ACTION Buy United Phosphorus (UNPO.BO)

Return Potential: 29%

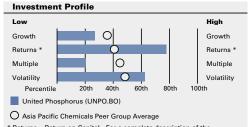
Relatively defensive stock; limited earnings downside; Buy

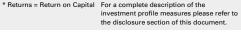
Source of opportunity

We reiterate our Buy rating on United Phosphorus (Uphos) with a 12-month P/B-based TP of Rs120, implying potential upside of 29%. We view the crop protection industry as relatively defensive in the agriculture space since basic demand for crop protection products exist even at low crop prices for the following reasons: 1) they act as insurance for maintaining farm yields; and 2) they constitute only about 10%-15% of total farm costs. Moreover, we believe Uphos, unlike Indian fertilizer companies, is operating in a fully unregulated environment and hence has the most compelling investment argument in the sector. We believe Uphos can generate EPS CAGR of 15% over FY09E-11E.

Catalyst

1) Improvement in margins through successful integration with Cerexagri, likely to reflect from 1QFY10E; 2) management delivering on inorganic growth through acquisitions; and 3) new registrations in key markets such as Europe and Latin America.





Key data	Current
Price (Rs)	92.85
12 month price target (Rs)	120.00
Market cap (Rs mn / US\$ mn)	20,194.9 / 413.4
Foreign ownership (%)	

3/08

5.80

0.0

(17.3)

5 80

16.0

1.7

10.7

2.2

15.0

EPS (Rs) New

EPS revision (%)

EPS growth (%)

EV/EBITDA (X)

Dividend yield (%)

P/E (X)

P/B (X)

ROE (%)

EPS (dil) (Rs) New

3/09

9.86

(3.4)

69.8

9 86

9.4

1.5

6.3

2.0

19.5

3/10

12.24

0.6

24.2

12.24

7.6

1.3

5.3

2.0

20.5

3/11F

13.03

8.2

6.4

7.1

1.1

4.7

2.0

18.4

13.03

Valuation	
-----------	--

Our 12-month P/B-based target price of Uphos is Rs120, which implies a P/E of 10X FY10E EPS. The company is likely to report ROE of more than 20% in FY10E, as per our estimates. We estimate DCF value for Uphos of Rs146. We adjusted our FY09/10/11E EPS estimates by -3%/+1%/+8% to factor in our revised volume assumptions and higher finance costs in FY09E.

The stock is currently trading at 7.6X FY10E P/E against its historical trading band of 6.0X-18.0X. While the company has demonstrated its organic growth capabilities in FY08, we note that it may have to pursue in-organic growth opportunities in order to sustain current volume growth.

Key risks

1) Margin erosion due to inability to pass on price increases to consumers; 2) the possibility of future equity dilution for inorganic growth; 3) pledged shares coming into the market.

INVESTMENT LIST MEMBERSHIP Asia Pacific Buy List

Coverage View: Cautious

India: Agriculture

Durga Dath +91(22)6616-9047 | durga.dath@gs.com Goldman Sachs India SPL Nilesh Banerjee +91(22)6616-9045 | nilesh.banerjee@gs.com Goldman Sachs India SPL Karthik Bhat

Karthik Bhat (212) 934-6321 | karthik.bhat@gs.com Goldman Sachs India SPL



Source: Company data, Goldman Sachs Research estimates, FactSet. Price as of 2/12/2009 close.

The Goldman Sachs Group, Inc. 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. For Reg AC certification, see the end of the text. Other important disclosures follow the Reg AC certification, or go to www.gs.com/research/hedge.html. Analysts employed by non-US affiliates are not registered/qualified as research analysts with FINRA in the U.S.

