

# 2013 US Equity Outlook: Selectively seeking growth

Portfolio Strategy Research

## Look past near-term political risk to improving growth prospects

### US economy will gain strength as 2013 progresses

The turbulent political environment that curtailed corporate risk-taking in 2012 will end. Full 'fiscal cliff' will be averted but taxes will rise and federal spending will be cut. Economy will grow by 1.9% in 2013 and 2.9% in 2014.

### Corporate fundamentals support continued profit cycle expansion

We forecast S&P 500 revenues rise by more than 4% in 2013 and 2014, margins hover at current levels (8.8%-9.0%), earnings climb by more than 6% and the P/E multiple expands modestly from 13.2x to 13.8x at end 2013.

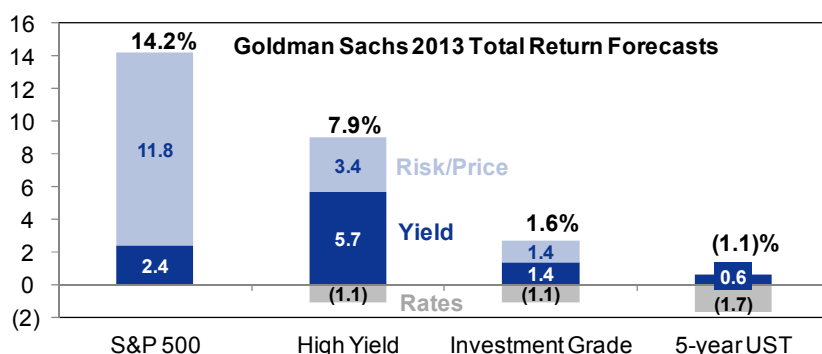
### Valuation: 12-month target of 1575 reflects 12% potential return

Our 3-month, 6-month, and 12-month forecasts are 1450, 1500, and 1575. We use six valuation approaches including DDM, uncertainty-based P/E multiple, cyclically-adjusted P/E multiple, price/book and ROE relationship.

### Strategies to capture growth: market, sectors, stocks

(1) Stocks will outperform Treasuries; (2) Equities will beat credit returns, although not on a risk-adjusted basis; (3) Cyclical sectors will beat defensive sectors (Materials, Industrials, Information Technology will outperform Consumer Staples, Telecom, and Health Care); (4) Double Sharpe Ratio stocks offer both high risk-adjusted earnings growth and prospective returns (Bloomberg ticker: <GSTHEPSR>); and (6) Stocks with high BRICs sales exposure will beat domestic-facing firms (<GSTHBRIC>).

### Our 2013 S&P 500 total return forecast exceeds other US asset classes



Source: Compustat 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.

#### Krag Gregory, Ph.D.

(212) 357-3770 krag.gregory@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.

#### Rima Reddy

(801) 884-4794 rima.reddy@gs.com  
Goldman, Sachs & Co.

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## Table of Contents

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<b>Our 2013 equity market outlook: Target, path, risks, and strategies</b>	<b>3</b>
<b>Portfolio manager summary</b>	<b>4</b>
<b>Investment recommendations: Our best ideas for 2013</b>	<b>6</b>
<b>Stocks vs. bonds: Compelling risk/reward</b>	<b>10</b>
<b>Credit vs. equity: Risk premiums reflect strong fundamentals</b>	<b>13</b>
<b>Money flow: We forecast \$200 billion of potential net equity inflow</b>	<b>16</b>
<b>Cash uses: How the S&amp;P 500 will spend money in 2013 and 2014</b>	<b>20</b>
<b>Sector allocation: Moderately cyclical with growth on the horizon</b>	<b>22</b>
<b>Risk-reward in action: EPS and price 'Sharpe' ratios (&lt;GSTHEPSR&gt;)</b>	<b>26</b>
<b>US equities in a global context: Seek BRICs revenue exposure</b>	<b>28</b>
<b>US economic backdrop for 2013 and 2014</b>	<b>30</b>
<b>Earnings, sales, and margins</b>	<b>32</b>
<b>Valuation: Not demanding but not "cheap"</b>	<b>36</b>
<b>Risks: Fiscal policy and politics top the list</b>	<b>40</b>
<b>Our 2012 scorecard</b>	<b>42</b>
<b>Appendix A: US Portfolio Strategy baskets on Bloomberg</b>	<b>44</b>
<b>Appendix B: Growth &amp; valuation for thematic and sector baskets</b>	<b>45</b>
<b>Appendix C: Our recommended US Portfolio Strategy baskets</b>	<b>46</b>
<b>Disclosure Appendix</b>	<b>48</b>

## Our 2013 equity market outlook: Target, path, risks, and strategies

**Target:** Our year-end 2013 S&P 500 target of 1575 suggests a potential price gain of 12% and a total return of roughly 14% including dividends. The market now trades at 13.2x our 2013 EPS forecast of \$107, consistent with the average forward P/E multiple over the past five years. Our valuation models forecast that by year-end 2013 the forward multiple will have expanded by 5% to 13.8x our anticipated 2014 EPS of \$114. If our target forecast is realized, it would rank in the 59<sup>th</sup> percentile of annual returns since 1928.

**Path:** We expect the forward path of the market will be highly uneven. S&P 500 drawdown equaled 16% in 2010 and 20% in 2011 and in 2012 the drawdown YTD has been 10%. The high drawdown during the past few years spurred risk-averse retail investors to shift assets into bond funds and away from equities. This pattern will not reverse until ten-year US Treasury yields rise to 3%, in our view. Assuming the political/fiscal/debt ceiling drama is addressed by the end of 1Q, the 2013 US equity market story will be one of steady acceleration in business activity accompanied by increased CEO confidence which will lead to a 15% jump in cash M&A volume and 11% hike in dividends. Looking further ahead, we anticipate the US economy will expand at a nearly 3% rate in 2014 and earnings will rise by 6%. The prospect of continued economic and profit growth in 2014 will lift the S&P 500 index in the second-half of 2013 to our year-end target of 1575.

**Assumptions:** Our 2013 outlook for the US stock market assumes the 'fiscal cliff' is averted. Most likely, either late this year or early next a Congressional compromise will be reached to increase taxes, reduce spending, and raise the federal debt ceiling. Stocks will rally if the White House and Congress establish a framework to address long-term fiscal imbalances. However, achieving compromise in Washington, DC is difficult. The crisis may not be resolved by year-end which explains our view that downside risk exists through December.

**Forecasts:** S&P 500 sales, which are measured in nominal terms, will rise by 4.4% in 2013 and 4.7% in 2014. We forecast net margins will remain static as they have for the past 18 months, hovering in the 8.8%-9.0% band through the end of 2014. Given this environment, S&P 500 EPS will rise from \$100 in 2012 to \$107 in 2013 and \$114 in 2014. Information Technology, Financials, and Energy will generate more than 50% of aggregate S&P 500 earnings. We estimate US real GDP grows by 1.9% next year and 2.9% in 2014 (assuming 1.4% and 2.5% fiscal contraction, respectively). Inflation remains subdued. Fed Funds rate is unchanged. Ten-year Treasury yields climb to 2.2% next year and 2.8% by year-end 2014.

**Risks:** The greatest positive catalyst that might lead us to raise our index forecast would be a "grand bargain" addressing the nation's long-term fiscal imbalances along the lines of the Simpson-Bowles report. It would spark a P/E multiple expansion and a higher target. Downside risks include political discord in US or Europe, the effectiveness of the Fed's QE policy, higher US Treasury yields, and the sustainability of record high profit margins.

### Strategies to selectively seek growth:

- 1. Buy stocks/sell bonds:** We strongly recommend asset re-allocation away from Treasuries and into equities for investors with both an intermediate and long-term horizon.
- 2. Equities should outperform credit, but not on a risk-adjusted basis:** The US economy is slowly improving and growth will be rewarded. Both stocks and high yield will benefit.
- 3. Overweight some cyclicals** (Industrials, Information Technology and Materials) and **Underweight some defensive sectors** (Consumer Staples, Health Care, and Telecom).
- 4. Own Double Sharpe Ratio stocks:** We identify 30 companies with high risk-adjusted earnings growth and risk-adjusted expected price return (Bloomberg ticker: <GSTHEPSR>).
- 5. BRICs vs. US sales exposure.** Size, liquidity, balance sheet strength, high margins, and transparent accounting benefit those US-domiciled stocks that sell to emerging markets.

## Portfolio manager summary

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### Five investment strategies for 2013

**Growth, rather than yield and value, will drive equity returns in 2013.** The turbulent political environment that curtailed corporate risk-taking in 2012 will end. The full 'fiscal cliff' will be averted yet taxes will rise and federal spending will be reduced. Monetary policy will remain accommodative. The pace of US economic growth will strengthen as 2013 progresses. Corporate sales will rise, margins will hover at current levels, earnings will climb and the P/E multiple will expand modestly. This report focuses on five strategies we believe will drive portfolio manager performance in 2013.

1. **Stocks will outperform Treasuries;**
2. **Equities will beat credit returns in 2013, although not on a risk-adjusted basis;**
3. **Cyclical sectors will beat defensive sectors (Tech, Materials, and Industrials will outperform Consumer Staples, Telecom, and Health Care);**
4. **Stocks with the highest combined earnings and price Sharpe ratios have high risk-adjusted earnings visibility and risk-adjusted return prospects and should outperform the S&P 500** (Bloomberg ticker: <GSTHEPSR>);
5. **Stocks with high BRICs revenue exposure will beat domestic-facing firms** (<GSTHBRIC> vs. <GSTHAINT>).

### Economic and policy backdrop for 2012

- The US economy is slowly healing. Goldman Sachs Economics forecasts real GDP growth will accelerate from 1.9% in 2013 to 2.9% in 2014. Consensus estimates are similar at 2.0% and 2.8%, respectively. The FOMC central tendency of 2013 annual average GDP growth equals 2.3-2.8%. Core CPI inflation will remain low at roughly 1.8% during each of the next two years.
- Goldman Sachs Economics projects the unemployment rate will fall from the current 7.9% to 7.7% at year-end 2013 and reach 7.0% by the end of 2014. Our forecast is roughly in line with the FOMC central tendency. Accelerating growth and resolution of fiscal uncertainty will support job creation and a steady participation rate.
- Monetary policy will remain accommodative as the Fed continues to focus on growth and inflation remains benign. Goldman Sachs Economics expects a rate hike will not occur until early 2016 (behind consensus). We forecast ten-year Treasury yields will rise to 2.2% by the end of 2013, 2.75% in 2014, 3.25% in 2015 and 3.75% in 2016.
- The Euro Area will remain in recession for most of 2013 and reach just 1% growth in 2014. However, reduction of 'tail risk' from the sovereign debt crisis will support a rebound in euro strength. Our 12-month EUR/\$ forecast is 1.40 versus 1.30 spot.
- We forecast Brent oil will remain relatively stable, reaching \$110 by end-2013 before moving to \$105 in 2014. We expect gold will rise by over 10% by the end of 2013 to \$1940/troy oz.

### S&P 500 earnings: \$107 per share in 2013 and \$107 in 2014

- We expect S&P 500 operating EPS of \$100 in 2012, \$107 (+7%) in 2013 and \$114 (+6%) in 2014. Information Technology, Financials, and Energy will collectively generate 51% of S&P 500 EPS in 2013. Our top-down estimates compare with bottom-up consensus of \$100, \$113 and \$126, respectively.

- We forecast S&P 500 revenue will increase by 4.4% in 2013 and by 4.7% in 2014. Our sales estimates are roughly in-line with consensus. Every 100 bp shift in 2013 US GDP growth rate translates into roughly \$5 per share in 2013 EPS.
- Our profit margin forecast is the source of the greatest investable gap relative to consensus expectations. We expect margins will return to the previous high of 8.9% in 2013 and reach 9.0% in 2014. Bottom-up consensus expects margins to establish a new record high of 9.5% next year and reach 10.1% in 2014. Every 50 bp swing in net margins translates into roughly \$5 per share in 2013 EPS.

### **Valuation: Our year-end 2013 price target for the S&P 500 is 1575**

- Our year-end 2013 estimate of fair value for the S&P 500 equals 1575, or 12% above the current level. We use our dividend discount model (DDM) as a guide for fair value. We also use an uncertainty-based implied P/E multiple, a macroeconomic valuation model, a cyclically-adjusted P/E multiple, and consider the future implied price/book ratio that stems from our forecast ROE.
- S&P 500 currently trades about 13.2x our top-down 2013 EPS estimate. Our year-end 2013 target reflects a roughly 5% multiple expansion to a P/E of 13.8x forward EPS.
- Our uncertainty-based P/E model suggests 10% downside and is far below the valuations implied by both our DDM and other models. Other macro or top-down approaches suggest 3-22% upside to S&P 500 fair value. The unusually low interest rate environment means the Fed model implies the most upside to share prices.
- Our ROE forecast of 17.3% in 2013 implies 21% upside to P/B valuation given the historical relationship between ROE and price-to-book valuation. Although this forecast represents a slight decline from our forecast of a cycle peak at 17.5% in 2012, the level of ROE remains well above long-run averages and supports a higher index valuation.

### **Money flow: \$200 billion will flow into US equities in 2013**

- We forecast the US equity market will receive roughly \$200 billion of net equity inflow from individuals, institutional investors, and companies in 2013.
- We expect net outflows of \$475 billion from retail and individual owners in 2013, following the pattern of the past decade with direct ownership declining and indirect ownership rising. We expect \$75 billion of net inflows into US equity ETFs.
- We forecast net equity inflows of \$75 billion from mutual funds, retirement funds and life insurance companies. This amount includes contributions to, and asset re-allocation within defined benefit pension funds, defined contribution pension funds, and government retirement funds. In recent years, retirement fund assets have shifted out of direct equity allocations into indirect equity ownership through mutual funds.
- Inflows from international investors should total \$75 billion, consistent with the 10-year average. International investors own 13% of the US equity market, the highest percentage in the 67-year history of the data series.
- S&P 500 non-Financials firms hold almost \$1.2 trillion in aggregate cash balances. We forecast total capital usage by S&P 500 firms will rise by 5% to \$1.9 trillion in 2013. We expect S&P 500 firms will allocate 61% of capital spending for growth (cap-ex, R&D, and cash M&A) and return 39% to shareholders (buybacks and dividends).

## Investment recommendations: Our best ideas for 2013

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**Our best ideas for 2013 emphasize the outperformance of equities relative to fixed income and the idea that growth will be a key attribute of superior stock returns.** We look for exposure to growth in selective ways such as some, but not all, cyclical sectors, stocks with the best risk-adjusted earnings growth and potential return, and firms with high revenues from BRICs as a sub-set of companies with large non-US revenues.

### 1. Stocks will outperform Treasuries (see page 10)

**Stocks will outperform Treasuries.** Mixed-asset investors must raise their equity allocations given dim return prospects for Treasuries that currently yield 1.7%. In 2013, we forecast the 5-year US Treasury note will return -1.1% compared with +14% for the S&P 500 including dividends. Over a medium-term horizon, if interest rates rise to the average yield during the past decade, the implied loss for a bond investor will be substantial. Viewed over a long-term horizon, we assign a greater than 95% probability that S&P 500 will outperform ten-year Treasuries. Consider long-dated call options on the S&P 500 index.

### 2. Equities will beat credit (see page 13)

**Equities will beat credit returns in 2013, although not on a risk-adjusted basis.** S&P 500 should generate better absolute total return (14%) than Investment Grade (1.6%) or High Yield (7.9%) bond indices. However, drawdown risk in stocks has equaled 16%, 20% and 10% during the past three years making the risk-adjusted case for stocks less compelling. Consider the Goldman Sachs Bond Buyers Equity basket.

### 3. Cyclical sectors will beat defensive sectors (see page 22)

**Cyclical sectors will beat defensive sectors (Technology, Materials, and Industrials will outperform Consumer Staples; Telecom, and Health Care).** An improving US economy should tilt investors towards growth-oriented sectors. We expect Information Technology and Materials will grow sales by 8%, 2x the broad market. A pick-up in activity in China will benefit the Industrials sector. In contrast, Health Care has performed strongly for the past two years and Telecom has a 76% dividend payout ratio which raises concerns.

### 4. Earnings & price Sharpe Ratio stocks should outperform (p. 26)

**We believe stocks with a high visibility of earnings growth coupled with strong risk-adjusted return potential will perform well in an improving yet still uncertain economic environment.** We recommend stocks with the highest combined earnings and price 'Sharpe' ratios. We identify 30 stocks that offer the best combination of high risk-adjusted EPS growth and risk-adjusted price gains based on consensus estimates. The median stock in our basket offers above average EPS growth through 2014 with half the earnings growth uncertainty of the typical S&P 500 stock, while also offering superior risk adjusted potential return to the consensus price target after adjusting for implied volatility. (Bloomberg ticker: <GSTHEPSR>).

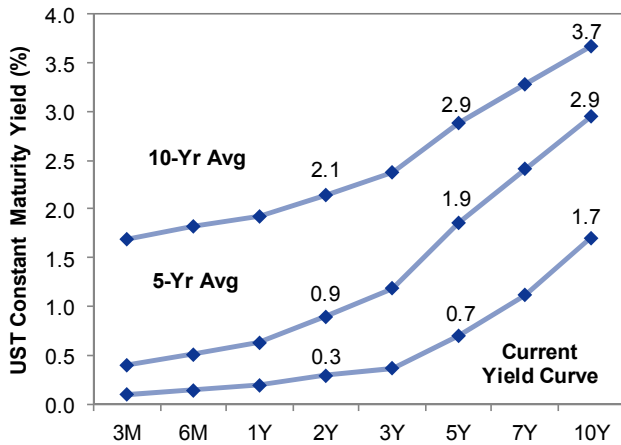
### 5. High BRICs sales (<GSTHBRIC>) vs. high US sales (<GSTHAINT>)

**We recommend investors buy a basket of US stocks with the highest BRICs exposure (Bloomberg ticker: <GSTHBRIC>) vs. the most domestic-facing firms (<GSTHAINT>).**

Our economists expect the BRICs will post strong and accelerating GDP growth in 2013 and 2014, and the region also represents the largest gap in expectations between our forecasts and consensus. At the same time, Europe remains in recession, US GDP growth is below trend, and many US firms have struggled to grow revenues. Superior growth prospects, combined with in-line valuation and recent underperformance, suggest stocks with the highest BRICs sales exposure should outperform domestic-facing stocks in 2013.

*Note: The ability to trade these baskets will depend upon market conditions, including liquidity and borrow constraints at the time of trade.*

**Exhibit 1: UST yield curve well below historical averages**  
as of November 23, 2012



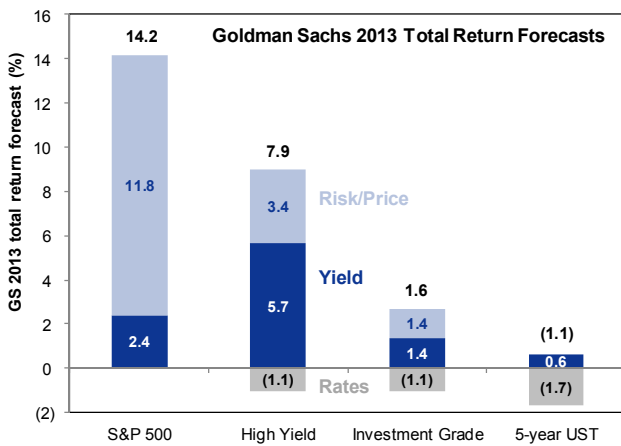
Source: US Treasury, Haver and Goldman Sachs Global ECS Research.

**Exhibit 2: Bond losses if yield reverts to averages in 12M**  
as of November 23, 2012

Maturity	Current Yield	5-Year		10-Year	
		Avg	Price Decline	Avg	Price Decline
2-Year	0.3 %	0.9 %	(0.0)%	2.1 %	(1.3)%
3-Year	0.4	1.2	(0.7)	2.4	(3.1)
5-Year	0.7	1.9	(2.5)	2.9	(6.7)
7-Year	1.1	2.4	(4.8)	3.3	(9.9)
10-Year	1.7	2.9	(7.4)	3.7	(13.4)

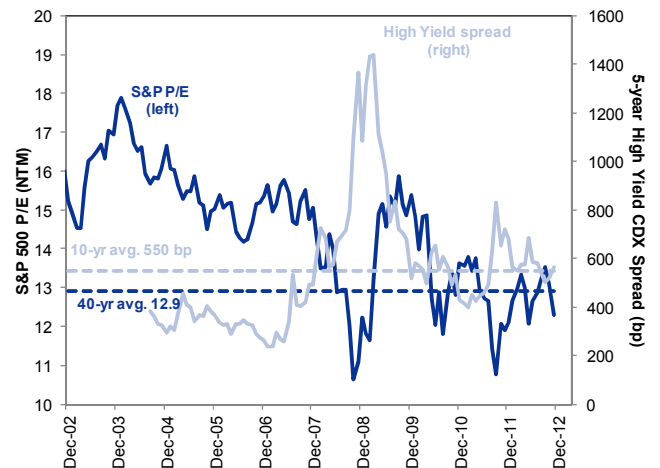
Source: US Treasury, Haver and Goldman Sachs Global ECS Research.

**Exhibit 3: S&P 500 has higher total return but less yield pricing**  
as of November 23, 2012



Source: FactSet and Goldman Sachs Global ECS Research.

**Exhibit 4: Equity and HY valuation similarly "average"**  
pricing as of November 23, 2012



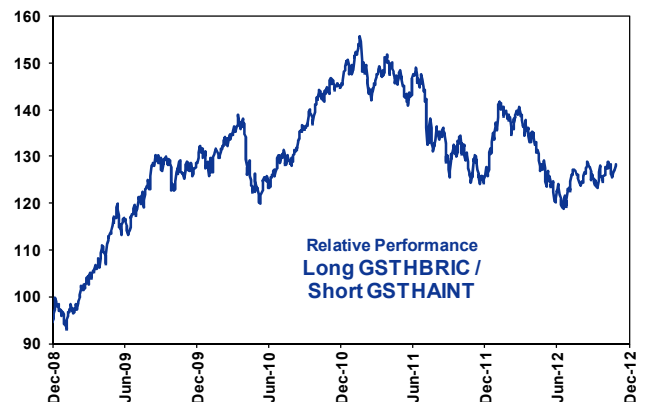
Source: FactSet and Goldman Sachs Global ECS Research.

**Exhibit 5: GS recommended sector weightings**  
as of November 23, 2012

Sectors	Sector Weightings		
	Goldman Sachs Sector Weightings	S&P 500 Weight	GS Weighting
Information Technology	Overweight	19 %	300 bp
Industrials		10	200
Materials		4	200
Energy	Neutral	11	0
Consumer Discretionary		11	0
Financials		15	0
Utilities		3	0
Telecom Services	Underweight	3	(100)
Health Care		12	(300)
Consumer Staples		11	(300)
<b>S&amp;P 500</b>		<b>100 %</b>	<b>0 bp</b>

Source: FactSet and Goldman Sachs Global ECS Research.

**Exhibit 6: BRICs vs. Domestic Sales basket performance**  
as of November 23, 2012



Source: FactSet and Goldman Sachs Global ECS Research.

## The anticipated path of the market in 2013

### Our 3-month, 6-month, and 12-month targets: 1450, 1500, 1575

Our interim S&P 500 forecasts equal 1450, 1500, and 1575 corresponding to 3%, 6% and 12% price returns, respectively. The current annualized dividend yield equals 2.4%.

Our DDM implies a 12-month forward fair value for the S&P 500 of 1575. If realized, the 12% price return would be 0.2 standard deviations above the 80-year average of 7%.

Our model-implied price gain during the next 12 months will be driven by roughly equal parts earnings growth and multiple expansion as the cost of equity moderates.

Besides our DDM, additional approaches used in establishing our index price target include a macroeconomic model, an uncertainty-based P/E multiple, a cyclically-adjusted P/E multiple, the Fed model, and the historical relationship between price/book and ROE.

