Agenda

- U.S Economic Landscape
  - Short term Headwinds and Long Term Tailwinds

- U.S Markets
  - Fixed Income
  - Equities

- Finding Access To Global Growth
  - EME
  - The World through the names you know
Federal Government Is Still Deleveraging Which Should Create Short

### Federal Budget Surplus/Deficit

**% of GDP, 1990 – 2022**

<table>
<thead>
<tr>
<th>Year</th>
<th>2012 CBO Baseline</th>
<th>2013 CBO Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td></td>
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<td>1994</td>
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<td>2002</td>
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<td>2010</td>
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<td>2014</td>
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<td>2018</td>
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<tr>
<td>2022</td>
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</tbody>
</table>

### Federal Net Debt (Accumulated Deficits)

**% of GDP, 1990 – 2022**

<table>
<thead>
<tr>
<th>Year</th>
<th>2012 CBO Baseline</th>
<th>2013 CBO Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td></td>
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<tr>
<td>1994</td>
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<td>2014</td>
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<tr>
<td>2018</td>
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<tr>
<td>2022</td>
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</tbody>
</table>


2012 numbers are actuals. Note: Years shown are fiscal years (Oct. 1 through Sep. 30). Chart on the left displays federal surplus/deficit (revenues – outlays). Federal net debt comprises all financial liabilities of the Federal government (gross debt) minus all intra-government holdings as assets. Deficit and debt scenarios are based on CBO budget forecasts from August 2012 and February 2013, which include the American Taxpayer Relief Act’s cost estimates.

Data are as of 3/31/13.
Corporations Have Deleveraged Enough

**Corporate Financing Gap**
Nonfarm nonfinancial corporate business, billions USD

- Total Internal Funds
- Total Capital Expenditures

*Companies must borrow*
*Companies can fund internally*

**Interest Coverage Ratio (EBIT / Net Interest)**
S&P 500, quarterly

- 3Q12: 7.2x

**Total Leverage**
S&P 500, ratio of total debt to total equity, quarterly

- Average: 173%
- 4Q12: 108%

Source: Federal Reserve, Compustat, Standard & Poor’s, FactSet, J.P. Morgan Asset Management.

(Top Left): All data is from the Fed’s Flow of Funds tables report Z.1, F.102 lines 9 and 11. Total internal funds equals retained earnings plus depreciation.

Data are as of 3/31/13.
And So Have Consumers…But What Is Catalyst To Spend?

**Consumer Balance Sheet**

- **Total Assets:** $79.5tn
- **Total Liabilities:** $13.5tn
- **Mortgages:** 71%
- **Other Financial Assets:** 41%
- **Pension Funds:** 18%
- **Deposits:** 10%
- **Other Tangible:** 7%
- **Homes:** 25%

**Household Debt Service Ratio**

- 2Q-'07 Peak: 11.1%
- 1Q-'09 Low: 10.4%
- 3Q07: 14.1%
- 1Q13*: 10.4%

**Household Net Worth**

- 3Q07: $67,413
- 1Q13*: $69,210

Source: (Left) FRB, J.P. Morgan Asset Management. Data includes households and nonprofit organizations. (Right) BEA, FRB, J.P. Morgan Asset Management. *1Q13 household debt service ratio and household net worth are J.P. Morgan Asset Management estimates. Values may not sum to 100% due to rounding.

Data are as of 3/31/13.
### Money Supply Component

<table>
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<th>Money Supply Component</th>
<th>$ Billions</th>
<th>Weight in Money Supply</th>
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<tr>
<td>M2-M1</td>
<td>7,941</td>
<td>76.6%</td>
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<tr>
<td>Retail MMMFs</td>
<td>628</td>
<td>6.1%</td>
</tr>
<tr>
<td>Savings deposits</td>
<td>6,701</td>
<td>64.6%</td>
</tr>
<tr>
<td>Small time deposits</td>
<td>612</td>
<td>5.9%</td>
</tr>
<tr>
<td>Institutional MMMFs</td>
<td>1,768</td>
<td>17.0%</td>
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<tr>
<td>Cash in IRA &amp; Keogh accounts</td>
<td>663</td>
<td>6.4%</td>
</tr>
<tr>
<td>Total</td>
<td>10,371</td>
<td>100.0%</td>
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</tbody>
</table>

### Annual Income Generated by $100,000 Investment in a 6-month CD

Yearly income generated by a $100,000 investment in a 6-month certificate of deposit (CD).

- **2006:** $5,240
- **2012:** $450

### Cash as a % of Total Household Financial Assets

- **Oct. '02 S&P 500 low**
- **Mar. '09 S&P 500 low**

### Source

- All cash measures obtained from the Federal Reserve are seasonally adjusted monthly numbers. All numbers are in billions of U.S. dollars.
- Small-denomination time deposits are those issued in amounts of less than $100,000. All IRA and Keogh account balances at commercial banks and thrift institutions are subtracted from small time deposits. Annual income is for illustrative purposes and is calculated based on the 6-month CD yield on average during each year and $100,000 invested. 2012 average income is through December 2012. IRA and Keogh account balances at money market mutual funds are subtracted from retail money funds.
- Past performance is not indicative of comparable future results.
- Data are as of 3/31/13.
As Confidence Returns, Demographics will Run Its Course
Agenda

- U.S Economic Landscape
  - Short term Headwinds and Long Term Tailwinds

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  - Fixed Income
  - Equities

- Finding Access To Global Growth
  - EM Local Opportunities
  - The World Through The Names You Know
### Fixed Income Yields and Returns

**Source:** U.S. Treasury, Barclays Capital, FactSet, J.P. Morgan Asset Management.

Fixed income sectors shown above are provided by Barclays Capital and are represented by:
- **Broad Market:** Barclays U.S. Aggregate
- **MBS:** Fixed Rate MBS Index
- **Corporate:** U.S. Corporates
- **Municipals:** Muni Bond Index
- **EMD ($):** Emerging Markets (USD)
- **High Yield: Corporate High Yield Index
- **EED (LCL):** Emerging Market Local Currency Government
- **Floating Rate:** Barclays U.S. Floating Rate Notes
- **Convertibles:** Barclays U.S. Convertibles Composite
- **TIPS:** Treasury Inflation Protection Securities

**Yield and return information based on Bellwethers for Treasury securities. Sector yields reflect yield to worst, while Treasury yields are yield to maturity.**

**Correlations are based on 10-years of monthly returns for all sectors except Floating Rate and EEMD (LCL), which are based on monthly returns from May 2004 and July 2008, respectively, due to data availability.**

**Change in bond price is calculated using both duration and convexity according to the following formula:**

\[ \text{New Price} = \text{Price} + (\text{Price} \times \text{Duration} \times \text{Change in Interest Rates}) + (0.5 \times \text{Price} \times \text{Convexity} \times (\text{Change in Interest Rates})^2) \]

*Calculation assumes 2-year Treasury interest rate falls 0.25% to 0.00% and the 5-year Treasury falls 0.77% to 0.00%, as interest rates can only fall to 0.00%. Chart is for illustrative purposes only. Past performance is not indicative of future results.*

**Data are as of 3/31/13.**
S&P 500 Index at Inflection Points

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<tr>
<td>Index level</td>
<td>1,527</td>
<td>1,565</td>
<td>1,569</td>
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<tr>
<td>P/E ratio (fwd.)</td>
<td>25.6x</td>
<td>15.2x</td>
<td>13.8x</td>
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<tr>
<td>Dividend yield</td>
<td>1.1%</td>
<td>1.8%</td>
<td>2.0%</td>
</tr>
<tr>
<td>10-yr. Treasury</td>
<td>6.2%</td>
<td>4.7%</td>
<td>1.9%</td>
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</table>

Source: Standard & Poor's, First Call, Compustat, FactSet, J.P. Morgan Asset Management.

Dividend yield is calculated as the annualized dividend rate divided by price, as provided by Compustat. Forward Price to Earnings Ratio is a bottom-up calculation based on the most recent S&P 500 Index price, divided by consensus estimates for earnings in the next 12 months (NTM), and is provided by FactSet Market Aggregates.

Returns are cumulative and based on S&P 500 Index price movement only, and do not include the reinvestment of dividends. Past performance is not indicative of future returns.

Data are as of 3/31/13.
Agenda

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Emerging Economies Are The Drivers of Global Growth

Emerging Market Country Real GDP Growth
Year-over-year % chg. – forecasts from JPMSI

Developed Market Country Real GDP Growth
Year-over-year % chg. – forecasts from JPMSI

Forecast and aggregate data come from J.P. Morgan Global Economic Research.
Data are as of 12/31/12.
As the EM Labor Cost Advantage Still Exists

Manufacturing Wages
Nominal, average USD per month

Chinese wages are those of rural migrant workers as a proxy. *Data begins in 2005 for Vietnam due to availability of data.
Data is from 2012 for Mexico, China, and Thailand; 2011 for United States, Vietnam (preliminary), and Indonesia (preliminary); and 2010 for Brazil, Germany, and Japan.

Data as of 3/28/13.
The Global Consumer Is No Longer Just An American..And Multinational

International Share of Global Nominal Consumption

Share of Global Nominal Consumption

Foreign Sales, % of Total Sales


Foreign sales as a percentage of total sales is calculated as an unweighted average of individual index constituent companies’ reported sales figures and does not capture all index members due to differences in reporting practices.

Data are as of 3/31/13.
Share of Global Market Capitalization
% global market capitalization, float adjusted

Emerging Market Share of MSCI ACWI Earnings
% of global market earnings, float adjusted

Weights in MSCI All Country World Index
% global market capitalization, float adjusted

Share of Global GDP
Based on purchasing power parity

Many Investors Are Strategically Underweight EME

Source: MSCI, IMF, FactSet, J.P. Morgan Asset Management.

Share of global market capitalization is based on float adjusted MSCI data. Share of global GDP based on purchasing power parity (PPP) as calculated by the IMF for 2013. Definition of emerging markets is based on MSCI and IMF data sources. Percentages may not sum to 100% due to rounding.

Data as of 3/31/13.
And Not all Emerging Markets Are Created Equal

<table>
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<tr>
<th>Emerging Market Countries</th>
<th>Current Composite Index</th>
<th>Current</th>
<th>10-year avg.</th>
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</thead>
<tbody>
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<td>World (ACWI)</td>
<td></td>
<td></td>
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<tr>
<td>EM Index</td>
<td>-0.29</td>
<td>13.0</td>
<td>1.8</td>
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<tr>
<td>Russia</td>
<td>-1.31</td>
<td>10.6</td>
<td>1.6</td>
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<tr>
<td>Brazil</td>
<td>-3.80</td>
<td>5.3</td>
<td>0.7</td>
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<tr>
<td>China</td>
<td>-1.76</td>
<td>11.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Taiwan</td>
<td>-2.14</td>
<td>9.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Thailand</td>
<td>-0.58</td>
<td>14.2</td>
<td>1.8</td>
</tr>
<tr>
<td>South Africa</td>
<td>-0.05</td>
<td>12.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Korea</td>
<td>0.16</td>
<td>12.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.12</td>
<td>8.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Mexico</td>
<td>3.09</td>
<td>15.1</td>
<td>3.8</td>
</tr>
<tr>
<td>India</td>
<td>2.41</td>
<td>18.0</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>2.52</td>
<td>13.6</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Source: MSCI, FactSet, J.P. Morgan Asset Management.
Note: Each valuation index shows an equally weighted composite of four metrics: price to forward earnings (Fwd. P/E), price to current book (P/B), price to last 12 months’ cash flow (P/CF) and price to last 12 months’ dividends. Results are then normalized using means and average variability over the last 10 years. The grey bars represent valuation index variability relative to that of the MSCI All Country World Index (ACWI). See disclosures page at the end for metric definitions.
Data are as of 3/31/13.
Asset Class Returns

Source: Russell, MSCI, Dow Jones, Standard & Poor’s, Credit Suisse, Barclays Capital, NAREIT, FactSet, J.P. Morgan Asset Management.

The "Asset Allocation" portfolio assumes the following weights: 25% in the S&P 500, 10% in the Russell 2000, 15% in the MSCI EAFE, 5% in the MSCI EM, 25% in the Barclays Capital Aggregate, 5% in the Barclays 1-3m Treasury, 5% in the CS/Tremont Equity Market Neutral Index, 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. All data represents total return for stated period. Past performance is not indicative of future returns. Data are as of 3/31/13, except for the CS/Tremont Equity Market Neutral Index, which reflects data through 2/28/13. “10-yr” returns represent period of 1/1/03 – 12/31/12 showing both cumulative (Cum.) and annualized (Ann.) over the period. Please see disclosure page at end for index definitions. *Market Neutral returns include estimates found in disclosures.

