been assumed to normalise to healthy levels. External liquidity in the form of working capital support from banks has been assumed to be available to support the volume expansion. Steady state EV/EBITDA has been factored at around 4.5 times and is at a 25% discount to the trading multiple of a good company from the sector

Extent of haircut:

Haircut details have been captured in the chart below. Debt-weighted average haircut works out in the range of 50%-75%, i.e. aggressive bucket, for the metal companies analysed.

Haircut distribution for metals sector



Source: CRISIL

CRISIL benchmarked the extent of haircut with that of replacement cost and book value of assets.

Average haircut based on economic value at 50%-75% is higher than

1. Haircut estimated based on replacement cost at 40%
2. Haircut estimated based on book value of fixed assets at 50%

These differences from economic value method can be attributed to the discount that a buyer may bargain due to the

- Risks attributable to the stressed assets and
- Additional funds that a new buyer may have to infuse to resolve the working capital and liquidity related issues.

Benchmarking with replacement cost and book value of fixed assets

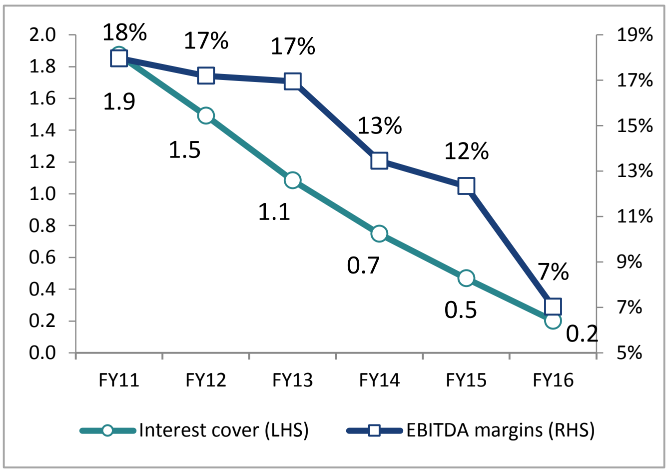
Total capacity analysed	**A**	**Mn tonne**	**23.9**
Total distressed debt	B	Rs cr	125,000
Book value of fixed assets	C	Rs cr	120,000
Debt per Rs tonne	D=B/A	Rs/tonne	52,300
Fixed assets per Rs tonne	E=C/A	Rs/tonne	50,000
Replacement cost per Rs tonne	F	Rs/tonne	60,000-70,000
Debt per Rs tonne assuming 50:50 D:E	G	Rs/tonne	30,000-35,000
Haircut based on replacement value method	H=1-G/D	%	40%
Ideal debt assuming 50:50 D:E on book value of fixed assets	I= 50%*E	Rs/tonne	25,000
Haircut based on book value of fixed assets method	J = 1-I/D	%	50%

Source: CRISIL

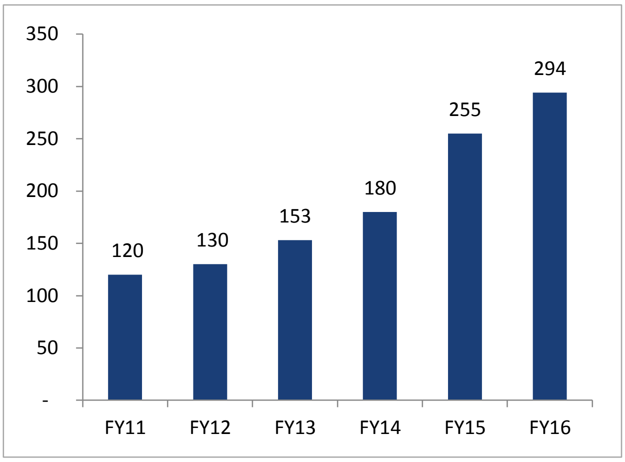
Construction sector

CRISIL analysed 17 construction sector companies with aggregate debt of Rs 1.1 lakh crore. These companies saw their order books shrink significantly over the last few years. This was partly on account of general slowdown in the sector, as well as constrained execution capability. The projects which were successfully bid by these companies saw little traction on account of regulatory hurdles – putting significant amount of pressure on the working capital. This further limited their ability to bid for new projects, bringing the operations to a virtual standstill. Revenues and operating profits declined, while debt kept ballooning – making the debt levels unsustainable and creating the need for steep haircuts.