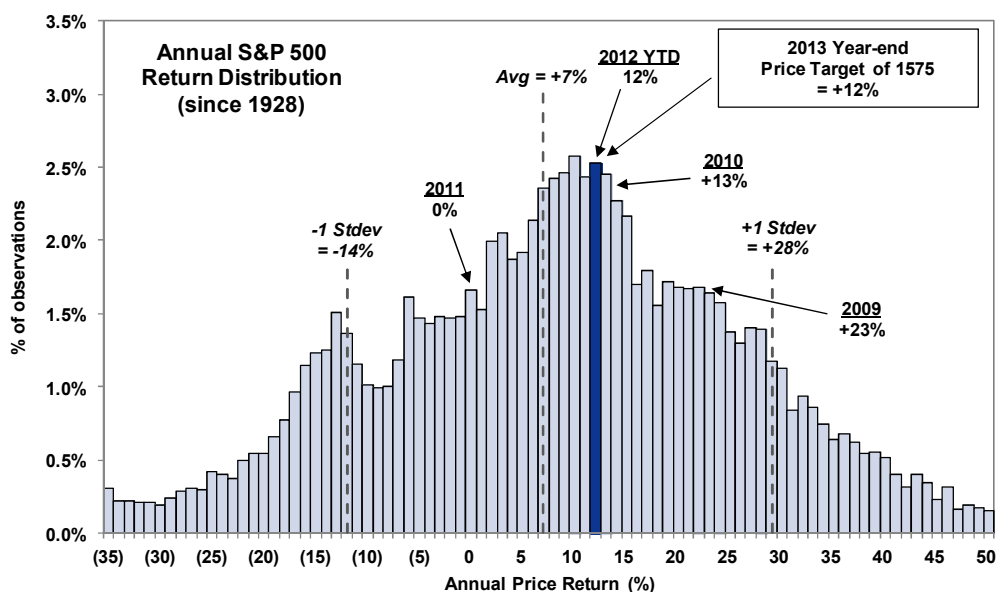
Our year-end 2013 price target implies that the forward P/E will expand by about 5% from 13.2x to 13.8x our top-down forward EPS estimates. We expect the P/E at year-end 2013 will lie between the 5-year and 10-year averages of 13.3x and 14.5x, respectively. We assume the 'fiscal cliff' is resolved, US GDP growth accelerates to an anticipated 3% pace in 2014, and risks from Europe and China moderate. Our price target translates into a forward P/E above the 35-year average of 12.9x.

Our interim price forecasts reflect our view of the likely path towards our 12-month DDM-based estimate of fair value for the S&P 500. The three-month target is the most market-driven of our price targets. Our three-month target of 1450 reflects a roughly 3% increase from the current level and incorporates an expectation that an agreement regarding the 'fiscal cliff' is reached near year-end 2012. The historical conditional return distribution based on trailing one-month returns of 0% to -5% assigns a 31% probability the market posts a return between 0% and +5% during the subsequent three months.

The details of fiscal resolution will affect the timing of our interim price targets.

Temporary or insufficient measures would delay or reduce upside while a comprehensive "grand bargain" could increase and accelerate potential upside.

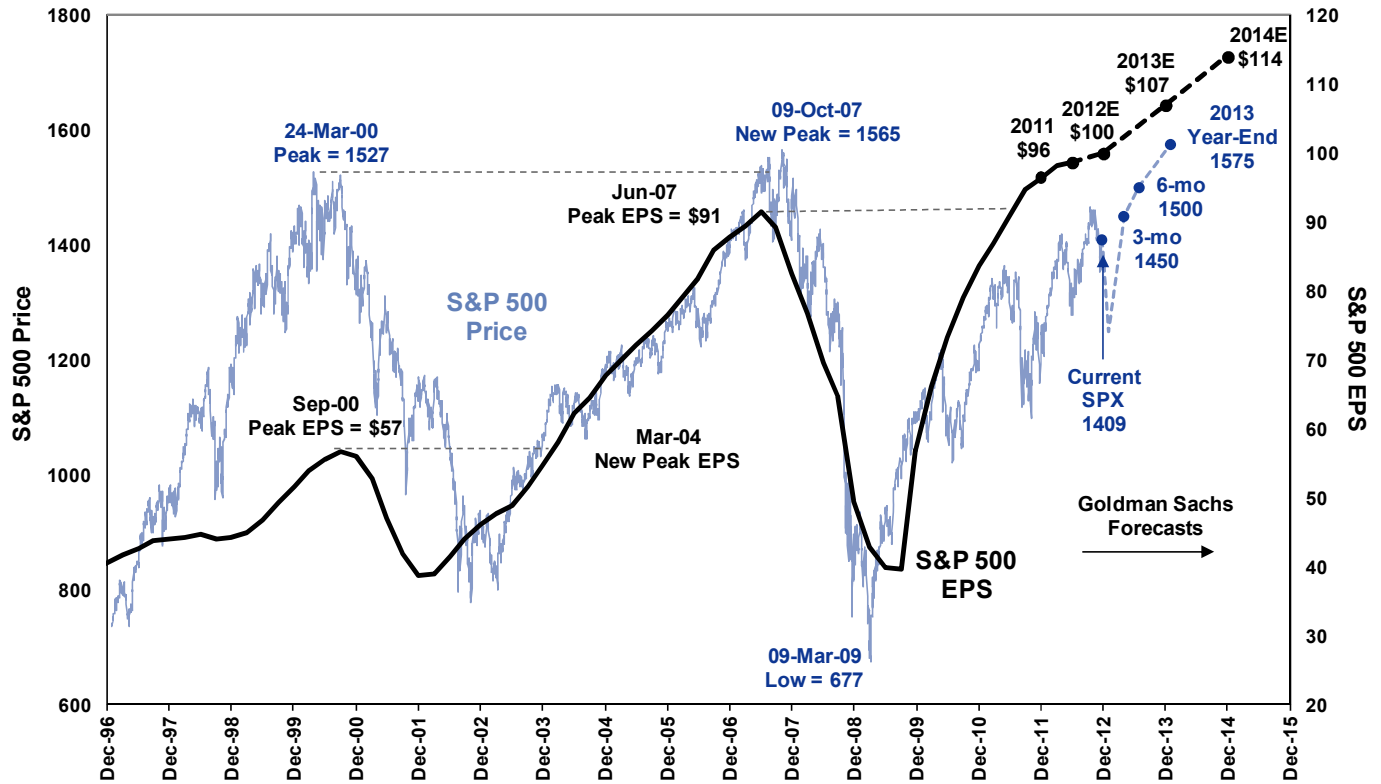
### Exhibit 7: Our 2013 target of 1575 falls slightly above the average annual return since 1928



Source: Bloomberg, FactSet, and Goldman Sachs Global ECS Research.

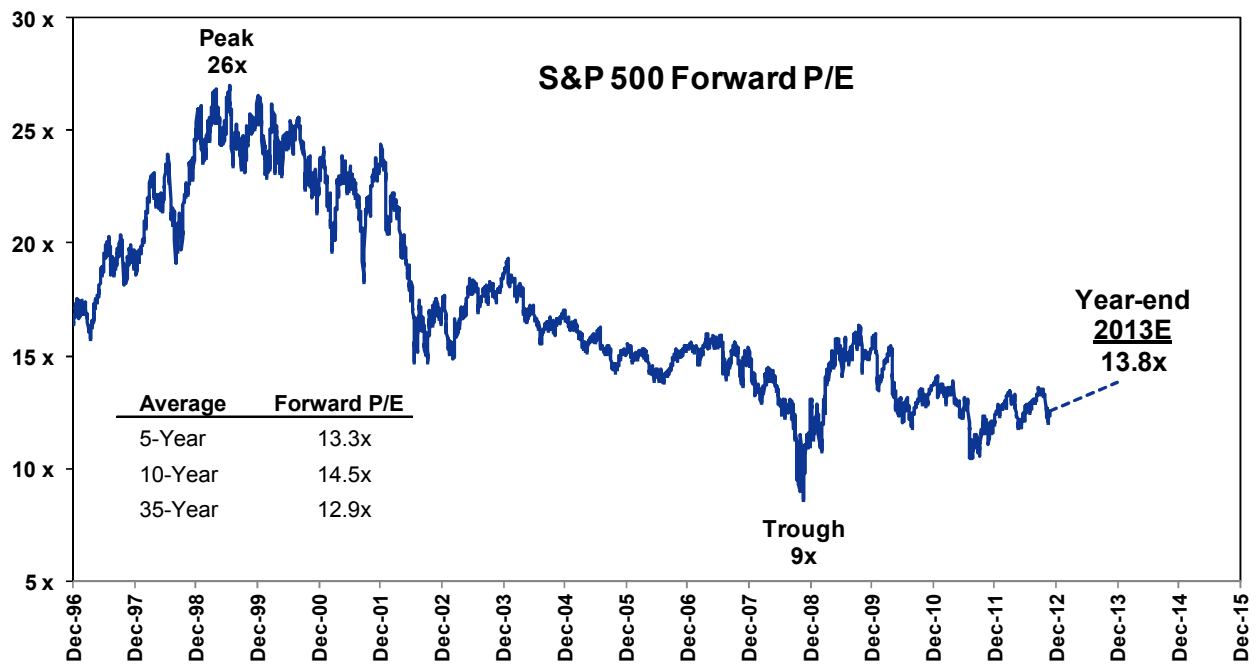


**Exhibit 8: We forecast S&P 500 EPS will establish another record high in 2013**  
as of November 23, 2012



Source: Compustat, IDC via Factset, and Goldman Sachs Global ECS Research.

**Exhibit 9: We expect modest forward P/E multiple expansion to 13.8x by year-end 2013**  
as of November 23, 2012



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

## Stocks vs. bonds: Compelling risk/reward

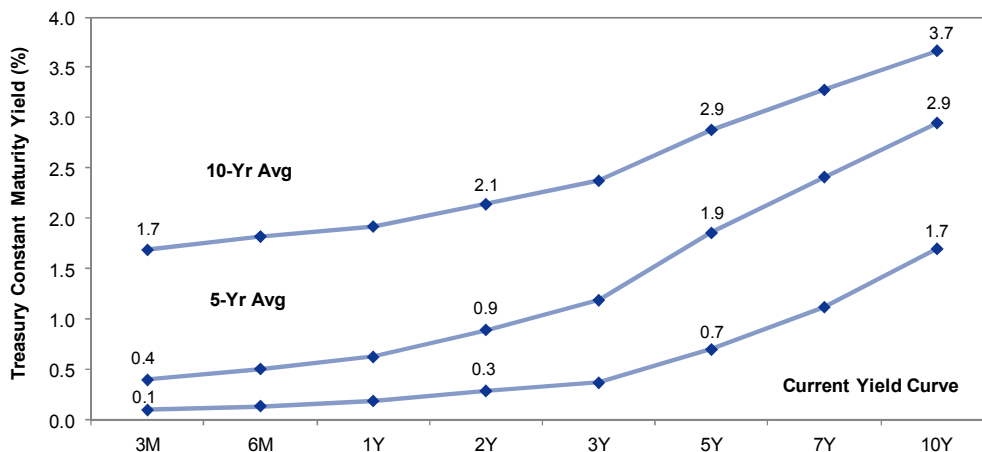
**A dramatic valuation discrepancy exists between stocks and bonds.** We view low government bond yields as the primary driver of the dislocation. Investors with a medium-term or long-term horizon should lower their bond exposure and boost equity allocations.

**Equities are attractively valued relative to government bonds.** The large spread between ten-year US Treasury yield and S&P 500 earnings yield is one clear example of the disconnect between the two assets. In addition, it is one of the only times during the past 20 years that bond yields trade far below the Goldman Sachs estimate of “fair” value (see Exhibits 13 and 14).

**The Fed Model is the standard approach used by investors to compare valuations across asset classes.** Assuming the valuation gap is closed equally from each side, our version of the model currently shows about 22% upside for the S&P 500 relative to the ten-year US Treasury note, 10-year TIPS, or BBB corporate bond yields. Upside is reduced to 15% if the Treasury yield is 2.5% and 5% if yield reverts to 3.7%, its average since 2002.

**In the medium-term, if current ten-year Treasury yields return to the average of the last five or ten years, then the implied loss would equal 7% and 13%, respectively.** A rise in bond yields during the next 12 months to our year-end 2013 forecast of 2.2% is unlikely to alter flows. But a backup in rates to the average over the past decade would result in a 13% loss for bond holders, and may prompt a shift in assets (see Exhibits 10-12).

**Exhibit 10: Current Treasury yield curve and average yield curve during last 5 and 10 years** as of November 23, 2012



Source: US Treasury, FactSet and Goldman Sachs Global ECS Research.

**Exhibit 11: Implied loss if yield curve reverts to 5-yr avg.** as of November 23, 2012

Maturity	Current Yield	5-Year Average	Difference	Implied Loss
2-Year	0.3 %	0.9 %	60 bp	(0.0)%
3-Year	0.4	1.2	82	(0.7)
5-Year	0.7	1.9	116	(2.5)
7-Year	1.1	2.4	129	(4.8)
10-Year	1.7	2.9	125	(7.4)

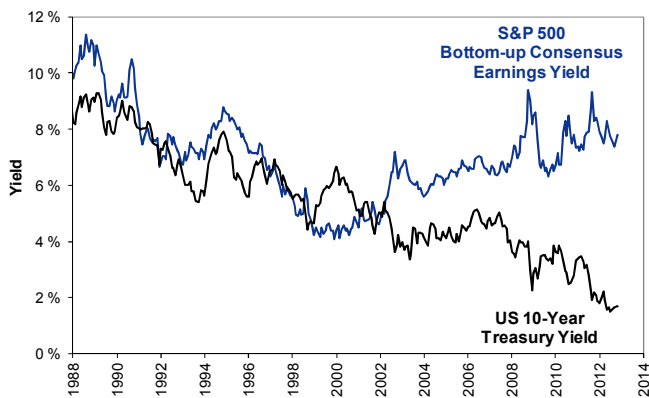
Source: US Treasury, FactSet and Goldman Sachs Global ECS Research.

**Exhibit 12: Implied loss if yield curve reverts to 10-yr avg.** as of November 23, 2012

Maturity	Current Yield	10-Year Average	Difference	Implied Loss
2-Year	0.3 %	2.1 %	185 bp	(1.3)%
3-Year	0.4	2.4	200	(3.1)
5-Year	0.7	2.9	218	(6.7)
7-Year	1.1	3.3	216	(9.9)
10-Year	1.7	3.7	197	(13.4)

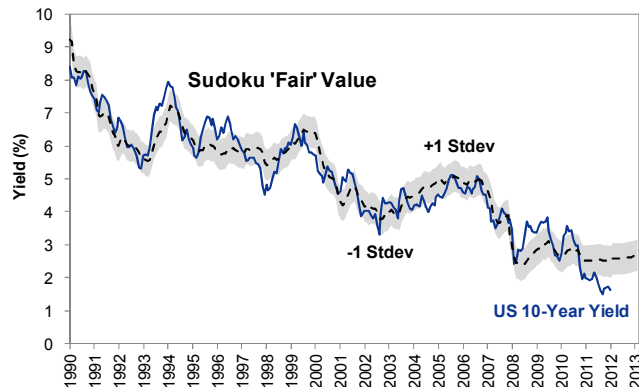
Source: US Treasury, FactSet and Goldman Sachs Global ECS Research.

**Exhibit 13: Gap between Treasury and earnings yield**  
as of November 23, 2012



Source: Goldman Sachs Global ECS Research.

**Exhibit 14: Ten-year US Treasury yield below fair value**  
as of November 23, 2012



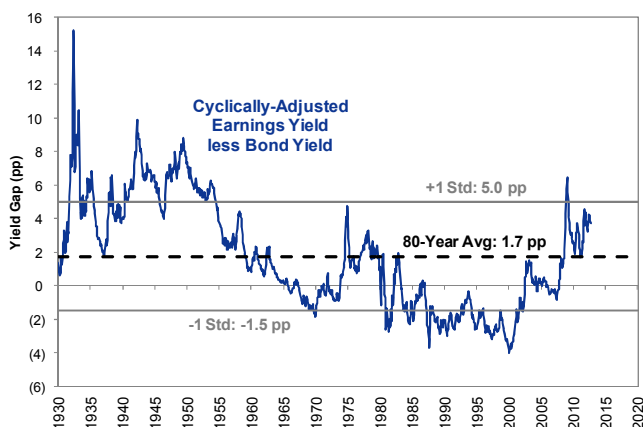
Source: Goldman Sachs Global ECS Research.

**In the long-term, we estimate S&P 500 has a greater than 95% likelihood of delivering an annualized return in excess of bonds during the next decade.** The difference between the cyclically-adjusted earnings yield (the inverse of the cyclically-adjusted P/E ratio we use to forecast nominal equity returns) and the US Treasury yield has explained 30% of the variation in excess return of stocks relative to bonds since 1930 (see Exhibit 15). The yield gap has averaged 170 bp since 1930. The current spread of 400 bp ranks in the 73<sup>rd</sup> percentile and has historically corresponded with a 10-year excess return of 7%, with more than 60% of returns falling between 6% and 12%, and equities beating bonds 95% of the time (see Exhibit 16). See *Forecasting long-term returns for US equities*, July 26, 2012.

**A complicating factor in forecasting relative performance is the Fed’s unconventional monetary policy that has arguably created an artificially low interest rate environment.** Our fixed-income strategists’ Sudoku model estimates that the US 10-Year yield is almost 100 bp below fair value, and they expect the gap will be roughly 50 bp at year-end 2013. Therefore the current yield gap may not provide an accurate indicator of the likely relative performance between equities and bonds.

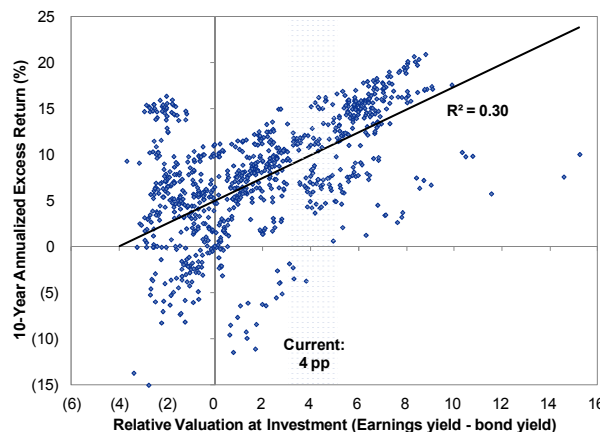
**Various tools exist for investors to express a view on equity/bond valuation.** Our report *Equity tools to express views on US Treasury yields* (June 19, 2012) created a sector-neutral basket of 50 stocks with the highest sensitivity to changes in ten-year US Treasury yields (Bloomberg ticker: <GSTHUSTY>). Consider buying long-dated S&P 500 call options.

**Exhibit 15: Relative valuation: S&P 500 cyclically-adjusted earnings yield less ten-year Treasury yield**  
as of November 23, 2012



Source: Robert Shiller, Compustat, and Goldman Sachs Global ECS Research.

**Exhibit 16: S&P 500 excess forward 10-year returns vs. bonds based on relative valuation at investment**  
as of November 23, 2012

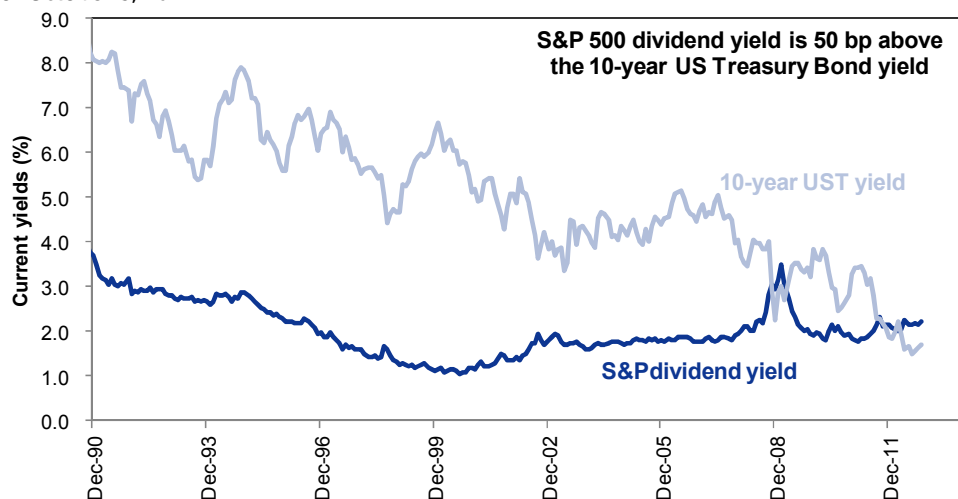


Source: Robert Shiller, Compustat, and Goldman Sachs Global ECS Research.

**Long-dated call options are currently a low cost way to add risk-managed equity upside.** Call options offer equity upside with downside protection and are currently priced near decade lows. US bond yields below the S&P 500 dividend yield lead to a negative forward price. Essentially, buying a 2-year call option with a 1400 strike price is priced as a 4% out-of-the-money (OTM) option due to the rates differential. This lowers the cost and implies too low a chance of the market rising over the next 2 years, in our view.

A two-year S&P 500 call option with a 1400 strike price costs 8.7% of spot and implies only a 50% chance that equity prices are above 1400 over that period. If the S&P 500 rises to our 2013 price target of 1575 in one year and volatility levels remain unchanged we estimate a return on initial option premium of 60%. That equals 4x the 15% estimated total return of a long-only equity position if S&P 500 reaches 1575 (12.6% price gain + 2.3% dividend yield).

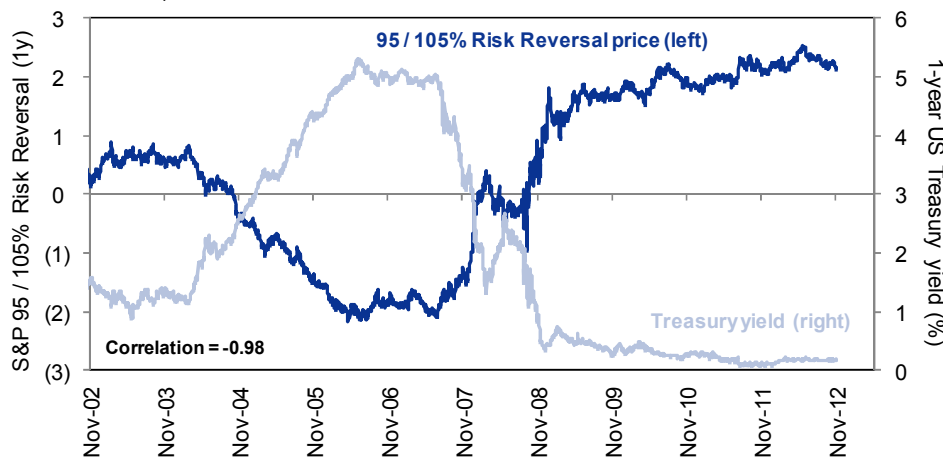
**Exhibit 17: S&P 500 dividend yield is higher than the 10-year UST yield**  
as of October 3, 2012



Source: Factset, and Goldman Sachs Global ECS Research.

**Investors looking for a lower cost implementation might favor slightly OTM call options or risk reversals** where a put option is sold to fully fund the call option purchase. We estimate that a 1-year S&P 500 4.4% OTM put would fully fund an at-the-money call option. Risk-reversals outperform a long stock position in a wide range but put sellers commit to buy the S&P 500 at the strike price at expiration and have a max loss of the put strike price – premium collected. Call buyers risk loss of premium paid.

**Exhibit 18: Low rates make prices of bullish options strategies attractive**  
as of November 27, 2012



Source: Goldman Sachs Global Investment Research.

## Credit vs. equity: Risk premiums reflect strong fundamentals

**Despite the wide gap between equity and Treasury yields we believe credit and equity risk premiums are generally in-line with strong corporate fundamentals.** As a result, strong asset flows into credit assets have been driven by uncertainty and poor risk-adjusted equity returns. Improving equity risk-reward is needed for a reversal, which could be as much as \$1 trillion given retail investors are materially underweight stocks.

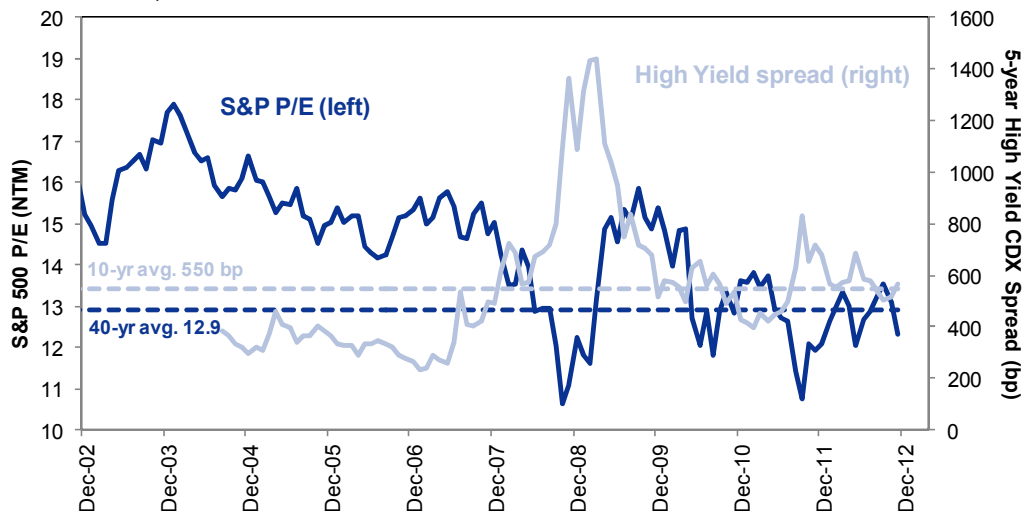
**Despite our positive outlook for the S&P 500 in 2013, strong high yield bond returns will be enough to postpone a potentially large re-allocation in 2013. In addition to our preference for equities at the index level we highlight potential equity option and single stock strategies to express this view.**

Risk premiums are supported by strong corporate fundamentals. High margins, strong earnings, safe balance sheets, and low default rates support tight risk premiums. The S&P 500 P/E ratio and high yield bond spreads confirm that view. The levels of the Cost of Equity (COE) and Credit Risk Premium (CRP) paint a similar picture.

