

## Upgrade post share price correction [EXTRACT]

### ■ Upgrade to Buy

We upgrade our rating from Neutral to Buy on valuation. We believe the share price decline following management's 14 September profit warning has brought the valuation to an attractive level. We believe the strength of its flagship *Parachute* brand will ensure good volume growth for the company. We think management's strategy of not increasing prices despite high commodity prices to encourage consumers to upgrade during periods of inflation or economic uncertainty will be viewed positively by investors due to strong volume growth.

### ■ Flat ROE, will remain under pressure near term

In FY11, ROE declined to 26%, approximately the FY01 level. ROE improved through FY07 and then started to fall due to declining asset turnover. We expect ROE to remain under pressure in FY12 but improve from FY13.

### ■ With all negatives factored in, expect good year ahead

With all the negatives factored in, any improvement on the cost front should result in earnings upside for Marico, in our view. Extending its flagship *Parachute* brand to the value added hair oil segment and recently the skin cream segment should help Marico garner market share in these segments. We believe Marico will benefit from: 1) rising incomes in rural India as consumers upgrade to branded hair oil and 2) higher spending on health foods and male grooming in India.

### ■ Valuation: upgrade rating to Buy, maintain Rs185.00 price target

We derive our price target from a DCF-based methodology and explicitly forecast long-term valuation drivers using UBS's VCAM tool. We assume a WACC of 10.8%.

Highlights (Rsm)	03/10	03/11	03/12E	03/13E	03/14E
Revenues	26,608	31,283	39,093	46,344	54,375
EBIT (UBS)	3,151	3,390	4,261	5,260	6,525
Net Income (UBS)	2,394	2,375	3,246	4,144	5,170
EPS (UBS, Rs)	3.93	3.88	5.33	6.81	8.49
Net DPS (UBS, Rs)	0.66	0.76	0.85	1.09	1.36

Profitability & Valuation	5-yr hist av.	03/11	03/12E	03/13E	03/14E
EBIT margin %	10.9	10.8	10.9	11.4	12.0
ROIC (EBIT) %	36.1	29.3	28.0	31.6	35.8
EV/EBITDA (core) x	16.0	19.3	17.9	14.3	11.4
PE (UBS) x	25.3	31.8	26.6	20.8	16.7
Net dividend yield %	1.0	0.6	0.6	0.8	1.0

Source: Company accounts, Thomson Reuters, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items. Valuations: based on an average share price that year, (E): based on a share price of Rs141.75 on 03 Oct 2011 23:55 SGT

### Sunita Sachdev

Analyst  
sunita.sachdev@ubs.com  
+91-22-6155 6062

India

Household Products, Non-Durable

12-month rating **Buy**  
Prior: *Neutral*

12m price target **Rs185.00/US\$3.76**  
*Unchanged*

Price **Rs141.75/US\$2.88**

RIC: MRCO.BO BBG: MRCO IB

4 October 2011

#### Trading data (local/US\$)

52-wk range	Rs167.30-113.60/US\$3.79-2.49
Market cap.	Rs86.3bn/US\$1.75bn
Shares o/s	609m (ORD)
Free float	34%
Avg. daily volume ('000)	445
Avg. daily value (m)	Rs68.9

#### Balance sheet data 03/12E

Shareholders' equity	Rs14.5bn
P/BV (UBS)	6.0x
Net Cash (debt)	(Rs2.57bn)

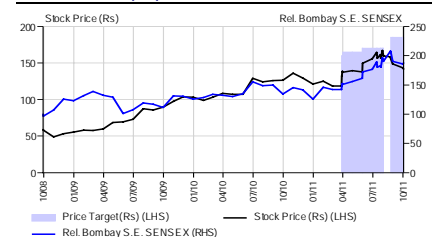
#### Forecast returns

Forecast price appreciation	+30.5%
Forecast dividend yield	0.6%
Forecast stock return	+31.1%
Market return assumption	13.3%
Forecast excess return	+17.8%

#### EPS (UBS, Rs)

	03/12E		03/11	
	From	To	Cons.	Actual
Q1E	-	1.40	1.28	1.21
Q2E	-	1.51	1.51	1.18
Q3E	-	1.61	1.61	2.39
Q4E	-	0.81	0.81	(0.87)
03/12E	-	5.33	5.33	
03/13E	-	6.81	6.81	

#### Performance (Rs)


[www.ubs.com/investmentresearch](http://www.ubs.com/investmentresearch)

This report has been prepared by UBS Securities India Private Ltd  
ANALYST CERTIFICATION AND REQUIRED DISCLOSURES BEGIN ON PAGE 5.

UBS does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

This is an extract from our India Consumer Sector report, published on 4 October 2011. For more detail, please refer to the full report.

