

# 2015 Rate Meetings

May 5, 2015

Presented by:

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# Agenda

- **Actuarial Principles**
- **Triennial Experience Study**
- **2014 Returns & Impact**
- **GASB 68**
- **Appendix**

# Actuarial Principles

- IMRF is an Agent Multiple Employer Public Employee Retirement System
- Each employer pre-funds retirement benefits for its employees
- Contributions are pooled for investment purposes
- The same actuarial assumptions apply to all employers (except 3 which are individually rated)

# Actuarial Principles

- **Actuarial Valuation Methods**

- Aggregate entry age actuarial cost method of valuation
- Costs to fund the pension are set at a level percent of payroll

- **Actuarial Cost Methods**

- Assumes investment income fully each year
- Differences between actual and assumed investment income are phased in over a closed 5 year period subject to a 20% corridor

# Actuarial Principles

- Each year the actuarial liabilities of IMRF are calculated as part of the December 31<sup>st</sup> valuation
- To perform the evaluation, IMRF's actuaries make assumptions about the future experience of IMRF regarding various risk areas
- The results of the liability calculation depend upon those assumptions

# Actuarial Principles

- No single set of assumptions will be suitable indefinitely
- Things change, and our understanding of things (whether or not they are changing) also changes
- IMRF statutes require reviewing assumptions every 3 years
- A systematic review of assumptions is called an “Experience Study”

# Actuarial Principles

- Annually
  - Actuarial Valuation
  - Gain/Loss Analysis
  - 50 Year Projection Report
- Triennial Experience Study
  - 2011-2013 (Latest)
- Asset Liability Modeling Study in 2016

# Actuarial Principles

## Primary Risks:

### Demographic:

Normal Retirement; Early Retirement; Death-in-Service; Disability; Separations; Merit/Longevity Pay

### Mortality:

Pre and Post Retirement

### Economic:

Price Inflation; Wage Inflation; Investment Return



# Triennial Experience Study

## Demographic

- Retirement rates
  - various experience (increase in rates)
- Death-in-Service
  - fewer deaths (increase in rates)
- Disability
  - lower occurrences (decrease in rates)
- Separations
  - higher occurrences (decrease in rates)
- Merit/Longevity Pay
  - lower experience (decrease in rates)

# Triennial Experience Study

## Mortality

- Society of Actuaries released new mortality tables in October 2014  
(RP-2014 tables; MP-2014 projection scale)
- Future improvements in mortality are recognized to:
  - ensure adequate funding
  - avoid liability losses
  - comply with actuarial best practices
  - avoid cost shifts to future generations

# Triennial Experience Study

## Mortality (continued)

- RP-2014 adjusted to match current IMRF experience
- Apply fully generational MP-2014 projection scale moving forward
  - more dynamic
  - based on both age and year of birth
  - anticipates/incorporates changes in life expectancy (new)

# Triennial Experience Study

## Economic Assumptions

- Price inflation; Wage Inflation; Investment Return
  - These economic assumptions need to be consistent with one another
  - Long-term averages
  - Lowered price inflation from 3.0% to 2.75%
  - Lowered wage inflation from 4.0% to 3.5%
  - Maintained investment return at 7.5%
- (based in part on current asset allocation)

# 2014 Returns & Impact

## Employer Reserve Statements:

- IMRF provided employer reserve statements in February 2015.
- Statements show employer funds on deposit for current active and inactive members and current year activity
  - Employer retirement contributions
  - Interest credited @ 7.5% less funding for employee and annuitant reserves
  - Adjustments, if any
  - Reductions for 2014 retirees

# 2014 Returns & Impact

## Preliminary Rate Notices for 2016:

- April 2015
  - Preliminary rate notices available
- April 2015 – October 2015
  - Staff reviews rates to ensure accuracy
- November 2015
  - Final notices available

# 2014 Returns & Impact

GASB 50 Disclosures (Available April 2015)

