

2015 US Equity Outlook: Low return & low dispersion

Portfolio Strategy Research

Focus on firms with domestic sales, cash return, and low turnover

S&P 500 will rise to 2100 at year-end 2015 for 5% total return

We expect a benign equity market reaction to the first Fed hike in six years. S&P 500 will climb higher in 1H, but P/E multiple will contract in 2H to 16x as the Fed tightens. We forecast a 6% annualized total return through 2018.

P/E multiple expansion phase of current bull market is over

S&P 500 trades at 17x forward EPS, a historically high P/E multiple and up 60% in three years. US GDP will grow by 3.1%, S&P 500 sales will rise by 4%, margins will stabilize at 9.1%, and earnings will climb by 5% to \$122.

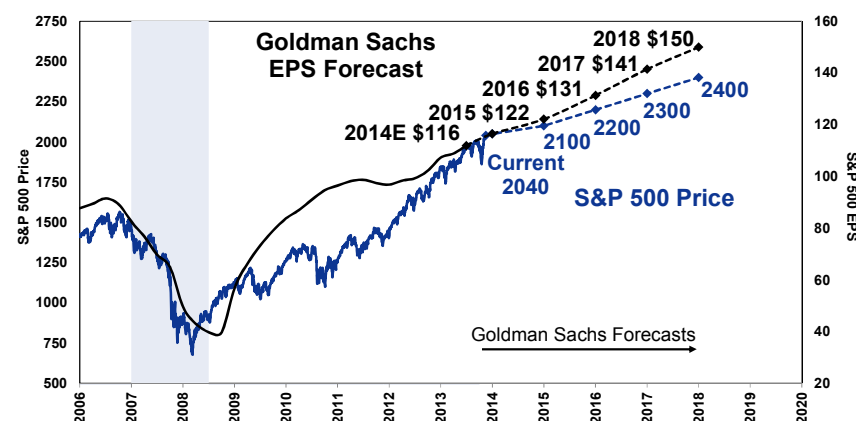
Low volatility, low return dispersion, tough to outperform

Above-trend economic growth suggests below-average return dispersion and volatility and a year of disappointing returns for active fund managers. Mutual and hedge funds typically underperform in low dispersion regimes.

Three strategies: (1) Fundamental, (2) Income, (3) Technical

(1) Fundamental: Own US stocks with high domestic sales and avoid firms with high Europe revenue exposure. (2) Income: Own stocks returning cash to shareholders via buybacks and dividends. Sell upside S&P 500 calls to enhance returns. (3) Technical: Buy stocks with low turnover to capture illiquidity premium and sell stocks with high ADV as a percent of free float.

US Portfolio Strategy forecast path of the S&P 500 index through 2018



Source: Compustat, IDC via FactSet, and Goldman Sachs Global Investment Research

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2015 US Equity Outlook: The path of stocks ahead of the tightening

We forecast US stocks will deliver a modest total return of 5% in 2015, in line with profit growth. The US economy will expand at a brisk pace. Corporations will boost sales and keep margins elevated allowing managements to both invest for growth and return cash to shareholders via buybacks and dividends. Investors will cheer these positive fundamental developments.

However, 2015 will prove to be another challenging year for active equity managers. Volatility will remain low. Stock return dispersion will stay in a narrow range making alpha generation difficult. Mutual funds and hedge funds typically lag the S&P 500 during low dispersion regimes. This year is a good example: S&P 500 realized volatility has averaged 11 YTD (37th percentile since 1962) while rolling three-month return dispersion has averaged in the second percentile versus the past 35 years. Just 14% of large-cap core mutual funds has outperformed the S&P 500. Equity long/short hedge funds have returned an average of 1% YTD, lagging the index for the sixth consecutive year.

Strategically, the multiple expansion phase of the current bull market ended in 2013. The strong S&P 500 YTD price gain of 10% roughly matches the realized year/year EPS growth of the index. The index has climbed by 17% annually during the past three years as the consensus forward P/E multiple surged by nearly 60% from 10x to 16x.

From a tactical perspective, the S&P 500 will continue its upward trajectory during the first-half of 2015. The index will climb by 5% to 2150, corresponding with a forward P/E multiple of 17x our top-down EPS forecast or 15.8x on a bottom-up basis.

However, we expect the P/E will contract and the index will slip during the second-half of 2015 as the Fed takes its first step in the long-awaited tightening cycle. Our S&P 500 year-end 2015 target of 2100 implies a modest 5-10% P/E multiple compression to 16.0x our top-down 2016 EPS estimate or 14.6x bottom-up consensus earnings estimates.

Every recent investor discussion centers on the question of how stocks will trade when interest rates start to rise. We expect multiples will compress while volatility and stock return dispersion remain low. Our forecast of solid US GDP growth underpins our expectation of low volatility, low dispersion, and low stock returns in 2015.

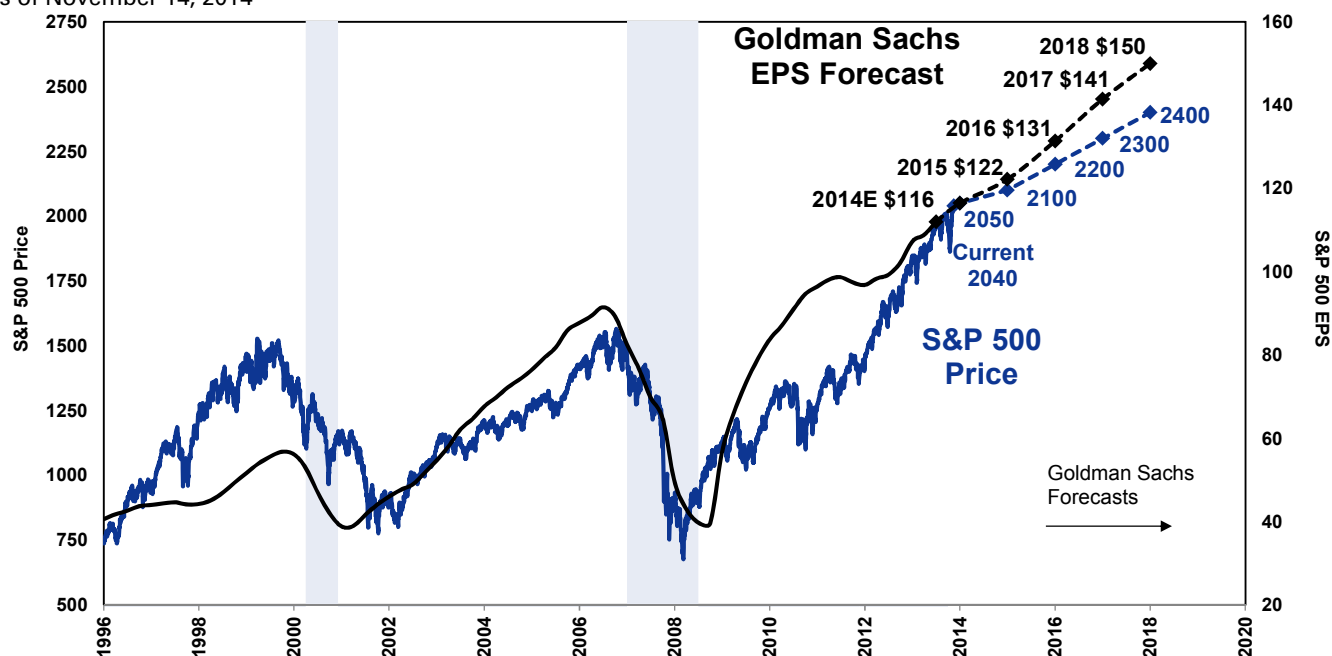
We expect a benign equity market reaction to the first Fed rate hike. Fed funds have been anchored near zero for six years. The Fed has been transparent in communicating the timing and slow trajectory of its planned exit from the unconventional monetary policies it has pursued since 2008. Goldman Sachs Economics expects the first hike will occur during 3Q and short-term rates will end 2015 at 0.6% while the 10-year yield will rise to 3%.

Exhibit 1: Summary of Goldman Sachs US Portfolio Strategy Forecasts
as of November 14, 2014

	ex. Financials and Utilities		EPS		Dividends			Valuation		Year-End Price Target	Forecast Total Return
	Sales Growth	Profit Margin	Level	Growth	Level	Growth	Payout Ratio	P/E (NTM)	Dividend Yield		
2013	2.3%	8.9%	\$107	11%	\$34.99	12%	33%	15.9x	2.5%	1848	32%
2014E	5.2	9.1	116	9	38.96	11	33	16.8	2.1	2050	13
2015E	3.6	9.1	122	5	42.30	9	35	16.0	2.1	2100	5
2016E	6.1	9.2	131	8	45.02	6	34	15.6	2.1	2200	7
2017E	6.8	9.2	141	8	47.43	5	34	15.3	2.2	2300	7
2018E	5.8	9.0	150	6	49.13	4	33	15.3	2.1	2400	6

Source: Compustat, and Goldman Sachs Global Investment Research.

Exhibit 2: Our S&P 500 year-end 2015 target equals 2100; our multi-year index targets follow the trajectory of earnings
as of November 14, 2014



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

Many fund managers disagree with our view and believe higher equity volatility will accompany higher interest rates. They argue that once the Fed begins to hike uncertainty will abound regarding the pace of further tightening and volatility will jump. Our response to those arguments is that the interest rate swaption market implies a relatively steady and shallow path of future hikes with volatility remaining quiescent.

Our baseline forecast assumes modest EPS gain alongside solid US economic growth.

In terms of economic activity, we expect above-trend US GDP growth of 3.1%, dismal 0.9% growth in Europe and Japan, and slowing albeit strong 7.0% growth in China. We forecast S&P 500 sales growth of 3.6%, flat margins of 9.1%, and EPS growth of 5% to \$122.

We highlight three investment recommendations for 2015. Our strategies should outperform the S&P 500 index that we project will return 5% during the next 12 months.

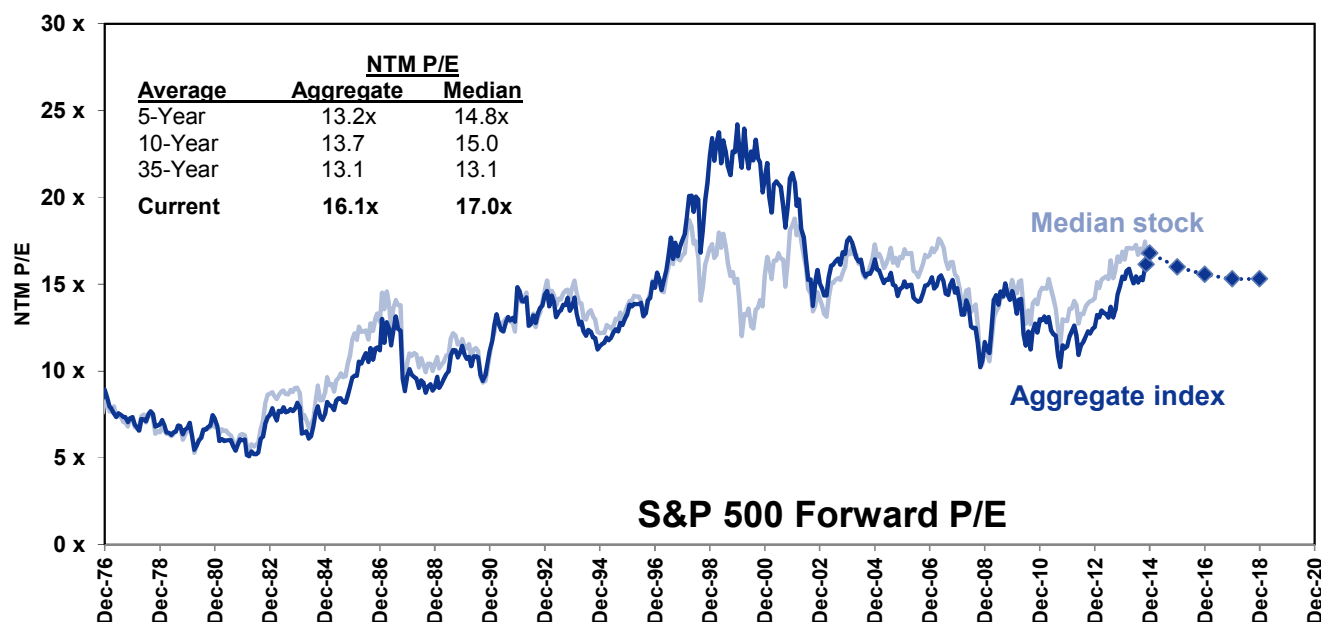
1. FUNDAMENTAL: Own US stocks with high domestic revenues and avoid US stocks with high Europe sales exposure (Bloomberg tickers: <GSTHAINT> / <GSTHWEUR>).

Volume and price trends support this strategy. The wide disparity in GDP growth rates means differential end-demand. Prices will be a headwind for exporters. We forecast the Euro will depreciate by 8% vs. the dollar in the next year and fall to parity by 2017.

2. INCOME: Own US stocks focused on returning cash to shareholders via buybacks and dividends (<GSTHCASH>). The median cash return to shareholders for the 50 stocks in this portfolio was more than twice the median for the S&P 500 index (12% vs. 5%). We forecast buybacks will surge by 18% in 2015 and dividend growth will total 8%. **Sell S&P 500 upside calls to enhance performance in a low return, low volatility, and low dispersion market environment.** Out-of-the-money call writing has historically outperformed when S&P 500 returns are modest. Income-oriented investors concerned about risk from a first Fed hike and higher rates should embrace this strategy.

3. TECHNICAL: Buy US stocks with low turnover / sell stocks with high turnover (<GSTHLOTO> vs. <GSTHHITO>). Managers with a six month investment horizon and a willingness to bear illiquidity risks stand to reap the benefits of holding less liquid stocks. Low turnover stocks have delivered twice the annualized return (15% vs. 7%) at much lower volatility (15 vs 26) and outperformed high turnover stocks 69% of the periods since 1985.

Exhibit 3: S&P 500 aggregate and median forward P/E ratio since 1976
as of November 14, 2014

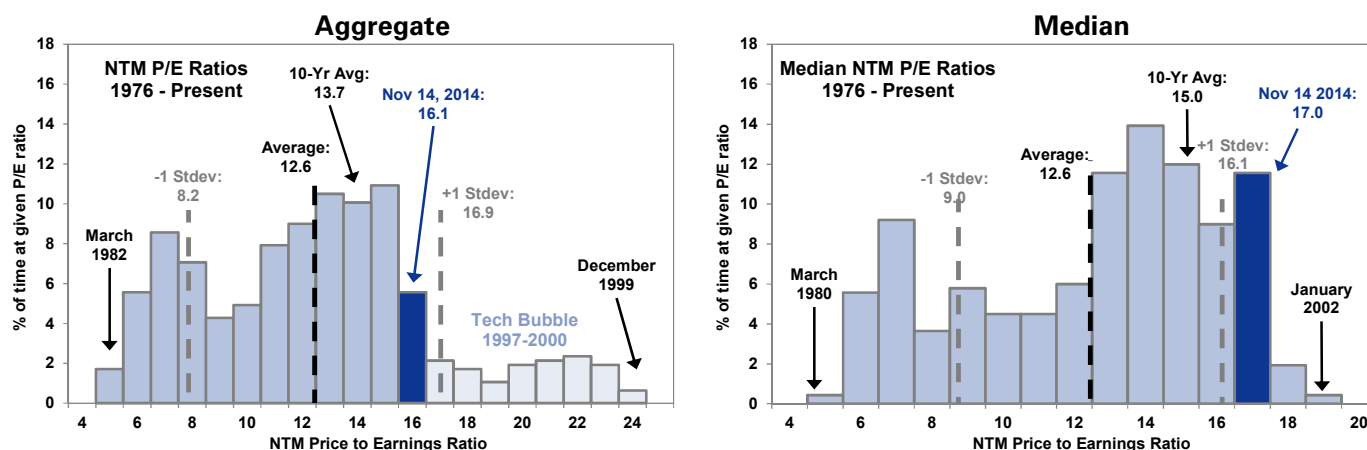


Source: Compustat, I/B/E/S, and Goldman Sachs Global Investment Research.

S&P 500 trades at the high end of a range of fair value based on most metrics, including P/E, EV/sales, EV/EBITDA, and Price/Book. Exhibit 3 shows the forward P/E multiples for the S&P 500 aggregate (index) and median (typical stock) since 1976. Exhibit 4 shows the same data as distributions. Note that the S&P 500 index has only exceeded 17x during the 1997-2000 Tech bubble and four months in 2003-2004. Similarly, only 15% of the time during the last 40 years has the median stock traded at a P/E higher than it does today.

We forecast a 5% total return for S&P 500 during the next 12 months and an annualized total return of 6% during the next five years. Starting valuation matters for long-term equity returns. We also forecast a 6% annualized return during the next 10 years. Major risks to our outlook include (1) weaker global economic growth than we assume; (2) rising domestic inflation; (3) monetary policy; (4) regulatory uncertainty; and (5) geopolitics.

Exhibit 4: Distribution of S&P 500 aggregate and median forward P/E ratios since 1976 (based on consensus estimates)
as of November 14, 2014

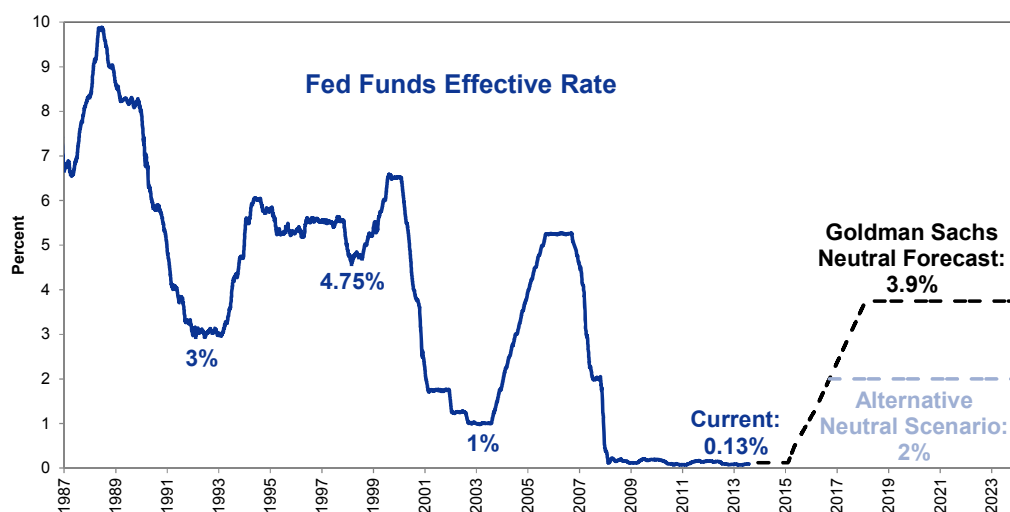


Source: Compustat, I/B/E/S, and Goldman Sachs Global Investment Research.

