United States

US Thematic Views

Portfolio Strategy Research

Buy stocks with High Revenue Growth <GSTHREVG>

Below-trend US GDP growth and slowing global growth are headwinds for US corporate revenues. 2Q earnings season showed that firms capable of expanding sales despite those challenges will outperform peers. Firms with high expected sales growth trade at historical average valuation levels. Buy our sector-neutral High Revenue Growth basket (Bloomberg ticker: <GSTHREVG>) of 50 companies forecast to generate median sales growth of 17% in 2013 vs. 5% for the S&P 500.

Peaking margins shift the onus for EPS growth to revenues

Margins have declined slightly over the past year meaning revenue growth will be needed for higher earnings. S&P 500 sales grew only 3% in 2Q, the lowest rate since 2009, and may remain slow through 2013 as GDP growth remains below trend; we expect S&P 500 sales growth of just 5% in 2013.

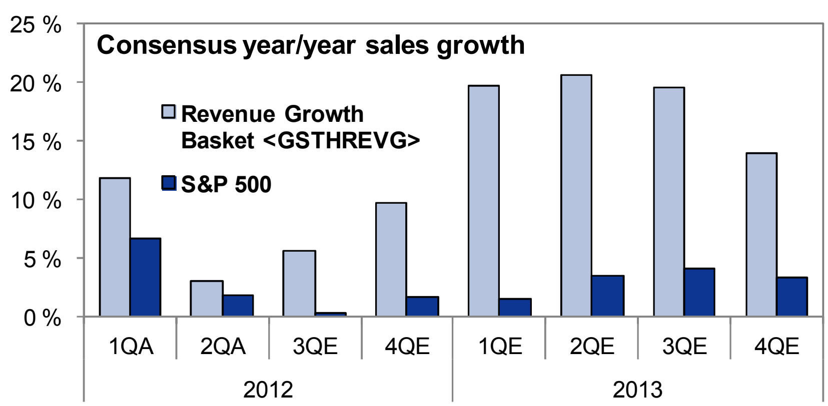
Stocks with strong sales growth deserve a scarcity premium

Only 16% of S&P 500 companies are forecast to grow sales by more than 10% in 2013, and revenue surprises were rare in 2Q. As a result, 80% of stocks that beat revenue estimates in 2Q beat the market during the next week. However, valuation is modest and we expect further outperformance.

Close Long Domestic Sales vs. Short International Sales

In November 2011 we recommended buying S&P 500 stocks with high US revenues vs. selling peers with high foreign sales. The trade returned 5.1%. We close the recommendation due to US policy risks before year's end.

2013 revenue growth of Sales Growth Basket <GSTHREVG> vs. S&P 500



Source: Compustat, I/B/E/S, and Goldman Sachs Global ECS Research.

David J. Kostin
(212) 902-6781 david.kostin@gs.com
Goldman, Sachs & Co.

Stuart Kaiser, CFA
(212) 357-6308 stuart.kaiser@gs.com
Goldman, Sachs & Co.

Amanda Sneider, CFA
(212) 357-9860 amanda.sneider@gs.com
Goldman, Sachs & Co.

Ben Snider
(212) 357-1744 ben.snider@gs.com
Goldman, Sachs & Co.

Peter Lewis
(212) 902-9693 peter.lewis@gs.com
Goldman, Sachs & Co.

Overview: Buy S&P 500 stocks with the highest revenue growth

US corporate sales growth is slowing and margins have peaked. In this environment, companies that can maintain revenue growth should grow earnings faster than peers. 2Q earnings season showed that investors will reward top-line growth. We recommend buying a 50 stock sector-neutral basket of S&P 500 companies with the highest forecast revenue growth (Bloomberg ticker: <GSTHREVG>).

Sales growth is slowing amid below-trend nominal GDP growth

US GDP growth is below trend and is likely to remain stagnant through at least 2013. Faster growing emerging market economies are also expanding slower than in 2010 and 2011. Slower nominal economic growth has led to muted corporate sales growth.

S&P 500 companies (excluding Financials and Utilities) posted just 3% year/year sales per share growth in 2Q, the weakest growth since 2009 and ranking in the 24th percentile since 1968. This weak pace should continue through 2013. Consensus expects just 16% of S&P 500 firms to post double-digit sales growth in 2013 and expects that the average S&P 500 company will grow 2013 sales at 6% year/year. We forecast S&P 500 aggregate sales growth of 5%.

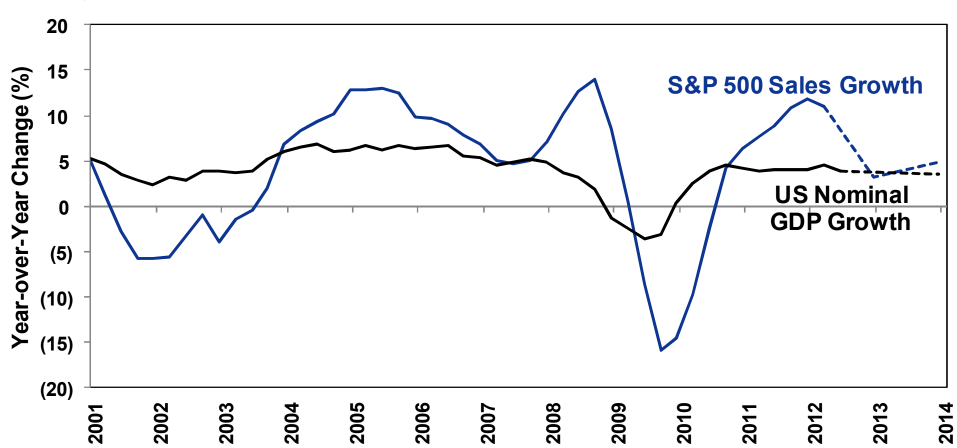
Investors will reward companies that successfully grow revenues

We expect margins to remain flat near the current 8.8%, meaning top-line sales growth should drive earnings through 2013. The stock market has begun to appreciate this situation, and only 18% of firms beat revenue expectations in 2Q2012, half the historical average. These rare companies consistently and strongly outperformed the S&P 500 by an average of 500 bp during the week after announcing results.

