Initiation of Coverage

India E&C and Infrastructure Sector

A rising tide, but will not lift all boats

Equities

India
Industrial

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Will the capex cycle reverse? Yes, a number of impediments are being resolved
In India, falling investments typically precede a slowdown for the rest of the economy and conversely, signal a broader recovery. Hence, rather than relying on a general recovery, we believe an external push on investments is required. The environment could become favourable with the resolution of a number of impediments such as: 1) regulatory issues surrounding environmental clearances and land acquisitions; 2) limited fiscal room for the government to spend; 3) a backlog of unviable projects; 4) inter-sector and institutional imbalances; and 5) high interest rates.

Are signposts visible? Yes, both real activity and sentiment showing an uptick
With growth in capex hitting a 20-year low and order inflows grinding nearly to a halt over the past two to three years, we think there is little room for a further decline. Early signs of a recovery include: 1) aggregate order inflows inching up; 2) revenue for short-cycle product companies picking up; and 3) an increase in project announcements.

Will all sectors recover? Infrastructure to drive upcycle; hazy outlook for others
While the building blocks are in place for an uptick in infrastructure orders, low capacity utilisation could constrain a pick-up in the power and industrial sectors. Meanwhile, orders from the real estate sector could be impacted by high inventory. We think the defence sector is a wild card. While it presents large new opportunities, we will await the onset of actual award activity given false starts in the past.

Initiating sector coverage—we prefer L&T and IRB
The industrials stocks we cover are trading at +1.6 SD above the cyclical average, but 32% below the peak. We think a recovery has been priced in, but there may be further upside if it gathers momentum. Thus, we recommend a selective approach. We prefer Larsen & Toubro (L&T) and IRB Infrastructure (IRB), which score well on our selection framework of: 1) exposure to high-growth segments; 2) margin improvements; 3) increased capacity utilisation; and 4) falling interest costs. We have a negative stance on Bharat Heavy Electricals (BHEL), ABB India, Cummins India, and Thermax—we believe a recovery has been priced in and visibility remains hazy. We think investors can better benefit from a recovery in the power sector through utilities (please refer to 'India Power Utilities: Improving asset utilisation to drive returns' published today).

Valuation comparisons—our E&C and infrastructure coverage

	Share price			FY15E			FY16E			FY17E		
	(Rs)	UBS rating	Price target	PE (x)	P/BV (x)	RoE (%)	PE (x)	P/BV (x)	RoE (%)	PE (x)	P/BV (x)	RoE (%)
IRB Infra	233.00	Buy	286.18	13.9	2.0	14.8%	13.0	1.8	14.4%	10.6	1.6	16.0%
L&T	1,700.65	Buy	2,107.83	35.9	3.9	11.2%	31.0	3.6	12.1%	22.3	3.2	15.3%
Crompton Greaves	171.90	Neutral	197.96	46.4	2.8	6.2%	21.9	2.6	12.2%	16.3	2.3	14.7%
ABB	1,268.45	Sell	979.95	117.6	9.6	8.3%	71.6	8.7	12.7%	51.8	7.7	15.8%
BHEL	258.30	Sell	201.99	28.1	1.8	6.6%	23.8	1.7	7.5%	25.6	1.7	6.6%
Cummins India	865.55	Sell	839.53	34.3	8.2	25.4%	28.8	7.2	26.7%	25.8	6.4	26.4%
Thermax	1,171.30	Sell	1,017.51	48.4	6.3	13.5%	38.3	5.6	15.5%	33.4	5.0	15.9%

Note: Above data as of 18 March 2015. E&C stands for engineering & construction. For comparison purposes, ABB FY15/16/17E data refers to 2014/15/16.
Source: Bloomberg, UBS estimates

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Executive summary

In this report, we address three questions that concern investors on the Indian capital goods sector.

(1) Will the capex cycle reverse? What could drive a reversal?

(2) Are signposts for a recovery visible?

(3) Will all sectors recover?

The capex cycle should reverse as regulatory impediments are resolved and the government steps up public investments

Our key conclusion is that the capex cycle will reverse. Experience from the last cycle suggests that a capex revival in India will need an external push, rather than be driven by a broader economic recovery. We think the removal of regulatory impediments could provide that external push in this cycle. Easing fiscal space for the government to step up public investments would provide the boost. Meanwhile, falling interest rates as well as regulatory forbearance should help repair private sector balance sheets.

Signs of the capex cycle bottoming out are emerging

There are early signs that the capex cycle has bottomed out. Whenever capex growth in India (as measured by gross fixed capital formation or GFCF) has fallen to the current levels, it has been followed by a sharp rebound. Fledging evidence of a recovery is also emerging. Aggregate order inflow growth to the engineering & construction (E&C) sector has entered positive territory over the last five to six quarters, after remaining in the negative territory over the prior six to seven quarters. Revenue for short-cycle product companies is starting to recover. Multiple indicators of sentiment are also showing an uptick.

However, unlike the last upcycle, all segments of capex may not witness an uptick

However, unlike the last upcycle when all segments of capex showed an uptick simultaneously, we believe transportation infrastructure such as highways/railways and urban infrastructure such as metros/industrial corridors will drive this upcycle. Power investments could remain subdued as we expect the power market to remain oversupplied in the medium term. However, investments in renewable power could witness an uptick. Commodity-driven industrial capex may be constrained by low capacity utilisation and unattractive returns (at current costs and prices). We think the defence sector could prove the biggest wildcard in this cycle. While initial government initiatives are quite encouraging, given the long lead times and previous false starts, we will await the onset of actual award activity in this segment.

As the uptick would be restricted to specific segments, we prefer companies that score well on our selection framework, which includes: 1) exposure to high-growth segments; 2) margin improvements; 3) increased capacity utilisation; and 4) falling interest costs. We avoid companies whose valuations seem to have priced in a decent recovery even though the outlook is still uncertain.

We prefer L&T and IRB

In terms of stocks, we prefer L&T and IRB. L&T is India's largest E&C company by a wide margin. Its diversified portfolio enables it to benefit from all the sectors where growth visibility is high. We believe IRB, India's largest pure play road developer in terms of its asset portfolio size and revenue, is best-positioned to benefit from an uptick in national highway investments.

We have a Sell rating on Bharat Heavy Electricals (BHEL) and ABB India (ABB) as we believe the oversupplied power market would result in muted investments in the sector over the medium term (please refer to our report *India Power Utilities: Improving asset utilisation to drive returns* published today). We do not like Thermax and Cummins India (Cummins) as we believe expectations of a rebound in industrial capex are unlikely to be met.

Infrastructure should drive the upcycle; industrial and real estate capex could remain sluggish

We estimate order award activity from large identifiable segments will increase by 109% over FY15-17 compared to FY12-14

Our view is predicated not only on a top-down macro view, but a bottom-up analysis of visible project pipelines in various sectors. We estimate order award activity from large identifiable segments will increase by 109% over FY15-17 compared to FY12-14. Railways, highways, metros, renewables, and urban infrastructure should record high growth. We believe the power generation and transmission and distribution (T&D) segments will remain sluggish.

Figure 1: Major infrastructure segments could witness a large uptick in order inflows, but power might remain sluggish

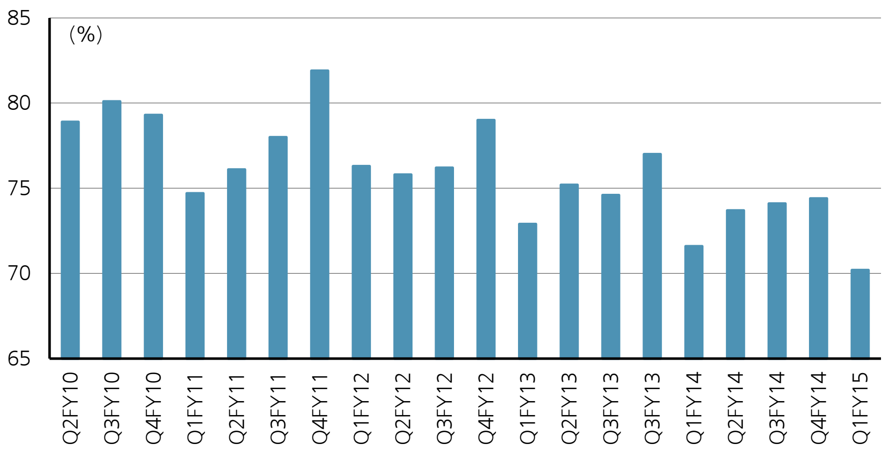
Sectors	Orders awarded FY12-14 (US$bn)	Orders awarded FY15-17E (value US$bn)
National highways	5	25
Metro Rail	6	18
Dedicated freight corridor	2	5
Railways	10	30
Industrial corridors	-	2.5
Renewables	11	20
Thermal Power	13	21
Power T&D	21	21

Note: Data is sourced from various government publications and media reports.
Source: UBS estimates

Industrial capex may be constrained by low capacity utilisation

Investment activity in the industrial sector should pick up with a lag only after a sustained recovery drives up capacity utilisation. The Reserve Bank of India's (RBI) quarterly estimate of aggregate industrial capacity utilisation is currently at its lowest since the time the central bank started to publish these estimates.

Figure 2: Broader industrial sector—capacity utilisation is running low

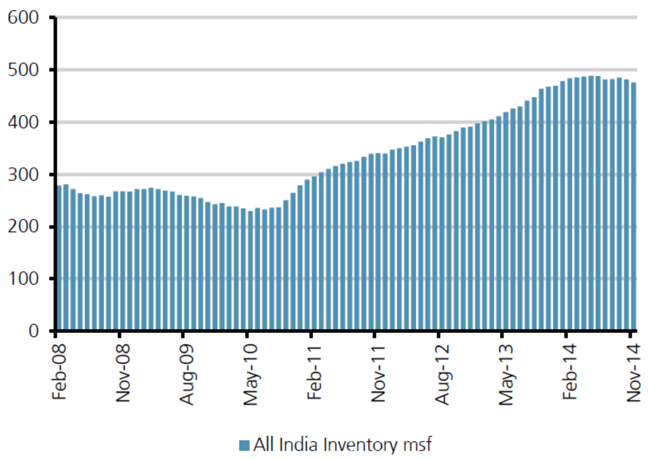


Source: RBI, UBS

Real estate inventory in most residential markets are near a seven-year peak, which suggests that even if the pre-sales trajectory were to improve, developers would temper the pace of new launches—signs of which have been visible from the strong drop in new launches in Q3 FY15, despite it being the festive season.

High real estate inventory suggests subdued order inflows for the E&C industry

Figure 3: India—residential inventory trends across cities



Note: Inventory is for Gurgaon, Mumbai, Bangalore, Hyderabad and Pune.
Source: PropEquity

Figure 4: Months of inventory

Cities	Months of inventory
Gurgaon	34
Bangalore	22
Mumbai	45
Hyderabad	24
Chennai	19
Pune	21

Note: Months of inventory calculated on November 2014 inventory and 2013 average presales.
Source: PropEquity

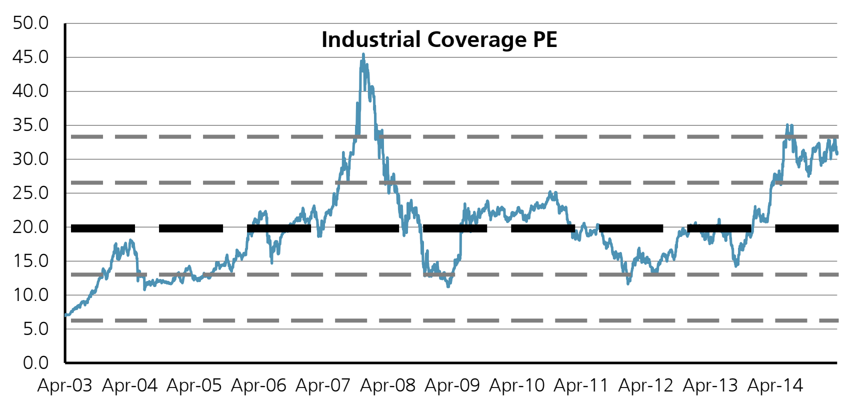
With the number of residential launches remaining low, order inflows to the E&C industry should remain subdued as this segment forms the bulk of the real estate market. Prospects of an uptick in the commercial and retail segments are not bright either.

Valuations have already factored in large improvements

Evidence of a bottom being formed and expectations of a change in the trajectory has resulted in stocks under our coverage rallying by 10-140% over the past 12 months. The market cap weighted index for cyclical industrial stocks under our coverage is now trading at a one-year forward PE of 30.7x (+1.6 standard deviation above the cyclical average of 20.2x).

The one-year forward PE for the industrial stocks we cover is +1.6SD above the cyclical average

Figure 5: One-year forward PE of our covered industrial stocks—trading at +1.6SD



Note: Above data as of 18 March 2015.
Source: Bloomberg, UBS estimates

We think current multiples discount a change in trajectory. Earnings expectations are not particularly sedate either—for the stocks under our coverage, consensus estimates a 28% earnings CAGR over FY15-17F, compared to a -16% CAGR over FY12-14 and a 19% cyclical average over FY04-14.

We think current multiples clearly discount a change in trajectory

However, if earnings expectations are met, the stocks we cover could continue to outperform the broader markets even in the absence of a re-rating. In addition, we think there is room for further re-rating if the uptick gathers momentum. The cyclical coverage index is 32% below the peak.

Regulatory setbacks and delays in uptick in public investments are the biggest risks

Some key reforms such as those on the land acquisition process need parliamentary approval. Although the government has the requisite majority to overcome a lack of majority in the upper house of parliament (Rajya Sabha), in a joint session, it needs to steer the legislative agenda adroitly given the possibility of delaying tactics that could be employed in the upper house.

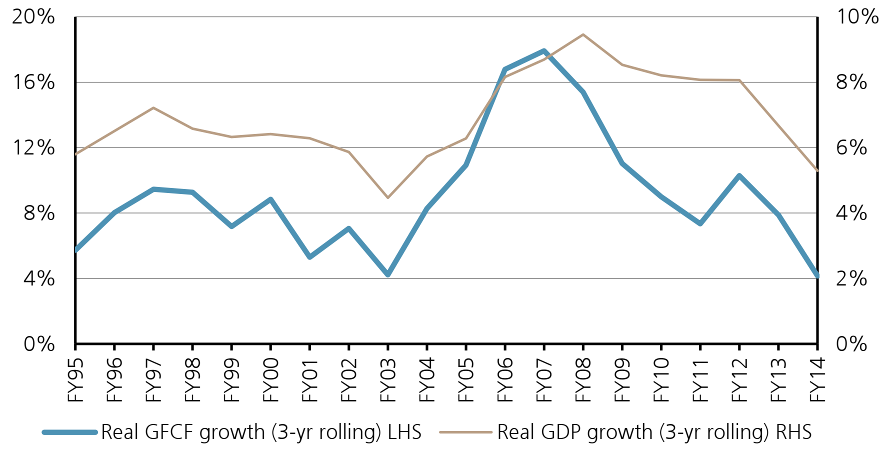
The bulk of the sharp increase in outlays in the FY16 budget for the highways and railways sector is proposed to be funded by enhanced borrowings from public institutions in these two sectors. Increased borrowings will fund 66% of the incremental outlay for railways and 92% in the case of roads. Public institutions in these sectors such as the National Highways Authority of India (NHAI) and Indian Railway Finance Corporation (IRFC) would have to create new financial models to support the enhanced borrowing levels. Delays in the finalisation of new institutional arrangements could hamper the expected improvements in ordering activity.

The ramp-up in ordering activity in some well-identified projects has so far been underwhelming, in our view. For example, the NHAI has been able to award road projects totalling only around 2,000km of the 5,500km FY15 target by January 2015. Similarly, the Dedicated Freight Corridor (DFC) has not awarded any new track orders so far in FY15, and the budget announcement of a 750km target for FY16 was below our expectations.

Will the capex cycle reverse? Yes, impediments are being resolved

In India, falling investments typically precede a slowdown in the rest of the economy, and conversely, also signal a broader recovery. It is not the case that a growth recovery in the broader economy will create investment demand and lead to a capex cycle revival. In fact, the data clearly indicates that it is an investment uptick that drives a recovery in the broader economy.

Figure 6: In the past, falling investments have preceded a downturn and driven an upturn in India



Source: Centre for Monitoring Indian Economy (CMIE), UBS

In all the cycles following the liberalisation of India's economy in FY92, a recovery in capex has preceded a general recovery

In all the cycles following the liberalisation of the Indian economy in FY92, a recovery in gross fixed capital formation (GFCF) has preceded a general recovery. It was an investment surge that drove the upcycle in FY94-97 and then again during FY04-08. In both the major downturns in the last 20 years, during FY98-03 and the current one, falling investment rates have preceded a downturn in the broader economy. Hence, we think a case for a recovery in the capex cycle that is predicated primarily on a generic recovery is weak. We believe an external push that kick-starts the investment cycle would set the stage for a growth revival in the rest of the economy.

Large structural changes in the Indian economy on the back of liberalisation in FY92 provided that external push during the FY94-97 upcycle. A second wave of reforms and the government prioritising infrastructure investments for the first time drove the last upcycle in FY04-08.

Figure 7: Large investments in highways started early in last upcycle

Year	Step
1998	NHAI granted statutory status through an act of Parliament
1998	Central Road Fund created by levying a cess on diesel and petrol; first ever dedicated source of funding for a specific sector
1999	5,846km Golden Quadrilateral programme launched, which progressively enlarged to become the 64,000km NHDP
2000	Central Road Fund given statutory status through an act of Parliament

Note: The above information was derived from media reports and government publications.
Source: UBS

Figure 8: Major reforms preceded a power boom in the last cycle

Year	Step
1998	Mega-Power Policy: fiscal incentives for the development of large projects
1998	Electricity Regulatory Commissions Ordinance: establishment of CERC and SERCs
1998	Creation of Central Transmission Utility – PGCIL
1998	Haryana Electricity Reforms Act: HSEB unbundled
1999	Andhra Pradesh Electricity Reforms Act: APSEB unbundled
1999	Karnataka Electricity Reforms Act: KSEB unbundled
2000	Power Ministers' Conference and Electricity Bill draft circulated
2000	Provision of compulsory metering for enhancing accountability and viability
2002	One-time settlement of SEB dues through debt forgiveness
2003	Electricity Act passed to replace the 1910 and 1948 laws

Note: The above information was derived from media reports and government publications.
Source: UBS

Following a sustained downturn since the global financial crisis (except for a short-lived uptick in FY10-11 on the back of significant fiscal and monetary stimulus), we believe a number of external factors are once again falling into place to provide impetus to the stalled investment cycle. There were a number of external factors that dragged down investments lower than warranted by cyclical conditions. We list five key impediments that had stymied the capex cycle as follows.

A number of external factors are once again falling into place to provide impetus to the stalled investment cycle

(1) Regulatory issues surrounding environmental clearances and land acquisitions

(2) A lack of fiscal space for the government to spend

(3) Unviable projects clogging the system

(4) Inter-sector and institutional imbalances

(5) High interest rates and overhang from bad loans in the banking system

The resolution of these impediments as well as reform measures undertaken by the new regime has created a favourable environment for the resumption of an upcycle.

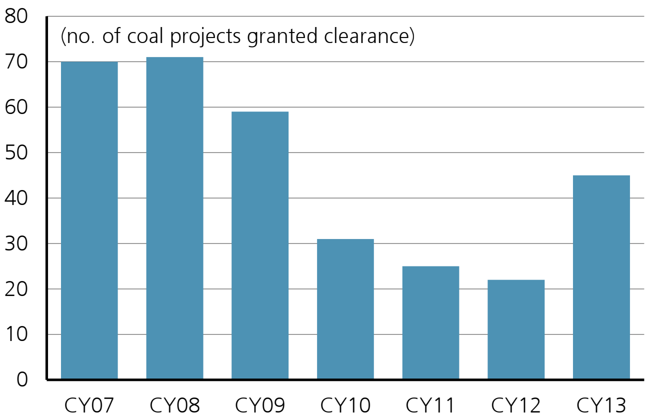
1) Regulatory environment becoming more conducive

Economic viability is necessary, but not a sufficient condition for projects to actually take off the ground. The requisite approvals and land are needed for actual activity on the ground. Over the last three to four years, it has become increasingly difficult for project proponents to procure these two key ingredients.

Of the myriad approvals required for a project, obtaining environmental and forest clearance have become the most difficult. Environmental and forest laws did not become more onerous, but the application of laws became more stringent. A prime example is the clearances for coal mines.

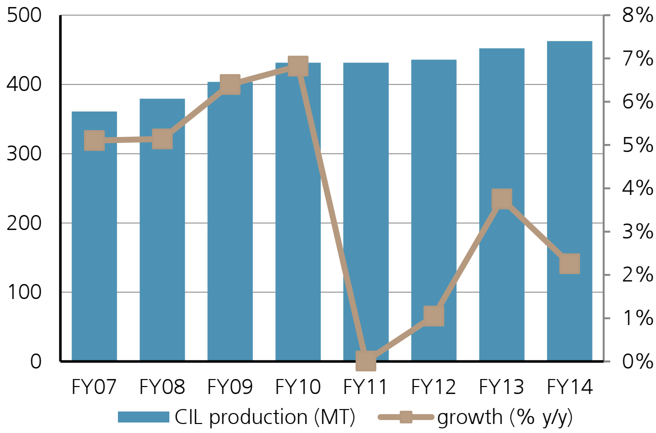
In the last three to four years, it has become more difficult for project proponents to procure land and environmental clearance

Figure 9: Clearances for coal projects fell dramatically from 2009 onwards…



Note: CY refers to calendar year.
Source: Company data, UBS

Figure 10: …which translated to declining production growth

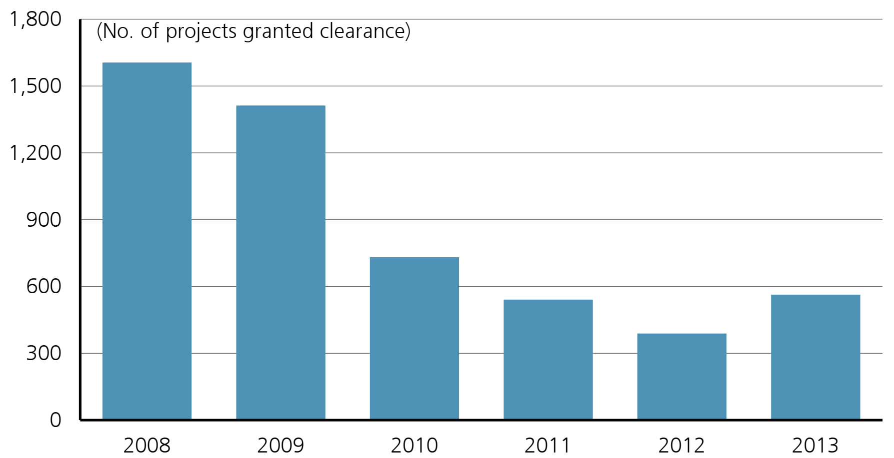


Source: Company data, UBS

Coal mining was not the only sector that witnessed environmental activism from the previous regime. Relying on a very broad interpretation of a Supreme Court ruling in an environmental clearance-related litigation, the central government made both environmental and forest clearances mandatory for linear projects such as highways, railways and power transmission lines. As the process to obtain forest clearances become more cumbersome, approvals for a number of road projects were delayed. 25 NHAI projects totalling 2,800km, with an aggregate project cost of around Rs300bn became stuck. The Supreme Court overturned the ministry's interpretation after two years, but the damage had already been done.

We believe these examples illustrate how the previous administration had gone overboard with its 'green' agenda, while trying to balance the imperatives of growth and environmental protection, as is evidenced by the sharp fall in the number of aggregate environmental clearances granted to all sectors from FY10 onwards.

Figure 11: Obtaining environmental clearances became more cumbersome for all sectors



Source: MoEF, UBS

The new government is diluting stringent laws and ensuring the faster processing of applications

The new regime has embarked on a completely different path—by watering down provisions in various acts, allowing a lenient interpretation of extant laws, and the faster processing of applications.

Figure 12: Recent steps taken by the government to expedite environmental clearances

- The Ministry of Environment and Forest (MoEF) has launched an online system for environmental and forest clearances for expeditious processing.
- The power to grant environmental clearance to small projects has been delegated to the state governments.
- No public hearing (the most onerous step in getting environmental approvals) is needed for the expansion of coal mines operating with a capacity below 16 MTPA to 50%, and those above 16 MTPA wanting to expand by up to 5 MTPA.
- Irrigation projects below 2,000ha need not apply for clearance, while those below 10,000ha can be sanctioned by the state governments.
- The Forest Rights Act that had required the consent of local tribal populations to divert forestland has been diluted. Instead of village councils certifying that their rights have been settled and that they had consented to the project, certification from the district administration would suffice, and the exercise must be completed in 60 days.
- Prospecting for minerals in forests has been exempt from the requirement of the consent of local village councils or settling tribal rights.
- Forest clearance has been delinked from approval by the National Board for Wildlife and the restriction on development around forest reserves has been halved from 10km to 5km.
- The power of state-level wildlife boards has been curtailed. These boards were entrusted with granting initial clearance to projects within a 10km radius of national parks and wildlife sanctuaries. Developers can now directly apply at the central level, cutting out one layer from the process.
- Pollution index-based moratoriums on new industries in critically polluted industrial areas have been lifted and a review of the index has been ordered.

Source: UBS

The current government's approach to the application of environmental laws can be gauged from the fact that the National Board for Wildlife—as constituted by the new administration—has granted clearance to 140 projects during a two-day sitting. It seems quite evident that environmental clearance will no longer be a bottleneck. The MoEF granting clearances to 240 projects in the first quarter of its tenure (as compared to 389 in FY12 and 563 in FY13) also supports this hypothesis.

Land acquisition is another issue that slows project implementation in India. It has always been a tricky issue, but the number of conflicts around land acquisition has been on the rise in recent past. The Rights and Resources Initiative, in alliance with other non-governmental organisations (NGO), estimated that the number of land acquisition conflicts has risen from 177 disputes in 130 districts in 2012 to 252 conflicts in 165 districts in 2013.

In order to address discontent regarding land acquisitions, the previous government had enacted a Land Acquisition Law that significantly increased the compensation for land and imposed onerous conditions for the process. It was not clauses related to increased compensation that had led to problems, but clauses related to the previous administration's new approval process. The new requirements of Social Impact Assessment and a new layer of bureaucracy to approve it meant that most land acquisition process would have taken at least four years to complete.

More importantly, the law had a very strict requirement for the process to begin—consent of 70-80% of the landowners. In most cases, the process would falter in the first step itself. That indeed proved to be the case. After the law was passed in Q313, the land acquisition process came to a virtual standstill, with even the states governed by the alliance that passed the legislation admitting that the law was proving to be unworkable.

We think the new government has shown political courage by bringing amendments to an ostensibly populist measure. Through an executive order, it has diluted the more onerous provisions of the law as follows.

- An expansion of the list of projects that are exempted from the consent and Social Impact Assessment clauses. Exempt categories now include defence, rural infrastructure, affordable housing, industrial corridors, and infrastructure projects such as Public-Private Partnerships (PPPs).
- An expansion of the definition of permissible infrastructure to include private hospitals and educational institutions.
- A dilution of the requirement that unused acquired land be returned to the original owners—unutilised land can now be returned after 10 years compared with a provision of five years earlier.
- A dilution of penal provisions against defaulting civil servants—prior sanction of the government is now required.
- A dilution of the retrospective clause—the law will now not apply to ongoing cases where the delay was caused due to a court injunction.

All the segments likely to witness an uptick have been included in the exempted list of the onerous land acquisition law

While some industry advocacy bodies have argued for the dilution of additional clauses related to rehabilitation, we think this first step addresses the biggest concerns in the land acquisition law. All the key segments likely to witness the most activity over the next three to four years—such as infrastructure, the industrial corridor and defence—have been included in the exempted list. More importantly, private sector participation has been facilitated in these sectors by bringing PPPs within the exempted list.

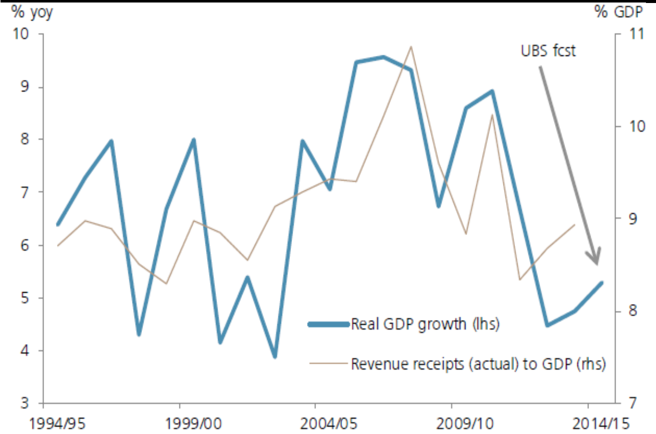
2) The government has the fiscal space to increase capex

Private sector balance sheets are not in a position to increase capex

With the three-year CAGR in investments falling to 20-year lows, an uptick in either private or public spending would be enough to at least kick-start the capex cycle. As we highlight in Figure 33, private sector balance sheets in industries where investments can/need to pick up are not in a position to spend. Against this backdrop, the government has to take a lead to restart the stalled capex cycle.

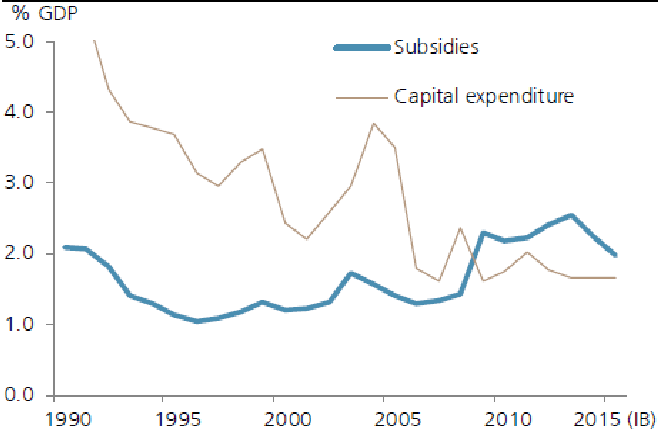
Following the global financial crisis, government finances were in no position to support the investment cycle. In the immediate aftermath of the global financial crisis, fiscal stimulus was aimed primarily at boosting consumption. As revenue slowed with the economy, it became increasingly difficult for the government to contain the deficit. Faced with a difficult choice between cutting subsidy spending and capital spending, the previous government chose the path of least resistance. Stagnant/declining capital spending by the central government became a drag on the capex cycle, rather than aiding it.

Figure 13: As Government of India (GoI) revenue declined with GDP growth…



Source: CEIC, UBS

Figure 14: … capex bore the brunt, not entitlements



Source: CEIC, UBS

However, the drop in crude oil prices has altered the fiscal picture. We estimate that at current crude oil prices, the GoI would have additional fiscal savings of Rs800bn (US$13bn, 0.6% of the GDP) in FY16 compared to FY15.

We estimate that at current crude oil prices, additional fiscal savings of Rs800bn could come in FY16 compared to FY15

Figure 15: At current crude oil prices, the GoI could have fiscal savings of 0.6% of the GDP

Incremental FY16E over FY15E at current crude oil prices	Rs bn
Central excise	600
Less: transfer to states	198
Lower subsidy on petroleum products	400
Total savings	802

Source: UBS estimates

With the government likely to achieve its fiscal consolidation goals for FY15 (a fiscal deficit of 4.1%), it does not need to use the additional savings on account of oil for further fiscal consolidation in FY16. With growth bottoming out, a gradual recovery in receipts should also aid fiscal consolidation.

3) Unviable projects are being unwound

By Q314, the NHAI was able to cancel 34 highway projects with a total project cost of around Rs386bn

As of November 2014, there were 77 national highway projects totalling 9,389km that were awarded where work had yet to start. Of the projects awaiting execution, projects for about 6,500km were awarded prior to end-FY12. Therefore, projects worth around Rs750bn (US$12bn) have been stuck for more than two years. These projects created a logjam in the system—the already-awarded projects were not witnessing any execution, while fresh bidding was untenable given a large number of stalled projects. Due to the contractual complexities involved, there have been long delays in terminating the contracts, but the backlog is being cleared gradually. By Q314, the NHAI was able to cancel 34 highway projects with a total project cost of around Rs386bn.

Figure 16: A snapshot of contracts cancelled in 2014

Project Name	Funded By	Length (km)	When terminated	App. Value (Rs bn)
Shivpuri –Dewas	BOT	330	May-2014	36
Aligarh - Kanpur	BOT	283	Sep-2014	31
Amravati - Jalgaon	BOT	275	Sep-2014	30
Jalgaon – Gujarat /Maharashtra Border	BOT	209	Sep-2014	23
Muhulia – Baharagora- Kharagpur	BOT	127	Sep-2014	14
Karnataka /Kerala Border - Kannur	BOT	127	Jan-2014	14
Patna - Buxar	BOT	125	Aug-2014	14
Agra – Etawah Byapss	BOT	125	May-2014	14
Khagaria – Bakhtiyarpur	BOT	113	Jan-2014	12
Cuttak -Angul	BOT	112	Jul-2014	12
Yamunanagar Saha—Barwala-Puchkula	BOT	107	Mar-2014	12
Hospet –Bellary-Karnataka /AP Border	BOT	95	Mar-2014	10
Rampur - Kathgodam	BOT	93	Apr-2014	10
Gopalganj - Chappra	Annuity	92	Apr-2014	10
Bimitrapur - Barkate	BOT	86	Mar-2014	9

Source: NHAI, UBS

Issues pertaining to all stalled highway projects have not yet been resolved. For projects that are legally trickier, the government is considering a reduction of the penalty for cancellation to be paid by bid winners, from 1% of the total project cost to 0.1%. The idea is to quickly resolve the issue through mutual consent rather than resorting to a lengthy litigation process.

Once projects are re-tendered, execution should be faster than before

A large proportion of the stalled projects that were awarded prior to FY12 had only 60-70% of land acquisitions completed when the projects were bid out. In the usual course, the NHAI continues to acquire the remaining land, while at the same time, developers work on financial closure and construction on the available stretches. In the intervening 30 months, land acquisition has progressed even when implementation was stalled. Hence, once projects are re-tendered, execution should be faster than before.

4) Inter-sector imbalances are being corrected

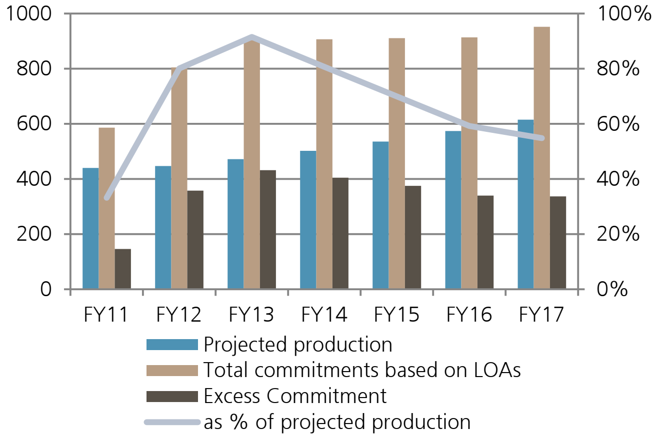
We believe a lack of inter-sector co-ordination has been a major shortcoming of Indian policymaking and planning. The current impasse in the power sector is the starkest example. In a perennially power-starved country, thermal power plants are running at around 65% plant load factor (PLF), not due to a lack of demand, but a lack of fuel. Investments totalling Rs3,130bn are impacted in power-generating assets in a low-return environment, constraining further investments in the sector.

Did coal scarcity develop because of an unforeseen event or supply disruption? No. It happened because the Government of India awarded coal linkages to prospective developers without a full assessment of Coal India's (CIL) production plans.

CIL's excess commitments over projected production are at 55-92% over FY11-17F

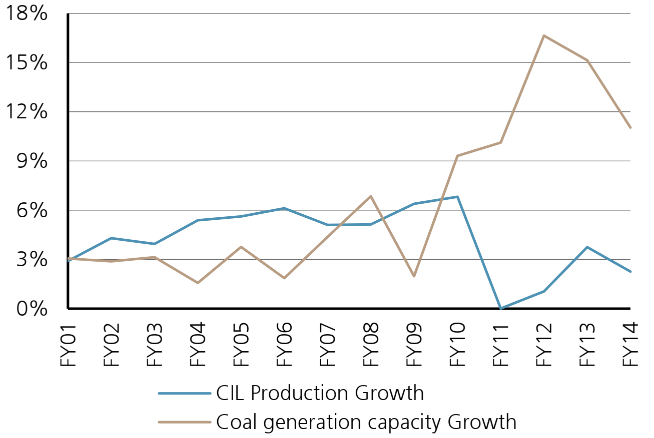
Developers armed with fuel supply assurances from the government through CIL were able to secure financing and went ahead with project implementation without actually assessing the risk of CIL not being able to supply adequate quantities of coal. According to CIL's own estimates in FY11, excess commitments over its projected production are at 55-92% over FY11-17F.

Figure 17: More coal linkages were awarded than CIL's production targets



Source: CIL, UBS

Figure 18: Generation capacity growth spiked from FY10 onwards and coal production could not keep pace



Source: CIL, CEA, UBS

In retrospect, this issue would not have arisen if CIL had not been asked to sign letters of intent (LOIs) significantly above its projected production or if the power planning bodies such as the Ministry of Power or the Central Electricity Authority would have stopped recommending power projects for coal linkages. Downstream, CIL's production and off-take targets would not have been missed by the large extent if targets were based on better inputs from the MoEF (for clearances), the state governments (for land acquisition) and the railways (for connectivity).

While the historical lack of co-ordination will not be resolved completely in a short period of time, steps taken by the new administration raises expectations of material improvements. Acknowledging the need for close co-ordination between the coal and power ministries, the two departments have been placed under a single minister. We view this as a small first step.

To incentivise states, all proceeds received from the auction of coal blocks would accrue to the respective state governments

To incentivise the state governments to help accelerate the pace of mine development, the central government has decided that all proceeds received from the auction of coal blocks would accrue to the respective state governments. This theme percolates further. In an recent amendment to the Mines & Minerals Development Regulation (MMDR) Act through an executive order, the central government has mandated that additional royalty to the extent of one-third of the royalty paid to the state governments would be payable to a local body. The monies collected would be spent at the district level.

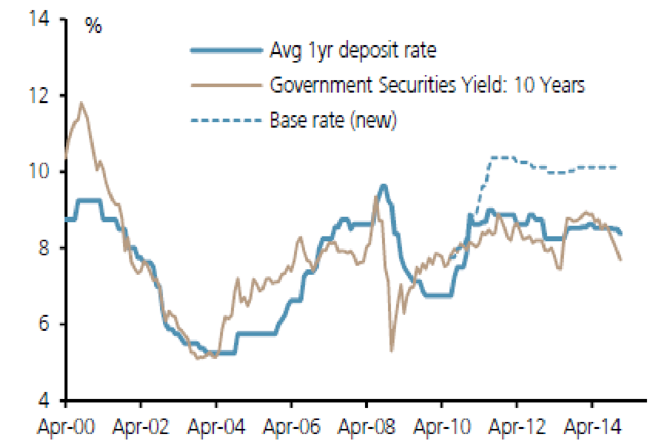
Railways have proposed formation of SPVs for specific projects with the state government

Coal and power are not the only sectors where this approach is discernible. Railways have embarked on a similar path. To ensure speedy state-level approvals and ensure that railway projects in a particular state are aligned to the development goals of the respective state governments, the railways have proposed the formation of special purpose vehicles (SPVs) for specific projects, with the state government holding a 51% equity stake. This is the first time such a proposal has been introduced. Encouragingly, Odisha, ruled by an opposition party, has become the first state to accept the proposal.

5) Rate cycle becoming more conducive; regulatory forbearance could help

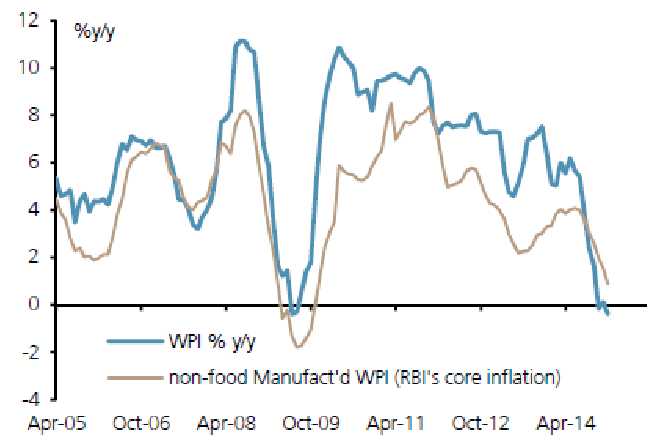
After a gap of 12 months (the last interest rate hike was in January 2014), the RBI has finally started to cut rates. This was more a question of when rather than if, as 10-year government securities' yields had already started to come off before the official cut in repo rates.

Figure 19: Key interest rates have started to drop…



Source: CEIC, UBS

Figure 20: …as inflation has fallen sharply



Source: CEIC, UBS

UBS expects a 200bp cut in interest rates in less than 24 months

With both Wholesale Price Index (WPI) and Consumer Price Index (CPI) inflation coming off significantly and currently running below the RBI's anticipated trajectory, UBS's India strategist, Gautam Chhaochharia, expects a 200bp cut in interest rates in less than 24 months. While his estimate is steeper than consensus, he believes the risks to his interest rate forecasts are on the downside as the inflation trajectory could continue to surprise positively.

While we are not in agreement with the generally accepted view that falling interest rates will necessarily result in an uptick in the investment cycle, we do believe that easing cost pressures will help both the P&Ls and balance sheets of debt-laden contractors and infrastructure companies. With interest costs nudging ahead of EBITDA for major contractors in FY14, they were facing significant cash flow issues in executing their existing order books.

Figure 21: Lower interest costs could ease cash flow for cash-strapped contractors

Rs m	EBITDA		Interest Exp.			EBITDA-Interest		
	FY13	FY14	FY13	FY14	FY14 at 100bp lower	FY13	FY14	FY14 at 100bp lower
NJCC	8,413	7,580	5,059	5,542	5,131	3,354	2,038	2,448
IVRCL	7,364	2,453	3,922	7,388	6,841	3,443	(4,935)	(4,388)
Simplex	4,722	5,323	2,607	3,309	3,064	2,115	2,014	2,259
HCC	3,836	6,445	5,166	5,844	5,411	(1,330)	601	1,034
Total	24,335	21,801	16,754	22,083	20,447	7,582	(282)	1,353

Source: Bloomberg, UBS

Interest cost savings would improve the cash flow of contractors

We estimate that a 100bp decline in interest rates would increase the EBITDA-interest cost spread for contractors by 12-72%, which should be supportive of a pick-up in execution rates and thus, real activity on the ground. Similarly, lower interest costs should improve infrastructure companies' cash flow from operational assets and boost valuations through lower discount rates. Improving valuations might nudge some infrastructure owners to sell down mature assets, aiding a balance sheet recovery and creating room for them to bid for newer assets.

In our view, more important than a rate cut is the availability of debt capital for large projects with typical debt-to-equity ratios of 70:30. The following recent regulatory interventions should help in this regard.

UBS estimates that regulatory pre-emptions would result in a 200bp expansion in spreads for infrastructure loans

(1) In July 2014, the RBI freed infrastructure loans advanced by banks from regulatory pre-emptions such as CRR, SLR and PSL[1] if such loans were financed through the issuance of infrastructure bonds. UBS's banks analyst, Vishal Goyal, estimates that these exemptions result in a 200bp expansion in spreads for infrastructure loans.

(2) In December 2014, the RBI allowed banks to apply the 5/25 restructuring rule to existing projects in the identified sectors (such as power, infrastructure, roads, and ports). Applying this rule based on a re-assessment of cash flow, banks are allowed to change existing repayment terms and stretch loan tenures to 25 years (if the asset lifecycle permits) without the loans attracting any additional provisioning charges. This rule basically gives the banks room to continue treating assets with stressed cash flows in the near term as standard, if a case can be made for an improvement in the long term.

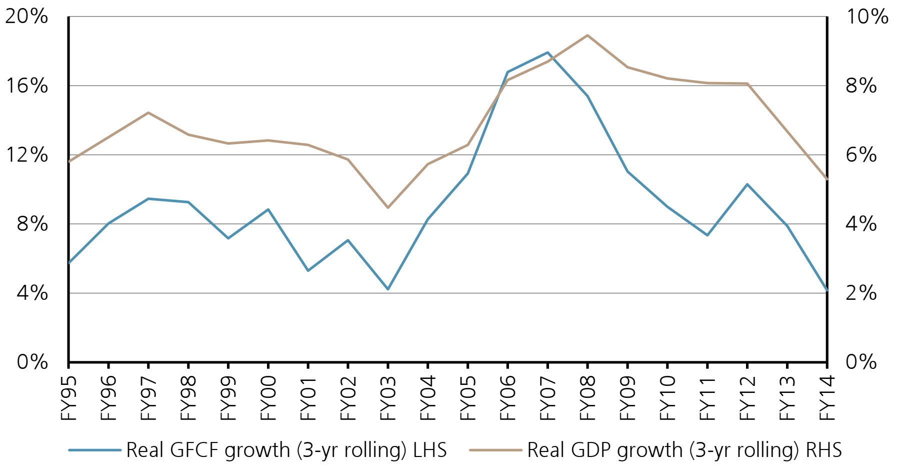
In addition to lowering direct and credit costs for loans to the stressed sectors, these interventions signal regulatory support for a continued flow of credit to the infrastructure, housing and heavy industry sectors. We think this should influence lending standards as well. We believe the risk of an overhang from surging stressed assets for the banking system impinging on debt availability has been mitigated to an extent by these measures.

[1] CRR = cash reserve ratio; SLR = statutory liquidity ratio; PSL = priority sector lending

Are signposts visible? Yes, both real activity and sentiment indices are showing an uptick

Growth in capex (as measured by gross fixed capital formation or GFCF) has hit a 20-year low.

Figure 22: Three-year CAGR in investments has hit a 20-year low



Source: CMIE, UBS

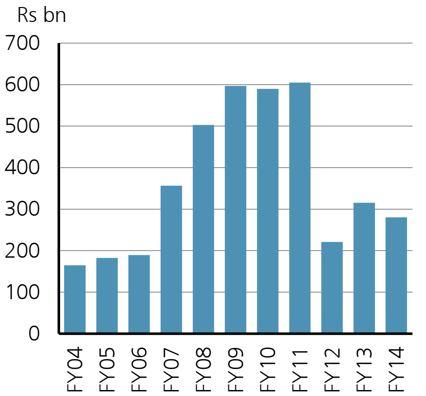
The fact that growth in GFCF has hit a 20-year low does not guarantee a sharp pull-back, but the balance of risks is on the upside. The last time GFCF growth fell to these levels, it was followed by a strong rebound.

