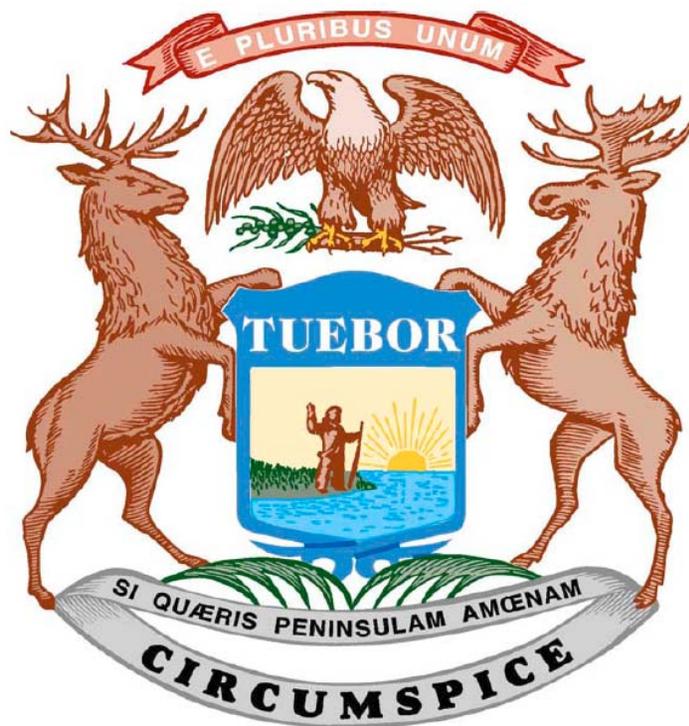




Michigan Department of Treasury Bureau of Investments



Jon M. Braeutigam

Chief Investment Officer

March 20, 2014



Bureau of Investments (BOI)

As of January 2014



BUREAU OF INVESTMENTS
Jon M. Braeutigam, CIO
Senior Chief Investment Officer 21

Director of Investments—Private Markets
Chief Operating Officer
Robert L. Brackenbury
Senior Director of Investments 20

Director of Investments—Public Markets
Director of Asset Allocation
Gregory J. Parker
Senior Director of Investments 20

Alternative Investments Division
Peter A. Woodford, Sr Investment Mgr 18

Real Estate & Infrastructure Investments Division
Brian C. Liikala, Sr Investment Mgr 18

Short Term Fixed Income, Absolute & Real Return Division
James L. Elkins, Sr Investment Mgr 18

Compliance & Corporate Governance Division
Amanda York Ellis, St Div Admin 17

Trust Accounting Division
Karen M. Stout, St Div Admin 17

Long Term Fixed Income Division
Vacant, Investment Mgr 18

Quantitative Analysis Division
Richard J. Holcomb, Sr Investment Mgr 18

Stock Analysis Division
Jack A. Behar, Sr Investment Mgr 18

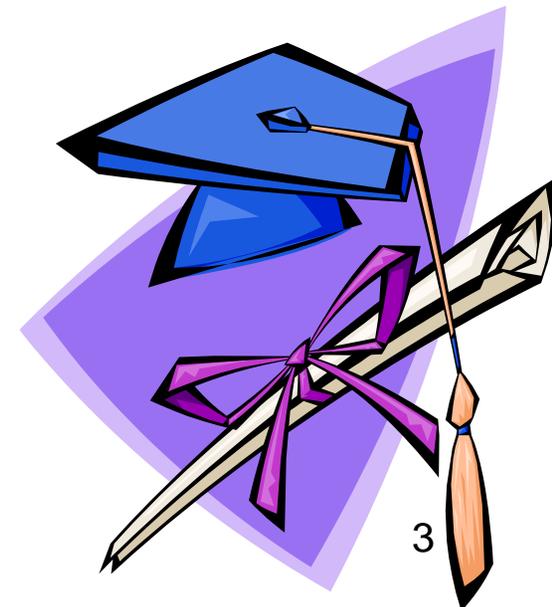
Defined Contribution, Trusts & Agencies Division
Richard D. DiBartolomeo, Sr Investment Mgr 18