Buy a basket of US stocks with the highest Revenue Growth

We rebalance our sector-neutral basket of the 50 S&P 500 stocks with the highest 2013E revenue growth based on consensus expectations (<GSTHREVG>). Consensus expects the average stock in the basket to grow 2013 sales three times as fast as the average S&P 500 company (19% vs. 6%). These stocks should outperform as the market rewards hard-to-find sales growth. Despite superior growth prospects, the basket's valuation is undemanding with a relative P/E that is in-line with its historical relationship to the average S&P 500 stock. Because our general outlook remains cautious and the basket's stocks have an average beta of 1.2, we recommend long positions in the revenue growth basket be offset by 1.2x short exposure in the S&P 500. Constituents appear on page 9.

Exhibit 1: We expect S&P 500 sales growth to fall as economic stagnation continues
As of August 31, 2012



Source: Standard and Poor's and Goldman Sachs Global ECS Research.

US corporate sales growth is slowing

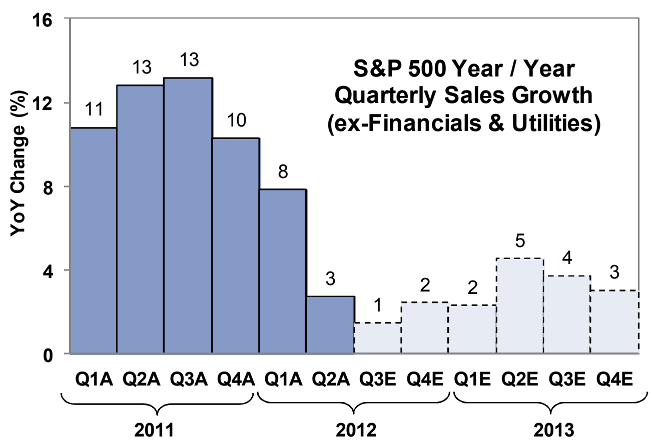
US corporate sales growth has slowed. Results from the 2Q earnings season showed top-line growth of just 3% year/year among S&P 500 companies, excluding Financials and Utilities, compared to a quarterly average of 7% since 1968. The current quarter looks weak as well, and consensus expects just 1% year/year revenue growth in 3Q (see Exhibit 2). Slow sales growth and declining margins result in a consensus forecast for 3Q2012 earnings to be down vs. 3Q2011.

Macro headwinds should persist, constraining revenues through 2013. Our economists expect nominal US GDP growth to average just 4.1% and 3.8% for full-year 2012 and 2013, respectively, representing real GDP growth of 2.3% in 2012 and 2.0% in 2013. Roughly one-third of S&P 500 sales are derived internationally, so weak non-US growth will also impact revenue growth. We expect the current recession in Europe to continue through 1Q2013, and forecast nominal emerging market GDP growth of 10% in 2012 and 14% in 2013, compared with an average over 18% in 2010 and 2011.

The weak pace of US GDP growth, along with FX headwinds from a strong dollar, is reflected in expectations for corporate sales growth. Bottom-up consensus expects full-year S&P 500 (excluding Financials and Utilities) sales growth of 4% in 2012, and 5% in 2013. Our forecast is for 3% and 5%, respectively.

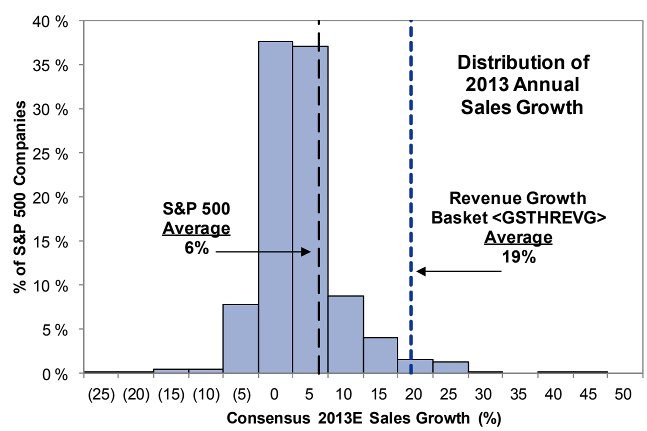
Only 16% of S&P 500 companies are expected to post double-digit sales growth in 2013. Consensus expects the average company to grow revenues at just 6%, and for almost 1 in 10 companies to see revenues decline year/year.

Exhibit 2: Consensus S&P 500 year/year sales growth
As of August 31, 2012



Source: Compustat, I/B/E/S, and Goldman Sachs Global ECS Research.

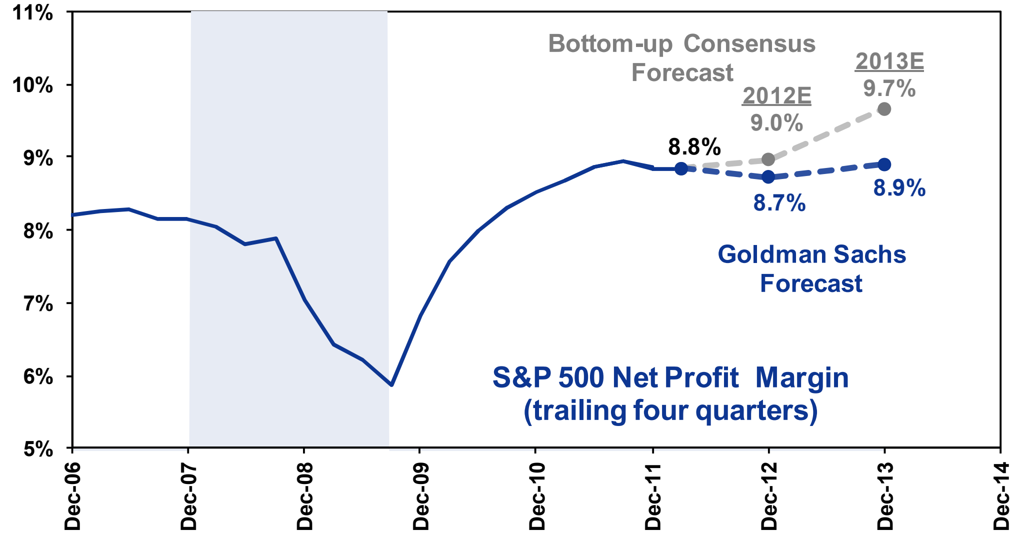
Exhibit 3: Distribution of S&P 500 2013E sales growth
As of August 31, 2012



Source: Compustat, I/B/E/S, and Goldman Sachs Global ECS Research.

