DHAKA STOCK EXCHANGE

PIAGGIO

Equity Research | Industry: Auto Manufacturing | 27th January 2011

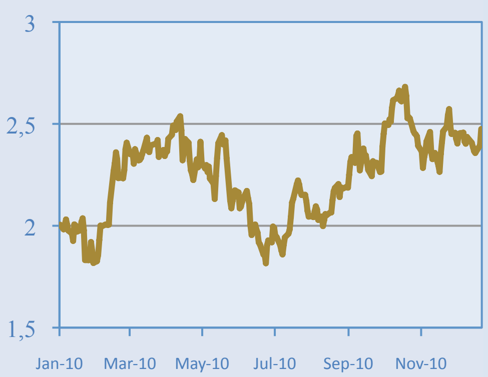
Rating	SELL
Price Target (€)	2.20
Price, 21st Jan 2011 (€)	2.42
Premium/(Discount)	(9.1%)
Ticker (Bloomberg)	PIA.IM

Market Data

52 Week high (€)	2.56
52 Week low (€)	1.77
Average daily volume (Th)	973.64
Beta	0.94
Dividend Yield (%)	4.90
Share Outstanding (Mil)	371.79
Market Capitalization (Mil)	899.74
Book Value per Share (€)	1.15
Debt to Capital (%)	72.79
Return on Equity (%)	12.5

Source: Reuters

Share Price Movement



Source: Bloomberg

Brakes on at Piaggio

Good performance under great management, but price full We derived a EUR 2.44 share price using a DCF approach based on a WACC of 6.9%, a relevered industry beta of 0.94, a risk-free rate of 2.5%, a terminal growth rate of 2.5% and an exit EBITDA margin of 12.5x. Based on a market value of EUR 2.42 per share, we believe that the stock is fairly valued, and therefore do not see any further potential value. Applying an estimated illiquidity discount of 10.7% to our DCF value, our target price falls to EUR 2.20 per share, which leads to our SELL recommendation.

What's in the numbers? The financials of Piaggio tell the story of a healthy company with sound growth and a robust structure. The company has continuously been able to re-service its debt at favorable cost, and it has been able to capture business opportunities without facing major obstacles. As the company has embarked on increased geographical diversification over the last few years, it has looked to rationalize production and R&D activities as a means of optimizing its operations in each market.

Future performance to depend on Asian markets The mature European market is expected to reach its pre-crisis turnover levels in 2014, and subsequently grow at moderate growth rates of around 1-2%. In contrast, Asian markets are expected to offer healthy growth rates. As Piaggio's European operations contributed with over 65% to 2010 revenues, future growth will primarily depend on its ability to penetrate Asian markets. According to our estimates, the proportion of revenues from Asian sales will increase from the current 35% to 46% by 2020.

Hidden dangers in the face of healthy growth potential CAGRs in sales of 5% and 4.88% in the 2011-2014 period are expected for both Asia-Pacific and Indian markets respectively. The company has communicated a strategic plan focused on scooter sales in these markets, and its current presence has already managed to offset crisis-driven contractions in Europe and North America. Increased competition, coupled with recent rises in commodities prices, offers a real threat to margins in the region. We expect the company to be able to reach its 15% EBITDA margin target in 2015, and we subsequently forecast a gradual decline to 12.5% in 2020.

Plans to capture Indian growth, but strategy not entirely clear 150 dealers (concentrated in rural India) of the current distribution network have given the green light for the distribution of two-wheelers. The company plans to roll out the 'Indian Vespa' in June 2012, intended for the upper-market segment; as well as an additional set of products targeting different market segments. Moreover, recent press releases confirm plans to release the premium Aprilia RSV4, as well as plans to set up a separate distribution network for Aprilia and Piaggio.

Forecast Summary

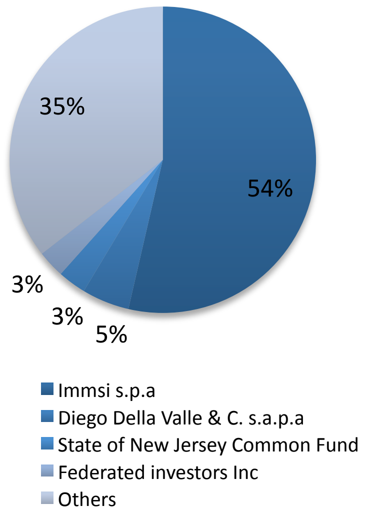
	2007	2008	2009	2010E	2011E	2012E	2013E
€ Millions							
Revenues	1,692	1,570	1,486	1,464	1,650	1,801	1,947
EBITDA	226	189	200	195	221	255	290
EBIT	136	94	104	104	120	146	174
Net Income	103	59	74	50	61	78	97
€ Per Share							
EPS	0.15	0.11	0.12	0.14	0.17	0.21	0.27
DPS	0.03	0.06	0.06	0.06	0.07	0.09	0.11
Returns (%)							
P/E	21.7	14.1	12.2	18.4	15.2	11.8	9.6
EV/EBITDA	6.7	5.0	4.6	7.7	6.8	5.9	5.2
Dividend yield	1.8	4.6	4.9	2.18	2.64	3.38	4.17

Source: Company Data, Dhaka Stock Exchange

BUSINESS DESCRIPTION

From Pontedera to the World

Figure 1: Shareholders' structure



Source: Orbis

The Piaggio Group, formed in 1884 by Rinaldo Piaggio and based in Pontedera in Italy started out as a railway equipment and aircraft producer, eventually switching its production efforts to powered two-wheeled vehicles in the aftermath of World War II. Today Piaggio, the fourth largest producer of scooters and motorcycles in the world is controlled by IMMSI S.p.A., a holding company listed on Borsa Italiana and headed by Roberto Colaninno, who is also the Chairman and Chief Executive Officer of The Piaggio Group *(Figure 1).* Mr. Colaninno is also Chairman of IMMSI SpA, a listed real estate company that controls the Piaggio Group, Chairman of Alitalia-Compagnia Aerea Italiana, and former CEO of Olivetti, the company that once ran Telecom Italia.

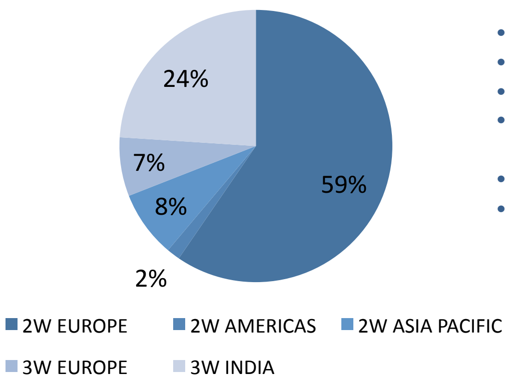
The Piaggio product range includes scooters and motorcycles from 50cc to 1,200 cc, as well as three and four-wheeled light commercial vehicles, encompassing the brands Ape, Porter and Quargo. The iconic Vespa, still the best selling scooter, remains the group's flagship product with Piaggio, Scarabeo, Gilera, Derbi (acquired in 2001) and Aprilia and Moto Guzzi (acquired in 2004) rounding up the two-wheelers product mix. The last four are successfully competing in the European market, in which Piaggio is looking to reinforce its leading position within the two-wheeler market, while maintaining its strong position in light commercial vehicles within the Indian market. (*Refer to Figure 2, 3 and 4 for the current revenues breakdown)*

Piaggio's 2013 forecasted sales targets around 40% of revenues coming from Asia, compared with the current 25% of revenues. The commercial vehicle unit in India is expected to see the biggest future rise in unit sales, joined by strong contributions from the Asian two-wheeler market, whereas European sales are relatively flat and showing a slight decline in both.

The Piaggio Group boasted overall production of around 610,000 units in 2009, and employed over 7,000 people in its 5 R&D centers and productions facilities in:

- Pontedera (Pisa) - Piaggio, Vespa and Gilera, light transport vehicles for the European market and engines for scooters and motorcycles
- Scorzè (Venice) - Aprilia and Scarabeo branded two-wheeled vehicles
- Mandello del Lario (Lecco) - Moto Guzzi vehicles and engines
- Martorelles (Barcelona, Spain) - Derbi vehicles
- Baramati (in the Indian state of Maharashtra) - three and four-wheeled light transport vehicles for the Indian market
- Vinh Phuc (Vietnam) - Vespa scooters for the local market and the ASEAN area
- 45% stake in Foshan, Chinese joint venture not included in the Group's consolidated results

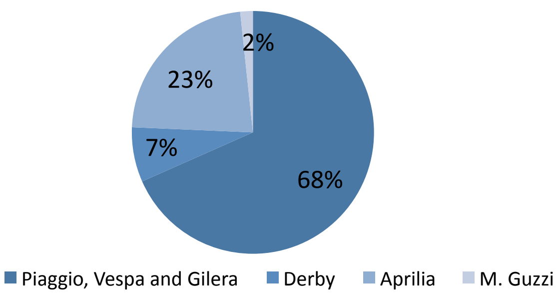
Figure 2: Turnover composition



Source: Piaggio

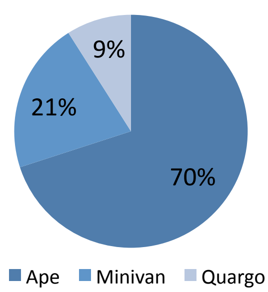
The 2009 investments of EUR 93.8m are in line with the company's plans to keep investing approximately EUR 100m annually, focusing on the growing markets of Vietnam, India and the broader Southeast Asian markets. Standard & Poor's long-term corporate bond rating is BB. In addition, 2009 revenues declined 5.3% to EUR 1,486.9m, while EBITDA margin jumped to 13.5%.

