CalPERS Chief Investment Officer
Total Fund Performance and Risk Report

Period Ending December 31, 2013

Investment Committee
February 2014

CalPERS | Investment Office

CalPERS CIO Total Fund Update

Economic and Market Conditions

The US economic recovery has broadened and accelerated, while global tail risks have somewhat receded.

Portfolio Risk

Portfolio Total Risk continues to trend lower but remains elevated versus pre-crisis levels with Growth assets continuing to drive Total Risk.

Total Fund Performance

Total Fund continues to outperform the Policy Benchmark with Growth assets generating strong total performance for the fiscal year-to-date (FYTD) period.

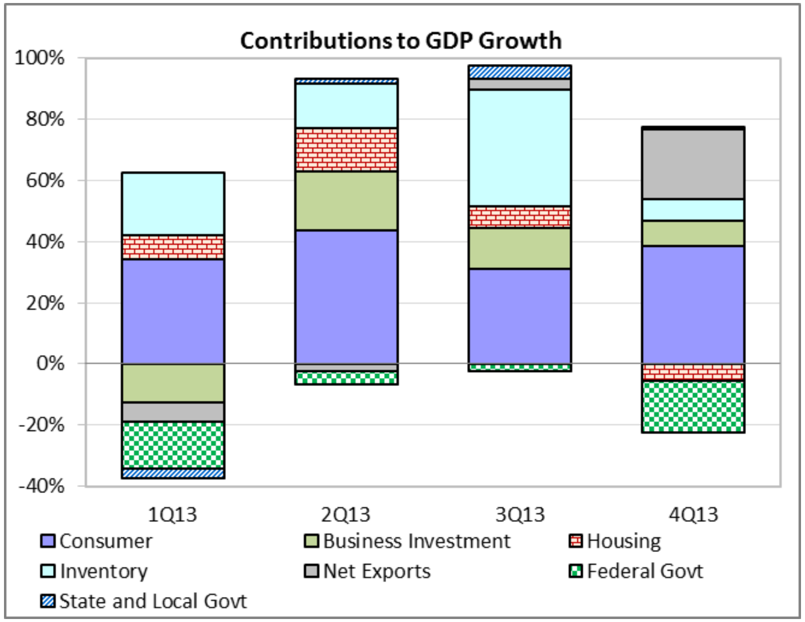
Economic Trends

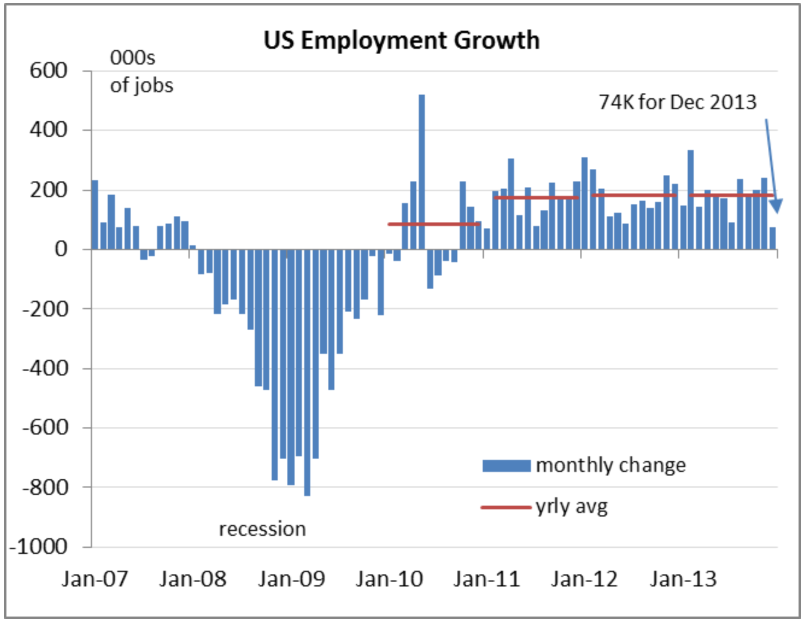
- The US recovery is broadening and government is becoming less of a drag on growth. Global economic conditions have improved too, reducing tail risks.

Positive	Same Trend	Negative
- Economic growth Real GDP growth may have reached 3.75% in 2H 2013, double the first half rate. **- Labor market quality** New high in temp jobs, more full time work, greater mobility, fewer discouraged workers. **- Consumer sentiment and spending** Confidence rebound after budget deal shows up in better chain store and retail sales. **- Manufacturing and trade** 2H IP strength led by IT, autos and oil/gas. Sharp narrowing of petroleum trade gap. **- Construction** Improvement in apartments, office and commercial building into year end. **- Household balance sheets** Net worth +$19bn in 4 years. Households have largely saved rather than spent it. **- Buiness profits and capex** 8% yearly profit growth for nonfinancial corporates, improving capex orders. **- Government sector** Federal deficit $560bn in 2013 vs $1060bn in 2012. Municipal spending improves.	**- Inflation** Headline and core inflation rates still in the low to mid 1s. **- Car sales** Auto sales have leveled out at a 15 5 mn unit rate and imports' share is recovering.	**- Cold weather** First casualty was a low rate of jobs growth in December, likely to bleed into January. **- Unemployment Rate** At 6.68% it is very near Fed's 6.5% threshold for considering less easy money. **- Mortgage applications** As mortgage rates rise, applications for purchase and refinancing slump. **Housing affordability** Decision between purchase and renting has become more even again. **- Home resales** Peaked in August at 5.4mn rate, now down to 4.9mn. But plans to buy jumped in Dec. **- Expiry of extended jobless benefits** This will impact 1.3mn workers at the start of 2014, with a small GDP impact. **- Inventories … too much?** Inventory rebuild has been aggressive although not out of whack with sales.

