

State Investment Board Update

Employee Benefits Programs Committee

September 25, 2012

Darren Schulz

Interim Chief Investment Officer

ND Retirement & Investment Office (RIO)

State Investment Board (SIB)

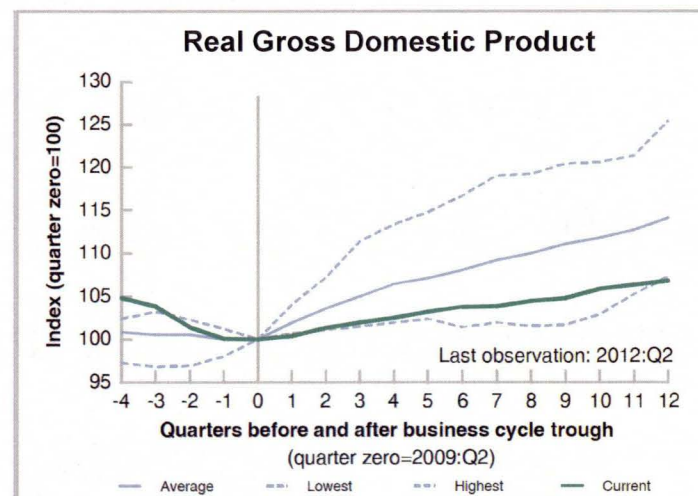
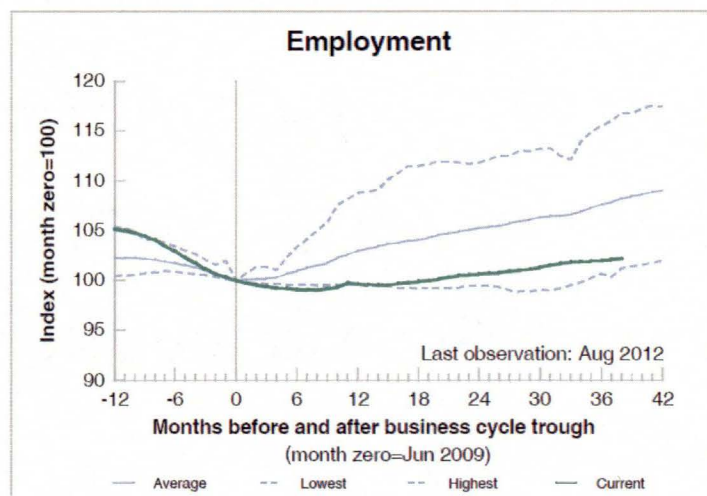
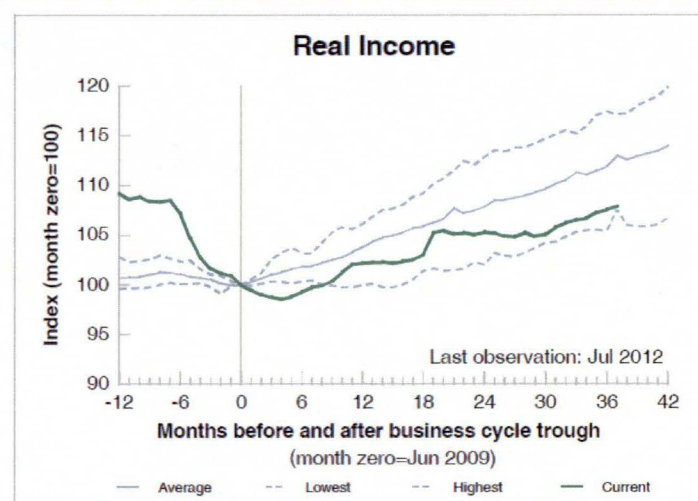
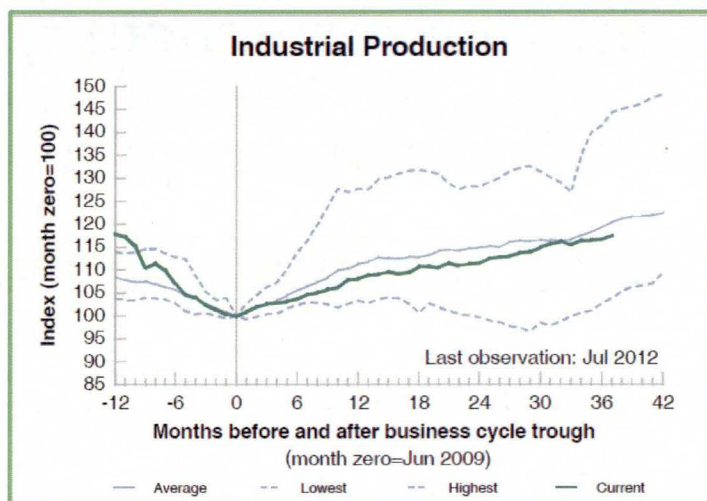
Presentation Agenda