United Phosphorus: Summary financials

Profit model (Rs mn)	3/08	3/09E	3/10E	3/11E	Balance sheet (Rs mn)	3/08	3/09E	3/10E	3/11E
Total revenue	35,155.1	44,999.1	41,399.1	43,469.1	Cash & equivalents	7,086.0	6,910.5	7,794.7	5,660.8
Cost of goods sold	(24,317.0)	(30,284.4)	(27,116.4)	(28,646.1)	Accounts receivable	8,540.5	14,794.2	13,610.7	14,291.2
SG&A	(5,933.3)	(5,819.9)	(4,802.9)	(5,190.0)	Inventory	10,853.4	13,539.0	12,142.8	12,823.0
R&D					Other current assets	4,240.6	4,240.6	4,240.6	4,240.6
Other operating profit/(expense)	2,150.6	0.0	0.0	0.0	Total current assets	30,720.5	39,484.3	37,788.8	37,015.6
EBITDA	7,055.4	8,894.8	9,479.8	9,633.0	Net PP&E	6,686.8	7,712.3	8,815.7	9,374.3
Depreciation & amortization	(1,522.7)	(1,949.1)	(1,793.2)	(1,882.8)	Net intangibles	3,195.6	2,221.1	1,324.5	383.1
EBIT	5,532.7	6,945.8	7,686.7	7,750.2	Total investments	5,429.5	5,929.5	6,429.5	6,929.5
Interest income	311.2	318.9	311.0	311.8	Other long-term assets	0.0	0.0	0.0	0.0
Interest expense	(1,688.0)	(2,537.4)	(1,786.3)	(1,252.9)	Total assets	52,710.8	64,625.5	63,636.9	62,981.0
Income/(loss) from uncons. subs.	222.8	500.0	500.0	500.0					
Others	0.0	0.0	0.0	0.0	Accounts payable	12,513.9	13,561.4	12,476.5	13,100.3
Pretax profits	4,378.7	5,227.3	6,711.4	7,309.1	Short-term debt	0.0	0.0	0.0	0.0
Income tax	(424.0)	(470.5)	(805.4)	(1,023.3)	Other current liabilities	959.0	959.0	959.0	959.0
Minorities	(9.8)	0.0	0.0	0.0	Total current liabilities	13,472.9	14,520.4	13,435.5	14,059.3
					Long-term debt	15,682.6	22,602.6	17,602.6	10,846.6
Net income pre-preferred dividends	3,944.9	4,756.8	5,906.0	6,285.8	Other long-term liabilities	1,115.9	1,115.9	1,115.9	1,115.9
Preferred dividends	0.0	0.0	0.0	0.0	Total long-term liabilities	16,798.5	23,718.5	18,718.5	11,962.5
Net income (pre-exceptionals)	3,944.9	4,756.8	5,906.0	6,285.8	Total liabilities	30,271.4	38,238.9	32,154.0	26,021.8
Post-tax exceptionals	(1,144.0)	0.0	0.0	0.0					
Net income	2,800.9	4,756.8	5,906.0	6,285.8	Preferred shares	0.0	0.0	0.0	0.0
550 // · · · · · · · · · · · · · · · · · ·					Total common equity	22,379.6	26,326.7	31,423.1	36,899.2
EPS (basic, pre-except) (Rs)	6.92	10.93	13.57	14.45	Minority interest	59.8	59.8	59.8	59.8
EPS (basic, post-except) (Rs)	6.92	10.93	13.57	14.45					
EPS (diluted, post-except) (Rs)	5.80	9.86	12.24	13.03	Total liabilities & equity	52,710.8	64,625.5	63,637.0	62,981.1
DPS (Rs)	2.00	1.86	1.86	1.86				70.00	
Dividend payout ratio (%)	28.9	17.0	13.7	12.9	BVPS (Rs)	55.28	60.51	72.22	84.81
Free cash flow yield (%)	(7.9)	(14.1)	13.4	11.4					
Growth & margins (%)	3/08	3/09E	3/10E	3/11E	Ratios	3/08	3/09E	3/10E	3/11E
Sales growth	52.1	28.0	(8.0)	5.0	ROE (%)	15.0	19.5	20.5	18.4
EBITDA growth	24.4	26.1	6.6	1.6	ROA (%)	5.6	8.1	9.2	9.9
EBIT growth	37.8	25.5	10.7	0.8	ROACE (%)	17.2	18.5	17.3	17.0
Net income growth	(0.7)	69.8	24.2	6.4	Inventory days	159.8	147.0	172.8	159.1
EPS growth	(8.1)	58.0	24.2	6.4	Receivables days	73.9	94.6	125.2	117.1
Gross margin	30.8	32.7	34.5	34.1	Payable days	187.8	157.1	175.2	162.9
EBITDA margin	20.1	19.8	22.9	22.2	Net debt/equity (%)	38.3	59.5	31.2	14.0
EBIT margin	15.7	15.4	18.6	17.8	Interest cover - EBIT (X)	4.0	3.1	5.2	8.2
					Valuation	3/08	3/09E	3/10E	3/11E
Cash flow statement (Rs mn)	3/08	3/09E	3/10E	3/11E					
Net income pre-preferred dividends	3,944.9	4,756.8	5,906.0	6,285.8	P/E (analyst) (X)	16.0	9.4	7.6	7.1
D&A add-back	1,522.7	1,949.1	1,793.2	1,882.8	P/B (X)	1.7	1.5	1.3	1.1
Minorities interests add-back	0.0	0.0	0.0	0.0	EV/EBITDA (X)	10.7	6.3	5.3	4.7
Net (inc)/dec working capital	(2,406.9)	(7,891.8)	1,494.7	(736.9)	Dividend yield (%)	2.2	2.0	2.0	2.0
Other operating cash flow	(2,797.4)	0.0	0.0	0.0					
Cash flow from operations	(646.7)	(1,685.9)	8,693.9	6,931.7					
Capital expenditures	(3,396.3)	(2,000.0)	(2,000.0)	(1,500.0)					
Acquisitions	(2,650.1)	(2,600.0)	0.0	0.0					
Divestitures	0.0	0.0	0.0	0.0					
Others	724.8	0.0	0.0	0.0					
Cash flow from investments	(5,321.6)	(4,600.0)	(2,000.0)	(1,500.0)					
Dividends paid (common & pref)	(14.4)	(809.7)	(809.7)	(809.7)					
Inc/(dec) in debt	(3,278.9)	6,920.0	(5,000.0)	(6,756.0)					
Common stock issuance (repurchase)	10,527.7	0.0	0.0	0.0					
Other financing cash flows	712.4	0.0	0.0	0.0					
Cash flow from financing	7,946.8	6,110.3	(5,809.7)	(7,565.7)					
Total cash flow	1,978.5	(175.6)	884.2	(2,134.0)	Note: Last actual year may include report	ed and estimated data.			
					Source: Company data, Goldman Sachs				