Table 1: Marico's ROE decomposition

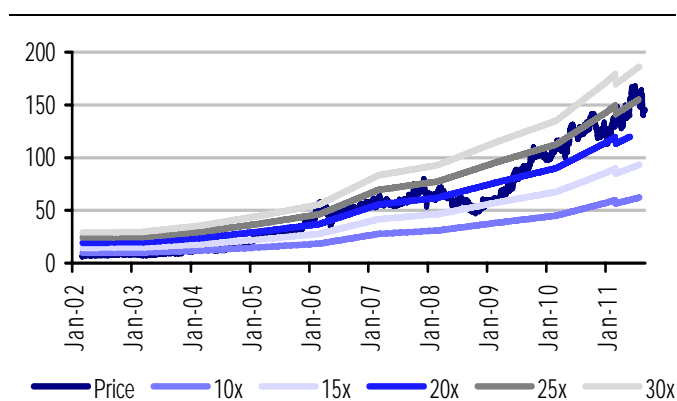
	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12E	FY13E
Net income margin	6.8%	7.2%	7.2%	6.6%	7.0%	7.6%	6.5%	8.4%	8.4%	9.0%	7.6%	8.3%	8.9%
Asset turnover	256.1%	242.0%	261.9%	292.8%	250.0%	168.3%	214.5%	196.8%	209.1%	175.7%	140.5%	144.1%	144.1%
Equity multiplier	152.9%	145.8%	153.5%	164.5%	185.7%	259.9%	377.3%	307.6%	251.8%	231.6%	243.2%	187.4%	200.5%
Return on equity	26.7%	25.4%	29.1%	32.0%	32.3%	33.2%	52.9%	51.1%	44.2%	36.6%	25.9%	22.4%	25.8%

Source: Company data, UBS estimates

In FY11, ROE declined to 26%, approximately the FY01 level. ROE improved through FY07 and then started to fall due to declining asset turnover.

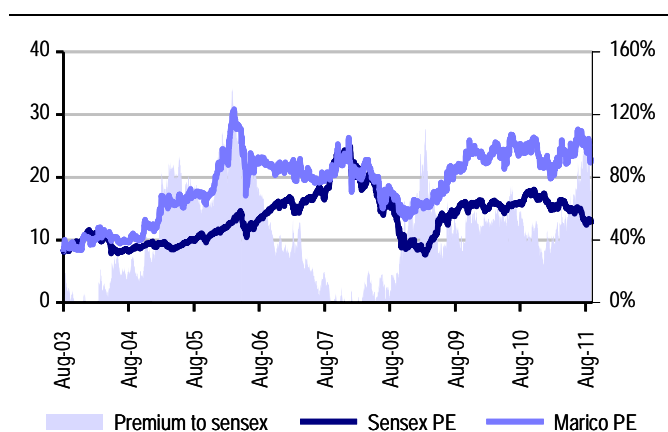
Marico issued a profit warning on 14 September 2011. The share price has since corrected 15% from its peak. The profit warning warned against 'super normal' profits as the company's strategy is now to invest in its brand. As a result, management indicated it expected a decline in gross margin since it will not increase prices. Marico's brands have low penetration but both Parachute and Saffola have very good brand equity. In our view, by keeping prices relatively affordable, Marico is trying to strengthen its equity further and encourage consumers to upgrade to branded products in times of economic uncertainty and inflation. We think investors are likely to view this positively as Parachute and Saffola are good brands and we expect a large-scale movement from unbranded to branded products. We therefore upgrade our rating from Neutral to Buy on the reasonable valuation and improved volume growth visibility.

