FUNDAMENTALS
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“More rapid growth in profits than GDP means a rising share of income to capital.”

KEY POINTS

1. Corporate profits are at or near an all-time high relative to both GDP and wages and salaries.
2. Globalization facilitated by a corporatist economic policy is the cause of the upward surge in profits. The resulting degree of income inequality seems socially intolerable.
3. Rising populism will likely lead to changes in government policy. Expect real earnings per share to grow much more slowly, or even decline, over the next couple of decades.

The Profits Bubble

Profits are dangerously elevated by all reasonable measures. S&P 500 Index real earnings per share are far above their long-term historical trend. Industry profit margins are at or near all-time highs. Corporate profits, both as a percentage of GDP and relative to labor income, are at or near record levels. The dramatic rise in income inequality is a direct consequence of this spectacular reallocation of income to capital and away from labor.

For nearly a quarter century, we have experienced profits growing at a faster clip than GDP. Extrapolating this trend into the future is speculative at best. Equilibrium real growth in earnings per share cannot exceed real growth in per capita GDP, real growth in wages, and real productivity growth, on a long-term basis, without violating our sense of social fairness: More rapid growth in profits than GDP means a rising share of income to capital. Capital’s share cannot rise in perpetuity; social and political forces, if not economic developments, will cause it—sooner or later— to revert to a more usual level.

Many of today’s investors uncritically assume that the conditions they have known over the course of their professional careers must be normal. The idea that we may soon experience a multi-decade period of zero or negative growth in real earnings per share, taking the level of profits down to a lower share of national income, seems preposterous. Yet economic history has seen many examples of such a turn, including the 1880–1890s, the World Wars, the 1930s, and the 1970–1980s. In fact, almost every decade except the 1990s and 2000s saw a protracted profits slump. Some declines in profitability lasted most of a decade; others, longer!

The profits bubble of 2007, likely to be just barely exceeded in 2013 in real EPS terms, is above trend by a wider margin than all previous profits booms except the one that ended in 1916 (see **Figure 1**). While it would be foolish to draw too much attention to the 39-year span before that peak was exceeded in 1955, or the two World Wars and the Great Depression that intervened, it would be equally unwise to lightly brush aside the aftermath of the 1916 crest.

The macroeconomic cause of today’s profits bubble can be understood as a quarter century of politically facilitated globalization. During the 50 years following WWII, we lived in an open global developed economy containing less than one billion people in Europe, North America, Australia, Japan, Korea, Taiwan, and a handful of others. Some countries were growing faster, some slower, but the technological level and population growth rates were not very different across the predominant countries within this relatively open global

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RAFI® Managed Assets*

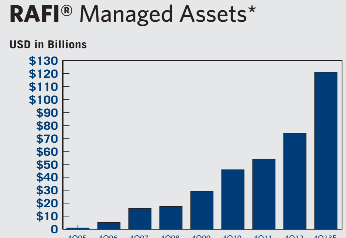

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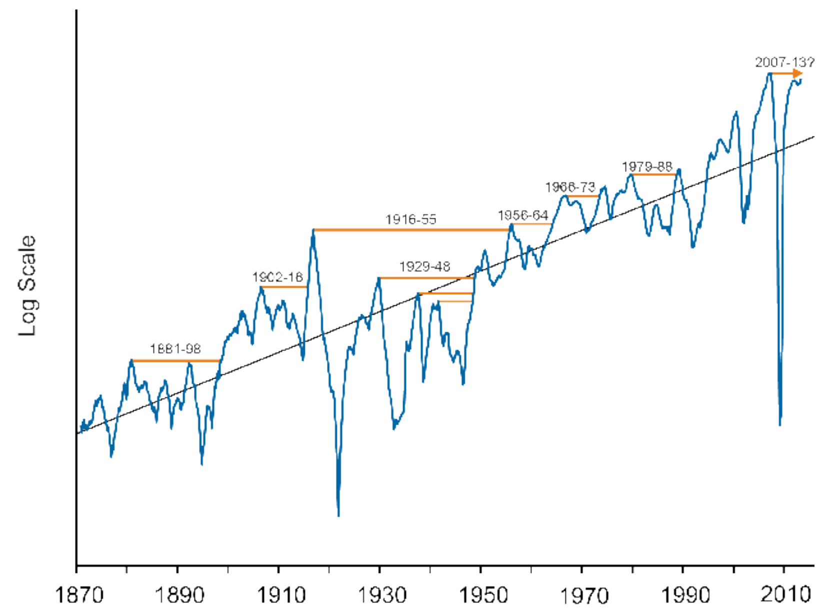
Figure 1. Shiller/S&P Real EPS with Trend, 1871–2013