The S&P 500 P/E ratio is currently 12.8x bottom-up consensus estimates vs. 12.9x on average since 1970 and our macro-based fair value estimate of 13.5x. Both Investment Grade (IG) and High Yield (HY) credit spreads have tightened significantly since 2008 to levels that are similar to 2007 and in-line with strong credit fundamentals and low default rates even during the financials crisis. In short, risk premiums are not elevated despite low growth and elevated policy uncertainty because corporate fundamentals remain strong.

### Exhibit 19: S&P P/E and HY spreads near average levels

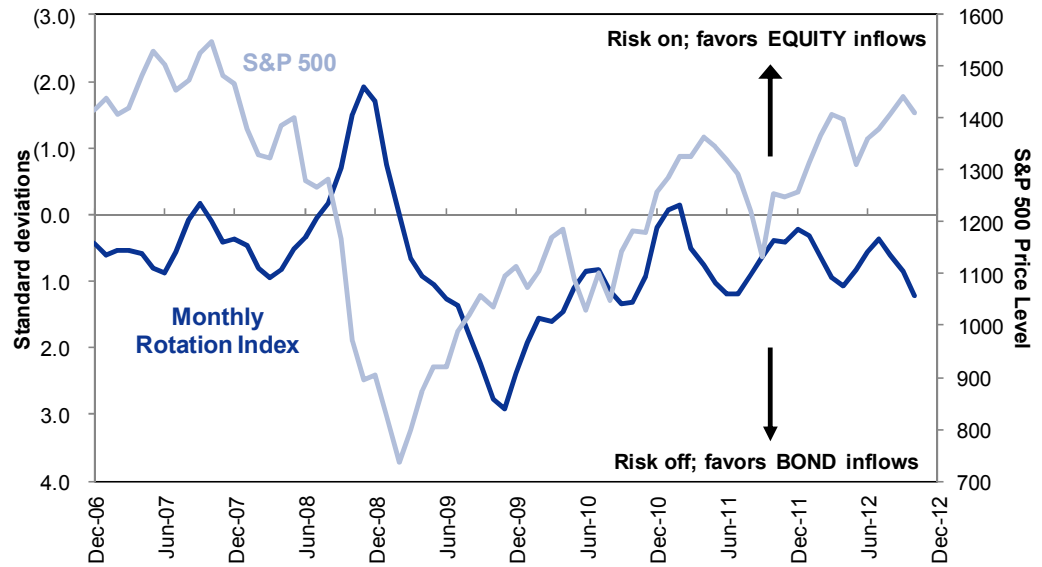
as of October 3, 2012



Source: Goldman Sachs Global ECS Research.

**Retail investors are materially underweight equities** relative to the 2003-2007 bull market and about in-line with the average during the past 20 years. Today, just 63% of mutual fund holdings are in equities versus 71% from 2003-2007 and 63% on average since 1992. The Goldman Sachs Rotation Index monitors retail investors' risk tolerance based on inflows across the mutual fund risk spectrum and has favored conservative bond flows for the past three years.

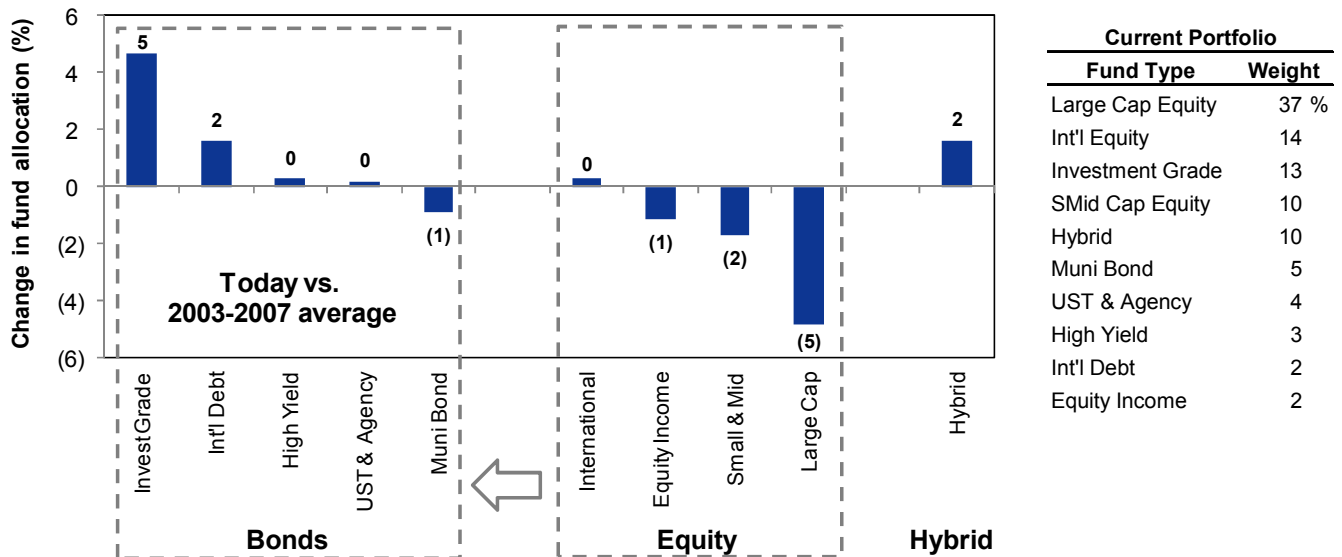
**Exhibit 20: Retail investors have been moderately more risk tolerant the past 2 years**  
as of October 3, 2012



Source: Lipper/AMG, and Goldman Sachs Global ECS Research.

**A shift back towards historical fund allocation could shift \$1.1 trillion into equity funds and \$500 billion out of IG funds.** If retail portfolio allocation returns to the average from 2003 to 2007, and based on the \$11.3 trillion dollars currently invested, retail investors would be large buyers of US equities and sellers of high grade and international bond funds. We are not forecasting such a large rotation in the short-term and these portfolio allocations could rebalance through performance and future flows as opposed to buying and selling of current holdings but this basic analysis does provide some idea of how much retail investors have changed their investment portfolios since the financial crisis.

**Exhibit 21: Retail investors own more IG bond funds and less large cap equity**  
as of October 3, 2012

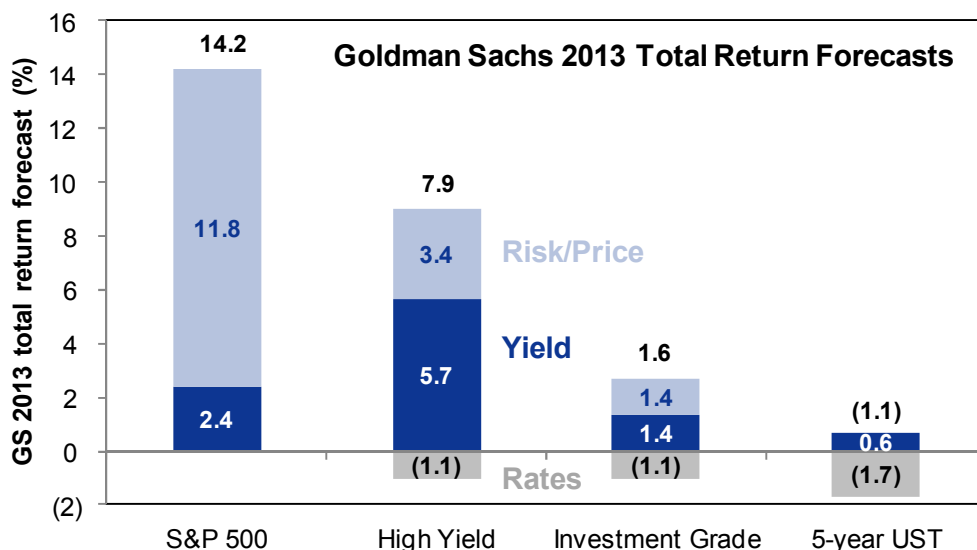


Source: Lipper/AMG, and Goldman Sachs Global ECS Research.

**High yield bonds still provide attractive potential return that may reduce the urgency of investors to focus on stocks.** Assuming interest rates rise modestly and HY credit spreads tighten by about 115 bp back to 450 bp we estimate a total return of about 800 bp in HY mutual funds in 2013. Our year-end 2013 S&P 500 price target of 1575 implies more than 14% total return from the current 1409 and including a 2.4% dividend yield. The 600 bp gap in potential return is wide but perhaps not large enough to push investors aggressively into equities given a still uncertain growth picture and a large yield differential of nearly 350 bp in favor of HY bonds. All bond estimates assume a 5-year benchmark.

**The choice of equity vs. corporate bonds boils down to a preference between yields vs. upside return potential.**

**Exhibit 22: Strong S&P 500 returns may not be high enough vs. bonds to shift flows**  
 Estimated 2013 total return of US asset classes as of November 23, 2012



Source: Lipper/AMG, and Goldman Sachs Global ECS Research.

In addition to straight-forward index implementation, equity options and single stocks provide very attractive ways for cross-asset investors to gain equity exposure. We recommend (1) buying medium-term S&P 500 call options (page 12) or (2) the Goldman Sachs Bond Buyers Equity Basket. In addition, our basket of stocks with high interest rate sensitivity (GSTHUSTY) is designed to outperform when 10-year US Treasury yields rise.

**At the single stock level Goldman Sachs Investment Research has introduced the Bond Buyers Equity Basket** of high quality companies with relatively secure business models and persistently high rates of cash returns. Yield on those stocks is then increased using full collateralized put selling to alter their payout structure and generate income. In combination this strategy offers investors 5.5% yield on a diversified portfolio of 100 companies with strong un-levered free cash flow, balance sheet and secure business models. See *Bond Buyers Equity Basket* (November 14, 2012) for more detail.

## Money flow: We forecast \$200 billion of potential net equity inflow

**We forecast the US equity market will receive roughly \$200 billion of net equity inflow from individuals, institutional investors, and companies in 2012.**

**Households directly own 35% of the US equity market.** However, the total effective household ownership is much higher when combined with indirect ownership in the form of mutual funds, pension funds and insurance policy holdings.

**We forecast a net outflow of \$475 billion from retail and other owners in 2013.** Our net outflow expectation follows the pattern of the past decade with direct ownership declining and indirect ownership rising (retirement accounts, for example). Since 2009, mutual fund investors have shifted their assets up the risk curve out of money market mutual funds and into bond funds and ETFs. Inflows through indirect equity ownership (401K accounts, for example) reduce the market impact of direct equity outflows.

Historically, the Household category represents a plug for all assets not classified into other classes and includes more than just retail investors. The sector also includes but is not limited to non-profits, domestic hedge funds, private equity funds, and personal trusts.

**We forecast net equity inflows of \$75 billion from mutual funds, retirement funds and life insurance companies.** This amount includes contributions to, and asset re-allocation within, defined benefit pension funds, defined contribution pension funds, and government retirement funds. In recent years, retirement fund assets have shifted out of direct equity allocations into indirect equity ownership through mutual funds. We expect roughly \$75 billion of net inflows into US equity-related ETFs.

**We forecast \$75 billion of inflows from international investors in 2013, consistent with the 10-year average.** International investors own 13% of the US equity market, the highest percentage in the 67-year history of the data series.

**We expect corporations to purchase \$450 billion of US equity through buybacks and cash M&A (net of share issuance).** Spending on share buybacks and M&A will have a direct, positive impact on the US equity market. We expect cash M&A will rise by 15% in 2013 (includes purchases of foreign and private companies). We forecast no change in the volume of buybacks from 2012 levels.

### Exhibit 23: We expect \$200 billion of net inflows into the US equity market during 2013

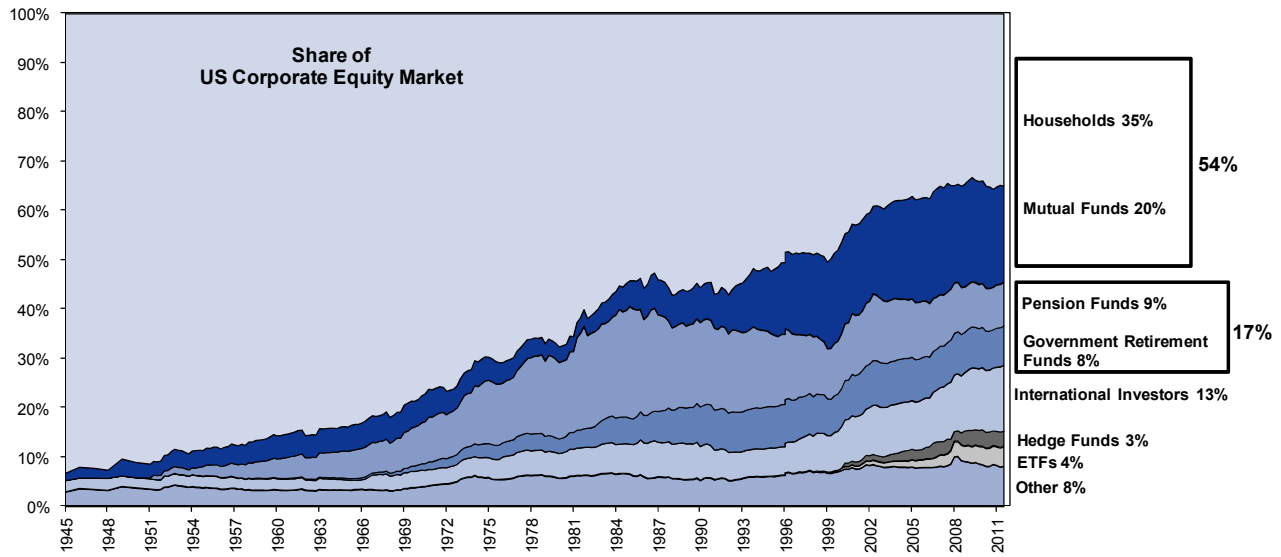
as of November 23, 2012; Flow of Funds summary statistics through 2Q 2012

in \$ billions Category	Net Equity Inflow / (Outflow)								
	2005	2006	2007	2008	2009	2010	2011	2012 Ann.	2013E
Retail / Other	\$ (366)	\$ (579)	\$ (842)	\$ (99)	\$ 91	\$ (136)	\$ (174)	\$ (203)	\$ (475)
Corporations	345	589	802	(120)	(1)	247	434	464	450
Mutual Funds	130	131	91	(38)	86	43	2	(7)	125
Pension Funds	(48)	(156)	(195)	(183)	(193)	(76)	(90)	(114)	(100)
Life Insurance	66	71	84	82	33	46	38	35	50
Foreign Investors	57	96	218	105	156	73	(38)	(25)	75
ETFs	50	68	137	154	71	88	72	87	75
<b>TOTAL</b>	<b>\$ 234</b>	<b>\$ 221</b>	<b>\$ 296</b>	<b>\$ (100)</b>	<b>\$ 242</b>	<b>\$ 283</b>	<b>\$ 243</b>	<b>\$ 237</b>	<b>\$ 200</b>

Source: Federal Reserve, Haver and Goldman Sachs Global ECS Research.



**Exhibit 24: Ownership of the domestic equity market since 1945**  
as of September 20, 2012

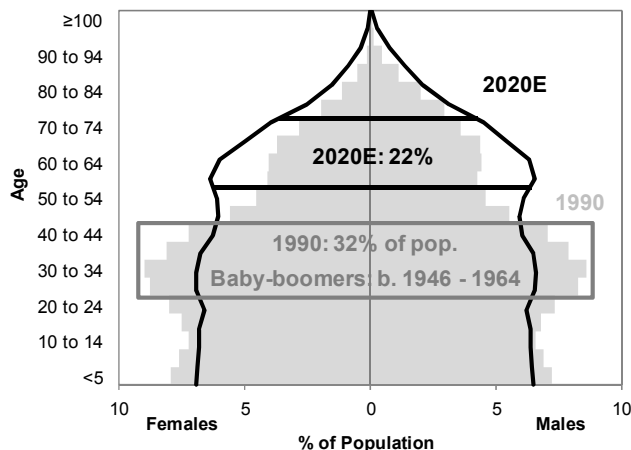


Source: Federal Reserve, Haver and Goldman Sachs Global ECS Research.

**Demography represents a source of uncertainty when forecasting long-term demand for equities.** Retiring baby-boomers could spark a massive disinvestment in equities which would compress valuations and could constrain stock returns. On the other hand, greater longevity means the next generation of retirees may choose to liquidate equity holdings at a slower pace to reduce the risk that they outlast their savings. In ten years, roughly 17% of the US population will be more than 65 years old (up from 13% today).

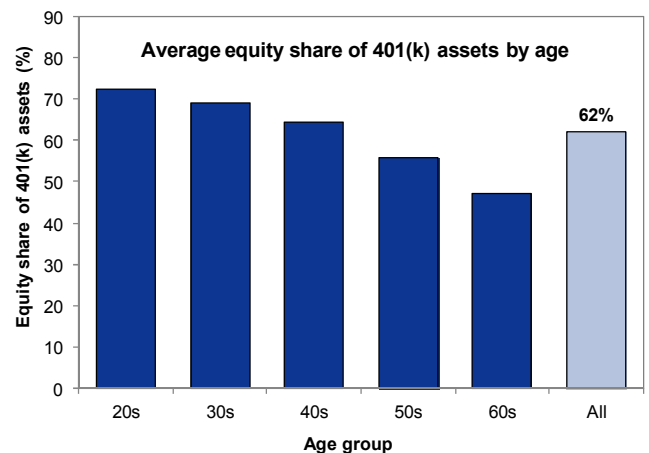
Analysis of 401K retirement fund asset allocation by age cohort shows that allocation to equities falls by roughly 15 percentage points from an average of 64% when individuals are in their 40s to 47% when individuals are in their 60s. Measured asset re-allocation along this glide path would not translate into the avalanche of equity outflow that some forecasters fear will occur as baby-boomers retire. A reduction in equity allocation when individuals are in their 60s does not mean stock holdings fall to zero. Furthermore, accumulated baby-boomer assets may be bequeathed to a younger generation, leading to less selling pressure than many believe.

**Exhibit 25: Distribution of US population by age**  
as of May 17, 2012



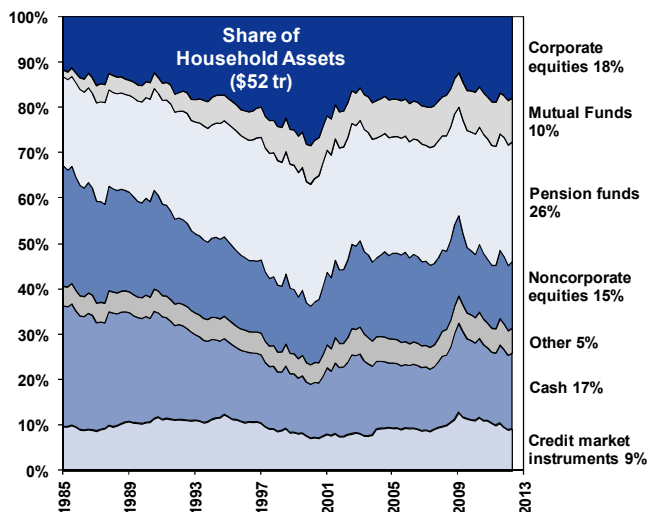
Source: Census Bureau and Goldman Sachs Global ECS Research.

**Exhibit 26: Equity share of 401k assets by participant age**  
as of 2010

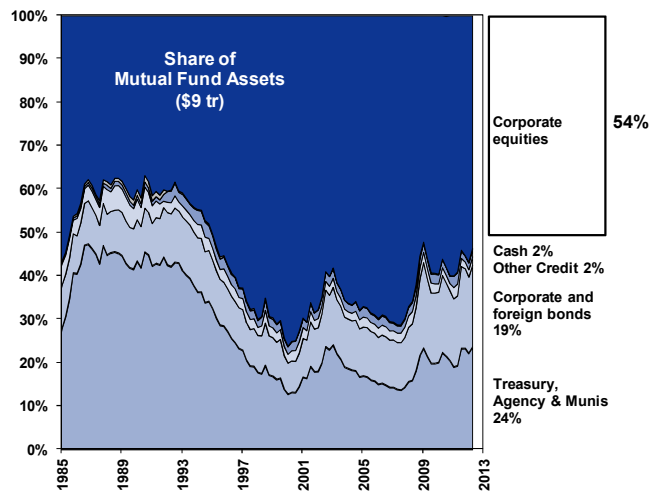


Source: ICI and Goldman Sachs Global ECS Research.

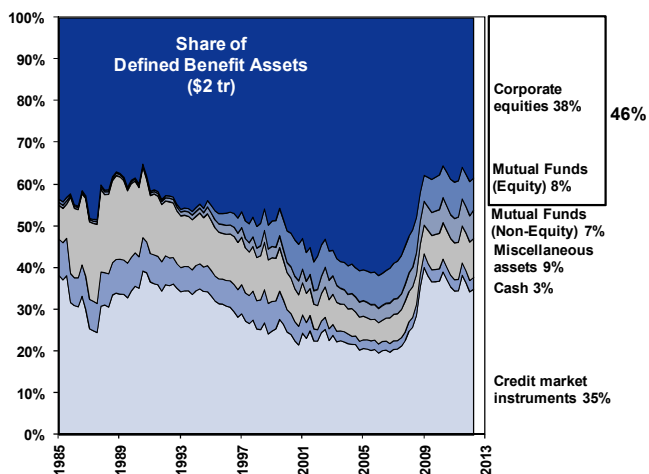
**Exhibit 27: Household Financial Asset Share**  
holdings as of June 30, 2012



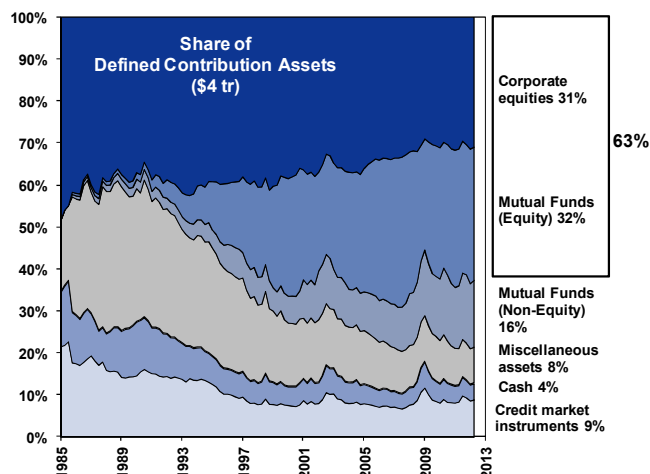
**Exhibit 28: Mutual Funds Asset Share**  
holdings as of June 30, 2012



**Exhibit 29: Defined Benefit Asset Share**  
holdings as of June 30, 2012



**Exhibit 30: Defined Contribution Asset Share**  
holdings as of June 30, 2012



Source: Federal Reserve and Goldman Sachs Global ECS Research.