Bureau of Investments (BOI)

As of January 2014

- 74 BOI Employees
- 45 Investment Professionals
- 32 Individuals with a Masters Degree or higher
- 19 C.F.A.
- 9 other professional designations





BOI Investment and Cash Position

As of December 31, 2013



TOTAL RETIREMENT RELATED	\$62,822,765,077
<i>OTHER MAJOR FUNDS</i>	
<u>Health Care Account</u>	
MPSERS Health Care Account	\$552,034,843
<u>Family Independence Agency</u>	
Children's Trust	\$24,528,169
<u>Lottery</u>	
State Lottery	314,912,974
<u>Military & Veterans Affairs</u>	
Veterans' Trust	53,806,493
<u>Natural Resources and Environment</u>	
Game and Fish Lifetime License Trust	16,383,148
Game and Fish Protection Trust	219,030,677
Natural Resources Trust	706,023,165
Nongame Fish and Wildlife Trust	6,795,029
State Park Endowment	231,496,193
<u>Multiple Agencies</u>	
Gifts, Bequests, and Deposits Fund	18,367,843
Children With Special Needs	20,433,353
<u>Transportation</u>	
Mackinac Bridge Authority	59,764,381
<u>Treasury</u>	
MESP (TIAA-CREF - 529 Plan)	3,674,850,697
MI 529 Advisor Plan	269,113,127
MET I	136,155,048
MET II	796,688,386
SUBTOTAL FOR TRUST AND AGENCY FUNDS	\$7,100,383,525
<i>COMMON CASH</i>	
State Treasurer's Common Cash	\$3,241,353,525
TOTAL UNDER MANAGEMENT	\$73,164,502,127



Plan Membership Summary

As of September 30, 2013

MEMBER TYPE	MSERS
Retirees & Benef. Receiving Benefits	56,854
Current Employees Vested	16,105
Current Employees Non-Vested	370
Current Employees Active in DC Plan	437
Inactive Employees Entitled To, But Not Yet Receiving Benefits	4,897
TOTAL MSERS MEMBERS	78,663



MRSERS Funded Ratio

Years Ending September

Year	Market Value of Assets	Actuarial Value of Assets	Actuarial Accrued Liability	Funded Ratio Based on Actuarial Value
2012	\$9,272	\$9,447	\$15,654	60.3%
2011	\$8,655	\$10,212	\$15,597	65.5%
2010	\$8,940	\$10,782	\$14,860	72.6%
2009	\$8,583	\$11,107	\$14,234	78.0%
2008	\$9,786	\$11,403	\$13,766	82.8%
2007	\$12,103	\$11,344	\$13,162	86.2%
2006	\$10,890	\$10,111	\$12,799	79.0%
1983	\$1,842	\$1,752	\$2,369	74.0%
<i>MRSERS Estimated Market Value Funded Ratio</i>				
12/31/2013	\$11,049	- - -	\$15,654	70.6%

(\$ in Millions)