The last time capex growth fell to these levels, it was followed by a strong rebound

1) Bottom formed; little room for a further decline

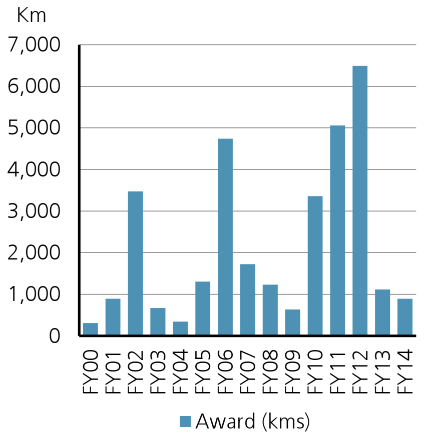
New award activity in large sectors such as power, highways and metals had nearly ground to a halt in the last two to three years, we believe leaving little room for a further decline. Award activity in the broader industrial sector has also been stagnant in the past two to three years.

Figure 23: BHEL order inflows have fallen below FY07 levels



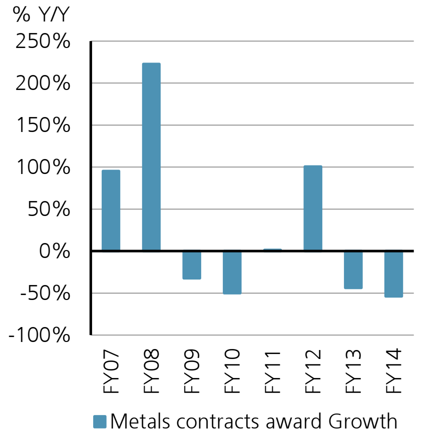
Source: Company data

Figure 24: So have highway projects awarded by the NHAI



Source: NHAI

Figure 25: Metal contract awards have been listless



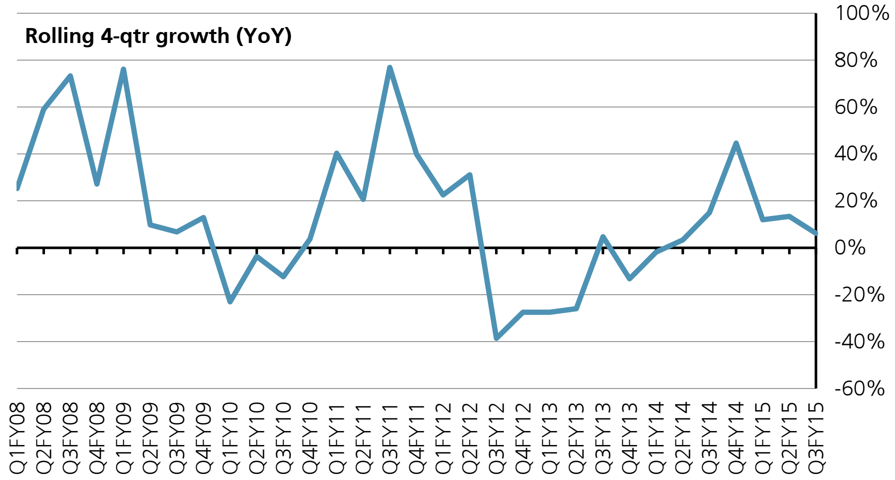
Source: Projects Today

2) Aggregate order inflows starting to inch up

There are many indices that are now starting to exhibit early signs of an uptick. In our view, aggregate order inflow to the E&C industry is the most important lead indicator of whether or not investment activity is picking up on the ground. According to a leading industry data aggregator, order inflows have started to inch up over the last five to six quarters, after remaining in the negative territory over the prior six to seven quarters.

Order inflows have started to inch up over the last five to six quarters

Figure 26: Aggregate order inflows to E&C companies starting to inch up



Source: Projects Today, UBS

3) SOEs' strengthening intentions to increase tendering

The strengthening intent of state-owned enterprises (SOE) to step up tendering activity is also an encouraging sign. Project orders from SOEs do not necessarily follow the cyclical trajectory, but are also conditioned by government imperatives. After a lull of two to three years, there are signs that SOEs are stepping up their award activity. For example, the state-owned utility in the newly-formed state of Telangana has announced the construction of ~6GW coal-fired power plants. Similarly, the southern state of Karnataka has ordered a 370MW gas-fired power plant in an environment of abysmally low gas availability in India. NTPC plans to bid out 4-5GW of thermal plant orders every year. There are other examples as well. Clearly, SOEs are willing to put their capital to work before clarity emerges on the fuel shortage issues.

After a lull of two to three years, there are signs that SOEs are stepping up their award activity

Figure 27: Contracts awarded by SOE power utilities in FY15 YTD

Utility	Value of contract (Rs bn)	Remarks
NTPC	112	Multiple projects
Gujarat State Electricity Corp	35	800MW Wanakbori Project
Karnataka Power Corp	12	370 MW gas turbine-based CCPP at Bengaluru
Madhya Pradesh Power Genco	51	2x600MW Malwa project at Khandwa on EPC basis
Neyveli Lignite Corp	12	BOP for (2x500 MW) Cuddalore project
Tamil Nadu Generation & Distribution Corp	78	EPC order for 2x660 MW Ennore SEZ Project
Telangana State Power Generation Corp	38	EPC order for 800 MW Kothagudem Project

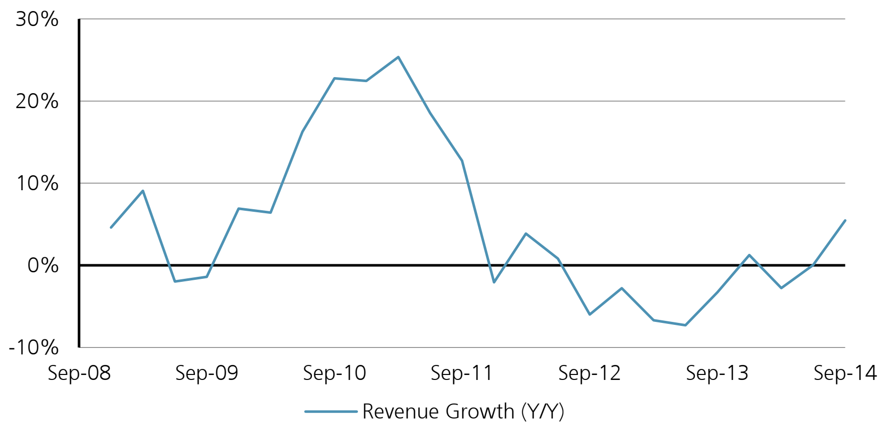
Source: Projects Today

4) Revenue for short-cycle products starting to pick up

In addition to signs of an order inflow recovery, short-cycle industrial product companies are showing signs of a pick-up in revenue. While P&L improvements for long-gestation project businesses occur with a lag, a recovery in short-cycle products can indicate a broad-based recovery, as changes in these businesses with a change in trajectory are visible much earlier.

Short-cycle industrial product companies are showing signs of a pick-up in revenue

Figure 28: Initial signs of a recovery in short-cycle industrial companies



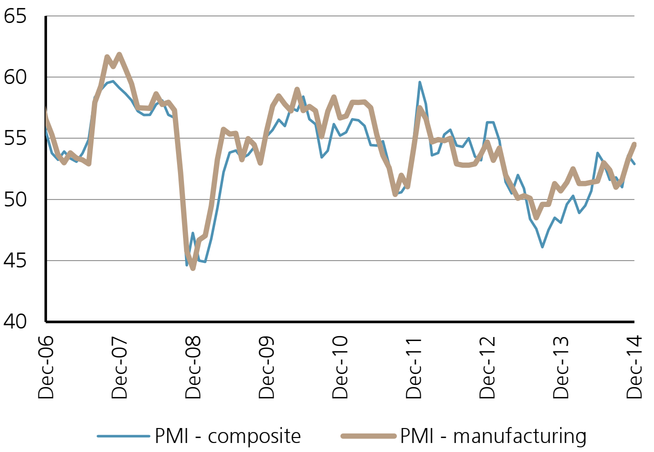
Note: We use average revenue of 24 capital goods product suppliers to calculate revenue growth.
Source: Bloomberg, UBS estimates

5) Sentiment indicators also showing an uptick

In addition to early signs of a pick-up in real activity, sentiment indicators are also showing an uptick. Project investment announcements have witnessed sharp YoY and QoQ increases in the last two quarters, and are now significantly off their multi-year lows. Manufacturing PMI has also started showing signs of a pick-up.

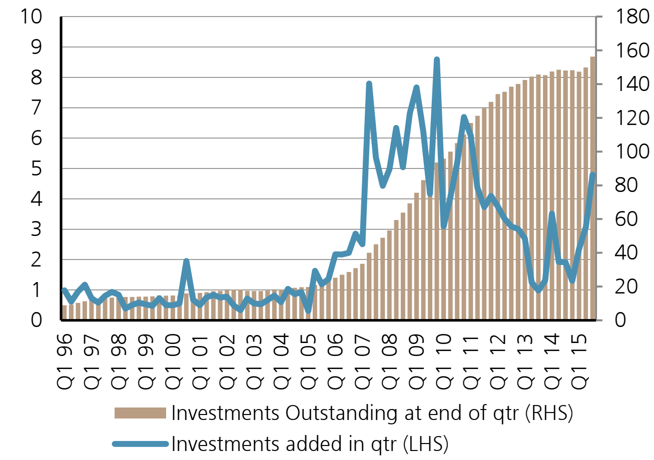
Project investment announcements have witnessed a sharp increase in the last two quarters

Figure 29: India's PMI has started to inch up…



Source: Haver, UBS

Figure 30: …and so have new investment intentions



Source: CMIE, UBS

Will all sectors recover? Infrastructure to drive upcycle; outlook for other segments still hazy

With a number of impediments that have constrained capex being resolved and the government in a position to step up expenditure, infrastructure investments are poised to take off. Our view is predicated not just on a top-down macro view, but also a bottom-up analysis of visible project pipelines for various sectors. We estimate order award activity from large identifiable segments will increase by 109% over FY15-17 compared to FY12-14. We expect the railways, highways, metros, renewables, and urban infrastructure sectors to record strong growth. Power generation and distribution might remain sluggish.

Order award activity from large identifiable segments to increase by 109% over FY15-17E compared to FY12-14

Figure 31: Major infrastructure segments could witness large upticks in order inflows

Sectors	Orders awarded FY12-14 (US$bn)	Orders awarded FY15-17E (value US$bn)
National highways	5	25
Metro Rail	6	18
Dedicated freight corridor	2	5
Railways	10	30
Industrial corridors	-	2.5
Renewables	11	20
Thermal Power	13	21
Power T&D	21	21

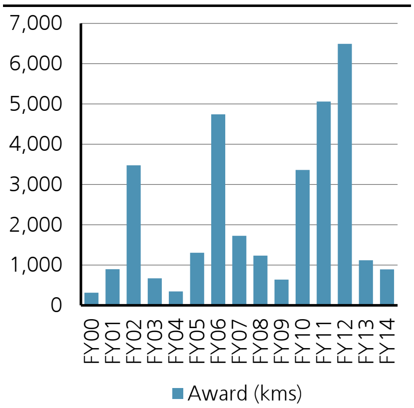
Note: Data is sourced from various government publications and media reports.
Source: UBS estimates

Resumption of NHAI tendering should drive road orders

Over the last 30 months during FY13-H1 FY15, NHAI award activity had almost completely stalled. In addition, most projects that were awarded during the surge in ordering in the prior two years (FY11-12) did not reach the implementation phase. By Q314, 34 projects with a total project cost of around Rs386bn awarded during this period have been cancelled, and more cancellations are in the pipeline.

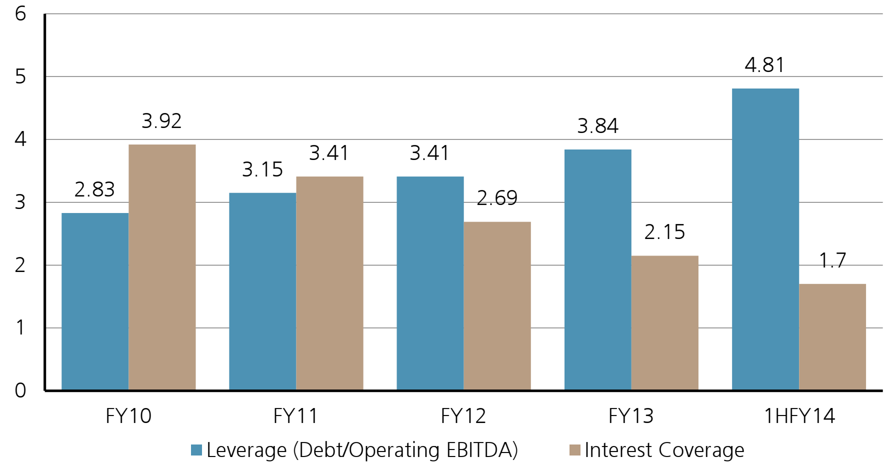
The logjam in the road sector was caused by the importance attached to the Public-Private-Partnership (PPP) model. Since FY07, the NHAI has awarded almost all projects on a PPP basis. As the asset portfolios of leading private developers grew, so did leverage. In addition, underwhelming returns in road asset bids became quite conspicuous by the time award activity surged in FY11-12. Both a lack of appetite and capacity in the private sector had stalled activity.

Figure 32: NHAI orders have dried up in the last two years



Source: NHAI, UBS

Figure 33: Contractors do not have the balance sheet strength to bid for BOT projects



Note: BOT stands for build–operate–transfer.
Source: Ind-Ra, UBS estimates

The government has now changed tack. Like during the pre-FY07 period, it has decided that the bulk of the national highway projects would be funded by the government, at least until private sector balance sheets can get back in shape through cash flow from operational assets and asset sales. The NHAI has a pipeline of 14,600km of highway projects that need to be awarded as part of the National Highway Development Plan (NHDP), a seven-phase national highway development plan conceived over FY99-04. In addition, we estimate that around 5,500km of cancelled projects would also be re-tendered.

National highway projects would be funded by the government, at least until private sector balance sheets are back in shape

The NHAI has a pipeline of 14,600km of highway projects to be awarded

Figure 34: The NHAI has a large pipeline of orders to award, in addition to the rebids of cancelled projects

Length (Km)	GQ	NS-EW	Phase III	Phase IV	Phase V	Phase VI	Phase VII	SARDP-NE	Total
Total length	5,846	7,142	12,109	14,799	6,500	1,000	700	388	48,484
Completed	5,846	6,325	6,300	776	1,910	-	22	95	21,274
Under implementation	-	400	4,464	5,509	2,171	-	19	17	12,580
Balance for award	-	417	1,345	8,514	2,419	1,000	659	276	14,630

Source: NHAI, UBS estimates

The government had fixed a target of bidding out 8,500km of highways in FY15—5,000km through the NHAI and 3,500km through the Ministry of Road Transport and Highways (MoRTH). We believe the FY15 targets will likely be missed, but award activity should pick up pace in FY16. We expect 14,000km of national highways to be tendered out over FY15-17, translating to an order opportunity of around US$25bn, compared to orders of around US$5bn over FY12-14.

Metro rail could pick up pace as projects in Tier II cities kick off

After work on the first large metro network in India kicked off in FY99 in Delhi, metro projects have become operational (or are under construction) in the top six cities. Metro projects are steadily taking shape outside Tier I cities, with Phase I of Jaipur metro nearing completion and implementation starting in Lucknow. We identify 12 metro projects that are in the advanced stages of planning and will likely start awarding orders over the next two to three years.

12 metro projects are in the advanced stages of planning and will likely to start orders over the next two to three years

These 12 projects, with an aggregate length of approximately 600km, entail around US$35bn of capex. Most would be financed by the respective state governments, with financial support from the central government. We expect these projects to award US$18bn of orders over FY15-17, compared to US$6bn of orders by various metro projects over FY12-14.

Figure 35: A number of metro projects are in the advanced stages of planning

Metro Projects	App. Project Cost (Rs bn)	Length (Km)	Status
Bangalore Ph-2	265	72	Tendering in progress
Chennai Ph-2	360	76	Feasibility study underway
Patna	140	-	DPR under progress
Jaipur Ph-2	70	24	Land acquisition in progress
Kochi	55	27	Tenders invited
Kolkata Ph-2 expansion	110	81	Tenders invited
Mumbai Ph-3	256	38	Under planning
Ahmedabad metro Ph-1	215	85	Tenders invited
Chandigarh-Mohali-Panchkula Ph-1	90	38	Detailed project report submitted
Pune metro Ph-1	80	32	Central government accorded approvals
Delhi Metro Ph-4	400	110	Detailed project report submitted
Ludhiana Metro	103	29	Detailed project report submitted
Total	2,144	612	

Source: Projects Today, UBS

A pick-up in DFC and pending projects should drive railway capex

The flagship project of the Indian Railways, the Dedicated Freight Corridor (DFC)—which comprise of two corridors aggregating 3,300km—is poised to resume ordering after a hiatus of 18 months, when L&T was awarded a large civil work order. Of the 3,300km, civil work contracts have been awarded for 1,068km. Of the remaining 2,230km, there are land acquisition issues and a lack of clarity on the mode of development (a PPP versus public model) for the 540km Dankuni-Sonnnagar stretch on the Eastern corridor.

We expect the award of civil works for 1,690km of tracks in the DFC project over FY15-17E

We expect civil works to be awarded for the remaining 1,690km over FY15-17E as: 1) 96% of the land has been acquired for these stretches; and 2) all the environmental clearances and other approvals are in place, except for coastal clearance for a very small stretch. In addition to the civil contracts, we expect electrical, signalling and telecom contracts to be awarded for the entire stretch. These should provide an order inflow opportunity of US$5bn over FY15-17E compared to the US$2bn over FY12-14.

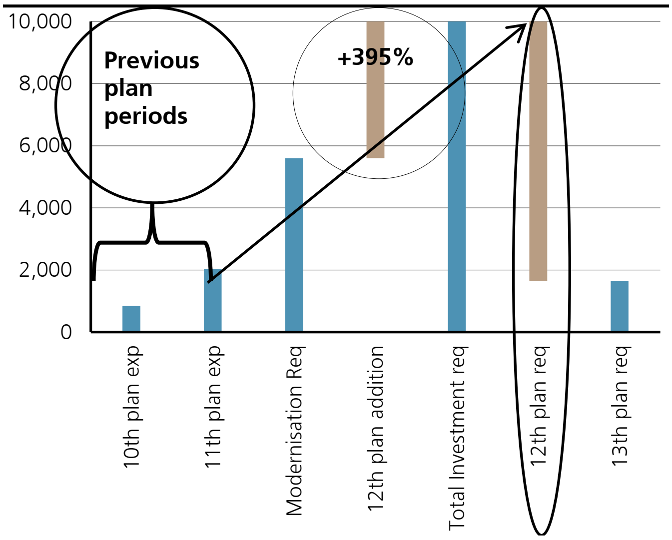
Figure 36: Award activity for the DFC stretches should restart

Western-DFC	Length (Km)	Status
Rewari-Iqbalgarh	626	Awarded to Sojitz-L&T
Iqbalgarh-Vadodara	322	2 contractors submitted price bids
JNPT-Vaitarana	102	Pre-qualification bids re-invited
Vaitarana-Sachin	186	Pre-qualification bids invited
Sachin-Vadodara	134	Pre-qualification bids invited
Rewari-Dadri	128	Pre-qualification bids invited
Eastern-DFC		
Karwandiya-New Ganj Khawaja	105	Awarded
Bhaupur-Khurja	337	Awarded
Mughalsarai-New Karchana	172	Pre-qualification bids invited
New Karchana-New Bhaupur	229	Pre-qualification bids invited
Sahnewal-Pilkhani	175	Pre-qualification bids invited
Dadri-Khurja	46	Pre-qualification bids invited
Khurja-Pilkhani	229	Pre-qualification bids invited

Source: Projects Today, UBS

While news around the DFC attracts the most headlines, Indian Railways has laid out an ambitious plan for modernisation and capacity expansion. The Expert Group on Modernization of Indian Railways has estimated an investment of US$162bn to upgrade existing infrastructure and complete the already identified expansion projects—it has recommended that US$135bn be spent over the next five years. This is more than a four-fold increase over investments in the prior five years.

Figure 37: The railways have outlined an ambitious capex programme…



Note: Data is in Rs bn.
Source: Ministry of Railways, UBS

Figure 38: …but need to generate higher internal resources to fund it

Sources of funds	5-year estimate	Per year requirement	FY16 budget estimate
Gross Budgetary support	2,500	500	400
Internal Generation	2,018	404	178
Safety fund	168	34	16
Dividend rebate by the Central government	240	48	-
Monetisation of underutilised assets	165	33	-
Borrowings	1,010	202	348
PPPs	2,290	458	58
Total	**8,391**	**1,678**	**1,000**

Note: Data is in Rs bn.
Source: Ministry of Railways, UBS

The expert group recommends that 39% of the funding be raised from the private sector through PPP projects, in addition to a significant increase in budgetary support from the central government and the railways own internal generation.

Given the significant required increase in all sources of funding, we find the plan to be overly ambitious. We think stepping up PPP projects would require the most time as models for private sector participation have yet to be finalised. Cognizant of these issues, the government has now allowed 100% foreign direct investment (FDI) in railways and is trying to evolve PPP models for the yet unexplored areas.

While these initiatives will take time, there are a number of critical projects identified within the modernisation programme that could record ordering activity over FY15-17. We expect FY15-17 orders to be primarily driven by the modernisation of 19,000km of high-traffic density track sections (to enable heavier loads and higher speeds). These sections account for 40% of the railway network, but carry 80% of the traffic. Order inflows from these projects will likely translate to a US$30bn opportunity over FY15-17E compared to the US$10bn over FY12-14.

Order inflows from the railways projects could translate to a US$30bn opportunity over FY15-17E

Industrial corridors and smart cities should drive urban infrastructure growth

The government has announced plans to develop seven industrial corridors and 100 smart cities to create planned urban clusters with modern infrastructure. This alone would provide an investment opportunity of upwards of US$500bn. However, most of the projects are still at the early stages of conceptualisation. Once the plans are firmed up, land acquisitions, clearances, co-ordination with the respective state governments, and obtaining funding will require further time. Thus, activity on the ground is some time away.

That said, there has been tangible progress in some projects. The largest of these—the Delhi-Mumbai Industrial Corridor (DMIC), which entails a cumulative capex of US$90bn—will start bidding out projects in FY15 for core infrastructure in five clusters. Investments in these five clusters in the initial phase are estimated at Rs138bn.

The Delhi-Mumbai Industrial Corridor (DMIC) entails a cumulative capex of US$90bn

The DMIC is being developed in conjunction with the DFC to create a model industrial corridor in India, with state-of-the-art infrastructure to enable the development of a global manufacturing hub. A total of 24 new industrial zones are planned to be created—11 investment regions with a minimum size of 200 sq km and 13 industrial areas with a minimum size of 100 sq km. 12 of these zones will be developed in the first phase.

Of the 12 zones, five cities are in the advanced stages of planning. To kick-start the process, small portions of the five identified cities would be developed initially. Land acquisition for the initial phase in these five cities is almost complete and core infrastructure requirements are being mapped. It is estimated that core infrastructure in the initial phase of these five cities would entail an investment of Rs138bn.

Core infrastructure in the initial phase of five cities in the DMIC would entail an investment of Rs138bn

Around 60% of investments during the initial phase would be funded through budgetary support from the central government, the rest will be debt-funded through Japanese agencies JBIC/JICA[2], which are also providing debt funding for the Western DFC. With land and funding issues settled, we expect ordering to commence in H1 FY16.

[2] JBIC stands for the Japan Bank for International Cooperation and JICA stands for the Japan International Cooperation Agency.

Figure 39: Industrial regions planned in the first phase of the DMIC

Node	Area (sq km)	Initial phase expected investment (Rs/bn)/status
Ahmedabad-Dholera Investment Region, Gujarat	920	50
Manesar-Bawal Investment Region, Haryana	402	25-30
Khushkhera-Bhiwadi-Neemrana Investment Region, Rajasthan	165	Process of consultant appointment underway
Pithampur-Dhar-Mhow Investment Region, Madhya Pradesh	372	8-10
Dadri-Noida-Ghaziabad Investment Region, Uttar Pradesh	200	10
Dighi Port Industrial Area, Maharashtra	253	Land acquisition in progress
Shendra Bidkin Industrial Park Maharashtra	84	50

Source: DMIC, UBS estimates

While the outlay for the initial phase is small from an overall capex cycle perspective, once ordering and implementation kicks off, plans for other cities should gather momentum as they would benefit from a tested template.

Investments in renewables could pick up sharply

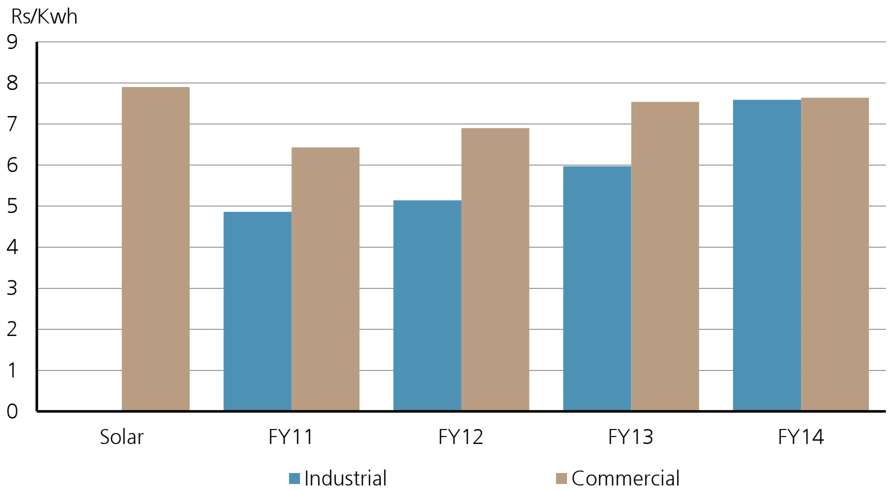
Investments in renewables, especially solar, have started to gain momentum

Investments in renewables, especially solar, have started to gain momentum off a low base in the last two to three years. The previous administration had outlined large capacity addition plans. We expect a sharp uptick in renewable investments as the new administration has professed an even stronger commitment to renewables. Given the shorter execution cycle, solar and wind power are best-suited to address the power deficit issue in the near term as fuel supply issues for fossil fuel-fired power plants are resolved.

As the capex/MW for solar projects is coming down, solar tariffs are approaching the levels of industrial tariffs

As the capex required per MW for a solar project is falling, solar tariffs are approaching the levels of industrial tariffs, after taking into account government subsidies on capex.

Figure 40: Attaining parity with industrial and commercial consumers (Rs/kWh)



Source: Annual Report FY14 (The working of state power utilities and electricity department)

The central government has brought the target of reaching 20GW of solar capacity under the Jawaharlal Nehru National Solar Mission (JNNSM) forward by two years, from FY22 to FY20. This represents significant growth over the existing capacity of 2.8GW.

Figure 41: National Solar Mission Targets (FY10–22)

Solar technology	Phase 1 (FY10–13)	Phase 2 (FY13–17)	Phase 3 (FY17–22)
Grid connected/rooftop	1,000–2,000MW	4,000–10,000MW	20,000MW
Off-grid solar applications	200MW	1,000MW	2,000MW
Solar hot water collectors	7m sqm	15m sqm	20m sqm
Rural solar lanterns/lighting	NA	NA	20m systems

Source: The Ministry of New and Renewable Energy, World Bank, UBS

The government has set even more ambitious targets of adding 100GW of capacity in the next five-year period after FY20. Like the ultra-mega thermal power projects, the government is planning to set up ultra-mega solar projects, each with a capacity of 4GW. The government is easing the regulatory environment to facilitate faster approvals of solar parks.

Based on capacity addition plans for the next five years and the government's stated commitment to the sector, we expect 12GW of orders over FY15-17, translating to an order inflow of about US$13.6bn.

12GW of orders from solar over FY15-17E could translate to an order inflow of around US$13.6bn

Wind power has been steadily gaining traction in India, driven by fiscal incentives through generation-based incentives and accelerated depreciation provisions. Capacity additions declined over FY13-14 as the incentives were withdrawn in FY12. With both incentives reinstated by FY14, we expect wind power additions to return to levels of 2-3GW/year. This could translate to an order inflow opportunity of about US$6.5bn.

Wind power additions could return to 2-3GW/year—an opportunity of around US$6.5bn

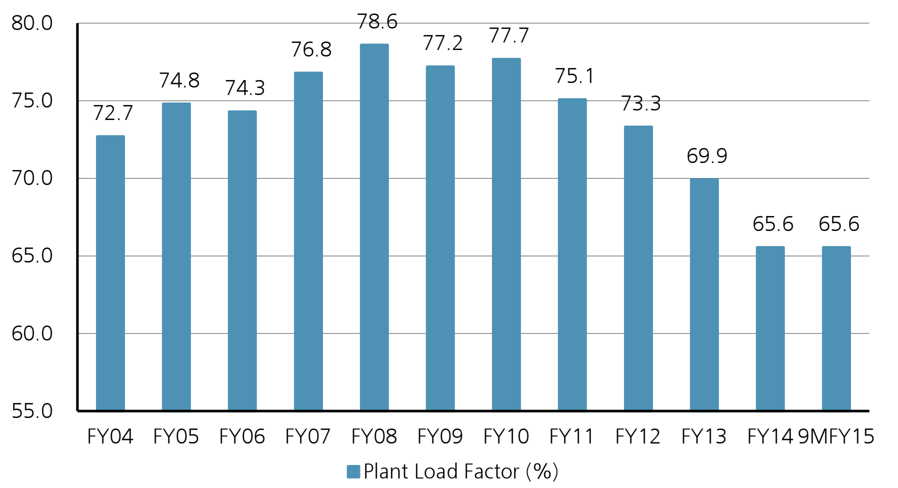
We expect US$20bn of order inflows from the renewables segment over FY15-17E, compared to the US$11bn over FY12-14.

Thermal power could bounce off a low base, but capacity additions likely to remain muted

The average capacity utilisation rate for coal-fired power plants is currently 65.6%, down from a peak of 78.6% in FY08. Given that 57% of the current installed base of 156GW was commissioned after FY09, thermal power plants can easily surpass the previous peak capacity utilisation rate as the proportion of older, inefficient power plants has dropped significantly. A lack of domestic coal has resulted in low PLF even though India's power deficit remains.

Figure 42: Coal-fired plants are running at multi-year low capacity utilisations

Capacity utilisation rates for coal-fired power plants are at multi-year lows



Source: CEA, UBS

Assuming imports double in the next five years and all incremental domestic thermal coal supplies over the next five years are allocated to the power sector, we estimate thermal coal supplies in India will need to grow 13.7% annually to meet the requirement of operational and under-construction capacities—a tall order given that the strongest increase India has achieved over any five-year period is 6.6%.

We estimate coal supplies need to grow 13.7% annually to meet the requirement of operational and under-construction capacities

Figure 43: Domestic coal production needs to grow at 2x the historical high to meet the requirement of current plants

	m tonnes
End-FY14 coal-fired capacity (GW)	145
Coal required for normalised PLF	639
Capacity post-FY14 monitored by CEA (GW)	98
Incremental coal required	432
Total coal required by FY19E	1,071
FY14 domestic coal to power sector)	385
FY14 coal imports for power sector	95
FY19E imports assuming same proportion	192
Incremental FY14-FY19E domestic coal	494
FY14 total domestic thermal coal supply	549
Production CAGR required assuming all incremental domestic coal allocated to power	13.7%
Best 5-year total domestic supply CAGR thus far	6.6%

Source: CCO, UBS estimates

It is difficult to argue for an increase in power capacity additions from current subdued levels given the challenging fuel demand-supply outlook. However, we still expect 60% growth in power generation order inflows in FY15-17 compared to FY12-14, mainly driven by the public utilities. Public enterprises' investment decisions are not solely based on economic considerations, but are also mandated by long-term government capacity addition plans. For example, the Karnataka state utility recently ordered a 370MW gas-fired power plant. Visibility for gas availability is significantly worse than that for coal, and it is difficult to argue for additional gas-fired capacity even in a blue skies scenario.

Visibility on gas availability is significantly worse than that for coal

Figure 44: SOE thermal power projects in advanced stages of planning

Expected order announcement from SOEs	Order size	Value (US$ bn)
Andhra Pradesh	1,600	1.4
Maharastra	660	0.6
Neyveli Lignite	1,980	1.8
NTPC	9,280	8.2
Tamil Nadu	1,320	1.2
Telengana	1,880	1.7
Uttar Pradesh	660	0.6
Total	18,380	15.4

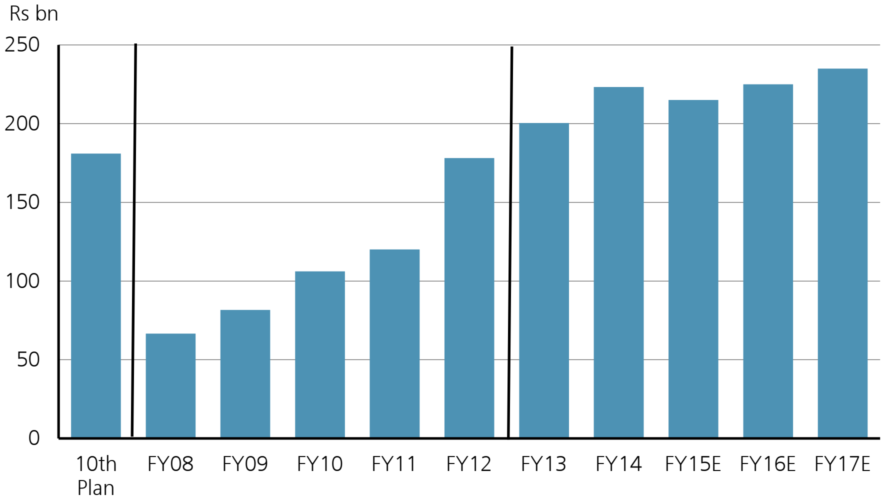
Source: UBS estimates

Power T&D order inflows could remain muted

Over the medium to long term, power transmission and distribution (T&D) investments will track power generation capacity additions, as more than 70% of the T&D capex is generation-linked. In the short run, investments and order inflows are dependent on T&D utilities' capital budgets. PGCIL, the central government utility that accounts for roughly 50% of India's transmission capex, has a stagnant capex outlay for the next two years. Based on current projections, overall transmission capex in India during FY18-22 (XIIIth Five-Year Plan) will likely remain almost stagnant (an 11% increase in total spending during FY18-22E over FY13-17E). Given PGCIL's near-term capital outlay and current investment outlook for the medium term, we expect the transmission sector's order inflows to remain stagnant.

Transmission capex in India will likely remain stagnant for the next two years

Figure 45: PGCIL's capex plans suggest stagnant order inflows



Source: Company data, UBS estimates

Planned investments in the distribution sector seem to suggest strong growth in order inflows. Compared to actual investments of Rs1,000bn during the XIth Five-Year Plan (FY08-12), capex of Rs3,062bn was planned for the XIIth Five-Year Plan (FY13-17). However, the distribution sector has a history of missing its planned targets by a wide margin. Targets for the distribution sector were at the same levels at the start of the XIth Five-Year Plan (FY08-12).

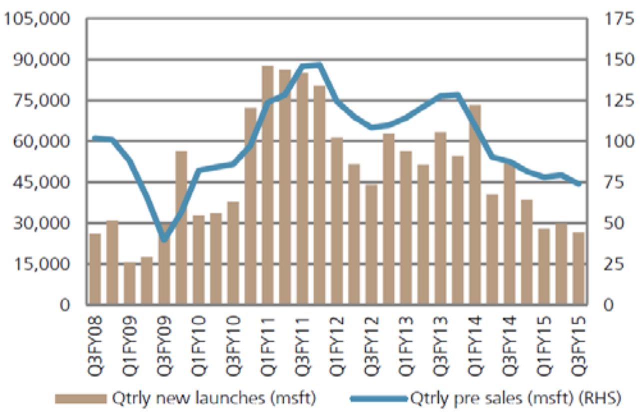
We do not expect this trend to change. State power distribution companies are still making cash losses and their ability to increase capex outlays has not improved. Unless the central government launches a new scheme for distribution reforms with increased outlays for incentive-based grants, we expect distribution capex, and hence, order inflows to remain at current levels.

Real estate orders unlikely to increase

Real estate orders unlikely to increase due to high inventory in the system

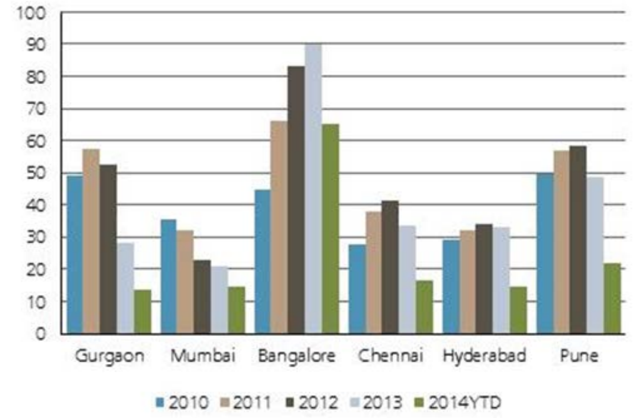
According to UBS real estate analyst Ashish Jagnani, residential sales in Q3 FY15 fell 6.8% QoQ, while new launches across key cities halved YoY and declined 10.6% QoQ. He does not expect any immediate rush of buyers. The number of new launches has been trending downwards over the last two years, along with a drop in pre-sales.

Figure 46: India market quarterly pre-sales and launches



Source: PropEquity

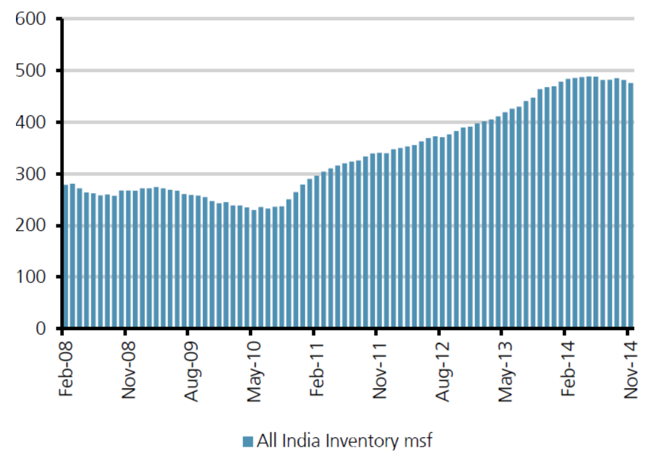
Figure 47: Key residential market sales trends (msf)



Note: 2014 YTD includes data up to November 2014.
Source: PropEquity

Inventory in most residential markets are near a seven-year peak, which suggests that even if the pre-sales trajectory improves, developers would temper their pace of new launches. Signs of this have been visible from a sharp fall in new launches in Q3 FY15, despite it being the festive season.

Figure 48: India residential inventory trends across cities



Note: Inventory is for Gurgaon, Mumbai, Bangalore, Hyderabad, and Pune
Source: PropEquity

Figure 49: Months of inventory

Cities	Months of inventory
Gurgaon	34
Bangalore	22
Mumbai	45
Hyderabad	24
Chennai	19
Pune	21

Note: Months of inventory are calculated based on November 2014 inventory and 2013 average presales.
Source: PropEquity

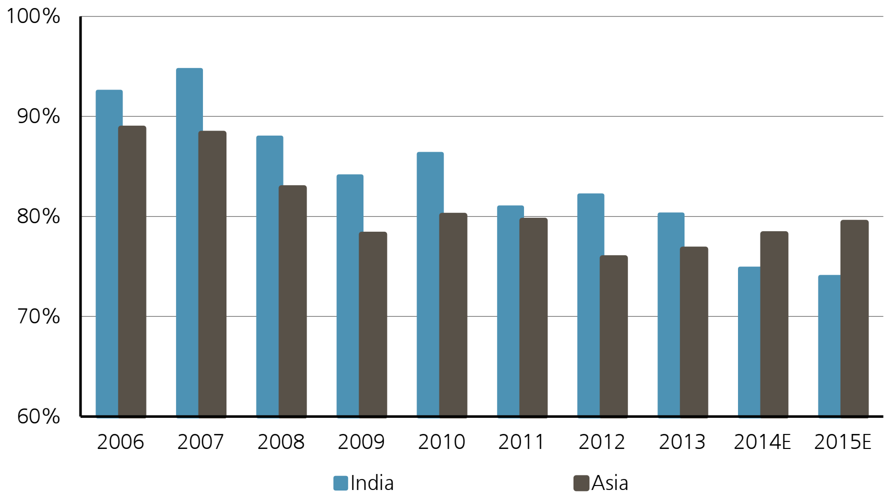
With residential launches remaining low, order inflows to the E&C industry should remain subdued as this segment forms the bulk of the real estate market. UBS analyst Ashish Jagnani is also doubtful of an increase in the commercial and retail property segments.

Commodity-driven industrial orders could remain sluggish

Order inflows from the metals sector, especially steel (traditionally a large contributor of order inflows for E&C companies) will likely remain sluggish. Steel capacity utilisation in India remains low. In addition, low capacity utilisation in the region could also stymie investment decisions in India.

Order inflows from the metals sector—especially steel—will likely remain sluggish due to low capacity utilisation

Figure 50: Steel production capacity utilisation (%)



Source: World Steel Association, UBS estimates

More importantly, at current input and output prices, expected returns from steel capacities will likely remain below the cost of capital. Greenfield projects' internal rate of return (IRR) at current prices based on captive iron ore come to 7.5%. If iron ore is sourced at domestic market prices, IRR would fall further to 0.3%. After recent amendments to the MMDR law, all new allotments to iron ore mines will be based on bids, and companies with existing mines can hold onto their mines until 2030.

At current input and output prices, expected returns from steel capacities will likely remain below the cost of capital

Figure 51: IRR profile for an integrated steel plant at current prices and costs

Assumptions	Case 1	Case 2
Procurement of Iron ore	Captive mine	Market
Exchange rate (Rs/US$)	62	62
Price of Iron ore (US$/tonne)	32	73
Price of Steel (US$/tonne)	480	480
Hard coking coal (US$/tonne)	115	115
PCI (US$/tonne)	85	85
Project Cost (US$m/MT)	1345	1,345
Debt	65%	65%
Equity	35%	35%
Equity IRR	3.2	Negative
Project IRR	7.5	0.3

Source: UBS estimates

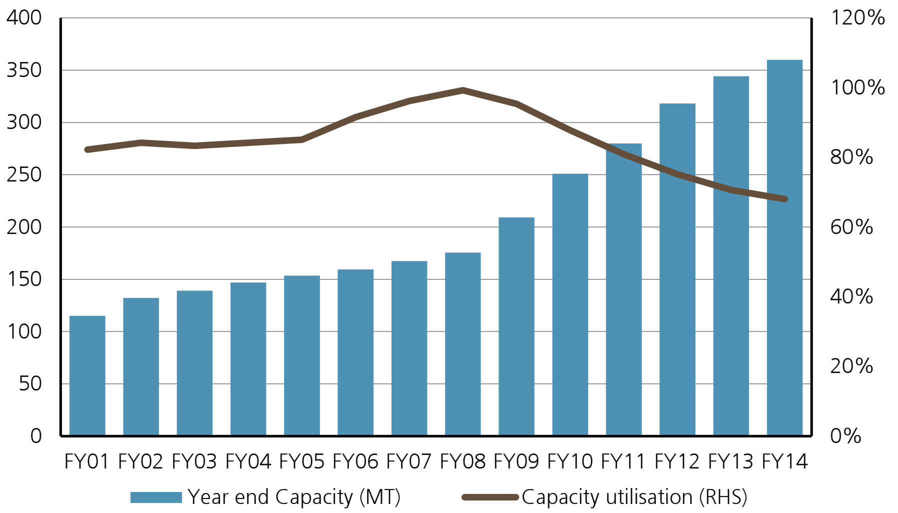
As in the case of power projects, SOEs such as SAIL could continue to announce new capacities irrespective of challenging economics. Some private sector operators might also expand capacity at brownfield locations given lower capex, and hence, better economics. These projects might translate to some 'lumpy' orders, but are unlikely to result in a sustained order inflow revival in the next two to three years.

The outlook for a rebound in order inflows from the cement sector over the next two to three years is not bright

Even though domestic commodities such as cement do not have to contend with an overhang of regional capacities, the outlook for a rebound in order inflows over the next two to three years is not bright. FY14 cement capacity utilisation in India stands at 68%, with 30-40MTPA of capacity under construction. Assuming a 7% cement demand CAGR over FY14-19E, capacity utilisation would reach 85% only by FY19-20E. History suggests that order inflows from the sector will see a spurt only after utilisation reaches these levels, which would then result in sharp increases in capacity after three to four years.

Cement capacity utilisation currently stands at 68%, with 30-40MTPA capacity under construction

Figure 52: India—cement capacity utilisation is at multi-year lows



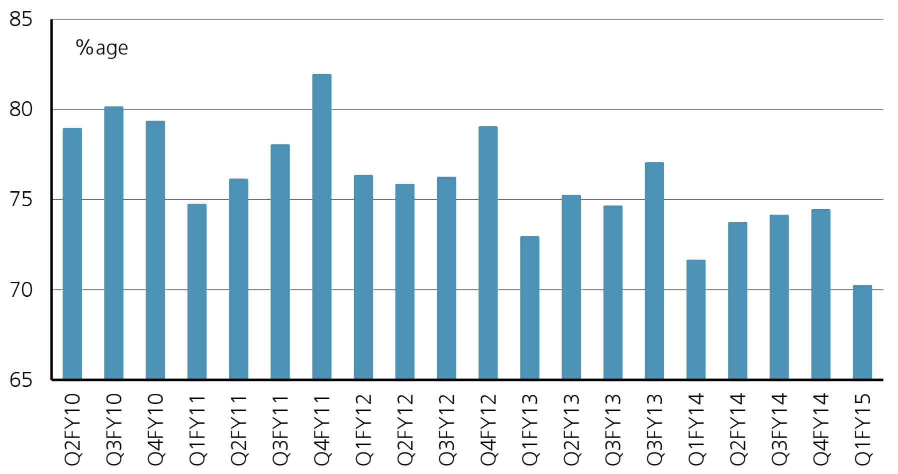
Source: CMA, Company data, UBS

The broader industrial sector grapples with low utilisation

There is optimism that investment activity in the broader industrial sector would revive with GDP growth accelerating from decade lows. While the argument seems intuitive, we believe investment activity in the industrial sector will pick up with a lag only after a sustained recovery drives up capacity utilisation. The RBI's quarterly estimate of aggregate industrial capacity utilisation is currently at its lowest since the time the central bank started to publish these estimates.