- Show funded status of each employer plan for last three years for its active and inactive members only
- Reflects **actuarial** funded status using five-year smoothing of investment returns subject to 20% corridor
- Footnote on schedule discloses funded status on market basis
- Actuarial funding increased due to a 10.1% actuarial return (vs. 7.5%)
- Market value funding decreased slightly (6.1% return) (vs. 7.5%)

# 2014 Returns & Impact

## Individual Employer Funded Status

- Affected by employee demographics; employer reserve account balance; projected liabilities
- Individual employer's funded status reflects percentage funded for active and inactive employees
- **It does not reflect the portion of the IMRF annuity reserve related to its retirees**
- If annuity portion were added to the analysis the funded percentage would increase for unfunded plans but the unfunded dollar amount would remain unchanged



# 2014 Returns & Impact

What did a 6.1% return mean for 2014?

- \$2.14 billion investment income (prior to investment expenses)
  - After \$134.5 million of direct investment and administrative expenses – Balance (\$108.1 million/\$26.4 million)
  - Credited \$1.18 billion of interest to annuitant and member reserves - Balance (\$17.9 billion/\$6.2 billion)
  - Credited \$820 million to employer reserves – Balance (\$11.8 billion)
    - Approximately 5.12% of opening employer balance
    - Percentage for individual employers varies based upon relationship between its employer reserve and annuitant reserve

# 2014 Returns & Impact

Member Contributions	\$ 351,089,241
Employer Contributions	\$ 923,382,825
Investment Income	<u>\$2,145,958,356</u>
	\$3,420,430,422
Retirement Benefits	(\$1,666,008,458)
- Administrative expenses	(\$ 26,436,912)
- Direct Investment Expenses	<u>(\$ 108,165,511)</u>
	(\$1,800,610,881)
Net increase	<b>\$1,619,819,541</b>

# 2014 Returns & Impact

## Impact on Funding Value

- Because of 2014 investment gain, IMRF
  - Began 2014 with \$3.1 billion of unrecognized gains for actuarial purposes
  - Ended 2014 with \$2.1 billion of unrecognized gains which will be recognized in 2017 through 2020
- Cost of Mortality Table change + \$1.5 billion
- Cost of other Economic Assumption Changes (\$.3 billion)

# 2014 Returns & Impact

## Impact on Funding Ratio:

- In 2014

	Beginning of Year		End of Year	
	MV	AV	MV	AV
Assets	\$33,203.00	\$30,083.00	\$34,833.10	\$32,700.20
Liabs	\$34,356.60	\$34,356.60	\$37,465.10	\$37,465.10
Ratio	96.6%	87.6%	93.0%	87.3%

- Funding value was impacted by:
  - investment returns below 7.5%
- Liabilities grew due to:
  - one more year of service credit
  - investment returns below 7.5%
  - Implementation of new actuarial assumptions (\$1.2 billion)

# GASB

- Governmental Accounting Standard Board implementation of GASB 67 and 68
- GASB 67, affects the financial statements of the pension system
- GASB 68 information from IMRF, affects the financial statements of the employers
- Annual GASB 50 Statements are still the same and provide employer funding information
- Focus is on cost to taxpayers over time to provide governmental services

# GASB 68

- GASB 68 Preliminary format was released by IMRF on January 22, 2014 for the data as of 12/31/12
- Each April new information to be released
- Share with your auditors
- IMRF Actuary – Gabriel Roeder Smith and Company, assisted with the compilation of the GASB 68 Implementation Guide
- New data as of 12/31/14 will be on the website soon

# GASB at a Glance

- Actuarial information from GASB 68 will be available the month of May
- GASB 68 for financial information and opined upon, will be end of May or early June
- Opinions will be posed as an Addendum to the IMRF financial statements

# GASB 68

- A questionnaire was mailed in the summer of 2014
- A mandatory application to request an opinion was sent in February 2015
- GASB 68 Actuarial data May 2015
- GASB 68 Opinion specific or general end of May or early June



# Impact of GASB 68 on Employers

- [IMRF.org](http://IMRF.org) - Employers Access Section
- Provides preliminary GASB Statement 68 Employer Reports as of 12/31/13, very soon 12/31/14 will be available. (actuary)
- 12/31/13 preliminary unaudited information. 12/31/14 opined by IMRF auditor. (auditor)
- Not intended for early implementation.
- A new report will be provided annually.
- Information could be material for your financial statements and audit considerations.