Chart 1: Marico 1-year forward PE band



Source: Reuters, UBS estimates

Chart 2: Marico prem/disc to Sensex



Source: Reuters, UBS estimates

# Marico Ltd

Income statement (Rsm)	03/07	03/08	03/09	03/10	03/11	03/12E	% ch	03/13E	% ch	03/14E	% ch
Revenues	15,569	19,050	23,884	26,608	31,283	39,093	25.0	46,344	18.5	54,375	17.3
Operating expenses (ex dephn)	(13,582)	(16,587)	(20,844)	(22,856)	(27,186)	(34,089)	25.4	(40,203)	17.9	(46,763)	16.3
EBITDA (UBS)	1,987	2,463	3,040	3,751	4,098	5,004	22.1	6,141	22.7	7,613	24.0
Depreciation	(522)	(309)	(358)	(601)	(708)	(743)	4.9	(881)	18.5	(1,088)	23.5
Operating income (EBIT, UBS)	1,465	2,155	2,682	3,151	3,390	4,261	25.7	5,260	23.4	6,525	24.0
Other income & associates	102	96	122	183	279	446	60.0	670	50.0	737	10.0
Net interest	(206)	(305)	(357)	(257)	(393)	(482)	22.6	(482)	0.0	(482)	0.0
Abnormal items (pre-tax)	0	0	0	0	0	0	-	0	-	0	-
Profit before tax	1,361	1,945	2,447	3,077	3,275	4,225	29.0	5,447	28.9	6,779	24.5
Tax	(343)	(337)	(441)	(664)	(850)	(930)	9.4	(1,253)	34.8	(1,559)	24.5
Profit after tax	1,017	1,608	2,006	2,413	2,425	3,296	35.9	4,194	27.3	5,220	24.5
Abnormal items (post-tax)	111	84	(119)	(77)	489	0	-	0	-	0	-
Minorities / pref dividends	0	(1)	0	(19)	(50)	(50)	-0.2	(50)	0.0	(50)	0.0
Net income (local GAAP)	1,128	1,691	1,887	2,317	2,864	3,246	13.3	4,144	27.7	5,170	24.7
Net Income (UBS)	1,017	1,607	2,006	2,394	2,375	3,246	36.6	4,144	27.7	5,170	24.7
Tax rate (%)	25	17	18	22	26	22	-15.2	23	4.5	23	0.0
Pre-abnormal tax rate (%)	25	17	18	22	26	22	-15.2	23	4.5	23	0.0
Per share (Rs)	03/07	03/08	03/09	03/10	03/11	03/12E	% ch	03/13E	% ch	03/14E	% ch
EPS (local GAAP)	1.85	2.78	3.10	3.80	4.68	5.33	14.6	6.81	27.7	8.49	24.7
EPS (UBS)	1.67	2.64	3.29	3.93	3.88	5.33	37.3	6.81	27.7	8.49	24.7
Net DPS	0.70	0.66	0.66	0.66	0.76	0.85	12.4	1.09	27.7	1.36	24.7
Cash EPS	2.53	3.15	3.88	4.91	5.04	6.55	30.0	8.25	26.0	10.28	24.5
BVPS	3.16	5.17	7.45	10.74	15.03	23.78	58.2	25.39	6.8	32.96	29.8
Balance sheet (Rsm)	03/07	03/08	03/09	03/10	03/11	03/12E	% ch	03/13E	% ch	03/14E	% ch
Net tangible fixed assets	1,277	2,136	2,715	3,465	4,015	5,226	30.2	6,663	27.5	8,294	24.5
Net intangible fixed assets	827	1,280	1,246	1,382	1,489	4,859	0.0	4,859	0.0	4,859	0.0
Net working capital (incl. other assets)	1,900	2,558	3,294	4,222	5,198	6,299	21.2	5,398	-14.3	6,420	19.0
Other liabilities	0	0	0	0	0	0	-	0	-	0	-
Operating invested capital	4,004	5,974	7,255	9,069	14,071	16,384	16.4	16,919	3.3	19,574	15.7
Investments	0	0	121	827	890	890	0.0	890	0.0	890	0.0
Total capital employed	4,004	5,974	7,376	9,896	14,961	17,274	15.5	17,809	3.1	20,463	14.9
Shareholders' equity	1,924	3,146	4,536	6,540	9,155	14,481	58.2	15,462	6.8	20,074	29.8
Minority interests	0	1	0	13	219	219	0.0	219	0.0	0	-
Total equity	1,924	3,147	4,536	6,552	9,374	14,700	56.8	15,681	6.7	20,074	28.0
Net debt / (cash)	2,080	2,827	2,841	3,344	5,587	2,574	-53.9	2,128	-17.3	389	-81.7
Other debt-deemed items	0	0	0	0	0	0	-	0	-	0	-
Total capital employed	4,004	5,974	7,376	9,896	14,961	17,274	15.5	17,809	3.1	20,463	14.9
Cash flow (Rsm)	03/07	03/08	03/09	03/10	03/11	03/12E	% ch	03/13E	% ch	03/14E	% ch
Operating income (EBIT, UBS)	1,465	2,155	2,682	3,151	3,390	4,261	25.7	5,260	23.4	6,525	24.0
Depreciation	522	309	358	601	708	743	4.9	881	18.5	1,088	23.5
Net change in working capital	(68)	(896)	(1,008)	(1,287)	(1,117)	994	-	(1,239)	-	(1,403)	13.2
Other (operating)	309	200	225	260	155	455	193.2	(409)	-	380	-
Operating cash flow (pre tax/interest)	2,227	1,768	2,257	2,725	3,135	6,453	105.8	4,492	-30.4	6,590	46.7
Net interest received / (paid)	(215)	(245)	(359)	(153)	(214)	(482)	125.3	(482)	0.0	(482)	0.0
Dividends paid	(456)	(325)	(477)	(472)	(471)	(519)	10.35	(663)	27.69	(827)	24.75
Tax paid	(343)	(337)	(441)	(664)	(850)	(930)	9.4	(1,253)	34.8	(1,559)	24.5
Capital expenditure	(2,993)	(1,221)	(790)	(1,526)	(1,841)	(1,955)	6.2	(2,317)	18.5	(2,719)	17.3
Net (acquisitions) / disposals	(7)	(393)	0	0	(2,276)	0	-	0	-	0	-
Other	193	0	(259)	(667)	63	446	612.0	670	50.0	737	10.0
Share issues	1,454	0	0	218	0	0	-	0	-	0	-
Cash flow (inc)/dec in net debt	(140)	(754)	(69)	(538)	(2,454)	3,013	-	446	-85.2	1,739	289.9
FX / non cash items	42	7	55	35	211	0	-	0	-	0	-
Balance sheet (inc)/dec in net debt	(98)	(746)	(14)	(504)	(2,243)	3,013	-	446	-85.2	1,739	289.9
Core EBITDA	1,987	2,463	3,040	3,751	4,098	5,004	22.1	6,141	22.7	7,613	24.0
Maintenance capital expenditure	(522)	(309)	(358)	(601)	(708)	(743)	4.9	(881)	18.5	(1,088)	23.5
Maintenance net working capital	0	0	0	0	0	0	-	0	-	0	-
Operating free cash flow, pre-tax	1,465	2,155	2,682	3,151	3,390	4,261	25.7	5,260	23.4	6,525	24.0