The RBI's quarterly estimate of aggregate industrial capacity utilisation is currently at its lowest point

Figure 53: India's broader industrial sector capacity utilisation is running low



Source: RBI, UBS

Admittedly, this is a very broad-based metric and there could be material deviations from the average in many sub-sectors and regions, where a more favourable demand-supply dynamic could translate to greater investment activity in the near term. However, low overall capacity utilisation rates do not suggest a revival in the broader industrial sector's capex in the near term.

Defence could be a wild card

Defence has long been considered a multi-year growth opportunity for India's E&C sector, but has generally disappointed due to a lack of policy implementation to encourage domestic procurement. The government of India has a longstanding policy goal to increase domestic defence procurement from the current 30:70 ratio to 70:30. Historically, there have been three main deterrents to the development of India's defence manufacturing sector.

(1) In procurement, preference is given to SOEs with a patchy track record in delivering even flagship projects. For example, indigenisation projects such as the Main Battle Tank and the Light Combat Aircraft projects have been delayed by over two decades and delivery schedules are still uncertain.

(2) The private sector for many defence segments is almost non-existent due to a lack of technology as FDI in the sector was limited to 26%.

(3) The armed forces require long lead times to certify the battlefield-worthiness of indigenously-developed prototypes.

India accounts for around 22% of international trade in defence

As a result, India has become the largest defence equipment importer in the world. According to the Stockholm International Peace Research Institute (SIPRI), India currently accounts for 22% of international trade in defence. While India's defence imports have been steadily increasing, China has been able to curtail its defence imports dramatically.

Figure 54: India is the world's biggest importer of defence equipment

Trend Indicator Value of defence imports US$m (1990 constant prices)	2013	2001-13
India	5,581	33,401
China	1,534	28,589
UAE	2,245	13,931
South Korea (ROK)	188	13,616
Pakistan	1,002	10,937
Australia	303	10,523
Greece	66	10,286
United States	759	10,164
Turkey	604	8,889
Saudi Arabia	1,486	8,081
Total	**25,570**	**308,185**
India as % of total	**21.8%**	**10.8%**

Source: SIPRI

The new administration has addressed some long-standing roadblocks.

- It has significantly pruned the list of defence items for which production requires licenses.
- The FDI limit has been increased from 26% to 49%.

- It is barring SOEs from bidding on some projects where capacity constraints are quite apparent (e.g. transport aircraft), but making domestic manufacturing compulsory at the same time.

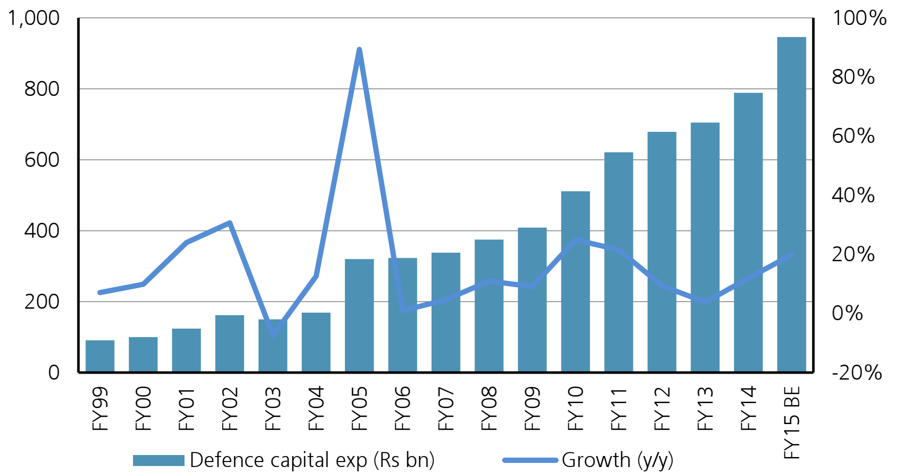
The intent is quite clear—encourage the domestic private sector to form JVs with foreign technology suppliers, and kick-start domestic manufacturing. However, there is a concern that the 49% FDI limit might not be attractive enough for foreign vendors to part with their technology and that the lack of assured orders could stymie investment decisions.

Nevertheless, we think evidence from the capital goods industry is quite reassuring. If the market opportunity is large enough (which the Indian defence market undoubtedly is), vendors may be willing to transfer technology even without equity participation. For instance, Siemens and Alstom passed supercritical technology for thermal power plants to BHEL without any equity participation. To address the issue of assured orders, bids can be designed in such a way that entails compulsory domestic manufacturing, but allows JVs to establish actual facilities after the bid has been won, as was done in the case of bulk tenders for supercritical thermal power plants by NTPC.

The defence sector presents a potential US$70bn market over the next five years

We estimate the defence sector presents a potential US$70bn market over the next five years. The FY15 defence capital budget increased 20% over FY14F (revised estimate) at US$15.7bn. Assuming the defence capital outlay will grow with nominal GDP, this should result in total capital spending of US$100bn over the next five years.

Figure 55: India's defence capital expenditure (Rs bn)



Note: BE stands for budget estimates.
Source: Union Budget, UBS

Of the US$100bn in capital spending estimated over the next five years, the domestic industry has a US$70bn opportunity if the government continues to build on the initial step taken towards achieving a 70% target for domestic procurement. New opportunities for domestic companies could primarily emerge from: 1) 155mm field guns; 2) submarines and other naval ships; 3) missile and weapon systems; and 4) electronic and communication systems procurement programmes.

Figure 56: Defence programmes that can translate into orders in the near term

Procurement programme	Estimated size (US$bn)	Likely participants
155mm field guns	4	Domestic private sector, foreign JVs, imports
Submarines	11	Mainly SOEs; private sector participation through sub-contracting
Aircraft carriers	5	Mainly SOEs
Destroyers & Frigates	9	Both public and private shipyards
Missile systems	10	SOEs in collaboration with foreign vendors; private sector participation through sub-contracting
Electronic and communication	5	Private sector JVs; SOEs
Total	44	

Source: UBS estimates

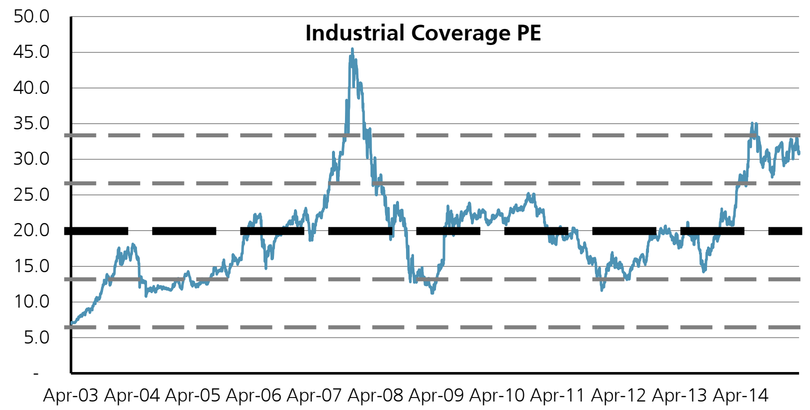
Increased domestic procurement of defence equipment presents strong growth opportunities for the industry. Government policy initiatives also look conducive. However, we are still hesitant to include opportunities from this sector in our overall growth estimates before the first meaningful orders are placed to domestic operators and JVs. There have been multiple false starts in the past, the multi-layer approval process remains tedious and evidence of large foreign vendors' willingness to form JVs has yet to emerge.

L&T and IRB are our top picks

With a number of impediments that have been constraining the investment cycle being resolved as well as fledgling signs of a recovery, we believe the Indian capex cycle is poised for an upturn. Evidence of a bottom being formed and expectations of a change in trajectory has resulted in stocks under our coverage rallying by 10-140% over the past 12 months. The market cap weighted index of cyclical industrial stocks within our coverage is now trading at 30.7x one-year forward PE, +1.6 standard deviation above the cyclical average of 20.2x.

The one-year forward PE for industrial stocks under our coverage is 30.7x, +1.6 SD above the cyclical average

Figure 57: One-year forward PE for industrial stocks we cover trading at +1.6SD



Note: Above data as of 18 March 2015.
Source: Bloomberg, UBS estimates

The current multiples clearly discount a change in the trajectory. Earnings expectations are not particularly sedate either—for the stocks under our coverage, consensus estimates a 28% earnings CAGR over FY15-17F, compared to a -16% CAGR over FY12-14 and a cyclical average of 19% over FY04-14.

There is room for re-rating if the uptick gathers momentum

However, if earnings expectations are met, stocks under our coverage could continue to outperform the broader markets, even in absence of a re-rating. In addition, we think there is room for a further re-rating if the uptick gathers momentum. The cyclical coverage index is 32% below the peak.

We prefer L&T and IRB based on four fundamental themes and our relative valuation framework

Given current valuations and our stance that growth outcomes would vary significantly across segments, we recommend a selective approach. We prefer L&T and IRB, which screen well both on a selection framework based on four themes and our relative valuation framework. We have a negative stance on BHEL, ABB, Cummins India, and Thermax—we believe a strong uptick has already been priced in and visibility remains hazy. We think investors can better benefit from a recovery in the power sector through utilities such as JSW Energy and Power Grid Corporation of India (PGCIL), where the upside would precede that for E&C vendors. For more details, please refer to our report, *India Power Utilities: Improving asset utilisation to drive returns* published today.

Figure 58: Valuation comparisons of E&C and infrastructure companies under our coverage

	Share price (Rs/share)	UBS rating	Price target	FY15E PE (x)	FY15E P/BV (x)	FY15E RoE (%)	FY16E PE (x)	FY16E P/BV (x)	FY16E RoE (%)	FY17E PE (x)	FY17E P/BV (x)	FY17E RoE (%)
IRB Infra	233.00	Buy	286.18	13.9	2.0	14.8%	13.0	1.8	14.4%	10.6	1.6	16.0%
L&T	1,700.65	Buy	2,107.83	35.9	3.9	11.2%	31.0	3.6	12.1%	22.3	3.2	15.3%
Crompton Greaves	171.90	Neutral	197.96	46.4	2.8	6.2%	21.9	2.6	12.2%	16.3	2.3	14.7%
ABB	1,268.45	Sell	979.95	117.6	9.6	8.3%	71.6	8.7	12.7%	51.8	7.7	15.8%
BHEL	258.30	Sell	201.99	28.1	1.8	6.6%	23.8	1.7	7.5%	25.6	1.7	6.6%
Cummins India	865.55	Sell	839.53	34.3	8.2	25.4%	28.8	7.2	26.7%	25.8	6.4	26.4%
Thermax	1,171.30	Sell	1,017.51	48.4	6.3	13.5%	38.3	5.6	15.5%	33.4	5.0	15.9%

Note: Above data as of 18 March 2015. For comparison purposes, ABB FY15/16/17E data refers to 2014/15/16E.
Source: Bloomberg, UBS estimates

Figure 59: L&T and IRB screen well on our fundamental theme framework

	Exposure to high-growth segments	Margin improvement	Increased capacity utilisation	Falling interest costs
IRB Infra	√√	√√	√√	√√
L&T	√√	√√	na	√
Crompton	√	√	na	na
ABB	×	√√	na	na
BHEL	××	x	na	na
Cummins	√	√	√	na
Thermax	×	√	na	na

Source: UBS estimates

L&T and IRB have the best exposure to high-growth segments

We expect a surge in infrastructure investments to drive the capex upcycle. Within the infrastructure space, the transportation and urban infrastructure segments have the largest pipeline of projects that can be awarded quickly. Order inflows from the buildings segment are expected to remain steady, buoyed by government spending on social infrastructure, but impacted by high residential real estate inventory. With the outlook still hazy for the power and commodity-driven industrial sectors, we expect order inflows from these segments to remain muted in the near term.

Figure 60: L&T and IRB have the best exposure to high-growth segments

Pillars of growth	Outlook	Exposure of companies
Roads and highways	Strong	L&T, IRB
Metro rail projects	Strong	L&T, ABB
Dedicated freight corridor	Strong	L&T, ABB, Crompton
Railways	Strong	L&T, BHEL, Crompton, Thermax, Cummins
Industrial corridors, smart cities and urban infra	Strong	L&T, Crompton, ABB
Renewables	Strong	L&T, BHEL, ABB, Thermax, Crompton
Thermal power	Weak	L&T, BHEL, Crompton, Thermax
Power T&D	Moderate	L&T, ABB, BHEL, Crompton
Commercial and real estate construction	Weak	L&T
Broad industrial ordering	Moderate	L&T, BHEL, ABB, Crompton, Thermax, Cummins
Commodity driven Industrial ordering	Weak	L&T, ABB, Crompton, Thermax, Cummins
Defence	Strong	L&T

Source: UBS estimates

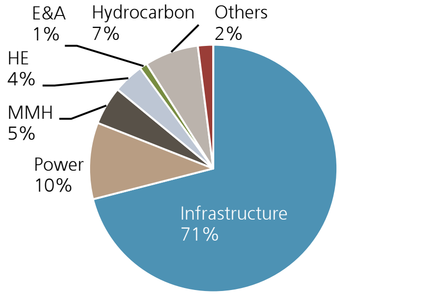
L&T (India's largest E&C company by a wide margin) is also the most diversified operator with exposure to almost all the sectors. However, 71% of its end-Q3 FY15 order book comprises of infrastructure orders. L&T includes buildings and factory orders within its infrastructure segment. We estimate L&T's building orders make up around 20% of the order book. Hence, around 50% of the order book is exposed to the core infrastructure sector, which we believe has the best outlook. The contribution from power and commodity-driven industrial sectors—where we expect the most delayed recovery—is only around 15%.

Around 50% of L&T's order book is exposed to the core infrastructure sector

Contribution from the power and commodity-driven industrial sectors is only around 15%.

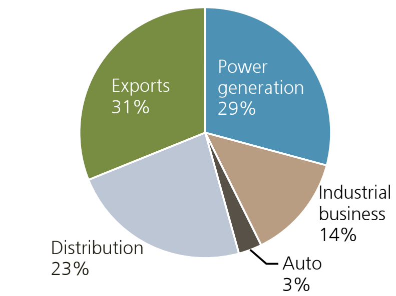
IRB is India's largest pure play road developer and contractor. We expect the highway sector to deliver the best order inflow growth over the near term. Cummins' engines have wide-ranging applications, from the broader industrial sector and infrastructure construction sites to mining equipment.

Figure 61: L&T—order book mix



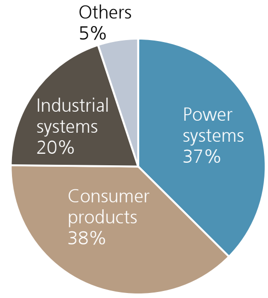
Note: Data as of end-Q3 FY15.
Source: Company data

Figure 62: Cummins—revenue mix



Note: FY14 data.
Source: Company data

Figure 63: Crompton—revenue mix

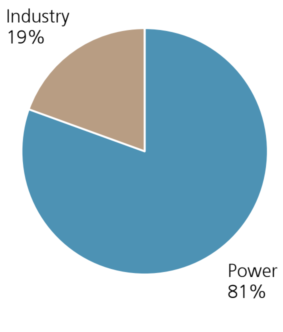


Note: The chart shows its parent company data for FY14.
Source: Company data

Crompton Greaves (Crompton) should benefit from exposure to the broader industrial sector's capex through its motor business and a steady pick-up in its consumer business. However, 37% of its parent company's revenue is derived from the power T&D business, where the prospects of an order inflow revival in the near term are quite dim. Similarly, while a pick-up in the broader industrial sector's capex should benefit Thermax, low visibility in the commodity-driven industrial and power segments (accounting for 50% of its revenue on a cycle average basis) should constrain its order inflow growth.

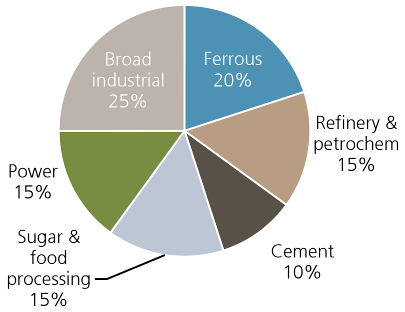
We think ABB and BHEL face the biggest challenge with regard to order inflow growth. BHEL relies almost entirely (around 80%) on the power generation business. Meanwhile, 55% of ABB's revenue comes from the power business (power systems and power products), which would struggle for order inflow growth. Order inflows in the industrial business (accounting for 45% of revenue) would benefit from a broad recovery, but could also be constrained by the fact that commodity sectors typically account for around one-third of ABB's industrial business.

Figure 64: BHEL—revenue mix



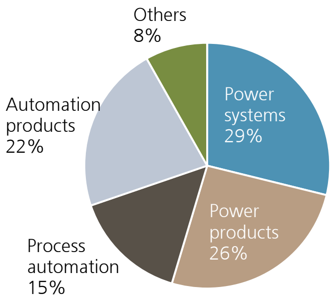
Note: FY14 data.
Source: Company data

Figure 65: Thermax—revenue mix



Note: Cyclical average data.
Source: Company data, UBS estimates

Figure 66: ABB—revenue mix



Note: 2013 data.
Source: Company data

ABB, Thermax and Crompton could record the highest margin expansion

Except for BHEL, we expect all the industrial companies under our coverage to record a margin expansion in FY15-17, driven by the following.

- Margins recovering from their cyclical lows
- A conducive input price environment, both for raw materials and wages
- Cost control initiatives implemented by the companies
- Favourable competitive dynamics

L&T's margins during FY14-15 were impacted by large losses on its Middle East hydrocarbon contracts

FY15E EBITDA margins for all the industrial stocks under our coverage (except for Cummins) are below their cyclical averages. In most cases, margins were driven down by negative surprises in projects won, with optimistic assumptions in a shrinking market. For example, L&T's margins during FY14-15 were impacted by large losses on its Middle East hydrocarbon contracts, where the company undertook more challenging projects to fill available capacity. Similarly, ABB ventured into rural electrification projects, a low-tech area and not the company's forte, which led to large losses.

Figure 67: FY15E margins for most industrial stocks are below cyclical averages

EBITDA margins	FY05-15E average	Peak	Trough	FY15E margins
Crompton parent co.	11.2%	16.2%	8.3%	8.8%
Thermax parent co.	11.4%	13.1%	8.8%	10.5%
ABB	7.6%	12.2%	1.3%	7.2%
L&T (parent co.)*	10.4%	13.0%	6.4%	9.1%
Cummins	15.4%	18.5%	12.0%	15.6%
BHEL	16.1%	19.5%	8.9%	8.7%

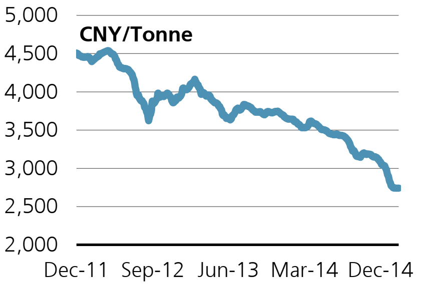
*Data for L&T includes the hydrocarbon business.
Source: Company data, Bloomberg, UBS estimates

L&T's troubled hydrocarbon projects would be almost fully executed by FY15

However, such loss-making orders are now winding down. For example, L&T's troubled hydrocarbon projects (totalling six projects) with an original value of Rs100bn would be almost fully executed by FY15. Given their recent experience, companies are now making more conservative assumptions while bidding.

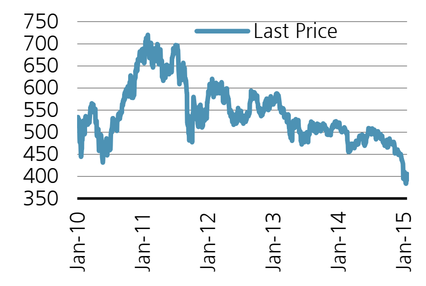
A drop in commodity prices should benefit all the companies under our coverage. We think companies with a large proportion of fixed-price orders in their backlog such as IRB, whose entire captive order book is fixed price, stand to gain the most. Similarly, companies such as Cummins, Crompton and Thermax should record margin gains in their standard product sales, where the cost gains are not competed away during bidding.

Figure 68: Steel prices have softened…



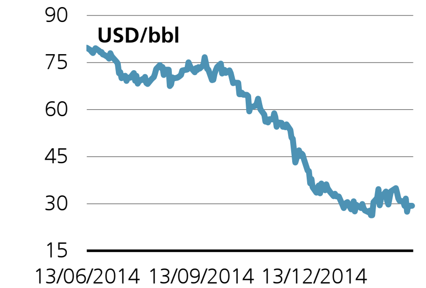
Source: Bloomberg, ISIXSTSC Index, Steel Price Index Steel Composite

Figure 69: …as have copper prices…



Note: S&P GSCI Copper Index Spot.
Source: Bloomberg

Figure 70: …and bitumen prices



Note: Bloomberg Index Spot.
Source: Bloomberg

Declining inflation and decelerating rural wage inflation should arrest wage growth and lower the contracting costs for all the companies under our coverage. Over the last three years, growth in employee costs has outpaced that for other operating expenses for most companies under our coverage.

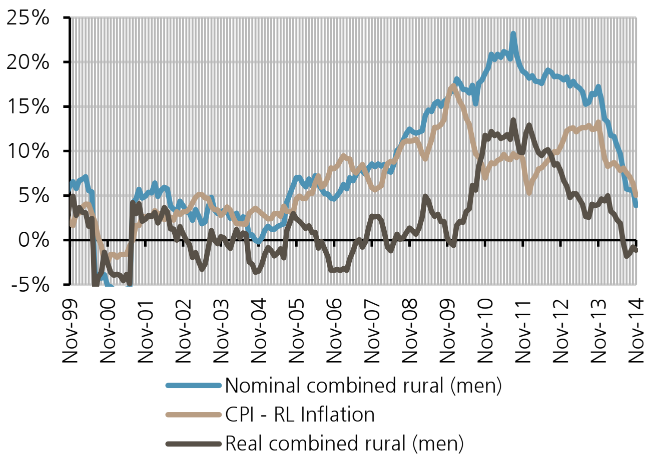
Declining inflation should benefit companies with a large proportion of fixed-price orders

Figure 71: Staff cost growth have outpaced that for other operating costs in the last three years

	FY11-14 staff costs CAGR	FY11-14 other operating costs CAGR
Crompton parent	15.4%	5.2%
Thermax	4.7%	9.8%
ABB India	8.9%	11.4%
L&T*	23.4%	5.8%
Cummins	10.1%	5.9%
BHEL	3.2%	1.6%

*Includes the hydrocarbon business.
Source: Company data, UBS

Figure 72: Declining rural wages could result in lower contracting costs



Source: Ministry of Labour

In addition to external factors, almost all the companies under our coverage have undertaken efficiency-enhancing programmes to lower their costs.

Figure 73: All companies have taken significant cost reduction measures

Company	Cost reduction programmes
ABB	Increasing localisation, which has partially aided its gross margin expansion by 600bp in FY13 compared to FY10
BHEL	A reduction in headcount through retirement; replacement staff costs less than retirees
	Faster localisation of supercritical products
Crompton Greaves	Centralised and cost-efficient sourcing of raw material
	Process improvements in transformer winding
	Focusing on low-cost manufacturing locations and adding capacity in India
	Restructuring of loss-making subsidiaries
Cummins	Programme to reduce direct material costs by 20% in three years
	30% reduction in indirect material costs over three years
	Cuts in discretionary spending
L&T	Design optimisation to reduce direct costs
	Better risk management processes in bidding to reduce negative surprises during execution; sourcing improvements to reduce raw material costs
Thermax	Cost-efficient sourcing of raw material, with increased localization
	Process improvements

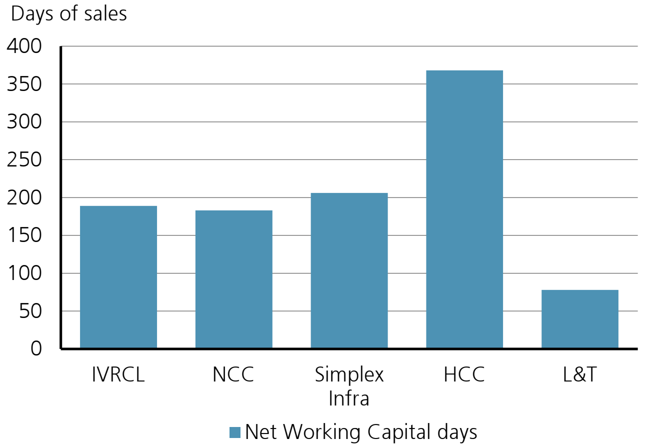
Source: Company data, UBS estimates

A few companies under our coverage would also benefit from lower competition in some of their business segments.

We expect L&T and IRB to benefit from lower competition

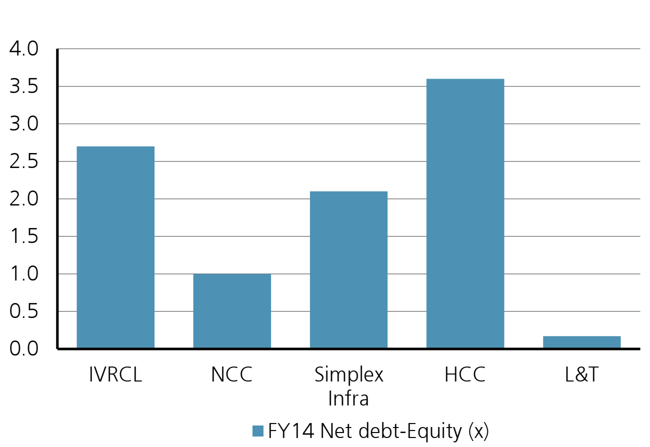
- We expect L&T to face less competition in large-ticket infrastructure projects given the stretched balance sheets and heightened working capital days of the rest of the contracting industry. Similarly, we think IRB will be better placed while bidding for road BOT projects.

Figure 74: Stretched working capital for contractors could limit their ability to bid for large projects…



Note: We use parent company data for L&T. Above data is for FY14.
Source: Company data, UBS

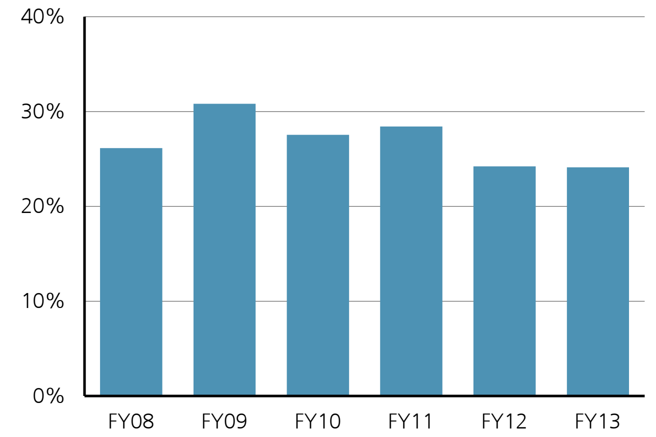
Figure 75: …as their balance sheets provide little room for further leverage



Note: We use parent company data for L&T.
Source: Company data, UBS

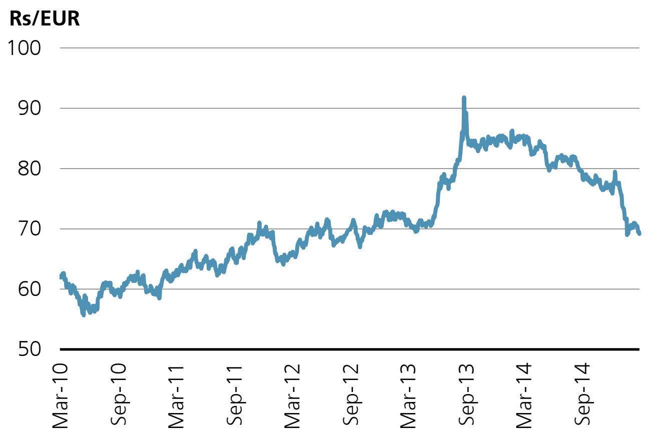
- Access to better technology from its parent company should give Cummins an advantage in higher-horsepower engines.
- A sharp depreciation in the euro versus the rupee should benefit MNC vendors with European headquarters, such as ABB, whose net imports form a high proportion of its revenue.

Figure 76: ABB India—imports as a percentage of sales



Source: Company data

Figure 77: Rupee appreciation against the euro should benefit European-based importers



Source: Bloomberg

Thus, we expect margins for all the industrial companies we cover (except for BHEL) to expand by 50-240bp over FY15-17E. Given pricing pressure in the power generation equipment industry and a lack of material operating leverage, we expect BHEL's margins to stagnate at FY14 levels.

Margins for all industrial companies we cover (except BHEL) could expand by 50-240bp over FY15-17E

Figure 78: Except for BHEL, we expect all industrial companies' margins to expand

	FY14	FY15E	FY16E	FY17E
BHEL	10.0	8.7	10.0	9.2
Crompton Greaves	5.1	5.0	6.1	6.6
Thermax	8.6	9.4	10.3	10.4
ABB	6.1	7.2	8.2	9.1
L&T	12.6	12.7	12.7	13.2
Cummins India	15.9	15.6	16.4	16.6
Average	**9.7**	**9.7**	**10.6**	**10.9**

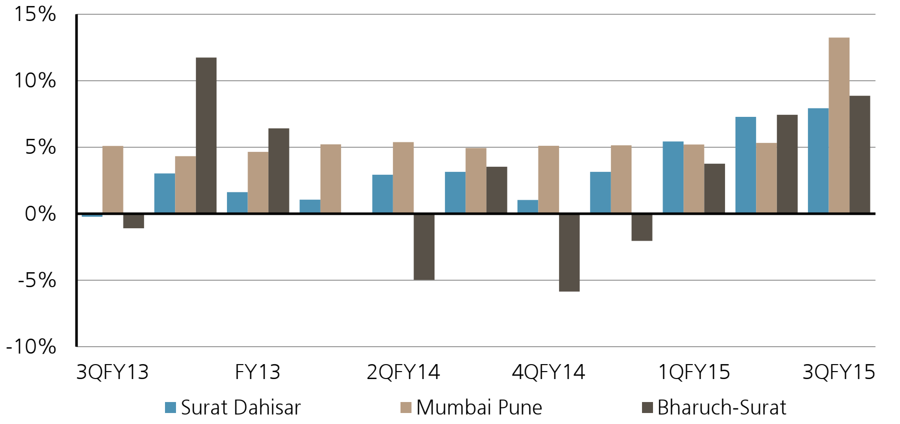
Source: Company data, UBS estimates

IRB could benefit from increasing utilisation

With the cycle bottoming, infrastructure asset owners such as IRB should benefit from accelerating traffic growth. Volume figures for these companies indicate that a recovery is already underway.

Infrastructure asset owners such as IRB should benefit from accelerating traffic growth

Figure 79: Traffic growth has started to improve for IRB



Source: Company data, UBS

The asset NAVs of infrastructure asset owners are quite sensitive to changes in growth assumptions. A 1ppt change in annual traffic growth would change IRB's asset value by 30%.

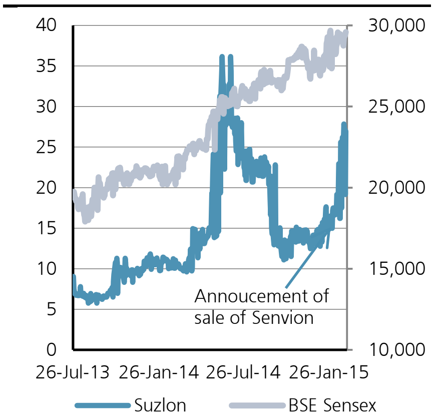
Asset owners could benefit from lower interest costs

UBS strategist Gautam Chhaochharia expects 10-year yields to fall by 100bp over the next 12 months, with scope for further positive surprises. Falling interest rates would not only positively impact leveraged asset owners with market-linked pricing through reduced interest costs, but would also boost the valuations of regulated-return asset owners through lower discount rates.

In the case of IRB, falling interest rates would have a marginal negative impact on its revenue as tariffs for most of its roads are indexed to the WPI, and a benign rate environment would imply that inflation is low. However, the net impact on its cash flow would still be positive.

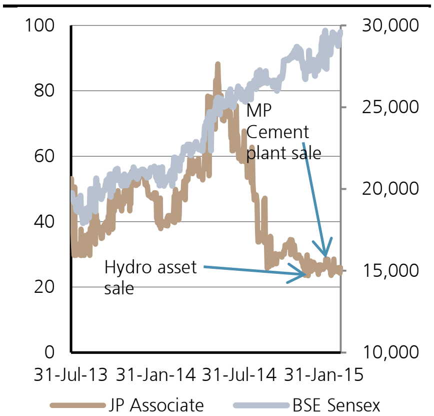
While we are quite positive on the impact of falling interest rates on asset owners, we are not as sanguine on the related theme of deleveraging through asset sales. The share price movements of three highly-leveraged companies, Jaiprakash Associates (JPA), GMR Infrastructure (GMR) and Suzlon Energy (Suzlon) after the commencement of asset sales suggests that deal valuations did not meet the market's expectations.

Figure 80: Suzlon versus BSE Sensex



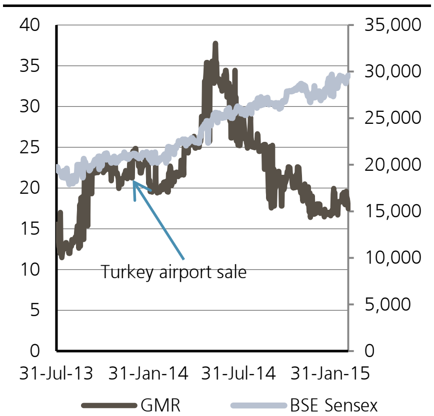
Source: Bloomberg, UBS

Figure 81: JPA versus BSE Sensex



Source: Bloomberg, UBS

Figure 82: GMR versus BSE Sensex



Source: Bloomberg, UBS

We think deleveraging via asset sales can be value-accretive to equity holders only if the transactions occur at higher-than-fair EV/EBITDA multiples. Otherwise, the sale of more attractive assets does nothing to the equity value, and at the same time, increases the discount rate of the residual portfolio, which has relatively riskier assets.

Deleveraging via asset sales is value-accretive only if the transactions occur at higher-than-fair EV/EBITDA multiples

Crompton and L&T have the most attractive valuations

To assess the sustainability or re-rating potential of the companies under our coverage, we first compare their FY16E PE to the cyclical averages and peaks.

Figure 83: Cummins and Thermax are trading at near peak multiples

	PE (x)			P/BV (x)		
	Average	Peak	FY16E	Average	Peak	FY16E
L&T	20.1	48.1	31.0	3.2	9.4	3.6
Cummins India	17.3	32.4	28.8	4.2	8.2	7.2
CRG parent	18.7	43.9	17.9	3.5	9.8	1.5
Thermax	20.4	42.2	38.0	4.7	12.2	5.6
ABB India	63.3	278.2	71.6	6.7	18.1	8.7
BHEL	16.5	47.9	23.8	3.5	11.6	1.7

Note: Above data as of 18 March 2015.
Source: Bloomberg, UBS estimates

While all the stocks we cover are trading at above their average PE, Cummins and Thermax are trading close to their peaks. ABB's PE average is distorted by high multiples during 2010-13, when its earnings collapsed. Adjusting for that period, ABB is also trading close to its peak.

While all the stocks we cover are trading above their average PE, Cummins and Thermax are trading close to their peaks

We think current valuations suggest that industrial stocks would benefit from:

(1) a growth recovery as order inflow improves; and

(2) higher margins from lower competition as the market expands and as revenue growth accelerates.

To segregate earnings growth expectations between the two drivers above, we recast FY16E PE multiples to reflect the average and historical peak margins (in place of our own estimates) to bring out revenue growth expectations that are embedded in valuations. We then compare these multiples against the companies' exposure to high-growth segments.

Figure 84: At cyclical average margin assumptions, L&T and Crompton are trading at near-average multiples

	PE at various margin levels			PAT Margin			Exposure to high growth segments
	Average	Peak	FY16E	Average	Peak	FY16E	FY15-17E
L&T	20.1	15.2	31.0	7.1	9.4	4.6	High
Cummins India	32.8	28.6	28.8	13.6	15.6	15.5	Medium
CRG parent	17.0	11.4	18.2	7.8	11.7	7.3	Medium
Thermax	31.0	24.8	38.0	7.1	8.9	5.8	Medium
ABB India	59.4	38.0	71.6	5.3	8.3	4.4	Low
BHEL	15.6	13.2	23.8	12.7	15.0	8.3	Low

Note: Above data as of 18 March 2015.
Source: Bloomberg, UBS estimates

At cyclical average margin assumptions, L&T and Crompton are trading at their average PE multiples. Their current valuations thus imply that these companies should revert to cyclical average growth and margins. In our view, expectations of L&T's growth accelerating to the cyclical average are realistic given its exposure to high-growth segments. As execution rates improve, we think the large order book should drive growth above the cyclical averages. Consolidated margins returning to cyclical averages will take some time due to accounting losses booked in infrastructure assets entering the operations phase.

For Crompton, we use its parent company numbers as losses for the overseas subsidiaries render an analysis based on consolidated numbers less useful. Current multiples imply a cessation of losses for the overseas subsidiaries and the parent company reverting to cyclical average growth and margins.

ABB, Cummins and Thermax's PE multiples remain quite demanding even at peak margin assumptions

ABB, Cummins and Thermax's PE multiples remain quite demanding even at peak margin assumptions. We find these assumptions quite unrealistic given that a significant proportion of their businesses have exposure to segments with weak growth prospects.

We think BHEL's valuations at both average and peak margin assumptions are reasonable when compared to the historical averages. However, there has been a structural deterioration in BHEL's power equipment business as we estimate that there is physical power generation overcapacity in India for the first time after large chronic deficits (please refer to our report *India Power Utilities: Improving asset utilisation to drive returns* for more details). Hence, we believe that deterioration in the company's growth and margin prospects is unlikely to reverse to the historical averages.

In addition to comparing the companies' current valuations to their own historical figures and growth outlook, we also look at their valuations relative to earnings growth expectations and their ROE profiles.

Figure 85: We believe Crompton, L&T and IRB have the most attractive valuations relative to their earnings growth expectations

	EPS			EPS CAGR	PE (x)	P/BV (X)	ROE (%)
	FY15E	FY16E	FY17E	FY15-17E	FY16E	FY16E	FY16E
IRB Infra	16.74	17.92	22.05	14.8%	13.0	1.8	14.4
BHEL	9.19	10.85	10.10	4.8%	23.8	1.7	7.5
Crompton Greaves	3.71	7.84	10.51	68.4%	21.9	2.6	12.2
Thermax	24.18	30.62	35.09	20.5%	38.3	5.6	15.5
ABB	10.78	17.72	24.50	50.7%	71.6	7.7	15.8
L&T	47.33	54.91	76.39	27.0%	31.0	3.6	12.1
Cummins India	25.24	30.05	33.58	15.3%	28.8	7.2	26.7

Note: Above data as of 18 March 2015.
Source: Bloomberg, UBS estimates

Risks to our investment view

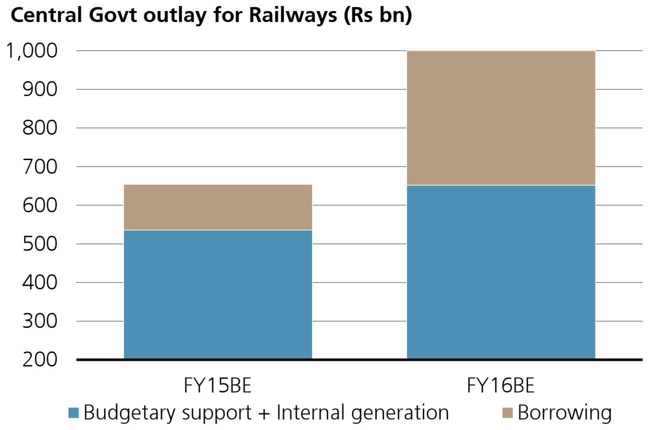
Delays in the removal of regulatory impediments

While the government does not need legislative approval to ease the environmental clearance process, changes in the land acquisition process will need parliamentary approval. The government has the requisite majority to overcome the lack of majority in the upper house of parliament (Rajya Sabha) in a joint session. However, there have been murmurs of protest on the proposed changes even within the ruling coalition. We think the government may need to steer the legislative agenda adroitly given possible delaying tactics in the upper house.

Delays in the uptick in public investments

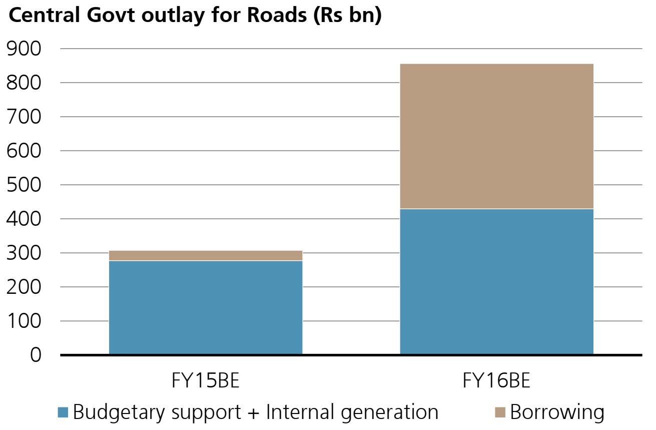
The FY16 budget has increased the central government's outlay for railways/roads by 52%/100% YoY. The increases are in line with our view that public investments in infrastructure will drive an uptick in investments. However, for both railways and roads, the bulk of the increase is proposed to be funded by enhanced borrowings from public institutions in these two sectors. Increased borrowings will fund 66% of the incremental outlay for railways and 92% for roads.

Figure 86: 66% of incremental outlay for railways to be funded by borrowings



Note: Data is sourced from government budget documents. BE=budget estimates.
Source: GoI, UBS

Figure 87: 92% of incremental outlay for roads to be funded by borrowings



Note: Data is sourced from government budget documents. BE=budget estimates.
Source: GoI, UBS

Public institutions in these sectors (such as the NHAI and IRFC) would have to create new financial models to support the enhanced borrowing levels. Delays in the finalisation of new institutional arrangements could hamper expected improvements in ordering activity.

A slower pick-up in ordering activity

We think the ramp-up in ordering activity in some well-identified projects has been underwhelming so far. For example, the NHAI has been able to award road projects totalling only around 2,000km of the 5,500km FY15 target by January 2015. Similarly, the DFC has not awarded any new track orders so far in FY15 and the budget announcement of a 750km FY16 target was below our expectation.

Sharp movements in crude oil prices

Further drops in crude oil prices could impact the existing order books of Indian E&C companies in the Middle East and North Africa (MENA) region, in addition to a decline in ordering activity. A sharp pullback in prices also poses a risk. Lower crude oil prices have provided the fiscal space for the government to step up public investments. Increasing the subsidy burden would constrain that flexibility again.

Company pages

Larsen & Toubro

Best positioned for an infra uptick

Best positioned to benefit from domestic investment uptick
Larsen & Toubro (L&T) is not only India's largest E&C company by a wide margin, it is also the most diversified: over the past five years, the key driver of order growth has changed from power, to buildings, to core infrastructure. The gap in scale vis-à-vis other contractors is only widening (1.5x the revenue of the next seven largest contractors combined in FY14, versus 1.2x in FY04), and L&T's revenue as a proportion of total capex in India has risen from 1.4% in FY04 to 2.0% in FY14. With the average ticket size of contracts increasing and smaller contractors constrained by their balance sheets, we believe L&T will continue to gain market share.

We expect execution pick-up to drive growth in the core E&C business
We believe L&T's E&C revenue growth over FY13-15E (9% CAGR) has lagged growth in its adjusted starting order book over the same period (21% CAGR). We expect this dichotomy to correct and forecast E&C revenue growth to accelerate to 21% over FY15-17, as execution of large new infrastructure orders ramps up. Improvement in cyclical conditions should boost execution rates, which are at cyclical lows. The drag from smaller segments will abate as the base effect kicks in over the next few quarters.

Contribution from new businesses should pick up
Losses in some new businesses such as shipbuilding and forging should narrow as utilisation of newly-built capacity gradually rises. Power JVs should benefit from recent order wins and a pick-up in traffic should help infrastructure assets. Execution ramp-up in captive real estate projects should enable recognition of higher margin revenue. We expect subsidiaries' total PAT (adjusted for dividends paid) to turn positive in FY17.

Valuation: initiate coverage with Buy rating and a price target of Rs2,107.83
At 31x FY16E consolidated PE, L&T is trading +1.5 SD above its cyclical average. Prima facie, the shares look expensive, but given it would be the pre-eminent beneficiary of a rise in domestic capex, we think valuations will sustain in the initial stage of the upcycle. Our SOTP-derived price target is 24% above the current level. The Middle Eastern business (about 25% of the Q3 FY15 order book) is the biggest risk factor in our view, as delays in execution could impact both revenue and margins.

Equities

India
Industrial, Diversified

12-month rating	**Buy**
	Prior: Not Rated
12m price target	**Rs2,107.83**
	Prior: -
Price	**Rs1,700.65**

RIC: LART.BO **BBG:** LT IB

Trading data and key metrics

52-wk range	Rs1,848.90-1,216.60
Market cap.	Rs1,573bn/US$25.1bn
Shares o/s	925m (ORD)
Free float	88%
Avg. daily volume ('000)	2,157
Avg. daily value (m)	Rs3,582.2
Common s/h equity (03/15E)	Rs405bn
P/BV (03/15E)	3.9x
Net debt / EBITDA (03/15E)	7.2x

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/15E	-	47.33	-	46.55
03/16E	-	54.91	-	62.01
03/17E	-	76.39	-	78.86

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Highlights (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenues	643,131	744,980	851,284	934,341	1,101,137	1,341,615	1,549,757	1,792,505
EBIT (UBS)	71,617	81,716	93,085	91,424	111,334	147,524	177,153	213,320
Net earnings (UBS)	46,090	47,402	45,680	43,921	51,000	70,952	84,077	96,112
EPS (UBS, diluted) (Rs)	50.32	51.48	49.38	47.33	54.91	76.39	90.52	103.47
DPS (Rs)	11.00	12.33	18.50	18.46	18.46	18.46	18.46	18.46
Net (debt) / cash	(436,279)	(583,625)	(760,563)	(854,577)	(944,880)	(1,054,850)	(1,103,488)	(1,112,073)

Profitability/valuation	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
EBIT margin %	11.1	11.0	10.9	9.8	10.1	11.0	11.4	11.9
ROIC (EBIT) %	12.8	10.7	9.5	8.0	8.8	10.4	11.4	12.9
EV/EBITDA (core) x	16.7	15.1	14.1	18.5	15.7	12.4	10.5	8.9
P/E (UBS, diluted) x	19.5	18.8	19.5	35.9	31.0	22.3	18.8	16.4
Equity FCF (UBS) yield %	(14.8)	(14.0)	(17.2)	(3.2)	(2.6)	(3.0)	1.6	5.0
Net dividend yield %	1.1	1.3	1.9	1.1	1.1	1.1	1.1	1.1

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs1,700.65 on 18 Mar 2015 22:38 HKT

Investment Thesis

Larsen & Toubro

12-month rating **Buy**

12m price target **Rs2,107.83**

Investment case

We believe L&T is best positioned to benefit from the infrastructure-led investment uptick in India, as the already large gap between L&T and other E&C vendors has widened further in recent years. While we expect order inflows to rise, L&T's revenue growth is not necessarily dependent on this; we believe improvements in execution rates from cyclical lows will be good enough to drive acceleration. We also see significant upside potential for our order inflow and revenue estimates from a possible kick-start of ordering for defence programmes. Subsidiaries in aggregate should start contributing to profit as increasing capacity utilisation narrows losses in new businesses.