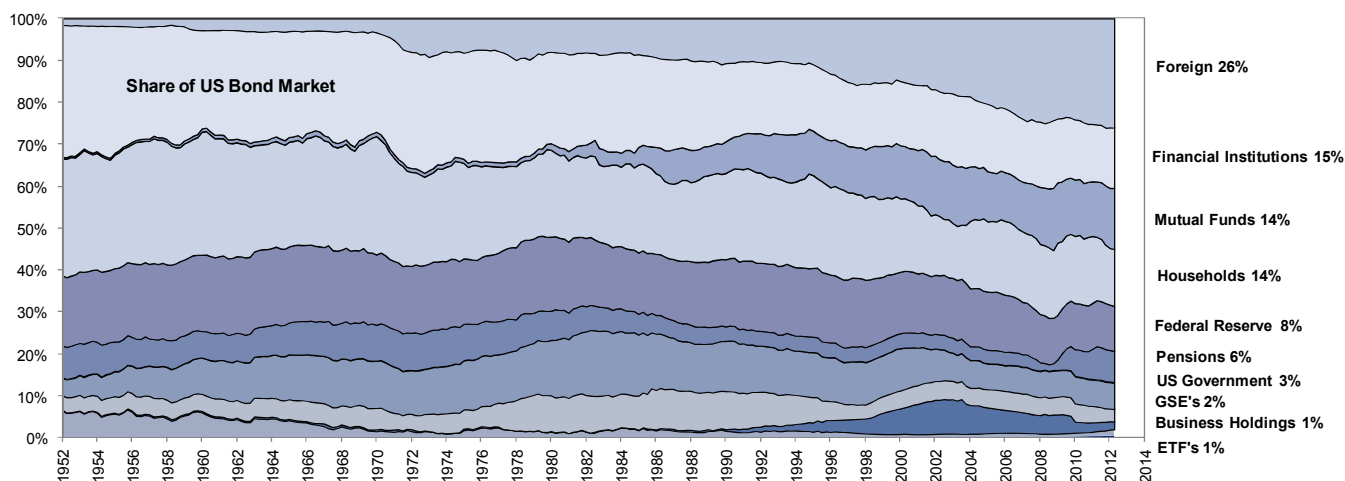
Source: Federal Reserve and Goldman Sachs Global ECS Research.

**The asset allocations of US households, mutual funds, and defined benefit and defined contribution pension plans appear in Exhibits 27-30.** Their equity holdings total approximately \$16 trillion and the equity allocations range from about 37% to 63%.

**We studied the ownership of the US bond market to identify the pockets of capital that might shift into equities over time.** The Federal Reserve data show the current size of the bond market approximates \$34 trillion. The total includes Federal debt outstanding, municipals, corporate and foreign issues, and debt issued by GSEs. Many of these holdings are unlikely to shift into equities. For example, the Federal Reserve owns \$1.7 trillion of federal debt and that will not be re-allocated into common stocks.

**Mutual funds, households, and pension funds represent three investor categories where asset re-allocation from bonds into stocks might occur over time.** Collectively these three groups own \$11.7 trillion of bonds, or roughly 1/3 of the total bond market. When re-allocations occur they typically take place slowly. But the magnitude can be significant. Mutual funds own nearly \$5 trillion of bonds, including \$1.8 trillion in corporate and foreign bonds. Households directly own \$4.7 trillion of bonds, with almost \$2 trillion in corporate and foreign issues. Finally, pension funds own about \$2 trillion of bonds.

**Exhibit 31: Ownership of the bond market since 1952 (Federal, Municipals, GSE and Corporate bonds)**  
as of September 20, 2012



Note: Financial Institutions includes broker-dealers, ABS issuers, depository institutions, credit unions, finance / funding / holding entities, and banks in US territories.  
Source: Federal Reserve, Haver and Goldman Sachs Global ECS Research.

**Exhibit 32: Anatomy of the bond market (Federal, Municipals, GSE and Corporate bonds)**  
as of September 20, 2012

	US Credit Market (Billions USD)						US Credit Market (% of Holdings by Investor Type)				
	Federal	Municipal	Corporate	GSE	Total	Percent	Federal	Municipal	Corporate	GSE	Total
Financial Institutions	\$531	\$361	\$1,976	\$2,107	\$4,976	15 %	11 %	7 %	40 %	42 %	100 %
Foreign	5,292	89	2,445	1,061	8,887	26	60	1	28	12	100
<b>Mutual Funds</b>	<b>865</b>	<b>940</b>	<b>1,795</b>	<b>1,362</b>	<b>4,962</b>	14	17	19	36	27	100
<b>Households</b>	<b>878</b>	<b>1,810</b>	<b>1,949</b>	<b>7</b>	<b>4,644</b>	14	19	39	42	0	100
<b>Pensions</b>	<b>795</b>	<b>8</b>	<b>770</b>	<b>541</b>	<b>2,114</b>	6	38	0	36	26	100
Insurance Companies	259	450	2,484	475	3,668	11	7	12	68	13	100
ETF's	67	11	136	0	213	1	32	5	64	0	100
GSE's	58	19	227	342	647	2	9	3	35	53	100
Federal Reserve	1,660	0	0	946	2,606	8	64	0	0	36	100
US Government	520	12	148	366	1,046	3	50	1	14	35	100
Business Holdings	101	26	28	334	488	1	21	5	6	68	100
<b>Total</b>	<b>\$11,026</b>	<b>\$3,726</b>	<b>\$11,957</b>	<b>\$7,542</b>	<b>\$34,250</b>	<b>100 %</b>	NM	NM	NM	NM	NM

Note: Financial Institutions includes broker-dealers, ABS issuers, depository institutions, credit unions, finance / funding / holding entities, and banks in US territories.  
Source: Federal Reserve, Haver and Goldman Sachs Global ECS Research.

**A \$1 trillion shift in assets out of bonds would represent about 9% of the fixed-income holdings of these three investor categories.** If the funds were to be allocated to equities, it would equate to about 6% of the outstanding public equity market.

**The motivation to re-allocate assets can often be reduced to risk and reward.**

Performance, volatility, and the risk of potential future loss are all factors. We highlighted previously the significant capital loss that would result from owning US Treasuries when interest rates normalize. Goldman Sachs Economics forecasts only a modest rise in interest rates during 2013, but it anticipates further increases over the next several years. We also forecast that US stocks will almost certainly outperform bonds over the next decade given the starting point in relative valuation between the two asset classes.

**Strong bond returns coupled with the high drawdown of equities during the past few years may explain why some investors have been reluctant to re-allocate assets from bonds into stocks.** Drawdown in the S&P 500 during 2010 and 2011 was 16% and 20%, while YTD it has been 10% compared with a median drawdown since 1970 of 12%. A stable growth profile for the economy and equity markets could prompt some re-balancing.

## Cash uses: How the S&P 500 will spend money in 2013 and 2014

**We forecast total capital usage by S&P 500 firms will rise by 5% to \$1.9 trillion in 2013, slightly below the high reached in 2007.** We expect S&P 500 firms will increase spending in all categories except share repurchases. We expect cash M&A will post the fastest growth, rising by 15% in 2013. Despite looming tax hikes, we expect dividends will grow by 11% in 2013.

**Despite the high cash positions and open credit markets, managements have been reluctant to expand business given the uncertain growth environment.** S&P 500 non-Financials firms hold almost \$1.2 trillion in aggregate cash balances. The cash/asset ratio rose to an all time high of 11.2% in late 2011 and now stands at 10.7%.

**Capex, R&D, and dividend spending are at all-time highs.** In the four quarters ending 2Q 2012, S&P 500 companies spent \$816 billion on capex and R&D and \$271 billion on dividends. Cash acquisition and share repurchase spending remain below 2007 highs.

**Investing for growth will account for 61% of cash spent by S&P 500 firms in 2013.** We anticipate a 6% rise in spending for growth. A slightly increased allocation to M&A will take priority over spending on capex and R&D given current below-average levels of capacity utilization. An eventual reduction in uncertainty and improved CEO confidence coupled with low borrowing costs will also support M&A activity.

**We estimate S&P 500 firms will allocate 39% of capital spending to buybacks and dividends in 2013 similar to the ratio of the last three years.** However, the dividend growth rate will be affected by the dividend tax rate. A large gap in investment tax rates may restrain dividend growth and push firms to return more cash through buybacks.

**Historically high cash balances, a benign credit environment and compelling IRRs make M&A an attractive proposition. One way for investors to capture this theme is the M&A Candidates Basket created by Goldman Sachs Tactical Research (Bloomberg ticker: <GSRHACQN>).** Our analysts assess the strategic nature of company assets and rank the probability of acquisition on a scale of 1 to 4. The basket includes stocks our analysts believe have more than a 15% chance of M&A activity over the next twelve months. See *M&A: A Resurgence on the Horizon* (March 23, 2012) for more details.

### Exhibit 33: US Portfolio Strategy S&P 500 capital usage forecasts

\$ Billions	2007	2008	2009	2010	2011	2012E	2013E	2014E
<b>Capital Usage</b>								
Capital Expenditures	\$517	\$567	\$446	\$487	\$580	\$634	\$648	\$671
Research & Development	186	195	169	180	195	212	224	238
Cash Acquisitions	269	180	115	186	225	231	266	301
Share Buybacks (a)	639	367	146	290	405	405	405	446
Dividends	271	266	239	226	256	300	334	361
<b>Total Capital Usage</b>	<b>\$1,882</b>	<b>\$1,574</b>	<b>\$1,115</b>	<b>\$1,369</b>	<b>\$1,661</b>	<b>\$1,782</b>	<b>\$1,877</b>	<b>\$2,016</b>
<b>% of Year/Year Growth</b>								
<b>Capital Usage</b>								
Capital Expenditures	4 %	10 %	(21)%	9 %	19 %	9 %	2 %	4 %
Research & Development	6	4	(13)	7	9	8	6	6
Cash Acquisitions	16	(33)	(36)	62	20	3	15	13
Share Buybacks	29	(43)	(60)	98	40	0	0	10
Dividends	14	(2)	(10)	(6)	13	17	11	8
<b>Total Capital Usage</b>	<b>15 %</b>	<b>(16)%</b>	<b>(29)%</b>	<b>23 %</b>	<b>21 %</b>	<b>7 %</b>	<b>5 %</b>	<b>7 %</b>

(a) TARP repayments of approximately \$125 bil in 2009, \$50 bil 2010, and \$50 bill in 2011 excluded from share buyback totals

Source: Compustat and Goldman Sachs Global ECS Research.

**We expect total capital usage to increase by 9% in 2012 and grow by 5% and 7% in 2013 and 2014, respectively. Our detailed projections are described below.**

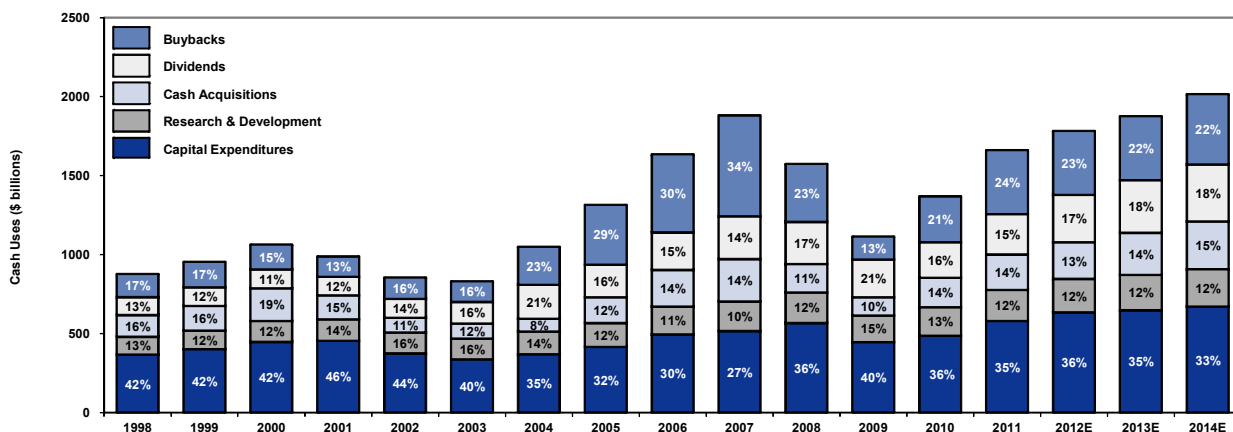
**In recent years, slow sales growth, low capacity utilization, and high levels of uncertainty have discouraged investment spending.** We expect investment spending as a percentage of total capital usage to remain at 61% with an emphasis on acquisitions.

- Capital Expenditures and Research & Development (46% of total in 2013).** We forecast S&P 500 capex will rise by 2% in 2013 and by 4% in 2014 and R&D will rise by 6% in both 2013 and 2014. These projections constitute a slowdown in capex and R&D growth. We expect the level of capex and R&D spending will reach new highs in 2012 at \$634 billion and \$212 billion, respectively. We model capex and R&D on the basis of their historical relationships to sales growth.
- Cash M&A (14% of total in 2013).** We estimate that S&P 500 cash M&A will grow by 15% in 2013 and 13% in 2014. The cash component of US M&A has averaged 42% since 1995, ranging from 21% in 2000 to 68% in 2011. We expect the cash component of total US M&A to remain in the high end of that range in 2013 due to high levels of cash on balance sheets and low borrowing costs. We model cash M&A on the basis of its historical relationship to mid-cap earnings growth.

**As the financial system has stabilized, S&P 500 firms have begun to return more cash to shareholders through dividends and share repurchases.** We expect cash returned to shareholders as a share of total capital usage to remain at 39%.

- Dividends (18% of total in 2013).** We estimate that dividends will grow by 11% in 2013 and 8% in 2014. Our estimates are based on our top-down earnings growth model and projections for future dividend payout levels. We assume the dividend tax rate will rise from the current 15% to roughly 25% in 2013 but not to 43.4% as scheduled under current law. If the dividend tax rate is higher, dividend growth will be curtailed and more cash will be returned via buybacks.
- Share Repurchases (22% of total in 2013).** Buybacks in 2012 are flat versus last year, and we expect no growth in 2013 followed by 10% growth in 2014. Our forecasts are based on growth in announced buyback programs and historical growth trends. Buybacks peaked at \$639 billion in 2007 and fell to \$146 billion in 2009. Buybacks surged over the following two years, rising to \$405 billion in 2011.

**Exhibit 34: We expect S&P 500 firms will allocate cash usage 61% for growth and 39% for return to shareholders**



Use of cash:	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012E	2013E	2014E
<b>Invest for Growth</b> (capex + R&D + M&A)	70%	71%	74%	75%	70%	68%	57%	55%	55%	52%	60%	65%	62%	60%	60%	61%	60%
<b>Return to Investors</b> (buybacks + dividends)	30%	29%	26%	25%	30%	32%	43%	45%	45%	48%	40%	35%	38%	40%	40%	39%	40%

Source: Compustat and Goldman Sachs Global ECS Research.

## Sector allocation: Moderately cyclical with growth on the horizon

Recent stability in US economic data along with our US Economics forecast for steady, if uninspiring, real GDP growth favors a modest cyclical bias in our sector allocation. However, with the economic recovery maturing and concerns about the vitality of peak margins our recommended sector weights are not out-right cyclical.

We recommend investors position **Overweight Materials, Information Technology and Industrials; Underweight Consumer Staples, Health Care and Telecom Services; and Neutral Financials, Energy, Utilities and Consumer Discretionary.**

### Exhibit 35: Goldman Sachs recommended sector weights

as of November 23, 2012. Previously rebalanced on January 30, 2012.

Sectors	Sector Weightings			Alpha	Return		
	Goldman Sachs Sector Weightings	S&P 500 Weight	GS Weighting	Alpha YTD	YTD	Total Return 3M	6M
Information Technology	Overweight	19 %	300 bp	0 bp	12 %	19 %	11 %
Industrials		10	200	(6)	9	8	4
Materials		4	200	(6)	8	7	1
Energy	Neutral	11	0	(12)	2	3	(6)
Consumer Discretionary		11	0	(14)	21	15	10
Financials		15	0	0	22	15	8
Utilities		3	0	(1)	(6)	1	(2)
Telecom Services	Underweight	3	(100)	(8)	14	15	6
Health Care		12	(300)	(7)	15	11	4
Consumer Staples		11	(300)	(12)	9	8	3
<b>S&amp;P 500</b>		<b>100 %</b>	<b>0 bp</b>	<b>(66)bp</b>	<b>12 %</b>	<b>11 %</b>	<b>5 %</b>

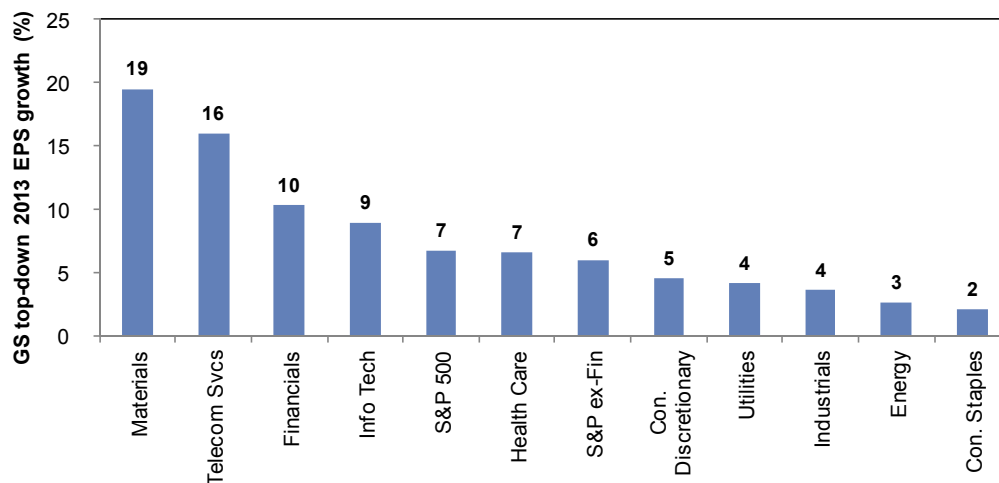
Source: FactSet and Goldman Sachs Global ECS Research.

To inform our sector allocation decisions we incorporate a combination of (1) our top-down forecast earnings growth; (2) consensus revision momentum; (3) trailing performance; and (4) relative valuation all in the broader context of the US business cycle. No sector meets all of the criteria but collectively we believe they will determine relative sector performance.

**Raw earnings growth favors Materials, Telecom Services, and Financials** where we forecast at least 10% EPS growth in 2013. However, strong Telecom performance suggests investors already expect strong fundamentals and we recommend Underweight allocation.

### Exhibit 36: We forecast highest EPS growth in Materials and lowest for Staples in 2013

2013 Goldman Sachs forecast sector operating EPS growth as of October 5, 2012



Source: FactSet and Goldman Sachs Global ECS Research.

**Relative valuation assigns a premium to the more defensive areas of the market:**

Utilities, Consumer Staples and Telecom Services. Information Technology valuation appears lowest on a relative basis and screens below historical average on all six valuation metrics. All other major S&P 500 sectors are within one standard deviation of the 10-year average valuation relative to the market. That split supports a more cyclical bias in sector allocation particularly in an improving US growth environment.

The primary risk to being underweight the more defensive areas of the market is yield given Utilities (4.5%) and Telecom Services (4.8%) are the only sectors with dividend yields above 4.0% and Consumer Staples is the third highest at 2.9%.

**Exhibit 37: Aggregate valuation metrics**

bottom-up consensus valuation, as of November 23, 2012

	EV/ Sales	EV/ EBITDA	Price/ Book	FCF Yield	PEG Ratio	Div Yield	NTM P/E
<b>S&amp;P 500</b>	<b>1.5x</b>	<b>7.7x</b>	<b>2.2x</b>	<b>5.6 %</b>	<b>1.2x</b>	<b>2.3 %</b>	<b>12.8x</b>
Telecom Services	1.9	6.9	2.2	10.0	2.4	4.8	18.5
Consumer Staples	1.3	10.0	3.8	5.3	1.8	2.9	15.7
Consumer Discretionary	1.4	7.9	3.5	5.7	1.1	1.6	15.3
Utilities	NM	8.0	1.5	(0.7)	4.1	4.5	13.9
Materials	1.5	8.3	2.5	3.9	1.3	2.5	13.1
Industrials	1.7	9.3	2.7	6.0	1.1	2.5	13.0
Health Care	1.3	8.3	2.8	7.2	1.5	2.2	13.0
Info Tech	2.1	7.7	3.3	8.2	0.9	1.8	12.0
Energy	1.0	5.1	1.8	0.7	1.5	2.3	11.1
Financials	NM	NM	1.0	NM	1.0	1.9	10.9

Source: Compustat, FirstCall,, and Goldman Sachs Global ECS Research

**Exhibit 38: Standard deviation vs. 10-yr history (Z-Score)**

bottom-up consensus, as of November 23, 2012

	EV/ Sales	EV/ EBITDA	Price/ Book	FCF Yield	P/E	PEG Ratio	Median Z-Score
<b>S&amp;P 500</b>	<b>(0.3)</b>	<b>(1.2)</b>	<b>(0.9)</b>	<b>(0.2)</b>	<b>(1.1)</b>	<b>(0.2)</b>	<b>(0.6)</b>
Info Tech	(1.3)	(1.4)	(0.2)	(2.5)	(1.4)	(1.3)	(1.4)
Financials	NM	NM	(1.2)	NM	(0.2)	(1.0)	(1.0)
Health Care	(0.9)	(0.2)	(0.3)	(0.5)	(0.0)	1.1	(0.3)
Industrials	(1.1)	0.0	1.1	0.8	(0.3)	(0.6)	(0.1)
Energy	(1.1)	(0.6)	(1.0)	1.5	0.5	0.7	(0.1)
Consumer Discretionary	2.3	0.6	2.4	(0.4)	0.0	(0.6)	0.3
Materials	0.4	0.4	0.6	1.5	(0.0)	(0.0)	0.4
Utilities	NM	1.0	(0.0)	0.6	0.6	1.5	0.6
Telecom Services	(0.0)	2.3	2.6	(0.1)	2.0	0.2	1.1
Consumer Staples	2.6	2.1	0.7	(0.1)	2.3	1.8	1.9

Source: Compustat, FirstCall,, and Goldman Sachs Global ECS Research

**Given likely resolution of current policy uncertainty and three month ISM dip below 50 we believe sector performance will mimic the early stages of the business cycle expansion (ISM > 50 and rising) over the next three to six months.** That period typically favors more cyclical sectors (Exhibit 39) our US Economics forecast also supports an extended period of growth, albeit at modest levels.

**Overweight Basic Materials. The sector offers a surprising combination of growth exposure and dividend yield.** Materials is the most sensitive sector to US and global growth expectations and have underperformed the market during a period of unsteady growth in the US, recessionary conditions in Europe, and slowing growth in China. Our outlook suggests improving momentum in the US from 2013 through 2016, stability in Europe, and a return to 8% growth in China that should all benefit growth-sensitive stocks.

Valuation is not a headwind with Materials screening roughly average on both P/E and PEG metrics. In aggregate the dividend yield of the Materials sector is 2.5%, the fourth highest among major S&P sectors. Earnings revision momentum is likely to improve after three very negative months when the sector reached its lowest level vs. the S&P 500 since 2005.

**Overweight Industrials. Stable and positive economic growth in the US and China along with lowered expectations should drive outperformance.** Earnings expectations are down sharply over the past three months with sentiment as weak vs. the S&P 500 as it was in March 2009, suggesting expectations have been re-based. Industrials have outperformed during long business cycle expansions. After a three month dip below 50 the US ISM is poised to remain above 50 for an extended period if US fiscal policy does not de-rail economic growth. Our expectation for a moderate pick-up in China growth should ease fears of a hard landing once new policy makers communicate their intentions.

**Overweight Information Technology. Strong EPS growth and modest valuation drive outperformance in a rising market.** We forecast 9% earnings growth for the S&P 500 Info Tech sector in 2013 and a further 7% growth in 2014. Although our estimates are below

bottom-up consensus they are attractive relative to other sectors. Tech companies grew quarterly revenues 6% year-on-year in 3Q 2012, the strongest among S&P sectors, and we forecast 8% sales growth in 2013 vs. 4% for the index. Efforts by US companies to protect high margins will likely keep spending on technology and software robust in an effort to maximize efficiency gains. In addition, we continue to expect superior dividend growth for the sector as well as cash-rich balance sheets. Risks to our positive view on the Tech sector include exceptionally high margins that have declined by about 50 bp from peak levels and slowing earnings growth although both remain higher than for the S&P 500 as a whole.

**Underweight Telecom Services. Above-average valuation and improving growth should lead the sector to underperform.** Telecom Services stocks are up 21% in the past 12-months vs. the S&P 500 up 18%. We believe a majority of that outperformance has been driven by elevated economic uncertainty and high dividend yield. Yield-focused investors will continue to find Telecom stocks attractive as the sector's 4.8% yield is well in excess of corporate bonds and most equities. However, Telco's 76% dividend payout ratio may not be sustainable longer term. Telecom shares screen at the second most expensive sector on average and carry a notable premium in terms of both P/E and P/B, although, they remain reasonable based on free cash flow yield. As we have noted in the past, defensive areas of the market justifiably garner a valuation premium when growth (measured by the ISM) is slowing. Our forecast for improving US GDP growth should begin to reduce that premium.