# Impact of GASB 68 on Employers

- IMRF will coordinate this information.
  - Employer uses an “application” through employer’s authorized agent through employer access on the IMRF portal
  - to receive a separate opinion on employer data.
  - A separate GASB 68 report will be provided to all employers for actuarial information.
- During 2015, IMRF has embarked on a SOC 1 TYPE 2 report for controls over calculations and allocation of additions and deductions to employers. The report will be issued in early 2016.
- Employers respective auditors will need to perform their own procedures. External auditors will have the ultimate authority.
- Again, this information can be material to your financial statements if you report under GAAP and issue a formal CAFR you will need the separate opinion for your information.

# AICPA - White Paper

- Plan prepares “Schedule of Changes in Fiduciary Net Position by Employer” and related notes to the schedule.
- Plan auditor is engaged to opine on the Schedule using one of two options
  - Option 1 – Plan engages auditor to opine on the Schedule as a whole and to issue a SOC 1 type 2 report on the controls over the calculation and allocation of additions and deductions to employer accounts, or
    - » ***A SOC 1 type 2 report will be unavailable for 2014 for IMRF, but will be available in 2015***
  - Option 2 – Plan engages auditor to opine on each employer column
    - » ***IMRF will select this option for 2014 only.***

# SOC 1 Type 2 Reporting

- IMRF Auditors will attest to the fairness of the descriptions, and determine if controls are suitable to achieve the objectives stated.
- These controls start with the employer and the payment process to IMRF, are an example of inflows.
- Payments to members, are an example of outflows.
- Tests include the transfer and calculation of contributions.
- IMRF will continue to share further developments by GASB and the AICPA for any other matters of concern.

# SOC 1 Type 2 Reporting Example

(IMRF auditors will provide assurances to your auditors)

## Schedule of Changes in Fiduciary Net Position

	<u>Employer 1</u>	<u>Employer 2</u>	<u>Employer 3</u>	<u>Total</u>
Additions:				
Contributions:				
Employer	86,252,000	34,500,000	51,751,000	172,503,000
Member	32,662,000	13,065,000	19,597,000	65,324,000
Investment income:	80,965,000	20,347,000	37,112,000	138,424,000
Total additions	<u>199,879,000</u>	<u>67,912,000</u>	<u>108,460,000</u>	<u>376,251,000</u>
Deductions:				
Pension benefits, including refunds	384,635,000	184,352,000	228,356,000	797,343,000
Administrative expenses	4,716,000	1,886,000	2,829,000	9,431,000
Total deductions	<u>389,351,000</u>	<u>186,238,000</u>	<u>231,185,000</u>	<u>806,774,000</u>
Net increase (decrease)	(189,472,000)	(118,326,000)	(122,725,000)	(430,523,000)
Net position restricted for pension benefits:				
Beginning of year	5,843,645,000	1,468,538,000	2,678,595,000	9,990,778,000
End of year	<u>\$ 5,654,173,000</u>	<u>1,350,212,000</u>	<u>2,555,870,000</u>	<u>9,560,255,000</u>

# GASB 68

## Format

- Copies available on the employer portal
- IMRF is available to answer questions for your specific employer

# GASB 68

- GASB 68 will impact each employer's Unfunded Annual Accrued Liability (**UAAL**).
- Potential for greater volatility from year to year for the UAAL, as well as for the Net Pension Liability (**NPL**)
  - Pension Expense at the entity-wide level will change UAAL
  - Changes in assumptions
  - Differences in expected and actual investment returns