Upside scenario

Higher execution rates and order inflows could result in revenue being 15% above our estimates. Better outcomes in Middle Eastern projects could drive a 50bps improvement in EBITDA margins. This could result in a 20% upgrade to earnings, translating to a valuation of Rs2,500/share.

Downside scenario

Delay in the domestic revival coupled with weakness in the Middle East could result in revenue acceleration failing to materialise. Further losses in Middle Eastern projects could translate to a 50-75bps downside to our margin estimates. This could lower earnings 25%, translating to a valuation of Rs1,750/share.

Upcoming catalysts

Evidence of an uptick in order inflows in traditional sectors, and wins in some large projects currently in the bidding stage. The finalisation of defence procurement programmes would be a re-rating trigger, in our view.

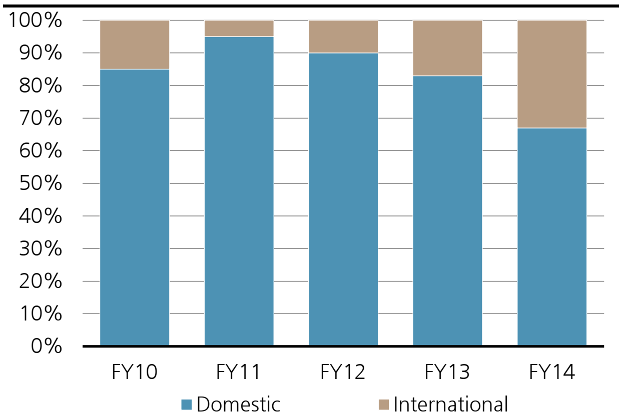
Business description

L&T is India's largest E&C company, with no real peers, given its breadth and scale of offerings. Businesses span a large spectrum, from heavy engineering, EPC contracts in hydrocarbon, process, metals and cement to construction and ownership of infrastructure assets. L&T manufactures power equipment and other industrial machinery. It also has financial and IT services businesses. It has a strong presence in the MENA region as well.

Industry outlook

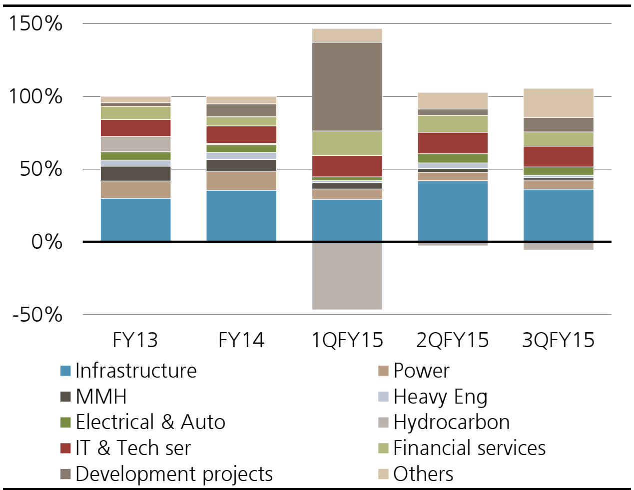
We expect a rise in infrastructure spending to benefit the E&C industry. With a number of contractors beset by balance sheet issues, we think stronger vendors stand to benefit disproportionately. Margins should start to edge upwards as the competitive intensity eases with an increasing pool of projects. Meanwhile, the general pick-up in the economy should improve the utilisation of infrastructure assets like road concessions.

Order inflow by region (%)



Source: Company data

EBIT by product segment



Source: Company data

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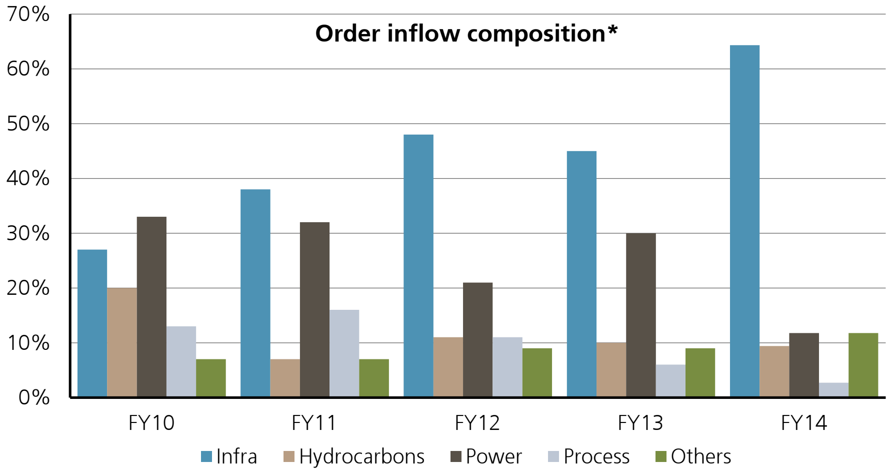
Best positioned for an uptick in domestic investment

L&T is not only India's largest E&C company by revenue by a wide margin, but also the most diversified: over the past five years, the key driver of order growth has changed from power, to buildings, to core infrastructure.

Figure 88: L&T's order inflow is not dependent on one or two sectors

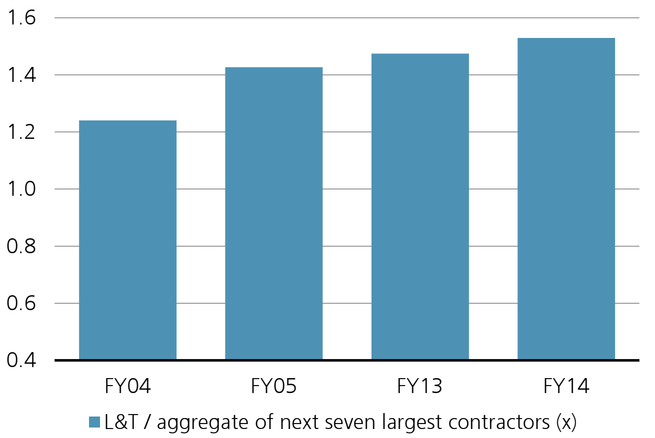


*Adjusted for change in segment definition.
Source: Company data, UBS

The increase in the proportion of infrastructure orders from 27% of overall order inflow in FY10 to 64% in FY14, and the decline in the share of orders from the power sector from 33% to 12% over the same period underscores that L&T has the ability to grow order book despite sluggishness in some large segments. Conversely, it also has the capability to benefit from upticks in multiple sectors.

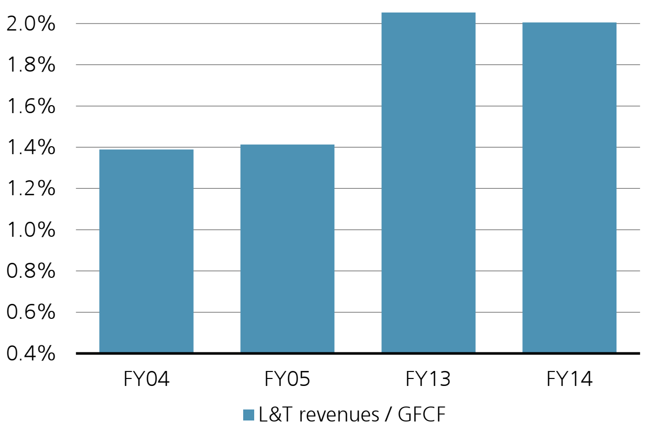
We think L&T will gain more than its fair share of orders as the domestic investment uptick unfolds. The gap in scale vis-à-vis other contractors is only widening (1.5x the revenue of the next seven largest contractors combined in FY14 versus 1.2x in FY04), and L&T's revenue as a proportion of India's gross fixed capital formation (GFCF) rose from 1.4% in FY04 to 2.0% in FY14.

Figure 89: L&T's revenue relative to other contractors has increased…



Source: Company data, UBS

Figure 90: … and so has its revenue as proportion of India's GFCF



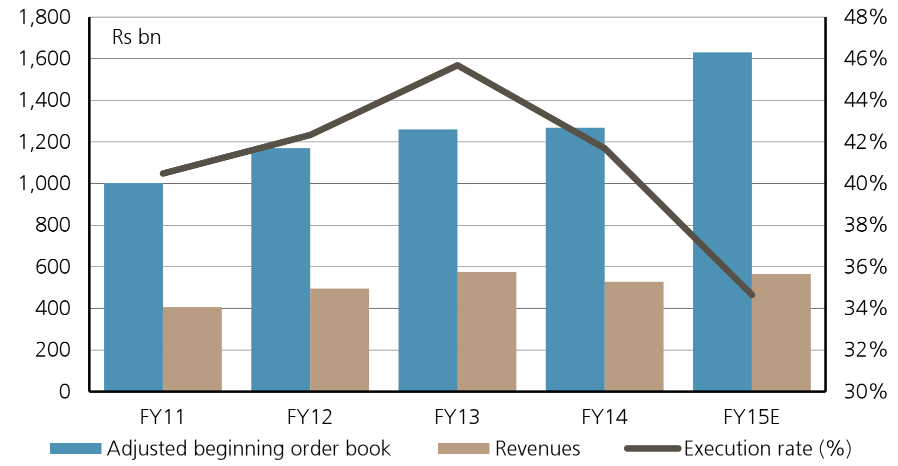
Source: Company data, CEIC, UBS

With the average ticket size of contracts increasing, and smaller contractors constrained by balance sheets, we believe L&T will continue to gain market share.

Revenue growth acceleration not dependent on rising order inflow

In recent years, L&T's parent E&C revenue growth has lagged growth in its adjusted starting order book; we estimate FY13-15 CAGRS of 9% and 21%, respectively.

Figure 91: Execution rate at a five-year low



Note: Starting order books adjusted for non-moving orders; like-to-like segments.
Source: Company data, UBS estimates

FY15E execution rate of 34.5% is a five-year low

We estimate L&T's FY15 execution rate at 34.5%, a five-year low. (In calculating execution rates we exclude slow-moving orders from the order book in each period and use like-to-like order book and revenue to adjust for changes in segment composition during the period.)

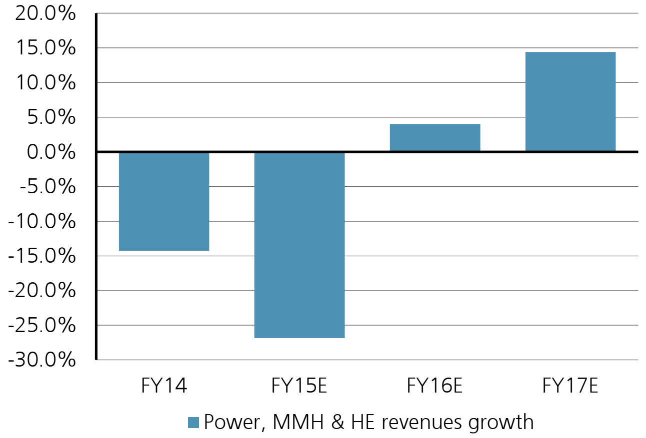
We forecast E&C revenue growth to accelerate to 20.7% over FY15-17 as execution ramps up in recently won large infrastructure orders. A gradual improvement in cyclical conditions should boost execution rates, which are at cyclical lows.

Another driver of revenue sluggishness for L&T has been sharp revenue declines in the: 1) power; 2) heavy engineering (HE); and 3) metallurgical & material handling (MMH) segments over the past two years. Revenue in the power segment is set to recover, as the company won two large orders in FY15 and some large projects are in the pipeline. However, we think the MMH segment will continue to stagnate, given the poor visibility on a metal capex revival in India, while the HE segment will continue to face headwinds from a lack of export traction to Europe and China in the near term.

Drag from the smaller segments will abate as revenue from them declines as a proportion of core E&C revenue

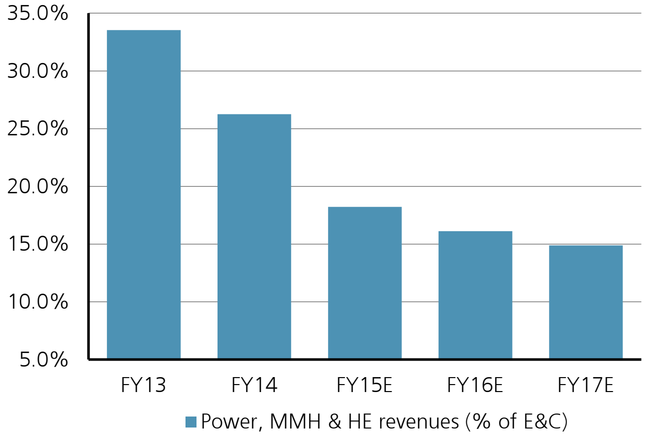
However, the impact on overall growth due to still lower growth in these segments should be more muted going forward, as we estimate revenue from these businesses declined from 33.5% of core E&C revenue in FY13 to 18.2% in FY15E.

Figure 92: Expect revenue decline in smaller segments to end, led by the power segment



Source: Company data, UBS estimates

Figure 93: Drag on overall growth should be lower, as revenue from these segments decline as a proportion of of overall revenue



Source: Company data, UBS estimates

Defence orders could drive HE revenue growth in the medium term

Defence orders could drive order inflows and revenue growth in the medium term

In consortium with its technology partners, L&T completed field trials for tracked and towed 155mm howitzers in FY14. We estimate the total procurement cost of various artillery weapons could total up to US$4bn over the next three to four years. L&T, along with its partners, has also qualified in India's first two "Make" programmes:

- The Tactical Communication System (we estimate an eventual order size of US$2bn).
- The Battlefield Management System (BMS); (we estimate an eventual order size of US$8bn).

The "Make" programmes are part of the government's initiative to develop indigenous defence capabilities. Two consortia have been chosen to develop a prototype for each of the projects, and the government will defray 80% of the development costs. Once a prototype is developed and passes various tests, orders for each of the two systems will be split between the two consortia — with the winner getting a larger share.

Order inflows from these projects will take time. For example, L&T won the order to develop the Tactical Communication System in Q1 FY13 and actual ordering is still a while away. The much larger BMS project could potentially take even longer.

However, the new government is expediting various defence procurement programmes. The formal award of even one large order would create expectations of further awards, in our view.

Expect contribution from new businesses to pick up

We expect execution ramp-up in captive real estate projects to enable recognition of higher margin revenue in the parent company. We estimate real estate business boosted the overall parent company EBITDA margin by about 60bps in FY15.

Losses in some new businesses, such as shipbuilding, should narrow as utilisation of newly-built capacity gradually rises. With the government's increasing focus on indigenous defence production, the new shipyard should benefit from naval orders. In our view, the naval orders most likely to be finalised over the next one to three years are: 1) two landing platform docks, each costing US$1bn; and 2) submarine orders aggregating US$10bn.

Losses in new businesses such as shipbuilding should narrow as utilisation of newly built capacity gradually increases

The utilisation of power equipment JVs should improve with recent order wins and further projects in the bidding pipeline. Infrastructure assets should benefit from a pickup in traffic as the economy improves. We expect subsidiaries' aggregate PAT (adjusted for dividends paid to the parent) to turn positive in FY17.

Figure 94: Consolidated EPS to exceed parent EPS in FY17E

Rs	FY13	FY14	FY15E	FY16E	FY17E
Parent EPS	**50.1**	**52.8**	**53.4**	**62.1**	**74.5**
IT & Tech Services	6.2	7.2	11.1	14.1	16.9
Financial Services	4.9	5.5	6.4	7.7	9.0
Hydrocarbon	1.1	0.1	-9.9	-0.7	3.4
Manufacturing JVs	0.7	1.5	1.6	1.8	2.0
Power equipment JVs	0.3	0.1	0.8	0.9	1.1
Forging	-1.2	-2.7	-2.7	-2.5	-2.2
Ship building	-2.1	-7.0	-6.5	-5.9	-4.6
L&T IDPL asset sale			12.4		
Infra/ others / dividend elimination	-8.4	-8.4	-19.3	-22.5	-23.7
Consolidated EPS	**51.6**	**49.2**	**47.3**	**54.9**	**76.4**

Source: Company data, UBS estimates

Best play on infrastructure uptick; initiate with Buy rating, price target 24% above current level

At 31x FY16E consolidated PE, L&T is trading at +1.5 SD above its cyclical average. Prima facie, the shares look expensive, but given our view that it is best positioned to benefit from the uptick in domestic capex, we believe valuations in the initial stage of the upcycle factor in acceleration in both earnings and order inflow. In our view, the above-average multiples also factor in the probability of defence opportunities finally materialising. Though order inflows and revenue from the defence sector are still a while away, the size of the opportunity is significant.

L&T is trading at +1.5 SD above its cyclical average

We value the parent business by applying the current multiples to FY17E earnings. We value the IT business at peer average multiples and the listed finance holdings company at the market price. Infrastructure investments and other subsidiaries are valued at 1.5x invested equity. We expect a 21% FY15-17E earnings CAGR to drive returns.

We think valuations in the initial part of the upcycle factor in an acceleration in both earnings and order inflow

Figure 95: Our SOTP-based price target is 24% above the current level

	Rs m	Rs per share	% of total	Valuation basis
Equity value of parent business	1,384,447	1,490	71%	24x FY17E parent earnings adj. for sub dividends; in line with early cycle multiples
Hydrocarbon business	50,090	54	3%	16x FY17E earnings; at a discount to parent multiples given risk in MENA region
Information Technology	188,169	203	9%	12x FY17E earnings; in line with listed mid-cap IT company multiples
LT Finance Holdings	95,153	102	5%	Current market price
Infrastructure assets	135,000	145	7%	1.5x invested equity
Other subsidiaries	105,000	113	5%	1.5x invested equity
Total value	**1,957,860**	**2,108**	**100%**	

Source: UBS estimates

Risk

Middle East exposure poses the biggest risk

The Middle East business (about 25% of the Q3 FY15 order book) is the largest risk factor, in our view. While order inflows from the region are likely to slow down, delay in the execution of existing contracts is more worrisome for us as it would impact both revenue and margins.

According to management, none of its existing orders have been deferred, as governments in the region are focusing on increasing infrastructure spending to cushion the impact of falling oil prices.

A slower-than-expected pickup in ordering activity in identified pipelines would pose a risk to our order inflow and medium-term revenue assumptions. The ramp-up in ordering activity in some well-identified projects has been underwhelming thus far. For example, the National Highways Authority of India (NHAI) has a target of awarding 5,500km of road projects in FY15, but by January 2015 had only awarded about 2,000km. Similarly, the Dedicated Freight Corridor Corporation of India (DFCCI) has not awarded any new track orders in FY15 and the announcement of a 750km target in the budget for FY16 was below our expectations.

Larsen & Toubro (LART.BO)

Income statement (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Revenues	**643,131**	**744,980**	**851,284**	**934,341**	*9.8*	**1,101,137**	*17.9*	**1,341,615**	**1,549,757**	**1,792,505**
Gross profit	170,946	198,051	234,336	257,628	*9.9*	303,960	*18.0*	376,155	437,151	509,598
EBITDA (UBS)	**87,420**	**98,087**	**107,543**	**118,552**	*10.2*	**140,127**	*18.2*	**177,737**	**208,492**	**245,939**
Depreciation & amortisation	(15,803)	(16,371)	(14,458)	(27,128)	*87.6*	(28,793)	*6.1*	(30,212)	(31,339)	(32,619)
EBIT (UBS)	**71,617**	**81,716**	**93,085**	**91,424**	*-1.8*	**111,334**	*21.8*	**147,524**	**177,153**	**213,320**
Associates & investment income	8,751	11,344	9,912	9,889	*-0.2*	10,805	*9.3*	10,759	9,607	8,341
Other non-operating income	0	0	0	0	-	0	-	0	0	0
Net interest	(11,019)	(20,950)	(31,414)	(33,146)	*-5.5*	(38,529)	*-16.2*	(41,693)	(45,585)	(56,188)
Exceptionals (incl goodwill)	568	4,149	3,340	2,493	*-25.4*	0	-	0	0	0
Profit before tax	**69,917**	**76,258**	**74,922**	**70,659**	*-5.7*	**83,610**	*18.3*	**116,590**	**141,176**	**165,472**
Tax	(22,912)	(23,985)	(26,284)	(23,346)	*11.2*	(31,660)	*-35.6*	(44,588)	(56,048)	(68,310)
Profit after tax	**47,005**	**52,273**	**48,638**	**47,314**	*-2.7*	**51,950**	*9.8*	**72,002**	**85,127**	**97,162**
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	(348)	(722)	382	(900)	-	(950)	*-5.6*	(1,050)	(1,050)	(1,050)
Extraordinary items	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	**46,657**	**51,551**	**49,020**	**46,414**	*-5.3*	**51,000**	*9.9*	**70,952**	**84,077**	**96,112**
Net earnings (UBS)	**46,090**	**47,402**	**45,680**	**43,921**	*-3.9*	**51,000**	*16.1*	**70,952**	**84,077**	**96,112**
Tax rate (%)	32.8	31.5	35.1	33.0	*-5.8*	37.9	*14.6*	38.2	39.7	41.3

Per share (Rs)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
EPS (UBS, diluted)	50.32	51.48	49.38	47.33	*-4.1*	54.91	*16.0*	76.39	90.52	103.47
EPS (local GAAP, diluted)	50.94	55.98	52.99	50.02	*-5.6*	54.91	*9.8*	76.39	90.52	103.47
EPS (UBS, basic)	50.32	51.48	49.38	47.33	*-4.1*	54.91	*16.0*	76.39	90.52	103.47
Net DPS (Rs)	11.00	12.33	18.50	18.46	*-0.2*	18.46	*0.0*	18.46	18.46	18.46
Cash EPS (UBS, diluted)[1]	67.57	69.25	65.01	76.57	*17.8*	85.90	*12.2*	108.91	124.26	138.59
Book value per share	334.79	367.09	407.75	437.53	*7.3*	472.27	*7.9*	528.58	599.09	682.60
Average shares (diluted)	915.94	920.85	925.00	927.88	*0.3*	928.85	*0.1*	928.85	928.85	928.85

Balance sheet (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Cash and equivalents	35,221	36,312	40,966	11,598	*-71.7*	22,967	*98.0*	29,587	28,982	25,386
Other current assets	722,402	887,719	1,109,608	1,215,483	*9.5*	1,393,250	*14.6*	1,642,387	1,833,504	2,047,032
Total current assets	**757,623**	**924,031**	**1,150,574**	**1,227,082**	*6.6*	**1,416,217**	*15.4*	**1,671,974**	**1,862,485**	**2,072,417**
Net tangible fixed assets	219,926	248,780	297,140	352,380	*18.6*	383,774	*8.9*	421,465	452,248	450,391
Net intangible fixed assets	123,210	168,620	168,620	168,620	*0.0*	168,620	*0.0*	168,620	168,620	168,620
Investments / other assets	95,598	89,617	83,894	83,894	*0.0*	83,894	*0.0*	83,894	83,894	83,894
Total assets	**1,196,356**	**1,431,048**	**1,700,227**	**1,831,975**	*7.7*	**2,052,505**	*12.0*	**2,345,952**	**2,567,246**	**2,775,322**
Trade payables & other ST liabilities	360,755	402,666	444,145	483,161	*8.8*	569,414	*17.9*	693,768	801,402	926,930
Short term debt	126,896	193,987	193,987	213,385	*10.00*	234,724	*10.00*	258,196	284,016	312,417
Total current liabilities	**487,651**	**596,653**	**638,131**	**696,546**	*9.2*	**804,137**	*15.4*	**951,964**	**1,085,417**	**1,239,347**
Long term debt	344,605	425,951	607,543	652,790	*7.4*	733,124	*12.3*	826,241	848,454	825,042
Other long term liabilities	52,698	43,319	45,646	45,646	*0.0*	45,646	*0.0*	45,646	45,646	45,646
Preferred shares	0	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	**884,954**	**1,065,922**	**1,291,319**	**1,394,982**	*8.0*	**1,582,907**	*13.5*	**1,823,851**	**1,979,517**	**2,110,035**
Common s/h equity	293,868	338,597	377,116	404,661	*7.3*	436,791	*7.9*	488,874	554,082	631,326
Minority interests	17,535	26,529	31,792	32,332	*1.7*	32,807	*1.5*	33,227	33,647	33,962
Total liabilities & equity	**1,196,356**	**1,431,048**	**1,700,227**	**1,831,975**	*7.7*	**2,052,505**	*12.0*	**2,345,952**	**2,567,246**	**2,775,322**

Cash flow (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Net income (before pref divs)	46,657	51,551	49,020	46,414	*-5.3*	51,000	*9.9*	70,952	84,077	96,112
Depreciation & amortisation	15,803	16,371	14,458	27,128	*87.6*	28,793	*6.1*	30,212	31,339	32,619
Net change in working capital	(133,150)	(123,406)	(180,411)	(66,858)	*62.9*	(91,514)	*-36.9*	(124,783)	(83,483)	(88,000)
Other operating	22,912	23,985	26,284	23,346	*-11.2*	31,660	*35.6*	44,588	56,048	68,310
Operating cash flow	**(47,777)**	**(31,499)**	**(90,649)**	**30,029**	-	**19,939**	*-33.6*	**20,969**	**87,981**	**109,042**
Tangible capital expenditure	(52,804)	(45,225)	(62,818)	(79,974)	*-27.3*	(60,188)	*24.7*	(67,903)	(62,122)	(30,763)
Intangible capital expenditure	(26,269)	(45,410)	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	0	0	0	0	-	0	-	0	0	0
Other investing	1,972	1,238	8,123	0	-	0	-	0	0	0
Investing cash flow	**(77,101)**	**(89,398)**	**(54,695)**	**(79,974)**	*-46.2*	**(60,188)**	*24.7*	**(67,903)**	**(62,122)**	**(30,763)**
Equity dividends paid	(11,119)	(12,528)	(18,869)	(18,869)	*0.0*	(18,869)	*0.0*	(18,869)	(18,869)	(18,869)
Share issues / (buybacks)	7,282	9,000	5,886	540	*-90.8*	475	*-12.0*	420	420	315
Other financing	143,518	148,437	181,592	64,646	*-64.40*	101,672	*57.27*	116,590	48,033	4,989
Change in debt & pref shares	143,518	148,437	181,592	64,646	*-64.40*	101,672	*57.27*	116,590	48,033	4,989
Financing cash flow	**283,198**	**293,346**	**350,201**	**110,964**	*-68.3*	**184,950**	*66.7*	**214,730**	**77,616**	**(8,576)**
Cash flow inc/(dec) in cash	**158,320**	**172,449**	**204,857**	**61,018**	*-70.2*	**144,701**	*137.1*	**167,797**	**103,476**	**69,703**
FX / non cash items	(159,553)	(171,359)	(200,203)	(90,386)	*54.9*	(133,332)	*-47.5*	(161,178)	(104,081)	(73,299)
Balance sheet inc/(dec) in cash	**(1,233)**	**1,091**	**4,654**	**(29,367)**	-	**11,369**	-	**6,619**	**(605)**	**(3,596)**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

Larsen & Toubro (LART.BO)

Valuation (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
P/E (local GAAP, diluted)	19.2	17.3	18.2	34.0	31.0	22.3	18.8	16.4
P/E (UBS, diluted)	19.5	18.8	19.5	35.9	31.0	22.3	18.8	16.4
P/CEPS	14.5	14.0	14.8	22.2	19.8	15.6	13.7	12.3
Equity FCF (UBS) yield %	(14.8)	(14.0)	(17.2)	(3.2)	(2.6)	(3.0)	1.6	5.0
Net dividend yield (%)	1.1	1.3	1.9	1.1	1.1	1.1	1.1	1.1
P/BV x	2.9	2.6	2.4	3.9	3.6	3.2	2.8	2.5
EV/revenues (core)	2.3	2.0	1.8	2.4	2.0	1.6	1.4	1.2
EV/EBITDA (core)	16.7	15.1	14.1	18.5	15.7	12.4	10.5	8.9
EV/EBIT (core)	20.4	18.1	16.3	24.0	19.7	14.9	12.4	10.3
EV/OpFCF (core)	20.4	18.1	16.3	24.0	19.7	14.9	12.4	10.3
EV/op. invested capital	2.6	1.9	1.6	1.9	1.7	1.6	1.4	1.3

Enterprise value (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Market cap.	859,642	869,623	891,696	1,572,897	1,572,897	1,572,897	1,572,897	1,572,897
Net debt (cash)	672,094	672,094	672,094	672,094	672,094	672,094	672,094	672,094
Buy out of minorities	17,535	26,529	31,792	32,332	32,807	33,227	33,647	33,962
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	**1,549,271**	**1,568,246**	**1,595,582**	**2,277,323**	**2,277,798**	**2,278,218**	**2,278,638**	**2,278,953**
Non core assets	(87,895)	(87,675)	(81,090)	(81,090)	(81,090)	(81,090)	(81,090)	(81,090)
Core enterprise value	**1,461,377**	**1,480,571**	**1,514,492**	**2,196,234**	**2,196,709**	**2,197,129**	**2,197,549**	**2,197,864**

Growth (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenue	23.6	15.8	14.3	9.8	17.9	21.8	15.5	15.7
EBITDA (UBS)	14.6	12.2	9.6	10.2	18.2	26.8	17.3	18.0
EBIT (UBS)	13.5	14.1	13.9	-1.8	21.8	32.5	20.1	20.4
EPS (UBS, diluted)	10.6	2.3	-4.1	-4.1	16.0	39.1	18.5	14.3
Net DPS	13.8	12.1	50.0	-0.2	0.0	0.0	0.0	0.0

Margins & Profitability (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Gross profit margin	26.6	26.6	27.5	27.6	27.6	28.0	28.2	28.4
EBITDA margin	13.6	13.2	12.6	12.7	12.7	13.2	13.5	13.7
EBIT margin	11.1	11.0	10.9	9.8	10.1	11.0	11.4	11.9
Net earnings (UBS) margin	7.2	6.4	5.4	4.7	4.6	5.3	5.4	5.4
ROIC (EBIT)	12.8	10.7	9.5	8.0	8.8	10.4	11.4	12.9
ROIC post tax	8.5	7.2	6.0	5.2	5.4	6.4	6.9	7.6
ROE (UBS)	16.9	15.0	12.8	11.2	12.1	15.3	16.1	16.2

Capital structure & Coverage (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Net debt / EBITDA	5.0	6.0	7.1	7.2	6.7	5.9	5.3	4.5
Net debt / total equity %	140.1	159.8	186.0	195.6	201.2	202.0	187.8	167.2
Net debt / (net debt + total equity) %	58.4	61.5	65.0	66.2	66.8	66.9	65.2	62.6
Net debt/EV %	29.9	39.4	50.2	38.9	43.0	48.0	50.2	50.6
Capex / depreciation %	NM	NM	NM	NM	NM	NM	198.2	94.3
Capex / revenue %	8.2	6.1	7.4	8.6	5.5	5.1	4.0	1.7
EBIT / net interest	6.5	3.9	3.0	2.8	2.9	3.5	3.9	3.8
Dividend cover (UBS)	4.6	4.2	2.7	2.6	3.0	4.1	4.9	5.6
Div. payout ratio (UBS) %	21.9	24.0	37.5	39.0	33.6	24.2	20.4	17.8

Revenues by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	643,131	744,980	851,284	934,341	1,101,137	1,341,615	1,549,757	1,792,505
Total	**643,131**	**744,980**	**851,284**	**934,341**	**1,101,137**	**1,341,615**	**1,549,757**	**1,792,505**

EBIT (UBS) by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	71,617	81,716	93,085	91,424	111,334	147,524	177,153	213,320
Total	**71,617**	**81,716**	**93,085**	**91,424**	**111,334**	**147,524**	**177,153**	**213,320**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

IRB Infrastructure

Best positioned in segment with highest visibility

Equities

India
Transportation Services

12-month rating	**Buy**
	Prior: Not Rated
12m price target	**Rs286.18**
	Prior: -
Price	**Rs233.00**

RIC: IRBI.BO **BBG:** IRB IB

Trading data and key metrics

52-wk range	Rs283.05-94.50
Market cap.	Rs77.4bn/US$1.23bn
Shares o/s	332m (ORD)
Free float	39%
Avg. daily volume ('000)	2,767
Avg. daily value (m)	Rs691.9
Common s/h equity (03/15E)	Rs39.3bn
P/BV (03/15E)	2.0x
Net debt / EBITDA (03/15E)	5.1x

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/15E	-	16.74	-	16.17
03/16E	-	17.92	-	18.30
03/17E	-	22.05	-	21.01

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Largest road developer, best positioned in segment with the highest visibility

IRB Infrastructure Developers (IRB), India's largest pure-play road developer, is well positioned to benefit from a sharp uptick in ordering activity. Future projects could also be won at potentially higher IRRs as numerous peers are grappling with debt overhang and some larger companies, like L&T, prefer Engineering Procurement & Construction (EPC) over Build Operate and Transfer (BOT) contracts. IRB is among the few who still prefer BOT projects. Given the prospects of value-accretive growth and an increase in the value of existing assets, IRB is our preferred pick in the road sector.

Uptick in traffic growth enhances value of existing assets

A 1ppt change in annual traffic growth assumptions has a large impact on the equity value of typical road assets, ranging from 10-100%. Following a gradual recovery in traffic over the past two to three quarters, IRB's operational assets recorded a sharp uptick in traffic growth in Q3 FY15. We expect the momentum to continue as the economy gradually picks up. A more constructive view on traffic growth underpins our Rs189/share DCF-based valuation for existing assets.

High margins in contracting business not a concern, in our view

The in-house construction business facilitates IRB's track record of commissioning assets on time and within budget. The EPC business focuses almost exclusively on captive projects and reports 25-30% EBITDA margins, almost double the industry average. Since both arms are fully in-house, we view this as just a choice about pacing cash flows based on business imperatives. Attributing a low multiple to the EPC business addresses concerns on long-term sustainability, as it effectively discounts just the near-term cash flows.

Valuation: initiate coverage with Buy rating and Rs286.18 price target

We estimate the value of existing assets and the EPC arm at Rs245/share, based on DCF of individual assets. Given the prospects of a sharp uptick in highway award activity, IRB's favourable positioning and the high likelihood of value accretive project wins, we add Rs41/share to our SOTP valuation, derived from value accretion from our estimated Rs40-50bn of project wins a year over the next three years. Key risks include the high sensitivity to traffic volume and a failure to win fresh orders at anticipated IRRs.

Highlights (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenues	31,307	36,872	37,319	39,906	48,567	55,463	63,284	71,497
EBIT (UBS)	10,700	11,918	12,766	14,918	18,630	21,155	23,745	26,234
Net earnings (UBS)	4,842	5,567	4,591	5,563	5,957	7,330	9,408	11,301
EPS (UBS, diluted) (Rs)	14.57	16.75	13.81	16.74	17.92	22.05	28.31	34.00
DPS (Rs)	6.00	6.00	4.00	4.85	5.19	6.00	6.00	6.00
Net (debt) / cash	(50,160)	(73,051)	(95,829)	(112,572)	(133,006)	(161,121)	(159,684)	(153,082)

Profitability/valuation	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
EBIT margin %	34.2	32.3	34.2	37.4	38.4	38.1	37.5	36.7
ROIC (EBIT) %	15.4	12.8	10.7	10.5	11.3	11.0	11.2	12.2
EV/EBITDA (core) x	10.3	7.9	6.6	7.3	6.0	5.3	4.8	4.4
P/E (UBS, diluted) x	11.5	7.8	6.7	13.9	13.0	10.6	8.2	6.9
Equity FCF (UBS) yield %	(30.4)	(39.3)	(72.7)	(19.3)	(23.9)	(33.3)	5.7	13.0
Net dividend yield %	3.6	4.6	4.4	2.1	2.2	2.6	2.6	2.6

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs233.00 on 18 Mar 2015 22:38 HKT

Investment Thesis

IRB Infrastructure

12-month rating **Buy**

12m price target **Rs286.18**

Investment case

IRB is among the largest toll road operators in India, with a diversified project portfolio. We like IRB for its integrated business model, longstanding experience in the sector, large cash-generating portfolio, reasonable balance sheet, large proportion of assets in the high-economic activity states of Maharashtra and Gujarat, and pricing visibility—toll rates are fixed and inflation-linked.

Upside scenario

We believe IRB has two major business drivers: 1) road traffic growth and 2) interest rates. In our upside scenario, if road traffic growth increases by 100bps and interest rates decrease by 100bps, we estimate valuation would rise 30-35%.

Downside scenario

In our downside scenario, we estimate 100bps lower traffic growth throughout concession life due to slower economic growth, which would reduce our valuation by 30%.

Upcoming catalysts

Potential upcoming catalysts include: 1) a further rate cut by the Reserve Bank of India; 2) a pick-up in project awards by the NHAI; and 3) a pick-up in economic activity leading to higher traffic growth.

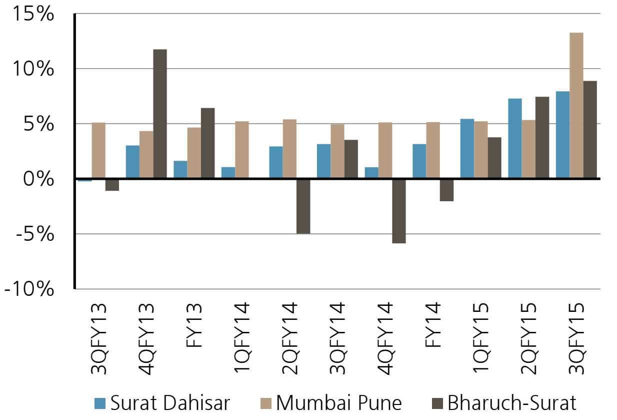
Business description

IRB Infrastructure Developers (IRB) is one of the largest build-operate-transfer (BOT) toll-road operators in India. IRB is vertically integrated and undertakes works related to the entire BOT development value chain in house, from traffic studies to maintaining the roads it operates. A large proportion of its portfolio is in the high-economic activity states of Maharashtra and Gujarat. IRB's construction business caters primarily to in-house projects, with few third-party contracts.

Industry outlook

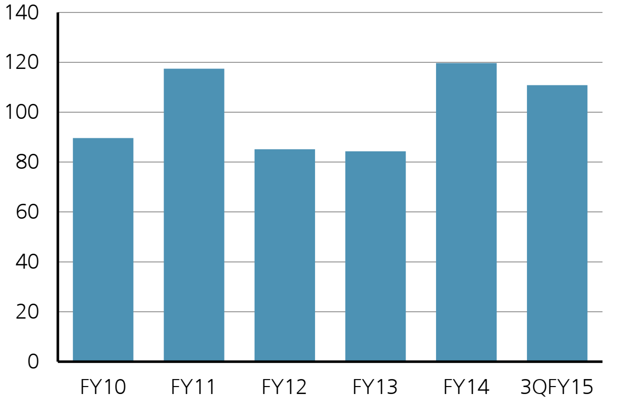
The past two to three years have been characterised by a lack of new projects, regulatory issues resulting in a large number of 'stuck' projects, constrained credit, high interest rates and low traffic growth. We think the outlook is gradually improving as unviable projects are being unwound. Improvement in the valuation of existing assets due to rising traffic, lower interest rates and value accretive project wins should prove beneficial for companies with reasonable balance sheets.

Highway traffic growth (%)



Source: Company data

IRB's construction order book (Rs bn)



Source: Company data

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Largest road developer, best positioned in the highest-visibility segment

IRB, India's largest pure-play road developer, is well positioned to benefit from a sharp uptick in ordering activity. Future projects could be won at potentially higher IRRs as numerous peers are grappling with debt overhang and some larger companies, like L&T, prefer EPC over BOT contracts. IRB is among the few who still prefer BOT projects. Given the prospects of value-accretive growth and an increase in the value of existing assets, IRB is our preferred pick in the road sector.

Among the few bidders for road BOT projects

The road sector is among the infrastructure sectors with the best visibility of sustained growth in order inflows. The NHAI has a pipeline of 14,600 km of highway projects that need to be awarded as part of the National Highway Development Plan (NHDP), a seven-phase national highway development plan conceived over FY99-04. In addition, we estimate about 5,500km of cancelled and foreclosed projects will also be re-tendered.

The road sector is among the sectors with the best visibility on sustained growth in order inflows

Figure 96: The NHAI has a large pipeline of orders to award, and must rebid cancelled projects

Length (km)	GQ	NS-EW	Phase III	Phase IV	Phase V	Phase VI	Phase VII	SARDP-NE	Total
Total length	5,846	7,142	12,109	14,799	6,500	1,000	700	388	48,484
Completed	5,846	6,325	6,300	776	1,910	-	22	95	21,274
Under implementation	-	400	4,464	5,509	2,171	-	19	17	12,580
Balance for award	-	417	1,345	8,514	2,419	1,000	659	276	14,630

Source: National Highways Authority of India

The government had fixed a target of bidding out 8,500km of highways in FY15: 5,000km through the NHAI and 3,500km through the Ministry of Road Transport and Highways (MORTH). We estimate the FY15 targets will likely be missed, but think award activity should accelerate in FY16. We expect 14,000km of national highways to be tendered out over FY15-17, translating to an order opportunity of about US$25bn up from about US$5bn over FY12-14. However, a large number of contractors and developers are grappling with debt overhang and cash flows in existing assets.

We expect 14,000km of national highways to be tendered out over FY15-17, translating to an order opportunity of about US$25bn

Figure 97: Significant portion of the industry is grappling with debt overhang

Net debt/equity	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
IRB Infra	0.84	0.21	0.25	0.28	0.29	0.54	0.76	0.99
GMR Infra	0.54	0.35	1.03	1.62	1.14	2.20	2.32	2.89
GVK Infra	1.40	0.35	1.07	1.18	0.94	1.94	2.52	3.41
Ashoka Buildcon	1.00	1.26	1.76	1.91	1.21	1.48	1.72	1.74
NCC	0.99	0.78	1.41	1.19	1.49	1.58	1.27	0.94
IVRCL	0.30	0.35	0.72	1.00	1.29	NA	NA	3.67
Hindustan Construction	1.79	2.35	3.72	3.30	4.41	7.34	11.70	15.60

Source: Bloomberg, company data

Some of the larger companies that still have capacity to expand balance sheets, including L&T, prefer EPC over BOT contracts. IRB is among the few who still have a preference for BOT projects and room for further leverage. We believe this presents an opportunity for it to achieve attractive IRRs in bids won with restricted competition. Its capacity to bid would also increase if the shareholder approval to raise equity (already in place) is acted upon.

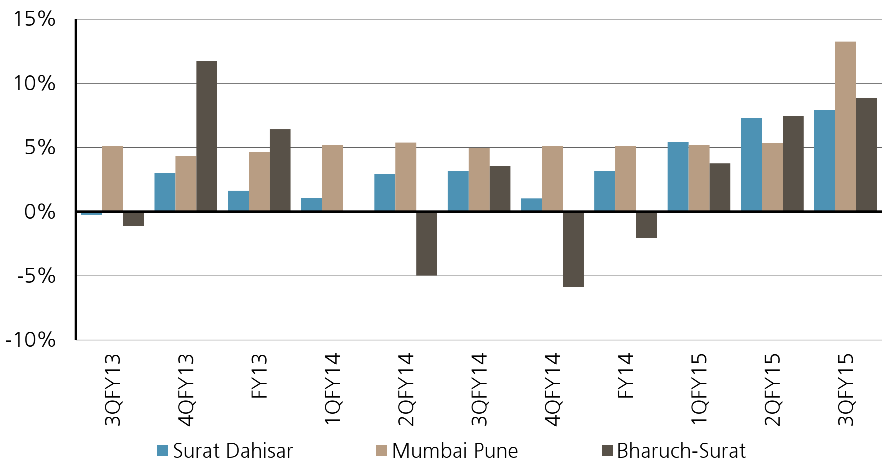
But many contractors and developers are grappling with debt overhang and cash flows in existing assets

Uptick in traffic growth enhances value of existing portfolio

Given their high financial and operating leverage, road BOT assets are very sensitive to traffic growth assumptions. A 1ppt change in annual growth assumptions over the life of a concession changes the equity value of a typical road asset 10-100%. The lower end of this range corresponds to a shorter period of operations left with a low debt-equity ratio, the higher end corresponds to relatively new assets with low equity IRRs to begin with. In the case of IRB, the equity value of the existing portfolio changes 30% for each ppt change in traffic CAGR assumptions. Following a gradual recovery in traffic over the past two to three quarters there was as sharp uptick in Q3 FY15.

A 1ppt change in annual growth assumptions changes the equity value of typical road assets 10-100%

Figure 98: Sharp uptick in traffic growth



Source: Company data, UBS

We expect the traffic momentum to be sustained as the economy gradually picks up. A more constructive view on traffic underpins our Rs189/share DCF-based valuation for existing assets.