Source: Company accounts, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items. Note: For some companies, the data represents an extract of the full company accounts.

12-month rating

Buy

12m price target

Rs185.00

Company profile

Marico is the leading producer and distributor of hair oil, which it sells under the Parachute and Nihar (33-35% of sales) brands. Other hair oils contribute 13% to sales. The company also manufactures cooking oil under the Saffola brand (15% of sales). It operates a chain of beauty and well-being clinics under the brand name Kaya (7% of sales). International sales, mainly in Bangladesh, Egypt, Malaysia, Singapore, South Africa, and the Middle East, contribute 23%.

Valuation (x)	5Yr Avg	03/10	03/11	03/12E	03/13E	03/14E
P/E (local GAAP)	23.8	23.3	26.6	26.6	20.8	16.7
P/E (UBS)	25.3	22.6	31.8	26.6	20.8	16.7
P/CEPS	19.5	18.0	24.5	21.6	17.2	13.8
Net dividend yield (%)	1.0	0.7	0.6	0.6	0.8	1.0
P/BV	10.5	8.3	8.2	6.0	5.6	4.3
EV/revenue (core)	2.1	2.1	2.5	2.3	1.9	1.6
EV/EBITDA (core)	16.0	15.0	19.3	17.9	14.3	11.4
EV/EBIT (core)	19.1	17.9	23.3	21.1	16.7	13.3
EV/OpFCF (core)	19.1	17.9	23.3	21.1	16.7	13.3
EV/op. invested capital	6.9	6.9	6.8	5.9	5.3	4.8

Enterprise value (Rsm)	03/10	03/11	03/12E	03/13E	03/14E
Average market cap	53,977	75,206	86,326	86,326	86,326
+ minority interests	6	116	219	219	109
+ average net debt (cash)	3,092	4,466	4,081	2,351	1,259
+ pension obligations and other	0	0	0	0	0
- non-core asset value	(827)	(890)	(890)	(890)	(890)
Core enterprise value	56,249	78,897	89,735	88,006	86,804

Growth (%)	5Yr Avg	03/10	03/11	03/12E	03/13E	03/14E
Revenue	19.1	11.4	17.6	25.0	18.5	17.3
EBITDA (UBS)	19.8	23.4	9.2	22.1	22.7	24.0
EBIT (UBS)	23.3	17.5	7.6	25.7	23.4	24.0
EPS (UBS)	23.5	19.3	-1.2	37.3	27.7	24.7
Cash EPS	18.8	26.6	2.5	30.0	26.0	24.5
Net DPS	2.0	0.8	15.0	12.4	27.7	24.7
BVPS	47.7	44.2	40.0	58.2	6.8	29.8

Margins (%)	5Yr Avg	03/10	03/11	03/12E	03/13E	03/14E
EBITDA / revenue	13.1	14.1	13.1	12.8	13.3	14.0
EBIT / revenue	10.9	11.8	10.8	10.9	11.4	12.0
Net profit (UBS) / revenue	8.0	9.0	7.6	8.3	8.9	9.5

Return on capital (%)	5Yr Avg	03/10	03/11	03/12E	03/13E	03/14E
EBIT ROIC (UBS)	36.1	38.6	29.3	28.0	31.6	35.8
ROIC post tax	-	30.3	21.7	21.8	24.3	27.5
Net ROE	46.8	43.2	30.3	27.5	27.7	29.1