Trends in interest coverage and EBITDA margins



Trends in receivable days



Source: CRISIL

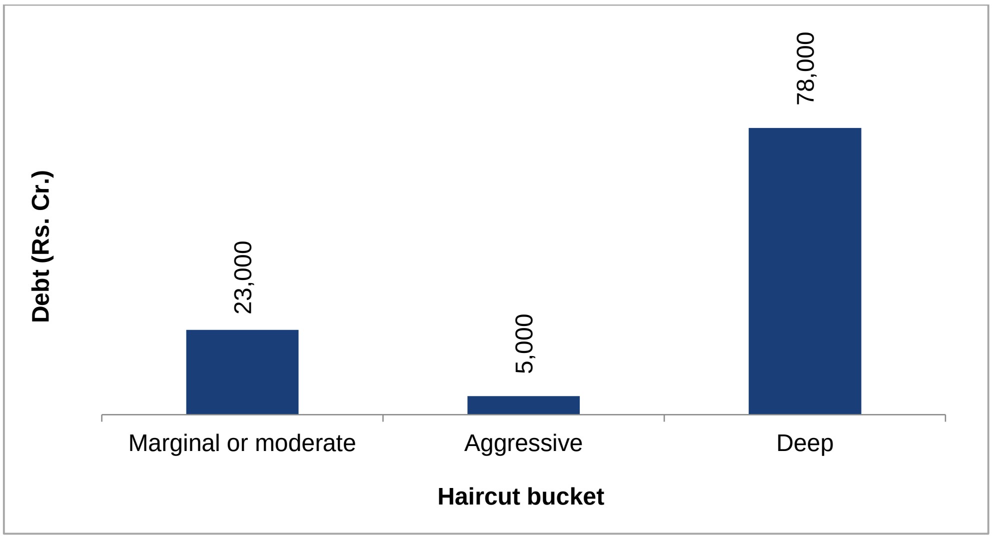
CRISIL analysed the extent of haircut on the basis of the following assumptions:

- Based on the financials, CRISIL tried to assess whether the business is sustainable, i.e. whether the scale of operations and cash flows are sufficient to support the fixed costs
- If the business is unviable, then the recovery would be through the sale of subsidiaries. The extent of realisation will depend on a variety of factors – whether the subsidiary is listed and can be easily divested, or whether the subsidiary is profitable. In case of build operate transfer (BOT) projects, realisation would depend on whether the project is operational or under construction. Even in operational projects, certainty of cash flows (and hence realisations) would be higher for annuity based projects than for toll roads
- However, if a turn-around is possible, it is assumed that with some amount of initial capital infusion (for working capital purposes) the company would be able to kickstart operations and be able to execute existing order book over next 3 years
- This would enable the company to start generating healthy EBITDA margins akin to what it had been generating in the past
- Steady state EV/EBITDA has been factored at around 6 times and is at a 25% discount to the trading multiple of a healthy construction company

Extent of haircut:

Debt weighted average haircut works to be in the range of 50-75%, i.e. the aggressive bucket.

Haircut distribution for construction sector companies



Source: CRISIL

As indicated in the chart above, significant proportion of debt will require deep haircut. The reason is that over the last few years, execution paralysis has rendered operations of many of the analysed construction firms unviable. Furthermore, these companies contracted huge amount of debt to invest in the subsidiaries, several of which are grappling with problems of their own. As on March 31, 2016, the loans, advances and investments in the subsidiaries for these companies was more than a 40% of their book debt. With scale of operations having shrunk to the point of unviability, recoveries from these companies would be primarily driven by divestment of subsidiaries.

- Turnaround of operations is a possibility only in one-quarter of debt, for the remaining, divestment is the only source of recovery
- Sale of subsidiaries is a critical input for arriving at the above haircut levels. Any delay in divestment or hurdles in offloading the same could potentially impact the haircut levels, adversely, by about 10%