Figure 3: 2W Turnover by brand



Source: Piaggio

Figure 4: 3W Turnover by brand

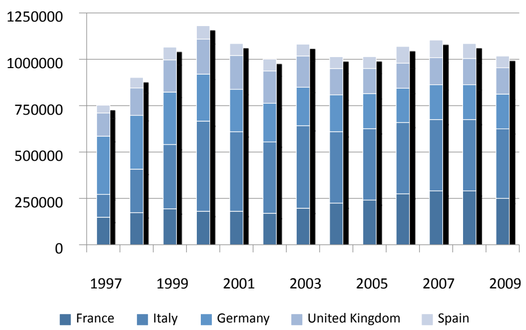


Source: Piaggio

MARKET OUTLOOK

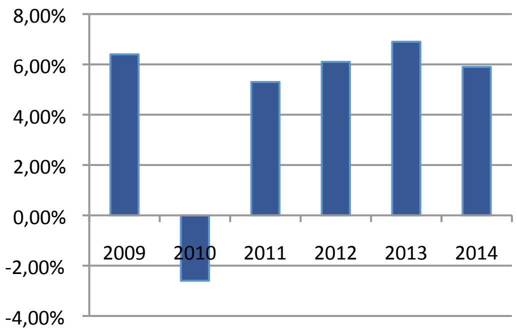
Will the Asian Bull Overpower the European Bear?

Figure 5: 2W Registration in Europe



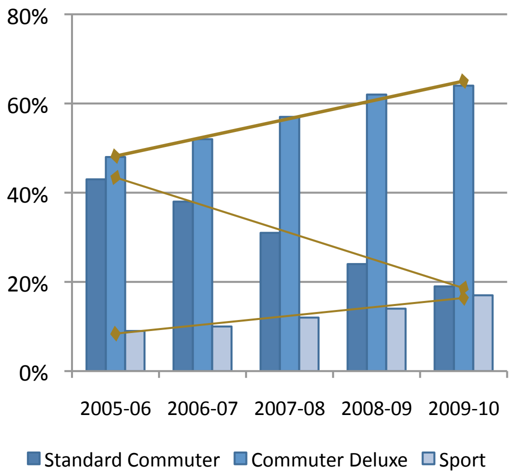
Source: ACEM

Figure 6: Asia 2W growth



Source: Datamonitor and Dhaka Stock Exchange

Figure 7: Moto Segmentation in India



Source: SIAM

Intense competition in slow-growing Europe

As the recent economic downturn has led to a contraction of the European two-wheeler industry *(Figure 5)*, and future growth is expected to be moderate, leaving existing players with the task of improving efficiency and luring business away from each other. These factors, in addition to the threat of new entrants in the long run from Asian, one can expect competition to intensify, which will put pressure on margins.

Europe slowing down, Asia-Pacific sprinting

Whilst expected to have experienced a decline in 2010, we expect Asia-Pacific markets to drive growth in the near future *(See Figure 6)*. Within the region, China constitutes the main single market, expected to account for roughly 55% of the coming growth. However, given a relatively large presence of pirated alternatives, and a strong position for the traditional Japanese giants, the market seems difficult to penetrate.

Rural produce to give scooters a hand in India

Both increasing income levels within rural areas, (from rising prices in rural produce) and continued investments in infrastructure are expected to drive growth (estimated 15.8% through 2012) in the Indian two-wheeler market. A large and increasing youth population is further expected to help sustain this growth. For new entrants, penetration is complicated by the dominance enjoyed by a group of four: Honda, Bajaj Auto, TVS and HMSI (85% market share). *(Figure 7 shows the split of 2W in India)*

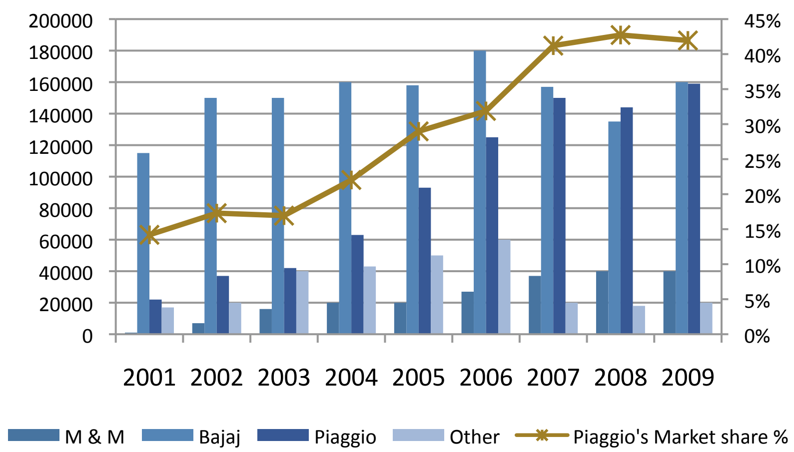
Indian market to carry the LCV industry

In 2009, the European LCV industry registered a decline of 30.5% in revenues, compared to 2008 figures. For the same period, the three-wheeler market in India experienced healthy growth of 18% *(see figure 8)*, driven by the passenger carriers segment which grew by 27.6%. As the goods carriers segment is highly correlated with business activity, it experienced a decline of 9.4%, however the outlook for the near future is positive for both segments, but with the passenger carriers segment forecasted to dominate. The goods carrier segment for three-wheelers has suffered from the success of the Tata Ace and with M&M releasing the Gio in 2010 (as a further threat to Piaggio's goods carrier market share), we see the increasing competition in this segment particularly damaging to Piaggio.

Changes in the rules of the game

Stringent emission standards agreed upon on a global level will put pressure on producers to invest in the development of fuel-efficient vehicles. The timing of the demand change toward these types of vehicles in different markets, and the extent to which demand will be diverted to these vehicles, is impossible to assess. However, in the long run, developing an edge within this segment could offer Piaggio a way of differentiating itself and thus protecting its margins.

Figure 8: 3W Sales (units) and Piaggio's market share



Source: Deutsche Bank

Rising commodities prices to put pressure on margins

An immediate concern for all vehicle manufacturers is the recent development in the prices of commodities. For different reasons, prices of key inputs have risen sharply. Natural rubber, used in the production of tires, has risen by roughly 95% y.o.y, while the prices of aluminium, steel and plastic have risen by 15-40%. Piaggio has multi-year supply contracts, in which prices are renegotiated on an annual basis. This means that the company is protected from sudden intra-year price fluctuations, however, if these commodities sustain higher price levels in the long-run, the company faces the risk of seeing its material costs rise, causing significant downward pressure on margins, due to the likelihood that increased costs cannot be entirely passed on to the consumer.

COMMODITY SNAPSHOT

Commodity	Bearish Neutral Bullish	Rationale
Crude Oil		1) Global inventories contracting, while demand hitting its historical high in 3Q10 2) Declining spare capacity, reaching 2007/2008 levels in 2012
Plastic		1) Price affected by a bullish oil market 2) Demand recovery to the 2007 levels
Steel		1) No further upside given the efforts to cool the Chinese economy 2) Possibility of future decline due to the slowdown in the developed countries' construction
Aluminum		1) Market likely to be in surplus until 2012, with strong demand not eliminating excess capacity

Source: Morgan Stanley

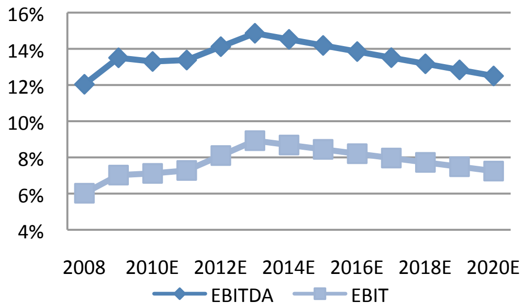
STRATEGY — On Board the Orient Express?

Efficiency and expansion to keep Piaggio rolling

Piaggio aims at improving its European operations through restructuring its distribution network and improving efficiency. Its target is to strengthen its position as a leader in the European markets. The restructuring will be achieved by exploiting group synergies and consolidation i.e. by having common sales points for similar products within the group. To improve efficiency, a procurement program has been formed, whereby a network of alternative low-cost, high-quality suppliers in Asia has been set up. In an attempt to gain an advantage in the fuel-efficient vehicles segment, Piaggio has developed the HYBRID MP3 scooter (most technologically advanced scooter on the market), and fitting facilities for its mass production has been installed in the Pontedera plant.