Data are as of 3/31/13.
Guide to the Markets®
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<td>FIXED INCOME</td>
<td>31</td>
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<td>INTERNATIONAL</td>
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<tr>
<td>ASSET CLASS</td>
<td>56</td>
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## U.S. Market Strategy Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
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<tbody>
<tr>
<td>Dr. David P. Kelly, CFA</td>
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<td>Gabriela D. Santos</td>
<td><a href="mailto:gabriela.d.santos@jpmorgan.com">gabriela.d.santos@jpmorgan.com</a></td>
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<tr>
<td>Anthony M. Wile</td>
<td><a href="mailto:anthony.m.wile@jpmorgan.com">anthony.m.wile@jpmorgan.com</a></td>
</tr>
</tbody>
</table>

*Past performance is not indicative of future returns.*
Returns by Style

Charts reflect index levels (price change only). All returns and annotations reflect total return, including dividends.

S&P 500 Index

1Q 2013

Since Market Peak (October 2007)

Since Market Low (March 2009)

Value | Blend | Growth
--- | --- | ---
Large | 12.3% | 10.6% | 9.5%
Mid | 14.2% | 13.0% | 11.5%
Small | 11.6% | 12.4% | 13.2%

Value | Blend | Growth
--- | --- | ---
Large | 17.5% | 16.0% | 15.3%
Mid | 18.5% | 17.3% | 15.8%
Small | 18.1% | 16.3% | 14.6%

Value | Blend | Growth
--- | --- | ---
Large | 6.2% | 13.2% | 23.5%
Mid | 25.6% | 25.9% | 24.5%
Small | 17.9% | 21.6% | 24.7%

Value | Blend | Growth
--- | --- | ---
Large | 164.7% | 153.0% | 151.8%
Mid | 220.8% | 203.8% | 187.8%
Small | 191.6% | 193.2% | 194.2%

Source: Russell Investment Group, Standard & Poor’s, FactSet, J.P. Morgan Asset Management.

All calculations are cumulative total return, including dividends reinvested for the stated period. Since Market Peak represents period 10/9/07 – 3/31/13, illustrating market returns since the most recent S&P 500 Index high on 10/9/07. Since Market Low represents period 3/9/09 – 3/31/13, illustrating market returns since the S&P 500 Index low on 3/9/09. Returns are cumulative returns, not annualized. For all time periods, total return is based on Russell-style indexes with the exception of the large blend category, which is reflected by the S&P 500 Index. Past performance is not indicative of future returns.

Data are as of 3/31/13.
Returns by Sector

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</thead>
<tbody>
<tr>
<td>S&amp;P Weight</td>
<td>15.9%</td>
<td>18.0%</td>
<td>12.5%</td>
<td>10.1%</td>
<td>10.9%</td>
<td>11.6%</td>
<td>11.0%</td>
<td>3.0%</td>
<td>3.5%</td>
<td>3.4%</td>
<td>100.0%</td>
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<tr>
<td>Russell Growth Weight</td>
<td>4.9%</td>
<td>28.9%</td>
<td>12.8%</td>
<td>12.9%</td>
<td>4.2%</td>
<td>16.9%</td>
<td>12.9%</td>
<td>2.3%</td>
<td>0.2%</td>
<td>3.9%</td>
<td>100.0%</td>
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<tr>
<td>Russell Value Weight</td>
<td>27.5%</td>
<td>6.7%</td>
<td>11.8%</td>
<td>9.1%</td>
<td>15.8%</td>
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<td>1Q13</td>
<td>11.4%</td>
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<td>4.8%</td>
<td>10.6%</td>
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<td>2012</td>
<td>28.8%</td>
<td>14.8%</td>
<td>17.9%</td>
<td>15.3%</td>
<td>4.6%</td>
<td>23.9%</td>
<td>10.8%</td>
<td>18.3%</td>
<td>1.3%</td>
<td>15.0%</td>
<td>16.0%</td>
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<tr>
<td>Since Market Peak</td>
<td>-42.7%</td>
<td>21.1%</td>
<td>42.8%</td>
<td>9.2%</td>
<td>11.7%</td>
<td>54.2%</td>
<td>66.3%</td>
<td>16.8%</td>
<td>19.2%</td>
<td>4.1%</td>
<td>13.2%</td>
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<td>(October 2007)</td>
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<tr>
<td>Since Market Low</td>
<td>212.8%</td>
<td>153.7%</td>
<td>130.3%</td>
<td>200.1%</td>
<td>104.5%</td>
<td>256.9%</td>
<td>133.2%</td>
<td>123.0%</td>
<td>108.6%</td>
<td>148.1%</td>
<td>153.0%</td>
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<tr>
<td>(March 2009)</td>
<td></td>
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<tr>
<td>Beta to S&amp;P 500</td>
<td>1.44</td>
<td>1.13</td>
<td>0.66</td>
<td>1.20</td>
<td>0.97</td>
<td>1.13</td>
<td>0.55</td>
<td>0.68</td>
<td>0.52</td>
<td>1.29</td>
<td>1.00</td>
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<tr>
<td>Forward P/E Ratio</td>
<td>11.7x</td>
<td>12.8x</td>
<td>14.4x</td>
<td>14.0x</td>
<td>12.1x</td>
<td>16.4x</td>
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<td>17.4x</td>
<td>15.9x</td>
<td>13.4x</td>
<td>13.8x</td>
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<tr>
<td>15-yr avg.</td>
<td>12.8x</td>
<td>23.7x</td>
<td>18.2x</td>
<td>16.8x</td>
<td>14.6x</td>
<td>18.6x</td>
<td>18.0x</td>
<td>17.4x</td>
<td>13.6x</td>
<td>16.1x</td>
<td>16.6x</td>
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<tr>
<td>Trailing P/E Ratio</td>
<td>15.0x</td>
<td>15.0x</td>
<td>18.9x</td>
<td>16.6x</td>
<td>12.1x</td>
<td>17.8x</td>
<td>19.3x</td>
<td>42.3x</td>
<td>19.0x</td>
<td>18.7x</td>
<td>18.7x</td>
</tr>
<tr>
<td>20-yr avg.</td>
<td>15.9x</td>
<td>26.5x</td>
<td>24.0x</td>
<td>20.3x</td>
<td>18.0x</td>
<td>19.3x</td>
<td>21.0x</td>
<td>20.0x</td>
<td>14.4x</td>
<td>19.4x</td>
<td>19.5x</td>
</tr>
<tr>
<td>Dividend Yield</td>
<td>1.9%</td>
<td>1.7%</td>
<td>2.0%</td>
<td>2.3%</td>
<td>2.2%</td>
<td>1.7%</td>
<td>2.7%</td>
<td>4.4%</td>
<td>4.0%</td>
<td>2.6%</td>
<td>2.0%</td>
</tr>
<tr>
<td>20-yr avg.</td>
<td>2.1%</td>
<td>0.6%</td>
<td>1.5%</td>
<td>1.8%</td>
<td>1.8%</td>
<td>1.0%</td>
<td>2.1%</td>
<td>3.8%</td>
<td>4.4%</td>
<td>2.1%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

Source: Standard & Poor’s, Russell Investment Group, FactSet, J.P. Morgan Asset Management.


Forward P/E Ratio is a bottom-up calculation based on the most recent S&P 500 Index price, divided by consensus estimates for earnings in the next 12 months (NTM), and is provided by FactSet Market Aggregates. Trailing P/E ratios are bottom-up values defined as month-end price divided by the last 12 months of available reported earnings. Historical data can change as new information becomes available. Note that P/E ratios for the S&P 500 may differ from estimates elsewhere in this book due to the use of a bottom-up calculation of constituent earnings (as described) rather than a top-down calculation. This methodology is used to allow proper comparison of sector level data to broad index level data. Dividend yields are bottom-up values defined as the annualized value of the most recent cash dividend as a percent of month-end price. Beta calculations are based on 10 years of monthly price returns for the S&P 500 and its sub-indices.

Past performance is not indicative of future returns.

Data are as of 3/31/13.
S&P 500 Index at Inflection Points

Index level                  1,527          1,565           1,569
P/E ratio (fwd.)           25.6x         15.2x           13.8x
Dividend yield             1.1%          1.8%            2.0%
10-yr. Treasury            6.2%          4.7%            1.9%

Dividend yield is calculated as the annualized dividend rate divided by price, as provided by Compustat. Forward Price to Earnings Ratio is a bottom-up calculation based on the most recent S&P 500 Index price, divided by consensus estimates for earnings in the next 12 months (NTM), and is provided by FactSet Market Aggregates.

Returns are cumulative and based on S&P 500 Index price movement only, and do not include the reinvestment of dividends. Past performance is not indicative of future returns.

Data are as of 3/31/13.

Source: Standard & Poor’s, First Call, Compustat, FactSet, J.P. Morgan Asset Management.

GTM – U.S.
### Stock Valuation Measures: S&P 500 Index

#### S&P 500 Index: Valuation Measures

<table>
<thead>
<tr>
<th>Valuation Measure</th>
<th>Description</th>
<th>Latest*</th>
<th>1-year ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/E</td>
<td>Price to Earnings</td>
<td>13.8x</td>
<td>13.0x</td>
</tr>
<tr>
<td>P/B</td>
<td>Price to Book</td>
<td>2.4</td>
<td>2.2</td>
</tr>
<tr>
<td>P/CF</td>
<td>Price to Cash Flow</td>
<td>9.4</td>
<td>8.9</td>
</tr>
<tr>
<td>P/S</td>
<td>Price to Sales</td>
<td>1.4</td>
<td>1.2</td>
</tr>
<tr>
<td>PEG</td>
<td>Price/Earnings to Growth</td>
<td>1.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Div. Yield</td>
<td>Dividend Yield</td>
<td>2.2%</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

#### Historical Averages

<table>
<thead>
<tr>
<th>Valuation Measure</th>
<th>Description</th>
<th>Latest*</th>
<th>1-year ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/E</td>
<td>Price to Earnings</td>
<td>12.6x</td>
<td>12.9x</td>
</tr>
<tr>
<td>P/B</td>
<td>Price to Book</td>
<td>2.1</td>
<td>2.1</td>
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<tr>
<td>P/CF</td>
<td>Price to Cash Flow</td>
<td>8.5</td>
<td>8.4</td>
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<tr>
<td>P/S</td>
<td>Price to Sales</td>
<td>1.2</td>
<td>1.1</td>
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<tr>
<td>PEG</td>
<td>Price/Earnings to Growth</td>
<td>1.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Div. Yield</td>
<td>Dividend Yield</td>
<td>2.2%</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

#### S&P 500 Shiller Cyclically Adjusted P/E

Adjusted using trailing 10-yr. avg. inflation adjusted earnings

**S&P 500 Earnings Yield vs. Baa Bond Yield**

S&P 500 Earnings Yield: (Inverse of fwd. P/E) 7.3%

Moody’s Baa Yield: 4.8%

---

Source: (Top) Standard & Poor’s, FactSet, Robert Shiller Data, J.P. Morgan Asset Management. Price to Earnings is price divided by consensus analyst estimates of earnings per share for the next 12 months. Price to Book is price divided by book value per share. Data post-1992 include intangibles and are provided by Standard & Poor’s. Price to Cash Flow is price divided by consensus analyst estimates of cash flow per share for the next 12 months. Price to Sales is calculated as price divided by consensus analyst estimates of sales per share for the next 12 months. PEG Ratio is calculated as NTM P/E divided by NTM earnings growth. Dividend Yield is calculated as consensus analyst estimates of dividends for the next 12 months divided by price. All consensus analyst estimates are provided by FactSet. (Bottom left) Cyclically adjusted P/E uses as reported earnings throughout. *Latest reflects data as of 3/31/2013. (Bottom right) Standard & Poor’s, Moody’s, FactSet, J.P. Morgan Asset Management. Data are as of 3/31/13.
Earnings Estimates and Valuations by Style

S&P 500 Index: Forward P/E Ratio

Average: 16.2x

Mar. 2013: 13.8x

S&P 500 Operating Earnings Estimates

Consensus estimates of the next twelve months’ rolling earnings

1Q13: $114.15

Current P/E vs. 20-year avg. P/E

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Blend</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>12.5</td>
<td>13.8</td>
<td>15.5</td>
</tr>
<tr>
<td></td>
<td>13.9</td>
<td>16.2</td>
<td>20.9</td>
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<tr>
<td>Mid</td>
<td>14.1</td>
<td>15.5</td>
<td>17.6</td>
</tr>
<tr>
<td></td>
<td>14.0</td>
<td>16.3</td>
<td>21.8</td>
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<tr>
<td>Small</td>
<td>14.2</td>
<td>15.6</td>
<td>17.4</td>
</tr>
<tr>
<td></td>
<td>14.2</td>
<td>17.1</td>
<td>21.3</td>
</tr>
</tbody>
</table>

Current P/E as % of 20-year avg. P/E

E.g.: Large Cap Blend stocks are 14.8% cheaper than their historical average.

