Equity Research

July 15, 2015

BSE Sensex: 27961

**AUTO**

**Mahindra CIE**
(Rs238– Buy)
Target price Rs317

**Wabco India**
(Rs5,414– Buy)
Target price Rs6,273

**Asahi India Glass**
(Rs146– Buy)
Target price Rs201

**Motherson Sumi**
(Rs 529– Add**)**
Target price Rs588

**Bharat Forge**
(Rs1,124– Add)
Target price Rs1,250

**Bosch**
(Rs 23,497– Hold)
Target price Rs24,454

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**INDIA**

# Auto Components

## Capturing paradigm shifts

Reason for report: Sector thematic and initiating coverage

*"It Is Not the Strongest of the Species that Survives But the Most Adaptable"–Charles Darwin*

**Analysing the auto components industry typically has stoked a tunnel vision approach focussing on the antiquated history (*supplier = assistant*) rather than the emergent trends (*supplier = partner*). This behaviour though understandable, stemmed from the philosophies Original Equipment Manufacturers (OEMs) practised with respect to their suppliers. OEMs in previous decades have always remained hawk-eyed on costs, sourcing from multiple suppliers with technological competence taking a backseat. Now though, times are changing and OEMs are grappling with multitude of challenges – a) rapidly changing customer demands, b) venturing new geographies for growth and c) stringent safety and emission targets. The ripple effects have made global OEMs increasingly wary of remaining exposed on multiple fronts – regions, products and regulators. Mega suppliers – young and old (from Boschs to Motherson Sumis of this world) – are graduating to partnership status.**

***The purpose of this report is to dissect a global theme –"mega platforms" and how they affect value chain; does India fit into the global context; and identifying winners amongst the Indian suppliers.***

**Topics of our dissertation (detailed disposition inside)**

- **Regulators box OEMs into the innovation corner:**
  Over the past few years, automotive regulators around the globe led by EU and USA have heightened their focus on environmental, safety norms. This led to OEMs contemplating a wide range of strategies and practices to balance production costs and regulatory compliance. OEMs got *"necessarily boxed"* into focusing on technological advancements and not just on costs and marketing. One of the *Eureka* solutions which emerged from OEMs came in the shape of "*mega platforms".*
- **Era of *new mega suppliers* dawns as OEMs handpick partners:**
  The challenge OEMs face is to survive profitably in an ultracompetitive automotive space, which translates into opportunities for well-positioned suppliers. OEMs have been accepting the changing dynamics of supplier-OEM relationship from suppliers as assistants (volume and cost focused) to suppliers as partners (technology, scale and capabilities also added as necessary conditions).
- **Can India Auto sector be the next big growth market, propel "Make in India"?:**
  India is expected to reach the critical threshold of 5mn-6mn units in annual sales (currently 3mn units) by 2020. Industry participants believe that India has another chance at fulfilling its potential as the demand manufacturing enablers ranging from demographic dividend to skilled yet cost competitive labor force
- **Indian auto component story just unraveling:** In terms of manufacturing competitiveness and excellence Indian suppliers (tier-1.5 and tier-2) remain strong, reflected from their success stories – Motherson Sumi and Bharat Forge. We cannot emphasize enough the advantage of global reach and associations. Suppliers who work to build a de-risked business model *("markets, products & customers"<20%*) would be an investor's dream & a core portfolio holding. While we are positive on all stocks however our Top Picks are **Mahindra CIE, Asahi India Glass, Wabco India.**

| Company | Reco | TP (Rs) | Price (Rs) | EPS (Rs) | | | P/E (x) | | | EV/E (x) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FY15P | FY16E | FY17E | FY15P | FY16E | FY17E | FY15P | FY16E | FY17E |
| Mahindra CIE | BUY | 317 | 238 | 7.4 | 10.9 | 15.9 | 32.0 | 21.7 | 15.0 | 20.6 | 11.8 | 8.8 |
| Wabco India | BUY | 6,273 | 5,414 | 69.7 | 118.5 | 174.2 | 77.7 | 45.7 | 31.1 | 49.2 | 31.9 | 21.9 |
| Asahi India | BUY | 201 | 146 | 2.6 | 6.8 | 11.2 | 55.1 | 21.5 | 13.0 | 14.0 | 9.9 | 8.0 |
| Motherson Sumi | ADD | 588 | 529 | 11.1 | 16.0 | 26.4 | 47.6 | 33.1 | 20.0 | 15.6 | 12.4 | 8.2 |
| Bharat Forge | ADD | 1,250 | 1,124 | 31.5 | 37.6 | 50.0 | 35.7 | 29.9 | 22.5 | 19.0 | 15.9 | 12.8 |
| Bosch | HOLD | 24,454 | 23,497 | 432.2 | 456.0 | 611.3 | 54.4 | 51.5 | 38.4 | 36.2 | 34.3 | 25.5 |

## TABLE OF CONTENTS



## COMPANIES



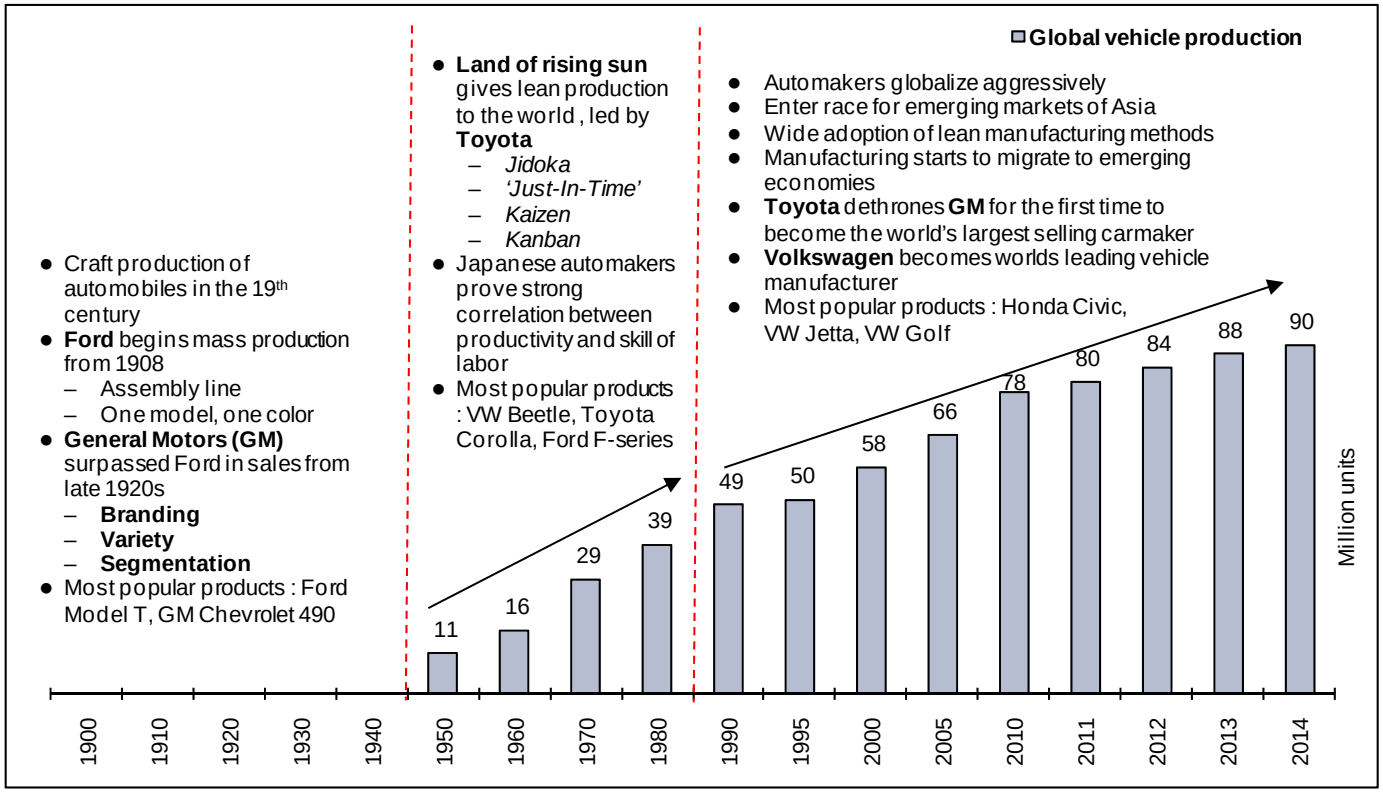
*Prices as on July 13, 2015*

## Snapshot of coverage companies

| Company Name | CMP (Rs) | Target price (Rs) | Market Cap (US$ mn) | Rating | EPS chg (%) FY16E | EPS chg (%) FY17E | Valuation methodology and remarks |
|---|---|---|---|---|---|---|---|
| Mahindra CIE | 238 | 317 | 1,215 | BUY | 20 | 22 | Valuing the stock at 20x FY17E EPS. This is at 20% discount to tier-1.5 India peers Motherson Sumi and Bharat Forge. Current PEG FY15-FY17E ~0.4x |
| Wabco India | 5,414 | 6,273 | 1,625 | BUY | 10 | 5 | Valuing the stock at 36x FY17E EPS. Considering the MNC and tier-1 parent franchise, it can be compared with only Bosch. Thus we value Wabco at a 10% discount to Bosch. Current PEG FY15-FY17E ~0.6x |
| Asahi India | 146 | 201 | 558 | BUY | NA | NA | Valuing the stock at 10.5x FY17E EV/EBITDA. Lack of domestic peers makes us look at history. Last 10-year average EV/EBITDA has been ~12.5x 2-year forward, while last 5-year average has been ~10x. Cashflow yield post capex is ~9% for FY17E. Global peers like Fuyao are trading at 8-9x EV/EBITDA; however, their growth is much lower vis-a-vis Asahi India. |
| Motherson Sumi | 529 | 588 | 7,325 | ADD | (7) | 8 | We have an SoTP valuation for this company: India business is valued in line with India tier-1.5 multiple of 25x FY17E EPS (same as Bharat Forge). International subsidiaries are valued at 20x FY17E EPS at a premium to global players like Faurecia on account of much higher growth on revenues and earnings. |
| Bharat Forge | 1,124 | 1,250 | 4,087 | ADD | (11) | (10) | Global forgings leader, this company is one of the best India tier-1.5 suppliers. We value the stock at 25x FY17E EPS. Cashflow yield post capex is ~4% FY17E. This is at a 20% discount to tier-1.5 India peers, Motherson Sumi and Bharat Forge. |
| Bosch Ltd | 23,497 | 24,454 | 11,625 | HOLD | (2) | 1 | Bosch is the only global listed entity of Bosch Gmbh, thus has always traded at premium in its history. Last 10-year average PEG has been ~1.2x-1.5x 2-year forward, while maxima and minima have been 1.8x and 1.1x respectively. We value the stock at 40x FY17E EPS, which implies a PEG FY15-FY17E of 1.15x |

Source: Bloomberg, I-Sec research

# Automotive manufacturing: A glimpse of the past




Source: Internet, I-Sec research

- Henry Ford's Model T (1908) marked the birth of commercial automobile production. Mass production helped Ford retain leadership till late 1920s, when General Motors (GM) realized second-time buyers needed variety and hence utilized aesthetics to brand and market their cars. Product-differentiation and segmentation via Chevrolet 490 thus displaced mass production as the predominant market strategy.

- By 1980s, Toyota and other Japanese automakers had perfected lean manufacturing, which took over as the new differentiator. Lean manufacturing eliminated any waste with just-in-time inventory and detected and fixed problems as they occurred, thus embedding quality into the manufacturing process.

- Lean manufacturing was successful when vehicle segments and markets were limited. Consumers and regulators have since become demanding and an automaker's survival and competency now rests on meeting innumerable expectations. It has to offer appealing vehicle designs, lined-up with safety and convenience features across models and engine variants, meet fuel efficiency and emission targets, and amidst all of this, try to maximize profit by producing flexibly and cost-effectively.

- Faced with high costs, strong competition and saturation at home, automakers have ambitiously set out on mergers, acquisitions, joint ventures and technical collaborations to both manufacture and sell in emerging markets, but competitive advantage has remained transient. The 1991-00 decade witnessed M&A activity of US$78 bn across 103 deals amongst automotive manufacturers. The next decade (2001-10) saw US$156 bn across 1,091 deals whereas the current decade to date (2011-15) has already seen ~US$63 bn of activity across 591 deals.

# New era of opportunities and challenges

## Challenge 1.0 - Global automotives have become complex organizations

In their quest for economies of scale and capturing new markets, OEMs have globalized their operations by producing and selling vehicles in as many markets as possible. This has resulted in a complex web of operations, interconnecting multiple plants, suppliers and markets across geographies. Cross-border acquisitions have complicated operations furthermore. As OEMs battle to increase global sales, it has become imperative for them to further expand the length and breadth of their product and brand portfolio, moving deeper into customisation, spoiling the consumer for choice. But when OEMs customize their vehicle offering to local preferences, they will have to dedicate product development effort to work on specific variations in manufacturing and component sourcing. Dedicated vehicle platforms, unique components and their respective suppliers devoted to an expanding and ever-changing product fleet works against economies of scale. It complicates both manufacturing and supplier coordination and results in an inflexible value chain, risking substantial inefficiency levels. The

### Simultaneously, regulators are enforcing industry-wide innovation

Environmental concerns due to overreliance on fossil fuels, casualty potential from vehicle defects and rising number of road accident deaths have resulted in regulators coming down heavily on automakers. This is a prime force of innovation in the automotive industry. Regulators set performance standards which are technology-enforcing in nature because adhering to the new standards becomes impossible within the scope of existing technology. Regulators have been setting tougher norms for the automotive industry in recent years on emission, fuel efficiency and safety.

## Challenge 2.0 - Emissions & fuel efficiency

Regulatory pressure to reduce overall emissions and improve fuel economy is driving technological advancements in powertrain systems and automotive suppliers are not far behind on this. Conventional fuel-based (diesel and petrol) powertrain systems are being overhauled to meet more stringent emission and fuel efficiency targets. Apart from combustion engine optimization, the conventional powertrain segment is seeing innovation in various subsystems like fuel injection, engine management and transmission and fuel-handling. Technology is also being developed to create alternative powertrains (hybrid, hydrogen, but chiefly electric).

Another important area that is drawing attention for fuel efficiency improvements is light-weighting. About one-third of a passenger car's total fuel consumption directly depends on its weight. For example, a weight reduction of 100 kg represents a fuel savings of between 0.3- 0.5 litres for every 100 km driven according to industry estimates (*Source: European Commission*). Therefore, OEMs are actively working on the application of advanced multi-material concepts that combine steel, aluminium, magnesium, plastics, carbon fibre and composites which can significantly reduce weight, and thus cut fuel consumption and carbon emissions. On this front, OEMs are also contemplating the use of nanotechnology and nanomaterials such as ‘graphene’, a form of carbon 200 times stronger than steel, but as thin as an atom.

**Table 1: Adoption status of EU norms along the years**

| Countries | >1995 | >2000 | >2005 | >2010 | >2015 | >2020 | >2025 |
|---|---|---|---|---|---|---|---|
| EU-28 | Euro-1 | Euro-2 | Euro-3 | Euro-4 | Euro-5 | Euro-6 | NG |
| Canada | Euro-3 | Euro-4 | Euro-4 | Euro-5 | Euro-6 | Euro-6 | NG |
| US | Euro-3 | Euro-4 | Euro-4 | Euro-5 | Euro-6 | Euro-6 | NG |
| Japan | Euro-1 | Euro-2 | Euro-3 | Euro-5 | Euro-6 | Euro-6 | NG |
| Australia | Euro-1 | Euro-2 | Euro-4 | Euro-4 | Euro-5 | Euro-6 | NG |
| South Korea | Euro-1 | Euro-3 | Euro-4 | Euro-4 | Euro-5 | Euro-6 | NG |
| China(national) | Pre-Euro | Euro-1 | Euro-2 | Euro-3 | Euro-4 | Euro-4 | NG |
| India(national) | Pre-Euro | Euro-1 | Euro-2 | Euro-3 | Euro-4 | Euro-6 | NG |
| Brazil | Pre-Euro | Euro-1 | Euro-2 | Euro-3 | Euro-4 | Euro-4 | NG |
| Mexico | Pre-Euro | Euro-1 | Euro-2 | Euro-3 | Euro-6 | Euro-6 | NG |
| Latin America-31 | Pre-Euro | Pre-Euro | Euro-2 | Euro-3 | Euro-3 | Euro-6 | |
| Russia | Pre-Euro | Pre-Euro | Euro-2 | Euro-3 | Euro-4 | Euro-6 | |
| Non-EU Europe | Pre-Euro | Euro-1 | Euro-2 | Euro-3 | Euro-4 | Euro-6 | |
| Asia-Pacific-40 | Pre-Euro | Euro-1 | Euro-1 | Euro-2 | Euro-3 | Euro-5 | |
| Africa | Pre-Euro | Pre-Euro | Euro-1 | Euro-1 | Euro-2 | Euro-4 | |
| Middle East | Pre-Euro | Euro-1 | Euro-2 | Euro-2 | Euro-4 | Euro-5 | |

Note: NG: Next-Generation
Source: ICCT, I-Sec Research

## Challenge 3.0 - Safety

2014 has been a historic year for vehicle recalls due to Takata's airbag and GM's ignition switch defects. The Takata airbag issue has affected nearly all OEMs as they had to deal with massive recalls, and reputational and financial damages. Passenger casualties is redirecting regulator's attention to automotive safety systems. Renowned car safety assessment agency, Global NCAP (Global New Car Assessment Programme) is putting increasing emphasis on the adoption of active safety in its star rating system by assigning more points to specific mechanisms incorporated in the vehicle as default. Vehicle safety systems comprise of active and passive safety mechanisms. Passive safety mechanisms that limit damage during a crash, like bumpers, crumple zones, airbags, seatbelts, head restraints and shoulder harnesses, offer limited scope of improvement, while also increasing the vehicle weight. Hence most of the innovation effort is going into active safety which deals with preventing an accident itself in the first place. High-end detection and monitoring techniques like Emergency Brake Assist (EBA), Electronic Stability Control (ESC), ABS (Anti-lock Brake System), Blind Spot Detection (BSD), Adaptive Cruise Control (ACC), Forward Collision Warning (FCW), Rear Cross Traffic Alert (RCTA), Lane Departure Warning (LDW), Traffic Sign Recognition (TSR), Intelligent Headlamp Control (IHC) and Advanced Drive Assistance System (ADAS) are becoming commonplace in new vehicles.

**Table 2: Recent high-profile vehicle recalls**

| Year | Manufacturer | Component | Million recalls | Comments |
|---|---|---|---|---|
| 2014 | Multi-OEM | Air bags | 34 | Takata (supplier) has admitted defects; total airbag recall has doubled to a record 34 million vehicles. |
| 2014 | General Motors | Ignition switch | 2.6 | Recent death toll was 121. GM has estimated that compensating all victims could cost ~US$400-600 mn. Industry sources sayGM has to pay anywhere between US$1.2-2.0 bn in penalties |
| 2010/2009 | Toyota | Pedals | >10 | Unintended acceleration. Toyota had to pay US$1.2 bn to settle federal charges |
| 2009 | Ford | Deactivation switch | 4.5 | |
| 2005 | Ford | Deactivation switch | 4.5 | |

Source: NHTSA, I-Sec research, Internet

## Solution 1.0 Megaplatforms: The alternative

A megaplatform is a single platform or a common skeletal structure, upon which an entire family of vehicles can be manufactured, across many different vehicle types, sizes and brands. So, if earlier, an OEM had 10 platforms to make 20 models, it might now have just 3 megaplatforms to make 40 models. The megaplatform is as important a technological breakthrough in automotives as was Ford's mass production or Toyota's lean production technique. The prevalent automotive manufacturing architecture proves inadequate to handle the imminent explosion of product diversity. OEMs rely on production forecasts (both in terms of volume and specification), and catering to constantly varying consumer demand makes production planning difficult for them. The deluge of M&A deals has added complexity to automotive manufacturing. The end-user market is getting fragmented into more segments, more models in each segment and more variants for each model. It would be a herculean task to constantly map this entire product line-up with dedicated platforms at multiple assembly lines. In such a scenario, OEMs generally can recover their R&D costs incurred on a platform by producing the platform's models in advance and then offering heavy dealer incentives to clear inventory. Operating multiple platforms thus translates into inefficient resource allocation due to higher start-up costs, higher R&D costs, higher marketing costs, bigger lead times, slower responses to market demands and thus lower productivity overall. A megaplatform lets an OEM manufacture multiple types of vehicles on a single platform with very high interchange ability of components, which saves costs and lead time substantially and lets the OEM focus on tailoring models to local needs.

**Table 3: Estimated 2020 volumes of the world's largest vehicle architectures**

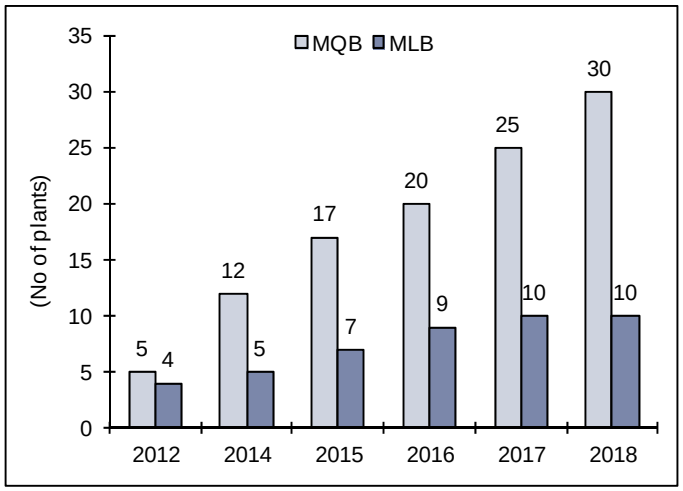
| OEM | Platform | Volumes | Key models using the platforms |
|---|---|---|---|
| 1. VW | MQB A/B | 57,54,000 | VW Golf, Jetta, Tiguan, CrossBlue, Passat, Beetle; Audi A3; Skoda Octavia; Seat Leon |
| 2. Renault-Nissan | CMF B | 35,03,000 | Renault Clio; Nissan Juke, March, Note; Dacia Sandero |
| 3. Toyota | NGA-C | 27,96,000 | Toyota Auris, Corolla, RAV4, Prius; Lexus CT |
| 4. Renault-Nissan | CMF C-D | 26,68,000 | Nissan Qashqai, X-Trail, Rogue; Renault Megane, Espace, Laguna, Scenic |
| 5. Honda | CCA | 24,22,000 | Civic, CR-V, Accord |
| 6. GM | Global Delta/D2XX | 23,14,000 | Opel Astra; Chevy Cruze, Equinox |
| 7. Hyundai-Kia | PB | 23,05,000 | Hyundai Accent, Pride, i20, ix25, Solaris; Kia Rio, Venga |
| 8. VW | MQB A0 | 21,60,000 | VW Polo; Audi A1; Skoda Rapid |
| 9. Ford | C2 | 19,46,000 | Focus, Escape |
| 10. Honda | GSP(2) | 19,03,000 | Fit, City, Brio |

Source: Industry

## Volkswagen has taken stride with its MQB megaplatform

Vokswagen has come out woth its modular toolkit strategy which comprises of four major platforms: 1] MQB - for transverse engined, small to medium-sized cars, 2] MLB - for medium-sized and larger longitudinal engined models, 3] MSB - for front-engined rear-wheel drive cars and 4] MSS -mid-engined platform, for performance sports cars. Of these, MQB is supposed to be one of the largest platforms. On MQB, only the distance between the accelerator pedal and the centre of the front wheels is fixed. All the rest (length, width, height, wheel size etc.) can be modulated and the platform can accommodate conventional, hybrid and electric engines. This concept, studied since 2007 by Volkswagen, enables to design and produce most models of the group. The company intends to use it for most of its 12 brands (as different and varied as Skoda, Audi, Porsche or Lamborghini) and produce more than 40 different models by 2018. Volkswagen plans to build more than 30 million vehicles using the platform from 2015 through 2021, according to industry projections. MQB would not be the only platform developed by the Volkswagen Group, which also includes a so-called MLB configuration, already the basis of several of the larger Audi models, and a third, the MSB, for luxury vehicles such Porsche, Bentley or Lamborghini.

**Chart 1: Number of toolkit equipped plants at Volkswagen**




Source: Company

Volkswagen has been increasing the share of MQB in its total production volume by rolling it out globally

MQB aids savings and hence improves margins by:

- Lowering the cost per unit
- Less hours of engineering per vehicle
- Less one-off expenditures

## Other OEMs are also rising to bridge differentiation

**Renault-Nissan**: Renault-Nissan collaboration has come out with the 'Called Common Module Family' (CMF), a new approach to engineering, which will consist of three different modular platforms: 1] CMF-A will provide a common pool of parts for small vehicles 2] CMF-B will only consist of parts that are to be used on mid-sized cars and 3] CMF-C/D will only be used for the largest vehicles made by the alliance. CMF is expected to save 20-30% on purchasing costs and 30-40% on engineering costs. Renault-Nissan management believes that development of CMF vehicles is helping to drive synergies in all its major business areas – from purchasing to vehicle engineering and powertrains and CMF will continue to be a major driver of the company's synergies in the future with 70% of the company's vehicles expected to fall within the CMF scope by 2020.

**Toyota**: Toyota Motor Corp. will shift half of all the vehicles it makes to new Toyota New Global Architecture (NGA) by 2020. In this platform design, Toyota has repositioned and lowered the center of gravity of powertrain components. With this, Toyota expects to reduce development costs by at least 20%, improve in the fuel efficiency of its powertrains by more than 25% and increase power output by more than 15%. It will also mean that compared with 2008, the cost of starting new production lines will fall by 50%, and initial investment required for a new plant will drop by 40%. Toyota will begin rolling out its new platforms with the launch of a mid-size front-wheel-drive vehicle, followed by specific new platforms for front-wheel-drive compact and large vehicles, as well as for rear-wheel-drive vehicles. Toyota expects approximately half of its vehicles sold worldwide in 2020 to feature the new platforms.

**Ford**: Ford Motor Co. plans to decrease the number of platforms to 8 in the coming years from the existing 15 global platforms. Ford originally forecast dropping to 9 global platforms by 2016. In 2007, Ford was building vehicles on 27 platforms. In 2007, Ford was able to build 3.9 vehicles per platform. Today, it can build 5.7 vehicles per platform, and has plans to reach 6.6 by 2019. Moreover, the company was building only 29% of its vehicles on global platforms. Now it wants to build 97% of the vehicles on global platforms.

**Table 4: Ford global platform consolidation plan**

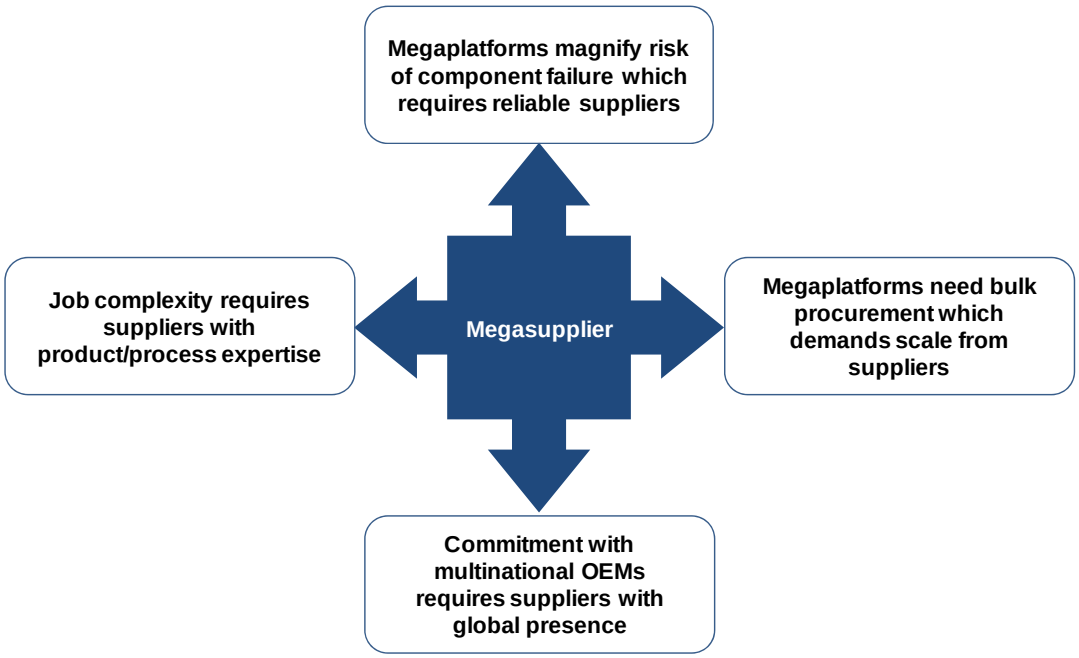
| 2007 | 2015 | 2016 | Target |
|---|---|---|---|
| 27 Platforms | 12 Platforms | 9 Platforms | 8 Platforms |

Source: Company

**General Motors**: GM chief, Mary Barra, announced in 2014 GM's ambitious plans to reduce its core platforms from 26 global platforms to just 4 by 2025. This year, GM expects to have 14 core platforms and 12 regional architectures. That will decrease to 11 core, two regional and two flexible architectures in 2020, before going solely to 4 component-set platforms in 2025. The 4 platforms will are one each for front- and rear-drive vehicles, SUVs and trucks.

## Powershift: From suppliers to partners

In earlier times of mass production, suppliers used to play the role of matching up to the product requirements of OEMs. When the product needs were not specialized and the suppliers' limited role was one of supplying just parts, the decisive factor in choosing a supplier was centred around price per unit. The relationship was far from symbiotic as suppliers used to be largely dependent on the product strategy and production plans of OEMs. But today's highly evolved automotive business model calls for a recast of the supplier role in the value chain. As OEMs have evolved to become large, global and technologically advanced, the supply side has simultaneously transformed into being an integral part of the value chain. The Toyota Production System (TPS) discussed earlier, spearheaded this with 'kaizen', in which suppliers were actively engaged for maximizing efficiencies. The industry thinking has already taken a departure from the notion that suppliers are just volume-focused ancillaries, who don't understand technology, could be pressed for bargains, and switched with ease. Suppliers' ability to solve problems, think ahead, innovate and pre-empt the issues OEMs face and the requirements of OEMs, have redefined supplier's role and image in the industry. The challenges OEMs face in trying to profitably survive in the ultracompetitive automotive space translate into colossal opportunities for well-positioned suppliers.

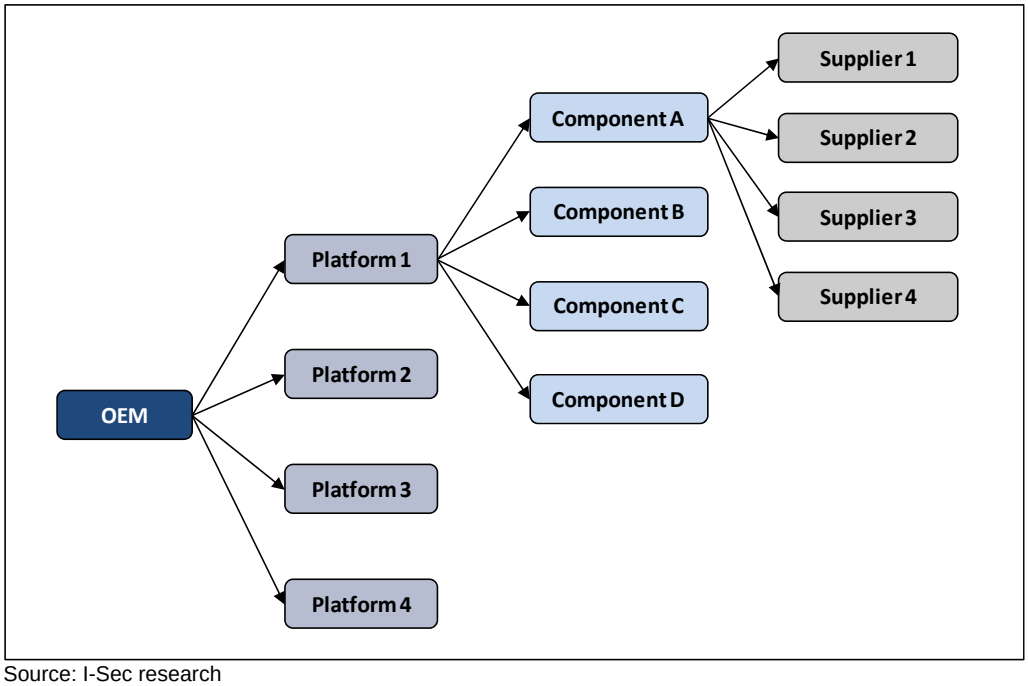



Source: I-Sec research

## Sweeping consolidation in automotives heralds the advent of specialized megasuppliers

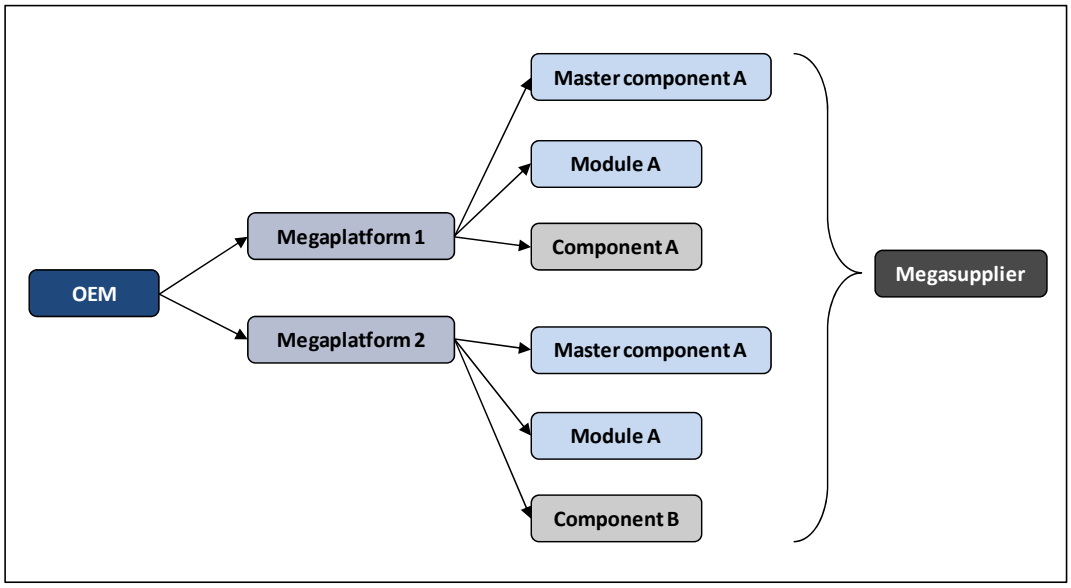
We had discussed earlier the bigger challenges OEMs face as they grapple with a shorter vehicle life cycle on one hand and a larger and inflexible manufacturing network on the other. Product proliferation leads to further complications and diseconomies of scale. We also discussed how regulatory push for cleaner, efficient and safer vehicles is driving innovation and also increasing the production cost per vehicle for the OEMs. Regulatory enhancements are applicable to entire fleet of vehicles an OEM produces and is a necessary and a mandatory cost. The bad part here is that this cost cannot be completely passed on to consumers since higher vehicle costs might dent customer affordability. With this as the background, it becomes increasingly infeasible for OEMs to 1] operate multiple platforms for multiple products and 2] incur duplicate costs for the same enhancements across all product platforms. One way out to achieve economies of scale is to simplify by standardising as much of the car manufacturing as possible. This standardising initiative encompasses plants, platforms, components, and suppliers. OEMs have already begun consolidating globally scattered plants by shifting regional production hubs from high-cost locations such as Australia to low-cost locations in emerging countries and condensing multiple vehicle platforms into megaplatforms. But for components, presently OEMs are ordering separate components for different platforms. They are then assembling many components at their end and are associated with a plethora of suppliers for ordering each component. Standardisation is proving beneficial for the OEMs and they are extending this initiative by pervasively consolidating vehicle components and their suppliers on a bigger scale than ever. ***The ensuing effect would be formation of megasuppliers who will supply entire systems or modules to OEMs and not just components.***

**Chart 2: Till now, multiple components and suppliers were mapped to multiple platforms…**




Source: I-Sec research

**Chart 3: …all that is changing as we now have common components, megaplatforms and megasuppliers**




Source: I-Sec research

## OEMs are seeking resilient, quality megasuppliers, not just low-cost suppliers

The reason OEMs want to hand down a significant portion of car-making (more than 60% of the car is now being made by suppliers) to their suppliers is because they want to realign their focus on product development, design, innovation and marketing. OEMs now find it distracting to order numerous components for multiple platforms and invite bids for each component from multiple suppliers; and after ordering each component, to devote even more resources assembling components at their end. So at an industry-level, they have tackled this complexity by dually reducing the number of components and suppliers. They are standardising components across platforms to make them interchangeable and bundling components and parts into integrated systems in their contracts to suppliers. Simultaneously, the adoption of megaplatforms has enlarged the average size of contracts from OEMs to suppliers. The products have become complex and the order size too large to risk execution error (Takada 2.0!). This stage of evolution in the automotive supply chain relies on a very big assumption that supplier integration in the value chain will be seamless and that suppliers will supply zero-defect products.

OEMs cannot help but look back at the recent spate of high-profile vehicle recalls and the bad press and regulatory flak that followed. With megaplatforms, the financial and reputational implications of component failure go up significantly as a recall would affect all vehicle models unlike earlier when only model-specific product lines were affected. With the supplier's share of vehicle content increasing, OEMs are showing heightened sensitivity to component failures traced back to an incapable or a small supplier. In the tradeoff between quality and cost OEMs are increasingly leaning on quality. ***The cost savings from preferring a cheaper supplier to a megasupplier are getting more than offset by the warranty costs and lawsuits that follow a high-volume recall.*** This culmination of circumstances makes OEMs naturally inclined towards accountable megasuppliers who have partnered with them earlier and who have proven their reliability in matters of product expertise and quality.

World's third-largest automotive interiors player Grupo Antolin believes that the bigger the platform the bigger the recall will be if there is a problem.

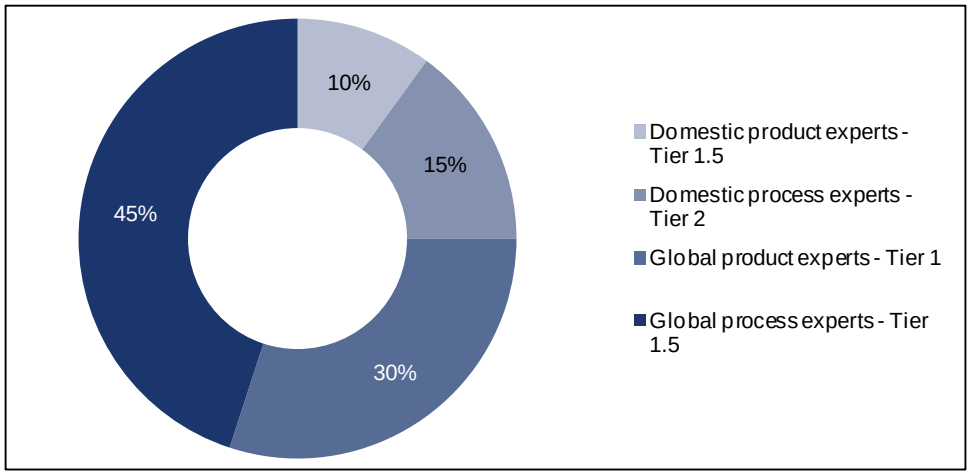
## Supplier relations crucial in fostering reliability

As per industry participants, suppliers opine that heightened friction between OEMs and suppliers on cost reduction matters is the main factor behind the deterioration of relations between automakers and suppliers globally in 2014. Industry studies indicate that eminent OEMs like Ford, General Motors, FCA and Nissan collectively could have saved anywhere between US$261 mn-US$2.0 bn more in expenses had their supplier relations improved as much as that of Toyota and Honda. OEM's relationship-building effort is highly correlated with the benefits that a supplier chooses to give an OEM – including which OEM is first to see a supplier's newest technology, is provided a supplier's best personnel for support, and gets their best pricing. All of these impact an OEM's competitiveness and operating profit.

### Large Tier 1 global suppliers to ace over smaller Tier 2 counterparts

Aside of the recall risk, a large OEM with global production hubs shall expect its suppliers to seamlessly interoperate with it across markets. Job complexity and size will redefine the way OEMs cherry-pick suppliers and work with them. ***Only reliable large suppliers with global scale and reach, and technological prowess will be able to gain credibility and 'follow' the OEM to all markets and adapt rapidly to shifting market demands.*** Large global suppliers shall find it relatively easy to expand their scale and benefit from large specialized orders globally whereas small suppliers shall need to acquire scale or specialization via M&A or greenfield expansion to compete with their established large peers. Competing on pricing alone would be very difficult for small suppliers as OEMs are outsourcing the entire modular systems of vehicles to global suppliers rather than just individual parts to local suppliers. Inability to compete with large suppliers or over-dependency on a single customer sets up a vicious cycle for small suppliers. Shrinking local orders warrants small suppliers should go global. At the same time, well-established competition in new markets does not justify the increased cost of going global. Thus, there is a high probability that the small suppliers (Tier 2/3) would either perish or be absorbed by the larger ones unless if they scale up.

**Chart 4: Being global is crucial: Global suppliers (Tier 1, Tier 1.5) dominate (with 75% total) automotive supplier revenues globally**




Source: Roland-Berger, Source: I-Sec research

## Automotive supplier space is continuing to get restructured

The automotive supplier space is broadly divided into two focus areas: product and process. Product specialists (Tier 1 suppliers) generally deal with complex, but precise requirements from the OEMs, requiring a higher degree of engineering and technical collaboration. Ideally, they would have been working closely with major OEMs for years to understand their product needs and supply them globally as well. Product experts are more profitable than process experts since process differentiation can be commoditized relatively easily, thus subjecting process experts to higher competition and extra focus on efficiencies. The shared relationship with the OEMs as well as years of industry experience grants Tier 1 suppliers the liberty and expertise to innovate on their own. A successful new product can secure the innovator a near monopoly through patenting (e.g., Bosch) and many megasuppliers have been successful in developing proprietary products. Persistently innovative megasuppliers are also the largest suppliers in the space, because they consistently spend a good portion of their sales on research and development (R&D) activities.

**Product innovators**

- Innovative products with differentiation potential
- Greater willingness among OEMS to pay (in return for higher R&D spending by suppliers)
- High entry barriers as a result of intellectual property
- Consolidated competitive structure (global market leader approx. 30-35% market share, top 5 approx. 75% market share)
- Products: Fuel injection systems, turbochargers, driver assistance systems, etc.

**Process specialists**

- Lower degree of innovation among the products
- Lower R&D spending
- Production process knowledge as a core competency
- Often fragmented competitive structure (global market leader approx. 15% market share, top 5 approx. 40% market share)
- Products: Interior parts, plastic components, passive acoustics components, cast parts, etc.

**Table 5: Largest suppliers of the world spend considerably more on R&D**

| Rank | Supplier | Domicile | 2014 Sales (US$ Mn) | 2014 R&D/ Sales (%) | 2013 Sales (US$ Mn) | 2013 R&D/ Sales (%) | Products |
|---|---|---|---|---|---|---|---|
| 1 | Robert Bosch GmbH | Germany | 65,031 | 10.1 | 61,201 | 9.9 | Gasoline systems, diesel systems, chassis system controls, electrical drives, starter motors & generators, car multimedia, electronics, steering systems, battery technology, exhaust gas turbochargers & treatment systems, systems, service solutions |
| 2 | Magna International Inc. | Canada | 36,641 | N.A. | 34,835 | 1.6 | Body, chassis, interiors, exteriors, seating, powertrain, electronics, vision, closure & roof systems & modules complete vehicle engineering & contract manufacturing |
| 3 | Continental AG | Germany | 45,841 | 6.2 | 44,280 | 5.6 | Electronic brakes, stability management systems, tires, foundation brakes, chassis systems, safety system electronics, telematics, powertrain electronics, interior modules, instrumentation, technical elastomers |
| 4 | Denso Corp. | Japan | 37,441 | 9.2 | 43,019 | 9.0 | Thermal, powertrain control, electronic & electric systems; small motors, telecommunications |
| 5 | Aisin Seiki Co. | Japan | 27,093 | 5.0 | 28,177 | 5.1 | Body, brake & chassis systems, electronics, drivetrain & engine components |
| 6 | Hyundai Mobis | Korea | 34,376 | 1.3 | 31,258 | 1.2 | Chassis, cockpit & front-end modules; ABS, ESC, MDPS, airbags, LED lamps, ASV parts, sensors, electronic control systems, hybrid car powertrains, parts & power control units |
| 7 | Faurecia | France | 25,014 | 1.3 | 23,951 | 1.4 | Seating, emissions control technologies, interior systems, exteriors |
| 8 | Johnson Controls Inc. | United States | 42,828 | 1.8 | 41,410 | 1.9 | Seating, overhead systems, door & instrument panels, center & overhead consoles & interior electronics; lead acid & hybrid vehicle batteries |
| 9 | ZF Friedrichshafen AG | Germany | 24,464 | 4.8 | 22,368 | 5.0 | Transmissions, chassis components & systems, steering systems, clutches, dampers |
| 10 | Lear Corp. | United States | 17,727 | 0.6 | 16,234 | 0.7 | Seating & electrical distribution systems |

Source: Automotive News, Company Financials, Research Infosource, Canada, I-Sec research

## Pioneering suppliers are driving industry innovation and creating a pull factor

Innovation lies at the heart of the automotive industry and OEMs aren't the only ones innovating. OEMs no longer want suppliers dependent on them for solutions to rising industry challenges, be it globalization, shortening product life cycles, technology or production complexity. OEMs are preferring suppliers who stay ahead of the curve, thus demonstrating clear and sustained technological or process expertise to rely on. This lets OEMs share vehicle development resources (cost and time) with suppliers and frees up OEM resources for core activities of a carmaker. And suppliers haven't fallen behind. Tier 1 automotive suppliers are playing an increasingly bigger role in innovating on differentiating elements of a vehicle such as powertrain, chasis components, transmission. Below are the some award-winning innovations of automotive suppliers

### Table 6: 2015 Automotive News PACE Award for automotive supplier innovation

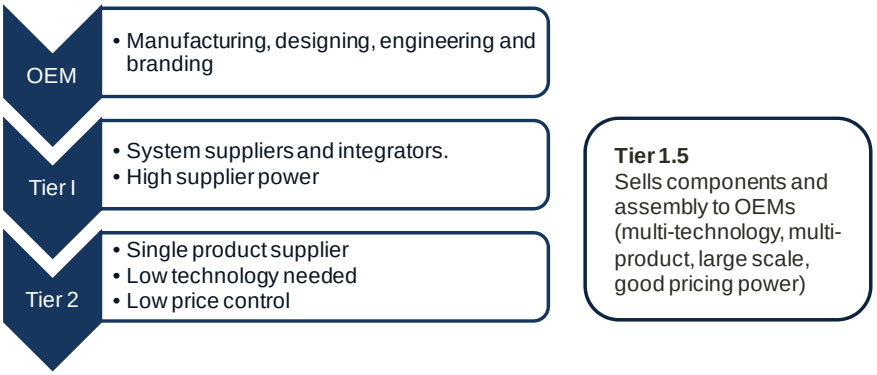
| Company | Innovation | Application of innovation | First customer |
|---|---|---|---|
| BorgWarner | Limited-slip differential for front-wheel drive | Improved traction for fwd vehicles | Volkswagen Golf GTI, November 2013 |
| Continental AG | Printed circuit board for transmission control units | Low-cost substrate for transmission computers | Mercedes-Benz seven-speed transmission, February 2012 |
| Continental Automotive | Multiapplication unified sensor element | 1 sensing device, many powertrain uses | Hyundai Sonata, Santa Fe Sport and Kia Optima and Sorento, January 2014 |
| Denso Corp. | Standardized HVAC unit | Standard HVAC units for many vehicles | Toyota, December 2013 |
| Federal-Mogul Corp. | DuroGlide piston ring coating | Piston coating reduces friction up to 20% | Volkswagen 1.6-liter and 2.0-liter BlueMotion models, 2014 |
| Federal-Mogul Powertrain | MicroTorq seal for rotating shafts | Seal for shafts cuts friction losses | Volvo, August 2013 |
| GKN Driveline | Two-speed gearbox for electrified vehicles | 2nd gear saves fuel for electrified vehicles | BMW i8, 2014 |
| Magna Closures | PureView seamless sliding window | Elegant rear window | 2015 Ford F-150 |
| Mahle GmbH | Evotec 2 lightweight piston | Cooling gallery makes piston more durable | Audi, February 2012 |

Source: Automotive News, I-Sec research
Note: For over 20 years, Automotive News PACE Award is recognized globally as the industry benchmark for innovation by automotive suppliers

## Emergence of the Tier 1.5 supplier

OEMs are increasingly following the demand of growing markets and believe in (proximity to markets, local content requirements, natural hedging, etc.). This globalization trend requires suppliers to follow the OEM across the globe thereby reaching increasing mass and supplier bargain power. Thus from an Indian perspective we find only a handful of companies (MSSL,MCIE) in this bracket which not only capabilities to invest and expand globally but also the management structure to overcome the complexities with a large diversified and network across the globe. The paucity of such India listed global oriented businesses (MSSL/CIE- Globally ranked 45/65 automotive supplier) lends strong business support to these companies.