US Economic Growth and Employment

- US real GDP growth was 3.7% in the second half of 2013, double the rate of the first half. Consumer, inventory, exports and municipal government drove the improvement.
- US jobs growth averaged 182K per month during 2013, similar to 2011 and 2012. During the year some modest progress was made toward a more robust jobs market.



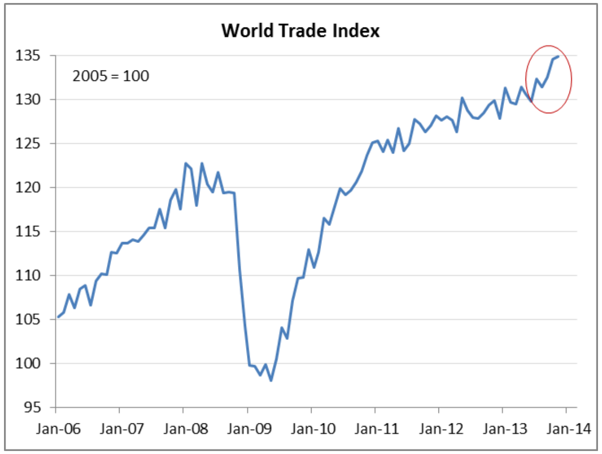


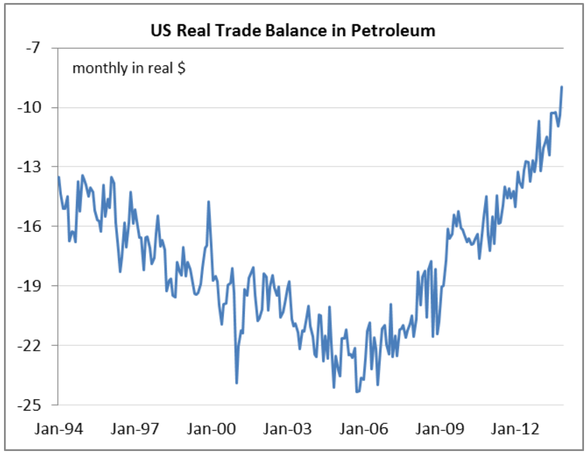
Domestic drivers of growth

- **Consumer** – Growing net worth and record low debt servicing costs drive a strong finish to 2013.
- **Corporate** – Business investment is the key swing variable for 2014.
- **Housing** – A second wind for starts and plans to buy a home. Household formation should improve.
- **Government** – Sharp decline in the federal deficit and better municipal revenue stream.

Global recovery still faces risks

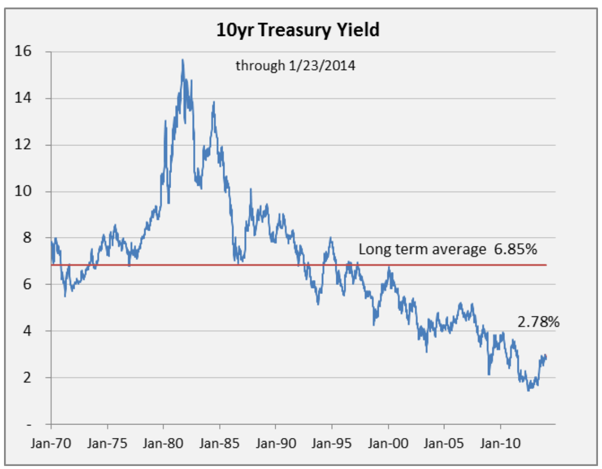
- There has been a sustained uptick in world trade and business survey results since the middle of 2013. So far this has been led by developed economies.
- However financial conditions remain weak in emerging economies and there are still difficult policy transitions to negotiate in Japan and China.
- The US is reaping the benefits of both a cheap dollar and a boom in petroleum output, helping to reduce the reliance on foreign sources of savings.