Flat margins mean that earnings will be driven by revenue growth. Margins have held steady near their current level of 8.8% for more than a year, having peaked at 8.9% in late 2011. We expect margins to remain near this level through 2013, declining slightly to 8.7% for full-year 2012 before recovering to 8.9% in 2013. In contrast, consensus expects margins to increase sharply in 4Q2012 and grow to 9.7% in 2013, although those estimates have been declining (see Exhibit 4). If companies cannot provide bottom-line growth through pricing, productivity gains, and other margin-boosting strategies, the firms that grow earnings will be those that can successfully expand revenues.

Exhibit 4: Top-line growth should drive earnings as margin growth stalls
As of August 31, 2012

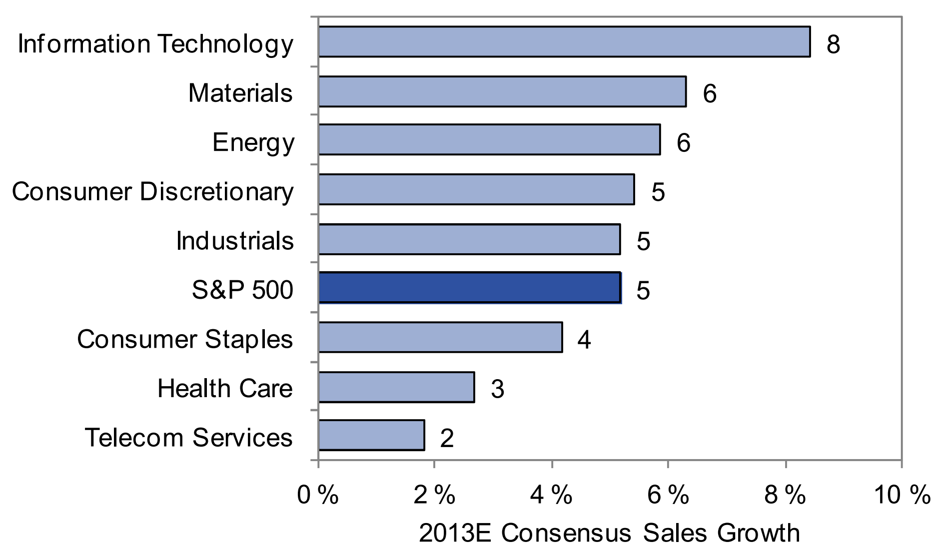


Source: Compustat, FirstCall, I/B/E/S, and Goldman Sachs Global ECS Research.

Information Technology is expected to produce the highest 2013 revenue growth
After growing sales by 15% in 2010 and 13% in 2011, however, the 8% growth expected for Information Technology in 2013 represents a marked slowdown. We recommend Overweight sector allocations in Information Technology and Energy, where revenues are expected to grow faster than the S&P 500. We continue to recommend Underweight exposure in the Health Care and Consumer Discretionary sectors, which have lower forecasted sales growth.

Consensus expects stronger 2013 revenue growth in cyclical sectors. Only the defensive Consumer Staples, Health Care, and Telecom sectors are forecast to grow sales below the weak 5% pace for the S&P 500 in aggregate.

Exhibit 5: Cyclical sectors are expected to drive overall S&P 500 sales growth in 2013
As of August 31, 2012

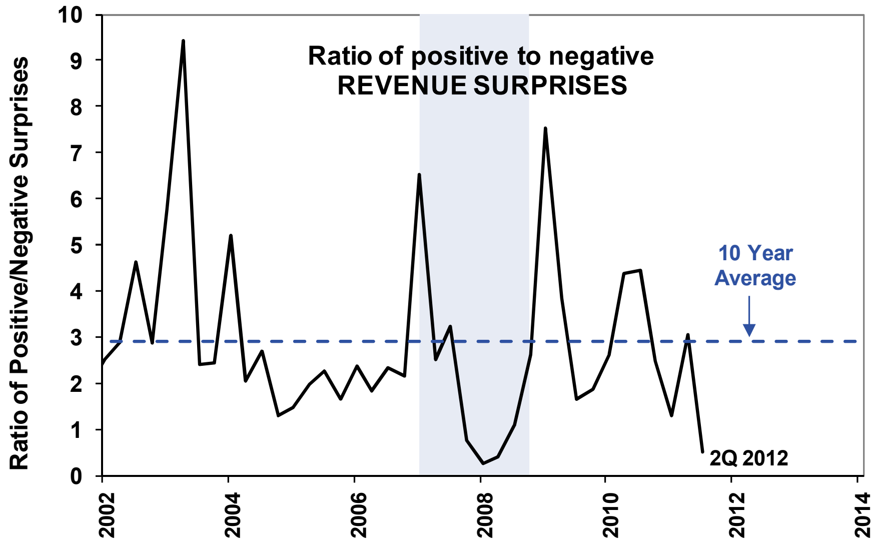


Source: Compustat, I/B/E/S, and Goldman Sachs Global ECS Research.

