Initiating Coverage

SECTOR: ENGINES

Greaves Cotton

Power horse

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Contents

Greaves Cotton

STOCK INFO.	BLOOMBERG
BSE Sensex: 15,261	GRV IN
	REUTERS CODE
S&P CNX: 4,440	GRVL.BO

30 July 2007 **Buy**

Initiating Coverage Rs334

Y/E JUNE	2006	2007E	2008E	2009E
Net Sales (Rs m)	8,349	11,103	14,536	18,227
EBITDA (Rs m)	1,335	1,824	2,372	2,984
PAT (Rs m)	745	1,181	1,384	1,803
Adjusted EPS (Rs)	15.2	24.2	28.3	36.9
EPS Growth (%)	65.0	58.6	17.1	30.3
BV/Share (Rs)	43.4	59.0	76.8	99.7
P/E (x)	18.7	13.8	11.8	9.0
P/BV (x)	7.7	5.7	4.3	3.3
EV/EBITDA (x)	11.8	8.8	6.6	5.1
EV/Sales (x)	1.7	1.3	1.0	0.7
RoE (%)	49.7	47.2	41.7	41.8
RoCE (%)	49.5	51.6	54.2	59.9

Large player in small engines segment: Greaves Cotton is one of the world's largest manufacturers of single- and twin-cylinder engines, which have wide-ranging applications – from driving small vehicles to agricultural pumpsets. The company also makes large engines used in power gensets. We expect Greaves' engines business to record 16% CAGR through FY10, given steady demand across product segments.

Excessive concern over Piaggio insourcing unwarranted: Greaves meets 100% of Piaggio India's three-wheeler engines requirement. Piaggio now plans to set up its own engines plant in India. However, the same is expected to commission only in 2HFY10 (June ending), by when we expect Greaves to make significant progress with its de-risking initiatives like focus on non-auto engines and exports. Hence we believe excessive concern over the Piaggio insourcing issue is unwarranted.

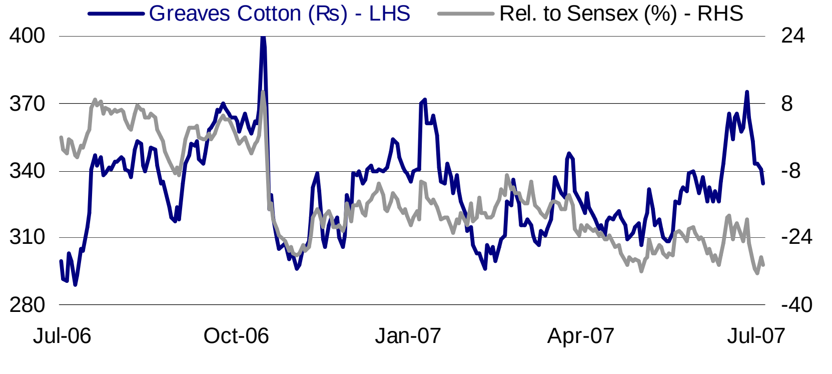
Infrastructure equipment business in hyper growth mode: Greaves' infrastructure equipment business is in the hyper growth mode with volume CAGR of over 50%. We expect large-scale investment in roads and construction to help sustain revenue CAGR of 49% through FY10. Economies of scale, higher indigenization and a strengthening rupee are driving up margins, from 4.4% in FY05 to 15% in 9MFY07.

Robust financials, low valuation, 33% upside, Buy: Greaves enjoys PAT margin of 10-11%, RoCE of over 50% and RoE of 47%. We estimate 22% EPS CAGR through FY10. Although growth beyond FY09 could be slower due to Piaggio's own engine plant, we believe a steep discount to the current TTM P/E of 14x is unwarranted. Our target price at 12x FY09E is Rs443, a 33% upside from current levels. **Buy.**

KEY FINANCIALS	
Shares Outstanding (m)	48.8
Market Cap. (Rs b)	16.2
Market Cap. (US$ b)	0.4
Past 3 yrs. Sales Growth (%)	16.3
Past 3 yrs. NP Growth (%)	28.6
Dividend Payout (%)	43.5
Dividend Yield (%)	1.9

STOCK DATA	
52-Week Range	420/261
Major Shareholders (as of June 2007)	%
Promoters	50.4
Domestic Institutions	34.0
FIIs/FDIs	2.8
Others	12.8
Average Daily Turnover	
Volume ('000 shares)	74.1
Value (Rs million)	24.5
1/6/12 Month Rel. Performance (%)	-2/-10/-31
1/6/12 Month Abs. Performance (%)	2/-2/11

STOCK PERFORMANCE (1 YEAR)



Large player in small engines market

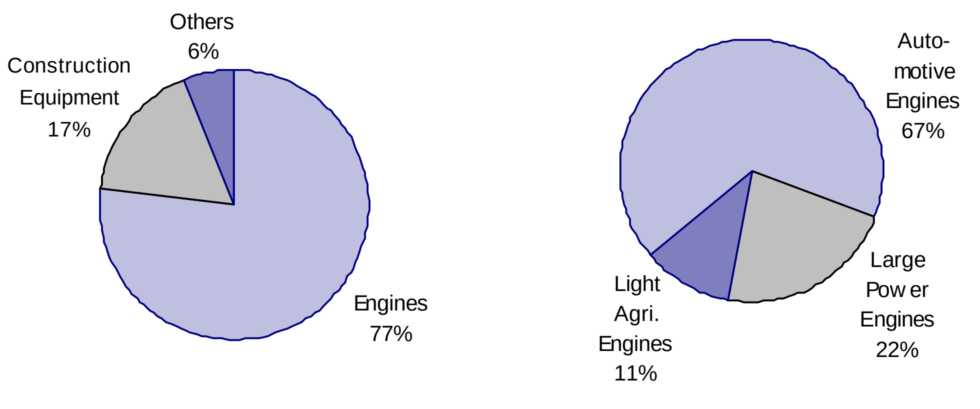
One of the world's largest single and twin cylinder engine manufacturer

Greaves Cotton is one of the world's largest manufacturers of single- and twin-cylinder engines, which have wide-ranging applications – from driving small vehicles to agricultural pumpsets. The company also makes large engines used in power gensets. We expect Greaves' engines business to record 16% CAGR through FY10, led by -

- Strong product portfolio
- Steady growth in Indian three-wheelers
- Emerging segment of engines for one-ton four-wheelers
- Strong demand for large engines in power gensets
- Value addition in agricultural engines – *Greaves* brand of pumpsets, portable gensets and tillers.

ENGINES ACCOUNT FOR 77% OF FY07E REVENUE

REVENUE MIX (RS12.5B FOR FY07E) ENGINES REVENUE MIX (RS9.6B FOR FY07E)



Source: Motilal Oswal Securities

Greaves has a strong engines portfolio

The company manufacturers three broad types of engines –

1. Light automotive engines
2. Portable petrol/kerosene engines
3. Power engines.

The company has several product variants for different applications in each segment. We believe Greaves has some unique advantage(s) in each of its product segments.