Coverage ratios (x)	5Yr Avg	03/10	03/11	03/12E	03/13E	03/14E
EBIT / net interest	8.5	12.3	8.6	8.8	10.9	13.5
Dividend cover (UBS EPS)	4.5	6.0	5.1	6.3	6.3	6.3
Div. payout ratio (% , UBS EPS)	24.6	16.8	19.6	16.0	16.0	16.0
Net debt / EBITDA	1.1	0.9	1.4	0.5	0.3	0.1

Efficiency ratios (x)	5Yr Avg	03/10	03/11	03/12E	03/13E	03/14E
Revenue / op. invested capital	3.3	3.3	2.7	2.6	2.8	3.0
Revenue / fixed assets	5.6	6.0	4.6	4.1	4.3	4.4
Revenue / net working capital	7.8	7.1	6.6	6.8	7.9	9.2

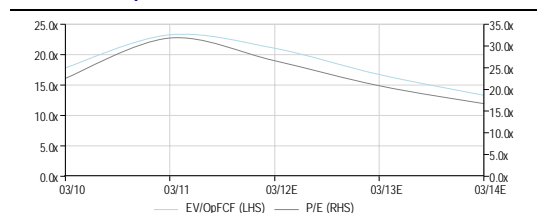
Investment ratios (x)	5Yr Avg	03/10	03/11	03/12E	03/13E	03/14E
OpFCF / EBIT	1.0	1.0	1.0	1.0	1.0	1.0
Capex / revenue (%)	7.2	5.7	5.9	5.0	5.0	5.0
Capex / depreciation	3.4	2.5	2.6	2.6	2.6	2.5

Capital structure (%)	5Yr Avg	03/10	03/11	03/12E	03/13E	03/14E
Net debt / total equity	65.9	51.1	61.0	17.8	13.8	1.9
Net debt / (net debt + equity)	39.7	33.8	37.9	15.1	12.1	1.9
Net debt (core) / EV	6.1	5.5	5.7	4.5	2.7	1.5

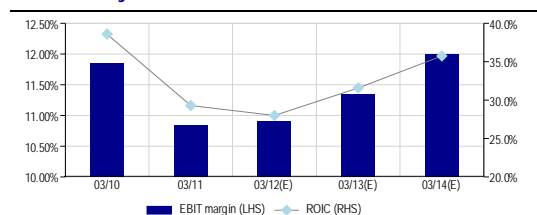
Source: Company accounts, UBS estimates. (UBS) valuations are stated before goodwill, exceptionals and other special items.

Valuations: based on an average share price that year, (E): based on a share price of Rs141.75 on 03 Oct 2011 23:55 SGT Market cap(E) may include forecast share issues/buybacks.

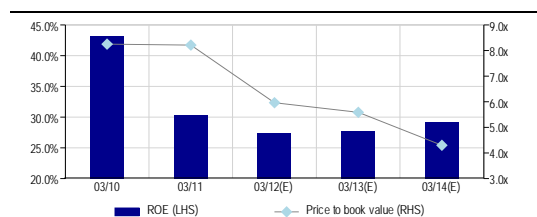
Value (EV/OpFCF & P/E)



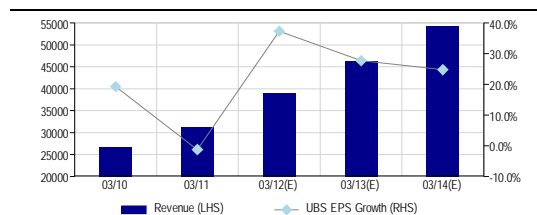
Profitability



ROE v Price to book value



Growth (UBS EPS)



Sunita Sachdev

Analyst

sunita.sachdev@ubs.com

+91-22-6155 6062

## ■ Marico Ltd

Marico is the leading producer and distributor of hair oil, which it sells under the Parachute and Nihar (33-35% of sales) brands. Other hair oils contribute 13% to sales. The company also manufactures cooking oil under the Saffola brand (15% of sales). It operates a chain of beauty and well-being clinics under the brand name Kaya (7% of sales). International sales, mainly in Bangladesh, Egypt, Malaysia, Singapore, South Africa, and the Middle East, contribute 23%.

## ■ Statement of Risk

We believe the potential risks for Marico include unfavourable copra price movements, smaller-than-expected volume growth due to declining trends in hair oil consumption and the failure to take incremental share from the unorganised hair and edible oil market.

## ■ Analyst Certification

Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers and were prepared in an independent manner, including with respect to UBS, and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

## Required Disclosures

This report has been prepared by UBS Securities India Private Ltd, an affiliate of UBS AG. UBS AG, its subsidiaries, branches and affiliates are referred to herein as UBS.

For information on the ways in which UBS manages conflicts and maintains independence of its research product; historical performance information; and certain additional disclosures concerning UBS research recommendations, please visit [www.ubs.com/disclosures](http://www.ubs.com/disclosures). The figures contained in performance charts refer to the past; past performance is not a reliable indicator of future results. Additional information will be made available upon request. UBS Securities Co. Limited is licensed to conduct securities investment consultancy businesses by the China Securities Regulatory Commission.