Source: Research Affiliates using data from Robert J. Shiller.

economy. The shares of income to labor and capital varied cyclically but tended to revert toward long-term averages.

Beginning in the 1990s, we experienced a seismic shift in our global political economy. Approximately three billion people began to join this open global economy: about one billion each in China and India and another billion or so in Russia, Eastern Europe, South America, and Southeast Asia. Average wages, level of technology, and amount of accumulated capital in the countries of the aspiring three billion lagged far behind those enjoyed by the one billion in the developed world. Imitation and appropriation is far easier than innovation and invention, so catching up has been rapid for those nations willing to make even modest concessions to the aspirations of their citizenry. For the past quarter century, the capital and technology accumulated by the old equilibrium advanced global economy has been suddenly shared across a labor force and populace that quadrupled.

This tectonic shift in our global political economy produced some winners and some losers. Incomes of many of the three billion newly joined rose quickly. Global poverty rates have plummeted.

> *"Beginning in the 1990s, we experienced a seismic shift in our global political economy."*

Meanwhile, wages in the old advanced economy countries stalled at least partly in response to competition from the lower wages welcomed by workers in developing countries.

Profits grew to a much larger share of output and an unprecedented percentage of wages and salaries (see **Figure 2**). To be sure, if we adjust wages to include the value of benefit programs and entitlements, we aren't quite at all-time highs in profits-to-total compensation ratios. But, even here, we're darned close to unprecedented records. In both cases, the five- and ten-year averages are at new highs. These longer-term trends are fueling popular unrest.

This period of globalization and the inflation of our profits bubble has been facilitated in part by a corporate capture of government policy, inhibiting competition, depressing investment, and promoting rent seeking. Rent seeking may be more extreme within our very own financial industry than in any other. TARP and QE are just the most recent and largest examples of government intervention to benefit corporate interests. For several decades, under governments led by *both* parties, the close nexus between Wall Street and Washington has facilitated an economic policy that favors politically savvy corporations and too-big-to-fail megabanks. Our policymakers have too often mistaken what is in the best interest of their elite peer group (and, surely by sheer coincidence, some of their largest campaign contributors) as in the best interest of the broader society. The result has been decades of stagnation in wages, high taxes on labor income, subsidies for debt and consumption, underinvestment, and soaring corporate profits.

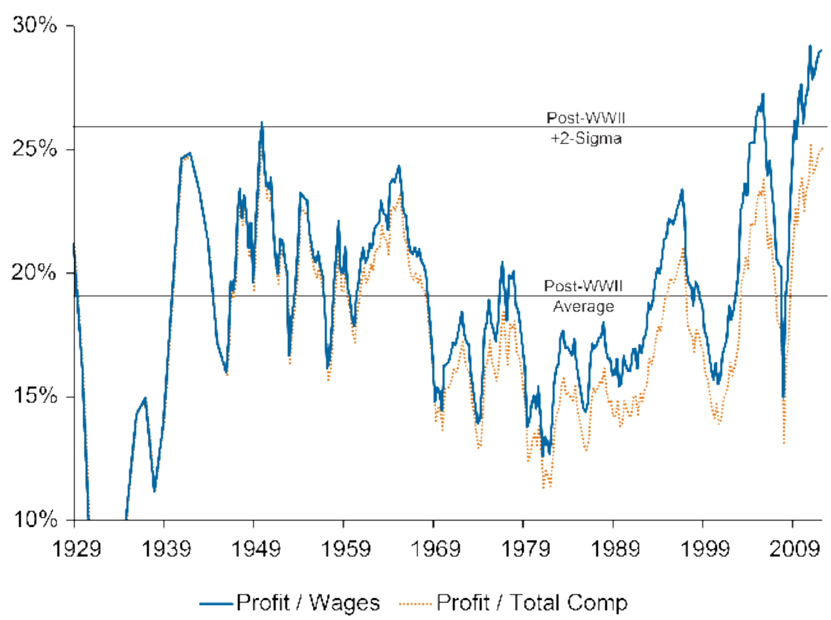
Now, we applaud business success and the resulting profits, particularly when profits flow from inventing new processes, products, and services and providing value to customers. We eschew government meddling in the economy especially