- ▷ Fiscal year highlights
- ▷ Investment climate
- ▷ Asset class historical returns
- ▷ Pension investment performance
- ▷ Pension asset allocation
- ▷ Fiscal year activity

Fiscal Year Highlights

- ▶ Eurozone sovereign debt and European bank crisis
- ▶ U.S. debt ceiling crisis and S&P credit rating downgrade
- ▶ Weak U.S./developed market economic growth
- ▶ Slowdown in emerging market economies
- ▶ Fed action via sterilized QE 2.1, a.k.a. Operation Twist
- ▶ Persistent unemployment in the U.S.
- ▶ Signs of U.S. housing market recovery
- ▶ U.S. manufacturing resurgence

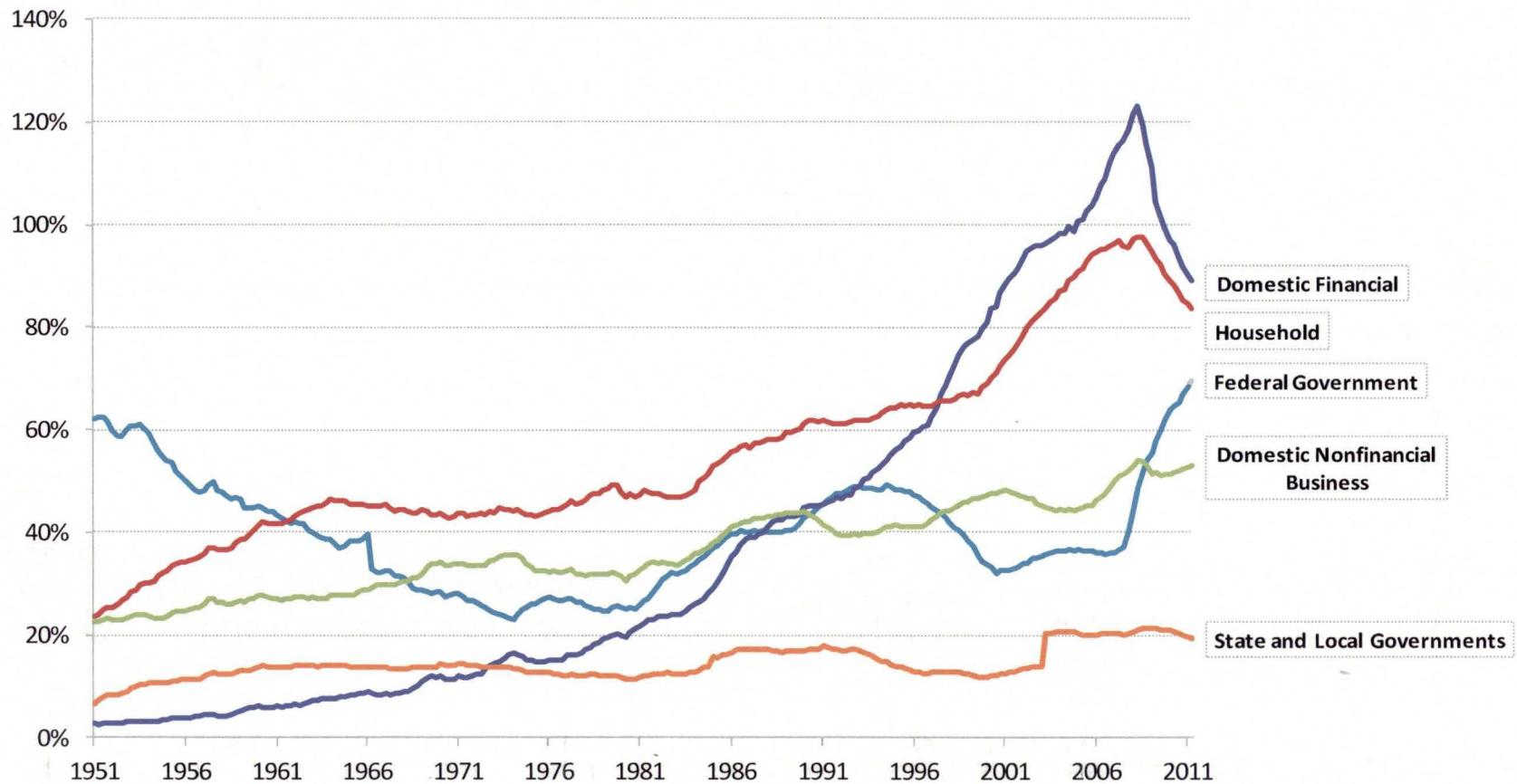
Current Recovery Versus Past Cycles



Source: Federal Reserve Bank of St. Louis

Debt Outstanding by Sector as a % of Total U.S. GDP

U.S. private sector debt has fallen relative to GDP since 2008, while public debt has reached its highest level since World War II.



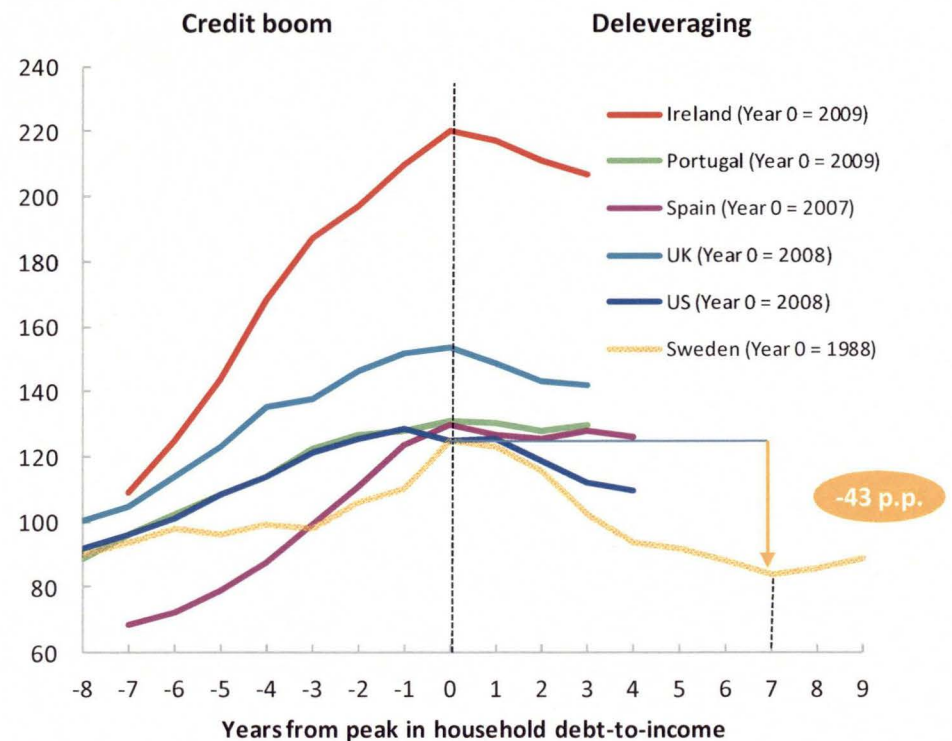
Source: Federal Reserve, Z.1 Flow of Funds Accounts

Household Debt as a % of Disposable Income

The accumulation of debt in the U.S. household sector has occurred over three decades.