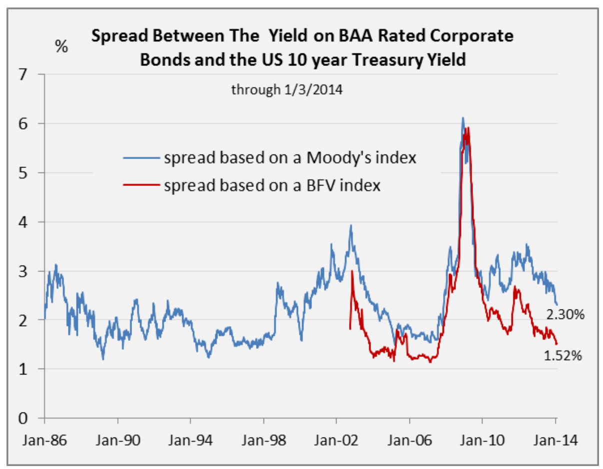


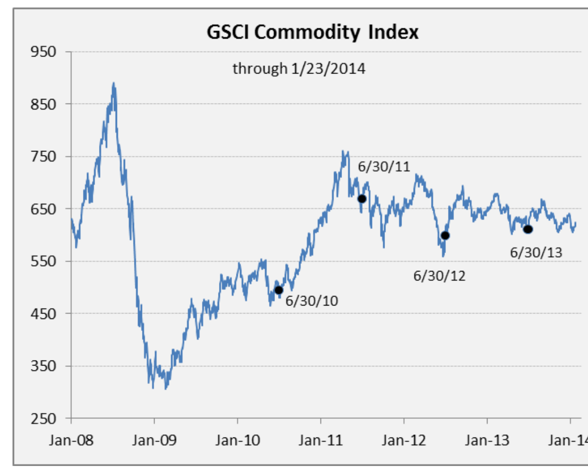


Market Environment

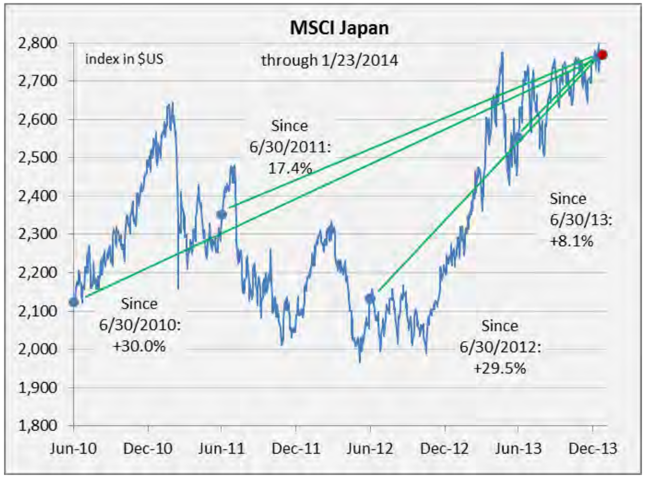
- The US 10 year bond yield started 2013 at 1.75% and finished the year at 3%, consistent with a gradually improving economy.
- Corporate spreads to Treasuries have continued to modestly narrow.
- Commodity prices have been subdued, consistent with a rising US dollar and slower demand growth from China.







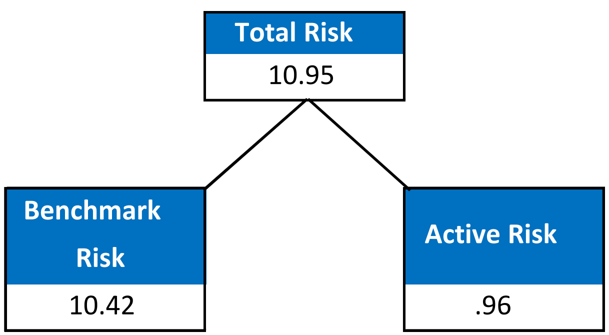
Market Environment

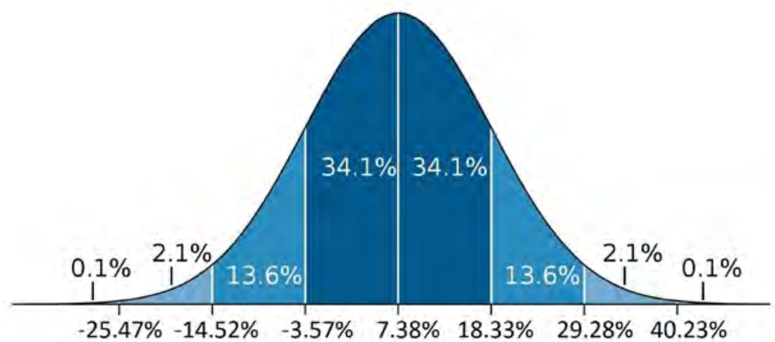


Total Fund Risk Profile

As of November 30, 2013

- Total Fund Forecast Risk is 10.95%
- Forecast Tracking Error is 0.96% and is within guidelines
- 10-Day Value-at-Risk is $10.2 billion
- 10-Day Expected Shortfall is $12.5 billion