Normalization of rates and the path of equities in 2015 and beyond

The key focus for equity investors in 2015 will be how the market responds to the first Fed hike. Goldman Sachs US Economics forecasts the Fed will begin increasing the funds rate in 3Q 2015 and steadily hike until reaching a neutral rate of 3.9% in 2018. Our interest rate forecast is roughly in line with the FOMC's long-run funds rate projection of 3.75%. However, our forecast deviates from the expectation of some investors who believe lower potential US growth will support a neutral fed funds rate closer to 2% (Exhibit 5).

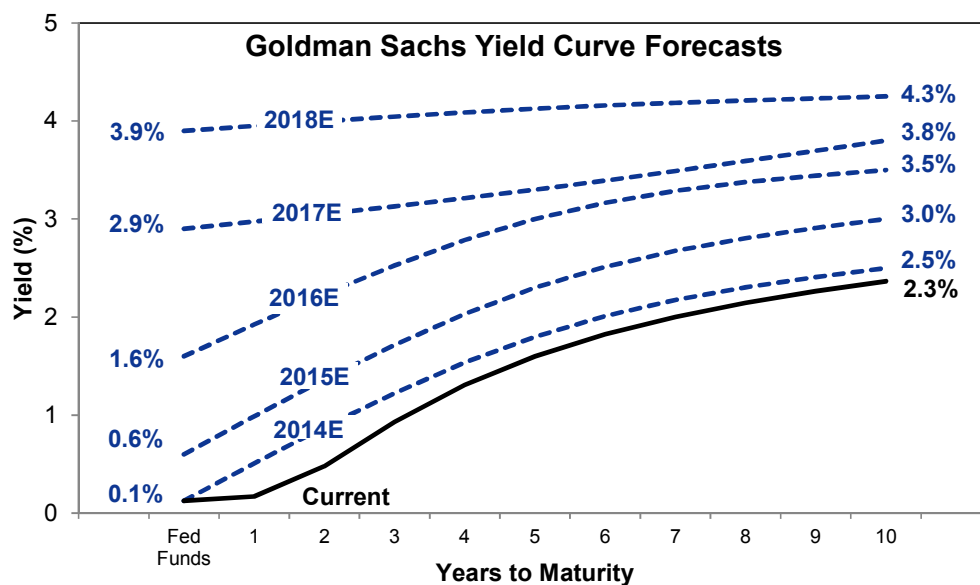
Exhibit 5: Goldman Sachs forecasts 2018 neutral fed funds rate of 3.9%; others expect ~2%
as of November 14, 2014



Source: Haver and Goldman Sachs Global Investment Research.

The normalization process for interest rates will re-shape the yield curve. We expect the slope of the curve will flatten during the next four years as the funds rate climbs by nearly 400 bp while the 10-year yield rises by 200 bp (Exhibit 6). The spread between fed funds and 10-year yields will fall from the current 220 bp to 25-50 bp by end-2018.

Exhibit 6: Fed funds rate to reach 3.9% and 10-year Treasury yield to reach 4.3% by 2018
as of November 17, 2014



Source: Haver, FRB, and Goldman Sachs Global Investment Research.

Exhibit 7: S&P 500 returns and P/E multiple change 3-, 6-, and 12-months before and after first hike in Fed Funds rate

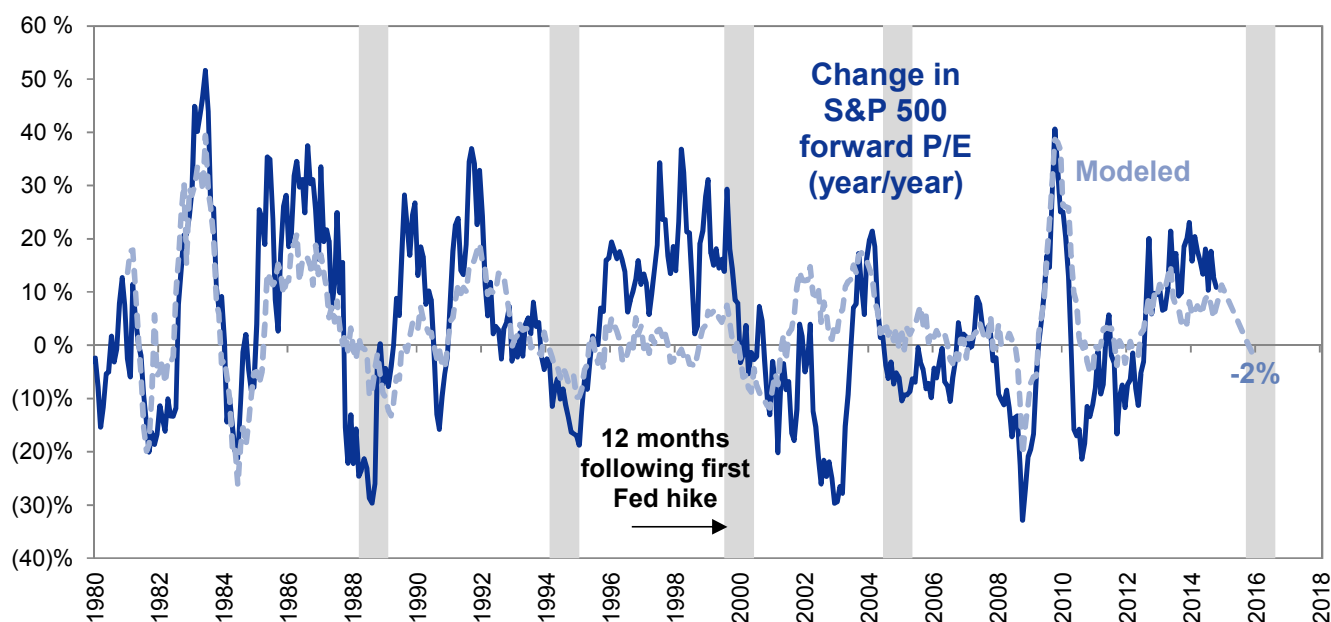
	PRECEDING First Rate Hike					FOLLOWING First Rate Hike				
	Feb 1994	Jun 1999	Jun 2004	Avg	Ex-Tech Avg	Feb 1994	Jun 1999	Jun 2004	Avg	Ex-Tech Avg
S&P 500 Returns										
3-Months	5 %	3 %	2 %	3 %	2 %	(5)%	(6)%	(1)%	(4)%	(4)%
6-Months	9	10	3	7	6	(3)	9	8	5	1
12-Months	11	21	18	17	12	3	9	7	6	3
S&P 500 P/E Change										
3-Months	0 %	1 %	(4)%	(1)%	(2)%	(10)%	(9)%	(5)%	(8)%	(8)%
6-Months	6	4	(6)	1	1	(13)	4	0	(3)	(6)
12-Months	(3)	16	2	5	4	(19)	(3)	(7)	(9)	(13)

Source: Haver and Goldman Sachs Global Investment Research.

S&P 500 returned an average of +3%, +7%, and +17% during the 3-months, 6-months, and 12-months before the three prior “first” interest rate hikes (1994, 1999, and 2004).

However, precedent shows S&P 500 suffered a swift P/E contraction averaging 8% during the three months following the initial tightening. The three month valuation compression averaged 7% when the 1999 Tech bubble episode is excluded.

We forecast the S&P 500 forward P/E will contract once the Fed raises interest rates in 2015. Our expectation is consistent with the historical experience of valuation multiples declining during tightening environments and our macro model that incorporates US economic growth, inflation, financial conditions, and corporate profit growth. Our model suggests that decelerating GDP and EPS growth combined with tightening financial conditions will lead to a modest decline in S&P 500 forward P/E (Exhibit 8).

Exhibit 8: Our macro model suggests a modest contraction in S&P 500 forward P/E multiple as of November 14, 2014

Shading indicates 12 months following first Fed hike.

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

Exhibit 9: The path ahead: Forecast annualized total return for US stocks and bonds, 2015-2018E
as of November 19, 2014

	Fed Funds		10-Year Treasury Note Equivalent (a)				S&P 500			
	Scenario	Year-End Yield	Return			Index	Dividends per Share	Return		
			Price	Income (b)	Total			Price	Income	Total
2015	0.63 %	3.0 %	(3.6)%	2.8 %	(0.8)%	2100	\$42	2.4 %	2.1 %	4.5 %
2016	1.63	3.5	(3.4)	3.3	(0.1)	2200	45	4.8	2.1	6.9
2017	2.88	3.8	(1.6)	3.6	2.0	2300	48	4.5	2.2	6.7
2018	3.88	4.3	(3.1)	4.0	0.9	2400	50	4.3	2.2	6.5
Annualized Total Return			(2.8)%	3.3 %	0.5 %			3.9 %	2.1 %	5.9 %
Annualized Real Return					(2.0)%					4.1 %
Risk-Adjusted Return Ratio (d)					0.1					0.3

(a) Assumes 10-Year constant maturity Treasury with duration rolled annually. (b) Assumes income return equivalent to midpoint between current and prior year's 10-year yield scenario. (c) Inflation reflects Core CPI. 2014 estimate from November through December. (d) Forward risk-adjusted return ratios use implied volatility from long-dated options on the S&P 500 and 10-year swaps.

Source: Haver, Compustat, FirstCall, and Goldman Sachs Global Investment Research.

We forecast significantly greater returns for stocks versus bonds as the interest rate environment normalizes between now and 2018. Under our interest rate scenario, the annualized total return of a constant maturity 10-year Treasury note will equal 0% vs. 6% for the S&P 500. On a real (inflation-adjusted) basis the annualized returns will be -2% for bonds and 4% for stocks (Exhibit 9).

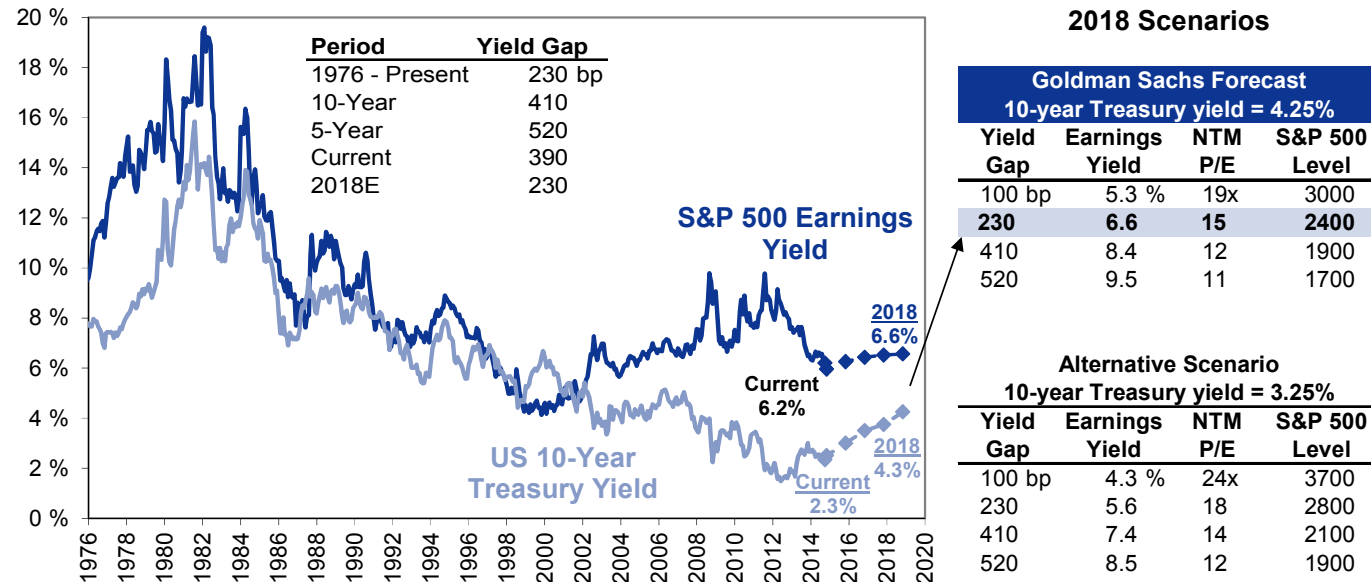
Our DDM suggests a year-end 2018 S&P 500 level of 2400 consistent with a 3.9% neutral fed funds rate, a neutral 10-year Treasury yield of 4.3%, and a trend real GDP growth rate of 2.0%-2.5% (Exhibit 10). Under an alternative neutral scenario with lower fed funds, 10-year yields, and GDP growth, the valuation would be 5-10% higher.

Exhibit 10: Year-end 2018 S&P 500 valuation of 2400 is consistent with 3.9% neutral fed funds and 2%-2½% trend GDP

Year-end 2018 DDM-implied S&P 500 Price Level										
Alternative Neutral					Goldman Sachs Forecast					
Fed Funds	2.0 %	2.5 %	3.0 %	3.5 %	4.0 %	4.5 %	5.0 %	5.5 %	6.0 %	
10-Year Treasury		2.5 %	3.0 %	3.5 %	4.0 %	4.5 %	5.0 %	5.5 %	6.0 %	

Source: Haver, Compustat, FirstCall, and Goldman Sachs Global Investment Research.

Exhibit 11: Fed Model compares earnings and bond yields
as of November 14, 2014



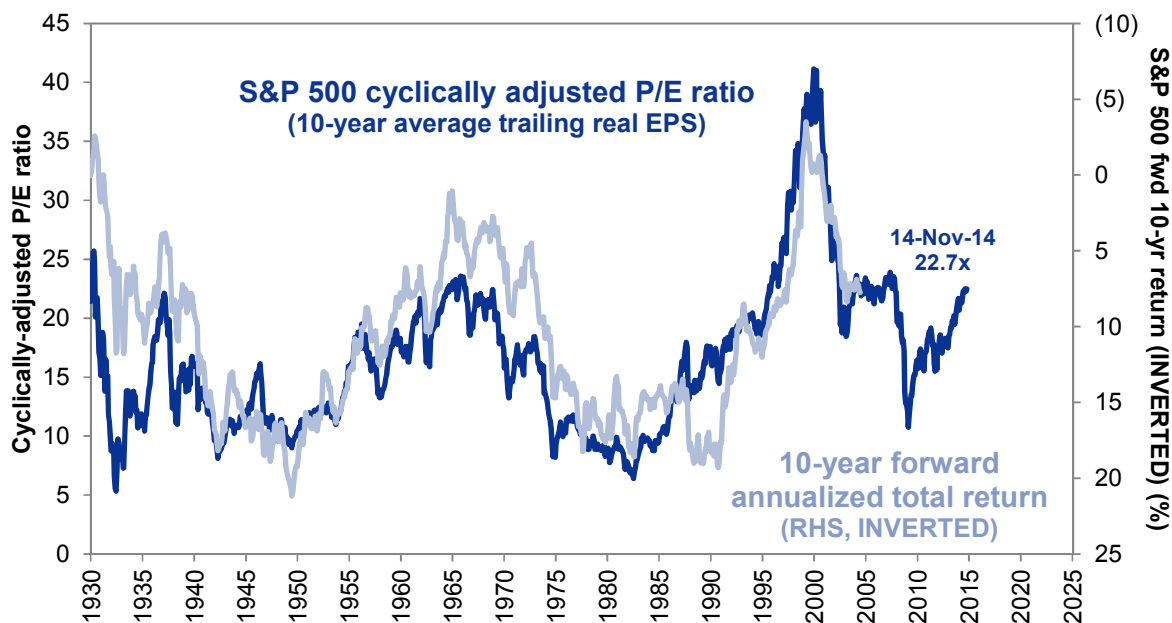
Note: Assumes 2019 EPS of \$157.

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

Our forecast S&P 500 index level of 2400 at year-end 2018 assumes the gap between the 10-year Treasury yield and S&P 500 earnings yield converges to its long-term average of 230 bp. The resulting earnings yield of 6.6% translates into a forward P/E multiple of 15.2x. Exhibit 11 contains valuation scenarios based on various yield gaps.

Current market valuation using the Shiller P/E ratio suggests a forward 10-year annualized total return similar to our one- and five-year forecasts. The relationship between cyclically adjusted P/E at investment and subsequent 10-year S&P 500 returns since 1929 suggests an annualized return of 2%-8% during the next decade (Exhibit 12).

Exhibit 12: Current S&P 500 cyclically-adjusted P/E ratio suggests a forward 10-year annualized total return of 2%-8%
as of November 14, 2014



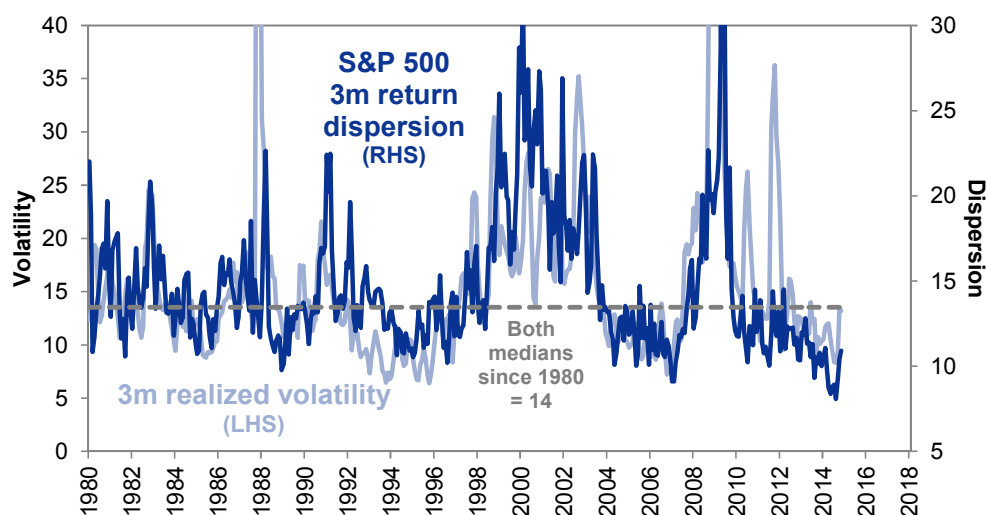
Source: Shiller and Goldman Sachs Global Investment Research.

Dispersion and volatility should remain low in 2015

GS options analyst Krag Gregory, Ph.D., contributed to this section.

We expect that equities will continue to trade with below-average volatility and dispersion in 2015, setting the stage for yet another year of disappointing returns for active managers. S&P 500 return dispersion hit historical lows in 2014, while volatility was similarly depressed. While dispersion will likely be above its record 2014 lows, our forecast of continued above-trend US GDP growth suggests dispersion and volatility will remain below historical averages in 2015. These conditions have been associated with poor hedge fund and mutual fund returns in the past, suggesting another challenging year lies ahead.