**Chart 5: Tiered structure of auto components industry**




Source: Company data, I-Sec research

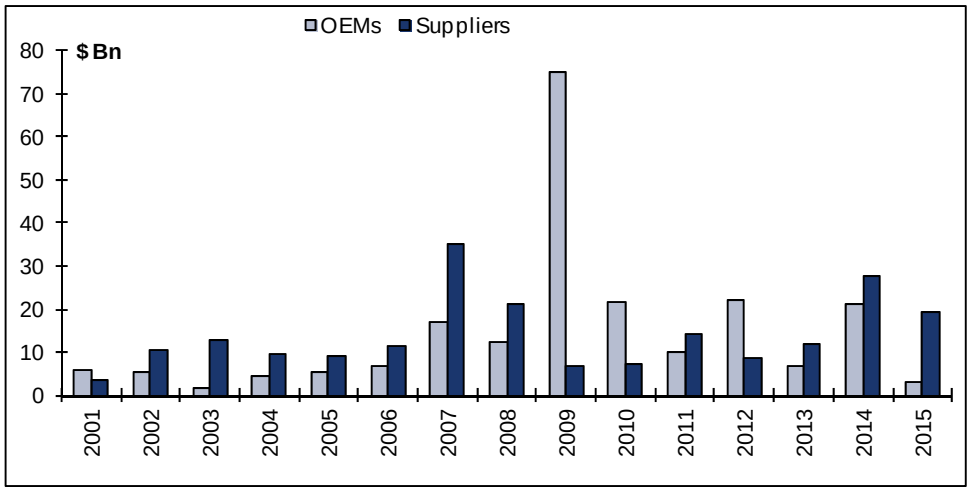
## Suppliers are merging to broaden capabilities and presence

Unlike the OEM industry, which is highly concentrated with few players (but has still seen quite some M&A deals), the automotive supplier industry is very scattered with a large number of players. Historically, consolidation in the OEM space has spilled over to the automotive suppliers space, but we strongly feel that a new world order is slowly but surely emerging in the automotive supplier space (primarily in the Tier 1.5 segment, which is process-driven and cost-driven). Globally, big mergers & acquisitions are taking place in the automotive supplier pace driven by factors as varied as changing customer demands to lack of successful operations management to simply competition. There is a tectonic shift in the supplier space from the large multi-segment megasuppliers to the younger, focussed megasuppliers which are lean, cost-competitive and process-driven. Big names of yesteryears such as Johnson Controls, Lear Corporation and Magna, the top automotive interior manufactures in North America, have been nearly replaced by younger mega-suppliers like Faurecia, Yanfeng Automotive Trim Systems, Grupo Antolin, Motherson Sumi, and International Automotive Components Group. Where big suppliers struggled to make money from interior components, their smaller rivals outdid them with higher degree of focus and better cost structure.

- In April this year, **Grupo Antolin**, announced it has reached an agreement with global automotive supplier, **Magna International**, to purchase substantially all of Magna's interiors operations US$525 mn. Magna's seating business is not included in this transaction. The deal includes 36 manufacturing operations and approximately 12,000 employees located in Europe, North America and Asia. Grupo Antolin, together with Magna's interiors operations would create the third largest player in the automotive interiors business

- **Johnson Controls Inc. (JCI),** world's biggest producer of automotive seats, decided to spin-off its interiors business and, on July 2, formally launched Yanfeng Automotive Interiors, a JV with Yanfeng Automotive Trim Systems, a wholly-owned partner of Huayu Automotive Systems (HASCO), which makes interior components and is the component group of Shanghai Automotive Industry Corporation (SAIC). This JV (JCI will hold 30%) makes Yanfeng Automotive Interiors the world's largest automotive interior parts supplier, as it will have revenues of US$8.5 bn and an order backlog of US$10 bn. The decision to spin-off its interiors business into a joint venture is one in a series of planned actions taken by JCI to strengthen and rebalance its portfolio of operating businesses. Even earlier, (July 2014), JCI had already sold off its automotive electronics business to Visteon Corp for US$265 mn.
- **China National Tire & Rubber Co**., a subsidiary of China's state-owned National Chemical Corp (ChemChina) will acquire 26.2% of Italian tire maker **Pirelli & C. S.p.A**., for US$2 bn. ChemChina intends to make a joint tender offer with Camfin and other investors for the remaining stake in Pirelli for ~US$7.9 bn deal
- German car-parts supplier **ZF Friedrichshafen,** a global leader in driveline and chassis technology, has acquired U.S. based safety systems manufacturer **TRW Automotive** for US$13.5 bn to create the world's second largest automotive supplier by sales. The combined company is a powerhouse of automotive technologies, ranging from driver assistance and occupant safety systems, to drivelines and transmissions, and braking and steering systems. The combined entity has a turnover of more than US$33 bn and a workforce of 134,000 employees operating in 213 locations across 40 countries.

**Chart 6: M&A trends in global automotives and automotive suppliers**




Source: Bloomberg, I-Sec research

If we analyse the trend of last 15 years, we see that as European OEMs faced relative stagnation in home markets, they chased Asia for growth and invested a cumulative US$13.4 bn in Asian OEMs through mergers, acquisitions, joint ventures and technical collaborations. After the European OEMs setup base in Asia, ambitious, young megasuppliers from Asia, which were supporting European OEMs locally, went global and aggressively bought businesses in Europe, investing cumulatively as much as European OEMs had in Asia - US$13.5 bn

### Table 7: Inbound M&A deals in Asian OEMs from 2001-15

| Acquirer Region | Target Region | # Deals | Volume (US$ Bn) | % of total |
|---|---|---|---|---|
| Asia Pacific | Asia Pacific | 631 | 35.8 | 66% |
| **Europe** | **Asia Pacific** | **76** | **13.4** | **25%** |
| North America | Asia Pacific | 62 | 4.4 | 8% |
| Latin America & Caribbean | Asia Pacific | 7 | 0.5 | 1% |
| Middle East & Africa | Asia Pacific | 5 | - | 0% |
| | | | **54.1** | |

Source: Bloomberg, I-Sec research

### Table 8: Outbound M&A deals by Asian suppliers from 2001-15

| Acquirer Region | Target Region | # Deals | Volume (US$ Bn) | % of total |
|---|---|---|---|---|
| Asia Pacific | Asia Pacific | 1,165 | 36.1 | 62% |
| **Asia Pacific** | **Europe** | **111** | **13.5** | **23%** |
| Asia Pacific | North America | 92 | 8.8 | 15% |
| Asia Pacific | Latin America & Caribbean | 13 | 0.1 | 0% |
| Asia Pacific | Middle East & Africa | 3 | 0.1 | 0% |
| | | | **58.5** | |

Source: Bloomberg, I-Sec research

# India to play a pivotal role in automakers' global plans

Now that automakers are charting out a clearer roadmap on vehicle production, they are establishing regional production hubs which can serve overseas markets as simultaneously. Nearly all OEMs are already in the process of setting up multi-billion dollar plants in Mexico for serving the NAFTA region. And now OEMs are looking for a reliable geography to establish a South Asian hub. A lot of factors go into deciding if a location away from the home market can be relied upon as a production hub.

- Least-cost but quality manufacturing
- Timely delivery of a wide array of vehicles
- Political and economic stability
- Availability and cost of raw material and labour
- Labour skill and productivity, work culture and ethic
- Infrastructure
- Logistics
- Trade agreements.

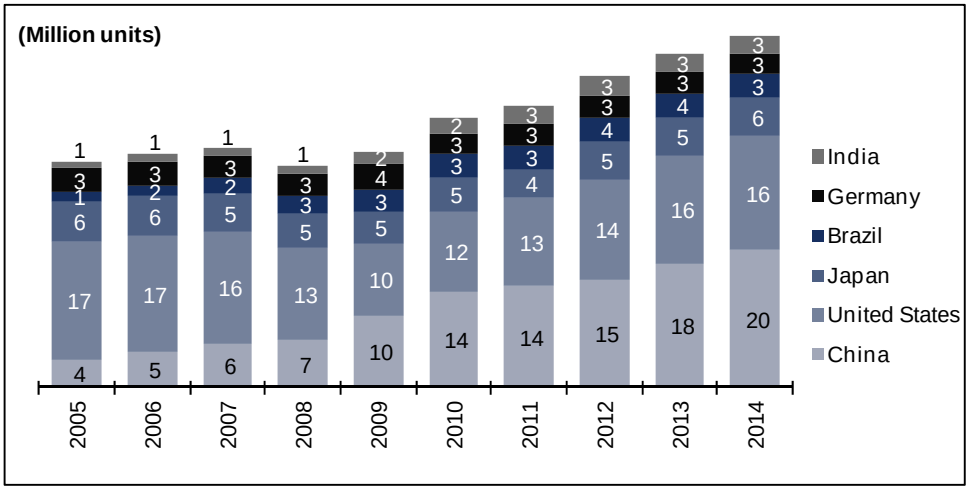
But even before these factors are considered, an OEM will primarily evaluate the new geography for a hub status on two basic criteria - sizeable local demand and bulk export potential that can be built up on local demand. Exports not only serve nearby markets but also cushion intermittently weak domestic demand. In the past, India has demonstrated its cost-competitiveness and has fared very well in manufacturing quality and labour productivity, but subdued local demand, unfriendly business environment and a paralyzed state of policy and infrastructure had deterred manufacturers from establishing a sizeable manufacturing base here. All of that is gradually changing.

## Demand outlook for passenger vehicles has improved

Indian passenger vehicles market is the sixth largest in the world. In absolute terms, 3.2 million passenger cars were sold in FY15, of which 19.3% (6.2 million units) were exported. Globally, a total of 74 million passenger vehicles were sold domestically in CY14, of which, India' share was 2.6 million units, or 3.5%. Of the total 78.1 million passenger vehicles produced in CY14, India's share was 3.2 million units, or 4.0%. The years CY2006 and CY2010 were critical since the country crossed the threshold of 1 million and 2 million units respectively. An industry shaped by consumer sentiment, passenger vehicle sales have been muddling above 2 million units since the last 5 years. And there is a growing belief held by industry participants that, as demand rebounds, passenger vehicle sales could reach 6 million units by 2020, thus making India possibly the world's third largest car market by 2020, behind only China and the United States.

## How OEMs are deciding on manufacturing locations?

**Chart 7: Top six automakers of the world by domestic sales**

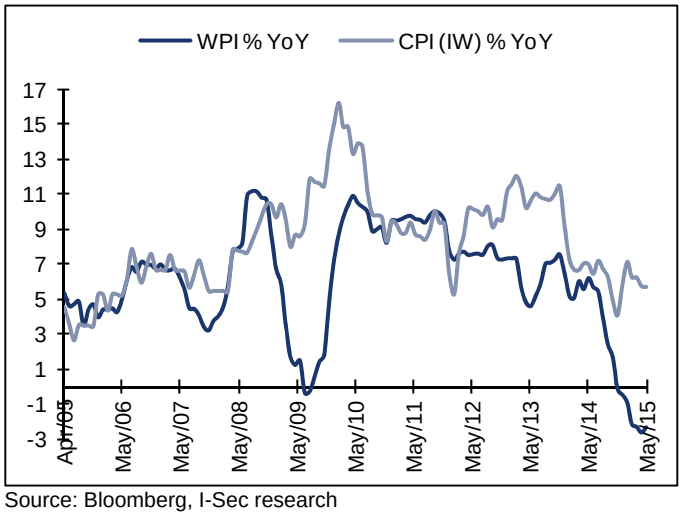



Source: Bloomberg, I-Sec research

## Consumer sentiment is turning positive

As indicated from the charts below, we are seeing an improving trend in key areas affecting consumers and their savings - fuel prices, interest rates and income stability. Better consumer sentiment and savings bode well for passenger car buying. One of the lowest car penetrations globally, (15 cars per 1000 persons) coupled with pent-up demand due to dampening economic and consumer sentiment of the earlier years point to a growing demand scenario.

**Chart 8: Inflation has receded**




Source: Bloomberg, I-Sec research

**Chart 9: Fuel prices have eased from their peaks**

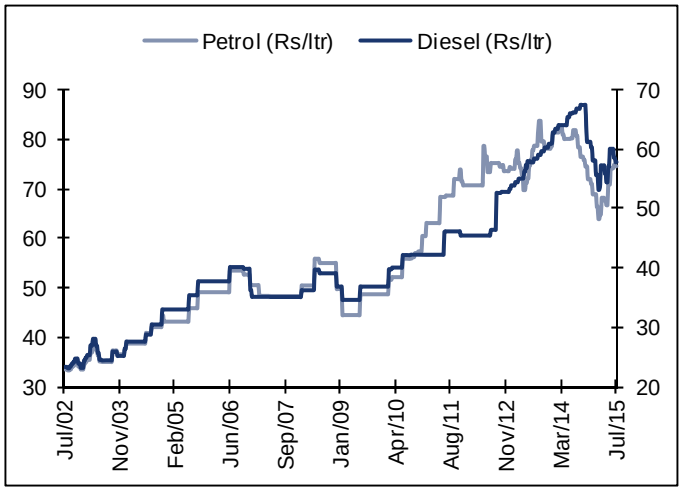
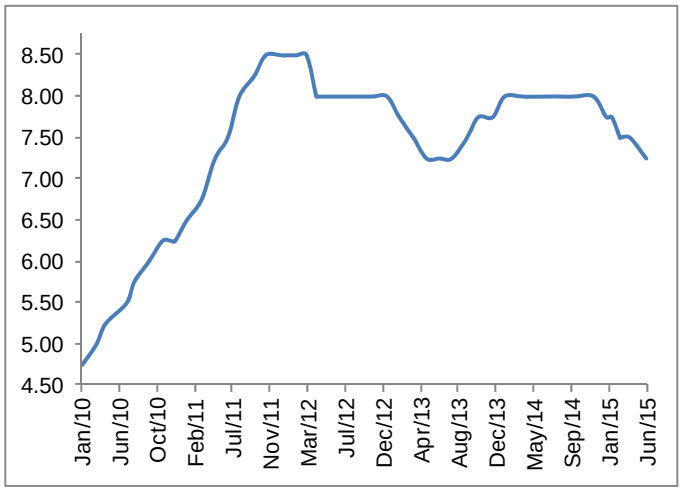
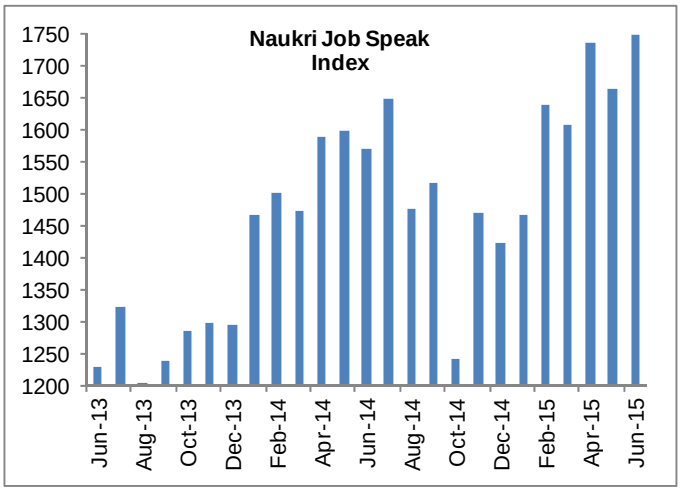


**Chart 10: RBI remains on the rate cut path…**




Source: Bloomberg, I-Sec Research

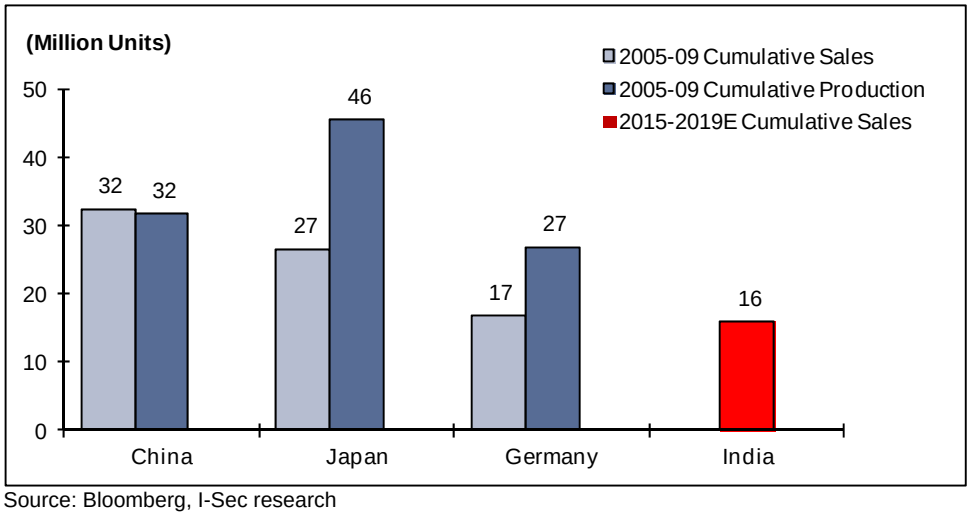
**Chart 11: …Hiring market is getting better**




Source: InfoEdge, I-Sec Research

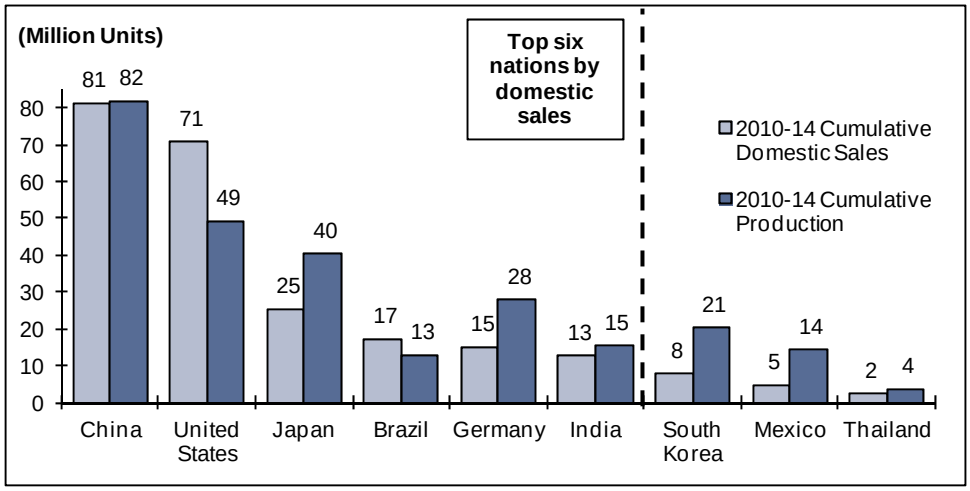
Currently at 3 million units of annual domestic sales, India is expected to reach the critical threshold of 5-6 million units of annual sales by 2020. With this size, the economies of scale shall induce automakers to manufacture in India and export from it on a larger scale than ever.

**Chart 12: India cumulative car sales in 5 years could mimic near present day Germany volumes?**




Source: Bloomberg, I-Sec research

**Chart 13: Export hubs South Korea, Mexico in top seven in total production**

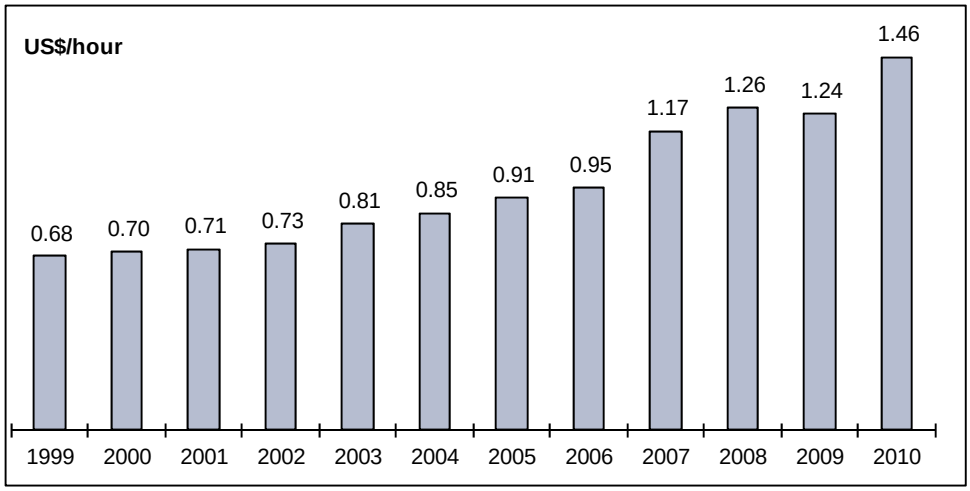



Source: Bloomberg, I-Sec research

## Cost-competitive manufacturing is India's pull factor

India's competitiveness as a manufacturing destination is attributed to surplus availability of raw material and low-cost labour. India ranks 6th, 4th and 6th in world aluminium, steel and copper production respectively. India's workforce is low-cost, skilled, young and abundant. The new government has set up a first of its kind 'Skill Development Ministry' to ready-up India's massive young workforce for jobs requiring specific skillsets across industries and sectors. This ministry will have four arms – National Skill Development Agency (NSDA), National Skill Development Corporation (NSDC), National Skill Development Fund (NSDF) and 33 Sector Skill Councils (SSCs) as well as 187 training partners registered with NSDC. The Skill Development Ministry will work very closely with the private sector to avert skill shortage and channelize the demographic dividend into social and economic betterment. The aim is to impart skills to 300 million people, one out of every four Indians, by 2020 and Rs15bn has been set aside for the same. According to National Skill Development Corporation (NSDC), India's automobile sector directly and indirectly employs ~19.1 million people and ~15 million people are expected to be employed directly (vs only 4 million now) in the automobile industry by 2022.

**Chart 14: Average hourly compensation in Indian manufacturing**




Source: U.S. Bureau of Labor Statistics

### Table 9: Average cost of labour in India

| | Rs/day | % to Total Cost of Production | $/day | $/hr (8-hr day) |
|---|---|---|---|---|
| 2008-09 | 410 | 5.56 | 8.9 | 1.1 |
| 2009-10 | 465 | 5.77 | 9.8 | 1.2 |
| 2010-11 | 540 | 5.85 | 11.8 | 1.5 |
| 2011-12 | 607 | 5.25 | 12.7 | 1.6 |

Source: Ministry of Labour, I-Sec research

### Table 10: Labour cost components in India

| | Wages/Salaries | Bonus | Provident Fund | Welfare Expenses |
|---|---|---|---|---|
| 2008-09 | 80.49 | 4.48 | 8.43 | 6.6 |
| 2009-10 | 80.19 | 4.35 | 8.61 | 6.86 |
| 2010-11 | 82.12 | 3.98 | 7.67 | 6.23 |
| 2011-12 | 82.58 | 3.93 | 7.31 | 6.18 |

Source: Ministry of Labour, I-Sec research

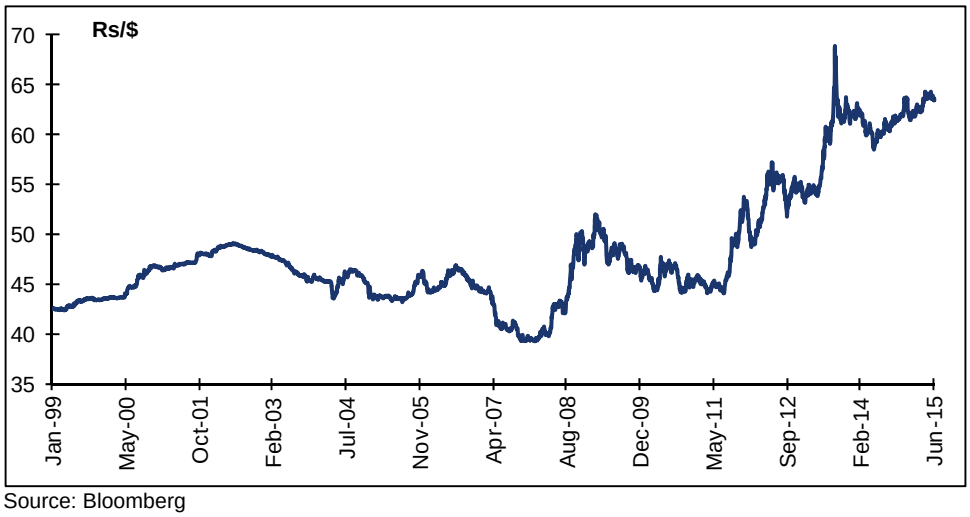
Strong growth in labour productivity and a depreciating rupee further reduce the labour costs for a multinational OEM, thus increasing the appeal for exports.

### Table 11: Average annual growth in labour productivity of India (% YoY)

| | 1990-1995 | 1995-2000 | 2000-2005 | 2005-2012 | 1990-2000 | 2000-2012 |
|---|---|---|---|---|---|---|
| Growth | 2.6 | 3.4 | 2.6 | 6.9 | 3.0 | 5.1 |
| Rank | 17th | 11th | 15th | 4th | 12th | 4th |

Source: Ministry of Labour, I-Sec research

### Chart 15: Rupee depreciation aids in overall cost reduction




Source: Bloomberg

## ‘Make in India’: Final push to automotive manufacturing

For the first time in 30 years, a single party (BJP) won a clear majority in the Parliament, ending an era of coalition politics and significantly reducing the political risk factor of investing in India. Soon after taking office, Prime Minister Narendra Modi announced the ‘Make in India’ initiative, which aims to increase the share of manufacturing in the GDP from 16% to 25% and create 100 million additional jobs by 2022. Prime Minister Narendra Modi has spent 55 days of his first year of office abroad, touring 5 continents and 18 countries so as to improve bilateral trade relations and more importantly, market India’s potential as a manufacturing and innovation hub. Automotive industry and its supply chain are at the centre of this campaign for their potential to bring in FDI inflows, contribution to GDP and pivotal role in manufacturing.

According to United Nations Conference on Trade and Development (UNCTAD)'s World Investment Report 2015, FDI in manufacturing in India has risen in the automotive industry. UNCTAD believes Indian government has identified automotive as a key industry in which India has the potential to become a world leader.

**Chart 16: Share of automobiles in FDI has been rising steadily through the years**

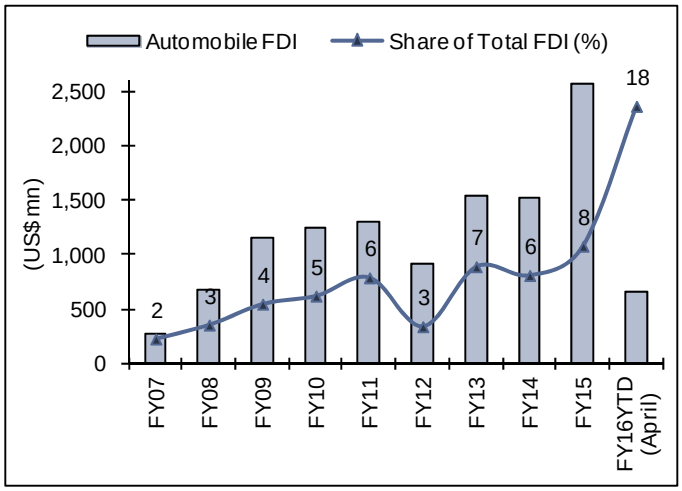
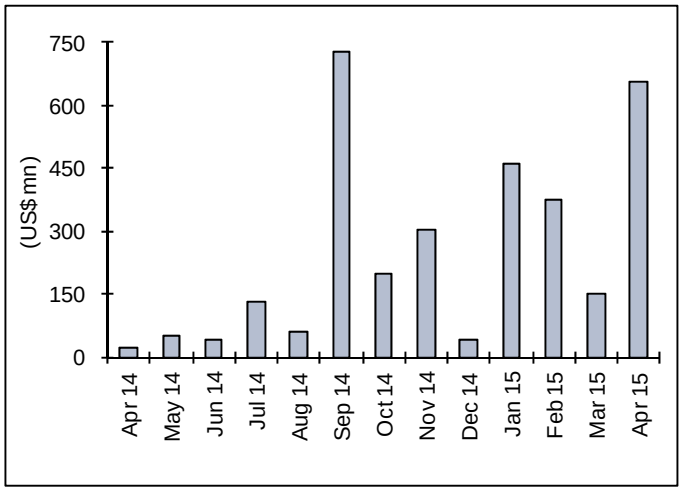



**Chart 17: Quantum of FDI in automobiles has gone up since the launch of 'Make in India' in Sep 2014**




Source: DIPP, I-Sec research

While the new government has set out ambitiously on 'Make in India', key areas that need redressal would be labour reforms, ease of doing business in India and infrastructure revamp. There has been parallel progress backing Modi's promises to global manufacturing giants on key issues which were of grave concern to investors and corporates alike. The government has identified urbanisation, power and coal, highways, railways, ports and freight corridors as priority areas and could spend more than Rs12 trn (US$190 bn) over the next five years on these areas.

**Infrastructure**

- With an aim to increase urbanisation, three mega flagship schemes have been launched - Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Smart Cities Mission, and Housing for All (Urban) at a total cost of Rs980 bn over the next five years.
- Recently, Maharashtra (wealthiest state of India) announced ~$16 bn over the next five to six years on a revamp of key infrastructure, reviving long-dormant projects including a new airport in Mumbai, a port and a key coastal road.
- The government, collaboration with Japan, is developing the Delhi-Mumbai Industrial Corridor (DMIC) as a global manufacturing and investment destination utilizing the 1,483 km-long, high-capacity, Dedicated Railway Freight Corridor (DFC) as the backbone at a total cost of US$90 bn.

**Ports & Shipping – crucial for exports**

- Prime Minister Narendra Modi has a stellar history of transforming the maritime sector in Gujarat. Under his close watch, the government is actively focusing on development/upgradation of capacities across all coastal states. It has only recently set up Customs Clearance and Facilitation Committees (CCFCs) at ports to ensure expeditious customs clearance
- The government is contemplating setting up a world-class transshipment port under the ambitious Sagarmala project besides promoting development of ports (dry and wet) and inland waterways for transporting key commodities such as coal, iron ore, foodgrains and petroleum products. It has sanctioned Rs6.92 bn (US$109 mn) for FY16 for this project. Under the project, 12 smart cities will be developed near ports with an investment of Rs500 bn (US$7.9 bn).
- Government is now looking to establish additional five major ports across India in the next five years, supported by at least US$28.7 bn in private investment.
- Jawaharlal Nehru Port Trust (JNPT), which is one of the 12 major ports in India, will receive Rs40 bn (US$630 mn) to develop its SEZ.
- The Ministry of Road Transport & Highways has said the cost of travelling through roads is Rs1.5, on railways Re 1 while on water, it's just one-third of it and hence it wants to promote water transport through this project to save huge logistics costs

**Investment climate**

- The government is making significant progress in the area of Land Acquisition Bill and Goods and Services Tax (GST), a unified tax regime aimed at simplifying the tax system.
- The Indian government wants to use Digital India as a platform where technology ensures government is incorruptible. This was demonstrated successfully through the Coal auctions which happened entirely and transparently via e-auctions

## ‘Make in India’ is starting to play out as OEMs are stepping up investments

**Table 12: Major India investments announced by passenger vehicle makers**

| | |
|---|---|
| **Ford Motor** | Rs40-50 bn - a new R&D centre |
| **Renault Nissan** | Rs50 bn - To expand capacity at Chennai plant |
| **Mahindra & Mahindra** | Rs40 bn - Rs20 bn in the test track and the new automotive plant in Chennai |
| **Isuzu** | Rs30 bn - New facility to manufacture SUVs and pick-ups. Initial capacity at 50,000 units to be increased to 120,000 units by 2020 |
| **Foton** | Rs30 bn - Rs12 bn for a plant in Chakan in Phase 1 followed by expansion of the plant in other phases |
| **Fiat Chrysler** | Rs15-25 bn - To manufacture luxury SUV and export to overseas market |
| **Volkswagen** | Rs15 bn - To increase production capacity to 200,000 from current 130,000 at Chakan by 2018 |
| **BMW India** | Rs1 bn - To invest in localisation of cars |
| **Honda Cars India** | Rs13.8 bn - To set up a new plant in Gujarat and expand capacity in Rajasthan Tapukura plant by 60,000 units |
| **Force Motors** | Rs10 bn - New product development and setting up of fedicated facility for BMWs |
| **Mercedes Benz** | Rs1.5bn - To add a new manufacturing line in Chakan; hike capacity to 20,000 units |

Source: Economic Times

## OEMs develop plans for product as well as component exports

Ford India's popular compact SUV EcoSport may be shipped to the US for sale starting October 2017. Ford has already begun work on developing a face-lifted version of the SUV for the North American markets. It has also kicked off a preliminary tendering process to source components. The initial requirement is for 90,000 units a year, more than the number Ford sells in India. No U.S. car maker has ever exported cars made in India back to its home market. If Ford gets the green signal, it will mark a historic first not only for the American car maker but also for India which has been striving to market its potential as a global automotive manufacturing hub. Higher utilisation of the manufacturing facility to cater to exports helped Ford India reduce its production cost per car. Once the U.S. volume kicks in, the plant is likely to transform into an EcoSport production base.

Car maker Honda plans to make India an export hub for components for its various international operations, while it also looks to enhance overseas shipping of global models produced in India. In FY15, Honda exported Rs7.22bn of components, and it is looking to increase this by over 50% to Rs11bn in FY16 by adding more countries such as the US, China and Canada to its basket.

**Table 13: Made-in-India cars below were exported more than sold in India**

| Model | Export Market | Volumes exported |
|---|---|---|
| Hyundai Accent | Algeria | 16,436 |
| Volkswagen Vento | Mexico | 45,814 |
| Toyota Etios | South Africa | 17,500 |
| Nissan Micra | Mexico | 43,338 |
| Ford Figo | South Africa | 12,305 |
| Suzuki Ertiga | Indonesia | 43,071 |
| Hyundai i10/Grand | Western and Central Europe | 87,546 |

Source: Economic Times

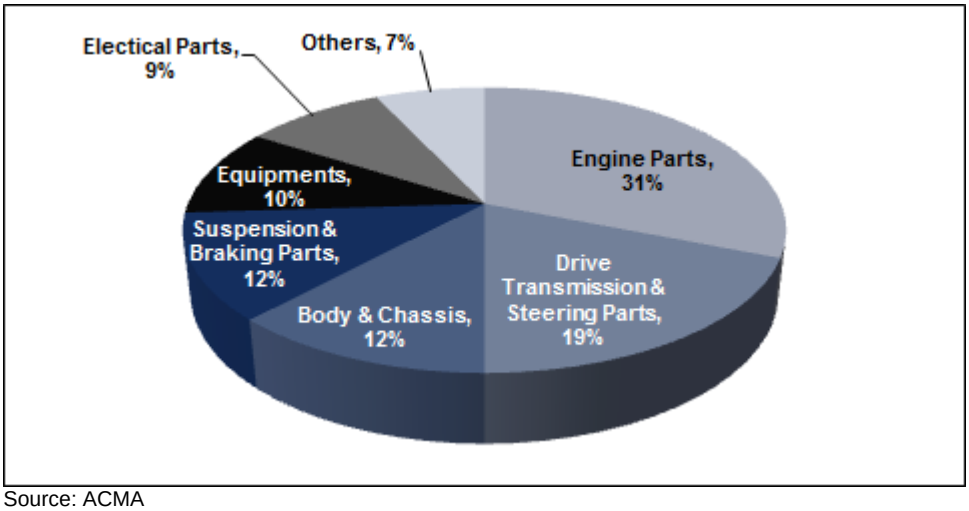
# Indian auto component players well-positioned to capture growth

In terms of manufacturing competitiveness and excellence Indian suppliers (tier-1.5 and tier-2) remain strong, reflected from their success stories – Motherson Sumi and Bharat Forge. We cannot emphasize enough the advantage of global reach and associations. Suppliers who work to build a de-risked business model ("markets, products & customers"<20%) would be an investor's dream & a core portfolio holding.

In the last decade the confidence of international OEM/Tier-1 buyers on Indian auto component companies has vastly improved, helping auto component exports. India has the largest number of Deming Award winning companies outside Japan. A considerable share of Indian auto component exports falls within categories such as engine parts, drive transmission and steering, electrical parts and a range of other products which are classified as technologically complex. These products demand high precision engineering skills to ensure adherence to strict quality specifications of global OEMs. The share of technically-complex products like engine parts and drive transmission and steering parts within Indian component exports has remained steady in the range of 30-40 % since 2006. However, this share remains lower than competing low-cost countries (LCCs) like Brazil (exported 60 % technically-complex products in 2012), Thailand (49 %), China (48 %) and South Korea (34 %). We expect the share of technically-complex products to increase, going forward

Indian auto component industry is poised to grow at 14-15% CAGR for FY15-17E, as demand from OEMs, particularly MHCVs and passenger vehicle improves. We believe strong model launches prior to the festive season would aid immediate domestic volume growth. Exports could grow ahead of domestic volumes on the back of rebound in EU (5%+ YoY) which has been sluggish for the last couple of years. Continued weakening of the rupee could further aid realizations. The industry's long-term growth story, however, remains intact. If the OEM industry is able to scale up to the targeted number of 6 million units, auto component industry could witness growth of 18-20% CAGR for FY15-FY20E.

**Chart 18: Indian auto component market segmentation**




Source: ACMA

Engine parts and fuel injection (FI) equipment is the second largest segment in the domestic auto components industry, with much better average RoCE. On top of this, a high degree of concentration is visible in the high technologically driven segment like engine parts (Bosch). Thus, top suppliers generate stable and above-average cash returns relative to global comparables

**Chart 19: Engine parts remains an attractive segment**

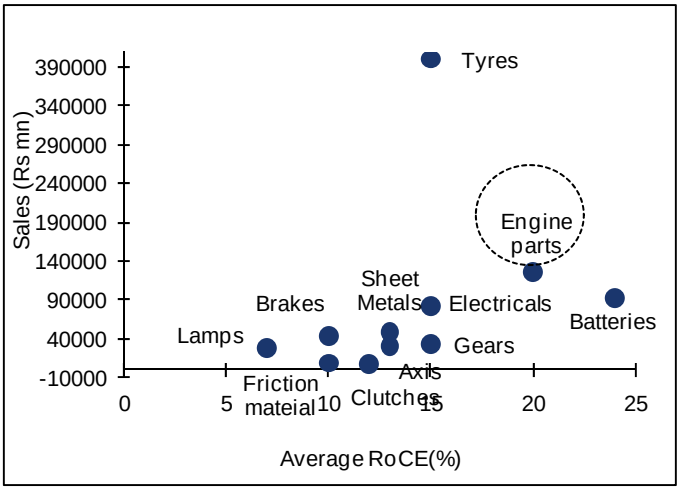
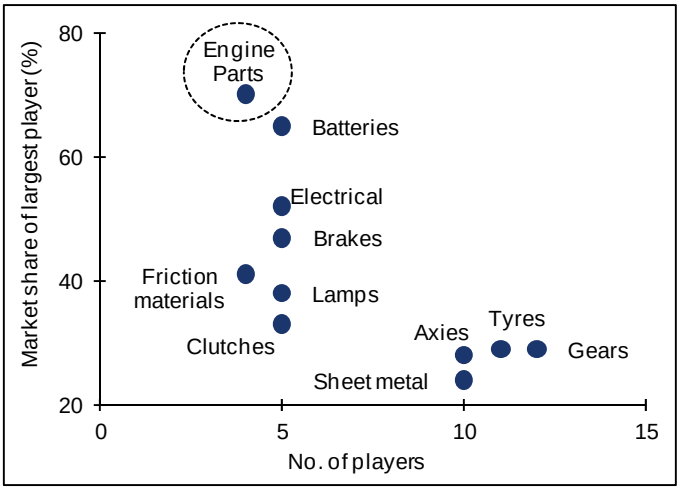



**Chart 20: Supplier concentration high in electrical and battery parts**




Source: Capitaline, I-Sec Research

## Increasing capacity utilizations to have multiplier effects on financials

In CY14, leading Indian auto component manufacturers (~40 % of the industry turnover) invested ~Rs65bn towards gross block additions. This addition as a share of total gross block is at ~11% (much below previous highs of 14-15%). The possible reason for the lower incremental spend would be attributed to the uncertain demand environment. However, going ahead, we believe, suppliers could invest into fresh capacities to brace for strong demand outburst. In the last upcycle, of CY06-08, automotive component industry witnessed ~22% CAGR in topline, while PAT grew at ~37% CAGR.

**Table 14: Historical financial trends and future possibilities of the auto component industry**

*(Rs mn)*

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2017E |
|---|---|---|---|---|---|---|---|---|---|---|
| Sales | 456,815 | 567,179 | 650,871 | 707,384 | 835,098 | 1,084,879 | 1,305,420 | 1,352,893 | 1,418,412 | 19,14,856 |
| EBITDA | 53,900 | 70,279 | 78,650 | 70,425 | 104,468 | 126,002 | 154,696 | 161,959 | 178,209 | 269,304 |
| Operating Margin (%) | 11.8 | 12.4 | 12.1 | 10.0 | 12.5 | 11.6 | 11.9 | 12.0 | 12.6 | 14.1 |
| PAT | 27,765 | 37,237 | 43,351 | 28,650 | 56,241 | 65,132 | 74,226 | 74,138 | 77,376 | 130,210 |
| PAT margin (%) | 6.1 | 6.6 | 6.7 | 4.1 | 6.7 | 6.0 | 5.7 | 5.5 | 5.5 | 6.8 |
| Gross Asset Turnover (x) | 1.7 | 1.8 | 1.7 | 1.6 | 1.6 | 1.8 | 1.9 | 1.6 | 1.5 | 1.9 |
| Leverage (x) | 0.8 | 0.8 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 |
| Deviation in Operating margin YoY(%) | | 0.6 | -0.3 | -2.1 | 2.6 | -0.9 | 0.2 | 0.1 | 0.6 | 1.5 |

Source: Capitaline, I-Sec Research

During this period, gross block addition was at ~19% CAGR. However, post the economic crisis, auto component manufacturers have become cautious and the slowdown has since led to relatively slow growth in terms of revenues (~14% CAGR CY08-14) while the gross block addition has been ~16% CAGR for CY08-14, thus leading to asset turnover declining from the peaks of 1.9x in CY2012 to ~1.5x in CY14. Thus, the industry has adequate capacity in place to take advantage of the growth in the automotive segment in the next 12-18 months. Capacity expansions are likely to follow ahead. We expect the auto component industry to grow at a conservative estimate of 14-15% CAGR FY14-17E, with asset turnover reaching ~1.9x by FY17E. Operating leverage benefits are likely to push up margins by ~150 bps from FY14 to FY17E, while profitability is likely to grow at ~30% CAGR FY15-17E.

# Annexure 1: Index of tables and charts

## Tables



## Charts

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Equity Research

July 15, 2015

BSE Sensex: 27961

INDIA

# Mahindra CIE

**BUY**

## Brace-up for accelerated turnaround **Rs238**

Reason for report: Initiating coverage

**Mahindra CIE Automotive (MACA) is one of the few unique cases of a strong European supplier (ranking75th), CIE Automotive SA, acquiring assets in India to expand in terms of products, geography and clients. MACA in its present form came into existence (Q3FY15) post the amalgamation of all automotive component companies of Mahindra Systech and CIE's forging companies in Europe. MACA is a strong tier-1.5 supplier (forgings, castings, machining and stampings) for global OEMs (Automotive & Non-automotive). On the automotive side it has clients across both commercial and passenger vehicle spaces while, on the non-auto side (<10% of revenues), it has clients like Honeywell, Caterpillar, Cummins, etc. We see two key triggers for the stock a) possible acceleration towards partial achievement of FY17E financial targets in FY16E: EBIT>10%, RoCE>20%, Debt/EBITDA<2.0, FCF/EBITDA>50%; b) strong growth cycle both via organic (new products, new customers) and inorganic ( parent put a €250mn revenue target till CY17E). We believe the street has been trailing the earnings trajectory of the company probably due to the non-linear nature of the financial turnaround, believe consensus estimates could undergo upward revisions through FY16E. We consciously estimate limited positive effects on revenue growth; however, we believe financial turnaround in itself could lead to ~46% CAGR on earnings through FY15-FY17E. We initiate coverage with a BUY rating.**

- **MACA's financial turnaround keeps surprising street:** MACA, since CIE's acquisition, has been surprising investors (mostly positively) with the pace of its turnaround in Europe (Mahindra Forgings Europe– MFE). The European business as per CIE, under IFRS, has clocked 12% exit EBITDA margins for FY15 up from -4% before acquisition. We feel the combined European entity post Metacastello's improvement could clock >10% EBIT margins by Q4FY16E. The India business suffered worst scenario with both market and key customer (M&M) faced a slump. The next two years could be reasonably decent for the overall domestic industry, this could aid MACA significantly in India its pursuit of >10% EBIT target.
- **CIE management signalling down growth markers for phase-II:** CIE's management has highlighted growth aspirations via MACA post imminent financial turnaround. The big bump in inorganic growth could unravel via two possible routes: a) consolidation of €150mn forgings assets in LatAm and China; b)acquisitions of ~ €250mn focused in (Asean)region targeting Japanese OEM's, thus completing CIE's customer bouquet (Europeans, Americans, Indian OEMs via MACA)
- **Valuations rerating a matter of time:** Mahindra CIE is a tier-1.5 category stock with peers like Bharat Forge, Motherson Sumi (both trading >20x FY17E EPS). MACA trades at alluring valuations (14.5x FY17E P/E); we value it at 20x FY17E EPS and ascribe a target price of Rs 317. Initiate coverage with a **BUY** rating.

| Market Cap | Rs77bn/US$1.2bn |
|---|---|
| Reuters/Bloomberg | MAHN.BO/MACA IN |
| Shares Outstanding (mn) | 323.1 |
| 52-week Range (Rs) | 248/152 |
| Free Float (%) | 25.1 |
| FII (%) | 4.9 |
| Daily Volume (US$/'000) | 2,074 |
| Absolute Return 3m (%) | 10.9 |
| Absolute Return 12m (%) | 56.2 |
| Sensex Return 3m (%) | (3.2) |
| Sensex Return 12m (%) | 11.7 |

| Year to Mar | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|
| Revenue (Rsbn) | 25.9 | 55.7 | 57.6 | 66.3 |
| Rec. Net Income (Rsbn) | (0.5) | 2.4 | 3.5 | 5.1 |
| EPS (Rs) | (1.5) | 7.4 | 10.9 | 15.9 |
| % Chg YoY | NM | NM | 47.0 | 44.9 |
| P/E (x) | NM | 32.0 | 21.7 | 15.0 |
| CEPS (Rs) | 1.2 | 4.9 | 18.7 | 24.3 |
| EV/E (x) (Incl. Indus) | 76.1 | 20.6 | 11.8 | 8.8 |
| Dividend Yield (%) | - | - | 0.8 | 1.3 |
| RoCE (%) | N.M. | 5.9 | 15.7 | 20.7 |
| RoE (%) | N.M. | N.M. | 18.6 | 23.1 |

*FY14 is pre-merger, not comparable

## Autos

**Target price Rs317**

### Shareholding pattern

| | Sep '14 | Dec '14 | Mar '15 |
|---|---|---|---|
| Promoters | 78.6 | 78.5 | 74.9 |
| Institutional investors | 8.3 | 8.6 | 11.5 |
| MFs and UTI | 5.4 | 5.4 | 5.2 |
| Insurance Co | - | - | 1.4 |
| FIIs | 2.9 | 3.2 | 4.9 |
| Others | 13.1 | 12.9 | 13.6 |

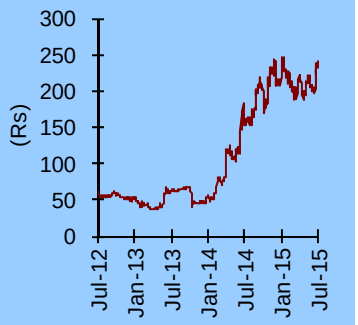
Source: NSE

### I-Sec vs Bbg* consensus

| (%) | FY16E | FY17E |
|---|---|---|
| Sales | (4) | (0) |
| EBITDA | 5 | 9 |
| PAT | 20 | 22 |

Source: *Bloomberg, I-Sec research

### Price chart

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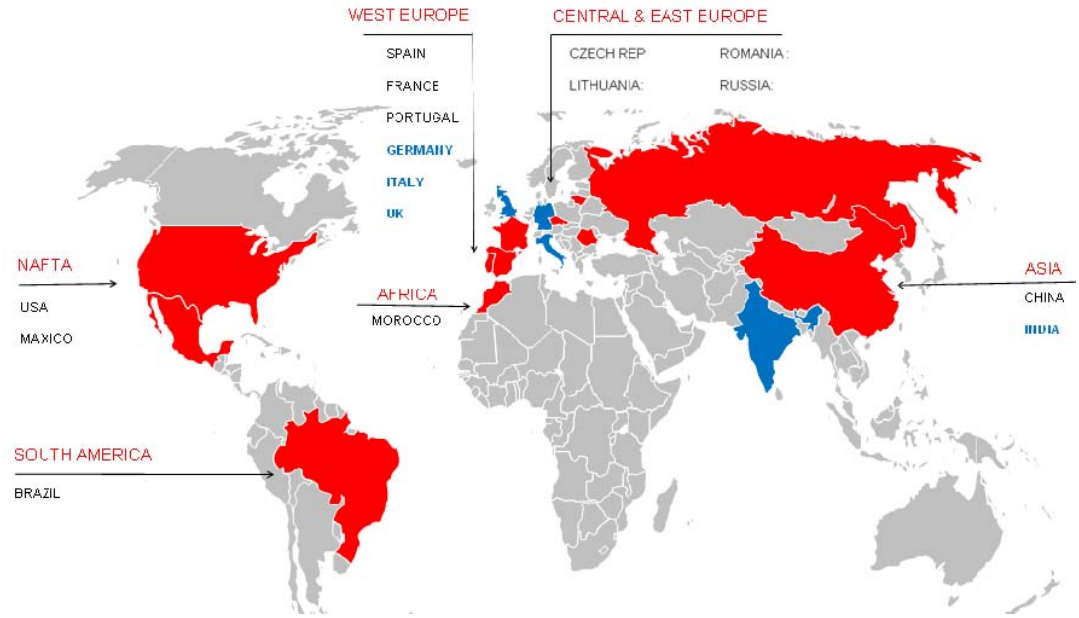
## TABLE OF CONTENTS

# The rise of the new '*TILA supplier'*!

Mahindra CIE Automotive (MACA), post the unique alliance which led to Spain-based CIE Automotive SA. acquiring the erstwhile M&M - Systech Division, has catapulted itself as a critical tier-1.5 supplier to OEMs. This puts MACA in a sweet spot in the auto component industry's value chain as tier-1.5 suppliers typically have high RoCE with relatively strong customer stickiness and repeat business. The criticality of the components supplied by MACA (crankshafts, steering knuckles, camshafts, etc.) limits the competition it faces via tier-2 suppliers to a large degree. We believe MACA's greatest advantage lies in its significant geographic spread, which has the *"There Is Little Alternative"* factor associated with it. With a presence ranging across Europe, Latin America (LatAm), North America Free trade Agreement (NAFTA) region and Asia, the alliance has produced a company facing limited competition in terms of presence, hence is attractive to global OEMs such as VW, GM, Ford, Volvo, Daimler, etc.