Investors should continue to reward top-line growth

As we discussed in our 2Q earnings season preview, the market was not prepared for the weakness in top-line growth experienced by US companies in the second quarter. Excluding Financials and Utilities, only 18% of S&P 500 companies beat consensus sales expectations by more than a standard deviation of estimates, compared with a historical average of 36%. At the same time, 36% of companies missed estimates, versus a historical average of 18%. With half as many companies reporting revenue beats as misses, 2Q was the weakest reporting season for sales in the last 10 years outside of 4Q2008 and 1Q2009.

Exhibit 6: Cyclical sectors are expected to drive S&P 500 sales growth in 2013
As of August 31, 2012



Source: Compustat, I/B/E/S, Bloomberg, and Goldman Sachs Global ECS Research.

The rare companies that posted strong 2Q revenue growth performed well. Companies that exceeded revenue expectations in 2Q outperformed the S&P 500 by an average of 526 bp over the following five trading days, with an 80% hit rate of outperformance among those companies (see Exhibits 7 and 8).

As sales growth decelerates for the broad index, we expect investors will continue to reward firms that are able to post strong top-line growth. We recommend investors buy our basket of S&P 500 stocks with High Revenue Growth (<GSTHREVG>).

Exhibit 7: Relative returns 1 week post-earnings in 2Q2012 earnings season
As of August 31, 2012

Average relative performance
5 trading days post-earnings

Sales	Earnings: Beat	In-Line	Miss	Total
Beat	**589 bp**	**499 bp**	**(72)bp**	**526 bp**
In-Line	195	(125)	(227)	0
Miss	(55)	(216)	(482)	(233)
Total	249	(81)	(369)	9

% of stocks outperforming the S&P 500
5 trading days post-earnings

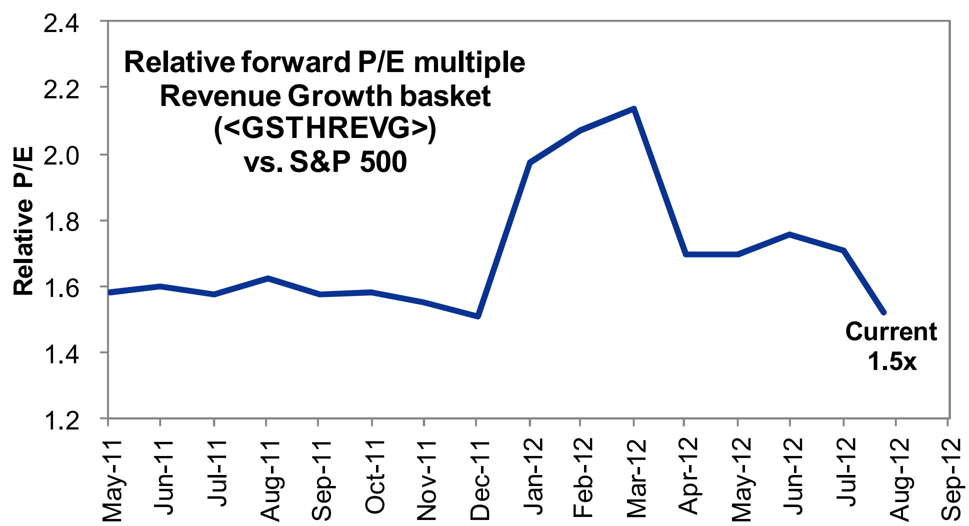
Sales	Earnings: Beat	In-Line	Miss	Total
Beat	**77%**	**94%**	**0%**	**80%**
In-Line	62%	37%	40%	47%
Miss	55%	34%	28%	37%
Total	64%	43%	30%	49%

Source: Compustat, FirstCall, I/B/E/S, Bloomberg, and Goldman Sachs Global ECS Research.

Valuation is undemanding

High Revenue Growth companies have undemanding valuation. Our high sales growth basket typically has a premium valuation compared with the average S&P 500 stock, but the relative P/E ratio remains in line with its historical average. The basket's average P/E multiple is 1.5x that of the index (22.4x vs. 14.8x for the average S&P 500 stock). Since May 2011, the basket has been valued at 1.7x the typical stock on average (see Exhibit 8). We believe the current environment supports a higher valuation.

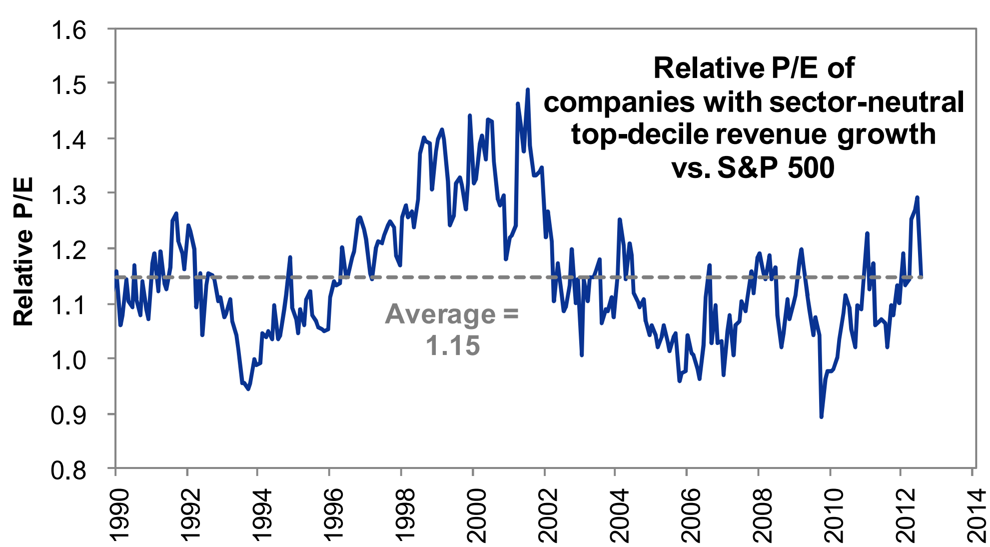
Exhibit 8: Revenue Growth basket currently trades near its historical relative valuation
As of August 31, 2012



Source: Compustat, I/B/E/S, and Goldman Sachs Global ECS Research.