Unique advantages in each product segment

GREAVES ENGINES BUSINESS – IN A NUTSHELL

ENGINE SEGMENT, BRIEF DESCRIPTION	APPLICATION	COMPETITIVE LANDSCAPE	GREAVES' UNIQUE POSITION
Light automotive engines (Single- and twin-cylinders engines up to 18hp)	✍ Sub 18hp engines used in three-wheeler passenger and cargo vehicles ✍ 18hp engines used in one-ton four-wheelers such as Tata Ace	✍ Bajaj Auto and Force Motors have in house engine capacity ✍ Lombardini is a major competitor (market share not available) ✍ Piaggio plans to insource engines from 4QFY10	✍ Currently, sole supplier to Piaggio and M&M ✍ Supplies to a total of 22 OEMs, including many in the unorganised sector such as Kranti Automobiles (Delhi) and Kerala Automobile
Portable petrol/ kerosene engines	✍ Agricultural pumpsets ✍ Lawn mowers ✍ Sugarcane crushers ✍ Rail cutting machines ✍ Power ploughs / tillers	High competition from – ✍ Regional, small players ✍ Imports from China	✍ Greaves supplies bare engines as well as complete pumpsets for the agricultural sector, where it enjoys leadership position ✍ Greaves is sustaining growth by augmenting application of its engines e.g. for concrete vibrators
Power engines (large multi-cylinder engines of 15-550kva, in air- and water-cooled versions)	✍ Diesel generating sets ✍ Pumps, compressors ✍ Barges ✍ Construction equipment ✍ Captively used for its own gensets branded Whispower	Major competitors are Cummins India, Caterpillar, Kirloskar Oil Engines, etc	Greaves bagged Rs300m worth of defense orders in FY06 – a testimony of its product quality

Source: Motilal Oswal Securities

Beneficiary of steady growth in Indian three-wheelers

The Indian three-wheeler industry recorded a 20% CAGR in sales in FY02-07. Over this period, the share of engine-outsourcing players rose from 16% to 38% vis-à-vis engine insourcers. The interplay of both these trends helped Greaves' automotive engines grow faster than the market at 24% CAGR.

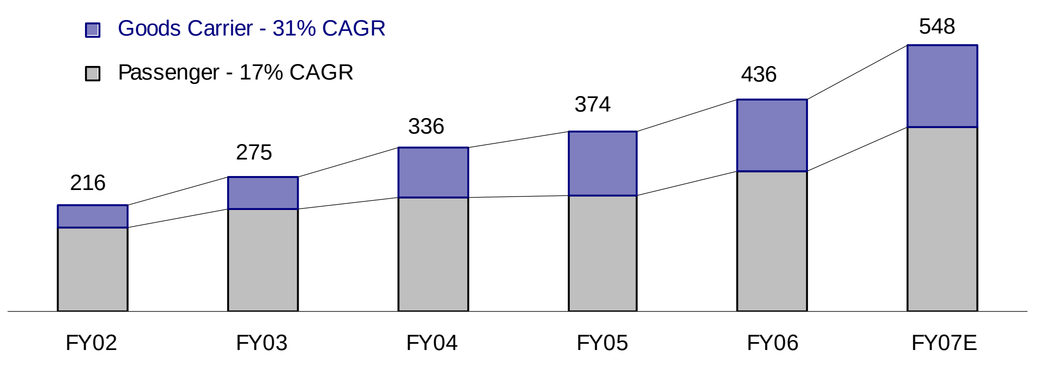
Goods carriers driving three-wheeler growth

Indian three-wheelers – 20% CAGR FY02-07: There are several reasons for growth of three-wheelers in a large and developing country like India –

- Need for low-cost means of local travel
- Cost-effective means of intra-city, last mile transportation of goods
- Transportation of people and goods in large number of small cities, towns and villages with narrow and/or non-motorable roads.

Traditionally, three-wheelers were mainly used for passenger travel. However, of late, three-wheeler goods carriers are showing a rising trend – up from 20% of total three-wheeler sales in FY02 to 31% in FY07, a 32% CAGR compared to 17% CAGR in passenger segment.

INDIAN THREE-WHEELER MARKET TREND ('000 NUMBERS)



Source: SIAM/Motilal Oswal Securities

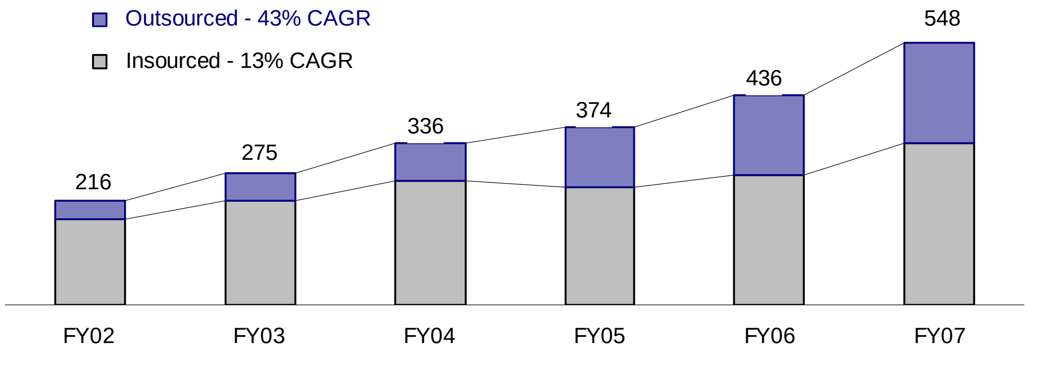
Engine outsourcing on the rise: In terms of engines sourcing, the three-wheeler players can be segmented into two:

1. Insourcers i.e. who make their own engines, mainly Bajaj Auto and Force Motors; and
2. Outsourcers i.e. who buy out their engines – Piaggio, Mahindra, Atul Auto and Scooters India.

Engine outsourcers growing faster than insourcers - FY02-07 CAGR 43% v/s 13%

The traditional three-wheeler manufacturers such as Bajaj Auto and Force Motors insourced their engines, due to legacy industry practices. However, for most new entrants like Piaggio, M&M and Atul Auto, the relatively low volumes did not justify setting up engine facilities. It was more feasible for them to outsource their requirement to specialized engine manufacturers who enjoy benefits of scale. As a result, share of outsourced engines increased from 16% in FY02 to 38% in FY07, a 43% CAGR compared to 13% for insourced engines. Engine manufacturers such as Greaves and Lombardini are the major beneficiaries of this trend.

OUTSOURCING OF ENGINES ON THE RISE



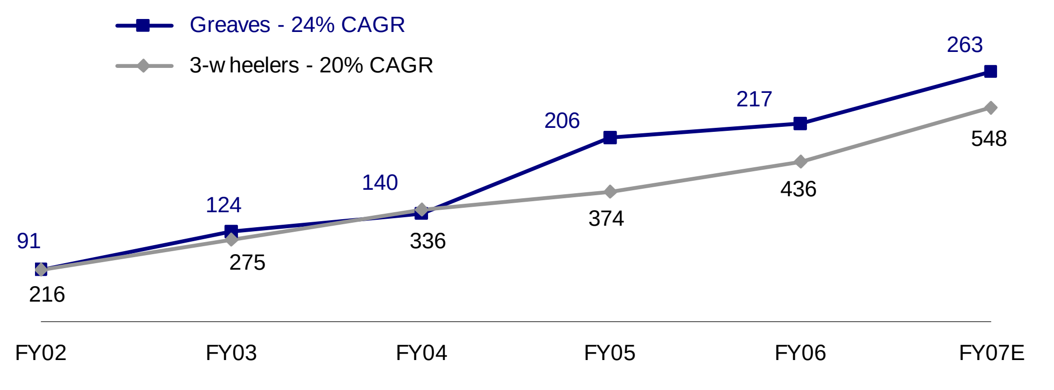
Source: SIAM/Motilal Oswal Securities

Three-wheeler growth and higher outsourcing of engines benefiting Greaves

FY02-07 CAGR of 24% for Greaves automotive engines: Greaves has been one of the biggest beneficiaries of the interplay of the above mentioned two factors i.e. high growth in the domestic three-wheeler market and outsourcing of engines by the new players. Greaves supplies engines to all the new entrants – Piaggio, Mahindra, Atul Auto and Scooters India. In fact, it is the sole supplier to Piaggio and Mahindra. Besides, it supplies engines to over 15 regional three-wheeler manufacturers such as Kranti Automobiles Delhi, Kerala Automobile Corporation, and small firms in Gujarat.