> *“The share of corporate profits is a political choice.”*

when the results favor the politically connected and thwart fair competition. Because globalization and corporatist economic policies seem to have unfairly tilted the scales against lower skilled workers in developed countries, we sympathize with the growing political pressure to subsidize the creation of low skill jobs, to improve the skills and wages of the less proficient, and provide a living wage to the working poor.

We cannot predict the quarter or year when profits will peak. We can predict the catalyst. The share of corporate profits is a political choice. The present share of income going to capital seems increasingly intolerable. Populism is rising throughout the developed world and will likely lead to political change. Today we have libertarians joining progressives in rhetorically attacking big banks and advocating redistribution through raising minimum wages and subsidizing low wage jobs. Expect corporations' labor, interest, and tax expenses to rise faster than sales over the next couple of decades and profits to grow much more slowly, or even decline, in real terms.

Figure 2. U.S. Profits/Wages and Salaries December 31, 1929 to March 31, 2013



Source: Research Affiliates using data from the U.S. Department of Commerce BEA.

Performance Update

FTSE RAFI® Equity Index Series*

TOTAL RETURN AS OF 12/31/13	BLOOMBERG TICKER	YTD	12 MONTH	ANNUALIZED 3 YEAR	5 YEAR	10 YEAR	10 YEAR VOLATILITY
FTSE RAFI® All World 3000[1]	TFRAW3	26.70%	26.70%	10.26%	17.45%	10.03%	18.51%
MSCI All Country World[2]	GDUEACWF	23.44%	23.44%	10.33%	15.53%	7.72%	16.52%
FTSE RAFI® Developed ex US 1000[3]	FRX1XTR	25.41%	25.41%	7.58%	14.04%	8.51%	20.21%
MSCI World ex US[4]	GDDUWXUS	21.57%	21.57%	7.87%	13.04%	7.57%	18.15%
FTSE RAFI® Developed ex US Mid Small[5]	TFRDXUSU	22.65%	22.65%	7.56%	18.48%	11.33%	18.81%
MSCI World ex US Small Cap[6]	GCUDWXUS	25.99%	25.99%	7.88%	18.88%	9.63%	20.15%
FTSE RAFI® Emerging Markets[7]	TFREMU	-6.79%	-6.79%	-4.00%	13.73%	14.08%	24.24%
MSCI Emerging Markets[8]	GDUEEGF	-2.27%	-2.27%	-1.74%	15.15%	11.52%	23.85%
FTSE RAFI® 1000[9]	FR10XTR	35.66%	35.66%	16.75%	22.07%	9.35%	17.10%
Russell 1000[10]	RU10INTR	33.11%	33.11%	16.30%	18.59%	7.78%	14.93%
S&P 500[11]	SPTR	32.39%	32.39%	16.18%	17.94%	7.41%	14.62%
FTSE RAFI® US 1500[12]	FR15USTR	42.17%	42.17%	16.59%	26.14%	11.99%	21.71%
Russell 2000[13]	RU20INTR	38.82%	38.82%	15.67%	20.08%	9.07%	19.70%
FTSE RAFI® Europe[14**]	TFREUE	24.79%	24.79%	8.21%	14.64%	7.58%	17.50%
MSCI Europe[15**]	GDDLE15	20.51%	20.51%	9.59%	14.28%	6.94%	14.42%
FTSE RAFI® Australia[16**]	FRAUSTR	23.28%	23.28%	11.61%	14.08%	10.30%	13.50%
S&P/ASX 200[17**]	ASA51	20.20%	20.20%	8.95%	12.47%	9.65%	13.58%
FTSE RAFI® Canada[18**]	FRCANTR	16.68%	16.68%	5.96%	14.60%	9.34%	13.46%
S&P/TSX 60[19**]	TX60AR	13.26%	13.26%	3.63%	10.82%	8.16%	13.91%
FTSE RAFI® Japan[20**]	FRJPNTR	57.26%	57.26%	14.50%	11.53%	5.27%	19.76%
MSCI Japan[21**]	GDDLJN	54.80%	54.80%	15.35%	11.05%	4.16%	19.20%
FTSE RAFI® UK[22**]	FRGBRTR	21.16%	21.16%	9.75%	14.00%	8.65%	15.56%
MSCI UK[23**]	GDDLUK	18.47%	18.47%	8.65%	12.94%	7.95%	13.60%