**Underweight Consumer Staples. Slow EPS growth, premium valuation and improving growth pose headwinds for relative sector performance.** We forecast Consumer Staples will post the slowest EPS growth among S&P 500 sectors. However, Consumer Staples valuation screens as the most expensive among S&P sectors and includes a particular premium in both P/E and PEG terms. Along with Telecom Services we believe a good deal of that premium has been driven by a combination of defensiveness and attractive dividend yield but declining risk premium (and better economic growth) will be a headwind for the sector's performance in 2013.

**Underweight Health Care. Strong outperformance, spending austerity, and stabilizing growth headwinds.** Health Care stocks have outperformed the S&P 500 by 300 bp in 2012 with the bulk of that excess return since August when the ISM dipped below 50 and the election's outcome resolved lingering Affordable Care Act (ACA) uncertainty. The sector also outperformed the market in 2011 by 1000 bp. While Health Care valuation is not stretched, two years of significant outperformance amid high economic growth uncertainty creates risk for the sector if growth and risk tolerance improve in 2013. In addition, government austerity measures are prevalent around the world and could impact both revenues and margins for companies who generate 60% of sales from government sales.

We recommend Neutral sector allocation due to:

**Energy** – A modest global growth outlook, reasonable valuation, and only 3% EPS growth;

**Consumer Discretionary** – Substantial outperformance, modest EPS growth, and potential headwind from payroll and income taxes along with reduced unemployment benefits;

**Utilities** – Expensive valuation and underperformance during economic expansion; and

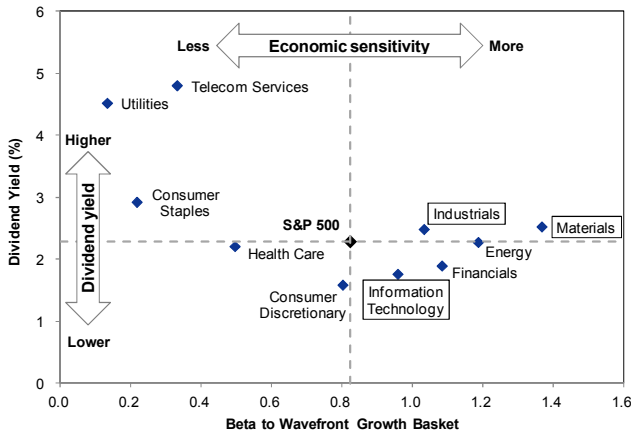
**Financials** – Low interest rates and regulatory concerns balance recovering housing, leverage to US growth, and attractive valuation.

**Risks to our more cyclical sector bias come mainly from growth in Europe and China.**

Continued disappointment in those regions may restrain risk taking and create downside risk to earnings and sales of more exposed sectors. Similarly, if growth is soft, investor preference for yield and safety may persist as a headwind for our allocation. Near-term policy risks may also favor safer areas of the S&P 500 where we recommend underweight.

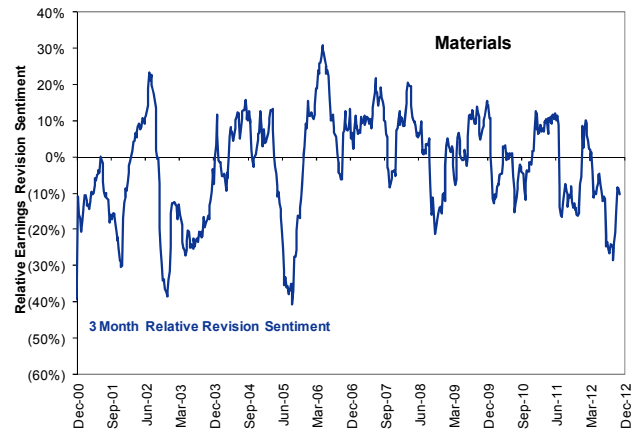


**Exhibit 39: Materials have the highest growth sensitivity**  
Sector beta to growth vs. dividend yield



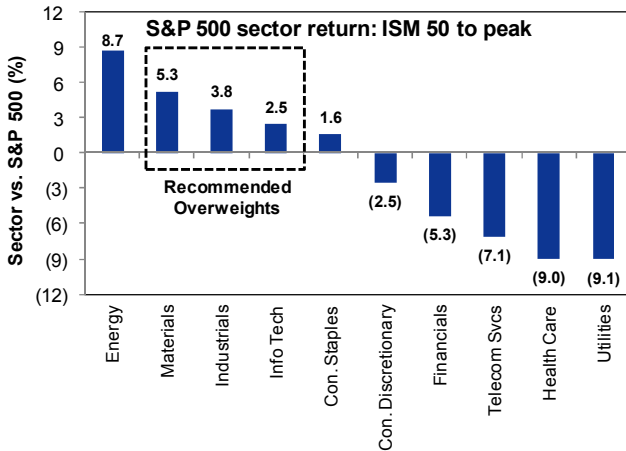
Source: Factset and Goldman Sachs Global ECS Research

**Exhibit 40: Negative EPS sentiment on Materials**  
Materials revision sentiment vs. S&P 500 sentiment



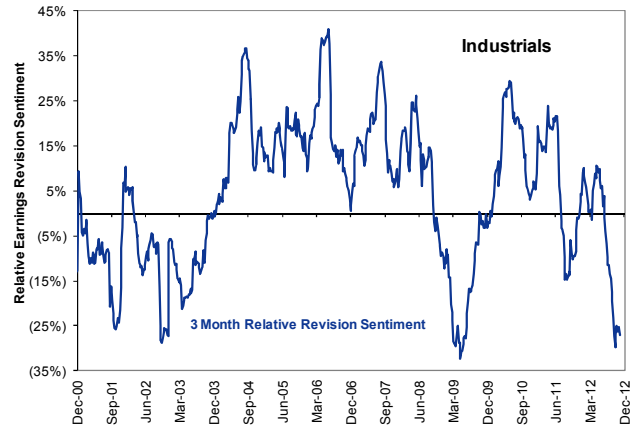
Source: Factset, ISM, and Goldman Sachs Global ECS Research

**Exhibit 41: ISM above 50 and rising favors cyclicals**  
Median sector performances vs. S&P 500 ISM > 50 and rising



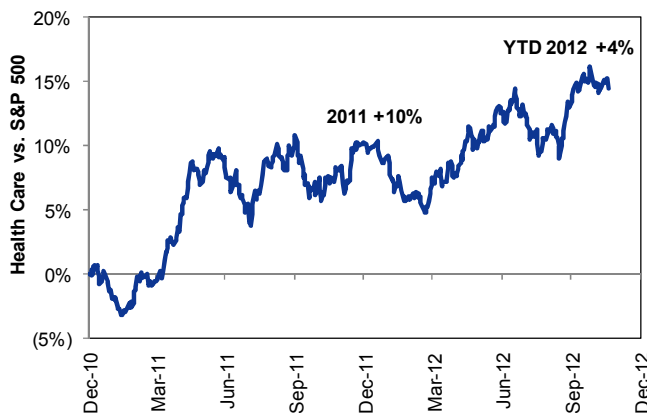
Source: Factset and Goldman Sachs Global ECS Research

**Exhibit 42: Negative EPS sentiment on Industrials**  
Industrials revision sentiment vs. S&P 500 sentiment



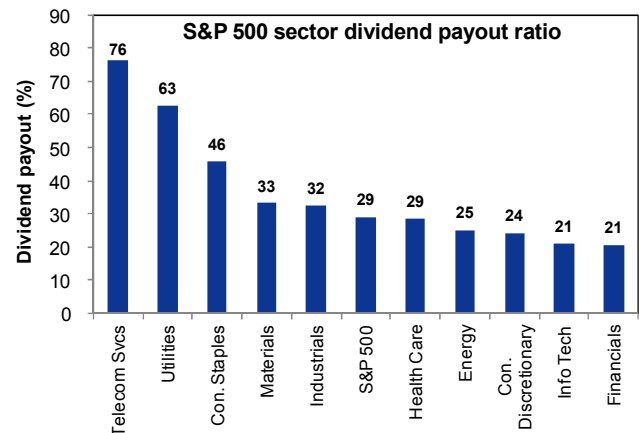
Source: Factset and Goldman Sachs Global ECS Research

**Exhibit 43: Health Care on 2-year run of outperformance**  
S&P 500 Health Care vs. Market 12/31/10 to present



Source: Factset and Goldman Sachs Global ECS Research

**Exhibit 45: Telecom dividend payout ratio very high**  
Aggregate dividend payout ratio of S&P 500 sectors



Source: Factset and Goldman Sachs Global ECS Research

## Risk-reward in action: EPS and price ‘Sharpe’ ratios (<GSTHEPSR>)

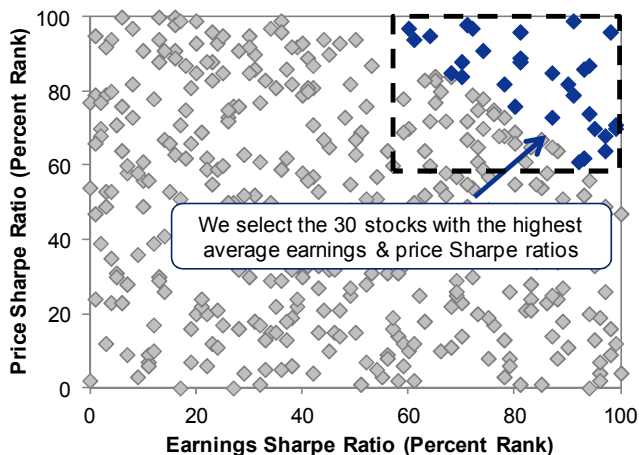
**We recommend investors buy S&P 500 stocks with the highest combined earnings and price ‘Sharpe’ ratios.** We identify 30 stocks that offer the best combination of high risk-adjusted EPS growth and risk-adjusted price gains based on consensus estimates. The median stock in our basket offers above average EPS growth through 2014 with half the earnings growth uncertainty of the typical S&P 500 stock, while also offering superior risk-adjusted potential return to the consensus price target after adjusting for implied volatility.

**We screen the S&P 500 index across two axes to generate our list of stocks.** First, we identify stocks offering strong consensus EPS growth between LTM earnings and 2014 EPS estimates when adjusted for the standard deviation of the consensus growth path (i.e., a high earnings growth ‘Sharpe’ ratio). Second, we look for stocks offering considerable upside to the 12-month consensus price target when adjusted for 6-month, option implied volatility (i.e., a high price ‘Sharpe’ ratio). We continue to publish and monitor our sector-neutral basket of high price Sharpe Ratio stocks (Bloomberg ticker: <GSTHSR>).

Each S&P 500 constituent is then assigned a percentile rank for both measures. We average the individual scores on each axis to reach a composite score. **The 30 stocks with the highest composite scores across their earnings and price ‘Sharpe’ ratios, regardless of sector or rating, are selected as constituents.** Acquisition candidates, stocks with fewer than five analysts contributing to estimates, or those for which we are unable to calculate an earnings or price ratio are excluded.

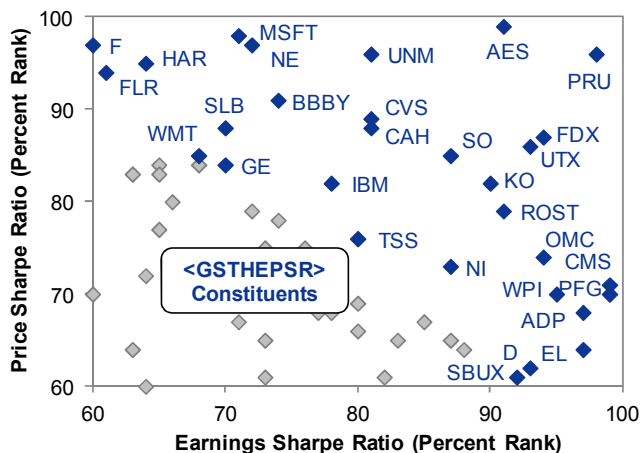
**We believe stocks with a high visibility of earnings growth coupled with strong risk-adjusted return potential will perform well in an improving yet still uncertain economic environment.** We have long advocated the use of risk-adjusted upside to the consensus price target as an approach to stock selection (through our High Sharpe Ratio basket). We believe overlaying a growth score at this time in addition to the appreciation potential can be valuable for investors. Many firms are struggling to achieve top line revenue growth given weak foreign economic activity. Margins stand at record high levels but have now been range bound for the last seven quarters. Accordingly, we focus on stocks where analysts have high conviction regarding EPS growth and where the shares are also expected to post strong risk-adjusted price gains. We believe this stock selection approach is both tactically and structurally appealing in the current market environment.

**Exhibit 46: Scatter of price and earnings percentile ranks**  
as of November 23, 2012



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

**Exhibit 47: Scatter of highest scoring S&P 500 stocks**  
as of November 23, 2012



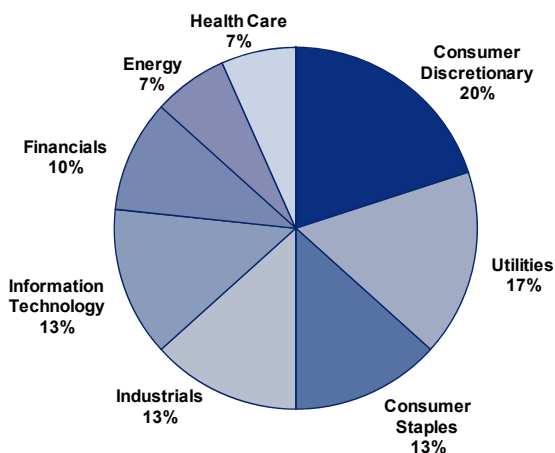
Source: I/B/E/S, FactSet, and Goldman Sachs Global ECS Research.

**Exhibit 48: S&P 500 stocks with highest combined earnings growth and price return 'Sharpe' ratios (<GSTHEPSR>)**  
as of November 23, 2012

Company	Ticker	Sector	Market		GS 'Sharpe' Ratio Components				Avg Pctl.
			Cap (\$ bil)	P/E NTM	EPS Growth		Price Return		
					2YR CAGR	Std Dev.	12M Upside	6M Vol.	
Prudential Financial	PRU	Financials	\$24	6.9x	18 %	1 %	31 %	28 %	97 %
AES Corp.	AES	Utilities	8	8.5	8	1	34	24	95
FedEx Corp.	FDX	Industrials	28	13.1	19	2	20	23	90
United Technologies	UTX	Industrials	72	14.2	11	1	17	20	89
Unum Group	UNM	Financials	6	6.3	9	1	23	21	89
Coca-Cola Co.	KO	Consumer Staples	171	17.8	10	1	12	15	86
Southern Co.	SO	Utilities	37	15.0	8	1	12	14	86
Ross Stores	ROST	Consumer Discretionary	13	14.7	15	1	20	26	85
Principal Financial Group	PFG	Financials	8	8.4	22	1	17	26	85
CVS Caremark Corp.	CVS	Consumer Staples	58	12.6	15	2	17	19	85
Cardinal Health	CAH	Health Care	14	11.4	13	2	17	19	85
Noble Corp.	NE	Energy	9	9.0	68	10	38	32	85
Microsoft Corp.	MSFT	Information Technology	232	9.0	19	3	28	22	85
CMS Energy Corp.	CMS	Utilities	6	14.4	8	0	10	15	84
Omnicom Group	OMC	Consumer Discretionary	13	12.5	13	1	14	20	84
Bed Bath & Beyond	BBBY	Consumer Discretionary	14	12.4	15	2	27	28	83
Automatic Data Processing	ADP	Information Technology	27	18.9	13	1	10	16	82
Watson Pharmaceuticals	WPI	Health Care	11	12.3	23	2	15	23	82
Estee Lauder	EL	Consumer Staples	23	22.2	20	1	16	26	81
International Bus. Machines	IBM	Information Technology	221	12.0	12	2	14	18	80
NiSource Inc.	NI	Utilities	7	15.5	10	1	12	17	80
Harman Intl Industries	HAR	Consumer Discretionary	3	10.2	33	6	39	37	79
Schlumberger Ltd.	SLB	Energy	94	15.2	20	3	24	27	79
Ford Motor Co.	F	Consumer Discretionary	42	7.5	19	4	32	29	78
Total System Services	TSS	Information Technology	4	15.9	13	2	15	20	78
Fluor Corp.	FLR	Industrials	9	13.2	13	3	31	30	78
Dominion Resources	D	Utilities	29	15.6	10	1	8	14	77
General Electric	GE	Industrials	222	12.8	14	2	17	21	77
Starbucks Corp.	SBUX	Consumer Discretionary	39	23.8	33	3	16	27	77
Wal-Mart Stores	WMT	Consumer Staples	236	13.5	12	2	13	16	77
<b>Basket Median</b>			<b>\$24</b>	<b>13.0x</b>	<b>14 %</b>	<b>2 %</b>	<b>17 %</b>	<b>22 %</b>	<b>83 %</b>
<b>S&amp;P 500 Median</b>			<b>12</b>	<b>14.0</b>	<b>13</b>	<b>3</b>	<b>11</b>	<b>25</b>	<b>50</b>

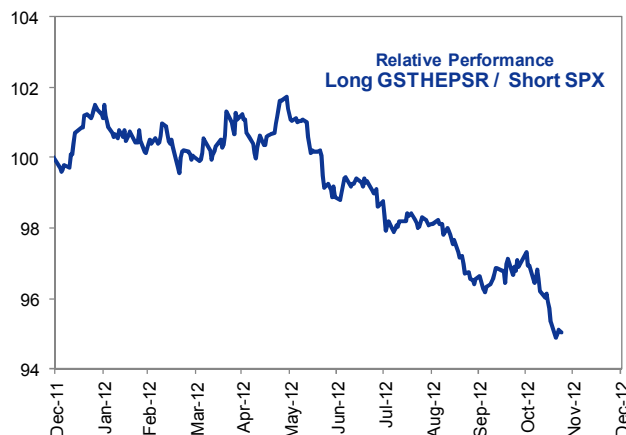
Source: I/B/E/S, FactSet, and Goldman Sachs Global ECS Research.

**Exhibit 49: Sector distribution of GSTHEPSR**  
as of November 23, 2012



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

**Exhibit 50: List attractive following YTD performance**  
as of November 23, 2012



Source: Compustat and Goldman Sachs Global ECS Research.

## US equities in a global context: Seek BRICs revenue exposure

**At 12% the US ranks last based on prospective 12-month equity returns behind Japan (20%), Asia ex-Japan (17%), and Europe (13%).** These returns are in base currency.

**We expect earnings growth to drive outperformance in Japan and Asia ex-Japan.**

Reacceleration of global growth, and Asian economies in particular, should provide a boost to those markets, where we expect the strongest 12-month base-currency returns.

Undemanding valuation and support from government policy should also act as tailwinds.

**Earnings growth will also drive European equity returns as policy-induced valuation expansion has largely taken place.** European returns reflect expectations of strong earnings growth as the region moves to exit from recession by 2014, aided by modest further multiple expansion as the debt crisis is addressed. A dividend yield above 4% and euro strength vs. the dollar should provide a significant boost to USD total returns.

**Exhibit 51: Goldman Sachs global equity strategy 3-month, 6-month, and 12-month return forecasts**  
pricing as of November 23, 2012

Index	Price 23-Nov-12	Goldman Sachs Price Target			Price Return			Total Return (USD)	EPS Growth		Forward P/E	
		3-mo	6-mo	12-mo	3-mo	6-mo	12-mo		2013E	2014E	Current Consensus	Year-End 2013E
TOPIX	776	820	900	930	6 %	16 %	20 %	26 %	20 %	11 %	13.6 x	14.4 x
MXAPJ	444	460	480	520	4	8	17	20	13	14	11.6	11.8
Stoxx Europe 600	273	280	290	310	2	6	13	27	9	12	11.1	11.6
<b>S&amp;P 500</b>	<b>1409</b>	<b>1450</b>	<b>1500</b>	<b>1575</b>	<b>3</b>	<b>6</b>	<b>12</b>	<b>14</b>	<b>7</b>	<b>6</b>	<b>12.8</b>	<b>13.8</b>

Note: TOPIX EPS based on fiscal, not calendar, years.

Source: Bloomberg and Goldman Sachs Global ECS Research.

**Exhibit 52: Goldman Sachs global GDP forecasts**  
consensus as of November 23, 2012

	2013E		GS vs. Consensus	2014E Goldman Sachs
	Goldman Sachs	Consensus		
<b>BRICs</b>	<b>7.2 %</b>	<b>6.8 %</b>	<b>40 bp</b>	<b>7.6</b>
Russia	3.8	3.5	30	4.7
UK	1.4	1.3	10	2.0
China	8.1	8.1	0	8.4
Brazil	3.8	3.8	0	4.3
<b>World</b>	<b>3.3</b>	<b>3.3</b>	<b>0</b>	<b>4.1</b>
India	6.5	6.6	(10)	7.2
<b>USA</b>	<b>1.9</b>	<b>2.0</b>	<b>(10)</b>	<b>2.9</b>
Euro Area	(0.2)	0.0	(20)	0.9
Japan	0.3	0.8	(50)	1.1

Source: Consensus Economics and Goldman Sachs Global ECS Research.

**Exhibit 53: Goldman Sachs 3-, 6-, and 12-month forecasts**  
for equities, rates, currencies, energy, and metals

	units	Current	Forecasts		
			3m	6m	12m
<b>Equities</b>					
S&P 500	level	1409	1450	1500	1575
DJStoxx 600	level	273	280	290	310
Asia Pac Ex-Japan	level	444	460	480	520
TOPIX	level	776	820	900	930
<b>Ten Year Rates</b>					
US	%	1.7	1.9	2.0	2.2
Euro Area	%	1.4	1.6	1.7	1.9
Japan	%	0.7	0.7	0.8	1.0
<b>Currencies</b>					
Euro / US Dollar	EUR/\$	1.30	1.25	1.33	1.40
Sterling / US Dollar	£/\$	1.60	1.52	1.56	1.65
US Dollar / Yen	\$/¥	82	80	80	80
<b>Energy</b>					
Brent Crude Oil	\$/bbl	111	115	110	105
NYMEX Nat. Gas	\$/mmBtu	3.90	4.00	4.25	4.50
<b>Metals</b>					
COMEX Gold	\$/troy oz	1751	1840	1940	1940
LME Copper	\$/mt	7777	8000	9000	8000

Source: FactSet and Goldman Sachs Global ECS Research.

**We recommend investors buy a basket of US stocks with the highest BRICs exposure (Bloomberg ticker: <GSTHBRIC>) vs. the most domestic-facing firms (<GSTHAINT>).**

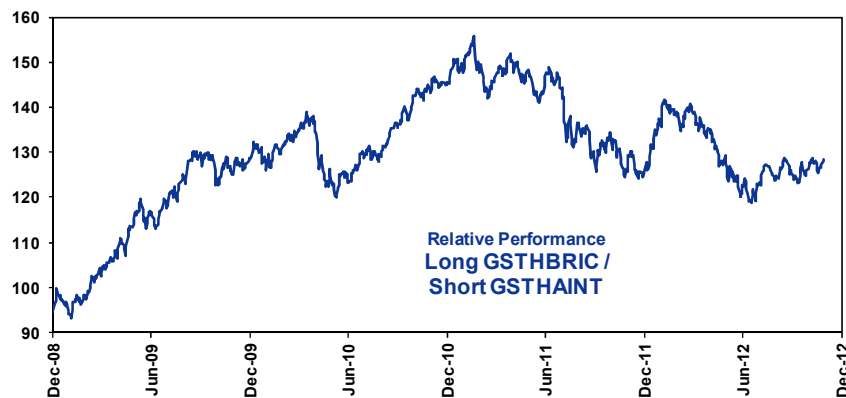
Our economists expect the BRICs to post strong and accelerating GDP growth in 2013 and 2014, and the region also represents the largest gap in expectations between our forecasts and consensus. At the same time, Europe remains in recession, US GDP growth is below trend, and many US firms have struggled to grow revenues. Superior growth prospects, combined with in-line valuation and recent underperformance, suggest stocks with the highest BRICs sales exposure should outperform domestic-facing stocks in 2013.

**The equal-weighted, sector-neutral BRICs basket identifies 50 Russell 1000 companies with the highest sales exposure to the BRICs countries and regions.** The median stock in the basket derives 73% of its sales from outside the US and 29% of its sales from BRICs regions compared with 100% US sales for the median firm in our Domestic Sales basket.

**The BRICs basket is designed to provide investors with exposure to superior EM growth balanced with the safety and liquidity of large-cap US stocks.** Last year our recommended strategy of buying domestic-facing stocks outperformed as recession in Europe and concerns over growth in China led investors to seek the relative safety and growth of stocks with domestic US exposure. Our basket of stocks with high domestic sales (Bloomberg ticker: <GSTHAINT>) returned 11% YTD compared with 8% for firms with large non-US revenue exposure (<GSTHINTL>). We expect negative economic growth in the Euro Area in 2013. In contrast, we forecast reacceleration in China GDP growth to 8.1% and 8.4% in 2013 and 2014, respectively. Strong EM economic growth coupled with fiscal restraint at home suggest US companies with EM revenue exposure should outperform.