**Chart 1: Geographic presence of CIE Automotive SA and Mahindra CIE**




Source: Company, I-Sec research

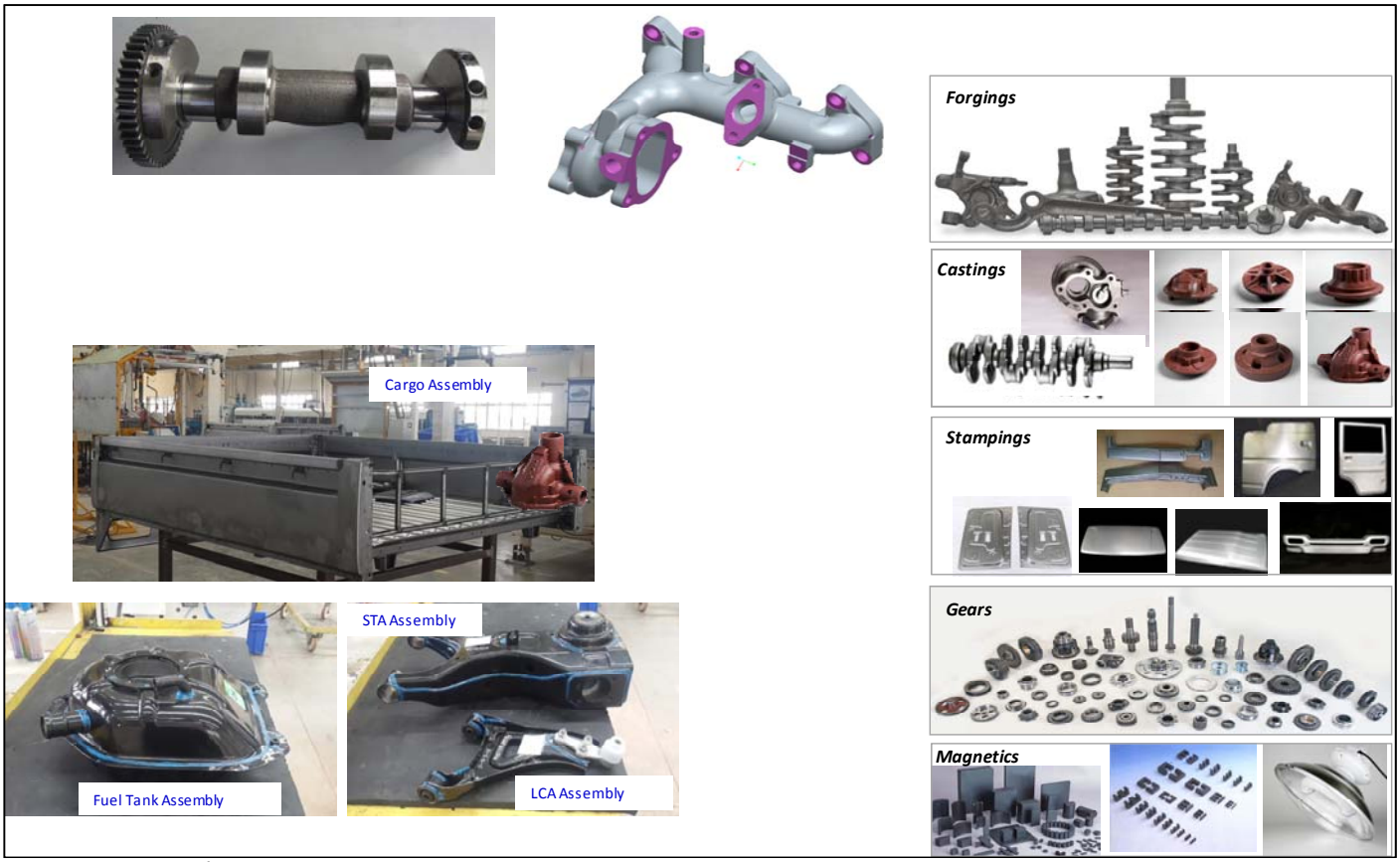
## Customers and content to rise as turnaround gathers pace!

The turnaround path laid out by CIE SA has gathered momentum and investors now question *when* but not *whether* the financial 'tenets' are going to be met. MACA is structuring itself to become one of the world's largest and increasingly profitable forgers/component suppliers comparable to the likes of ThyssenKrupp, Bharat Forge, Sumitomo Metals, etc. MACA's focus last year was on financial turnaround whereas the strategy now is increasingly moving towards acquisition of new customers and new order-wins (for existing and new products). CIE's presence in the passenger car market of Europe, Nafta and Chinam supplying to leading OEMs, provides MACA with a strong opportunity to bid for various vehicle platforms and products. MACA is moving increasingly towards being a multi-product auto ancillary company, which we see as a strategy to both de-risk client concentration and product-related competition.

On new customer side, we believe the company has started to discuss with new clients like Renault, VW, GM and Ford, though bigger ramp-up of these clients would take place only on new platforms (FY17E-FY18E). MACA might also increasingly focus on the Japanese clients like Honda as they remain essential missing client-group in CIE's parent portfolio as well.

On new product side, the company is looking at adding more products that CIE produces; e.g. in the stampings space, it is moving away from just pure panel stampings to value-added products such as cargo body, fuel tanks, crosscar beams, window arms, etc. This approach across product lines would increase content per customer besides increasing operating profitability on low capital outlay for new product development.

**Chart 2: New products to push growth to forward!**




Source: I-Sec research, Company

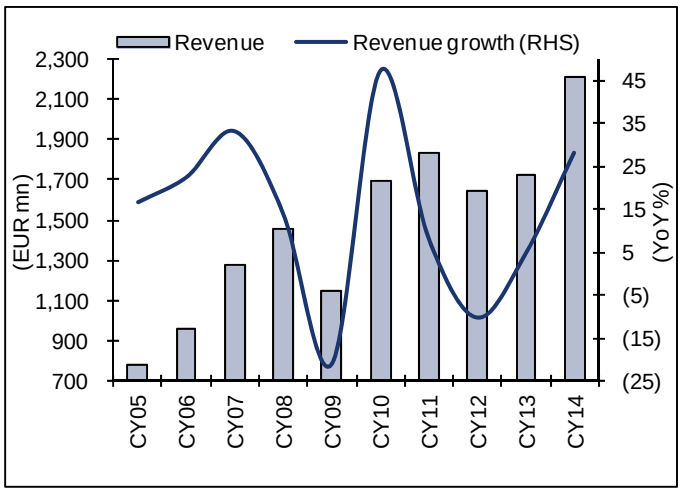
## What makes CIE different from others?

CIE's group history shows that focus on financial performance and return on investments is at the core to its business choices. The group has four financial 'tenets'– a) >10% EBIT margin, b) >20% RoNA, c) Debt/EBITDA ratio of <2, and d) FCF/EBITDA>50% for businesses across the globe. Conservatism and pragmatism (not just growth ambition) take centre stage and one is of the reason sit stayed away from large high-growth acquisitions, which could risk the parent's balance sheet.

The key differentiators of CIE's management are:

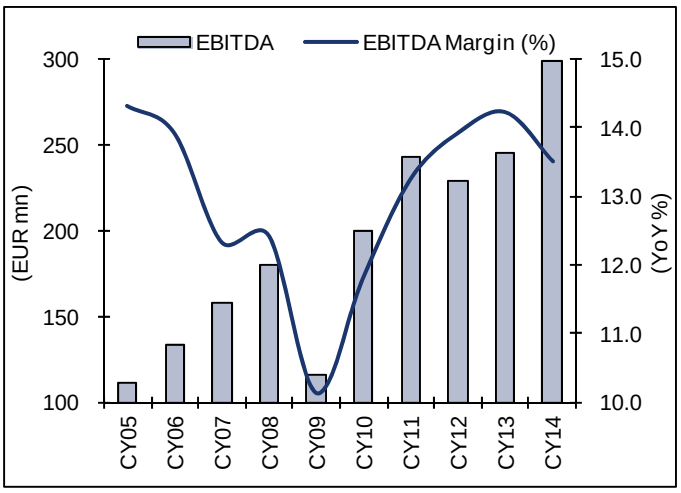
- **Lean and decentralised:** CIE treats its acquired businesses as distinct SBUs that need to grow on their own. CIE Automotive views each plant as a complete profit centre, in-charge of its own P/L and revenues. The decentralised nature of operations has an positive effect on the corporate's overheads – as reflected by the fact that, at the group level, the company has <1% of sales as corporate overheads. The company tends to provide long-term incentives to the top management. This reflects in the high focus on accountability and productivity. The company also provides a strong performance-linked variable compensation component for all labour.
- **High experience in company integration:** CIE has a successful track record of acquisitions, which have helped drive its growth over the past decade. This success has much to do with the company's basic acquisition philosophy, which differs from the approach generally adopted in the sector. CIE looks at factors likeability to generate EBITDA in three years, which can cover the cost of acquisition, thereby having an operational payback period of about three years.
- **Process champions treat financial 'tenets' as gospel:** CIE's management is known for its operations management capabilities which are now even more evident from the MFE turnaround. It has a proven track-record in LatAm as well, where it acquired companies across the years and successfully turned them around. CIE's focus on achieving the *four financial tenets* keeps it equally profitable in good as well as bad times as evident from the charts below. Even during the European crisis, when many auto component companies like Visiocorp, Peguform (acquired by Motherson Sumi) went deep into the red, CIE managed to raise EBITDA margins by ~500bps to go back to pre-crisis levels. Currently, all its plants are healthy with CIE generating an overall EBITDA margin of >15%. This has been achieved despite the absence of machining in the forging business.

**Chart 3: CIE SA– Consistent revenue CAGR in 2002-12 at ~13%**




Source: Bloomberg, I-Sec research

**Chart 4: CIE SA – Consistent operational performance at ~16% CAGR (2002-12)**




Source: Bloomberg, I-Sec research

## Where the turnaround currently is and the path forward

The turnaround on MACA has reached a firm footing in which all of its businesses in Europe are starting to perform at a touching distance from the implied targets for various businesses. However, due to domestic market forces, both passenger vehicle side and the sudden drop in tractor volumes (declined 44% QoQ in Q3FY15) affected MACA's India profitability. This however is expected to reverse on account of improvement in demand as well as key customer launches across various platforms (commercial as well passenger). This, coupled with some new product initiatives and increasing supplies to existing/new customers, is expected to lead to strong recovery in the domestic business's operating margins (from 8.6% in FY15 to 13.5% in FY17E)

**Table 1: Snapshot of current position and future estimated margin trends**

| Region/Segment | Est. current revenues (mn) | Est. current EBITDA margins (%) | EBITDA margin expectations (%)* | Key drivers for improvements |
|---|---|---|---|---|
| **Europe** | | | | |
| Forgings (MFE) | €260 | 9-10 | 11-12 | Location, product rationalisation coupled with increased energy subsidies |
| Forgings (CIE) | €190 | 14-15 | 15-16 | Market growth |
| Gears | €50 | 10-12 | 14-15 | New products, new customers |
| **India** | | | | |
| Forgings | Rs 3700 | 15-16 | 17-18 | Market growth, reduction in power costs and increase in material yields |
| Stampings | Rs 6600 | 8-9 | 12-13 | Market stabilisation on tractor side coupled with strategy to move into stamped products |
| Castings | Rs4500 | 9-10 | 12-13 | Capacity augmentation, process improvements reducing rejection rates |
| Gears | Rs 1400 | 13-14 | 14-15 | Market growth, new customer additions like BEML |
| Composites | Rs700 | 5-6 | 8-9 | New customers and new products |

Source: I-Sec research *All targets are expected to be achieved in next 12-18 months

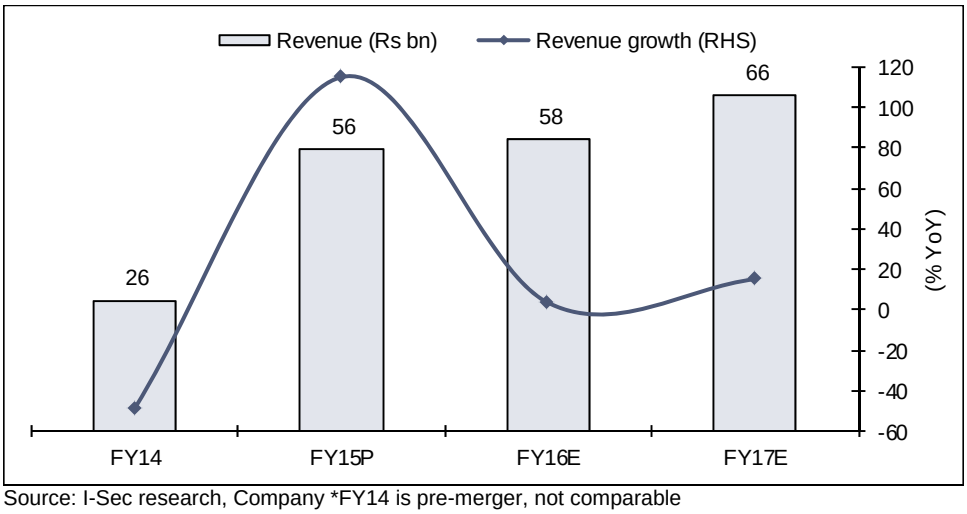
## The less discussed point – What are CIE's growth ambitions?

CIE has a simple two-part plan for MACA's revenue growth aspirations, as outlined below:

- **Merger of the remaining forging assets:** CIE would look to consolidate its forging plants into MACA after the financials targets are achieved. These plants also have ~EUR100mn-120mn revenues, which can be added and would be expectedly transferred at an arm's length. This makes most sense as MACA's forgings assets in Germany are under the tutelage of CIE S.p.A global forgings head. So, the three more plants under consideration are each in Brazil, Mexico and China.
- **Acquisitions with customer focused intent:** CIE SA in its recent investor disclosures cleared the path for inorganic expansion of ~EUR250mn; however, this is expected to happen only after financial targets are met. The management has highlighted that it is looking at some strategic partners/acquisitions in the Asean market to gain key customer penetration (e.g. Japanese OEMs). The Asean region remains a strong Japanese manufacturing base, hence such a partnership could nearly complete MACA's global customer portfolio (ranging from majors in the US to Asia) and also bring another lever for consistent growth.
- **MACA's business lines could look to mirror CIE SA:** We believe, as MACA's acquisition integrates with CIE, future business synergies could replicate in the former in the form of new business lines. CIE SA has other business verticals such as aluminium and plastics, which could be replicated in MACA. It seems a natural progression for MACA as CIE intends to bring all its businesses, customers and capabilities to MACA in order to chase future growth across emerging markets.

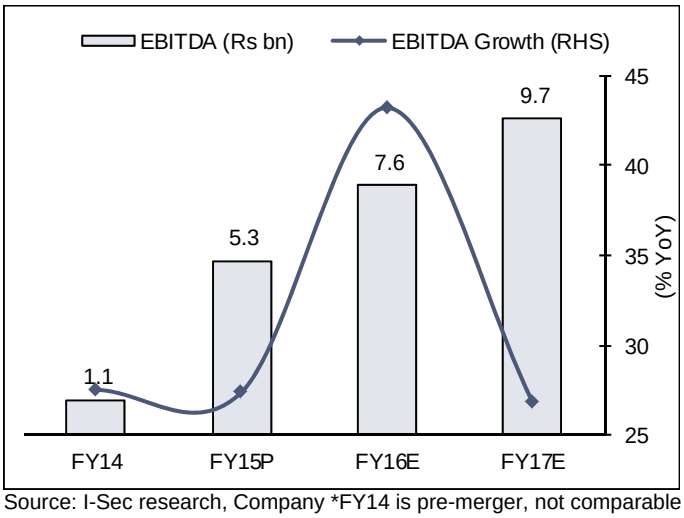
# Financials in charts

### Chart 5: Recovery in Europe, Indian volumes to aid growth



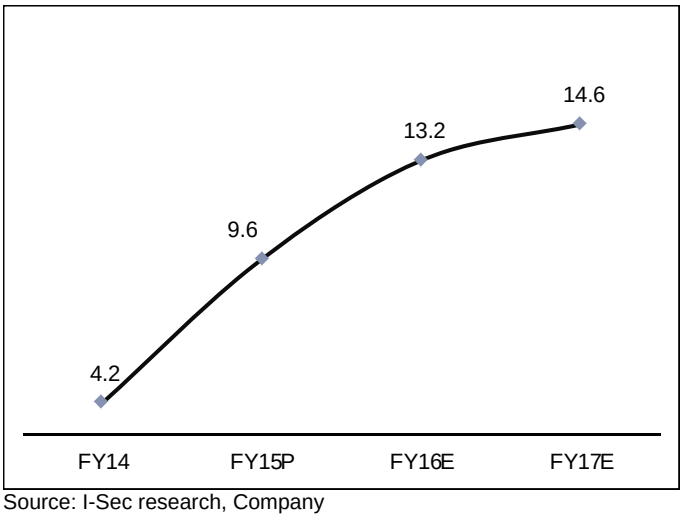

Source: I-Sec research, Company *FY14 is pre-merger, not comparable

### Chart 6: EBITDA turnaround to accelerate



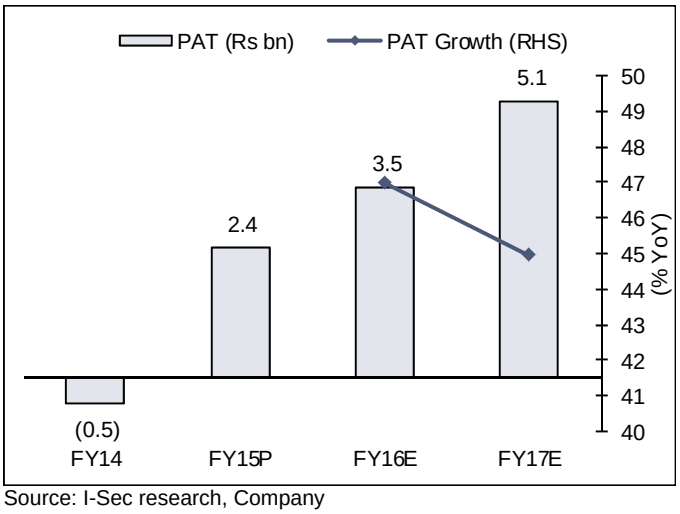

Source: I-Sec research, Company *FY14 is pre-merger, not comparable

### Chart 7: EBITDA margins to increase upwards



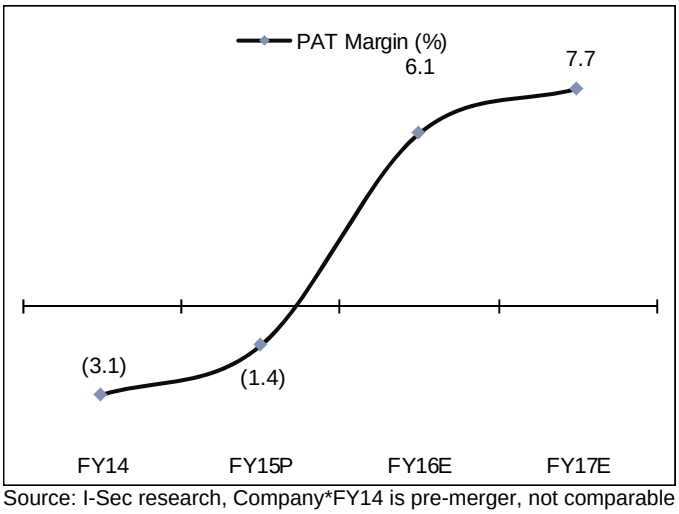

Source: I-Sec research, Company

### Chart 8: Profits growth to remain strong



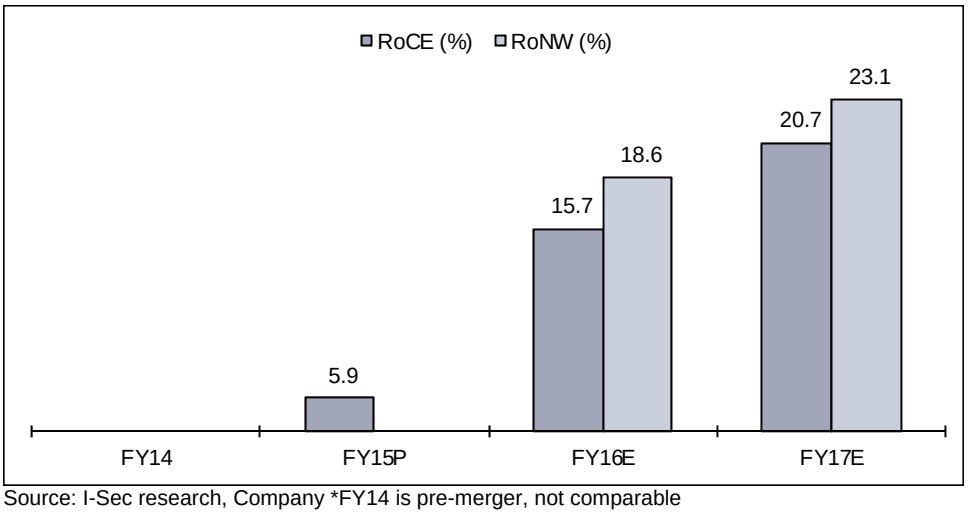

Source: I-Sec research, Company

### Chart 9: PAT margin trend to increase



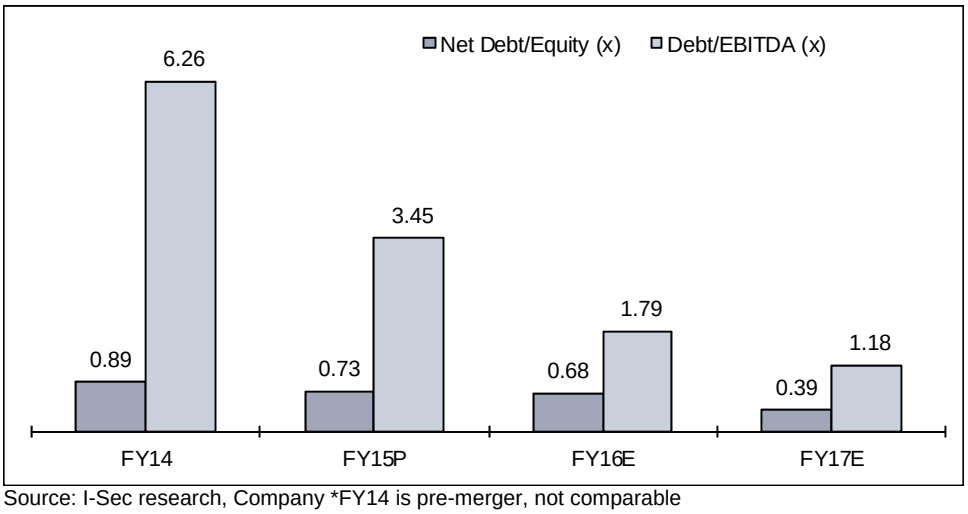

Source: I-Sec research, Company*FY14 is pre-merger, not comparable

### Chart 10: Return ratios to improve >20% target



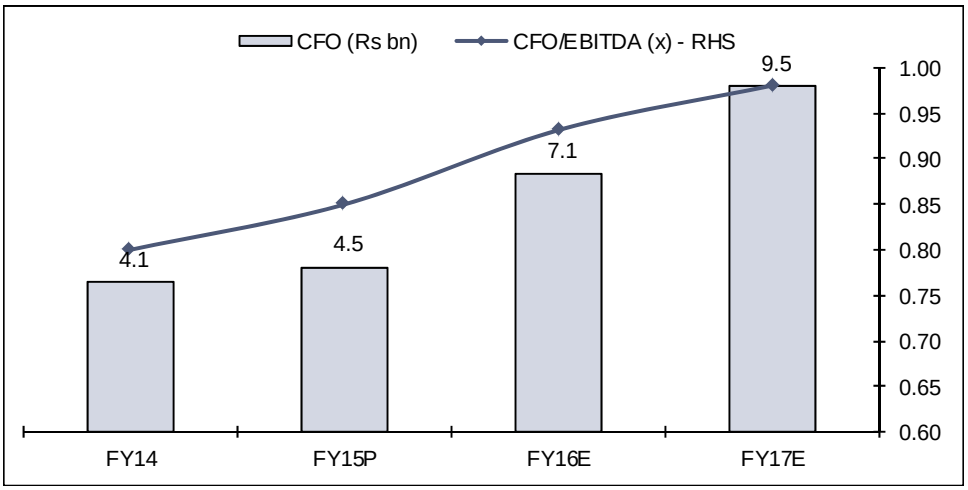

Source: I-Sec research, Company *FY14 is pre-merger, not comparable

### Chart 11: Balance sheet to improve




Source: I-Sec research, Company *FY14 is pre-merger, not comparable

### Chart 12: Stronger cash flow generation ahead




Source: I-Sec research, Company *FY14 is pre-merger, not comparable

# Valuation and recommendation

We initiate coverage on Mahindra CIE Automotive (MACA) with a **BUY** rating and a target price of Rs317.

We value the company at 20x FY17EP/E, which is below its peers by ~20% (Motherson Sumi, Bharat Forge bot valued at 25x FY17E P/E). We feel MACA has high margin of safety as our revenue assumptions are modest and as turnaround completion visibility improves the stock will start to price in inorganic growth opportunities. We believe the multiples have headroom considering the strong growth surge expected post-FY17E, coupled with a rub-off multinational company premium. We believe consistency in profitability and >20% RoCE would be the mainstay of investor confidence in the coming years. In terms of cashflow yield (post capex), the stock remains highly attractive at ~9% FY17E.

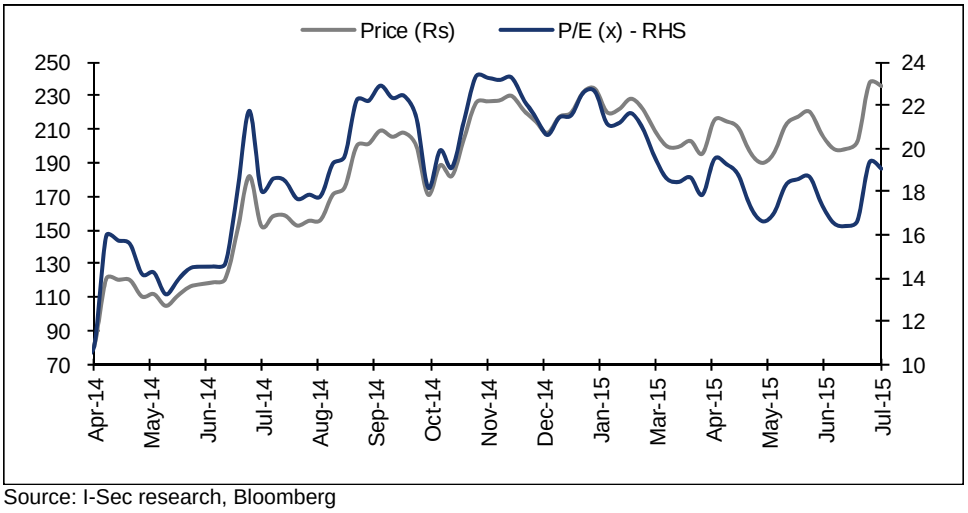
**Table 2: Peer comparison**

| | | | | EPS growth (% YoY) | | | P/E (x) | | | EV/EBITDA (x) | | | ROE (%) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Company** | **Curr.** | **Price** | **Mkt. Cap.** | **FY15** | **FY16E** | **FY17E** | **FY15** | **FY16E** | **FY17E** | **FY15** | **FY16E** | **FY17E** | **FY15** | **FY16E** | **FY17E** |
| **Mahindra CIE** | **INR** | **238** | **1,212** | **N.M.** | **47** | **45** | **32.0** | **21.7** | **15.0** | **20.6** | **11.8** | **8.8** | (4.1) | 18.6 | 23.1 |
| MothersonSumi | INR | 529 | 7,339 | 28 | 44 | 66 | 47.6 | 33.1 | 20.0 | 15.6 | 12.7 | 8.8 | 25.9 | 31.7 | 39.3 |
| Bharat Forge | INR | 1,124 | 4,119 | 73 | 24 | 27 | 35.7 | 28.8 | 22.6 | 19.0 | 15.6 | 12.9 | 22.1 | 23.3 | 24.6 |
| CIE Automotive SA | EUR | 15 | 2,062 | 16 | 37 | 29 | 22.3 | 16.3 | 12.6 | 10.2 | 8.1 | 7.1 | 16.5 | 18.0 | 20.3 |

Source: I-Sec research

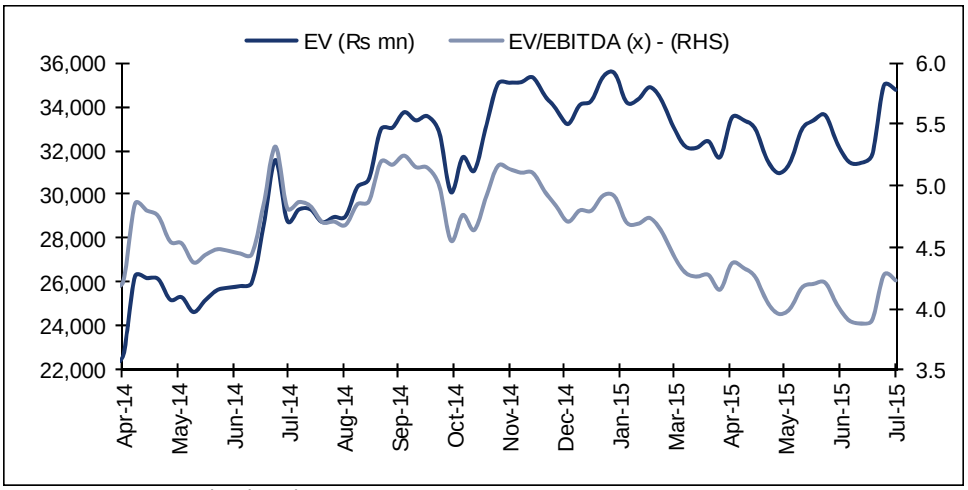
The stock currently trades at 21.7/15 FY16E/FY17E on P/E basis, while on EV/EBITDA basis the multiple is at 11.8x/8.8x FY16E/FY17E, based on our forecasts.

**Chart 13: P/E 1-year forward**




Source: I-Sec research, Bloomberg

**Chart 14: EV/EBITDA 1-year forward**




Source: I-Sec research, Bloomberg

**Table 3: I-Sec *vs* Consensus estimates**

*(Rs mn)*

| | I-Sec | | Consensus | | % Difference | |
|---|---|---|---|---|---|---|
| | FY16E | FY17E | FY16E | FY17E | FY16E | FY17E |
| Revenue | 57,596 | 66,315 | 60,075 | 66,419 | (4) | (0) |
| EBITDA | 7,631 | 9,677 | 7,246 | 8,906 | 5 | 9 |
| PAT | 3,536 | 5,125 | 2,945 | 4,192 | 20 | 22 |
| EPS (Rs) | 10.9 | 15.9 | 9.1 | 13.0 | 20 | 22 |

Source: Bloomberg, I-Sec research

We believe consensus has missed the company's earnings trajectory probably due to the non-linear nature of turnaround, which is difficult to model. We believe the consensus estimates will undergo further revisions through FY16 as MACA continues to accelerate towards its FY17 financial targets. We conservatively estimate very limited positive effects of the turnaround on growth, but we expect it to bring about a ~46% CAGR on earnings throughFY15-FY17E.

## Key risks

Product failure in the domestic market for key customers like M&M on the Utility vehicle side is the key risk to our revenue estimates. Currently, M&M accounts for~35% of MACA's India revenues, covering both automotive and tractors segments.

Significant drop in EUR/INR rates could have negative effects on translation of financials in Europe.

# Annexure 1: Consolidated financials

## Table 4: Profit and Loss statement

*(Rs mn, year ending March 31)*

| | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|
| Net Sales | 24,649 | 52,720 | 56,200 | 64,712 |
| Other operating income | 1,259 | 2,979 | 1,397 | 1,603 |
| **Total Op. Income (Sales)** | **25,908** | **55,699** | **57,596** | **66,315** |
| Raw material expense | 10,648 | 25,608 | 27,528 | 31,092 |
| Employee expense | 7,298 | 11,862 | 10,809 | 12,259 |
| Other expenses | 6,876 | 13,827 | 11,629 | 13,288 |
| **Operating Expenses** | **24,821** | **51,296** | **49,965** | **56,639** |
| **EBITDA** | **1,087** | **4,402** | **7,631** | **9,677** |
| *% margins* | *0* | *0* | *0* | *0* |
| Depreciation & Amortisation | **1,200** | **2,375** | **2,499** | **2,737** |
| **EBIT** | **(113)** | **2,027** | **5,132** | **6,940** |
| Other Income | **128** | **429** | **15** | **96** |
| Gross Interest | **628** | **1,197** | **589** | **503** |
| **PBT** | **(614)** | **1,260** | **4,558** | **6,533** |
| Less: Exceptionals | **83** | **2,261** | **-** | **-** |
| **PBT after Exceptionals** | **(697)** | **(1,001)** | **4,558** | **6,533** |
| Less: Taxes | **118** | **(219)** | **1,022** | **1,408** |
| Less: Minority Interest | **-** | **-** | **-** | **-** |
| Add: Profit from Associates | **-** | **-** | **-** | **-** |
| **Net Income (Reported)** | **(815)** | **(782)** | **3,536** | **5,125** |
| **Net Income (Adjusted)** | **(493)** | **2,406** | **3,536** | **5,125** |

Source: Company data, I-Sec research *FY14 is pre-merger, not comparable

## Table 5: Balance sheet

*(Rs mn, Year ending March 31)*

| | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|
| **ASSETS** | | | | |
| **Current Assets, Loan & Advances** | | | | |
| Inventories | 3,683 | 6,850 | 7,083 | 7,446 |
| Sundry debtors | 1,609 | 4,225 | 4,504 | 5,186 |
| Loans and advances | 706 | 616 | 600 | 691 |
| Other current assets | 1 | 730 | 778 | 896 |
| Cash & cash equivalents | 435 | 893 | 309 | 2,333 |
| **Total Current Assets** | **6,434** | **13,313** | **13,274** | **16,552** |
| **Current Liabilities & Provisions** | | | | |
| Sundry creditors | 2,720 | 10,477 | 11,168 | 13,037 |
| Short-term provisions | 132 | 361 | 441 | 580 |
| Other current liabilities | 2,009 | 2,183 | 2,439 | 2,809 |
| **Total Current Liabilities & Provisions** | **4,861** | **13,021** | **14,048** | **16,426** |
| **Net Current Assets** | **1,573** | **293** | **(774)** | **127** |
| **Investments** | **578** | **570** | **570** | **570** |
| **Goodwill** | **0** | **0** | **0** | **0** |
| **Fixed Assets** | | | | |
| Gross Fixed Assets | 13,604 | 36,076 | 38,576 | 41,076 |
| Accumulated Depreciation | 1,200 | 3,575 | 6,074 | 8,811 |
| **Net Fixed Assets** | **12,404** | **32,501** | **32,502** | **32,265** |
| Capital Work-in-Progress | 0 | 0 | 0 | 0 |
| **Total Fixed Assets** | **12,404** | **32,501** | **32,502** | **32,265** |
| Long term loans & advances | 94 | 2,121 | 2,261 | 2,604 |
| Deferred Tax Assets | 655 | 1,307 | 1,207 | 1,107 |
| Other non-current asset | 0 | 26 | 26 | 26 |
| **Total Assets** | **15,305** | **36,818** | **35,792** | **36,699** |
| | | | | |
| **LIABILITIES** | | | | |
| **Borrowings** | **6,800** | **15,183** | **13,683** | **11,433** |
| *long-term borrowings* | *3,158* | *14,229* | *12,729* | *10,229* |
| *short-term borrowings* | *3,642* | *954* | *954* | *1,204* |
| Long-term provisions | 1,859 | 2,200 | 2,700 | 2,700 |
| Deferred Tax Liability | 56 | 333 | 333 | 333 |
| Other Non-current Liabilities | 30 | 83 | 83 | 83 |
| Minority Interest | *0* | *0* | *0* | *0* |
| Equity Share Capital | *923* | *3,230* | *3,230* | *3,230* |
| Reserves & Surplus | *5,637* | *15,790* | *15,765* | *18,921* |
| **Net Worth** | **6,560** | **19,020** | **18,994** | **22,151** |
| **Total Liabilities** | **15,305** | **36,818** | **35,793** | **36,699** |

Source: Company data, I-Sec research *FY14 is pre-merger, not comparable

## Table 6: Cashflow statement

*(Rs mn, Year ending March 31)*

| | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|
| **Cash Flow from Operating Activities** | | | | |
| PAT | (815) | (782) | 3,536 | 5,125 |
| Add: Depreciation | 1,200 | 2,375 | 2,499 | 2,737 |
| Add: Other Operating activities | 628 | 1,197 | 589 | 503 |
| **Operating cash flow before working capital changes** | **1,013** | **2,790** | **6,624** | **8,365** |
| **Changes in working capital** | | | | |
| (Increase) / Decrease Inventories | 2,178 | (3,167) | (233) | (364) |
| (Increase) / Decrease Receivables | 4,941 | (2,616) | (279) | (682) |
| Increase / (Decrease) Payables | (2,860) | 7,757 | 691 | 1,869 |
| Others | (1,176) | (236) | 304 | 300 |
| **Net Working Capital Changes** | **3,082** | **1,738** | **483** | **1,123** |
| **Cash flow from Operating Activities** | **4,095** | **4,528** | **7,107** | **9,488** |
| **Capital Commitments** | **(13,604)** | **(22,472)** | **(2,500)** | **(2,500)** |
| **Free Cash Flow** | **(9,509)** | **(17,944)** | **4,607** | **6,988** |
| **Cash flow from Investing Activities** | **(12,786)** | **(24,499)** | **(2,040)** | **(2,743)** |
| **Cash Flow from Financing Activities** | | | | |
| Issue of Share Capital | **-** | **2,306** | **-** | **-** |
| Inc/(Dec) in securities premium | **-** | **-** | **-** | **-** |
| Buyback of shares | **-** | **-** | **-** | **-** |
| Inc/(Dec) in Borrowings | **(9,928)** | **8,383** | **(1,500)** | **(2,250)** |
| Dividend paid | **-** | **-** | **(646)** | **(969)** |
| Others | **(10,147)** | **9,738** | **(3,505)** | **(1,503)** |
| **Cash flow from Financing Activities** | **(20,076)** | **20,428** | **(5,651)** | **(4,722)** |
| **Net Cash Flow** | **(28,767)** | **457** | **(584)** | **2,023** |
| **Opening Cash & Bank balance** | **29,202** | **435** | **893** | **309** |
| **Closing Cash & Bank balance** | **435** | **893** | **309** | **2,333** |
| **Increase / (Decrease) in Cash & cash equivalents** | **(28,767)** | **457** | **(584)** | **2,023** |

Source: Company data, I-Sec research *FY14 is pre-merger, not comparable

## Table 7: Key ratios

*(Year ending March 31)*

| | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|
| **Per Share Data (in Rs.)** | | | | |
| EPS (Basic) | -2.5 | -2.4 | 10.9 | 15.9 |
| EPS (Adjusted) | -1.5 | 7.4 | 10.9 | 15.9 |
| Cash EPS | 1.2 | 4.9 | 18.7 | 24.3 |
| Dividend per share (DPS) | - | - | 2.0 | 3.0 |
| BVPS (Adjusted) | 20 | 59 | 59 | 69 |
| **Growth Ratios (%)** | | | | |
| Total Op. Income (Sales) | -48.8 | 115.0 | 3.4 | 15.1 |
| EBITDA | -66.9 | 305.2 | 73.3 | 26.8 |
| Net Income (Adjusted) | -124.8 | -588.0 | 47.0 | 44.9 |
| EPS (Adjusted) | -124.8 | -588.0 | 47.0 | 44.9 |
| Cash EPS | -80.6 | 313.8 | 278.8 | 30.3 |
| BVPS (Adjusted) | -61.2 | 189.9 | -0.1 | 16.6 |
| **Valuation Ratios (x)** | | | | |
| P/E (Adjusted) | - | 32.0 | 21.7 | 15.0 |
| P/BV (Adjusted) | 11.7 | 4.0 | 4.0 | 3.5 |
| EV/EBITDA | 76.1 | 20.6 | 11.8 | 8.8 |
| EV/Sales | 3.2 | 1.6 | 1.6 | 1.3 |
| **Operating/Profitability Ratios (%)** | | | | |
| Raw Material Expenses/Sales | 41.1 | 46.0 | 47.8 | 46.9 |
| Employee Expenses/Sales | 28.2 | 21.3 | 18.8 | 18.5 |
| Marketing Expenses/Sales | - | - | - | - |
| Administrative Expenses/Sales | - | - | - | - |
| Other Expenses/Sales | 26.5 | 24.8 | 20.2 | 20.0 |
| EBITDA Margin | 4.2 | 7.9 | 13.2 | 14.6 |
| Net Income Margin (Adjusted) | (3.1) | (1.4) | 6.1 | 7.7 |
| RoCE | (0.8) | 5.9 | 15.7 | 20.7 |
| RoNW | (12.4) | (4.1) | 18.6 | 23.1 |
| Dividend Payout Ratio | - | - | 18.3 | 18.9 |
| Dividend Yield | - | - | 0.8 | 1.3 |
| **Solvency/Wkg. Cap. Ratios (x)** | | | | |
| Net D/E | 0.9 | 0.7 | 0.7 | 0.4 |
| Debt/EBITDA | 6.3 | 3.4 | 1.8 | 1.2 |
| EBIT/Interest | (0.2) | 1.7 | 8.7 | 13.8 |
| Current Ratio | 1.3 | 1.0 | 0.9 | 1.0 |
| Quick Ratio | 0.6 | 0.5 | 0.4 | 0.6 |
| Inventory (days) | 55 | 47 | 46 | 42 |
| Receivables (days) | 24 | 29 | 29 | 29 |
| Payables (days) | 40 | 73 | 73 | 74 |

Source: Company data, I-Sec research *FY14 is pre-merger, not comparable

# Annexure 2: Index of tables and charts

## Tables



## Charts

Equity Research

July 15, 2015

BSE Sensex: 27661

INDIA

# Wabco India

**BUY**

## The strongest content enrichment play! **Rs5,414**

Reason for report: Initiating coverage

**Wabco India (WIL) is the market leader in the Indian Medium &Heavy Commercial Vehicle (M&HCV) air braking systems, with a market share of nearly 85% in the OEM segment. WIL is a strong proxy play to both growth in M&HCVs (incidentally one of the strongest pockets of growth in automobile sector) and rise in content per vehicle (of >US$1000/vehicle vis-à-vis ~US$300/vehicle at present) on increasing safety regulations. Further, WIL also acts as a global sourcing facility for its parent (Wabco Inc) which has no binding like BOS on local for local policy. We believe that the company's earnings trajectory in the coming years could be strongly non-linear (58% CAGR FY15-FY17E) driven by strong revenue growth (CAGR~28% FY15-17E). On valuations the stock has risen to higher multiples on account of demand outlook coupled with MNC parentage. We value the stock at 36x PE FY17E EPS and initiate our coverage on the stock with a BUY rating.**

- **Twin story: M&HCV recovery and content multiplier:** The M&HCV segment has witnessed smart recovery in FY15 (21% YoY growth) aided by expectation of recovery in demand and modest pick-up in investment activity. However, the growth still remains around 25% below the peak industry production level of FY12.We expect the growth in the M&HCV space to remain strong in the coming years on the back of GST and pick-up in infrastructure. Though WIL is yet to see major new product additions, its domestic revenue has grown ata CAGR of 17%over FY10-FY15even as industry volumes grew 4% CAGR over the same period. This underscores our thesis of increasing content per vehicle (Rs 9,000/vehicle FY10 to Rs 18,000/vehicle in FY15). WIL expects content per vehicle to move towards the global average as new safety norms kick in a stronger way over the next 4-5 years. Successful implementation of ABS could lead to ~Rs 3bn by FY17E in revenues.
- **Parent supplies technology and also sources via cost effective WIL:** Wabco Inc has an array of products ranging from electronic stability to vehicle architecture systems, many of which are yet to come to India. However, Wabco Inc has "Design to Cost" type of programmes, which makes it receptive to exporting products localised in India on benchmarks of competitive costing. WIL exports products like vacuum pumps and compressors to Europe and North America. WIL currently exports products worth Rs 5bn, which is expected to grow further.
- **Market dominance and technology franchise deserve premium valuation:** WIL is the subsidiary of dominant global Tier-1 (Wabco Inc) supplier. The stock in terms of peers has only Bosch Ltd, which trades at 38x and 26x FY17E PE and EV/EBITDA, respectively. We value WIL at a discount of 10% to Bosch Ltd, we ascribe a target multiple of 36x FY17E EPS (Implied PEG: 0.6x) and, arrive at a target price of Rs6273/share. We initiate our coverage on the stock with a **BUY.**

| | |
|---|---|
| Market Cap | Rs103bn/US$1.6bn |
| Reuters/Bloomberg | WABC.BO/WIL IN |
| Shares Outstanding (mn) | 19.0 |
| 52-week Range (Rs) | 5990/3269 |
| Free Float (%) | 25.0 |
| FII (%) | 2.0 |
| Daily Volume (US$/'000) | 869 |
| Absolute Return 3m (%) | (5.4) |
| Absolute Return 12m (%) | 52.5 |
| Sensex Return 3m (%) | (3.2) |
| Sensex Return 12m (%) | 11.7 |

| Year to Mar | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|
| Revenue (Rs bn) | 11.1 | 13.5 | 16.7 | 22.0 |
| Rec. Net Income (Rs bn) | 1.2 | 1.3 | 2.2 | 3.3 |
| EPS (Rs) | 62.0 | 69.7 | 118.5 | 174.2 |
| % Chg YoY | (10.1) | 12.4 | 70.1 | 47.1 |
| P/E (x) | 87.4 | 77.7 | 45.7 | 31.1 |
| CEPS (Rs) | 78.9 | 94.2 | 144.3 | 201.6 |
| EV/E (x) (Incl. Indus) | 60.6 | 49.2 | 31.9 | 21.9 |
| Dividend Yield (%) | 0.1 | 0.1 | 0.2 | 0.2 |
| RoCE (%) | 17.7 | 18.1 | 24.1 | 28.1 |
| RoE (%) | 15.6 | 15.2 | 20.8 | 23.8 |

## Autos

**Target price Rs6,273**

### Shareholding pattern

| | Sep '14 | Dec '14 | Mar '15 |
|---|---|---|---|
| Promoters | 75.0 | 75.0 | 75.0 |
| Institutional investors | 11.0 | 11.0 | 11.1 |
| MFs and UTI | 8.6 | 8.6 | 8.7 |
| Insurance Co | 0.1 | 0.1 | 0.0 |
| FIIs | 2.3 | 2.2 | 2.0 |
| Others | 14.0 | 14.0 | 13.9 |

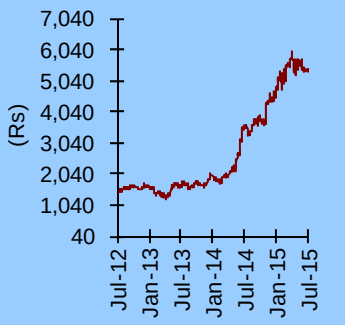
Source: NSE

### I-Sec vs Bbg* consensus

| (%) | FY16E | FY17E |
|---|---|---|
| Sales | (6) | (8) |
| EBITDA | (2) | (6) |
| PAT | 10 | 5 |

Source: *Bloomberg, I-Sec research

### Price chart

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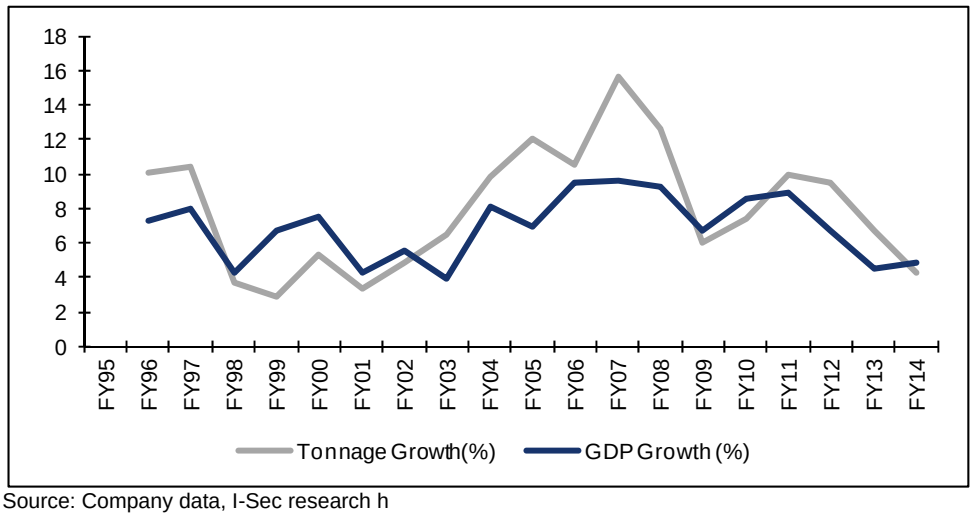
# Proxy to M&HCV growth and content enrichment

Wabco India (WIL), a subsidiary of Wabco Holdings Inc, is the leader in conventional braking products and advanced braking systems and is the pioneer of air brake systems for commercial vehicles (CVs) in India. With strong product integration and early mover advantage, WIL commands market share of around 85%in the airbrake systems for the CV segment. WIL's dominant business profile in braking systems lends it strong bargaining power with original equipment manufacturers (OEMs). Globally, Wabco Holdings remains the market leader in Anti-Lock Braking Systems (ABS) for the M&HCV segment. With strong technology parentage, WIL is a good play on recovery in the CV cycle in India and move towards mandatory ABS for M&HCVs. Strong export potential from Indian operations also lends stability to earnings and ensures that capacity utilization levels stay firm for WIL.

## M&HCV segment growth outlook remains strong

The M&HCV segment has grown the fastest in the industry over the past year on the back of various factors ranging from major fleet replenishment to increase in mining activity in southern India. Our analysis of historical data suggests that sales of heavy trucks bear a strong correlation with GDP growth. We witness a strong correlation between absolute tonnage sold in a year and GDP growth rate. Hence, as economic growth rate rises in keeping with the expectations, it may push up volume growth in the CV segment.

**Chart 1: The M&HCV market is looked on as an early indicator of pick-up in industrial demand.**




Source: Company data, I-Sec research h

The economy is expected to grow at a strong pace in FY16/FY17E (consensus estimates), which could lead to a more broad-based growth in the commercial vehicle (CV)/light commercial vehicles (LCV) space vis-à-vis heavy duty trucks).We expect volume of the M&HCV segment to witness a CAGR of ~17%-18% between FY15-17E, touching ~400,000 units by FY17. However, this will be still below the peak volume levels of FY11 signifying.