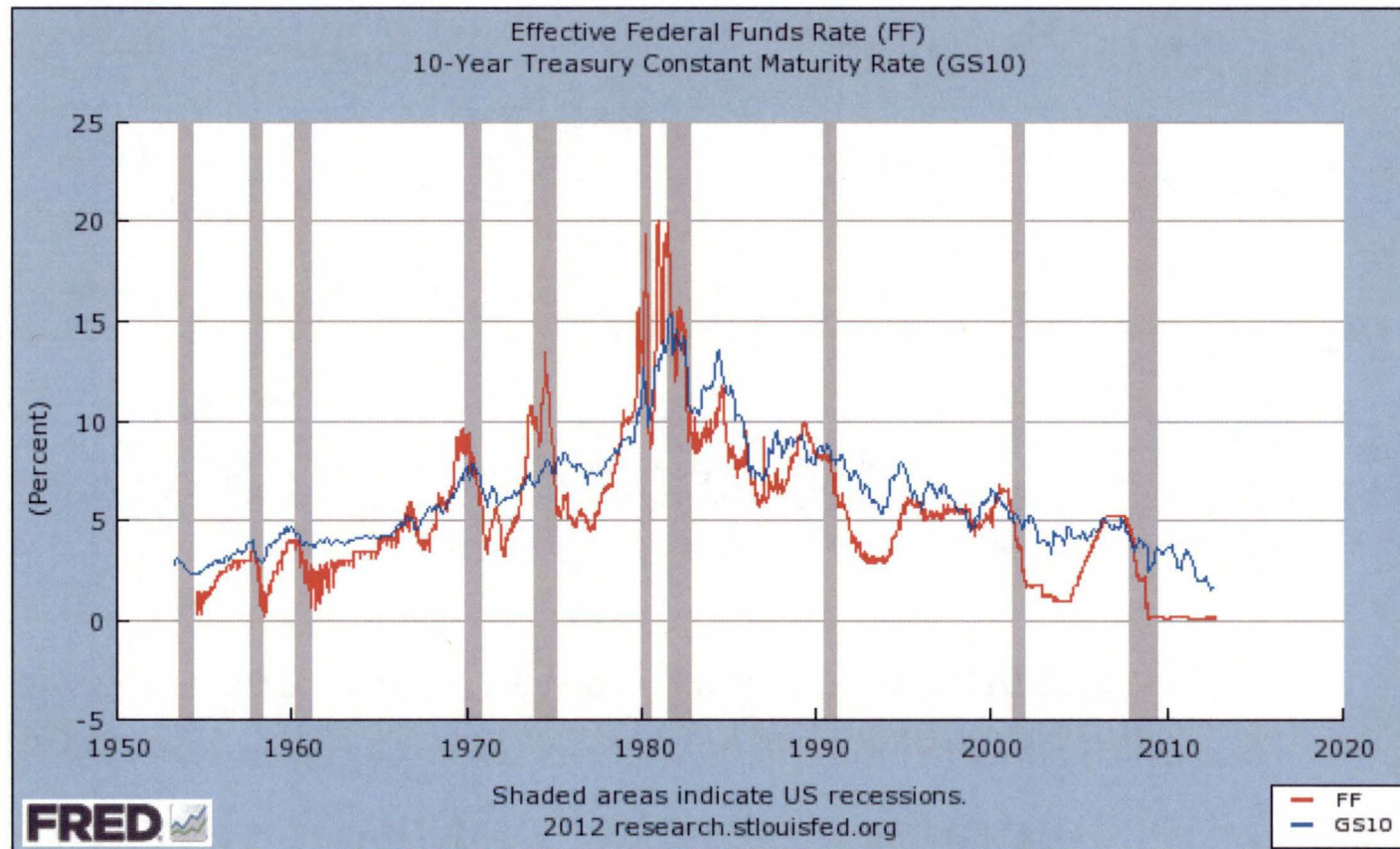
The U.S. is ahead of other developed countries in deleveraging, but household debt remains high.