Greaves' automotive engines business has registered a strong growth - 24% CAGR FY02-FY07, higher than 20% CAGR for the organised three-wheeler market.

GREAVES' AUTO ENGINES GROWING FASTER THAN THREE-WHEELERS ('000 NOS)



Source: SIAM /Motilal Oswal Securities

One-ton four-wheelers – a whole new opportunity

The huge success of Tata Motors' *Ace* has led to many players eyeing the one-ton four-wheeler goods carrier segment. These carriers provide a cost effective way of transportation and are hence gaining in popularity.

Greaves' major customers eyeing one-ton four-wheeler segment

Piaggio has introduced its four-wheeler *Quargo* in India as *Apé Truk*. Bajaj Auto and Atul Auto are among others to have announced similar plans. One-ton four-wheelers require twin-cylinder engines, which have higher value than single-cylinder engine for three-wheelers. We expect Greaves to supply twin-cylinder engines to Piaggio and Atul Auto at least. It is highly likely that going forward, some more players such as Mahindra will enter the one-ton carrier segment, expanding the twin-cylinder engines segment for Greaves.

Large engines are powering along

Gensets and construction equipment driving demand for large engines

Greaves' large engines business accounts for 20% of total engine revenue. It grew 40% in FY06, and we expect it to maintain its growth momentum in FY07. Beyond that, we have assumed growth of 30% in FY08 and 25% in FY09.

Large engines have diverse applications – power generation, construction equipment, marine, and defense. We believe the key drivers for this business are –

- Power deficit in the medium-term, leading to higher demand for supplementary power from gensets;
- Rising demand for back-up power e.g. in IT/ITeS and telecom sectors, malls, high-rise buildings, etc; and
- Higher spend in infrastructure and construction activities, leading to high demand for engines in construction equipment.

LARGE ENGINES - DIVERSE APPLICATIONS

SEGMENT	APPLICATION
Power	Gensets, used for power supply and/or backup power Marine fishing vessels, pilot launches, barges, cargo vessels, marine auxiliary sets and patrol boats
Construction Equipments	Hydraulic excavators, rear dumpers, front end loaders, rope shovels etc
Defence	Military vehicles, large ships, ground power units for aircrafts, compressors, high powered gensets
Others	Explosion proof engines in fire fighting pumpset for offshore oil platforms

Source: Motilal Oswal Securities

Value addition to fight competition in agricultural engines

Agri engines used in own portable pump sets, gensets and power tillers

Greaves enjoys a leadership position in portable petrol/kerosene engines, which contribute about 10% of the engine revenue. There is high competition in this segment, both from local players and low-cost Chinese imports. We believe Greaves is addressing this issue through the value-addition route –

- It makes its own portable pumpsets and gensets
- It exports engines to China for conversion into power tillers, which it trades back into India
- It plans to augment applications of its engines, e.g. for concrete vibrators used in the construction sector.

Considering all of the above, we expect Greaves' engines revenue to clock 16% CAGR through FY10, by when the Piaggio insourcing factor comes into play.

Excessive concern over Piaggio insourcing unwarranted

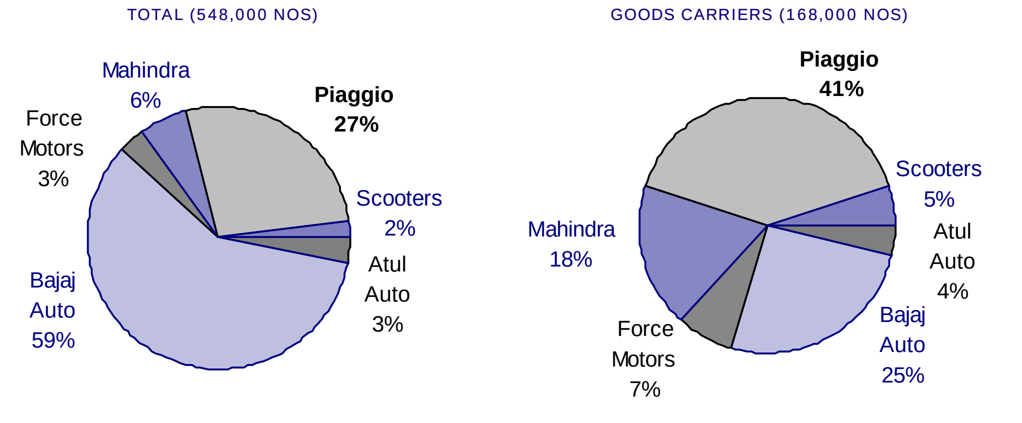
Piaggio enjoys ~36% share of the domestic three-wheeler market. Greaves currently meets 100% of Piaggio's engines requirement, which accounts for about 30% of its total revenue. In November 2006, Piaggio announced its plan to set up its own engines plant in India, and the Greaves stock has underperformed since then. However, Piaggio's plant is expected to commission only in 2HFY10, by when Greaves would have made significant progress with its de-risking initiatives like focus on non-auto engines and scale-up of its recent Bukh-Farymann acquisition. Overall, we believe that the Piaggio issue may be a bit overblown.

Piaggio is a key customer for Greaves

Piaggio is the 2nd largest three-wheeler company in India - 36% market share

Piaggio of Italy is the second largest three-wheeler company in India. In FY07, it sold 146,640 vehicles, enjoying a 36% share of the domestic market, and 27% share of the total three-wheelers sold, including exports. In the goods carrier segment, Piaggio is the market leader with a 41% share.

3-WHEELER MARKET SHARES (FY07)



Source: SIAM/Motilal Oswal Securities

Greaves a sole supplier of engines to Piaggio

Piaggio is a key customer for Greaves. Currently, Greaves meets 100% of Piaggio's engine requirements, which accounts for ~30% of Greaves's overall revenue.

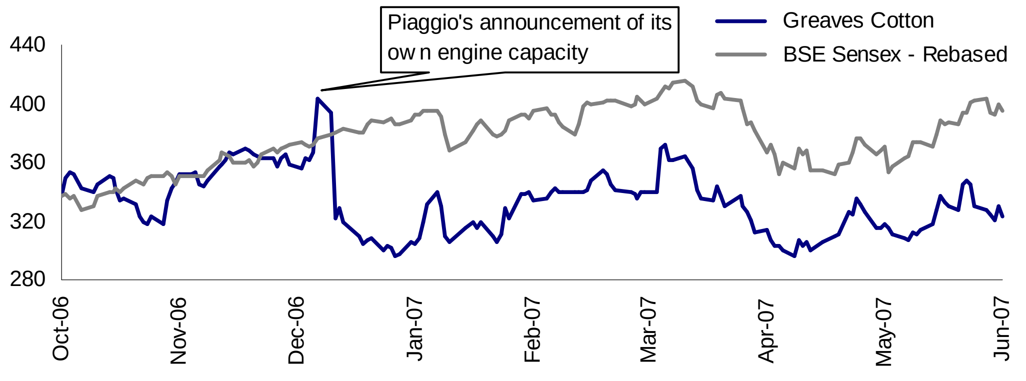
Piaggio plans to set up own engines plant in India

Piaggio's own engines facility negative for Greaves

In November 2006, Piaggio announced its plan to set up its own engines facility in India. The €65m (Rs3.5b) facility would have a capacity of 200,000 engines per annum. On this news, the Greaves stock crashed 25% within five sessions, and has continued to underperform the market ever since.