# GASB 68

- Net Pension Liability (NPL) recorded as a liability on Financial Statements, currently it is a footnote disclosure
- Actuarial Assets measured at market value and discounted using assumed return unless assets are insufficient then deficit is discounted using a tax-exempt high quality bond rate



# Illinois Municipal Retirement Fund

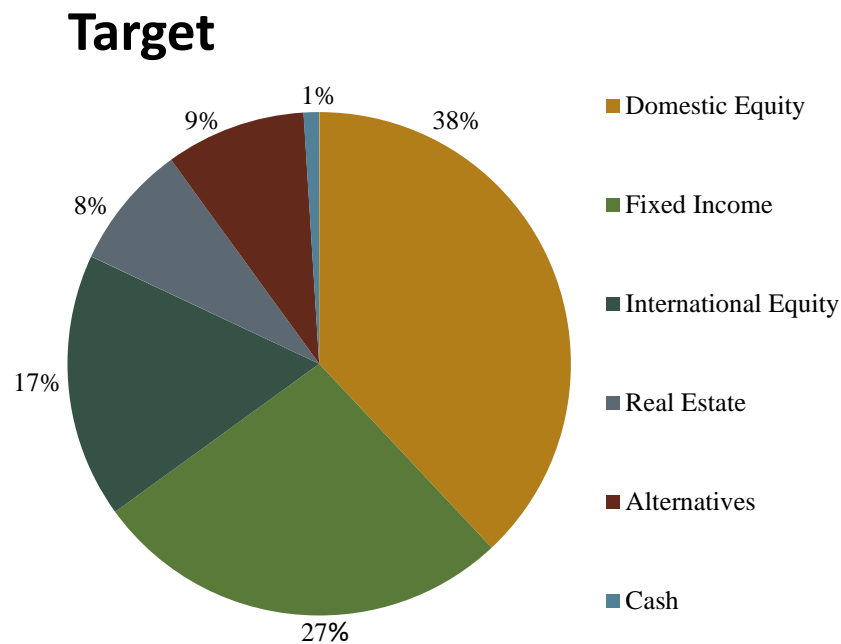
- We can be reached at:
  - [lkosiba@imrf.org](mailto:lkosiba@imrf.org)
  - 630-368-5355
  - [mnannini@imrf.org](mailto:mnannini@imrf.org)
  - 630-368-5345
- Employer 800# (1-800-728-7971)
- New IMRF Website [www.imrf.org](http://www.imrf.org)
  - Comprehensive Annual Financial Report
  - Annual Budget

# Appendix – Data

	2013	2014
Amount Under Mgt.	\$33.2 billion	\$34.6 billion
Investment Return	20.26%	6.10%
Actuarial Return	10.4%	10.1%
Funding Level (M)	96.7%	93.0%
Funding Level (A)	87.6%	87.3%
Active Members	173,481	173,963
Retirees	106,997	111,989
<u>Inactive</u>	<u>117,772</u>	<u>137,941</u>
Rates (Average)	2015	2016
Regular	11.69%	11.73%
SLEP	22.33%	22.71%
ECO	70.37%	86.07%

Employee Contributions 4.5% (Reg); 7.5% (SLEP/ECO)