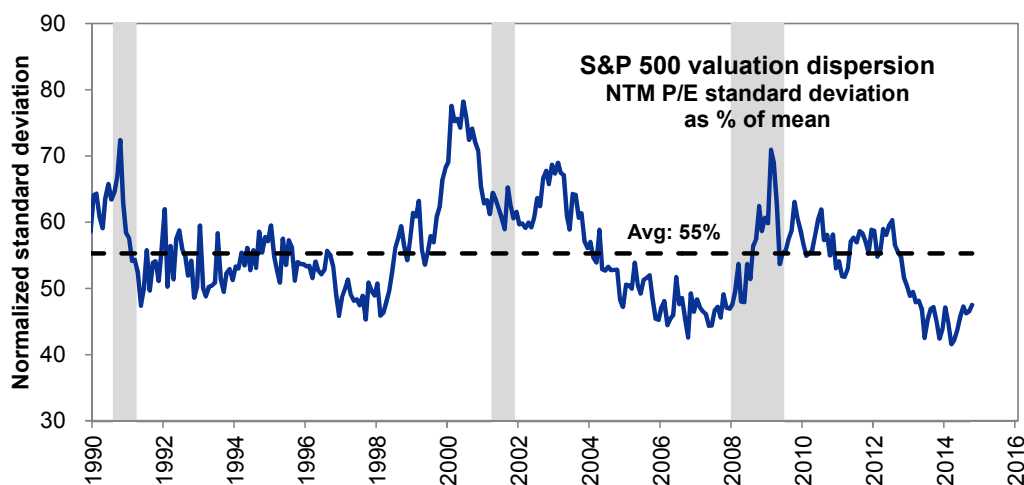
Exhibit 13: S&P 500 volatility and return dispersion have been historically low in 2014
as of November 14, 2014



Source: Goldman Sachs Global Investment Research.

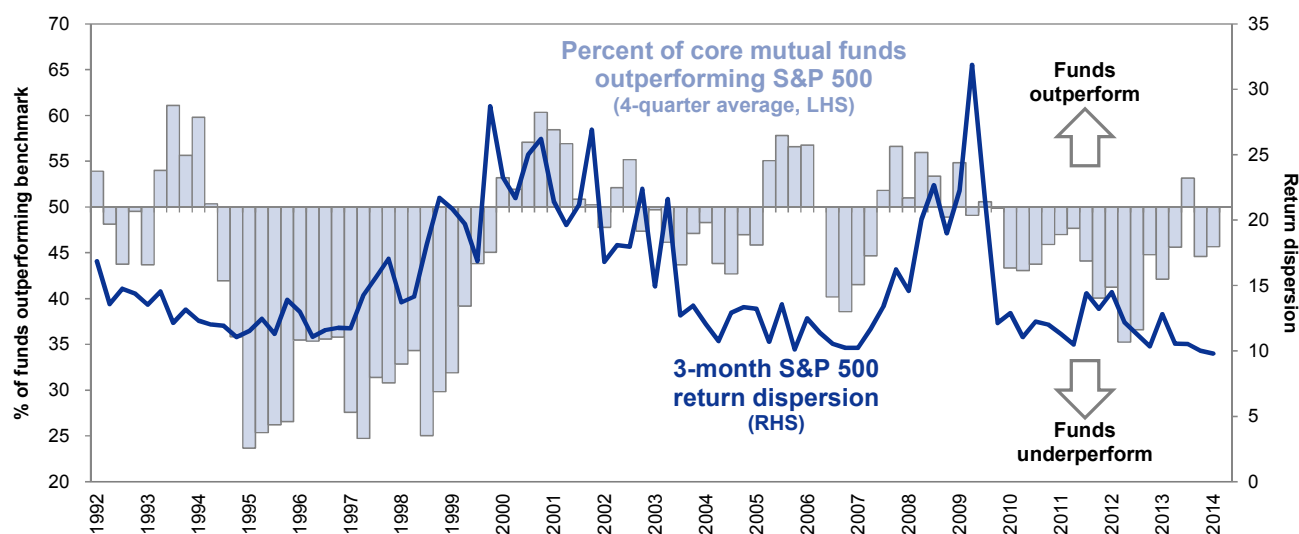
Stock valuations are also historically compressed. The recent compression coincided with the outperformance of low valuation stocks in 2012-2013 as economic growth improved and uncertainty declined. GDP forecasts and company EPS estimates are also tightly clustered. The current dispersion of S&P 500 P/E multiples hovers at a low level reached only two other times during the past 25 years: 1997-1998 and 2006-2007. Dispersion soared following the Tech bubble and during the Financial crisis but we do not expect another cataclysmic stock market episode in 2015.

Exhibit 14: S&P 500 P/E multiples are tightly grouped relative to history
as of October 31, 2014



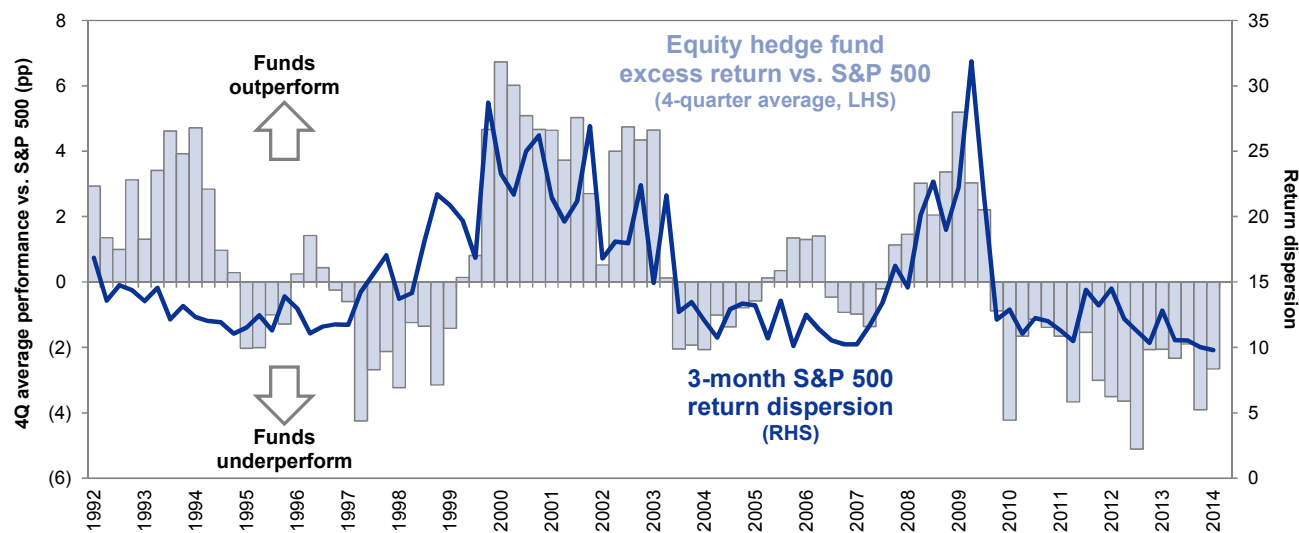
Source: Compustat, I/B/E/S, and Goldman Sachs Global Investment Research.

Exhibit 15: Low return dispersion has often been associated with mutual fund underperformance
as of November 14, 2014



Source: SimFunds and Goldman Sachs Global Investment Research.

Exhibit 16: Hedge funds have struggled in the shrunken "alpha sandbox" of low dispersion environments
as of November 14, 2014



Source: HFR and Goldman Sachs Global Investment Research.

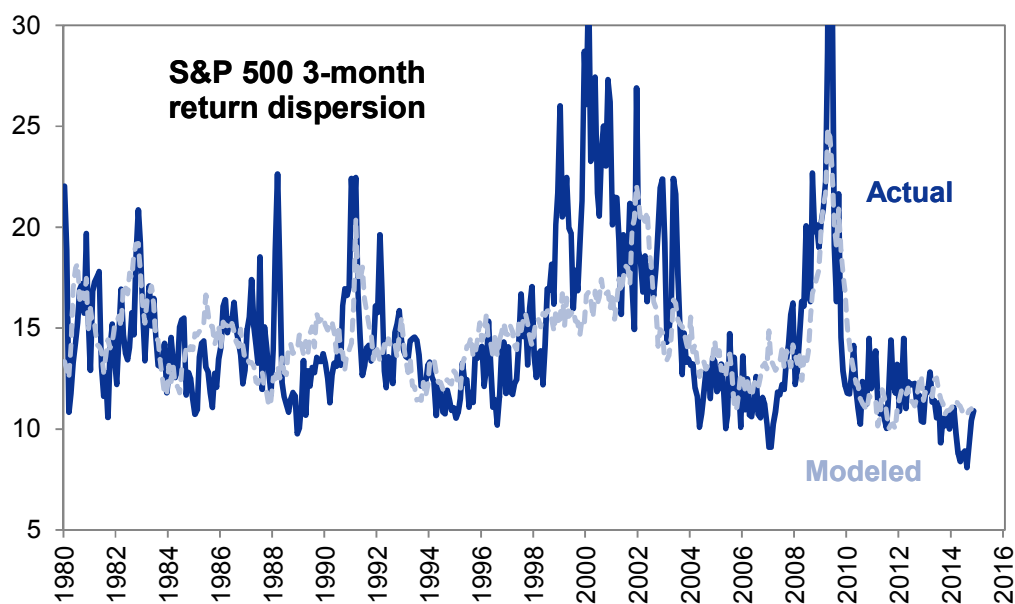
Low dispersion suggests another difficult year for generating alpha. Low dispersion, measured as the cross-sectional standard deviation of S&P 500 stock returns, indicates that the potential alpha to be gained from stock picking is small. Historically, low return dispersion coincided with poor relative returns of both mutual funds and hedge funds.

Improving US economic growth has historically been associated with low levels of dispersion, and we expect both trends will continue in 2015. We forecast an above-trend US GDP growth rate of 3.1% next year. Exhibit 17 compares actual return dispersion with levels suggested by a regression based on macro factors (unemployment, ISM, and consumer spending).

A steady economic growth environment suggests 2015 dispersion will be slightly higher than the 2014 average of 10 pp but below the 35-year median of 14 pp. Our macro model implies it would take a significant deterioration in the economic climate, such as higher unemployment or lower ISM, to drive dispersion to a level at or above the long-term average of 14 (Exhibit 18).

We do not believe the Fed “lift-off” presents significant upside risk to dispersion. In fact, return dispersion was lower during the 12 months following the first Fed hikes in 1994 and 2004 than it was during the year preceding the hikes. However, dispersion following the 1999 Tech bubble explosion and Fed hike was higher than before.

Exhibit 17: Macro model supports current low dispersion
as of October 31, 2014



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

Exhibit 18: Dispersion will likely stay below the 35-year average of 14
as of October 31, 2014

Sensitivity of S&P 500 3-month stock return dispersion to US economic environment							
Long-term avg = 14		ISM Manufacturing Index					
		40	45	50	55	60	65
Unemployment	6.6%	16.8	16.3	15.7	15.2	14.7	14.2
	6.2	15.8	15.3	14.8	14.3	13.8	13.4
	5.8	14.9	14.4	13.9	13.4	13.0	12.6
	5.4	14.0	13.5	13.1	12.6	12.2	11.8
	5.0	13.1	12.7	12.3	11.9	11.5	11.1
	4.6	12.4	11.9	11.6	11.2	10.8	10.5

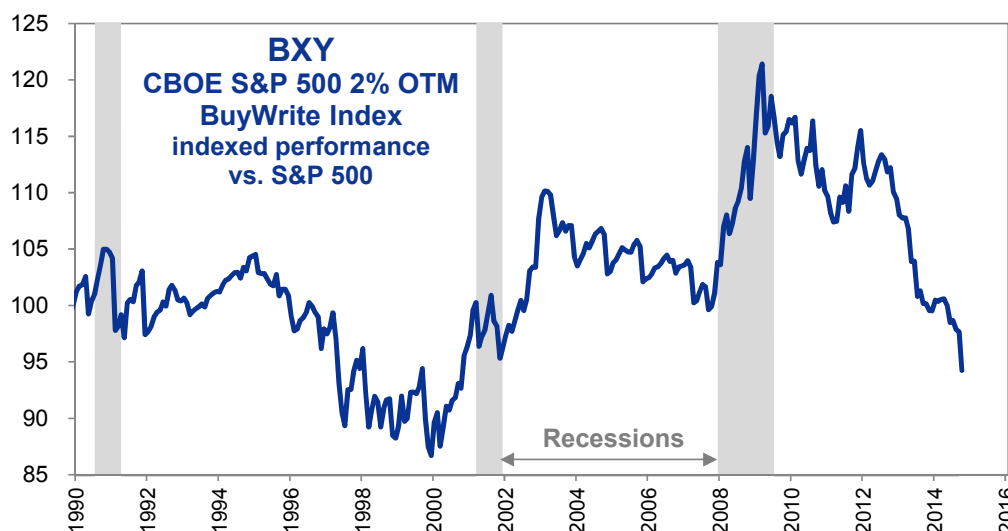
Shading indicates dispersion above historical average of 14.

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

In a low return, low dispersion environment, we recommend investors write calls. We believe overall market upside is limited given modest EPS growth and a P/E multiple that will slowly decline as the Fed begins to tighten. Given our forecasts of slim 5% full-year return and continued low dispersion, 2015 should be a year of scarce beta and alpha. The CBOE BXY Index, which tracks the performance of monthly 2% OTM call writing, has historically outperformed in low S&P 500 return environments. We believe this strategy will be attractive during 2H 2015 as the market slips at the time of the Fed hike (Exhibit 19).

The potential incremental return generated by call overwriting is significant (Exhibit 20). Based on the typical distribution of mutual fund returns, the 264 bp average outperformance of BXY when S&P 500 returns between 0% and 5%, which is roughly 50 bp above the S&P 500 dividend yield, would be enough to move a mutual fund ranking in 33rd percentile of returns to the 81st percentile. However, given low current volatility, investors may prefer to increase yield by selling calls closer to the money. Income-oriented investors concerned about the risk to stocks with high dividend yields from a potential 2015 rate hike may find call writing an appealing alternative strategy.

Exhibit 19: Call writing strategy performance vs. S&P 500
as of October 31, 2014



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

Exhibit 20: BXY outperforms in weak return environments
as of October 31, 2014

S&P 500 12m return	Frequency	Average 12m return	
		BXY	BXY less S&P 500
>30 %	11%	31 %	(562)bp
25 to 30	8	24	(250)
20 to 25	10	19	(310)
15 to 20	15	15	(186)
10 to 15	16	13	13
5 to 10	14	9	102
0 to 5	5	5	264
(10) to 0	6	0	562
(20) to (10)	6	(10)	492
< (20)	7	(22)	753
Total	100%	11 %	2 bp

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

Buy low turnover stocks to capture illiquidity premium

Liquidity concerns are increasingly in focus for market participants in light of today's macro-prudential environment. Collateralization requirements make holding inventories of risky assets more costly for market-makers. At the same time, fund managers continue to place premiums on the ability to move in and out of positions quickly to manage redemption needs. Under these constraints, market-makers and fund managers alike will continue to place a premium on holding highly liquid assets that allow them to prudently manage their balance sheet and portfolios risks.

Fund managers with longer investment horizons and a willingness to bear illiquidity risks stand to reap the benefits of holding less liquid assets. Illiquidity discounts are well established phenomena that cross the gamut of financial assets, including equities¹. The higher costs to transact with illiquid versus liquid assets reflect an agglomeration of supply/demand imbalances, inventory risks, and other search frictions required to match limited buyers and sellers. Given these costs, investors demand higher returns for holding illiquid assets versus their more liquid counterparts.

We use share turnover as a proxy for liquidity, which we measure as the trailing 12-month average of daily shares traded divided by float. Although various measures for liquidity exist, we use this metric given its simplicity and effectiveness as a trading strategy. Our measure broadly tracks NYSE equity market trading volume (Exhibit 22). Turnover at the exchange as measured in shares has declined sharply since the onset of the financial crisis, although on a notional dollar basis the effect has been more muted.

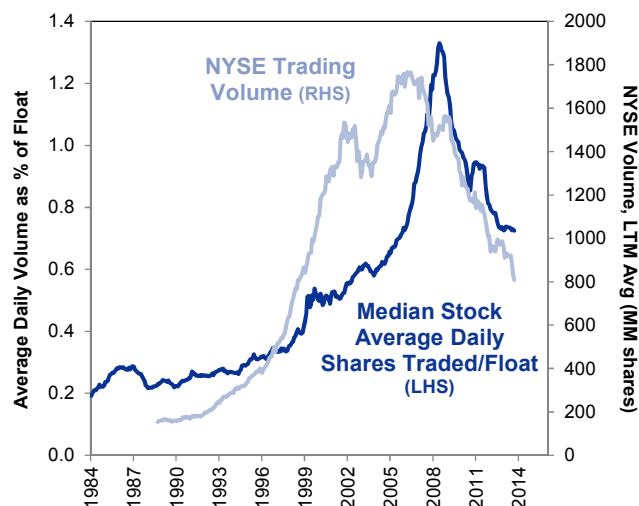
We recommend investors with longer investment horizons buy our low turnover basket (Bloomberg ticker: <GSTHLOTO>) and short our high turnover basket (Bloomberg ticker <GSTHHITO>). The completion of QE3 heralded the end of incremental liquidity added by asset purchases, while Fed rate hikes forecast for 3Q 2015 will make capital more costly. Both of these factors suggest liquidity will tighten during the coming year. As liquidity tightens, investors stand to capture a growing illiquidity risk premium.

Exhibit 21: Historical performance: Low vs. High Turnover
as of November 14, 2014



Source: FactSet, Lionshares and Goldman Sachs Global Investment Research.

Exhibit 22: Falling turnover matches trading volumes
as of November 14, 2014



Source: FactSet, Lionshares and Goldman Sachs Global Investment Research.

¹ See Ibbotson, Chen, Kim, and Hu, "Liquidity as an Investment Style" *Financial Analysts Journal*, Volume 69, 2013.

A sector-neutral portfolio of low turnover stocks generated a 15% average annualized return versus 7% for high turnover stocks, and outperformed during 69% of semi-annual holding periods since 1985 (Exhibit 23). Our analysis covered a universe of the 1,500 largest market cap firms in the Russell 3000 index. We constructed sector-neutral baskets of the top and bottom 50 stocks ranked by their trailing 12-month turnover every six months, and subsequently measured their 6-month forward returns. We also back-tested with one- and three-month rebalancing frequencies and the results were similar.

Volatility is also notably lower on low turnover stocks than on high turnover stocks, providing for a greater risk-adjusted return. While seemingly counterintuitive, stocks with very high rates of turnover are more prone to fall during periods of rising volatility and declining liquidity, precisely because these stocks trade more frequently.

Our basket of low turnover stocks does not embed a size tilt (small vs. large). In fact, constituents in our low turnover basket actually have a larger median equity cap than stocks in our high turnover basket (\$4.4 billion versus \$3.2 billion). Low turnover stocks trade at a lower P/B multiple and offer a higher dividend yield (Exhibits 24 and 25). However, stocks in the high turnover basket have lower P/E and EV/sales multiples and higher return to consensus price targets. S&P 500 constituents account for 30% of the 50 stocks in the low turnover and 10% of the high turnover stocks, respectively.