Figure 99: We value the current portfolio at Rs189/share

	Rs m	Rs/share
Operational	**53,652**	**161**
Mumbai-Pune	18,091	54
Pathankot-Amritsar	5,145	15
Jaipur Deoli	4,484	13
Talegaon-Amravati	697	2
Tumkur-Chitradurga	9,951	30
Surat Dahisar	1,508	5
Bharuch Surat	2,984	9
Thane Ghodbunder	3,007	9
Smaller roads	7,785	23
Under-construction	**9,041**	**27**
Ahmedabad Vodadara	(3,403)	(10)
Goa Kundapur	5,471	16
Solapur Yedeshi	1,246	4
Yedeshi Aurangabad	3,087	10
Kaithal-Rajasthan border	2,641	8

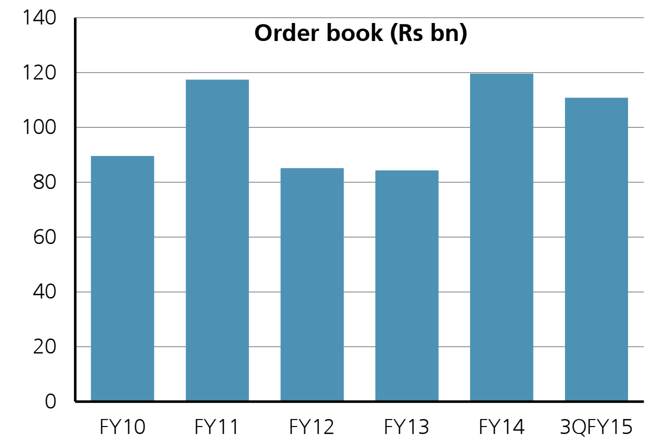
Source: UBS estimates

Not concerned by high margins in contracting

IRB's in-house construction business facilitates its track record of commissioning assets on time and within budget. The EPC business focuses almost exclusively on captive projects and reports 25-30% EBITDA margins, almost double the industry average. We attribute the high margin partly to minimal sub-contracting, its ownership of a higher proportion of construction equipment, and backward integration for aggregates. However, even adjusting for these advantages, the margins are still high. Given that both arms are fully in-house, we believe it is just a choice about pacing cash flows based on business imperatives.

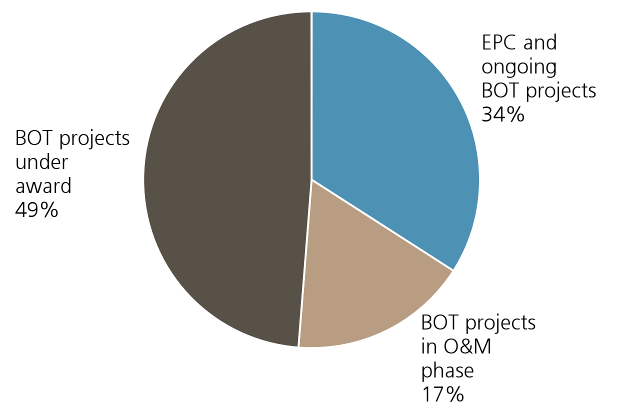
The contracting business currently has an order book of Rs111bn, comprising of its under-development projects and the O&M contracts of these assets.

Figure 100: IRB's construction order book



Source: Company data

Figure 101: Breakdown of Q3 FY15 order book



Source: Company data

The construction order book provides visibility on our contracting revenue estimates over the next three years. We value the construction business at Rs57/share derived from 7x FY17E contracting earnings. Attributing a low multiple to the EPC business addresses concerns on long-term sustainability, as it effectively discounts just the near-term cash flow.

Attributing a low multiple to the EPC business addresses concerns on long-term sustainability, as it effectively discounts just the near-term cash flows

We forecast a 20% net profit CAGR over FY14-19

We estimate revenue will increase 14% annually over FY14-19, driven primarily by traffic growth at existing assets and the commissioning of new assets. This should drive a 20% profit CAGR over the same period, given operating and financial leverage.

Figure 102: We expect an FY14-19E net profit CAGR of 20%

Rs m	FY14	FY15E	FY16E	FY17E	FY18E	FY19E
Revenue	37,319	39,906	48,567	55,463	63,284	71,497
EBITDA	17,537	22,068	26,944	30,412	33,867	37,175
Interest	7,562	9,202	12,089	12,939	13,232	13,605
Depreciation	4,771	7,150	8,314	9,257	10,122	10,942
Other income	1,214	1,264	1,314	1,364	1,414	1,464
PBT	6,419	6,980	7,855	9,580	11,927	14,094
Tax	1,823	1,412	1,890	2,241	2,509	2,780
Net profit	4,591	5,563	5,957	7,330	9,408	11,301

Source: Company data, UBS estimates

Growth premium warranted

We estimate the value of existing assets and the EPC arm at Rs245/share. Given the prospects of a sharp uptick in highway award activity, IRB's favourable positioning and the high likelihood of value-accretive project wins, we add Rs41/share to our SOTP-derived valuation from value accretion from our estimated Rs40-50bn of project wins a year over the next three years.

Figure 103: SOTP-based price target

	Rs m	Rs/share	Methodology
Operational assets	53,652	161	DCF
Under-construction	9,041	27	DCF
Contracting business	18,796	57	7x FY17E P/E as the business is captive
Growth premium	13,626.93	41	Likely value creation from project wins in next 3 years
Total	**95,116**	**286**	

Source: UBS estimates

Risk

High sensitivity to traffic growth estimates is the key risk

In our view, high sensitivity to traffic is the key risk for the stock:

- The equity value of IRB's asset portfolio changes 30% for every 1ppt change in the traffic growth CAGR.
- Valuation of under-construction assets is highly sensitive to initial traffic estimates. If initial traffic undershoots forecasts, our under-construction asset portfolio value would take a hit.

Our SOTP valuation factors in Rs40-50bn of annual order wins over the next three years at equity IRRs of 16-18%. Lower-than-expected asset accretion or IRRs present risk to our growth premium estimates.

Payment of tolls has gained wide acceptance in India, unlike user charges for other infrastructure facilities. However, there are sporadic incidents of public protests against tolls, especially for intra-city roads or highways in the vicinity of cities. For example, IRB had to delay collection of tolls at its Kolhapur project due to such protests in 2013. Most concession documents have clauses to compensate the developer for such force majeure events, but approval for compensation is a tedious process in India.

IRB Infrastructure (IRBI.BO)

Income statement (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Revenues	**31,307**	**36,872**	**37,319**	**39,906**	*6.9*	**48,567**	*21.7*	**55,463**	**63,284**	**71,497**
Gross profit	16,057	19,112	20,818	22,068	*6.0*	26,944	*22.1*	30,412	33,867	37,175
EBITDA (UBS)	**13,670**	**16,333**	**17,537**	**22,068**	*25.8*	**26,944**	*22.1*	**30,412**	**33,867**	**37,175**
Depreciation & amortisation	(2,970)	(4,415)	(4,771)	(7,150)	*49.9*	(8,314)	*16.3*	(9,257)	(10,122)	(10,942)
EBIT (UBS)	**10,700**	**11,918**	**12,766**	**14,918**	*16.9*	**18,630**	*24.9*	**21,155**	**23,745**	**26,234**
Associates & investment income	1,252	1,301	1,214	1,264	*4.1*	1,314	*4.0*	1,364	1,414	1,464
Other non-operating income	0	0	0	0	-	0	-	0	0	0
Net interest	(5,464)	(6,153)	(7,562)	(9,202)	*-21.7*	(12,089)	*-31.4*	(12,939)	(13,232)	(13,605)
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
Profit before tax	**6,489**	**7,066**	**6,419**	**6,980**	*8.7*	**7,855**	*12.5*	**9,580**	**11,927**	**14,094**
Tax	(1,647)	(1,530)	(1,823)	(1,412)	*22.5*	(1,890)	*-33.9*	(2,241)	(2,509)	(2,780)
Profit after tax	**4,842**	**5,536**	**4,596**	**5,568**	*21.2*	**5,965**	*7.1*	**7,339**	**9,419**	**11,313**
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	0	31	(5)	(6)	*-20.0*	(7)	*-20.0*	(9)	(10)	(12)
Extraordinary items	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	**4,842**	**5,567**	**4,591**	**5,563**	*21.2*	**5,957**	*7.1*	**7,330**	**9,408**	**11,301**
Net earnings (UBS)	**4,842**	**5,567**	**4,591**	**5,563**	*21.2*	**5,957**	*7.1*	**7,330**	**9,408**	**11,301**
Tax rate (%)	25.4	21.7	28.4	20.2	*-28.8*	24.1	*19.0*	23.4	21.0	19.7

Per share (Rs)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
EPS (UBS, diluted)	14.57	16.75	13.81	16.74	*21.2*	17.92	*7.1*	22.05	28.31	34.00
EPS (local GAAP, diluted)	14.57	16.75	13.81	16.74	*21.2*	17.92	*7.1*	22.05	28.31	34.00
EPS (UBS, basic)	14.57	16.75	13.81	16.74	*21.2*	17.92	*7.1*	22.05	28.31	34.00
Net DPS (Rs)	6.00	6.00	4.00	4.85	*21.2*	5.19	*7.1*	6.00	6.00	6.00
Cash EPS (UBS, diluted)[1]	23.50	30.03	28.17	38.25	*35.8*	42.94	*12.3*	49.91	58.76	66.92
Book value per share	87.67	97.95	107.13	118.34	*10.5*	130.40	*10.2*	145.39	164.82	188.30
Average shares (diluted)	332.36	332.36	332.36	332.36	*0.0*	332.36	*0.0*	332.36	332.36	332.36

Balance sheet (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Cash and equivalents	18,208	14,710	15,012	13,935	*-7.2*	10,685	*-23.3*	8,727	11,374	16,437
Other current assets	285	1,830	1,236	1,237	*0.1*	1,239	*0.2*	1,242	1,246	1,251
Total current assets	**18,493**	**16,540**	**16,247**	**15,171**	*-6.6*	**11,924**	*-21.4*	**9,969**	**12,620**	**17,688**
Net tangible fixed assets	79,995	104,248	130,411	150,885	*15.7*	175,331	*16.2*	208,433	213,461	214,669
Net intangible fixed assets	0	0	0	0	-	0	-	0	0	0
Investments / other assets	139	620	145	145	*0.0*	145	*0.0*	145	145	145
Total assets	**98,627**	**121,409**	**146,804**	**166,202**	*13.2*	**187,400**	*12.8*	**218,547**	**226,225**	**232,502**
Trade payables & other ST liabilities	0	0	0	0	-	0	-	0	0	0
Short term debt	0	0	0	0	-	0	-	0	0	0
Total current liabilities	**0**	**0**	**0**	**0**	-	**0**	-	**0**	**0**	**0**
Long term debt	68,367	87,761	110,841	126,507	*14.1*	143,691	*13.6*	169,849	171,058	169,519
Other long term liabilities	0	0	0	0	-	0	-	0	0	0
Preferred shares	0	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	**68,367**	**87,761**	**110,841**	**126,507**	*14.1*	**143,691**	*13.6*	**169,849**	**171,058**	**169,519**
Common s/h equity	29,137	32,556	35,607	39,333	*10.5*	43,339	*10.2*	48,321	54,779	62,582
Minority interests	1,123	1,092	356	362	*1.7*	369	*2.0*	378	388	401
Total liabilities & equity	**98,627**	**121,409**	**146,804**	**166,202**	*13.2*	**187,400**	*12.8*	**218,547**	**226,225**	**232,502**

Cash flow (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Net income (before pref divs)	4,842	5,567	4,591	5,563	*21.2*	5,957	*7.1*	7,330	9,408	11,301
Depreciation & amortisation	2,970	4,415	4,771	7,150	*49.9*	8,314	*16.3*	9,257	10,122	10,942
Net change in working capital	(470)	2,115	(710)	1	-	2	*100.0*	3	4	5
Other operating	0	0	0	0	-	0	-	0	0	0
Operating cash flow	**7,342**	**12,097**	**8,652**	**12,713**	*46.9*	**14,274**	*12.3*	**16,590**	**19,535**	**22,248**
Tangible capital expenditure	(24,240)	(29,231)	(30,850)	(27,624)	*10.5*	(32,760)	*-18.6*	(42,360)	(15,150)	(12,150)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	0	0	0	0	-	0	-	0	0	0
Other investing	411	(481)	475	0	-	0	-	0	0	0
Investing cash flow	**(23,829)**	**(29,711)**	**(30,375)**	**(27,624)**	*9.1*	**(32,760)**	*-18.6*	**(42,360)**	**(15,150)**	**(12,150)**
Equity dividends paid	(597)	(1,909)	(1,555)	(1,837)	*-18.1*	(1,951)	*-6.2*	(2,348)	(2,950)	(3,498)
Share issues / (buybacks)	0	0	0	0	-	0	-	0	0	0
Other financing	191	(30)	120	6	*-95.03*	7	*20.00*	9	10	12
Change in debt & pref shares	22,112	19,393	23,080	15,666	*-32.12*	17,184	*9.69*	26,158	1,209	(1,539)
Financing cash flow	**21,706**	**17,454**	**21,645**	**13,836**	*-36.1*	**15,240**	*10.2*	**23,818**	**(1,730)**	**(5,025)**
Cash flow inc/(dec) in cash	**5,219**	**(160)**	**(78)**	**(1,075)**	*NM*	**(3,246)**	*-201.9*	**(1,952)**	**2,655**	**5,073**
FX / non cash items	989	(3,337)	380	(2)	-	(4)	*-100.1*	(6)	(8)	(10)
Balance sheet inc/(dec) in cash	**6,208**	**(3,498)**	**302**	**(1,077)**	-	**(3,250)**	*-201.7*	**(1,958)**	**2,647**	**5,063**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

IRB Infrastructure (IRBI.BO)

Valuation (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
P/E (local GAAP, diluted)	11.5	7.8	6.7	13.9	13.0	10.6	8.2	6.9
P/E (UBS, diluted)	11.5	7.8	6.7	13.9	13.0	10.6	8.2	6.9
P/CEPS	7.1	4.4	3.3	6.1	5.4	4.7	4.0	3.5
Equity FCF (UBS) yield %	(30.4)	(39.3)	(72.7)	(19.3)	(23.9)	(33.3)	5.7	13.0
Net dividend yield (%)	3.6	4.6	4.4	2.1	2.2	2.6	2.6	2.6
P/BV x	1.9	1.3	0.9	2.0	1.8	1.6	1.4	1.2
EV/revenues (core)	4.5	3.5	3.1	4.1	3.3	2.9	2.6	2.3
EV/EBITDA (core)	10.3	7.9	6.6	7.3	6.0	5.3	4.8	4.4
EV/EBIT (core)	13.2	10.8	9.0	10.9	8.7	7.7	6.8	6.2
EV/OpFCF (core)	NM	NM	NM	NM	NM	NM	8.7	6.5
EV/op. invested capital	2.0	1.4	1.0	1.1	1.0	0.8	0.8	0.8

Enterprise value (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Market cap.	55,528	43,578	30,534	77,440	77,440	77,440	77,440	77,440
Net debt (cash)	84,440	84,440	84,440	84,440	84,440	84,440	84,440	84,440
Buy out of minorities	1,123	1,092	356	362	369	378	388	401
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	**141,090**	**129,110**	**115,330**	**162,242**	**162,249**	**162,258**	**162,268**	**162,280**
Non core assets	(139)	(620)	(145)	(145)	(145)	(145)	(145)	(145)
Core enterprise value	**140,951**	**128,489**	**115,185**	**162,097**	**162,104**	**162,112**	**162,123**	**162,135**

Growth (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenue	28.4	17.8	1.2	6.9	21.7	14.2	14.1	13.0
EBITDA (UBS)	25.0	19.5	7.4	25.8	22.1	12.9	11.4	9.8
EBIT (UBS)	23.2	11.4	7.1	16.9	24.9	13.6	12.2	10.5
EPS (UBS, diluted)	7.0	15.0	-17.5	21.2	7.1	23.0	28.4	20.1
Net DPS	0.0	0.0	-33.3	21.2	7.1	15.6	0.0	0.0

Margins & Profitability (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Gross profit margin	51.3	51.8	55.8	55.3	55.5	54.8	53.5	52.0
EBITDA margin	43.7	44.3	47.0	55.3	55.5	54.8	53.5	52.0
EBIT margin	34.2	32.3	34.2	37.4	38.4	38.1	37.5	36.7
Net earnings (UBS) margin	15.5	15.1	12.3	13.9	12.3	13.2	14.9	15.8
ROIC (EBIT)	15.4	12.8	10.7	10.5	11.3	11.0	11.2	12.2
ROIC post tax	11.5	10.0	7.7	8.4	8.6	8.4	8.8	9.8
ROE (UBS)	18.1	18.0	13.5	14.8	14.4	16.0	18.3	19.3

Capital structure & Coverage (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Net debt / EBITDA	3.7	4.5	5.5	5.1	4.9	5.3	4.7	4.1
Net debt / total equity %	165.8	217.1	266.5	283.6	NM	NM	289.5	243.1
Net debt / (net debt + total equity) %	62.4	68.5	72.7	73.9	75.3	76.8	74.3	70.9
Net debt/EV %	35.6	56.9	83.2	69.4	82.1	99.4	98.5	94.4
Capex / depreciation %	NM	NM	NM	NM	NM	NM	149.7	111.0
Capex / revenue %	NM	NM	NM	NM	NM	NM	23.9	17.0
EBIT / net interest	2.0	1.9	1.7	1.6	1.5	1.6	1.8	1.9
Dividend cover (UBS)	2.4	2.8	3.5	3.5	3.5	3.7	4.7	5.7
Div. payout ratio (UBS) %	41.2	35.8	29.0	29.0	29.0	27.2	21.2	17.6

Revenues by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	31,307	36,872	37,319	39,906	48,567	55,463	63,284	71,497
Total	**31,307**	**36,872**	**37,319**	**39,906**	**48,567**	**55,463**	**63,284**	**71,497**

EBIT (UBS) by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	10,700	11,918	12,766	14,918	18,630	21,155	23,745	26,234
Total	**10,700**	**11,918**	**12,766**	**14,918**	**18,630**	**21,155**	**23,745**	**26,234**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Crompton Greaves

Wobbly trajectory, but more than priced in

Equities

India
Industrial, Diversified

12-month rating	**Neutral**
	Prior: Not Rated
12m price target	**Rs197.96**
	Prior: -
Price	**Rs171.90**

RIC: CROM.BO **BBG:** CRG IB

Trading data and key metrics

52-wk range	Rs226.40-149.90
Market cap.	Rs110bn/US$1.76bn
Shares o/s	641m (ORD)
Free float	66%
Avg. daily volume ('000)	3,970
Avg. daily value (m)	Rs709.2
Common s/h equity (03/15E)	Rs38.2bn
P/BV (03/15E)	2.8x
Net debt / EBITDA (03/15E)	1.7x

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/15E	-	3.71	-	4.49
03/16E	-	7.84	-	8.43
03/17E	-	10.51	-	11.51

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Wobbly trajectory: lacklustre parent growth, delayed recovery in overseas subs

Parent revenue should be constrained by a lack of traction in the domestic power systems business, as we expect power T&D order activity to stagnate over the next two to three years. We think low teen growth in the consumer business and a gradual recovery in industrial capex would at best deliver 10% growth in overall parent revenue. The prospects of overseas subsidiaries turning profitable in the near term are not bright, in our view. We initiate coverage with a Neutral rating, as we believe overseas losses have been overly penalised.

Parent margins close to cyclical bottom; we estimate a small uptick

We expect an 80bps expansion in parent EBITDA margin over FY15-17E to 9.7%, 140bps above trough but still 170bps below the cyclical average. We expect the power systems business to broadly maintain current margins, as results of T&D peers suggest irrational bidding is behind us. A recovery in industrial systems margins from trough levels as demand improves would result in an uptick in overall margins.

Increasingly difficult to form a constructive view on overseas subsidiaries

After Rs11.2bn in losses over the past 15 quarters (cumulative Rs2.3bn loss since the first overseas business was acquired in FY06) and multiple disappointments on expectations of a turnaround, estimates on subsidiaries are likely to prove volatile. Management commentary suggests that its Hungarian operations, the reason for the latest disappointment, will take two to three quarters to stabilise. Potentially high-margin automation orders won in FY15 are unlikely to yield revenue before Q3 FY16.

Valuation: overseas losses overly penalised; initiate with Rs197.96 price target

At 46.4x FY15E consolidated earnings, the shares look quite expensive. However, valuing the parent consumer and industrial businesses at average peer multiples implies a negative equity value of Rs29bn for the loss-making foreign subsidiaries. This seems overly harsh—the turnaround might take longer than expected, but with major restructuring behind us future losses are unlikely to exceed the total for the past 15 quarters. While valuations are attractive, the lack of near-term positives guides our Neutral rating. Our SOTP-based price target is 15% above the current level.

Highlights (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenues	112,486	120,944	134,806	142,396	155,815	172,042	191,622	216,854
EBIT (UBS)	5,437	1,802	4,198	4,450	6,812	8,530	10,609	12,965
Net earnings (UBS)	3,736	846	2,443	2,324	4,911	6,590	7,875	9,693
EPS (UBS, diluted) (Rs)	5.82	1.32	3.90	3.71	7.84	10.51	12.56	15.47
DPS (Rs)	1.40	1.20	1.20	0.93	1.57	1.58	1.88	2.32
Net (debt) / cash	(4,873)	(12,681)	(13,781)	(11,934)	(11,387)	(9,610)	(7,558)	(4,379)

Profitability/valuation	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
EBIT margin %	4.8	1.5	3.1	3.1	4.4	5.0	5.5	6.0
ROIC (EBIT) %	17.8	4.9	9.6	9.5	14.4	17.2	20.1	23.1
EV/EBITDA (core) x	13.7	19.8	11.4	16.7	12.2	10.1	8.2	6.7
P/E (UBS, diluted) x	30.6	88.4	26.9	46.4	21.9	16.3	13.7	11.1
Equity FCF (UBS) yield %	(0.6)	(9.2)	(5.5)	3.3	2.3	3.4	4.1	5.6
Net dividend yield %	0.8	1.0	1.1	0.5	0.9	0.9	1.1	1.3

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs171.90 on 18 Mar 2015 22:38 HKT

Investment Thesis

Crompton Greaves

12-month rating	Neutral
12m price target	Rs197.96

Investment case

Crompton's margins have remained under pressure since Q1 FY12 due to losses at subsidiaries. Turnaround in these businesses could take several more quarters but we believe the worst has passed. We expect moderate growth in the parent business due to stagnant power T&D order activity. However, margins should improve from trough levels. We would await evidence of sustainable improvement in the overseas subsidiaries before turning more constructive on the stock.

Upside scenario

In our upside scenario, we assume breakeven margin at the subsidiary level in FY16 and a faster recovery in the parent company's industrial and consumer business. We estimate this would lead to an upside valuation of Rs270.

Downside scenario

In our downside scenario, there is no change in margins at the subsidiary level. We estimate this would lead to a downside valuation of Rs170.

Upcoming catalysts

Potential upcoming catalysts include: 1) evidence of margin improvement in overseas business through high-margin automation orders by H2 FY16; and 2) a pick-up in demand for industrial motors.

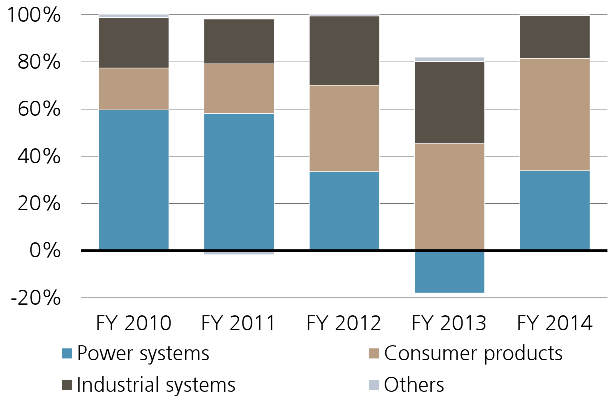
Business description

Crompton Greaves (CG) is one of the largest engineering companies in India. Part of the Avantha Group, CG has three main businesses: power systems, consumer products, and industrial systems. The majority of its sales are of electrical products. CG has more than 20 manufacturing divisions in India and a large customer base that includes state electricity boards and large companies in the private and public sectors. CG has overseas businesses through its various acquisitions.

Industry outlook

For the T&D and automation industries, the past two years have been characterised by: 1) a lack of order inflows; 2) pressure on profitability due to significant overcapacity in the system; and 3) heightened competitive pressure. The scenario might not improve materially in the near term. However, gradual recovery in broad industrial capex and capital expenditure by state-owned enterprises would improve traction for the industry.

EBIT by product segment (%)



Source: Company data

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Wobbly trajectory: lacklustre parent growth, delayed recovery in overseas subs

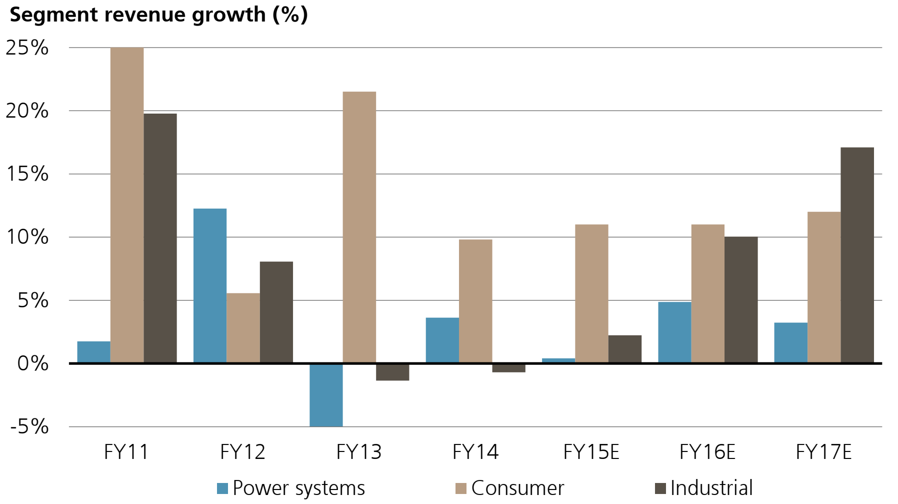
We believe parent revenue will be constrained by a lack of traction in the domestic power systems business, as we expect power T&D order activity to stagnate over the next two to three years. Low teen growth in the consumer business and a gradual recovery in industrial capex would at best deliver 10% growth in overall parent revenue, in our view. The prospects of overseas subsidiaries turning profitable in the near term are not bright. Management commentary suggests that the Hungarian operations, the reason for the latest disappointment, should take two to three quarters to stabilise. At 46.4x FY15E consolidated earnings, the shares look quite expensive. However, valuing the parent consumer and industrial businesses at average peer multiples implies a negative equity value of Rs29bn for the lossmaking foreign subs. We therefore initiate coverage with a Neutral rating as we believe overseas losses have been overly penalised.

Expect parent revenue growth to remain in single digits

Parent revenue should be constrained by lack of traction in the domestic power systems business

We believe parent revenue will be constrained by a lack of traction in the domestic power systems business, as we expect power T&D order activity and capex to stagnate over the next two to three years. The emerging evidence of a slowdown in discretionary consumer spending suggests the consumer business is unlikely to recover to the 20%+ revenue CAGR seen over FY09-11, and is likely to maintain its current trajectory of low teen growth. A gradual recovery in industrial capex would at best deliver 10% growth in overall parent revenue, in our view.

Figure 104: Parent revenue growth likely to remain low



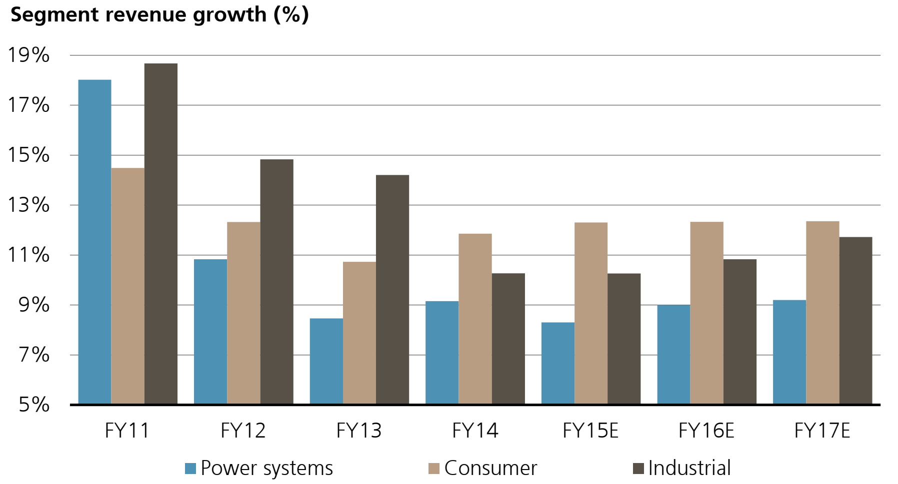
Source: Company data, UBS estimates

Margins close to cyclical bottom; expect a small uptick

Recovery in industrial systems margins from trough levels should boost overall margins

We expect the power systems business to broadly maintain current margins, as the results of T&D peers suggest irrational bidding is behind us. A recovery in industrial systems margins from trough levels as demand improves would result in an uptick in overall margins.

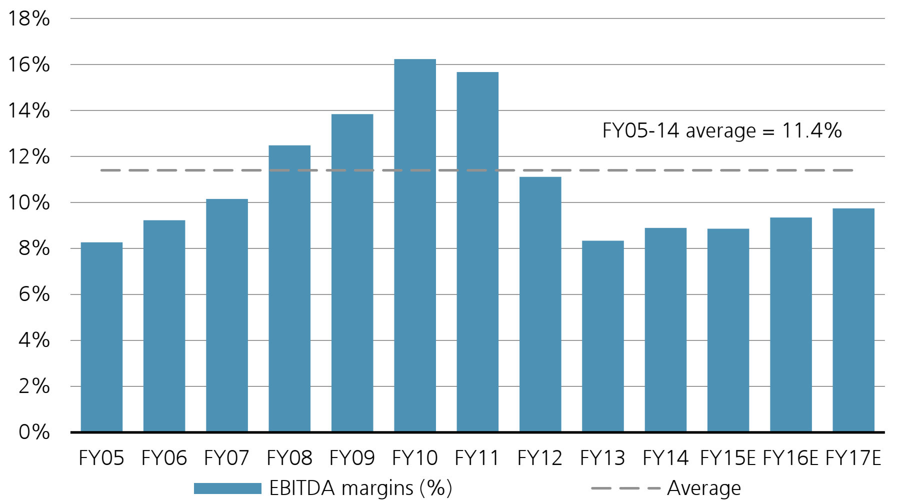
Figure 105: Improvement in industrial systems margins to aid overall margins



Source: Company data, UBS estimates

Our forecast 80bps expansion in parent EBITDA margin to 9.7% over FY15-17E is 140bps above trough but still 170bps below the cyclical average. Given the overcapacity in the power T&D and electrical motor industries we are not calling for a sharper improvement in EBITDA margins. However, a better-than-expected recovery in the industrial systems business could result in margin upside potential

Figure 106: Our FY17 EBITDA margin estimate is 170bps below cyclical average



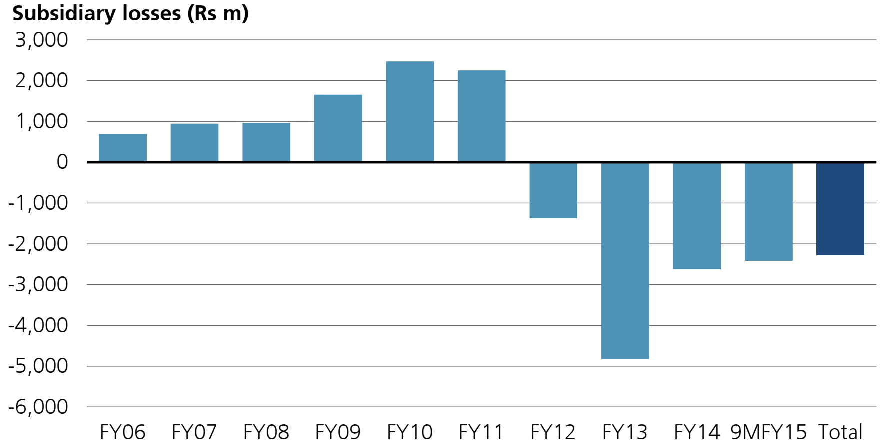
Source: Company data, UBS estimates

Difficult to form a constructive view on overseas subsidiaries

Crompton's overseas subsidiaries have recorded a loss of Rs11.2bn over the past 15 quarters, and a cumulative Rs2.3bn loss since the first overseas business was acquired in FY06.

Overseas subsidiaries have recorded a loss of Rs11.2bn over the past 15 quarters

Figure 107: Overseas subsidiaries have lost a cumulative Rs2.3bn since FY06



Source: Company data, UBS

Given multiple disappointments on expectations of a turnaround, we think estimates on subsidiaries are likely to prove volatile. Management commentary suggests the Hungarian operations, the reason for the latest disappointment, should take two to three quarters to stabilise. Potentially high-margin automation orders won in FY15 are unlikely to yield revenue before Q3 FY16. We prefer to wait for sustainable performance over three to four quarters before turning constructive on the overseas subsidiaries.

Expect strong growth in consolidated profit as subsidiary losses narrow

We forecast consolidated profit to grow 32% pa over FY14-19, well ahead of the 10% revenue CAGR we expect over the period. We believe the strong profit growth will be driven by narrowing losses in overseas subsidiaries — the prime driver of our estimated 230bps expansion in consolidated EBITDA margin. Our estimates of 12% parent earnings growth over the same period is more sedate.

Figure 108: Expect consolidated profit growth to be driven by narrowing subsidiary losses

Rs m	FY14	FY15E	FY16E	FY17E	FY18E	FY19E
Net sales	134,806	142,396	155,815	172,042	191,622	216,854
growth (%)		*5.6%*	*9.4%*	*10.4%*	*11.4%*	*13.2%*
EBITDA	6,820	7,123	9,546	11,337	13,560	16,067
EBITDA margin (%)	*5.1%*	*5.0%*	*6.1%*	*6.6%*	*7.1%*	*7.4%*
Depreciation	2,621	2,673	2,734	2,807	2,951	3,102
Other income	1,716	1,343	1,444	1,480	1,576	1,769
Interest expense	967	1,036	847	827	807	787
PBT	4,947	4,756	7,409	9,183	11,377	13,946
Tax	2,361	2,045	2,371	2,479	3,413	4,184
Minority interest	7	7	7	8	8	9
Associate income	(150)	(150)	(135)	(122)	(97)	(78)
Adj consolidated PAT	2,443	2,568	4,911	6,590	7,875	9,693
growth (%)		*5.1%*	*91.2%*	*34.2%*	*19.5%*	*23.1%*
Parent PAT	5,211	5,408	6,243	7,066	8,198	9,092
Subsidiary PAT	(2,768)	(2,840)	(1,332)	(476)	(323)	601

Source: Company data, UBS estimates

Overseas subs being overly penalised

At 46.4x FY15E consolidated earnings, the shares look quite expensive. However, consolidated earnings are depressed because losses at subsidiaries wipe Rs4.5/share off the parent FY15E EPS of Rs8.6. Valuing the parent consumer and industrial businesses at average peer multiples implies a negative equity value of Rs29bn for the lossmaking foreign subs.

Valuing the parent consumer and industrial businesses at average peer multiples implies a negative equity value of Rs29bn for the lossmaking foreign subsidiaries

Figure 109: Current share price implies a negative equity value of Rs29bn for overseas subsidiaries …

Segment	FY15E EPS (Rs)	FY15E peer average multiple (x)	Value (Rs /share)
Power systems	2.6	20.0	52
Consumer	4.3	30.0	129
Industrial	1.7	22.0	38
Total parent	8.6	26	218
Current share price			172
Negative equity value of overseas subs (Rs m)			(29,520)

Source: UBS estimates

Against an Rs11.2bn loss in overseas subsidiaries (including restructuring costs) over the past 15 quarters, a negative value of Rs29bn seems overly harsh—the turnaround might take longer than expected, but future losses are unlikely to exceed Rs11.2bn with major restructuring behind us. For reference, Crompton Greaves paid a cumulative EV of Rs25bn for the foreign acquisitions. We estimate an aggregate debt of Rs26bn on foreign subsidiaries at end-FY15.

CRG has paid a cumulative EV of Rs25bn for the foreign acquisitions

Figure 110: …which were acquired at an EV of Rs25bn

Major overseas acquisition	Year	Price (m)	Price (Rs m)
Pauwels	FY06	EUR28.3	1,958
Ganz	FY07	EUR35	2,426
Microsol	FY08	EUR10.5	728
PT Pauwels Trafo Asia remaining stake	FY08	US$10.7	592
MSE Power	FY09	US$16	885
Sonomatra	FY09		111
Power tech Solutions Ltd	FY10	GBP30	2,600
Emotron EV	FY11	EUR57.8	4,006
QEI	FY11	US$30	1,660
ZIV	FY13	EUR150	10,000
Total EV paid			**24,966**

Source: Company data, UBS estimates

Valuation attractive but lack of triggers; initiate with Neutral rating

We value the stock at Rs197.96/share, derived from Rs219/share for the parent company (19.4x FY17E parent EPS) and a negative equity value of Rs21/share for foreign subsidiaries (50% of acquisition EV paid – current debt). Given the wobbly trajectory of overseas subsidiaries, it is difficult to value them on current earnings trajectory. We therefore value the subsidiaries at a discount to acquisition EV paid, adjusted for current debt.

Figure 111: Valuation

Segment	FY17E EPS (Rs)	FY17E peer average multiple (x)	Value (Rs /share)
Power systems	3.2	15.0	47.9
Consumer	5.5	24.0	132.0
Industrial	2.6	15.0	39.1
Total parent	**11.3**	**19.4**	**219.0**
50% of acquisition EV paid - current debt			-21.0
Total consolidated	**10.5**	**18.9**	**197.96**

Source: UBS estimates

While valuations are attractive and our price target is 15% above the current level, we initiate coverage with a Neutral rating due to the lack of near-term positives. We would await evidence of sustainable improvement in the overseas subsidiaries before turning more constructive.

Risk

Lack of recovery in overseas subsidiaries poses the biggest risk

We believe the key downside risks to Crompton Greaves are continued losses in the overseas subsidiaries. In this case, the parent might have to enhance support to the overseas businesses.

In the parent company, higher-than-expected competition in power T&D bidding could result in margin disappointments. A delayed recovery in industrial capex would impact the industrial systems business.

The key upside risks, in our view, are higher-than-expected margins in automation orders won by overseas subsidiaries, which would start delivering revenue by Q3 FY16. A faster-than-expected narrowing of losses in overseas subsidiaries would result in a sharp reduction in the negative equity value attributed to these businesses. The onset of ordering for the green transmission corridor could result in better-than-expected order inflow in the Indian power system business.

Crompton Greaves (CROM.BO)

Income statement (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Revenues	**112,486**	**120,944**	**134,806**	**142,396**	5.6	**155,815**	9.4	**172,042**	**191,622**	**216,854**
Gross profit	16,184	18,054	21,311	23,869	12.0	28,061	17.6	31,992	36,740	42,537
EBITDA (UBS)	**8,036**	**3,832**	**6,820**	**7,123**	4.5	**9,546**	34.0	**11,337**	**13,560**	**16,067**
Depreciation & amortisation	(2,600)	(2,029)	(2,621)	(2,673)	2.0	(2,734)	2.3	(2,807)	(2,951)	(3,102)
EBIT (UBS)	**5,437**	**1,802**	**4,198**	**4,450**	6.0	**6,812**	53.1	**8,530**	**10,609**	**12,965**
Associates & investment income	690	996	1,964	1,192	-39.3	1,309	9.8	1,359	1,479	1,691
Other non-operating income	0	0	0	0	-	0	-	0	0	0
Net interest	(576)	(955)	(1,366)	(1,465)	-7.2	(847)	42.2	(827)	(807)	(787)
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
Profit before tax	**5,551**	**1,843**	**4,797**	**4,178**	-12.9	**7,274**	74.1	**9,062**	**11,280**	**13,868**
Tax	(1,821)	(1,009)	(2,360)	(1,861)	21.2	(2,371)	-27.4	(2,479)	(3,413)	(4,184)
Profit after tax	**3,729**	**834**	**2,436**	**2,317**	-4.9	**4,903**	111.6	**6,582**	**7,867**	**9,685**
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	7	11	7	7	5.0	7	5.0	8	8	9
Extraordinary items	0	(1,207)	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	**3,736**	**(362)**	**2,443**	**2,324**	-4.9	**4,911**	111.3	**6,590**	**7,875**	**9,693**
Net earnings (UBS)	**3,736**	**846**	**2,443**	**2,324**	-4.9	**4,911**	111.3	**6,590**	**7,875**	**9,693**
Tax rate (%)	32.8	54.7	49.2	44.5	-9.5	32.6	-26.8	27.4	30.3	30.2

Per share (Rs)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
EPS (UBS, diluted)	5.82	1.32	3.90	3.71	-4.9	7.84	111.3	10.51	12.56	15.47
EPS (local GAAP, diluted)	5.82	(0.56)	3.90	3.71	-4.9	7.84	111.3	10.51	12.56	15.47
EPS (UBS, basic)	5.82	1.32	3.90	3.71	-4.9	7.84	111.3	10.51	12.56	15.47
Net DPS (Rs)	1.40	1.20	1.20	0.93	-22.8	1.57	69.0	1.58	1.88	2.32
Cash EPS (UBS, diluted)[1]	9.88	4.48	8.08	7.97	-1.3	12.20	53.0	14.99	17.27	20.42
Book value per share	56.29	55.52	56.81	60.93	7.2	67.20	10.3	76.14	86.82	99.96
Average shares (diluted)	641.50	641.50	626.75	626.75	0.0	626.75	0.0	626.75	626.75	626.75

Balance sheet (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Cash and equivalents	4,976	5,834	8,150	9,496	16.5	9,544	0.5	10,821	12,372	15,051
Other current assets	50,368	53,974	61,019	61,466	0.7	67,408	9.7	74,594	83,274	93,852
Total current assets	**55,344**	**59,807**	**69,168**	**70,962**	2.6	**76,952**	8.4	**85,414**	**95,646**	**108,903**
Net tangible fixed assets	22,575	30,663	34,591	34,965	1.1	35,430	1.3	35,981	36,557	37,158
Net intangible fixed assets	0	0	0	0	-	0	-	0	0	0
Investments / other assets	8,377	9,589	4,521	5,774	27.7	6,828	18.3	7,851	9,184	10,744
Total assets	**86,296**	**100,059**	**108,280**	**111,700**	3.2	**119,209**	6.7	**129,246**	**141,387**	**156,805**
Trade payables & other ST liabilities	40,182	45,834	49,787	51,971	4.4	56,059	7.9	61,002	66,957	74,645
Short term debt	607	55	1,686	1,686	0.00	1,686	0.00	1,686	1,686	1,686
Total current liabilities	**40,789**	**45,890**	**51,473**	**53,657**	4.2	**57,745**	7.6	**62,688**	**68,643**	**76,331**
Long term debt	9,241	18,460	20,244	19,744	-2.5	19,244	-2.5	18,744	18,244	17,744
Other long term liabilities	0	0	0	0	-	0	-	0	0	0
Preferred shares	0	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	**50,030**	**64,349**	**71,717**	**73,401**	2.3	**76,989**	4.9	**81,433**	**86,888**	**94,075**
Common s/h equity	36,109	35,615	36,446	38,189	4.8	42,117	10.3	47,719	54,412	62,652
Minority interests	157	95	118	110	-6.1	103	-6.8	95	87	78
Total liabilities & equity	**86,296**	**100,059**	**108,280**	**111,700**	3.2	**119,209**	6.7	**129,246**	**141,387**	**156,805**

Cash flow (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Net income (before pref divs)	3,736	(362)	2,443	2,324	-4.9	4,911	111.3	6,590	7,875	9,693
Depreciation & amortisation	2,600	2,029	2,621	2,673	2.0	2,734	2.3	2,807	2,951	3,102
Net change in working capital	(601)	2,751	(2,339)	1,737	-	(1,855)	-	(2,242)	(2,725)	(2,891)
Other operating	(673)	(1,168)	149	0	-	0	-	0	0	0
Operating cash flow	**5,061**	**3,251**	**2,874**	**6,734**	134.3	**5,790**	-14.0	**7,155**	**8,101**	**9,904**
Tangible capital expenditure	(5,758)	(10,117)	(6,550)	(3,047)	53.5	(3,199)	-5.0	(3,359)	(3,527)	(3,703)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	0	0	0	0	-	0	-	0	0	0
Other investing	(1,117)	(44)	4,919	(1,253)	-	(1,054)	-	(1,023)	(1,333)	(1,560)
Investing cash flow	**(6,875)**	**(10,161)**	**(1,631)**	**(4,300)**	-163.7	**(4,253)**	1.1	**(4,382)**	**(4,860)**	**(5,263)**
Equity dividends paid	(898)	(770)	(752)	(581)	22.8	(982)	-69.0	(989)	(1,181)	(1,454)
Share issues / (buybacks)	525	637	(860)	0	-	0	17.6	0	0	0
Other financing	(1)	(62)	23	(7)	-	(7)	-5.00	(8)	(8)	(9)
Change in debt & pref shares	5,146	8,666	3,415	(500)	-	(500)	0.00	(500)	(500)	(500)
Financing cash flow	**4,772**	**8,472**	**1,826**	**(1,088)**	-	**(1,490)**	-36.9	**(1,496)**	**(1,690)**	**(1,963)**
Cash flow inc/(dec) in cash	**2,957**	**1,562**	**3,069**	**1,347**	-56.1	**47**	-96.5	**1,277**	**1,552**	**2,679**
FX / non cash items	(965)	(704)	(753)	0	100.0	0	-	0	0	0
Balance sheet inc/(dec) in cash	**1,992**	**858**	**2,316**	**1,347**	-41.8	**47**	-96.5	**1,277**	**1,552**	**2,679**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

Crompton Greaves (CROM.BO)

Valuation (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
P/E (local GAAP, diluted)	30.6	NM	26.9	46.4	21.9	16.3	13.7	11.1
P/E (UBS, diluted)	30.6	88.4	26.9	46.4	21.9	16.3	13.7	11.1
P/CEPS	18.0	26.0	13.0	21.6	14.1	11.5	10.0	8.4
Equity FCF (UBS) yield %	(0.6)	(9.2)	(5.5)	3.3	2.3	3.4	4.1	5.6
Net dividend yield (%)	0.8	1.0	1.1	0.5	0.9	0.9	1.1	1.3
P/BV x	3.2	2.1	1.8	2.8	2.6	2.3	2.0	1.7
EV/revenues (core)	1.0	0.6	0.6	0.8	0.7	0.7	0.6	0.5
EV/EBITDA (core)	13.7	19.8	11.4	16.7	12.2	10.1	8.2	6.7
EV/EBIT (core)	20.2	NM	18.5	26.7	17.1	13.4	10.5	8.3
EV/OpFCF (core)	18.2	NM	11.9	NM	13.5	10.6	8.3	6.8
EV/op. invested capital	3.6	2.1	1.8	2.5	2.5	2.3	2.1	1.9

Enterprise value (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Market cap.	114,240	74,702	67,259	110,272	110,272	110,272	110,272	110,272
Net debt (cash)	3,296	8,777	13,231	12,857	11,660	10,498	8,584	5,968
Buy out of minorities	157	126	106	114	107	99	91	82
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	**117,693**	**83,604**	**80,596**	**123,243**	**122,039**	**120,869**	**118,947**	**116,323**
Non core assets	(7,864)	(7,908)	(2,989)	(4,242)	(5,296)	(6,319)	(7,652)	(9,212)
Core enterprise value	**109,829**	**75,696**	**77,607**	**119,002**	**116,743**	**114,550**	**111,295**	**107,111**

Growth (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenue	12.4	7.5	11.5	5.6	9.4	10.4	11.4	13.2
EBITDA (UBS)	-40.2	-52.3	78.0	4.5	34.0	18.8	19.6	18.5
EBIT (UBS)	-52.7	-66.8	132.9	6.0	53.1	25.2	24.4	22.2
EPS (UBS, diluted)	-59.7	-77.4	195.7	-4.9	111.3	34.2	19.5	23.1
Net DPS	-36.4	-14.3	0.0	-22.8	69.0	0.7	19.5	23.1

Margins & Profitability (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Gross profit margin	14.4	14.9	15.8	16.8	18.0	18.6	19.2	19.6
EBITDA margin	7.1	3.2	5.1	5.0	6.1	6.6	7.1	7.4
EBIT margin	4.8	1.5	3.1	3.1	4.4	5.0	5.5	6.0
Net earnings (UBS) margin	3.3	0.7	1.8	1.6	3.2	3.8	4.1	4.5
ROIC (EBIT)	17.8	4.9	9.6	9.5	14.4	17.2	20.1	23.1
ROIC post tax	11.9	2.2	4.9	5.3	9.7	12.5	14.0	16.1
ROE (UBS)	10.9	2.4	6.8	6.2	12.2	14.7	15.4	16.6

Capital structure & Coverage (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Net debt / EBITDA	0.6	3.3	2.0	1.7	1.2	0.8	0.6	0.3
Net debt / total equity %	13.4	35.5	37.7	31.2	27.0	20.1	13.9	7.0
Net debt / (net debt + total equity) %	11.8	26.2	27.4	23.8	21.2	16.7	12.2	6.5
Net debt/EV %	4.4	16.8	17.8	10.0	9.8	8.4	6.8	4.1
Capex / depreciation %	NM	NM	NM	114.0	117.0	119.7	119.5	119.4
Capex / revenue %	5.1	8.4	4.9	2.1	2.1	2.0	1.8	1.7
EBIT / net interest	9.4	1.9	3.1	3.0	8.0	10.3	13.1	16.5
Dividend cover (UBS)	4.2	1.1	3.2	4.0	5.0	6.7	6.7	6.7
Div. payout ratio (UBS) %	24.0	91.0	30.8	25.0	20.0	15.0	15.0	15.0

Revenues by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	112,486	120,944	134,806	142,396	155,815	172,042	191,622	216,854
Total	**112,486**	**120,944**	**134,806**	**142,396**	**155,815**	**172,042**	**191,622**	**216,854**

EBIT (UBS) by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	5,437	1,802	4,198	4,450	6,812	8,530	10,609	12,965
Total	**5,437**	**1,802**	**4,198**	**4,450**	**6,812**	**8,530**	**10,609**	**12,965**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

ABB India

Heady growth days unlikely to return

Equities	
India	
Industrial, Diversified	
12-month rating	**Sell**
	Prior: Not Rated
12m price target	**Rs979.95**
	Prior: -
Price	**Rs1,268.45**
RIC: ABB.BO **BBG:** ABB IB	

Trading data and key metrics	
52-wk range	Rs1,452.65-784.55
Market cap.	Rs269bn/US$4.28bn
Shares o/s	212m (ORD)
Free float	25%
Avg. daily volume ('000)	116
Avg. daily value (m)	Rs154.5
Common s/h equity (12/14E)	Rs28.1bn
P/BV (12/14E)	9.6x
Net debt / EBITDA (12/14E)	NM

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
12/14E	-	10.78	-	10.78
12/15E	-	17.72	-	17.36
12/16E	-	24.50	-	24.00

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Expectations of sustained high growth likely to be overly optimistic

Expectations of ABB India (ABB) achieving growth acceleration at the start of the current cycle similar to that in the last cycle are likely to be disappointed. In the previous cycle the power and industry segments fired together. However, we think growth in the power business (50% of revenue) is likely to be modest in this cycle, as we expect T&D investment to stagnate over the next two to three years (see *India Power Utilities: Improving asset utilisation to drive returns*). Growth should be further constrained by a lack of traction in commodity capex. We initiate coverage with a Sell rating, given the combination of the most expensive valuations in our coverage universe and a weak growth outlook.

