THE END OF EASY MONEY
ASSET ALLOCATION IN A POST-QE WORLD

Dan Morris
Global Investment Strategist

February 27, 2014
Tempe, Arizona
MONEY AND RETURNS HAVE BEEN EASY

MONEY SUPPLY $2.9 tr

EQUITIES 155%

BONDS 33%

Total returns in USD since March 9, 2009. Source: Federal Reserve, MSCI, Barclays.
2 YOUR RETIREMENT: KEY STRATEGIES
WEAK CONSUMER SPENDING IN THIS RECOVERY

GDP component growth

<table>
<thead>
<tr>
<th>Component</th>
<th>Average 2009-14</th>
<th>2009-14</th>
<th>Average 2009-14</th>
<th>2009-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>5.0%</td>
<td>2.1%</td>
<td>2.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>CONSUMER DEMAND</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Last data 4q2014. Note: Average is for post-war non-recessionary periods. Source: BEA, TIAA-CREF Asset Management.
RISING HOME PRICES BOOSTING SENTIMENT

House price index

2000
$171,200

2007
$277,900

2012
$201,000

2013
$246,500

NEW CONSTRUCTION NEEDS LABOR AND MATERIAL

Housing starts


30 65 100 135

CHANGES IN THE LABOR MARKET A CHALLENGE

Employment levels

HEALTH CARE +38%
MANUFACTURING -30%

DEBT LEVELS REMAIN HIGH

GOVERNMENT DEBT IS PROJECTED TO SKYROCKET

U.S. government debt-to-GDP

FOREIGN INVESTORS HOLD A RISING SHARE OF DEBT

THE EUROZONE CRISIS HAS FADED

Change in government interest rates, peak to current

- Ireland: 12%↓3%
- Spain: 12%↓4%
- Portugal: 16%↓5%
- Italy: 13%↓4%
- Greece: 35%↓8%

EMERGING MARKETS STILL OFFER GROWTH

Source: YouTube.
QE CREATES PROBLEMS FOR EMERGING MARKETS

Source: Google.
YOUR RETIREMENT: KEY STRATEGIES
Basics

LONG-TERM FOCUS

DIVERSIFY

REBALANCE

Diversification does not ensure a profit or protect against loss.
Rebalancing does not protect against losses or guarantee that an investor’s goals will be met.
EQUITY VALUATIONS ARE STILL REASONABLE

THERE ARE LESS EXPENSIVE MARKETS ABROAD

Relative equity market multiples

-30 %  -20  -10  0  10

- United States
- Europe
- Japan
- Emerging Markets

Last data: 4 February 2014. Note: Valuation based on current price to next twelve month earnings relative to long-run average. Japan value calculated on median PE only since 2000. Source: IBES, TIAA-CREF Asset Management.
EARNINGS EXPECTATIONS ARE MODERATING

Next-twelve-month earnings growth expectations

Last data: 4 February 2014. Indices in local currency terms except emerging markets, which is in USD. Note: EM = Emerging markets. Source: Bloomberg, TIAA-CREF Asset Management.
BONDS REMAIN EXPENSIVE

Real fixed income yield

%  
8
6
4
2
0
-2


HIGHER YIELDING DEBT OFFERS SOME PROTECTION

Index price and total return for 1% increase in interest rates

Note: Theoretical price change based on formula Price change = (-duration x change in yield x 100) + (C x change in yield squared x 100). Total return adds one year interest. Analysis is an approximation based on a hypothetical shift in interest rates and does not imply a forecast of future interest rate or bond market trends. Last data: 4 February 2014. Note: EM = Emerging markets sovereign USD. FRN = Floating rate notes. Source: Barclays, TIAA-CREF Asset Management.
INCOME WILL BE HARD TO FIND EVEN AFTER QE

Bond yields

%  
12  
8  
4  

1800 1850 1900 1950 2000

Bond yield

Real yield

Crisis

CONCLUSIONS

- End of QE will create market volatility, but underlying trends for economic growth are good
- Equities likely to see modest gains this year
- Emerging market equities are attractively valued, but difficulties near term
- Look to higher yielding fixed income to protect portfolios
This material is prepared by TIAA-CREF Asset Management and represents the views of Daniel Morris as of February 2014. These views may change in response to changing economic and market conditions. Past performance is not indicative of future results. The material is for informational purposes only and should not be regarded as a recommendation or an offer to buy or sell any product or service to which this information may relate. Certain products and services may not be available to all entities or persons.

TIAA-CREF Asset Management provides investment advice and portfolio management services to the TIAA-CREF group of companies through the following entities: TeachersAdvisors, Inc., TIAA-CREF Investment Management, LLC, and Teachers Insurance and Annuity Association®(TIAA®). Teachers Advisors, Inc., is a registered investment advisor and wholly owned subsidiary of Teachers Insurance and Annuity Association (TIAA). TIAA-CREF products may be subject to market and other risk factors. See the applicable product literature, or visit tiaa-cref.org for details.

Annuity contracts and certificates are issued by Teachers Insurance and Annuity Association (TIAA) and College Retirement Equities Fund (CREF), New York, NY.

©2014 Teachers Insurance and Annuity Association-College Retirement Equities Fund, New York, NY 10017

C15023