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Blend</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>89.7%</td>
<td>85.2%</td>
<td>74.0%</td>
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<tr>
<td>Mid</td>
<td>100.7%</td>
<td>95.2%</td>
<td>80.5%</td>
</tr>
<tr>
<td>Small</td>
<td>99.5%</td>
<td>91.4%</td>
<td>81.6%</td>
</tr>
</tbody>
</table>

Source: (Top and bottom left) Standard & Poor’s, FactSet, J.P. Morgan Asset Management. (Right) Russell Investment Group, IBES, FactSet. Earnings estimates are for calendar years and taken at quarter end dates throughout the year. Forward Price to Earnings is price divided by consensus analyst estimates of earnings per share for the next 12 months. P/E ratios are calculated and provided by Russell based on IBES consensus estimates of earnings over the next 12 months except for large blend, which is the S&P 500. Data are as of 3/31/13.
Corporate Profits

S&P 500 Earnings Per Share
Operating basis, quarterly

4Q12: $23.16

2Q07: $24.06

Adjusted After-Tax Corporate Profits (% of GDP)
Includes inventory and capital consumption adjustments

4Q12: 9.9%

50-yr. avg.: 6.2%

Source: Standard & Poor’s, Compustat, BEA, J.P. Morgan Asset Management.
EPS levels are based on operating earnings per share. Most recently available data is 3Q12 as 4Q12 are Standard & Poor’s estimates with 99.8% of companies reported.
Past performance is not indicative of future returns.
Data are as of 3/31/13.
Sources of Earnings per Share Growth

Growth broken into revenue growth and margin expansion, quarterly

S&P 500 Year-Over-Year EPS Growth

Source: Standard & Poor’s, Compustat, J.P. Morgan Asset Management.
EPS levels are based on operating earnings per share. Most recently available data is 3Q12 as 4Q12 are Standard & Poor’s estimates with 99.8% of companies reported. Past performance is not indicative of future returns. 4Q2008, 1Q2010 and 2Q2010 reflect -101%, 92% and 51% growth in operating earnings, and are adjusted on the chart.

Data are as of 3/31/13.
**Multiple Expansion and Contraction**

S&P 500 forward P/E based on consensus EPS estimates

- **Forward P/E**
- **Consumer Sentiment**

**Est. impact of a 10pt. rise in sentiment: +2.0 multiple points**

**Correlation Coefficient: 0.75**

**Sentiment & Real Yields**

Real yield based on nominal 10-yr. yield minus year-over-year core CPI

- **Real 10-year Yield**
- **Consumer Sentiment**

**Est. impact of a 10pt. rise in sentiment: +54 basis points**

**Correlation Coefficient: 0.68**

Source: (Top) Standard & Poor’s, FactSet, J.P. Morgan Asset Management. (Bottom) U.S. Treasury, BLS, University of Michigan, J.P. Morgan Asset Management. Price to Earnings is price divided by consensus analyst estimates of earnings per share for the next twelve months. Real 10-year Treasury yields are calculated as the daily Treasury yield less year-over-year core inflation for that month. *Estimated impact based on coefficients from regression analysis. Data are as of 3/31/13.*
Correlations Between Weekly Stock Returns and Interest Rate Movements


Returns are based on price index only and do not include dividends.
Data are as of 3/31/13.
Deploying Corporate Cash

Corporate Cash as a % of Current Assets
S&P 500 companies – cash and cash equivalents, quarterly

Corporate Growth
$bn, nonfarm nonfinancial capex, quarterly value of deals completed

Dividend Payout Ratio
S&P 500 companies, LTM

Cash Returned to Shareholders
S&P 500 companies, rolling 4-quarter averages, billions USD


(Top left) Standard & Poor’s, FactSet, J.P. Morgan Asset Management. (Top right) M&A activity is the quarterly value of deals completed and capital expenditures are for nonfarm nonfinancial corporate business. (Bottom left) Standard & Poor’s, FactSet, J.P. Morgan Asset Management. (Bottom right) Standard & Poor’s, Compustat, FactSet, J.P. Morgan Asset Management. Data are as of 3/31/13.
Broad Market Lagged Price to Earnings Ratio

Lagged P/E Ratio – All U.S. Corporations
Ratio of market value of all U.S. corporations to adjusted after-tax corporate profits for prior four quarters

P/E Ratios

<table>
<thead>
<tr>
<th></th>
<th>Average: 13.7x</th>
</tr>
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<tbody>
<tr>
<td>Avg. During Recessions</td>
<td>12.6x</td>
</tr>
<tr>
<td>Avg. During Expansions</td>
<td>13.9x</td>
</tr>
<tr>
<td>March 31, 2013</td>
<td>14.4x</td>
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</tbody>
</table>


*The March 31, 2013 price is a J.P. Morgan Asset Management estimate based on the daily value of the Wilshire 5000 Total Market Index.
Data are as of 3/31/13.
P/E Ratios and Equity Returns

P/E and Total Return Over 1-yr. Periods
Quarterly, 1Q 1952 to 4Q 2011

P/E and Total Return Over 5-yr. Annualized Periods
Quarterly, 1Q 1952 to 4Q 2007

Source: BEA, FRB, J.P. Morgan Asset Management. Prices are based on the market value of all U.S. corporations and include quarterly dividends. Valuation based on long-term P/E ratio.

Note: Orange line denote results of linear regression with R-squared of 0.15 for 1-yr. returns (left) and 0.35 for 5-yr. returns (right).

Data are as of 3/31/13.
Equity Correlations and Volatility

Large Cap Stocks
Correlations Among Stocks

- Great Depression / World War II
- Cuban Missile Crisis
- OPEC Oil Crisis
- 1987 Crash
- Lehman Bankruptcy
- Tech Bust & 9/11
- Sovereign Debt Crisis

Average: 26.7%

Mar. 2013: 34.5%

Daily Volatility of DJIA

Volatility Measure  '08 Peak  Average  Latest
DJIA (Left)        3.30%     0.72%     0.45%
VIX (Right)        80.9      20.4      12.7


Charts shown for illustrative purposes only. Data are as of 3/31/13.
Economic Growth and the Composition of GDP

**Real GDP**

% chg at annual rate

- **20-yr avg.** 4Q12
- **Real GDP:** 2.5% 0.4%

- **'04**
- **'06**
- **'08**
- **'10**
- **'12**

$625 bn of output lost

$964 bn of output recovered

**Components of GDP**

4Q12 nominal GDP, billions USD

- **2.6% Housing**
- **10.6% Investment ex-housing**
- **19.2% Gov’t Spending**
- **70.9% Consumption**

- **- 3.3% Net Exports**

Source: BEA, FactSet, J.P. Morgan Asset Management.

GDP values shown in legend are % change vs. prior quarter annualized and reflect 4Q12 GDP.

Data are as of 3/31/13.
Cyclical Sectors

Light Vehicle Sales
Millions, seasonally adjusted annual rate

Housing Starts
Thousands, seasonally adjusted annual rate

Change in Private Inventories
Billions of 2005 dollars, seasonally adjusted annual rate

Real Capital Goods Orders
Non-defense capital goods orders ex. aircraft, $ bn, seasonally adjusted

Source: (Top left) BEA, FactSet, J.P. Morgan Asset Management. (Top right) Census Bureau, FactSet, J.P. Morgan Asset Management. (Bottom left) Census Bureau, FactSet, J.P. Morgan Asset Management. (Bottom right) Census Bureau, FactSet, J.P. Morgan Asset Management.

Capital goods orders deflated using the producer price index for capital goods.

Data are as of 3/31/13.
The Aftermath of the Housing Bubble

Home Prices
Indexed to 100, seasonally adjusted

- Case Shiller 20-city
- FHFA Purchase Only
- Average Existing Home

Home Inventories
Millions, annual rate, seasonally adjusted

Monthly Rent vs. Monthly Mortgage Payment
Vacant properties

- Monthly Mortgage Payment
- Monthly Rent

Sources: (Left) National Association of Realtors, Standard & Poor’s, FHFA, FactSet, J.P. Morgan Asset Management. (Top right) Census Bureau, J.P. Morgan Asset Management. Monthly mortgage payment assumes a 20% down payment at prevailing 30-year fixed-rate mortgage rates; analysis based on median asking rent and median mortgage payment based on asking price. (Bottom right) Census Bureau, National Association of Realtors, J.P. Morgan Asset Management. *1Q13 rent and mortgage payment values are J.P. Morgan Asset Management estimates.

Data are as of 3/31/13.
### Consumer Finances

#### Consumer Balance Sheet
Trillions of dollars outstanding, not seasonally adjusted

- **Total Assets:** $79.5tn
- **Total Liabilities:** $13.5tn

**Assets:**
- **Homes:** 25%
- **Deposits:** 10%
- **Pension Funds:** 18%
- **Other Financial Assets:** 41%

**Liabilities:**
- **Mortgages:** 71%
- **Other Tangible:** 7%
- **Other Financial Liabilities:** 8%
- **Revolving (e.g.: credit cards):** 6%
- **Non-revolving:** 14%

---

#### Household Debt Service Ratio
Debt payments as % of disposable personal income, seasonally adjusted

- **1Q80:** 11.1%
- **3Q07:** 14.1%
- **1Q13*:** 10.4%

**Source:** (Left) FRB, J.P. Morgan Asset Management. Data includes households and nonprofit organizations. (Right) BEA, FRB, J.P. Morgan Asset Management. *1Q13 household debt service ratio and household net worth are J.P. Morgan Asset Management estimates. Values may not sum to 100% due to rounding.

Data are as of 3/31/13.
Corporate Finances

Corporate Financing Gap
Nonfarm nonfinancial corporate business, billions USD

- Total Internal Funds
- Total Capital Expenditures

Companies must borrow
Companies can fund internally

Interest Coverage Ratio (EBIT / Net Interest)
S&P 500, quarterly

3Q12: 7.2x

Total Leverage
S&P 500, ratio of total debt to total equity, quarterly

4Q12: 108%

Source: Federal Reserve, Compustat, Standard & Poor’s, FactSet, J.P. Morgan Asset Management.

(Top Left): All data is from the Fed’s Flow of Funds tables report Z.1, F.102 lines 9 and 11. Total internal funds equals retained earnings plus depreciation.

Data are as of 3/31/13.
**Federal Finances: Outlays and Revenues**

**The 2013 Federal Budget**
CBO Baseline forecast, trillions USD

- **Total Spending:** $3.6tn
  - Medicare & Medicaid: $858bn (24%)
  - Defense: $751bn (21%)
  - Social Security: $810bn (23%)
  - Net Int.: $224bn (6%)
  - Corp.: $251bn (7%)
  - Borrowing: $845bn (24%)
  - Other: $241bn (7%)
  - Other: $448bn (13%)

**Total Government Spending**

**Sources of Financing**

- **Income:** $1,264bn (36%)
- **Social Insurance:** $952bn (27%)
- **Other:** $241bn (7%)
- **Non-defense Disc.:** $461bn (13%)
- **Defense:** $751bn (21%)


2013 Federal Budget is based on the CBO’s February 2013 Baseline Scenario.

Note: Years shown are fiscal years (Oct. 1 through Sep. 30).

Data are as of 3/31/13.

**Federal Outlays and Receipts**
1960 – 2013, % of GDP

- Average: 20.6%
- 2013: 23.3%
- Average: 17.9%
- 2013: 17.8%
Federal Finances: Deficits and Debt

**Federal Budget Surplus/Deficit**

% of GDP, 1990 – 2022

-12% -10% -8% -6% -4% -2% 0%

2012 CBO Baseline

2013 CBO Baseline

**Forecast**

**Federal Net Debt (Accumulated Deficits)**

% of GDP, 1990 – 2022

100%

80%

60%

40%

20%

0%

2012 actual: 72.5%

2022: 76.0%

2022: 58.3%


2012 numbers are actuals. Note: Years shown are fiscal years (Oct. 1 through Sep. 30). Chart on the left displays federal surplus/deficit (revenues – outlays). Federal net debt comprises all financial liabilities of the Federal government (gross debt) minus all intra-government holdings as assets. Deficit and debt scenarios are based on CBO budget forecasts from August 2012 and February 2013, which include the American Taxpayer Relief Act’s cost estimates.