Analyst Contributors

Durga Dath

durga.dath@gs.com

Nilesh Banerjee

nilesh.banerjee@gs.com

Karthik Bhat

karthik.bhat@gs.com

Defensive stock in uncertain economic environment

Steady earnings growth with low downside risks

We forecasts Uphos to grow at 15% CAGR over FY09E-11E despite an uncertain economic environment. Since crop protection products act as insurance for maintaining yield and crop protection constitutes just about 10-15% of the total farm cost, we expect the basic demand to exist even in the scenario of declining crop prices. In our view, Uphos being one of the top 10 global agri-chem companies is better poised to serve this basic demand than many of its peers.

Exhibit 1: Our net income estimates for Uphos are 9%-14% below consensus Net income estimates of GS, market implied and consensus

Rs mn	FY09E	FY10E	FY11E	CAGR FY09E-11E
GS estimates	4,757	5,906	6,286	15%
YoY growth		24%	6%	
Consensus estimates	5,223	6,675	7,328	18%
YoY growth		28%	10%	

Source: Bloomberg, Goldman Sachs Research estimates

Prices to decline reflecting reduction in raw material costs

We expect the end product prices to decline going forward reflecting low raw material costs. Some of the key raw materials such as white phosphorus declined by about 60%-70% from its peak, and we expect Uphos to correspondingly adjust its end product prices downwards. Uphos already marked down its high cost inventory acquired during 1HFY09, on concerns of raw material shortage. We expect the margins to remain flat as lower raw material costs results in lower revenues due to pass-through of cost savings.

However, Uphos management indicated that pass-through of costs savings may not be uniform across various products, and they may retain some costs savings leading to margin expansion. We expect the benefits of Cerexagri re-structuring to be reflected in the margins from FY10E onwards

Volumes key for earnings growth

In a steady margin environment, volume growth is critical for earnings growth. The company currently has about 10%-14% of spare capacity available to meet the incremental volumes without incremental capex. We believe Uphos can achieve volume growth of about 6% in FY2010 through penetration of existing markets by fresh registrations and key Latin American markets, such as Argentina, Costa Rica and Ecuador.