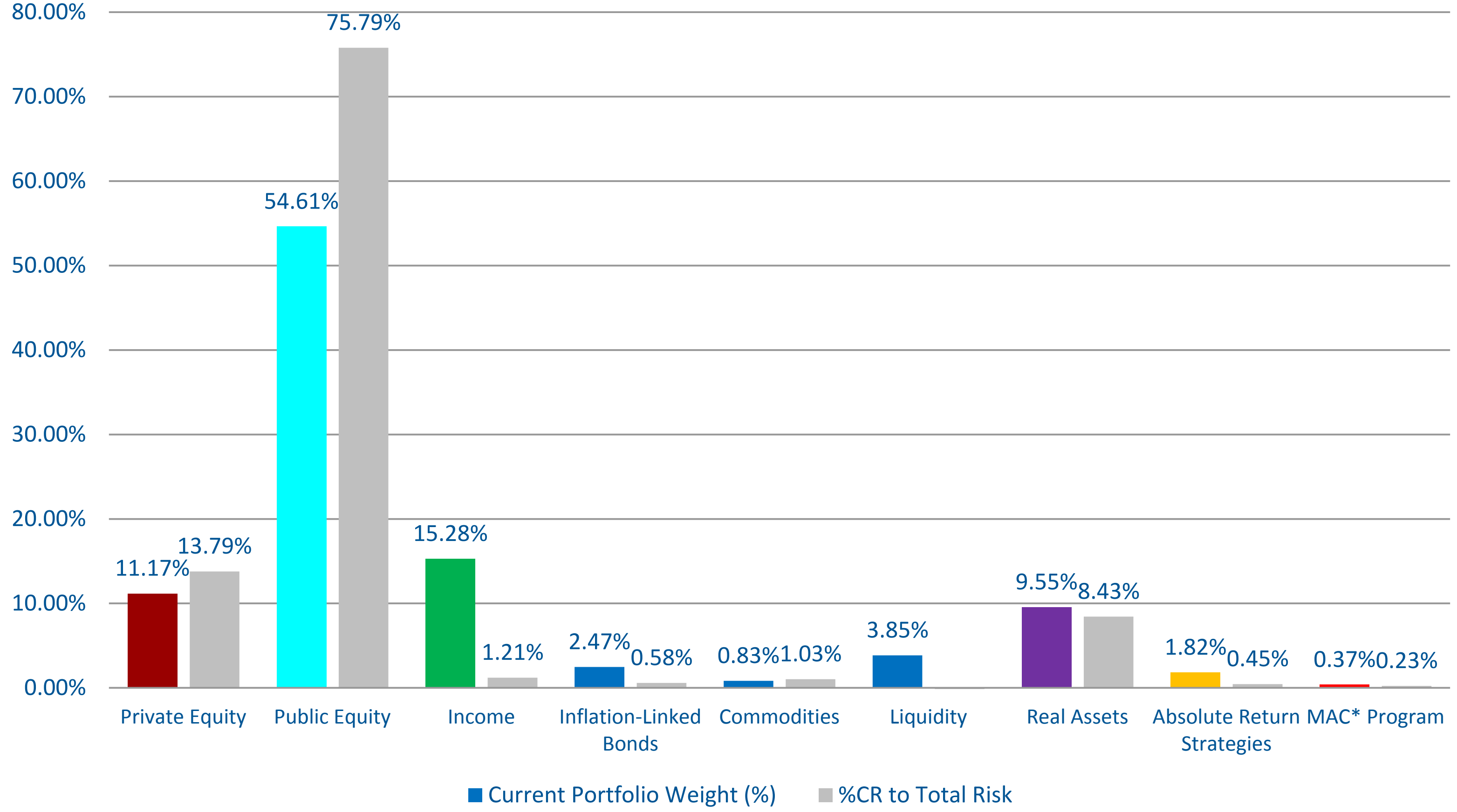


Forecasted Distribution of Returns*

*Based on Forecasted Returns from 2010 Asset Liability Workshop of 7.4% and Predicted Risk of 10.95%

Contribution to Risk (CR)

Portfolio Weight and Contribution to Total Risk – as of November 30, 2013



* Multi-Asset Class (MAC) Program

Total Fund Performance Summary

- 1-year return of 16.2% outperformed strategic benchmark by 140 basis points (BPS).
- 10-year return of 6.8% underperformed strategic policy benchmark by 90 BPS and is below current actuarial return expectation of 7.5%.

	FYTD Net Return	1-YR Net Return	3-YR Net Return	5-YR Net Return	10-YR Net Return
TOTAL FUND	**10.6%**	**16.2%**	**10.0%**	**10.9%**	**6.8%**
POLICY INDEX	10.2%	14.8%	9.8%	12.2%	7.7%
Excess Return	0.4%	1.4%	0.2%	(1.3%)	(0.9%)

Affiliate Funds Performance Summary

- The 5-year return for all Defined Benefit Plans outperformed their respective benchmarks
- Judges' Retirement Fund underperformed a cash equivalent benchmark for the FYTD, 1-year, and 3-year periods

	FYTD		1-YR		3-YR		5-YR		10-YR	
Defined Benefit Plans	Net Return	Excess BPS	Net Return	Excess BPS	Net Return	Excess BPS	Net Return	Excess BPS	Net Return	Excess BPS
JUDGES' RETIREMENT FUND	0.0%	(4)	0.0%	(6)	0.1%	(3)	0.2%	9	1.8%	12
JUDGES' RETIREMENT SYSTEM II FUND	10.7%	34	14.1%	55	10.0%	2	13.1%	40	6.9%	5
LEGISLATORS' RETIREMENT SYSTEM FUND	5.5%	57	4.7%	93	7.6%	24	10.8%	101	6.3%	7
CERBT STRATEGY 1	10.8%	35	14.2%	55	9.3%	8	13.4%	10	N/A	N/A
CERBT STRATEGY 2	8.1%	41	9.2%	68	N/A	N/A	N/A	N/A	N/A	N/A
CERBT STRATEGY 3	5.3%	60	4.1%	79	N/A	N/A	N/A	N/A	N/A	N/A
CALPERS HEALTH CARE BOND FUND	1.0%	60	(0.9%)	109	4.0%	71	5.8%	131	4.6%	5
LONG-TERM CARE FUND	2.6%	36	(0.1%)	52	4.9%	16	10.3%	44	5.6%	19