Greaves stock crashes 25% in five sessions

GREAVES STOCK PERFORMANCE – PRE- AND POST-PIAGGIO ANNOUNCEMENT



Source: Motilal Oswal Securities

Excessive concern over Piaggio insourcing unwarranted

On the surface, Piaggio's planned insourcing of engines is a major concern for Greaves. However, a deeper analysis suggests that the concern is somewhat exaggerated -

- Piaggio's engines facility would start full-fledged production earliest in 1QCY10 i.e. 3QFY10 (June-end) for Greaves (we are currently in 4QFY07).
- Our calculations suggest that even after its own engines facility, in FY11, Piaggio is likely to buy 80-100,000 engines from Greaves assuming 12-15% CAGR FY07-11E.
- Automotive engine clients other than Piaggio (especially Mahindra) are expected to register healthy growth. In any case, Greaves supplies to as many as 22 OEMs.
- By FY10, Greaves' various other de-risking initiatives would also be in place: (1) thrust on non-automotive engines, (2) scaling up of its recent German acquisition, Bukh-Farymann, and (3) increasing share from exports.

Piaggio's engine facility is still far off

Piaggio's engine facility to start only in 3QFY10

Having scaled up its operations in India, Piaggio is looking at insourcing its engine requirements for the purpose of its three-wheelers and the recently launched four-wheeler, *Apé Truk*. Towards this end, the company announced setting up its own engine facility in India. However, this facility is expected to start commercial production earliest by 1QCY10 (3QFY10 for Greaves). This is a good 11 quarters away. Till such time, Piaggio will continue outsourcing its entire requirements from Greaves. To this extent, we believe Greaves is not impacted by Piaggio's engine facility till FY10.

Incremental engine requirement will continue to be sourced from Greaves

Greaves to remain a second source post FY10

Piaggio produced about 150,000 three-wheelers during FY07. It registered a 35% volume CAGR over FY02-07 vis-à-vis a 21% CAGR for total three-wheelers. We have factored in a slowdown and assume a 12-15% volume growth for Piaggio three-wheelers going forward. We have added about 50,000 of *Apé Truk* volumes to this. Thus, Piaggio's total engine requirement works out to 280-300,000 in FY11. This amounts to an incremental requirement of 80-100,000 engines. We believe this incremental demand would continue to be sourced from Greaves.

Other auto OEMs showing good growth

Supplies to 21 other OEMs - a key hedge against Piaggio

Apart from Piaggio, Greaves currently supplies engines to 21 OEMs including national players like Mahindra, Atul Auto, Scooters India, and other regional players like Kranti Automobile and Kerala Automobiles. These players have witnessed strong growth in recent years, with national players recording 42% CAGR FY03-07. Greaves is the exclusive engines supplier to Mahindra, and the primary supplier to Atul Auto and Scooters India (the other supplier being Lombardini). Thus, supply to other OEMs is a key hedge against slowing contribution from Piaggio. Our estimates factor in only 10% growth in non-Piaggio auto engines to account for potential slower growth of regional players.

Bukh-Farymann acquisition opens up export opportunity

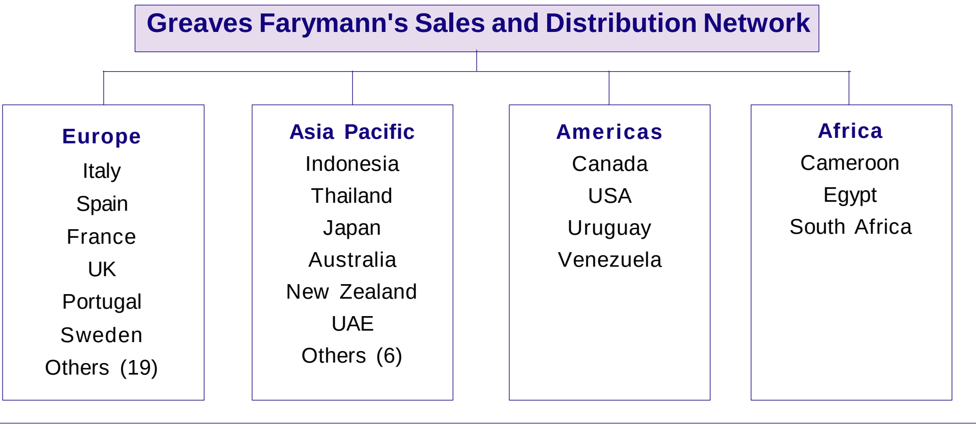
Greaves can leverage Farymann's global distribution network

In March 2007, Greaves acquired Bukh-Farymann Diesel GmbH, Germany through its 100% subsidiary, Greaves Cotton, Netherlands. The company, now renamed Greaves Farymann, was valued at €4.24m (approx Rs245m), including debt of €1.5m. Greaves Farymann has a turnover of about Rs500m, mainly from single cylinder, 5-15hp diesel engines used in construction equipment and special applications such as defense generating sets, life rescue boats and fire-fighting equipment.

The key factors behind this acquisition are –

- Company with a 60-year old brand and lean manufacturing, with only 45 people
- Opportunity to improve margins from the present 7-8% by outsourcing components from Greaves in India, rather than from vendors in Europe
- Improved cost-competitiveness to help ramp up Farymann sales from the current Rs500m to Rs2b by FY10, yet another initiative to offset loss of business from Piaggio.
- Access to Farymann's global distribution network, which ties in well with Greaves' own plans to focus on exports.

POTENTIAL EXPORT MARKETS FOR GREAVES COTTON



Source: Company/Motilal Oswal Securities

Infrastructure equipment will also help offset engines slowdown

Construction equipment such as concrete mixers and vibratory compactors currently account for 20% of overall revenue. This segment has grown 28% in FY06 and a high 82% in 9MFY07. Large-scale construction activity coupled with Greaves' own capacity expansions should see this business sustain high growth rates in the medium term.

Bottomline - Piaggio issue not a major negative

Our calculations suggest that loss of Piaggio volumes does not have a major negative impact on Greaves' performance through FY12, barring a small blip in FY11. Even here, we believe there is potential upside to our numbers by way of exports and higher-than-estimated revenue at Greaves-Farymann. Overall, we believe that excessive concern over the Piaggio issue is unwarranted.

Infrastructure equipment business in hyper growth mode

Greaves has a focused presence in hi-tech infrastructure equipment –

- **Road construction -** vibratory soil compactors and tandem rollers; and
- **Concreting** – batch mix plants, transit mixers and concrete pumps.

FY03-06 volume CAGR of 50-60%

Greaves is among the top three players in both segments. This business is in the hyper growth mode for Greaves – FY03-06 volume CAGR of over 50%, albeit on a small base. We expect large-scale investment in roads and real estate construction to help sustain this high growth over the medium term.

Our estimates factor in 49% CAGR in infrastructure equipment revenue through FY10. Economies of scale, higher indigenization and a strengthening rupee are driving up EBIT margins, from 4.4% in FY05 to 15% in 9MFY07.

Focused presence in hi-tech infrastructure equipment

Greaves' infrastructure equipment group has five hi-tech, high-growth products.