Source: Federal Reserve Bank of St. Louis, Haver Analytics, Statistics Sweden, McKinsey Global Institute

Interest Rate Environment

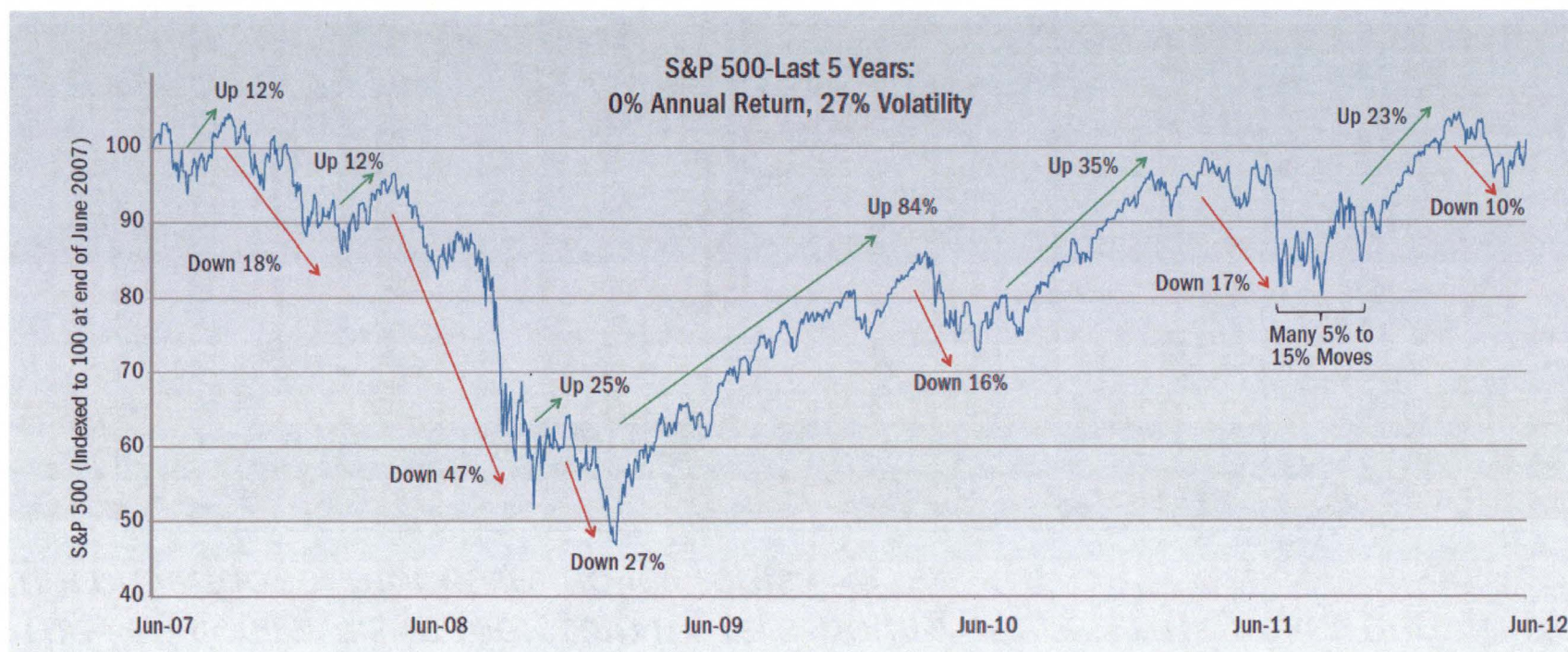
The Fed continues to maintain its zero-bound interest rate policy and utilize unconventional monetary policy tools.



Source: Federal Reserve Bank of St. Louis

U.S. Equity Market: A Long, Tumultuous Journey

Since June 2007, the S&P 500 has exhibited high volatility, a zero nominal return, and negative returns when adjusted for inflation.