Data are as of 3/31/13.
Trade and the U.S. Dollar

Current Account Balance, % of GDP

-8%  -6%  -4%  -2%  0%

'94 '96 '98 '00 '02 '04 '06 '08 '10 '12

4Q05: -6.5%
4Q12: -2.8%

Source: BEA, FactSet, J.P. Morgan Asset Management.
Data are as of 3/31/13.

U.S. Dollar Index
Nominal trade-weighted exchange index: major currencies

Data are as of 3/31/13.
Civilian Unemployment Rate

Seasonally adjusted

- 6%
- 7%
- 8%
- 9%
- 10%
- 11%
- 12%

Feb. 2013: 7.7%

50-yr. avg.: 6.1%

Source: BLS, FactSet, J.P. Morgan Asset Management.
Data are as of 3/31/13.

Employment – Total Private Payroll

Total job gain/loss (thousands)

- 1,000
- 800
- 600
- 400
- 200
0
200
400
600
800
1,000

2003 '04 '05 '06 '07 '08 '09 '10 '11 '12

8.8mm jobs lost
6.4mm jobs gained

Source: BLS, FactSet, J.P. Morgan Asset Management.
Unemployment Rate by Education Level

- Less than High School Degree
- High School No College
- Some College
- College or Greater

Average Annual Earnings by Highest Degree Earned

Full-time workers aged 18 and older, 2011, USD

- High School Graduate: $32,493
- Bachelor's Degree: $59,415
- Advanced Degree: $87,981

Source: Census Bureau, J.P. Morgan Asset Management.

Unemployment rates shown are for civilians aged 25 and older. Data are as of 3/31/13.
CPI and Core CPI
% change vs. prior year, seasonally adjusted

<table>
<thead>
<tr>
<th>CPI and Core CPI</th>
<th>50-yr. Avg.</th>
<th>Feb. 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headline CPI</td>
<td>4.2%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Core CPI</td>
<td>4.1%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

CPI Components
Weight in CPI 12-month Change
- Food & Bev. 15.3% 1.7%
- Housing 41.0% 2.0%
- Apparel 3.6% 2.0%
- Transportation 16.8% 3.7%
- Medical Care 7.2% 3.3%
- Recreation 6.0% 0.8%
- Educ. & Comm. 6.8% 2.0%
- Other 3.4% 1.7%
- Headline CPI 100.0% 2.0%
- Core CPI 76.1% 2.0%
- Energy 9.6% 4.4%
- Food 14.3% 1.7%

Source: BLS, FactSet, J.P. Morgan Asset Management.
CPI used is CPI-U and values shown are % change vs. 1 year ago and reflect February 2013 CPI data. CPI component weights are as of December 2012 and 12-month change reflects non-seasonally adjusted data through February 2013. Core CPI is defined as CPI excluding food and energy prices.
Data are as of 3/31/13.
Oil and the Economy

**WTI Crude Oil & Retail Gasoline Prices**

<table>
<thead>
<tr>
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<th>12/31/00</th>
<th>3/31/13</th>
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<tbody>
<tr>
<td>Oil</td>
<td>$26.72</td>
<td>$97.23</td>
</tr>
<tr>
<td>Gas</td>
<td>$1.41</td>
<td>$3.68</td>
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</tbody>
</table>

**Economic Drag From Oil Prices**

U.S. petroleum imports as a % of GDP

- 3Q08: 3.8%
- 1Q13*: 2.7%

**Total U.S. Energy Net Imports**

% of total energy consumption

*1Q12 drag on growth is a J.P. Morgan Asset Management estimate.

Source: (Top) BEA, FactSet, J.P. Morgan Asset Management. (Bottom) EIA, J.P. Morgan Asset Management.

Data are as of 3/31/13.

Source: U.S. Department of Energy, FactSet, J.P. Morgan Asset Management. Price of gas based on U.S. retail national average of all formulations and WTI for crude. Imports are mostly crude oil, petroleum and natural gas while consumption includes oil, gas, coal, nuclear, hydropower and bio-fuels.
Global Energy Supply

Middle East Energy Production & Chokepoints
Percent of global liquid fuel production, 2011

U.S. Natural Gas Production
Trillions of cubic meters, USD

EIA forecast

Shale Gas

Other

Natural Gas Prices by Country
USD per mmBTU*

Major Producers
Percent of global total, 2011

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>13%</td>
</tr>
<tr>
<td>Russia</td>
<td>12%</td>
</tr>
<tr>
<td>United States</td>
<td>12%</td>
</tr>
</tbody>
</table>

Major Consumers
Percent of global total, 2011

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>22%</td>
</tr>
<tr>
<td>India</td>
<td>4%</td>
</tr>
<tr>
<td>Iraq</td>
<td>3%</td>
</tr>
<tr>
<td>Brazil</td>
<td>3%</td>
</tr>
</tbody>
</table>

Data are as of 3/31/13.
Consumer Confidence and the Stock Market

Source: University of Michigan, FactSet, J.P. Morgan Asset Management.

Peak is defined as the highest index value before a series of lower lows, while a trough is defined as the lowest index value before a series of higher highs. Subsequent 12-month S&P 500 returns are price returns only, which excludes dividends.

Data are as of 3/31/2013.
Fixed Income Sector Returns

<table>
<thead>
<tr>
<th>Year</th>
<th>High Yield</th>
<th>EMD</th>
<th>High Yield</th>
<th>TIPS</th>
<th>Treas.</th>
<th>High Yield</th>
<th>High Yield</th>
<th>High Yield</th>
<th>TIPS</th>
<th>EMD</th>
<th>High Yield</th>
<th>EMD</th>
<th>EMD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>29.0%</td>
<td>11.9%</td>
<td>12.3%</td>
<td>11.8%</td>
<td>11.6%</td>
<td>13.7%</td>
<td>58.2%</td>
<td>15.1%</td>
<td>13.6%</td>
<td>17.9%</td>
<td>200.3%</td>
<td>11.6%</td>
<td>11.6%</td>
</tr>
<tr>
<td>2004</td>
<td>EMD</td>
<td>High Yield</td>
<td>Asset Alloc.</td>
<td>3.6%</td>
<td>TIPS</td>
<td>MBS</td>
<td>EMDB</td>
<td>8.3%</td>
<td>34.2%</td>
<td>12.8%</td>
<td>Muni</td>
<td>High Yield</td>
<td>0.3%</td>
</tr>
<tr>
<td>2005</td>
<td>TIPS</td>
<td>Muni</td>
<td>MBS</td>
<td>Barclays Agg</td>
<td>7.0%</td>
<td>Barclays Agg</td>
<td>5.2%</td>
<td>Corp.</td>
<td>18.7%</td>
<td>9.0%</td>
<td>Treas.</td>
<td>Corp.</td>
<td>9.8%</td>
</tr>
<tr>
<td>2006</td>
<td>TIPS</td>
<td>MBS</td>
<td>High Yield</td>
<td>Asset Alloc.</td>
<td>6.2%</td>
<td>EMD</td>
<td>Asset Alloc.</td>
<td>-1.4%</td>
<td>Asset Alloc.</td>
<td>-15.8%</td>
<td>Asset Alloc.</td>
<td>0.1%</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>TIPS</td>
<td>Muni</td>
<td>High Yield</td>
<td>Asset Alloc.</td>
<td>5.1%</td>
<td>MBS</td>
<td>Asset Alloc.</td>
<td>-2.4%</td>
<td>Muni</td>
<td>Barclays Agg</td>
<td>65.7%</td>
<td>Barclays Agg</td>
<td>5.2%</td>
</tr>
<tr>
<td>2008</td>
<td>TIPS</td>
<td>Muni</td>
<td>MBS</td>
<td>High Yield</td>
<td>2.7%</td>
<td>Barclays Agg</td>
<td>4.3%</td>
<td>EMD</td>
<td>Asset Alloc.</td>
<td>-2.5%</td>
<td>Muni</td>
<td>Barclays Agg</td>
<td>1.6%</td>
</tr>
<tr>
<td>2009</td>
<td>TIPS</td>
<td>Muni</td>
<td>MBS</td>
<td>High Yield</td>
<td>2.7%</td>
<td>Barclays Agg</td>
<td>4.3%</td>
<td>EMD</td>
<td>Asset Alloc.</td>
<td>-2.5%</td>
<td>Muni</td>
<td>Barclays Agg</td>
<td>1.6%</td>
</tr>
<tr>
<td>2010</td>
<td>MBS</td>
<td>Barclays Agg</td>
<td>3.1%</td>
<td>High Yield</td>
<td>3.8%</td>
<td>MBS</td>
<td>High Yield</td>
<td>-14.7%</td>
<td>MBS</td>
<td>5.9%</td>
<td>MBS</td>
<td>MBS</td>
<td>2.6%</td>
</tr>
<tr>
<td>2011</td>
<td>MBS</td>
<td>Barclays Agg</td>
<td>3.1%</td>
<td>High Yield</td>
<td>3.8%</td>
<td>MBS</td>
<td>High Yield</td>
<td>-14.7%</td>
<td>MBS</td>
<td>5.9%</td>
<td>MBS</td>
<td>MBS</td>
<td>2.6%</td>
</tr>
<tr>
<td>2012</td>
<td>Treas.</td>
<td>High Yield</td>
<td>2.2%</td>
<td>High Yield</td>
<td>3.8%</td>
<td>MBS</td>
<td>High Yield</td>
<td>-14.7%</td>
<td>MBS</td>
<td>5.9%</td>
<td>MBS</td>
<td>MBS</td>
<td>2.6%</td>
</tr>
<tr>
<td>1Q13</td>
<td>EMD</td>
<td>High Yield</td>
<td>2.5%</td>
<td>High Yield</td>
<td>3.8%</td>
<td>MBS</td>
<td>High Yield</td>
<td>-14.7%</td>
<td>MBS</td>
<td>5.9%</td>
<td>MBS</td>
<td>MBS</td>
<td>2.6%</td>
</tr>
<tr>
<td></td>
<td>High Yield</td>
<td>EMD</td>
<td>EMD</td>
<td>High Yield</td>
<td>1.9%</td>
<td>High Yield</td>
<td>-14.7%</td>
<td>MBS</td>
<td>5.9%</td>
<td>MBS</td>
<td>MBS</td>
<td>2.6%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Barclays Capital, FactSet, J.P. Morgan Asset Management.
Past performance is not indicative of future returns. Fixed income sectors shown above are provided by Barclays Capital and are represented by: Barclays Capital U.S. Aggregate Index; MBS: Fixed Rate MBS Index; Corporate: U.S. Corporates; Municipals: Muni Bond Index; Emerging Debt: Emerging Markets USD Index; High Yield: Corporate High Yield Index; Treasuries: Barclays Capital U.S. Treasury; TIPS: Barclays Capital TIPS. The “Asset Allocation” portfolio assumes the following weights: 10% in MBS, 20% in Corporate, 15% in Municipals, 10% in Emerging Debt, 10% in High Yield, 25% in Treasuries, 10% in TIPS. Asset allocation portfolio assumes annual rebalancing.
Data are as of 3/31/13.
### Nominal and Real 10-year Treasury Yields

#### Sep. 30, 1981:
- Nominal Yields: 15.84%
- Real Yields: 2.55%

#### Mar. 31, 2013:
- Nominal Yields: 1.87%
- Real Yields: 0.09%

### Data

- **Nominal Yields**
  - Mar. 31, 2013: 1.87%
  - Average: 6.42%

- **Real Yields**
  - Mar. 31, 2013: 0.09%
  - Average: 2.55%

### Source

Federal Reserve, BLS, J.P. Morgan Asset Management.