Another lever for the economy and specifically for road transportation could be the implementation of the Goods and Services Tax (GST), which according to industry participants will aid GDP growth by ~1%-2%. On the fleet side, GST can aid fleet profitability and reduce waiting time whereas on the manufacturer side it can also lead to cut in inventory management costs.

## Increasing content per vehicle – ABS and Opti Drive biggest opportunities

WIL has a market share of more than 85%in the air braking systems in the Indian M&HCV industry (more than 7.5 tonne category). WIL's product offering can be broadly classified into: a) conventional braking products, b) advanced braking system and c) driveline control. Currently, MHCVs in India mostly use conventional braking systems, which contribute more than 90% to WIL's domestic revenue. WIL's domestic revenue has grown at a CAGR of17%over FY10-FY15 even though MHCVs' volume growth over the same period has been at a tepid CAGR of ~ 4%.This has been primarily because of increasing content per vehicle -- from Rs9,000 per vehicle in FY10 to Rs18,000 ($290)/vehicle in FY15. In the coming three to five years, as safety norms related to M&HCVs are implemented both by OEMs and authorities, content per vehicle could increase by more than 2x-3x to US$600-US$900/vehicle. Conventional products contribute 90% to Wabco Holdings revenues. Indian operations account for only 45% of Wabco Holdings' global sales even as advanced braking products remain under-penetrated in the emerging markets (EMs).Thus, we see continued opportunity size for WIL in the under-penetrated products besides the new products.

However, we see penetration of existing products like ABS, Opti Drive, clutch control and lift axle control valve to drive increase in content per vehicle over the next decade. Content per truck in India remains abysmally low at $240 per vehicle at present, which pales in comparison to those of peers in Western Europe (at $3,000 per vehicle), and even that in China, Brazil, Japan at around $1,000.

We believe that the implementation of the latest safety standards and the move towards better fuel efficiency will result in better performance standards among fleet operators. We believe that the implementation of the latest safety standards at OEM level will be driven by: a) roadmap on emission norms by the government and b) new platform launches by MNC competition such as Daimler Trucks and VECV.

## Key products to drive content increase

### ABS, the most immediate driver

ABS (Anti-lock Braking System) prevents locking of wheels caused by excessive actuation of service braking system. It prevents wheel locking during sudden braking, and ensures steer ability and stability (prevents skidding). We believe ABS could provide an additional ~Rs 30bn in sales for WIL (80% penetration on FY15 MHCV sales and WIL's market share of 85%). The mandatory ABS implementation would start from H2FY16E and the Rs 30bn estimate would be on an annualised basis.

### Opti Drive to aid fuel efficiency

Opti Drive is a modular Automated Manual Transmission (AMT) system for M&HCVs, which improves fuel efficiency, vehicle control and safety by optimizing gear shifting process. It claims it can cut fuel consumption by more than 5% and reduce maintenance cost of engine.

For OEMs, Opti Drive offers a relatively cheap and easier way to boost fuel efficiency and reduce CO2 emissions. On opportunity basis, we estimate this segment holds the potential to clock close to Rs60 bn (assuming 30% penetration on MHCV sales in FY15; market share of 85%). Additionally, the fuel savings of ~5% can bring down the breakeven levels for fleet operators. In many cases, payback for initial incremental cost is sometimes less than a year, however all these can only occur if implementation remains strong.

## Chart 2: Snapshot of Wabco's product portfolio

| | Product | Description | Criticality | Cost |
|---|---|---|---|---|
|  | Actuator | Converts energy stored in compressed air into mechanical force applied to foundation brake to slow or stop CVs | ● ● ● | $600 onwards |
|  | Anti-lock braking systems (ABS) | Prevents wheel locking during braking to ensure steerability and stability | ● ● ● | $250 onwards |
|  | Air compressor & air processing/air management system | Provides compressed, dried air for braking, suspension and other pneumatic systems on trucks, buses and trailers | ● ● ● | $950-$3000 |
|  | Brake Chambers | Converts the air pressure into mechanical output f | ● ● ● | $60-$200 |
|  | Relay Emergency Valves | Provides safety to trailers in breakaway condition by application and release of trailer brakes and the emergency application of the brakes in the event of accidental decoupling of the trailer | ● ● ● | $75-$100 |
|  | Lift Axle Control Valves | Used for lifting and lowering the axle depending upon the vehicle's load condition. It operates through the pneumatic load sensed by detection valve. It automatically lowers the axle during ignition 'off' condition to prevent theft of wheels. | ● | $350-$700 |
|  | OptiDrive | A modular automated transmission system which consists of a cabin mounted shift lever unit, including the system's electronic control unit; a shift actuator mounted on the gearbox, and a clutch actuator. It optimizes gear shifting and improves vehicle control, thereby, reducing | ● ● | ~$1000 |

Source: Company, I-Sec Research

# WIL enjoys dominant position in domestic market

Wabco Holdings is a leading global supplier of technology and control systems for safety and efficiency of commercial vehicles. The company has strong market share across segments and is a leading supplier to OEMs globally. Due to the technological edge, WIL enjoys, it has been able to maintain its pricing premium over OEMs even during a sharp slowdown.WIL is a technology-driven product company and has been consistently introducing new value added products.

Globally, Wabco Holdings faces competition from Knorr and Haldex and also a few smaller competitors. However, it has managed to establish strong tie-ups with Daimler and Volvo, globally. However, in India, Wabco enjoys a near monopoly, with Knorr getting just a small portion of business of Tata Motors through a joint venture (Knorr-Tata Auto comp JV).

**Chart 3: Comparative analysis between WABCO and peers**

| Global product offerings | Wabco | Knorr-Bremse | Haldex | Haldex |
|---|---|---|---|---|
| Anti-lock Braking Systems | ●●● | ●●● | ●● | ● |
| Electronic Braking Systems | ●●● | ●●● | ● | |
| Conventional Products | ●●● | ●●● | ●● | ● |
| Transmission Automation | ●●● | | | |
| Air Compressors | ●●● | ●●● | ●● | ● |
| Air Processing | ●●● | ●●● | ●● | ● |
| Actuators | ●●● | ●●● | ●● | ● |
| Suspension Control | ●●● | ●●● | ● | ● |
| Foundation Brakes | ●● | ●●● | ●● | ● |

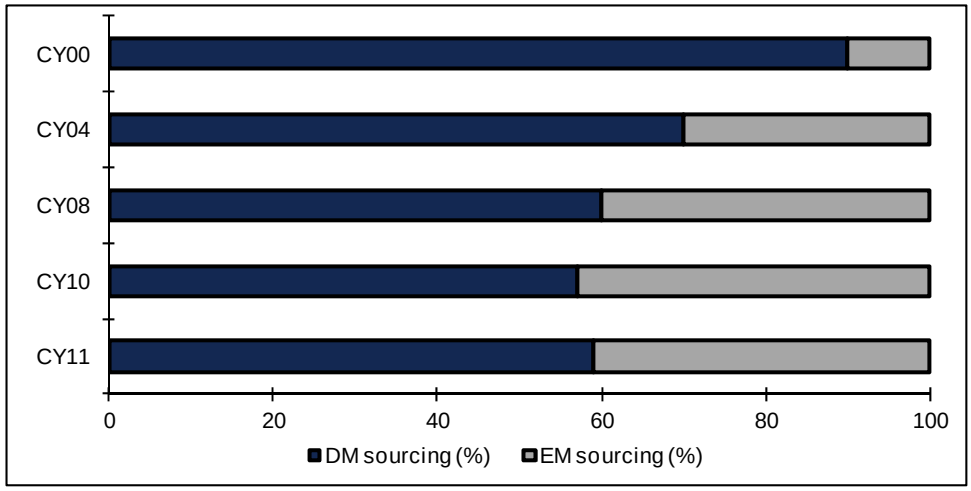
Source: Company, I-Sec Research

## Strong parent open to larger export opportunities from India

WIL's exports to Wabco Holdings (parent) have increased from Rs 190mn in FY08 to Rs4.7bn in FY15, primarily on account of increased share of global sourcing by the parent. Wabco Holdings sees India as a strong manufacturing base for its global sourcing and engineering activities. WIL has its manufacturing facilities in Mahindra World City SEZ, which has enabling elements like low cost sourcing, effective conversion costs to produce at relatively lower costs vis-à-vis developed markets. WIL exports products like vacuum pumps and compressors to Wabco Holding's factories in Europe, North America and Brazil.

Currently, WIL is focussing on domestic demand. However, it has capacity to scale exports to upto Rs7 bn - Rs 8bn.

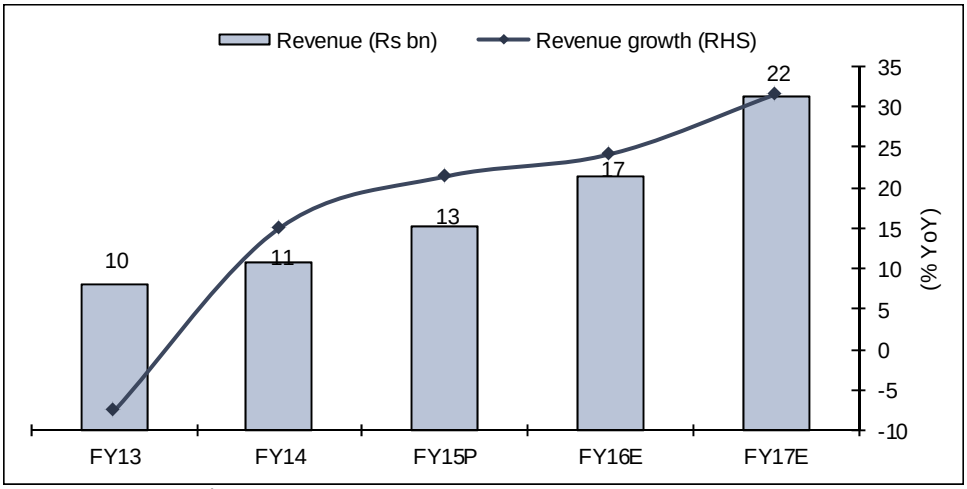
**Chart 4: Consistent increase in sourcing from emerging markets**




Source: Company, I-Sec Research

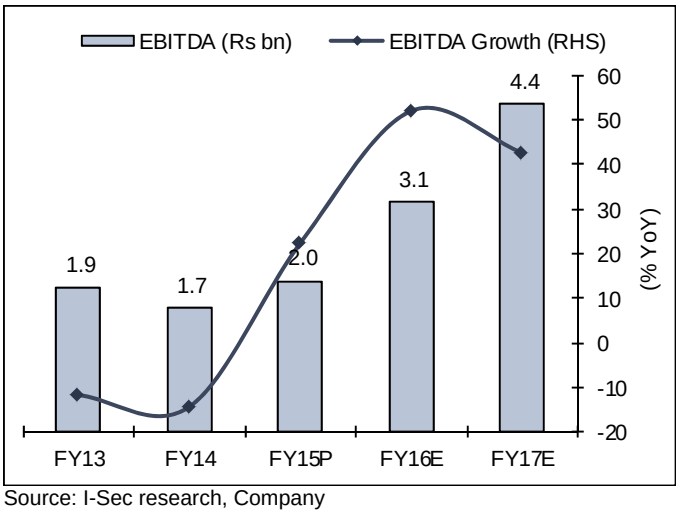
# Financials in charts

### Chart 5: Strong and consistent revenue growth



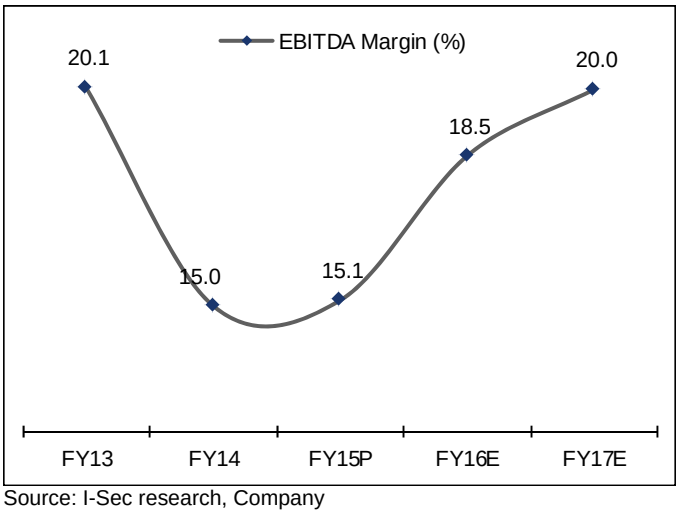

Source: I-Sec research, Company

### Chart 6: EBITDA growth to remain non-linear



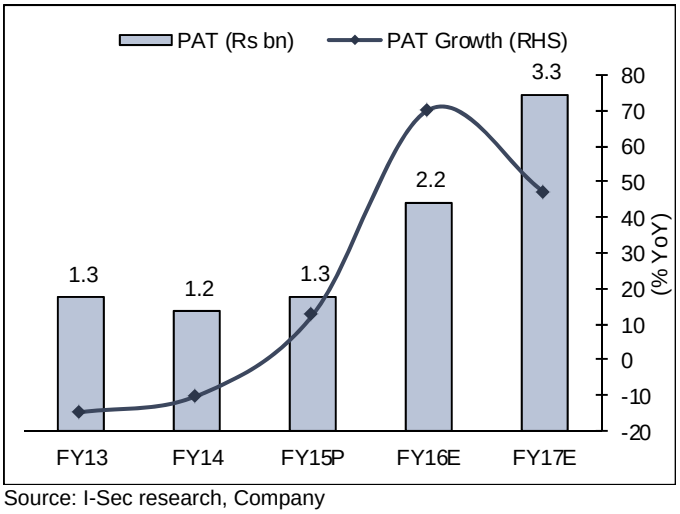

Source: I-Sec research, Company

### Chart 7: EBITDA margins to zoom up



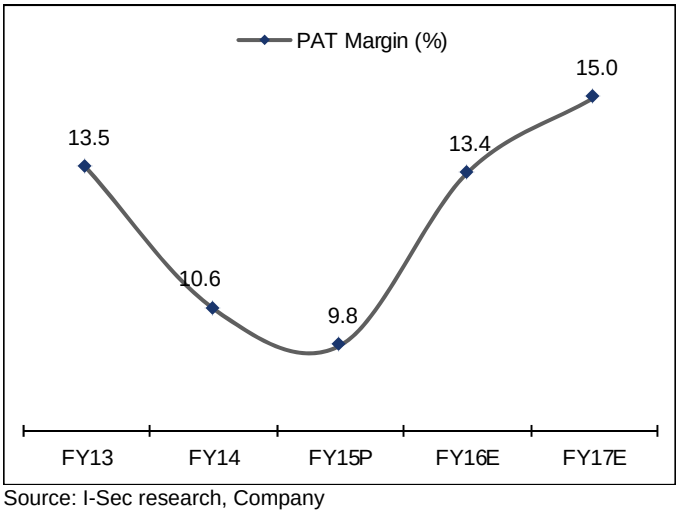

Source: I-Sec research, Company

### Chart 8: Profit growth to mimic EBITDA trends



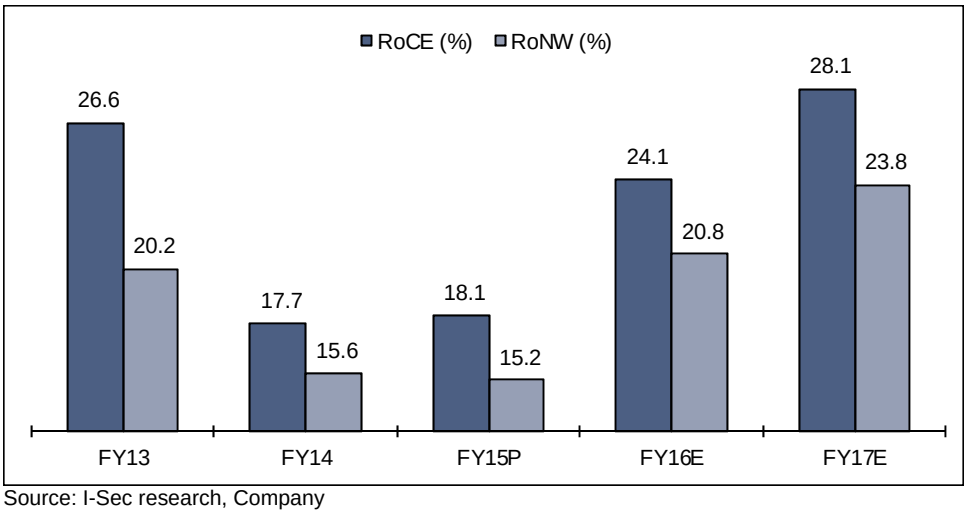

Source: I-Sec research, Company

### Chart 9: PAT margin trend impressive



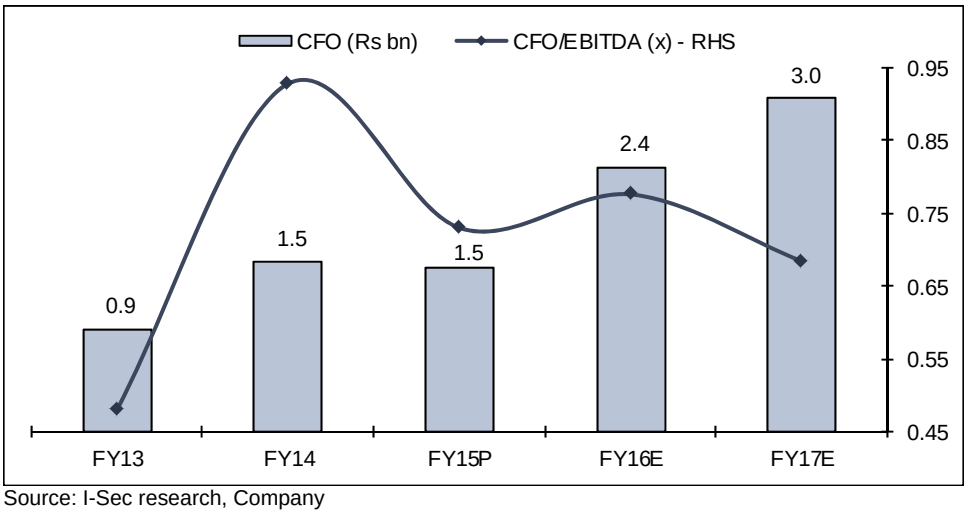

Source: I-Sec research, Company

**Chart 10: Return ratios continue to remain stellar**




Source: I-Sec research, Company

**Chart 11: Cash flows to nearly double in next two years**




Source: I-Sec research, Company

# Valuation and recommendation

We initiate coverage on the stock with a **BUY** rating and a target price of Rs6,273/share.

WIL is the subsidiary of dominant global Tier-1 (Wabco Inc) supplier. The stock in terms of peers has only Bosch Ltd, which trades at 38x and 26x FY17E PE and EV/EBITDA, respectively. We value WIL at a discount of 10% to Bosch Ltd, we ascribe a target multiple of 36x FY17E EPS (Implied PEG: 0.6x) and, arrive at a target price of Rs6273/share. We initiate our coverage on the stock with a **BUY** .We believe consistency of profitability and RoCE of >28% and surprisingly stable CV play makes it the mainstay of investor confidence in the company. In terms of cash flow (post capex) yield, the stock remains reasonable at 2.3% FY17E.

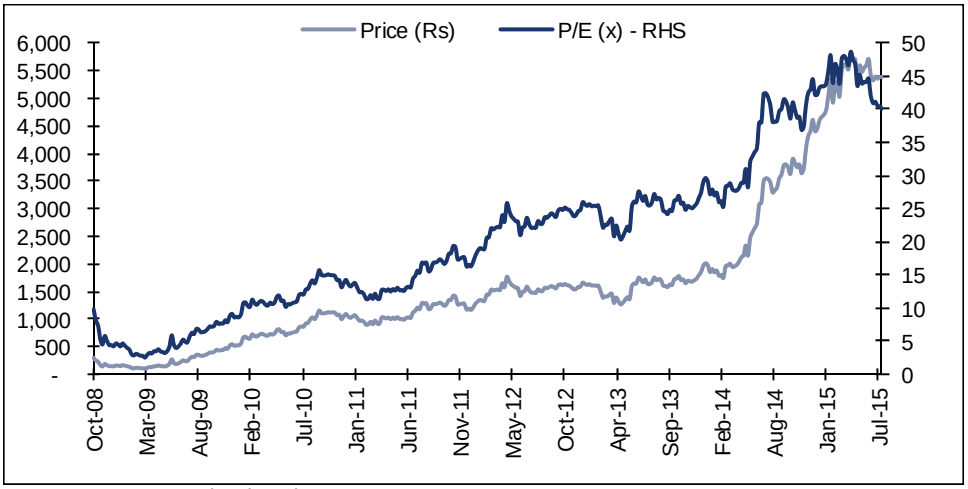
**Table 1: Peer comparison**

| | | | Mkt. | EPS growth (% YoY) | | | P/E (x) | | | EV/EBITDA (x) | | | ROE (%) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Company** | **Curr.** | **Price** | **Cap.** | **FY15** | **FY16E** | **FY17E** | **FY15** | **FY16E** | **FY17E** | **FY15** | **FY16E** | **FY17E** | **FY15** | **FY16E** | **FY17E** |
| **WABCO India** | **INR** | **5,383** | **1,612** | **8.5** | **75.2** | **41.5** | **79.8** | **45.5** | **32.2** | **47.9** | **31.7** | **22.5** | **14.7** | **20.9** | **23.2** |
| Bosch Ltd | INR | 23,073 | 11,440 | | 4.2 | 30.6 | 50.9 | 48.8 | 37.4 | 33.7 | 32.3 | 24.7 | 18.1 | 16.6 | 18.3 |
| Continental AG | EUR | 214 | 47,611 | 23.5 | 19.4 | 10.1 | 18.0 | 15.1 | 13.7 | 8.6 | 8.1 | 7.5 | 24.1 | 23.3 | 21.9 |
| Denso Corp | JPY | 5,775 | 41,562 | (6.9) | 16.3 | 10.1 | 17.8 | 15.3 | 13.9 | 8.6 | 7.3 | 6.7 | 9.0 | 9.3 | 9.7 |
| ZF TRW Automotive | USD | 105 | 12,225 | (68.2) | 202.7 | 10.8 | 40.3 | 13.3 | 12.0 | 13.7 | 7.1 | 6.4 | 7.3 | 21.6 | 18.5 |
| Delphi Automotive | USD | 79 | 22,868 | 15.4 | 19.3 | 18.0 | 17.6 | 14.8 | 12.5 | 10.5 | 9.9 | 8.8 | 49.8 | 58.6 | 60.8 |

Source: I-Sec research

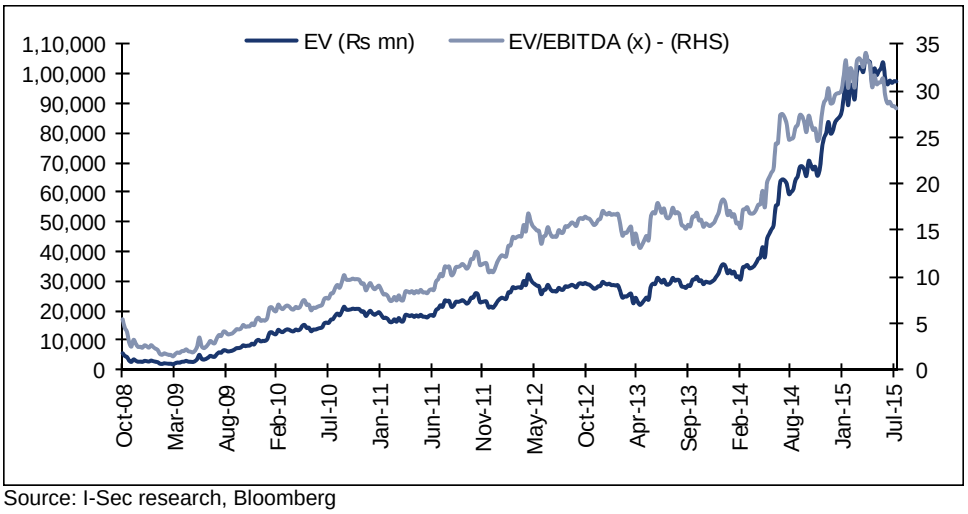
The stock currently trades at 45.7/31.1 FY16E/17E on PE basis while on EV/EBITDA basis the multiple is trading at 31.9x/21.9xFY16E/17E, based on our forecasts.

**Chart 12: P/E-1year forward**




Source: I-Sec research, Bloomberg

**Chart 13: EV/EBIDTA 1-year forward**




Source: I-Sec research, Bloomberg

**Table 2: I-Sec vs. Consensus**

*(Rs mn)*

| | I-Sec | | Consensus | | Difference | |
|---|---|---|---|---|---|---|
| | FY16E | FY17E | FY16E | FY17E | FY16E | FY17E |
| Revenue | 16,731 | 22,005 | 17,887 | 23,823 | (6) | (8) |
| EBITDA | 3,093 | 4,411 | 3,161 | 4,711 | (2) | (6) |
| PAT | 2,247 | 3,305 | 2,044 | 3,153 | 10 | 5 |
| EPS (Rs) | 118 | 174 | 107.9 | 165.9 | 10 | 5 |

Source: Bloomberg, I-Sec research

We are anticipating better than consensus EBITDA margins coupled with higher treasury income and declining corporate tax rates

# Key risks

Significant decline in domestic demand in the M&HCV space would hurt the earnings estimates for WIL.

Any weakening of government focus on passenger safety and emission norms can hurt the content enrichment thesis of WIL.

# Annexure 1: Consolidated financials

## Table 3: Profit and Loss statement

*(Rs mn, year ending March 31)*

| | FY13 | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|---|
| Net Sales | 9,174 | 10,458 | 12,715 | 15,748 | 20,711 |
| Other operating income | 486 | 649 | 764 | 984 | 1,294 |
| **Total Op. Income (Sales)** | **9,659** | **11,107** | **13,479** | **16,731** | **22,005** |
| Raw material expense | 5,172 | 6,339 | 7,929 | 9,430 | 12,321 |
| Employee expense | 1,070 | 1,252 | 1,434 | 1,582 | 1,865 |
| Other expenses | 1,477 | 1,854 | 2,082 | 2,627 | 3,408 |
| **Operating Expenses** | **7,719** | **9,445** | **11,445** | **13,639** | **17,594** |
| **EBITDA** | **1,941** | **1,662** | **2,034** | **3,093** | **4,411** |
| *% margins* | *20.1%* | *15.0%* | *15.1%* | *18.5%* | *20.0%* |
| Depreciation & Amortisation | 217 | 321 | 467 | 490 | 519 |
| **EBIT** | **1,724** | **1,341** | **1,567** | **2,603** | **3,892** |
| Other Income | 126 | 272 | 317 | 541 | 666 |
| Gross Interest | 0 | 2 | 4 | - | - |
| **PBT** | **1,850** | **1,611** | **1,881** | **3,143** | **4,559** |
| Less: Exceptionals | - | - | - | - | - |
| **PBT after Exceptionals** | **1,850** | **1,611** | **1,881** | **3,143** | **4,559** |
| Less: Taxes | 542 | 436 | 559 | 896 | 1,254 |
| Less: Minority Interest | - | - | - | - | - |
| Add: Profit from Associates | - | - | - | - | - |
| **Net Income (Reported)** | **1,308** | **1,175** | **1,321** | **2,247** | **3,305** |
| **Net Income (Adjusted)** | **1,308** | **1,175** | **1,321** | **2,247** | **3,305** |

Source: Company data, I-Sec research

## Table 4: Balance sheet

*(Rs mn, Year ending March 31)*

| | FY13 | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|---|
| **ASSETS** | | | | | |
| **Current Assets, Loan & Advances** | | | | | |
| Inventories | 1,356 | 1,124 | 1,180 | 1,381 | 1,759 |
| Sundry debtors | 1,898 | 2,315 | 2,992 | 3,452 | 4,256 |
| Loans and advances | 384 | 655 | 681 | 844 | 1,110 |
| Other current assets | 1 | 7 | 8 | 10 | 13 |
| Cash & cash equivalents | 990 | 1,552 | 2,234 | 3,759 | 5,573 |
| **Total Current Assets** | **4,630** | **5,652** | **7,094** | **9,444** | **12,710** |
| **Current Liabilities & Provisions** | | | | | |
| Sundry creditors | 1,025 | 1,510 | 1,933 | 2,373 | 2,951 |
| Short-term provisions | 129 | 128 | 147 | 180 | 224 |
| Other current liabilities | 30 | 50 | 60 | 75 | 98 |
| **Total Current Liabilities & Provisions** | **1,183** | **1,688** | **2,141** | **2,628** | **3,273** |
| **Net Current Assets** | **3,447** | **3,965** | **4,953** | **6,816** | **9,437** |
| **Investments** | **255** | **502** | **392** | **442** | **542** |
| Goodwill | 0 | 0 | 0 | 0 | 0 |
| **Fixed Assets** | | | | | |
| Gross Fixed Assets | 3,984 | 4,730 | 5,450 | 6,170 | 6,990 |
| Accumulated Depreciation | 1,347 | 1,663 | 2,130 | 2,620 | 3,139 |
| **Net Fixed Assets** | **2,637** | **3,067** | **3,320** | **3,550** | **3,851** |
| Capital Work-in-Progress | 254 | 111 | 111 | 111 | 111 |
| **Total Fixed Assets** | **2,891** | **3,178** | **3,431** | **3,661** | **3,962** |
| Long term loans & advances | 157 | 237 | 229 | 284 | 373 |
| Deferred Tax Assets | 0 | 0 | 0 | 0 | 0 |
| Other non-cuurent asset | 0 | 0 | 0 | 0 | 0 |
| **Total Assets** | **6,749** | **7,881** | **9,006** | **11,203** | **14,314** |
| | | | | | |
| **LIABILITIES** | | | | | |
| **Borrowings** | **0** | **0** | **0** | **0** | **0** |
| *long-term borrowings* | 0 | 0 | 0 | 0 | 0 |
| *short-term borrowings* | 0 | 0 | 0 | 0 | 0 |
| Long-term provisions | 143 | 166 | 180 | 230 | 280 |
| Deferred Tax Liability | 117 | 161 | 161 | 161 | 161 |
| Other Non-current Liabilities | 0 | 0 | 0 | 0 | 0 |
| Minority Interest | 0 | 0 | 0 | 0 | 0 |
| Equity Share Capital | 95 | 95 | 95 | 95 | 95 |
| Reserves & Surplus | 6,394 | 7,458 | 8,569 | 10,716 | 13,777 |
| **Net Worth** | **6,489** | **7,553** | **8,663** | **10,811** | **13,872** |
| **Total Liabilities** | **6,749** | **7,881** | **9,005** | **11,203** | **14,314** |

Source: Company data, I-Sec research

## Table 5: Cash flow statement

*(Rs mn, Year ending March 31)*

| | FY13 | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|---|
| **Cash Flow from Operating Activities** | | | | | |
| PAT | 1,308 | 1,175 | 1,321 | 2,247 | 3,305 |
| Add: Depreciation | 217 | 321 | 467 | 490 | 519 |
| Add: Other Operating activities | 0 | 2 | 4 | - | - |
| **Operating cash flow before working capital changes** | **1,525** | **1,498** | **1,791** | **2,737** | **3,824** |
| **Changes in working capital** | | | | | |
| (Increase) / Decrease Inventories | (199) | 232 | (55) | (201) | (378) |
| (Increase) / Decrease Receivables | (323) | (416) | (677) | (460) | (804) |
| Increase / (Decrease) Payables | (55) | 485 | 424 | 440 | 578 |
| Others | (17) | (257) | 2 | (117) | (202) |
| **Net Working Capital Changes** | **(594)** | **44** | **(307)** | **(338)** | **(806)** |
| **Cash flow from Operating Activities** | **931** | **1,542** | **1,485** | **2,399** | **3,018** |
| **Capital Commitments** | **(676)** | **(608)** | **(720)** | **(720)** | **(820)** |
| **Free Cash Flow** | **255** | **934** | **765** | **1,679** | **2,198** |
| **Cash flow from Investing Activities** | **(639)** | **(868)** | **(588)** | **(775)** | **(959)** |
| **Cash Flow from Financing Activities** | | | | | |
| Issue of Share Capital | - | - | - | - | - |
| Inc/(Dec) in securities premium | - | - | - | - | - |
| Buyback of shares | - | - | - | - | - |
| Inc/(Dec) in Borrowings | - | - | - | - | - |
| Dividend paid | (111) | (111) | (111) | (200) | (244) |
| Others | **(0)** | **(2)** | **(104)** | **100** | **-** |
| **Cash flow from Financing Activities** | **(111)** | **(112)** | **(215)** | **(100)** | **(244)** |
| **Net Cash Flow** | **182** | **561** | **682** | **1,525** | **1,814** |
| **Opening Cash & Bank balance** | **809** | **990** | **1,552** | **2,234** | **3,759** |
| **Closing Cash & Bank balance** | **990** | **1,552** | **2,234** | **3,759** | **5,573** |
| **Increase / (Decrease) in Cash & cash equivalents** | **182** | **561** | **682** | **1,525** | **1,814** |

Source: Company data, I-Sec research

## Table 6: Key ratios

*(Year ending March 31)*

| | FY13 | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|---|
| **Per Share Data (in Rs.)** | | | | | |
| EPS (Basic) | 69.0 | 62.0 | 69.7 | 118.5 | 174.2 |
| EPS (Adjusted) | 69.0 | 62.0 | 69.7 | 118.5 | 174.2 |
| Cash EPS | 80.4 | 78.9 | 94.2 | 144.3 | 201.6 |
| Dividend per share (DPS) | 5.0 | 5.0 | 5.0 | 9.0 | 11.0 |
| BVPS (Adjusted) | 342.1 | 398.2 | 456.7 | 570.0 | 731.4 |
| **Growth Ratios (%)** | | | | | |
| Total Op. Income (Sales) | (7.6) | 15.0 | 21.4 | 24.1 | 31.5 |
| EBITDA | (11.8) | (14.4) | 22.4 | 52.1 | 42.6 |
| Net Income (Adjusted) | (14.7) | (10.1) | 12.4 | 70.1 | 47.1 |
| EPS (Adjusted) | (14.7) | (10.1) | 12.4 | 70.1 | 47.1 |
| Cash EPS | (9.8) | (1.9) | 19.5 | 53.1 | 39.7 |
| BVPS (Adjusted) | 22.6 | 16.4 | 14.7 | 24.8 | 28.3 |
| **Valuation Ratios (x)** | | | | | |
| P/E (Adjusted) | 78.5 | 87.4 | 77.7 | 45.7 | 31.1 |
| P/BV (Adjusted) | 15.8 | 13.6 | 11.9 | 9.5 | 7.4 |
| EV/EBITDA | 52.3 | 60.6 | 49.2 | 31.9 | 21.9 |
| EV/Sales | 10.5 | 9.1 | 7.4 | 5.9 | 4.4 |
| **Return/Profitability Ratio (%)** | | | | | |
| Raw Material Expenses/Sales | 53.5 | 57.1 | 58.8 | 56.4 | 56.0 |
| Employee Expenses/Sales | 11.1 | 11.3 | 10.6 | 9.5 | 8.5 |
| Marketing Expenses/Sales | - | - | - | - | - |
| Administrative Expenses/Sales | - | - | - | - | - |
| Other Expenses/Sales | 15.3 | 16.7 | 15.4 | 15.7 | 15.5 |
| EBITDA Margin | 20.1 | 15.0 | 15.1 | 18.5 | 20.0 |
| Net Income Margin (Adjusted) | 13.5 | 10.6 | 9.8 | 13.4 | 15.0 |
| RoCE | 26.6 | 17.7 | 18.1 | 24.1 | 28.1 |
| RoNW | 20.2 | 15.6 | 15.2 | 20.8 | 23.8 |
| Dividend Payout Ratio | 7.2 | 8.1 | 7.2 | 7.6 | 6.3 |
| Dividend Yield | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| **Solvency/Wkg. Cap. Ratios (x)** | | | | | |
| Net D/E | - | - | - | - | - |
| Debt/EBITDA | - | - | - | - | - |
| EBIT/Interest | 9,792.6 | 864.8 | 434.3 | - | - |
| Current Ratio | 3.9 | 3.3 | 3.3 | 3.6 | 3.9 |
| Quick Ratio | 2.8 | 2.7 | 2.8 | 3.1 | 3.3 |
| Inventory (days) | 54 | 39 | 34 | 32 | 31 |
| Receivables (days) | 76 | 81 | 86 | 80 | 75 |
| Payables (days) | 41 | 53 | 56 | 55 | 52 |

Source: Company data, I-Sec research

# Annexure 2: Index of tables and charts

## Tables



## Charts

Equity Research

July 15, 2015

BSE Sensex: 27961

INDIA

# Asahi India Glass

**BUY**

## Turning around after tough times! **Rs146**

Reason for report: Initiating coverage

**Asahi India Glass (AISG) is the dominant leader in India's automotive glass industry and is a classic case of a good company mired in challenging times. On the automotive side, the company has nearly 70% market share in passenger vehicle space with Maruti Suzuki leading its customer list. On the architectural side (~35% share of revenues), AISG has chosen to move out of the commoditised float glass segment into the value-added tinted and coated glass. On the industry side, the last decade of stress was characterised by three things: a) heavy competitive intensity– both domestic and imports, b) weak demand environment post Lehman, and c) significant and sustained increase in power and fuel costs. We believe the domestic glass industry, and more so the value-added and automotive glass industry, could turn into a profitable duopoly between AISG and Saint-Gobain India. The three key reasons for it are: a) tough industry cycle learnings have led to industry consolidation, e.g. Sejal Glass, thereby lending pricing discipline; b) positive external effects such as drop in crude prices and5-year anti-dumping duty, c) improvement in content and end-demand both on the automotive side as well architectural. We conservatively estimate limited positive effects on architectural volume growth; however, we believe AISG's operating performance would improve. We expect EBITDA, earnings to witness ~131% CAGR across FY15-FY17E and value the stock at 10.5x (~15% discount to last 10-year average) FY17E EBITDA. We initiate coverage on AISG with a BUY rating.**

- **Domestic glass industry entering a sweet spot:** The glass industry is typically characterised by high share of power and fuel costs (18-20% of net sales) due to the nature of the beast (furnace needs to be run through the year 24x7). The significant drop in crude prices below US$65/bbl has immensely benefitted the industry. Cheaper imports of glass from the Middle East caused major stress during the high crude price period. The 5-year anti-dumping duty recently imposed (US$58-165/te) has given domestic manufacturers a strong competitive edge.
- **Industry consolidation to aid core pricing as entry barriers remain high:** The domestic float glass industry witnessed three new plant additions in CY08 thereby causing overcapacity. Leading to stress as costs went up and prices nosedived on account of weak demand and cheaper imports. Industry then consolidated as players like Sejal Glass got acquired, now has large global players(AISG, Saint-Gobain, Guardian) who are prioritising profitability
- **AISG - dominant automotive proxy riding both volumes and content:** Nearly two-thirds of AISG's revenues are attributable to growth in the passenger vehicle industry as it commands ~70% market share in the space. The company has also seen steady content enrichment both on account of increasing glass content and product mix (reduced share of *Alto's* down from ~65% to ~31% since FY04).

| | |
|---|---|
| Market Cap | Rs35.4bn/US$558mn |
| Reuters/Bloomberg | AISG.BO/AISG IN |
| Shares Outstanding (mn) | 243.1 |
| 52-week Range (Rs) | 168/82 |
| Free Float (%) | 45.6 |
| FII (%) | 0.7 |
| Daily Volume (US$/'000) | 215 |
| Absolute Return 3m (%) | 2.2 |
| Absolute Return 12m (%) | 74.4 |
| Sensex Return 3m (%) | (3.2) |
| Sensex Return 12m (%) | 11.7 |

| Year to Mar | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|
| Revenue (Rs bn) | 21.1 | 20.6 | 23.1 | 27.0 |
| Rec. Net Income (Rs bn) | (0.1) | 0.6 | 1.6 | 2.7 |
| EPS (Rs) | (0.2) | 2.6 | 6.8 | 11.2 |
| % Chg YoY | N.M. | N.M. | 157.0 | 64.7 |
| P/E (x) | - | 55.1 | 21.5 | 13.0 |
| CEPS (Rs) | 4.0 | 6.5 | 11.4 | 16.0 |
| EV/E (x) (Incl. Indus) | 16.2 | 14.0 | 9.9 | 8.0 |
| Dividend Yield (%) | - | - | 0.7 | 1.4 |
| RoCE (%) | 10.8 | 15.5 | 22.9 | 26.6 |
| RoE (%) | N.M. | 16.3 | 36.4 | 40.2 |

## Autos

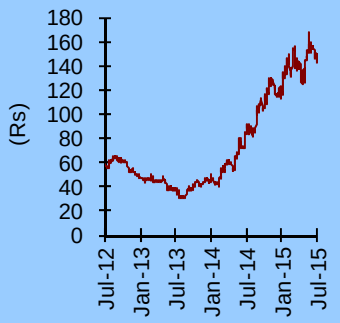
**Target price Rs201**

### Shareholding pattern

| | Sep '14 | Dec '14 | Mar '15 |
|---|---|---|---|
| Promoters | 54.4 | 54.4 | 54.4 |
| Institutional investors | 0.5 | 0.6 | 1.2 |
| MFs and UTI | 0.0 | 0.0 | 0.5 |
| Insurance Co | - | - | - |
| FIIs | 0.4 | 0.6 | 0.7 |
| Others | 45.2 | 45.0 | 44.4 |

Source: NSE

### Price chart

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## TABLE OF CONTENTS

# Business background

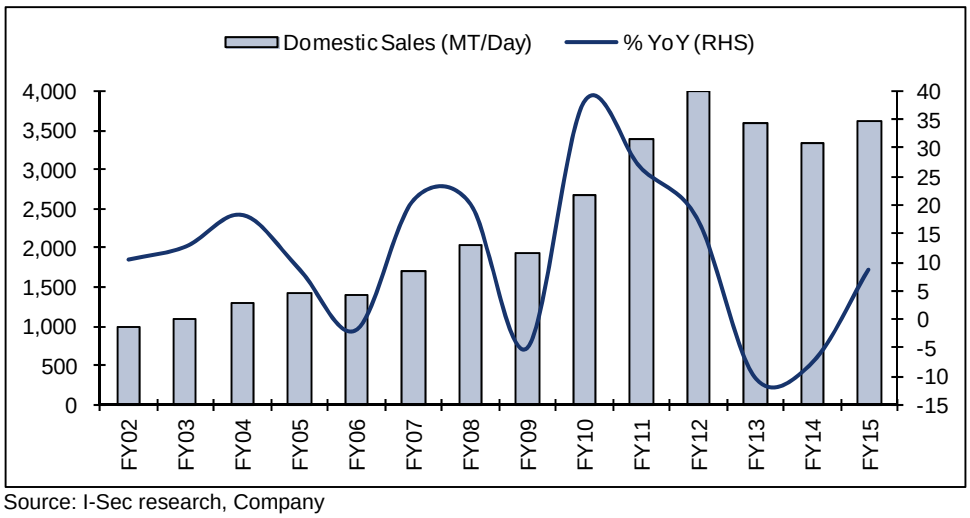
Asahi India Glass (AISG) was established in 1984 and is a dominant automotive and value-added glass supplier in India with a market share of~70% in the automotive side, and strong market share on the coated glass side (~65% in hard coat, ~25% in soft coat). The company is a joint venture between Asahi Glass Co Ltd (Japan), the Labroo family, and Maruti Suzuki India Ltd. AISG specializes in automotive glass (~65% of standalone revenues in FY15) and value-added architectural glass (~35%). In the automotive space, AISG supplies laminated windshields and its clients include almost all major auto OEMs. Two-thirds of the company's automotive revenues, as per our understanding, are attributable to OEMs while the rest to the aftermarket. On the architectural-coated glass side, customers range from institutional entities to construction industry players, and the products include reflective glass, tinted glass, soft coated glass, etc. AISG has strong distribution reach across India with close to 1,300 dealers on the architectural side and close to 200 depots/hubs on the automotive side. It has a pan-India manufacturing presence (three plants post the Taloja plant shutdown, and three sub-assembly units).

## Indian float glass industry

The total Indian float glass industry is estimated at nearly US$1bn in revenues, which serves the construction and infrastructure industry. Of the total demand, architectural glass accounts for~70% while the remaining ~30% is processed automotive demand. On the demand side, float glass demand inclusive of imports stood at ~4,100-4,200TPD. Overall capacity stands at ~5,000TPD including Saint-Gobain's recently commissioned Bhiwandi facility.

In terms of per capita consumption of glass, India pales at 1.2kg in comparison to the US and Japan at 30kg and10kg respectively. The floatglass industry is dominated by three large players AISG, Saint-Gobain India and Gujarat Guardian.

**Chart 1: Domestic float glass sales trend**



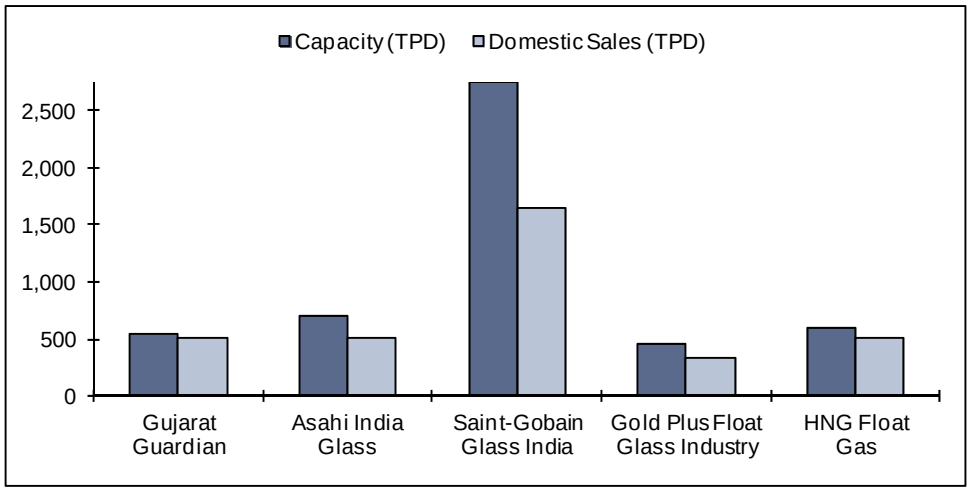

Source: I-Sec research, Company

In terms of raw materials, silica remains a major input for making the basic float glass, which is then converted into value-added or toughened glass. The major cost component along with the raw materials, remains power and fuel. This is due to the necessity of furnace heating for conversion of glass. In the past couple of years, crude oil prices at ~US$100/bbl had caused major cost pressures across the industry not only in India but globally too.

## Key growth drivers of overall float glass consumption:

- Increasing population and per capita expenditure
- Green buildings and environmental concerns
- Demand for housing
- Automotive industry growth
- Solar energy savings focus

**Chart 2: Installed capacity and sale of float glass in FY15**




Source: I-Sec research, Company

## What went wrong in the “lost last decade”?

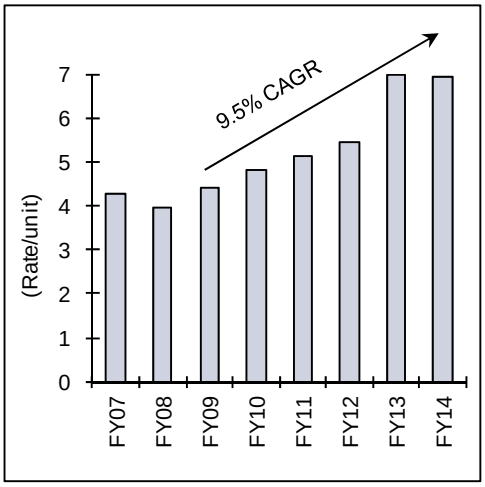
The previous decade started with a number of new entrants like Hindustan National Glass and Sezal Glass among others in expectation of consistent rise in infrastructural demand in India. AISG too, along with Saint-Gobain, invested in expanding its capacities by FY06. The industry expansion proved to be highly counterproductive as the economy was hit by the onset of the global recession and slowing domestic housing demand.

The industry was further hit as cheaper imports, particularly from the Middle East and China, began to increase and until recently had reached as high as ~15-20% of industry demand. The imports were excessively cheap and domestic manufacturers could not compete with them, thus leading to decline in profitability and increased losses during the decade.

On the costs side, gross margins weakened as raw material (particularly soda ash) prices rose and was exacerbated with a depreciating INR. Glass manufacturing has an essential challenge, i.e. it requires the furnace to be working 24x7x365 throughout the life of the furnace. This leads to high operating costs which, during the period under reference, increased manifold as crude oil prices rose from US$40/bbl to US$110/bbl and electricity prices skyrocketed from Rs3/unit to Rs9-10/unit.

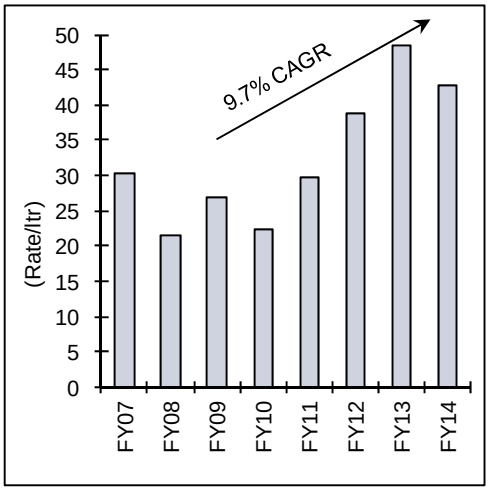
## Power and fuel price trends for Asahi India Glass

**Chart 3: Electricity price trend**



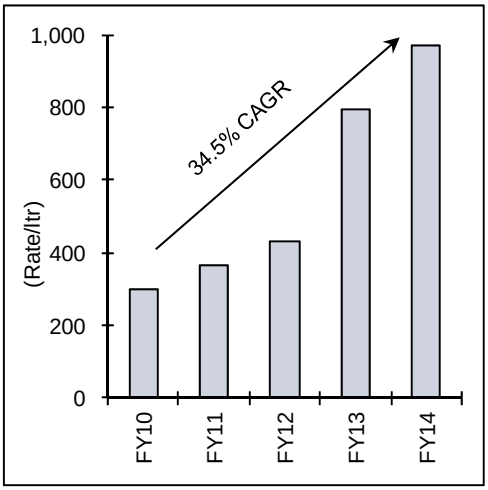

Source: I-Sec research, Company

**Chart 4: Heavy fuel oil price trend**




Source: I-Sec research, Company

**Chart 5: Natural gas price trend**




Source: I-Sec research, Company

# Asahi India Glass: Why are we bullish then?

Asahi India Glass (AISG) is a classic example of a good company in troubled times. It is into manufacturing of both architectural as well as automotive glass (~50% each). Globally, glass manufacturing has been under duress in the past decade primarily due to higher fuel costs and modest demand.