*To see the complete series, please go to: http://www.ftse.com/Indices/FTSE_RAFI_Index_Series/index.jsp.

**The above indices have been restated to reflect the use of local currencies for all single country strategies and EUR for Europe regional strategies rather than USD.

Russell Fundamental Index Series*

TOTAL RETURN AS OF 12/31/13	BLOOMBERG TICKER	YTD	12 MONTH	ANNUALIZED 3 YEAR	5 YEAR	10 YEAR	10 YEAR VOLATILITY
Russell Fundamental Global Index Large Company[24]	RUFGLTU	27.67%	27.67%	11.84%	17.26%	10.17%	16.83%
MSCI All Country World Large Cap[25]	MLCUAWOG	23.15%	23.15%	10.39%	15.01%	7.33%	16.21%
Russell Fundamental Developed ex US Index Large Company[26]	RUFDXLTU	26.80%	26.80%	8.53%	13.52%	9.14%	18.31%
MSCI World ex US Large Cap[27]	MLCUWXUG	21.51%	21.51%	7.97%	12.67%	7.24%	18.03%
Russell Fundamental Developed ex US Index Small Company[28]	RUFDXSTU	27.15%	27.15%	9.96%	18.44%	11.53%	18.18%
MSCI World ex US Small Cap[6]	GCUDWXUS	25.99%	25.99%	7.88%	18.88%	9.63%	20.15%
Russell Fundamental Emerging Markets[29]	RUFGETRU	-0.68%	-0.68%	-0.35%	16.93%	14.92%	23.83%
MSCI Emerging Markets[8]	GDUEEGF	-2.27%	-2.27%	-1.74%	15.15%	11.52%	23.85%
Russell Fundamental US Index Large Company[30]	RUFUSLTU	34.92%	34.92%	17.45%	20.51%	9.73%	15.47%
Russell 1000[10]	RU10INTR	33.11%	33.11%	16.30%	18.59%	7.78%	14.93%
S&P 500[11]	SPTR	32.39%	32.39%	16.18%	17.94%	7.41%	14.62%
Russell Fundamental US Index Small Company[31]	RUFUSSTU	39.42%	39.42%	16.91%	25.89%	12.76%	20.70%
Russell 2000[13]	RU20INTR	38.82%	38.82%	15.67%	20.08%	9.07%	19.70%
Russell Fundamental Europe[32**]	RUFEUTE	22.71%	22.71%	8.75%	15.59%	8.99%	15.86%
MSCI Europe[15**]	GDDLE15	20.51%	20.51%	9.59%	14.28%	6.94%	14.42%

*To see the complete series, please go to: http://www.russell.com/indexes/data/Fundamental/About_Russell_Fundamental_indexes.asp.