Source: Pension Plans Component Unit Financial Reports and Actuarial Valuations



MSEERS

Contributions and Distributions

FY 2013

Contributions

Members	\$53.0
Employer	<u>604.8</u>

Total Contributions \$657.8

Pension Benefit Distributions 1,187.9

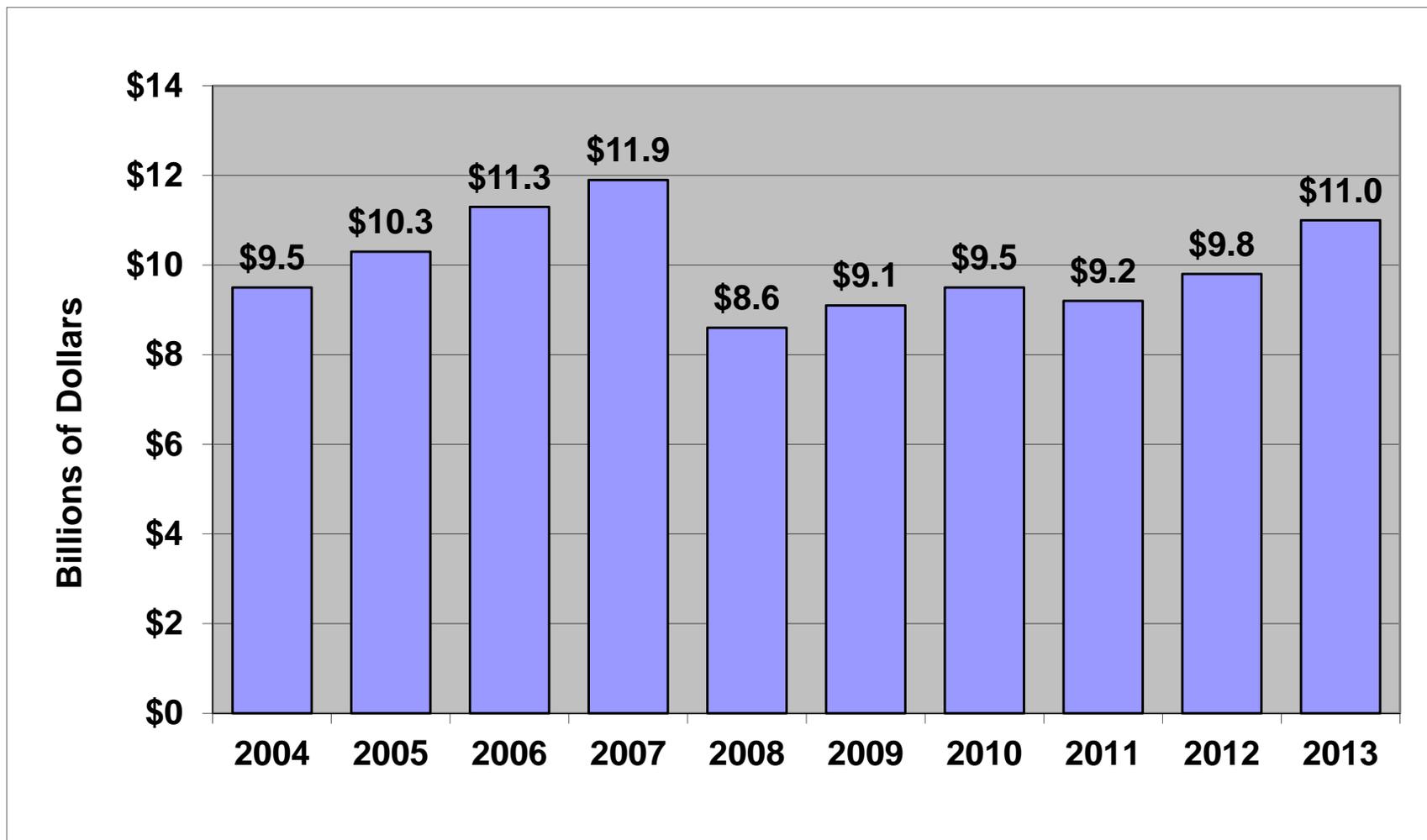
Net **(\$530.1)**

- Equal to (per quarter on average) (\$132.5)
- Or about 4.8% of total market value of fund



MRSERS Market Value

\$11.0 Billion



Years Ending December 31

Footnote: In FY 2013 the net payout was \$530 million. This represents the amount paid to beneficiaries in excess of employer and employee contributions.



MRSERS Asset Allocation

As of December 31, 2013

Asset Allocation By Market Value (In Millions)

Investment Strategies	12/31/2013		Target Allocation	
			Target	Range
Domestic Equity	\$3,300	29.9%	31%	20% - 50%
Alternative Investments	1,999	18.1%	16%	10% - 25%
International Equity	1,782	16.1%	16%	10% - 20%
Fixed Income	1,314	11.9%	15%	10% - 25%
Real Estate & Infrastructure	1,023	9.3%	9%	0% - 15%
Real Return & Opportunistic	612	5.5%	5%	0% - 10%
Absolute Return	475	4.3%	4%	0% - 12%
Short Term	544	4.9%	4%	1% - 9%
TOTAL	\$11,049	100.0%	100%	