- The efficiency measures applied by the company have already materialised in the form of improved EBITDA margins. As the company is a leader in its relevant markets in Europe, we expect it to perform slightly better than what has been forecast. However, further rises in commodities prices will have a countering effect on the efficiency measures, and in the long-run we see potential for new Asian-based competitors to compete in the market. As a result of these factors we expect the EBITDA margin to gradually decline, *(as shown in Figure 9).*

Figure 9: Margin Trends Forecast



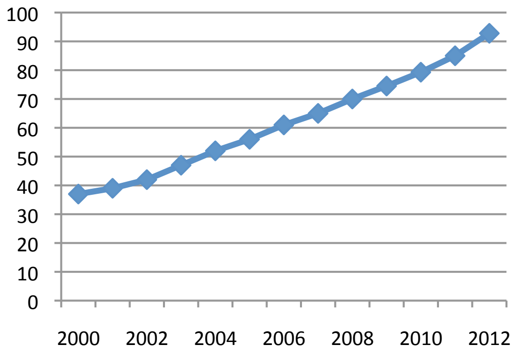
Source: Dhaka Stock Exchange

ASEAN growth to give Vespa a lift

A typically Southeast Asian, cost effective type of Vespa is being distributed in Vietnam, which is the market in which Piaggio is currently most active. As the company seeks to further penetrate Asia-Pacific markets, it plans to expand its current 100,000-unit production capacity in Vietnam by 150%, with planned production from the new plant starting in 2012. With this move, Piaggio will drastically decrease the import taxes paid from 90% to 5%, as well as improve its position to serve neighbouring countries. Furthermore, women and teenagers have emerged as a growing segment, and Piaggio is one of the few players to serve their demand, mainly through the introduction of a line of lighter scooters. As for China, the company is moving slowly, with plans to export the Hybrid MP3 and Vespa scooters as a first phase and, if the response is satisfactory, possibly set up production facilities there. However, for the time being, no such plans have been communicated.

As the decline in import duties are already incorporated into the EBITDA margin estimates for Vietnam, we do not believe that margins will improve with increased revenues from deepened penetration in Asia-Pacific. As competition in the market will intensify and commodities prices are expected to further rise, we believe that the exceptional EBITDA margins earned today will fall in the long run, towards historical levels, *(See Figure 9).*

Figure 10: 2W penetration in India



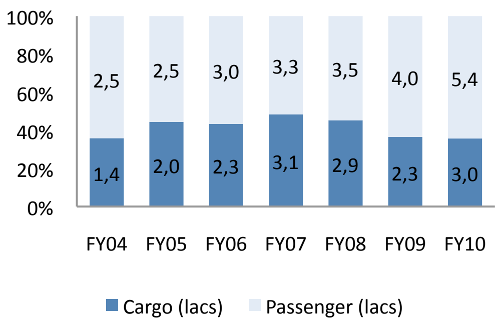
Source: Fortune

'Indian Vespa' to capture rural growth

A EUR 30m investment project was started in 2010 with the purpose of installing a production facility with a capacity of 150,000 units per year. The sale of these vehicles is planned to begin in mid 2012. The plant is intended to produce a version of the Vespa adapted to the Indian market, as well as an additional group of scooters to be introduced in the following years. The products are intended for the upper-segment of the market, and the company is aiming at a market share of around 1%. Roughly 50% of the current dealer network established for the sale of commercial vehicles is ready to move with the company into distribution of two-wheelers. The network is constituted of 300 dealers, mainly situated in rural areas, which for reference, can be compared to Honda's 1,000 dealers (planned to double, with a focus in rural areas). The urban middle class mainly drives the demand for products within the upper-segment; as a result we believe that the upper segment products to be released do not fit with the current distribution network.

- As the company has set up very moderate revenue targets, we expect them to be achieved by 2013, after achieving a 0.2% market share in its initial year on the market. Judging from the strategy followed in Asia-Pacific, in which the company's presence has been gradually increased over a period of couple of years, we expect the company to further penetrate the Indian market through an enlarged distribution network and the introduction of new products. As the market leaders enjoy exceptional brand recognition, we believe that a strategy based on competitive prices is justified.

Figure 11: 3W Segmentation in India



Source: Dhaka Stock Exchange

CVs=India

Roughly 92% of the Piaggio's 2009 volumes were sold in India, and in 2010 we have estimated that 78% of the group's CV revenues will come from there. In Europe, the company's revenues declined by 18.4% in 2009 while, according to our estimates, a further fall of 19.65% was experienced in 2010. During the same period, revenues from India grew by 14.3% and 31.29%, respectively. In Europe, the strategy is focused on diversifying itself through eco-friendly solutions, while in India the company will introduce new four-wheeled products.

- Based on the increased competition arriving from four-wheeled alternatives in the Indian goods carrier segment (particularly from the Tata Ace and Gio), we believe that the company has chosen the right strategy to protect its market share and grow. Having said this, we see that the three-wheelers segment for goods carriers is under pressure and therefore Piaggio's ability to maintain its position will depend on how well it can compete with the four-wheelers in this segment. Furthermore, we forecast that the passenger carrier segment will continue to drive the 3-wheeler industry as a result of: an increasing need for mobility, poor public transport and an increasing number of permits issued, *(See Figure 11).* We note that Piaggio's strength is within the goods carrier segment and despite strong growth, has lost market share in the passenger carrier segment. Thus the increased uncertainty over Piaggio's future market positioning means that we are cautious over Piaggio's future performance within the industry. In our valuation, this is reflected through a possible upside and downside to our base case margin – with a key driver being the competition in the light commercial vehicle industry.

FINANCIAL ANALYSIS

Performance Underneath

F-SCORE	
1) Is net income positive?	1
2) Is operating cash flow positive?	1
3) Is operating cash flow > net income?	1
4) Has return on assets increased	1
5) Has gross margin improved?	0
6) Has asset turnover improved?	0
7) Has LT Debt / Total Assets decreased?	0
8) Has the current ratio improved?	1
9) Has there been no new equity issuance?	1
F-SCORE	**6**
In Piotroski's terms, this is NOT a strong stock	

Source: Dhaka stock exchange

Joseph Piotroski is a professor at the University of Chicago. He shows that by using a set of nine different fundamental signals taken from the companies' financials, an investor could separate the winners from the losers. By buying only those stocks that had the highest scores, an investor could have outperformed the market by an average of 10%.

Earnings *(Appendix A)*

Despite exposure to a saturated European market, Piaggio has an increasing exposure to high growth Indian and Vietnamese markets that ensures that earnings will rise over the coming years. The increase will, however, slow down as both EBITDA as well as EBIT margin will decrease from 2014 onwards. Combining selected profitability, capital structure and operating efficiency factors, we derive Piaggio's Piotroski F-Score of 6, which mechanically interpreted infers that the firm is likely to perform in line with the market. To assess the accuracy of the data, we look at the M-Score *(Appendix F)*, which in Piaggio's case allows us to be confident about the integrity of the disclosure.

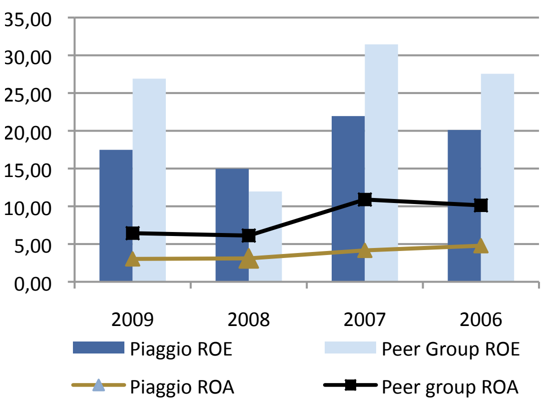
Balance Sheet & Financing *(Appendix B)*

With only reinvestment being required, tangible and intangible assets only change if revaluations and write-downs occur. Many other positions stay at their current levels for the same reason. Trade receivables and trade payables have been kept nearly constant as a percentage of either revenues or material costs as of 2009 levels. The debt/equity ratio will fall as equity rises due to a higher net income on the one hand and even debt levels on the other hand until a target debt/total asset ratio of around 25% is reached. In terms of financing in particular, no heavy new investment that could lead to any new huge issuance of debt is seen on the horizon.

Cash Flow *(Appendix C)*

Capital expenditure is only as high as depreciation and amortization in the current year. Looking at the same numbers historically, one can see that the company's reinvestment needs are low. Even when investing in new markets, Piaggio is able to keep a steady level. Together with low refinancing needs and growing profits, cash flows will steadily rise over the next years. Given that information, free cash flows will slowly increase for the foreseeable future. In particular, we highlight the cash flow from operating activities is recovering from a heavy drop in 2008 and 2009 – EUR 123m – to an amount of EUR 255m at steady state.

Figure 12: Profitability ratios weaker than the peer average



Source: Reuters

Ratio Analysis *(Appendix G)*

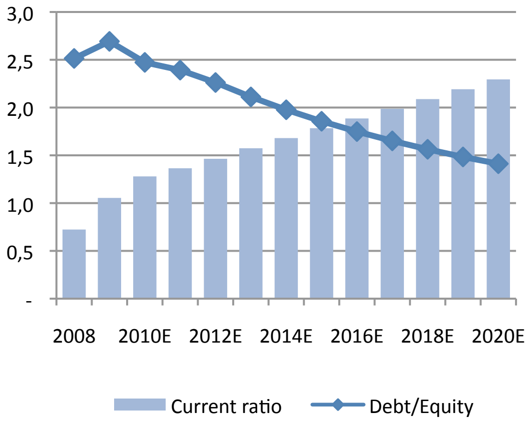
Profitability

Despite above average EBITDA margins of ~13% since its IPO, Piaggio has constantly failed to deliver a big proportion of it to the bottom line. The main culprit has been the high asset base prone to heavy depreciation and amortization expenses and interest expenses on servicing the debt. Thus, the return on shareholders' funds has constantly been below the peer group average *(see Figure 12)*, even though the return on capital employed has held its own against the competitors and even outperformed during the recession, indicating the company's ability to create value through the cycle.