Technology tie-ups - Cifa for concrete equipment, Bomag for road equipment

GREAVES INFRASTRUCTURE EQUIPMENT PORTFOLIO

SEGMENT, PRODUCT	BRIEF DESCRIPTION	MAJOR COMPETITORS	GREAVES' POSITIONING
Road Equipment			
Vibratory soil compactors, Tandem rollers	**Soil compactors:** Used for compacting soil to create a level base **Tandem rollers:** Used for leveling asphalt during road construction	Volvo India (by acquiring Ingersoll Rand's business), L&T-Case, Escorts Construction Equipment, Caterpillar	- Technical tie up with Bomag of Germany - Vying with L&T-Case for second spot after Ingersoll-Rand - Recent capacity expansion expected to help improve market share
Concreting Equipment			
Batch mix plants	Used for the production of ready mix concrete (RMC)	Schwing Stetter (India)	- Entered this segment in a small way in FY06 - Growth potential considering 30-35% growth in RMC volumes
Transit mixers	Truck-mounted equipment for continuous mixing of concrete while transporting from plant to the construction site	Schwing Stetter (India), a market leader with 65-70% market share	- Has technical tie up with CIFA of Italy - No.2 in a near duopoly– 30-33% market share - Recent doubling of capacity to 200 transit mixers per month expected to help improve market share
Concrete pumps	Pumping of liquid concrete from the mixers to the exact location at the construction site	Schwing Stetter (India)	- Trying to improve presence through launch of new products e.g. Metro pumps

Source: Motilal Oswal Securities

Hyper growth mode on a small base

Rising construction activity driving growth - 50%+ CAGR FY03-06

Infrastructure equipment business is in the hyper growth mode for Greaves – FY03-06 volume CAGR of over 50%. We believe there are three key drivers for this –

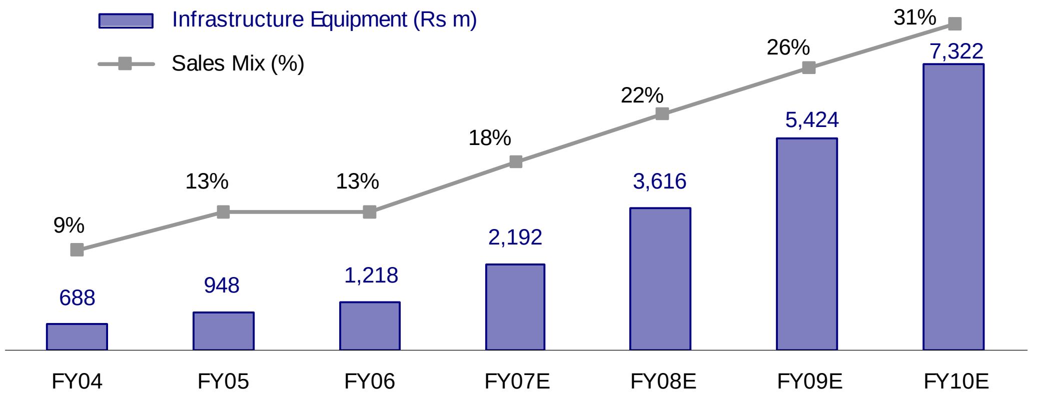
1. Significantly higher and rising outlays on all forms of construction activity, including roads and real estate
2. Rising use of hi-tech equipment due to considerations such as superior quality and faster project completion
3. Greaves' strong positioning in each product segment. The company is among the top three players in most products, and has the right technology partnerships – with Cifa of Italy for concreting equipment and Bomag of Germany for road equipment.

Rising infrastructure spend to help sustain growth rates

Infrastructure equipment to rise from 18% of sales in FY07 to 31% in FY10

We expect large-scale investment in roads and real estate construction to help sustain high growth rates over the medium term. Going forward, for Greaves, we have factored in 49% CAGR in infrastructure equipment revenue through FY10. Based on this, share of this division rises from 18% of sales in FY07 to 31% in FY10.

INFRASTRUCTURE EQUIPMENT GROUP REVENUES AND SALES MIX



Source: Motilal Oswal Securities

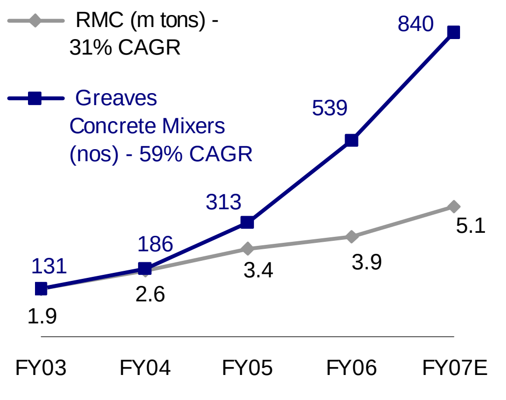
Road equipment: The Eleventh Five-Year Plan (FY08-12) budgets for total investment in roads of Rs2,831b, almost 3x the Tenth Plan spend. This should keep demand for road construction equipment buoyant.

Concrete equipment: Here, our confidence on growth rates stems from two indicators:

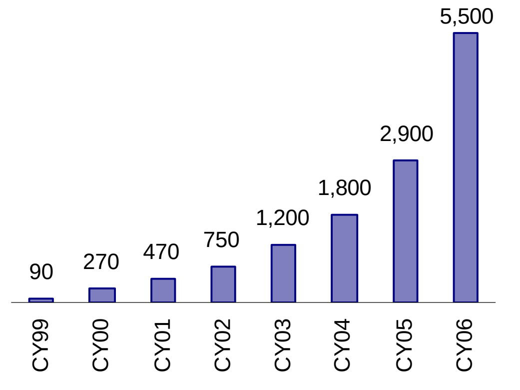
1. Robust growth in ready-mix concrete (RMC) volumes – 33% CAGR FY03-06; and
2. Strong performance track record of market leader, Schwing Stetter (India), the 100% subsidiary of its German namesake – 80% CAGR CY99-06.

CONCRETE EQUIPMENT GROWTH INDICATORS

RMC PRODUCTION VIS-À-VIS CONCRETE MIXERS



SCHWING STETTER SALES TREND (RS M) - 80% CAGR



Source: Company/Motilal Oswal Securities

Steady improvement in infrastructure business margin

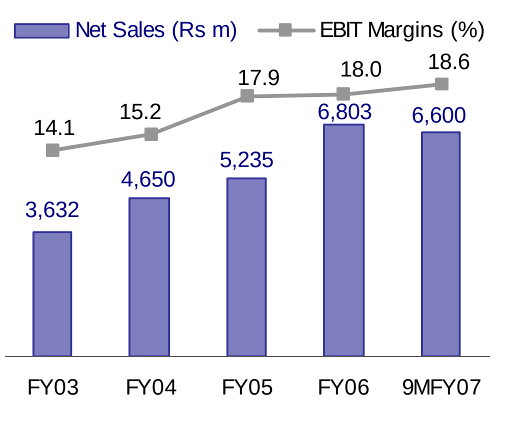
EBIT margin up from 4.4% in FY05 to 15% in 9MFY07

EBIT margin in the infrastructure business is steadily improving – up from 4.4% in FY05 to as high as 15% in 9MFY07. We believe the major reasons for this improvement are:

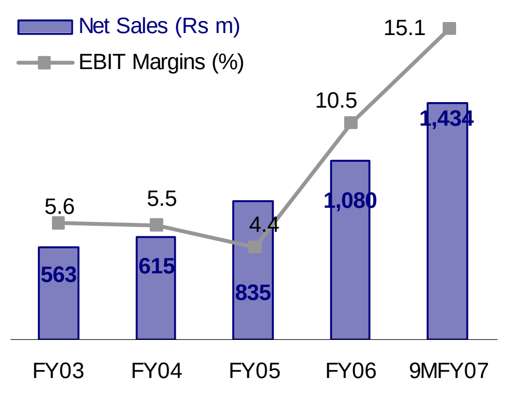
- Economies of scale led by over 50% CAGR in volumes
- Technology absorption and higher indigenization
- Stronger rupee in FY07, leading to lower cost of key imported components like hydraulic systems.

