Research

CRISIL

An S&P Global Company

Industry Risk Score

Punjab National Bank

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Electric Equipment

Introduction

Industry Risk Score (IRS) reflects the impact of industry variables on the cash flows and debt repayment ability of the companies in the industry over 3-4 years. The risk score for an industry is arrived at, by aggregating the scores assigned to the parameters relevant for the industry.

Industry parameters include variables such as demand-supply outlook, cost structures, competition and financial performance. The parameters are selected based on the extent to which they affect the debt-servicing ability of the companies operating in the industry. Scores on these parameters reflect the extent of positive/negative impact on cash flows, and the degree of variability in cash flows of the companies.

The industry risk scores have been graded on a seven-point scale, with 1 indicating high risk and 7 indicating low risk.

Risk score	Risk factors
6.01 - 7.00	Highly favourable
4.51 - 6.00	Favourable
4.01 - 4.50	Marginally favourable
3.01 - 4.00	Neutral
2.51 - 3.00	Marginally unfavourable
1.01 - 2.50	Unfavourable
0.00 - 1.00	Highly unfavourable

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About CRISIL
CRISIL is a global analytical company providing ratings, research, and risk and policy advisory services. We are India's leading ratings agency. We are also the foremost provider of high-end research to the world's largest banks and leading corporations.

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About Research
CRISIL Research is India's largest independent integrated research house. We provide insights, opinion and analysis on the Indian economy, industry, capital markets and companies. We also conduct training programs to financial sector professionals on a wide array of technical issues. We are India's most credible provider of economy and industry research. Our industry research covers 86 sectors and is known for its rich insights and perspectives. Our analysis is supported by inputs from our network of more than 5,000 primary sources, including industry experts, industry associations and trade channels. We play a key role in India's fixed income markets. We are the largest provider of valuation of fixed income securities to the mutual fund, insurance and banking industries in the country. We are also the sole provider of debt and hybrid indices to India's mutual fund and life insurance industries. We pioneered independent equity research in India, and are today the country's largest independent equity research house. Our defining trait is the ability to convert information and data into expert judgements and forecasts with complete objectivity. We leverage our deep understanding of the macro-economy and our extensive sector coverage to provide unique insights on micro-macro and cross-sectoral linkages. Our talent pool comprises economists, sector experts, company analysts and information management specialists.

Executive summary

Revenue growth is expected to remain tepid, led by declining order book over the past few quarters. Order book declined mainly on account of slowdown in order inflows from power generation and Industrial segments.However, pace of execution for slow moving orders has picked up for companies in this sector coupled with increasing short-cycle orders from emerging markets of railways and renewable energy (mainly solar). Although it has aided in faster revenue realization but as the share of these segments in overall revenue is still low it is unlikely to create any significant impact.Demand growth is forecasted from government led spending on power transmission systems and a positive impact from the UDAY implementation is expected to improve discom finances, prompting investment. Additionally, outlay from government schemes such as IPDs and Deen Dayal Upadhyay scheme to drive growth in the power distribution space. PGCIL spending to remain consistent at the Rs 20,000-25,000 cr capex level while state SEBs set to drive ordering with focus on them to leverage the inter-state transmission additions so far. Industrial segment continues to remain sluggish with companies not seeing any traction on capex from industrial consumers. However, companies like ABB and Siemens are benefitting from an existing installed base, leveraging order for operational maintenance in the industrial segment.In order to protect the domestic industry from increasing competition from Chinese players in the BTG segment, the government had approved an import duty of 21 per cent on power equipment. However, the benefit from this duty is expected to accrue in 13th plan as orders for 12th plan have already been placed. Players have provided guidance of slightly better margins on account of lower raw material prices, as well as completion of low margin legacy orders taking place.