Exhibit 23: Historical performance metrics of low and high turnover basket since 1985
as of November 14, 2014

	Annualized		Risk-Adjusted	Avg. daily volume	Hit Rate of
	Return	Volatility	Return	as % of float	Outperformance
Low Turnover	15 %	15	1.0	2.2 %	
High Turnover	7	26	0.3	0.1	
Low vs. High Turnover	8	16	0.5		69 %

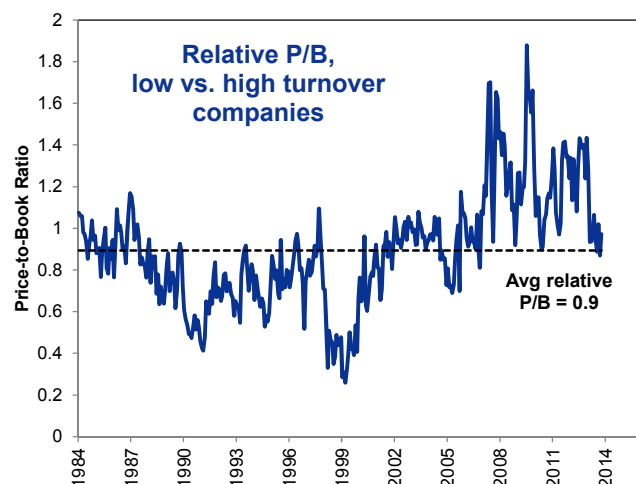
Source: FactSet, Compustat, Lionshares and Goldman Sachs Global Investment Research.

Exhibit 24: Valuation and growth metrics of current low and high turnover basket constituents
as of November 14, 2014

	Bloomberg Ticker	YTD Return	Median Growth and Value Metrics								Div Yield	Avg. daily volume as % of float
			Market Cap (\$bn)	Return to Target	SPX Beta	2015E Growth		P/E NTM	Price / Book	EV / Sales		
Low Turnover	GSTHLOTO	5.2 %	\$ 4.4	4 %	0.9	10 %	5 %	19.8 x	2.9 x	3.0 x	1.5 %	0.4 %
High Turnover	GSTHHITO	1.0	3.2	19	1.5	21	16	15.6	3.8	2.1	0.0	2.8
Median of 1500 largest Russell 3000 stocks		9.6	4.7	8	1.1	12	7	17.1	2.8	2.1	1.2	0.8

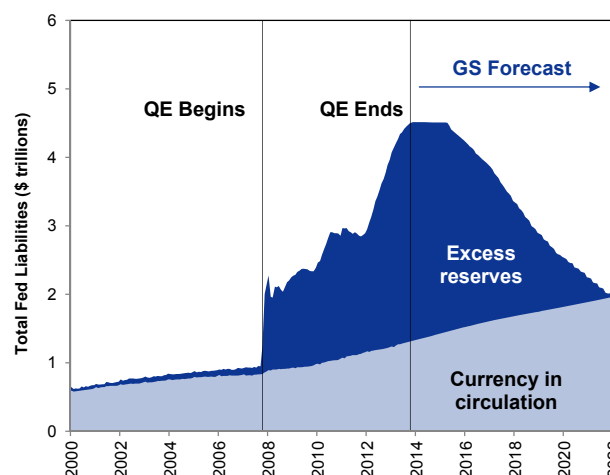
Source: FactSet, I/B/E/S, Compustat, Lionshares and Goldman Sachs Global Investment Research.

Exhibit 25: Low turnover trades at relative P/B discount
as of November 14, 2014



Source: Compustat and Goldman Sachs Global Investment Research.

Exhibit 26: Fed balance sheet will fall for several years
as of November 14, 2014



Source: Haver and Goldman Sachs Global Investment Research.

Low Turnover Basket Constituents (GSTHLOTO)

Our low turnover basket contains 50 stocks from the top half of the Russell 3000 (ranked by market cap) with the lowest trailing 12-month average of daily shares traded divided by share float outstanding. The median stock averages 0.4% daily turnover versus 0.8% from our universe of selected stocks. Constituents of the S&P 500 index account for 30% of the stocks in the low turnover basket.

Exhibit 27: Goldman Sachs Low Turnover Basket Constituents (GSTHLOTO)

as of November 14, 2014

Company	Ticker	YTD return	Market cap (\$bn)	Avg. daily volume as % of free float cap	Company	Ticker	YTD return	Market cap (\$bn)	Avg. daily volume as % of free float cap
CONSUMER DISCRETIONARY					INDUSTRIALS				
Federal-Mogul Holdings Corp	FDML	(23)%	\$2	0.2%	Rollins, Inc.	ROL	10 %	\$5	0.3%
Thomson Reuters Corporation	TRI	5	30	0.3	Donaldson Company, Inc.	DCI	(1)	6	0.3
Churchill Downs Incorporated	CHDN	8	2	0.4	Moog Inc. Class A	MOG.A	9	3	0.3
Loral Space & Communications Inc.	LORL	(8)	2	0.4	General Electric Company	GE	(3)	265	0.4
Morningstar, Inc.	MORN	(11)	3	0.4	HNI Corporation	HNI	24	2	0.4
Choice Hotels International, Inc.	CHH	9	3	0.4					
CONSUMER STAPLES					INFORMATION TECHNOLOGY				
Seaboard Corporation	SEB	23 %	\$4	0.2%	Automatic Data Processing, Inc.	ADP	22 %	\$41	0.4%
Harbinger Group Inc.	HRG	10	3	0.3	Amphenol Corporation Class A	APH	15	16	0.4
Philip Morris International Inc.	PM	4	137	0.3	National Instruments Corporation	NATI	2	4	0.4
Procter & Gamble Company	PG	11	242	0.3	AVX Corporation	AVX	3	2	0.4
Snyder's-Lance, Inc.	LNCE	6	2	0.3	ANSYS, Inc.	ANSS	(9)	7	0.4
ENERGY					International Business Machines Corporation	IBM	(10)	162	0.4
Exxon Mobil Corporation	XOM	(3)%	\$408	0.3%	Jack Henry & Associates, Inc.	JKHY	3	5	0.4
Chevron Corporation	CVX	(4)	224	0.3	Blackbaud, Inc.	BLKB	14	2	0.4
Schlumberger NV	SLB	7	127	0.5	SS&C Technologies, Inc.	SSNC	12	4	0.4
ConocoPhillips	COP	5	88	0.5	Solera Holdings, Inc.	SLH	(24)	4	0.4
FINANCIALS					MATERIALS				
CNA Financial Corporation	CNA	(4)%	\$11	0.1%	Tahoe Resources Inc.	TAHO	2 %	\$3	0.1%
Erie Indemnity Company Class A	ERIE	20	5	0.1	Aptargroup, Inc.	ATR	(2)	4	0.4
White Mountains Insurance Group, Ltd.	WTM	5	4	0.2	TELECOMMUNICATION SERVICES				
First Citizens BancShares, Inc. Class A	FCNCA	11	2	0.2	AT&T Inc.	T	7 %	\$182	0.5%
Markel Corporation	MKL	21	10	0.3	UTILITIES				
Loews Corporation	L	(11)	16	0.3	MGE Energy, Inc.	MGEE	18 %	\$2	0.2%
BOK Financial Corporation	BOKF	4	5	0.3					
Berkshire Hathaway Inc. Class B	BRK.B	23	357	0.3					
International Bancshares Corporation	IBOC	4	2	0.3					
HEALTH CARE					GSTHLOTO Median				
Johnson & Johnson	JNJ	21 %	\$305	0.3%			5 %	\$4.4	0.4%
QIAGEN NV	QGEN	(1)	6	0.4	Median of 1500 largest US Stocks				
Cantel Medical Corp.	CMN	20	2	0.4			10	4.7	0.8
Neogen Corporation	NEOG	(8)	2	0.4					
Bio-Rad Laboratories, Inc. Class A	BIO	(8)	3	0.4					
West Pharmaceutical Services, Inc.	WST	6	4	0.4					
Merck & Co., Inc.	MRK	22	170	0.4					

Source: FactSet, Lionshares, and Goldman Sachs Global Investment Research.

High Turnover Basket Constituents (GSTHHITO)

Our high turnover basket contains 50 stocks from the top half of the Russell 3000 (ranked by market cap) with the highest trailing 12-month average of daily shares traded divided by share float outstanding. The median stock averages 2.8% daily turnover versus 0.8% from our universe of selected stocks. Constituents of the S&P 500 index account for 10% of the stocks in the high turnover basket.

Exhibit 28: Goldman Sachs High Turnover Basket Constituents (GSTHHITO)
as of November 14, 2014

Company	Ticker	YTD return	Market cap (\$bn)	Avg. daily volume as % of free float cap	Company	Ticker	YTD return	Market cap (\$bn)	Avg. daily volume as % of free float cap
CONSUMER DISCRETIONARY					INDUSTRIALS				
Tesla Motors, Inc.	TSLA	69 %	\$31	8.9%	SolarCity Corp.	SCTY	(6)%	\$5	10.4%
Netflix, Inc.	NFLX	4	23	6.4	JetBlue Airways Corporation	JBLU	45	4	2.4
KB Home	KBH	(6)	2	5.6	Proto Labs, Inc.	PRLB	(10)	2	2.2
Groupon, Inc. Class A	GRPN	(36)	5	4.8	Hertz Global Holdings, Inc.	HTZ	(22)	10	2.1
Deckers Outdoor Corporation	DECK	10	3	3.6	Terex Corporation	TEX	(32)	3	2.1
Standard Pacific Corp.	SPF	(17)	2	3.3					
CONSUMER STAPLES					INFORMATION TECHNOLOGY				
Keurig Green Mountain, Inc.	GMCR	106 %	\$25	3.1%	SunPower Corporation	SPWR	(8)%	\$4	8.1%
Rite Aid Corporation	RAD	8	5	2.9	Yelp Inc. Class A	YELP	(16)	5	7.4
Nu Skin Enterprises, Inc. Class A	NUS	(72)	2	2.5	First Solar, Inc.	FSLR	(12)	5	7.3
Dean Foods Company	DF	(2)	2	2.3	Zynga Inc. Class A	ZNGA	(28)	2	4.9
Pilgrim's Pride Corporation	PPC	90	8	2.3	Zillow, Inc. Class A	Z	44	4	4.6
					Pandora Media, Inc.	P	(24)	4	4.3
ENERGY					SunEdison, Inc.	SUNE	27	5	3.8
PBF Energy, Inc. Class A	PBF	(8)%	\$2	3.4%	Advanced Micro Devices, Inc.	AMD	(31)	2	3.8
Peabody Energy Corporation	BTU	(40)	3	2.8	Facebook, Inc. Class A	FB	36	195	3.7
Western Refining, Inc.	WNR	4	5	2.8	Trulia, Inc.	TRLA	41	2	3.7
Continental Resources, Inc.	CLR	(6)	20	2.6					
FINANCIALS					MATERIALS				
Nationstar Mortgage Holdings Inc.	NSM	(23)%	\$3	4.1%	United States Steel Corporation	X	23 %	\$5	5.0%
Radian Group Inc.	RDN	19	3	2.9	U.S. Silica Holdings, Inc.	SLCA	26	2	4.8
MGIC Investment Corporation	MTG	8	3	2.4					
NorthStar Realty Finance Corp.	NRF	50	4	2.2	TELECOMMUNICATION SERVICES				
Ocwen Financial Corporation	OCN	(62)	3	2.2	T-Mobile US, Inc.	TMUS	(17)%	\$23	2.3%
Wisdomtree Investments, Inc.	WETF	(13)	2	2.1					
MBIA Inc.	MBI	(14)	2	2.1	UTILITIES				
Ryman Hospitality Properties, Inc.	RHP	23	3	1.8	NRG Energy, Inc.	NRG	12 %	\$11	1.2%
DCT Industrial Trust Inc.	DCT	21	3	1.8					
HEALTH CARE									
ACADIA Pharmaceuticals Inc.	ACAD	8 %	\$3	2.9%					
Auxilium Pharmaceuticals, Inc.	AUXL	55	2	2.6					
Clovis Oncology, Inc.	CLVS	(12)	2	2.3					
Intercept Pharmaceuticals, Inc.	ICPT	132	4	2.3					
Molina Healthcare, Inc.	MOH	43	2	2.2					
NPS Pharmaceuticals, Inc.	NPSP	(1)	3	2.1					
Lannett Company, Inc.	LCI	41	2	1.8					
GSTHHITO Median							1 %	\$3.2	2.8%
Median of 1500 largest US Stocks							10	4.7	0.8

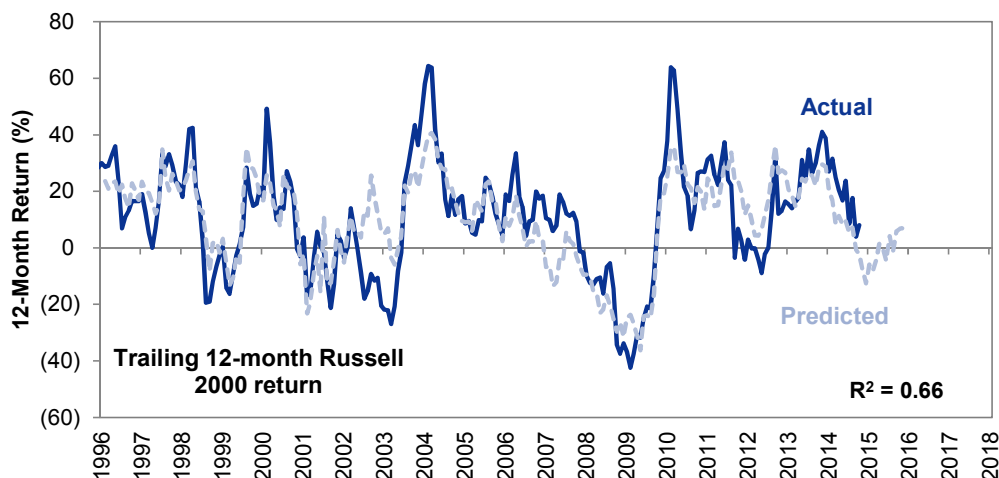
Source: FactSet, Lionshares, and Goldman Sachs Global Investment Research.

Size will trade sideways in 2015

Strong US economic growth but still-high valuations suggest large-cap and small-cap stocks will generate similar returns of roughly 5% in 2015. However, on a risk-adjusted basis we continue to prefer large-caps.

Since 1995, valuation and forward economic growth have been the primary drivers of Russell 2000 returns. Continued above-trend U.S. economic growth, particularly as foreign growth stumbles, will provide a tailwind for small-caps. However, valuations remain stretched, and Fed tightening poses potential headwinds for small-caps in 2H 2015.

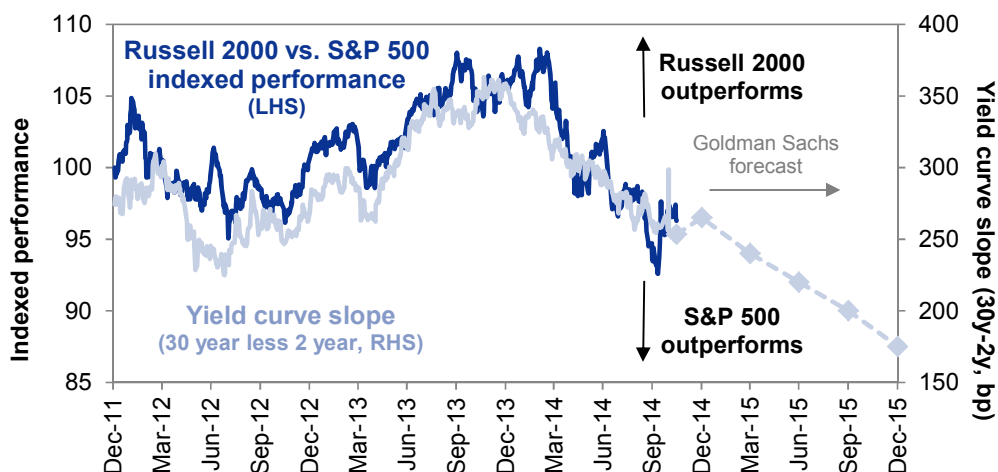
Exhibit 29: Our model estimates Russell 2000 will return 6% during the next 12 months
as of November 14, 2014



Source: Goldman Sachs Global Investment Research.

The recent tight relationship between Russell 2000 relative performance and the slope of the US yield curve highlights the risk to small-caps from the Fed and global growth. The Russell 2000 has lagged the S&P 500 by more than 1000 bp YTD (2% vs. 12%) as the term structure flattened. Relative performance and yield curve slope reflect investor concerns over risks to growth, particularly from economies in Europe and Asia, as well as expectation of Fed policy tightening in 2015.

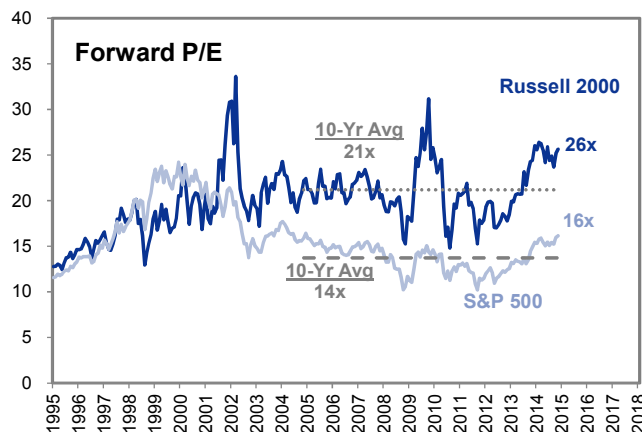
Exhibit 30: Small-caps have underperformed in 2014 as the yield curve flattened
as of November 14, 2014



Source: FactSet and Goldman Sachs Global Investment Research.

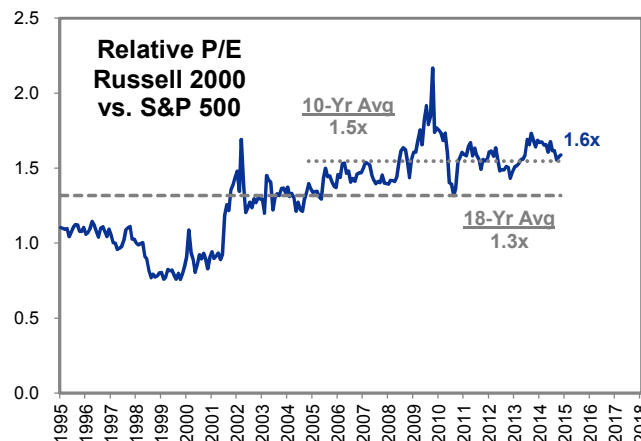
Dollar strength and comparatively weak foreign GDP should be tailwinds to small-cap returns relative to large caps. Russell 2000 EPS and performance are highly levered to US GDP growth, which we expect will continue to grow at an above-trend 3.1% pace in 2015. Roughly 80% of Russell 2000 sales are domestic, explaining the historical pattern of small-cap outperformance as USD strengthens – a trend we expect will persist in 2015.