Operations

Piaggio manages its operational efficiency reasonably well. In 2009 the company was collecting its receivables every 25 days on average, while the payables period was 98 days, making for a payables-receivables spread that was 61 days higher than the peer average. Nonetheless, a clear outperformance in this segment was partially offset by a low inventory turnover of 6.4x in 2009, as compared to the peer average of 30x.

Figure 13: Balance sheet trend

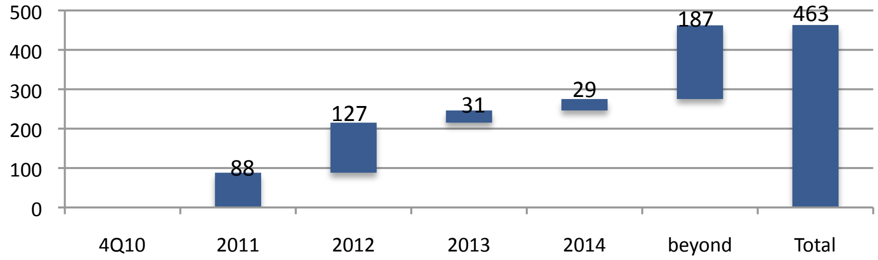


Source: Piaggio and Dhaka Stocks Exchange

Structure

At first glance potential investors would find Piaggio's 2009 balance of current assets and current liabilities worrisome. Looking only at the most liquid assets, the acid test drops to 0.62. A lowly 1.63 value for the Altman Z-Score, a measure of financial health, does not alleviate liquidity headaches either. However, historically, the group has managed its short-term liabilities well, as the current ratio has remained constant and sustainable over the years. Furthermore, the solvency of the company, with the debt-to-equity persistently around a constant target capital structure threshold, should relieve any anxiety over Piaggio's ability to meet its financial obligations, *(see Figure 13).* Furthermore, the maturity of Piaggio medium to long-term financial liabilities is well spread across the coming years, *(see Figure 14).*

Figure 14: Maturities of piaggio medium-long term financial liabilities (EUR mil.)



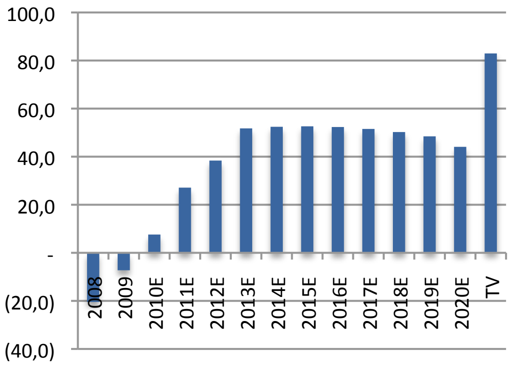
Source: Dhaka Stock Exchange

VALUATION

Declining Margins, Despite Top Line Hike

Risk-Reward Snapshot		
Bull Case 2.47 EUR		• Piaggio's EBITDA margin declines to a higher steady state margin of 13.5% by 2020. This higher margin is based on a stronger performance particularly in Asia-Pacific, where it is able to maintain stronger positioning in its respective markets, and thus be able to maintain stronger margins. In addition, we have included the potential for future sales of Aprilia products in Indian markets, in particular its current RSV4 bike that will allow it to generate strong margins and boost the brand recognition of the Piaggio Group • Revenue growth is slightly higher in the up scenario, particularly early on in the explicit forecast. We have delayed a decline in revenue growth because the effect of competition, particularly within the Indian three-wheeler markets and European markets will take longer to have an adverse effect on Piaggio's market share
Base Case 2.20 EUR		• The EBITDA margin will reach a steady state of 12.5%, which also reflects the average over the last five years, thereby taking both up and down movements of the industry cycle into account. After a first rise up to 15% in 2013, the margin is falling because of an increasing competition in India and the ASEAN markets • The revenue growth is based on company forecasts until 2013, and sees a sharp drop in revenue from 2011 to 2012. This drop is due to a forecasted rebound between 2010 and 2011 but sees a steady decline in revenue growth immediately from an increasingly competitive environment particularly in Indian and ASEAN markets and a relatively flat European market, in which Piaggio may see increasing competition and market share pressure from new entrants and new current player exits in the long-term
Bear Case 1.76 EUR		• A stronger decline in Piaggio's EBITDA margin, in which by the steady state scenario the EBITDA margin reaches 11%. The EBITDA margin sees greater pressure coming from stronger competition in the Asia-Pacific markets. The margin decline to 11% in steady state is likely to be caused by a stronger sensitivity to commodity prices for the group's input costs as we believe that increasing competitive pressures will restrict them from passing on as much of the cost burden to consumers. Further competition induced pricing discounts will erode margins ahead as we expect manufacturers to be burdened with future inflationary cost-push from additional employee costs and higher distribution costs. *For industry EBITDA comparison please refer to Appendix G* • Revenue growth remains in-line with the base case scenario forecasts

Figure 15: Free Cash Flow Forecast



Source: Piaggio

We note that Piaggio has historically released forecasts that are at the lower end of their estimates, but since the market is still in a recovery stage, we have based the core valuation on these conservative figures up to 2013. From 2013 onwards, as mentioned in the market outlook above, the market will slowly mature, which in the valuation translates into decreasing growth rates until reaching a terminal growth rate of 2.5%. In generating our estimates we used a top-down approach. For our first step the two-wheelers as well as light commercial vehicle markets in different regions have been forecasted. As a second step, Piaggio's position relative to its competitors has been forecasted for each of its markets.

By the end of the detailed forecast period (year 2020), we forecast the company will have reached a target capital structure of 75% equity over total assets. As a second major input factor, WACC was calculated by applying this capital structure to our forecasted cost of equity and after-tax cost of debt. The former can be broken down into a risk-free rate of 2.5% taken from German 10-year bond rates, a beta factor of 0.94 based on an industry beta, relevered at Piaggio's capital structure and an expected equity market risk premium of 5.5%. The cost of debt is an after-tax consideration (marginal tax rate of 35% applied) of the same risk-free rate and a credit spread of 4.5%. With these inputs we derive a WACC of 6.9% to discount the free cash flows, *(see Figure 16)*. *(see Appendix D for the WACC breakdown).*

As both, upside potential as well as downside risk to that target price has been identified; we have subsequently performed a scenario-based analysis to model the uncertainty.

Weighting the scenarios by a probability of occurrence of 30% bull case, 50% base case and 20% bear case shows an expected market capitalisation EUR 908.46 and a DCF valuation of EUR 2.44 per share. Compared to the current market price of EUR 2.42 per share (as of close on 21st January 2011), we estimate Piaggio to have only a 1% upside, before any illiquidity discount to be applied to small-mid cap stocks. Considering a free float of only 37% and a daily trading volume of less than 0.2% of the total outstanding shares, we have applied a formula taken from Damodaran to compute an illiquidity discount of 10.74%. Using the 10.74% discount, (our valuation shows a target price of EUR 2.20. Consequently, we see an unattractive risk-reward profile and recommend shareholders to SELL the stock. *(see Appendix E for Free Cash Flow Reconciliation)*

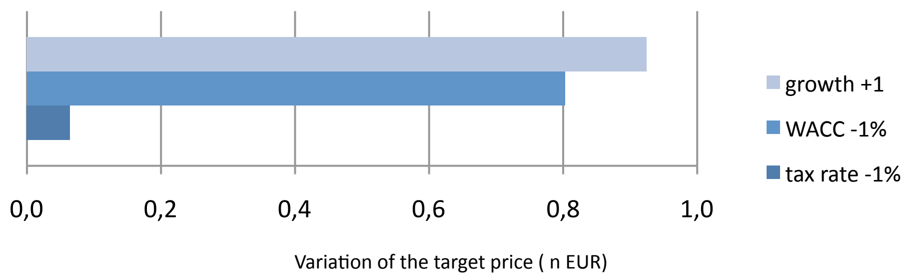
VALUATION DETERMINANTS	
Explicit forecast period	11 years
Risk Free	2.5%
Beta	0.94
Risk Premium	5.5%
Cost of Debt (after tax)	4.7%
WACC	**6.9%**
ROIC w/o Goodwill (2010)	12.8%
Terminal Growth	2.5%
Net Financial Debt (2009, mil)	394.95

Source: Bloomberg and Dhaka Stock Exchange

Risks to our Price Target

A discounted cash flow analysis is based on assumptions and estimates that make a price target subjective; thereby it is also open to discussions. Hence, applying a range to our target price will be more useful to make decisions. For that reason the influence of sensitive factors on the valuation are shown in the following chart:

Sensitivity analysis



In words, the target price can vary by the above amounts given any of the above-mentioned input changes by one percent. As can be seen, the terminal growth rate can have a high impact on the valuation of Piaggio. A second very influential variable is the weighted average cost of capital. In addition to that, a change of one percent in the corporate tax rate will drive the price up by nearly EUR 0.06.