## Dual play–Demand recovery, content enrichment

### Automotive demand to be the forte

AISG is the market leader in the automotive glass segment with a dominant market share of close to 70% in the OEM space. The segment is dominated by just AISG and Saint-Gobain India (~30% market share) thus leading to strong pricing power. The expectation of a stronger recovery in the passenger vehicle market led by Maruti Suzuki (largest customer for AISG) makes AISG a good proxy to the same. On top of this, over the last decade, the content per vehicle has also gone up meaningfully (mix effect is nearly 50% since FY07) as industry product mix has incrementally drifted away from the compact segment (*Alto*) to hatchbacks (*Swift*). Thus, a faster pace of growth of bigger-sized cars/SUVs could increase this metric further, and the amount of glass used could also increase on account of issues related to safety and greenhouse effects. On the distribution side, AISG has close to 65 major depots/dealers with close to 200 connect hubs across the country supplying to the major aftermarket retailers.

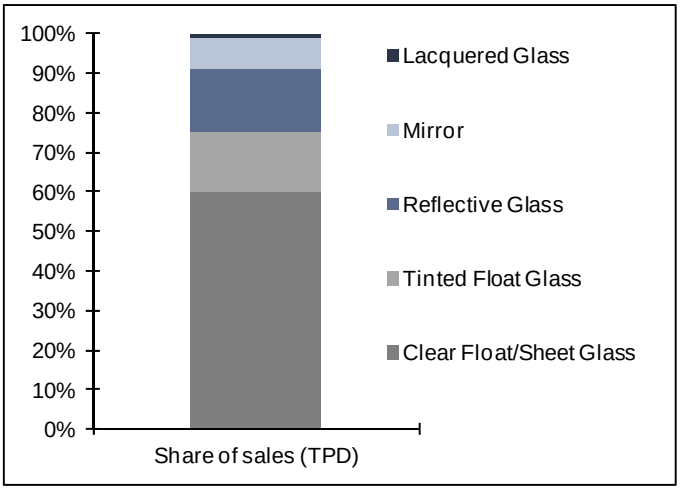
In the automotive segment, we expect automotive industry to register ~8% growth in FY16E and ~13% in FY17E, which could lead to a ~15% CAGR in automotive revenue growth for AISG for FY15-FY17E. We have remained conservative on the growth side considering the turnaround nature of business

### Architectural segment could be a 'smart city' benefactor

On the architectural side, AISG is present across the entire value chain. However, after completing its lifetime of 20 years of operations, the company's Taloja furnace has been shut down. The management has decided to thus reduce presence in the increasingly commoditised float glass space and focus more on the value-added coated segments. Both these segments remain much more profitable and also require higher technology intensiveness and customer association (B2B) leading to higher entry barriers for competitors. On the clear float glass side, AISG still has ~15% market share, which is below the leader Saint-Gobain's ~47%. However on the hard coat side – tinted and reflective glass – AISG enjoys ~65% market share, while on the soft coat or lacquered segment (which has highest margins but also highest technology requirements) AISG enjoys only ~25% market share. We feel the recently launched government initiatives like ***"Smart City and Gift City"*** if successful could lead to significant volume growth possibilities for AISG due to the value-added market dominance the company enjoys. AISG has a strong pan-India network of close to 1,300 dealers on the architectural side, at par with the market leader Saint-Gobain. The dealerships have strong company loyalties and our channel checks suggest that dealers have had relationships with AISG for decades.

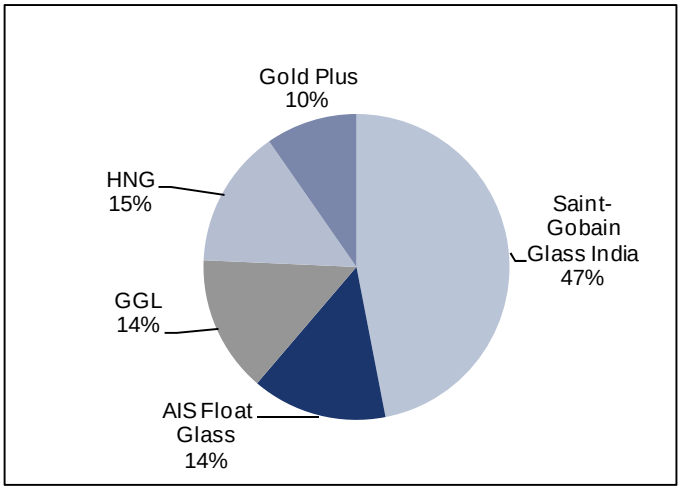
In the architectural glass segment, we believe a spur in end-use demand coupled with better pricing (anti-dumping effect)/content growth could lead to ~ 14% CAGR in the segment for AISG revenues.

**Chart 6: Breakdown of FY15 float glass sales**




Source: I-Sec research, Company

**Chart 7: Float glass market shares(automotive)**




Source: I-Sec research, Company

## Anti-dumping duty provides a five-year cushion to the Industry

As highlighted earlier, the Indian domestic glass market had witnessed cheap float glass imports equivalent to 15-20% of demand in the past decade, which had effectively reduced domestic manufacturers' competitive advantage. This recently prompted the government of India to two orders – a) 75-150% anti-dumping duties for five years on imports from the Middle East, and b) continued anti-dumping duties on float glass imports from China at ~65% higher rates (US$218/te) than previous rates.

The effect of the above two moves has been that the glass industry is now at a demand-supply equilibrium, with float glass prices increasing to Rs68/2mm thick sheet (prior to the anti-dumping duty, it was ~Rs54/2mm thickness). The industry expects prices to rise to ~Rs73-74/2mm thickness, which remains the import parity level. The same has not yet been achieved due to massive inventory purchases last year prior to the anti-dumping implementation. However, from subsequent quarters, realisations are expected to witness move towards the import parity levels.

## Industry consolidation to aid pricing stability and rise in profitability

As earlier discussed, the industry post-FY07 witnessed the entry of many new manufacturers like HNG, Sejal Glass and Gold Plus among others. However, due to poor demand conditions, high costs and leverage in balance sheets, all of these companies have either been sold off or are in dire financial situations. The industry now has >80% of the market controlled by global leaders such as Saint-Gobain (France), Asahi (Japan) and Guardian(US) .Thus, the industry now seems to have learnt from its past mistakes and has no alternative but to grow profitably; thus the market leaders are expected to lead a disciplined industry behaviour going forward. The industry could be entering a positive business cycle as entry barriers remain extremely high.

## Costs pressures abate; company aligns strategies

The difficulty in glass manufacturing is the nature of its fixed costs– viz. furnaces need to run for their entire lifetime once fired. This is also a reason why even global glass manufacturing is dominated by a few continental majors who control chunky market shares.

Thus, the high power and fuel costs (which was equivalent to ~22% of net sales in H1FY15) has steadily seen a decline to ~14% in Q4FY15 for AISG. This has primarily occurred due to two reasons:

- Global crude price fall (~50% YoY fall to <US$60/bbl) has caused spot gas prices to fall from US$17-18 to <US$10/bbl. AISG had entered into rolling long-term contracts (for five years in FY10) which elapsed in Dec'14. Thus the company is now procuring gas on a spot basis, which is significantly cheaper
- AISG has moved away from the high-cost diesel towards furnace oil and pet coke, which are significantly cheaper than diesel post deregulation, thus contributing to strong cost savings. Given the lower gas prices, this change of fuel mix to furnace oil can lead to benefits on margins to the tune of ~300-400bpsYoY

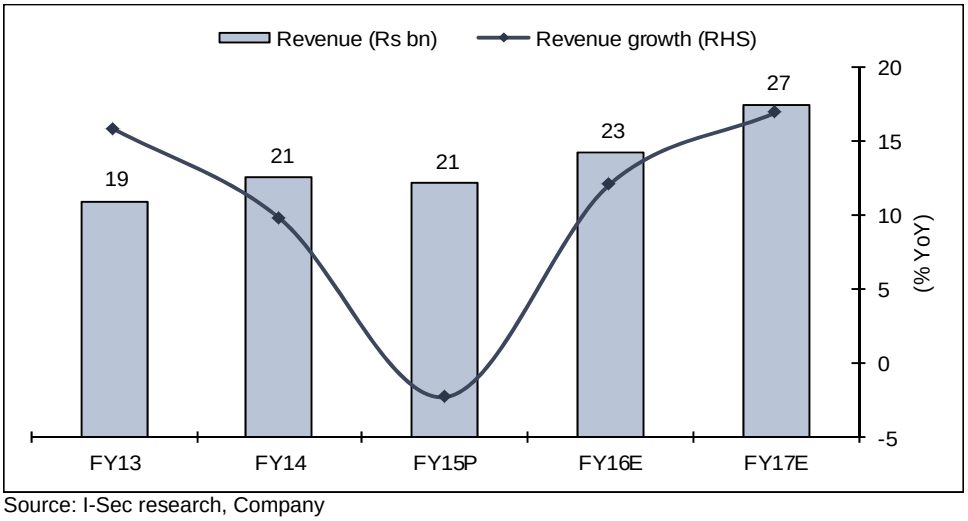
On the merchant power side too, post the increased availability of coal, power and increase in supplies, power tariffs are expected to decline significantly, which will come as an additional boost to large consumers like AISG. The shutdown of AISG's Taloja plant is also has also resulted in savings of Rs480mn-600mn on recurring basis as it was the company's oldest plant with an ageing workforce and relatively weaker operating lines vis-à-vis the Roorkee facility.

## Financials to improve in a non-linear fashion: PAT~3x, RoI >28% FY15-FY17E

AISG is expected to reap strong gains from the various positive triggers ranging from increase in domestic glass prices on account of the anti-dumping duty mentioned earlier to sharp reduction in operating costs. We however remain conservative on our revenue growth estimates for the company's architectural glass business. Nevertheless, considering the financial turnaround in AISG, we believe it could clock earnings CAGR of ~131% through FY15-FY17E. This, coupled with strong free cash flow generation, low capital expenditure, rising return ratios (all>25%), strong debt reduction plans (~15% over FY15-FY17E), suggests that the business has 40-50% headroom to grow with minimal capex. All this, against the backdrop of high entry barriers, could lead to a rerating of the stock.

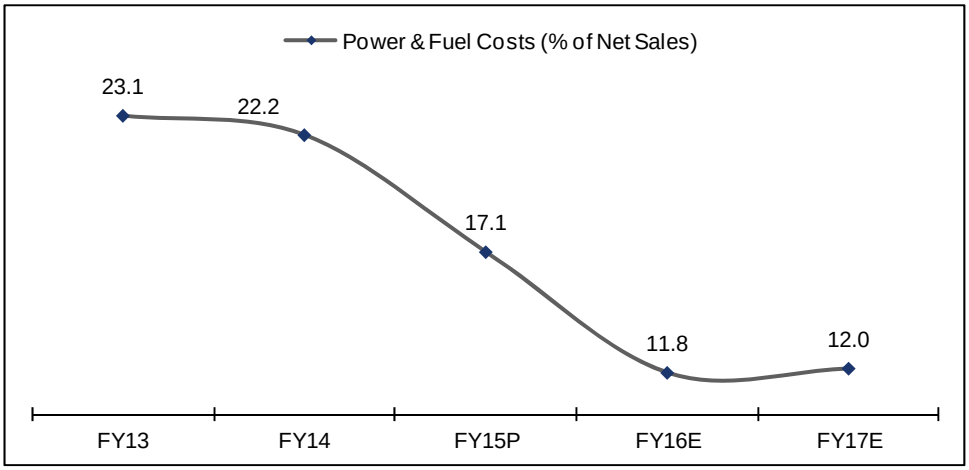
# Financials in charts

### Chart 8: Revenue growth expected to gradually improve



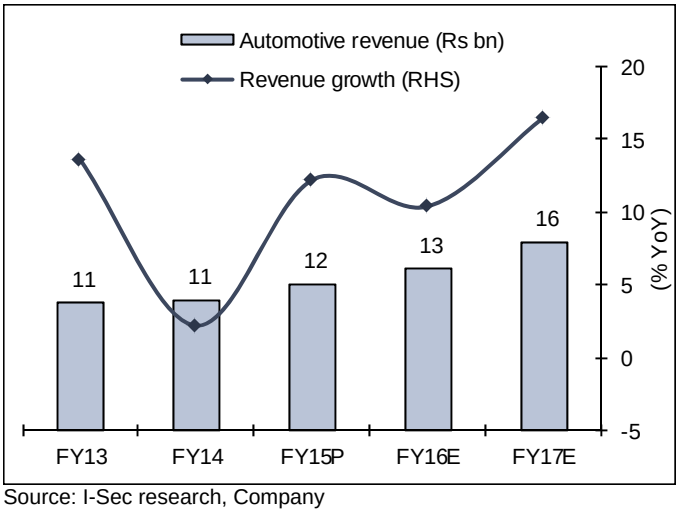

Source: I-Sec research, Company

### Chart 9: Fuel shifts and end of long-term contracts aid savings



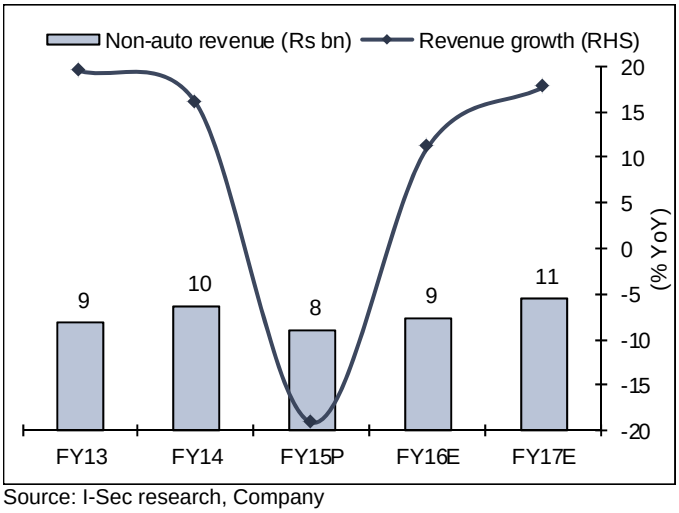

Source: I-Sec research, Company

### Chart 10: Ahead of automotive growth



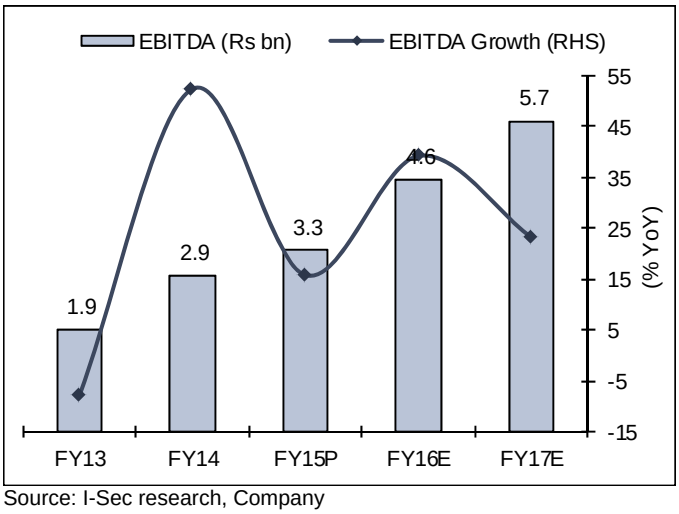

Source: I-Sec research, Company

### Chart 11: Non-auto growth even as Taloja shut



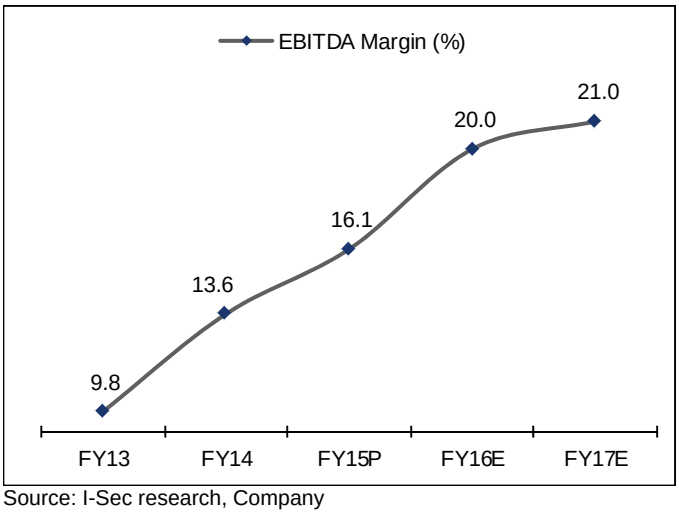

Source: I-Sec research, Company

### Chart 12: EBITDA to witness dramatic rise



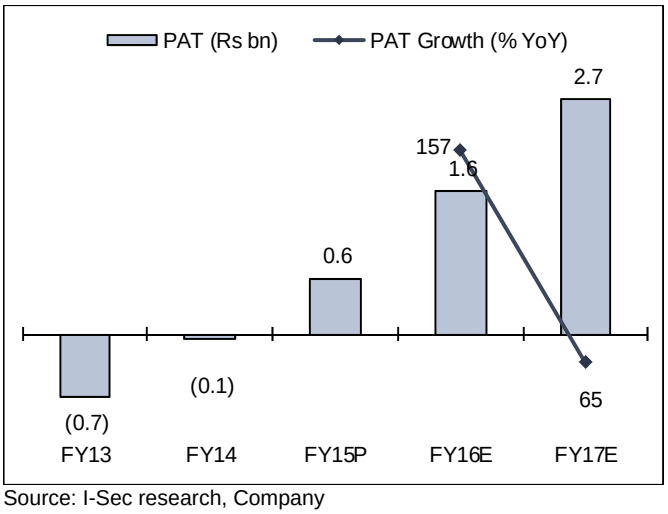

Source: I-Sec research, Company

### Chart 13: EBITDA margins expand significantly



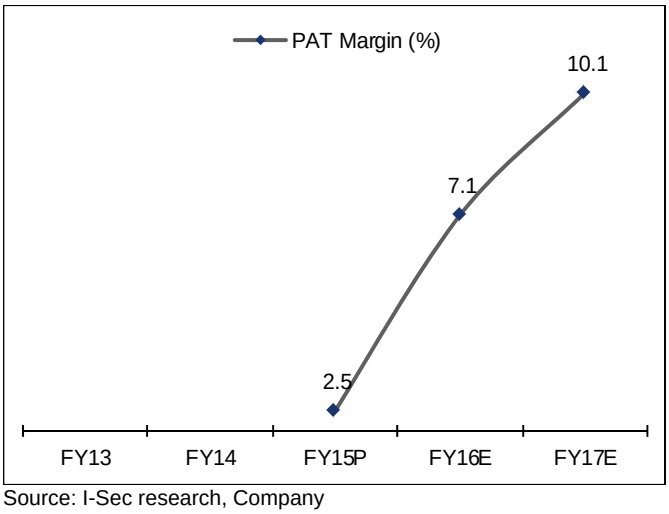

Source: I-Sec research, Company

### Chart 14: Profits to grow non-linear



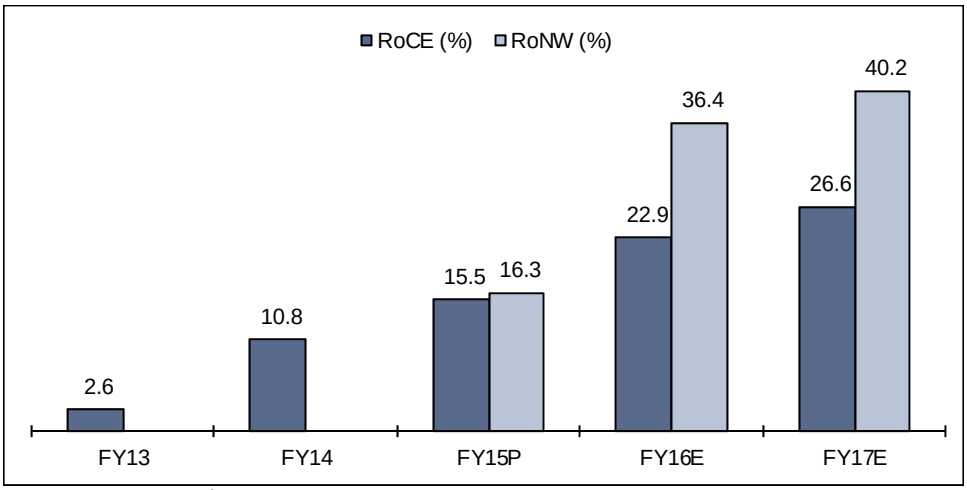

Source: I-Sec research, Company

### Chart 15: PAT margins to rise exponentially



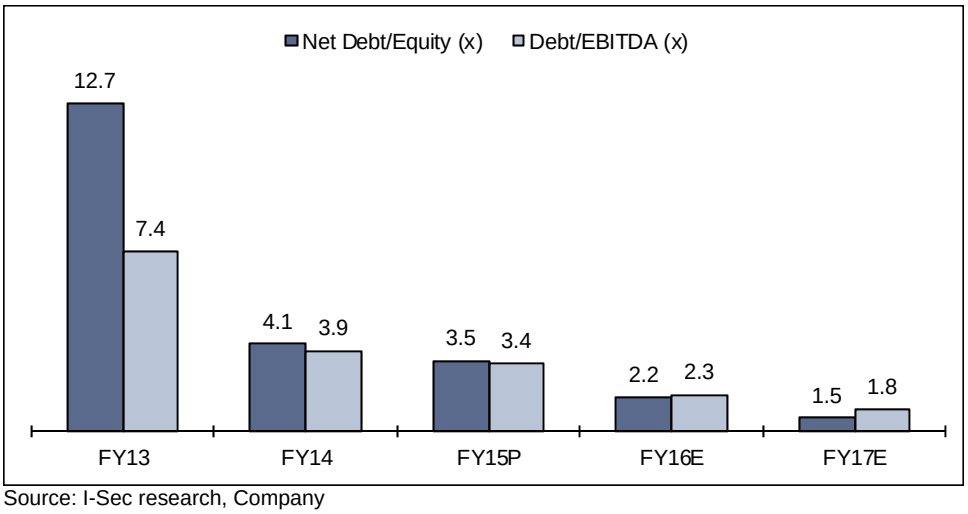

Source: I-Sec research, Company

### Chart 16: Return ratios to improve significantly



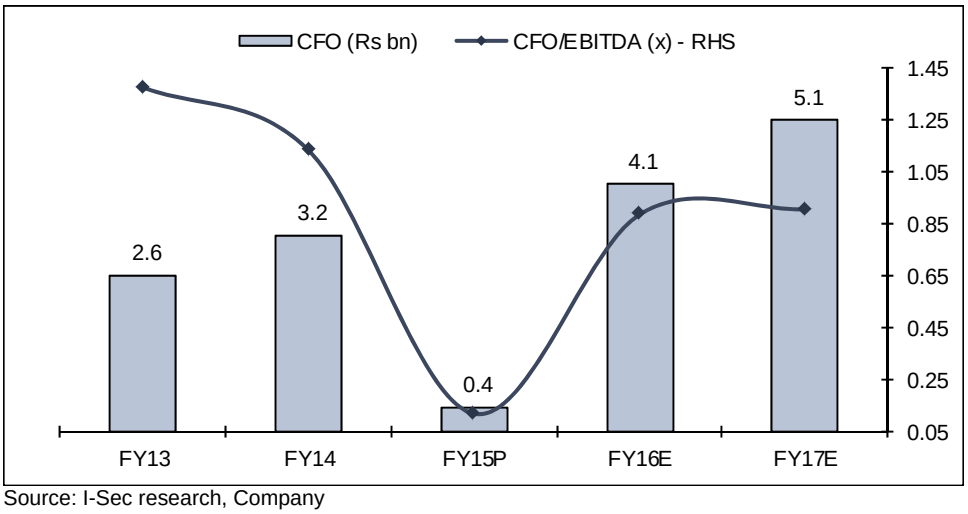

Source: I-Sec research, Company

**Chart 17: Sharp declines in leverage scenario over next two years**




Source: I-Sec research, Company

**Chart 18: Cash flows to grow rapidly**




Source: I-Sec research, Company

# Valuation and recommendation

We initiate coverage on AISG with a **BUY** rating and a target price of Rs201.

Industries witnessing structural turnarounds can have significantly higher valuations over the period in which earnings starts to consistently flow. In case of AISG we looked at the last decade (post FY06) the average EV/EBITDA multiple has been ~12.5x while over the last 5-years it has been ~10x. We feel considering the huge barriers to entry and the dominant moat in passenger vehicle industry AISG could trade at a premium to last-5 year average and has possibility of re-rating in case demand outlook or costs improve faster than anticipated. We expect EBITDA, earnings to witness ~131% CAGR across FY15-FY17E and value the stock at 10.5x (~15% discount to last 10-year average) FY17E EBITDA. We initiate coverage on AISG with a BUY rating. In terms of cash flow (post capex) yield, the stock remains alluring at 9% FY17E.

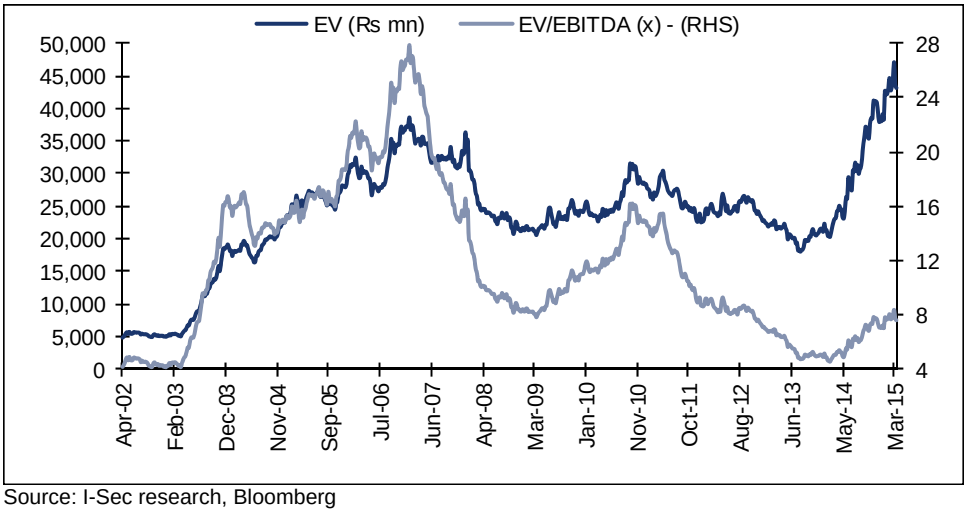
**Table 1: Peer table**

| Company | Curr. | Price | Mkt. Cap. | EPS growth (% YoY) | | | P/E (x) | | | EV/EBITDA (x) | | | ROE (%) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FY15 | FY16E | FY17E | FY15 | FY16E | FY17E | FY15 | FY16E | FY17E | FY15 | FY16E | FY17E |
| **Asahi India Glass** | **INR** | **146** | **557** | **N.M.** | **157** | **65** | **55.1** | **21.5** | **13.0** | **14.0** | **9.9** | **8.0** | **16.3** | **36.4** | **40.2** |
| Saint-Gobain | EUR | 42 | 26,628 | 55 | 47 | 19 | 24.6 | 16.8 | 14.0 | 7.4 | 7.2 | 6.6 | 5.4 | 7.5 | 8.7 |
| Fuyao Glass Ind. | HKD | 693 | 6,661 | (1) | 135 | 2 | 50.3 | 21.4 | 21.0 | 6.4 | 6.0 | 5.7 | 1.4 | 3.4 | 3.3 |
| Asahi Glass Co | JPY | 19 | 6,224 | 16 | (2) | 14 | 16.9 | 17.3 | 15.2 | 9.9 | 8.8 | 7.5 | 26.6 | 20.4 | 18.0 |
| Nippon Sheet Glass | JPY | 123 | 900 | N.M. | 36 | 224 | 66.5 | 48.8 | 15.0 | 7.7 | 7.5 | 7.0 | 1.0 | 1.3 | 4.2 |

Source: I-Sec research

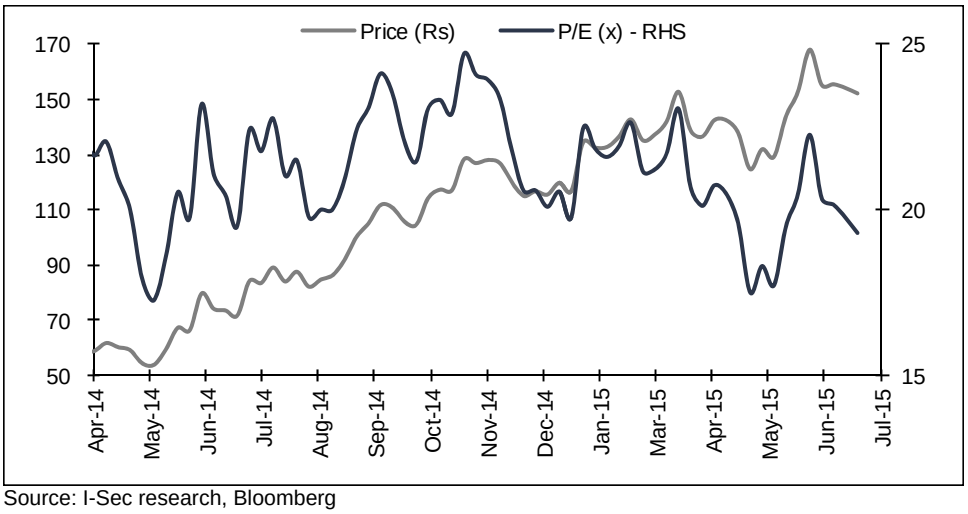
The stock currently trades at 21.5/13 FY16E/17E on P/E basis, while on EV/EBITDA basis is trading at 9.9x/8.0xFY16E/FY17E, based on our forecasts.

**Chart 19: 2-yr fwd EV/EBITDA band chart**



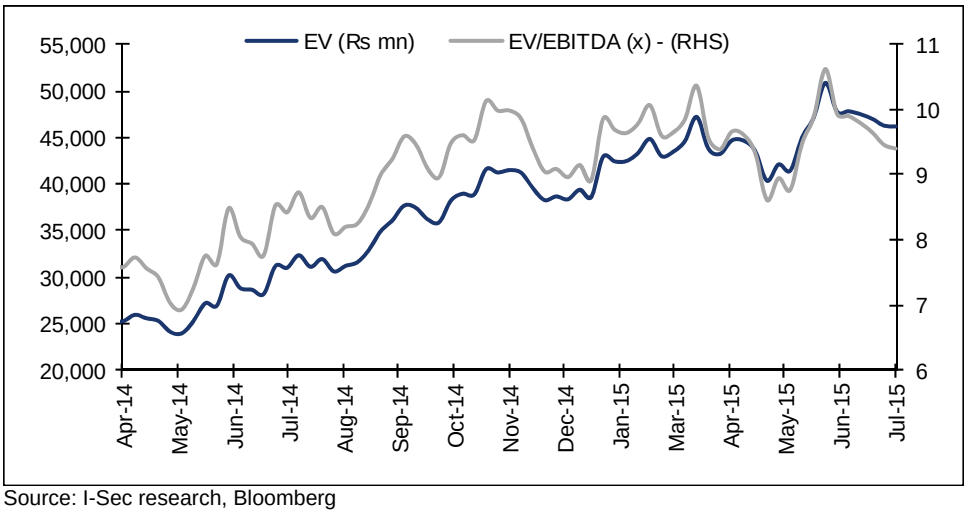

Source: I-Sec research, Bloomberg

**Chart 20: 1-yr rolling forward P/E band chart**




Source: I-Sec research, Bloomberg

**Chart 21: 1-yr rolling forward EV/EBITDA band chart**




Source: I-Sec research, Bloomberg

# Key risks

Sharp and sustained increase in global crude prices above >US$70/bbl could be a risk to our estimates.

Weakness in demand from key customers like Maruti Suzuki could affect the company's revenue growth and our estimates.

# Annexure 1: Consolidated financials

## Table 2: Profit and Loss statement

*(Rs mn, year ending March 31)*

| | FY13 | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|---|
| Net Sales | 19,134 | 21,051 | 20,572 | 23,076 | 26,983 |
| Other operating income | 42 | 8 | 8 | - | - |
| **Total Op. Income (Sales)** | **19,176** | **21,059** | **20,580** | **23,076** | **26,983** |
| Raw material expense | 6,479 | 6,932 | 7,306 | 8,593 | 9,900 |
| Employee expense | 1,520 | 1,647 | 1,708 | 2,028 | 2,484 |
| Other expenses | 9,302 | 9,623 | 8,259 | 7,850 | 8,928 |
| **Operating Expenses** | **17,301** | **18,202** | **17,273** | **18,472** | **21,312** |
| **EBITDA** | **1,875** | **2,856** | **3,307** | **4,604** | **5,672** |
| *% margins* | *9.8%* | *13.6%* | *16.1%* | *20.0%* | *21.0%* |
| Depreciation & Amortisation | 1,486 | 1,371 | 1,072 | 1,124 | 1,175 |
| **EBIT** | **389** | **1,486** | **2,236** | **3,480** | **4,497** |
| Other Income | 194 | 48 | 168 | 42 | 45 |
| Gross Interest | 1,692 | 1,625 | 1,593 | 1,441 | 1,146 |
| **PBT** | **(1,108)** | **(91)** | **810** | **2,082** | **3,396** |
| Less: Exceptionals | 288 | 535 | 169 | - | - |
| **PBT after Exceptionals** | **(1,396)** | **(626)** | **641** | **2,082** | **3,396** |
| Less: Taxes | (478) | (224) | 133 | 432 | 679 |
| Less: Minority Interest | - | - | - | - | - |
| Add: Profit from Associates | - | - | - | - | - |
| **Net Income (Reported)** | **(918)** | **(402)** | **508** | **1,649** | **2,717** |
| **Net Income (Adjusted)** | **(729)** | **(59)** | **642** | **1,649** | **2,717** |

Source: Company data, I-Sec research

## Table 3: Balance sheet

*(Rs mn, Year ending March 31)*

| | FY13 | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|---|
| **ASSETS** | | | | | |
| **Current Assets, Loan & Advances** | | | | | |
| Inventories | 4,712 | 4,748 | 4,960 | 5,437 | 6,210 |
| Sundry debtors | 3,647 | 4,042 | 3,456 | 3,857 | 4,436 |
| Loans and advances | 681 | 753 | 955 | 1,072 | 1,037 |
| Other current assets | 9 | 5 | 6 | 7 | 8 |
| Cash & cash equivalents | 603 | 266 | 292 | 626 | 218 |
| **Total Current Assets** | **9,651** | **9,814** | **9,669** | **10,998** | **11,908** |
| **Current Liabilities & Provisions** | | | | | |
| Sundry creditors | 5,124 | 4,783 | 2,772 | 3,161 | 3,844 |
| Short-term provisions | 113 | 103 | 164 | 203 | 265 |
| Other current liabilities | 3,022 | 4,510 | 3,512 | 3,939 | 4,606 |
| **Total Current Liabilities & Provisions** | **8,258** | **9,396** | **6,447** | **7,303** | **8,716** |
| **Net Current Assets** | **1,393** | **418** | **3,222** | **3,695** | **3,192** |
| **Investments** | **163** | **163** | **164** | **164** | **164** |
| Goodwill | 0 | 0 | 0 | 0 | 0 |
| **Fixed Assets** | | | | | |
| Gross Fixed Assets | 24,000 | 24,818 | 25,707 | 26,707 | 29,207 |
| Accumulated Depreciation | 12,201 | 13,561 | 14,632 | 15,756 | 16,931 |
| **Net Fixed Assets** | **11,799** | **11,258** | **11,074** | **10,951** | **12,276** |
| Capital Work-in-Progress | 336 | 441 | 300 | 800 | 200 |
| **Total Fixed Assets** | **12,135** | **11,698** | **11,374** | **11,751** | **12,476** |
| Long term loans & advances | 515 | 425 | 567 | 636 | 744 |
| Deferred Tax Assets | 1,811 | 1,930 | 1,822 | 1,722 | 1,622 |
| Other non-cuurent asset | 0 | 0 | 0 | 0 | 0 |
| **Total Assets** | **16,017** | **14,634** | **17,149** | **17,967** | **18,198** |
| | | | | | |
| **LIABILITIES** | | | | | |
| **Borrowings** | **13,922** | **11,069** | **11,272** | **10,672** | **10,172** |
| *long-term borrowings* | 6,117 | 4,098 | 8,102 | 7,502 | 7,002 |
| *short-term borrowings* | 7,805 | 6,971 | 3,170 | 3,170 | 3,170 |
| Long-term provisions | 0 | 0 | 0 | 0 | 0 |
| Deferred Tax Liability | 891 | 786 | 786 | 786 | 786 |
| Other Non-current Liabilities | 157 | 153 | 1,981 | 1,981 | 481 |
| Minority Interest | 0 | 0 | 0 | 0 | 0 |
| Equity Share Capital | 160 | 243 | 243 | 243 | 243 |
| Reserves & Surplus | 888 | 2,384 | 2,867 | 4,285 | 6,516 |
| **Net Worth** | **1,048** | **2,627** | **3,110** | **4,528** | **6,759** |
| **Total Liabilities** | **16,017** | **14,634** | **17,149** | **17,968** | **18,198** |

Source: Company data, I-Sec research

## Table 4: Cashflow statement

*(Rs mn, Year ending March 31)*

| | FY13 | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|---|
| **Cash Flow from Operating Activities** | | | | | |
| PAT | (918) | (402) | 508 | 1,649 | 2,717 |
| Add: Depreciation | 1,486 | 1,371 | 1,072 | 1,124 | 1,175 |
| Add: Other Operating activities | 1,692 | 1,625 | 1,593 | 1,441 | 1,146 |
| **Operating cash flow before working capital changes** | **2,259** | **2,594** | **3,173** | **4,214** | **5,038** |
| **Changes in working capital** | | | | | |
| (Increase) / Decrease Inventories | 42 | (36) | (212) | (477) | (773) |
| (Increase) / Decrease Receivables | (524) | (395) | 586 | (401) | (579) |
| Increase / (Decrease) Payables | 1,441 | (341) | (2,011) | 389 | 683 |
| Others | (644) | 1,410 | (1,141) | 349 | 763 |
| **Net Working Capital Changes** | **315** | **638** | **(2,778)** | **(139)** | **94** |
| **Cash flow from Operating Activities** | **2,574** | **3,231** | **395** | **4,075** | **5,132** |
| **Capital Commitments** | **(699)** | **(933)** | **(748)** | **(1,500)** | **(1,900)** |
| **Free Cash Flow** | **1,875** | **2,298** | **(353)** | **2,575** | **3,232** |
| **Cash flow from Investing Activities** | **(1,169)** | **(1,072)** | **1,045** | **(1,469)** | **(3,408)** |
| **Cash Flow from Financing Activities** | | | | | |
| Issue of Share Capital | 500 | (417) | - | - | - |
| Inc/(Dec) in securities premium | - | 2,386 | - | - | - |
| Buyback of shares | - | - | - | - | - |
| Inc/(Dec) in Borrowings | 357 | (2,853) | 204 | (600) | (500) |
| Dividend paid | - | - | - | (243) | (486) |
| Others | **(1,827)** | **(1,613)** | **(1,618)** | **(1,429)** | **(1,146)** |
| **Cash flow from Financing Activities** | **(969)** | **(2,496)** | **(1,414)** | **(2,272)** | **(2,133)** |
| **Net Cash Flow** | **436** | **(337)** | **26** | **334** | **(408)** |
| **Opening Cash & Bank balance** | **168** | **603** | **266** | **292** | **626** |
| **Closing Cash & Bank balance** | **603** | **266** | **292** | **626** | **218** |
| **Increase / (Decrease) in Cash & cash equivalents** | **436** | **(337)** | **26** | **334** | **(408)** |

Source: Company data, I-Sec research

## Table 5: Key ratios

*(Year ending March 31)*

| | FY13 | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|---|
| **Per Share Data (in Rs.)** | | | | | |
| EPS (Basic) | (3.8) | (1.7) | 2.1 | 6.8 | 11.2 |
| EPS (Adjusted) | (3.0) | (0.2) | 2.6 | 6.8 | 11.2 |
| Cash EPS | 2.3 | 4.0 | 6.5 | 11.4 | 16.0 |
| Dividend per share (DPS) | - | - | - | 1.0 | 2.0 |
| BVPS (Adjusted) | 4.3 | 10.8 | 12.8 | 18.6 | 27.8 |
| **Growth Ratios (%)** | | | | | |
| Total Op. Income (Sales) | 15.8 | 9.8 | -2.3 | 12.1 | 16.9 |
| EBITDA | -8.1 | 52.4 | 15.8 | 39.2 | 23.2 |
| Net Income (Adjusted) | N.M. | N.M. | N.M. | 157.0 | 64.7 |
| EPS (Adjusted) | N.M. | N.M. | N.M. | 157.0 | 64.7 |
| Cash EPS | -16.3 | 70.6 | 63.1 | 75.6 | 40.3 |
| BVPS (Adjusted) | -29.1 | 150.8 | 18.4 | 45.6 | 49.3 |
| **Valuation Ratios (x)** | | | | | |
| P/E (Adjusted) | - | - | 55.1 | 21.5 | 13.0 |
| P/BV (Adjusted) | 33.8 | 13.5 | 11.4 | 7.8 | 5.2 |
| EV/EBITDA | 26.0 | 16.2 | 14.0 | 9.9 | 8.0 |
| EV/Sales | - | - | - | - | - |
| **Return/Profitability Ratio (%)** | | | | | |
| Raw Material Expenses/Sales | 33.8 | 32.9 | 35.5 | 37.2 | 36.7 |
| Employee Expenses/Sales | 7.9 | 7.8 | 8.3 | 8.8 | 9.2 |
| Marketing Expenses/Sales | - | - | - | - | - |
| Administrative Expenses/Sales | - | - | - | - | - |
| Other Expenses/Sales | 25.5 | 23.5 | 23.0 | 22.2 | 21.1 |
| Power & Fuel/Sales | 23.0 | 22.2 | 17.1 | 11.8 | 12.0 |
| EBITDA Margin | 9.8 | 13.6 | 16.1 | 20.0 | 21.0 |
| Net Income Margin (Adjusted) | N.M. | N.M. | 2.5 | 7.1 | 10.1 |
| RoCE | 2.6 | 10.8 | 15.5 | 22.9 | 26.6 |
| RoNW | N.M. | N.M. | 16.3 | 36.4 | 40.2 |
| Dividend Payout Ratio | - | - | - | 14.7 | 17.9 |
| Dividend Yield | - | - | - | 0.7 | 1.4 |
| **Solvency/Wkg. Cap. Ratios (x)** | | | | | |
| Net D/E | 12.7 | 4.1 | 3.5 | 2.2 | 1.5 |
| Debt/EBITDA | 7.4 | 3.9 | 3.4 | 2.3 | 1.8 |
| EBIT/Interest | 0.2 | 0.9 | 1.4 | 2.4 | 3.9 |
| Current Ratio | 1.2 | 1.0 | 1.5 | 1.5 | 1.4 |
| Quick Ratio | 0.6 | 0.5 | 0.7 | 0.8 | 0.7 |
| Inventory (days) | 90 | 82 | 88 | 86 | 84 |
| Receivables (days) | 70 | 70 | 61 | 61 | 60 |
| Payables (days) | 98 | 83 | 49 | 50 | 52 |

Source: Company data, I-Sec research

# Annexure 2: Index of tables and charts

## Tables



## Charts

Equity Research

July 15, 2015

BSE Sensex: 27961

## Autos

**Target price Rs588**

### Shareholding pattern

| | Sep '14 | Dec '14 | Mar '15 |
|---|---|---|---|
| Promoters | 65.6 | 65.6 | 65.6 |
| Institutional investors | 22.5 | 23.4 | 23.5 |
| MFs and UTI | 5.7 | 5.0 | 5.1 |
| Insurance Co | - | - | - |
| FIIs | 16.7 | 18.2 | 18.3 |
| Others | 12.0 | 11.0 | 10.9 |

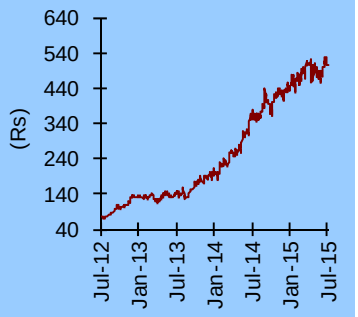
Source: NSE

### I-Sec vs Bbg* consensus

| (%) | FY16E | FY17E |
|---|---|---|
| Sales | (6) | (1) |
| EBITDA | (8) | 1 |
| PAT | (7) | 9 |

Source: *Bloomberg, I-Sec research

### Price chart





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**INDIA**

ICICI Securities

# Motherson Sumi Systems

**ADD**

## The supplier that galloped ahead!

**Rs529**

Reason for report: Initiating coverage

**Motherson Sumi (MSS) is one of the leading tier 1.5 auto component company (ranked 41st globally) listed on Indian bourses. MSS has three business pillars: a) a dominant supplier of passenger car wiring harness in India (65% market share), b) leading manufacturer of rear view mirrors globally (22% global market share) and c) currently amongst the largest supplier of polymer moulded parts and modules in the Europe. MSS's phenomenal growth (42% CAGR in revenues) over the past decade has been driven by both acquisitions and increasing product lines. However, for us, one of the key differentiators for the success of the company is the vision of its management and its capability to identify M&A opportunities. The company which has consistently outperformed the industry on delivering the targets, has again set another five-year target on delivering revenue of US$ 18bn, RoCE of 40% and dividend payout of 40%. We feel comfortable about the business model which works to insulate itself from shocks to customers, segments and geographies in terms of demand, and still targets to grow ahead of peers and industry. We estimate the earnings to grow at healthy CAGR of ~16% over FY15-17E. We value the stock on a SOTP basis (India: 25x/International subs: 20x FY17E PE) and ascribe a target price of Rs588/share with an ADD rating.**

- **The Indian behemoth – to add customers, geographies and market share:** MSS is in its next five year journey is entering into the two largest and relatively higher growth automotive markets (USA and China). We envisage rapid increase in order flow likes of Daimler AG, Ford Motor Company and General Motors, as prior MSS was handicapped due to lack of NAFTA manufacturing footprint. We believe MSS could witness increase in market share as OEMs start to adjust to risks reduced mega suppliers (Magna, Visteon and Johnson Control have exited the business).
- **As industry aggregates MSS's track record, management focus lends confidence:** As highlighted earlier, the global auto component industry is undergoing aggregation at a fast pace with ever increasing needs of OEMs. Under this context MSS remains a clear favourite of OEMs considering its track record of making large acquisitions globally with commendable ease. We believe ~40% of incremental growth (~$5bn) would come from the inorganic route which however could still be carried with same purchase philosophy (*customer driven)*.

  **Scarcity premium deservedly to remain high:** MSS is first Indian components supplier breaking the hegemony of global counterparts like Faurecia, Magna and Johnson Control. We believe considering its phenomenal growth potential both in home market as well as globally the stock would continue to trade at a premium to global peers. We value the stock on a SOTP basis (India: 25x/Europe: 20x FY17E PE) and ascribe a target price of Rs588/share with a **ADD** rating.

| | |
|---|---|
| Market Cap | Rs466bn/US$7.3bn |
| Reuters/Bloomberg | MOSS.BO / MSS IN |
| Shares Outstanding (mn) | 881.8 |
| 52-week Range (Rs) | 529/348 |
| Free Float (%) | 34.4 |
| FII (%) | 18.3 |
| Daily Volume (US$/'000) | 11,742 |
| Absolute Return 3m (%) | 3.9 |
| Absolute Return 12m (%) | 49.9 |
| Sensex Return 3m (%) | (3.2) |
| Sensex Return 12m (%) | 11.7 |

| Year to Mar | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|
| Revenue (Rs bn) | 304.3 | 350.3 | 385.9 | 488.7 |
| Rec. Net Income (Rs bn) | 7.7 | 9.8 | 14.1 | 23.3 |
| EPS (Rs) | 8.7 | 11.1 | 16.0 | 26.4 |
| % Chg YoY | 72.1 | 28.0 | 43.6 | 65.8 |
| P/E (x) | 60.9 | 47.6 | 33.1 | 20.0 |
| CEPS (Rs) | 17.9 | 20.2 | 27.6 | 39.7 |
| EV/E (x) (Incl. Indus) | 21.1 | 15.6 | 12.4 | 8.2 |
| Dividend Yield (%) | 0.5 | 0.6 | 0.9 | 1.5 |
| RoCE (%) | 18.4 | 24.1 | 26.1 | 35.0 |
| RoE (%) | 25.9 | 25.9 | 31.7 | 39.3 |

## TABLE OF CONTENTS

## Vision and execution the key differentiators!

A large customer base, wide geographic coverage, numerous technological partnerships and tier-1.5 supplier status make MSS a dominant player in the global auto ancillary space in interiors and exteriors (more than 80% of consolidated revenues).

MSS is also one of the best proxies in India to play the passenger vehicle penetration and growth theme, as it is the largest supplier of wiring harnesses. We believe the company is a key beneficiary of increasing auto demand in India given its dominant position and high barriers to entry.

On the global side, we believe, new geographies like North America and bigger share of business from customers like Daimler AG would be the significant way to success in the next five years.

The market remains concerned about the future acquisition/s needed to achieve the revenue target of US$ 18bn over the next five years. However, we chose to focus on acquisitions made by the company in the past (SMR and Peguform) to have confidence on the management's ability to not only choose targets well but also mitigate possible acquisition risks.