Source: Standard & Poor's

Historical Market Returns by Asset Class

Asset Class	Represented by	Periods Ended June 30, 2012						
		1 Year	3 Year	5 Years	10 Years	20 Years	25 Years	30 Years
Large Cap US Stocks	Russell 1000	4.37%	16.64%	0.39%	5.72%	8.52%	8.77%	11.61%
Small Cap US Stocks	Russell 2000	-2.08%	17.80%	0.54%	7.00%	8.96%	8.12%	10.53%
Non-US Stocks (Developed)	MSCI EAFE	-13.83%	5.96%	-6.10%	5.14%	5.27%	4.34%	9.53%
Non-US Stocks (Emerging)	MSCI Emerging Mkts	-15.67%	10.10%	0.21%	14.42%	8.31%		
US Bonds	BC Aggregate	7.47%	6.93%	6.79%	5.63%	6.48%	7.28%	8.82%
High Yield Bonds	BC High Yield Credit	7.27%	16.29%	8.45%	10.16%	8.06%	8.54%	
Non-US Sovereign Debt	Citi World Gov't Bond ex US	0.44%	5.13%	7.39%	7.15%	6.35%	7.16%	
Inflation Protected	BC Global Inflation Linked	4.25%	7.04%	6.13%	7.67%			
Real Estate	NCREIF	12.04%	8.82%	2.51%	8.29%	8.41%	7.39%	7.96%
TFFR Total Fund (net of fees)		-0.96%	11.87%	-1.24%	6.01%	7.06%	7.58%	8.79%
PERS Total Fund (net of fees)		0.06%	11.36%	-0.32%	6.29%	7.53%	7.61%	9.57%