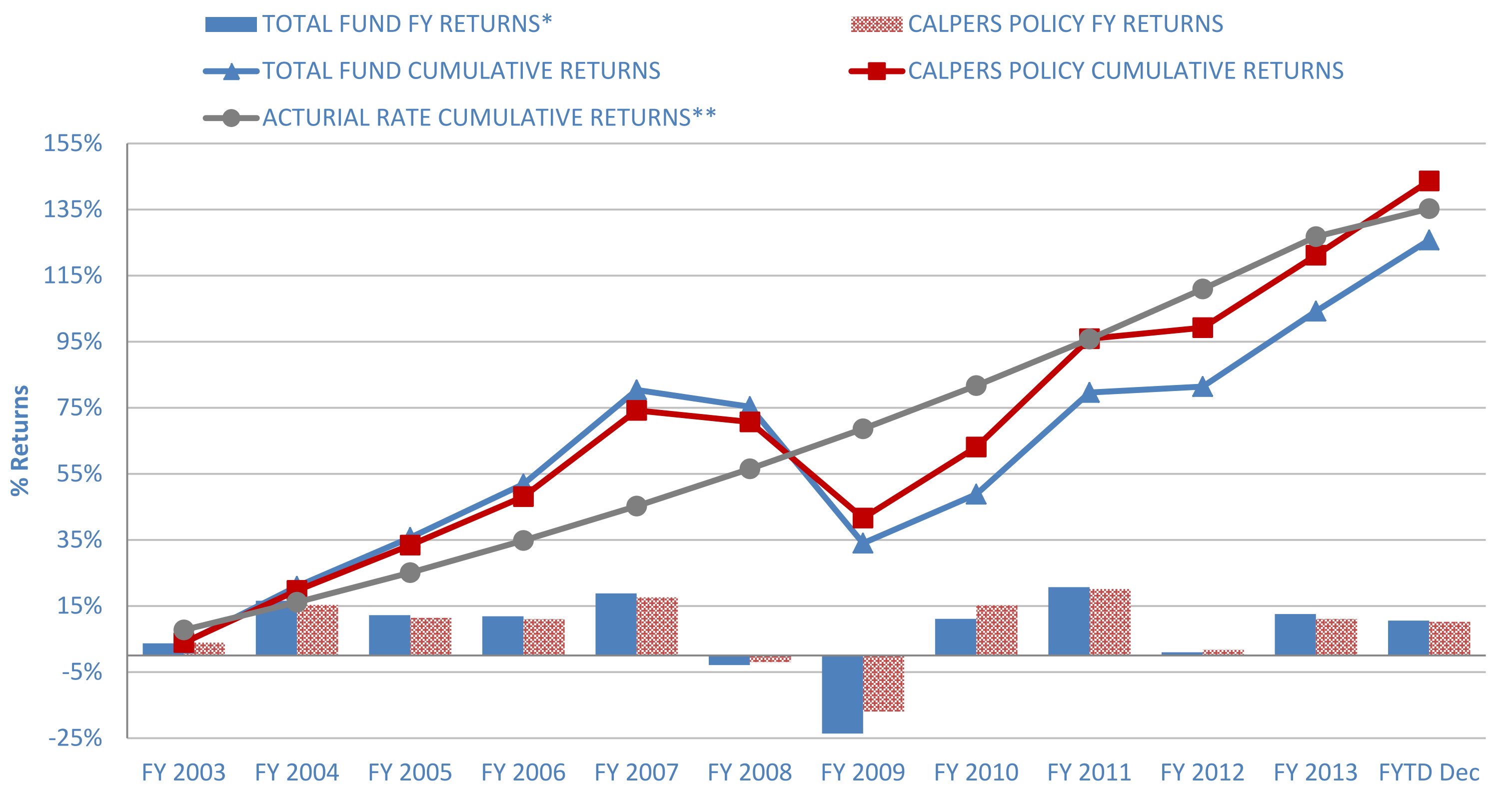
Total Fund FYTD Performance

Asset Class	Average Weight (%)	FYTD Return (%)	Contribution to Return (%)
GROWTH	**65.2**	**15.5**	**9.9**
PUBLIC EQUITY	*53.6*	*16.9*	*8.8*
PRIVATE EQUITY	*11.6*	*9.3*	*1.1*
INCOME	**15.0**	**0.9**	**0.1**
REAL ASSETS	**9.9**	**2.7**	**0.3**
LIQUIDITY	**4.0**	**(0.3)**	**(0.0)**
INFLATION	**3.4**	**1.5**	**0.0**
ARS	**2.1**	**13.0**	**0.3**
MAC	**0.3**	**4.9**	**0.0**
TRANSITION+PLAN LEVEL	**0.1**	**(2.6)**	**(0.0)**
TOTAL FUND ex OVERLAY	**100.00**	**10.6**	**10.6**

Source: FactSet; Weights and returns calculated utilizing monthly linked returns.

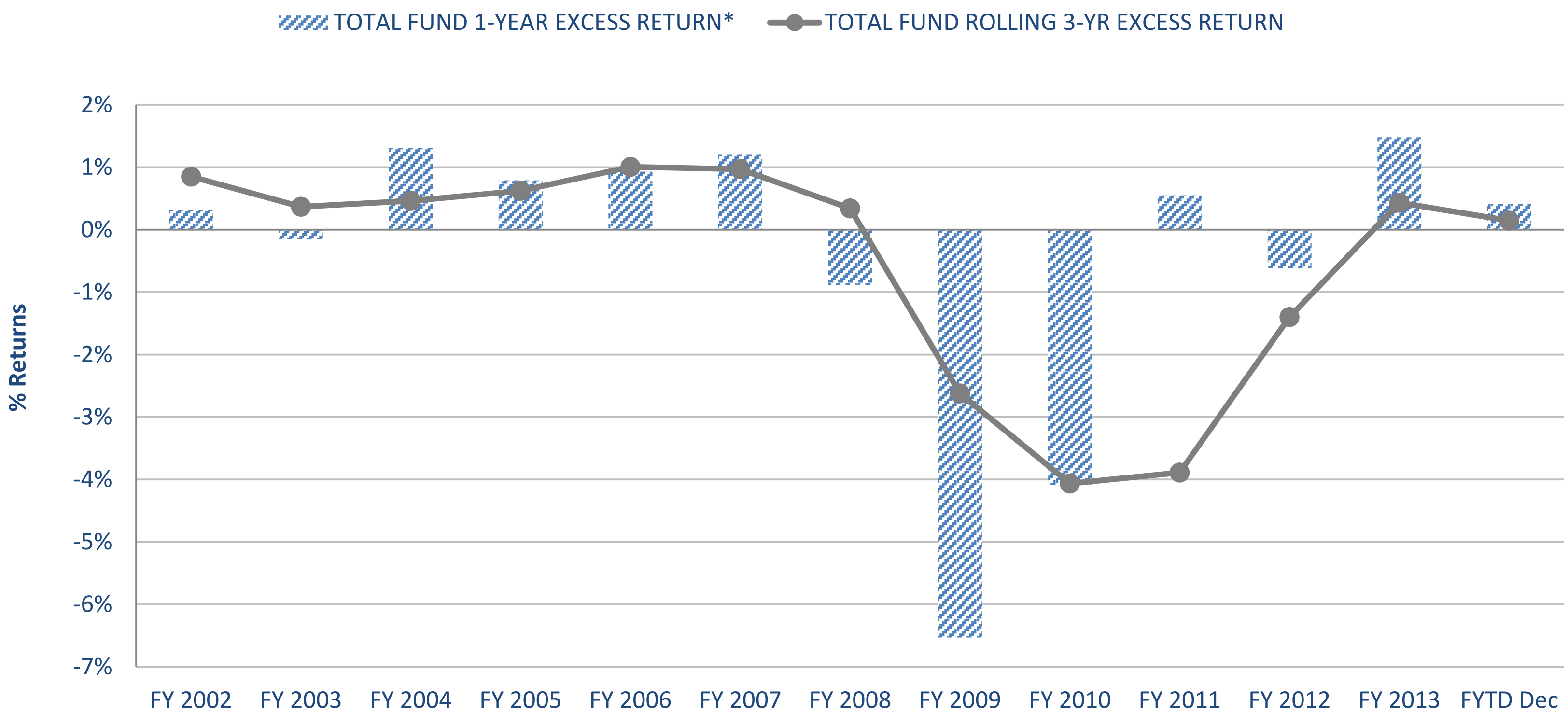
- Growth assets remain the primary contributors to returns accounting for 9.9% of 10.6% total return.