Real 10-year Treasury yields are calculated as the daily Treasury yield less year-over-year core inflation for that month except for March 2013, where real yields are calculated by subtracting out February 2013 year-over-year core inflation. All returns above reflect annualized total returns, which include reinvestment of dividends. Corporate bond returns are based on a composite index of investment grade bond performance. Data are as of 3/31/13.
### Fixed Income Yields and Returns

<table>
<thead>
<tr>
<th>Sector</th>
<th># of Issues</th>
<th>Correlation to 10-year</th>
<th>Avg. Maturity</th>
<th>Yield 3/31/2013</th>
<th>Return 1Q13</th>
<th>Return 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U.S. Treasuries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Year</td>
<td>73</td>
<td>0.69</td>
<td>2 years</td>
<td>0.25%</td>
<td>0.09%</td>
<td>0.31%</td>
</tr>
<tr>
<td>5-Year</td>
<td>60</td>
<td>0.92</td>
<td>5</td>
<td>0.77%</td>
<td>0.18%</td>
<td>2.29%</td>
</tr>
<tr>
<td>10-Year</td>
<td>21</td>
<td>1.00</td>
<td>10</td>
<td>1.87%</td>
<td>-0.31%</td>
<td>4.13%</td>
</tr>
<tr>
<td>30-Year</td>
<td>18</td>
<td>0.92</td>
<td>30</td>
<td>3.10%</td>
<td>-3.07%</td>
<td>2.34%</td>
</tr>
<tr>
<td>TIPS</td>
<td>34</td>
<td>0.62</td>
<td>10</td>
<td>-0.64%</td>
<td>-0.36%</td>
<td>6.98%</td>
</tr>
<tr>
<td><strong>EMD ($)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Year</td>
<td>623</td>
<td>0.23</td>
<td>9.6</td>
<td>4.30%</td>
<td>-1.46%</td>
<td>17.95%</td>
</tr>
<tr>
<td>5-Year</td>
<td>430</td>
<td>-0.04</td>
<td>7.0</td>
<td>4.86%</td>
<td>0.34%</td>
<td>15.09%</td>
</tr>
</tbody>
</table>

### Price Impact of a 1% Rise/Fall in Interest Rates

<table>
<thead>
<tr>
<th>Sector</th>
<th>2y UST</th>
<th>5y UST</th>
<th>TIPS</th>
<th>10y UST</th>
<th>30y UST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>+1%</td>
<td>-1%</td>
<td></td>
<td>20.4%</td>
</tr>
</tbody>
</table>

**Source:** U.S. Treasury, Barclays Capital, FactSet, J.P. Morgan Asset Management.

Fixed income sectors shown above are provided by Barclays Capital and are represented by – Broad Market: Barclays U.S. Aggregate; MBS: Fixed Rate MBS Index; Corporate: U.S. Corporates; Municipals: Muni Bond Index; EMD ($) Emerging Markets (USD); High Yield: Corporate High Yield Index; TIPS: Treasury Inflation Protection Securities (TIPS); EMD (LCL): Barclays Emerging Market Local Currency Government; Floating Rate: Barclays U.S. Floating Rate Notes; Convertibles: Barclays U.S. Convertibles Composite. Treasury securities data for # of issues based on U.S. Treasury benchmarks from Barclays Capital. Yield and return information based on Bellwethers for Treasury securities. Sector yields reflect yield to worst, while Treasury yields are yield to maturity. Correlations are based on 10-years of monthly returns for all sectors except Floating Rate and EMD (LCL), which are based on monthly returns from May 2004 and July 2008, respectively, due to data availability. Change in bond price is calculated using both duration and convexity according to the following formula: New Price = (Price + (Price * - Duration * Change in Interest Rates))+(0.5 * Price * Convexity * (Change in Interest Rates)^2).

*Calculation assumes 2-year Treasury interest rate falls 0.25% to 0.00% and the 5-year Treasury falls 0.77% to 0.00%, as interest rates can only fall to 0.00%. Chart is for illustrative purposes only. Past performance is not indicative of future results.

Data are as of 3/31/13.
The Fed and the Money Supply


Monetary base is defined as the total amount of a currency that is either circulated in the hands of the public or in the commercial bank deposits held in the central bank’s reserves. Money multiplier defined as M2 divided by the monetary base. Long-term Fed projection is based on average expectations of FOMC members.

Data are as of 3/31/13.
Credit Conditions

Lending Standards for Approved Mortgage Loans
Average FICO score based on origination date

Commercial & Industrial Loan Demand
Net percent of banks reporting stronger demand

Delinquency Rates
All banks, seasonally adjusted

Common Equity as a % of Total Assets
All FDIC insured institutions, 1934 – 2011


All data reflect most recently available releases.

Data are as of 3/31/13.
High Yield Bonds

High Yield Spreads and Defaults

- HY Spreads
- Lev. Loan Spreads
- HY Default Rates

HY Spreads
- Average: 5.9%
- Latest: 5.0%

Lev. Loan Spreads
- Average: 5.1%
- Latest: 4.5%

HY Defaults Rates
- Average: 4.2%
- Latest: 1.2%

Historical High Yield Recovery Rates

High yield bonds, cents on the dollar

Average: 42.1c

Annual Flows into High Yield and Leveraged Loan Funds

Mutual funds & ETFs, billions USD

YTD 2013: $11.7bn

Source (Top chart): U.S. Treasury, J.P. Morgan, Strategic Insight, J.P. Morgan Asset Management. Default rates are defined as the par value percentage of the total market trading at or below 50% of par value and include any Chapter 11 filing, prepackaged filing or missed interest payments. (Bottom left): J.P Morgan, Fitch, J.P. Morgan Asset Management. Spreads indicated are benchmark yield to worst less comparable maturity Treasury yields.

2013 recovery rate is a weighted average number as of February 28, 2013. Yield to worst is defined as the lowest potential yield that can be received on a bond without the issuer actually defaulting and reflects the possibility of the bond being called at an unfavorable time for the holder.

Flows include ETFs and are as of February 28, 2013. Past performance is not indicative of comparable future results.

Data are as of 3/31/13.
Fixed Income

Municipal Finance

**Muni/Treasury Ratio**
Ratio of Barclays 10-year Municipal Bond yield to 10-year Treasury

**State & Local Government Debt Service**
% of current expenditures

**Municipal Bond Issuance**
Billions USD, revenue and GO issues


*Excludes maturities of 13 months or less and private placements. 2013 issuance data is as of February 2013.

Data are as of 3/31/13.
Emerging Market Debt

Index Breakdown – USD Denominated EMD

- Middle East & Africa 7%
- Latin America 43%
- Europe 33%
- Asia 17%
- Middle East & Africa 13%
- Latin America 29%
- Europe 16%
- Asia 41%

Sovereigns (EMBIG) vs. Corporates (CEMBI)

Emerging Markets Debt Spreads

Spread to Treasuries of USD-denominated debt, percent

Index | Average Spread | Spread (3/31/13)
--- | --- | ---
Sov. | 3.8% | 3.1%
Corp. | 3.3% | 3.4%

Emerging Market Debt Credit Rating

EMBIG average monthly credit rating, inverse scale

Feb. 2013: BBB-

Emerging Market Debt Credit Rating

Annual Flows into EMD Mutual Funds & ETFs

Billions USD

YTD 2013: $5.0


Spreads measure the credit risk premium over comparable maturity U.S. Treasury bonds. The J.P. Morgan EMBI Global (EMBIG) Index is a USD-denominated external debt index tracking bonds issued by sovereigns and quasi-sovereigns in developing nations. The J.P. Morgan Corporate Emerging Bond Index (CEMBI) is a USD-denominated external debt index tracking bonds issued by corporations in developing nations. Flow data is as of February 2013. Past performance is not indicative of comparable future results.

Data are as of 3/31/13.
Global Equity Markets: Returns

### MSCI EAFE Index: Return Needed to Reach 2007 Peak
Analysis as of Mar. 31, 2013, implied average annualized total return

<table>
<thead>
<tr>
<th></th>
<th>1 Yr</th>
<th>2 Yrs</th>
<th>3 Yrs</th>
<th>4 Yrs</th>
<th>5 Yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA (S&amp;P 500)</td>
<td>46.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAFE</td>
<td>23.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe ex-U.K.</td>
<td>16.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific ex-Japan</td>
<td>12.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emerging Markets</td>
<td>10.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### MSCI EME Index: Return Needed to Reach 2007 Peak
Analysis as of Mar. 31, 2013, implied average annualized total return

<table>
<thead>
<tr>
<th></th>
<th>1 Yr</th>
<th>2 Yrs</th>
<th>3 Yrs</th>
<th>4 Yrs</th>
<th>5 Yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>21.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>11.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>8.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>8.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>7.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>6.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>6.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>6.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Standard & Poor’s, MSCI, IMF, FactSet, J.P. Morgan Asset Management.

All return values are MSCI Gross Index (official) data. Definition of emerging markets is based on MSCI data. Data assume dividend yields as of 3/31/13 (MSCI EAFE: 3.3% and MSCI EM: 2.7%). Chart is for illustrative purposes only. Past performance is not indicative of future results. Please see disclosure page for index definitions.

Data as of 3/31/13.
Global Equity Markets: Composition

Share of Global Market Capitalization
% global market capitalization, float adjusted

Weights in MSCI All Country World Index
% global market capitalization, float adjusted

Emerging Market Share of MSCI ACWI Earnings
% of global market earnings, float adjusted

Share of Global GDP
Based on purchasing power parity

Source: MSCI, IMF, FactSet, J.P. Morgan Asset Management.

Share of global market capitalization is based on float adjusted MSCI data. Share of global GDP based on purchasing power parity (PPP) as calculated by the IMF for 2013. Definition of emerging markets is based on MSCI and IMF data sources.
Percentages may not sum to 100% due to rounding.
Data as of 3/31/13.
Emerging Market Country Real GDP Growth
Year-over-year % chg. – forecasts from JPMSI

Developed Market Country Real GDP Growth
Year-over-year % chg. – forecasts from JPMSI

Forecast and aggregate data come from J.P. Morgan Global Economic Research.
Data are as of 3/31/13.
The Importance of Exports

Exports as a % of GDP – 2011
Goods exports only

Numbers represent exports of goods only and would be higher if services were included. Values may not sum to total exports due to rounding. Data are as of 3/31/13.
The Impact of Global Consumers

Share of Global Nominal Consumption

Foreign Sales, % of Total Sales


Foreign sales as a percentage of total sales is calculated as an unweighted average of individual index constituent companies’ reported sales figures and does not capture all index members due to differences in reporting practices.

Data are as of 3/31/13.
GDP Growth, Gross Debt to GDP and Borrowing Costs


Growth and debt data are based on the October 2012 World Economic Outlook.
Borrowing costs based on local currency debt. EU overall borrowing cost based on Barclays Capital Euro-Aggregate 7-10 year treasury. South Africa’s borrowing cost is based on 7-year government bond yield due to data availability.

Data as of 3/31/13.
Global Manufacturing Wages

Manufacturing Wages
Nominal, average USD per month


Chinese wages are those of rural migrant workers as a proxy. *Data begins in 2005 for Vietnam due to availability of data.

Data as of 3/31/13.
Global Monetary Policy

Central Bank Assets – Percent of Nominal GDP

Bank of Japan
European Central Bank
U.S. Federal Reserve

Real Policy Rates – Monthly

Emerging Markets
Developed Markets

Country Level Monetary Policy and Inflation

Target Policy Rate
Inflation Rate
Real Policy Rate

(Top charts) Emerging and Developed Economy GDP growth and real policy rates represent GDP weighted aggregates estimated by J.P. Morgan Global Economics Research. (Bottom chart) Target policy rates are the short-term target interest rates set by central banks. Inflation rates shown represent year-over-year quarterly rates for 4Q12. Real policy rates are short-term target interest rates set by central banks minus year-over-year inflation. Data are as of 3/31/13.
Europe: Economic Growth

Europe Real GDP
Year-over-year % change

<table>
<thead>
<tr>
<th>Year</th>
<th>4Q12</th>
<th>Avg. Since 1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>'99</td>
<td>1.5%</td>
<td>-0.5%</td>
</tr>
<tr>
<td>'01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Latest GDP Growth Rates for European Countries
4Q12, year-over-year % change

- Greece: -5.7%
- Portugal: -3.8%
- Spain: -1.9%
- Italy: -2.8%
- Finland: -1.4%
- Spain: -1.4%
- Denmark: -1.0%
- Netherlands: -0.9%
- Belgium: -0.4%
- France: -0.3%
- U.K.: -0.5%
- Ireland: -0.2%
- Germany: 0.0%
- Austria: 0.7%
- Switzerland: 1.4%
- Sweden: 1.4%
- Norway: 2.1%
- Europe: 1.5%


Data are as of 3/31/13.
Europe: Inflation and Unemployment

### Europe Inflation

<table>
<thead>
<tr>
<th>Year-over-year % change</th>
<th>Avg. Since 1999</th>
<th>Feb. 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headline CPI</td>
<td>2.1%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Core CPI</td>
<td>1.7%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

### Unemployment Rate

- Greece and Spain
- Euro area
- U.S.
- Italy
- Germany

Source: (Left) ECB, FactSet, J.P. Morgan Asset Management. (Right) Note: Greece and Spain unemployment rate is weighted average of each country’s harmonised unemployment rate based on population size. Latest data January 2013 except US which is February 2013. Source: Eurostat, FactSet, J.P. Morgan Asset Management.