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Performance Update

Fixed Income/Alternatives

TOTAL RETURN AS OF 12/31/13	BLOOMBERG TICKER	YTD	12 MONTH	ANNUALIZED 3 YEAR	ANNUALIZED 5 YEAR	ANNUALIZED 10 YEAR	10 YEAR VOLATILITY
RAFI® Bonds US Investment Grade Master[33]	—	-2.01%	-2.01%	5.17%	8.16%	5.59%	5.80%
ML Corporate Master[34]	C0A0	-1.46%	-1.46%	5.35%	8.93%	5.31%	5.94%
RAFI® Bonds US High Yield Master[35]	—	4.72%	4.72%	9.02%	18.67%	9.10%	9.44%
ML Corporate Master II High Yield BB-B[36]	H0A4	6.31%	6.31%	8.74%	16.56%	7.80%	9.14%
RAFI® US Equity Long/Short[37]	—	12.28%	12.28%	3.37%	10.91%	4.95%	11.19%
1-Month T-Bill[38]	GB1M	0.03%	0.03%	0.05%	0.07%	1.50%	0.52%
FTSE RAFI® Global ex US Real Estate[39]	FRXR	8.15%	8.15%	6.73%	18.26%	—	—
FTSE EPRA/NAREIT Global ex US[40]	EGXU	2.12%	2.12%	5.40%	15.09%	—	—
FTSE RAFI® US 100 Real Estate[41]	FRUR	6.63%	6.63%	9.97%	22.29%	—	—
FTSE EPRA/NAREIT United States[42]	UNUS	2.46%	2.46%	9.21%	16.50%	—	—
Citi RAFI Sovereign Developed Markets Bond Index Master[43]	CRFDMU	-1.36%	-1.36%	3.67%	4.17%	5.23%	7.31%
Merrill Lynch Global Governments Bond Index II[44]	W0G1	-4.33%	-4.33%	1.31%	2.35%	4.20%	6.69%
Citi RAFI Sovereign Emerging Markets Local Currency Bond Index Master[45]	CRFELMU	-10.15%	-10.15%	—	—	—	—
JPMorgan GBI-EM Global Diversified[46]	JGENVUUG	-8.98%	-8.98%	—	—	—	—

Definition of Indices:

(1) The FTSE RAFI® All World 3000 Index is a measure of the largest 3,000 companies, selected and weighted using fundamental factors; (sales, cash flow, dividends, book value), across both developed and emerging markets.
(2) The MSCI All Country World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets.
(3) The FTSE RAFI® Developed ex US 1000 Index is a measure of the largest 1000 non U.S. listed, developed market companies, selected and weighted using fundamental factors; (sales, cash flow, dividends, book value).
(4) The MSCI World ex US Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets, excluding the United States.
(5) The FTSE RAFI® Developed ex US Mid Small Index tracks the performance of small and mid-cap companies domiciled in developed international markets (excluding the United States), selected and weighted based on the following four fundamental measures of firm size: sales, cash flow, dividends and book value.
(6) The MSCI World ex US Small Cap Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of small cap developed markets, excluding the United States.
(7) The FTSE RAFI® Emerging Markets Index comprises the largest 350 Emerging Market companies selected and weighted using fundamental factors (sales, cash flow, dividends, book value).
(8) The MSCI Emerging Markets Index is an unmanaged, free-float-adjusted cap-weighted index designed to measure equity market performance of emerging markets.
(9) The FTSE RAFI® 1000 Index is a measure of the largest 1,000 U.S. listed companies, selected and weighted using fundamental factors; (sales, cash flow, dividends, book value).
(10) The Russell 1000 Index is a market-capitalization-weighted benchmark index made up of the 1,000 highest-ranking U.S. stocks in the Russell 3000.
(11) The S&P 500 Index is an unmanaged market index that focuses on the large-cap segment of the U.S. equities market.
(12) The FTSE RAFI® US 1500 Index is a measure of the 1,001st to 2,500th largest U.S. listed companies, selected and weighted using fundamental factors; (sales, cash flow, dividends, book value).
(13) The Russell 2000 is a market-capitalization weighted benchmark index made up of the 2,000 smallest U.S. companies in the Russell 3000.
(14) The FTSE RAFI® Europe Index is comprised of all European companies listed in the FTSE RAFI® Developed ex U.S. 1000 Index, which in turn is comprised of the largest 1,000 non U.S. listed developed market companies, selected and weighted using fundamental factors; (sales, cash flow, dividends, book value).
(15) The MSCI Europe Index is a free-float adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in Europe.
(16) The FTSE RAFI® Australia Index is comprised of all Australian companies listed in the FTSE RAFI® Developed ex U.S. 1000 Index, which in turn is comprised of the largest 1,000 non U.S. listed developed market companies, selected and weighted using fundamental factors; (sales, cash flow, dividends, book value).
(17) The S&P/ASX 200 Index, representing approximately 78% of the Australian equity market, is a free-float-adjusted, cap-weighted index.
(18) The FTSE RAFI® Canada Index is comprised of all Canadian companies listed in the FTSE RAFI® Developed ex U.S. 1000 Index, which in turn is comprised of the largest 1,000 non U.S. listed developed market companies, selected andweighted using fundamental factors; (sales, cash flow, dividends, book value).
(19) The S&P/Toronto Stock Exchange (TSX) 60 is a cap-weighted index consisting of 60 of the largest and most liquid (heavily traded) stocks listed on the TSX, usually domestic or multinational industry leaders.
(20) The FTSE RAFI® Japan Index is comprised of all Japanese companies listed in the FTSE RAFI® Developed ex U.S. 1000 Index, which in turn is comprised of the largest 1,000 non U.S. listed developed market companies, selected and weighted using fundamental factors; (sales, cash flow, dividends, book value).
(21) The MSCI Japan Index is an unmanaged, free-float-adjusted cap-weighted index that aims to capture 85% of the publicly available total market capitalization of the Japanese equity market.
(22) The FTSE RAFI® UK Index is comprised of all UK companies listed in the FTSE RAFI® Developed ex U.S. 1000 Index, which in turn is comprised of the largest 1,000 non U.S. listed developed market companies, selected and weighted using fundamental factors; (sales, cash flow, dividends, book value).
(23) The MSCI UK Index is an unmanaged, free-float-adjusted cap-weighted index that aims to capture 85% of the publicly available total market capitalization of the British equity market.
(24) The Russell Fundamental Global Index Large Company is a measure of the largest companies, selected and weighted using fundamental factors; (adjusted sales, retained cash flow, dividends + buybacks), across both developed and emerging markets.
(25) The MSCI All Country World Large Cap Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets.
(26) The Russell Fundamental Developed ex US Large Company is a subset of the Russell Fundamental Developed ex US Index, and is a measure of the largest non-U.S. listed developed country companies, selected and weighted using fundamental factors; (adjusted sales, retained cash flow, dividends + buybacks).
(27) The MSCI World ex US Large Cap Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of large cap-developed markets, excluding the United States.