New businesses helped maintain trajectory, but unlikely to sustain high growth

New businesses like solar and a focus on exports have helped maintain stable order inflow and revenue trajectories. For example, when domestic orders declined 8.3% YoY in 2013, 28% growth in export orders helped maintain stability in order inflows and revenue. The new segments now account for about 30% of the business. While this part of the business might continue to grow, we think lack of traction in the rest of business will result in stagnation in the order book: the end-2014 order book was almost flat YoY and down 13% from the 2011 peak.

We expect margins to continue to expand from the trough

At 7.2%, 2014 EBITDA margin was up sharply from the 1.3% trough level of 2010, as lossmaking low-tech orders were wound down and the company undertook efficiency measures to control material costs. However, margins are still well below the 10.7% average over 2003-08. We expect margins to inch towards normalised levels but stay below the 2003-08 level given low capacity utilisation in the industry.

Valuation: most expensive in our universe; initiate with Rs979.95 price target

The 71.6x 2015E PE multiple underscores expectations of both strong revenue growth and margin expansion. To better appreciate the built-in growth expectations, we look at 2016E multiples based on the peak 12.8% EBITDA margin (attained only once, in 2007). The shares trade at 37.3x 2016E on those assumptions—still the most expensive stock in our universe. Is the company likely to attain peak margins? Will it deliver the best earnings growth in our E&C coverage universe after attaining peak margins? We think the answer is no in both cases. We base our price target on 40x 2016E PE; 23% below the current level.

Highlights (Rsm)	12/11	12/12	12/13	12/14E	12/15E	12/16E	12/17E	12/18E
Revenues	74,490	75,650	77,220	77,333	85,066	97,826	112,500	129,375
EBIT (UBS)	2,570	2,424	3,666	4,429	5,828	7,646	9,333	11,729
Net earnings (UBS)	1,845	1,374	1,769	2,285	3,756	5,191	6,342	7,969
EPS (UBS, diluted) (Rs)	8.71	6.48	8.35	10.78	17.72	24.50	29.93	37.60
DPS (Rs)	2.99	3.00	3.00	3.50	4.00	4.50	5.00	5.50
Net (debt) / cash	2,644	671	3,067	3,879	9,909	11,957	14,715	18,819
Profitability/valuation	**12/11**	**12/12**	**12/13**	**12/14E**	**12/15E**	**12/16E**	**12/17E**	**12/18E**
EBIT margin %	3.4	3.2	4.7	5.7	6.9	7.8	8.3	9.1
ROIC (EBIT) %	12.7	10.9	17.3	22.2	31.8	43.1	46.8	52.5
EV/EBITDA (core) x	46.1	45.8	24.5	46.6	36.9	29.1	23.6	19.2
P/E (UBS, diluted) x	87.4	NM	70.4	NM	71.6	51.8	42.4	33.7
Equity FCF (UBS) yield %	(1.5)	0.6	3.4	0.7	2.5	1.1	1.4	1.9
Net dividend yield %	0.4	0.4	0.5	0.3	0.3	0.4	0.4	0.4

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs1,268.45 on 18 Mar 2015 22:38 HKT

Investment Thesis

ABB India

12-month rating **Sell**

12m price target **Rs979.95**

Investment case

A subsidiary of ABB Global, ABB India has a long history in India and has been highly successful. We think it has a technological edge in T&D equipment and industrial products in India. At the current share price, we think its risk-reward profile is unfavourable as: 1) short-cycle orders might not achieve the glory days of revenue growth and margins; 2) new businesses and exports (30% revenue share) might rise, but the domestic business is likely to remain subdued; and 3) it is the most expensive stock under our coverage, by a wide margin.

Upside scenario

In our upside scenario, we assume margins recover to cyclical averages and order inflow rises 10%, translating to a valuation of Rs1,197/share.

Downside scenario

In our downside scenario, we assume order inflows stagnate at current levels over the medium term due to sluggish T&D orders and a delayed recovery in industrial capex. In this scenario, we estimate valuation would decline to Rs803/share.

Upcoming catalysts

Potential catalysts include: 1) a lack of sustained recovery in order inflows as evidenced from quarterly results expected in May 2015; and 2) a lack of recovery in the short-cycle products business, reducing visibility for improvement in the projects business.

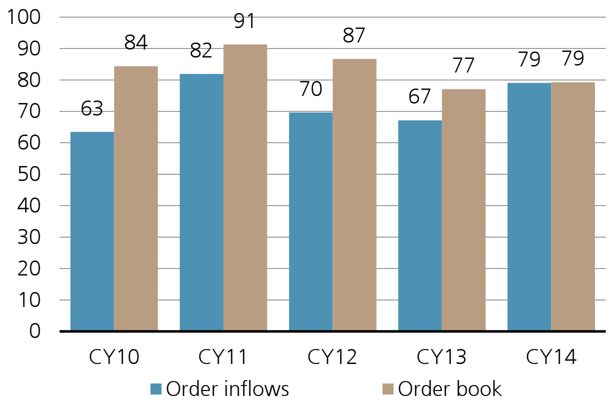
Business description

ABB India (ABB) is a 75%-owned subsidiary of Switzerland-based ABB Group, a global provider of power transmission and distribution (T&D) products and automation technology with operations in more than 100 countries. Through its large base of manufacturing facilities, ABB is a leader in the medium- (MV) to high-voltage (HV) power T&D and process industry automation sectors in India. ABB Group also uses India as a resource base for its international operations.

Industry outlook

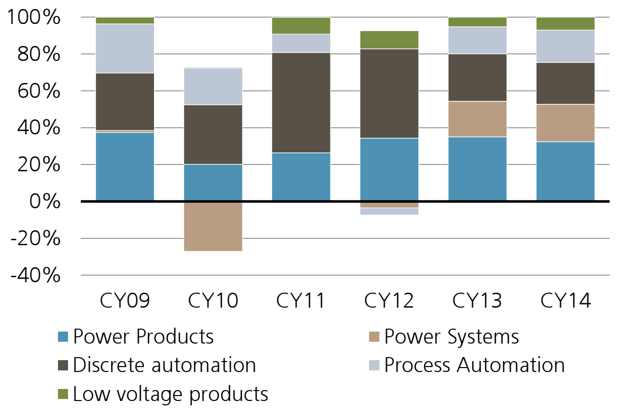
For the T&D and automation industries, the previous two years have been characterised by: 1) a lack of order inflows; 2) pressure on profitability due to significant overcapacity in the system; and 3) heightened competitive pressure. The scenario might not improve materially in the near term. However, gradual recovery in broad industrial capex and capital expenditure by state-owned enterprises would improve traction for the industry.

Order book and order inflow (Rs bn)



Source: Company data

EBIT contribution by product segment (%)



Source: Company data

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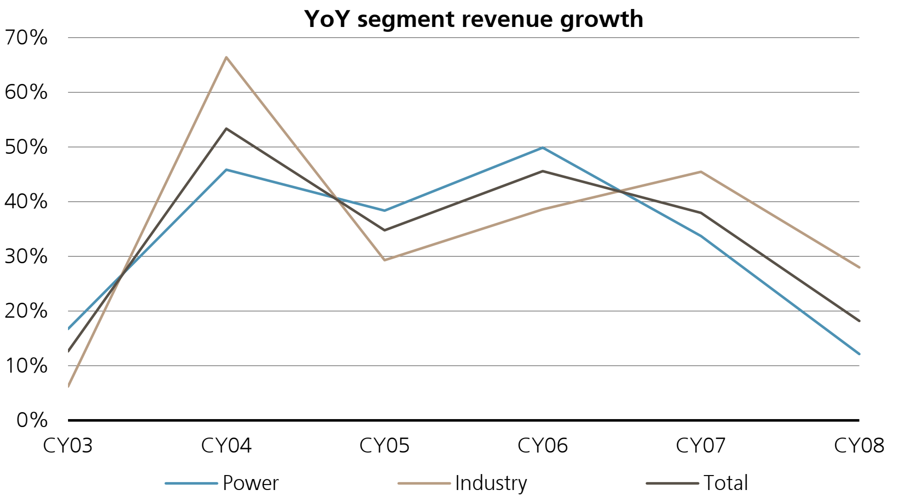
Expectations of sustained high growth likely to be optimistic

Given the short cycle composition of its business, there are expectations that ABB will witness the fastest growth acceleration at the start of the cycle, as it did during the last cycle, recording a 39% revenue CAGR over 2003-07. However, the power and industry segments fired together in the last cycle.

In the last cycle the power and industry segments fired together

Figure 112: In the last cycle, the power and industry segments fired together

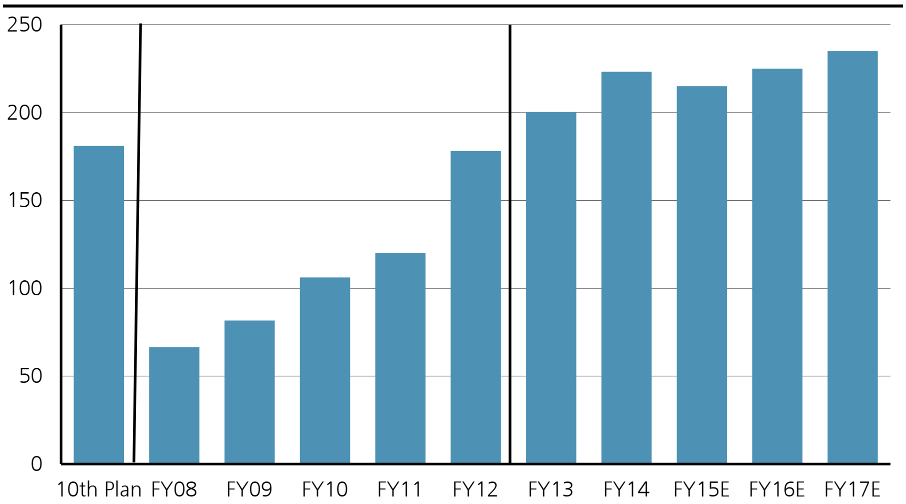


Source: Company data, UBS

In this cycle, we think growth in the power business (50% of total revenue) is likely to be modest, as we expect T&D investment to stagnate over the next two to three years. Capex by Power Grid Corporation of India Limited (PGCIL), the central government utility that accounts for roughly 50% of transmission capex in India, has been stagnant for the past two years. As per current government projections, overall transmission capex in India during FY18-22 (the 13th Five Year Plan) is likely to remain almost stagnant (an 11% increase in total spending in FY18-22 versus FY13-17 is envisaged). Given PGCIL's near-term capital outlay and the current medium-term investment outlook, we expect transmission sector order inflows to remain stagnant.

In this cycle, we expect modest growth in the power business (50% of revenue)

Figure 113: PGCIL's capex plans suggest stagnant order inflows (PGCIL capex, Rs bn)



Source: Company data, UBS estimates

We believe even the industry segment will find it difficult to match last cycle growth rates, as the outlook for commodity capex, the traditional driver of large orders, is quite hazy. For example, at current input and output prices, returns from steel capacity are likely to remain below the cost of capital. Greenfield project IRRs at current prices, based on captive iron ore, come to around 7.5%, if iron ore is sourced at domestic market prices, IRRs fall to 0.3%. After the recent amendments to the Mines and Mineral Development and Regulation (MMDR) law, all new allotments to iron ore mines will be based on bidding and companies with existing mines can hold on to their mines till 2030.

Difficult for even the industry segment to match last cycle growth rates given the outlook for commodity capex

Figure 114: IRR profile for typical integrated steel plant at current prices

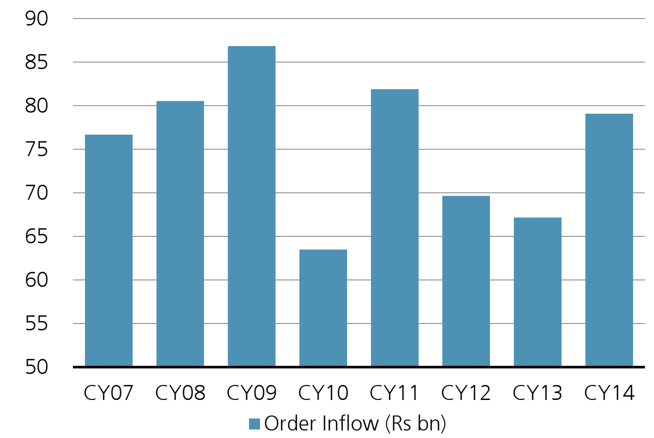
Assumptions	Case 1	Case 2
Procurement of iron ore	Captive mine	Market
Exchange rate (INR/US$)	62	62
Price of iron ore (US$/tonne)	32	73
Price of steel (US$/tonne)	480	480
Hard coking coal (US$/tonne)	115	115
PCI (US$/tonne)	85	85
Project cost (US$m/MT)	1,345	1,345
Debt	65%	65%
Equity	35%	35%
Equity IRR	3.2	Negative
Project IRR (for the firm)	7.5	0.3

Source: UBS estimates

New businesses helped maintain trajectory, but unlikely to sustain high growth

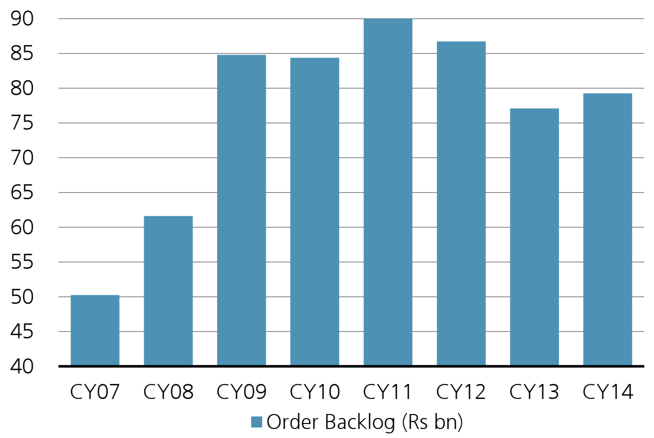
New businesses like solar and a focus on exports have helped maintain stable order inflow and revenue trajectories. For example, in 2013, when domestic orders declined 8.3% YoY, 28% growth in export orders helped maintain stability in order inflows and revenue. The new segments now account for about 30% of the business. While this part of the business might continue to grow, we think lack of traction in the rest of business will result in stagnation in the order book: the end-2014 order book was almost flat YoY and down 13% from the 2011 peak.

Figure 115: Order inflows recovered in 2014...



Source: Company data

Figure 116: ...but the order book is still stagnant



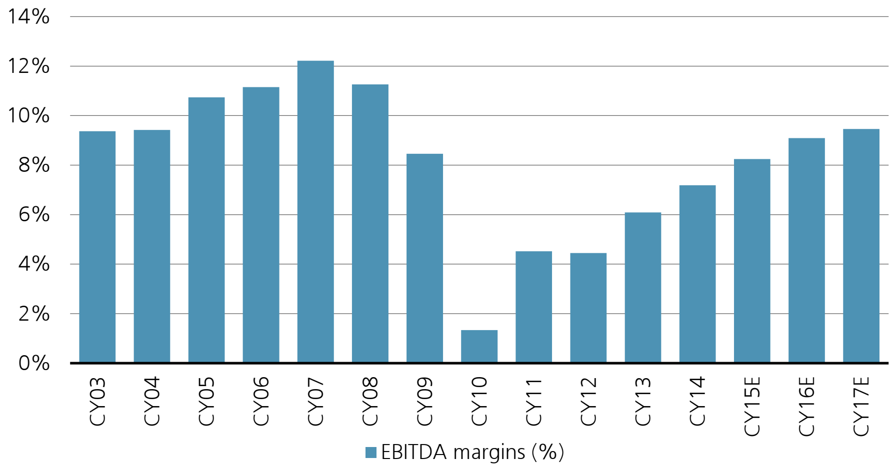
Source: Company data

Margins should continue to expand from the trough

At 7.2%, 2014 EBITDA margin was up sharply from the 1.3% trough level of 2010, as lossmaking low-tech orders were wound down and the company undertook efficiency measures to control material costs. However, margins are still well below the 10.7% average over 2003-08. We expect margins to inch towards normalised levels but stay below the 2003-08 level given low capacity utilisation in the industry.

Expect margins to inch towards normalised levels but stay below 2003-08 levels given low capacity utilisation in the industry

Figure 117: Margins recovering from trough, but likely to remain below 2003-08 levels



Source: Company data, UBS estimates

Margin expansion drives our forecast of a 2014-18 profit CAGR of 37%

Margins normalising from trough levels underpin our forecast of a 37% profit CAGR over 2014-18. We expect EBITDA margin to expand from 7.2% in 2014 to 10.1% in 2018E, causing net margin to more than double from 3.0% to 6.2% over the period.

Figure 118: Margin expansion drives our forecast of a 37% profit CAGR over 2014-18E

Rs m	2013	2014	2015E	2016E	2017E	2018E
Revenue	77,220	77,333	85,066	97,826	112,500	129,375
growth (%)		*0.1%*	*10.0%*	*15.0%*	*15.0%*	*15.0%*
EBITDA	4,699	5,557	7,016	8,894	10,639	13,095
EBITDA margin (%)	*6.1%*	*7.2%*	*8.2%*	*9.1%*	*9.5%*	*10.1%*
Depreciation	1,033	1,128	1,189	1,248	1,307	1,366
Interest	1,011	1,050	405	121	121	121
Other income	70	173	216	270	311	357
PBT	2,725	3,552	5,639	7,795	9,522	11,965
Total tax	956	1,267	1,883	2,604	3,180	3,996
PAT	1,769	2,285	3,756	5,191	6,342	7,969
PAT margin (%)	*2.3%*	*3.0%*	*4.4%*	*5.3%*	*5.6%*	*6.2%*
growth (%)		*29.2%*	*64.4%*	*38.2%*	*22.2%*	*25.7%*

Source: Company data, UBS estimates

Most expensive stock in our coverage; initiate with Sell

We think the 71.6x 2015E PE multiple underscores expectations of both strong revenue growth and margin expansion. To better appreciate the built-in growth expectations, we look at 2016E multiples based on the peak 12.8% EBITDA margin (attained only once, in 2007). The shares trade at 37.3x 2016E on those assumptions—still the most expensive stock in our universe.

72x 2015E PE multiple underscores expectations of both strong growth and margin expansion

Figure 119: ABB remains the most expensive stock in our coverage universe even at peak margin assumptions

	2016E	2016E at peak margin
EBITDA margin (%)	9.1%	12.2%
Revenue (Rs m)	102,435	102,435
EPS (Rs)	24.5	34.0
PE	**51.8x**	**37.3x**

Source: Company data, Bloomberg, UBS estimates

Is ABB likely to attain peak margins? We consider this a very low probability event, given underutilisation in both the power T&D and automation industries. If the shares are still the most expensive in our coverage universe at peak margins, will it deliver the best revenue-driven earnings growth in our coverage universe after attaining peak margins? Not in our view. We expect modest growth in the power segment (50% of revenue). Sustained growth is unlikely in the automation segment as well, given the hazy visibility in the commodity segment.

The shares are trading at 37.3x 2016E earnings even if we assume peak margins

We initiate coverage with a Sell rating and a price target of Rs979.95 (40x 2016E PE, in line with the average multiples before the earnings collapse in 2010, which made comparing earnings multiples irrelevant after the period) implying 23% downside from the current level. We attribute a high multiple to FY16E earnings as our margin estimates are below 2002-08 averages and could surprise on the upside. But attributing the highest multiple in our coverage universe to the stock still implies a 23% downside from the current level.

Risk

Faster-than-expected industrial recovery is the key upside risk

The key risk to our rating is a faster-than-expected industrial recovery and onset of T&D ordering from the green corridor project. A faster acceleration in revenue growth could translate to margins above our estimates due to operating leverage.

Downside risks emanate from the high competitive intensity if ordering activity remains subdued. Since FY11, competition from foreign vendors, especially Korean and Chinese companies, has been intense. Many of these vendors have set up manufacturing facilities in India, worsening the overcapacity in the industry.

ABB India (ABB.BO)

Income statement (Rsm)	12/11	12/12	12/13	12/14E	% ch	12/15E	% ch	12/16E	12/17E	12/18E
Revenues	**74,490**	**75,650**	**77,220**	**77,333**	*0.1*	**85,066**	*10.0*	**97,826**	**112,500**	**129,375**
Gross profit	20,536	21,372	23,235	24,904	*7.2*	27,646	*11.0*	31,891	36,675	42,176
EBITDA (UBS)	**3,365**	**3,365**	**4,699**	**5,557**	*18.3*	**7,016**	*26.3*	**8,894**	**10,639**	**13,095**
Depreciation & amortisation	(795)	(941)	(1,033)	(1,128)	*9.2*	(1,189)	*5.4*	(1,248)	(1,307)	(1,366)
EBIT (UBS)	**2,570**	**2,424**	**3,666**	**4,429**	*20.8*	**5,828**	*31.6*	**7,646**	**9,333**	**11,729**
Associates & investment income	0	0	0	0	-	0	-	0	0	0
Other non-operating income	415	71	70	173	*147.2*	216	*25.0*	270	311	357
Net interest	(307)	(432)	(1,011)	(1,049)	*-3.8*	(405)	*61.5*	(121)	(121)	(121)
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
Profit before tax	**2,677**	**2,062**	**2,725**	**3,552**	*30.4*	**5,639**	*58.8*	**7,795**	**9,522**	**11,965**
Tax	(832)	(688)	(956)	(1,267)	*-32.6*	(1,883)	*-48.7*	(2,604)	(3,180)	(3,996)
Profit after tax	**1,845**	**1,374**	**1,769**	**2,285**	*29.2*	**3,756**	*64.4*	**5,191**	**6,342**	**7,969**
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	0	0	0	0	-	0	-	0	0	0
Extraordinary items	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	**1,845**	**1,374**	**1,769**	**2,285**	*29.2*	**3,756**	*64.4*	**5,191**	**6,342**	**7,969**
Net earnings (UBS)	**1,845**	**1,374**	**1,769**	**2,285**	*29.2*	**3,756**	*64.4*	**5,191**	**6,342**	**7,969**
Tax rate (%)	31.1	33.4	35.1	35.7	*1.7*	33.4	*-6.4*	33.4	33.4	33.4

Per share (Rs)	12/11	12/12	12/13	12/14E	% ch	12/15E	% ch	12/16E	12/17E	12/18E
EPS (UBS, diluted)	8.71	6.48	8.35	10.78	*29.2*	17.72	*64.4*	24.50	29.93	37.60
EPS (local GAAP, diluted)	8.71	6.48	8.35	10.78	*29.2*	17.72	*64.4*	24.50	29.93	37.60
EPS (UBS, basic)	8.71	6.48	8.35	10.78	*29.2*	17.72	*64.4*	24.50	29.93	37.60
Net DPS (Rs)	2.99	3.00	3.00	3.50	*16.7*	4.00	*14.3*	4.50	5.00	5.50
Cash EPS (UBS, diluted)[1]	12.46	10.92	13.22	16.11	*21.8*	23.33	*44.9*	30.39	36.09	44.05
Book value per share	119.60	122.60	126.35	132.70	*5.0*	145.75	*9.8*	165.00	189.08	220.25
Average shares (diluted)	211.91	211.91	211.91	211.91	*0.0*	211.91	*0.0*	211.91	211.91	211.91

Balance sheet (Rsm)	12/11	12/12	12/13	12/14E	% ch	12/15E	% ch	12/16E	12/17E	12/18E
Cash and equivalents	2,644	767	3,166	3,978	*25.7*	10,008	*151.6*	12,055	14,813	18,918
Other current assets	46,957	47,631	48,903	48,327	*-1.2*	49,185	*1.8*	56,730	65,447	75,264
Total current assets	**49,600**	**48,398**	**52,069**	**52,305**	*0.5*	**59,193**	*13.2*	**68,785**	**80,260**	**94,182**
Net tangible fixed assets	12,523	13,248	14,390	14,315	*-0.5*	14,126	*-1.3*	13,878	13,572	13,206
Net intangible fixed assets	0	0	0	0	-	0	-	0	0	0
Investments / other assets	731	3,054	4,037	4,407	*9.2*	4,407	*0.0*	4,407	4,407	4,407
Total assets	**62,855**	**64,700**	**70,495**	**71,027**	*0.8*	**77,726**	*9.4*	**87,070**	**98,239**	**111,795**
Trade payables & other ST liabilities	37,509	38,624	43,621	42,808	*-1.9*	46,743	*9.2*	52,008	58,075	65,026
Short term debt	0	0	0	0	-	0	-	0	0	0
Total current liabilities	**37,509**	**38,624**	**43,621**	**42,808**	*-1.9*	**46,743**	*9.2*	**52,008**	**58,075**	**65,026**
Long term debt	0	96	99	99	*0.0*	99	*0.0*	99	99	99
Other long term liabilities	0	0	0	0	-	0	-	0	0	0
Preferred shares	0	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	**37,509**	**38,720**	**43,720**	**42,907**	*-1.9*	**46,842**	*9.2*	**52,107**	**58,173**	**65,125**
Common s/h equity	25,345	25,980	26,776	28,120	*5.0*	30,884	*9.8*	34,963	40,065	46,670
Minority interests	0	0	0	0	-	0	-	0	0	0
Total liabilities & equity	**62,855**	**64,700**	**70,495**	**71,027**	*0.8*	**77,726**	*9.4*	**87,070**	**98,239**	**111,795**

Cash flow (Rsm)	12/11	12/12	12/13	12/14E	% ch	12/15E	% ch	12/16E	12/17E	12/18E
Net income (before pref divs)	1,845	1,374	1,769	2,285	*29.2*	3,756	*64.4*	5,191	6,342	7,969
Depreciation & amortisation	795	941	1,033	1,128	*9.2*	1,189	*5.4*	1,248	1,307	1,366
Net change in working capital	467	440	3,725	(237)	-	3,078	-	(2,280)	(2,651)	(2,866)
Other operating	(415)	(70)	(70)	(173)	*-147.2*	(216)	*-25.0*	(270)	(310)	(357)
Operating cash flow	**2,693**	**2,685**	**6,458**	**3,003**	*-53.5*	**7,806**	*159.9*	**3,889**	**4,687**	**6,111**
Tangible capital expenditure	(5,081)	(1,666)	(2,175)	(1,053)	*51.6*	(1,000)	*5.0*	(1,000)	(1,000)	(1,000)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	0	0	0	0	-	0	-	0	0	0
Other investing	0	0	0	0	-	0	-	0	0	0
Investing cash flow	**(5,081)**	**(1,666)**	**(2,175)**	**(1,053)**	*51.6*	**(1,000)**	*5.0*	**(1,000)**	**(1,000)**	**(1,000)**
Equity dividends paid	(737)	(739)	(744)	(868)	*-16.7*	(992)	*-14.3*	(1,116)	(1,240)	(1,364)
Share issues / (buybacks)	0	0	(254)	(73)	*71.3*	0	-	4	0	0
Other financing	0	0	0	0	-	0	-	0	0	0
Change in debt & pref shares	0	0	0	0	-	0	-	0	0	0
Financing cash flow	**(737)**	**(739)**	**(998)**	**(941)**	*5.7*	**(992)**	*-5.4*	**(1,112)**	**(1,240)**	**(1,364)**
Cash flow inc/(dec) in cash	**(3,125)**	**280**	**3,285**	**1,010**	*-69.3*	**5,814**	*NM*	**1,777**	**2,448**	**3,748**
FX / non cash items	(102)	(2,157)	(886)	(198)	*77.7*	216	-	270	311	357
Balance sheet inc/(dec) in cash	**(3,228)**	**(1,877)**	**2,399**	**812**	*-66.2*	**6,030**	*NM*	**2,047**	**2,758**	**4,105**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

ABB India (ABB.BO)

Valuation (x)	12/11	12/12	12/13	12/14E	12/15E	12/16E	12/17E	12/18E
P/E (local GAAP, diluted)	NM	NM	70.4	NM	71.6	51.8	42.4	33.7
P/E (UBS, diluted)	87.4	NM	70.4	NM	71.6	51.8	42.4	33.7
P/CEPS	61.1	70.2	44.4	NM	54.4	41.7	35.1	28.8
Equity FCF (UBS) yield %	(1.5)	0.6	3.4	0.7	2.5	1.1	1.4	1.9
Net dividend yield (%)	0.4	0.4	0.5	0.3	0.3	0.4	0.4	0.4
P/BV x	6.4	6.3	4.6	9.6	8.7	7.7	6.7	5.8
EV/revenues (core)	2.1	2.0	1.5	3.3	3.0	2.6	2.2	1.9
EV/EBITDA (core)	46.1	45.8	24.5	46.6	36.9	29.1	23.6	19.2
EV/EBIT (core)	NM	NM	NM	NM	NM	NM	26.9	21.4
EV/OpFCF (core)	NM	NM	NM	NM	NM	NM	26.9	21.4
EV/op. invested capital	7.7	6.9	5.4	NM	NM	NM	NM	NM

Enterprise value (Rsm)	12/11	12/12	12/13	12/14E	12/15E	12/16E	12/17E	12/18E
Market cap.	161,247	162,481	124,494	268,797	268,797	268,797	268,797	268,797
Net debt (cash)	(5,621)	(5,621)	(5,621)	(5,621)	(5,621)	(5,621)	(13,336)	(13,336)
Buy out of minorities	0	0	0	0	0	0	0	0
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	**155,626**	**156,860**	**118,873**	**263,177**	**263,177**	**263,177**	**255,462**	**255,462**
Non core assets	(507)	(2,906)	(3,757)	(4,255)	(4,255)	(4,255)	(4,255)	(4,255)
Core enterprise value	**155,119**	**153,954**	**115,116**	**258,922**	**258,922**	**258,922**	**251,207**	**251,207**

Growth (%)	12/11	12/12	12/13	12/14E	12/15E	12/16E	12/17E	12/18E
Revenue	18.5	1.6	2.1	0.1	10.0	15.0	15.0	15.0
EBITDA (UBS)	NM	0.0	39.7	18.3	26.3	26.8	19.6	23.1
EBIT (UBS)	NM	-5.7	51.2	20.8	31.6	31.2	22.1	25.7
EPS (UBS, diluted)	191.9	-25.5	28.7	29.2	64.4	38.2	22.2	25.7
Net DPS	50.2	0.3	0.0	16.7	14.3	12.5	11.1	10.0

Margins & Profitability (%)	12/11	12/12	12/13	12/14E	12/15E	12/16E	12/17E	12/18E
Gross profit margin	27.6	28.3	30.1	32.2	32.5	32.6	32.6	32.6
EBITDA margin	4.5	4.4	6.1	7.2	8.2	9.1	9.5	10.1
EBIT margin	3.4	3.2	4.7	5.7	6.9	7.8	8.3	9.1
Net earnings (UBS) margin	2.5	1.8	2.3	3.0	4.4	5.3	5.6	6.2
ROIC (EBIT)	12.7	10.9	17.3	22.2	31.8	43.1	46.8	52.5
ROIC post tax	8.8	7.2	11.2	14.3	21.1	28.7	31.2	35.0
ROE (UBS)	7.4	5.4	6.7	8.3	12.7	15.8	16.9	18.4

Capital structure & Coverage (x)	12/11	12/12	12/13	12/14E	12/15E	12/16E	12/17E	12/18E
Net debt / EBITDA	(0.8)	(0.2)	(0.7)	(0.7)	(1.4)	(1.3)	(1.4)	(1.4)
Net debt / total equity %	(10.4)	(2.6)	(11.5)	(13.8)	(32.1)	(34.2)	(36.7)	(40.3)
Net debt / (net debt + total equity) %	(11.6)	(2.6)	(12.9)	(16.0)	(47.2)	(52.0)	(58.0)	(67.6)
Net debt/EV %	(1.7)	(0.4)	(2.7)	(1.5)	(3.8)	(4.6)	(5.9)	(7.5)
Capex / depreciation %	NM	177.1	NM	93.3	84.1	80.1	76.5	73.2
Capex / revenue %	6.8	2.2	2.8	1.4	1.2	1.0	0.9	0.8
EBIT / net interest	8.4	5.6	3.6	4.2	14.4	63.0	NM	NM
Dividend cover (UBS)	2.9	2.2	2.8	3.1	4.4	5.4	6.0	6.8
Div. payout ratio (UBS) %	34.4	46.3	35.9	32.5	22.6	18.4	16.7	14.6

Revenues by division (Rsm)	12/11	12/12	12/13	12/14E	12/15E	12/16E	12/17E	12/18E
Others	74,490	75,650	77,220	77,333	85,066	97,826	112,500	129,375
Total	**74,490**	**75,650**	**77,220**	**77,333**	**85,066**	**97,826**	**112,500**	**129,375**

EBIT (UBS) by division (Rsm)	12/11	12/12	12/13	12/14E	12/15E	12/16E	12/17E	12/18E
Others	2,570	2,424	3,666	4,429	5,828	7,646	9,333	11,729
Total	**2,570**	**2,424**	**3,666**	**4,429**	**5,828**	**7,646**	**9,333**	**11,729**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Bharat Heavy Electricals Limited

The wait is not over yet

Is order book poised for recovery after a 37% decline? Not in our view

Fuel supply and not physical capacity is the key constraint facing the Indian power sector. We believe normalised utilisation of operational coal-fired capacity should be more than sufficient to meet unfulfilled demand, and believe the 87GW under construction could deliver an 8% power generation CAGR over the next five years, in line with GDP growth. The Indian power market is clearly oversupplied, but order inflows will not dry up as SOEs will continue to order based on long-term projections. This could result in 12-16GW orders per year, translating to Bharat Heavy Electricals' (BHEL) order book moving plus or minus 10% from current levels over the next three to four years.

Re-start of stalled projects uncertain; could provide transitory relief

The company estimates 22% of its current orders are stalled, primarily due to uncertainty over captive coal allocations. Management believes execution could quickly pick up after auctions are completed by end-FY15. We are not as sanguine—existing developers might fail to win coal mines, and raising equity after a win would also take time. In any case, an increase in execution rates in the absence of order inflow growth would result in only three to four quarters of transitory revenue growth, in our view.

Negative operating leverage to abate, but salaries and pricing still a risk

Expectations that reductions in staff strength will reduce costs are unlikely to be met. Employee strength is likely to decline 4% in FY15, but costs are unlikely to come down as inflation and time-indexed increments offset the decline in numbers. The decadal re-set of salaries is due in Q4 FY17, and the last re-set resulted in a 40% hike. Gross margins are unlikely to expand in the face of aggressive bidding with companies still awaiting their first orders.

Valuation: expect ROE to remain below COE. Initiate with Sell rating

At 23.8x FY16E PE, BHEL is trading 44% above its cyclical average. With earnings likely to stagnate over the medium term, we consider this quite expensive. We expect average ROE to be below the COE over FY15-17E—which is not reflected at 1.76x FY16E P/BV. We initiate coverage with a Sell rating and price target of Rs201.99, based on 20x FY17E PE (in line with cyclical averages). Upside risks include a bunching up of lumpy orders, resulting in strong orders in one or two quarters being misread as a sustained revival, or transitory improvement due to execution of stalled projects being construed as sustained growth.

Equities

India
Industrial, Diversified

12-month rating	**Sell**
	Prior: Not Rated
12m price target	**Rs201.99**
	Prior: -
Price	**Rs258.30**

RIC: BHEL.BO **BBG:** BHEL IB

Trading data and key metrics

52-wk range	Rs297.00-175.55
Market cap.	Rs632bn/US$10.1bn
Shares o/s	2,448m (ORD)
Free float	37%
Avg. daily volume ('000)	4,328
Avg. daily value (m)	Rs1,160.5
Common s/h equity (03/15E)	Rs346bn
P/BV (03/15E)	1.8x
Net debt / EBITDA (03/15E)	NM

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/15E	-	9.19	-	7.22
03/16E	-	10.85	-	9.96
03/17E	-	10.10	-	14.50

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Highlights (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenues	469,915	473,348	381,303	304,002	327,760	335,748	374,701	377,002
EBIT (UBS)	83,489	76,533	28,379	16,154	21,963	19,341	23,494	20,884
Net earnings (UBS)	70,400	66,147	34,608	22,488	26,554	24,719	27,626	25,799
EPS (UBS, diluted) (Rs)	28.76	27.03	14.14	9.19	10.85	10.10	11.29	10.54
DPS (Rs)	6.40	5.41	2.79	2.43	2.87	2.67	2.99	2.79
Net (debt) / cash	65,486	63,169	92,182	94,594	90,033	107,720	108,660	131,581

Profitability/valuation	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
EBIT margin %	17.8	16.2	7.4	5.3	6.7	5.8	6.3	5.5
ROIC (EBIT) %	58.5	36.4	12.0	6.7	8.5	7.2	8.4	7.3
EV/EBITDA (core) x	7.8	5.2	7.8	20.1	16.1	17.2	15.0	15.9
P/E (UBS, diluted) x	11.5	8.3	11.5	28.1	23.8	25.6	22.9	24.5
Equity FCF (UBS) yield %	(1.4)	2.4	9.3	1.4	0.6	4.0	1.5	4.9
Net dividend yield %	1.9	2.4	1.7	0.9	1.1	1.0	1.2	1.1

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs258.30 on 18 Mar 2015 22:38 HKT

Investment Thesis

Bharat Heavy Electricals Limited

Investment case

BHEL is India's leading power equipment manufacturer. We estimate that power generation capacity has become surplus in India for the first time in history, and the large under-construction project pipeline means overcapacity will persist in the medium term. Order inflows, driven mainly by SOEs, should continue to hover around current levels. The decadal wage re-set will impact margins from FY17 onwards. The shares are trading well above average valuation, with a stagnant medium-term earnings outlook, in our view.

Upside scenario

Upside risks include a bunching up of lumpy orders resulting in strong order inflows in one or two quarters that is misread as a sustained revival, or a transitory improvement due to execution of stalled projects being construed as sustained growth. This could translate to a higher target multiple resulting in a valuation of Rs260.

Downside scenario

In our downside scenario, we assume further declines in the order book, with the consequent revenue decline and margin contraction resulting in continuing earnings decline. In this scenario, we estimate declining earnings coupled with de-rating could drive the share price to Rs100.

Upcoming catalysts

Potential catalysts include: 1) finalisation of the current bid pipeline; 2) evidence of a re-start of stalled projects by H2 FY16; and 3) early indications of the likely wage hikes due in Q4 FY17.

12-month rating	**Sell**
12m price target	**Rs201.99**

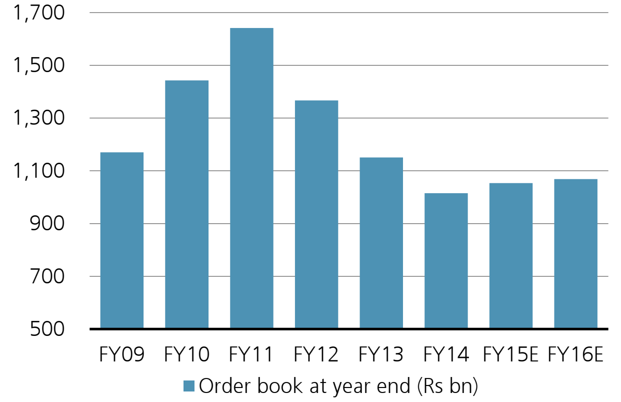
Business description

Bharat Heavy Electricals (BHEL) focuses on the Indian power equipment business. Its main customers are National Thermal Power Corporation and the state electricity boards. BHEL also services the power transmission, captive power plant, industrial equipment, and transport segments. It is majority-owned by the government of India.

Industry outlook

For power generation equipment manufacturers, the past four years have been characterised by: 1) challenges in obtaining new orders; 2) pressure on profitability due to significant overcapacity in the system; and 3) heightened competitive pressure. This scenario is unlikely to change in the medium term

Order book (Rs bn)



Source: Company data, UBS estimates

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Recovery still not in sight

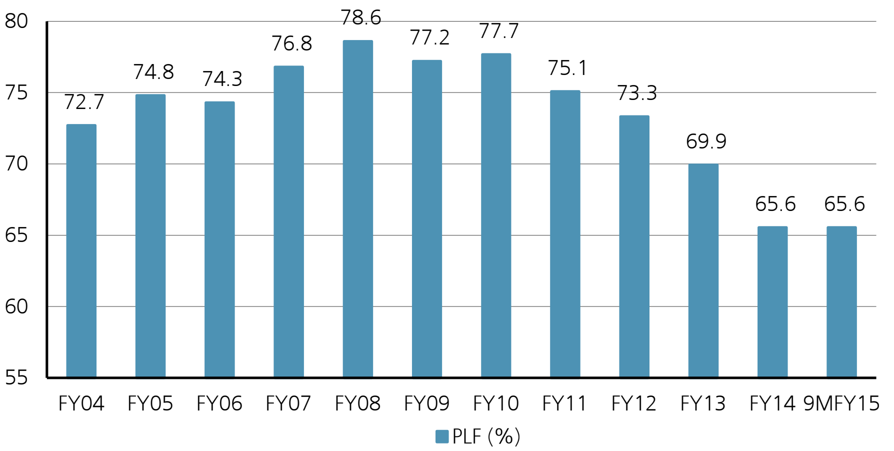
Fuel supply and not physical capacity is the key constraint facing the Indian power sector. We believe normalised utilisation of operational coal-fired capacity should be more than sufficient to meet unfulfilled demand, and think the 87GW under construction could deliver an 8% power generation CAGR over the next five years, in line with GDP growth. The Indian power market is clearly oversupplied, but order inflows will not dry up as SOEs will continue to order based on long-term projections. This could result in 12-16GW orders per year, translating to Bharat Heavy Electricals' (BHEL) order book moving plus or minus 10% from current levels over the next three to four years.

Expectations that reductions in staff strength will reduce costs are unlikely to be met. The decadal re-set of salaries in Q4 FY17 will further impact margins. However, at 23.8x FY16E PE (44% above cyclical average), we believe the shares are pricing in a recovery in growth and margins. With earnings likely to stagnate over the medium term, we consider this quite expensive. We therefore initiate coverage with a Sell rating and price target of Rs201.99, based on 20x FY17E PE.

Order inflows challenged in the near term due to coal

India is running a power deficit due to an insufficient supply of domestic coal, which has driven utilisation of coal-fired capacity to a low of 65.6%.

Figure 120: Coal fired plants are running at multi-year lows



Source: CEA, UBS

A doubling of coal supply to the power sector (to 1,071mtpa) by FY19 for optimal capacity utilisation is therefore more important for the sector than placing new orders with equipment vendors.