Data are as of 3/31/13.
The ECB announced the second round of Long Term Refinancing Operations (LTRO) in February 2012. The Outright Monetary Transaction (OMT) program was announced in September 2012.

Data are as of 3/31/13.
China GDP Contribution
Year-over-year % change

Investment
Consumption
Net Exports

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment</th>
<th>Consumption</th>
<th>Net Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>9.6%</td>
<td>4.5%</td>
<td>0.9%</td>
</tr>
<tr>
<td>2009</td>
<td>9.1%</td>
<td>8.1%</td>
<td>-3.5%</td>
</tr>
<tr>
<td>2010</td>
<td>10.4%</td>
<td>5.5%</td>
<td>0.4%</td>
</tr>
<tr>
<td>2011</td>
<td>9.3%</td>
<td>4.5%</td>
<td>-0.4%</td>
</tr>
<tr>
<td>2012</td>
<td>7.8%</td>
<td>4.1%</td>
<td>-0.2%</td>
</tr>
</tbody>
</table>


Values may not sum to 100% due to rounding. RRR represents the reserve requirement ratio.

Data are as of 3/31/13.
China: Cyclical Indicators

Chinese Currency
Renminbi per US Dollar (inverted scale)

Merchandise Trade Growth
Year-over-year % change

Residential Floor Space Started and Sold
Year-over-year % change, seasonally adjusted

Manufacturing PMIs
Index level


Note: NBS manufacturing PMI covers approximately 800 companies with a bias toward state-owned and large enterprises, while the Markit manufacturing PMI includes 400 companies with a bias toward small and medium-sized companies.

Data are as of 3/31/13.
Japan: Economic Snapshot

**Real GDP**
Year-over-year % change

<table>
<thead>
<tr>
<th>Year</th>
<th>20-yr Avg.</th>
<th>4Q12</th>
</tr>
</thead>
<tbody>
<tr>
<td>'02</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>'04</td>
<td>0.4%</td>
<td></td>
</tr>
</tbody>
</table>

**CPI Inflation**
Year-over-year % change, sa

<table>
<thead>
<tr>
<th>Year</th>
<th>Headline CPI</th>
<th>Core CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 2013:</td>
<td>-0.4%</td>
<td>-0.6%</td>
</tr>
</tbody>
</table>


Core CPI is defined as CPI excluding food and energy prices.

Data are as of 3/31/13.
Global Equity Valuations – Developed Markets

### Developed Market Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Current Composite Index</th>
<th>Current</th>
<th>10-year avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>World (ACWI)</td>
<td>-0.29</td>
<td>13.0</td>
<td>1.8</td>
</tr>
<tr>
<td>EAFE Index</td>
<td>-1.11</td>
<td>12.8</td>
<td>1.5</td>
</tr>
<tr>
<td>France</td>
<td>-1.83</td>
<td>11.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Germany</td>
<td>-1.51</td>
<td>11.3</td>
<td>1.5</td>
</tr>
<tr>
<td>U.K.</td>
<td>-0.93</td>
<td>11.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Japan</td>
<td>-0.25</td>
<td>14.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Australia</td>
<td>-0.45</td>
<td>14.2</td>
<td>1.9</td>
</tr>
<tr>
<td>Canada</td>
<td>-0.32</td>
<td>13.3</td>
<td>1.8</td>
</tr>
<tr>
<td>United States</td>
<td>1.08</td>
<td>13.9</td>
<td>2.4</td>
</tr>
<tr>
<td>Switzerland</td>
<td>0.82</td>
<td>14.6</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Source: MSCI, FactSet, J.P. Morgan Asset Management.

Note: Each valuation index shows an equally weighted composite of four metrics: price to forward earnings (Fwd. P/E), price to current book (P/B), price to last 12 months’ cash flow (P/CF) and price to last 12 months’ dividends. Results are then normalized using means and average variability over the last 10 years. The grey bars represent valuation index variability relative to that of the MSCI All Country World Index (ACWI). See disclosures page at the end for metric definitions.

Data are as of 3/31/13.
Global Equity Valuations – Emerging Markets

Emerging Market Countries

<table>
<thead>
<tr>
<th></th>
<th>Current Composite Index</th>
<th>Current</th>
<th>10-year avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>World (ACWI)</td>
<td>-0.29</td>
<td>13.0</td>
<td>1.8</td>
</tr>
<tr>
<td>EM Index</td>
<td>-1.31</td>
<td>10.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Russia</td>
<td>-3.80</td>
<td>5.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Brazil</td>
<td>-1.76</td>
<td>11.2</td>
<td>1.4</td>
</tr>
<tr>
<td>China</td>
<td>-2.14</td>
<td>9.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Taiwan</td>
<td>-0.58</td>
<td>14.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Thailand</td>
<td>-0.05</td>
<td>12.4</td>
<td>2.4</td>
</tr>
<tr>
<td>South Africa</td>
<td>0.16</td>
<td>12.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Korea</td>
<td>0.12</td>
<td>8.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.09</td>
<td>15.1</td>
<td>3.8</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.41</td>
<td>18.0</td>
<td>3.0</td>
</tr>
<tr>
<td>India</td>
<td>2.52</td>
<td>13.6</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Source: MSCI, FactSet, J.P. Morgan Asset Management.

Note: Each valuation index shows an equally weighted composite of four metrics: price to forward earnings (Fwd. P/E), price to current book (P/B), price to last 12 months’ cash flow (P/CF) and price to last 12 months’ dividends. Results are then normalized using means and average variability over the last 10 years. The grey bars represent valuation index variability relative to that of the MSCI All Country World Index (ACWI). See disclosures page at the end for metric definitions.

Data are as of 3/31/13.
### Emerging Market Equity Composition

**MSCI EM Index by Region**
- Latin America ex Brazil: 9%
- Brazil: 13%
- Africa/Mideast: 7%
- Europe: 10%
- Asia ex China & Korea: 28%
- Korea: 15%
- China: 18%

**MSCI EM Index by Sector**
- Commodities: 23%
- Financials: 27%
- Tech: 14%
- Consumer: 17%
- Other: 19%

**MSCI EM Country Index by Sector**

- **Brazil**
  - Other: 16%
  - Commodities: 33%
  - Financials: 29%
  - Tech: 2%
  - Consumer: 20%

- **Russia**
  - Other: 12%
  - Commodities: 64%
  - Financials: 19%
  - Tech: 5%
  - Consumer: 17%

- **India**
  - Other: 16%
  - Commodities: 30%
  - Financials: 18%
  - Tech: 18%
  - Consumer: 17%

- **China**
  - Other: 22%
  - Commodities: 21%
  - Financials: 40%
  - Tech: 6%
  - Consumer: 10%

- **Mexico**
  - Other: 26%
  - Commodities: 22%
  - Financials: 13%
  - Tech: 39%
  - Consumer: 37%

- **Korea**
  - Other: 15%
  - Commodities: 12%
  - Financials: 13%
  - Tech: 37%
  - Consumer: 22%


* Mexican Telecom sector accounts for 19% of the country’s market capitalization. Values may not sum to 100% due to rounding.

Data are as of 3/31/13.
## Correlations: 10-Years

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Large Cap</th>
<th>Small Cap</th>
<th>EAFE</th>
<th>EME</th>
<th>Core Bonds</th>
<th>Corp. HY</th>
<th>EMD</th>
<th>Cmdty.</th>
<th>REITs</th>
<th>Hedge Funds</th>
<th>Eq. Market Neutral*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Cap</td>
<td>1.00</td>
<td>0.95</td>
<td>0.91</td>
<td>0.81</td>
<td>-0.22</td>
<td>0.79</td>
<td>0.65</td>
<td>0.51</td>
<td>0.80</td>
<td>0.82</td>
<td>0.58</td>
</tr>
<tr>
<td>Small Cap</td>
<td>1.00</td>
<td></td>
<td>0.87</td>
<td>0.77</td>
<td>-0.28</td>
<td>0.75</td>
<td>0.61</td>
<td>0.45</td>
<td>0.84</td>
<td>0.76</td>
<td>0.55</td>
</tr>
<tr>
<td>EAFE</td>
<td>1.00</td>
<td></td>
<td>0.92</td>
<td>0.16</td>
<td>0.78</td>
<td>0.71</td>
<td>0.59</td>
<td>0.73</td>
<td>0.89</td>
<td>0.73</td>
<td></td>
</tr>
<tr>
<td>EME</td>
<td>1.00</td>
<td></td>
<td></td>
<td>0.08</td>
<td>0.82</td>
<td>0.80</td>
<td>0.64</td>
<td>0.63</td>
<td>0.91</td>
<td>0.62</td>
<td></td>
</tr>
<tr>
<td>Core Bonds</td>
<td>1.00</td>
<td></td>
<td>-0.04</td>
<td>0.30</td>
<td>-0.25</td>
<td>0.00</td>
<td>0.00</td>
<td>-0.22</td>
<td>-0.08</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Corp. HY</td>
<td>1.00</td>
<td></td>
<td>0.86</td>
<td>0.54</td>
<td>0.72</td>
<td>0.78</td>
<td>0.44</td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>EMD</td>
<td>1.00</td>
<td></td>
<td>0.44</td>
<td>0.66</td>
<td>0.68</td>
<td>0.43</td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Commodities</td>
<td>1.00</td>
<td></td>
<td>0.39</td>
<td>0.72</td>
<td>0.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>REITs</td>
<td>1.00</td>
<td></td>
<td>0.59</td>
<td>0.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Hedge Funds</td>
<td>1.00</td>
<td></td>
<td></td>
<td>0.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Eq. Market Neutral*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

Source: Standard & Poor’s, Russell, Barclays Capital Inc., MSCI Inc., Credit Suisse/Tremont, NCREIF, DJ UBS, J.P. Morgan Asset Management.

Indexes used – Large Cap: S&P 500 Index; Small Cap: Russell 2000; EAFE: MSCI EAFE; EME: MSCI Emerging Markets; Bonds: Barclays Capital Aggregate; Corp HY: Barclays Capital Corporate High Yield; EMD: Barclays Capital Emerging Market; Cmdty.: DJ UBS Commodity Index; Real Estate: NAREIT Equity REIT Index; Hedge Funds: CS/Tremont Multi-Strategy Index; Equity Market Neutral: CS/Tremont Equity Market Neutral Index. *Market Neutral returns include estimates found in disclosures.

All correlation coefficients calculated based on quarterly total return data for period 3/31/03 to 3/31/13.

This chart is for illustrative purposes only.