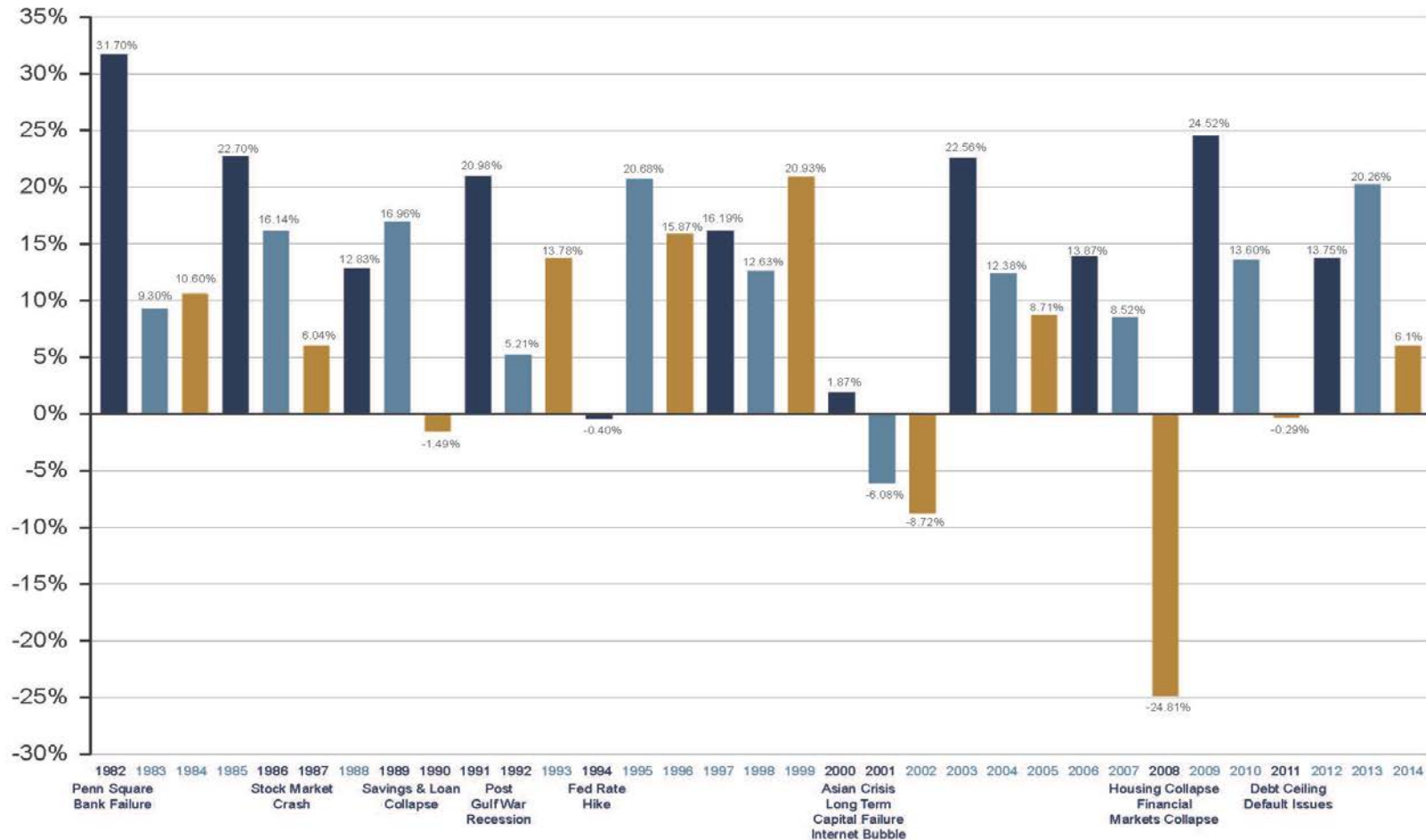
# Appendix – Asset Allocation



As of February 28, 2015

# Appendix - How is the money invested?

IMRF ANNUAL TOTAL FUND RETURNS  
1982-2014