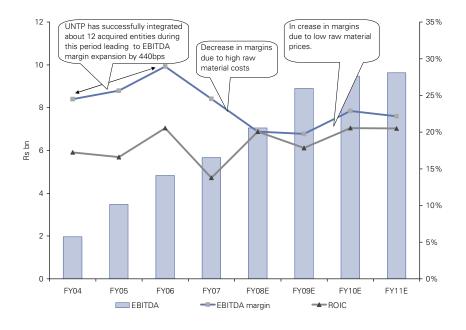
Growth limited through organic route; in-organic growth may be required

United phosphorus delivered 17% organic volume growth for 9MFY09 in a very attractive operating environment. Keeping aside the above normal growth the industry witnessed in last 2 years, global agri-chemical industry grew at an average annual rate of 2%-3% since 1990. In the absence of pricing power as compared to the patented players, and in view of

the low capex guidance, we believe it may be difficult for Uphos to deliver organic volume growth in excess of 10%-15%.

We believe Uphos may have to go for in-organic growth, either acquiring companies or the molecules coming off patent. We forecast the company to have US\$150mn of cash on the balance sheet as of FY09E and with net debt/equity ratio of 0.6X they could leverage their balance sheet. A raising of US\$200mn to fund any potential acquisition plans would imply a net debt/equity of 1.0X. Historically, Uphos has successfully integrated the acquired companies that resulted in EBITDA margin expansion of 440bps over FY04-06.





Source: Company data, Goldman Sachs Research estimates.

Data points indicate steady macro environment

Agri commodities out-performed rest of the commodity basket

Fundamentals in the agricultural have held up relatively better given the more-insulated nature of demand for grains and oilseeds that is partly tied to population growth and government-mandated bio-fuel usage and for lower-priced proteins that benefit as cash-strapped consumers trade down.

The agriculture commodities have performed well during the month of December 2008 when we saw most of other commodities testing their lows. This demonstrates the defensiveness of the agricultural commodities against global economic slowdown. **Even though the underlying demand for agri chemicals is less sensitive to commodity prices, we expect continued sustenance of agri commodity prices at current levels would help offer downside protection to the agri-chemical demand.**

US FDA projects increase in net farm income and lower debt levels Net farm income is forecasted by the US FDA to be \$86.9 billion in 2008, little changed from the record \$86.8 billion farmers are estimated to have earned in 2007, and 42 percent

above the 10-year average of \$61.1 billion. The net to assets ratio of the farm sector is about 9% which is much below the peak of 22% in 1985.

European Union regulatory changes; no material impact

The proposals to impose greater restrictions on agrochemical industry have been voted by the European government in Jan 2009. However, the proposals need to be formally adopted by the ministers before becoming law.

The new regulation would replace the EU agrochemical registration directive (91/414), which would ban the active ingredients because of their hazardous properties rather than on the basis of the assessment of risk. Uphos management has indicated that most of their active ingredients do not come under preview of the proposed new regulation and they see little business impact if it were to become law. Also, the new regulation would impact only those Active Ingredients (AI) that are up for renewal.

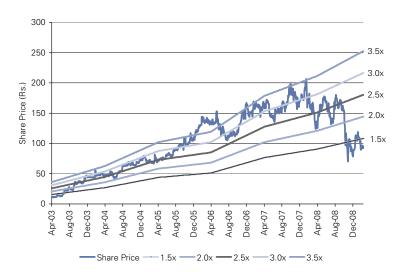
Target price of Rs120 implies potential upside of 29%

We valued Uphos on 12-months forward P/BV. Our target price of Rs120 is based on ROE adjusted trough P/BV multiple of 2X, which implies a P/E of 10X FY10E EPS. Uphos is trading at lows on P/B since 2005, even though ROEs have remained steady. We forecast Uphos ROE to be about 19% in FY10E, which is higher than FY05-09 average ROE of 18%. Having regard to the steady ROEs, de-rating of FY10 P/B from 3.5X to 1.3X is not warranted, in our view.