Source: Callan

Callan Periodic Table of Investment Returns

Fiscal Year Returns (1993-2012) Ranked in Order of Performance

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Russell 2000 26.0%	MSCI Emerging Markets 37.2%	S&P 500 26.1%	S&P 500 26.0%	S&P 500 34.7%	S&P 500 30.2%	MSCI Emerging Markets 28.7%	MSCI EAFE 17.2%	NCREIF Total Index 11.6%	Barclays Aggregate 8.6%	Barclays Aggregate 10.4%	MSCI Emerging Markets 33.5%	MSCI Emerging Markets 34.9%	MSCI Emerging Markets 35.9%	MSCI Emerging Markets 45.5%	NCREIF Total Index 9.2%	Barclays Aggregate 6.0%	MSCI Emerging Markets 23.5%	Russell 2000 37.4%	NCREIF Total Index 12.0%
MSCI EAFE 20.3%	MSCI EAFE 17.0%	Russell 2000 20.1%	Russell 2000 23.9%	Total Fund-PERS Net 19.7%	NCREIF Total Index 17.5%	S&P 500 22.8%	Russell 2000 14.3%	Barclays Aggregate 11.2%	NCREIF Total Index 5.5%	NCREIF Total Index 7.6%	Russell 2000 33.4%	NCREIF Total Index 18.0%	MSCI EAFE 26.6%	MSCI EAFE 27.0%	Barclays Aggregate 7.1%	NCREIF Total Index (19.6%)	Russell 2000 21.5%	S&P 500 30.7%	Barclays Aggregate 7.5%
MSCI Emerging Markets 18.6%	Russell 2000 4.3%	Total Fund-PERS Net 14.3%	Total Fund-PERS Net 15.8%	Total Fund-TFFR Net 19.3%	Russell 2000 16.5%	NCREIF Total Index 12.8%	Total Fund-TFFR Net 11.6%	Russell 2000 0.6%	MSCI Emerging Markets 1.3%	MSCI Emerging Markets 7.0%	MSCI EAFE 32.4%	Total Fund-PERS Net 14.1%	NCREIF Total Index 18.7%	S&P 500 20.6%	MSCI Emerging Markets 4.9%	Total Fund-PERS Net (24.5%)	S&P 500 14.4%	MSCI EAFE 30.4%	S&P 500 5.4%
Total Fund-TFFR Net 15.0%	NCREIF Total Index 3.7%	Total Fund-TFFR Net 13.7%	Total Fund-TFFR Net 15.3%	Russell 2000 16.3%	Total Fund-PERS Net 16.1%	Total Fund-TFFR Net 11.1%	NCREIF Total Index 11.6%	Total Fund-PERS Net (3.9%)	Total Fund-PERS Net (6.8%)	Total Fund-PERS Net 5.5%	Total Fund-TFFR Net 19.3%	MSCI EAFE 13.7%	Total Fund-TFFR Net 14.8%	Total Fund-TFFR Net 20.0%	Total Fund-PERS Net (5.6%)	Russell 2000 (25.0%)	Total Fund-TFFR Net 13.8%	MSCI Emerging Markets 28.2%	Total Fund-PERS Net 0.1%