Parameter	Weightage	Score
Electric Equipment: Industry risk score		**3.00**
Industry characteristics	**95**	**2.92**
Demand-supply gap	40	2.33
Government policy	15	4.67
Input-related risk	20	3.50
Extent of competition	25	2.33
Industry financials	**5**	**4.64**
Operating margin of industry	35	3.50
RoCE of industry	65	5.25

Source: CRISIL Research

Background

The electrical equipment industry covers power generation and transmission and distribution (T&D) equipments. Power generation equipment is primarily classified into 2 main components - Boiler Turbine Generator (BTG) and Balance of Plant (BoP). BTG forms 55 per cent of the total plant and machinery cost, while BoP accounts for the balance. T&D equipment industry includes transformers, switchgears, towers, cables and conductors. Primary customers of electrical equipment are power utilities and industrial users.

Industry risk parameters

Demand - Supply

The BTG segment is facing muted demand with a slowdown in capital expenditure from power generation and industrial segments. Power generation investments are expected to decline given slowing generation capacity additions. We expect generation capacity additions to slow down to 47 GW over FY17-21 as compared with 64 GW in the previous 3 years due to stretched financial position of developers and weak power demand from distribution utilities. Similarly, industrial segments such as cement, steel, oil and gas etc. are witnessing dampened sentiment with several sectors facing underutilization of capacities. For instance, revenues of BHEL continued to decline by around 15 per cent in FY 16, led by payment delays and weak financial position of developers. A greater pace of order execution that too at sustainable margins key to revenue growth for the sector at present to preserve profitability.On the other hand, T&D is expected to be a positive contributor for companies, where sectors like cables, distribution transformers and power transformers saw a volume growth of 10%, 12% and 28% in FY 16 respectively. CRISIL Research expects investments in the T&D segment to continue to grow at a strong pace over the medium-term led by a push towards rural electrification through central government funded schemes such as DDUGJY and IPDS and a gradual rise in investments in distribution infrastructure by state discoms.

Government policies

GOI does not provide any direct financial support to the sector. However, to protect the domestic BTG industry from rising Chinese competition, the CCEA in Feb 2016 abolished import of capital goods under EPCG scheme. Additionally, the current duty for imported power equipment comprises of 7.5 per cent basic customs duty, 12.5 per cent counter-veiling duty and 3 per cent of total cess. However, benefit is expected to accrue in 13th plan as most of the orders for 12th plan have already been placed. Government has increased focus on T&D. CCEA has approved Rs. 440 bn for Deen Dayal Upadhyay Scheme (DDUGJY), GOI support- Rs 354 bn, apart from subsuming existing budget (Rs 392 bn) of Rajiv Gandhi Yojana (RGGVY). DDUGJY is targeted to improve rural electrification and separation of feeders to improve delivery of power. Similarly, CCEA has approved an outlay of Rs 440 bn for the Integrated Power Development Scheme (IPDS), GOI support- Rs 227 bn. Aimed at strengthening and metering of the urban T&D systems, IPDS has subsumed R-APDRP (Budget: Rs 326 bn). GOI has provided Rs 55 bn in 2015-16 and has budgeted Rs 78 bn for 2016-17 and Rs 106

Input - related risk

Raw material costs account for 55-60 per cent of revenues. Typically, in case where projects are awarded by central and state utilities, there is a price variation clause in the contracts. This is linked to IEEMA index which enables the company to pass through any increase or decrease in raw material prices. However, in case of industrial clients, this price variation clause is not present as they are short-term delivery contracts. With sharp decline in raw material prices - steel, aluminum, copper - profitability of players is expected to improve, however, the net impact on the bottom-line would be negated by a drop in realizations with the benefit being passed on to consumers.Additionally, there is intense competition with aggressive bidding from smaller players as well as presence of Chinese manufacturers who have set up manufacturing facilities in India. Many companies are also facing stretched working capital cycles due to stalled projects or weak financial position of consumers causing delayed payments.

Extent of Competition

Competitive scenario remains intense in BTG as well as T&D equipment segment. Chinese players have expanded their presence in India in the BTG orders for 12th five year plan due equipment-linked financing and timely delivery of equipment. For instance, 29 per cent of BTG orders placed in the twelfth year plan (April 2013-December 2016) were bagged by Chinese equipment suppliers. In the T&D segment, a slowdown in ordering over the past 3 years has led to aggressive bidding by domestic players, particularly in 765 kV transformers and reactors, conductors, insulators, switchgears and high voltage cables. In addition to imports, significant over capacity (mainly in the low voltage segment), has adversely impacted the profitability of these players. The significant overcapacity in this segment is on account of low capital and technology barriers.