Data as of 3/31/13.
Mutual Fund Flows

**Fund Flows**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Equity</td>
<td>4,608</td>
<td>17</td>
<td>(156)</td>
<td>(81)</td>
<td>(29)</td>
<td>(149)</td>
<td>(65)</td>
<td>(0)</td>
<td>18</td>
<td>101</td>
<td>120</td>
<td>(26)</td>
<td>55</td>
<td>261</td>
<td>176</td>
<td>149</td>
<td></td>
</tr>
<tr>
<td>World Equity</td>
<td>1,689</td>
<td>35</td>
<td>3</td>
<td>4</td>
<td>58</td>
<td>28</td>
<td>(80)</td>
<td>139</td>
<td>149</td>
<td>106</td>
<td>71</td>
<td>24</td>
<td>(3)</td>
<td>(22)</td>
<td>53</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Taxable Bond</td>
<td>2,899</td>
<td>43</td>
<td>254</td>
<td>137</td>
<td>224</td>
<td>310</td>
<td>21</td>
<td>98</td>
<td>45</td>
<td>27</td>
<td>5</td>
<td>40</td>
<td>125</td>
<td>76</td>
<td>(36)</td>
<td>8</td>
<td>59</td>
</tr>
<tr>
<td>Tax-exempt Bond</td>
<td>593</td>
<td>10</td>
<td>50</td>
<td>(12)</td>
<td>11</td>
<td>69</td>
<td>8</td>
<td>11</td>
<td>15</td>
<td>5</td>
<td>(15)</td>
<td>(7)</td>
<td>17</td>
<td>11</td>
<td>(14)</td>
<td>(12)</td>
<td>15</td>
</tr>
<tr>
<td>Hybrid</td>
<td>1,042</td>
<td>18</td>
<td>46</td>
<td>29</td>
<td>29</td>
<td>12</td>
<td>(25)</td>
<td>41</td>
<td>18</td>
<td>37</td>
<td>48</td>
<td>38</td>
<td>8</td>
<td>9</td>
<td>(36)</td>
<td>(14)</td>
<td>10</td>
</tr>
<tr>
<td>Money Market</td>
<td>2,653</td>
<td>(43)</td>
<td>(0)</td>
<td>(124)</td>
<td>(525)</td>
<td>(539)</td>
<td>637</td>
<td>654</td>
<td>245</td>
<td>62</td>
<td>(157)</td>
<td>(263)</td>
<td>(46)</td>
<td>375</td>
<td>159</td>
<td>194</td>
<td>235</td>
</tr>
</tbody>
</table>

**Cumulative Flows into Stock & Bond Funds**
Includes both mutual funds and ETFs, $ billions

- Feb. ’13: $1,447 billion into bond funds and fixed income ETFs since ’07
- Feb. ’13: $278 billion into stock funds and equity ETFs since ’07

**Difference Between Flows Into Stock and Bond Funds**
Billions, USD, U.S. and international funds, monthly

- Bond flows exceeded equity flows by $6 billion in February 2013

Data include flows through February 2013 and exclude ETFs except for the bottom left chart. ICI data are subject to periodic revisions. World equity flows are inclusive of emerging market, global equity and regional equity flows. Hybrid flows include asset allocation, balanced fund, flexible portfolio and mixed income flows. Data are as of 3/31/13.
Yield Alternatives: Domestic and Global

S&P 500 Total Return: Dividends vs. Capital Appreciation

Average annualized returns

<table>
<thead>
<tr>
<th>Period</th>
<th>Capital Appreciation</th>
<th>Dividends</th>
</tr>
</thead>
<tbody>
<tr>
<td>1926 - 1929</td>
<td>13.9%</td>
<td>4.7%</td>
</tr>
<tr>
<td>1930's</td>
<td>3.0%</td>
<td>5.4%</td>
</tr>
<tr>
<td>1940's</td>
<td>6.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>1950's</td>
<td>13.6%</td>
<td>5.1%</td>
</tr>
<tr>
<td>1960's</td>
<td>4.4%</td>
<td>4.4%</td>
</tr>
<tr>
<td>1970's</td>
<td>4.2%</td>
<td>2.5%</td>
</tr>
<tr>
<td>1980's</td>
<td>12.6%</td>
<td>4.4%</td>
</tr>
<tr>
<td>1990's</td>
<td>15.3%</td>
<td>2.5%</td>
</tr>
<tr>
<td>2000's</td>
<td>1.8%</td>
<td>4.1%</td>
</tr>
<tr>
<td>1926 to 2012</td>
<td>-2.7%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

Equity Dividend Yields

Major world markets by capitalization

<table>
<thead>
<tr>
<th>Country</th>
<th>1-year government bond yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>2.2%</td>
</tr>
<tr>
<td>Australia</td>
<td>4.2%</td>
</tr>
<tr>
<td>France</td>
<td>3.8%</td>
</tr>
<tr>
<td>U.K.</td>
<td>3.6%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2.9%</td>
</tr>
<tr>
<td>Canada</td>
<td>2.9%</td>
</tr>
<tr>
<td>ACWI</td>
<td>2.7%</td>
</tr>
<tr>
<td>Japan</td>
<td>2.0%</td>
</tr>
<tr>
<td>10-year government bond yield</td>
<td></td>
</tr>
</tbody>
</table>

Yield Alternatives

Annualized Yield

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Yield Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMD Loc.</td>
<td>4.9%</td>
</tr>
<tr>
<td>Preferreds</td>
<td>4.7%</td>
</tr>
<tr>
<td>U.S. REITs</td>
<td>3.5%</td>
</tr>
<tr>
<td>Inter. REITs</td>
<td>3.3%</td>
</tr>
<tr>
<td>Converts</td>
<td>1.0%</td>
</tr>
<tr>
<td>Floating Rate</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

10-year government bond yield

Source: (Top chart) Standard & Poor’s, Ibbotson, J.P. Morgan Asset Management. Dividend vs. capital appreciation returns are through 12/31/12. (Bottom left) FactSet, NAREIT, J.P. Morgan Asset Management. Yields shown are that of the appropriate MSCI index. (Bottom right) FactSet, MSCI, J.P. Morgan Asset Management. Yields shown are that of the appropriate FTSE NAREIT REIT index, which excludes property development companies. Preferreds, U.S. REITs, Inter. REITs, EMD Loc., Converts, and Floating Rate yields reflect current yield.

Data are as of 3/31/13.
Global Commodities

Commodity Prices
Weekly index prices rebased to 100

- Precious Metals
- Industrial Metals
- Energy
- Grains
- Livestock

Source: Dow Jones/UBS, FactSet, J.P. Morgan Asset Management.
Commodity prices represented by the appropriate DJ/UBS Commodity sub-index.
Data are as of 3/31/13.

Oil Demand: Emerging Markets Share
Emerging markets as % of total global oil consumption

Data are as of 3/31/13.

Commodity Prices and Inflation
Year-over-year % chg.

- DJ-UBS Commodity Index (Y/Y % chg.)
- Headline CPI (Y/Y % chg.)
CPI adjusted gold values are calculated using monthly averages of gold spot prices divided by the CPI value for that month. CPI is rebased to 100 at the end of the chart.

Returns based on nominal prices.

Data are as of 3/31/13.
### Historical Returns by Holding Period

**Range of Stock, Bond and Blended Total Returns**

Annual total returns, 1950 – 2012

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Annual Avg. Total Return</th>
<th>Growth of $100,000 over 20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stocks</td>
<td>10.8%</td>
<td>$782,751</td>
</tr>
<tr>
<td>Bonds</td>
<td>6.2%</td>
<td>$335,627</td>
</tr>
<tr>
<td>50/50 Portfolio</td>
<td>8.9%</td>
<td>$554,754</td>
</tr>
</tbody>
</table>

**Annual Total Returns**

- **1-yr.**
  - Stocks: -37%
  - Bonds: -8%
  - 50/50 Portfolio: -15%

- **5-yr. rolling**
  - Stocks: 28%
  - Bonds: 23%
  - 50/50 Portfolio: 21%

- **10-yr. rolling**
  - Stocks: 19%
  - Bonds: 16%
  - 50/50 Portfolio: 17%

- **20-yr. rolling**
  - Stocks: 18%
  - Bonds: 12%
  - 50/50 Portfolio: 14%


Returns shown are based on calendar year returns from 1950 to 2012. Growth of $100,000 is based on annual average total returns from 1950-2012.

Data are as of 3/31/13.
Diversification and the Average Investor

Maximizing the Power of Diversification (1994 – 2012)

(Top) Indexes and weights of the traditional portfolio are as follows: U.S. Stocks: 55% S&P 500; U.S. Bonds: 30% Barclays Capital Aggregate; International Stocks: 15% MSCI EAFE. Portfolio with 25% in alternatives is as follows: U.S. Stocks: 22.2% S&P 500, 8.8% Russell 2000; International Stocks: 4.4% MSCI EM, 13.2% MSCI EAFE; U.S. Bonds: 26.5% Barclays Capital Aggregate; Alternatives: 8.3% CS/Tremont Equity Market Neutral; 8.3% DJ/UBS Commodities; 8.3% NAREIT Equity REIT Index. Return and standard deviation calculated using Morningstar Direct. Charts are shown for illustrative purposes only. Past performance is not indicative of future returns. Diversification does not guarantee investment returns and does not eliminate risk of loss. Data are as of 3/31/13.

(Bottom) Indexes used are as follows: REITS: NAREIT Equity REIT Index, EAFE: MSCI EAFE, Oil: WTI Index, Bonds: Barclays Capital U.S. Aggregate Index, Homes: median sale price of existing single-family homes, Gold: USD/troy oz, Inflation: CPI. Average asset allocation investor return is based on an analysis by Dalbar Inc., which utilizes the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behavior. Returns are annualized (and total return where applicable) and represent the 20-year period ending 12/31/12 to match Dalbar’s most recent analysis.
S&P 500 Intra-year Declines vs. Calendar Year Returns

Despite average intra-year drops of 14.7%, annual returns positive in 25 of 33 years

Source: Standard & Poor’s, FactSet, J.P. Morgan Asset Management.

Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980 to 2012.

Data are as of 3/31/13.
Cash Accounts

Annual Income Generated by $100,000 Investment in a 6-month CD

Cash as a % of Total Household Financial Assets

Source: Federal Reserve, St. Louis Fed, Bankrate.com, J.P. Morgan Asset Management. All cash measures obtained from the Federal Reserve are seasonally adjusted monthly numbers. All numbers are in billions of U.S. dollars. Small-denomination time deposits are those issued in amounts of less than $100,000. All IRA and Keogh account balances at commercial banks and thrift institutions are subtracted from small time deposits. Annual income is for illustrative purposes and is calculated based on the 6-month CD yield on average during each year and $100,000 invested. 2012 average income is through December 2012. IRA and Keogh account balances at money market mutual funds are subtracted from retail money funds. Past performance is not indicative of comparable future results. Data are as of 3/31/13.
Corporate DB Plans and Endowments

Asset Allocation: Corporate DB Plans vs. Endowments

- **Endowments**
  - Equities: 32.0%
  - Fixed Income: 13.0%
  - Hedge Funds: 2.7%
  - Private Equity: 4.7%
  - Real Estate: 6.1%
  - Other: 4.1%
  - Cash: 4.0%

- **Corporate Defined Benefit Plans**
  - Equities: 45.3%
  - Fixed Income: 35.5%
  - Hedge Funds: 21.9%
  - Private Equity: 10.7%
  - Real Estate: 3.1%
  - Other: 12.2%
  - Cash: 4.7%

Defined Benefit Plans – Funded Status: S&P 500 Companies

- **Overfunded**
  - 1999: 6%
  - 2011: 94%

- **Underfunded**
  - 1999: 22%
  - 2011: 78%

Pension Return Assumptions: S&P 500 companies

- **1999:** Average 9.2%
- **2012:** Average 7.3%

Source: NACUBO (National Association of College and University Business Officers), Towers Watson, Compustat/FactSet, J.P. Morgan Asset Management. Asset allocation as of 2010. Funded status as of 2011. Endowments represents dollar-weighted average data of 842 colleges and universities. Pension Return Assumptions based on all available and reported data from S&P 500 Index companies. Funded Status based on 347 companies reporting pension funding status. Return assumption bands are inclusive of upper range. All information is shown for illustrative purposes only. Data are as of 3/31/13.
Stock Market Since 1900

S&P Composite Index, Price Return (Since 1900)

Log Scale

Source: IDC, FactSet, J.P. Morgan Asset Management.

Data shown in log scale to best illustrate long-term index patterns. P/E ratios shown at price peaks and troughs use trailing four quarters of reported earnings and are shown as a one year average.

Past performance is not indicative of future returns. Chart is for illustrative purposes only.

Data are as of 3/31/13.
J.P. Morgan Asset Management – Index Definitions

All indexes are unmanaged and an individual cannot invest directly in an index. Index returns do not include fees or expenses.

The S&P 500 Index is widely regarded as the best single gauge of the U.S. equities market. This world-renowned index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. Although the S&P 500 Index focuses on the large-cap segment of the market, with approximately 75% coverage of U.S. equities, it is also an ideal proxy for the total market. An investor cannot invest directly in an index.

The S&P 400 Mid Cap Index is representative of 400 stocks in the mid-range sector of the domestic stock market, representing all major industries.

The Russell 3000 Index® measures the performance of the 3,000 largest U.S. companies based on total market capitalization.

The Russell 1000 Index® measures the performance of the 1,000 largest companies in the Russell 3000.

The Russell 1000 Growth Index® measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

The Russell 1000 Value Index® measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

The Russell Midcap Index® measures the performance of the 800 smallest companies in the Russell 1000 Index.

The Russell Midcap Growth Index® measures the performance of those Russell Midcap companies with higher price-to-book ratios and higher forecasted growth values. The stocks are also members of the Russell 1000 Growth index.