As per company disclosure to SEBI, Uphos has pledged about 5.1% of the shares in order to fund the subscription of warrants issues in FY08. UPL has allotted 62.2mn warrants to the promoters in Oct 2007 with a plan to buy 20.8mn shares every year over FY08-10. The promoters have so far converted 12.17mn warrants.

Exhibit 3: Uphos is currently trading at historic lows on P/B, even though the ROEs have been steady

P/B band chart of UNTP



Source: Datastream, Goldman Sachs Research estimates.

We adjusted our FY09/10/11E EPS estimates by -3%/+1%/+8% to factor in our revised volume assumptions and higher finance costs, following the release of the 3QFY09 results.

Exhibit 4: Uphos is trading at a discount to global comps on most valuation parameters

		Price	Market cap		P/E (X)		EPS	growth (%)		P/BV		EV/	EBITDA	(X)		ROE (%)		Div yield
Company name	Rating	Feb 11	(US\$mn)	2008E	2009E	2010E	2008E	2009E	2010E	2008E	2009E	2010E	2008E	2009E	2010E	2008E	2009E	2010E	2008E
Monsanto (US\$)	Neutral	80.85	45,276	22.1	16.5	15.3	85.0	34.1	8.1	4.8	3.8	3.1	13.3	10.3	9.7	24.3%	25.5%	22.3%	0.9%
Syngenta (SF)	Neutral	235.80	25,690	17.3	23.9	NA	36.9	(27.6)	(10.4)	3.2	3.0	2.9	11.0	13.9	14.8	23.1%	15.0%	12.9%	2.4%
Anhui Huaxing Chemical (CNY)	NC	17.08	408	12.6	8.3	16.1	220.3	51.1	(48.2)	NA	NA	NA	12.7	13.5	13.3	24.5%	21.2%	19.6%	0.5%
BASF	Neutral	24.67	29,564	7.0	66.4	84.8	(16.2)	(89.4)	(21.7)	1.1	1.2	1.2	3.6	5.6	5.5	15.9%	1.6%	1.3%	8.1%
Bayer	Buy	42.76	42,614	11.2	15.3	14.4	0.8	(26.9)	5.6	1.8	1.8	1.8	6.7	7.9	7.8	17.5%	12.1%	12.7%	3.5%
United Phosphorus (a)	Buy	89.45	862	9.1	7.3	6.9	20.6	24.2	6.4	1.5	1.2	1.1	5.9	4.9	4.4	18.1%	18.8%	17.0%	2.1%
MAI	NC	1,580	1,276	7.5	7.0	6.5	NA	19.1	4.1	0.9	0.8	0.7	3.8	3.5	3.8	17.1%	17.8%	17.5%	NA
Nufarm (b)	NC	9.53	3,805	11.4	9.3	8.4	NA	37.5	11.4	1.5	1.3	1.2	7.5	6.2	5.9	17.0%	16.6%	16.2%	NA
Average				13.0	12.5	11.3	72.7	15.9	(3.3)	2.3	2.0	1.8	8.7	8.6	8.5	20%	18%	17%	2%

Note: (a) As of March 31 (e.g. the E for P/E 2007E is the E for the year-ending on March 31, 2008) (b) Year ending July 31. Valuation multiples are calculated using 50% of previous year and 50% of the current year For important disclosures, please go to http://www.gs.com/research/hedge.html

Source: Datastream, Bloomberg, Goldman Sachs Research estimates.

Reg AC

I, Durga Dath, hereby certify that all of the views expressed in this report accurately reflect my personal views about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Investment profile

The Goldman Sachs Investment Profile provides investment context for a security by comparing key attributes of that security to its peer group and market. The four key attributes depicted are: growth, returns, multiple and volatility. Growth, returns and multiple are indexed based on composites of several methodologies to determine the stocks percentile ranking within the region's coverage universe.

The precise calculation of each metric may vary depending on the fiscal year, industry and region but the standard approach is as follows:

Growth is a composite of next year's estimate over current year's estimate, e.g. EPS, EBITDA, Revenue. **Return** is a year one prospective aggregate of various return on capital measures, e.g. CROCI, ROACE, and ROE. **Multiple** is a composite of one-year forward valuation ratios, e.g. P/E, dividend yield, EV/FCF, EV/EBITDA, EV/DACF, Price/Book. **Volatility** is measured as trailing twelve-month volatility adjusted for dividends.