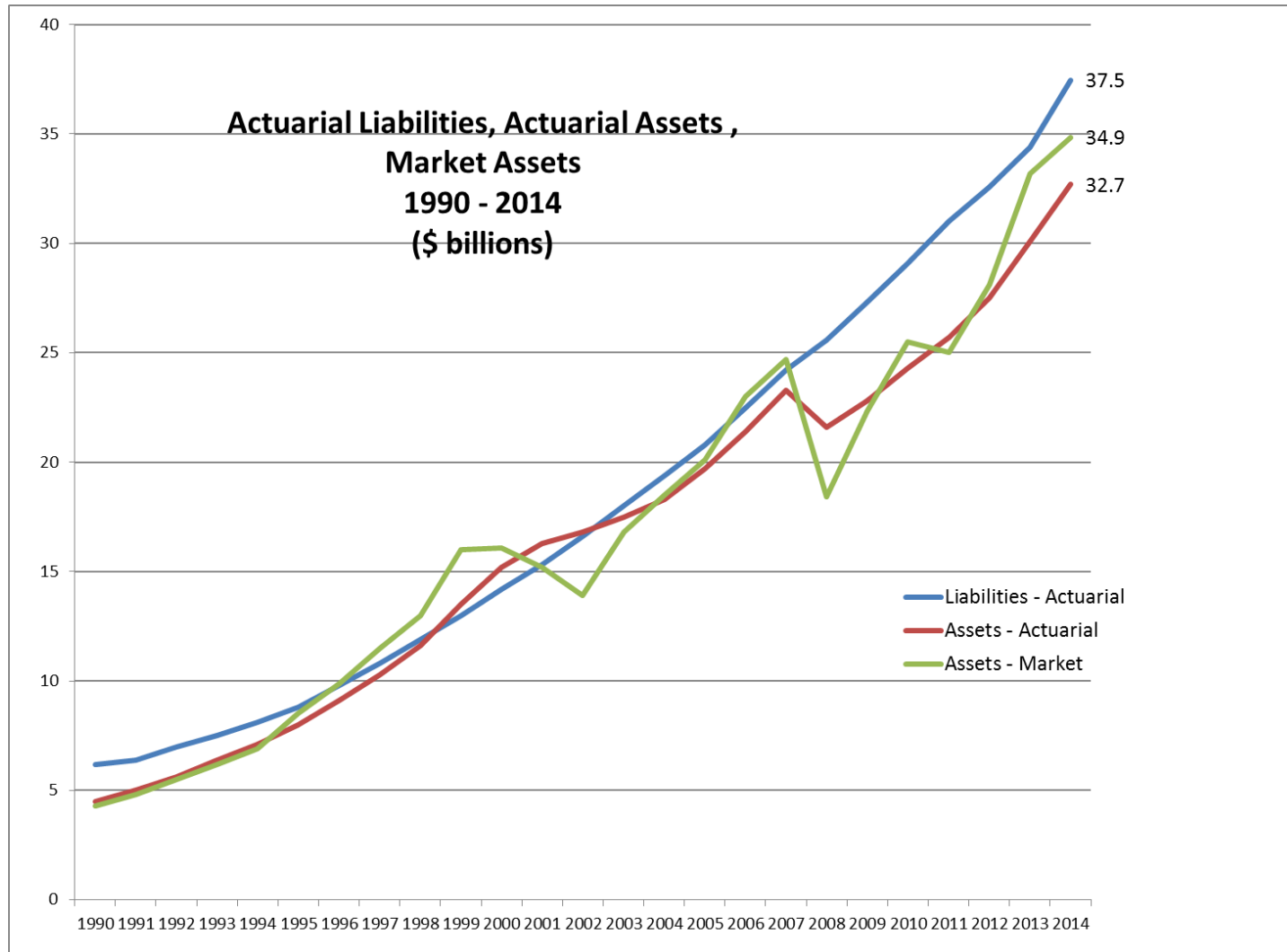


- In 1982, began operating under the “Prudent Person Rule”
- 7.5% assumed return
- **Annualized Total Fund return 1982-2014: 10.24%**