The Russell Midcap Value Index® measures the performance of those Russell Midcap companies with lower price-to-book ratios and lower forecasted growth values. The stocks are also members of the Russell 1000 Value index.

The Russell 2000 Index® measures the performance of the 2,000 smallest companies in the Russell 3000 Index.

The Russell 2000 Growth Index® measures the performance of those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.


The Russell Top 200 Index® measures the performance of the largest cap segment of the U.S. equity universe. It includes approximately 200 of the largest securities based on a combination of their market cap and current index membership and represents approximately 68% of the U.S. market.

The MSCI EAFE® (Europe, Australia, Far East) Net Index is recognized as the pre-eminent benchmark in the United States to measure international equity performance. It comprises 21 MSCI country indexes, representing the developed markets outside of North America.

The MSCI Emerging Markets Index®TM is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. As of June 2007, the MSCI Emerging Markets Index consisted of the following 25 emerging market country indices: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

The MSCI ACWI (All Country World Index) Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. As of June 2009 the MSCI ACWI consisted of 45 country indices comprising 23 developed and 22 emerging market country indices.

The MSCI Small Cap Indices® target 40% of the eligible Small Cap universe within each industry group, within each country. MSCI defines the Small Cap universe as all listed securities that have a market capitalization in the range of USD200-1,500 million.

The MSCI Value and Growth Indices cover the full range of developed, emerging and All Country MSCI Equity indices. As of the close of May 30, 2003, MSCI implemented an enhanced methodology for the MSCI Global Value and Growth Indices, adopting a two dimensional framework for style segmentation in which value and growth securities are categorized using different attributes - three for value and five for growth including forward-looking variables. The objective of the index design is to divide constituents of an underlying MSCI Standard Country Index into a value index and a growth index, each targeting 50% of the free float adjusted market capitalization of the underlying country index. Country Value/Growth indices are then aggregated into regional Value/Growth indices. Prior to May 30, 2003, the indices used Price/Book Value (P/BV) ratios to divide the standard MSCI country indices into value and growth indices. All securities were classified as either "value" securities (low P/BV securities) or "growth" securities (high P/BV securities), relative to each MSCI country index.

The following MSCI Total Return Indices® are calculated with gross dividends:
This series approximates the maximum possible dividend reinvestment. The amount reinvested is the dividend distributed to individuals resident in the country of the company, but does not include tax credits.

The MSCI Europe Index® is a free float-adjusted market capitalization index that is designed to measure developed market equity performance in Europe. As of June 2007, the MSCI Europe Index consisted of the following 16 developed market country indices: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

The MSCI Pacific Index® is a free float-adjusted market capitalization index that is designed to measure equity market performance in the Pacific region. As of June 2007, the MSCI Pacific Index consisted of the following 5 Developed Market countries: Australia, Hong Kong, Japan, New Zealand, and Singapore.

Credit Suisse/Tremont Hedge Fund Index is compiled by Credit Suisse Tremont Index, LLC. It is an asset-weighted hedge fund index and includes only funds, as opposed to separate accounts. The Index uses the Credit Suisse/Tremont database, which tracks over 4500 funds, and consists only of funds with a minimum of US$50 million under management, a 12-month track record, and audited financial statements. It is calculated and rebalanced on a monthly basis, and shown net of all performance fees and expenses. It is the exclusive property of Credit Suisse Tremont Index, LLC.

The NCREIF Property Index is a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only. All properties in the NPI have been acquired, at least in part, on behalf of tax-exempt institutional investors - the great majority being pension funds. As such, all properties are held in a fiduciary environment.

The NAREIT EQUITY REIT Index is designed to provide the most comprehensive assessment of overall industry performance, and includes all tax-qualified real estate investment trusts (REITs) that are listed on the NYSE, the American Stock Exchange or the NASDAQ National Market List.
All indexes are unmanaged and an individual cannot invest directly in an index. Index returns do not include fees or expenses.

The Dow Jones-UBS Commodity Index is composed of futures contracts on physical commodities and represents nineteen separate commodities traded on U.S. exchanges, with the exception of aluminum, nickel, and zinc.

The S&P GSCI Index is a composite index of commodity sector returns representing an unleveraged, long-only investment in commodity futures that is broadly diversified across the spectrum of commodities. The returns are calculated on a fully collateralized basis with full reinvestment. Individual components qualify for inclusion in the index on the basis of liquidity and are weighted by their respective world production quantities.

The Barclays Capital U.S. Aggregate Index represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities. These major sectors are subdivided into more specific indexes that are calculated and reported on a regular basis. This U.S. Treasury Index is a component of the U.S. Government index.

West Texas Intermediate (WTI) is the underlying commodity for the New York Mercantile Exchange’s oil futures contracts.

The Barclays Capital High Yield Index covers the universe of fixed rate, non-investment grade debt, Pay-in-kind (PIK) bonds, Eurobonds, and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, and 144-A and As are also included.

The Barclays Capital 1-3 Month U.S. Treasury Bill Index includes all publicly issued zero-coupon U.S. Treasury Bills that have a remaining maturity of less than 3 months and more than 1 month, are rated investment grade, and have $250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed rate and non-convertible.

The Barclays Capital General Obligation Bond Index is a component of the Barclays Capital Municipal Bond Index. To be included in the index, bonds must be general obligation bonds rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody’s, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. The bonds must have an outstanding par value of at least $7 million and be issued as part of a transaction of at least $75 million. The bonds must be fixed rate, have a dated-date after December 31, 1990, and must be at least one year from their maturity date. Remarked issues, taxable municipal bonds, bonds with floating rates, and derivatives, are excluded from the benchmark.

The Barclays Capital Revenue Bond Index is a component of the Barclays Capital Municipal Bond Index. To be included in the index, bonds must be revenue bonds rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody’s, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. They must have an outstanding par value of at least $7 million and be issued as part of a transaction of at least $75 million. The bonds must be fixed rate, have a dated-date after December 31, 1990, and must be at least one year from their maturity date. Remarked issues, taxable municipal bonds, bonds with floating rates, and derivatives, are excluded from the benchmark.

The Barclays High Yield Municipal Index includes bonds rated Ba1 or lower or non-rated bonds using the middle rating of Moody’s, S&P and Fitch.

The Barclays Capital Taxable Municipal Bond Index is a rules-based, market-value weighted index engineered for the long-term taxable bond market. To be included in the index, bonds must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies if all three rate the bond: Moody’s, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. They must have an outstanding par value of at least $7 million and be issued as part of a transaction of at least $75 million. The bonds must be fixed rate and must be at least one year from their maturity date. Remarked issues (unless converted to fixed rate), bonds with floating rates, and derivatives, are excluded from the benchmark. Municipal Bond Index: To be included in the index, bonds must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody’s, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. They must have an outstanding par value of at least $7 million and be issued as part of a transaction of at least $75 million. The bonds must be fixed rate, have a dated-date after December 31, 1990, and must be at least one year from their maturity date. Remarked issues, taxable municipal bonds, bonds with floating rates, and derivatives, are excluded from the benchmark.

The Barclays Capital Emerging Markets Index includes USD-denominated debt from emerging markets in the following regions: Americas, Europe, Middle East, Africa, and Asia. As with other fixed income benchmarks provided by Barclays Capital, the index is rules-based, which allows for an unbiased view of the marketplace and easy replicability.

The Barclays Capital MBS Index covers the mortgage-backed pass-through securities of Ginnie Mae, Fannie Mae, and Freddie Mac. Aggregate components must have a weighted average maturity of at least one year, must have $250 million par amount outstanding, and must be fixed rate mortgages.

The Barclays Capital Corporate Bond Index is the Corporate component of the U.S. Credit index.

The Barclays Capital TIPS Index consists of Inflation-Protection securities issued by the U.S. Treasury.

The J.P. Morgan EMBI Global Index includes U.S. dollar denominated Brady bonds, Eurobonds, traded loans and local market debt instruments issued by sovereign and quasi-sovereign entities.

The J.P. Morgan Domestic High Yield Index is designed to mirror the investable universe of the U.S. dollar domestic high yield corporate debt market.

The CS/Tremont Equity Market Neutral Index takes both long and short positions in stocks with the aim of minimizing exposure to the systematic risk of the market (i.e., a beta of zero).

The CS/Tremont Multi-Strategy Index consists of funds that allocate capital based on perceived opportunities among several hedge fund strategies. Strategies adopted in a multi-strategy fund may include, but are not limited to, convertible bond arbitrage, equity long/short, statistical arbitrage and merger arbitrage.

The Barclays U.S. Dollar Floating Rate Note (FRN) Index provides a measure of the U.S. dollar denominated floating rate note market.

*Market Neutral returns for November 2008 are estimates by J.P. Morgan Funds Market Strategy, and are based on a December 8, 2008 published estimate for November returns by CS/Tremont in which the Market Neutral returns were estimated to be +0.85% (with 69% of all CS/Tremont constituents having reported return data). Presumed to be excluded from the November return are three funds, which were later marked to $0 by CS/Tremont in connection with the Bernard Madoff scandal. J.P. Morgan Funds believes this distortion is not an accurate representation of returns in the category. CS/Tremont later published a finalized November return of -40.56% for the month, reflecting this mark-down. CS/Tremont assumes no responsibility for these estimates.
Past performance is no guarantee of comparable future results.

Diversification does not guarantee investment returns and does not eliminate the risk of loss.

Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise. The price of equity securities may rise, or fall because of changes in the broad market or changes in a company’s financial condition, sometimes rapidly or unpredictably. These price movements may result from factors affecting individual companies, sectors or industries, or the securities market as a whole, as such changes in economic or political conditions. Equity securities are subject to “stock market risk” meaning that stock prices in general may decline over short or extended periods of time.

Small-capitalization investing typically carries more risk than investing in well-established “blue-chip” companies since smaller companies generally have higher risk of failure. Historically, smaller companies’ stock has experienced a greater degree of market volatility than the average stock.

Mid-capitalization investing typically carries more risk than investing in well-established “blue-chip” companies. Historically, mid-cap companies’ stock has experienced a greater degree of market volatility than the average stock.

Real estate investments may be subject to a higher degree of market risk because of concentration in a specific industry, sector or geographical sector. Real estate investments may be subject to risks including, but not limited to, declines in the value of real estate, risks related to general and economic conditions, changes in the value of the underlying property owned by the trust and defaults by borrower.

International investing involves a greater degree of risk and increased volatility. Changes in currency exchange rates and differences in accounting and taxation policies outside the U.S. can raise or lower returns. Also, some overseas markets may not be as politically and economically stable as the United States and other nations. Investments in emerging markets can be more volatile. As mentioned above, the normal risks of investing in foreign countries are heightened when investing in emerging markets. In addition, the small size of securities markets and the low trading volume may lead to a lack of liquidity, which leads to increased volatility. Also, emerging markets may not provide adequate legal protection for private or foreign investment or private property.

Investments in commodities may have greater volatility than investments in traditional securities, particularly if the instruments involve leverage. The value of commodity-linked derivative instruments may be affected by changes in overall market movements, commodity index volatility, changes in interest rates, or factors affecting a particular industry or commodity, such as drought, floods, weather, livestock disease, embargoes, tariffs and international economic, political and regulatory developments. Use of leveraged commodity-linked derivatives creates an opportunity for increased returns but, at the same time, creates the possibility for greater loss.

Derivatives may be riskier than other types of investments because they may be more sensitive to changes in economic or market conditions than other types of investments and could result in losses that significantly exceed the original investment. The use of derivatives may not be successful, resulting in investment losses, and the cost of such strategies may reduce investment returns.

Price to forward earnings is a measure of the price-to-earnings ratio (P/E) using forecasted earnings. Price to book value compares a stock’s market value to its book value. Price to cash flow is a measure of the market’s expectations of a firm’s future financial health. Price to dividends is the ratio of the price of a share on a stock exchange to the dividends per share paid in the previous year, used as a measure of a company’s potential as an investment.

There is no guarantee that the use of long and short positions will succeed in limiting an investor’s exposure to domestic stock market movements, capitalization, sector swings or other risk factors. Investing using long and short selling strategies may have higher portfolio turnover rates. Short selling involves certain risks, including additional costs associated with covering short positions and a possibility of unlimited loss on certain short sale positions.

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All cases studies shown for illustrative purposes only and should not be relied upon as advice or interpreted as a recommendation. Results shown are not meant to be representative of actual investment results.

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Unless otherwise stated, all data are as of March 31, 2013 or most recently available.