### UBS Investment Research: Global Equity Rating Allocations

UBS 12-Month Rating	Rating Category	Coverage <sup>1</sup>	IB Services <sup>2</sup>
Buy	Buy	59%	35%
Neutral	Hold/Neutral	35%	33%
Sell	Sell	6%	14%
UBS Short-Term Rating	Rating Category	Coverage <sup>3</sup>	IB Services <sup>4</sup>
Buy	Buy	less than 1%	0%
Sell	Sell	less than 1%	20%

1:Percentage of companies under coverage globally within the 12-month rating category.

2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.

3:Percentage of companies under coverage globally within the Short-Term rating category.

4:Percentage of companies within the Short-Term rating category for which investment banking (IB) services were provided within the past 12 months.

Source: UBS. Rating allocations are as of 30 September 2011.

### UBS Investment Research: Global Equity Rating Definitions

UBS 12-Month Rating	Definition
Buy	FSR is > 6% above the MRA.
Neutral	FSR is between -6% and 6% of the MRA.
Sell	FSR is > 6% below the MRA.
UBS Short-Term Rating	Definition
Buy	Buy: Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.
Sell	Sell: Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.

## KEY DEFINITIONS

**Forecast Stock Return (FSR)** is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months.

**Market Return Assumption (MRA)** is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium).

**Under Review (UR)** Stocks may be flagged as UR by the analyst, indicating that the stock's price target and/or rating are subject to possible change in the near term, usually in response to an event that may affect the investment case or valuation.

**Short-Term Ratings** reflect the expected near-term (up to three months) performance of the stock and do not reflect any change in the fundamental view or investment case.

**Equity Price Targets** have an investment horizon of 12 months.

## EXCEPTIONS AND SPECIAL CASES

**UK and European Investment Fund ratings and definitions are:** Buy: Positive on factors such as structure, management, performance record, discount; Neutral: Neutral on factors such as structure, management, performance record, discount; Sell: Negative on factors such as structure, management, performance record, discount.

**Core Banding Exceptions (CBE):** Exceptions to the standard +/-6% bands may be granted by the Investment Review Committee (IRC). Factors considered by the IRC include the stock's volatility and the credit spread of the respective company's debt. As a result, stocks deemed to be very high or low risk may be subject to higher or lower bands as they relate to the rating. When such exceptions apply, they will be identified in the Company Disclosures table in the relevant research piece.

Research analysts contributing to this report who are employed by any non-US affiliate of UBS Securities LLC are not registered/qualified as research analysts with the NASD and NYSE and therefore are not subject to the restrictions contained in the NASD and NYSE rules on communications with a subject company, public appearances, and trading securities held by a research analyst account. The name of each affiliate and analyst employed by that affiliate contributing to this report, if any, follows.

**UBS Securities India Private Ltd:** Sunita Sachdev.

## Company Disclosures

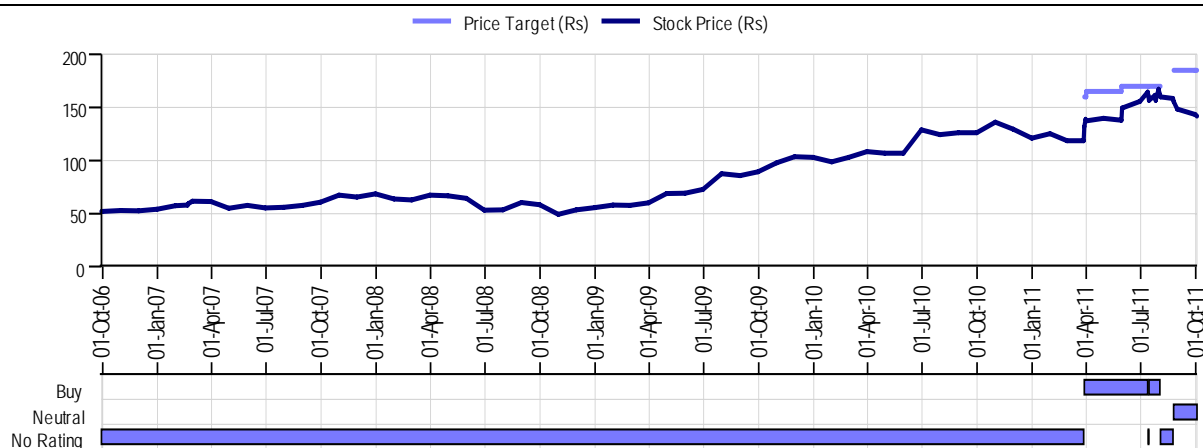
Company Name	Reuters	12-mo rating	Short-term rating	Price	Price date
Marico Ltd	MRCO.BO	Neutral	N/A	Rs141.75	03 Oct 2011

Source: UBS. All prices as of local market close.

Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date

Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report.

## Marico Ltd (Rs)



Source: UBS; as of 03 Oct 2011





## Global Disclaimer

This report has been prepared by UBS Securities India Private Ltd, an affiliate of UBS AG. UBS AG, its subsidiaries, branches and affiliates are referred to herein as UBS. In certain countries, UBS AG is referred to as UBS SA.

This report is for distribution only under such circumstances as may be permitted by applicable law. Nothing in this report constitutes a representation that any investment strategy or recommendation contained herein is suitable or appropriate to a recipient's individual circumstances or otherwise constitutes a personal recommendation. It is published solely for information purposes, it does not constitute an advertisement and is not to be construed as a solicitation or an offer to buy or sell any securities or related financial instruments in any jurisdiction. No representation or warranty, either express or implied, is provided in relation to the accuracy, completeness or reliability of the information contained herein, except with respect to information concerning UBS AG, its subsidiaries and affiliates, nor is it intended to be a complete statement or summary of the securities, markets or developments referred to in the report. UBS does not undertake that investors will obtain profits, nor will it share with investors any investment profits nor accept any liability for any investment losses. Investments involve risks and investors should exercise prudence in making their investment decisions. The report should not be regarded by recipients as a substitute for the exercise of their own judgement. Past performance is not necessarily a guide to future performance. The value of any investment or income may go down as well as up and you may not get back the full amount invested. Any opinions expressed in this report are subject to change without notice and may differ or be contrary to opinions expressed by other business areas or groups of UBS as a result of using different assumptions and criteria. Research will initiate, update and cease coverage solely at the discretion of UBS Investment Bank Research Management. The analysis contained herein is based on numerous assumptions. Different assumptions could result in materially different results. The analyst(s) responsible for the preparation of this report may interact with trading desk personnel, sales personnel and other constituencies for the purpose of gathering, synthesizing and interpreting market information. UBS is under no obligation to update or keep current the information contained herein. UBS relies on information barriers to control the flow of information contained in one or more areas within UBS, into other areas, units, groups or affiliates of UBS. The compensation of the analyst who prepared this report is determined exclusively by research management and senior management (not including investment banking). Analyst compensation is not based on investment banking revenues, however, compensation may relate to the revenues of UBS Investment Bank as a whole, of which investment banking, sales and trading are a part.

The securities described herein may not be eligible for sale in all jurisdictions or to certain categories of investors. Options, derivative products and futures are not suitable for all investors, and trading in these instruments is considered risky. Mortgage and asset-backed securities may involve a high degree of risk and may be highly volatile in response to fluctuations in interest rates and other market conditions. Past performance is not necessarily indicative of future results. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related instrument mentioned in this report. For investment advice, trade execution or other enquiries, clients should contact their local sales representative. Neither UBS nor any of its affiliates, nor any of UBS' or any of its affiliates, directors, employees or agents accepts any liability for any loss or damage arising out of the use of all or any part of this report. For financial instruments admitted to trading on an EU regulated market: UBS AG, its affiliates or subsidiaries (excluding UBS Securities LLC and/or UBS Capital Markets LP) acts as a market maker or liquidity provider (in accordance with the interpretation of these terms in the UK) in the financial instruments of the issuer save that where the activity of liquidity provider is carried out in accordance with the definition given to it by the laws and regulations of any other EU jurisdictions, such information is separately disclosed in this research report. UBS and its affiliates and employees may have long or short positions, trade as principal and buy and sell in instruments or derivatives identified herein.

Any prices stated in this report are for information purposes only and do not represent valuations for individual securities or other instruments. There is no representation that any transaction can or could have been effected at those prices and any prices do not necessarily reflect UBS's internal books and records or theoretical model-based valuations and may be based on certain assumptions. Different assumptions, by UBS or any other source, may yield substantially different results.