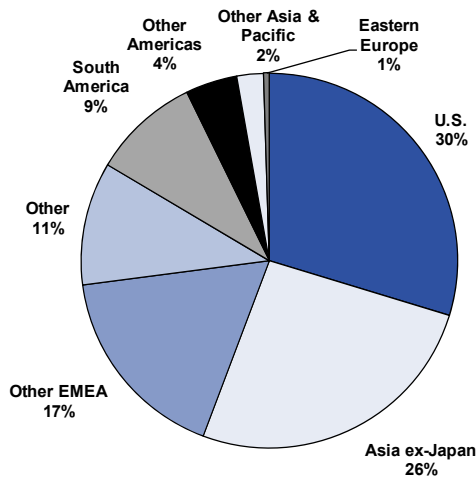
**Our BRICs Sales basket offers better expected growth with similar valuation.** Analysts expect the BRICs basket's median stock will grow earnings in 2013 and 2014 by 10% and 14%, respectively, compared with 9% and 11% for the median Domestic Sales stock. However, the median firms in each basket both trade at a 14x forward P/E.

**Exhibit 54: BRICs vs. Domestic Sales basket performance, as of November 23, 2012**



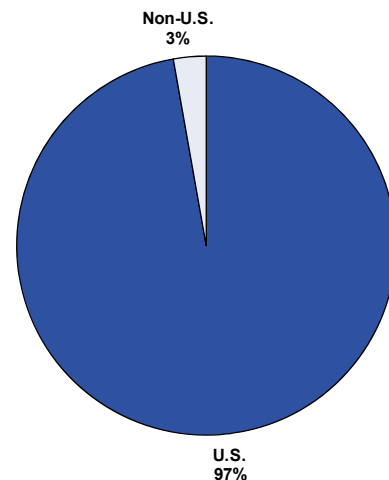
Source: FactSet and Goldman Sachs Global ECS Research.

**Exhibit 55: Regional composition of GSTHBRIC basket as of April 24, 2012**



Source: Company filings, FactSet, and Goldman Sachs Global ECS Research.

**Exhibit 56: Regional composition of GSTHAINT basket as of April 24, 2012**



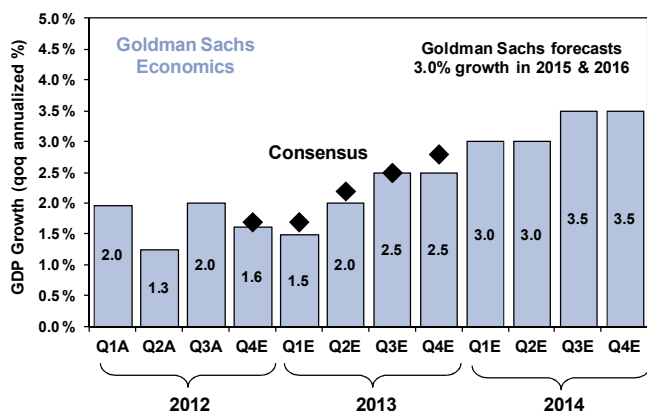
Source: Company filings, FactSet, and Goldman Sachs Global ECS Research.

# US economic backdrop for 2013 and 2014

**Goldman Sachs Economics forecasts tepid growth in 1H 2013 before acceleration in 2H, leading to above trend growth in 2014-2016 around 3%.** Our policy analysts assume only 40% of slated fiscal restraint will come to pass in a 'fiscal cliff' agreement, leading to a 1.4 pp headwind throughout 2013 as a whole. While associated policy uncertainty will hamper business fixed investment and consumer expenditures in 1H, our Economists see considerable growth inflection as the year progresses joined by already strong residential fixed investment. Home starts should grow 19% per year through 2016 with 3% price gains.

**Monetary policy will remain accommodative and inflation benign.** Our economists do not expect a rate hike until early 2016, behind consensus, while also forecasting a more accommodative path thereafter. They further expect the Fed's key measure of core PCE to fall below the FOMC's published central tendency, providing ample room for monetary policymakers who will sharpen focus on a still slowly improving unemployment picture.

**Exhibit 57: Goldman Sachs quarterly US GDP forecasts** as of November 23, 2012



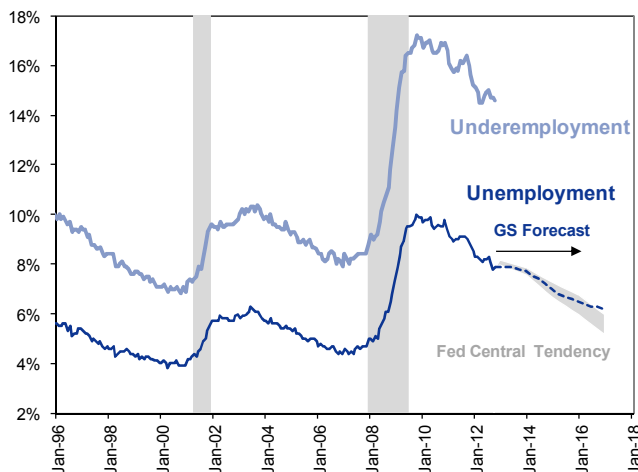
Source: Bloomberg and Goldman Sachs Global ECS Research.

**Exhibit 58: Goldman Sachs US Economics forecast** as of November 23, 2012

	% Annual Change					
	2011	2012E	2013E	2014E	2015E	2016E
<b>Real GDP</b>	1.8%	2.2%	1.9%	2.9%	3.2%	3.0%
Consumer Spending	2.5	1.9	1.5	2.4	2.7	2.5
Business Fixed Investment	8.6	7.2	2.7	8.5	7.4	6.1
Residential Investment	(1.4)	12.1	12.9	14.8	13.4	12.5
<b>Federal Spending</b>	(2.8)	(1.5)	(1.4)	(2.5)	(1.9)	(0.9)
Net Exports (Bil.)	(420)	(408)	(411)	(400)	(410)	(423)
<b>Inflation</b>						
Headline CPI	3.0	2.4	2.0	1.7	2.0	2.0
Core CPI	2.2	1.9	1.8	1.8	1.9	2.0
Core PCE	1.9	1.7	1.7	1.6	1.7	1.8
<b>Unemployment Rate</b>	8.9	8.1	7.8	7.3	6.7	6.3
<b>Fed Funds Rate</b>	0.1	0.1	0.1	0.1	0.1	1.3
10-year Treasury Rate	1.9	1.8	2.2	2.8	3.3	3.8

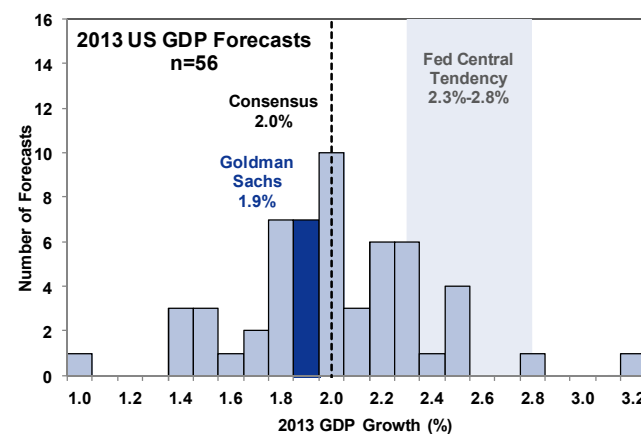
Source: Goldman Sachs Global ECS Research.

**Exhibit 59: Unemployment and underemployment rates** as of November 23, 2012



Source: Bureau of Labor Statistics, Haver and GS Global ECS Research.

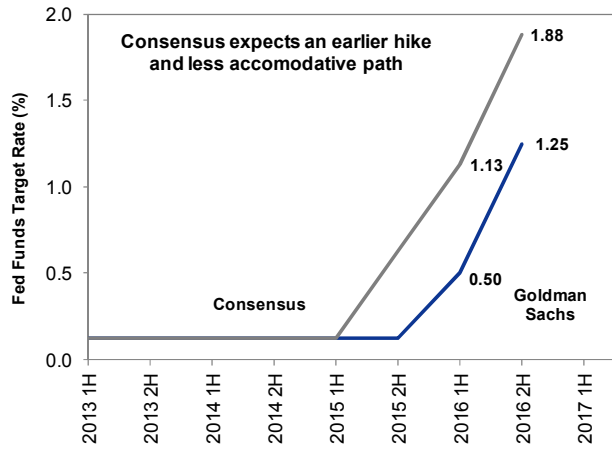
**Exhibit 60: GS vs. Consensus and Fed Central Tendency** consensus estimates as of November 10, 2012



Note: Fed Central tendency above translates 4Q/4Q growth of 2.5%-3.0% into average annual growth rate.

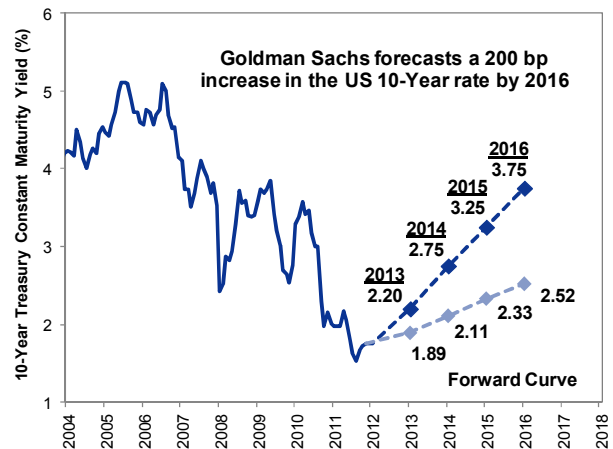
Source: Federal Reserve, Blue Chip Economics, and GS Global ECS Research.

**Exhibit 61: Fed Funds target rate**  
consensus as of October 15, 2012



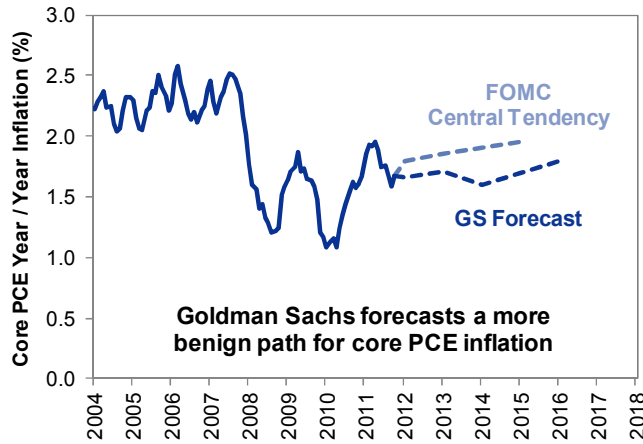
Source: Federal Reserve and Goldman Sachs Global ECS Research.

**Exhibit 62: 10-year US Treasury path**  
as of November 23, 2012



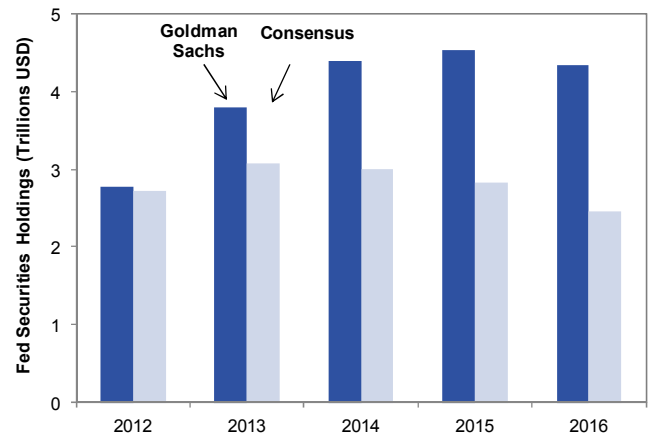
Source: Haver, Bloomberg and Goldman Sachs Global ECS Research.

**Exhibit 63: Inflation outlook to 2016**  
as of November 23, 2012



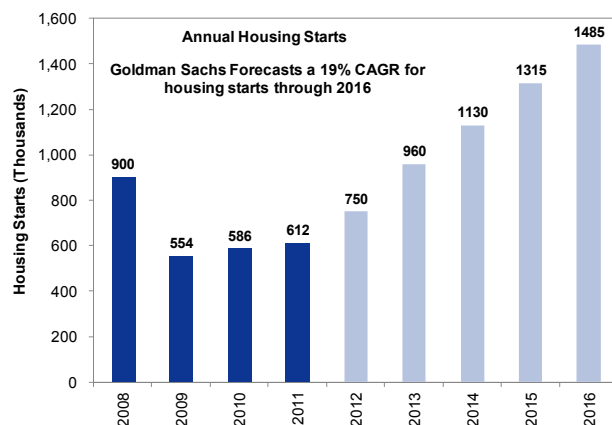
Source: Haver and Goldman Sachs Global ECS Research.

**Exhibit 64: Federal Reserve securities holdings**  
consensus as of October 15, 2012



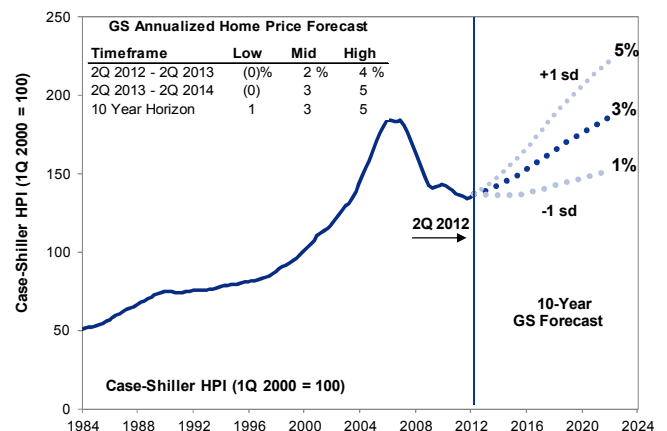
Source: Federal Reserve and Goldman Sachs Global ECS Research.

**Exhibit 65: Housing starts outlook to 2016**  
as of November 23, 2012



Source: Haver and Goldman Sachs Global ECS Research.

**Exhibit 66: Housing price forecast to 2024**  
as of November 23, 2012



Source: Case-Shiller and Goldman Sachs Global ECS Research

## Earnings, sales, and margins

We forecast S&P 500 EPS will rise from \$100 in 2012 to \$107 in 2013 and to \$114 in 2014 implying annual growth of 7% in 2013 and 6% in 2014. Our estimates are below current bottom-up consensus EPS estimates of \$113 and \$126, respectively.

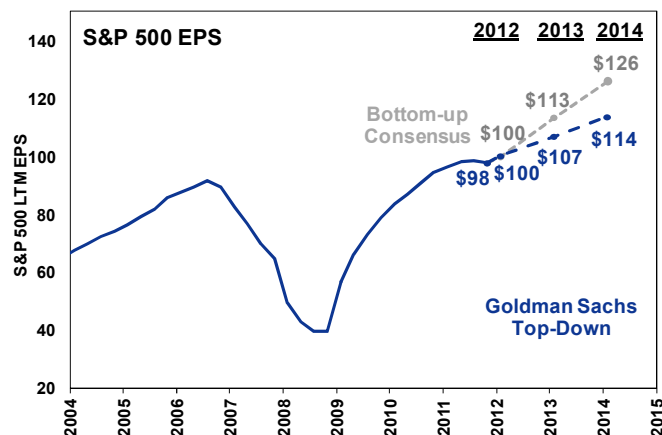
Our regression-based model of sales and net margins for each sector drives our earnings forecasts for individual sectors and for the overall S&P 500. Variables included in our sales and margin models encompass US GDP growth, world GDP growth, 2-year and 10-year US Treasury rates, Brent crude oil, core inflation, and the trade-weighted US dollar (see *US Equity Views: S&P 500 has near-term political risk but long-term policy support*, October 5, 2012, for details of our model and key assumptions).

Domestic real GDP growth is the most important macro input in our earnings model. We expect US GDP to grow at an average annualized rate of 1.9% in 2013 and 2.9% in 2014.

Exhibit 68 shows the sensitivity of our EPS model to various US GDP growth rate assumptions. A 100 bp shift in 2013 GDP growth translates into a \$5 per share shift in EPS. The sensitivity of our 2014 EPS estimates to GDP growth rate assumptions is similar.

The level of sales is highly correlated with nominal economic growth. We assume the nominal size of the US economy will grow by 3.9% in 2013 and by 4.3% in 2014. Given more than 30% of aggregate revenues of S&P 500 companies take place outside of the US, our model forecasts S&P 500 sales will rise by 4.4% in 2013 and 4.7% in 2014, respectively. Our revenue growth forecast is in-line with consensus expectations.

**Exhibit 67: Goldman Sachs EPS forecasts**  
consensus estimates as of November 23, 2012



Source: Compustat, FirstCall, and Goldman Sachs Global ECS Research.

**Exhibit 68: Sensitivity of S&P 500 EPS to US GDP growth**

		2013 US GDP					
		(1.1)%	(0.1)%	0.9%	1.9%	2.9%	3.9%
2012 US GDP	3.7%	92	98	103	109	114	120
	3.2%	92	97	103	108	114	119
	2.7%	92	97	102	108	113	118
	2.2%	91	96	102	107	112	118
	1.7%	91	96	101	106	111	117
	1.2%	90	95	100	106	111	116
	0.7%	90	95	100	105	110	115

Source: Goldman Sachs Global ECS Research.



**Exhibit 69: S&P 500 sales, earnings, and margin forecasts, 2011A-2014E**  
 as of November 23, 2012

	Top-down GS Forecast				Bottom-Up Consensus		
	2011	2012E	2013E	2014E	2012E	2013E	2014E
S&P 500 ex-Financials and Utilities							
Sales Per Share	\$877	\$909	\$949	\$994	\$906	\$944	\$990
Y/Y growth		4 %	4 %	5 %	3 %	4 %	5 %
Y/Y growth ex- Energy		5	5	5	3	5	5
Profit Margin	8.8%	8.8%	8.9%	9.0%	8.8%	9.5%	10.1%
EPS	\$78	\$80	\$85	\$89	\$80	\$90	\$100
Y/Y growth		3%	6%	5%	3%	13%	11%
Utilities EPS	\$3	\$3	\$3	\$3	\$3	\$3	\$4
Financials EPS	16	17	19	21	17	20	22
<b>S&amp;P 500 EPS</b>	<b>\$96</b>	<b>\$100</b>	<b>\$107</b>	<b>\$114</b>	<b>\$100</b>	<b>\$113</b>	<b>\$126</b>
<b>Y/Y growth</b>		<b>4%</b>	<b>7%</b>	<b>6%</b>	<b>4%</b>	<b>14%</b>	<b>11%</b>

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

**Exhibit 70 compares our sector earnings forecasts with the bottom-up consensus estimates.** The largest gaps between our top-down sector earnings forecasts and bottom-up consensus occur in Financials, Information Technology and Consumer Discretionary.

**Exhibit 70: Goldman Sachs top-down and consensus bottom-up S&P 500 EPS forecasts, 2011A-2014E**  
 as of November 23, 2012

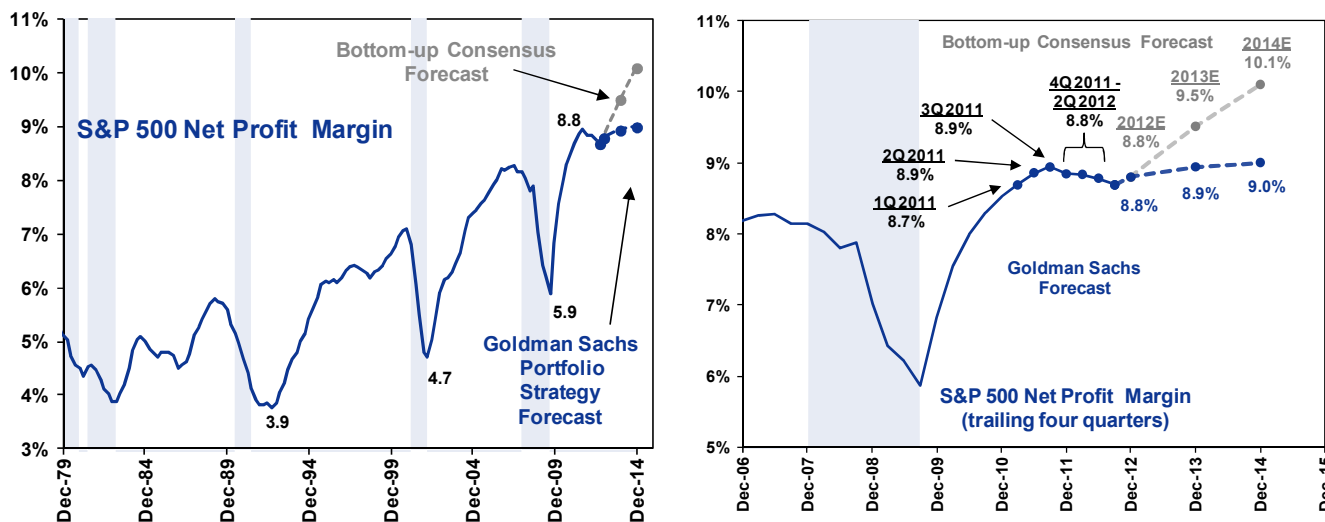
	2011A	Contribution to EPS						Annual earnings growth rates			
		GS Top-Down EPS			Bottom-up			GS Top-Down		Bottom-Up	
		2012E	2013E	2014E	2012E	2013E	2014E	2013E	2014E	2013E	2014E
Materials	\$3	\$3	\$4	\$4	\$3	\$4	\$5	19 %	6 %	27 %	16 %
Telecom Services	2	2	3	3	2	3	3	16	9	13	21
Information Technology	18	20	22	23	20	23	26	9	7	18	13
Health Care	12	12	13	14	12	14	15	7	6	14	8
Consumer Discretionary	9	9	10	10	9	11	13	5	4	14	17
Utilities	3	3	3	3	3	3	4	4	1	7	4
Industrials	10	11	11	12	10	11	13	4	4	8	12
Energy	14	14	14	15	13	14	15	3	5	7	5
Consumer Staples	9	9	10	10	9	10	11	2	3	8	10
<b>S&amp;P 500 ex-Financials</b>	<b>81</b>	<b>83</b>	<b>88</b>	<b>93</b>	<b>83</b>	<b>93</b>	<b>104</b>	<b>6</b>	<b>5</b>	<b>12</b>	<b>11</b>
Financials	16	17	19	21	17	20	22	10	11	19	10
<b>S&amp;P 500 Operating EPS</b>	<b>\$96</b>	<b>\$100</b>	<b>\$107</b>	<b>\$114</b>	<b>\$100</b>	<b>\$113</b>	<b>\$126</b>	<b>7 %</b>	<b>6 %</b>	<b>14 %</b>	<b>11 %</b>

Source: Compustat, FirstCall, and Goldman Sachs Global ECS Research.

**We forecast trailing four quarter net margins will return to the previous peak of 8.9% by 2013 before rising to a new peak of 9.0% in 2014.** Higher labor costs and decelerating margin expansion in the Information Technology sector are headwinds to further margin expansion at the index-level (see Exhibit 72). Consensus expects aggressive margin expansion of 60bp in both 2013 and 2014. Bottom-up consensus forecasts S&P 500 margins will reach new peak levels by 2Q 2013.

**Exhibit 71: S&P 500 net margin, 1979-2014E**

as of November 23, 2012

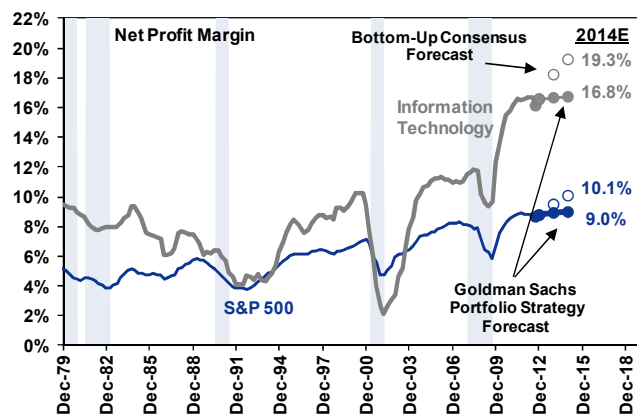


Source: Compustat, FirstCall, I/B/E/S, and Goldman Sachs Global ECS Research.