Exhibit 31: Russell 2000 NTM P/E is 10% above average
as of November 14, 2014



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

Exhibit 32: Russell 2000 relative valuations vs. S&P 500
as of November 14, 2014

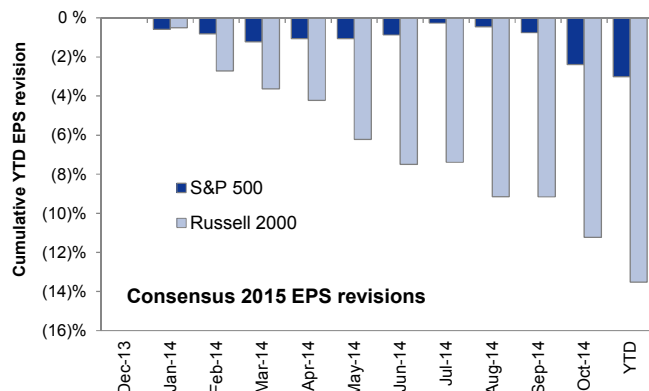


Source: Compustat, I/B/E/S, and Goldman Sachs Global Investment Research.

However, small-cap valuation remains extended on an absolute and relative basis.

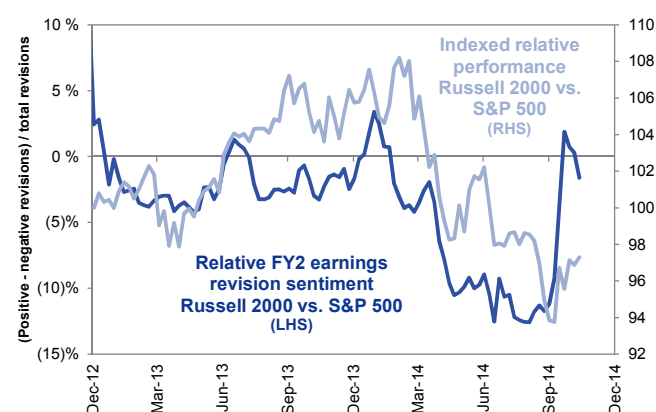
Russell 2000 continues to trade roughly 20% above its trailing 10-year average P/E (Exhibits 31 and 32). The relative valuation of the Russell 2000 versus the S&P 500 is close to the 10-year average largely because of the 13% YTD negative earnings revisions for the small-cap index compared with just 3% negative earnings revision for the S&P 500 (Exhibits 33 and 34). Despite the revisions, consensus still expects Russell 2000 EPS growth of 30% in 2015, compared with 10% for S&P 500.

Exhibit 33: 2015 EPS revisions for small- and large-caps
as of November 14, 2014



Source: FactSet and Goldman Sachs Global Investment Research.

Exhibit 34: Russell 2000 relative revisions vs. S&P 500
as of November 14, 2014



Source: FirstCall and Goldman Sachs Global Investment Research.

Sectors: Screening for outperformance over a 12-month horizon

We recommend investors overweight Information Technology, Energy, and Telecom Services and Underweight Consumer Discretionary, Industrials, and Materials. We seek to identify sectors likely to out-perform and under-perform the S&P 500 over a 12-month horizon. Given we forecast a modest 5% return for the S&P 500 index in 2015, and we expect return dispersion will remain low, our recommended sector tilts are only 100 bp (Exhibit 35).

Exhibit 35: Goldman Sachs recommended sector weightings
as of November 14, 2014

as of November 17, 2014

	Sector Weightings								
	Goldman Sachs Recommended	Current S&P 500	GS Overweight / Underweight	NTM	GS EPS Growth		2014 YTD		
Sectors	Sector Weightings	Weight		P/E	2015	2016	Return	Realized Volatility	Sharpe Ratio
Information Technology	Overweight	20 %	100 bp	16.2 x	9 %	6 %	19 %	13 %	1.4
Energy		9	100	14.0	(12)	8	(1)	15	(0.1)
Telecom Services		2	100	14.5	4	4	11	12	0.9
Financials	Neutral	16	0	13.9	9	11	12	13	0.9
Health Care		14	0	17.4	8	11	23	14	1.6
Consumer Staples		10	0	18.9	6	3	14	9	1.5
Utilities		3	0	16.6	7	5	22	13	1.6
Consumer Discretionary	Underweight	12	(100)	18.2	6	6	5	13	0.4
Industrials		10	(100)	16.5	5	7	9	13	0.7
Materials		3	(100)	16.8	(9)	7	8	13	0.6
S&P 500		100 %	0 bp	16.1 x	5 %	8 %	12 %	11 %	1.1

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

Our sector allocation model combines 29 sector fundamentals and macro factors to forecast 12-month excess returns relative to the S&P 500. Roughly half of the inputs are sector-specific fundamentals relating to valuation, earnings growth, return on capital, and return to shareholders. The other half of the metrics incorporate macro variables such as interest rates, inflation, risk sentiment, oil prices, the US dollar, and stage of the business cycle (Exhibits 36 and 37).

Based on data since 1994, the model explains 60%-80% of rolling 12-month returns for most sectors. The best results from the model were generated for the Materials sector (R^2 of 82%) and the lowest explanatory power for the Financials sector (57%).

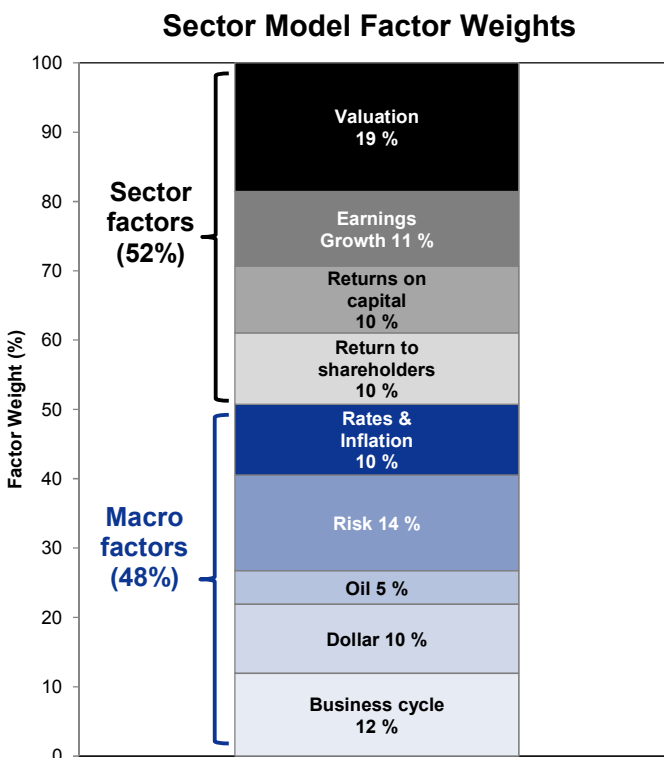
In addition to model-estimated returns, our sector allocation recommendations incorporate bottom-up views from our equity research analysts as well as thematic undercurrents that we expect will drive market performance in 2015.

Information Technology at the sector level benefits from attractive earnings growth and shareholder returns while at the macro level our overweight recommendation is supported by trends in interest rates, inflation, oil, and the US dollar. Information Technology has rallied 19% YTD and accounts for 20% of the S&P 500 equity capitalization, the largest weight of any of the ten sectors in the index. We forecast Technology will post the fastest EPS growth in 2015 at 9% compared with 5% for the S&P 500. However, margins are almost twice as high as other sectors of the market (17% vs. 9%). Tech is the largest payer of S&P 500 dividends and has the highest gross buyback yield in the market.

Energy is the worst performing sector YTD and the only sector with a negative return (-1%). The key to our overweight sector recommendation is the 12-month horizon because obviously the 30% plunge in Brent oil price since June is a gale force headwind for near-term performance. Our model suggests attractive current valuation and return to shareholders will support Energy sector outperformance during the next year.

Exhibit 36: Sector-specific and macro factors in our sector allocation model
as of November 14, 2014

	Category	Variable
Sector-Specific Factors	Valuation	P/E
		P/B
		EV/Sales
		EV/EBITDA
	Earnings Growth	Long-Term Growth
		2-Year Ahead EPS Growth
		1-Year Ahead EPS Growth
	Returns on capital	ROA
		ROE
		ROIC
		Operating Margins
Macro Factors	Returns to Shareholders	Dividend yield
		Payout ratio
		Free cash flow yield
	Rates & Inflation	Five-year vs. fed funds slope
		Five- vs. two-year slope
		Ten- vs. two-year slope
		Headline CPI
		Core CPI
	Risk	Credit spreads
		Volatility (normalized)
	Oil Prices	Oil prices, YoY change
		Oil curve slope
Macro Factors	US Dollar	GS Trade-Weighted Dollar
		DXY Index
	Business Cycle	ISM Manufacturing
		Unemployment gap
		Real GDP
		GS GLI



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

Exhibit 37: Sector-specific and macro factors in our sector allocation model
as of November 14, 2014

	Sector-Specific Factors				Macro Factors				
	Valuation	Earnings Growth	Returns on Capital	Returns to Shareholders	Rates & Inflation	Risk	Oil	Dollar	Business Cycle
Information Technology	-	+	-	+	+	-	+	+	
Energy	+		-	+	+		-	+	-
Telecom Services	+	-	-	+	-		+	-	+
Financials				-	-				-
Health Care	-	-	+	+				+	+
Consumer Staples	+				+			-	
Utilities	-	+	+		+		-		+
Consumer Discretionary	-	-	+	+	-			-	+
Industrials		-	-		-	+		+	-
Materials	+	+	-	-	+				

Source: Goldman Sachs Global Investment Research.

Exhibit 38: Sector absolute and historical relative valuation
 as of November 14, 2014

Aggregate valuation metrics

	EV/ Sales	EV/ EBITDA	Price/ Book	FCF Yield	PEG Ratio	NTM P/E
S&P 500	1.9x	9.6x	2.8x	4.5 %	1.5x	16.1x
Consumer Staples	1.5	11.9	4.9	4.7	2.2	18.9
Consumer Discretionary	1.7	9.6	4.4	4.0	1.2	18.2
Health Care	2.0	12.5	4.1	5.0	1.5	17.4
Materials	1.9	9.6	3.1	3.1	1.5	16.8
Utilities	NM	9.0	1.8	0.0	3.2	16.6
Industrials	2.1	11.1	3.4	4.9	1.5	16.5
Information Technology	3.2	10.8	4.3	6.2	1.3	16.2
Telecommunication Services	2.3	5.7	3.3	6.9	2.2	14.5
Energy	1.3	6.0	1.9	1.1	1.2	14.0
Financials	NM	NM	1.4	NM	1.5	13.9

Standard deviation vs. 10-year history (z-score)

	EV/ Sales	EV/ EBITDA	Price/ Book	FCF Yield	P/E	PEG Ratio	Median Z-Score
S&P 500	2.0	0.6	0.8	1.0	1.6	1.7	1.3
Telecommunication Services	(0.6)	(1.0)	3.3	0.8	(1.0)	(0.9)	(0.8)
Energy	(1.4)	(1.1)	(2.2)	0.5	0.1	(0.4)	(0.7)
Utilities	NM	(0.4)	(1.1)	(0.2)	(0.4)	(0.3)	(0.4)
Financials	NM	NM	(0.6)	NM	(0.3)	0.1	(0.3)
Consumer Discretionary	0.4	(0.3)	1.3	(0.1)	(0.4)	(1.0)	(0.2)
Information Technology	1.5	(0.1)	(0.1)	(0.7)	(0.5)	0.3	(0.1)
Materials	0.1	(0.1)	(0.1)	1.0	(0.2)	(0.1)	(0.1)
Industrials	(1.4)	(0.3)	0.3	0.5	(0.5)	0.2	(0.0)
Health Care	0.4	2.0	1.6	0.9	0.4	(0.7)	0.7
Consumer Staples	(0.2)	1.1	1.1	(1.2)	1.0	1.4	1.0

Note: S&P valuation calculated on an absolute basis. Sector valuations calculated relative to S&P 500.

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

At the commodity level, we have a bearish medium-term oil outlook (see *The New Oil Order: OPEC loses pricing power, shale shifts to the margin*, October 26, 2014). Our 2015 forecast equals \$84 Brent/\$74 WTI which we believe will stimulate a reduction in Saudi production and in US shale growth. Refiners represent one of the few Energy sub-sectors that can grow cash flow in a declining crude price environment (see *Breakthrough the noise: Resume at Attractive given FCF, midstream and wider spreads*, November 17, 2014). **US refiners have an average upside to GS target price of 25% during the next six months.**

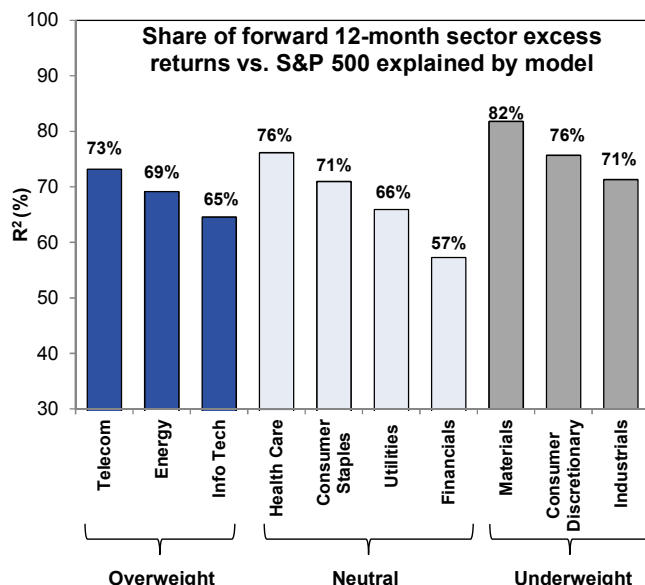
Telecom Services has returned 11% YTD and trades at the largest relative multiple discount versus the S&P 500 based on valuation during the past decade. In addition to valuation, the sector is attractive based on returns to shareholders. Telecom has a 4.7% dividend yield in 2015, highest in the S&P 500. However, the likelihood of a hike in rates in 3Q 2015 represents a potential headwind to returns. The sector accounts for 2% of S&P 500 market cap with two firms accounting for more than 90% of the equity cap of the sector. Our analyst Brett Feldman believes towers represent the best fundamental story in the telecom sector with a demand cycle that could last 10 years. We project a 50% rise in the spectrum in use during the next decade (see *Telecom Services: The urge to converge*, Sept. 2, 2014).

Industrials should underperform in 2015 as weak foreign economic growth and falling commodity prices weigh on the foreign-exposed cyclical sector. Industrials will feel the direct impact of the sharp deceleration in energy-related capex. Some industrial firms will benefit from lower input costs as a result of commodity price declines, but others will feel negative effects as investment spending in the energy and agriculture industries slows. Energy firms accounted for one-third of S&P 500 capex for each of the past four years but the collapse in crude prices led to the cancellation of many projects. Earnings growth, return on capital, inflation, and interest rates will impede Industrials performance next year.

Consumer Discretionary has returned just 5% YTD, ranking behind all other sectors other than Energy. Earnings growth, interest rates, and inflation are factors that our sector allocation model indicates will weigh on Consumer Discretionary returns during the next 12 months. At an 18.2x forward P/E multiple, the sector still trades a 20% premium to the S&P 500, compared with a long-term average of parity. Investors should note that hedge funds have 22% of their net exposure to stocks in the Consumer Discretionary sector.

Materials faces the macro headwind of slowing emerging market demand led by China. Return on capital and returns to shareholders are among the metrics that suggest Materials will lag the S&P 500 during the next 12 months. We expect the sector's EPS will fall 9% next year as foreign growth struggles and commodity prices remain low.

Exhibit 39: Share of forward return explained by model
as of November 14, 2014



Source: Compustat and Goldman Sachs Global Investment Research.

Exhibit 40: Sector composition of consensus 2015 DPS
as of November 14, 2014

Sector	Market cap		Points	2015E DPS		
	(\$Bil)	Share		Share	Yield	Growth
Info Tech	\$3,589	20 %	\$6.53	15 %	1.6 %	10 %
Financials	2,967	16	6.45	15	1.9	14
Consumer Staples	1,766	10	5.45	13	2.7	7
Energy	1,619	9	5.07	12	2.8	10
Health Care	2,552	14	4.65	11	1.6	10
Industrials	1,901	10	4.85	11	2.3	12
Consumer Discretionary	2,125	12	3.93	9	1.6	14
Utilities	558	3	2.28	5	3.6	4
Telecom Services	449	2	2.40	6	4.7	5
Materials	594	3	1.54	4	2.3	10
S&P 500	\$18,120	100 %	\$43.15	100 %	2.1 %	10 %

Source: Compustat, Bloomberg, and Goldman Sachs Investment Research.

Dividend growth remains robust. Both our top-down S&P 500 dividend growth estimates and the market-implied levels suggest CAGR dividend growth of roughly 5% during the next ten years. We forecast 7.7% growth in 2015 and 6.9% growth in 2016. Seven of 10 sectors are expected to grow dividends by 10% or more in 2015 (Exhibit 40).

How stocks will respond to the first Fed tightening in 2015 is a key issue for equity fund managers and a major focus of this report. We expect a benign market reaction at the index level. However, sector differences will likely be pronounced. History shows that during the six months before the Fed hiked for the first time the US market generated positive return averaging 7% led by cyclical sectors while defensives sectors lagged (Exhibit 41). Equity returns after the initial tightening were mostly negative with the notable exception of 1999 when the Tech bubble was still inflating and the sector soared by 35%.

Exhibit 41: Sector performance 6 months before and after first fed funds rate increase

	6-Months PRECEDING First Rate Hike				6-Months FOLLOWING First Rate Hike			
	Feb 1994	Jun 1999	Jun 2004	Avg	Feb 1994	Jun 1999	Jun 2004	Avg
S&P 500	9 %	10 %	3 %	7 %	(3)%	9 %	8 %	5 %
Sectors vs. S&P 500								
Materials	8 pp	15 pp	(3)pp	7 pp	4 pp	(7)pp	6 pp	1 pp
Information Technology	8	12	(3)	6	2	35	(4)	11
Industrials	4	5	4	4	(2)	(6)	3	(2)
Energy	(6)	5	9	3	1	(11)	9	(0)
Consumer Discretionary	6	4	(4)	2	(5)	(3)	4	(2)
Telecom	(11)	5	1	(1)	4	(7)	8	2
Financials	(4)	(0)	(1)	(2)	3	(15)	1	(4)
Health Care	6	(15)	(1)	(3)	2	(13)	(8)	(6)
Consumer Staples	1	(16)	3	(4)	(0)	(7)	(5)	(4)
Utilities	(15)	(9)	0	(8)	(7)	(21)	13	(5)

Source: Factset, Haver, and Goldman Sachs Global Investment Research.