Total Fund Cumulative Returns



*Inflation, Liquidity and Real Assets were created on July 1, 2011 from existing portfolios; therefore historical values are being represented for prior years.
** Actuarial Rate FY 2003-12 was 7.75%, FY 2012-14 rate is 7.5%

Total Fund Rolling 3-Year Excess Return



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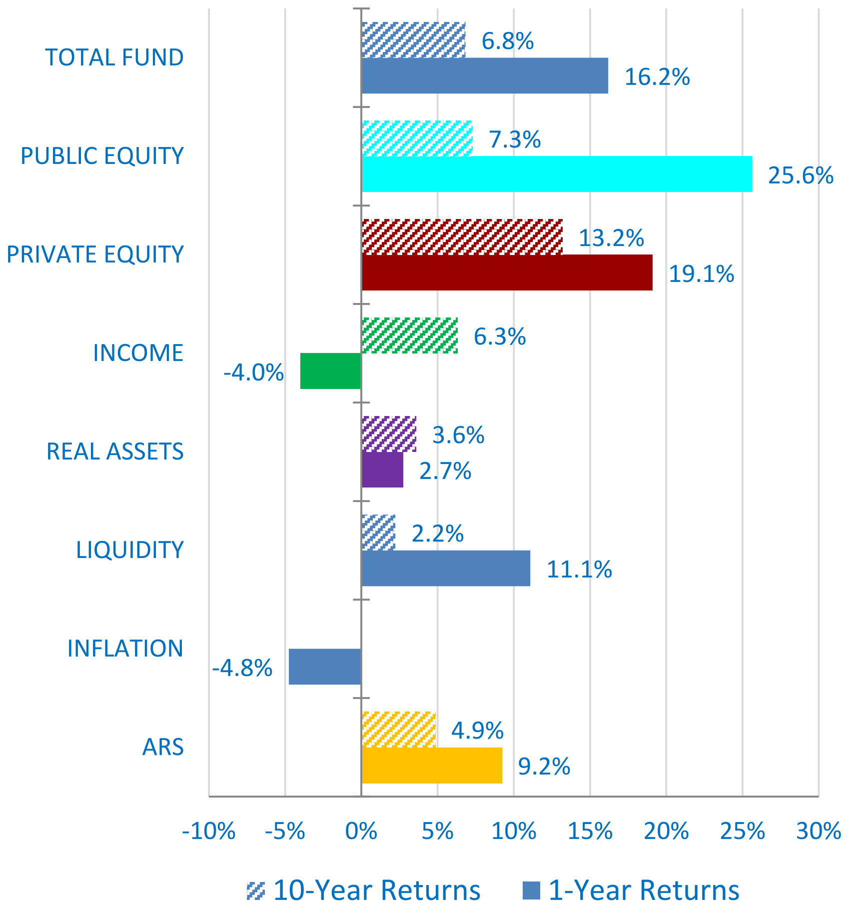
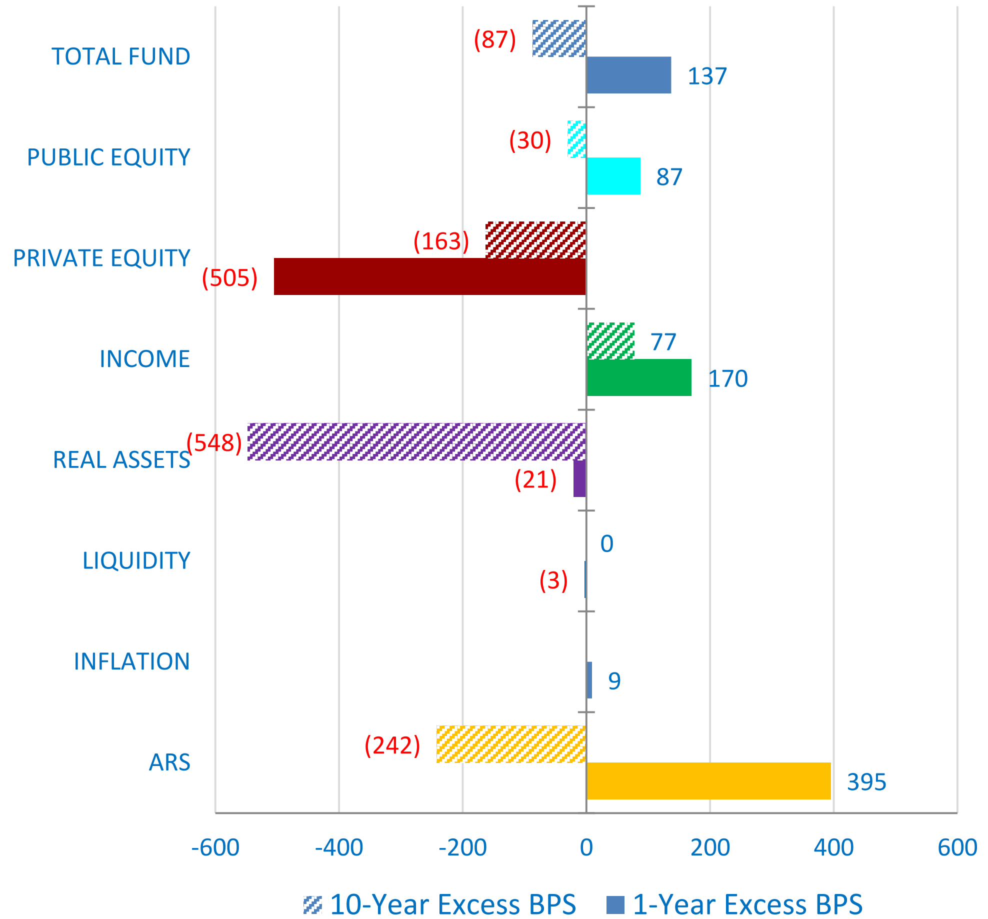
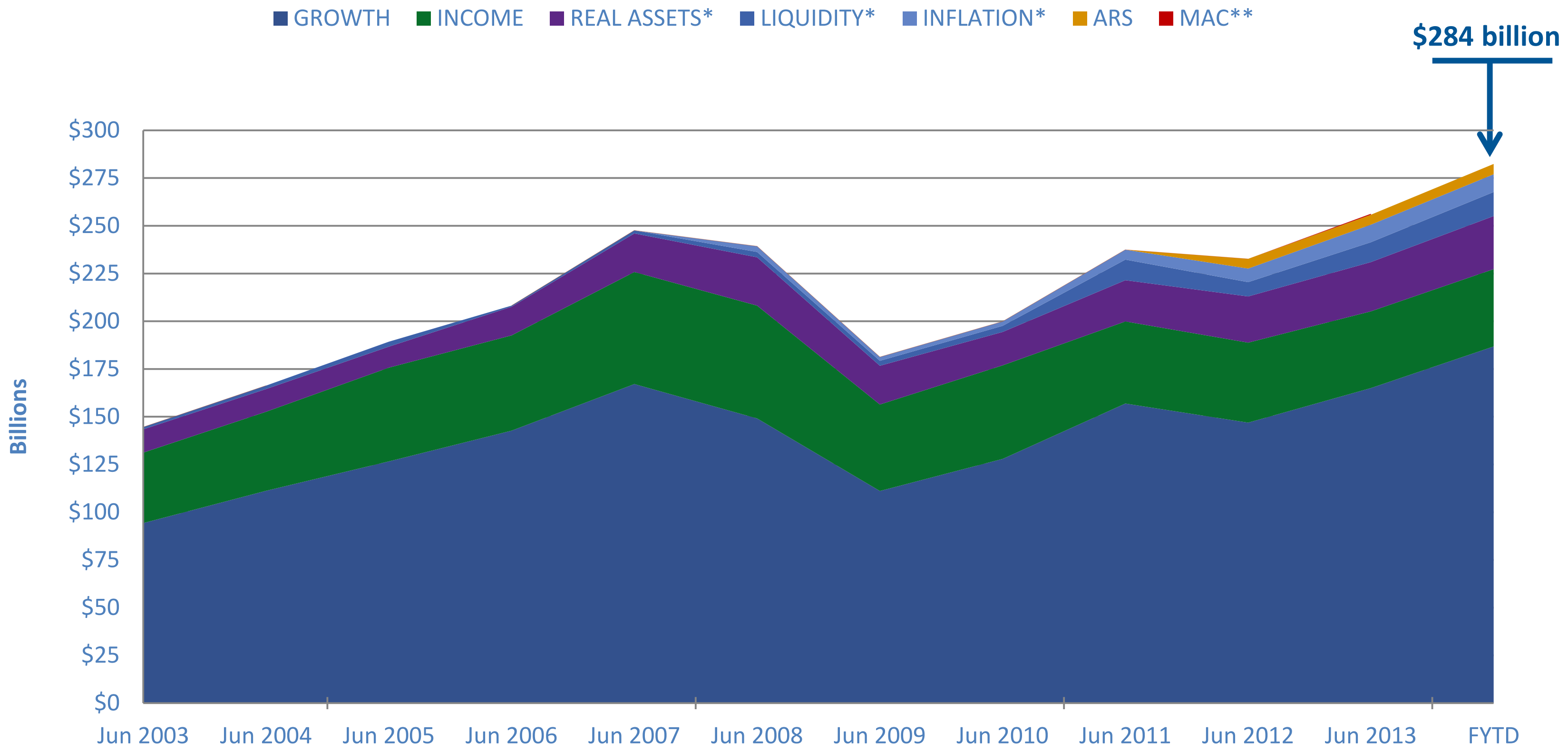
Total Returns and Relative Returns