Financial Risk

Electric Equipment: Financial parameters

Select Financial parameters	Unit	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16
Aggregate turnover	Rs million	529878	653483	733887	724132	622636	526850	486025
Operating profit margin	Per cent	13.3	19.9	17.1	15.9	11.6	8.7	-0.3
Return on capital employed	Per cent	41.2	41.7	35.9	26.2	14.1	11.9	1.8
Net profit margin	Per cent	11.1	11.1	10.8	10	7	5.5	1.2
Return on equity	Per cent	25	25.5	23.3	18.3	10.3	6.5	1.3
Interest coverage ratio	Times	47.7	74.1	79.8	72.6	-45.7	7.4	49.1
Debt-equity ratio	Times	0	0	0	0.1	0.1	0	0
Current ratio	Times	1.3	1.3	1.3	1.4	1.5	1.5	1.5
Assets turnover ratio	Times	5.5	5.4	5	4.4	3.4	2.8	2.5
Raw materials days	Days	79	89	90	76	83	97	97
WIP holding days	Days	48	42	42	38	33	39	41
Finished goods days	Days	8	10	10	12	15	18	16
Debtors days	Days	203	204	236	262	308	349	382
Creditors days	Days	176	152	157	153	173	197	203
Nos. of companies	**No**	**6**	**6**	**6**	**6**	**6**	**6**	**6**

Source: CRISIL Research

Electric Equipment: Cost aggregates

Cost Structure (% of net Sales)	Unit	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	Mar-16
Raw material cost	Per cent	49.9	48.8	50.5	50.2	50.1	49.6	53.6
Power and fuel cost	Per cent	0.8	0.8	0.9	1	1.2	1.3	1.3
Other operating costs	Per cent	19.9	18.5	19.7	20.2	22.6	24.2	27.5
Employee cost	Per cent	15	11	10.4	11	13.2	14.7	16.4
Selling cost	Per cent	1.2	1	1.4	1.7	1.2	1.4	1.5
Nos. of companies	No	6	6	6	6	6	6	6

Source: CRISIL Research

Annexure

Companies used for calculating sector aggregates

Bharat Bijlee Ltd.,Bharat Heavy Electricals Ltd.,Emco Ltd.,Siemens Ltd.,Transformers & Rectifiers (India) Ltd.,A B B India Ltd.