Total Fund-PERS Net 15.0%	Total Fund-PERS Net 1.5%	Barclays Aggregate 12.5%	MSCI EAFE 13.3%	MSCI EAFE 12.8%	Total Fund-TFFR Net 14.0%	Total Fund-PERS Net 10.6%	MSCI Emerging Markets 9.5%	Total Fund-TFFR Net (7.0%)	Russell 2000 (6.6%)	Total Fund-TFFR Net 2.3%	S&P 500 19.1%	Total Fund-TFFR Net 13.3%	Russell 2000 14.6%	Total Fund-PERS Net 19.0%	Total Fund-TFFR Net (7.5%)	S&P 500 (26.2%)	Total Fund-PERS Net 13.7%	Total Fund-TFFR Net 24.2%	Total Fund-TFFR Net (1.0%)
S&P 500 13.6%	S&P 500 1.4%	NCREIF Total Index 7.8%	MSCI Emerging Markets 8.5%	MSCI Emerging Markets 12.8%	Barclays Aggregate 10.5%	MSCI EAFE 7.6%	Total Fund-PERS Net 9.3%	S&P 500 (14.8%)	Total Fund-TFFR Net (8.9%)	S&P 500 0.3%	Total Fund-PERS Net 16.6%	Russell 2000 9.4%	Total Fund-PERS Net 12.0%	NCREIF Total Index 17.2%	MSCI EAFE (10.6%)	Total Fund-TFFR Net (27.4%)	Barclays Aggregate 9.5%	Total Fund-PERS Net 21.4%	Russell 2000 (2.1%)
Barclays Aggregate 11.8%	Total Fund-TFFR Net 1.2%	MSCI EAFE 1.7%	NCREIF Total Index 8.1%	NCREIF Total Index 10.8%	MSCI EAFE 6.1%	Barclays Aggregate 3.1%	S&P 500 7.2%	MSCI EAFE (23.6%)	MSCI EAFE (9.5%)	Russell 2000 (1.6%)	NCREIF Total Index 10.8%	Barclays Aggregate 6.8%	S&P 500 8.6%	Russell 2000 16.4%	S&P 500 (13.1%)	MSCI Emerging Markets (27.8%)	MSCI EAFE 5.9%	NCREIF Total Index 16.7%	MSCI EAFE (13.8%)
NCREIF Total Index (2.7%)	Barclays Aggregate (1.3%)	MSCI Emerging Markets 0.0%	Barclays Aggregate 5.0%	Barclays Aggregate 8.1%	MSCI Emerging Markets (39.1%)	Russell 2000 1.5%	Barclays Aggregate 4.6%	MSCI Emerging Markets (25.8%)	S&P 500 (18.0%)	MSCI EAFE (6.5%)	Barclays Aggregate 0.3%	S&P 500 6.3%	Barclays Aggregate (0.8%)	Barclays Aggregate 6.1%	Russell 2000 (16.2%)	MSCI EAFE (31.4%)	NCREIF Total Index (1.5%)	Barclays Aggregate 3.9%	MSCI Emerging Markets (15.7%)

Source: Callan

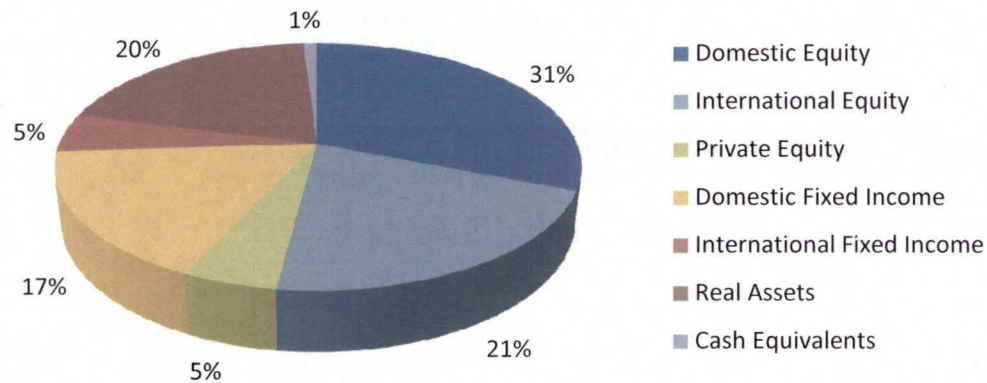
Asset Class & Total Fund Investment Performance