Peer Group Valuation

In valuing Piaggio relative to a peer group we accept that Piaggio does not have any real peers because of its wide range of products. As there is no clear direct comparable we have split the peer analysis into two different groups of peers. The first is made up of companies that manufacture scooters and motorcycles, although most not on an exclusive basis. In the global peer group, we compare Piaggio to the Japanese producers Honda, Suzuki and Yamaha who all have a global presence and are the main competitors for Piaggio in a number of markets for the two-wheelers. We have intentionally excluded Harley-Davidson, as a niche player its incredibly high EBITDA margins are not comparable with other players and Peugeot as the multiple values are not consistent with the peer group. We also recognize that the peers all have high contribution to sales from segments non 2-wheel related. As a separate peer group we have compared players predominantly within the high growth Indian market, comprising both two and three-wheeler vehicle manufacturers. We feel this peer group is increasingly relevant as Piaggio not only is a dominant player within the three-wheeled segment but also introducing the Vespa in India from 2012 onwards. Sales from India contributed around 19% by the end of 2009 and it is forecasted to contribute 28% by 2013.

On the valuation side, the stock does not look particularly appealing at the earnings multiples levels as it trades to a premium to the global peers. This premium can be justified by its stronger growth, particularly its exposure to high growth segments in India and South East Asia. Incorporating the high growth from Indian markets we can compare Piaggio to the Indian peers, in this case it trades slightly lower than the Indian peers which is expected as Piaggio still has two thirds of its revenues coming from a stagnant European market, even in 2013 Piaggio forecasts Europe will still contribute over 60% of group revenues. Following on from this forecast we have taken a weighted average and calculated the mean multiples based on 2/3 global peers and 1/3 Indian peer multiples, our fair value is based on an average of the P/E multiple and EV/EBITDA for 2011 and 2012 values and this generates a fair value price of EUR 2.32.

Trading Multiples

	EV/SALES	EV/SALES	EV/SALES	EV/EBITDA	EV/EBITDA	EV/EBITDA	EV/EBIT	EV/EBIT	EV/EBIT	P/E	P/E	P/E
	2010E	2011E	2012E	2010E	2011E	2012E	2010E	2011E	2012E	2010E	2011E	2012E
Piaggio	**1.0x**	**0.9x**	**0.8x**	**7.7x**	**6.8x**	**5.9x**	**14.3x**	**12.5x**	**10.2x**	**18.4x**	**15.2x**	**11.8x**
Global Peer Analysis												
Honda Motor Co. Ltd	0.4x	0.4x	0.3x	3.5x	3.2x	2.8x	5.9x	5.4x	4.5x	10.5x	11.0x	9.5x
Suzuki Motor Corp.	0.5x	0.4x	0.4x	4.9x	4.5x	4.1x	10.7x	9.6x	8.3x	23.9x	19.6x	16.8x
Yamaha Motor Co.	0.5x	0.5x	0.5x	7.5x	6.2x	5.2x	13.0x	9.4x	7.1x	15.9x	13.1x	10.1x
Peugeot S.A.	0.2x	0.2x	0.2x	1.9x	1.8x	1.6x	5.8x	5.0x	4.0x	7.9x	6.4x	4.6x
Mean*	0.5x	0.4x	0.4x	5.3x	4.6x	4.0x	9.9x	8.1x	6.6x	16.8x	14.6x	12.1x
*Peugeot removed as outlier												
Indian Peer Analysis												
Mahindra&Mahindra	1.7x	1.5x	1.3x	10.5x	8.8x	9.0x	12.3x	9.8x	9.6x	16.0x	13.8x	11.7x
Maruti Suzuki India	1.0x	0.8x	0.7x	9.2x	7.7x	6.2x	11.9x	9.9x	7.7x	15.7x	13.5x	10.9x
Bajaj Auto	2.2x	1.9x	1.6x	10.8x	9.6x	8.3x	10.9x	9.6x	8.4x	14.5x	12.6x	10.6x
Hero Honda	1.7x	1.4x	1.3x	10.5x	9.2x	8.6x	11.6x	10.2x	9.6x	14.1x	12.0x	10.9x
TVS Motor Company	0.5x	0.4x	0.4x	6.5x	5.1x	4.8x	8.7x	6.0x	4.6x	13.9x	9.9x	8.5x
Tata Motors	0.7x	0.6x	0.6x	5.3x	4.7x	4.2x	7.0x	6.2x	5.5x	9.1x	7.8x	6.9x
Mean	1.3x	1.1x	1.0x	8.8x	7.5x	6.9x	10.4x	8.6x	7.6x	13.9x	11.6x	11.4x
Piaggio*	0.7x	0.7x	0.6x	6.5x	5.6x	5.0x	10.0x	8.3x	6.9x	15.8x	13.6x	11.4x

Source: Bloomberg and Dhaka Stock Exchange

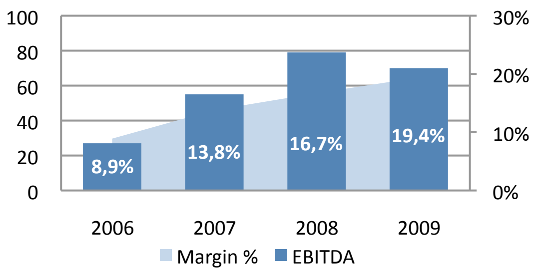
CATALYSTS

The Piaggio Group is Built upon a Number of Acquisitions

The mission of IMMSI, Piaggio's main shareholder, is to create value through takeovers of well-known international brands and companies with strong market positions in their respective segments, but requiring financial and industrial turnaround. For that reason, we find it necessary to highlight two potential contrasting takeover targets, private equity held Ducati and state-run Scooters India, both of which have been linked with Piaggio before.

Ducati	
Rationale	**Downside (Risks)**
1) Diversification of sales mix towards a more balanced profile (high-displacement motorcycle segment)	1) On the grounds that the superbike market is quite insignificant in Asia
2) Ducati has a strong North American presence and distribution network	2) Ducati's North American presence represents a flattening market
3) Ducati is developing its emerging markets presence, particularly in China and India over the last two years	3) Only a small section of consumers go for premium-priced branded products of South East Asia and India
4) Both strong EBITDA margins from high-end products and operations from private equity background	
5) Well placed to look for an industrial alliance in the near future	
6) Strong industrial alliance, scale to compete with Japanese competitors – without diluting the brand	

Ducati EBITDA (EUR m) and Margin (%)



Our thoughts

Although there are certainly arguments for combining the two companies in a merger, we believe that at the current stage within the Piaggio Group's strategy and particularly its focus on Asian markets, it does not make sense to acquire a company whose products do not represent a significant share of these markets.

Scooters India	
Rationale	**Downside (Risks)**
1) Annual capacity around 12,000 units, potentially considerably more with a strategic partner on board	1) Likely to be a very competitive bidding process; potential bidders include M&M, Sonalika Group, Bajaj Auto, Atul Auto and Tata Motors
2) Huge potential from strong growth from the North Indian and Uttar Pradesh markets, largely due to their sizeable population, rising per capita income and increasing urbanization	2) Significant investment in Scooters India needed
3) 800 out of 1,200 workers are set to retire by 2012-13 diminishing the previous union issue	3) Since 2006-07 Scooters India has been mounting losses every year - possible risk of failure to turnaround the company
4) Benefit of acquiring a 'liability free' company with fuel efficient and highly cost effective products	
5) Scale up three wheelers and consolidate Piaggio's position within high growth and high margin segment	

Our thoughts

As a large player in an ever increasingly competitive three-wheeler market, it is important that Piaggio continues to maintain a strong position in the market, but Piaggio has established a strong brand under the Ape name and therefore is not in the same position it was in 2000 when it first showed interest in Scooters India.

INVESTMENT RISKS

Potholes to Look Out For

RISK AT A GLANCE

Risks	Mitigation Factors
High revenues coming from a mature market	Increasing importance of growing Asian markets
Strong competition of low cost producers in the scooter market	Piaggio's focus on efficiency and expertise of the management
Highly competitive markets	Wide range of products and excellent brand recognition.
Reliance on product innovation	Localized R&D department in all the main region to adapt to the local demand
No control of the distribution network	Strong brand recognition and costumer loyalty
Change in the regulatory framework	Piaggio often involved in the parliamentary committees appointed to formulate new laws
Volatility of raw material prices	Multi-year supply contracts limit the impact of intra-year fluctuations
Strong exposure to India Rupee	A new production plant in Asia and hedge of 66% of the economic exposure
Access to the credit market	Committed credit lines available

Source: Dhaka Stock Exchange

Over 65% revenues generated in mature market with low economic growth

In 2010, around 65% of total revenues and 85% of Piaggio motorcycle sales were coming from Europe, which is a mature market and characterized by a potential weakening of the consumer purchasing power. Therefore, a further European slowdown will have a negative effect on the group's sales.

51% revenues generated by scooters, the most vulnerable segment to competition from low-cost manufacturers

During 2010, 51% of the total revenues were being generated by scooters, which are the most vulnerable products to low-cost manufacturers - particularly in the 50cc engine displacements, in which Piaggio is the market leader in Europe. However, the high brand recognition and the investments in production facilities in India and Vietnam could partially offset this risk.