GREAVES SEGMENT ANALYSIS (REVENUE AND EBIT MARGINS)

ENGINES



INFRASTRUCTURE EQUIPMENT



Source: Company/Motilal Oswal Securities

Financials and projections

Major business and financial restructuring completed in FY06

Three positives from restructuring - business focus, low debt, high profitability

Over the last five years ending FY06, Greaves completed a major business-cum-financial restructuring program.

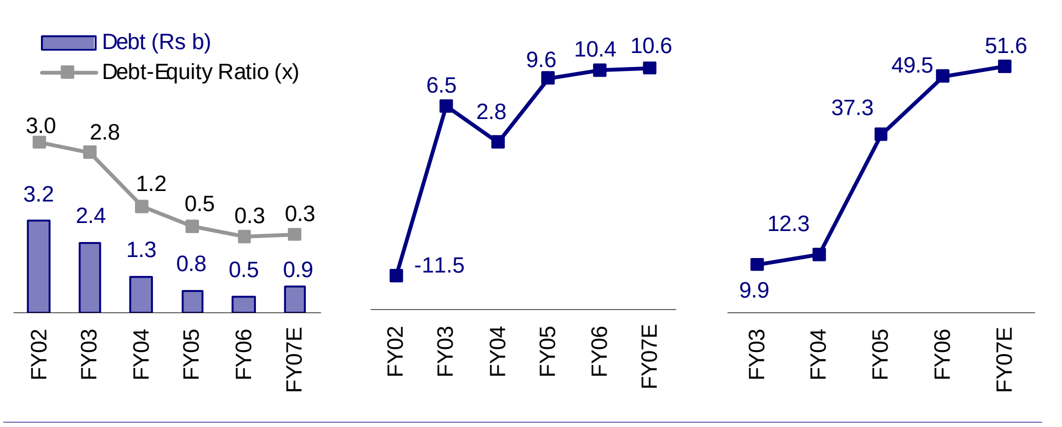
YEAR	RESTRUCTURING STEPS
FY01 *	✍ Suspension of loss-making Rajasthan Polymers division ✍ Exit from JV with Piaggio for three-wheelers
FY02 #	✍ Exit from JVs with Same of Italy for tractors and tractor engines ✍ ERP for engines unit implemented
FY03	✍ Acquisition of fluid couplings and cluster gears business from Pembril group ✍ One-time settlement with creditors of Rajasthan Polymers ✍ ERP roll-out to other business units
FY04	✍ Divestment of Rajasthan Polymers division ✍ Sale of power transmission business ✍ Manpower rightsizing via Rs270m VRS
FY05	✍ Exit from oilfield and drilling business ✍ Debt reduced to Rs790m against Rs3.2b in FY02 ✍ Return to the dividend list after a gap of five years
FY06	✍ Divestment of 25.5% stake in Greaves Morganite Crucible ✍ New Rs500m Technology Center at Aurangabad for R&D on various engines

**18 months ending September 2001; # - 9 months ending June 2002; all other years are 12 months ending June*　*Source: Company/Motilal Oswal Securities*

The key outcomes of the restructuring program are –

- Company emerges as a focused player in two business segments – engines and infrastructure equipment
- Debt down from Rs3.2b in June 2002 to Rs0.5b in June 2006; corresponding debt equity down from 3x to 0.3x
- Significant turnaround in company's profits and profitability.

GREAVES – IMPROVING FINANCIAL PERFORMANCE



Source: Company/Motilal Oswal Securities

9MFY07 results reinforce key investment themes

The financial performance during 9MFY07 (June year end) reinforces our key investment themes for Greaves –

- Steady growth in engines till FY10 (9MFY07 growth of 31%)
- Hyper growth in infrastructure equipment coupled with better margins due to economies of scale (9MFY07 growth of 85%, EBIT margin up 340bp to 15.1%)

GREAVES – 9MFY07 SEGMENT PERFORMANCE (RS M)

	9MFY06	9MFY07	YOY (%)	FY06
Segment Sales	**6,092**	**8,291**	**36.1**	**8,349**
Engines	5,049	6,600	30.7	6,803
Infrastructure	779	1,434	83.9	1,080
Others	352	358	1.9	466
Less: Inter-segmental	88	101	15.2	
Segment EBIT	**1,121**	**1,518**	**35.3**	**1,434**
Engines	948	1,229	29.5	1,225
Infrastructure	92	216	136.2	113
Others	82	73	-10.4	97
Unallocable Expenses	147	213	45.1	58
EBIT	**975**	**1,305**	**33.9**	**1,376**
Interest	50	124	146.8	103
Other Income	0	0		24
Extraordinary Income	16	0	-100.0	52
PBT	**940**	**1,180**	**25.6**	**1,349**
Segment EBIT Margin (%)	**18.4**	**18.3**	**-0.1**	**17.2**
Engines	18.8	18.6	-0.2	18.0
Infrastructure	11.7	15.1	3.3	10.5
Others	23.2	20.4	-2.8	20.7
EBIT Margin (%)	**16.0**	**15.7**	**-0.3**	**16.5**

Source: Company/Motilal Oswal Securities

Capex of Rs1.5b in FY07 to support growth

Capacity expansion to boost topline

Greaves' planned capex for FY07 is about Rs1.5b. This is in addition to the Rs245m acquisition of Bukh-Farymann, Germany, in March 2007. The amount is significantly higher than the trend in the past few years, suggesting an aggressive capacity expansion plan to support growth in both its product segments. We expect much of this capex to be funded out of internal accruals, considering strong FY07E cash profit of Rs1.4b.

Twin-cylinder engines to be launched in 1QFY08: Half of the Rs1.5b capex is expected to be for the engines business. In 1QFY08, Greaves plans to launch twin-cylinder engines for one-ton four-wheelers, including Piaggio's *Apé Truk*. Large engine capacity is also being expanded.

New infrastructure equipment plant in Chennai: In February 2007, Greaves inaugurated its new Rs100m plant in Chennai, doubling its capacity of transit mixers to about 200 per month. It is also expanding capacity of compactors and tandem rollers from about 50 per month to 100 per month.

Focus on technological upgradation

R&D spend of Rs300m: Greaves plans to increase focus on innovative R&D and proprietary technology. In FY06, it spent Rs500m to set up a dedicated Technology Centre at Aurangabad. In FY07, it has earmarked an additional Rs300m towards R&D, including a separate R&D Centre at Pune. The research areas include –

- New standards in engine fuel efficiency, NVH (noise, vibration, harshness) and conformity to stringent emission norms expected to be introduced in India in CY08.
- Optimal solutions for the light transportation sector in consultation with Ricardo of UK
- New series of products in both engines and infrastructure equipment (in FY06, Greaves' product launches include high-end vibratory compactors, concrete batching plants and higher capacity concrete pumps).

EPS CAGR of 22% through FY10

We estimate revenue CAGR of 24% through FY10. We have factored in stable 16.5-16% EBITDA margin. Despite higher depreciation and tax rates, PAT and EPS CAGR stands at a healthy 22%.

Revenue CAGR of 24%: We expect Greaves' consolidated revenue to nearly double from Rs12.5b in FY07 to Rs24b in FY10, a strong 24% CAGR. The potential upsides to our estimates are: (1) scaling up of Greaves Farymann to Rs2b by FY10 (our estimate Rs0.9b) and (2) leveraging the Farymann network for exports of engines.