Constitutes 80-85 per cent of the sector

Electric Equipment - Sector Aggregate - Interim results

(Figures in Rs Million)	Jul-Sep 2016-17	% of net Sales	Jul-Sep 2015-16	% of net Sales	Apr-Sep 2016-17	% of net Sales	Apr-Sep 2015-16	% of net Sales
Net sales	136430.8	100 %	127851.7	100 %	256226.9	100 %	225711.2	100 %
Total Operating exp	129710.2	95 %	127020.2	99 %	243863.7	95 %	222830.3	99 %
Raw Material exp	77387.3	57 %	77895	61 %	142507.5	56 %	136387.2	60 %
Purchase of Finished goods	7843.5	6 %	6139.7	5 %	17634.6	7 %	13295.7	6 %
Change in stock	4068.8	3 %	499	0 %	5876.5	2 %	-5933.8	-3 %
Salaries and wages	21834.2	16 %	21954.9	17 %	43276.9	17 %	42845.1	19 %
Power & Fuel	0	0 %	0	0 %	0	0 %	0	0 %
Rent & lease rent	0	0 %	0	0 %	0	0 %	0	0 %
Selling & distribution expenses	0	0 %	0	0 %	0	0 %	0	0 %
Other expenses	18576.4	14 %	20531.6	16 %	34568.2	13 %	36236.1	16 %
OPBDIT	6720.6	5 %	831.5	1 %	12363.2	5 %	2880.9	1 %
Depreciation	3287.1	2 %	3460.9	3 %	6798.7	3 %	7208.5	3 %
OPBIT	3433.5	3 %	-2629.4	-2 %	5564.5	2 %	-4327.6	-2 %
Interest	991.5	1 %	736.1	1 %	1813.1	1 %	1396.6	1 %
OPBT	2442	2 %	-3365.5	-3 %	3751.4	1 %	-5724.2	-3 %
Other Income	3517.2	3 %	4610.2	4 %	6753.3	3 %	10794.7	5 %
Non-op Income	0	0 %	0	0 %	0	0 %	0	0 %
Extraordinary Income/Expenses	30626.7	22 %	2239.9	2 %	30642.7	12 %	2350	1 %
PBT	36585.9	27 %	3484.6	3 %	41147.4	16 %	7420.5	3 %
Total Tax	8720.1	6 %	1915.1	1 %	10113.3	4 %	3263.3	1 %
Current tax	0	0 %	0	0 %	0	0 %	0	0 %
Deferred tax	0	0 %	0	0 %	0	0 %	0	0 %
FBT	0	0 %	0	0 %	0	0 %	0	0 %
Net profit	27865.8	20 %	1569.5	1 %	31034.1	12 %	4157.2	2 %
Nos. of companies	**7**		**7**		**7**		**7**	

Companies included in interim sector aggregate
A B B India Ltd.; Bharat Bijlee Ltd.; Bharat Heavy Electricals Ltd.; Crompton Greaves Ltd.; Emco Ltd.; Siemens Ltd.; Transformers & Rectifiers (India) Ltd.

Electric Equipment - Business risk evaluation

Risk entity name	Weightages
Operating Efficiency	**65**
Access to Cost Effective Technology	**20**
Access to super critical technology for Boiler Turbine Generator (BTG) equipment and presence in the extra high voltage category (in the transformers and cables segment) will help players expand the addressable market, thus improving their growth prospects.	
Management of Price Volatility	**30**
The price variation clause is present in case of orders awarded by government utilities. However, in case of orders awarded by industries or export orders, this clause may or may not be present. Management of price volatility is critical in case of contracts without a price escalation clause to protect profitability.	
Indigenisation Level	**25**
Access to indigenious technology through R&D or tie-up with foreign technology providers plays a critical role in cost optimisation for electric equipment manufacturers	
Integration of Operations	**25**
Lateral integration through diversification into multiple equipment manufacturing allows players to increase scope of order wins as diverse products available under one roof	
Market Position	**35**
Project Management Skills	**35**
Project management is critical to ensure timely completion, which in turn helps avoid cost overruns.	
Diversified Markets	**20**
Diversified presence, in terms of geography and customer base, lowers the concentration risk.	
After Sales Service	**15**
Offering support services helps the company build a strong brand image and generate repeat orders from customers.	
Product Range	**30**
Players offering a wide product range would be able to diversify risks of a slowdown in any particular segment. For example, BHEL, which manufactures a wide range of products, enjoys a better market position.	

Source: CRISIL Research

Note

Note

Note

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Our Capabilities
Making Markets Function Better

Economy and Industry Research

- Largest team of economy and industry research analysts in India
- Acknowledged premium, high quality research provider with track record spanning two decades
- 95% of India's commercial banking industry by asset base uses our industry research for credit decisions
- Coverage on 86 sectors: We provide analysis and forecast on key industry parameters including demand, supply, prices, investments and profitability, along with insightful opinions on emerging trends and impact of key events
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- Largest provider of fixed income valuations in India
- Provide valuation for more than Rs.81 trillion (USD 1,275billion) of Indian debt securities
- Sole provider of fixed income and hybrid indices to mutual funds and insurance companies; we maintain 37 standard indices and over 100 customised indices
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- Due Diligence, IPO Grading and Independent Equity Research for SME companies planning to list or already listed in NSE Emerge platform
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- Training programs being conducted in India, Sri Lanka and Bangladesh through an extensive network of well-qualified financial professionals

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