Quantum

Quantum is Goldman Sachs' proprietary database providing access to detailed financial statement histories, forecasts and ratios. It can be used for in-depth analysis of a single company, or to make comparisons between companies in different sectors and markets.

Disclosures

Coverage group(s) of stocks by primary analyst(s)

Durga Dath: Asia Pacific Chemicals.

Asia Pacific Chemicals: Chambal Fertilisers and Chemicals, Cheil Industries, Far Eastern Textile, Formosa Chemicals & Fibre, Formosa Plastics, Hanwha Chemical, Honam Petrochemical, Kingboard Chemical Holdings, Kingboard Laminates Holdings, LG Chem, Nan Ya Plastics, Rashtriya Chemicals & Fertilisers, Sinopec Yizheng Chemical Fibre (A), Sinopec Yizheng Chemical Fibre (H), Tata Chemicals, United Phosphorus.

Company-specific regulatory disclosures

The following disclosures relate to relationships between The Goldman Sachs Group, Inc. (with its affiliates, "Goldman Sachs") and companies covered by the Global Investment Research Division of Goldman Sachs and referred to in this research.

Goldman Sachs beneficially owned 1% or more of common equity (excluding positions managed by affiliates and business units not required to be aggregated under US securities law) as of the month end preceding this report: United Phosphorus (Rs92.85)

Goldman Sachs expects to receive or intends to seek compensation for investment banking services in the next 3 months: United Phosphorus (Rs92.85)

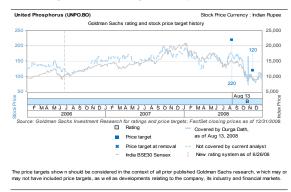
Distribution of ratings/investment banking relationships

Goldman Sachs Investment Research global coverage universe

_	Ra	ting Distribution	on	 Investme	nt Banking Rela	tionships
	Buy	Hold	Sell	Buy	Hold	Sell
Global	23%	56%	21%	 54%	48%	40%

As of January 1, 2009, Goldman Sachs Global Investment Research had investment ratings on 2,863 equity securities. Goldman Sachs assigns stocks as Buys and Sells on various regional Investment Lists; stocks not so assigned are deemed Neutral. Such assignments equate to Buy, Hold and Sell for the purposes of the above disclosure required by NASD/NYSE rules. See 'Ratings, Coverage groups and views and related definitions' below.

Price target and rating history chart(s)



Regulatory disclosures

Disclosures required by United States laws and regulations

See company-specific regulatory disclosures above for any of the following disclosures required as to companies referred to in this report: manager or co-manager in a pending transaction; 1% or other ownership; compensation for certain services; types of client relationships; managed/co-managed public offerings in prior periods; directorships; market making and/or specialist role.

The following are additional required disclosures: **Ownership and material conflicts of interest:** Goldman Sachs policy prohibits its analysts, professionals reporting to analysts and members of their households from owning securities of any company in the analyst's area of coverage. **Analyst compensation:** Analysts are paid in part based on the profitability of Goldman Sachs, which includes investment banking revenues. **Analyst as officer or director:** Goldman Sachs policy prohibits its analysts, persons reporting to analysts or members of their households from serving as an officer, director, advisory board member or employee of any company in the analyst's area of coverage. **Non-U.S. Analysts:** Non-U.S. analysts may not be associated persons of Goldman, Sachs & Co. and therefore may not be subject to NASD Rule 2711/NYSE Rules 472 restrictions on communications with subject company, public appearances and trading securities held by the analysts. **Distribution of ratings:** See the distribution of ratings disclosure above. **Price chart:** See the price chart, with changes of ratings and price targets in prior periods, above, or, if electronic format or if with respect to multiple companies which are the subject of this report, on the Goldman Sachs website at http://www.gs.com/research/hedge.html. Goldman, Sachs & Co. is a member of SIPC(http://www.sipc.org).