**Chart 1: Customer revenue break-up**

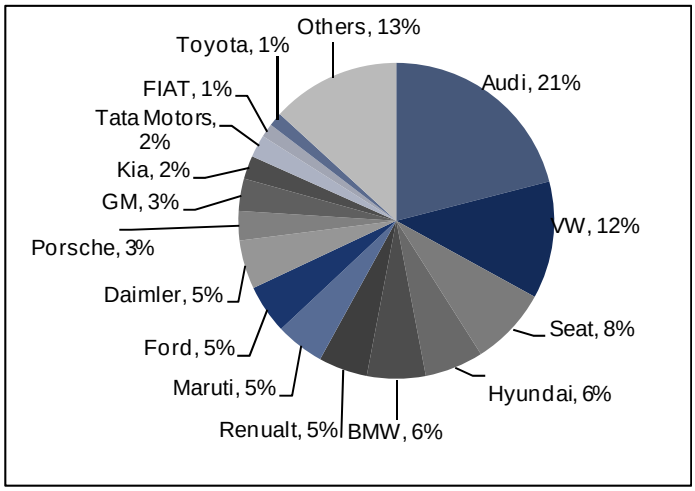
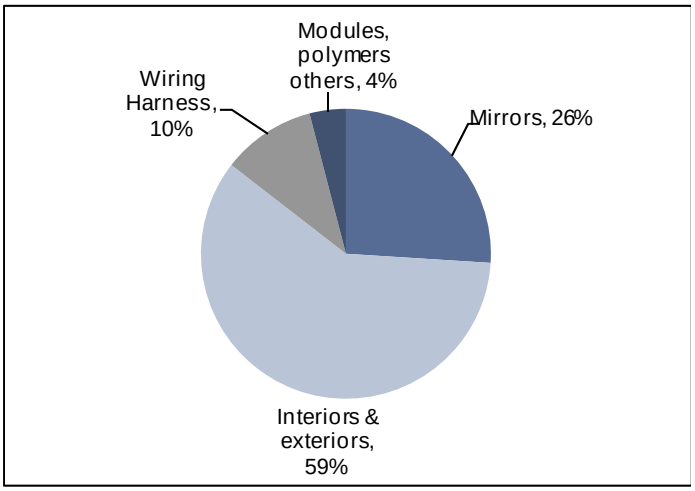
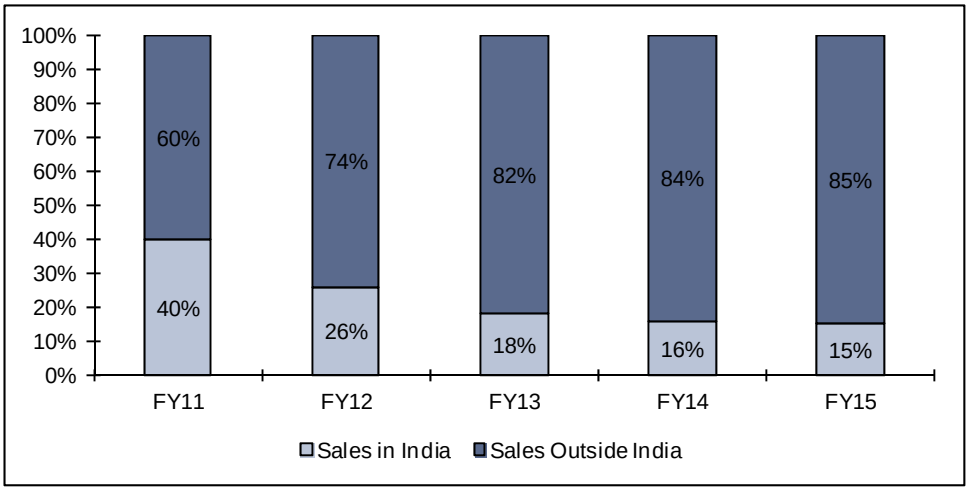



**Chart 2: Segment wise revenue break-up**




Source: Company, I-Sec Research

**Chart 3: Geographic breakup of sales across last five years**




Source: Company, I-Sec Research

## Wiring harness business to remain strong

MSS is the market leader in wiring harnesses for passenger vehicles in India, with a two-third market share. One of the biggest advantages for MSS is to have Sumitomo Wiring Systems (SWS) -- one of the global leaders in auto wiring -- as an equity partner (26% equity in MSS). SWS provides technical support for manufacturing wiring harnesses, components, injection-moulded parts, and engineering design to SWS. It also trains engineers and production personnel, and shares Japanese manufacturing techniques with MSS. The major competitors of MSS in India are Japanese players like Delphi and Yazaki who operate under joint ventures in India.

Auto makers remain committed to adoption of intelligent electronics which make their vehicles safer to drive and more friendly to environment. This is quite evident from the whole host of new launches across OEMs which have multiplied electronic offerings for Indian customers. The global under-the-hood electronics market is ~US$45 bn which as per industry participants could grow to ~US$ 77bn by CY20. Thus from an Indian perspective, MSS could continue to witness increased growth for wiring harness segment as both electronic content growth on account of consumer demand as well enforced by emission norms would have connectivity requirements as electrical systems become more complicated.

The company is also well placed to grow the business rapidly given its strong association with global OEMs, who could rapidly expand their India manufacturing footprint in the coming years. MSS has a strong vertical integration for key inputs for wiring harnesses such as wires, fuse boxes, connectors and terminals.

The company is looking to expand its global presence in the non-auto and commercial vehicle wiring harness segment. In the same sequence, it acquired the wiring harness business of Stoneridge, which has a presence in the farm and commercial vehicle segments. MSS bought the company for US$66 mn (EV/Sales : 0.2x, Sales: US$ 300mn) and is looking at turning around the business by driving stronger top line, as it looks to improve efficiencies across its six plants adding new customers, new products and increasing backward integration. MSS is looking at various new customers like Paccar, Navistar and John Deere for bigger supplies from erstwhile Stoneridge (MWS).

## SMRPBV readying for continued global growth!

SMRPBV is a consolidated structure which holds both SMP and SMR.
MWS-Motherson Wiring systems

Samvardhana Motherson Automotive System BV (SMRPBV) truly operates on a global platform, which it continues to expand further into NAFTA and China. SMRPBV has 45 manufacturing facilities across 16 countries and of 45 manufacturing facilities, Samvardhana Motherson Reflectec (SMR) operates 20 facilities and Samvardhana Motherson Peguform (SMP) 25.

**Table 1: Snapshot of new plants coming up across globe**

| Company | Region | Plant | Product | Type | Commissioning period |
|---|---|---|---|---|---|
| SMP | Europe | Schierling | Exterior modules | Greenfield | Started |
| SMP | Europe | Oldenburg | Paint shop for exterior modules | Brownfield | Started |
| SMP | Europe | Botzingen | Natural fibre door panels | Brownfield | Q3FY16 |
| SMP | Europe | Polinya | New pain line/ rebuilding scorched plant | Brownfield | Q1FY16 |
| SMR | Europe | France | Actuator manufacturing and assembly line | Greenfield | Started |
| SMR | Asia-Pacific | Chongqing | Exterior mirrors | Greenfield | Started |
| SMP | Asia-Pacific | Beijing | Door Panels | Greenfield | Q1FY17 |
| SMP | Asia-Pacific | Foshan | Plastic parts- A/B/C pillars | Greenfield | Started |
| SMR | NAFTA | Michigan | Exterior mirrors | Greenfield | Started |
| SMP | NAFTA | San Jose | Exterior modules | Greenfield | Q1FY17 |

Source: Company, I-Sec Research

SMRPBV Group continues to strengthen existing relationships with OEM customers while simultaneously pursuing opportunities to develop new OEM relationships. The company continues to maintain strong track record of repeat orders as well as expand new orders from OEM customers.

SMRP BV Group has been awarded incremental new orders of ~€4.2 bn in FY15, of which ~€1.2 bn worth of orders are for SMR whereas the remaining are for SMP. One of the key order wins in the year was of ~€2.2 bn from Daimler AG for the supply of a range of exterior and interior systems for Mercedes Benz expected to commence from CY18.This order will require SMRPBV to open two new plants (one each in USA and Germany) to move closer to customer and secure higher share of business in future.

## Investing into new technologies to stay ahead of competition

SMRPBV is committed to technological leadership and, has been investing in developing new innovative solutions to meet growing customer demands. SMRPBV has Research & Development (R&D) engineering staff of more than 700, which has led to a strong patent portfolio of more than 900 patents coupled with 25 design centres and more than 27 registered utility models. Some of the key successes in product development exercise are listed below.

- Blind spot detection systems (BSDS) designed to enhance safety by using a sophisticated camera system to recognize vehicles in driver's blind spot
- Telescopic trailer tow (TTT) mirrors with power telescopic and power folding functions, designed to aid visibility when towing wide loads
- Door panels manufactured using innovative lightweight and recyclable natural fibre materials to help become increasingly environment friendly
- Aesthetic/emotion-Audi and JLR two tone slash skin for panels and logo lamp

There are two competing technologies for blind spot detection system or BSDS -- one based on radar technology and the other based on camera technology. MSS believes that the camera technology has an edge over the radar technology, as the former technology delivers a smarter image. The company is also working towards technologies which could possibly integrate laser into the existing camera technology. It is also investing heavily after developing cameras with much higher frame rate and resolution, which could provide an edge over the radar technology.

Though there is significant potential for camera and mirror substitution, the high cost structure at present (camera can cost up Euro 200) will make mass migration to the system difficult. However, with declining costs, the management expects the use of camera-based systems to grow over the time. The company has developed the software in house whereas camera is sourced from Taiwan. The successful adoption of these technologies can significantly enhance the margins of the company in the coming years.

## Are concerns over SMRPBV's margin trajectory unreasonable?

Many investors and analysts are of the view that SMP and SMRPBV together will not be able to significantly scale up the company's margins given the factors ranging from OEM pricing squeeze to competition (mentioned earlier in the note).

We tried to put some more mind into the idea and analyse one of the key cost component in auto components (Labour productivity/costs) employee costs **(~18% of revenue)**. We have chosen Faurecia as the closest peer in terms of business. We have deliberately ignored gross margins, as any savings from backward integration such as product mix and market mix in the case of MSS plays a big part in the same. This also attempts to provide level playing field to global players on the gross margin front.

**Table 2: Comparison of key cost component of Faurecia and Motherson**

| | Faurecia | | Motherson Sumi | | % change | |
|---|---|---|---|---|---|---|
| | AY14 | AY15 | AY14 | AY15 | AY14 | AY15 |
| Revenue per employee | 188.886 | 193.877 | 209.627 | 167.262 | 11 | -14 |
| Cost per employee | 33.943 | 34.836 | 39.359 | 29.920 | 16 | -14 |

Source: Company, I-Sec Research

Faurecia has worldwide presence and is the global leader in the automotive interiors business, supplying to the biggest customers and platforms in the space. However, it also has a very high labour cost structure.

It is interesting to note that till FY14, SMRPBV which was primarily centred for manufacturing in Europe, which explains its higher cost per employee (~16%) vis-à-vis Faurecia, conversely it also had superior revenue per employee (~11%) (Refer Table 2). However, in FY15, SMRPBV's revenues dropped (by ~14%) which has more to do with the company's six new plants that came into operation in H2FY15 and which are yet to ramp up well. However, the cost side effect of these new plants has already started to filter through (even though these costs are also not annualised).However, these plants are located outside Europe (NAFTA, China) in lower costs zones which could lead to much a favourable productivity vs cost scenario than prevalent in Europe

*Looking at both the aspects (productivity and geographic benefits on labour costs), we believe that significant benefits from new plants will start flowing in FY16 and FY17 and that the lever in itself has potential to add **~100bps-200bps** to the company's EBITDA margin.*

**Table 3: Acquisition philosophy for MSS to not change!**

| Year | Sales (mn) | Target company | Acquirer company | EV/Sales (x) | Deal price (mn) |
|---|---|---|---|---|---|
| 2009 | € 700 | Visiocorp | Motherson Sumi | 0.0 | € 27 |
| 2011 | € 1,360 | Peguform | Motherson Sumi | 0.2 | € 142 |
| 2014 | $300 | Stoneridge | Motherson Sumi | 0.2 | € 66 |
| 2014 | € 240 | Schrier & Trier | Motherson Sumi | 0.2 | € 36 |
| | | | | | |
| 2014 | $3,617 | Halla Visteon | Hankook Tire | 1.1 | $3,417 |
| 2014 | $2,450 | Magna | Grupo Antolin | 0.2 | $430 |
| 2014 | $850 | Eagle Ottawa | Lear Corp | 0.9 | $1,000 |

Source: Company, I-Sec Research

Mergers & acquisitions (M&A) have been a key driver of shareholder value as well as growth of MSS over the years, with the management playing an instrumental role in the same. Time and again, the management has successfully targeted distressed assets with no debt and, entered into purchase of assets only when favourable terms with OEM customers were offered. These terms have enabled the company acquire assets which broke even on EBITDA right from the outset.

The management also has a track record of successfully turning around the businesses. The case in point could be SMR (Visiocorp) and SMP (Peguform), which were turned around from loss making entities to profit making ones.

Globally, big mergers & acquisitions are happening in the automotive supplier pace driven by factors as varied as changing demands from customers to lack of successful management of operations to just pure competition (mentioned earlier in the note).

We strongly feel that a new world order is slowly but surely emerging in the automotive supplier's sphere (primarily on tier 1.5 front, which is process and cost driven business).

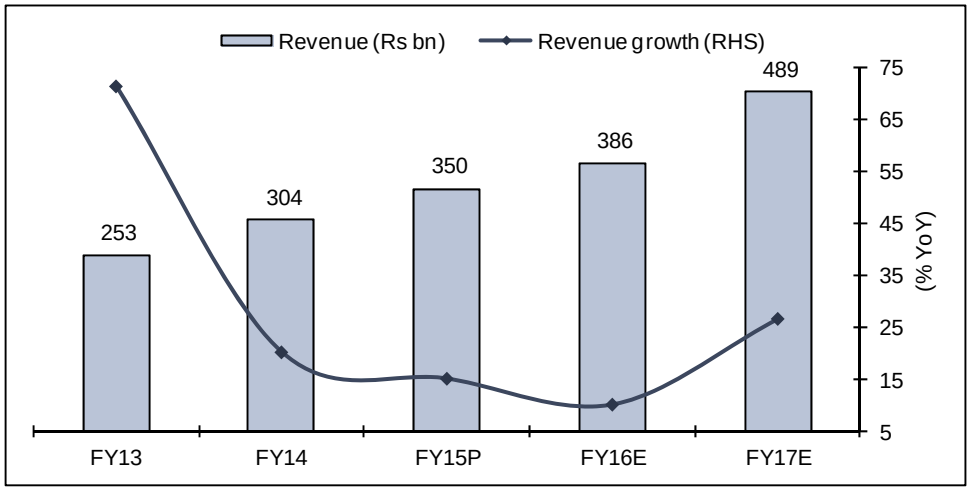
Big names of yesteryears such as Johnson Controls, Lear Corporation and Magna, the top manufactures in automotive interiors in North America, are nearly replaced by younger mega-suppliers like Faurecia, Yanfeng Automotive Trim Systems, Grupo Antolin, Motherson Sumi, and International Automotive Components Group.

Where big suppliers like Magna struggled to make money from interior components, their smaller rivals outdid them with higher degree of focus and better cost structure.

Entry into NAFTA and China will enable MSS to gain more foothold in these markets and gain on the back of best delivery, highest productivity, and relatively modest costs.

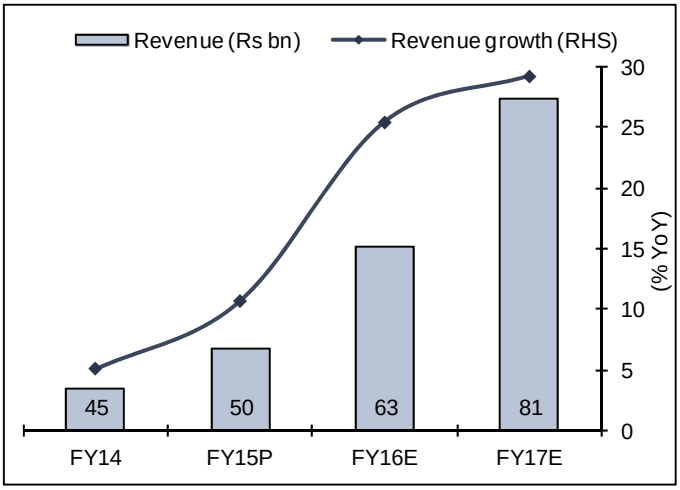
# Financials in charts

### Chart 5: Revenue growth to be stunted a bit in FY16E due to Euro effect



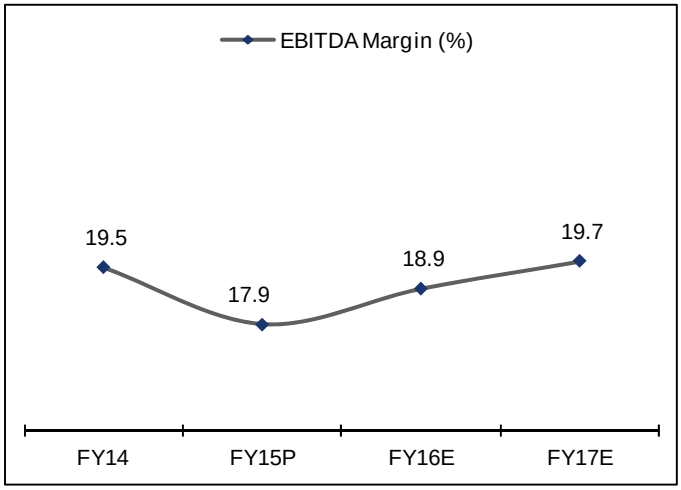

Source: I-Sec research, Company

### Chart 6: Standalone revenues to grow rapidly



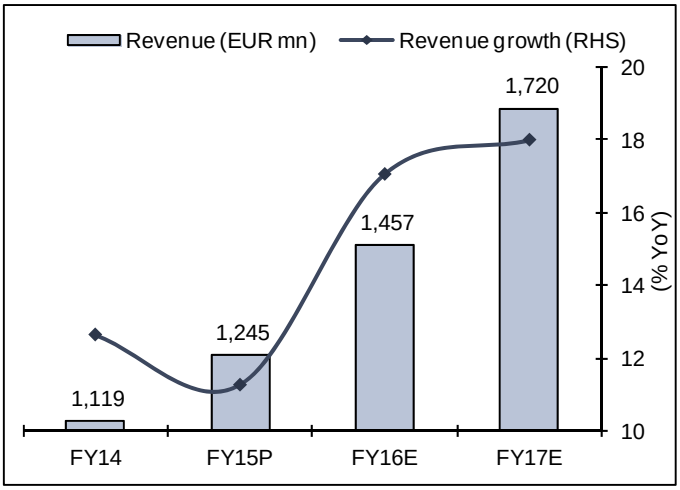

Source: I-Sec research, Company

### Chart 7: EBITDA margins remain strong



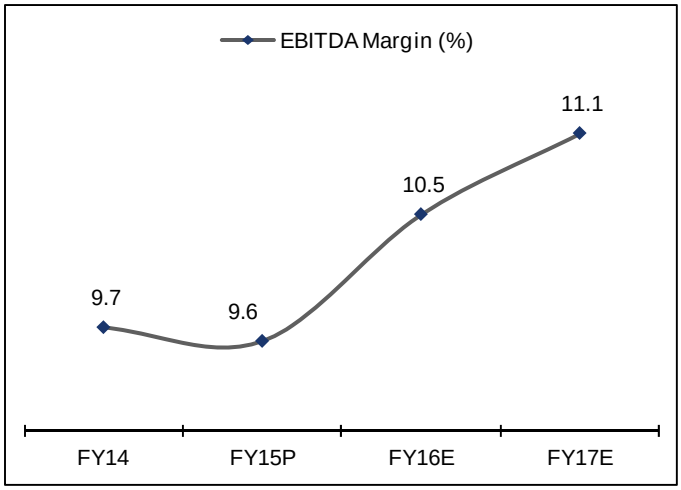

Source: I-Sec research, Company

### Chart 8: SMR to benefit from new orders



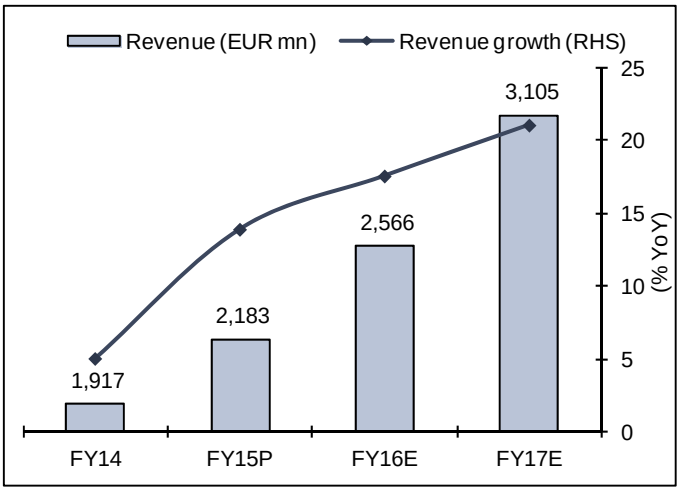

Source: I-Sec research, Company

### Chart 9:SMR EBIDTA margins on upward path



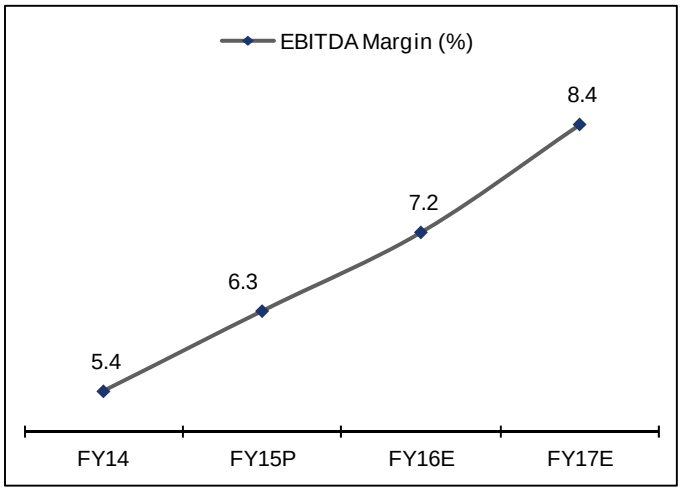

Source: I-Sec research, Company

### Chart 10:SMP biggest beneficiary of new orders



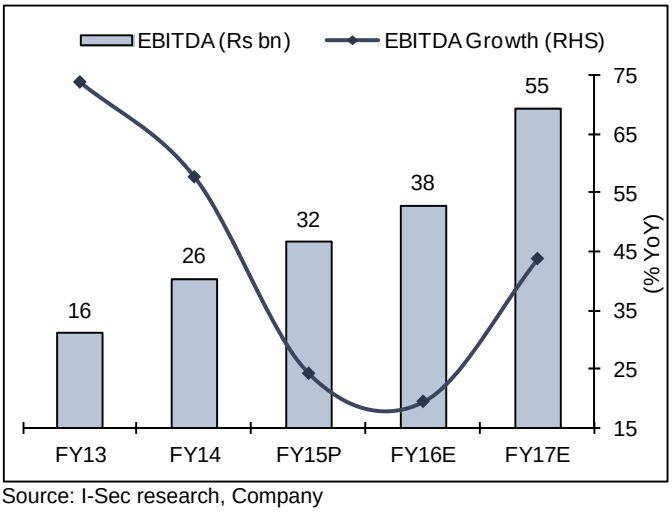

Source: I-Sec research, Company

### Chart 11: SMP margins to scale up gradually



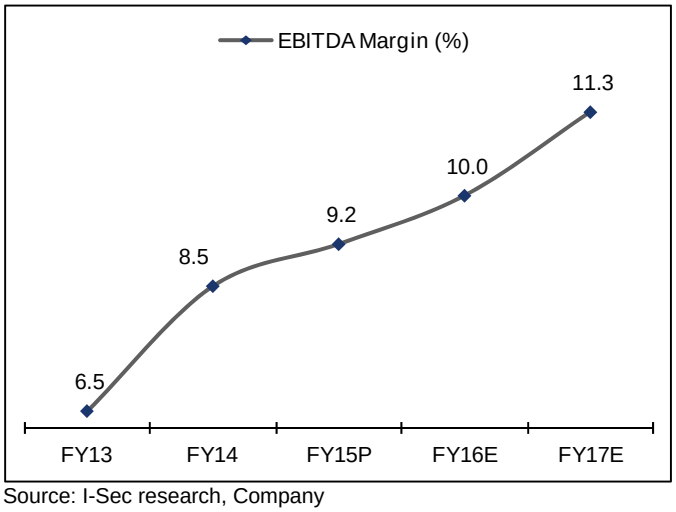

Source: I-Sec research, Company

### Chart 12: Consolidated EBITDA to grow rapidly



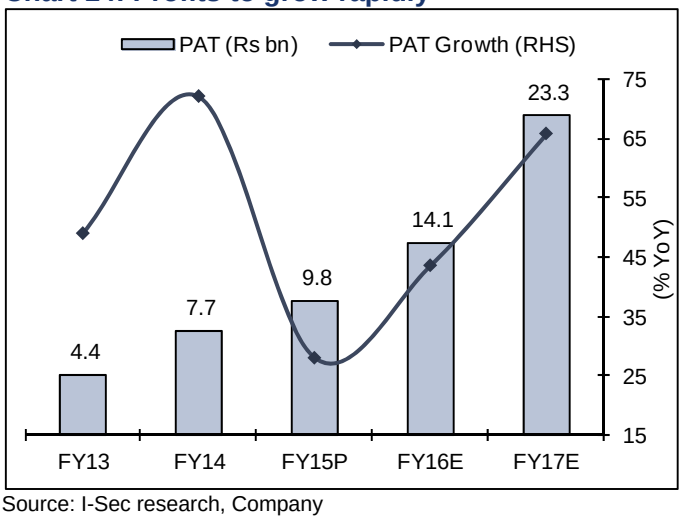

Source: I-Sec research, Company

### Chart 13:Consolidated EBITDA margins to grow



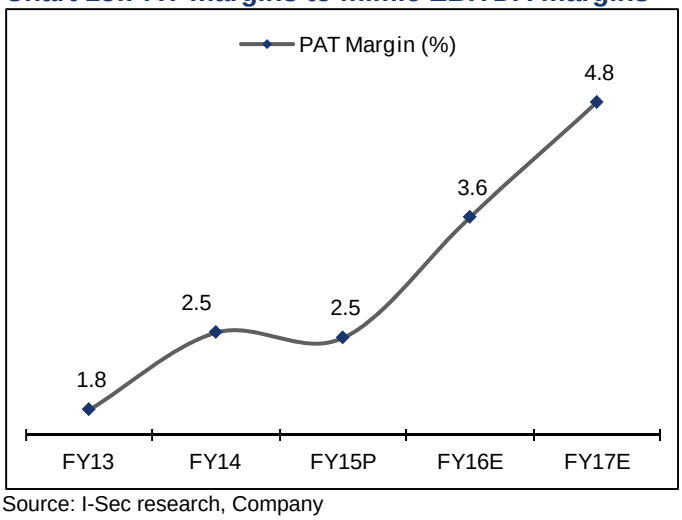

Source: I-Sec research, Company

### Chart 14: Profits to grow rapidly



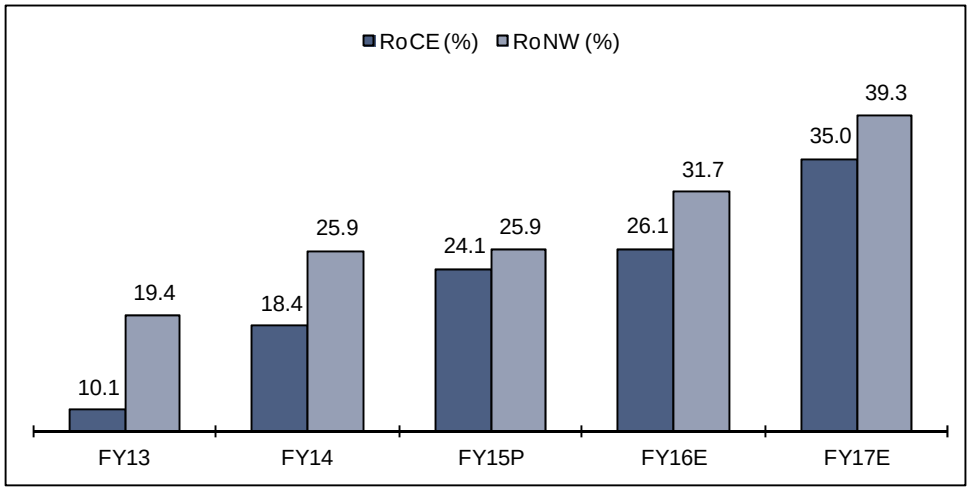

Source: I-Sec research, Company

### Chart 15:PAT margins to mimic EBITDA margins



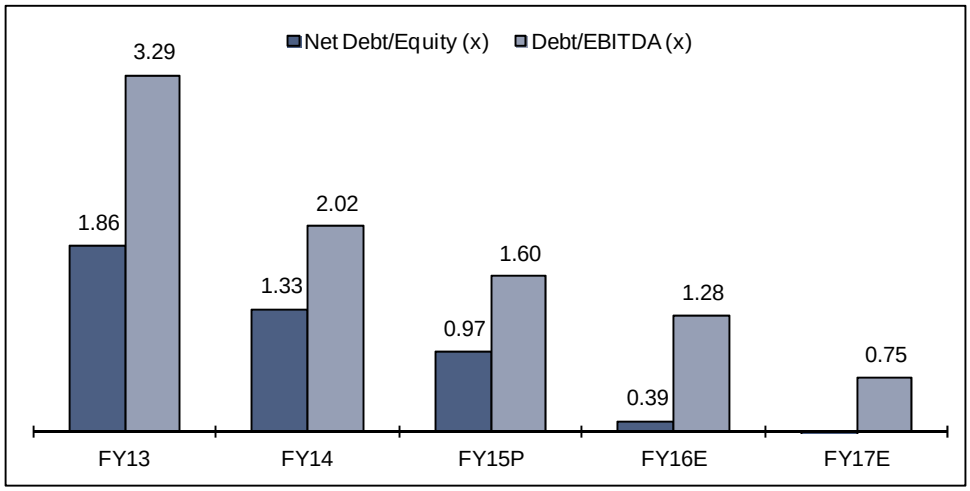

Source: I-Sec research, Company

**Chart 20: Return on assets to rise as plants start to ramp up**



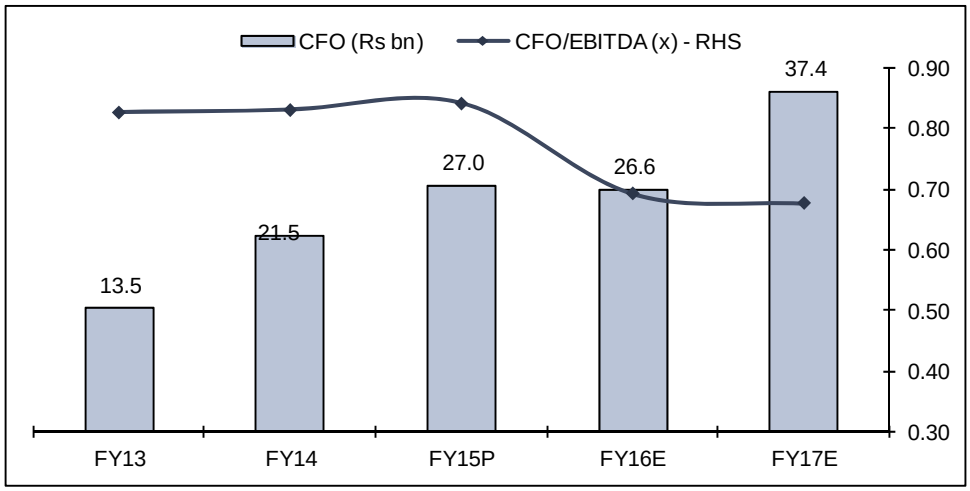

Source: I-Sec research, Company

**Chart 21: Comfortable financial leverage situation**




Source: I-Sec research, Company

**Chart 22: Strong cash flow situation to continue to grow**




Source: I-Sec research, Company

# Valuation and recommendation

We initiate coverage on the stock with a **ADD** rating and a target price of Rs588/share.

MSS is first Indian components supplier breaking the hegemony of global counterparts like Faurecia, Magna and Johnson Control. We believe considering its phenomenal growth potential both in home market as well as globally the stock would continue to trade at a premium to global peers. We value the stock on a SOTP basis (India: 25x/Europe: 20x FY17E PE) and ascribe a target price of Rs588/share with a **ADD** rating. In terms of cash flow yield, the stock remains attractive at operating cash flow (post capex) remains reasonable at 2.5% FY17E.

**Table 4: SoTP-based target price of Rs588**

| Business regions | Methodology | FY17(Rs/sh) |
|---|---|---|
| India | 25.0 x PE- (In-line with domestic peers) | 296 |
| International subsidiaries | 20.0 x PE- (Premium to global peers) | 292 |
| **Target price** | | **588** |

Source: I-Sec research

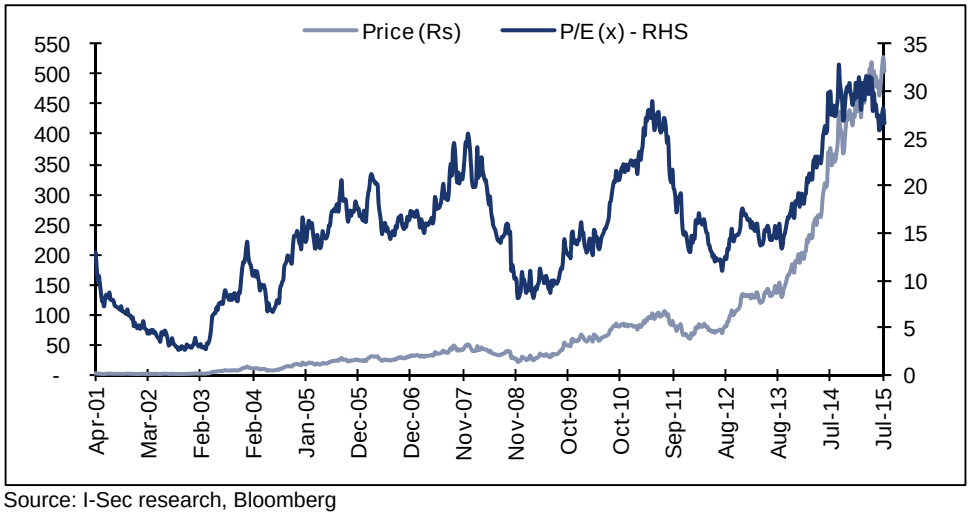
**Table 5: Peer comparison**

| Company | Curr. | Price | Mkt. Cap. | EPS growth (% YoY) | | | P/E (x) | | | EV/EBITDA (x) | | | ROE (%) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FY15 | FY16E | FY17E | FY15 | FY16E | FY17E | FY15 | FY16E | FY17E | FY15 | FY16E | FY17E |
| **Motherson Sumi** | **INR** | **529** | **7,346** | **28** | **44** | **66** | **47.6** | **33.1** | **20.0** | **15.6** | **12.7** | **8.8** | **25.9** | **31.7** | **39.3** |
| Johnson Controls | USD | 49 | 32,309 | - | 87.2 | 16.0 | 27.1 | 14.5 | 12.5 | 14.1 | 10.4 | 9.5 | 10.3 | 19.3 | 20.5 |
| Magna Intl | USD | 56 | 23,085 | 29.0 | 6.6 | 21.6 | 12.7 | 11.9 | 9.8 | 7.0 | 7.2 | 6.5 | 21.0 | 22.9 | 25.7 |
| Valeo SA | EUR | 132 | 11,599 | - | 29.8 | 13.0 | 18.3 | 14.1 | 12.5 | 7.6 | 6.3 | 5.8 | 21.9 | 23.4 | 22.3 |
| Lear Corp | USD | 105 | 8,186 | 65.5 | 14.6 | 14.6 | 12.5 | 10.9 | 9.6 | 7.7 | 6.1 | 5.6 | 22.4 | 24.7 | 25.4 |
| Faurecia | EUR | 37 | 5,101 | 69.6 | 122.5 | 21.0 | 27.6 | 12.4 | 10.3 | 5.0 | 4.1 | 3.8 | 10.3 | 19.7 | 20.9 |

Source: I-Sec research

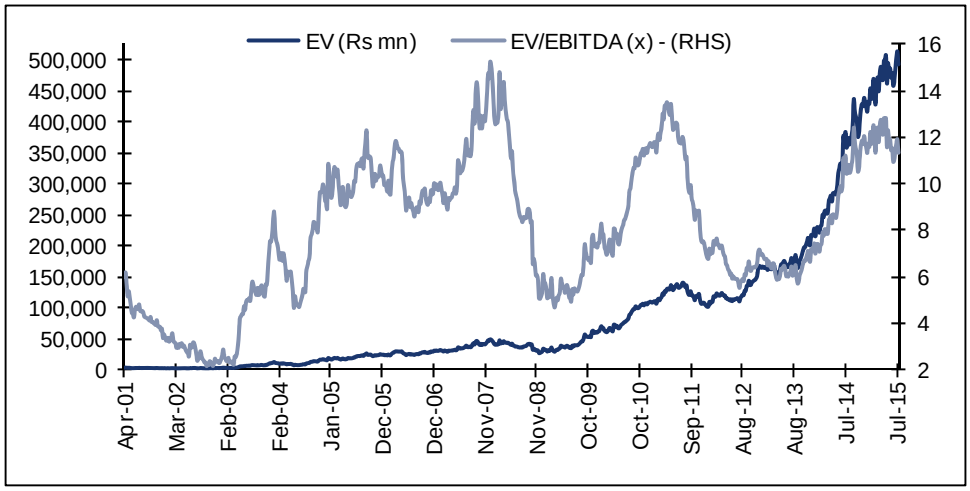
The stock currently trades at 33.1/20 FY16E/17E on PE basis while on EV/EBITDA basis the multiple is at 12.7x/8.8xFY16E/17E, based on our forecasts.

**Chart 4: PE: 1-year forward**




Source: I-Sec research, Bloomberg

**Chart 5: EV/EBITDA: 1-year forward**




Source: I-Sec research, Bloomberg

**Table 6: I-Sec vs. Consensus**

*(Rs mn)*

| | I-Sec | | Consensus | | Difference | |
|---|---|---|---|---|---|---|
| | FY16E | FY17E | FY16E | FY17E | FY16E | FY17E |
| Revenue | 385,917 | 488,682 | 412,558 | 491,194 | (6) | (1) |
| EBITDA | 38,428 | 55,260 | 41,811 | 54,906 | (8) | 1 |
| PAT | 14,067 | 23,326 | 15,077 | 21,360 | (7) | 9 |
| EPS (Rs) | 16.0 | 26.4 | 17.1 | 24.4 | (7) | 8 |

Source: Bloomberg, I-Sec research

Our estimates remain lower probably only on account of more aggressive EUR/INR assumptions for FY16E. While for FY17E we estimate reversals of below EBITDA losses and lower interest outgo

## Key risks

If Global automotive market witnesses slowdown along with key customers like VW this could affect estimates for the company.

Risk of an expensive acquisition as company chases it FY20 targets.

# Annexure 1: Consolidated financials

## Table 7: Profit and Loss statement

*(Rs mn, year ending March 31)*

| | FY13 | FY14 | FY15 | FY16E | FY17E |
|---|---|---|---|---|---|
| Net Sales | 252,792 | 304,040 | 344,903 | 378,397 | 479,191 |
| Other operating income | 332 | 239 | 5,416 | 7,520 | 9,491 |
| **Total Op. Income (Sales)** | **253,124** | **304,279** | **350,319** | **385,917** | **488,682** |
| Raw material expense | 164,838 | 193,615 | 216,314 | 238,611 | 303,137 |
| Employee expense | 42,827 | 51,065 | 63,653 | 64,642 | 74,690 |
| Forex Loss/(Gain) | 1,627 | 1,881 | 114 | (600) | (400) |
| Other expenses | 29,064 | 33,749 | 38,212 | 44,236 | 55,594 |
| **Operating Expenses** | **238,357** | **280,309** | **318,292** | **346,889** | **433,022** |
| **EBITDA** | **14,767** | **23,970** | **32,027** | **39,028** | **55,660** |
| *% margins* | *5.8%* | *7.9%* | *9.1%* | *10.1%* | *11.4%* |
| Depreciation & Amortisation | 7,145 | 8,172 | 9,206 | 10,256 | 11,676 |
| **EBIT** | **7,622** | **15,798** | **22,820** | **28,772** | **43,985** |
| Other Income | 3,215 | 3,106 | 177 | 211 | 268 |
| Gross Interest | 2,495 | 2,944 | 3,178 | 2,893 | 2,850 |
| **PBT** | **8,342** | **15,960** | **19,819** | **26,090** | **41,402** |
| Less: Exceptionals | - | - | 1,648 | - | - |
| **PBT after Exceptionals** | **8,342** | **15,960** | **18,172** | **26,090** | **41,402** |
| Less: Taxes | 3,835 | 4,993 | 5,256 | 6,682 | 10,508 |
| Less: Minority Interest | 70 | 3,316 | 4,294 | 5,905 | 8,471 |
| Add: Profit from Associates | 8 | (2) | 3 | 565 | 903 |
| **Net Income (Reported)** | **4,445** | **7,650** | **8,624** | **14,067** | **23,326** |
| **Net Income (Adjusted)** | **4,445** | **7,650** | **9,795** | **14,067** | **23,326** |

Source: Company data, I-Sec research

## Table 8: Balance sheet

*(Rs mn, Year ending March 31)*

| | FY13 | FY14 | FY15 | FY16E | FY17E |
|---|---|---|---|---|---|
| **ASSETS** | | | | | |
| **Current Assets, Loan & Advances** | | | | | |
| Inventories | 26,036 | 32,822 | 38,823 | 39,966 | 46,682 |
| Sundry debtors | 29,400 | 32,384 | 30,711 | 34,211 | 39,386 |
| Loans and advances | 7,215 | 9,728 | 13,562 | 12,217 | 20,716 |
| Other current assets | 99 | 126 | 191 | 157 | 284 |
| Cash & cash equivalents | 5,944 | 9,061 | 18,926 | 32,420 | 49,266 |
| **Total Current Assets** | **68,694** | **84,121** | **102,213** | **118,971** | **156,334** |
| **Current Liabilities & Provisions** | | | | | |
| Sundry creditors | 31,808 | 40,917 | 49,562 | 53,909 | 64,330 |
| Short-term provisions | 5,255 | 6,742 | 7,889 | 8,581 | 10,240 |
| Other current liabilities | 11,912 | 16,318 | 20,769 | 18,406 | 26,413 |
| **Total Current Liabilities & Provisions** | **48,975** | **63,977** | **78,220** | **80,895** | **100,982** |
| **Net Current Assets** | **19,719** | **20,144** | **23,993** | **38,075** | **55,352** |
| **Investments** | **716** | **749** | **649** | **749** | **849** |
| Goodwill | - | - | - | - | - |
| **Fixed Assets** | | | | | |
| Gross Fixed Assets | 107,425 | 126,336 | 140,336 | 152,336 | 165,336 |
| Accumulated Depreciation | 54,655 | 67,147 | 76,353 | 86,609 | 98,285 |
| **Net Fixed Assets** | **52,770** | **59,189** | **63,983** | **65,727** | **67,051** |
| Capital Work-in-Progress | 3,859 | 6,471 | 6,471 | 6,471 | 2,471 |
| **Total Fixed Assets** | **56,629** | **65,660** | **70,454** | **72,198** | **69,522** |
| Long term loans & advances | | | | | |
| Deferred Tax Assets | 882 | 1,184 | 1,909 | 2,209 | 2,509 |
| Other non-cuurent asset | 1,354 | 1,909 | 2,230 | 2,311 | 3,439 |
| **Total Assets** | **79,300** | **89,646** | **99,234** | **115,542** | **131,672** |
| | | | | | |
| **LIABILITIES** | | | | | |
| **Borrowings** | **48,556** | **48,394** | **51,306** | **49,806** | **41,806** |
| *long-term borrowings* | 27,159 | 29,834 | 40,859 | 39,359 | 36,359 |
| *short-term borrowings* | 21,397 | 18,560 | 10,447 | 10,447 | 5,447 |
| Long-term provisions | - | - | - | - | - |
| Deferred Tax Liability | 1,441 | 1,680 | 1,457 | 1,457 | 1,457 |
| Other Non-current Liabilities | 2,388 | 2,083 | 3,091 | 3,791 | 4,491 |
| Minority Interest | 4,025 | 7,896 | 10,142 | 16,047 | 24,518 |
| Equity Share Capital | 588 | 882 | 882 | 882 | 882 |
| Reserves & Surplus | 22,302 | 28,711 | 32,356 | 43,559 | 58,517 |
| **Net Worth** | **22,890** | **29,593** | **33,238** | **44,441** | **59,399** |
| **Total Liabilities** | **79,300** | **89,646** | **99,234** | **115,542** | **131,672** |

Source: Company data, I-Sec research

## Table 9: Cash flow statement

*(Rs mn, Year ending March 31)*

| | FY13 | FY14 | FY15 | FY16E | FY17E |
|---|---|---|---|---|---|
| **Cash Flow from Operating Activities** | | | | | |
| PAT | 4,445 | 7,650 | 8,624 | 14,067 | 23,326 |
| Add: Depreciation | 7,145 | 8,172 | 9,206 | 10,256 | 11,676 |
| Add: Other Operating activities | 2,495 | 2,944 | 3,178 | 2,893 | 2,850 |
| **Operating cash flow before working capital changes** | **14,085** | **18,766** | **21,008** | **27,216** | **37,852** |
| **Changes in working capital** | | | | | |
| (Increase) / Decrease Inventories | (3,540) | (6,786) | (6,001) | (1,143) | (6,716) |
| (Increase) / Decrease Receivables | 727 | (2,984) | 1,673 | (3,501) | (5,174) |
| Increase / (Decrease) Payables | 827 | 9,109 | 8,645 | 4,347 | 10,421 |
| Others | 1,444 | 3,353 | 1,699 | (292) | 1,039 |
| **Net Working Capital Changes** | **(542)** | **2,692** | **6,016** | **(589)** | **(431)** |
| **Cash flow from Operating Activities** | **13,543** | **21,458** | **27,024** | **26,627** | **37,421** |
| **Capital Commitments** | **(12,394)** | **(17,203)** | **(14,000)** | **(12,000)** | **(9,000)** |
| **Free Cash Flow** | **1,149** | **4,255** | **13,024** | **14,627** | **28,421** |
| **Cash flow from Investing Activities** | **(12,429)** | **(14,288)** | **(11,914)** | **(5,876)** | **(1,358)** |
| **Cash Flow from Financing Activities** | | | | | |
| Issue of Share Capital | 196 | 294 | - | - | - |
| Inc/(Dec) in securities premium | (196) | (144) | - | - | - |
| Buyback of shares | - | - | - | - | - |
| Inc/(Dec) in Borrowings | 3,039 | (162) | 2,912 | (1,500) | (8,000) |
| Dividend paid | (1,432) | (2,615) | (3,138) | (4,706) | (8,367) |
| Others | **(1,335)** | **(1,426)** | **(5,019)** | **(1,051)** | **(2,850)** |
| **Cash flow from Financing Activities** | **272** | **(4,053)** | **(5,245)** | **(7,258)** | **(19,217)** |
| **Net Cash Flow** | **1,387** | **3,117** | **9,865** | **13,494** | **16,847** |
| **Opening Cash & Bank balance** | **4,558** | **5,944** | **9,061** | **18,926** | **32,420** |
| **Closing Cash & Bank balance** | **5,944** | **9,061** | **18,926** | **32,420** | **49,266** |
| **Increase / (Decrease) in Cash & cash equivalents** | **1,387** | **3,117** | **9,865** | **13,494** | **16,847** |

Source: Company data, I-Sec research

## Table 10: Key ratios

*(Year ending March 31)*

| | FY13 | FY14 | FY15 | FY16E | FY17E |
|---|---|---|---|---|---|
| **Per Share Data (Rs)** | | | | | |
| EPS (Basic) | 5.0 | 8.7 | 9.8 | 16.0 | 26.4 |
| EPS (Adjusted) | 5.0 | 8.7 | 11.1 | 16.0 | 26.4 |
| Cash EPS | 13.1 | 17.9 | 20.2 | 27.6 | 39.7 |
| Dividend per share (DPS) | 2.0 | 2.5 | 3.0 | 4.5 | 8.0 |
| BVPS (Adjusted) | 26.0 | 33.6 | 37.7 | 50.4 | 67.4 |
| **Growth Ratios (%)** | | | | | |
| Total Op. Income (Sales) | 71.3 | 20.2 | 15.1 | 10.2 | 26.6 |
| EBITDA | 65.5 | 62.3 | 33.6 | 21.9 | 42.6 |
| Net Income (Adjusted) | 49.0 | 72.1 | 28.0 | 43.6 | 65.8 |
| EPS (Adjusted) | 49.0 | 72.1 | 28.0 | 43.6 | 65.8 |
| Cash EPS | 81.3 | 36.5 | 12.7 | 36.4 | 43.9 |
| BVPS (Adjusted) | 22.3 | 29.3 | 12.3 | 33.7 | 33.7 |
| **Valuation Ratios (x)** | | | | | |
| P/E (Adjusted) | 104.9 | 60.9 | 47.6 | 33.1 | 20.0 |
| P/BV (Adjusted) | 20.4 | 15.7 | 14.0 | 10.5 | 7.8 |
| EV/EBITDA | 34.4 | 21.1 | 15.6 | 12.4 | 8.2 |
| EV/Sales | 2.0 | 1.7 | 1.4 | 1.3 | 0.9 |
| **Return/Profitability Ratio (%)** | | | | | |
| Raw Material Expenses/Sales | 65.1 | 63.6 | 61.7 | 61.8 | 62.0 |
| Employee Expenses/Sales | 16.9 | 16.8 | 18.2 | 16.8 | 15.3 |
| Marketing Expenses/Sales | - | - | - | - | - |
| Forex Loss/(Gain)/Sales | 0.6 | 0.6 | 0.0 | (0.2) | (0.1) |
| Other Expenses/Sales | 11.5 | 11.1 | 10.9 | 11.5 | 11.4 |
| EBITDA Margin | 5.8 | 7.9 | 9.1 | 10.1 | 11.4 |
| Net Income Margin (Adjusted) | 1.8 | 2.5 | 2.5 | 3.6 | 4.8 |
| RoCE | 10.1 | 18.4 | 24.1 | 26.1 | 35.0 |
| RoNW | 19.4 | 25.9 | 25.9 | 31.7 | 39.3 |
| Dividend Payout Ratio | 39.7 | 28.8 | 27.0 | 28.2 | 30.2 |
| Dividend Yield | 0.4 | 0.5 | 0.6 | 0.9 | 1.5 |
| **Solvency/Wkg. Cap. Ratios (x)** | | | | | |
| Net D/E | 1.9 | 1.3 | 1.0 | 0.4 | - |
| Debt/EBITDA | 3.3 | 2.0 | 1.6 | 1.3 | 0.8 |
| EBIT/Interest | 3.1 | 5.4 | 7.2 | 9.9 | 15.4 |
| Current Ratio | 1.4 | 1.3 | 1.3 | 1.5 | 1.5 |
| Quick Ratio | 0.9 | 0.8 | 0.8 | 1.0 | 1.1 |
| Inventory (days) | 35 | 35 | 38 | 38 | 33 |
| Receivables (days) | 42 | 39 | 33 | 33 | 30 |
| Payables (days) | 46 | 49 | 52 | 52 | 49 |

Source: Company data, I-Sec research

# Annexure 2: Index of tables and charts

## Tables



## Charts

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Equity Research

July 15, 2015

BSE Sensex: 27961

## Autos

**Target price Rs1,250**

### Shareholding pattern

| | Sep '14 | Dec '14 | Mar '15 |
|---|---|---|---|
| Promoters | 46.8 | 46.8 | 46.8 |
| Institutional investors | 31.9 | 31.7 | 31.7 |
| MFs and UTI | 10.9 | 11.0 | 10.5 |
| Insurance Co | 1.8 | 1.7 | 1.5 |
| FIIs | 16.7 | 16.3 | 16.2 |
| Others | 21.3 | 21.5 | 21.6 |

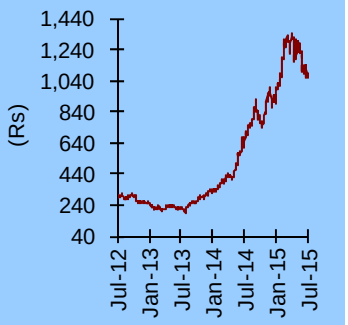
Source: NSE

### I-Sec vs Bbg* consensus

| (%) | FY16E | FY17E |
|---|---|---|
| Sales | 3 | 2 |
| EBITDA | (6) | (7) |
| PAT | (11) | (10) |

Source: *Bloomberg, I-Sec research

### Price chart

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**INDIA**

# Bharat Forge

**ADD**

## The Indian forging champion! **Rs1,124**

Reason for report: Re-Initiating coverage

**Bharat Forge (BHFC) is one of the strongest manufacturing companies based out of India. It has, across business cycles, demonstrated tremendous ability to penetrate new segments to not only de-risk its business but also drive growth. BHFC started as primarily a component supplier to the M&HCV segment, but now has nearly half its revenues from the industrial segment (Oil & Gas and Power). BHFC is ready to drive the next leg of growth through new segments like aerospace, defence, materials, railways and passenger vehicles. It is also a proxy for the 'Make in India' drive, with capabilities to develop products across a whole set of requirements for automotive as well industrial segments. We believe BHFC faces three immediate challenges: a) competition in domestic market, b) slowdown in oil & gas segment, and c) moderation in the US class-8 truck ordering. However, we believe the effects of these challenges can be mitigated by: BHFC's improving product mix (BHFC regularly culls ~20% of low end products each year) and softening commodity prices, continued judicious use of capital chould aid superior return ratios. We estimate BHFC to clock a healthy ~18%/23% CAGR on revenue/earnings over FY15-FY17E and value the stock at 25x FY17E EPS. We re-initiate coverage on the stock with an ADD rating.**

- **"Make in India" to be a major pillar for BHFC's revenues:** BHFC's capabilities on developing new products remain among the strongest in industry reflected via orders from Boeing and Safran in aerospace vertical. The management believes verticals like defence, materials and railways could scale upto ~Rs10bn each in revenue after FY18. BHFC has already started work on the land systems front for which the ordering process is underway. On targets, the management expects to meet its guidance of Rs75bn standalone revenues in FY18E.
- **Domestic competition emergence to highlight BHFC's capabilities:** The forgings industry is a basic building block for any machinery manufacturing. Globally, the industry ranges from the highly unorganised (hand-hammer) to extremely complex high-value (press) forging. Recently, new competition has emerged in the India market, which seems to be banking upon providing lower pricing to customers to take market share. We feel this might create disruptions in short term; however, BHFC's costing structure and manufacturing competence is capable of handling these pressures and, in the longer run, smaller competitors tend to lose profitability or delivery consistencies when market conditions turn unfavourable.
- **Valuations remain at a justified high:** BHFC's valuations are reflective of unique automotive positioning as leading automotive supplier with a diversified product mix, >20% RoCE coupled with unique defence sector exposure. The stock trades at 22.6x EPS / 12.9x EV/EBITDA FY17E. We value the stock at 25x FY17E EPS to ascribe a target price of Rs1,250. We re-initiate coverage with an **ADD** rating.

| | |
|---|---|
| Market Cap | Rs262bn/US$4.1bn |
| Reuters/Bloomberg | BHFC IN/BFRG.BO |
| Shares Outstanding (mn) | 232.8 |
| 52-week Range (Rs) | 1340/644 |
| Free Float (%) | 53.3 |
| FII (%) | 16.2 |
| Daily Volume (US$/'000) | 22,699 |
| Absolute Return 3m (%) | (15.6) |
| Absolute Return 12m (%) | 78.4 |
| Sensex Return 3m (%) | (3.2) |
| Sensex Return 12m (%) | 11.7 |

| Year to Mar | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|
| Revenue (Rs bn) | 66.1 | 74.8 | 88.9 | 104.5 |
| Rec. Net Income (Rs bn) | 4.2 | 7.3 | 8.8 | 11.6 |
| EPS (Rs) | 18.2 | 31.5 | 37.6 | 50.0 |
| % Chg YoY | 90.9 | 72.7 | 19.3 | 33.1 |
| P/E (x) | 61.6 | 35.7 | 29.9 | 22.5 |
| CEPS (Rs) | 36.8 | 48.3 | 54.5 | 68.4 |
| EV/E (x) (Incl. Indus) | 26.3 | 19.0 | 15.9 | 12.8 |
| Dividend Yield (%) | 0.4 | 0.6 | 0.7 | 1.2 |
| RoCE (%) | 14.2 | 18.6 | 21.3 | 23.7 |
| RoE (%) | 18.6 | 22.1 | 22.6 | 24.9 |

## TABLE OF CONTENTS

# Mantra: Build capability & continually diversify

BHFC is the world's leading powertrain and chassis component manufacturer. Its customer base includes major global automotive (54% of standalone revenue) OEM's & tier-1 suppliers, various OEMs in the industrial segment (46% of standalone revenues). On automotive front, BHFC has a dominant market share across geographies such as India, North America coupled with strong presence in Europe, supplying products like crankshafts, front axles beams for commercial vehicles. On industrial front, it has ventured into verticals like energy, transportation, construction and mining. One of the BHFC's abilities has been adaptability to business challenges across time frames and economic cycles. It has demonstrated tremendous tenacity even in challenging times. The company has developed strong competence on metal forming front, which is being driven by high technology inputs and massive production learnings spanning decades. This has enabled BHFC to successfully penetrate newer sectors like oil & gas and power at the global level. It has successfully reduced its exposure to the cyclical heavy truck industry and increased industrial business share from 28% of parent revenues in FY09 to 46% in FY15. However, it is now readying to drive the next leg of growth & diversification via entry into the passenger vehicle segment on the automotive side and expanding capabilities further in new businesses like aerospace, defence.