Revenue growth stocks are valued near their historical average relative to S&P 500. Exhibit 9 shows the average P/E of the 50 stocks with the fastest trailing 1-year revenue growth on a sector-neutral basis vs. the average S&P 500 P/E. This ratio is currently 1.15x, equal to the average relative valuation since 1990.

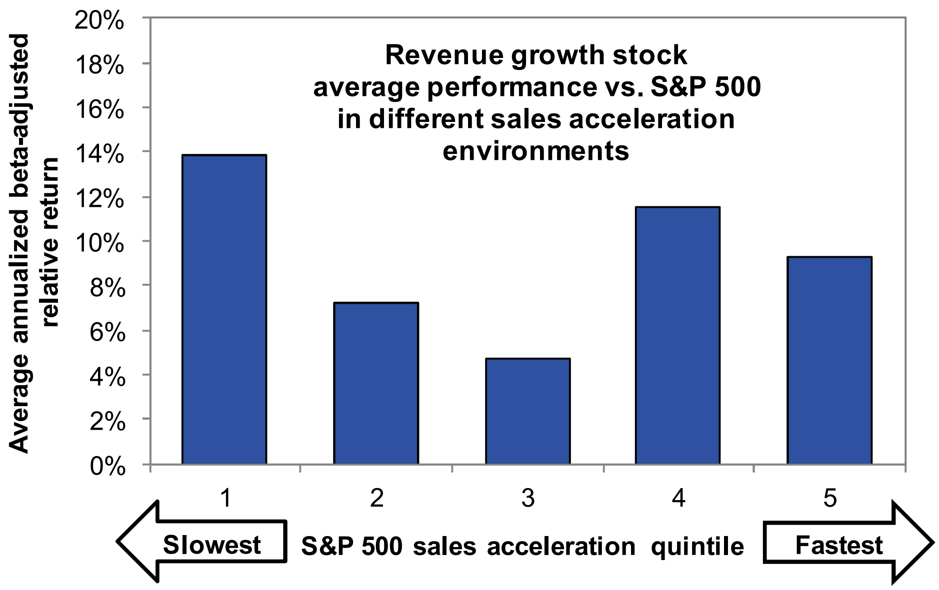
Exhibit 9: Fastest revenue growers currently trade near their historical average valuation
As of August 31, 2012



Source: Compustat, I/B/E/S, and Goldman Sachs Global ECS Research.

A high revenue growth investment strategy generates the best relative performance versus the S&P 500 when sales growth is decelerating. After posting 12% annual sales growth (excluding Financials and Utilities) in 2011, we forecast S&P 500 top-line growth of just 3% in 2012. Year/year sales growth fell from 8% in 1Q2012 to 3% in 2Q, and consensus expects just 1% growth in 3Q2012. Exhibit 10 shows the average annualized beta-adjusted returns vs. S&P 500 over the last 35 years for a sector-neutral basket of the fastest revenue growth stocks. Historically, a high revenue growth strategy outperformed most during periods with the weakest acceleration in S&P 500 sales growth.

Exhibit 10: Revenue growth stocks outperform most when sales growth is decelerating
As of August 31, 2012



Source: Compustat and Goldman Sachs Global ECS Research.

Risks: higher beta and overly optimistic revenue forecasts

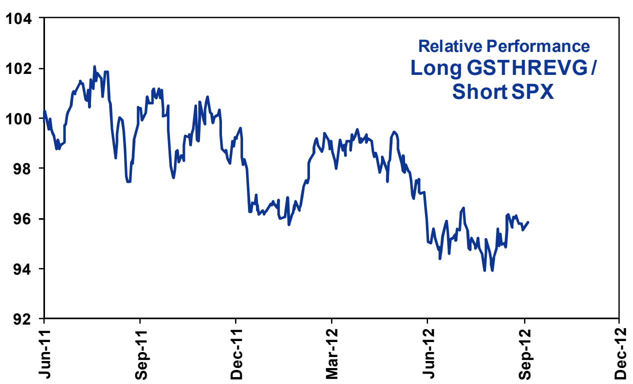
Our rebalanced Revenue Growth basket has an average beta to the S&P 500 of 1.2, meaning a sharp market pullback could cause significant underperformance. In addition, if consensus sales growth estimates for these companies are incorrect, or if the market has already priced those expectations, the basket may not track the revenue growth theme as well as we intend. To mitigate those risks we recommend long positions in the revenue growth basket be offset by 1.2x short exposure in the S&P 500. Additionally, if domestic and/or global economic growth reaccelerate, sales growth will be less rare. In this case, however, a higher-beta basket should benefit from better-than-expected growth expectations.

High Revenue Growth Basket <GSTHREVG>

Exhibit 11: Stocks with High Revenue Growth (Bloomberg:<GSTHREVG>)

Our Revenue Growth basket, introduced in May 2011, is a sector-neutral basket containing 50 stocks with the highest expected 2012-2013 sales growth based on consensus estimates. Except for the Energy stocks, no more than two constituents from a given subsector were included in the basket. The basket focuses on companies positioned to use top-line revenue generation instead of margins to drive bottom-line earnings.