Selected stocks in two or more recommended thematic baskets

Exhibit 42: Stocks in two or more recommended thematic baskets

as of November 14, 2014

Company	Ticker	Price	YTD Return	Market Cap (bn)	2015 Growth		Valuation		Upside to GS Target	GSTHAINT	GSTHCASH	GSTHLOTO	LOW VAL	GSTHHVIP
					EPS	Sales	P/E	EV/ Sales						
CONSUMER DISCRETIONARY														
CBS Corp.	CBS	\$53	(16)%	\$28	16 %	3 %	14.7x	2.5x	7 %		X			X
Dollar General	DG	65	7	20	14	9	17.1	1.2	NM	X				X
DIRECTV	DTV	88	27	44	5	5	14.3	1.9	NM		X			X
General Motors	GM	32	(20)	51	61	3	7.6	0.4	48				X	X
Kohl's Corp.	KSS	57	3	12	9	1	13.5	0.8	(14)		X		X	
Macy's Inc	M	62	18	22	12	2	13.3	1.0	8	X	X			
CONSUMER STAPLES														
CVS Health Corp.	CVS	\$89	26 %	\$103	14 %	6 %	18.4x	0.8x	(4)%	X	X			
Kroger Co.	KR	58	48	28	10	5	16.6	0.4	(8)	X	X			
Walgreen Co.	WAG	67	19	64	13	29	18.4	0.9	NM	X				X
ENERGY														
Chevron Corp.	CVX	\$116	(4)%	\$221	(5)%	(6)%	11.8x	1.1x	NM			X	X	
Hess Corp.	HES	83	1	26	(20)	(27)	21.7	2.2	NM		X			X
Marathon Petroleum	MPC	92	2	26	13	(3)	9.7	0.3	NM	X	X			
FINANCIALS														
American Intl Group	AIG	\$54	6 %	\$77	6 %	NM	11.3x	NM	13 %				X	X
Berkshire Hathaway	BRK.B	146	23	358	8	NM	23.7	NM	NM			X		X
Citigroup Inc.	C	53	3	162	54	NM	10.1	NM	1				X	X
XL Group Plc	XL	35	10	9	(6)	NM	11.0	NM	1		X		X	

Source: Goldman Sachs Global Investment Research.

GSTHAINT = High domestic sales exposure (see pages 32-33)

GSTHCASH = Total cash return to shareholder (see pages 34-35)

GSTHLOTO = Low Turnover (see pages 16-17)

Low Val = Low valuation (see pages 36)

GSTHHVIP = Hedge Fund Very Important Positions

Exhibit 42 cont'd: Stocks in two or more recommended thematic baskets
 as of November 14, 2014

Company	Ticker	Price	YTD Return	Market Cap (bn)	2015 Growth		Valuation		Upside to GS Target	G\$THAINT	G\$THCASH	G\$THLOTO	LOW VAL	G\$THHVIP
					EPS	Sales	NTM P/E	EV/ Sales						
HEALTH CARE														
Aetna Inc.	AET	\$84	24 %	\$30	7 %	7 %	12.1x	0.6x	5 %	X			X	
Cigna Corp.	CI	102	17	27	10	9	12.8	0.8	6		X		X	
Quest Diagnostics	DGX	62	19	9	8	2	14.4	1.7	27		X		X	
Express Scripts Holding	ESRX	78	11	58	12	2	14.6	0.7	(1)	X	X		X	
Humana Inc.	HUM	136	32	21	16	11	15.9	0.3	15	X			X	
WellPoint Inc.	WLP	125	37	34	7	8	13.5	0.4	5	X	X		X	
INDUSTRIALS														
Delta Air Lines	DAL	\$44	61 %	\$37	25 %	4 %	10.9x	1.1x	51 %				X	X
INFORMATION TECHNOLOGY														
Apple Inc.	AAPL	\$114	45 %	\$684	17 %	12 %	15.1x	3.7x	9 %		X			X
Automatic Data Processing	ADP	85	22	41	13	(1)	27.2	3.1	5	X		X		
First Solar Inc.	FSLR	48	(11)	5	64	15	12.8	1.2	(9)	X			X	
Corning Inc.	GLW	20	17	26	10	2	13.0	2.7	(2)		X		X	
Juniper Networks	JNPR	21	(7)	9	20	(3)	14.4	1.7	10		X		X	
Micron Technology	MU	33	50	35	13	11	9.3	2.3	(11)				X	X
Xerox Corp.	XRX	13	12	15	5	(1)	11.5	1.1	(18)		X		X	
TELECOM SERVICES														
AT&T Inc.	T	\$36	8 %	\$186	2 %	2 %	13.9x	2.0x	NM	X		X	X	
S&P 500			12 %		10 %	4 %	16.1x	1.9x	3 %					

Source: Goldman Sachs Global Investment Research.

GSTHAINT = High domestic sales exposure (see pages 32-33)

GSTHCASH = Total cash return to shareholder (see pages 34-35)

GSTHLOTO = Low Turnover (see pages 16-17)

Low Val = Low valuation (see pages 36)

GSTHHVIP = Hedge Fund Very Important Positions

2015 Global equity market returns: Japan, Asia-Pacific, Europe, US

We forecast positive equity returns for all four major global equity indices. However, the ranked order of returns depends on whether one is a US dollar-based investor or measures returns in local currency terms. Goldman Sachs Economics expects the euro and the yen will weaken vs. the US dollar by 8% and 12%, respectively, during the next year.

In US dollar terms, we forecast an 11% total return for Asia-Pacific ex Japan (MXAPJ), 8% for the TOPIX, 5% for STOXX 600, and 5% for the S&P 500 (Exhibit 43). The 20% local currency return for TOPIX will fall to 8% in USD terms after adjusting for the plunging yen.

For US equity investors, we recommend owning domestic stocks with high US sales and avoiding exposure to US stocks with high European revenues (Exhibit 44).

Volume and price trends support this strategy. The wide disparity in GDP growth rates means differential end-demand. Prices will be a headwind for exporters. See pages 32-33 for a description and the constituents of our high US sales exposure basket (GSTHAINT).

Exhibit 43: Global equity market valuation and return forecasts: Japan, Asia-Pacific, Europe, US
as of November 14, 2014

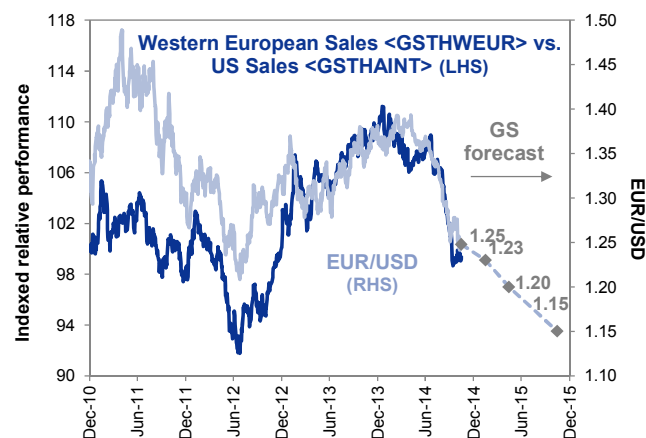
	Price 14-Nov-14	EPS Forecast			EPS Growth		NTM P/E		EV/ EBITDA	Price/ Book	FCF Yield	Div Yield	Net Margin	ROE	12-month Total Return	
		2014	2015	2016	2015	2016	Current	2015							Local	USD
TOPIX	1400	¥ 91	¥ 111	¥ 121	22 %	9 %	13.9 x	12.7 x	8.1 x	1.3 x	4.9 %	1.9%	4.2 %	8.7 %	20 %	8 %
Asia Pac (Ex-Japan)	480	\$ 37	\$ 40	\$ 43	8	10	12.3	12.1	7.1	1.6	2.3	3.2	6.9	12.5	14	11
STOXX Europe 600	336	€ 22	€ 23	€ 25	6	8	14.6	14.4	8.3	1.8	4.1	3.7	6.4	9.3	12	5
S&P 500	2040	\$ 116	\$ 122	\$ 131	5	8	16.9	16.7	9.6	2.8	4.5	2.1	9.1	14.9	5	5

Asia Pac (Ex-Japan) EPS integers are in USD whereas EPS growth rates are local currency effective.

TOPIX data based on March-ending fiscal year. US, Europe and AEJ data based on December-ending fiscal year

Source: FactSet and Goldman Sachs Global Investment Research.

Exhibit 44: US vs. Europe geographic sales basket
as November 14, 2014



Source: FactSet and Goldman Sachs Global Investment Research

Exhibit 45: Global equity market performance 2014 YTD
as of November 14, 2014

Market	Price Return (%) US Dollar				Local Currency
	1-Week	1-Month	3-Month	2014 YTD	
U.S. (S&P 500)	0 %	9 %	4 %	10 %	10 %
China (MSCI China)	2	5	(3)	2	2
Australia (ASX 200)	(0)	5	(8)	(1)	2
Mexico (Bolsa)	(3)	(0)	(7)	(2)	2
Japan (TOPIX)	1	6	(3)	(3)	8
UK (FTSE 100)	0	2	(7)	(7)	(1)
Korea (KOSPI)	(0)	(2)	(13)	(7)	(3)
Spain (IBEX 35)	1	(2)	(8)	(7)	2
Europe (DJ Stoxx 600)	1	3	(5)	(7)	2
Brazil (Bovespa)	(5)	(18)	(19)	(9)	1
France (CAC 40)	1	1	(7)	(11)	(2)
Germany (Dax)	0	3	(6)	(12)	(3)
Average	(0)%	1 %	(7)%	(5)%	2 %

Source: FactSet and Goldman Sachs Global Investment Research

Exhibit 46: Goldman Sachs global equity market earnings, price, and valuation forecasts, 2014-2018E

as of November 19, 2014

	GS EPS Forecasts				Earnings growth		GS Index forecast				Price returns		12-month forward P/E				Change in P/E	
	2015	2016	2017	2018	Total	CAGR 2015-18	Year-End				Total	CAGR 2014-17	Year-End				Total	CAGR 2014-17
							2014	2015	2016	2017			2014	2015	2016	2017		
TOPIX	¥ 111	¥ 121	¥ 126	¥ 133	20 %	6 %	1425	1650	1800	1900	33 %	10 %	12.9 x	13.7 x	14.2 x	14.3 x	11 %	3 %
STOXX Europe 600	€ 23	€ 25	€ 27	€ 29	24	7	340	365	400	440	29	9	14.6	14.5	14.7	15.2	4	1
Asia Pac (Ex-Japan)	\$ 40	\$ 43	\$ 46	\$ 49	22	7	490	520	570	615	26	8	12.3	12.1	12.3	12.6	3	1
S&P 500	\$ 122	\$ 131	\$ 141	\$ 150	23	7	2050	2100	2200	2300	12	4	16.8	16.0	15.6	15.3	(9)	(3)

Source: Goldman Sachs Global Investment Research.

Exhibit 47: Goldman Sachs global macro forecasts

as of November 19, 2014

	units	Current	3m	6m	12m	Target
Ten Year Rates						
US	%	2.3	2.6	2.8	3.0	68 bp
Euro Area (Germany)	%	0.7	1.1	1.2	1.3	51
Japan	%	0.5	0.7	0.7	0.8	32
Currencies						
US Dollar / Yen	\$/¥	116	116	118	120	3 %
Sterling / US Dollar	£/\$	1.56	1.60	1.58	1.53	(2)
Euro / US Dollar	EUR/\$	1.25	1.23	1.20	1.15	(8)
Energy						
Brent Crude Oil	\$/bbl	79	85	80	85	7 %
NYMEX Nat. Gas	\$/mmBtu	4.02	4.00	4.10	4.00	(0)
WTI Crude Oil	\$/bbl	76	75	70	75	(1)
Metals						
LME Copper	\$/mt	6695	6600	6200	6000	(10)%
COMEX Gold	\$/troy oz	1186	1195	1135	1050	(11)

Source: Goldman Sachs Global Investment Research.

Exhibit 48: Goldman Sachs real GDP forecasts 2013-2018E

as of November 19, 2014

Goldman Sachs real GDP growth forecasts						
	2013	2014	2015	2016	2017	2018
China	7.7 %	7.3 %	7.0 %	6.7 %	6.5 %	6.2 %
World	3.0	3.0	3.4	3.7	3.8	3.8
USA	2.2	2.2	3.1	3.0	3.0	2.7
UK	1.7	3.0	2.8	2.8	2.8	2.6
Australia	2.4	2.9	2.0	3.4	4.0	3.6
Spain	(1.2)	1.3	1.6	1.6	1.6	1.7
Germany	0.2	1.3	1.0	1.8	1.4	1.2
Russia	1.3	0.3	1.0	2.1	2.1	2.4
Japan	1.5	0.3	0.9	1.2	0.7	0.9
Euro Area	(0.4)	0.8	0.9	1.4	1.5	1.5
France	0.4	0.4	0.8	1.4	1.5	1.9
Brazil	2.5	0.2	0.7	2.0	3.1	3.4
Italy	(1.9)	(0.4)	0.2	0.5	1.6	1.5

Source: Goldman Sachs Global Investment Research.

Earnings forecast with sensitivity to shifts in oil price and the dollar

In our October 29 *US Equity Views: Our baseline S&P 500 earnings model and sensitivity analyses*, we explored the impact various macro variables have on 2015 S&P 500 EPS. Variables include US GDP growth, world GDP growth, core inflation, 2-year and 10-year US Treasury yields, crude oil, and the trade-weighted US dollar.

Exhibit 49: S&P 500 sales, margins, and earnings forecasts, 2013-2018E

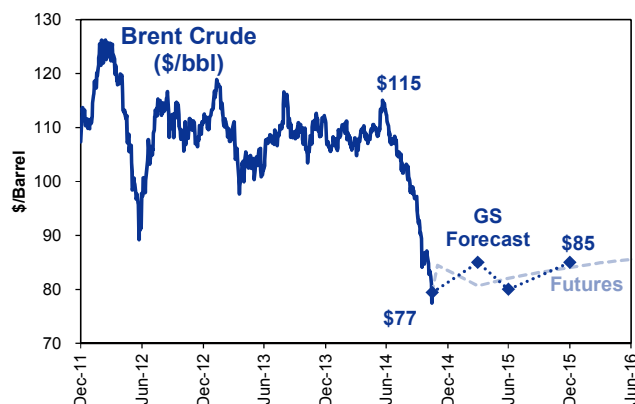
as of November 14, 2014

	Goldman Sachs Top-down Forecast						Consensus Bottom-up		
	2013	2014E	2015E	2016E	2017E	2018E	2014E	2015E	2016E
S&P 500 ex-Financials and Utilities									
Sales Per Share	\$930	\$979	\$1014	\$1076	\$1150	\$1217	\$972	\$1014	\$1065
Growth		5 %	4 %	6 %	7 %	6 %	4 %	4 %	5 %
Profit Margin	8.9%	9.1%	9.1%	9.2%	9.2%	9.0%	9.2%	9.8%	10.5%
EPS	\$82	\$89	\$93	\$99	\$105	\$110	\$90	\$100	\$112
Growth		8 %	4 %	7 %	6 %	4 %	9 %	11 %	12 %
Financials and Utilities EPS									
EPS	\$25	\$27	\$29	\$32	\$36	\$40	\$27	\$29	\$32
Growth		9 %	9 %	10 %	11 %	11 %	9 %	7 %	9 %
S&P 500 EPS									
EPS	\$107	\$116	\$122	\$131	\$141	\$150	\$117	\$128	\$143
Growth		9 %	5 %	8 %	8 %	6 %	9 %	10 %	12 %

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

Exhibit 50: Brent crude price down 30% since June

as of November 14, 2014



Source: Haver and Goldman Sachs Global Investment Research.

Exhibit 51: Sensitivity of S&P 500 EPS to avg Brent oil price

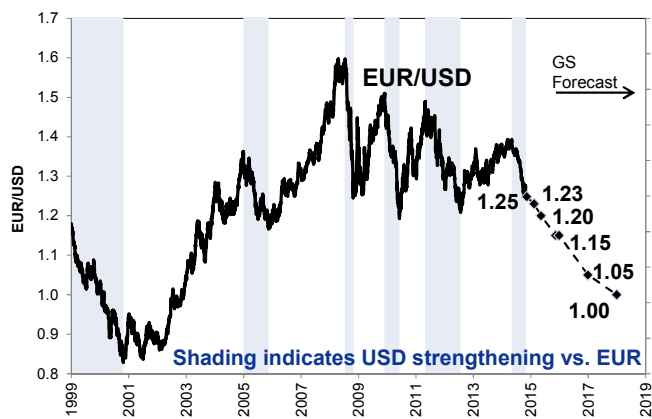
as of November 14, 2014

Sensitivity to change in average 2015 Brent Oil							
Oil Price	\$54	\$64	\$74	\$84	\$94	\$104	\$114
GDP							
2015	3.8 %	3.6 %	3.4 %	3.1 %	2.9 %	2.7 %	2.4 %
2016	4.4	4.0	3.5	3.0	2.5	2.0	1.6
2015 EPS							
Level	\$126	\$125	\$124	\$122	\$121	\$119	\$118
Growth	9 %	7 %	6 %	5 %	4 %	2 %	1 %
2016 EPS							
Level	\$143	\$139	\$135	\$131	\$128	\$124	\$120
Growth	13 %	11 %	9 %	8 %	6 %	4 %	2 %

Source: Goldman Sachs Global Investment Research.

Exhibit 52: Euro vs. USD will reach parity by 2017

as of November 14, 2014



Source: Compustat, FactSet, and Goldman Sachs Global Investment Research.

Exhibit 53: Minimal impact on EPS from US dollar strength

as of November 14, 2014

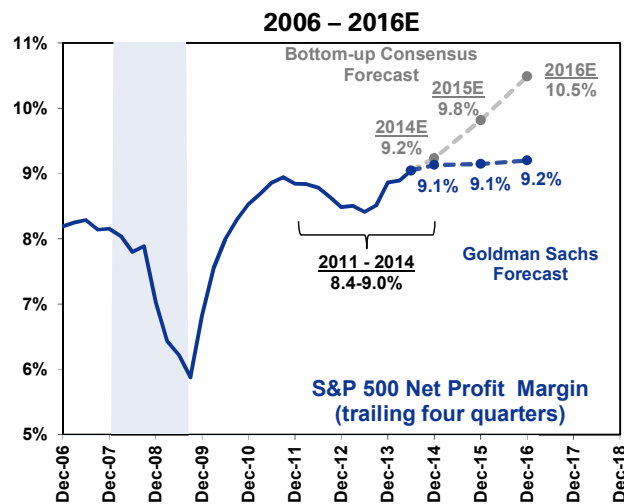
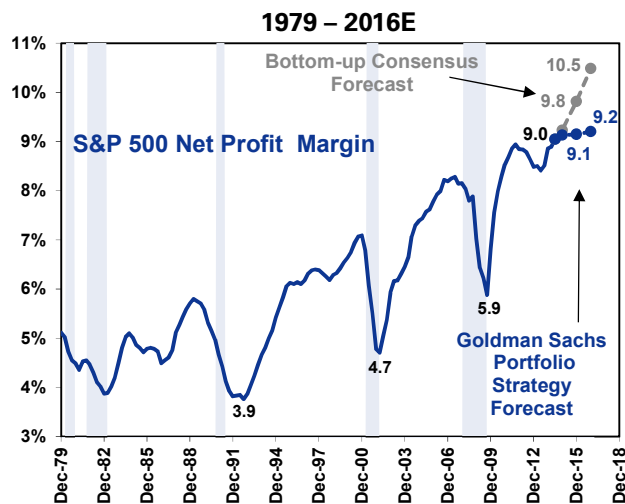
Sensitivity of 2015 S&P 500 EPS to USD (10% change ≈ \$3 of EPS)

	Trade-weighted	EPS	
	US dollar	Level	Growth
Stronger ↑	20 %	\$115	(0)%
	15	117	1
	10	119	2
	5	120	4
	0	122	5
Weaker ↓	(5)	123	7
	(10)	125	8
	(15)	127	9
	(20)	128	11

Source: Goldman Sachs Global Investment Research.