## BHFC: Already "Makes in India" for the world

Inspite of strong macro-economic headwinds, the company has continued to deliver on its strategy of building a strong auto and industrial forging business. The company owns two out of six largest presses (more than 12,500T capacity) in the world and can manufacture crankshafts weighing from 10Kg to 2,200Kg. On automotive front, most of the global marquees like Daimler AG, Iveco, Volvo, Man etc. are his clients while on industrial front, Alstom, John Deere, Cummins and Boeing etc. are his customers. The management of the company expects all the verticals such as defence, materials and railways to scale to Rs 10bn each in revenues after FY18E.

The 'Make in India' initiative by the Government of India aims to revive the manufacturing sector by increasing its (manufacturing sector's) share to GDP from 15% to 25%. The initiative will primarily benefit infrastructure related sectors such as power, mining, and railways. The government has unveiled plans to invest around Rs 8500bn in its rail network over the next five years, with around Rs 1000bn in rolling stock. BHFC remains exposed to many such government related spaces ranging from railways to infrastructure to defence. The company has achieved the prestigious status of becoming the first Indian supplier to Indian Railways for crankshafts and has also won orders from highly technological intensive OEMs like Boeing for Titanium forged components.

## Defence opportunity

According to the government and industry participants, the defence manufacturing space could witness spending in excess of US$ 150bn over the next five to seven years. The opportunity could be back-ended given the long procurement cycles in the space. However, the order sizes could be quite significant and could have repeat replacement and upgrade demand attached to it.

This could usher major demand for not only large private companies who would invest and target global defence manufacturers as partners but also help other component suppliers, creating a strong cycle for India's defence manufacturing space.

## 'Kalyani Group's' foray in the defence sector

The Kalyani group (parent of BHFC) has been traditionally supplying of components and sub-systems to the Indian defence sector for more than three decades. The group has been supplying products ranging from safety and critical components like ammunition and shells, T-72 crankshafts, road wheel for tanks and front axle beams to steering knuckles and transmission parts to the sector. Recently, the group has announced a joint venture with Rafael Advanced Defence Systems of Israel to develop and manufacture a wide range of technology and systems.

| Achievements of BHFC in Defence |
|---|
| Road wheel supplier for tanks with near zero failure rates |
| First indigenous private manufacturer of tank barrels |
| Supplied shells to government for long |
| T-72 tank crankhshaft supplier |

The Indian defence sector could thus become a strong business vertical for BHFC given the company's proven capabilities in the space. BHFC also stands to benefit from high end metal forging required in orders won either by Kalyani group or by its competitors in the coming years.

## A small case of defence requirement: Artillery guns

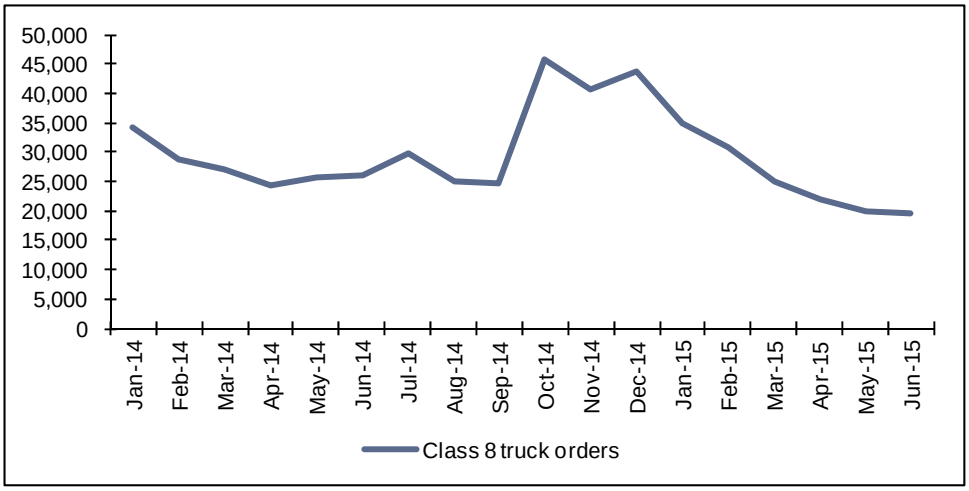
*Artillery guns are a good example where requirements have remained imminent and could be localised in India. As per defence ministry the last major purchase of artillery guns by India was in 1986, when it procured 410, 155mm Bofors guns. However, now nearly after three decades India is now facing severe shortage of artillery guns, for the same the Field Artillery Rationalization Programme (FARP) has been made advocating large procurement. As per the Ministry of Defence, we could need in excess of 3,000 artillery guns over the next decade to bridge the lacuna in its system. The government finally gave a clearance on a long pending 145 ultra-light howitzers from BAE systems. This however it just the start and requirement remains significant.*

## Are investors reading too much into Class-8 order slowdown?

Of late, investors have grown wary about the slowdown in ordering for Class-8 trucks in North American markets, with some viewing it as a precursor to a massive slowdown in overall US truck demand. However, we are of the view that the slowdown has more to do with: a) significantly high (2x of normal) order backlog created in CY14 (net orders rose 42% YoY), b) OEMs slowing down on manufacturing even when ordering was rising on account of lack of production capacity and c) wait and watch approach by OEM's before new emission targets for heavy trucks in CY18.

We maintain our view that the slowdown in Class-8 trucks is more of a mismatch on these factors and is transient in nature. The actual OEM production however remains firm in high single digit terms even as MoM ordering has been steadily slowing down.

**Chart 1: Class 8 truck orders monthly trend**



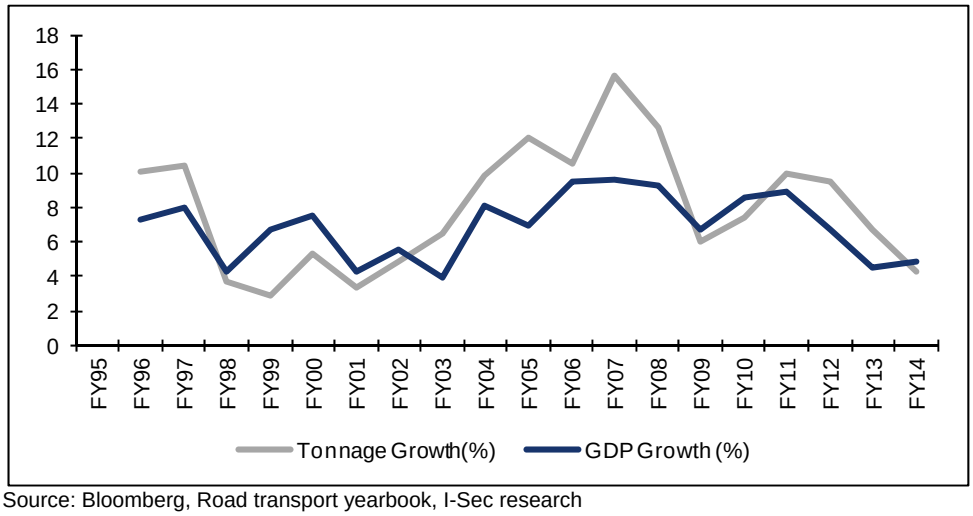

Source: ftrintel.com, I-Sec research

## India M&HCV segment growth outlook remains strong

The M&HCV segment has grown at the fastest pace in the automotive industry over the past one year on factors varying from major fleet replenishment to increase in mining activity in south India. Our analysis of historical data suggests strong correlation between sales of heavy trucks and GDP growth, similarly a strong correlation between absolute tonnages sold in a year vis-à-vis GDP growth rate. The expected growth in economy (Consensus GDP estimate ~7.6% FY16E) is expected to continue to provide momentum to the CV segment up.

The M&HCV market is looked as an early indicator of pick-up in industrial demand. The street expects strong economic growth in FY16E/FY17E, which could lead to more broad-based growth of the CV sector (ICV/LCV vis-à-vis HD trucks). We expect volumes of the M&HCV segment to grow at a CAGR of ~17%-18% over FY15-FY17E, touching 400,000 units, which though optically large would still be below the demand peaks level of FY11. Thus providing comfort on actual possibilities of future growth as GDP has grown 1.5x of FY11 while M&HCV volumes are still to reach past peaks.

**Chart 2: M&HCV Tonnage and GDP growth closely linked**



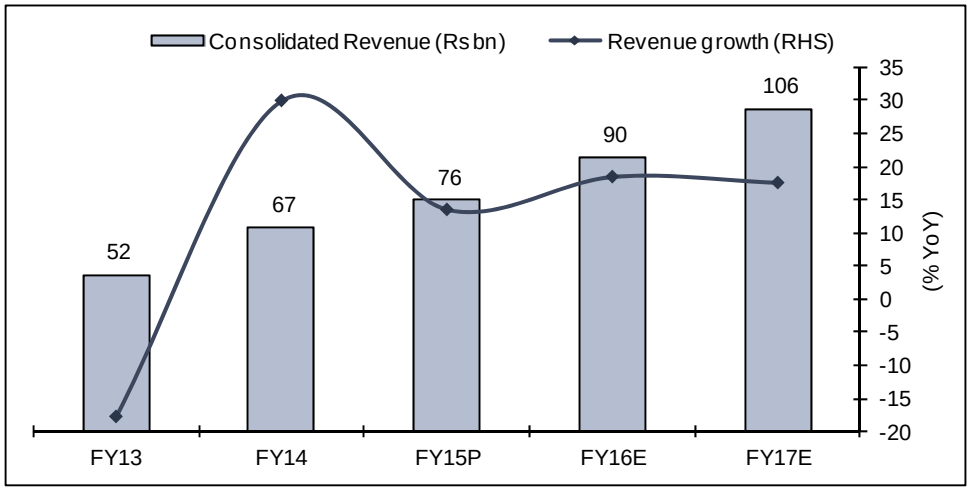

Source: Bloomberg, Road transport yearbook, I-Sec research

## Business diversity and low customer concentration provide comfort!

The company has initiated many new measures ranging from entering into passenger vehicle market to rapidly expanding its presence in power generation and oil & gas sectors over the past few years. There is no single product towards a single customer segment which contributes more than 20% to the company's revenue. Since the US subprime mortgage crises led slowdown in the world economy, the company has been judiciously allocating capital and, has focused on improving its product mix and sweating its assets to the maximum. Investments have been made only after very important capability building in sectors such as Aerospace, which also have led to new orders from clients like Boeing. In automotive and industrial forging business, it remains imperative that capital expenditure costs are limited to the minimum to meet investor expectation of 20% RoCE. The company remains well placed to use its existing capacity to maximum potential in the coming years, thereby operating at higher utilizations for both strong FCF as well higher RoCE.

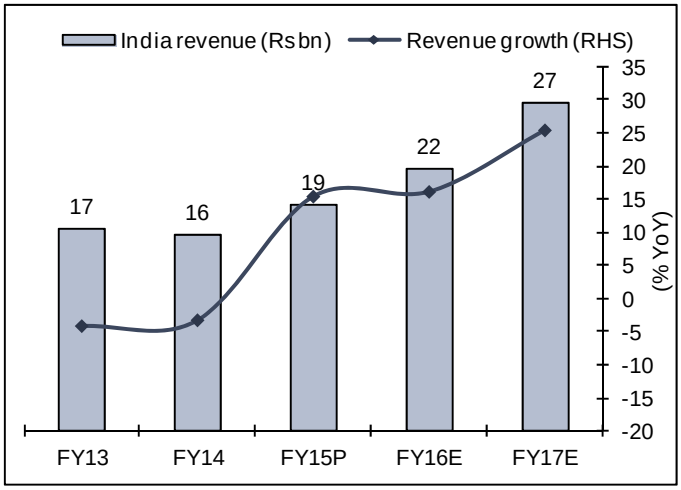
# Financials in charts

### Chart 3: Revenue growth trend remains healthy (consolidated)



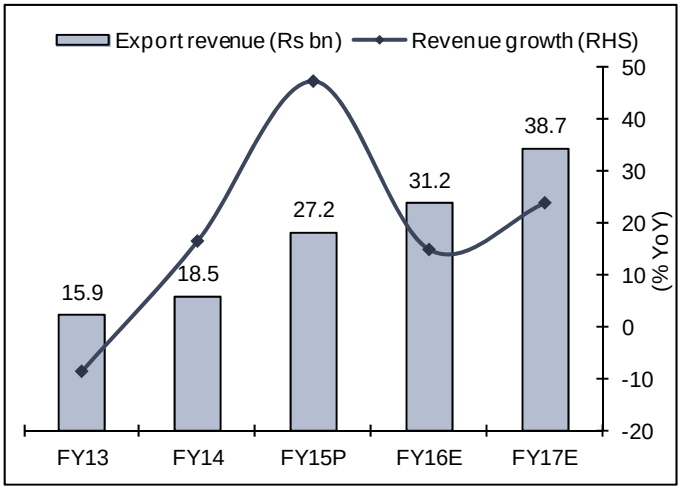

Source: I-Sec research, Company

### Chart 4: India revenue trend (standalone)



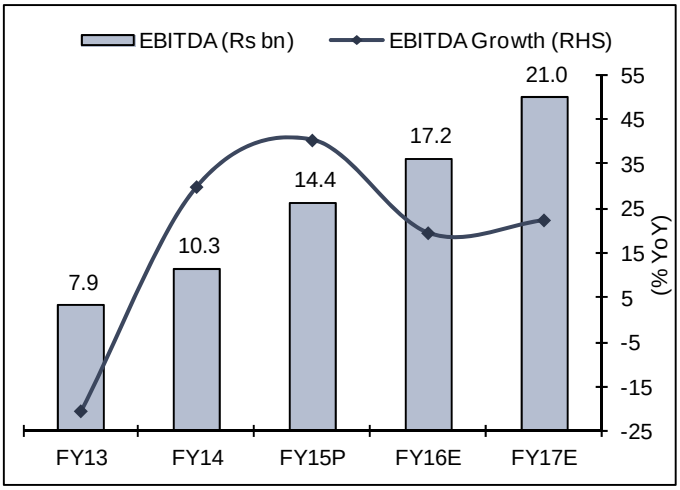

Source: I-Sec research, Company

### Chart 5: Export revenue trend (standalone)



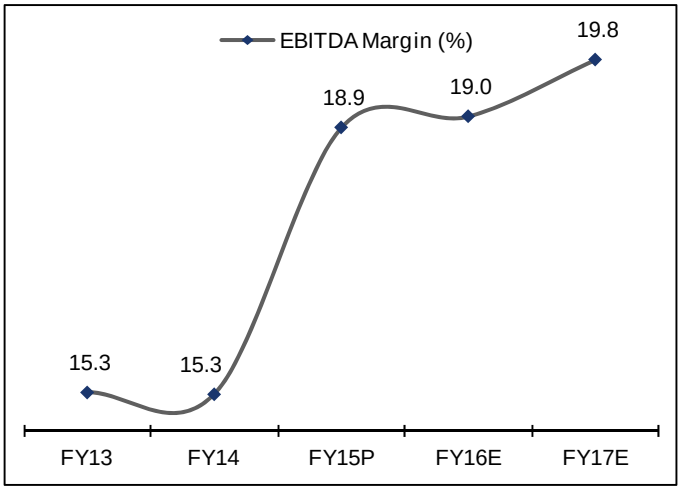

Source: I-Sec research, Company

### Chart 6: EBITDA growth better than peers



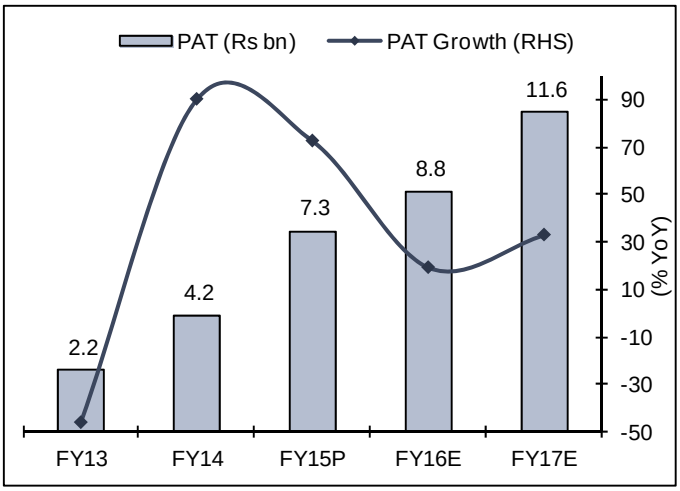

Source: I-Sec research, Company

### Chart 7: EBITDA margins to improve gradually



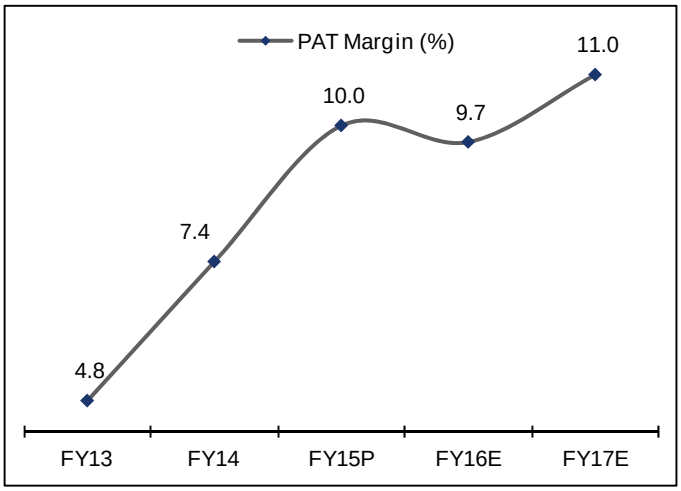

Source: I-Sec research, Company

### Chart 8: PAT growth to remain robust



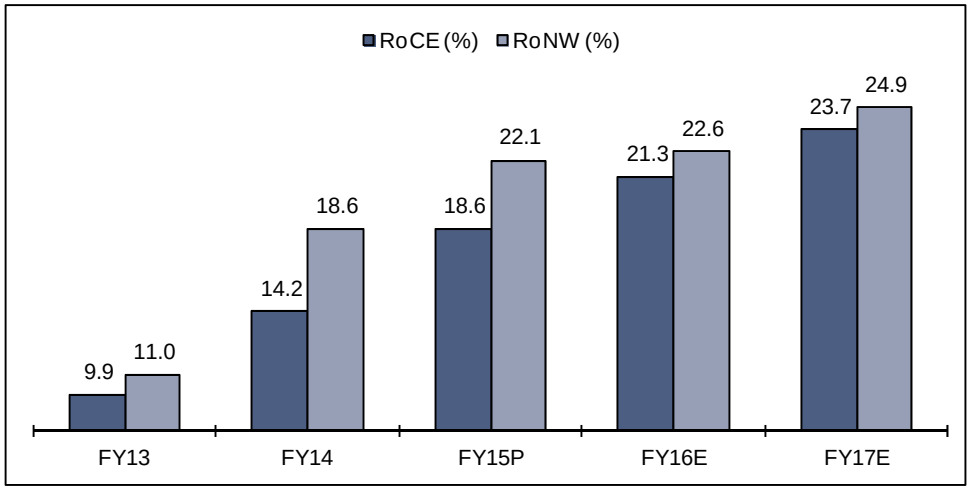

Source: I-Sec research, Company

### Chart 9: PAT margins one of the best industry



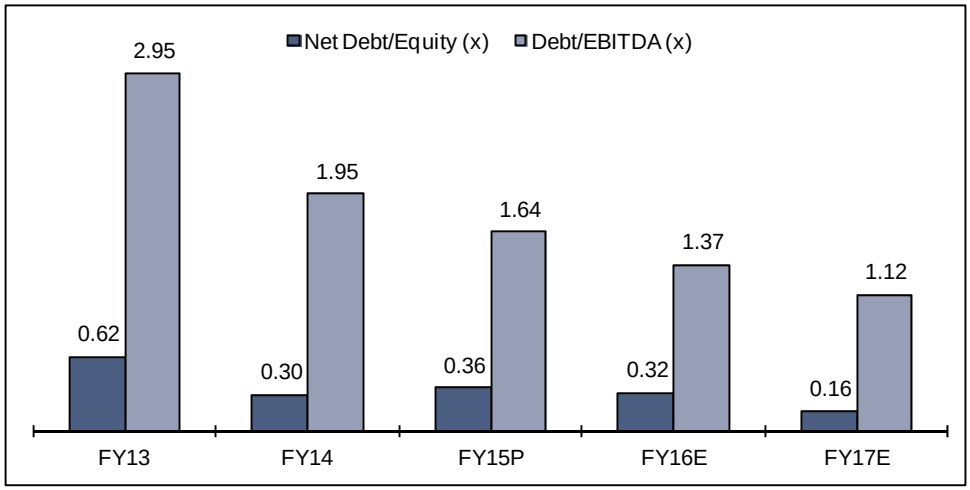

Source: I-Sec research, Company

### Chart 10: Return ratios to improve structurally as assets sweat



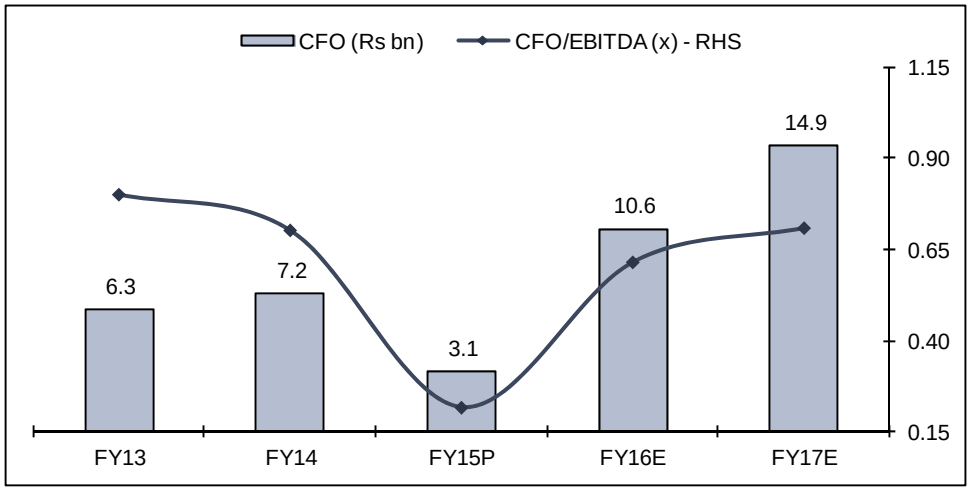

Source: I-Sec research, Company

### Chart 11: BHFC remains comfortable on leverage




Source: I-Sec research, Company

**Chart 12: CFO growth remains strong**




Source: I-Sec research, Company

# Valuation and recommendation

We re-initiate coverage on the stock with **ADD** rating and a target price of Rs1,250/share.

BHFC's valuations are reflective of unique automotive positioning as leading automotive supplier with a diversified product mix, >20% RoCE coupled with unique defence sector exposure. The stock trades at 22.6x EPS / 12.9x EV/EBITDA FY17E. We value the stock at 25x FY17E EPS to ascribe a target price of Rs1,250. We re-initiate coverage with **ADD** rating. In terms of cash flow yield (post capex), the stock remains attractive at 3.6% FY17E.

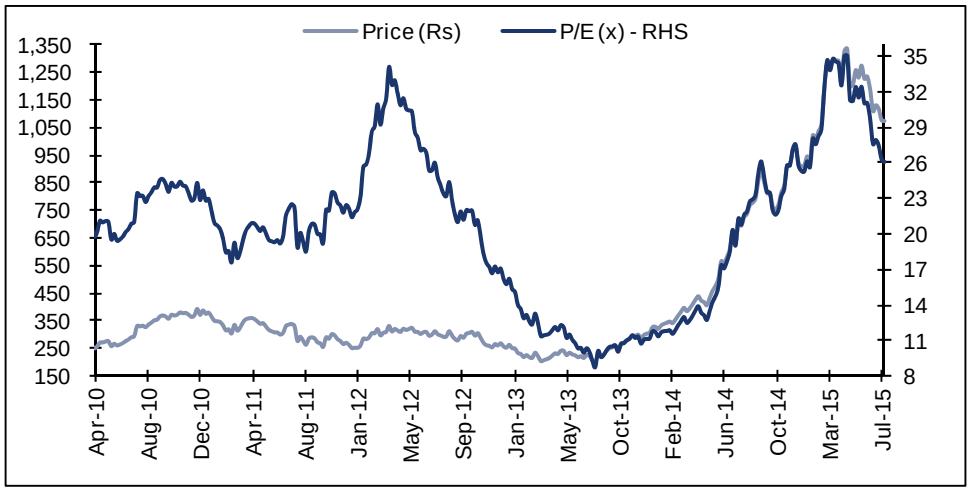
**Table 1: Peer table**

| | | | Mkt. | EPS growth (% YoY) | | | P/E (x) | | | EV/EBITDA (x) | | | ROE (%) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Company** | **Curr.** | **Price** | **Cap.** | **FY15** | **FY16E** | **FY17E** | **FY15** | **FY16E** | **FY17E** | **FY15** | **FY16E** | **FY17E** | **FY15** | **FY16E** | **FY17E** |
| **Bharat Forge** | **INR** | **1,124** | **4,122** | **72.7** | **19.3** | **33.1** | **35.7** | **29.9** | **22.5** | **19.0** | **15.9** | **12.8** | **22.1** | **22.6** | **24.9** |
| ThyssenKrupp | EUR | 24 | 14,920 | N.M. | 149.5 | 63.1 | 62.9 | 25.2 | 15.5 | 7.9 | 6.4 | 5.7 | 8.0 | 16.9 | 23.0 |
| Motherson Sumi | INR | 529 | 7,345 | 28.0 | 43.6 | 65.8 | 47.6 | 33.1 | 20.0 | 15.6 | 12.7 | 8.8 | 25.9 | 31.7 | 39.3 |
| CIE Automotive | EUR | 15 | 2,066 | 15.6 | 37.2 | 28.7 | 22.3 | 16.3 | 12.6 | 10.2 | 8.1 | 7.1 | 16.5 | 18.0 | 20.3 |

Source: I-Sec research

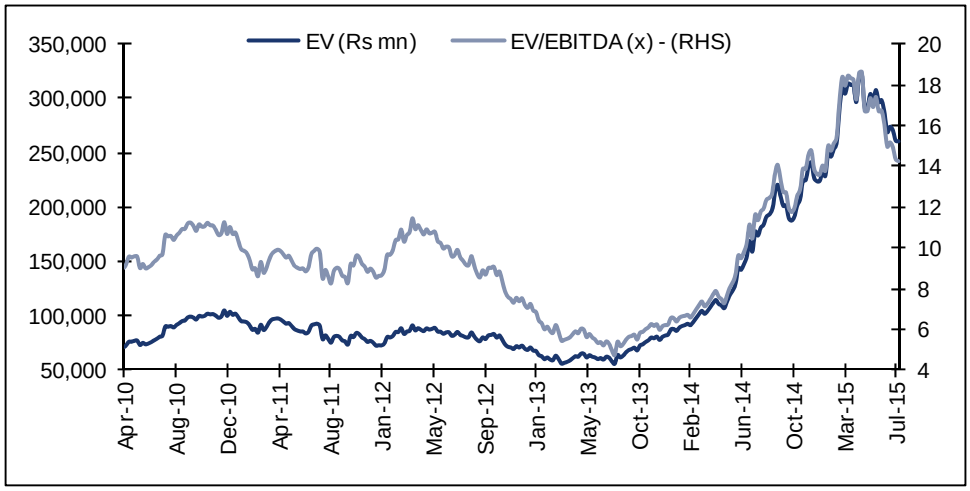
The stock currently trades at 29.9/22.5 FY16E/17E on PE basis while on EV/EBITDA basis the multiple is trading at 15.9x/12.8xFY16E/17E, based on our forecasts.

**Chart 13: 1-yr rolling forward P/E band chart**




Source: I-Sec research, Bloomberg

**Chart 14: 1-yr rolling forward EV/EBITDA band chart**




Source: I-Sec research, Bloomberg

**Table 2: I-Sec vs. Consensus**

*(Rs mn)*

| | I-Sec | | Consensus | | Difference | |
|---|---|---|---|---|---|---|
| | FY16E | FY17E | FY16E | FY17E | FY16E | FY17E |
| Revenue | 90,346 | 106,235 | 87,769 | 104,330 | 3 | 2 |
| EBITDA | 17,207 | 21,046 | 18,320 | 22,679 | (6) | (7) |
| PAT | 8,753 | 11,647 | 9,820 | 12,908 | (11) | (10) |
| EPS (Rs) | 38 | 50 | 42.3 | 55.7 | (11) | (10) |

Source: Bloomberg, I-Sec research

We are below consensus on Bharat Forge due to tepid expectations of earnings recovery in the subsidiaries.

# Key risks

The major risk remains of any slowdown in the domestic M&HCV market, which could lead to price competition from new competitors like RK Forgings.

Further deterioration in the oil & gas segment if global crude oil prices drop significantly from the current levels (of $68/bbl)

# Annexure 1: Consolidated financials

## Table 3: Profit and Loss statement

*(Rs mn, year ending March 31)*

| | FY13 | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|---|
| Net Sales | 50,987 | 66,090 | 74,847 | 88,890 | 104,522 |
| Other operating income | 679 | 1,071 | 1,401 | 1,456 | 1,712 |
| **Total Op. Income (Sales)** | **51,665** | **67,162** | **76,248** | **90,346** | **106,235** |
| Raw material expense | 22,792 | 32,240 | 33,812 | 40,353 | 47,028 |
| Employee expense | 7,016 | 7,900 | 9,051 | 8,947 | 10,625 |
| Other expenses | 13,942 | 16,748 | 18,977 | 23,839 | 27,535 |
| **Operating Expenses** | **43,750** | **56,888** | **61,840** | **73,138** | **85,189** |
| **EBITDA** | **7,916** | **10,273** | **14,408** | **17,207** | **21,046** |
| *% margins* | *15.3%* | *15.3%* | *18.9%* | *19.0%* | *19.8%* |
| Depreciation & Amortisation | 3,195 | 3,579 | 3,624 | 3,935 | 4,292 |
| **EBIT** | **4,720** | **6,695** | **10,783** | **13,272** | **16,754** |
| Other Income | 1,121 | 1,248 | 1,368 | 973 | 1,520 |
| Gross Interest | 1,672 | 1,692 | 1,356 | 1,300 | 1,250 |
| **PBT** | **4,169** | **6,251** | **10,795** | **12,945** | **17,025** |
| Less: Exceptionals | (366) | (1,037) | (428) | - | - |
| **PBT after Exceptionals** | **4,535** | **7,288** | **11,223** | **12,945** | **17,025** |
| Less: Taxes | 1,529 | 2,100 | 3,587 | 4,143 | 5,278 |
| Less: Minority Interest | 530 | 202 | 11 | 50 | 100 |
| Add: Profit from Associates | - | - | - | - | - |
| **Net Income (Reported)** | **2,476** | **4,986** | **7,625** | **8,753** | **11,647** |
| **Net Income (Adjusted)** | **2,233** | **4,248** | **7,334** | **8,753** | **11,647** |

Source: Company data, I-Sec research

## Table 4: Balance sheet

*(Rs mn, Year ending March 31)*

| | FY13 | FY14 | FY15P | FY16E | FY17E |
|---|---|---|---|---|---|
| **ASSETS** | | | | | |
| **Current Assets, Loan & Advances** | | | | | |
| Inventories | 11,320 | 10,386 | 10,339 | 12,570 | 13,222 |
| Sundry debtors | 7,966 | 8,659 | 8,535 | 10,380 | 12,491 |
| Loans and advances | 4,586 | 5,397 | 5,612 | 7,480 | 7,914 |
| Other current assets | 3,784 | 4,871 | 8,569 | 8,282 | 9,442 |
| Cash & cash equivalents | 5,555 | 4,231 | 6,822 | 5,639 | 9,437 |
| Assets held for sale | 546 | 0 | (0) | 0 | (0) |
| **Total Current Assets** | **33,757** | **33,545** | **39,877** | **44,351** | **52,507** |
| **Current Liabilities & Provisions** | | | | | |
| Sundry creditors | 9,211 | 10,554 | 11,016 | 13,083 | 15,384 |
| Short-term provisions | 2,133 | 2,886 | 2,986 | 3,547 | 4,170 |
| Other current liabilities | 15,341 | 13,003 | 8,036 | 8,951 | 9,352 |
| **Total Current Liabilities & Provisions** | **26,685** | **26,443** | **22,039** | **25,581** | **28,906** |
| **Net Current Assets** | **7,073** | **7,101** | **17,838** | **18,770** | **23,601** |
| **Investments** | **4,160** | **8,011** | **4,954** | **5,954** | **6,954** |
| Goodwill | 32 | 57 | 537 | 537 | 537 |
| **Fixed Assets** | | | | | |
| Gross Fixed Assets | 56,438 | 53,887 | 57,977 | 63,477 | 68,977 |
| Accumulated Depreciation | 27,373 | 28,604 | 32,228 | 36,163 | 40,455 |
| **Net Fixed Assets** | **29,065** | **25,283** | **25,749** | **27,314** | **28,522** |
| Capital Work-in-Progress | 6,324 | 5,826 | 8,586 | 8,586 | 8,586 |
| **Total Fixed Assets** | **35,389** | **31,109** | **34,335** | **35,899** | **37,108** |
| Long term loans & advances | 2,233 | 2,361 | 2,403 | 3,255 | 4,443 |
| Deferred Tax Assets | - | - | - | - | - |
| Other non-cuurent asset | 374 | 261 | 232 | 232 | 232 |
| **Total Assets** | **49,261** | **48,900** | **60,298** | **64,648** | **72,875** |
| | | | | | |
| **LIABILITIES** | | | | | |
| **Borrowings** | **23,326** | **20,074** | **23,645** | **23,645** | **23,645** |
| *long-term borrowings* | 18,274 | 15,212 | 19,815 | 19,815 | 19,815 |
| *short-term borrowings* | 5,052 | 4,862 | 3,830 | 3,830 | 3,830 |
| Long-term provisions | - | - | - | - | - |
| Deferred Tax Liability | 1,345 | 1,644 | 1,637 | 1,637 | 1,637 |
| Other Non-current Liabilities | 383 | 180 | 595 | 595 | 595 |
| Minority Interest | 1,642 | 170 | (21) | 29 | 129 |
| Equity Share Capital | 466 | 466 | 466 | 466 | 466 |
| Reserves & Surplus | 22,098 | 26,367 | 33,976 | 38,276 | 46,403 |
| **Net Worth** | **22,564** | **26,832** | **34,442** | **38,741** | **46,869** |
| **Total Liabilities** | **49,261** | **48,900** | **60,298** | **64,648** | **72,875** |

Source: Company data, I-Sec research

## Table 5: Cash flow statement

*(Rs mn, Year ending March 31)*

| | FY14 | FY15 | FY16E | FY17E | FY18E |
|---|---|---|---|---|---|
| **Cash Flow from Operating Activities** | | | | | |
| PAT | 2,476 | 4,986 | 7,625 | 8,753 | 11,647 |
| Add: Depreciation | 3,195 | 3,579 | 3,624 | 3,935 | 4,292 |
| Add: Other Operating activities | - | - | - | - | - |
| **Operating cash flow before working capital changes** | **5,671** | **8,565** | **11,250** | **12,688** | **15,939** |
| **Changes in working capital** | | | | | |
| (Increase) / Decrease Inventories | (359) | 934 | 47 | (2,231) | (653) |
| (Increase) / Decrease Receivables | 168 | (693) | 124 | (1,845) | (2,112) |
| Increase / (Decrease) Payables | (2,578) | 1,343 | 462 | 2,067 | 2,301 |
| Others | 3,432 | (2,937) | (8,779) | (107) | (570) |
| **Net Working Capital Changes** | **663** | **(1,352)** | **(8,146)** | **(2,115)** | **(1,033)** |
| **Cash flow from Operating Activities** | **6,334** | **7,213** | **3,104** | **10,573** | **14,905** |
| **Capital Commitments** | **(6,923)** | **702** | **(6,850)** | **(5,500)** | **(5,500)** |
| **Free Cash Flow** | **(589)** | **7,914** | **(3,746)** | **5,073** | **9,405** |
| **Cash flow from Investing Activities** | **(4,504)** | **(4,565)** | **(4,069)** | **(7,302)** | **(7,588)** |
| **Cash Flow from Financing Activities** | | | | | |
| Issue of Share Capital | - | - | - | - | - |
| Inc/(Dec) in securities premium | (894) | - | - | - | - |
| Buyback of shares | - | - | - | - | - |
| Inc/(Dec) in Borrowings | (863) | (3,253) | 3,572 | - | - |
| Dividend paid | (924) | (1,226) | (1,760) | (2,031) | (3,520) |
| Others | 67 | 508 | 1,744 | (2,423) | - |
| **Cash flow from Financing Activities** | **(2,614)** | **(3,971)** | **3,556** | **(4,454)** | **(3,520)** |
| **Net Cash Flow** | **(784)** | **(1,324)** | **2,591** | **(1,183)** | **3,798** |
| **Opening Cash & Bank balance** | **6,339** | **5,555** | **4,231** | **6,822** | **5,639** |
| **Closing Cash & Bank balance** | **5,555** | **4,231** | **6,822** | **5,639** | **9,437** |
| **Increase / (Decrease) in Cash & cash equivalents** | **(784)** | **(1,324)** | **2,591** | **(1,183)** | **3,798** |

Source: Company data, I-Sec research

## Table 6: Key ratios

*(Year ending March 31)*

| | FY14 | FY15 | FY16E | FY17E | FY18E |
|---|---|---|---|---|---|
| **Per Share Data (in Rs.)** | | | | | |
| EPS (Basic) | 10.6 | 21.4 | 32.7 | 37.6 | 50.0 |
| EPS (Adjusted) | 9.6 | 18.2 | 31.5 | 37.6 | 50.0 |
| Cash EPS | 24.3 | 36.8 | 48.3 | 54.5 | 68.4 |
| Dividend per share (DPS) | 3.4 | 4.5 | 6.5 | 7.5 | 13.0 |
| BVPS (Adjusted) | 96.8 | 115.2 | 147.8 | 166.3 | 201.2 |
| **Growth Ratios (%)** | | | | | |
| Total Op. Income (Sales) | (17.7) | 30.0 | 13.5 | 18.5 | 17.6 |
| EBITDA | (20.6) | 29.8 | 40.2 | 19.4 | 22.3 |
| Net Income (Adjusted) | (45.9) | 90.2 | 72.7 | 19.3 | 33.1 |
| EPS (Adjusted) | (46.1) | 90.9 | 72.7 | 19.3 | 33.1 |
| Cash EPS | (20.7) | 51.0 | 31.3 | 12.8 | 25.6 |
| BVPS (Adjusted) | 3.3 | 18.9 | 28.4 | 12.5 | 21.0 |
| **Valuation Ratios (x)** | | | | | |
| P/E (Adjusted) | 117.6 | 61.6 | 35.7 | 29.9 | 22.5 |
| P/BV (Adjusted) | 11.6 | 9.8 | 7.6 | 6.8 | 5.6 |
| EV/EBITDA | 34.8 | 26.3 | 19.0 | 15.9 | 12.8 |
| EV/Sales | 5.3 | 4.0 | 3.6 | 3.0 | 2.5 |
| **Return/Profitability Ratio (%)** | | | | | |
| Raw Material Expenses/Sales | 44.1 | 48.0 | 44.3 | 44.7 | 44.3 |
| Employee Expenses/Sales | 13.6 | 11.8 | 11.9 | 9.9 | 10.0 |
| Marketing Expenses/Sales | - | - | - | - | - |
| Administrative Expenses/Sales | - | - | - | - | - |
| Other Expenses/Sales | 27.0 | 24.9 | 24.9 | 26.4 | 25.9 |
| EBITDA Margin | 15.3 | 15.3 | 18.9 | 19.0 | 19.8 |
| Net Income Margin (Adjusted) | 4.8 | 7.4 | 10.0 | 9.7 | 11.0 |
| RoCE | 9.9 | 14.2 | 18.6 | 21.3 | 23.7 |
| RoNW | 11.0 | 18.6 | 22.1 | 22.6 | 24.9 |
| Dividend Payout Ratio | 35.6 | 24.7 | 20.6 | 20.0 | 26.0 |
| Dividend Yield | 0.3 | 0.4 | 0.6 | 0.7 | 1.2 |
| **Solvency/Wkg. Cap. Ratios (x)** | | | | | |
| Net D/E | 0.6 | 0.3 | 0.4 | 0.3 | 0.2 |
| Debt/EBITDA | 2.9 | 2.0 | 1.6 | 1.4 | 1.1 |
| EBIT/Interest | 2.8 | 4.0 | 8.0 | 10.2 | 13.4 |
| Current Ratio | 1.3 | 1.3 | 1.8 | 1.7 | 1.8 |
| Quick Ratio | 1.1 | 1.1 | 1.5 | 1.5 | 1.5 |
| Inventory (days) | 80 | 60 | 51 | 47 | 45 |
| Receivables (days) | 57 | 48 | 42 | 43 | 44 |

Source: Company data, I-Sec research

# Annexure 2: Index of tables and charts

## Tables



## Charts

Equity Research

July 15, 2015

BSE Sensex: 27961

INDIA

# Bosch Ltd

HOLD

## Too important to ignore!

**Rs23,497**

Reason for report: Initiating coverage

**Bosch Ltd (BOS) is the dominant automotive supplier of fuel systems in India, particularly to the diesel segment. A subsidiary of Germany-based Bosch Gmbh, BOS has a massive technology moat, is poised to emerge as a key partner for OEMs in implementation of the much delayed emission norms (Bharat Stage IV/V/VI) in the next five to seven years. It is also steadily growing its non-automotive business (led by power tools), which we believe provides ample scope for revenue diversification (currently, the segment is ~13% of revenues for BOS vis-à-vis ~25% for parent). The key triggers for BOS in the immediate term remain: a) continued growth momentum in the M&HCV space (which is nearly half of revenues), b) timelines for new emission norm implementation (lead to a big revenue thrust), and c) recovery in the tractor segment (currently accounting for ~15% of revenues). Considering that India has potential to grow to top-3 automotive markets in size ~6mn units by FY20 manufacturers, BOS is well positioned in this promising market. Valuations for BOS have always been at a premium, we see that historically it has broadly traded between 1.1-1.5x 2-year forward PEG. We feel that, amidst the upcycle of demand valuation multiples could remain skewed upwards. We expect BOS to clock a healthy ~35% CAGR on earnings over FY15-FY17E and we value the stock at 40x PE FY17E EPS (implied PEG ~1.1x FY15-17E). We initiate coverage on BOS with a HOLD rating.**

- **BOS technology critical for OEMs in race to meet emission targets:** Indian emission standards have lagged global peers for long and it now seems policy bearers are looking to accelerate adoption of BS-IV/V/VI. Though the timeline remains uncertain, BOS's position as the major supplier of products such as advanced fuel injection systems or after-treatment techniques like selective catalytic reduction (SCR) remain unmatched. Thus, the opportunity arising from policy changes remains large – e.g. on FY15 M&HCV volumes, **BS-IV migration** could lead to **incremental technology cost of >Rs50bn** for the OEMs.
- **Parent's investment in R&D to help maintain edge:** Bosch Gmbh spends ~10% of its revenues on R&D and the largest global supplier of auto components by revenues (€49bn). It leads in innovation globally (files 18 patents every day, employs 45,700 researchers & developers).In terms of new technology, Bosch Gmbh is developing cost-effective electric vehicle solutions (mild-hybrid system supported only on a 48V battery to reducing emissions by 5-18%).
- **Look elsewhere if you wish to buy this for the cheap:** BOS remains one of the most dominant automotive suppliers in India and ascribing a scarcity premium to valuation has for many years remained a challenge. Looking at a decade of 2-year forward PEG's (average PEG: ~1.3x) we find the current PEG of 1.1x is reasonable. We value the stock at 40x FY17E EPS), and initiate coverage with a **HOLD** rating.

| | |
|---|---|
| Market Cap | Rs738bn/US$11.6bn |
| Reuters/Bloomberg | BOSH.BO/BOS IN |
| Shares Outstanding (mn) | 31.4 |
| 52-week Range (Rs) | 27658/12995 |
| Free Float (%) | 28.8 |
| FII (%) | 9.3 |
| Daily Volume (US$/'000) | 18,549 |
| Absolute Return 3m (%) | (9.9) |
| Absolute Return 12m (%) | 83.4 |
| Sensex Return 3m (%) | (3.2) |
| Sensex Return 12m (%) | 11.7 |

| Year to Mar | CY13 | FY15P | FY16E | FY17E |
|---|---|---|---|---|
| Revenue (Rs bn) | 85.4 | 119.2 | 109.9 | 136.9 |
| Rec. Net Income (Rs bn) | 8.8 | 13.6 | 14.3 | 19.2 |
| EPS (Rs) | 281.8 | 432.2 | 456.0 | 611.3 |
| % Chg YoY | (7.7) | * | 5.5 | 34.1 |
| P/E (x) | 83.4 | 54.4 | 51.5 | 38.4 |
| CEPS (Rs) | 404.1 | 600.6 | 621.2 | 798.2 |
| EV/E (x) (Incl. Indus) | 55.2 | 36.2 | 34.3 | 25.5 |
| Dividend Yield (%) | 0.2 | 0.4 | 0.3 | 0.4 |
| RoCE (%) | 14.1 | 19.3 | 18.1 | 21.2 |
| RoE (%) | 14.1 | 18.2 | 16.9 | 19.0 |

*FY15 not like-to-like because of change in financial year

## Autos

**Target price Rs24,454**

### Shareholding pattern

| | Sep '14 | Dec '14 | Mar '15 |
|---|---|---|---|
| Promoters | 71.2 | 71.2 | 71.2 |
| Institutional investors | 18.9 | 18.6 | 19.8 |
| MFs and UTI | 3.1 | 3.1 | 1.9 |
| Banks/FIs | 0.1 | 0.1 | 0.1 |
| Insurance Co | 8.6 | 8.6 | 8.6 |
| FIIs | 7.1 | 6.9 | 9.3 |
| Others | 9.9 | 10.2 | 9.0 |

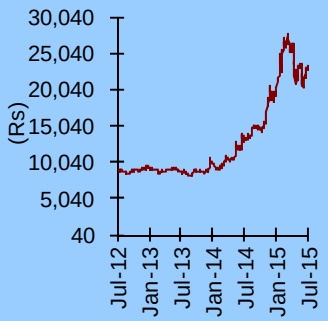
Source: NSE

### I-Sec vs Bbg* consensus

| (%) | FY16E | FY17E |
|---|---|---|
| Sales | (1) | (0) |
| EBITDA | 2 | 3 |
| PAT | 1 | 3 |

Source: *Bloomberg, I-Sec research

### Price chart

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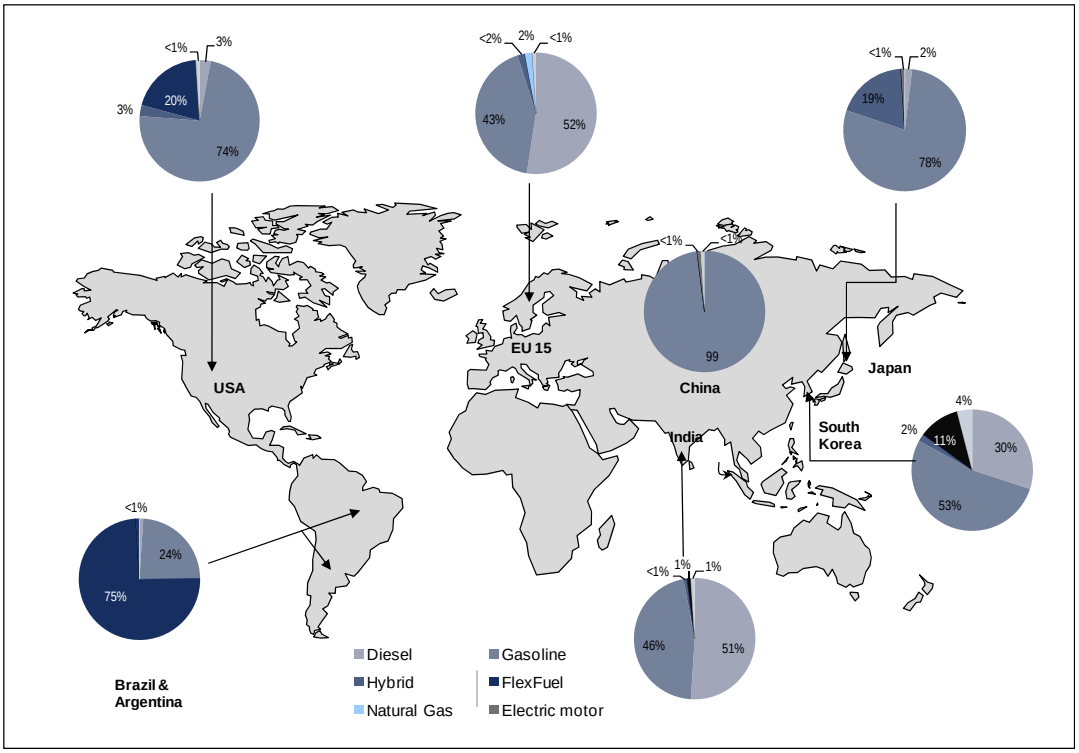
## TABLE OF CONTENTS

# Unlisted global giant's listed Indian cousin!

Bosch Ltd is the only major listed subsidiary of Germany-based Bosch Gmbh (world's largest automotive supplier). In India, the company deals in products and services in the automotive segment (~87% of revenues) such as diesel and gasoline systems, starters and generators, and non-automotive segments (13% of revenues) comprising power tools and packaging. BOS is the leader in diesel fuel injection systems for passenger cars, commercial vehicles and tractors in India. It has a significant aftermarket presence (accounting for 25% of auto segment sales) with 3,000 authorised workshops for applications in passenger vehicles, commercial vehicles, tractors, two- and three-wheelers, and off-road vehicles.