Additional disclosures required under the laws and regulations of jurisdictions other than the United States

The following disclosures are those required by the jurisdiction indicated, except to the extent already made above pursuant to United States laws and regulations. Australia: This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act. Canada: Goldman Sachs Canada Inc. has approved of, and agreed to take responsibility for, this research in Canada if and to the extent it relates to equity securities of Canadian issuers. Analysts may conduct site visits but are prohibited from accepting payment or reimbursement by the company of travel expenses for such visits. Hong Kong: Further information on the securities of covered companies referred to in this research may be obtained on request from Goldman Sachs (Asia) L.L.C. India: Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (India) Securities Private Limited; Japan: See below. Korea: Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (Asia) L.L.C., Seoul Branch. Russia: Research reports distributed in the Russian Federation are not advertising as defined in Russian law, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian Law on Appraisal. Singapore: Further information on the covered companies referred to in this research may be obtained from Goldman Sachs (Singapore) Pte. (Company Number: 198602165W). Taiwan: This material is for reference only and must not be reprinted without permission. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor. United Kingdom: Persons who would be categorized as retail clients in the United Kingdom, as such term is defined in the rules of the Financial Services Authority, should read this research in conjunction with prior Goldman Sachs research on the covered companies referred to herein and should refer to the risk warnings that have been sent to them by Goldman Sachs International. A copy of these risks warnings, and a glossary of certain financial terms used in this report, are available from Goldman Sachs International on request.

European Union: Disclosure information in relation to Article 4 (1) (d) and Article 6 (2) of the European Commission Directive 2003/126/EC is available at http://www.gs.com/client_services/global_investment_research/europeanpolicy.html

Japan: Goldman Sachs Japan Co., Ltd. Is a Financial Instrument Dealer under the Financial Instrument and Exchange Law, registered with the Kanto Financial Bureau (Registration No. 69), and is a member of Japan Securities Dealers Association (JSDA) and Financial Futures Association of Japan (FFJAJ). Sales and purchase of equities are subject to commission pre-determined with clients plus consumption tax. See company-specific disclosures as to any applicable disclosures required by Japanese stock exchanges, the Japanese Securities Dealers Association or the Japanese Securities Finance Company.

Ratings, coverage groups and views and related definitions

Buy (B), Neutral (N), Sell (S) -Analysts recommend stocks as Buys or Sells for inclusion on various regional Investment Lists. Being assigned a Buy or Sell on an Investment List is determined by a stock's return potential relative to its coverage group as described below. Any stock not assigned as a Buy or a Sell on an Investment List is determed Neutral. Each regional Investment Review Committee manages various regional Investment Lists to a global guideline of 25%-35% of stocks as Buy and 10%-15% of stocks as Sell; however, the distribution of Buys and Sells in any particular coverage group may vary as determined by the regional Investment Review Committee. Regional Conviction Buy and Sell lists represent investment recommendations focused on either the size of the potential return or the likelihood of the realization of the return.

Return potential represents the price differential between the current share price and the price target expected during the time horizon associated with the price target. Price targets are required for all covered stocks. The return potential, price target and associated time horizon are stated in each report adding or reiterating an Investment List membership.

Coverage groups and views: A list of all stocks in each coverage group is available by primary analyst, stock and coverage group at http://www.gs.com/research/hedge.html. The analyst assigns one of the following coverage views which represents the analyst's investment outlook on the coverage group relative to the group's historical fundamentals and/or valuation. **Attractive (A).** The investment outlook over the following 12 months is favorable relative to the coverage group's historical fundamentals and/or valuation. **Neutral (N).** The investment outlook over the following 12 months is neutral relative to the coverage group's historical fundamentals and/or valuation. **Cautious (C).** The investment outlook over the following 12 months is unfavorable relative to the coverage group's historical fundamentals and/or valuation. **Cautious (C).** The investment outlook over the following 12 months is unfavorable relative to the coverage group's historical fundamentals and/or valuation.

Not Rated (NR). The investment rating and target price, if any, have been removed pursuant to Goldman Sachs policy when Goldman Sachs is acting in an advisory capacity in a merger or strategic transaction involving this company and in certain other circumstances. Rating Suspended (RS). Goldman Sachs Research has suspended the investment rating and price target, if any, for this stock, because there is not a sufficient fundamental basis for determining an investment rating or target. The previous investment rating and price target, if any, are no longer in effect for this stock and should not be relied upon. Coverage Suspended (CS). Goldman Sachs has suspended coverage of this company. Not Covered (NC). Goldman Sachs does not cover this company. Not Available or Not Applicable (NA). The information is not available for display or is not applicable. Not Meaningful (NM). The information is not meaningful and is therefore excluded.