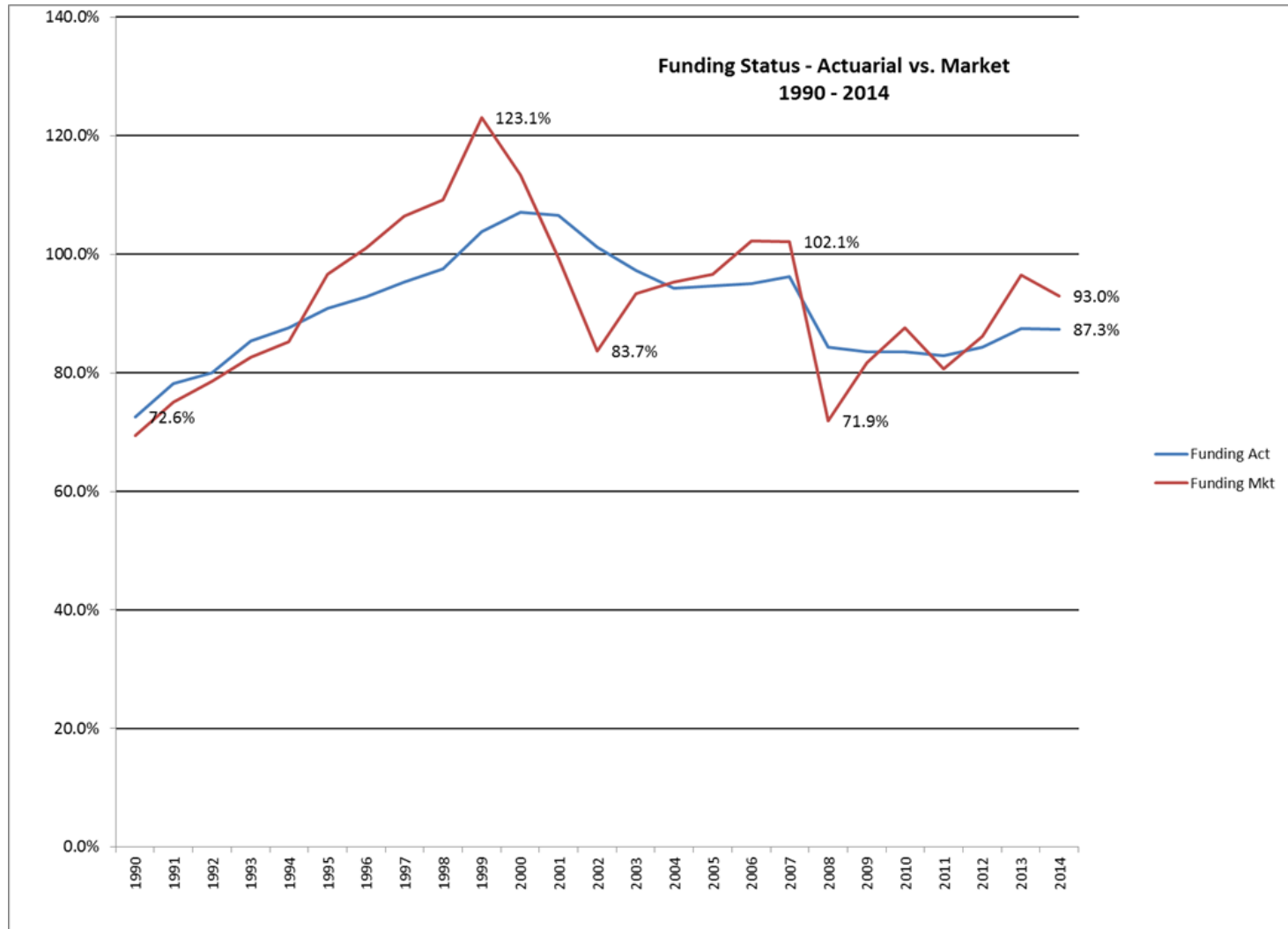
- 6 periods in which IMRF lost money
- 4 periods < 7.5%
- 23 periods > 7.5%
- 20 periods double-digit returns



# Appendix



# Appendix



Thank you  
for attending!