Relative performance

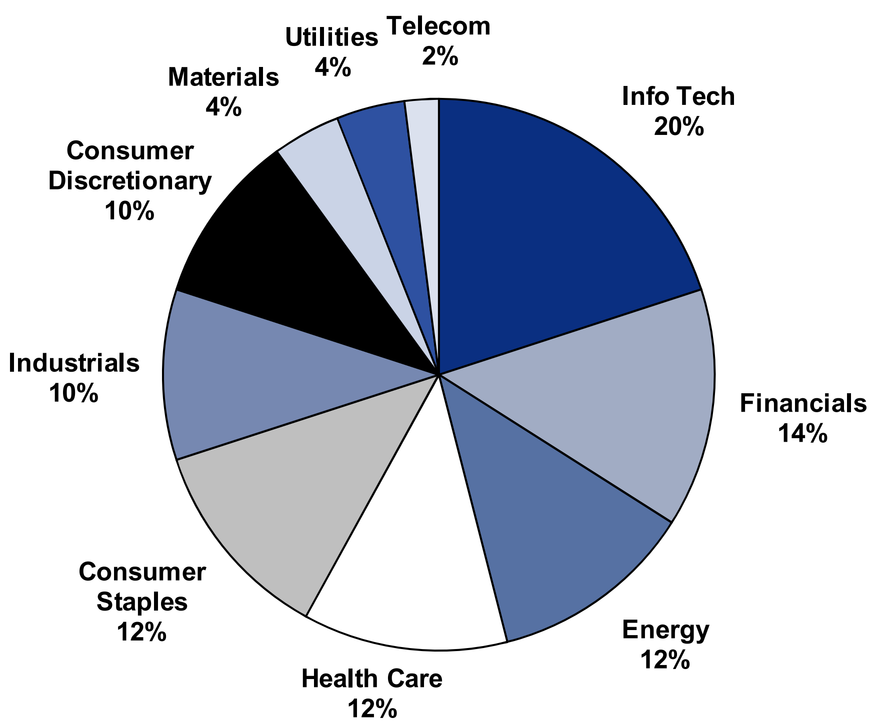


Constituent attributes

- **Key Criteria:** S&P 500 stocks with the highest consensus expected revenue growth in 2013.
- **Growth:** The basket is expected to grow median 2013 sales by 17% and earnings by 18%. The S&P 500 is expected to have lower median sales (5%) and earnings growth (11%).
- **Valuation:** The median P/E of the basket trades at a premium multiple of 18.2x vs. 13.8x for the S&P 500.
- **Sector Exposure:** Basket constructed to have the same sector composition as the overall market at initiation.
- **Performance:** 5.3% since inception vs. 9.4% for S&P 500 and 13.4% YTD vs. 13.4% for S&P 500.

Source: FactSet and Goldman Sachs Global ECS Research.

Exhibit 12: Sector composition of GSTHREVG basket



Source: Goldman Sachs Global ECS Research.

GSTHREVG: High Revenue Growth Basket Constituents

Exhibit 13: High Revenue Growth Basket Constituents (Bloomberg ticker: <GSTHREVG>)
As of September 4, 2012

Company Name	Ticker	Consensus Sales Growth 2012	Consensus Sales Growth 2013	EPS Growth 2013	NTM P/E	YTD Return
Information Technology						
salesforce.com Inc.	CRM	34 %	27 %	31 %	NM	43 %
Google Inc.	GOOG	47	27	16	15	5
Lam Research Corp.	**LRCX**	12	25	46	13	(9)
Apple Inc.	AAPL	37	21	18	14	67
SanDisk Corp.	**SNDK**	(13)	18	72	17	(17)
Cognizant Tech Solutions	CTSH	20	17	17	17	(0)
Red Hat Inc.	RHT	18	17	17	47	38
Altera Corp.	**ALTR**	(11)	16	18	19	1
F5 Networks	FFIV	19	16	17	19	(11)
Microchip Technology	**MCHP**	14	16	15	16	(3)
Basket Median		19 %	18 %	18 %	17 x	0 %
Sector Median		5	7	11	14	11
Financials						
Morgan Stanley	MS	(12)%	13 %	NM	9 x	3 %
T. Rowe Price Group	TROW	9	11	14	18	10
American Tower Corp	**AMT**	16	10	34	41	19
Health Care REIT	**HCN**	28	10	9	16	12
AvalonBay Communities	**AVB**	8	10	12	24	11
IntercontinentalExchange	**ICE**	6	9	12	17	13
Capital One Financial	**COF**	31	9	11	8	34
Basket Median		9 %	10 %	12 %	17 x	12 %
Sector Median		4	4	11	12	14
Energy						
Cabot Oil & Gas	COG	20 %	40 %	77 %	62 x	10 %
EQT Corp.	EQT	2	26	42	25	(1)
Noble Corp.	NE	37	23	69	10	25
Range Resources	RRC	15	22	62	69	6
Pioneer Natural Resources	PXD	12	20	35	19	9
Rowan Companies	**RDC**	46	19	69	12	16
Basket Median		18 %	22 %	65 %	22 x	9 %
Sector Median		2	8	17	12	-2
Health Care						
Watson Pharmaceuticals	WPI	20 %	46 %	34 %	14 x	38 %
Alexion Pharmaceuticals	**ALXN**	44	30	39	51	52
Intuitive Surgical	ISRG	23	17	17	32	6
Edwards Lifesciences	EW	15	14	29	34	47
Cerner Corp.	CERN	19	12	18	29	20
Cigna Corp.	**CI**	20	11	10	8	8
Basket Median		20 %	16 %	23 %	30 x	29 %
Sector Median		4	5	11	13	12
Consumer Staples						
Constellation Brands	**STZ**	(1)%	89 %	23 %	15 x	61 %
Monster Beverage	**MNST**	25	16	23	26	24
Whole Foods Market	WFM	15	13	17	34	40
Molson Coors Brewing	**TAP**	14	12	4	11	5
Mead Johnson Nutrition	MJN	8	9	13	22	8
Kellogg Co.	**K**	6	8	8	15	3
Basket Median		11 %	13 %	15 %	19 x	16 %
Sector Median		5	5	9	15	13