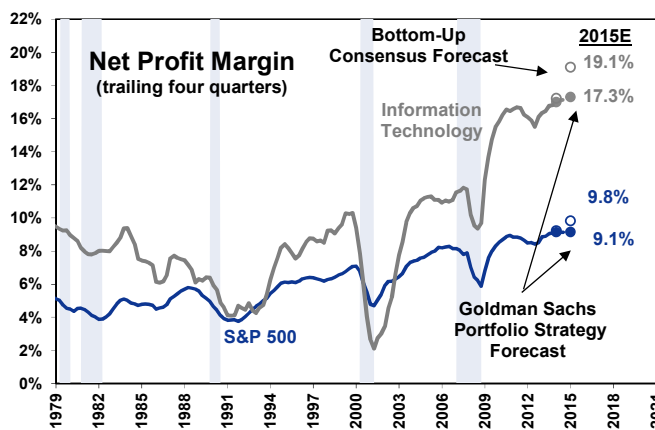
Margin forecast for S&P 500 index and sectors

Exhibit 54: S&P 500 net profit margins have hovered around 9.0% since 2011; we expect stable margins through 2018
as of November 14, 2014



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

Exhibit 55: Margins: Info Tech vs. S&P 500
as of November 14, 2014



Source: Haver and Goldman Sachs Global Investment Research.

Exhibit 56: Sensitivity: 50 bp shift in margins ≈ \$5 in EPS,
as of November 14, 2014

Sensitivity of 2015 EPS forecast to sales growth and margin						
		2015 Profit Margin				
		8.1 %	8.6 %	9.1 %	9.6 %	10.1 %
2015 Sales Growth	5.6 %	114	119	124	129	134
	4.6	113	118	123	128	133
	3.6	112	117	122	127	132
	2.6	111	116	121	126	131
	1.6	110	115	120	125	130

Source: Goldman Sachs Global Investment Research.

Exhibit 57: We forecast stable margins of 9.1% in 2014 and 2015; consensus expects expansion to 9.8% in 2015
as of November 14, 2014

	Net Margin						Annual margin expansion			
	GS Top-Down			Bottom-up			GS Top-Down		Bottom-Up	
	2014E	2015E	2016E	2014E	2015E	2016E	2015E	2016E	2015E	2016E
Information Technology	17.0 %	17.3 %	17.3 %	17.2 %	19.1 %	20.1 %	29 bp	1 bp	188 bp	105 bp
Telecom Services	10.3	10.6	10.9	10.2	10.5	10.8	30	32	27	39
Industrials	9.2	9.3	9.5	9.3	9.8	10.5	15	20	58	61
Health Care	8.9	9.1	9.3	9.1	10.3	11.0	20	19	120	72
Energy	8.2	7.4	7.5	8.3	7.7	8.4	(76)	5	(54)	68
Materials	8.0	7.2	7.3	8.0	9.1	10.3	(79)	10	110	119
Consumer Discretionary	6.9	6.9	6.9	6.9	7.5	8.1	5	(5)	55	68
Consumer Staples	6.4	6.5	6.4	6.6	6.6	6.8	11	(10)	7	20
S&P 500 Net Margin	9.1 %	9.1 %	9.2 %	9.2 %	9.8 %	10.5 %	1 bp	5 bp	58 bp	67 bp

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

Distribution of Economics forecasts and EPS sensitivity to GDP

Exhibit 58: GDP growth recovers to 3% in 2015-2018E
as of November 19, 2014

	% Annual Change					
	2013A	2014E	2015E	2016E	2017E	2018E
Real GDP	2.2%	2.2%	3.1%	3.0%	3.0%	2.7%
Consumer Spending	2.4	2.3	2.9	2.7	2.5	2.2
Business Fixed Investment	3.0	5.8	5.7	5.5	5.5	5.2
Residential Investment	11.9	1.7	9.0	12.3	12.5	10.9
Federal Spending	(5.7)	(1.8)	(0.7)	(1.3)	(0.6)	(0.6)
Net Exports (Bil.)	(420)	(431)	(449)	(485)	(506)	(529)
Inflation						
Headline CPI	1.5	1.7	1.3	2.3	2.3	2.4
Core CPI	1.8	1.8	1.9	2.1	2.2	2.4
Core PCE	1.3	1.4	1.5	1.7	1.9	2.0
Unemployment Rate	7.4	6.2	5.6	5.2	4.8	4.6
Fed Funds Rate	0.1	0.1	0.6	1.6	2.9	3.9
10-year Treasury Rate	3.0	2.5	3.0	3.5	3.8	4.3

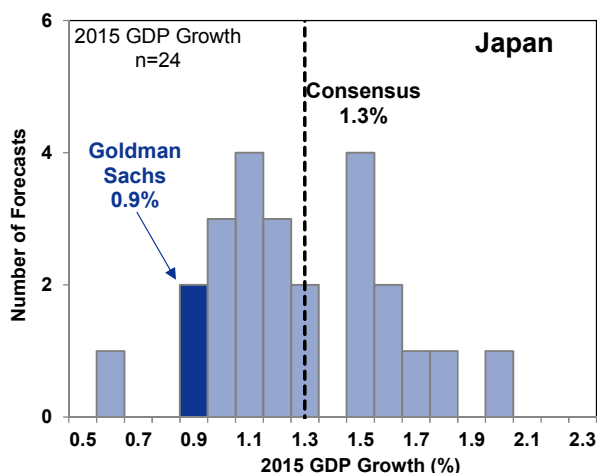
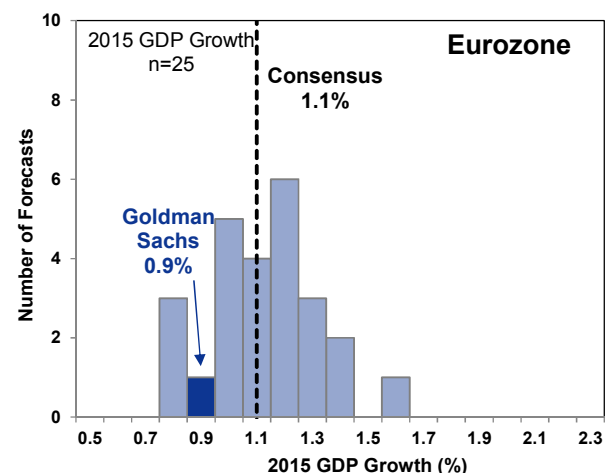
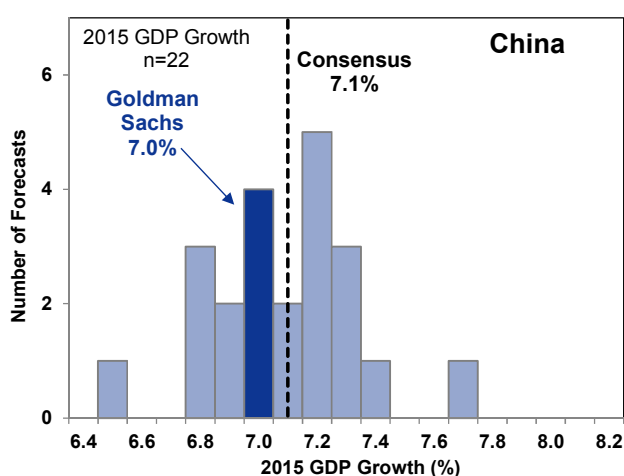
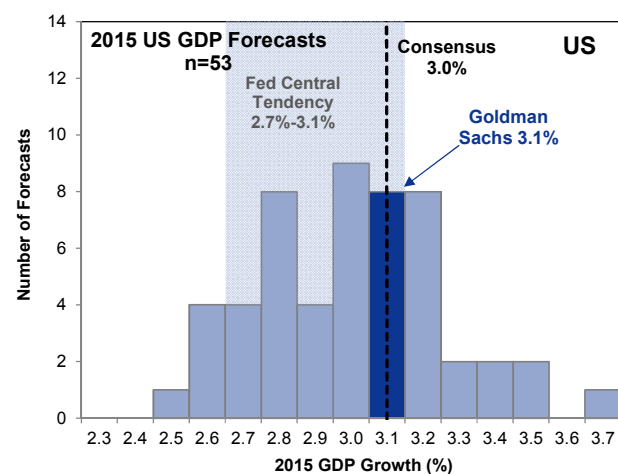
Source: Bloomberg and Goldman Sachs Global Investment Research

Exhibit 59: EPS sensitivity to US and World ex-US GDP
as of November 14, 2014

		S&P 500 EPS					
		US GDP					
		1.6 %	2.1 %	2.6 %	3.1 %	3.6 %	4.1 %
World ex-US GDP	4.8 %	117	120	123	126	129	132
	4.3	116	119	122	125	128	131
	3.8	115	118	121	124	127	130
	3.3	113	116	119	122	125	128
	2.8	112	115	118	121	124	127
	2.3	110	113	116	119	122	125
	1.8	109	112	115	118	121	124

Source: Goldman Sachs Global Investment Research

Exhibit 60: Distribution of 2015 regional GDP growth forecasts: US, Europe, China and Japan
as of November 14, 2014

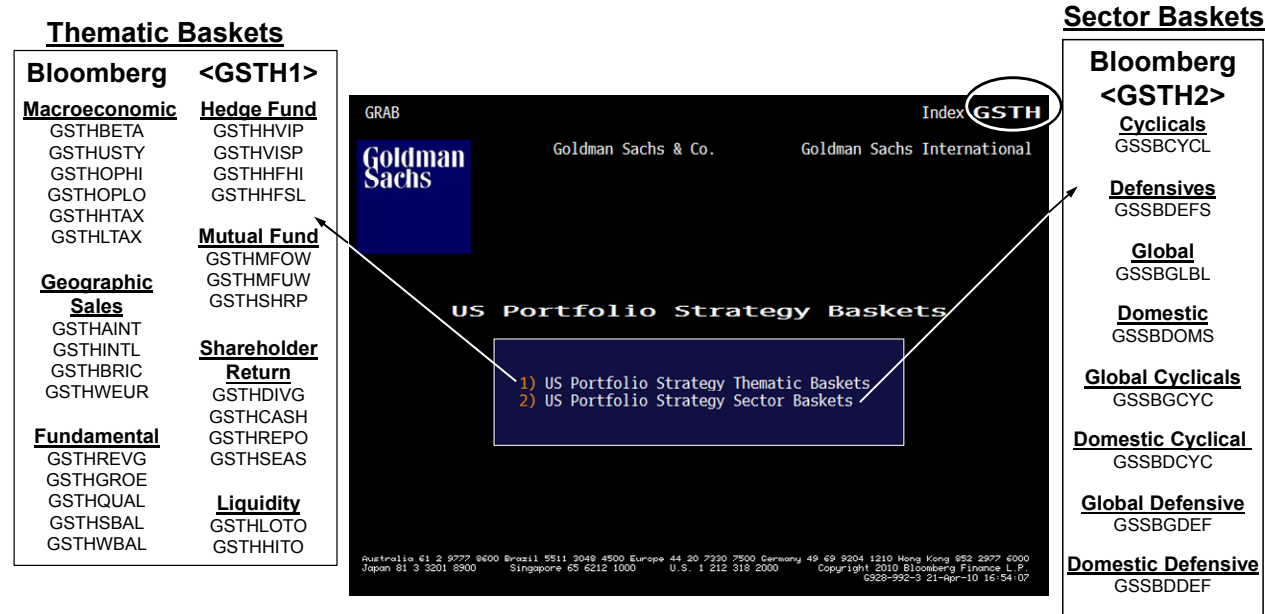


Note: Fed Central Tendency shown as annual average GDP growth.

Source: Blue Chip Economic Forecasts, Consensus Economics, and Goldman Sachs Global Investment Research.

US Portfolio Strategy Thematic and Sector Baskets

Exhibit 61: Type <GSTH> for Goldman Sachs US Portfolio Strategy Baskets on Bloomberg



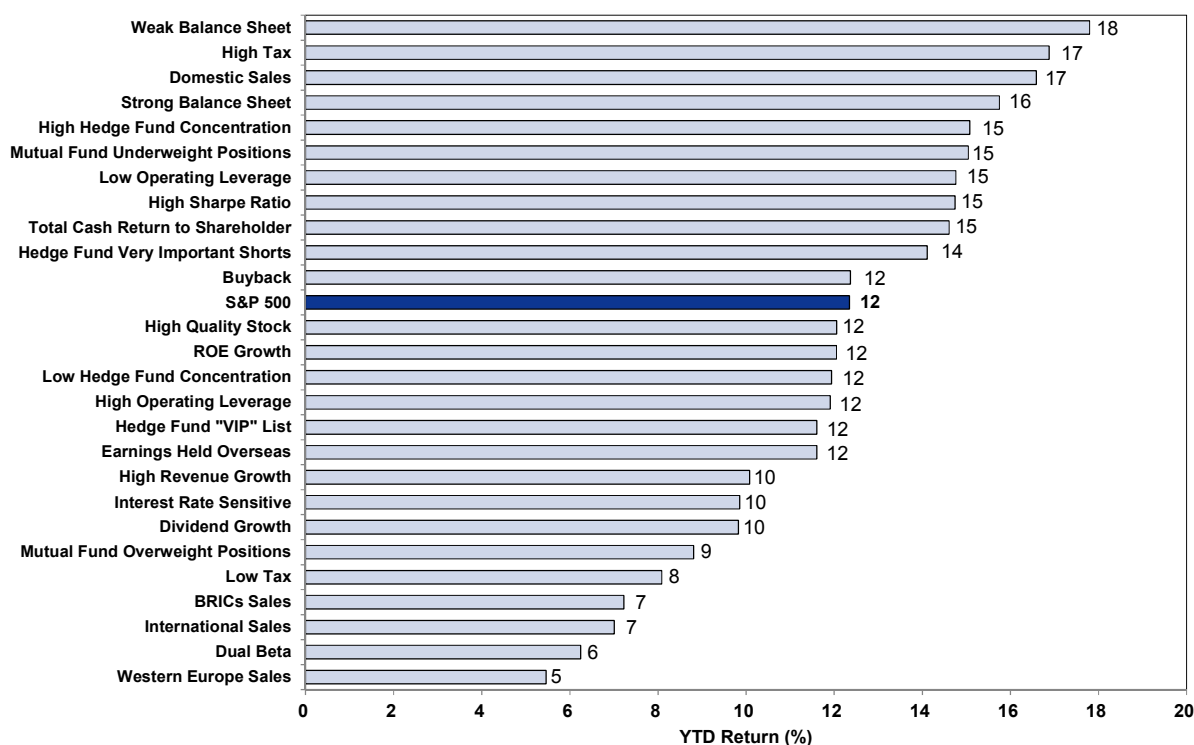
Permission to our GS Portfolio Strategy Baskets

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.

Source: Bloomberg and Goldman Sachs Global Investment Research.

Exhibit 62: US Portfolio Strategy Thematic baskets ranked by 2014 YTD performance as of November 14, 2014



Source: FactSet and Goldman Sachs Global Investment Research.

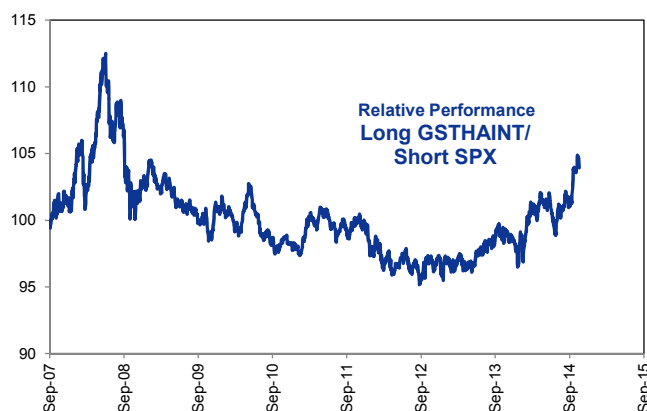
GSTHAINT – Domestic Sales Basket

Stocks leveraged to domestic growth (Bloomberg ticker: <GSTHAINT>)

Our Domestic Sales basket contains 50 S&P 500 stocks with the highest domestic revenue exposure using 2013 company filings. The median stock in the basket derives 100% of its revenues domestically compared with 71% for the median S&P 500 company and 67% for the S&P 500 in aggregate.

See our report *Portfolio Passport: Global Re-entry* (July 1, 2014) for more information.

Relative Performance



Source: IDC and Goldman Sachs Global Investment Research.

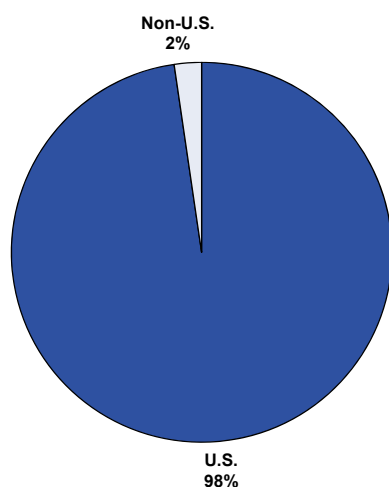
Constituent attributes

- **Key Criteria:** S&P 500 stocks with highest percentage of domestic sales within each sector.
- **Weighting/Sectors:** Equal-weighted. Basket constructed to have the same sector composition as the overall market at rebalance.
- **Updates:** Initiated in September 2007 and last rebalanced in July 2014. Rebalanced annually.

	Performance		Median Value and Growth Metrics				
	Inception (Sep '07)	YTD	SPX Beta	2015E Growth EPS	2015E Growth Sales	P/E NTM	Div Yield
GSTHAINT	60.1 %	16.6 %	1.0	11 %	6 %	17.4x	1.5%
GSTHINTL	57.1	7.0	1.0	11	6	15.3	1.6
S&P 500	56.1	11.2	1.0	10	5	17.0	1.7

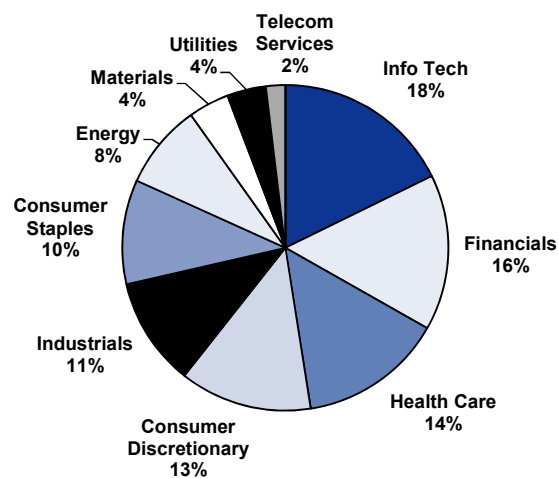
Source: FactSet and Goldman Sachs Global Investment Research.