GREAVES REVENUE MODEL (RS M)

YEAR ENDING JUNE	2006	2007E	2008E	2009E	2010E	CAGR 07-10 (%)
Engines	7,668	9,722	12,101	14,382	15,882	17.8
Automotive	4,650	5,672	6,548	7,616	7,869	11.5
Piaggio	2,823	3,575	4,241	5,078	5,078	12.4
Others	1,827	2,097	2,307	2,538	2,792	10.0
Light Engines	664	797	957	1,148	1,378	20.0
Large Engines	1,329	1,860	2,418	3,023	3,627	24.9
Greaves Farymann	0	125	600	720	936	95.6
Spares	1,025	1,268	1,578	1,876	2,072	17.8
Infrastructure Equipment	1,218	2,192	3,616	5,424	7,322	49.5
Others	525	578	635	699	769	10.0
Total	**9,410**	**12,491**	**16,353**	**20,505**	**23,973**	**24.3**
Growth (%)	*28.7*	*32.7*	*30.9*	*25.4*	*16.9*	

Source: Motilal Oswal Securities

PAT and EPS CAGR of 22%: We have factored in stable 16.5-16% EBITDA margins through FY10. In the engines segment, we believe it has reasonable pricing power to pass on major hikes in raw material costs. In construction equipment, we expect economies of scale to kick in, helping sustain margins.

We have also factored in a hefty capex of ~Rs3b till FY10. Much of this is in FY07 – the Rs250m acquisition of Greaves Farymann and the Rs1.5b mega capacity expansion in engines and construction equipment. As a result, depreciation is expected to rise sharply – from Rs187m in FY07 to Rs334m in FY10. The effective tax rate is also expected to be higher due to exhaustion of tax shield. Still, PAT CAGR through FY10 works out to a healthy 22%. With no equity dilution expected, EPS CAGR is also at 22%.

Valuation and recommendation

Attractively valued – absolute and relative to peers

Available at a steep discount to peers

Greaves is currently trading at a P/E of 13.8x FY07E, 11.8x FY08E and 9x FY09E. This is attractive relative to our estimated 22% EPS CAGR through FY10.

We have compared key financial and valuation parameters of Greaves with peers, Cummins India and Kirloskar Oil Engines. Here too, Greaves fares well – comparable margins and earnings growth, but steep valuation discount due to uncertainty over the Piaggio issue.

RELATIVE VALUATION SUMMARY - FY09E

	GREAVES COTTON	CUMMINS INDIA	KIRLOSKAR OIL ENGINES
Sales (Rs m)	18,227	30,199	26,943
EBITDA Margin (%)	16.4	18.6	11.0
PAT Margin (%)	9.9	12.8	7.5
RoE (%)	41.8	27.8	19.0
EPS CAGR - FY07-09E (%)	23.6	25.0	21.9
P/E (x)	**9.0**	**19.1**	**16.8**
EV/EBITDA (x)	5.1	13.0	11.9

Source: Motilal Oswal Securities/Bloomberg

Greaves has attained critical mass

High annual cash profits, superior return ratios and steady dividend payout

We are convinced that Greaves has attained critical mass to sustain future growth with minimum recourse to external funds. The key indicators are – average annual cash profit of almost Rs2b over the next four years, dividend payout of over 30%, zero net-debt company in FY08, average RoCE of over 50% and average RoE of over 40%. The major implication is that the company can aggressively exploit the inorganic growth option to offset any possible slowdown in organic growth e.g. the recent acquisition of Greaves-Farymann, Germany.

Target price of Rs443 at 12x FY09E, 33% upside, Buy

We have valued the stock at 12x FY09E to arrive at a target price of Rs443, a 33% upside from current levels.

Stock may get re-rated to the 14-16x P/E band

We believe the Greaves stock valuation discount is too steep and unsustainable. The company seems well placed to de-risk itself from the potential loss of Piaggio business given its wide product range, focus on R&D, export potential and inorganic growth options. As developments unfold, we expect the valuation discount to narrow, and the stock to get re-rated to the 14-16x P/E band.

Meanwhile, we consider the prevailing uncertainty over the Piaggio issue as an investment opportunity. We recommend **Buy.**

Investment concerns

Sharp slowdown in three-wheelers

The Indian three-wheeler market is showing signs of a slowdown. Compared to a FY02-07 CAGR of 20%, sales volumes for 1QFY08 are up only 3% YoY. In our estimates, we have factored in three-wheeler sales growth to slow down to 10-12%. If the current growth rate does not improve, we should see a downward revision in revenue and earnings estimates for Greaves.

Mitigant: The slower growth in three-wheeler sales is most likely a temporary phenomenon driven by (1) higher interest rates and (2) *adhik maas* in May-June, an inauspicious period for Hindus, causing postponement of asset purchases. We expect the situation to improve July onwards. In any case, 1QFY08 sales volumes of engine outsourcers (Piaggio, Mahindra, Atul Auto and Scooters India) are up 10.7% YoY even as total three-wheeler sales are up only 3% YoY.

Margins could be lower than estimated

We expect Greaves to maintain EBITDA margin at around 16.5% through FY10. This is based on a couple of hypotheses –

1. **In the engines business:** Reasonable pricing power to pass on major raw material cost hikes, improvement in product mix towards large engines, and steady revenue from spares and services.
2. **In the infrastructure equipment business:** Economies of scale, and strong rupee leading to lower cost of major imported inputs such as hydraulics.

If any of these hypotheses turn out to be incorrect, margins – and hence earnings – are likely be lower than estimates.

Mitigant: None

Background

Greaves Cotton, established in 1859, is a part of the BM Thapar group (owning Crompton Greaves). It is one of India's leading and diversified engineering company having core competencies in diesel/petrol engines, gensets, agro and construction equipment.

Business segments

Greaves has a presence in two business segments -

- Engines (~80% of FY07E total revenue)
- Infrastructure equipment (balance 20% of the revenue)

Engines: This segment is further organized into three business groups –

1. *Automotive Applications Group (70% of FY07E engine revenue):* Available in the range of 4-11 HP models, Greaves light engines are ideal for automotive applications like two-wheelers, three-wheelers and mini cars.
2. *Power Generation Group (20%):* Present in the 15-550kva range, Greaves power engines are used in diesel generating sets, compressors, barges, pilot launches etc.
3. *Agricultural Applications Group (10%):* Greaves claims to enjoy leadership position in portable pumpsets, powered by petrol/kerosene engines. These engines also find application in other areas such as power tillers, and concrete vibrators (used in construction sector).

Infrastructure Equipment: This segment is further classified into three areas: (1) Road construction equipment - vibratory soil compactors and tandem rollers, (2) Concreting equipment - batch mix plants, transit mixers and concrete pumps, and (3) Trading in select mining and metallurgy equipment.

Seven manufacturing units in India, one in Germany

In India, Greaves has a total of seven manufacturing units located in Maharashtra and Tamil Nadu, including a foundry at its engines plant in Pune, Maharashtra.

GREAVES' MANUFACTURING UNITS

Plant Location

Engines Segment

Automotive Engines

2 units at Aurangabad, Maharashtra

1 unit at Ranipet, Tamil Nadu

Power Engines

Unit at Pune, Maharashtra

Agricultural Engines

Unit at Thoraipakkam-Chennai, Tamil Nadu

Infrastructure Equipment

1 Unit at Gummidipoondi, Tamil Nadu

1 Unit at Thangal-Chennai, Tamil Nadu

Source: Company/Motilal Oswal Securities

In February 2007, it acquired Bukh-Farymann Diesel GmbH, which has a unit in Lampertheim, 65km south of Frankfurt in Germany.