Company Name	Ticker	Consensus Sales Growth 2012	Consensus Sales Growth 2013	EPS Growth 2013	NTM P/E	YTD Return
Consumer Discretionary						
Amazon.com	AMZN	30 %	28 %	NM	NM	43 %
Lennar Corp.	**LEN**	26	27	(39)	29	68
PulteGroup	**PHM**	17	23	87	20	118
TripAdvisor	**TRIP**	19	19	19	21	37
Chipotle Mexican Grill	**CMG**	20	16	21	29	(15)
Basket Median		20 %	23 %	20 %	25 x	43 %
Sector Median		6	6	14	15	14
Industrials						
United Technologies	**UTX**	1 %	15 %	19 %	15 x	9 %
Fastenal Co.	FAST	15	13	17	28	1
Precision Castparts	PCP	17	13	16	16	(3)
Jacobs Engineering Group	**JEC**	7	11	12	12	(3)
Roper Industries	**ROP**	9	10	15	20	19
Basket Median		9 %	13 %	16 %	16 x	1 %
Sector Median		4	5	12	13	6
Materials						
Titanium Metals	TIE	11 %	22 %	38 %	16 x	(19)%
Freeport-McMoRan Cp & Gld	**FCX**	(11)	19	42	9	(1)
Basket Median		0 %	20 %	40 %	12 x	(10)%
Sector Median		2	6	17	14	4
Utilities						
Duke Energy Corp.	**DUK**	40 %	20 %	4 %	15 x	2 %
ONEOK Inc.	OKE	(14)	20	22	24	6
Basket Median		13 %	20 %	13 %	20 x	4 %
Sector Median		1	4	5	15	4
Telecommunication Services						
Crown Castle Intl	**CCI**	15 %	7 %	47 %	NM	41 %
Sector Median		5 %	1 %	7 %	16 x	17 %
Basket Median		16 %	17 %	18 %	18 x	9 %
S&P 500 Median		4	5	11	14	10

Note: New constituents highlighted in bold.
Note: The ability to trade this basket will depend upon market conditions, including liquidity and borrow constraints at the time of trade.

Source: Compustat, I/B/E/S, FactSet, and Goldman Sachs Global ECS Research.

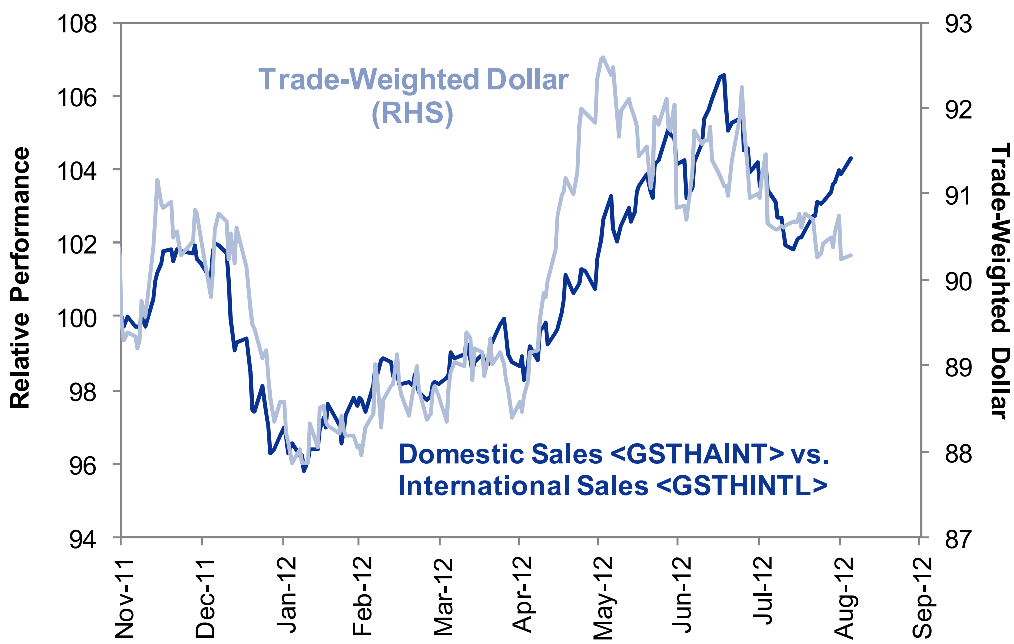
Close our Domestic vs. International Sales trade recommendation

We close our recommendation to buy a basket of stocks with Domestic Sales exposure (Bloomberg ticker: <GSTHAINT>) and sell a basket of stocks with International Sales exposure (<GSTHINTL>). We initially recommended this trade in November 2011 based on expectations of relative macroeconomic strength in the US compared with Europe and Asia and ongoing concerns about the European sovereign debt crisis.

Since November 30, 2011, this recommended trade has returned 5.1% (11% vs. 5%) vs. the S&P 500 up 14.5%. The trade performed poorly at first, falling 3.0% in December and January, but returned 10.4% from February 8 through July 17. Over the last month it has reversed direction sharply as policy commitments by ECB President Draghi allayed immediate investor concerns over stability in the Euro area (see Exhibit 14).

Improving US growth data and increasing expectations of upcoming Fed easing have combined to reverse some of the recent dollar strength. Our FX strategists expect this trend to continue going forward, and a weaker US dollar should benefit exporters. In addition to FX concerns, the global economic cycle appears to be stabilizing, albeit at a low level, and our expectations for economic growth over the next year in the US, Europe, and China are roughly in-line with consensus.

Exhibit 14: Performance of our recommended trade <GSTHAINT> vs. <GSTHINTL>
As of September 4, 2012



Source: Goldman Sachs Global ECS Research.