**United Kingdom and the rest of Europe:** Except as otherwise specified herein, this material is communicated by UBS Limited, a subsidiary of UBS AG, to persons who are eligible counterparties or professional clients and is only available to such persons. The information contained herein does not apply to, and should not be relied upon by, retail clients. UBS Limited is authorised and regulated by the Financial Services Authority (FSA). UBS research complies with all the FSA requirements and laws concerning disclosures and these are indicated on the research where applicable. **France:** Prepared by UBS Limited and distributed by UBS Limited and UBS Securities France SA. UBS Securities France S.A. is regulated by the Autorité des Marchés Financiers (AMF). Where an analyst of UBS Securities France S.A. has contributed to this report, the report is also deemed to have been prepared by UBS Securities France S.A. **Germany:** Prepared by UBS Limited and distributed by UBS Limited and UBS Deutschland AG. UBS Deutschland AG is regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin). **Spain:** Prepared by UBS Limited and distributed by UBS Limited and UBS Securities España SV, SA. UBS Securities España SV, SA is regulated by the Comisión Nacional del Mercado de Valores (CNMV). **Turkey:** Prepared by UBS Menkul Degerler AS on behalf of and distributed by UBS Limited. **Russia:** Prepared and distributed by UBS Securities CJSC. **Switzerland:** Distributed by UBS AG to persons who are institutional investors only. **Italy:** Prepared by UBS Limited and distributed by UBS Limited and UBS Italia Sim S.p.A.. UBS Italia Sim S.p.A. is regulated by the Bank of Italy and by the Commissione Nazionale per le Società e la Borsa (CONSOB). Where an analyst of UBS Italia Sim S.p.A. has contributed to this report, the report is also deemed to have been prepared by UBS Italia Sim S.p.A.. **South Africa:** UBS South Africa (Pty) Limited (Registration No. 1995/011140/07) is a member of the JSE Limited, the South African Futures Exchange and the Bond Exchange of South Africa. UBS South Africa (Pty) Limited is an authorised Financial Services Provider. Details of its postal and physical address and a list of its directors are available on request or may be accessed at <http://www.ubs.co.za>. **United States:** Distributed to US persons by either UBS Securities LLC or by UBS Financial Services Inc., subsidiaries of UBS AG; or by a group, subsidiary or affiliate of UBS AG that is not registered as a US broker-dealer (a 'non-US affiliate'), to major US institutional investors only. UBS Securities LLC or UBS Financial Services Inc. accepts responsibility for the content of a report prepared by another non-US affiliate when distributed to US persons by UBS Securities LLC or UBS Financial Services Inc. All transactions by a US person in the securities mentioned in this report must be effected through UBS Securities LLC or UBS Financial Services Inc., and not through a non-US affiliate. **Canada:** Distributed by UBS Securities Canada Inc., a subsidiary of UBS AG and a member of the principal Canadian stock exchanges & CIPF. A statement of its financial condition and a list of its directors and senior officers will be provided upon request. **Hong Kong:** Distributed by UBS Securities Asia Limited. **Singapore:** Distributed by UBS Securities Pte. Ltd [mica (p) 039/11/2009 and Co. Reg. No.: 198500648C] or UBS AG, Singapore Branch. Please contact UBS Securities Pte Ltd, an exempt financial advisor under the Singapore Financial Advisers Act (Cap. 110); or UBS AG Singapore branch, an exempt financial adviser under the Singapore Financial Advisers Act (Cap. 110) and a wholesale bank licensed under the Singapore Banking Act (Cap. 19) regulated by the Monetary Authority of Singapore, in respect of any matters arising from, or in connection with, the analysis or report. The recipient of this report represent and warrant that they are accredited and institutional investors as defined in the Securities and Futures Act (Cap. 289). **Japan:** Distributed by UBS Securities Japan Ltd to institutional investors only. Where this report has been prepared by UBS Securities Japan Ltd, UBS Securities Japan Ltd is the author, publisher and distributor of the report. **Australia:** Distributed by UBS AG (Holder of Australian Financial Services License No. 231087) and UBS Securities Australia Ltd (Holder of Australian Financial Services License No. 231098) only to 'Wholesale' clients as defined by s761G of the Corporations Act 2001. **New Zealand:** Distributed by UBS New Zealand Ltd. An investment adviser and investment broker disclosure statement is available on request and free of charge by writing to PO Box 45, Auckland, NZ. **Dubai:** The research prepared and distributed by UBS AG Dubai Branch, is intended for Professional Clients only and is not for further distribution within the United Arab Emirates. **Korea:** Distributed in Korea by UBS Securities Pte. Ltd., Seoul Branch. This report may have been edited or contributed to from time to time by affiliates of UBS Securities Pte. Ltd., Seoul Branch. **Malaysia:** This material is authorized to be distributed in Malaysia by UBS Securities Malaysia Sdn. Bhd (253825-x). **India :** Prepared by UBS Securities India Private Ltd. 2/F,2 North Avenue, Maker Maxity, Bandra Kuria Complex, Bandra (East), Mumbai (India) 400051. Phone: +912261556000 SEBI Registration Numbers: NSE (Capital Market Segment): INB230951431, NSE (F&O Segment) INF230951431, BSE (Capital Market Segment) INB010951437.

The disclosures contained in research reports produced by UBS Limited shall be governed by and construed in accordance with English law.

UBS specifically prohibits the redistribution of this material in whole or in part without the written permission of UBS and UBS accepts no liability whatsoever for the actions of third parties in this respect. Images may depict objects or elements which are protected by third party copyright, trademarks and other intellectual property rights. © UBS 2011. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved.