Highly competitive markets

The recent market decline in Europe will tend to discourage new entrants to the market, but intensify rivalry between the incumbents, most of which are large multinationals. A very aggressive policy adopted by the main Japanese and Korean players, as well as Peugeot, all of which have well-known, high-quality brands, good access to dealers and a good price-quality ratio, could force Piaggio to increase discounts and therefore decrease the margins in order to defend its market share. To at least partially defend itself, Piaggio would have to continuously introduce innovative products to the market.

Strong reliance on product innovation

New product launches are the main drivers of sales. Product failures, as well as significant capital expenditures could be a threat to the group's margins and returns. However, thanks to the large portfolio of brands Piaggio can obtain economies of scale in the development of new products and create CAPEX efficiencies. Furthermore, Piaggio has localized R&D department to adapt to the local demand.

No control over the distribution network

Piaggio serves 50 countries through almost 15,000 distributors, among which 12,100 are multi-franchises. The company does not have direct control on the dealers and often its competitors are larger, with the ability of developing economies of scale. This offers them the advantage of being able to offer dealers better margins, which works as an incentive to push certain brands to the market ahead of others. However, this risk is partially offset by the loyalty of the final customers to the brands of Piaggio.

Regulatory framework

Piaggio's operations are strongly subjective to a large number of regulations regarding: 1) safety, 2) noise, 3) consumption and 4) pollution, all of which are established by national and international authorities. An unpredicted change in the regulations could make current products obsolete and force Piaggio to invest in upgrading or adapting them.

Fluctuation of raw materials' prices

Piaggio is not exposed to sudden intra-year fluctuations of commodity prices because the company signs multi-year supply contracts. However, the terms of the agreements are re-negotiated annually, therefore a long-term rise to new trends for the raw material costs will impact Piaggio's gross margin.

Currency

EUR/USD is not a major problem since roughly 10% of the sales are denominated in USD, which is comparable to the total amount of sourcing in USD (more than 20% of the total purchases). Piaggio has a strong exposure to the Indian Rupee, since more than 20% of the company's sales are generated in India. In the coming years, thanks to the introduction of a new production facility in India, this risk will be partially mitigated by a better balance between revenues and operating costs in Indian Rupee.

Future financing dependent on cash flows

Although Piaggio's financial situation is not alarming, the current level of debt and the BB rating could have a negative effect on the Group's operations in the future, limiting its capacity to obtain further financing or resulting in financing with more unfavorable conditions. As a result, the company could face headwinds in financing future growth opportunities if it fails to produce sustainable cash flows.

If these factors manifest themselves differently than we have anticipated, earnings may differ from our forecasts and shares may deviate from our target price.

APPENDIX A – STATEMENT OF PROFIT AND LOSS

EUR m	2008	2009	2010E	2011E	2012E	2013E	…	2020E
Sales	**1,570.06**	**1,486.88**	**1,464.50**	**1,650.02**	**1,798.14**	**1,939.61**		**2,695.65**
Growth	*(7.21%)*	*(5.30%)*	(1.51%)	12.67%	8.98%	7.84%		2.50%
Material costs	(936.60)	(871.65)	(866.08)	(975.79)	(1,063.39)	(1,147.06)		(1,594.16)
Gross margin	**633.46**	**615.23**	**598.42**	**674.22**	**734.75**	**792.56**		**1,101.48**
% of sales	*40.35%*	*41.38%*	40.86%	40.86%	40.86%	40.86%		40.86%
Cost for services and use of third party assets	(292.92)	(272.07)	(267.97)	(301.92)	(329.02)	(354.91)		(493.25)
Salary	(250.97)	(242.92)	(227.23)	(254.69)	(264.24)	(270.63)		(438.39)
Net other expenses/income	99.48	100.55	91.56	103.16	112.42	121.27		168.53
EBITDA	**189.05**	**200.80**	**194.78**	**220.77**	**253.91**	**288.28**		**338.38**
% of sales	*12.04%*	*13.50%*	13.30%	13.38%	14.12%	14.86%		12.50%
Depreciation	(38.07)	(37.15)	(34.91)	(38.80)	(41.72)	(44.41)		(56.10)
Amortization	(56.47)	(59.23)	(55.65)	(61.86)	(66.52)	(70.81)		(89.44)
EBIT	**94.51**	**104.42**	**104.22**	**120.11**	**145.67**	**173.07**		**195.40**
% of sales	*6.02%*	*7.02%*	7.12%	7.28%	8.10%	8.92%		7.24%
Income from equity investments	0.01	0.45	0.00	0.00	0.00	0.00		0.00
Financial income	6.37	4.46	4.46	4.46	4.46	4.46		4.46
Financial expense	(41.29)	(33.28)	(33.28)	(33.28)	(33.28)	(33.28)		(33.28)
Net exchange gain/loss	0.03	(1.96)	0.00	0.00	0.00	0.00		0.00
EBT	**59.63**	**74.09**	**75.40**	**91.29**	**116.85**	**144.25**		**166.58**
% of sales	*3.80%*	*4.98%*	5.15%	5.53%	6.50%	7.44%		6.17%
Tax on income	(16.30)	(26.67)	(26.39)	(31.95)	(40.90)	(50.49)		(58.30)
Net income	**43.33**	**47.42**	**49.01**	**59.34**	**75.95**	**93.76**		**108.28**

Source: Company Documents and Dhaka Stock Exchange estimates

APPENDIX B – BALANCE SHEET

EUR m	2008	2009	2010E	2011E	2012E	2013E	…	2020E
Intangible assets	648.2	641.3	641.3	641.3	641.3	641.3		641.3
Tangible assets	250.4	250.4	244.5	238.5	232.6	226.6		185.0
Financial assets	0.6	0.6	0.6	0.6	0.6	0.6		0.6
Long-term tax receivables	8.2	5.0	5.0	5.0	5.0	5.0		5.0
Deferred tax assets	48.8	59.4	59.4	59.4	59.4	54.9		59.4
Total fixed assets	**956.2**	**956.6**	**950.7**	**944.7**	**938.8**	**932.8**		**891.2**
Inventories	258.0	252.5	244.7	275.6	300.4	324.0		450.3
Trade receivables	90.3	103.2	92.9	104.7	114.1	123.1		171.0
Other short-term receivables	49.2	48.2	48.2	48.2	48.2	48.2		48.2
Other short term investment	5.8	4.1	4.1	4.1	4.1	4.1		4.1
Cash & cash equivalent	40.0	200.2	233.3	280.5	337.6	405.4		933.0
Total current assets	**443.2**	**608.2**	**623.2**	**713.1**	**804.4**	**904.8**		**1,606.6**
Total assets	**1,399.3**	**1,564.8**	**1,573.9**	**1,657.9**	**1,743.2**	**1,837.6**		**2,497.8**
Equity	**398.2**	**423.8**	**453.2**	**488.8**	**534.4**	**590.6**		**1,035.5**
Long-term debt	264.8	443.2	499.8	499.8	499.8	499.8		499.8
Pensions and other accruals	85.9	84.9	97.7	110.9	123.4	136.2		226.2
Other long-term liabilities	6.2	6.5	6.5	6.5	6.5	6.5		6.5
Deferred tax liabilities	31.8	29.7	29.7	29.7	29.7	29.7		29.7
Total long-term liabilities	**388.6**	**564.2**	**633.6**	**646.5**	**659.3**	**672.1**		**762.1**
Short-term debt	160.6	132.4	56.6	56.6	56.6	56.6		56.6
Trade payables	362.2	346.0	339.4	382.4	416.7	449.5		624.7
Tax payables	19.1	19.0	19.0	19.0	19.0	19.0		19.0
Other short-term liabilities	70.7	79.6	72.1	64.7	57.3	49.9		-
Total short-term liabilities	**612.6**	**576.9**	**487.0**	**522.6**	**549.5**	**574.9**		**700.2**
Total equity & liabilities	**1,399.3**	**1,564.8**	**1,573.9**	**1,657.9**	**1,743.2**	**1,837.6**		**2,497.8**

Source: Company Documents and Dhaka Stock Exchange estimates

EUR m	2008	2009	2010E	2011E	2012E	2013E	…	2020E
NET FINANCIAL POSITION	417.4	395.0	342.3	298.8	244.6	179.6		(255.5)