Ratings, coverage views and related definitions prior to June 26, 2006

Our rating system requires that analysts rank order the stocks in their coverage groups and assign one of three investment ratings (see definitions below) within a ratings distribution guideline of no more than 25% of the stocks should be rated Outperform and no fewer than 10% rated Underperform. The analyst assigns one of three coverage views (see definitions below), which represents the analyst's investment outlook on the coverage group relative to the group's historical fundamentals and valuation. Each coverage group, listing all stocks covered in that group, is available by primary analyst, stock and coverage group at http://www.gs.com/research/hedge.html.

Definitions

Outperform (OP). We expect this stock to outperform the median total return for the analyst's coverage universe over the next 12 months. **In-Line** (**IL).** We expect this stock to perform in line with the median total return for the analyst's coverage universe over the next 12 months. **Underperform** (**U).** We expect this stock to underperform the median total return for the analyst's coverage universe over the next 12 months.

Coverage views: Attractive (A). The investment outlook over the following 12 months is favorable relative to the coverage group's historical fundamentals and/or valuation. **Neutral (N)**. The investment outlook over the following 12 months is neutral relative to the coverage group's historical fundamentals and/or valuation. **Cautious (C)**. The investment outlook over the following 12 months is unfavorable relative to the coverage group's historical fundamentals and/or valuation.

Current Investment List (CIL). We expect stocks on this list to provide an absolute total return of approximately 15%-20% over the next 12 months. We only assign this designation to stocks rated Outperform. We require a 12-month price target for stocks with this designation. Each stock on the CIL will **automatically** come off the list after 90 days unless renewed by the covering analyst and the relevant Regional Investment Review Committee.

Global product; distributing entities

The Global Investment Research Division of Goldman Sachs produces and distributes research products for clients of Goldman Sachs, and pursuant to certain contractual arrangements, on a global basis. Analysts based in Goldman Sachs offices around the world produce equity research on industries and companies, and research on macroeconomics, currencies, commodities and portfolio strategy.

This research is disseminated in Australia by Goldman Sachs JBWere Pty Ltd (ABN 21 006 797 897) on behalf of Goldman Sachs; in Canada by Goldman Sachs Canada Inc. regarding Canadian equities and by Goldman Sachs & Co. (all other research); in Germany by Goldman Sachs & Co. oHG; in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs JBWere (NZ) Limited on behalf of Goldman Sachs; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman, Sachs & Co. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom and European Union.

European Union: Goldman Sachs International, authorised and regulated by the Financial Services Authority, has approved this research in connection with its distribution in the European Union and United Kingdom; Goldman, Sachs & Co. oHG, regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht, may also be distributing research in Germany.

General disclosures in addition to specific disclosures required by certain jurisdictions

This research is for our clients only. Other than disclosures relating to Goldman Sachs, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Goldman Sachs conducts a global full-service, integrated investment banking, investment management, and brokerage business. We have investment banking and other business relationships with a substantial percentage of the companies covered by our Global Investment Research Division.

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and our proprietary trading desks that reflect opinions that are contrary to the opinions expressed in this research. Our asset management area, our proprietary trading desks and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

We and our affiliates, officers, directors, and employees, excluding equity analysts, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives (including options and warrants) thereof of covered companies referred to in this research.

This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of the investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors. Investors should review current options disclosure documents which are available from Goldman Sachs sales representatives or at http://www.theocc.com/publications/risks/riskchap1.jsp. Transactions cost may be significant in option strategies calling for multiple purchase and sales of options such as spreads. Supporting documentation will be supplied upon request.

Our research is disseminated primarily electronically, and, in some cases, in printed form. Electronic research is simultaneously available to all clients.

Disclosure information is also available at http://www.gs.com/research/hedge.html or from Research Compliance, One New York Plaza, New York, NY 10004.

Copyright 2009 The Goldman Sachs Group, Inc.

No part of this material may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without the prior written consent of The Goldman Sachs Group, Inc.