Other sectors

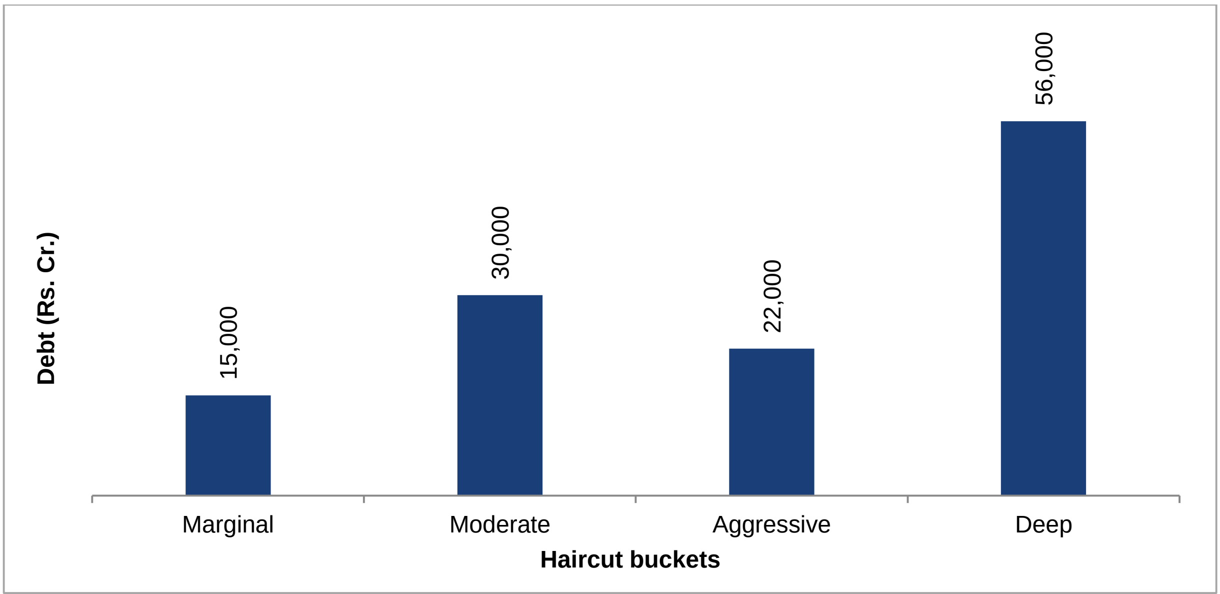
CRISIL analysed 15 companies in a number of sectors with aggregate debt of about Rs. 1.2 lakh crore. These companies belonged to a variety of sectors – telecom infra, textiles, gems and jewellery etc. The haircut for these sectors ranged from moderate to aggressive, while on the whole aggressive haircut would be required for this entire section.

The key issues that resulted in stress in the companies analysed:

Sector	Contribution to stressed debt (of Rs 1.2 lakh crore)	Extent of hair cut	Key issues
Auto; Textiles	~35%	Aggressive	Weak utilisation subsequent to huge debt funded capex or acquisition
Telecom infra and Food products	~25%	Moderate	Higher reliance on debt for acquisitions followed by regulatory actions or poor working capital management
Shipping and Real estate	~20%	Aggressive	Weak demand conditions coupled with high levels of debt
Gems and jewellery	~15%	Aggressive	A combination of sticky receivables and inability to manage the risks emanating out of regulatory issues resulted in high debt levels and weak cash flows

Haircut arrived at depended on case specific issues, usually through economic value approach. The cases where marginal or moderate haircut was required were characterized by weak demand conditions leading to temporary setback, which can be corrected. On the other hand, for cases where the business is no longer viable or the sector is going through a prolonged slowdown and an imminent upturn is unlikely, the haircut requirement was high. The distribution of debt by hair-cut levels is highlighted in the chart below:

Haircut distribution for other sectors



Source: CRISIL

Conclusion

Given the issues faced by many of the companies that CRISIL analysed, the haircut required may be on the aggressive side. The hair cut levels may be further impacted by the fact that a large number of stressed assets may be put on the block by lenders, making it effectively a buyer's market. Buyers with healthy credit profile may explore M&A opportunities wherever they find strong synergies – an aspect that has not been factored in our analysis.

While the estimated haircut levels are largely in line with the past empirical data points studied by CRISIL, they may be influenced by several variables. Any change in valuation of subsidiaries, significant uptick or prolonged demand slump, price outlook of commodity linked sectors or regulatory intervention can change the underlying assumptions of the analysis and hence the hair-cut expectation.

Finally, CRISIL believes it would be in the larger interest of the economy to pop the bitter pill of haircut than kick the can down the road. While banks have already provisioned for a part of these exposures, given the quantum of haircut involved, adequate recapitalization of banks will have to be ensured. Quick resolution of the NPA stress could aid in the kick start of the next investment cycle.

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Last updated: April 2016

CRISIL Limited: CRISIL House, Central Avenue, Hiranandani Business Park, Powai, Mumbai – 400076. India
Phone: + 91 22 3342 3000 | Fax: + 91 22 3342 3001 | www.crisil.com
/company/crisil @CRISILLimited /CRISILLimited /user/CRISILLimited

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