Figure 121: Domestic coal production would need to grow at 2x historical highs to feed operational and under-construction capacity

	m tonnes
End-FY14 coal fired capacity (GW)	145
Coal required for normalized PLF	639
Capacity post-FY14 monitored by CEA (GW)	98
Incremental coal required	432
Total coal required by FY19E	**1,071**
FY14 domestic coal to power sector	385
FY14 coal imports for power sector	95
FY19 imports assuming same proportion	192
Incremental FY14-19E domestic coal	494
FY14 total domestic thermal coal supply (including other sectors)	549
Production CAGR required, assuming all incremental domestic coal allocated to power	**13.7%**
Best five-year total domestic supply CAGR so far	**6.6%**

Source: CCO, UBS estimates

As utilities grapple with the coal deficit, capacity addition plans and ordering intentions will take a back seat.

Order inflows unlikely to grow even in the medium term

We have used heuristics to quantify unfulfilled power demand in India. In contrast to the long-held view that unfulfilled demand is 'unlimited', we estimate actual demand is 22% above current levels—well above the current 3.8% official deficit estimate—but not 'extremely large/unlimited' as generally believed (refer to *India Power Utilities: Improving asset utilisation to drive returns*).

If run at normalised utilisation levels we believe the current operational coal capacity could more than meet the latent demand for power.

We believe current operational coal capacity—if run at normalised utilisation levels—could more than meet the latent demand for power

Figure 122: Normalised utilisation of coal capacity could deliver 23% extra power

	b kwh
10M FY15 total generation	881
Coal fired generation	676
End-10M FY15 coal capacity (MW)	156,191
Power generated if coal cap run at 83% PLF	878
Additional power generated	202
Additional power generated as % of total generation	**22.9%**

Source: CEA, UBS estimates

We estimate under-construction coal-fired projects alone could deliver an FY15-20 power generation CAGR of 8% over the expanded base (including latent demand), ignoring any incremental contribution from hydro or nuclear projects over the next five years.

Figure 123: We estimate under-construction coal capacity could deliver an FY15-20 CAGR of 8% in power generation

Capacity	b kwh
Current coal fired running at normative PLF	1,048
Other sources at current run-rate	244
Total FY15 generation achievable	**1,291**
Under-construction coal capacity monitored by CEA expected to be completed by FY17E	87,237
Additional power produced if this capacity is completed by FY19-20	585
Additional power if current gas capacity reaches 40% PLF by FY20	34
FY20E generation	**1,910**
Generation growth after latent demand fully met	**8.1%**

Source: CEA, UBS estimates

Ordering by public utilities should help maintain current trajectory

Public utilities' capex plans are not driven solely by an economic rationale

But order inflows will not dry up, as SOEs will continue to order based on long-term projections. In many cases, capex plans for public utilities are not driven solely by an economic rationale. For example, the newly formed state of Telengana is setting up 6GW of capacity within the state that will use imported coal, rather than using power from plants outside the state. Similarly, the southern state of Karnataka has ordered a 370MW gas-fired power plant in an environment of abysmally low gas availability in India and no clear visibility of improvement in the medium term. NTPC plans to bid out 4-5 GW of thermal plant orders every year. There are other examples as well.

Figure 124: Contracts awarded by SOE power utilities in FY15 YTD

Utility	Value of contract (Rs bn)	Remarks
NTPC	112	Multiple projects
Gujarat State Electricity Corp	35	800MW Wanakbori Project
Karnataka Power Corp	12	370 MW gas turbine-based CCPP at Bengaluru
Madhya Pradesh Power Genco	51	2x600MW Malwa project at Khandwa on EPC basis.
Neyveli Lignite Corp	12	BOP for (2x500 MW) Cuddalore project
Tamil Nadu Generation & Distribution Corp	78	EPC order for 2x660 MW Ennore SEZ Project
Telangana State Power Generation Corp	38	EPC Order for 800 MW Kothagudem Project

Source: Projects Today, UBS

This could result in 12-16GW orders per year, translating to BHEL's order book moving in a plus or minus 10% range from current levels over the next three to four years.

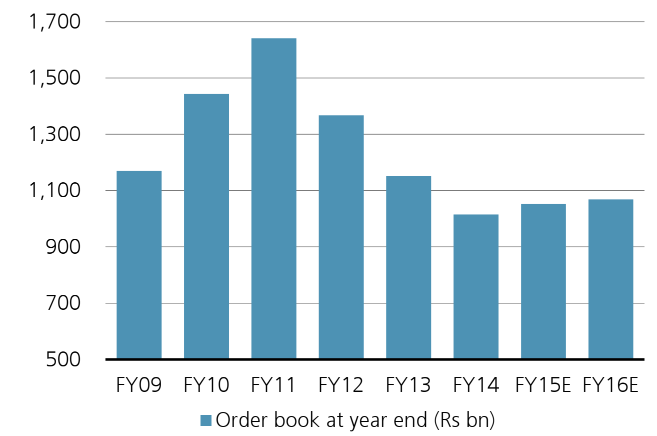
Expect revenue to stagnate with order book; re-start of stalled projects could provide transitory relief

Re-start of stalled projects could provide transitory revenue growth

Management estimates execution of 22% of BHEL's current order book is stalled due to uncertainty over captive coal allocations and regulatory and funding issues. However, the pace of execution in some stalled projects, such as the Jaiprakash Power Ventures (JPVL) project at Bara and the Bajaj Hindustan project in Lalitpur, has improved recently.

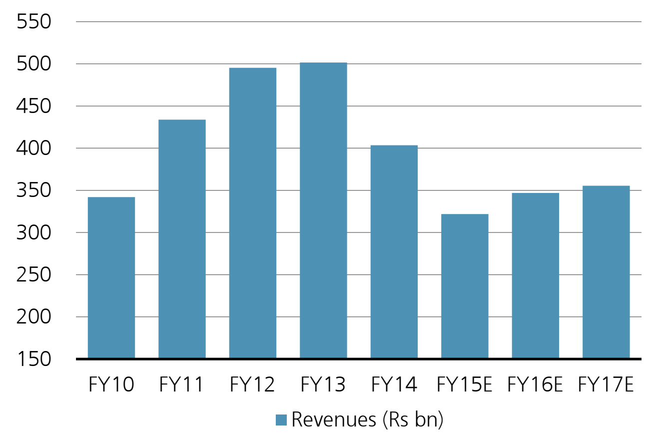
Management believes execution could quickly pick up after auctions are completed by end-FY15. We are not as sanguine—existing developers might fail to win coal mines and raising equity after a win would also take time. In any case, an increase in execution rates in the absence of order inflow growth would result in only three to four quarters of transitory revenue growth, in our view

Figure 125: We expect the order book to stagnate…



Source: Company data, UBS estimates

Figure 126: …and revenue to follow suit



Source: Company data, UBS estimates

Expect negative operating leverage to abate, but salary hikes and pricing still a risk

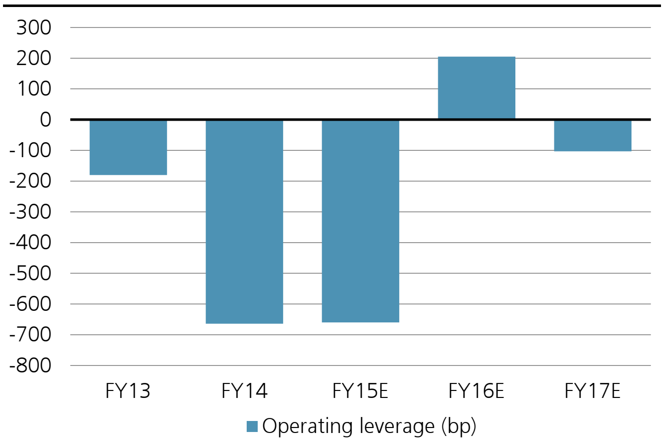
We expect the sharp revenue decline over FY13-15E to end in FY15, which should see negative operating leverage abate as well. We estimate negative operating leverage has shaved 15ppt off EBITDA margins over FY13-15, but that a 425bps improvement in gross margin over the same period has limited the EBITDA margin contraction to 10.8%. Gross margins jumped sharply in FY15E due to an easing in material costs, reduced iron ore content and less need for outsourcing, as BHEL's own units were under-utilised.

However, gross margins are unlikely to expand further in the face of aggressive bidding with companies still awaiting their first orders. Expectations that a reduction in staff strength would reduce costs and lead to stronger operating leverage are unlikely to materialise—we think employee strength is likely to shrink 4% in FY15, but expect total employee costs to rise 3% as inflation and time-indexed increments offset the decline in numbers.

Decadal re-set of salaries is due in Q4 FY17: the last re-set resulted in a 40% hike

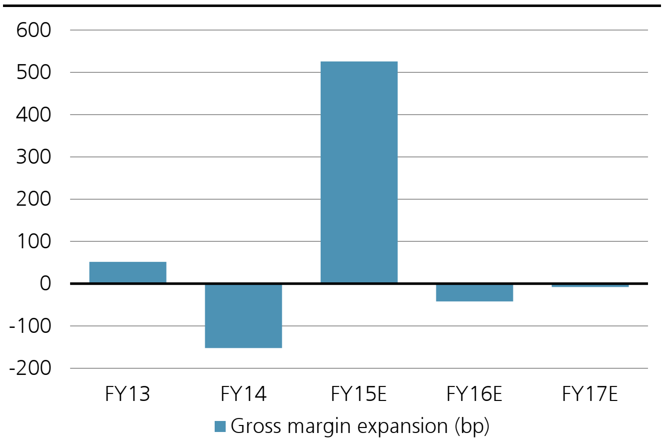
The decadal re-set of salaries is due in Q4 FY17, and the last re-set resulted in a 40% hike. The increase might not be as steep this time round, but should still be meaningful. For reference, the wage settlement for SOE bank employees resulted in a 15% hike (SOE banks follow a five-year wage revision cycle).

Figure 127: Expect negative operating leverage to abate…



Source: Company data, UBS estimates

Figure 128: …but think gross margins are unlikely to expand further



Source: Company data, UBS estimates

Initiate coverage with a Sell rating and price target of Rs201.99—22% below current level

At 23.8x FY16E PE, BHEL is trading at 44% above its cyclical average. With earnings likely to stagnate over the medium term, we consider this quite expensive. We expect average ROE to be below the COE over FY15-17E—which is not reflected at 1.9x FY16E P/BV. We initiate coverage with a Sell rating and price target of Rs201.99, based on 20x FY17E PE (in line with cyclical averages). Our price target is 22% below the current level.

Risk

Bunching up of SOE orders presents key upside risk to our call

A bunching of lumpy orders resulting in strong order inflows in one or two quarters could be misread as a sustained revival in order inflows. Similarly, a transitory improvement in revenue growth due to more rapid execution of stalled projects could be construed as a sustained growth revival. These represent the key upside risks to our Sell rating.

Sustained high competitive intensity from both domestic and foreign vendors due to a lack of orders could result in negative surprises to our gross margin assumptions, resulting in further downside to our earnings estimates.

Bharat Heavy Electricals Limited (BHEL.BO)

Income statement (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Revenues	**469,915**	**473,348**	**381,303**	**304,002**	-20.3	**327,760**	7.8	**335,748**	**374,701**	**377,002**
Gross profit	190,111	193,951	150,422	135,911	-9.6	145,156	6.8	148,431	168,110	169,382
EBITDA (UBS)	**91,489**	**86,067**	**38,209**	**26,386**	-30.9	**32,930**	24.8	**30,897**	**35,540**	**33,420**
Depreciation & amortisation	(8,000)	(9,534)	(9,829)	(10,232)	4.1	(10,968)	7.2	(11,556)	(12,046)	(12,535)
EBIT (UBS)	**83,489**	**76,533**	**28,379**	**16,154**	-43.1	**21,963**	36.0	**19,341**	**23,494**	**20,884**
Associates & investment income	20,046	19,044	23,090	17,298	-25.1	17,298	0.0	17,298	17,298	17,298
Other non-operating income	0	0	0	0	-	0	-	0	0	0
Net interest	(513)	(1,253)	(1,326)	(1,326)	0.0	(1,326)	0.0	(1,326)	(1,326)	(1,326)
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
Profit before tax	**103,023**	**94,324**	**50,143**	**32,126**	-35.9	**37,935**	18.1	**35,313**	**39,466**	**36,856**
Tax	(32,623)	(28,177)	(15,535)	(9,638)	38.0	(11,380)	-18.1	(10,594)	(11,840)	(11,057)
Profit after tax	**70,400**	**66,147**	**34,608**	**22,488**	-35.0	**26,554**	18.1	**24,719**	**27,626**	**25,799**
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	0	0	0	0	-	0	-	0	0	0
Extraordinary items	0	0	(60)	0	-	0	-	0	0	0
Net earnings (local GAAP)	**70,400**	**66,147**	**34,548**	**22,488**	-34.9	**26,554**	18.1	**24,719**	**27,626**	**25,799**
Net earnings (UBS)	**70,400**	**66,147**	**34,608**	**22,488**	-35.0	**26,554**	18.1	**24,719**	**27,626**	**25,799**
Tax rate (%)	31.7	29.9	31.0	30.0	-3.2	30.0	0.0	30.0	30.0	30.0

Per share (Rs)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
EPS (UBS, diluted)	28.76	27.03	14.14	9.19	-35.0	10.85	18.1	10.10	11.29	10.54
EPS (local GAAP, diluted)	28.76	27.03	14.11	9.19	-34.9	10.85	18.1	10.10	11.29	10.54
EPS (UBS, basic)	28.76	27.03	14.14	9.19	-35.0	10.85	18.1	10.10	11.29	10.54
Net DPS (Rs)	6.40	5.41	2.79	2.43	-12.8	2.87	18.1	2.67	2.99	2.79
Cash EPS (UBS, diluted)[1]	32.03	30.92	18.16	13.37	-26.4	15.33	14.7	14.82	16.21	15.66
Book value per share	103.67	124.38	135.02	141.57	4.8	149.05	5.3	156.02	163.80	171.07
Average shares (diluted)	2,447.60	2,447.60	2,447.60	2,447.60	0.0	2,447.60	0.0	2,447.60	2,447.60	2,447.60

Balance sheet (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Cash and equivalents	66,720	77,321	118,729	119,642	0.8	110,080	-8.0	122,767	113,708	136,129
Other current assets	524,517	547,865	531,941	423,989	-20.3	456,901	7.8	467,966	522,310	525,482
Total current assets	**591,237**	**625,185**	**650,670**	**543,631**	-16.5	**566,981**	4.3	**590,733**	**636,017**	**661,610**
Net tangible fixed assets	56,444	56,301	53,351	52,719	-1.2	47,751	-9.4	42,195	36,150	29,614
Net intangible fixed assets	0	0	0	0	-	0	-	0	0	0
Investments / other assets	20,079	19,799	23,891	23,891	0.0	23,891	0.0	23,891	23,891	23,891
Total assets	**667,760**	**701,285**	**727,912**	**620,241**	-14.8	**638,623**	3.0	**656,820**	**696,058**	**715,116**
Trade payables & other ST liabilities	336,380	293,270	267,633	166,392	-37.8	165,069	-0.8	169,067	188,700	189,846
Short term debt	1,234	14,152	26,548	25,048	-5.65	20,048	-19.96	15,048	5,048	4,548
Total current liabilities	**337,614**	**307,422**	**294,181**	**191,439**	-34.9	**185,117**	-3.3	**184,114**	**193,748**	**194,394**
Long term debt	0	0	0	0	-	0	-	0	0	0
Other long term liabilities	76,414	89,421	103,260	82,305	-20.3	88,694	7.8	90,841	101,391	102,006
Preferred shares	0	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	**414,028**	**396,844**	**397,441**	**273,744**	-31.1	**273,810**	0.0	**274,956**	**295,138**	**296,400**
Common s/h equity	253,732	304,441	330,471	346,497	4.8	364,813	5.3	381,864	400,920	418,716
Minority interests	0	0	0	0	-	0	-	0	0	0
Total liabilities & equity	**667,760**	**701,285**	**727,912**	**620,241**	-14.8	**638,623**	3.0	**656,820**	**696,058**	**715,116**

Cash flow (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Net income (before pref divs)	70,400	66,147	34,548	22,488	-34.9	26,554	18.1	24,719	27,626	25,799
Depreciation & amortisation	8,000	9,534	9,829	10,232	4.1	10,968	7.2	11,556	12,046	12,535
Net change in working capital	(82,843)	(53,450)	4,126	(14,246)	-	(27,846)	-95.5	(4,920)	(24,161)	(1,410)
Other operating	6,173	(44)	(4,062)	0	-	0	-	0	0	0
Operating cash flow	**1,730**	**22,187**	**44,441**	**18,475**	-58.4	**9,676**	-47.6	**31,355**	**15,511**	**36,925**
Tangible capital expenditure	(12,707)	(9,006)	(7,378)	(9,600)	-30.1	(6,000)	37.5	(6,000)	(6,000)	(6,000)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	0	0	0	0	-	0	-	0	0	0
Other investing	(225)	325	90	0	-	0	-	0	0	0
Investing cash flow	**(12,932)**	**(8,681)**	**(7,288)**	**(9,600)**	-31.7	**(6,000)**	37.5	**(6,000)**	**(6,000)**	**(6,000)**
Equity dividends paid	(18,206)	(15,438)	(8,004)	(6,976)	12.8	(8,238)	-18.1	(7,669)	(8,570)	(8,004)
Share issues / (buybacks)	0	0	0	0	-	0	-	0	0	0
Other financing	0	0	0	0	-	0	-	0	0	0
Change in debt & pref shares	213	12,918	12,396	(1,500)	-	(5,000)	-233.33	(5,000)	(10,000)	(500)
Financing cash flow	**(17,993)**	**(2,521)**	**4,392**	**(8,476)**	-	**(13,238)**	-56.2	**(12,669)**	**(18,570)**	**(8,504)**
Cash flow inc/(dec) in cash	**(29,195)**	**10,985**	**41,545**	**398**	-99.0	**(9,561)**	-	**12,687**	**(9,060)**	**22,421**
FX / non cash items	(386)	(384)	(136)	514	-	0	-100.0	0	0	0
Balance sheet inc/(dec) in cash	**(29,582)**	**10,601**	**41,409**	**912**	-97.8	**(9,561)**	-	**12,687**	**(9,060)**	**22,421**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

Bharat Heavy Electricals Limited (BHEL.BO)

Valuation (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
P/E (local GAAP, diluted)	11.5	8.3	11.5	28.1	23.8	25.6	22.9	24.5
P/E (UBS, diluted)	11.5	8.3	11.5	28.1	23.8	25.6	22.9	24.5
P/CEPS	10.4	7.3	9.0	19.3	16.8	17.4	15.9	16.5
Equity FCF (UBS) yield %	(1.4)	2.4	9.3	1.4	0.6	4.0	1.5	4.9
Net dividend yield (%)	1.9	2.4	1.7	0.9	1.1	1.0	1.2	1.1
P/BV x	3.2	1.8	1.2	1.8	1.7	1.7	1.6	1.5
EV/revenues (core)	1.5	0.9	0.8	1.7	1.6	1.6	1.4	1.4
EV/EBITDA (core)	7.8	5.2	7.8	20.1	16.1	17.2	15.0	15.9
EV/EBIT (core)	8.5	5.9	10.5	NM	24.2	27.5	22.6	25.5
EV/OpFCF (core)	8.5	5.9	10.5	NM	24.2	27.5	22.6	25.5
EV/op. invested capital	5.0	2.1	1.3	2.2	2.1	2.0	1.9	1.9

Enterprise value (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Market cap.	812,388	550,183	398,483	632,215	632,215	632,215	632,215	632,215
Net debt (cash)	(96,462)	(96,462)	(96,462)	(96,462)	(96,462)	(96,462)	(96,462)	(96,462)
Buy out of minorities	0	0	0	0	0	0	0	0
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	**715,926**	**453,721**	**302,020**	**535,753**	**535,753**	**535,753**	**535,753**	**535,753**
Non core assets	(4,202)	(4,202)	(4,202)	(4,202)	(4,202)	(4,202)	(4,202)	(4,202)
Core enterprise value	**711,724**	**449,519**	**297,819**	**531,551**	**531,551**	**531,551**	**531,551**	**531,551**

Growth (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenue	13.5	0.7	-19.4	-20.3	7.8	2.4	11.6	0.6
EBITDA (UBS)	15.1	-5.9	-55.6	-30.9	24.8	-6.2	15.0	-6.0
EBIT (UBS)	12.8	-8.3	-62.9	-43.1	36.0	-11.9	21.5	-11.1
EPS (UBS, diluted)	17.1	-6.0	-47.7	-35.0	18.1	-6.9	11.8	-6.6
Net DPS	2.7	-15.5	-48.4	-12.8	18.1	-6.9	11.8	-6.6

Margins & Profitability (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Gross profit margin	40.5	41.0	39.4	44.7	44.3	44.2	44.9	44.9
EBITDA margin	19.5	18.2	10.0	8.7	10.0	9.2	9.5	8.9
EBIT margin	17.8	16.2	7.4	5.3	6.7	5.8	6.3	5.5
Net earnings (UBS) margin	15.0	14.0	9.1	7.4	8.1	7.4	7.4	6.8
ROIC (EBIT)	58.5	36.4	12.0	6.7	8.5	7.2	8.4	7.3
ROIC post tax	40.0	25.5	8.3	4.7	5.9	5.0	5.9	5.1
ROE (UBS)	30.9	23.7	10.9	6.6	7.5	6.6	7.1	6.3

Capital structure & Coverage (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Net debt / EBITDA	(0.7)	(0.7)	(2.4)	(3.6)	(2.7)	(3.5)	(3.1)	(3.9)
Net debt / total equity %	(25.8)	(20.7)	(27.9)	(27.3)	(24.7)	(28.2)	(27.1)	(31.4)
Net debt / (net debt + total equity) %	(34.8)	(26.2)	(38.7)	(37.6)	(32.8)	(39.3)	(37.2)	(45.8)
Net debt/EV %	(9.2)	(14.1)	(31.0)	(17.8)	(16.9)	(20.3)	(20.4)	(24.8)
Capex / depreciation %	158.8	94.5	75.1	93.8	54.7	51.9	49.8	47.9
Capex / revenue %	2.7	1.9	1.9	3.2	1.8	1.8	1.6	1.6
EBIT / net interest	NM	61.1	21.4	12.2	16.6	14.6	17.7	15.7
Dividend cover (UBS)	4.5	5.0	5.1	3.8	3.8	3.8	3.8	3.8
Div. payout ratio (UBS) %	22.3	20.0	19.7	26.5	26.5	26.5	26.5	26.5

Revenues by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	469,915	473,348	381,303	304,002	327,760	335,748	374,701	377,002
Total	**469,915**	**473,348**	**381,303**	**304,002**	**327,760**	**335,748**	**374,701**	**377,002**

EBIT (UBS) by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	83,489	76,533	28,379	16,154	21,963	19,341	23,494	20,884
Total	**83,489**	**76,533**	**28,379**	**16,154**	**21,963**	**19,341**	**23,494**	**20,884**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Cummins India

Expectations need a re-set

Equities

India
Industrial, Diversified

12-month rating	**Sell**
	Prior: Not Rated
12m price target	**Rs839.53**
	Prior: -
Price	**Rs865.55**

RIC: CUMM.BO **BBG:** KKC IB

Trading data and key metrics

52-wk range	Rs937.90-524.45
Market cap.	Rs240bn/US$3.82bn
Shares o/s	277m (ORD)
Free float	49%
Avg. daily volume ('000)	83
Avg. daily value (m)	Rs73.8
Common s/h equity (03/15E)	Rs29.3bn
P/BV (03/15E)	8.2x
Net debt / EBITDA (03/15E)	0.0x

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/15E	-	25.24	-	25.65
03/16E	-	30.05	-	29.72
03/17E	-	33.58	-	35.65

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Anchoring to historical domestic sales trajectory could be misleading

While we expect domestic power revenue to recover after a 34% decline over FY14-15E, there has been a structural deterioration in another historical demand driver: gensets used as a prime power source. Peak and base deficits should continue to decline in the medium term. Consensus estimates anchored on historical trends should therefore prove optimistic, in our view. We think export growth is likely to moderate as the recent ramp-up becomes part of the base, while price cuts to regain market share could offset operating leverage. With the shares trading near historical highs, we initiate coverage with a Sell rating.

Price cuts to regain market share could offset operating leverage

Cummins India (Cummins) has lost market share in the sub-800kVA genset segment after new emission norms came into force. Unlike Cummins, competitors made the minimum changes necessary to meet enhanced standards, and also absorbed some cost increases. Cummins has now scaled back some design features and cut prices. This could constrain margin expansion driven by operating leverage over FY16-17E.

Export growth to moderate as LHP ramp-up become part of the base

The company's 47% export growth in 9MFY15 was driven primarily by a doubling of low horsepower engine (LHP) exports as production in the new export-dedicated facility ramped up. With LHP capacity utilisation currently at 60%, further ramp-up would yield more moderate growth rates. We consider acceleration in high horsepower engine (HHP) exports, traditionally the biggest contributor to exports, unlikely, as the growth outlook in key target markets—China, the Middle East, Southeast Asia, Latin America and Africa remains uncertain.

Valuation: trading near historical highs; risks skewed to downside;

At 28.8x FY16E PE, the shares are at the upper end of their trading band. Our FY17 EPS estimates, derived from robust cyclical recovery assumptions and margin forecasts that are 130bps above the 10-year average, are still 8% below consensus. With the outlook for industrial capex and commercial real estate still hazy, we think risks are clearly skewed to the downside. We think rich multiples based on above cyclical margin estimates and expectations of a sharp uptick in revenue growth prepare the ground for disappointments ahead. We initiate coverage with a Sell rating and a price target of Rs839.53, based on 25x FY17E PE (the average multiple over the past year).

Highlights (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenues	40,522	45,090	38,991	44,148	53,656	60,000	67,107	75,068
EBIT (UBS)	5,902	7,073	5,664	6,057	7,825	8,831	10,044	11,311
Net earnings (UBS)	5,398	7,025	6,000	6,997	8,329	9,309	10,489	11,711
EPS (UBS, diluted) (Rs)	19.47	25.34	21.65	25.24	30.05	33.58	37.84	42.25
DPS (Rs)	11.00	13.00	13.00	13.00	14.00	16.00	19.00	22.00
Net (debt) / cash	2,235	3,547	865	(229)	(674)	106	1,420	3,856
Profitability/valuation	**03/12**	**03/13**	**03/14**	**03/15E**	**03/16E**	**03/17E**	**03/18E**	**03/19E**
EBIT margin %	14.6	15.7	14.5	13.7	14.6	14.7	15.0	15.1
ROIC (EBIT) %	54.3	53.3	32.7	27.0	29.3	28.9	30.2	32.0
EV/EBITDA (core) x	17.9	16.3	19.1	34.1	26.8	23.6	20.7	18.3
P/E (UBS, diluted) x	22.3	18.7	20.8	34.3	28.8	25.8	22.9	20.5
Equity FCF (UBS) yield %	2.4	3.7	0.1	1.1	1.7	2.5	3.5	4.0
Net dividend yield %	2.5	2.7	2.9	1.5	1.6	1.8	2.2	2.5

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs865.55 on 18 Mar 2015 22:38 HKT

Investment Thesis

Cummins India

12-month rating	**Sell**
12m price target	**Rs839.53**

Investment case

While we expect domestic revenue to recover on a capex recovery and normalisation of the disruption caused by new emission standards, we believe domestic revenue expectations based on past trajectory are unlikely to be met given the structural decline underway in India's power deficit. Furthermore, export growth is likely to moderate as low-horse power engine exports become part of the base. Margins are close to historical highs, but price cuts to regain lost market share could impact margins. Multiples close to historical peaks make risk-reward even more unfavourable, in our view.

Upside scenario

A sharper-than-expected recovery in industrial capex could result in domestic revenue 15% above our estimates and margin surprise driven by operating leverage could translate to 20% higher earnings. We estimate a valuation of Rs1,000 in this scenario.

Downside scenario

A delayed recovery in industrial capex, coupled with declining power deficits, could result in domestic revenue 20% below our estimates. The higher competitive intensity could drive margins 100bps lower, translating to 30% earnings downside from our base case. We estimate a valuation of Rs588 in this scenario.

Upcoming catalysts

Q4 FY15 results will provide evidence of whether price cuts drove market share gains or had a greater impact on margins. Normalisation of domestic powergen sales after the disruption related to new emission norms. Lower-than-expected normalised levels could be a de-rating event.

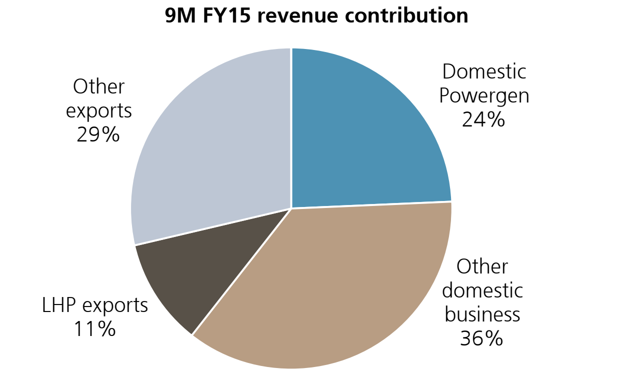
Business description

Cummins India is a 51%-owned subsidiary of Cummins Inc, USA and the leading manufacturer of diesel engines meant for generators in India. It has been present in India since 1962. The company also produces engines for the industrial and auto sectors.

Industry outlook

The domestic diesel engine market has been buffeted by lack of demand due to declining industrial capex and declining power deficits. Competition has also increased, with some domestic companies scaling up capabilities and MNCs setting up new capacity in India. Prospects for the industry depend on the strength of the recovery in industrial capex.

Revenue by region and category (%)



Source: Company data

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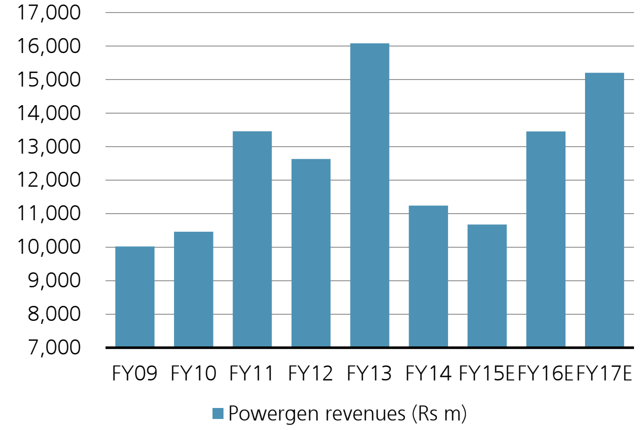
Estimates anchored to historical domestic sales trajectory could be misleading

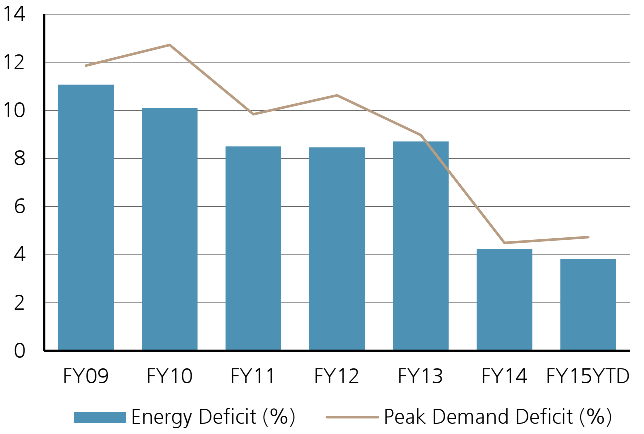
We expect domestic powergen revenue (historically a third of overall revenue) to recover after a 34% decline over FY14-15E, driven by: 1) a cyclical capex recovery; and 2) normalisation after the disruptions caused by the new emission norms that took effect in FY15 (the new CPCB-II norms entailed design changes resulting in sharp price increases).

Figure 129: We expect domestic powergen revenue to recover but not regain historical highs…



Source: Company data, UBS estimates

Figure 130: …as power shortages have eased significantly



Source: CEA, UBS

Expect declining power deficit to impact domestic powergen revenue

However, there has been a structural deterioration in another historical demand driver—gensets as a prime power source. FY13 powergen revenue spiked with a sharp jump in the power deficit in southern India to 15.5%. The all-India deficit was also high at 8.7% in FY13. Deficits have fallen dramatically from FY14 onwards as thermal plant commissioning has picked up pace—the all-India power deficit has declined to 3.8% in FY15 YTD and the deficit in southern India has dropped to 4.5%. This trend is unlikely to change as fuel supply constraints are progressively resolved. We therefore believe consensus estimates anchored on historical trends will prove optimistic.

Tweaking marketing strategy would constrain margin expansion

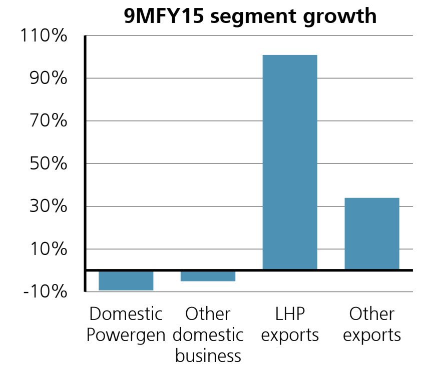
Cummins has lost market share in the sub-800kVA genset segment after the new emission norms came into force. According to management, the company took a very conservative view of the emission norms and in hindsight believes some features are not required to meet the standards. This resulted in higher cost increases for Cummins than competitors; Cummins also passed on relatively more of its cost increases to customers.

This resulted in the price differential between a Cummins genset and a competitors' product rising beyond the usual 10-15% on average. Cummins has now scaled back some design features and lowered prices. We expect this to constrain margin expansion driven by operating leverage over FY16-17E. We build in 100bps EBITDA margin expansion over FY15-17E. Any further tweaking of the marketing strategy would pose downside risk to our margin estimates.

Export growth likely to moderate as LHP becomes part of the base

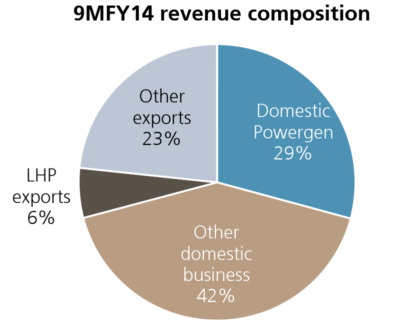
The 9% YoY decline in domestic powergen revenue during 9MFY15 did not translate to an overall revenue decline as exports grew 47% during the period.

Figure 131: LHP exports the key contributor to revenue growth…



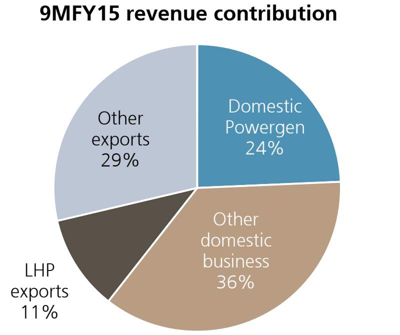
Source: Company data, UBS

Figure 132: …as a result, the LHP contribution doubled YoY…



Source: Company data, UBS

Figure 133: …while the contribution from domestic business has declined



Source: Company data, UBS

Strong export growth in 9MFY15 primarily driven by doubling of LHP exports as production in the new facility ramped up

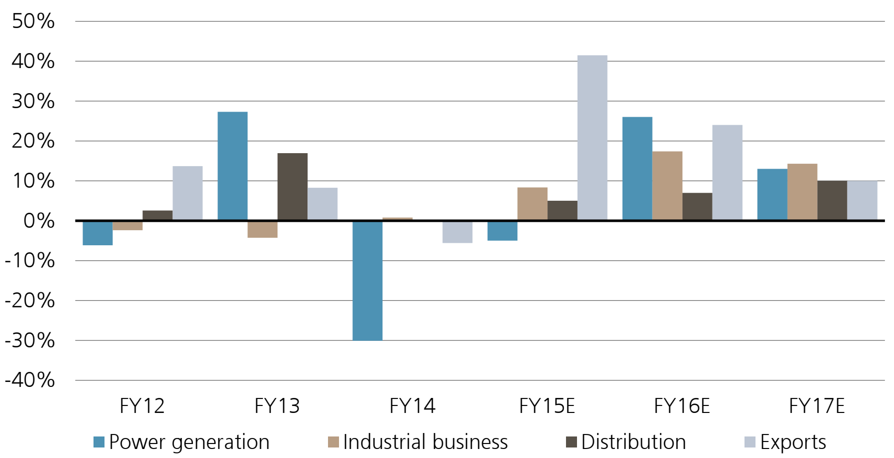
The strong export growth in 9MFY15 was primarily driven by a doubling of LHP engine exports as production in the new export-dedicated facility ramped up. With LHP capacity utilisation currently at 60%, further ramp-up would yield more moderate growth rates. Exports of HHP engines, traditionally the largest contributor to exports, are unlikely to accelerate as the growth outlook in key target markets—China, the Middle East, Southeast Asia, Latin America and Africa, remains uncertain. The strong growth in HHP exports during 9MFY15 was partially driven by a sharp spike in Q2 due to one-off exports to China and some other countries.

Earnings risks skewed to the downside

We derive our FY17 EPS estimates from robust cyclical recovery assumptions and margin forecasts that are 130bps above the 10-year average. With the outlook for a number of key demand drivers including industrial capex and commercial real estate still hazy, we believe the risks to our estimates are skewed to the downside.

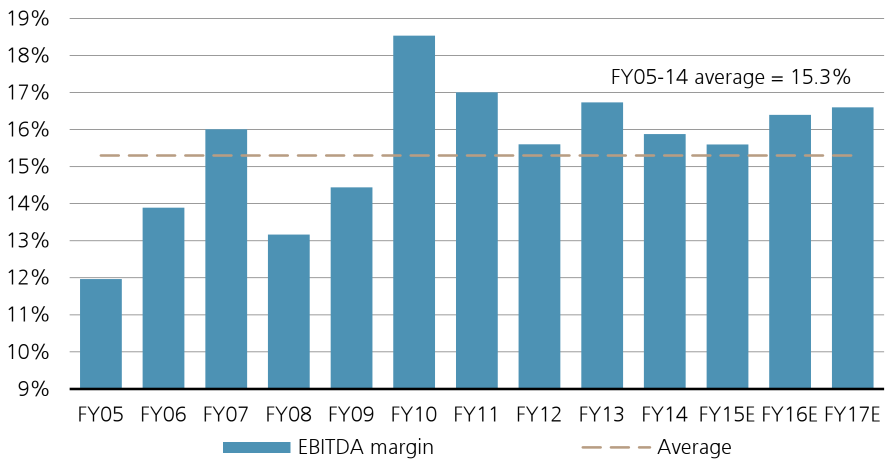
However, our FY17 earnings estimates are still 8% below consensus estimates, which we think are expecting a sharper recovery. We foresee a risk of sharp cuts in consensus earnings estimates as it becomes evident that there has been a structural deterioration in domestic demand.

Figure 134: We assume a robust recovery in the domestic powergen business



Source: Company data, UBS estimates

Figure 135: Our EBITDA margin assumptions are 130bps above the FY05-14 average

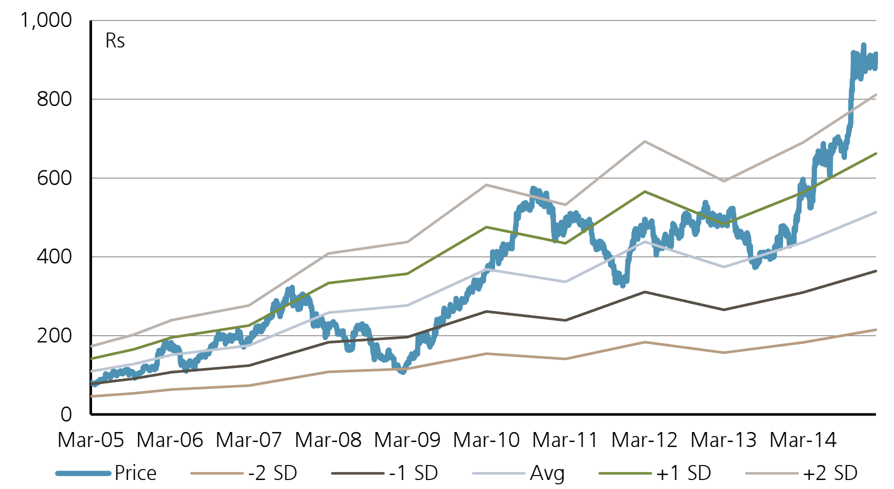


Source: Company data, UBS estimates

Valuations are rich; initiate coverage with a Sell rating

At 28.8x FY16E PE, the shares are trading at a 66% premium to their 10-year average. We believe expectations of a strong recovery in revenue growth, coupled with above average margin estimates and multiples, prepare the ground for future disappointment. We initiate coverage with a Sell rating and a price target of Rs839.53 derived from 25x FY17E PE—the average multiple over the past year.

Figure 136: At 30x FY16E PE, the shares are trading at a 75% premium to averages



Source: Company data, UBS estimates

Risk

Faster-than-expected capex recovery and continuing fuel constraints pose the main risks to our call

A sharper-than-expected recovery in industrial capex and commercial real estate activity would result in faster growth in the domestic powergen business. If the domestic coal supply fails to accelerate in such a scenario, the need for back-up power would surge again. This would translate to even stronger traction in the domestic business. A recovery in global capex, especially in the mining and infrastructure sectors, could result in positive surprises to our export revenue forecasts.

Accelerating coal supply growth presents the biggest downside risk as the demand for back-up power declines. Increasing competition from the scaling up of domestic vendors and the entry of new MNC manufacturers pose downside risk to our margin estimates. Cummins has already made some price adjustments to arrest recent market share erosion.