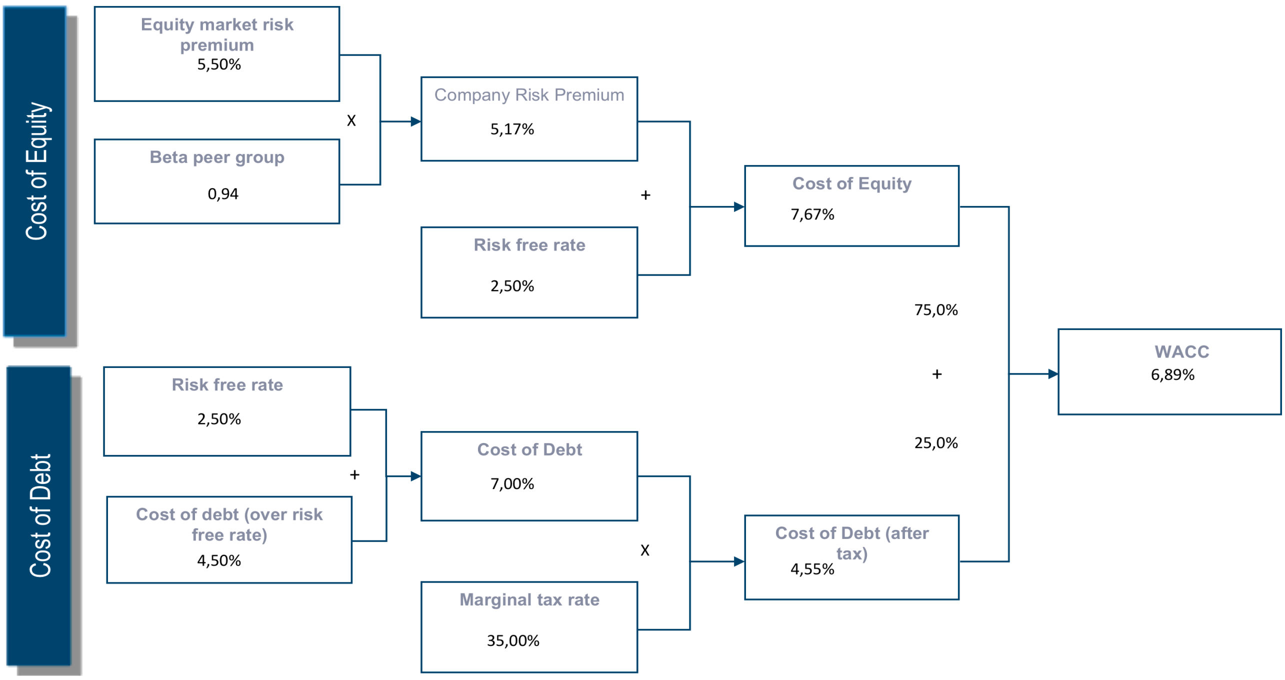
APPENDIX C – CASH FLOW STATEMENT

EUR m	2008	2009	2010E	2011E	2012E	2013E	…	2020E
Consolidated net income	43.0	46.0	49.0	59.3	76.0	93.8		108.3
Minority shareholders	0.3	1.4	-	-	-	-		-
Taxation for the period	16.3	26.7	26.4	32.0	40.9	50.5		58.3
Depreciation of property, plant and equipment	38.1	37.1	34.9	38.8	41.7	44.4		56.1
Amortization of intangible assets	56.5	59.2	55.7	61.9	66.5	70.8		89.4
Non-monetary costs for stock options	2.0	0.7	-	-	-	-		-
Allocations for risks and retirement funds and employee benefits	29.8	28.7	24.3	24.3	24.3	24.3		24.3
Write-downs / (Revaluations)	6.3	7.4	6.0	6.0	6.0	6.0		6.0
Losses / (Gains) on the disposal of PPE	(0.2)	0.1	-	-	-	-		-
Loss / (gain) for measurement of financial assets at FV	-	-	-	-	-	-		-
Financial income	(3.9)	(1.4)	(1.8)	(1.8)	(1.8)	(1.8)		(1.8)
Dividend income	-	(0.6)	-	-	-	-		-
Financial charges	35.7	28.1	13.3	13.3	13.3	13.3		13.3
Income from public grants	(7.3)	(7.4)	(7.4)	(7.4)	(7.4)	(7.4)		(5.3)
Change in working capital:								
(Increase)/Decrease in trade receivables	31.1	(12.9)	10.3	(11.8)	(9.4)	(9.0)		(4.2)
(Increase)/Decrease other receivables	(1.0)	(2.8)	-	-	-	-		-
(Increase)/Decrease in inventories	(32.4)	5.5	7.8	(31.0)	(24.7)	(23.6)		(11.0)
Increase/(Decrease) in trade payables	14.8	(16.2)	(6.6)	43.0	34.3	32.8		15.2
(Increase)/Decrease other payables	(3.8)	8.9	-	-	-	-		-
Increase/(Decrease) in provisions for risks	(18.4)	(19.0)	-	-	-	-		-
Increase/(Decrease) in retirement funds and employee benefits	(11.6)	(11.5)	(11.5)	(11.5)	(11.5)	(11.5)		(11.5)
Other changes	(16.5)	20.299	-	-	-	-		-
Cash generating by operating activities	**178.7**	**198.2**	**200.3**	**215.1**	**248.2**	**282.5**		**337.2**
Interest paid	(32.7)	(33.5)	(11.5)	(11.5)	(11.5)	(11.5)		(11.5)
Taxation paid	(22.4)	(35.3)	(26.4)	(32.0)	(40.9)	(50.5)		(58.3)
Penalty for the debenture loan redeemed in advance	-	(6.1)	-	-	-	-		-
Cash flow from operating activities (A)	**123.6**	**123.2**	**162.4**	**171.6**	**195.7**	**220.5**		**267.4**
Investment in PPE	(45.6)	(39.3)	(34.9)	(38.8)	(41.7)	(44.4)		(56.1)
Sale price, or repayment value, of PPE	1.1	1.5	-	-	-	-		-
Investment in intangible assets	(57.3)	(54.5)	(55.7)	(61.9)	(66.5)	(70.8)		(89.4)
Sale price, or repayment value, of intangible assets	0.0	0.1	-	-	-	-		-
Sale price of equity investments	0.5	-	-	-	-	-		-
Repayment of loans provided	0.1	0.0	-	-	-	-		-
Purchase of financial assets	(0.0)	-	-	-	-	-		-
Sale price of financial assets	12.6	1.6	-	-	-	-		-
Collected interests	4.0	2.1	-	-	-	-		-
Cash flow from investment activities (B)	**(84.6)**	**(88.5)**	(90.6)	(100.7)	(108.2)	(115.2)		(145.5)
Purchase of own shares	(26.1)	(1.2)	-	-	-	-		-
Outflow for dividends paid	(23.3)	(22.5)	(19.6)	(23.7)	(30.4)	(37.5)		(43.3)
Loans received	43.5	395.4	113.2	56.6	56.6	56.6		56.6
Outflow for repayment of loans	(101.6)	(234.2)	(132.3)	(56.6)	(56.6)	(56.6)		(56.6)
Repayment of finance leases	(0.7)	(0.7)	-	-	-	-		-
Cash flow from funding activities (C)	**(108.2)**	**136.7**	(38.8)	(23.7)	(30.4)	(37.5)		(43.3)
Increase / (Decrease) in liquid funds (A+B+C)	**(69.2)**	**171.5**	**33.1**	**47.2**	**57.1**	**67.8**		**78.6**
Current account overdrafts	-	-	2.0	-	-	-		-
Opening balance	**94.9**	**26.0**	198.3	233.3	280.5	337.6		854.4
Exchange differences	0.3	0.8	-	-	-	-		-
Closing balance	**26.0**	**198.3**	233.3	280.5	337.6	405.4		933.0

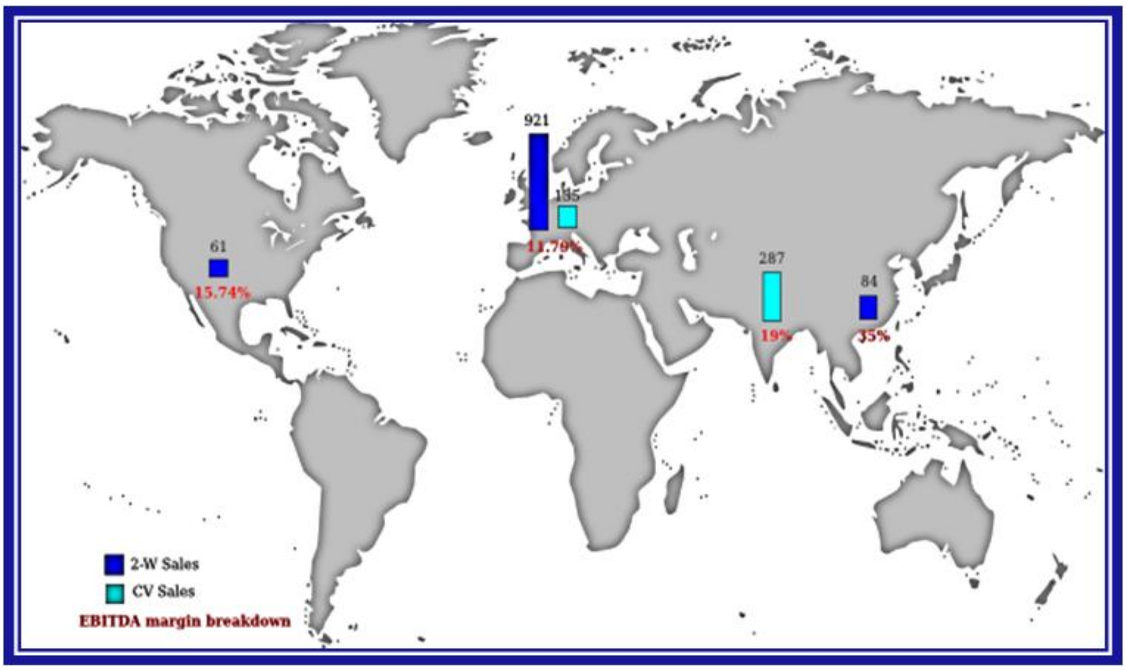
Source: Company Documents and Dhaka Stock Exchange estimates