Fiscal Year Ended June 30, 2012

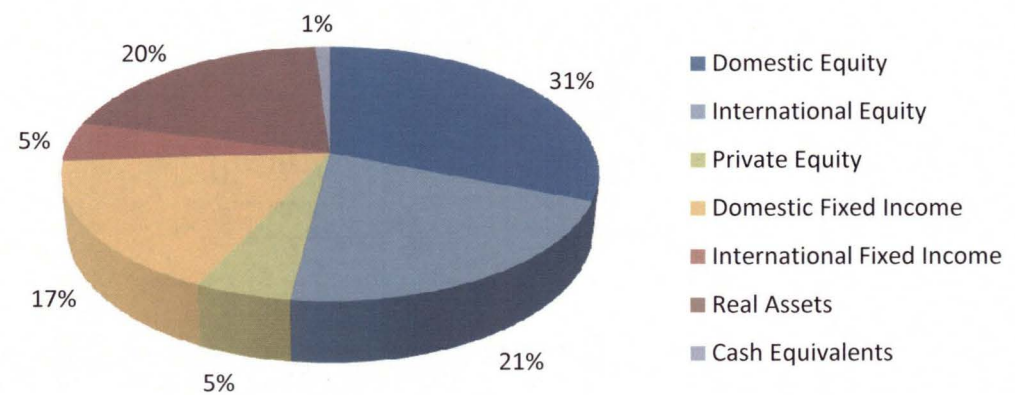
	Actual Return (Net)	Benchmark	Difference
<i>Global Equity</i>			
US Large Cap Equity	3.35%	5.34%	-1.99%
US Small Cap Equity	-0.37%	-2.08%	1.71%
International Equity	-15.15%	-13.83%	-1.32%
Emerging Markets Equity	-9.98%	-15.95%	5.97%
Private Equity	5.12%	5.12%	0.00%
<i>Global Fixed Income</i>			
US Investment Grade Fixed Income	5.99%	7.47%	-1.48%
US High Yield	3.06%	7.21%	-4.15%
International Fixed Income	4.25%	-0.64%	4.89%
<i>Global Real Assets</i>			
Real Estate	12.46%	12.04%	0.42%
<i>Total Fund</i>			
TFFR (net)	-0.96%	-0.82%	-0.14%
PERS (net)	0.06%	1.17%	-1.11%

Pension Asset Allocation

TFFR Target Allocation



PERS Target Allocation



Fiscal Year SIB Activity

- ▶ New asset allocation framework adopted by PERS, TFFR and other pension clients
- ▶ Fixed income allocation restructured to deliver enhanced risk-adjusted returns via reduced credit exposure
- ▶ Global equity mandate structure is currently being reviewed and a phased restructuring is pending
- ▶ In the low return, high volatility climate, we have been seeking to do the following:
 - ▶ Emphasize current income
 - ▶ Adopt a more global perspective with less emphasis on “style boxes”
 - ▶ Dampen the sensitivity to equity market volatility
 - ▶ Reduce investment management fees

Contact Information

- ▶ **Phone:**

701-328-9885 or

1-800-952-2970 (outside Bismarck/Mandan)

- ▶ **Mailing Address**

ND Retirement and Investment Office

1930 Burnt Boat Drive, P.O. Box 7100

Bismarck, ND 58507-7100

- ▶ **E-mail Address:**

rio@nd.gov or djschulz@nd.gov

- ▶ **Website Address:**

www.nd.gov/rio