Goldman Sachs US Portfolio Strategy Baskets on Bloomberg

Exhibit 15: Type <GSTH> for Goldman Sachs US Portfolio Strategy Baskets on Bloomberg

Thematic Baskets

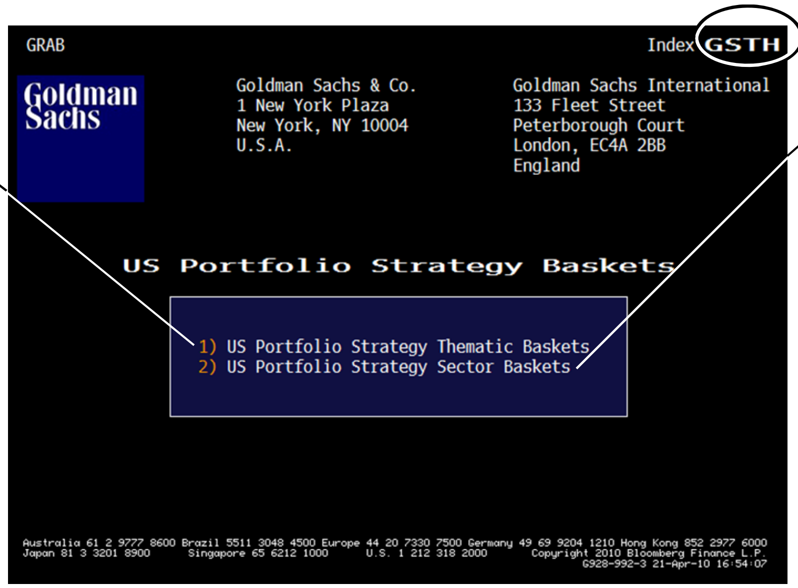
Bloomberg <GSTH1>

Macroeconomic
GSTHBETA
GSTHINTL
GSTHAINT
GSTHBRIC
GSTHWEUR

Fundamental
GSTHREVG
GSTHGROE
GSTHOPHI
GSTHOPLO
GSTHSBAL
GSTHWBAL

Hedge Fund
GSTHHVIP
GSTHHFHI
GSTHHFSL

Valuation
GSTHDIVG
GSTHSHRP
GSTHSVLU
GSTHAVLU
GSTHGARP



Sector Baskets

Bloomberg <GSTH2>

Cyclicals
GSSBCYCL

Defensives
GSSBDEFS

Global
GSSBGLBL

Domestic
GSSBDOMS

Global Cyclicals
GSSBGCYC

Domestic Cyclical
GSSBDCYC

Global Defensive
GSSBGDEF

Domestic Defensive
GSSBDDEF

Permission to our GS Portfolio Strategy Baskets

To receive access to the Goldman Sachs US Portfolio Strategy <GSTH> Bloomberg page, please follow the directions below:

1. Please go to your Bloomberg terminal and type IAM <go>.
2. Take a screen shot of the page.
3. Send the attachment and an e-mail to your Goldman Sachs salesperson requesting access to the US Portfolio Strategy Bloomberg <GSTH> page.

Source: Bloomberg and Goldman Sachs Global ECS Research.

Equity Basket Disclosure

The Securities Division of the firm may have been consulted as to the various components of the baskets of securities discussed in this report prior to their launch; however, none of this research, the conclusions expressed herein, nor the timing of this report was shared with the Securities Division.

Disclosure Appendix

Reg AC

We, David J. Kostin, Stuart Kaiser, CFA, Amanda Sneider, CFA, Ben Snider and Peter Lewis, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Disclosures

Distribution of ratings/investment banking relationships

Goldman Sachs Investment Research global coverage universe

	Rating Distribution			Investment Banking Relationships		
	Buy	Hold	Sell	Buy	Hold	Sell
Global	31%	55%	14%	48%	41%	35%

As of July 1, 2012, Goldman Sachs Global Investment Research had investment ratings on 3,480 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.

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; for equity securities, market making and/or specialist role. Goldman Sachs usually makes a market in fixed income securities of issuers discussed in this report and usually deals as a principal in these securities.

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.

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:** Goldman Sachs Australia Pty Ltd and its affiliates are not authorised deposit-taking institutions (as that term is defined in the Banking Act 1959 (Cth)) in Australia and do not provide banking services, nor carry on a banking business, in Australia. This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act, unless otherwise agreed by Goldman Sachs. **Brazil:** Disclosure information in relation to CVM Instruction 483 is available at http://www.gs.com/worldwide/brazil/area/gir/index.html. Where applicable, the Brazil-registered analyst primarily responsible for the content of this research report, as defined in Article 16 of CVM Instruction 483, is the first author named at the beginning of this report, unless indicated otherwise at the end of the text. **Canada:** Goldman, Sachs & Co. 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. **New Zealand:** Goldman Sachs New Zealand Limited and its affiliates are neither "registered banks" nor "deposit takers" (as defined in the Reserve Bank of New Zealand Act 1989) in New Zealand. This research, and any access to it, is intended for "wholesale clients" (as defined in the Financial Advisers Act 2008) unless otherwise agreed by Goldman Sachs. **Russia:** Research reports distributed in the Russian Federation are not advertising as defined in the Russian legislation, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian legislation on appraisal activity. **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/disclosures/europeanpolicy.html which states the European Policy for Managing Conflicts of Interest in Connection with Investment Research.

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 (FFAJ). 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 deemed 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.

Not Rated (NR). The investment rating and target price 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 for this stock, because there is not a sufficient fundamental basis for determining, or there are legal, regulatory or policy constraints around publishing, 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.

Global product; distributing entities

The Global Investment Research Division of Goldman Sachs produces and distributes research products for clients of Goldman Sachs 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 Australia Pty Ltd (ABN 21 006 797 897); in Brazil by Goldman Sachs do Brasil Corretora de Títulos e Valores Mobiliários S.A.; in Canada by Goldman, Sachs & Co. regarding Canadian equities and by Goldman, Sachs & Co. (all other research); 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 New Zealand Limited; in Russia by OOO 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, authorized 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 AG, regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht, may also distribute research in Germany.

General disclosures

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. Goldman, Sachs & Co., the United States broker dealer, is a member of SIPC (http://www.sipc.org).

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.

The analysts named in this report may have from time to time discussed with our clients, including Goldman Sachs salespersons and traders, or may discuss in this report, trading strategies that reference catalysts or events that may have a near-term impact on the market price of the equity securities discussed in this report, which impact may be directionally counter to the analysts' published price target expectations for such stocks. Any such trading strategies are distinct from and do not affect the analysts' fundamental equity rating for such stocks, which rating reflects a stock's return potential relative to its coverage group as described herein.

We and our affiliates, officers, directors, and employees, excluding equity and credit analysts, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, 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 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.