APPENDIX D – WACC AND EBITDA MARGIN BREAKDOWN

WACC



EBITDA MARGIN



USA	EUROPE	INDIA	ASIA PACIFIC
15.74%	11.76%	19%	35%

APPENDIX E – FREE CASH FLOW RECONCILIATION

EUR m	2008	2009	2010E	2011E	2012E	2013E	…	2020E
NOPLAT	61.4	67.9	67.7	78.1	94.7	112.5		127.0
+ Depreciation	38.1	37.1	34.9	38.8	41.7	44.4		56.1
+/- Δ Working Cap	(15.9)	(16.9)	(4.5)	10.9	10.2	10.1		6.5
- Capital Expenditure	(104.1)	(95.3)	(90.6)	(100.7)	(108.2)	(115.2)		(145.5)
Free Cash Flow	**(20.5)**	**(7.3)**	**7.6**	**27.1**	**38.4**	**51.8**		**44.1**

APPENDIX F – SCORE ANALYSIS

Z-Score

	2009	2008	2007	2006
EBIT	104,421	94,511	136,577	114,224
Total Assets	1,564,820	1,399,329	1,443,979	1,469,326
Net Sales	1,486,882	1,570,060	1,692,126	1,607,412
Market Value of Equity	796,042.23	499,011.54	922,775.32	1,226,836.14
Total Liabilities	1,141,018	1,001,108	972,532	1,030,628
Current Assets	608,203	443,163	506,659	520,016
Current Liabilities	576,851	612,555	507,178	522,130
Retained Earnings	226,550	201,130	264,780	0
Net income-Dividends	24886	20080.000	48121	70345
Z-SCORE	1.63	1.52	2.10	2.13

Z-Score above 2.9	"Safe" Zone
Z-Score between 1.8 and 2.99	"Grey" Zone
Z-Score less than 1.8	"Distress" Zone

The formula for the Z-Score is as follows:

Z-Score Formula = 1.2(working capital/Total Assets)+3.3(EBIT/Total Assets)+(Net Sales/Total Assets)+0.6(Market Value Of Equity)+1.4(Retained Earnings/Total Assets)

M-Score	Value
DSRI - Days' Sales in Receivables Index	1.19
GMI - Gross Margin Index	1.02962799
AQI - asset quality index	0.89473691
SGI - sales growth index	0.94702241
DEPI - depreciation index	0.97570457
SGAI - sales, general and administrative expenses index	0.94685293
LVGI - leverage index	1.29687447
TATA - total accruals to total assets	0.07856842
M-Score	-2.10200961

The formula for the M-Score is as follows:

M-Score Formula = -4.84 + 0.92 * DSRI + 0.528 * GMI + 0.404 * AQI + 0.892 * SGI + 0.115 * DEPI - .172 * SGAI - .327 * LEVI + 4.679 * TATA

APPENDIX G – RATIO ANALYSIS

	PROFITABILITY RATIOS																			
	Return on Shareholder Funds (%) (before taxes)				Return on Capital Employed (%)				Return on Total Assets (%)				Profit Margin (%)				EBITDA Margin (%)			
	2009	2008	2007	2006	2009	2008	2007	2006	2009	2008	2007	2006	2009	2008	2007	2006	2009	2008	2007	2006
PIAGGIO	**17,48**	**14,97**	**21,95**	**20,11**	**10,87**	**12,83**	**15,09**	**12,85**	**3,03**	**3,10**	**4,16**	**4,78**	**3,18**	**2,75**	**3,54**	**4,37**	**13,50**	**12,04**	**13,36**	**12,69**
YAMAHA	-81,74	9,84	23,53	25,08	-26,95	7,88	19,54	20,49	-17,59	3,34	9,91	10,46	-15,05	2,42	7,10	7,46	-0,77	6,73	10,34	10,81
HONDA	7,77	4,04	19,71	17,69	4,25	2,43	11,50	10,40	2,89	1,37	7,10	6,59	3,92	1,62	7,46	7,15	11,58	8,26	12,26	11,03
SUZUKI	9,72	12,53	20,22	18,71	6,96	8,33	13,43	12,25	3,88	3,71	6,54	5,98	3,75	2,67	4,50	4,38	8,96	7,26	8,88	8,94
HERO HONDA	81,72	46,87	47,23	50,45	n.a.	n.a.	42,31	44,24	33,22	29,28	27,80	29,36	17,86	14,42	13,61	12,54	17,48	14,25	13,37	12,32
BAJAJ	88,48	45,59	68,83	n.a	59,09	24,86	37,66	n.a	28,75	14,08	22,97	n.a	20,11	9,40	12,40	n.a	21,47	11,87	12,69	n.a
MAHINDRA	39,55	32,01	40,62	45,35	18,56	13,10	15,24	17,06	11,30	7,20	9,65	11,09	12,75	8,42	10,34	12,34	17,62	14,18	15,96	16,03
TATA	52,26	-35,84	35,48	39,99	25,80	-10,88	13,93	17,48	5,76	-2,86	8,73	12,15	5,36	-3,00	8,62	9,54	11,87	-1,93	12,02	10,24

	OPERATIONAL RATIOS																			
	Net Assets Turnover (x)				Interest Cover (x)				Stock Turnover (x)				Collection period (days)				Credit period (days)			
	2009	2008	2007	2006	2009	2008	2007	2006	2009	2008	2007	2006	2009	2008	2007	2006	2009	2008	2007	2006
PIAGGIO	**1,00**	**1,12**	**1,80**	**1,10**	**3,33**	**2,41**	**3,18**	**10,23**	**6,43**	**6,60**	**7,50**	**7,55**	**25,00**	**21,00**	**26,00**	**31,00**	**98,00**	**95,00**	**86,00**	**102,00**
YAMAHA	1,90	2,69	2,58	2,59	-6,29	5,93	14,91	17,78	5,16	5,03	5,40	5,31	60,00	42,00	48,00	49,00	34,00	35,00	40,00	54,00
HONDA	1,04	1,32	1,51	1,43	28,98	8,41	57,34	65,98	9,17	8,05	10,01	9,37	37,00	31,00	71,00	179,00	34,00	24,00	30,00	37,00
SUZUKI	1,71	2,80	2,82	2,66	9,59	8,25	15,88	19,52	10,45	9,26	7,95	7,89	36,00	29,00	34,00	37,00	57,00	44,00	62,00	65,00
HERO HONDA	4,29	3,06	3,19	3,59	n.a.	n.a.	n.a.	n.a.	36,33	37,81	32,68	36,06	0,00	0,00	10,00	0,00	25,00	20,00	26,00	0,00
BAJAJ	2,93	2,58	3,02	n.a	359,80	41,69	187,68	n.a	26,08	23,65	24,61	n.a	0,00	0,00	0,00	n.a	0,00	0,00	0,00	n.a
MAHINDRA	1,17	1,17	1,26	1,22	4,79	4,06	7,60	8,29	8,90	8,18	7,39	7,35	37,00	47,00	56,00	10,00	0,00	0,00	55,00	2,00
TATA	2,72	1,68	1,65	2,01	1,96	n.a.	n.a.	n.a.	8,83	6,48	10,86	10,22	26,00	24,00	21,00	18,00	68,00	94,00	68,00	54,00

	STRUCTURE RATIOS																			
	Current Ratio (x)				Acid Test (x)				Shareholders Liquidity Ratio (x)				Solvency Ratio (%)				Gearing (%)			
	2009	2008	2007	2006	2009	2008	2007	2006	2009	2008	2007	2006	2009	2008	2007	2006	2009	2008	2007	2006
PIAGGIO	**1,05**	**0,72**	**1,00**	**1,00**	**0,62**	**0,30**	**0,55**	**0,64**	**0,75**	**1,02**	**1,01**	**0,86**	**27,08**	**28,46**	**32,65**	**29,85**	**159,83**	**132,90**	**112,84**	**125,66**
YAMAHA	1,64	1,26	1,31	1,29	1,05	0,70	0,74	0,72	0,54	1,96	3,49	3,37	21,52	33,92	42,13	41,70	200,21	56,65	29,93	31,47
HONDA	1,35	1,09	1,12	1,93	1,08	0,80	0,86	1,66	1,12	1,12	1,34	1,37	37,22	33,91	36,02	37,24	106,35	113,59	93,83	90,17
SUZUKI	1,58	1,17	1,27	1,27	1,33	0,87	0,89	0,91	1,92	1,48	1,68	1,66	39,98	29,63	32,32	31,94	56,20	74,65	59,56	60,36
HERO HONDA	0,60	0,49	0,51	0,62	0,51	0,33	0,34	0,43	15,29	16,41	11,37	8,38	40,66	62,46	58,86	58,20	6,54	6,09	8,79	11,93
BAJAJ	0,71	0,94	0,88	n.a	0,60	0,78	0,69	n.a	1,99	1,13	1,20	n.a	32,49	30,88	33,37	n.a	50,17	88,24	83,63	n.a
MAHINDRA	2,35	2,21	2,53	2,70	1,94	1,82	2,04	2,23	0,61	0,44	0,47	0,50	28,58	22,48	23,77	24,45	164,92	225,54	212,39	201,97
TATA	0,68	1,02	1,41	1,75	0,48	0,68	1,17	1,40	0,39	0,16	0,67	0,92	11,02	7,99	24,61	30,37	326,21	611,49	149,79	108,39

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