Exhibit 63: Average regional composition of GSTHAINT



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

Exhibit 64: Sector composition of GSTHAINT basket



Source: FactSet and Goldman Sachs Global Investment Research.

GSTHAINT: Domestic Sales Basket Constituents

Exhibit 65: Domestic Sales basket constituents (Bloomberg ticker: <GSTHAINT>)

as of November 14, 2014

Company	Ticker	Market Cap (\$bn)	Non-U.S. Sales	Company	Ticker	Market Cap (\$bn)	Non-U.S. Sales
Information Technology				Health Care			
Intuit Inc.	INTU	\$26	0 %	UnitedHealth Group	UNH	\$92	0 %
Paychex Inc.	PAYX	17	0	WellPoint Inc.	WLP	34	0
Fiserv Inc.	FISV	17	7	Aetna Inc.	AET	30	0
Harris Corp.	HRS	7	8	Humana Inc.	HUM	21	0
First Solar Inc.	FSLR	5	14	DaVita HealthCare Partners	DVA	16	0
Automatic Data Processing	ADP	41	19	Tenet Healthcare	THC	5	0
Fidelity National Info Svc.	FIS	17	21	Express Scripts Holding	ESRX	58	0
Cognizant Tech Solutions	CTSH	32	22				
Alliance Data Systems	ADS	16	23				
Basket median			14 %	Basket median			0 %
Sector median			53	Sector median			39
Financials				Industrials			
Wells Fargo & Co.	WFC	\$279	0 %	Union Pacific Corp.	UNP	\$108	0 %
U.S. Bancorp	USB	79	0	Norfolk Southern	NSC	36	0
PNC Financial Svc. Gp.	PNC	47	0	CSX Corp.	CSX	37	0
Charles Schwab	SCHW	38	0	Republic Services	RSG	14	0
Discover Financial Services	DFS	30	0	Cintas Corp.	CTAS	8	0
BB&T Corp.	BBT	27	0				
Equity Residential	EQR	25	0	Basket median			0 %
HCP Inc.	HCP	20	0	Sector median			37
Basket median			0 %	Materials			
Sector median			7	Nucor Corp.	NUE	\$17	0 %
Consumer Staples				Vulcan Materials	VMC	9	0
CVS Health Corp.	CVS	\$103	0 %				
Altria Group Inc.	MO	97	0	Basket median			0 %
Walgreen Co.	WAG	64	0	Sector median			53
Reynolds American	RAI	34	0	Utilities			
Kroger Co.	KR	28	0	Dominion Resources	D	\$42	0 %
Basket median			0 %	Southern Co.	SO	42	0
Sector median			23	Basket median			0 %
Consumer Discretionary				Sector median			0
Lowe's Companies	LOW	\$58	0 %	Telecommunication Services			
Macy's Inc	M	22	0	AT&T Inc.	T	\$186	0 %
Dollar General	DG	20	0				
Chipotle Mexican Grill	CMG	21	0	Basket median			0 %
O'Reilly Automotive	ORLY	19	0	Sector median			0
Ross Stores Inc.	ROST	17	0				
Basket median			0 %				
Sector median			24				
Energy							
Pioneer Natural Resources	PXD	\$24	0 %				
Marathon Petroleum	MPC	26	0				
Chesapeake Energy	CHK	15	0				
Southwestern Energy	SWN	12	0				
Cabot Oil & Gas	COG	14	0				
Basket median			0 %				
Sector median			33				
				GSTHAINT median			0 %
				S&P 500 median			29

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

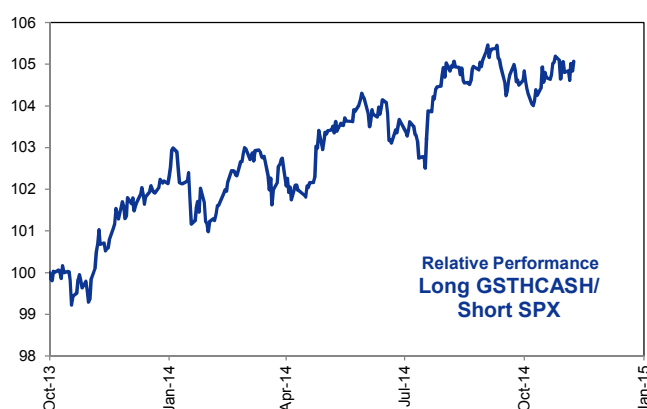
GSTHCASH – Total Cash Return to Shareholders Basket

Stocks that have the highest total cash returned to shareholders (Bloomberg: <GSTHCASH>)

Our Total Cash Return to Shareholders basket consists of 50 stocks with a median total cash return of 12.1% during the last four quarters. In comparison, the median stock in the S&P 500 returned 5.1% of market cap during the same period of time. We measure total cash return as the trailing four-quarter gross buybacks and common dividends as a share of the company's market cap at the beginning of this period. Investors should use this basket to identify stocks returning cash to shareholders through a combination of share repurchases and dividends.

See our reports *US Thematic Views: S&P 500 buyback and cash return to shareholder strategies* (October 7, 2013) and *US Weekly Kickstart: Resumption of buybacks after 3Q earnings season will drive S&P 500 to 2050 at year-end* (October 17, 2014) for more information.

Relative Performance



Source: IDC and Goldman Sachs Global Investment Research.

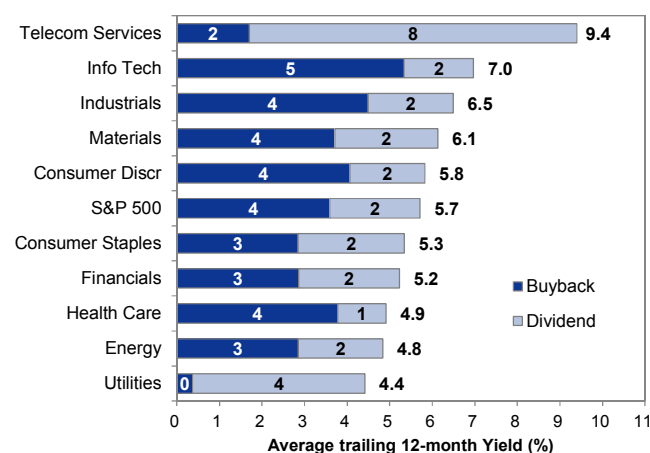
Constituent attributes

- **Key Criteria:** S&P 500 stocks with highest trailing four-quarter total cash return relative to their sector.
- **Weighting/Sectors:** Equal-weighted. Basket constructed to have the same sector composition as the overall market at rebalance.
- **Updates:** Initiated in October 2013 and last re-balanced in October 2014. Rebalanced semi-annually.

	Performance		Median Value and Growth Metrics				
	Inception (Oct '13)	YTD	SPX Beta	2015E Growth EPS	Growth Sales	P/E NTM	Div Yield
GSTHCASH	29.6 %	14.6 %	1.0	10 %	3 %	14.6x	1.8%
S&P 500	24.5	12.3	1.0	10	5	17.0	1.7

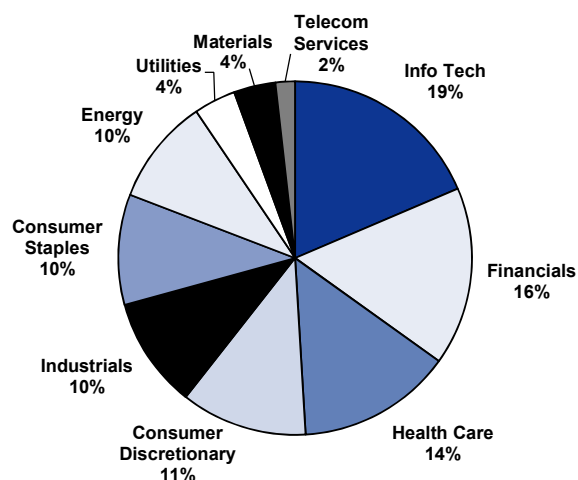
Source: FactSet and Goldman Sachs Global Investment Research.

Exhibit 66: Average total cash return by S&P 500 sector



Source: FactSet, Compustat and Goldman Sachs Global Investment Research.

Exhibit 67: Sector composition of GSTHCASH basket



Source: FactSet and Goldman Sachs Global Investment Research.

GSTHCASH: Cash Return to Shareholders Basket Constituents

Exhibit 68: Total Cash Return to Shareholders basket constituents (Bloomberg ticker: <GSTHCASH>)
as of November 14, 2014

Company	Ticker	Market cap (\$bn)	Trailing 12-month yield		
			Buyback	Dividend	Total
CONSUMER DISCRETIONARY					
Viacom Inc.	VIAB	\$31	16.1%	1.7%	17.8%
Time Warner Inc.	TWX	68	9.7	2.1	11.8
Macy's Inc	M	22	9.1	2.1	11.2
CBS Corp.	CBS	28	10.2	1.0	11.2
Kohl's Corp.	KSS	12	8.3	2.8	11.1
DIRECTV	DTV	44	10.1	0.0	10.1
CONSUMER STAPLES					
Coca-Cola Enterprises	CCE	\$10	10.9%	2.4%	13.4%
Kroger Co.	KR	28	9.2	1.9	11.1
Lorillard Inc.	LO	22	4.8	5.2	10.0
CVS Health Corp.	CVS	103	7.3	1.7	9.0
Mondelez Intl	MDLZ	64	6.3	1.7	8.0
ENERGY					
Hess Corp.	HES	\$26	16.3%	1.4%	17.7%
Cameron Intl	CAM	12	17.4	0.0	17.4
Marathon Petroleum	MPC	26	11.7	2.2	13.9
Halliburton	HAL	47	10.2	1.3	11.5
Phillips 66	PSX	40	7.2	2.6	9.7
FINANCIALS					
Travelers Companies	TRV	\$35	11.3%	2.4%	13.8%
Ameriprise Financial	AMP	24	10.9	2.6	13.4
Legg Mason Inc.	LM	6	10.1	1.7	11.7
Allstate Corp.	ALL	29	9.3	2.2	11.6
Aon plc	AON	26	9.2	1.2	10.4
XL Group Plc	XL	9	7.5	2.4	9.8
Hartford Financial Svc. Gp.	HIG	18	8.0	1.8	9.8
Moody's Corp.	MCO	21	7.8	1.7	9.5
HEALTH CARE					
WellPoint Inc.	WLP	\$34	12.8%	1.9%	14.7%
Abbott Laboratories	ABT	66	12.6	2.1	14.7
C. R. Bard Inc.	BCR	12	11.2	0.8	12.0
Express Scripts Holding	ESRX	58	11.5	0.0	11.5
Cigna Corp.	CI	27	8.9	0.1	8.9
Pfizer Inc.	PFE	192	5.6	3.3	8.9
Quest Diagnostics	DGX	9	6.9	2.0	8.8
INDUSTRIALS					
ADT Corp.	ADT	\$6	18.4%	1.5%	19.8%
FedEx Corp.	FDX	49	17.0	0.6	17.6
Northrop Grumman	NOC	28	14.4	2.9	17.3
Illinois Tool Works	ITW	37	14.4	2.3	16.7
L-3 Communications Hldgs	LLL	10	11.6	2.7	14.2
INFORMATION TECHNOLOGY					
Corning Inc.	GLW	\$26	16.3%	2.8%	19.1%
VeriSign Inc.	VRSN	8	15.3	0.0	15.3
Seagate Technology	STX	21	11.9	3.5	15.3
Citrix Systems Inc.	CTXS	11	13.8	0.0	13.8
Juniper Networks	JNPR	9	12.8	0.0	12.8
SanDisk Corp.	SNDK	22	10.9	1.4	12.3
Apple Inc.	AAPL	684	9.2	3.1	12.2
Xerox Corp.	XRX	15	9.4	2.8	12.2
NVIDIA Corp.	NVDA	11	8.7	2.1	10.8
MATERIALS					
CF Industries Holdings	CF	\$13	20.3%	1.9%	22.2%
LyondellBasell Industries	LYB	45	12.5	3.5	16.0
TELECOMMUNICATION SERVICES					
Windstream Holdings	WIN	\$6	0.0%	13.1%	13.1%
UTILITIES					
Pepco Holdings Inc.	POM	\$7	0.0%	5.4%	5.4%
PPL Corp.	PPL	24	0.3	5.2	5.4
GSTHCASH Median		\$25	10.2%	2.0%	12.1%
S&P 500 Median		18	2.7	2.0	5.1

Source: Compustat and Goldman Sachs Global Investment Research.

50 S&P 500 stocks with lowest valuation

Exhibit 69: 50 S&P 500 stocks with lowest valuation

Sector-neutral: P/E, P/B, EV/Sales, EV/EBITDA, FCF yield; as of November 14, 2014

		YTD	Valuation					
Company	Ticker	Return	Fwd P/E	P/B	EV/Sales	EV/EBITDA	FCF Yield	
CONSUMER DISCRETIONARY								
General Motors	GM	(20)%	7.6x	1.3x	0.5x	5.2x	(1.2)%	
GameStop Corp.	GME	(8)	11.4	2.3	0.5	6.1	12.6	
Staples Inc.	SPLS	(13)	14.0	1.4	0.4	6.1	8.2	
Kohl's Corp.	KSS	3	13.5	2.0	0.8	6.2	9.1	
Best Buy Inc.	BBY	(9)	14.1	3.0	0.3	6.0	8.5	
Goodyear Tire & Rubber	GT	8	7.8	4.8	0.7	5.4	(10.9)	
CONSUMER STAPLES								
Archer-Daniels-Midland Co.	ADM	20 %	14.5x	1.6x	0.4x	7.8x	11.6 %	
Avon Products Inc.	AVP	(40)	11.3	4.5	0.7	6.8	9.2	
ConAgra Foods Inc.	CAG	6	14.7	2.7	1.5	10.1	7.4	
Safeway Inc.	SWY	22	23.9	1.4	0.2	6.7	(12.0)	
Tyson Foods Inc.	TSN	22	13.0	2.4	0.5	7.8	3.4	
ENERGY								
Nabors Industries	NBR	(2)%	8.6x	0.8x	1.1x	4.9x	(1.1)%	
Transocean Ltd.	RIG	(43)	8.5	0.6	2.3	4.6	(3.9)	
Valero Energy Corp.	VLO	(0)	8.3	1.3	0.3	3.9	14.9	
Chevron Corp.	CVX	(4)	11.8	1.4	1.2	4.5	(0.9)	
Murphy Oil Corp.	MUR	(18)	14.3	1.1	2.2	3.3	(3.9)	
FINANCIALS								
Genworth Financial	GNW	(39)%	7.8x	0.3x	NM	NM	NM	
Citigroup Inc.	C	3	10.1	0.8	NM	NM	NM	
MetLife Inc.	MET	4	9.2	0.9	NM	NM	NM	
Unum Group	UNM	(1)	9.2	1.0	NM	NM	NM	
Prudential Financial	PRU	(7)	8.5	1.0	NM	NM	NM	
American Intl Group	AIG	6	11.3	0.7	NM	NM	NM	
XL Group Plc	XL	10	11.0	0.9	NM	NM	NM	
Lincoln National	LNC	10	9.4	1.0	NM	NM	NM	
HEALTH CARE								
Aetna Inc.	AET	24 %	12.1x	2.1x	0.6x	6.9x	11.1 %	
WellPoint Inc.	WLP	37	13.5	1.4	0.4	5.0	7.8	
Cigna Corp.	CI	17	12.8	2.5	0.8	7.1	6.0	
Quest Diagnostics	DGX	19	14.4	2.2	1.7	8.8	6.1	
Express Scripts Holding	ESRX	11	14.6	2.8	0.7	10.5	7.0	
Humana Inc.	HUM	32	15.9	2.1	0.3	5.9	4.4	
Laboratory Corp. of America	LH	8	13.7	3.2	1.8	9.2	6.6	
INDUSTRIALS								
Quanta Services	PWR	5 %	14.9x	1.7x	0.8x	7.6x	(0.5)%	
Jacobs Engineering Group	JEC	(24)	13.1	1.5	0.5	8.1	5.8	
Delta Air Lines	DAL	61	10.9	3.1	1.0	7.0	8.0	
Ryder System Inc.	R	26	15.3	2.5	1.3	5.8	(22.3)	
Joy Global Inc.	JOY	(8)	15.0	1.9	1.6	9.1	7.4	
INFORMATION TECHNOLOGY								
Hewlett-Packard	HPQ	34 %	9.5x	2.5x	0.7x	5.9x	12.5 %	
First Solar Inc.	FSLR	(11)	12.8	1.0	1.1	6.4	(6.1)	
Xerox Corp.	XRX	12	11.5	1.3	1.1	6.6	11.6	
Computer Sciences Corp.	CSC	12	13.1	2.3	0.7	4.4	12.7	
Western Digital	WDC	19	11.7	2.6	1.4	6.5	10.0	
Corning Inc.	GLW	17	13.0	1.3	2.5	6.1	14.4	
Micron Technology	MU	50	9.3	3.6	2.0	6.3	8.7	
Cisco Systems Inc.	CSCO	21	12.3	2.4	2.1	7.3	8.1	
Juniper Networks	JNPR	(7)	14.4	1.4	2.1	7.6	7.1	
MATERIALS								
Owens-Illinois Inc.	OI	(29)%	9.2x	2.5x	1.1x	6.1x	5.1 %	
Freeport-McMoRan	FCX	(22)	11.4	1.4	2.5	5.6	(0.6)	
TELECOMMUNICATION SERVICES								
AT&T Inc.	T	8 %	13.9x	2.0x	1.9x	5.1x	5.9 %	
UTILITIES								
Entergy Corp.	ETR	35 %	14.4x	1.5x	NM	6.4x	9.9 %	
FirstEnergy Corp.	FE	14	12.4	1.2	NM	8.8	(4.1)	
Portfolio Median		7 %	12.3x	1.6x	0.9x	6.3x	7.1 %	
S&P 500 Median		11	17.0	3.2	2.5	10.8	4.2	

Source: Compustat, FactSet, FirstCall, and Goldman Sachs Global Investment Research.

Equity Basket Disclosure

The ability to trade the basket(s) discussed in this research will depend upon market conditions, including liquidity and borrow constraints at the time of trade.

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, Amanda Sneider, CFA, Ben Snider, Krag Gregory, Ph.D., Elad Pashtan, Arjun Menon and Brett Sanchez, 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.

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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.

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Goldman Sachs Investment Research global coverage universe

	Rating Distribution				Investment Banking Relationships		
	Buy	Hold	Sell		Buy	Hold	Sell
Global	32%	54%	14%		42%	36%	30%

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