Total Fund Allocation Trend

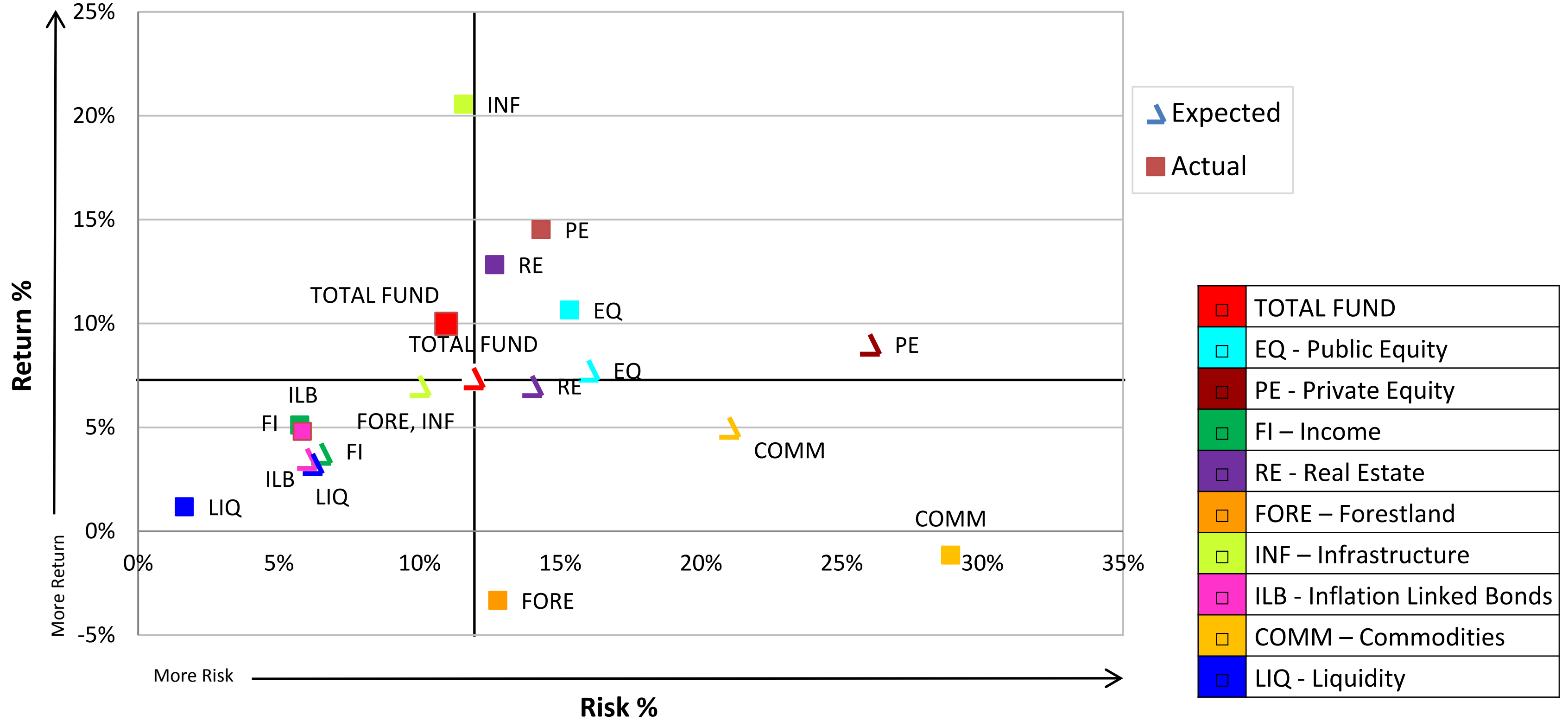
Total Fund up $119 billion from February 2009



* Inflation, Liquidity and Real Assets were created on July 1, 2011 from existing portfolios; therefore historical values are being represented for prior years.
** MAC funded in December 2012.

Asset Liability Management Expectations

Expected Risk and Return vs. Actual Risk and Return



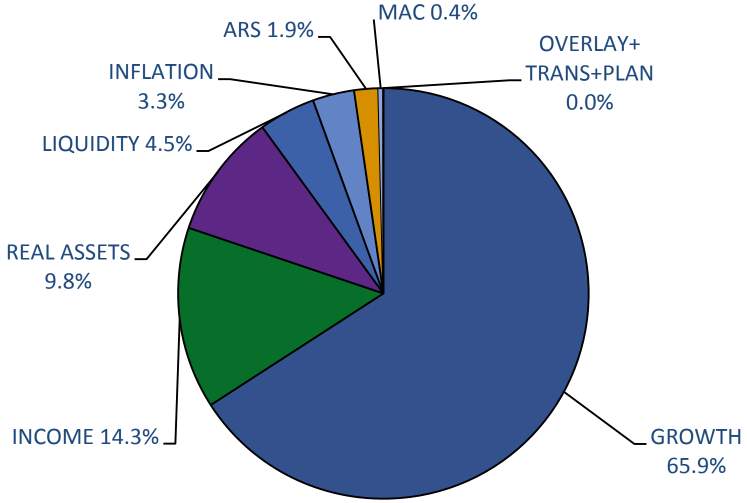
Note: Expected risk and return is based on 2010 Asset Liability Management Workshop, excluding ARS and MAC. Actual returns are based on 3-year annualized net return and actual risk based on current projected standard deviation as of November 30, 2013.

Asset Allocation

As of December 31, 2013

	Actual Allocation (%)	Interim Strategic Target (%)*	Variance (%)
GROWTH	65.9%	64%	1.9%
PUBLIC EQUITY	*55.1%*	*50%*	*5.1%*
PRIVATE EQUITY	*10.8%*	*14%*	*-3.2%*
INCOME	14.3%	17%	-2.7%
REAL ASSETS	9.8%	11%	-1.2%
REAL ESTATE	*8.6%*	*9%*	*-0.4%*
FORESTLAND	*0.8%*	*1%*	*-0.2%*
INFRASTRUCTURE	*0.5%*	*1%*	*-0.5%*
LIQUIDITY	4.5%	4%	0.5%
INFLATION	3.3%	4%	-0.7%
ARS	1.9%	N/A	1.9%
MAC	0.4%	N/A	0.4%
OVERLAY+TRANS+PLAN	0.0%	N/A	0.0%
TOTAL FUND	100.0%	100.0%	0.0%

*Interim strategic targets adopted by the Board at the August 2011 Investment Committee meeting



Actual Capital Allocation

Total Fund Positioning

- Strong Public Equity returns continue to drive allocation higher with 5.1% over allocation.
- Under allocations to Private Equity and Real Assets were driven by the challenges to effectively deploy capital to illiquid asset classes.
- Over allocation to Public Equity and under allocation to Income, Real Assets and Inflation had a positive impact on returns relative to the Policy Benchmark.

Conclusion

- US economic growth is improving. With inflation still low and sectoral imbalance narrowing, this is a favorable economic environment for risk assets.
- Portfolio Total Risk levels continue to decline but remain elevated versus pre-crisis levels while Active Risk remains within established Policy limits.
- Strong FYTD total and relative performance continues trend of performance recovery since 2009 financial crisis with Growth assets driving returns.