**Chart 1: Snapshot on global automotive powertrains**




Source: Industry

**Gasoline engines:** Worldwide, gasoline engines are the most popular powertrain. Countries like China lead the field with nearly 100% of all new passenger vehicles on a gasoline engine. In the US and Japan, the figure is ~ 75%. In terms of technology, engines with port-fuel injection still feature ~50% of gasoline vehicles sold. Downsizing, turbo charging and direct injection are becoming increasingly popular, which can lead to efficiency increase in excess of 15%.

**Diesel:** In the EU and India, nearly every second new car is a diesel. But outside these markets as well, diesel is becoming increasingly popular. The United States is a growing diesel market, and Bosch estimates that diesel's market share there will rise from ~3% today to ~10% in CY18. In other key markets such as South Korea, diesel is becoming more and more popular. The benefits of diesel fuel are clear: a modern diesel vehicle consumes ~25% less fuel than a comparable gasoline engine and delivers nearly ~40% more torque.

**Hybrid and electric vehicles:** In Japan, nearly every fifth new car now features a hybrid powertrain, which makes it the undisputed pioneer in electrification. In just a few years, registrations of hybrids will be significantly higher outside Japan as well. Bosch GmbH has forecast that the global passenger vehicle market could reach ~113mn total vehicles byCY20 (CAGR of ~8% over CY14-CY20). Of this, ~6.5mn could be strong hybrids, 3mn could be plug-in hybrids, and 2.5mn could be all-electric (EV).

## Rise of electric powertrains remains an opportunity!

As mentioned above, Bosch GmbH believes in the cleaner environment setup and is constantly investing to improve efficiencies. The company is developing a broad product portfolio for mass market usage for both the hybrid and the electrified vehicles. Bosch Gmbh is developing entry-level hybrids based on a 48-volt electrical system. As of now, the company has received 30 orders relating to various types of electrical powertrains. Currently, Bosch is investing **~EUR400mn (~9-10% of total R&D spends)** in its electro-mobility division and further developing the current battery technology. Bosch is partnering with companies like Tesla Motors and receiving preferred supplier status. As per Bosch Gmbh, it has been instrumental in making the diesel powertrain a global success and wishes to achieve the same for the electrical powertrain.

EV technologies are yet very nascent and players like Tesla Motors, understanding the need of global investments, has recently opened up its patents for other players. The quintessential requirement then becomes capability in terms of technology as well as capacity to invest. On both these accounts, Bosch Gmbh remains a formidable player if not the strongest global automotive supplier. Thus, we believe Bosch Gmbh would continue to expand its moat of dominance in the automotive space across powertrain platforms.

**Chart 2: BOS: Revenue breakup by key product categories**

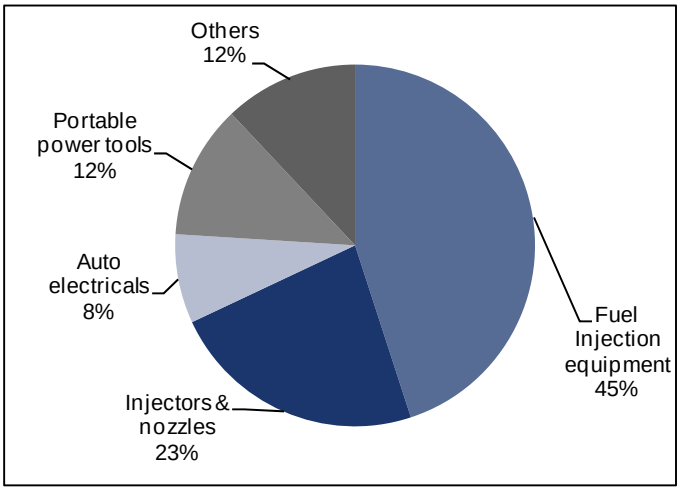
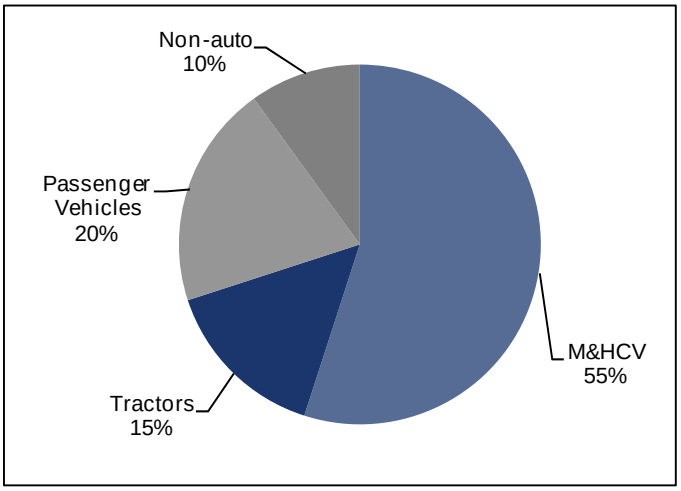



**Chart 3: BOS: Revenue breakup by key end-user categories**




Source: Company data, I-Sec research

## Indian awakening to emissions to be a significant opportunity

The government of India has finally taken cognisance of the health hazard in delaying countrywide improvement in automotive emission standards. There have been draft proposals and incremental news flow signalling a stringent implementation cycle of the various emission standards through the next 5-7 years. Discussions are being held even on skipping BS-V emission standards and move directly to BS-VI.

We are of the view that regardless of whether BS-V standards are skipped or not, one thing is for sure: the opportunity on diesel powertrains across both the passenger side as well as the heavy trucks and buses side remains significant. We have tried to analyse the possible opportunity on the latest cost structures highlighted by ICCT for China which, like India, is aggressively looking toward more stringent emission norms. The table 1 below gives a perspective on possible incremental costs between various emission norms. The Bharat Stage (BS) norms are on same lines as the Euro norms. Thus, other than the localisation and scale benefits which might also emerge in India, the costing structures assumed for China and India could be similar in many respects.

**Table 1: Expected incremental costs of emission migration in China**

| $/vehicle | Large Buses Diesel | Private Cars Gasoline | Light Trucks Diesel | Heavy Trucks Diesel |
|---|---|---|---|---|
| Euro 1/I* | 158 | 142 | 150 | 174 |
| Euro 2/II* | 52 | 62 | 50 | 58 |
| Euro 3/III* | 473 | 122 | 450 | 520 |
| Euro 4/IV* | 2044 | 25 | 1764 | 4239 |
| Euro 5/V* | 231 | 10 | 218 | 403 |
| Euro 6/VI* | 1742 | 0 | 1558 | 3681 |

Source: ICCT *Costs are summarized as European standards equivalent.

We have tried to analyse the possible increase of costing for the various segments, which turns out to be an opportunity for BOS. We have tried to keep it simple with base assumption on volumes on current basis and to estimate the possible size of the opportunity if India migrates to BS-VI. We have also adjusted opportunity for the share of the BS-IV trucks currently being sold (~12% of total volumes). We have kept gasoline systems out of it as the cost of incremental upgradation remains low.

Though these costs/opportunities might come in the next 5-7 years, BOS, being a dominant ~2/3$^{rd}$ market leader in diesel powertrains across categories, could be a significant beneficiary of the same. A quick adoption path could also lead to significant margin gains as OEM dependence on BOS for compliance with norms would be very high.

**Table 2: Analysis of probable incremental costs of migrating from BS-IV to BS-VI**

| Segment | Current annual production | Incremental cost* ($/Vehicle) | Total Opportunity ($ mn) |
|---|---|---|---|
| Large Buses | 50,000 | 1,776 | 89 |
| Passenger diesel | 1,200,000 | 1,776 | 2,131 |
| Light Trucks* | 36,000 | 3,540 | 120 |
| Heavy trucks | 234,000 | 8,323 | 1,829 |

Source: ICCT, I-Sec, *from current standard to BS-VI as per Table 1

## Technology debate: SCR *vs* EGR

When the current Euro-5 legislation and the roughly equivalent statutory requirements of EPA 2007 (North America) came into force, heavy-duty truck and bus manufacturers fell into two camps. There were those who thought it better to prevent the formation of excessive NOx inside the engine, through exhaust gas recirculation (EGR). On the other side were the champions of selective catalytic reduction (SCR), allowing high levels of NOx but which could be neutralized downstream, before reaching the tailpipe. The pros and cons of the two technologies have been well aired.

But with the advent of much more stringent US EPA 2010 and Euro-VI norms permitted NOx levels, have put in place such low emission targets that in a sense the SCR-EGR hatchet is being buried. Nearly all parties are agreed that to achieve the ultra-low limits – on particulate matter (PM) as well as NOx – now being demanded by the regulators (US/EU), these two methods of NOx reduction must work in tandem. Huge additional costs are involved for both sides. E.g. adding a SCR to an existing EGR engine could translate into a ~US$5,000 increase in a heavy diesel truck's price.

SCR remains the preferred technology in terms of adoption, while EGR remains a more cost-effective solution which has a limitation of usage beyond Euro-IV on an independent basis.

**Table 3: Snapshot of key competing emission technologies**

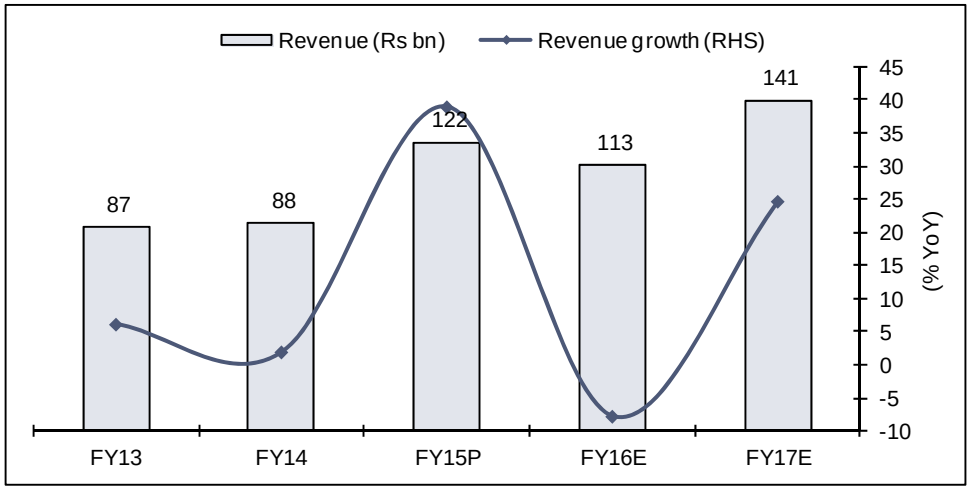
| SCR | EGR |
|---|---|
| SCR uses an after treatment system to reduce NOx emissions outside of the engine by dosing the exhaust stream with a small amount of Diesel Exhaust Fluid | EGR is a technique to reduce NOx emissions by recirculating a portion of an engine's exhaust gas back to the engine cylinders |
| Started to be commercially used in 2010 | Started to be commercially used in 2007 |
| Technologically more advanced and hence higher cost can help in meeting stringent Euro-V/VI emission norms | Older technology has its barriers and also the reason it is relatively lower costing as compared to SCR. Can be used in a combination to SCR to help meet emission target |

Company data, I-Sec research

Bosch has developed a similar albeit cheaper solution to EGR after-treatment technology system, the *DeNox 6.5*, for emerging markets. The ***DeNox 6.5*** is an SCR system for reducing NOx emissions, primarily for heavy commercial vehicles.

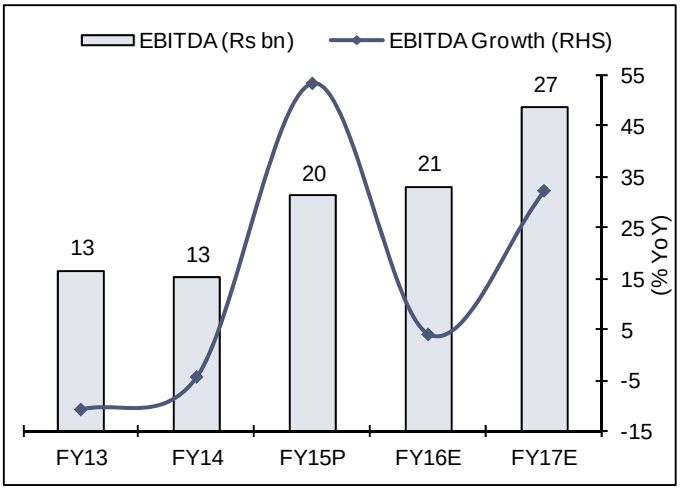
# Financials in charts

### Chart 4: Revenue growth trajectory to remain healthy



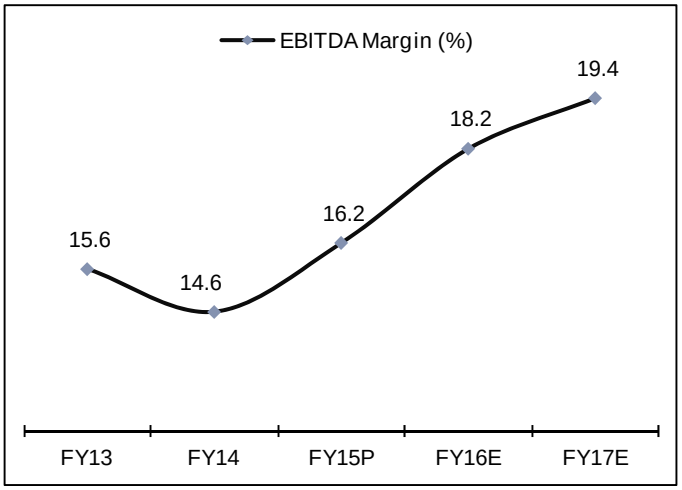

Source: I-Sec research, Company * FY15 ~15 month period

### Chart 5: EBITDA growth to remain strong



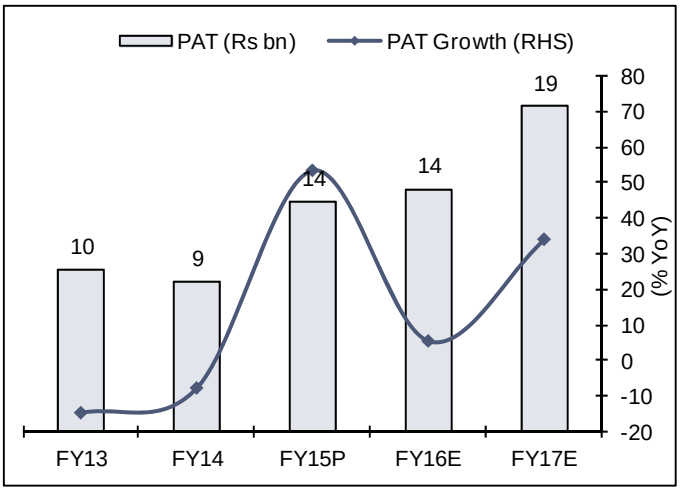

Source: I-Sec research, Company * FY15 ~15 month period

### Chart 6: EBITDA margins to trend up

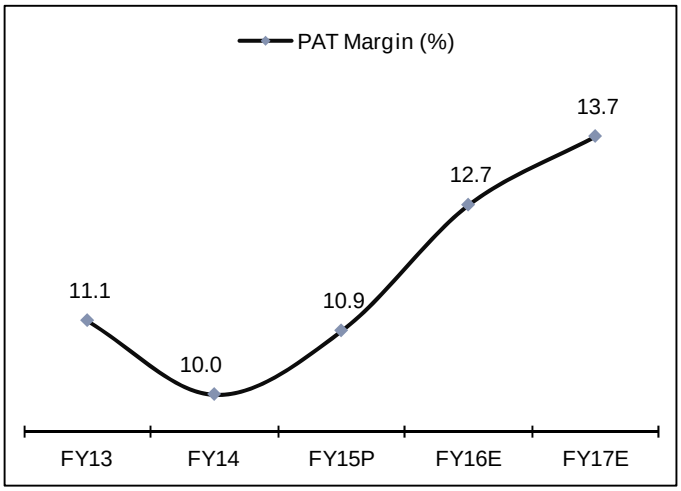



Source: I-Sec research, Company * FY15 ~15 month period

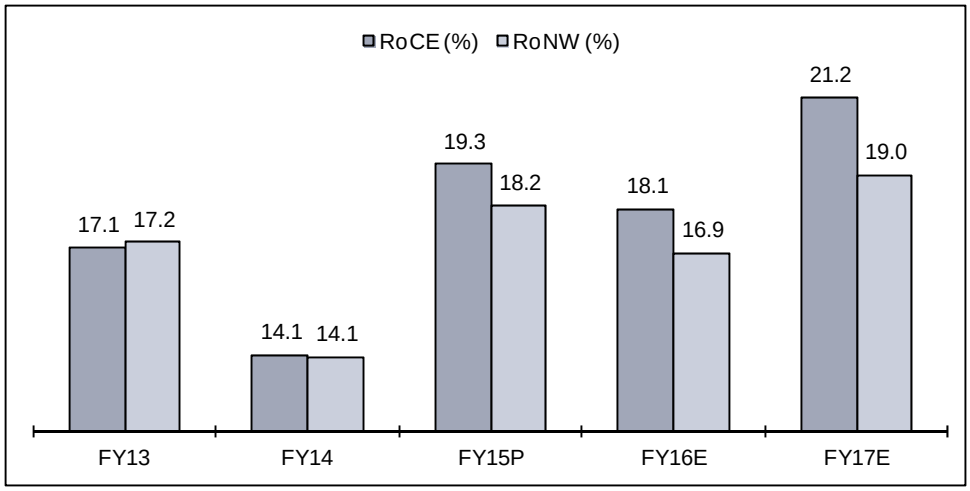
### Chart 7: Robust growth of >30% in FY17E




### Chart 8: PAT margin trend impressive

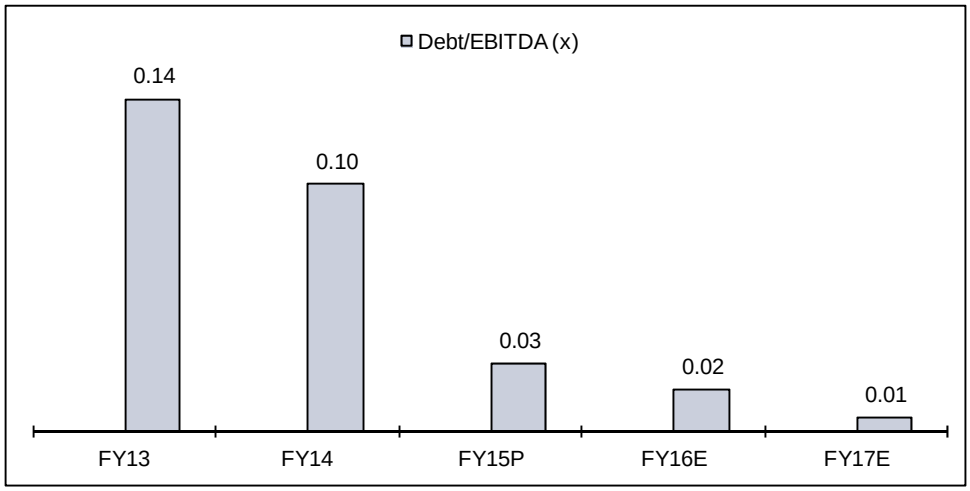



### Chart 9: Return ratios to continue on upward trajectory



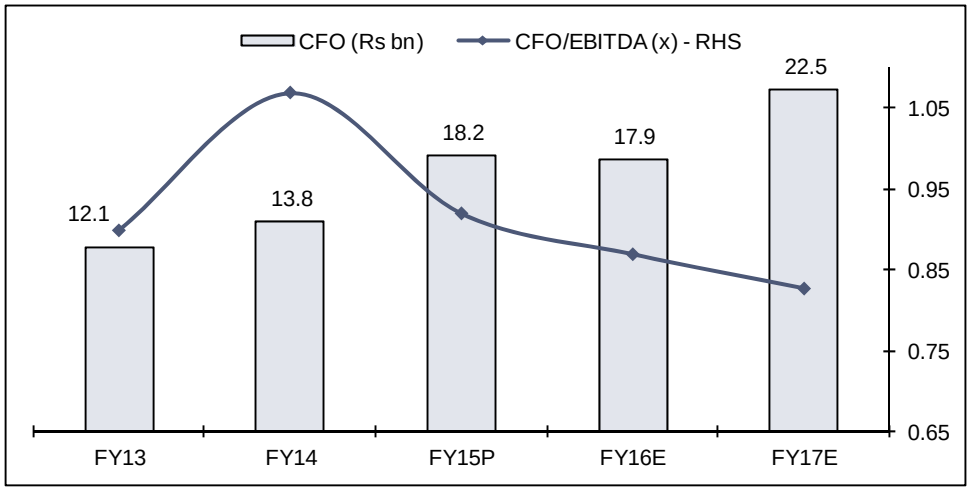

Source: I-Sec research, Company * FY15 ~15 month period

### Chart 10: Debt free balance sheet




Source: I-Sec research, Company * FY15 ~15 month period

**Chart 11: Strong cash flow generation**




Source: I-Sec research, Company * FY15 ~15 month period

## Valuation and recommendation

We initiate coverage on Bosch Ltd with a **HOLD** rating and target price of Rs24,454.

BOS would remain one of the most dominant automotive suppliers in India with the strongest technology backing. Ascribing a scarcity premium to valuation has for many years remained a challenge for investors & analyst alike. However, looking at a decade of 2-year forward PEG's (average PEG: ~1.3x / maxima: 1.8x / mininma: 1.0x) we find the current PEG of 1.1x is reasonable. We value the stock at 40x FY17E EPS (implied 2-year forward PEG ~1.1x), and initiate coverage with a HOLD rating and a target price of Rs24,454. In terms of cash flow (post capex) yield the stock remains fair at ~2.2%FY17E.

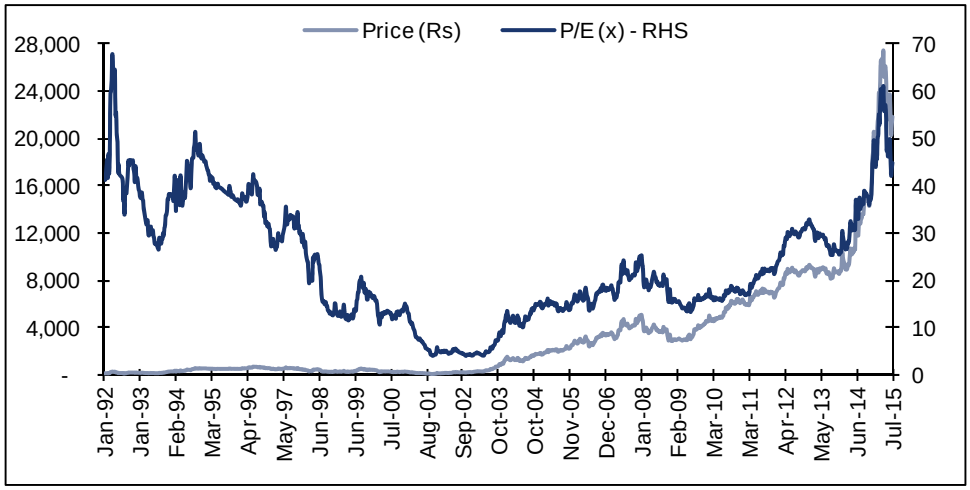
**Table 4: Peer comparison**

| | | | Mkt. | EPS growth (% YoY) | | | P/E (x) | | | EV/EBITDA (x) | | | ROE (%) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Company** | **Curr.** | **Price** | **Cap.** | **FY15** | **FY16E** | **FY17E** | **FY15** | **FY16E** | **FY17E** | **FY15** | **FY16E** | **FY17E** | **FY15** | **FY16E** | **FY17E** |
| **Bosch Ltd** | **INR** | **23,497** | **11,630** | | **5.5** | **34.1** | **54.4** | **51.5** | **38.4** | **36.2** | **34.3** | **25.5** | **18.2** | **16.9** | **19.0** |
| WABCO India Ltd | INR | 5,414 | 1,619 | 12.4 | 70.1 | 47.1 | 77.7 | 45.7 | 31.1 | 49.2 | 31.9 | 21.9 | 15.2 | 20.8 | 23.8 |
| Continental AG | EUR | 215 | 47,315 | 23.5 | 19.5 | 10.1 | 18.1 | 15.1 | 13.7 | 8.7 | 8.1 | 7.5 | 24.1 | 23.4 | 22.0 |
| Denso Corp | JPY | 5,862 | 42,007 | (6.9) | 16.3 | 10.1 | 18.1 | 15.6 | 14.1 | 8.7 | 7.4 | 6.8 | 9.0 | 9.3 | 9.7 |
| ZF TRW | USD | 105 | 12,225 | (68.2) | 202.7 | 10.8 | 40.3 | 13.3 | 12.0 | 13.7 | 7.1 | 6.4 | 7.3 | 21.6 | 18.5 |
| Delphi Automotive | USD | 80 | 22,963 | 15.4 | 19.4 | 18.1 | 17.7 | 14.8 | 12.5 | 10.5 | 9.9 | 8.8 | 49.8 | 58.6 | 60.8 |

Source: I-Sec research

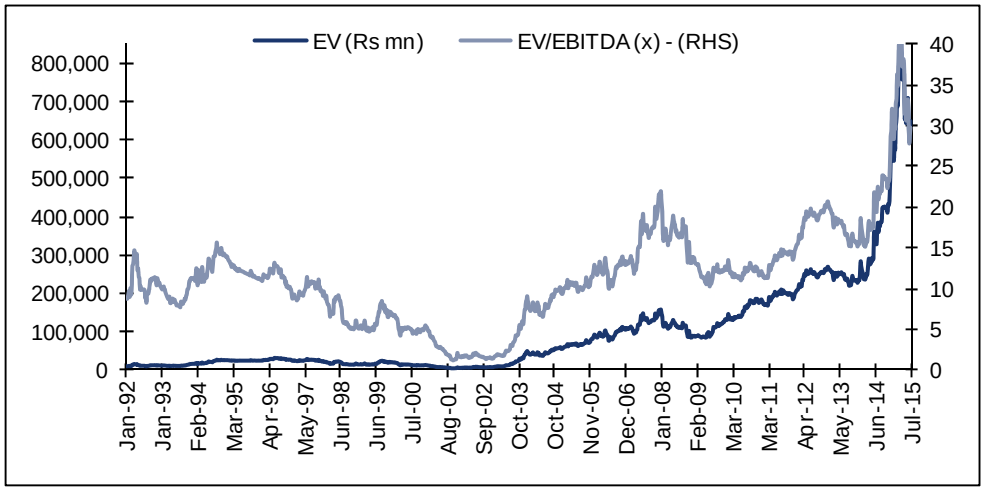
The stock currently trades at 51.5/38.4 FY16E/17E on P/E basis, while on EV/EBITDA basis it is trading at 34.3x/25.5xFY16E/FY17E, based on our forecasts.

**Chart 12: P/E (1-yr forward)**



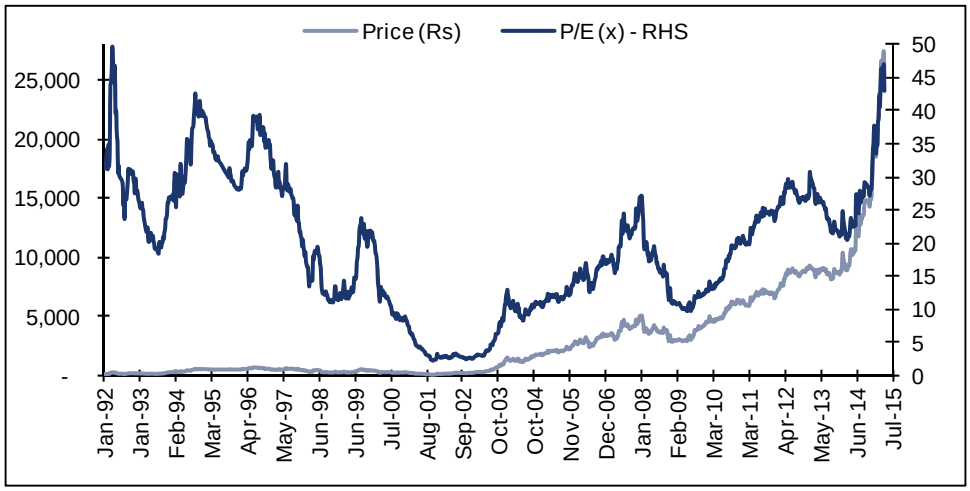

Source: I-Sec research, Bloomberg

**Chart 13: EV/EBITDA (1-yr forward)**



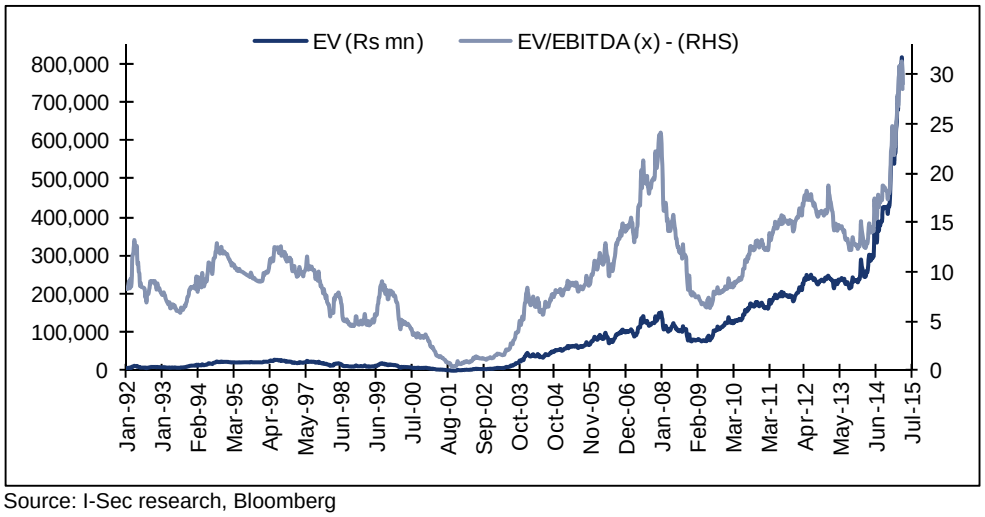

Source: I-Sec research, Bloomberg

**Chart 14: P/E (2-yr forward)**




Source: I-Sec research, Bloomberg

**Chart 15: EV/EBITDA (2-yr forward)**




Source: I-Sec research, Bloomberg

**Table 5: I-Sec vs. Consensus**

*(Rs mn)*

| | I-Sec | | Consensus | | Difference | |
|---|---|---|---|---|---|---|
| | FY16E | FY17E | FY16E | FY17E | FY16E | FY17E |
| Revenue | 112,853 | 140,614 | 114,180 | 140,652 | (1) | (0) |
| EBITDA | 20,594 | 27,236 | 20,206 | 26,490 | 2 | 3 |
| PAT | 14,320 | 19,196 | 14,206 | 18,646 | 1 | 3 |
| EPS (Rs) | 456 | 611 | 452.1 | 594.1 | 1 | 3 |

Source: Bloomberg, I-Sec research

We are in-line with consensus in believing that automotive growth is expected to be strong, but there are concerns on the tractor segment growth, but we continue to believe on the strong technology moat of Bosch Ltd.

# Key risks

Significant decline in tractor and M&HCV segment in the coming years could disrupt our assumptions on growth.

Any unknown regulatory hurdle in implementation of the long needed emission changes in India could again jeopardise earnings visibility.

# Annexure 1: Consolidated financials

## Table 6: Profit and Loss statement

*(Rs mn, year ending March 31)*

| | CY12 | CY13 | FY15 | FY16E | FY17E |
|---|---|---|---|---|---|
| Net Sales | 84,172 | 85,405 | 119,231 | 109,943 | 136,859 |
| Other operating income | 2,419 | 2,796 | 3,245 | 2,910 | 3,755 |
| **Total Op. Income (Sales)** | **86,591** | **88,201** | **122,476** | **112,853** | **140,614** |
| Raw material expense | 47,534 | 47,823 | 64,712 | 58,862 | 73,361 |
| Employee expense | 10,371 | 11,912 | 17,329 | 14,915 | 17,629 |
| Other expenses | 15,191 | 15,555 | 20,637 | 18,482 | 22,389 |
| **Operating Expenses** | **73,096** | **75,291** | **102,678** | **92,259** | **113,379** |
| **EBITDA** | **13,495** | **12,910** | **19,797** | **20,594** | **27,236** |
| *% margins* | *15.6* | *14.6* | *16.2* | *18.2* | *19.4* |
| Depreciation & Amortisation | 3,670 | 3,841 | 5,480 | 5,187 | 5,867 |
| **EBIT** | **9,825** | **9,069** | **14,317** | **15,407** | **21,369** |
| Other Income | 3,692 | 3,526 | 5,689 | 4,961 | 5,916 |
| Gross Interest | 55 | 29 | 163 | 5 | 2 |
| **PBT** | **13,462** | **12,566** | **19,842** | **20,362** | **27,282** |
| Less: Exceptionals | - | - | 280 | - | - |
| **PBT after Exceptionals** | **13,462** | **12,566** | **19,562** | **20,362** | **27,282** |
| Less: Taxes | 3,879 | 3,719 | 6,182 | 6,043 | 8,086 |
| Less: Minority Interest | - | - | - | - | - |
| Add: Profit from Associates | - | - | - | - | - |
| **Net Income (Reported)** | **9,583** | **8,847** | **13,380** | **14,320** | **19,196** |
| **Net Income (Adjusted)** | **9,583** | **8,847** | **13,571** | **14,320** | **19,196** |

Source: Company data, I-Sec research * FY15 ~15 month period

## Table 7: Balance sheet

*(Rs mn, Year ending March 31)*

| | CY12 | CY13 | FY15 | FY16E | FY17E |
|---|---|---|---|---|---|
| **ASSETS** | | | | | |
| **Current Assets, Loan & Advances** | | | | | |
| Inventories | 10,957 | 11,978 | 12,762 | 13,856 | 17,248 |
| Sundry debtors | 10,210 | 10,561 | 11,877 | 13,705 | 17,060 |
| Loans and advances | 8,787 | 9,084 | 11,417 | 9,868 | 11,463 |
| Other current assets | 1,403 | 1,457 | 1,599 | 1,475 | 1,836 |
| Cash & cash equivalents | 14,872 | 14,404 | 18,970 | 22,615 | 28,138 |
| **Total Current Assets** | **46,229** | **47,484** | **56,625** | **61,519** | **75,745** |
| **Current Liabilities & Provisions** | | | | | |
| Sundry creditors | 9,304 | 10,475 | 12,165 | 12,154 | 15,129 |
| Short-term provisions | 5,065 | 5,112 | 8,870 | 8,862 | 11,032 |
| Other current liabilities | 4,569 | 6,156 | 4,463 | 4,115 | 5,122 |
| **Total Current Liabilities & Provisions** | **18,938** | **21,742** | **25,498** | **25,131** | **31,284** |
| **Net Current Assets** | **27,291** | **25,741** | **31,127** | **36,388** | **44,461** |
| **Investments** | **15,198** | **22,023** | **28,889** | **35,139** | **42,389** |
| Goodwill | 0 | 0 | 0 | 0 | 0 |
| **Fixed Assets** | | | | | |
| Gross Fixed Assets | 39,479 | 42,990 | 51,115 | 56,115 | 62,115 |
| Accumulated Depreciation | 30,846 | 33,770 | 39,251 | 44,438 | 50,304 |
| **Net Fixed Assets** | **8,633** | **9,220** | **11,864** | **11,677** | **11,810** |
| Capital Work-in-Progress | 4,171 | 4,568 | 568 | 568 | 568 |
| **Total Fixed Assets** | **12,804** | **13,788** | **12,432** | **12,245** | **12,378** |
| Long term loans & advances | 2,256 | 2,626 | 2,189 | 2,019 | 2,513 |
| Deferred Tax Assets | 2,552 | 2,989 | 4,172 | 4,472 | 4,772 |
| Other non-cuurent asset | 0 | 0 | 0 | 0 | 0 |
| **Total Assets** | **60,101** | **67,167** | **78,809** | **90,262** | **106,513** |
| | | | | | |
| **LIABILITIES** | | | | | |
| **Borrowings** | **1,850** | **1,316** | **555** | **355** | **155** |
| *long-term borrowings* | 37 | 27 | 13 | 13 | 13 |
| *short-term borrowings* | 1,813 | 1,289 | 542 | 342 | 142 |
| Long-term provisions | 2,184 | 2,517 | 4,302 | 4,702 | 5,102 |
| Deferred Tax Liability | 0 | 0 | 0 | 0 | 0 |
| Other Non-current Liabilities | 334 | 391 | 483 | 483 | 483 |
| Minority Interest | 0 | 0 | 0 | 0 | 0 |
| Equity Share Capital | 314 | 314 | 314 | 314 | 314 |
| Reserves & Surplus | 55,419 | 62,629 | 73,155 | 84,408 | 100,459 |
| **Net Worth** | **55,733** | **62,943** | **73,469** | **84,722** | **100,773** |
| **Total Liabilities** | **60,101** | **67,167** | **78,809** | **90,262** | **106,513** |

Source: Company data, I-Sec research * FY15 ~15 month period

## Table 8: Cashflow statement

*(Rs mn, Year ending March 31)*

| | CY12 | CY13 | FY15 | FY16E | FY17E |
|---|---|---|---|---|---|
| **Cash Flow from Operating Activities** | | | | | |
| PAT | 9,583 | 8,847 | 13,380 | 14,320 | 19,196 |
| Add: Depreciation | 3,670 | 3,841 | 5,480 | 5,187 | 5,867 |
| Add: Other Operating activities | 55 | 29 | 163 | 5 | 2 |
| **Operating cash flow before working capital changes** | **13,308** | **12,717** | **19,024** | **19,512** | **25,065** |
| **Changes in working capital** | | | | | |
| (Increase) / Decrease Inventories | 874 | (1,021) | (784) | (1,094) | (3,392) |
| (Increase) / Decrease Receivables | (1,251) | (351) | (1,316) | (1,828) | (3,355) |
| Increase / (Decrease) Payables | (1,001) | 1,171 | 1,690 | (11) | 2,975 |
| Others | 195 | 1,283 | (410) | 1,318 | 1,221 |
| **Net Working Capital Changes** | **(1,183)** | **1,082** | **(820)** | **(1,615)** | **(2,551)** |
| **Cash flow from Operating Activities** | **12,125** | **13,799** | **18,204** | **17,896** | **22,514** |
| **Capital Commitments** | **(7,350)** | **(4,825)** | **(4,125)** | **(5,000)** | **(6,000)** |
| **Free Cash Flow** | **4,775** | **8,974** | **14,079** | **12,896** | **16,514** |
| **Cash flow from Investing Activities** | **(4,975)** | **(12,067)** | **(9,860)** | **(10,979)** | **(13,644)** |
| **Cash Flow from Financing Activities** | | | | | |
| Issue of Share Capital | - | 0 | - | - | - |
| Inc/(Dec) in securities premium | - | - | - | - | - |
| Buyback of shares | - | - | - | - | - |
| Inc/(Dec) in Borrowings | (604) | (534) | (761) | (200) | (200) |
| Dividend paid | (2,190) | (2,035) | (3,145) | (2,775) | (3,145) |
| Others | **1,001** | **369** | **128** | **(297)** | **(2)** |
| **Cash flow from Financing Activities** | **(1,793)** | **(2,200)** | **(3,778)** | **(3,272)** | **(3,347)** |
| **Net Cash Flow** | **5,357** | **(468)** | **4,566** | **3,645** | **5,523** |
| **Opening Cash & Bank balance** | **9,515** | **14,872** | **14,404** | **18,970** | **22,615** |
| **Closing Cash & Bank balance** | **14,872** | **14,404** | **18,970** | **22,615** | **28,138** |
| **Increase / (Decrease) in Cash & cash equivalents** | **5,357** | **(468)** | **4,566** | **3,645** | **5,523** |

Source: Company data, I-Sec research * FY15 ~15 month period

## Table 9: Key ratios

*(Year ending March 31)*

| | CY12 | CY13 | FY15 | FY16E | FY17E |
|---|---|---|---|---|---|
| **Per Share Data (in Rs.)** | | | | | |
| EPS (Basic) | 305.2 | 281.8 | 426.1 | 456.0 | 611.3 |
| EPS (Adjusted) | 305.2 | 281.8 | 432.2 | 456.0 | 611.3 |
| Cash EPS | 422.1 | 404.1 | 600.6 | 621.2 | 798.2 |
| Dividend per share (DPS) | 60.0 | 55.0 | 85.0 | 75.0 | 85.0 |
| BVPS (Adjusted) | 1,774.9 | 2,004.6 | 2,339.8 | 2,698.2 | 3,209.3 |
| | | | | | |
| **Growth Ratios (%)** | | | | | |
| Total Op. Income (Sales) | 6.0 | 1.9 | | (7.9) | 24.6 |
| EBITDA | (10.7) | (4.3) | | 4.0 | 32.3 |
| Net Income (Adjusted) | (14.6) | (7.7) | | 5.5 | 34.1 |
| EPS (Adjusted) | (14.6) | (7.7) | | 5.5 | 34.1 |
| Cash EPS | (4.0) | (4.3) | | 3.4 | 28.5 |
| BVPS (Adjusted) | 17.9 | 12.9 | | 15.3 | 18.9 |
| | | | | | |
| **Valuation Ratios (x)** | | | | | |
| P/E (Adjusted) | 77.0 | 83.4 | 54.4 | 51.5 | 38.4 |
| P/BV (Adjusted) | 13.2 | 11.7 | 10.0 | 8.7 | 7.3 |
| EV/EBITDA | 52.9 | 55.2 | 36.2 | 34.3 | 25.5 |
| EV/Sales | 8.2 | 8.1 | 5.9 | 6.3 | 4.9 |
| | | | | | |
| **Return/Profitability Ratio (%)** | | | | | |
| Raw Material Expenses/Sales | 54.9 | 54.2 | 52.8 | 52.2 | 52.2 |
| Employee Expenses/Sales | 12.0 | 13.5 | 14.1 | 13.2 | 12.5 |
| Royalty & Technical Service Fee/Sales | 1.7 | 1.5 | - | - | - |
| Administrative Expenses/Sales | - | - | - | - | - |
| Other Expenses/Sales | 16.0 | 16.2 | 16.8 | 16.6 | 16.1 |
| EBITDA Margin | 15.6 | 14.6 | 16.2 | 18.2 | 19.4 |
| Net Income Margin (Adjusted) | 11.1 | 10.0 | 10.9 | 12.7 | 13.7 |
| RoCE | 17.1 | 14.1 | 19.3 | 18.1 | 21.2 |
| RoNW | 17.2 | 14.1 | 18.2 | 16.9 | 19.0 |
| Dividend Payout Ratio | 19.7 | 19.5 | 19.7 | 16.4 | 13.9 |
| Dividend Yield | 0.3 | 0.2 | 0.4 | 0.3 | 0.4 |
| | | | | | |
| **Solvency/Wkg. Cap. Ratios (x)** | | | | | |
| Net D/E | - | - | - | - | - |
| Debt/EBITDA | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| EBIT/Interest | - | - | - | - | - |
| Current Ratio | 2.4 | 2.2 | 2.2 | 2.4 | 2.4 |
| Quick Ratio | 1.9 | 1.6 | 1.7 | 1.9 | 1.9 |
| Inventory (days) | 48 | 51 | 39 | 46 | 46 |
| Receivables (days) | 44 | 45 | 36 | 46 | 46 |
| Payables (days) | 40 | 45 | 37 | 40 | 40 |

Source: Company data, I-Sec research * FY15 ~15 month period

# Annexure 2: Index of tables and charts

## Tables



## Charts

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