(28) The Russell Fundamental Developed ex US Index Small Company is a subset of the Russell Fundamental Developed ex US Index, and is a measure of small non-U.S. listed developed country companies, selected and weighted using fundamental factors; (adjusted sales, retained cash flow, dividends + buybacks).
(29) The Russell Fundamental Emerging Markets Index is a measure of Emerging Market companies, selected and weighted using fundamental factors; (adjusted sales, retained cash flow, dividends + buybacks).
(30) The Russell Fundamental U.S. Index Large Company is a subset of the Russell Fundamental US Index, and is a measure of the largest U.S. listed companies, selected and weighted using fundamental measures; (adjusted sales, retained cash flow, dividends + buybacks).
(31) The Russell Fundamental US Index Small Company is a subset of the Russell Fundamental US Index, and is a measure of U.S. listed small companies, selected and weighted using fundamental measures; (adjusted sales, retained cash flow, dividends + buybacks).
(32) The Russell Fundamental Europe Index is a measure of European companies, selected and weighted using fundamental factors; (adjusted sales, retained cash flow, dividends + buybacks).
(33) The RAFI® Bonds US Investment Grade Master Index is a U.S. investment-grade corporate bond index comprised of non-zero fixed coupon debt with maturities ranging from 1 to 30 years issued by publicly traded companies. The issuers held in the index are weighted by a combination of four measures of their fundamental size—sales, cash flow, dividends, and book value of assets.
(34) The Merrill Lynch U.S. Corporate Master Index is representative of the entire U.S. corporate bond market. The index includes dollar-denominated investment-grade corporate public debt issued in the U.S. bond market.
(35) The RAFI® Bonds US High Yield Master is a U.S. high-yield corporate bond index comprised of non-zero fixed coupon debt with maturities ranging from 1 to 30 years issued by publicly traded companies. The issuers held in the index are weighted by a combination of four measures of their fundamental size—sales, cash flow, dividends, and book value of assets.
(36) The Merrill Lynch Corporate Master II High Yield BB-B Index is representative of the U.S. high yield bond market. The index includes domestic high-yield bonds, including deferred interest bonds and payment-in-kind securities. Issues included in the index have maturities of one year or more and have a credit rating lower than BBB-/Baa3, but are not in default.
(37) The RAFI® US Equity Long/Short Index utilizes the Research Affiliates Fundamental Index® (RAFI®) methodology to identify opportunities that are implemented through long and short securities positions for a selection of U.S. domiciled publicly traded companies listed on major exchanges. Returns for the index are collateralized and represent the return of the strategy plus the return of a cash collateral yield.
(38) The 1-Month T-bill return is calculated using the Bloomberg Generic 1-month T-bill. The index is interpolated based off of the currently active U.S. 1 Month T-bill and the cash management bill closest to maturing 30 days from today.
(39) The FTSE RAFI® Global ex US Real Estate Index comprises 150 companies with the largest RAFI fundamental values selected from the constituents of the FTSE Global All Cap ex U.S. Index that are classified by the Industry Classification Benchmark (ICB) as Real Estate.
(40) The FTSE EPRA/NAREIT Global ex US Index is a free float-adjusted index, and is designed to represent general trends in eligible listed real estate stocks worldwide, excluding the United State. Relevant real estate activities are defined as the ownership, trading and development of income-producing real estate.
(41) The FTSE RAFI® US 100 Real Estate Index comprises of the 100 U.S. companies with the largest RAFI fundamental values selected from the constituents of the FTSE USA All Cap Index that are classified by the Industry Classification Benchmark (ICB) as Real Estate.
(42) The FTSE EPRA/NAREIT United States Index is a free float-adjusted index, is a subset of the EPRA/NARIET Global Index and the EPRA/NAREIT North America Index and contains publicly quoted real estate companies that meet the EPRA Ground Rules. EPRA/NARIET Index series is seen as the representative benchmark for the real estate sector.
(43) The Citi RAFI Sovereign Developed Markets Bond Index Series seeks to reflect exposure to the government securities of a universe of 23 developed markets. By weighting components by their fundamentals, the indices aim to represent each country's economic footprint and proxies for its ability to service debt.
(44) The Merrill Lynch Global Government Bond Index II tracks the performance of investment grade sovereign debt publicly issued and denominated in the issuer's own domestic market and currency.
(45) The Citi RAFI Sovereign Emerging Markets Local Currency Bond Index Series seeks to reflect exposure to the government securities of a universe of 14 emerging markets. By weighting components by their fundamentals, the indices aim to represent each country's economic footprint and proxies for its ability to service debt.
(46) The JPMorgan GBI-EM Diversified Index seeks exposure to the local currency sovereign debt of over 15 countries in the emerging markets.

Source: All index returns are calculated using total return data from Bloomberg and FactSet. Returns for all single country strategies and Europe regional strategies are in local currency. All other returns are in USD.