SMRS by Asset Class

As of September 30, 2013

Domestic Equity

\$15.3 Billion in managed funds
24 Strategies
Approximately 1,300 Stocks

Real Estate

\$5.9 Billion in managed funds
41 Advisors
68 Accounts

Alternative Investments

\$10.2 Billion in managed funds
86 Sponsors
266 Partnerships
3,384 Companies

Absolute and Real Return (and Opportunistic)

\$5.3 Billion in managed funds
4 Strategies
136 Managers



SMRS by Asset Class

As of September 30, 2013

Fixed Income

\$6.7 Billion in managed funds

9 Strategies

Represents Over 2,650 Positions

Short Term Investments

\$2.4 Billion in Managed Funds

International Equity

\$7.4 Billion in managed funds

16 Strategies

Representing 5,100 Stocks

Trust Accounting

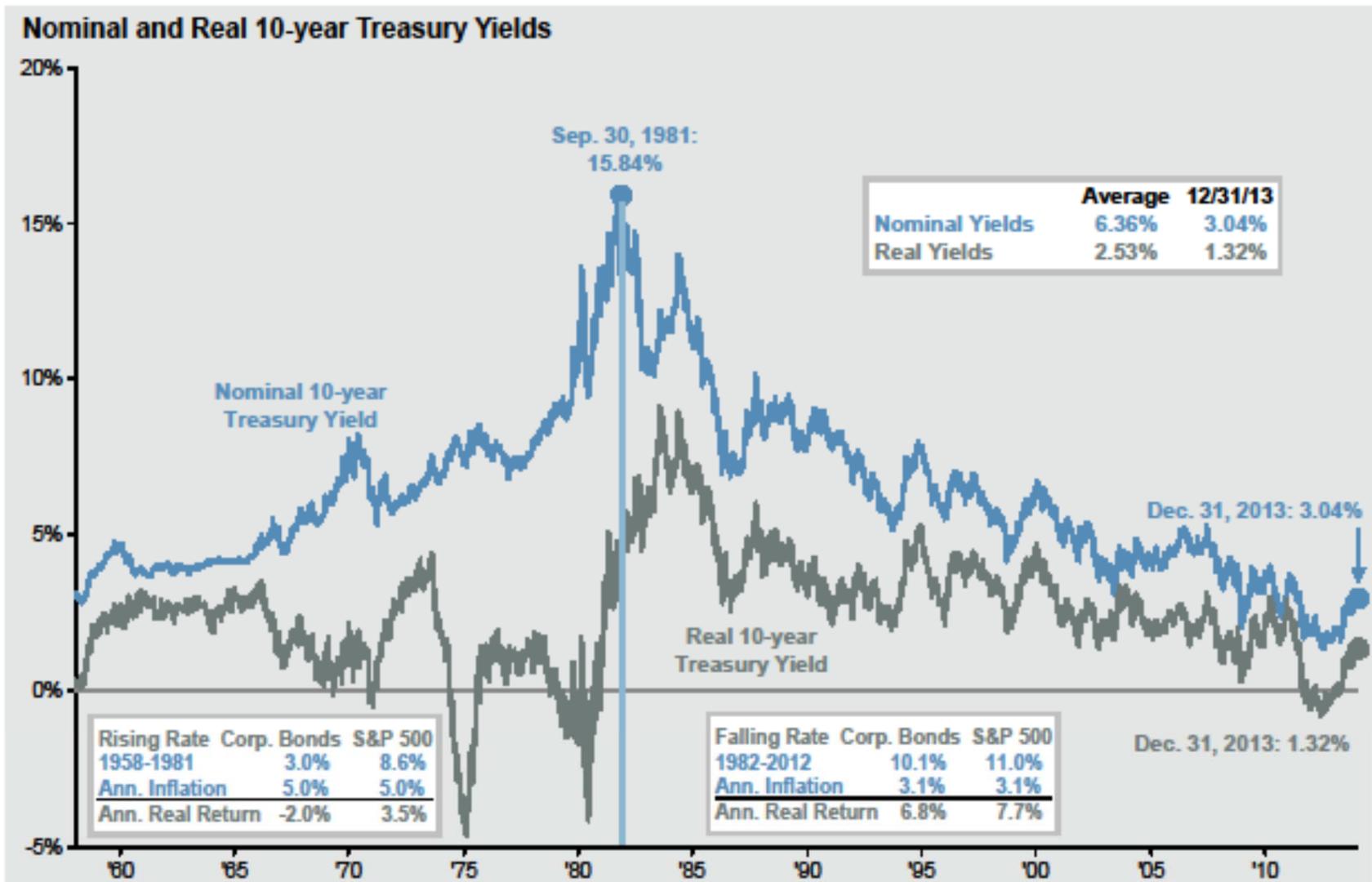
Approximately 100,000

transactions annually



MARKET INSIGHTS Interest Rates and Inflation

Fixed Income



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 December 2013, where real yields are calculated by subtracting out November 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. Guide to the Markets - U.S.

Data are as of 12/31/13.





Stock Market Update

Market	As of 12/31/13		Thru 2/25/14	
	1 Year Price Change	12/31/13	Year-to-Date Price Change	2/25/14
DJIA	26.5%	16,577	-2.4%	16,180
S&P 500	29.6%	1,848	-0.2%	1,845
NASDAQ	38.3%	4,177	3.0%	4,305
MSCI ACWI Ex USA	20.5%	408.0	0.0%	408.0



S&P 500 – Last 10 Years





MSERS FUND

Time-Weighted Rate of Return

Public Funds (DB) > \$10 Billion

As of December 31, 2013

	<u>1 Year</u> Rate	<u>3 Years</u> Rate	<u>5 Years</u> Rate	<u>7 Years</u> Rate	<u>10 Years</u> Rate
TOTAL PLAN	16.3	10.5	11.2	5.2	7.1
Median - Greater than \$10 Billion	15.8	9.8	11.7	5.3	7.1