Steady topline growth

Stable margins

PAT CAGR of 22% FY07-10E

INCOME STATEMENT (RS MILLION)

Y/E JUNE	2005	2006	2007E	2008E	2009E	2010E
Net sales	**6,530**	**8,349**	**11,103**	**14,536**	**18,227**	**21,309**
Change (%)	*2.4*	*27.8*	*33.0*	*30.9*	*25.4*	*16.9*
Raw Materials Consumed	4,250	5,533	7,461	9,913	12,576	14,810
Power and Fuel Cost	81	82	100	116	128	128
Employee Cost	523	572	658	789	908	1,044
Other Manufacturing Cost	179	200	233	291	346	384
Selling and Admn Expenses	363	413	538	690	847	969
Misc Expenses	182	215	289	363	437	490
EBITDA	953	1,335	1,824	2,372	2,984	3,484
Change (%)	*87.7*	*40.1*	*36.6*	*30.1*	*25.8*	*16.8*
EBITDA Margin (%)	*14.6*	*16.0*	*16.4*	*16.3*	*16.4*	*16.4*
Depreciation	119	138	187	273	305	335
EBIT	**834**	**1,198**	**1,637**	**2,099**	**2,678**	**3,150**
Interest	136	103	182	192	164	149
Other income	100	115	141	158	176	238
Extra-ordinary items (net)	227	140	0	0	0	0
PBT	**1,024**	**1,350**	**1,596**	**2,065**	**2,691**	**3,239**
Tax	399	479	415	682	888	1,069
Rate (%)	*38.9*	*35.5*	*26.0*	*33.0*	*33.0*	*33.0*
Reported PAT	**626**	**870**	**1,181**	**1,384**	**1,803**	**2,170**
Adjusted PAT	**422**	**745**	**1,181**	**1,384**	**1,803**	**2,170**
Change (%)	*79.6*	*76.6*	*58.6*	*17.1*	*30.3*	*20.3*
PAT margin (%)	*6.5*	*8.9*	*10.6*	*9.5*	*9.9*	*10.2*

E: MOSt Estimates

Zero debt by FY09

Includes Rs1,500m capacity expansion

BALANCE SHEET (RS MILLION)

Y/E JUNE	2005	2006	2007E	2008E	2009E	2010E
Equity share capital	456	488	488	488	488	488
Reserves	977	1,678	2,439	3,305	4,420	5,730
Networth	1,434	2,167	2,927	3,794	4,908	6,218
Loans	787	550	795	323	0	0
Net Deferred Tax	-389	-39	0	0	0	0
Capital Employed	**1,832**	**2,677**	**3,723**	**4,116**	**4,908**	**6,218**
Gross Fixed Assets	1,922	2,285	3,947	4,447	4,947	5,347
Less: Depreciation	983	1,102	1,289	1,562	1,867	2,202
Net Fixed Assets	**939**	**1,183**	**2,658**	**2,885**	**3,080**	**3,146**
Capital WIP	153	164	100	100	100	100
Investments	343	681	681	681	848	1,713
Current Assets	**2,495**	**2,918**	**2,872**	**3,416**	**4,103**	**4,733**
Inventory	667	882	959	1,272	1,605	1,882
Debtors	628	926	913	1,195	1,498	1,751
Cash & Bank	666	363	300	250	200	200
Loans, Adv. & Others	533	747	700	700	800	900
Current liab. & Prov.	**2,098**	**2,267**	**2,588**	**2,966**	**3,223**	**3,474**
Creditors	1,675	1,929	2,288	2,666	2,923	3,174
Other Liabilities	45	32	0	0	0	0
Provisions	378	306	300	300	300	300
Net current Assets	**398**	**650**	**284**	**450**	**880**	**1,259**
Misc. exp. (not written off)	0	0	0	0	0	0
Application of Funds	**1,832**	**2,677**	**3,723**	**4,116**	**4,908**	**6,218**

E: MOSt Estimates

RATIOS

Y/E JUNE	2005	2006	2007E	2008E	2009E	2010E
Basic (Rs)						
EPS	**9.2**	**15.2**	**24.2**	**28.3**	**36.9**	**44.4**
Growth (%)	75.7	65.0	58.6	17.1	30.3	20.3
Cash EPS	16.3	20.6	28.0	33.9	43.2	51.3
Book value	30.3	43.4	59.0	76.8	99.7	126.6
DPS	7.0	7.0	7.5	9.0	12.0	15.0
Payout (incl. Div. Tax.) (%)	58.2	43.5	35.3	37.2	38.0	39.5
Valuation (x)						
P/E		18.7	13.8	11.8	9.0	7.5
Cash P/E		16.2	11.9	9.8	7.7	6.5
Price/Book value		7.7	5.7	4.3	3.3	2.6
EV/Sales		1.7	1.3	1.0	0.7	0.6
EV/EBITDA		11.8	8.8	6.6	5.1	4.1
Dividend yield (%)		2.1	2.2	2.7	3.6	4.5
Profitability ratios (%)						
RoE	51.7	49.7	47.2	41.7	41.8	39.3
RoCE	37.3	49.5	51.6	54.2	59.9	57.0
Turnover ratios						
Debtors (Days of Sales)	35	40	30	30	30	30
Inventory (Days of Sales)	37	39	32	32	32	32
Creditor (Days of Total exp.)	110	100	90	80	70	65
Asset Turnover (x)	2.9	3.1	3.0	3.5	3.7	3.4
Leverage ratio						
Debt/Equity (x)	0.6	0.3	0.3	0.1	0.0	0.0

E: MOSt Estimates

EPS CAGR of 22% FY07-10E

30% plus dividend payout

Superior return ratios

Zero debt by FY09

Strong and rising operating cash flow

CASH FLOW STATEMENT						(RS MILLION)
Y/E JUNE	2005	2006	2007E	2008E	2009E	2010E
PBT before EO items	798	1,210	1,596	2,065	2,691	3,239
Add : Depreciation	119	138	187	273	305	335
Interest	136	103	182	192	164	149
Less : Direct taxes	399	479	415	682	888	1,069
(Inc)/Dec in WC	322	-556	303	-217	-479	-379
CF from Operations	**976**	**415**	**1,854**	**1,632**	**1,793**	**2,274**
EO, Misc. & Other items	227	140	0	0	0	0
CF from Oper. incl. EO Items	**1,203**	**555**	**1,854**	**1,632**	**1,793**	**2,274**
(Inc)/Dec in FA	-374	-396	-1,602	-503	-503	-403
(Pur)/Sale of investments	-23	-338	0	0	-168	-865
CF from Investments	**-397**	**-734**	**-1,602**	**-503**	**-671**	**-1,268**
Inc/(Dec) in networth	85	243	0	0	0	0
Inc/(Dec) in debt	-485	-237	246	-473	-323	0
Inc/(Dec) in deferred tax liability	309	350	39	0	0	0
Less : Interest paid	136	103	182	192	164	149
Dividend paid	363	377	418	514	686	857
CF from Fin. Activity	**-590**	**-124**	**-315**	**-1,179**	**-1,172**	**-1,006**
Inc/Dec in Cash	**216**	**-303**	**-63**	**-50**	**-50**	**0**
Add: Beginning Balance	450	666	363	300	250	200
Closing Balance	**666**	**363**	**300**	**250**	**200**	**200**

E: MOSt Estimates

NOTES

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Disclosure of Interest Statement	Greaves Cotton
1. Analyst ownership of the stock	No
2. Group/Directors ownership of the stock	No
3. Broking relationship with company covered	No
4. Investment Banking relationship with company covered	No