Cummins India (CUMM.BO)

Income statement (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Revenues	**40,522**	**45,090**	**38,991**	**44,148**	*13.2*	**53,656**	*21.5*	**60,000**	**67,107**	**75,068**
Gross profit	14,068	16,216	14,750	16,909	*14.6*	20,335	*20.3*	22,680	26,507	29,652
EBITDA (UBS)	**6,322**	**7,545**	**6,192**	**6,887**	*11.2*	**8,800**	*27.8*	**9,960**	**11,274**	**12,611**
Depreciation & amortisation	(420)	(472)	(527)	(830)	*57.4*	(974)	*17.3*	(1,129)	(1,230)	(1,301)
EBIT (UBS)	**5,902**	**7,073**	**5,664**	**6,057**	*6.9*	**7,825**	*29.2*	**8,831**	**10,044**	**11,311**
Associates & investment income	1,884	2,871	2,553	2,645	*3.6*	2,895	*9.5*	3,145	3,445	3,745
Other non-operating income	0	0	0	0	-	0	-	0	0	0
Net interest	(54)	(46)	(42)	(42)	*0.0*	(42)	*0.0*	(42)	(42)	(42)
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
Profit before tax	**7,732**	**9,897**	**8,175**	**8,660**	*5.9*	**10,678**	*23.3*	**11,934**	**13,447**	**15,014**
Tax	(2,334)	(2,872)	(2,175)	(1,663)	*23.6*	(2,349)	*-41.3*	(2,626)	(2,958)	(3,303)
Profit after tax	**5,398**	**7,025**	**6,000**	**6,997**	*16.6*	**8,329**	*19.0*	**9,309**	**10,489**	**11,711**
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	0	0	0	0	-	0	-	0	0	0
Extraordinary items	(514)	(616)	0	(905)	-	0	-	0	0	0
Net earnings (local GAAP)	**4,884**	**6,409**	**6,000**	**6,092**	*1.5*	**8,329**	*36.7*	**9,309**	**10,489**	**11,711**
Net earnings (UBS)	**5,398**	**7,025**	**6,000**	**6,997**	*16.6*	**8,329**	*19.0*	**9,309**	**10,489**	**11,711**
Tax rate (%)	30.2	29.0	26.6	19.2	*-27.8*	22.0	*14.6*	22.0	22.0	22.0

Per share (Rs)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
EPS (UBS, diluted)	19.47	25.34	21.65	25.24	*16.6*	30.05	*19.0*	33.58	37.84	42.25
EPS (local GAAP, diluted)	17.62	23.12	21.65	21.98	*1.5*	30.05	*36.7*	33.58	37.84	42.25
EPS (UBS, basic)	19.47	25.34	21.65	25.24	*16.6*	30.05	*19.0*	33.58	37.84	42.25
Net DPS (Rs)	11.00	13.00	13.00	13.00	*0.0*	14.00	*7.7*	16.00	19.00	22.00
Cash EPS (UBS, diluted)[1]	20.99	27.05	23.55	28.24	*19.9*	33.56	*18.9*	37.65	42.28	46.94
Book value per share	73.71	86.10	92.54	105.87	*14.4*	119.58	*12.9*	134.49	150.16	166.73
Average shares (diluted)	277.20	277.20	277.20	277.20	*0.0*	277.20	*0.0*	277.20	277.20	277.20

Balance sheet (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Cash and equivalents	2,235	3,547	865	971	*12.2*	526	*-45.8*	1,106	1,420	3,856
Other current assets	17,591	20,732	21,760	23,489	*7.9*	28,548	*21.5*	31,924	35,705	39,941
Total current assets	**19,826**	**24,279**	**22,625**	**24,460**	*8.1*	**29,074**	*18.9*	**33,030**	**37,125**	**43,797**
Net tangible fixed assets	5,146	6,142	10,149	14,319	*41.1*	16,344	*14.1*	18,216	18,585	18,885
Net intangible fixed assets	0	0	0	0	-	0	-	0	0	0
Investments / other assets	6,045	5,948	4,488	4,954	*10.4*	4,954	*0.0*	4,954	5,954	5,954
Total assets	**31,017**	**36,368**	**37,262**	**43,732**	*17.4*	**50,372**	*15.2*	**56,199**	**61,664**	**68,635**
Trade payables & other ST liabilities	10,585	12,501	11,611	13,184	*13.5*	16,023	*21.5*	17,918	20,040	22,418
Short term debt	0	0	0	0	-	0	-	0	0	0
Total current liabilities	**10,585**	**12,501**	**11,611**	**13,184**	*13.5*	**16,023**	*21.5*	**17,918**	**20,040**	**22,418**
Long term debt	0	0	0	1,200	-	1,200	*0.0*	1,000	0	0
Other long term liabilities	0	0	0	0	-	0	-	0	0	0
Preferred shares	0	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	**10,585**	**12,501**	**11,611**	**14,384**	*23.9*	**17,223**	*19.7*	**18,918**	**20,040**	**22,418**
Common s/h equity	20,432	23,867	25,652	29,348	*14.4*	33,149	*12.9*	37,281	41,624	46,218
Minority interests	0	0	0	0	-	0	-	0	0	0
Total liabilities & equity	**31,017**	**36,368**	**37,262**	**43,732**	*17.4*	**50,372**	*15.2*	**56,199**	**61,664**	**68,635**

Cash flow (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Net income (before pref divs)	4,884	6,409	6,000	6,092	*1.5*	8,329	*36.7*	9,309	10,489	11,711
Depreciation & amortisation	420	473	528	830	*57.4*	974	*17.3*	1,129	1,230	1,301
Net change in working capital	(1,633)	(1,225)	(1,918)	(156)	*91.8*	(2,219)	*NM*	(1,481)	(1,659)	(1,858)
Other operating	514	616	0	905	-	0	-	0	0	0
Operating cash flow	**4,185**	**6,273**	**4,609**	**7,671**	*66.4*	**7,084**	*-7.7*	**8,957**	**10,060**	**11,153**
Tangible capital expenditure	(1,255)	(1,423)	(4,535)	(5,000)	*-10.3*	(3,000)	*40.0*	(3,000)	(1,600)	(1,600)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	0	0	0	0	-	0	-	0	0	0
Other investing	1,397	97	1,459	(465)	-	0	-	0	(1,000)	0
Investing cash flow	**142**	**(1,325)**	**(3,075)**	**(5,465)**	*-77.7*	**(3,000)**	*45.1*	**(3,000)**	**(2,600)**	**(1,600)**
Equity dividends paid	(3,544)	(4,205)	(4,205)	(4,205)	*0.0*	(4,529)	*-7.7*	(5,176)	(6,146)	(7,117)
Share issues / (buybacks)	158	0	0	0	-	0	-	0	0	0
Other financing	0	0	0	0	-	0	-	0	0	0
Change in debt & pref shares	0	0	0	1,200	-	0	-	(200)	(1,000)	0
Financing cash flow	**(3,385)**	**(4,205)**	**(4,205)**	**(3,005)**	*28.5*	**(4,529)**	*-50.7*	**(5,376)**	**(7,146)**	**(7,117)**
Cash flow inc/(dec) in cash	**941**	**742**	**(2,671)**	**(799)**	*70.1*	**(445)**	*44.3*	**581**	**313**	**2,436**
FX / non cash items	256	570	(11)	905	-	0	-	0	0	0
Balance sheet inc/(dec) in cash	**1,198**	**1,312**	**(2,682)**	**106**	-	**(445)**	-	**581**	**313**	**2,436**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

Cummins India (CUMM.BO)

Valuation (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
P/E (local GAAP, diluted)	24.7	20.5	20.8	39.4	28.8	25.8	22.9	20.5
P/E (UBS, diluted)	22.3	18.7	20.8	34.3	28.8	25.8	22.9	20.5
P/CEPS	20.7	17.6	19.1	30.7	25.8	23.0	20.5	18.4
Equity FCF (UBS) yield %	2.4	3.7	0.1	1.1	1.7	2.5	3.5	4.0
Net dividend yield (%)	2.5	2.7	2.9	1.5	1.6	1.8	2.2	2.5
P/BV x	5.9	5.5	4.9	8.2	7.2	6.4	5.8	5.2
EV/revenues (core)	2.8	2.7	3.0	5.3	4.4	3.9	3.5	3.1
EV/EBITDA (core)	17.9	16.3	19.1	34.1	26.8	23.6	20.7	18.3
EV/EBIT (core)	19.1	17.4	20.9	NM	NM	26.6	23.2	20.5
EV/OpFCF (core)	19.1	17.4	20.9	NM	NM	26.6	23.2	20.5
EV/op. invested capital	NM	9.3	6.8	NM	8.8	7.7	7.0	6.5

Enterprise value (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Market cap.	120,611	131,709	124,874	239,930	239,930	239,930	239,930	239,930
Net debt (cash)	(1,636)	(2,891)	(2,206)	(318)	452	284	(763)	(2,638)
Buy out of minorities	0	0	0	0	0	0	0	0
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	**118,974**	**128,818**	**122,668**	**239,613**	**240,382**	**240,214**	**239,167**	**237,292**
Non core assets	(6,045)	(5,948)	(4,488)	(4,953)	(4,953)	(4,953)	(5,953)	(5,953)
Core enterprise value	**112,929**	**122,870**	**118,180**	**234,659**	**235,429**	**235,261**	**233,214**	**231,339**

Growth (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenue	2.6	11.3	-13.5	13.2	21.5	11.8	11.8	11.9
EBITDA (UBS)	-5.9	19.3	-17.9	11.2	27.8	13.2	13.2	11.9
EBIT (UBS)	-7.1	19.8	-19.9	6.9	29.2	12.9	13.7	12.6
EPS (UBS, diluted)	-8.7	30.1	-14.6	16.6	19.0	11.8	12.7	11.7
Net DPS	2.7	18.2	0.0	0.0	7.7	14.3	18.8	15.8

Margins & Profitability (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Gross profit margin	34.7	36.0	37.8	38.3	37.9	37.8	39.5	39.5
EBITDA margin	15.6	16.7	15.9	15.6	16.4	16.6	16.8	16.8
EBIT margin	14.6	15.7	14.5	13.7	14.6	14.7	15.0	15.1
Net earnings (UBS) margin	13.3	15.6	15.4	15.8	15.5	15.5	15.6	15.6
ROIC (EBIT)	54.3	53.3	32.7	27.0	29.3	28.9	30.2	32.0
ROIC post tax	37.9	37.9	24.0	21.8	22.8	22.6	23.6	25.0
ROE (UBS)	28.0	31.7	24.2	25.4	26.7	26.4	26.6	26.7

Capital structure & Coverage (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Net debt / EBITDA	(0.4)	(0.5)	(0.1)	0.0	0.1	(.0)	(0.1)	(0.3)
Net debt / total equity %	(10.9)	(14.9)	(3.4)	0.8	2.0	(0.3)	(3.4)	(8.3)
Net debt / (net debt + total equity) %	(12.3)	(17.5)	(3.5)	0.8	2.0	(0.3)	(3.5)	(9.1)
Net debt/EV %	(2.0)	(2.9)	(0.7)	0.1	0.3	(.0)	(0.6)	(1.7)
Capex / depreciation %	NM	NM	NM	NM	NM	NM	130.1	123.0
Capex / revenue %	3.1	3.2	11.6	11.3	5.6	5.0	2.4	2.1
EBIT / net interest	NM	NM	NM	NM	NM	NM	NM	NM
Dividend cover (UBS)	1.8	1.9	1.7	1.9	2.1	2.1	2.0	1.9
Div. payout ratio (UBS) %	56.5	51.3	60.1	51.5	46.6	47.6	50.2	52.1

Revenues by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	40,522	45,090	38,991	44,148	53,656	60,000	67,107	75,068
Total	**40,522**	**45,090**	**38,991**	**44,148**	**53,656**	**60,000**	**67,107**	**75,068**

EBIT (UBS) by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	5,902	7,073	5,664	6,057	7,825	8,831	10,044	11,311
Total	**5,902**	**7,073**	**5,664**	**6,057**	**7,825**	**8,831**	**10,044**	**11,311**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Thermax

Expectations running ahead

Equities

India
Industrial, Diversified

12-month rating	**Sell**
	Prior: Not Rated
12m price target	**Rs1,017.51**
	Prior: -
Price	**Rs1,171.30**
RIC: THMX.BO **BBG:** TMX IB	

Trading data and key metrics

52-wk range	Rs1,293.65-718.00
Market cap.	Rs140bn/US$2.22bn
Shares o/s	119m (ORD)
Free float	36%
Avg. daily volume ('000)	67
Avg. daily value (m)	Rs77.0
Common s/h equity (03/15E)	Rs22.3bn
P/BV (03/15E)	6.3x
Net debt / EBITDA (03/15E)	0.7x

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/15E	-	24.18	-	23.30
03/16E	-	30.62	-	32.24
03/17E	-	35.09	-	41.57

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Muted recovery; consensus estimates appear high

The YoY decline in order book, still sluggish order inflow trajectory and lack of visibility on a capex revival in the commodity sectors imply that revenue growth should remain modest in the medium term. We believe lack of traction in order inflows would result in downgrades to FY17 consensus estimates, which are 18% above our estimates. The utility equipment JV is unlikely to turnaround in the medium term, in our view. While the company has navigated the downturn well, we find valuations quite demanding. We initiate coverage with a Sell rating and a price target of Rs1,017.51.

Utility equipment JV unlikely to turnaround in the medium term

As cash losses continue to accrue in the Thermax-Babcock & Wilcox (TMX-B&W) JV, interest costs will also rise. Over the next two to three years, we estimate the JV needs to make an EBITDA of Rs1.5bn to break even. This corresponds to an order book of about 3.5GW and annual inflow of about 1GW of boiler equipment orders assuming a 10% EBITDA margin (for reference, margins in L&T's supercritical JV in the first four years of operations stand at 5.5%). The JV is yet to win its first boiler order.

Creditable navigation of the downturn

Management has kept a tight leash on fixed costs through the downturn, and has reduced material costs through sourcing and process improvements. This has arrested margin contraction, with parent EBITDA slipping below 10% only once in FY14 despite intense competition. Cash flows have remained robust as the company did not resort to aggressive changes in payment terms to win orders. The extension of product lines and an increased focus on services have helped mitigate pressure on revenue.

Valuation: too high a premium for quality

High standards of corporate governance and a creditable navigation of the downturn warrant a premium but at 38x FY16E PE (+2.5 SD above the cyclical average), we consider valuation too demanding given the likelihood of earnings cut ahead. At this stage of the cycle, valuations are most sensitive to order inflow trajectory and we believe weakness in domestic orders in 9MFY15 has been masked by overseas wins. We base our price target of Rs1,017.51 on 29x FY17E PE, in line with its cyclical averages. Our price target is 13% below the current level.

Highlights (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenues	60,912	54,917	50,999	55,887	61,883	70,115	77,925	87,191
EBIT (UBS)	5,257	4,131	3,451	3,795	5,051	6,127	6,869	8,108
Net earnings (UBS)	4,035	3,201	2,460	2,881	3,648	4,181	4,672	5,265
EPS (UBS, diluted) (Rs)	33.86	26.87	20.64	24.18	30.62	35.09	39.21	44.19
DPS (Rs)	8.14	8.19	7.03	7.93	9.12	10.49	12.06	13.87
Net (debt) / cash	5,622	(1,162)	(2,797)	(3,576)	(3,808)	(3,756)	(2,848)	(1,811)

Profitability/valuation	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
EBIT margin %	8.6	7.5	6.8	6.8	8.2	8.7	8.8	9.3
ROIC (EBIT) %	69.4	31.9	20.3	20.6	24.8	26.9	27.2	29.4
EV/EBITDA (core) x	9.2	11.8	16.1	26.1	20.9	17.7	15.8	13.5
P/E (UBS, diluted) x	15.3	19.7	30.3	48.4	38.3	33.4	29.9	26.5
Equity FCF (UBS) yield %	0.5	(6.5)	1.6	0.2	0.7	0.6	1.5	1.9
Net dividend yield %	1.6	1.5	1.1	0.7	0.8	0.9	1.0	1.2

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs1,171.30 on 18 Mar 2015 22:38 HKT

Investment Thesis

Thermax

12-month rating **Sell**

12m price target **Rs1,017.51**

Investment case

We believe the sluggish order inflow trajectory is unlikely to change without visibility on an improvement in commodity-driven capex. This looks unlikely, in our view. We expect the power equipment JV to continue to struggle to breakeven as order inflows in the industry remain sluggish. The weak growth outlook, coupled with valuations at +2SD above average, drive our negative view on the stock. We consider the risk-reward profile unfavourable at the current share price.

Upside scenario

In our upside scenario, we assume margins are 100bps higher than in our base case and order inflow rises 10%. We estimate a valuation of Rs1,305 in this scenario.

Downside scenario

In our downside scenario, we assume margins are 200bps lower than in our base case and there is no growth in order inflow. In this scenario, we estimate valuation would decrease to Rs826.

Upcoming catalysts

Upcoming potential catalysts include: 1) poor performance in the core business; 2) a late recovery in the industrial capex cycle; and 3) slow order award activity in the power equipment business.

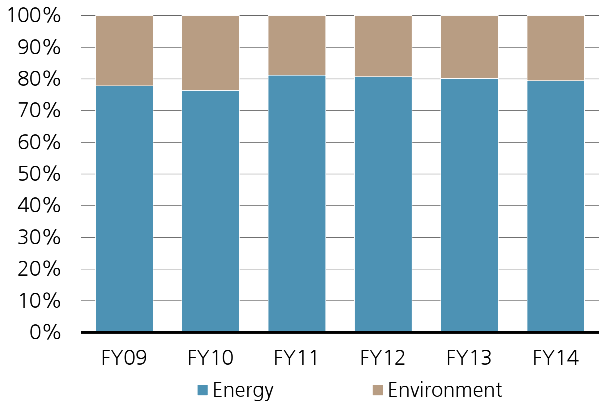
Business description

Thermax is a major engineering company in India. It has two business divisions: energy and environment. The energy segment, which supplies boilers and captive power plants to industries, contributes the bulk of its total revenue and the environment segment, which manufactures air and water pollution control equipment, contributes the remainder. The company has a joint venture with Babcock and Wilcox to manufacture supercritical boilers.

Industry outlook

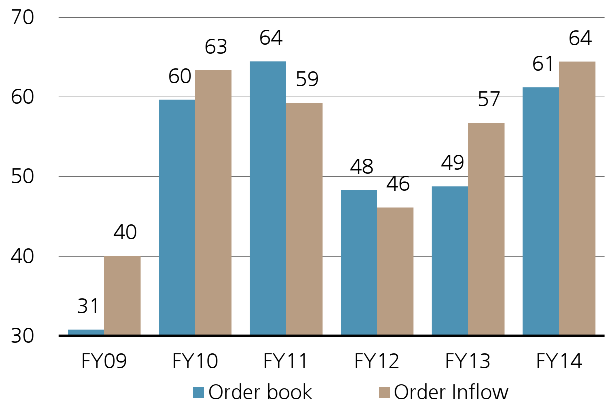
For capital goods companies, the previous two years have been characterised by: 1) challenges in obtaining new business; 2) pressure on profitability due to significant overcapacity in the system; and 3) heightened competitive pressure. The scenario might not improve materially in near term. However, in the medium term, recovery in industrial capex should translate to order inflow growth and margin recovery.

Revenue by segment (%)



Source: Company data

Order backlog and order inflows (Rs bn)



Source: Company data

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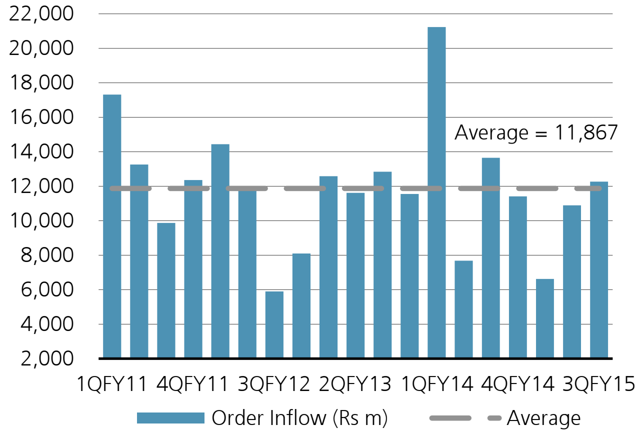
Muted recovery; consensus needs to cut estimates

The YoY decline in the order book, still sluggish order inflow trajectory and lack of visibility on a capex revival in in the commodity sectors lead us to believe revenue growth will remain modest in the medium term. While lumpy export orders might help sustain order inflows at current levels, improved traction in domestic markets is necessary for sustained improvement in order inflows. We believe a lack of traction in order inflows over the next two to three quarters would result in downgrades to consensus FY17 earnings estimates, which are 18% above our estimates. We think the utility equipment JV is unlikely to turnaround in the medium term as award activity is unlikely to pick up over the next few years given power generation overcapacity. While the company has navigated the downturn well, we find valuations, at 38x FY16E PE (+2.5 SD above the cyclical average) quite demanding. We initiate coverage with a Sell rating.

Growth acceleration expectations unlikely to be met

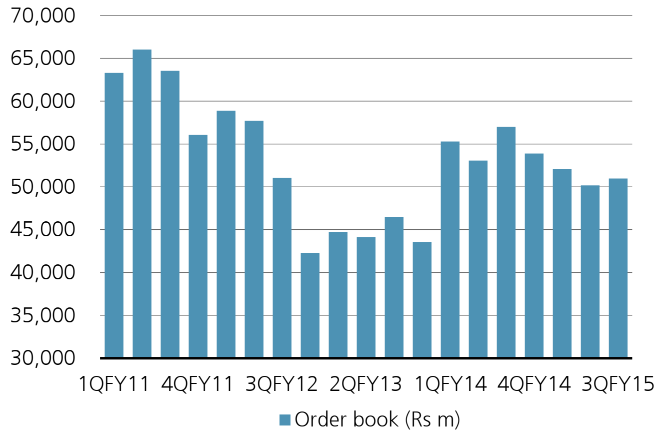
The Q3 FY15 order book was down 10.6% YoY. Order inflows have averaged about Rs12bn over the past 19 quarters—insufficient for order book accretion, as we estimate FY15 parent revenue will be similar.

Figure 137: Order inflows hover around the revenue run-rate



Source: Company data

Figure 138: Order book has declined 11% YoY



Source: Company data

If inflows do not accelerate over the next two to three quarters, revenue growth would stagnate or slip to single digits after a mild recovery in FY15. Order inflows tend to be lumpy for Thermax, and the company could well win a large order over the next few quarters. Order inflows have already benefitted from large export orders in the past two quarters.

Over the medium term a consistent recovery in order inflows is contingent on a revival of large domestic project awards. Generally, commodity-based industries such as steel, cement, petrochemicals, and non-ferrous metals are the key users of large captive power plants and boilers. At present, there is limited visibility on the timing and strength of an uptick in investment in these sectors. A ramp-up in execution could deliver revenue growth with a stagnant order book, but the growth would likely remain modest.

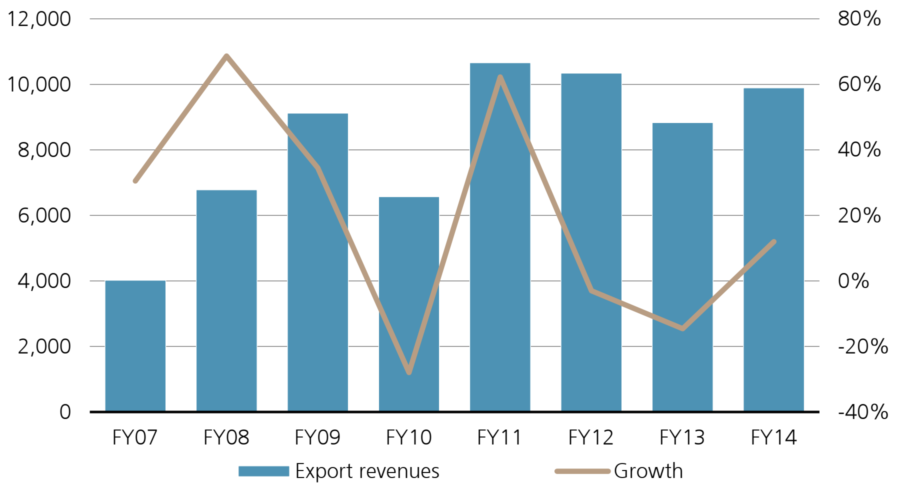
Export-driven growth inspires little confidence

Large order bookings from overseas markets over the past two quarters have resulted in optimism that export revenue can pick up the slack before the domestic market revives. However, data over FY07-14 indicates that though export revenue picks up as the company wins large lumpy orders there is hardly any evidence of sustained growth.

Exports have exhibited a volatile trajectory

The data underscores that export growth hinges crucially on the growth and competitive dynamics in the target markets—exports grew well over FY07-09, when capex was on an upswing globally, but stalled over FY11-14 in line with the market. Clearly, export growth is not dependent only on the endogenous variables within the company's control. We therefore remain sceptical of exports as sustainable growth driver in an environment where the global growth outlook is not particularly robust.

Figure 139: Exports have had a volatile trajectory



Source: Company data, UBS

Utility equipment JV unlikely to turnaround in the medium term

TMX-B&W JV needs an order book of 3.5GW before it breaks even

As cash losses keep accruing in the TMX-B&W JV (set up to manufacture supercritical boilers with a capacity of 3GW), interest costs will also rise. We estimate the initial Rs3.5bn debt will more than double to about Rs8bn by FY17, resulting in interest and depreciation costs rising to Rs1.5bn. To break even, the JV would need to make an equivalent EBITDA over the next two to three years.

Figure 140: TMX-B&W JV needs an order book of 3.5GW before it breaks even

Target to breakeven	Rs m
Order book (MW)	3,500
Average pricing of supercritical boiler (Rs m/MW)	14.0
Order book	49,000
Execution cycle (years)	3.25
Revenue	15,077
Yearly execution (MW)	1,077
EBITDA margin estimate	10.0%
EBITDA	1,508

Source: UBS estimates

We have worked backwards from the target EBITDA to arrive at: 1) the order book the JV needs to accumulate before it breaks even; and 2) the yearly order inflow required to maintain the order book level. While our pricing assumptions are based on current market levels, we have made generous assumptions for execution rates and margins. On average, a supercritical boiler takes 4 years to execute versus our assumption of 3.25 years. We have assumed a 10% EBITDA margin in line with the company's existing EPC business. For reference, margins at L&T's supercritical JV, the only domestic comparable, were 5.5% in the first four years of operations.

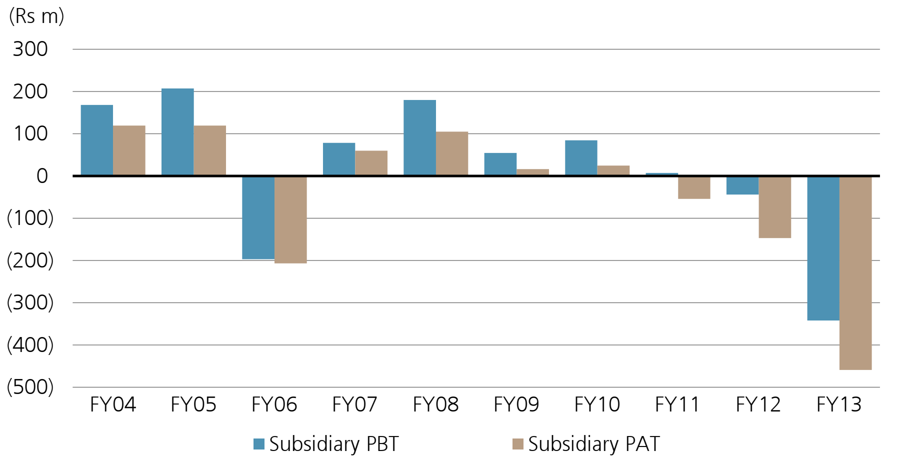
We think it will be difficult for the JV to achieve these targets—it is yet to win its first boiler order and the power generation equipment market is unlikely to experience any buoyancy, even in the medium term.

Other subsidiaries are not profitable either

Losses at the TMX-B&W JV have received all the focus since FY14. However, the 10 years prior to the JV indicate that subsidiaries in aggregate have delivered an average PBT of just Rs20m a year and a net loss of Rs42m a year.

Subsidiaries excluding the TMX-B&W JV have delivered an average PBT of just Rs20m a year and a net loss of Rs42m a year over the past 10 years

Figure 141: Aggregate subs have made losses even before TMX-B&W JV

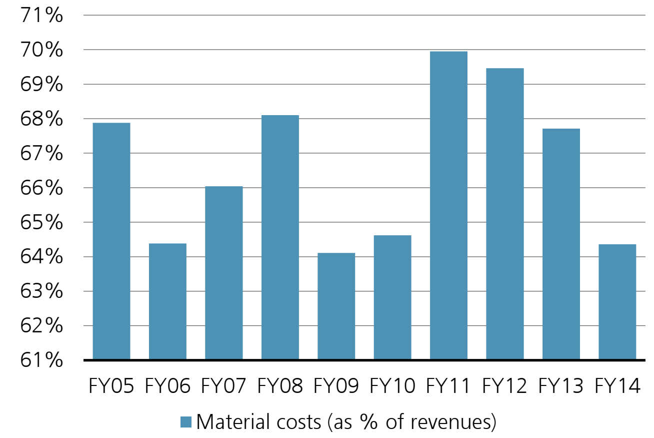


Source: Company data, UBS

The company has navigated the downturn well

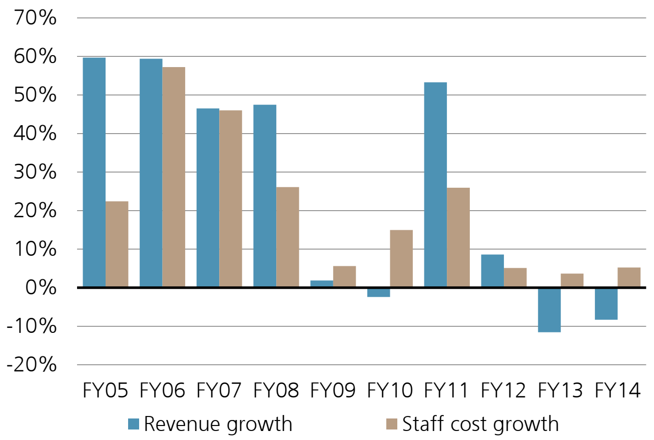
Management has kept a tight leash on fixed costs through the downturn, and has reduced material costs through sourcing and process improvements. This has arrested margin contraction, with parent EBITDA slipping below 10% only once in FY14 despite intense competition. Cash flows have remained robust, as the company has not resorted to aggressive changes in payment terms to win orders.

Figure 142: Thermax has managed material costs well…



Source: Company data, UBS

Figure 143: …and arrested employee cost increases



Source: Company data, UBS

But too high a premium for quality; initiate coverage with Sell

High standards of corporate governance and creditable navigation of the downturn warrant a premium, in our view. However, even if we ignore subsidiary losses, the shares are trading at 35x FY16E parent PAT, which is +2SD above the cyclical average. Valuations already factor in a sharp earnings rebound, which we consider unlikely given the declining order book and dim prospects of improvement in order inflows. The rich valuations are especially vulnerable to a cut in consensus earnings estimates, which we see as overly optimistic.

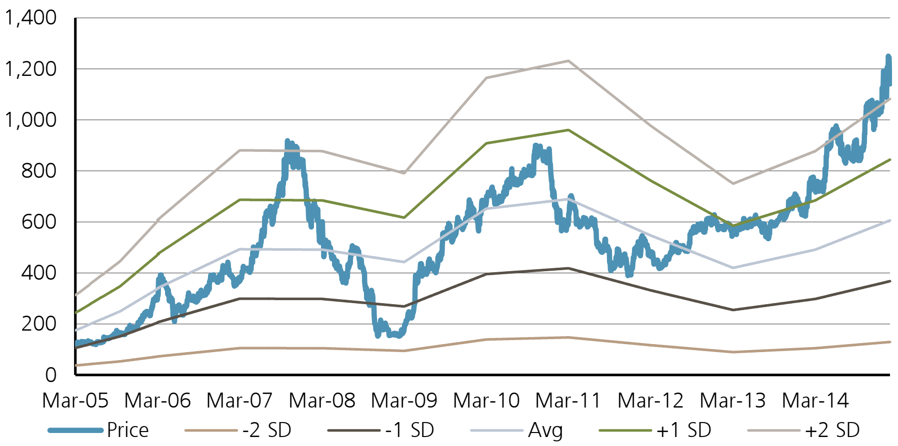
Even if we ignore subsidiary losses, the stock is trading at 35x FY16E parent PAT, which is +2SD above its cyclical average

Figure 144: UBS estimates versus consensus

	FY16E			FY17E		
Rs m	UBS-e	Consensus	% diff	UBS-e	Consensus	% diff
Sales	61,883	65,377	-5%	70,115	76,892	-9%
PAT	3,616	3,779	-4%	4,173	4,930	-15%
EPS (Rs)	30.35	31.71	-4%	35.02	41.37	-15%

Source: Bloomberg, UBS estimates

Figure 145: Thermax is trading above +2SD above average



Source: Bloomberg, UBS estimates

It could be argued that at this stage of the cycle, valuations are more sensitive to order inflow than earnings trajectory. We agree that rich valuations could be sustained in the face of earnings disappointments if there is a sharp uptick in order inflows. However, we do not foresee that outcome either. Weakness in 9MFY15 domestic orders has been masked by overseas wins. In the absence of a domestic recovery the order book could fall sharply over the next two to three quarters if there are no lumpy export orders.

Rich valuations could be sustained amid earnings disappointments if there is a sharp uptick in order inflows — but this is an unlikely outcome in our view

We value the stock at Rs1,017.51 on 29x FY17E PE, in line with its cyclical averages. Our price target is 13% below the current level. We expect valuations to trend downward, as we expect moderate 20% earnings growth over FY15-17E and see little likelihood of an acceleration in earnings.

Risk

Faster-than-expected capex recovery the main risk to our call

A sharper-than-expected recovery in industrial capex would likely result in a faster recovery in domestic order inflows. A recovery in capex in target markets, such as Southeast Asia, the Middle East and Europe could result in upside to export revenue.

Increasing competitive intensity if domestic industrial capex fails to pick up could result in margin erosion in addition to muted revenue growth.

Thermax (THMX.BO)

Income statement (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Revenues	**60,912**	**54,917**	**50,999**	**55,887**	*9.6*	**61,883**	*10.7*	**70,115**	**77,925**	**87,191**
Gross profit	21,815	20,989	21,461	23,085	*7.6*	25,747	*11.5*	29,367	32,652	36,578
EBITDA (UBS)	**5,919**	**4,902**	**4,373**	**5,238**	*19.8*	**6,532**	*24.7*	**7,681**	**8,583**	**9,981**
Depreciation & amortisation	(662)	(771)	(921)	(1,443)	*56.6*	(1,481)	*2.6*	(1,554)	(1,714)	(1,873)
EBIT (UBS)	**5,257**	**4,131**	**3,451**	**3,795**	*10.0*	**5,051**	*33.1*	**6,127**	**6,869**	**8,108**
Associates & investment income	0	0	0	0	-	0	-	0	0	0
Other non-operating income	830	849	716	700	*-2.2*	636	*-9.1*	420	783	823
Net interest	(122)	(165)	(274)	(724)	*-164.6*	(736)	*-1.7*	(751)	(769)	(789)
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
Profit before tax	**5,965**	**4,814**	**3,893**	**3,771**	*-3.1*	**4,951**	*31.3*	**5,796**	**6,883**	**8,142**
Tax	(2,043)	(1,773)	(1,696)	(1,606)	*5.3*	(1,916)	*-19.3*	(2,139)	(2,540)	(3,005)
Profit after tax	**3,921**	**3,041**	**2,198**	**2,165**	*-1.5*	**3,035**	*40.2*	**3,657**	**4,343**	**5,138**
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	114	161	262	717	*173.1*	613	*-14.4*	524	329	128
Extraordinary items	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	**4,035**	**3,201**	**2,460**	**2,881**	*17.1*	**3,648**	*26.6*	**4,181**	**4,672**	**5,265**
Net earnings (UBS)	**4,035**	**3,201**	**2,460**	**2,881**	*17.1*	**3,648**	*26.6*	**4,181**	**4,672**	**5,265**
Tax rate (%)	34.3	36.8	43.6	42.6	*-2.2*	38.7	*-9.2*	36.9	36.9	36.9

Per share (Rs)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
EPS (UBS, diluted)	33.86	26.87	20.64	24.18	*17.1*	30.62	*26.6*	35.09	39.21	44.19
EPS (local GAAP, diluted)	33.86	26.87	20.64	24.18	*17.1*	30.62	*26.6*	35.09	39.21	44.19
EPS (UBS, basic)	33.86	26.87	20.64	24.18	*17.1*	30.62	*26.6*	35.09	39.21	44.19
Net DPS (Rs)	8.14	8.19	7.03	7.93	*12.8*	9.12	*15.0*	10.49	12.06	13.87
Cash EPS (UBS, diluted)[1]	39.42	33.33	28.38	36.29	*27.9*	43.05	*18.6*	48.13	53.59	59.91
Book value per share	136.73	156.82	171.06	187.31	*9.5*	208.80	*11.5*	233.41	260.55	290.87
Average shares (diluted)	119.16	119.16	119.16	119.16	*0.0*	119.16	*0.0*	119.16	119.16	119.16

Balance sheet (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Cash and equivalents	6,983	3,211	4,508	4,021	*-10.8*	4,093	*1.8*	4,462	5,699	7,077
Other current assets	26,445	28,108	32,031	35,205	*9.9*	38,957	*10.7*	44,114	49,028	54,857
Total current assets	**33,427**	**31,319**	**36,540**	**39,226**	*7.4*	**43,050**	*9.7*	**48,575**	**54,727**	**61,934**
Net tangible fixed assets	10,907	13,901	15,802	17,182	*8.7*	18,524	*7.8*	19,792	20,902	21,851
Net intangible fixed assets	0	0	0	0	-	0	-	0	0	0
Investments / other assets	2,395	4,430	7,079	7,220	*2.0*	7,365	*2.0*	7,512	7,662	7,816
Total assets	**46,729**	**49,650**	**59,421**	**63,629**	*7.1*	**68,939**	*8.3*	**75,880**	**83,291**	**91,601**
Trade payables & other ST liabilities	27,581	25,104	30,018	32,714	*9.0*	35,771	*9.3*	39,438	43,264	47,597
Short term debt	485	541	2,139	2,225	*4.00*	2,314	*4.00*	2,406	2,502	2,603
Total current liabilities	**28,065**	**25,646**	**32,157**	**34,938**	*8.6*	**38,085**	*9.0*	**41,845**	**45,766**	**50,200**
Long term debt	876	3,832	5,167	5,373	*4.0*	5,588	*4.0*	5,812	6,044	6,286
Other long term liabilities	378	383	318	318	*0.0*	318	*0.0*	318	318	318
Preferred shares	0	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	**29,319**	**29,861**	**37,642**	**40,629**	*7.9*	**43,991**	*8.3*	**47,974**	**52,128**	**56,803**
Common s/h equity	16,293	18,687	20,383	22,319	*9.5*	24,881	*11.5*	27,813	31,047	34,660
Minority interests	1,116	1,103	1,397	680	*-51.3*	67	*-90.2*	93	115	137
Total liabilities & equity	**46,729**	**49,650**	**59,421**	**63,629**	*7.1*	**68,939**	*8.3*	**75,880**	**83,291**	**91,601**

Cash flow (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Net income (before pref divs)	4,035	3,201	2,460	2,881	*17.1*	3,648	*26.6*	4,181	4,672	5,265
Depreciation & amortisation	663	771	922	1,443	*56.6*	1,481	*2.6*	1,554	1,714	1,873
Net change in working capital	(1,010)	(4,139)	990	(478)	-	(695)	*-45.4*	(1,490)	(1,089)	(1,496)
Other operating	(35)	(155)	(328)	(716)	*-118.7*	(613)	*14.4*	(524)	(328)	(127)
Operating cash flow	**3,653**	**(323)**	**4,044**	**3,130**	*-22.6*	**3,822**	*22.1*	**3,722**	**4,968**	**5,515**
Tangible capital expenditure	(3,361)	(3,765)	(2,823)	(2,823)	*0.0*	(2,823)	*0.0*	(2,823)	(2,823)	(2,823)
Intangible capital expenditure	0	0	0	0	-	0	-	0	0	0
Net (acquisitions) / disposals	0	0	0	0	-	0	-	0	0	0
Other investing	20	(2,035)	(2,649)	(142)	-	(144)	-	(147)	(150)	(153)
Investing cash flow	**(3,342)**	**(5,800)**	**(5,472)**	**(2,964)**	*45.8*	**(2,967)**	*-0.1*	**(2,970)**	**(2,973)**	**(2,976)**
Equity dividends paid	(969)	(976)	(837)	(945)	*-12.8*	(1,086)	*-15.0*	(1,249)	(1,437)	(1,652)
Share issues / (buybacks)	79	168	74	0	-	0	-	0	0	0
Other financing	597	(14)	294	(716)	-	(613)	*14.42*	26	22	23
Change in debt & pref shares	(29)	3,013	2,932	292	*-90.03*	304	*4.00*	316	329	342
Financing cash flow	**(323)**	**2,191**	**2,462**	**(1,369)**	-	**(1,396)**	*-2.0*	**(907)**	**(1,087)**	**(1,288)**
Cash flow inc/(dec) in cash	**(12)**	**(3,932)**	**1,035**	**(1,204)**	-	**(541)**	*55.0*	**(155)**	**909**	**1,251**
FX / non cash items	114	161	262	717	*173.1*	613	*-14.4*	524	329	128
Balance sheet inc/(dec) in cash	**102**	**(3,771)**	**1,297**	**(487)**	-	**72**	-	**368**	**1,237**	**1,378**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

Thermax (THMX.BO)

Valuation (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
P/E (local GAAP, diluted)	15.3	19.7	30.3	48.4	38.3	33.4	29.9	26.5
P/E (UBS, diluted)	15.3	19.7	30.3	48.4	38.3	33.4	29.9	26.5
P/CEPS	13.2	15.9	22.0	32.3	27.2	24.3	21.9	19.6
Equity FCF (UBS) yield %	0.5	(6.5)	1.6	0.2	0.7	0.6	1.5	1.9
Net dividend yield (%)	1.6	1.5	1.1	0.7	0.8	0.9	1.0	1.2
P/BV x	3.8	3.4	3.7	6.3	5.6	5.0	4.5	4.0
EV/revenues (core)	0.9	1.0	1.4	2.4	2.2	1.9	1.7	1.6
EV/EBITDA (core)	9.2	11.8	16.1	26.1	20.9	17.7	15.8	13.5
EV/EBIT (core)	10.4	14.0	20.4	NM	27.0	22.2	19.7	16.7
EV/OpFCF (core)	10.4	14.0	20.4	NM	27.0	22.2	19.7	16.7
EV/op. invested capital	7.2	4.4	4.1	7.4	6.7	6.0	5.4	4.9

Enterprise value (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Market cap.	61,880	63,206	74,415	139,572	139,572	139,572	139,572	139,572
Net debt (cash)	(5,556)	(2,230)	1,980	3,187	3,692	3,782	3,302	3,302
Buy out of minorities	818	1,110	1,250	1,038	373	80	104	126
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	**57,142**	**62,086**	**77,644**	**143,797**	**143,638**	**143,434**	**142,978**	**143,000**
Non core assets	(2,395)	(4,430)	(7,079)	(7,220)	(7,365)	(7,512)	(7,662)	(7,816)
Core enterprise value	**54,747**	**57,656**	**70,565**	**136,577**	**136,273**	**135,922**	**135,316**	**135,184**

Growth (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenue	14.9	-9.8	-7.1	9.6	10.7	13.3	11.1	11.9
EBITDA (UBS)	10.1	-17.2	-10.8	19.8	24.7	17.6	11.7	16.3
EBIT (UBS)	8.8	-21.4	-16.5	10.0	33.1	21.3	12.1	18.0
EPS (UBS, diluted)	5.7	-20.7	-23.2	17.1	26.6	14.6	11.7	12.7
Net DPS	-22.2	0.7	-14.2	12.8	15.0	15.0	15.0	15.0

Margins & Profitability (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Gross profit margin	35.8	38.2	42.1	41.3	41.6	41.9	41.9	42.0
EBITDA margin	9.7	8.9	8.6	9.4	10.6	11.0	11.0	11.4
EBIT margin	8.6	7.5	6.8	6.8	8.2	8.7	8.8	9.3
Net earnings (UBS) margin	6.6	5.8	4.8	5.2	5.9	6.0	6.0	6.0
ROIC (EBIT)	69.4	31.9	20.3	20.6	24.8	26.9	27.2	29.4
ROIC post tax	45.6	20.1	11.5	11.8	15.2	17.0	17.2	18.6
ROE (UBS)	27.4	18.3	12.6	13.5	15.5	15.9	15.9	16.0

Capital structure & Coverage (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Net debt / EBITDA	(0.9)	0.2	0.6	0.7	0.6	0.5	0.3	0.2
Net debt / total equity %	(32.3)	5.9	12.8	15.6	15.3	13.5	9.1	5.2
Net debt / (net debt + total equity) %	(47.7)	5.5	11.4	13.5	13.2	11.9	8.4	4.9
Net debt/EV %	(10.3)	2.0	4.0	2.6	2.8	2.8	2.1	1.3
Capex / depreciation %	NM	NM	NM	195.6	190.6	181.6	164.7	150.7
Capex / revenue %	5.5	6.9	5.5	5.1	4.6	4.0	3.6	3.2
EBIT / net interest	43.2	25.0	12.6	5.2	6.9	8.2	8.9	10.3
Dividend cover (UBS)	4.2	3.3	2.9	3.0	3.4	3.3	3.3	3.2
Div. payout ratio (UBS) %	24.0	30.5	34.0	32.8	29.8	29.9	30.8	31.4

Revenues by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	60,912	54,917	50,999	55,887	61,883	70,115	77,925	87,191
Total	**60,912**	**54,917**	**50,999**	**55,887**	**61,883**	**70,115**	**77,925**	**87,191**

EBIT (UBS) by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	5,257	4,131	3,451	3,795	5,051	6,127	6,869	8,108
Total	**5,257**	**4,131**	**3,451**	**3,795**	**5,051**	**6,127**	**6,869**	**8,108**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

ABB India Investment case

A subsidiary of ABB Global, ABB India has a long history in India and has been highly successful. We think it has a technological edge in T&D equipment and industrial products in India. At the current share price, we think its risk-reward profile is unfavourable as: 1) short-cycle orders might not achieve the glory days of revenue growth and margins; 2) new businesses and exports (30% revenue share) might rise, but the domestic business is likely to remain subdued; and 3) it is the most expensive stock under our coverage, by a wide margin.

Bharat Heavy Electricals Limited Investment case

BHEL is India's leading power equipment manufacturer. We estimate that power generation capacity has become surplus in India for the first time in history, and the large under-construction project pipeline means overcapacity will persist in the medium term. Order inflows, driven mainly by SOEs, should continue to hover around current levels. The decadal wage re-set will impact margins from FY17 onwards. The shares are trading well above average valuation, with a stagnant medium-term earnings outlook, in our view.

Thermax Investment case

We believe the sluggish order inflow trajectory is unlikely to change without visibility on an improvement in commodity-driven capex. This looks unlikely, in our view. We expect the power equipment JV to continue to struggle to breakeven as order inflows in the industry remain sluggish. The weak growth outlook, coupled with valuations at +2SD above average, drive our negative view on the stock. We consider the risk-reward profile unfavourable at the current share price.

Cummins India Investment case

While we expect domestic revenue to recover on a capex recovery and normalisation of the disruption caused by new emission standards, we believe domestic revenue expectations based on past trajectory are unlikely to be met given the structural decline underway in India's power deficit. Furthermore, export growth is likely to moderate as low-horse power engine exports become part of the base. Margins are close to historical highs, but price cuts to regain lost market share could impact margins. Multiples close to historical peaks make risk-reward even more unfavourable, in our view.

Crompton Greaves Investment case

Crompton's margins have remained under pressure since Q1 FY12 due to losses at subsidiaries. Turnaround in these businesses could take several more quarters but we believe the worst has passed. We expect moderate growth in the parent business due to stagnant power T&D order activity. However, margins should improve from trough levels. We would await evidence of sustainable improvement in the overseas subsidiaries before turning more constructive on the stock.

IRB Infrastructure Investment case

IRB is among the largest toll road operators in India, with a diversified project portfolio. We like IRB for its integrated business model, longstanding experience in the sector, large cash-generating portfolio, reasonable balance sheet, large proportion of assets in the high-economic activity states of Maharashtra and Gujarat, and pricing visibility—toll rates are fixed and inflation-linked.

Larsen & Toubro Investment case

We believe L&T is best positioned to benefit from the infrastructure-led investment uptick in India, as the already large gap between L&T and other E&C vendors has widened further in recent years. While we expect order inflows to rise, L&T's revenue growth is not necessarily dependent on this; we believe improvements in execution rates from cyclical lows will be good enough to drive acceleration. We also see significant upside potential for our order inflow and revenue estimates from a possible kick-start of ordering for defence programmes. Subsidiaries in aggregate should start contributing to profit as increasing capacity utilisation narrows losses in new businesses.

Statement of Risk

Delays in the removal of regulatory impediments can delay a recovery in the investment cycle. The government may need to steer the legislative agenda adroitly given possible delaying tactics in the Parliament. The increased outlays for public spending outlined in the recent budget relies on sharp increases in borrowings from public institutions in the respective sectors. New financial models are needed to support the enhanced borrowing levels. Delays in the finalisation of new institutional arrangements could hamper expected improvements in ordering activity. We think the ramp-up in ordering activity in some well-identified projects has been underwhelming so far. Further delays could result in negative surprises to expectations of a quick recovery. Sharp movements in crude oil prices also pose a risk to engineering and construction (E&C) companies. Further drops in crude oil prices could impact the existing order books of Indian E&C companies in the Middle East region, while a sharp pullback would constrain the government's flexibility to step up public investments.

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12-Month Rating	Definition	Coverage[1]	IB Services[2]
Buy	FSR is > 6% above the MRA.	47%	37%
Neutral	FSR is between -6% and 6% of the MRA.	42%	32%
Sell	FSR is > 6% below the MRA.	11%	21%
Short-Term Rating	**Definition**	**Coverage[3]**	**IB Services[4]**
Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%

Source: UBS. Rating allocations are as of 31 December 2014.
1:Percentage of companies under coverage globally within the 12-month rating category. 2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.
3:Percentage of companies under coverage globally within the Short-Term rating category. 4:Percentage of companies within the Short-Term rating category for which investment banking (IB) services were provided within the past 12 months.

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UBS Securities India Private Ltd: Gopal Ritolia.

Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
ABB India	ABB.BO	Not Rated	N/A	Rs1,268.45	18 Mar 2015
Bharat Heavy Electricals Limited	BHEL.BO	Not Rated	N/A	Rs258.30	18 Mar 2015
Crompton Greaves	CROM.BO	Not Rated	N/A	Rs171.90	18 Mar 2015
Cummins India	CUMM.BO	Not Rated	N/A	Rs865.55	18 Mar 2015
IRB Infrastructure[13]	IRBI.BO	Not Rated	N/A	Rs233.00	18 Mar 2015
JSW Energy	JSWE.BO	Not Rated	N/A	Rs117.85	18 Mar 2015
Larsen & Toubro	LART.BO	Not Rated	N/A	Rs1,700.65	18 Mar 2015
Power Grid Corporation of India[4]	PGRD.BO	Not Rated	N/A	Rs146.55	18 Mar 2015
Thermax	THMX.BO	Not Rated	N/A	Rs1,171.30	18 Mar 2015

Source: UBS. All prices as of local market close.
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