**Exhibit 73 shows the sensitivity of our 2013 EPS forecast to various margin assumptions.** For example, our 2013 EPS estimate of \$107 per share corresponds with a 8.9% net margin. A 50 bp shift in 2013 margins represents roughly \$5 in EPS. The sensitivity of our 2014 EPS estimate to shifts in margins is of a similar magnitude. The roughly 60 bp gap between our margin forecast and consensus estimates explains more than 75% of the difference between our 2013 EPS forecast of \$107 and bottom-up expectation of \$113.

**Exhibit 72: Information Technology net profit margin**

consensus estimates as of November 23, 2012



Source: Bloomberg and Goldman Sachs Global ECS Research.

**Exhibit 73: Sensitivity of 2013 S&P 500 EPS to sales growth and margin**

		Sensitivity of 2013 EPS forecast to sales growth and margin				
		2013 Profit Margin				
		7.9 %	8.4 %	8.9 %	9.4 %	9.9 %
2013 Sales Growth	6.4 %	99	104	109	113	118
	5.4	98	103	108	113	117
	4.4	97	102	107	112	116
	3.4	97	101	106	111	116
	2.4	96	101	105	110	115

Source: Goldman Sachs Global ECS Research.

**Exhibit 74: Goldman Sachs top-down and consensus bottom-up S&P 500 sales forecasts, 2012E-2014E**  
 as of November 23, 2012

	Contribution to Sales						Annual sales growth rates			
	GS Top-Down Sales			Bottom-up			GS Top-Down		Bottom-Up	
	2012E	2013E	2014E	2012E	2013E	2014E	2013E	2014E	2013E	2014E
Information Technology	\$120	\$129	\$138	\$118	\$127	\$136	8 %	7 %	7 %	7 %
Materials	41	44	46	42	46	48	8	4	9	5
Consumer Discretionary	139	147	157	139	146	156	6	7	5	7
Health Care	132	138	144	131	135	140	5	4	3	4
Industrials	126	131	136	123	126	133	3	4	3	5
Consumer Staples	151	154	159	148	154	162	2	3	4	5
Telecom Services	35	35	36	35	36	36	2	2	2	2
<b>S&amp;P 500 ex-Energy</b>	<b>743</b>	<b>779</b>	<b>816</b>	<b>736</b>	<b>769</b>	<b>811</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>
Energy	166	170	177	171	175	180	2	5	3	3
<b>S&amp;P 500 Sales per Share</b>	<b>\$909</b>	<b>\$949</b>	<b>\$994</b>	<b>\$906</b>	<b>\$944</b>	<b>\$990</b>	<b>4 %</b>	<b>5 %</b>	<b>4 %</b>	<b>5 %</b>

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

**Our model indicates that the strongest sales growth will come from the Information Technology and Materials sectors.** We expect both sectors will grow sales by 8% in 2013, twice as fast as index-level sales (4%). Energy will account for 18% of the 2013 aggregate sales level for the S&P 500 (excluding Financials and Utilities). Consumer Staples ranks second at 16%. Our 2013 S&P 500 sales forecast is roughly 50 bp above the bottom-up consensus forecast, \$949 vs. \$944 per share (see Exhibit 74).

**At 16.6%, Information Technology contributes most to the overall margin level (220 bp or 25% of the 880 bp of expected margin in 2012).** We forecast Information Technology net margins will rise to 16.7% in 2013 and 16.8% in 2014. Bottom-up consensus expects margins will reach 18.2% in 2013 and 19.3% in 2014 (see Exhibit 75). The bottom-up margin for the Information Technology sector may appear higher than the associated operating margin as some consensus estimates exclude employee stock option expenses.

**Exhibit 75: Goldman Sachs top-down and consensus bottom-up S&P 500 margin forecasts, 2012E-2014E**  
 as of November 23, 2012

	Net Margin						Annual margin expansion			
	GS Top-Down Margin			Bottom-up			GS Top-Down		Bottom-Up	
	2012E	2013E	2014E	2012E	2013E	2014E	2013E	2014E	2013E	2014E
Telecom Services	6.3 %	7.1 %	7.7 %	6.6 %	7.3 %	8.7 %	88 bp	50 bp	69 bp	136 bp
Materials	7.4	8.2	8.4	7.5	8.7	9.6	82	18	120	89
Health Care	9.1	9.2	9.4	9.2	10.2	10.6	17	14	96	43
Information Technology	16.6	16.7	16.8	16.6	18.2	19.3	13	6	164	102
Energy	8.2	8.2	8.3	7.8	8.2	8.4	3	3	36	20
Industrials	8.5	8.5	8.5	8.4	8.9	9.4	1	2	43	58
Consumer Staples	6.3	6.3	6.3	6.3	6.6	6.9	(2)	(2)	24	31
Consumer Discretionary	6.6	6.5	6.3	6.9	7.4	8.1	(10)	(16)	55	68
<b>S&amp;P 500 Net Margin</b>	<b>8.8 %</b>	<b>8.9 %</b>	<b>9.0 %</b>	<b>8.8 %</b>	<b>9.5 %</b>	<b>10.1 %</b>	<b>14 bp</b>	<b>6 bp</b>	<b>72 bp</b>	<b>59 bp</b>

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

## Valuation: Not demanding but not “cheap”

**Once fiscal policy risks have been resolved, investors will focus on the slowly improving pace of US economic growth and implications for earnings and valuation.** Stable profit margins and a declining risk premium suggest S&P 500 will rise during the next 12 months. We expect 7% EPS growth, a narrowing US output gap, muted inflation, and strong ROE will support higher equity prices.

**However, until the fiscal cliff and debt ceiling issues are addressed, we assign a discount to fundamentally-based fair value estimates of the S&P 500.** Our uncertainty P/E estimate is notably below our other valuation models.

**We estimate a fair value P/E ratio of 13.5X for the S&P 500 based on our various valuation approaches, implying a year-end 2013 index value of 1540.** At the high end the Fed model implies 22% upside to US equities while our uncertainty-based model suggests 10% downside (based on risk metrics as of today). We believe both measures somewhat overstate the extremes as bond yields are well-below our estimate of fair value and rising inflation expectations have recently pushed our uncertainty P/E lower.

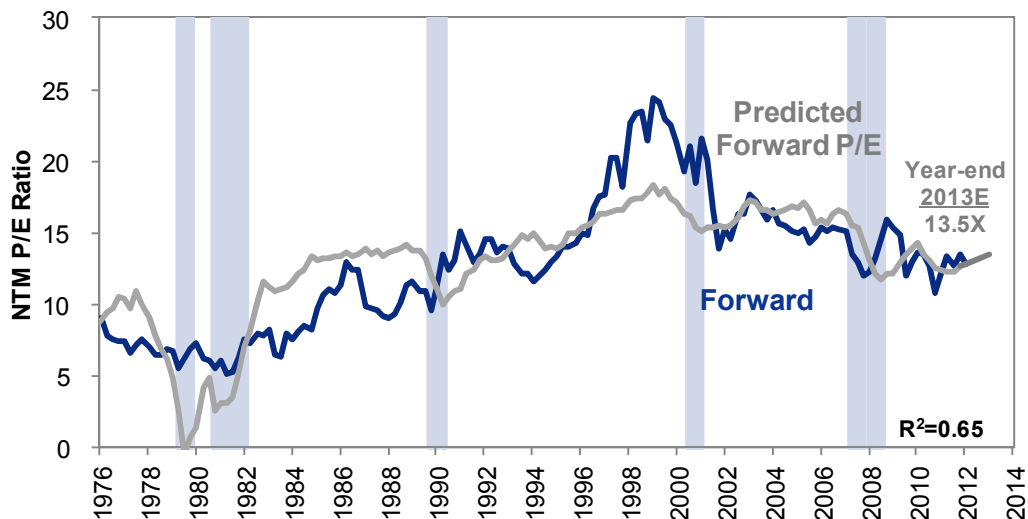
**Exhibit 76: Six approaches to estimating a year-end 2013 S&P 500 fair value P/E multiple** as of November 23, 2012

Methodology	Implied Year-End 2013 Fair Value		
	P/E Multiple	Price	
		Level	Upside
Fed Model	15.1X	1725	22 %
ROE and Price/Book Relationship	15.0	1700	21
US Portfolio Strategy DDM	13.8	1575	12
Macroeconomic Regression	13.5	1525	8
Cyclically Adjusted P/E	12.8	1450	3
Uncertainty-Based P/E	11.2	1275	(10)
<b>Six Approach Average</b>		<b>1540</b>	<b>9 %</b>

Source: Goldman Sachs Global ECS Research.

**Our macroeconomic model combines expectations of a persistent but narrowing output gap and below-trend inflation and points to an S&P 500 P/E ratio of 13.5X.** Our macroeconomic equity valuation model relies on the US GDP output gap (the degree to which actual GDP is above/below potential GDP) and inflation. Our macroeconomic regression model suggests the S&P 500 currently trades at about a 8% discount to its fair value forecast for the end of 2013 (for a discussion of the model, see *US Equity Views: The Multiple Mystery: At what P/E should the market trade?*, October 1, 2009).

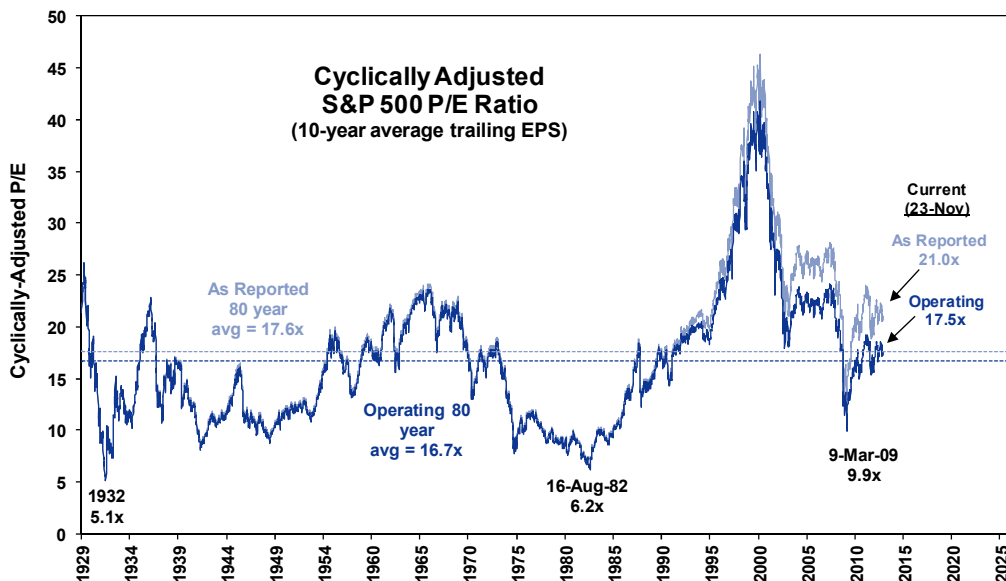
**Exhibit 77: Macro regression suggests year-end 2013 P/E of 13.5X**  
as of November 23, 2012



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

**S&P 500 currently trades close to its historical average cyclically adjusted P/E ratio.** Normalized P/E, calculated on 10-year average trailing operating earnings, has averaged 16.7x over the last 80 years. At the current level, the market has a normalized P/E of 17.5x, roughly 0.1 standard deviations above what would be expected from a “mean reversion” perspective.

**Exhibit 78: S&P 500 cyclically-adjusted P/E ratio, 1929-2012**  
as of November 23, 2012



Source: Compustat, Robert Shiller and Goldman Sachs Global ECS Research.

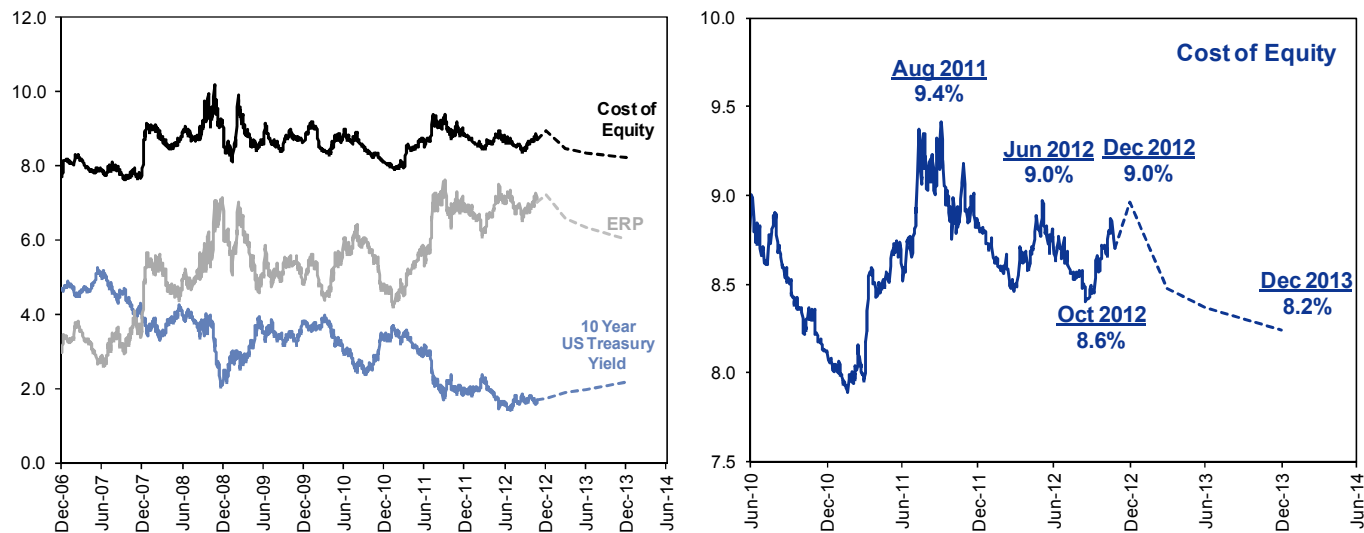
**The Dividend Discount Model (DDM) is our preferred fair value approach for the S&P 500.** Inputs to the model include assumptions for earnings growth, interest rates, inflation, and the cost of equity discount rate. Based on our forecasts the S&P 500 year-end 2013 fair value is 1575, which implies a P/E ratio of 13.8x on our 2014 EPS estimates. Our estimates include a 50 bp increase in the 10-year US Treasury bond yield and 100 bp compression in the ERP. Together those changes lower the cost of equity by 50 bp during 2013.

**Exhibit 79: 3-month, 6-month, and year-end 2013 fair value estimate of S&P 500**  
as of November 23, 2012

	3 Month	6 Month	Year-End 2013
<b>Assumptions</b>			
<u>Assumed long-term EPS growth rate</u>			
Real growth rate	2.5%	2.5%	2.5%
Inflation	2.0	2.0	2.0
10 year US Treasury	1.9	2.0	2.2
Equity risk premium	6.6	6.4	6.0
<b>Cost of Equity (risk free rate + ERP)</b>	<b>8.5%</b>	<b>8.4%</b>	<b>8.2%</b>
<b>Calculation of DCF value</b>			
Terminal year multiple	15.4 x	15.7 x	16.0 x
PV of terminal year value	946	985	1044
PV of dividends years 1-20	504	515	531
<b>PV of terminal year value + PV of dividends</b>	<b>1450</b>	<b>1500</b>	<b>1575</b>
S&P 500 DDM Fair Value	1450	1500	1575
Current S&P 500 Price	1409		
<b>Premium / (Discount) to Current</b>	<b>3%</b>	<b>6%</b>	<b>12%</b>

Source: IDC via FactSet and Goldman Sachs Global ECS Research.

**Exhibit 80: S&P 500 cost of equity = ERP + 10-Year Treasury**  
as of November 23, 2012



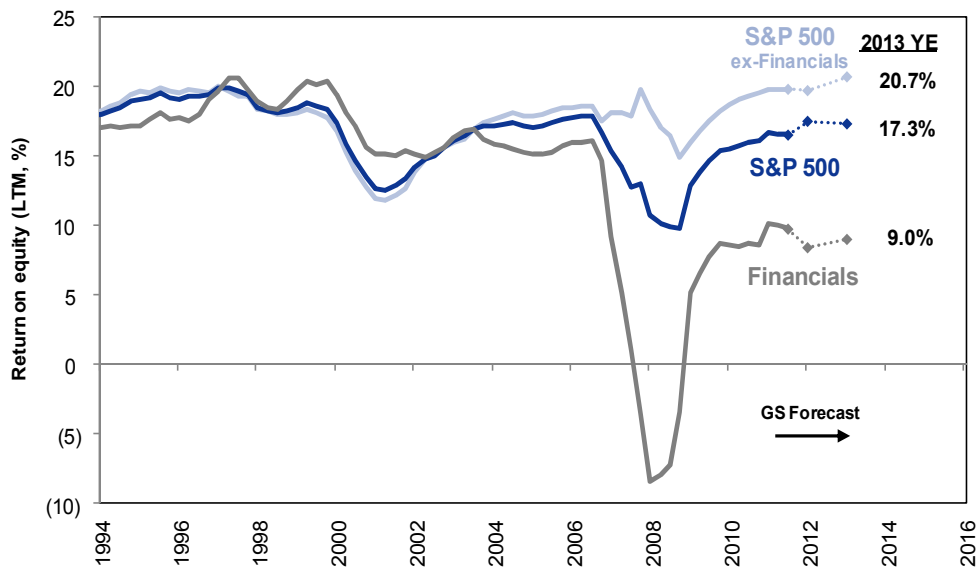
Note: We estimate the equity risk premium (ERP) using our DDM framework to model expected future cash flows. We solve for the cost of equity that implies the market is at 'fair value' and then deduct the 10-year US Treasury.

Source: IDC via FactSet, and Goldman Sachs Global ECS Research.

**We forecast continued low US Government bond yields and expect the ERP will decline once year-end 2012 policy risks are resolved.** However, the ERP is likely to remain higher than normal partly due to the artificially low US Treasury yields. Small changes in the ERP have large impact on fair value estimates. A sensitivity analysis of our DDM suggests that each 10 bp change in ERP equates to about 40 S&P 500 index points or a 2.5% change in the index level.

**We forecast S&P 500 return on equity (ROE) of 17.3% in 2013.** This represents a slight decline from our forecast of a cycle peak of 17.5% in 2012 (see Exhibit 81). We assume modest increases in borrow costs and effective tax rates as those metrics stand at historically low levels and may rise as a result of fiscal consolidation.

**Exhibit 81: S&P 500 return on equity**  
as of October 3, 2012

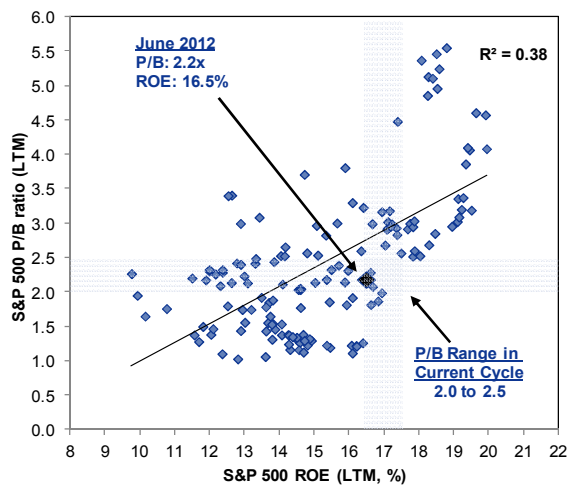


Source: Compustat and Goldman Sachs Global ECS Research.

**The most likely source of meaningful upside risk to our ROE outlook comes from leverage.** The asset/equity leverage of the S&P 500 has declined considerably during the past five years and any increase could magnify already peak margin levels. As growth improves and uncertainty declines, corporate management should feel more comfortable increasing currently low leverage and deploying exceptionally healthy balance sheets.

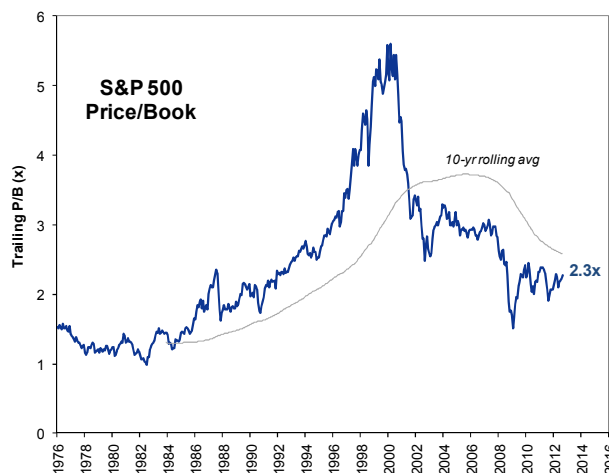
**High S&P 500 ROE supports higher index valuation.** S&P 500 companies earned 16.5% ROE in 2Q 2012 and 19.8% when Financials are excluded. Both measures are well above long-run averages and suggest a price-to-book (P/B) ratio of 2.5x to 3.0x. The index has traded in the 2.0x to 2.5x range during the current ROE cycle (see Exhibits 82 and 83).

**Exhibit 82: S&P 500 ROE supports a steady P/B ratio of 2.3x**  
as of October 3, 2012



Source: Compustat and Goldman Sachs Global ECS Research.

**Exhibit 83: S&P 500 historical trailing P/B ratio**  
as of October 3, 2012



Source: Compustat and Goldman Sachs Global ECS Research.

## Risks: Fiscal policy and politics top the list

**The US government’s questionable ability to reach agreement on fiscal policy represents a key near-term risk to the US equity market.** Failure to address the situation in an orderly fashion by year-end 2012 will result in sharp fiscal contraction in 1Q 2013. Such an event would damage market sentiment as well as both consumer and CEO confidence.

**We expect some form of resolution to the ‘fiscal cliff’ by year-end, although a real risk exists that the debate could drag into early 2013.** Our Washington-based analyst Alec Phillips believes a last-minute, short-term extension may be necessary if no compromise is reached by late December.

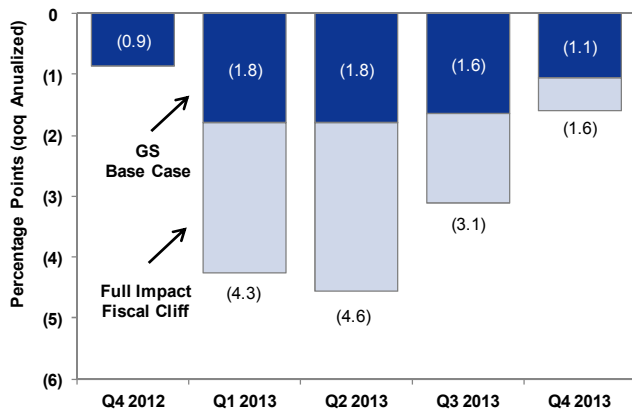
**Our base case assumes an expiration of payroll and upper income tax cuts but extension of 2001/2003 middle class tax cuts, resulting in a fiscal drag of 1.4% of GDP.** As currently scheduled, 2013 fiscal drag would otherwise be 3.5% of GDP and would likely send the US back into recession. See Exhibit 84 for the effect of fiscal policy on US GDP.

**Key fiscal issues for investors include the potential tax hikes on capital gains and dividends as well as the impact of higher taxes on the US consumer.** Under current law, taxes on qualified dividends will increase from 15% to over 40% in 2013, but we believe a compromise is likely somewhere between those two levels, such as the 23.8% rate on both capital gains and dividends that Senate Democrats proposed earlier this year. These tax changes could have a significant negative impact on stocks with high dividend yields and those that are sensitive to discretionary cash flow.

**The debt ceiling represents another source of uncertainty around the corner.** The government will reach the current limit of outstanding US public debt in late February if Congress doesn’t include an extension as part of a year-end deal to resolve the ‘fiscal cliff.’ Debate over the ceiling last August proved to be divisive and damaging, sending the S&P 500 lower by over 15% and leading to a downgrade of the US sovereign debt rating.

**Each 100 bp of fiscal drag on GDP beyond our base case equates to about \$5 of 2013 EPS, in addition to any impact on valuation.** Page 32 shows the sensitivity of S&P 500 EPS to US GDP growth. In addition to the effect of fiscal policy on GDP and earnings, as we saw last summer and in early November of this year, a lack of confidence in US policymakers can also have a significant and immediate effect on P/E.