Time-Weighted Rates of Return

Individual asset classes doing very well on a relative basis

Asset Class w/Benchmark	CY 2013	
	Three Years Rate	One Year Rate
Total Plan*	10.5%	16.3%
Median*	9.8%	15.8%
Domestic Equities	15.9%	34.0%
S&P 1500 Index	16.2%	32.8%
International Equities	6.3%	14.8%
MSCI ACWI Ex USA	5.6%	15.8%
Bonds	4.0%	-0.5%
Barclays Aggregate	3.3%	-2.0%

*Comparison universe is the State Street Universe comprised of Public Funds greater than \$10 Billion on the Total Plan level and greater than \$1 Billion for asset classes.



Time-Weighted Rates of Return

Asset Class w/Benchmark	CY 2013	
	Three Years Rate	One Year Rate
Private Equity	15.7%	16.8%
Alternative Blended Benchmark	19.2%	22.4%
Real Estate	11.0%	11.3%
NCREIF Open Fund Index Net	12.5%	12.9%
Absolute Return	6.0%	12.0%
HFRI FOF Cons 1 month lagged	2.9%	7.9%
Real Return and Opportunistic	6.2%	8.7%
Benchmark	7.6%	7.3%
Cash Equivalents	0.3%	0.4%
30-Day T-Bill	0.1%	0.0%

*Comparison universe is the State Street Universe comprised of Public Funds greater than \$10 Billion on the Total Plan level and greater than \$1 Billion for asset classes.



U.S. Economy

- Forecasted for modest higher growth
- Housing continues to do well
- Auto sales are doing well
- Energy – less dependence on foreign sources
- Yearly deficit projections are falling
- Consumer debt service is low
- Stock market near an all time high
- Corporations have strong balance sheets



Still Needed

- Need to address U.S., states, and municipalities long-term liabilities
- World is uncertain (Iran, North Korea, Ukraine, Syria, etc.)
- Europe is out of the recession, but banking sector needs reforms
- Larger emerging market economies are experiencing growing pains