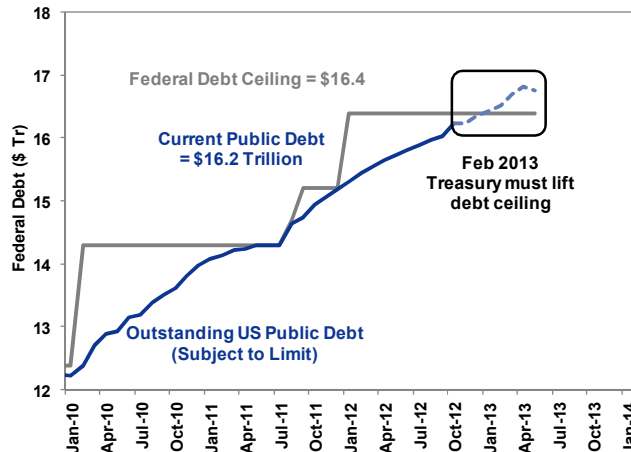
**Exhibit 84: Annualized drag from ‘fiscal cliff’ provisions**  
as of November 23, 2012



Goldman Sachs base case: ACA taxes implemented, payroll and upper income tax cuts lapse, drawdown of unemployment support, mild sequestration.

Source: Goldman Sachs Global ECS Research.

**Exhibit 85: Debt limit debate to follow ‘fiscal cliff’**  
as of November 6, 2012



Source: US Treasury, Haver and Goldman Sachs Global ECS Research.



## Other risks to our US equity market forecast

### **Relative to last year the risks to our equity outlook seem much more benign.**

Recession risk in the US has declined substantially, Europe Central Bank mechanisms are now in place to limit tail risk, and the political transition in China has already occurred although policy details remain to be seen. That said, those factors remain the principal risks to the market even if the intensity is lower: the US fiscal cliff could itself drive a US recession, Europe risks are quiet but remain present, and China policy is as yet undefined.

**QE effectiveness** – The largest risk facing US equities is the perceived effectiveness of Fed stimulus programs. Should open-ended quantitative easing (QE) fail to stimulate growth and bring down unemployment investor sentiment towards growth assets could sour quickly.

**Peak margins** – Fundamentally speaking, S&P 500 profit margins are the biggest source of uncertainty to our outlook given slow revenue growth, peak margins, and rising taxes on consumers. A 50 bp drop in profit margins would reduce our 2013 S&P 500 EPS forecast by \$5 (about 5%) to \$102. EBIT margins have already shown signs of weakness.

**Inflation** – Inflation expectations rose sharply ahead of the September FOMC announcement of open-ended QE. Those expectations have stabilized at about their mid-point over the past decade but another rise could pressure the Fed's easing commitment. While higher bond yields may translate positively to equities if motivated by better growth expectations an inflation surprise may be negative for risk appetite.

**Stagnant US growth** – Despite lower recession risk, US growth remains mired around 2%. Weak growth has kept companies from investing for growth, instead returning cash to shareholders via buybacks, and if it remains low could create a negative feedback loop from low investment to low growth. Recent management commentary established the link between economic and policy uncertainty with corporate spending and investment.

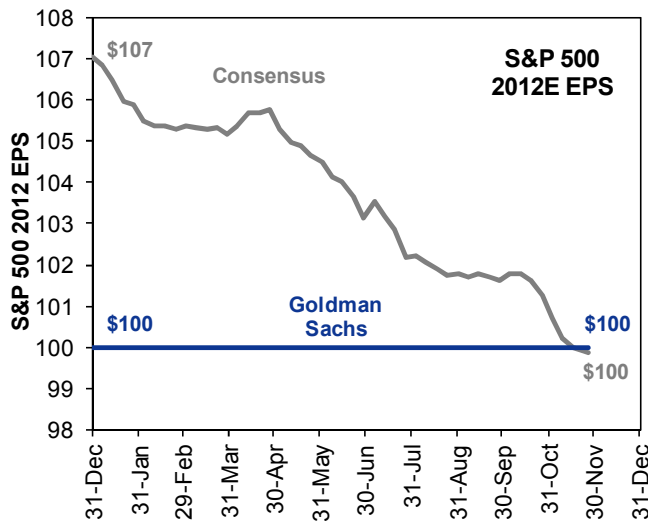
**Commodities** – Higher oil prices have become less of a concern for investors over the past 12 months, despite Iran event risk, due to slow growth and an improving medium-term supply outlook in the US. However, acceleration in global growth could quickly inflame supply-demand tightness in the near-term while political unrest in the Middle East remains acute. The net impact of higher oil prices on S&P 500 earnings is modest but the impact on growth and sentiment can be large enough to stymie equity performance.

**FX volatility** – S&P 500 revenues will be impacted if the dollar strengthens or weakens considerably in 2013. Our FX strategists expect a modestly weaker but generally stable dollar and company managements have expressed similar expectations. Given the mid-2012 surge in dollar strength, currency exchange rates may even provide a revenue boost in year/year terms to US firms with significant international exposure.

# Our 2012 scorecard

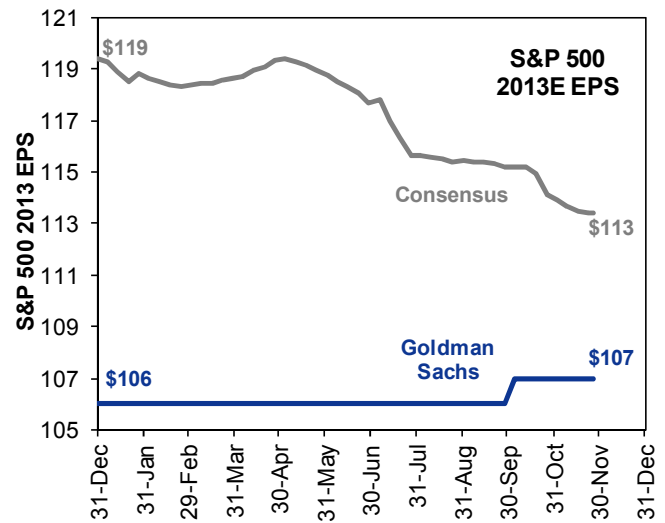
**1. Earnings: Our top-down 2012 S&P 500 EPS estimate has remained unchanged at \$100 since the start of the year.** The bottom-up consensus earnings estimate for 2012 has dropped by 7% since the start of the year and is now in-line with our 2012 EPS forecast of \$100. Consensus EPS for 2013 fell 5% to \$113, but remains 6% above our forecast of \$107.

**Exhibit 86: Goldman Sachs 2012E EPS vs. consensus**



Source: Compustat, FirstCall, and Goldman Sachs Global ECS Research.

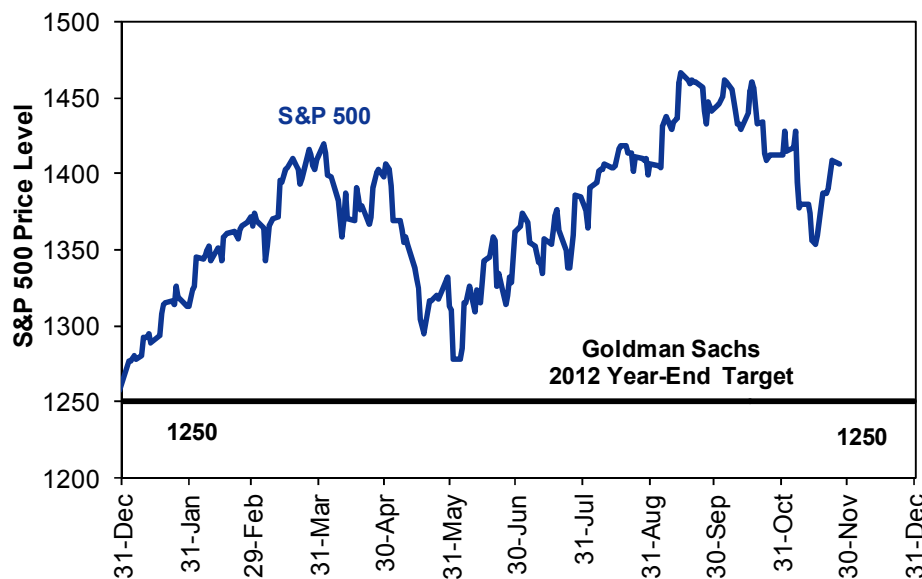
**Exhibit 87: Goldman Sachs 2013E EPS vs. consensus**



Source: Compustat, FirstCall, and Goldman Sachs Global ECS Research.

**2. Valuation: Despite our accurate EPS forecast, valuation is notably higher.** Our expectation that S&P 500 valuation would remain flat in 2012 in the face of stagnating economic and earnings growth has been incorrect to this point. Investor response to the dramatic Fed and ECB policy actions since June 2012 was far more dramatic than we anticipated. The consensus forward P/E multiple has expanded by 6% to 12.8x and S&P 500 has advanced by 12% year-to-date.

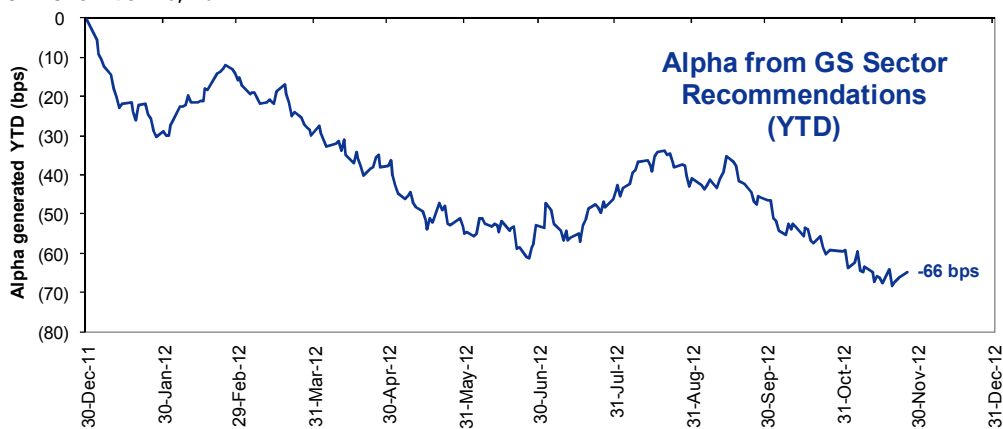
**Exhibit 88: Goldman Sachs 2012 year-end S&P 500 price target vs. index level**



Source: IDC via Factset and Goldman Sachs Global ECS Research.

**3. Sectors: Our sector recommendations generated -65 bp negative alpha during the first 11 months of 2012.** By design, the sector recommendations have a net weight of zero but contain an embedded beta exposure due to the weightings' net cyclical tilt. Our neutral, late-cycle mix lost alpha through our overweight Energy and underweight Consumer Discretionary positions. Consumer Discretionary outperformed the S&P 500 year-to-date (+22% vs. +14%) while Energy underperformed (+4% vs. +14%).

**Exhibit 89: Alpha generated by Goldman Sachs sector weightings**  
as of November 26, 2012



Source: FactSet and Goldman Sachs Global ECS Research.

**4. Themes: Seven long/short trades were outstanding during all or part of 2012 and four generated positive returns since inception while three posted negative results.** The average return since inception equaled 2.8%. Restricting the performance to 2012 YTD, three of our seven thematic trade recommendations generated positive returns and four trades generated negative returns with an average performance of 1.5% (see Exhibit 90). Our Cyclically Attractive Risk-Reward basket was our best performing trade idea for the year and it outperformed the S&P 500 by 14.8 percentage points. The basket outperformed as domestically focused cyclical areas such as housing improved. Our High Quality and Sharpe Ratio strategies underperformed as investors overlooked analyst targets and historically stable stocks.

**We close our recommendations to buy high quality <GSTHQUAL>, dividend growth <GSTHDIVG>, and Sharpe ratio stocks <GSTHSHRP> versus the S&P 500.** We prefer strategies to capture growth such as our double Sharpe ratio <GSTHEPSR> and BRICs sales exposure <GSTHBRIC> baskets.

**Exhibit 90: Our 2012 Thematic recommendations have posted a 1.5% return on average YTD**  
as of November 27, 2012

2012 Thematic Recommendations							Recommendation Return	
Buy	Bloomberg Ticker	Sell	Bloomberg Ticker	Inception Date	Date Closed	Trade Timing	Since Inception	2012
High Sharpe Ratio	<GSTHSHRP>	S&P 500	SPX	7-Dec-09	28-Nov-12	155 weeks	9.4 %	(2.8)%
Dividend Growth	<GSTHDIVG>	S&P 500	SPX	5-Aug-11	28-Nov-12	69	(0.1)	(0.8)
High Quality	<GSTHQUAL>	S&P 500	SPX	3-Oct-11	28-Nov-12	60	(4.1)	(2.7)
Defensives	<GSSBDEFS>	S&P 500	SPX	3-Oct-11	27-Jan-12	17	(6.8)	(3.2)
Domestic Sales	<GSTHAINT>	International Sales	<GSTHINTL>	30-Nov-11	5-Sep-12	40	5.2	3.6
<b>Cyclically Attractive Risk-Reward</b>	<b>&lt;GSTHCARR&gt;</b>	<b>S&amp;P 500</b>	<b>SPX</b>	<b>9-Jan-12</b>	<b>*</b>	<b>46</b>	<b>14.8</b>	<b>14.8</b>
Revenue Growth	<GSTHREVG>	S&P 500 (1.2 times)	SPX x 1.2	5-Sep-12	*	12	1.6	1.6
<b>Average</b>						<b>57 weeks</b>	<b>2.8 %</b>	<b>1.5 %</b>

Bold indicates open trade.

Source: FactSet and Goldman Sachs Global ECS Research.

# Appendix A: US Portfolio Strategy baskets on Bloomberg

## 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.

### Exhibit 91: Strategy baskets are listed on Bloomberg <GSTH>: Portfolio Strategy / Thematic and Sector Baskets

#### Thematic Baskets

- Bloomberg <GSTH1>**
- Macroeconomic  
 GSTHCARR  
 GSTHAINT  
 GSTHINTL  
 GSTHBETA  
 GSTHBRIC  
 GSTHWEUR
- Fundamental  
 GSTHUSTY  
 GSTHQUAL  
 GSTHREVG  
 GSTHGROE  
 GSTHOPHI  
 GSTHOPLO  
 GSTHSBAL  
 GSTHWBAL
- Hedge Fund  
 GSTHHVIP  
 GSTHVISP  
 GSTHHFHI  
 GSTHHFSL
- Valuation  
 GSTHDIVG  
 GSTHEPSR  
 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  
 GSSBDEDF

Source: Bloomberg and Goldman Sachs Global ECS Research.

## Appendix B: Growth & valuation for thematic and sector baskets

### Exhibit 92: Median growth & valuation for thematic and sector baskets

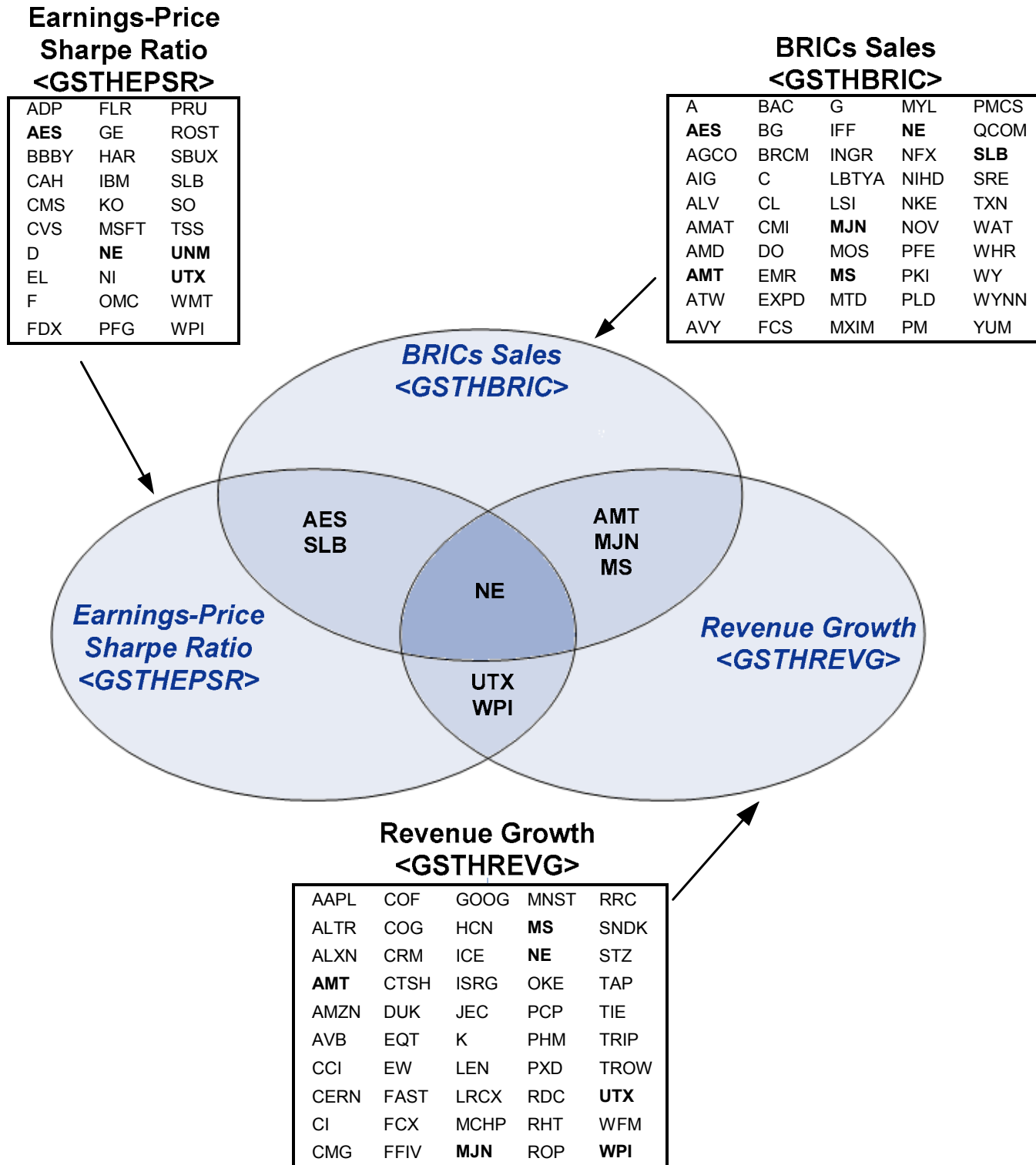
as of November 23, 2013

	Bloomberg Ticker	Beta vs. S&P 500	EPS Growth		Sales Growth		Profit Margin	P/E NTM	ROE NTM	Div Yield
			2012E - 2013E	2013E - 2014E	2012E - 2013E	2013E - 2014E	2013			
<b>Macroeconomic Baskets</b>										
<b>BRICs Sales</b>	<b>GSTHBRIC</b>	<b>1.3</b>	<b>12 %</b>	<b>18 %</b>	<b>6 %</b>	<b>8 %</b>	<b>13 %</b>	<b>14.9x</b>	<b>19 %</b>	<b>1.4 %</b>
Dual Beta	GSTHBETA	1.6	12	17	4	8	9	14.7	15	0.9
International Sales	GSTHINTL	1.2	16	16	7	9	14	14.5	21	1.6
Rate Sensitive	GSTHUSTY	1.2	14	14	6	7	10	14.6	17	1.7
US Sales	GSTHAINT	1.0	13	14	6	8	11	15.0	19	2.3
Western Europe Sales	GSTHWEUR	1.2	11	16	5	7	12	15.3	17	1.5
<b>Fundamental Baskets</b>										
<b>Revenue Growth</b>	<b>GSTHREVG</b>	<b>1.2</b>	<b>23 %</b>	<b>21 %</b>	<b>21 %</b>	<b>15 %</b>	<b>16 %</b>	<b>21.1x</b>	<b>19 %</b>	<b>1.0 %</b>
<b>Cyc. Attractive Risk-Reward</b>	<b>GSTHCARR</b>	<b>1.4</b>	<b>21</b>	<b>21</b>	<b>8</b>	<b>9</b>	<b>8</b>	<b>15.7</b>	<b>23</b>	<b>1.6</b>
High Quality	GSTHQUAL	1.0	12	13	9	8	16	16.8	28	1.7
ROE Growth	GSTHGROE	1.2	15	13	8	6	12	14.4	19	1.6
High Op Leverage	GSTHOPHI	1.3	19	21	8	10	9	19.0	15	0.9
Low Op Leverage	GSTHOPLO	1.0	10	13	9	6	17	14.3	28	2.2
Strong Balance Sheet	GSTHSBAL	1.2	12	14	10	10	16	18.8	27	1.1
Weak Balance Sheet	GSTHWBAL	1.3	11	16	5	5	9	13.8	14	1.9
<b>Hedge Fund Baskets</b>										
High HF Concentration	GSTHHFHI	1.2	10 %	14 %	7 %	6 %	14 %	18.3x	22 %	0.5 %
Low HF Concentration	GSTHHFSL	0.8	9	10	5	6	10	14.9	21	3.0
Hedge Fund VIP	GSTHHVIP	1.2	11	14	9	8	16	14.5	19	1.4
Hedge Fund Shorts	GSTHVISP	1.0	10	12	4	5	14	15.1	23	2.6
<b>Valuation Baskets</b>										
<b>Earnings-Price Sharpe Ratio</b>	<b>GSTHEPSR</b>	<b>1.0</b>	<b>16 %</b>	<b>13 %</b>	<b>8 %</b>	<b>7 %</b>	<b>11 %</b>	<b>13.2x</b>	<b>24 %</b>	<b>2.2 %</b>
GARP	GSTHGARP	1.2	13	15	7	7	17	13.9	22	1.5
Dividend Growth	GSTHDIVG	1.1	8	9	4	4	13	12.0	22	2.9
High Sharpe Ratio	GSTSHSRP	1.3	7	15	3	6	11	12.3	18	2.0
<b>Sector Baskets</b>										
Global Cyclical	GSSBGCYC	1.4	13 %	17 %	7 %	7 %	11 %	14.3x	20 %	1.9 %
Global Defensives	GSSBGDEF	0.9	10	13	7	6	17	16.3	29	1.8
Domestic Cyclical	GSSBDCYC	1.1	13	12	5	5	11	13.9	15	2.2
Domestic Defensives	GSSBDDEF	0.9	8	9	6	6	8	14.5	19	2.6
<b>S&amp;P 500</b>		<b>1.0</b>	<b>14 %</b>	<b>11 %</b>	<b>4 %</b>	<b>5 %</b>	<b>10 %</b>	<b>12.8x</b>	<b>17 %</b>	<b>2.3 %</b>
<b>S&amp;P 500 Average</b>		<b>1.1</b>	<b>11</b>	<b>13</b>	<b>6</b>	<b>7</b>	<b>12</b>	<b>14.7</b>	<b>20</b>	<b>2.1</b>
<b>S&amp;P 500 Median</b>		<b>1.1</b>	<b>10</b>	<b>12</b>	<b>5</b>	<b>6</b>	<b>10</b>	<b>14.0</b>	<b>18</b>	<b>2.0</b>

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

## Appendix C: Our recommended US Portfolio Strategy baskets

Exhibit 93: Intersection of our 3 recommended strategies: GSTHEPSR, GSTHBRIC, and GSTHREVG



Source: Goldman Sachs Global ECS Research.

## Equity Basket Disclosure

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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, Krag Gregory, Ph.D., Ben Snider, Peter Lewis and Rima Reddy, 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

### Option Specific Disclosures

**Price target methodology:** Please refer to the analyst's previously published research for methodology and risks associated with equity price targets.

**Pricing Disclosure:** Option prices and volatility levels in this note are indicative only, and are based on our estimates of recent mid-market levels (unless otherwise noted). All prices and levels exclude transaction costs unless otherwise stated.

**General Options Risks** – The risks below and any other options risks mentioned in this research report pertain both to specific derivative trade recommendations mentioned and to discussion of general opportunities and advantages of derivative strategies. Unless otherwise noted, options strategies mentioned in this report may be a combination of the strategies below and therefore carry with them the risks of those strategies.

**Buying Options** - Investors who buy call (put) options risk loss of the entire premium paid if the underlying security finishes below (above) the strike price at expiration. Investors who buy call or put spreads also risk a maximum loss of the premium paid. The maximum gain on a long call or put spread is the difference between the strike prices, less the premium paid.

**Selling Options** - Investors who sell calls on securities they do not own risk unlimited loss of the security price less the strike price. Investors who sell covered calls (sell calls while owning the underlying security) risk having to deliver the underlying security or pay the difference between the security price and the strike price, depending on whether the option is settled by physical delivery or cash-settled. Investors who sell puts risk loss of the strike price less the premium received for selling the put. Investors who sell put or call spreads risk a maximum loss of the difference between the strikes less the premium received, while their maximum gain is the premium received.

**For options settled by physical delivery,** the above risks assume the options buyer or seller, buys or sells the resulting securities at the settlement price on expiry.

### 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%	49%	42%	35%

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**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.

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