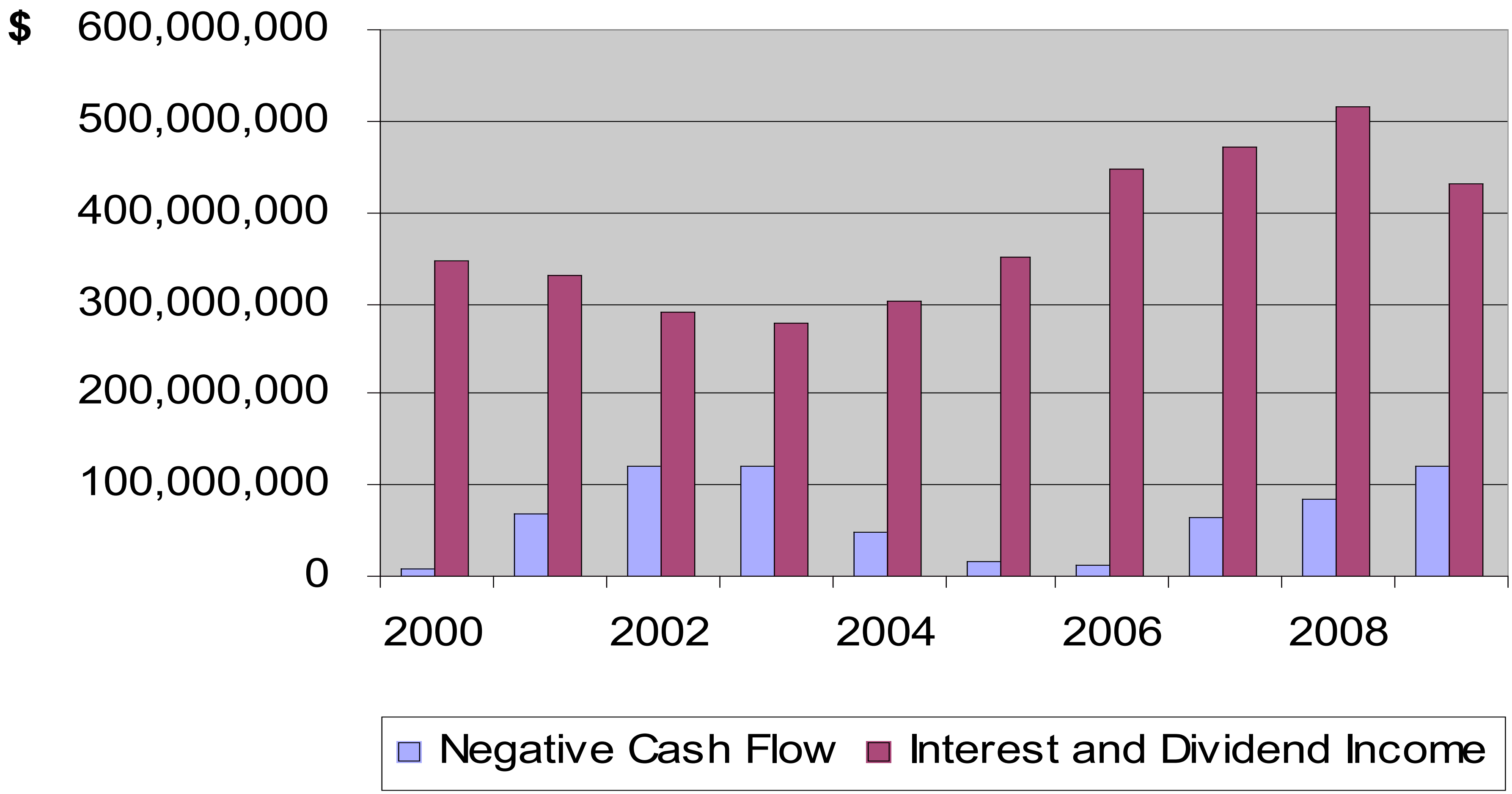
Increase in Plan Net Assets

	Millions
Investment Income	$4,476
Direct Investment Expenses	(52)
Administrative Expenses	(22)
Benefits Paid in Excess of Contributions	(121)
Increase in Plan Net Assets	$4,281

Negative Cash Flow

- As a mature defined benefit plan, IMRF prefunds retirement benefits.
- It is not unusual for a mature plan to pay out more in benefits than it receives in contributions.
- This “negative” cash flow is covered by investment income.
- IMRF has had negative cash flow since 2000.

Comparison of Net Cash Flow to Interest and Dividend Income



The Impact on Funding Value

- While IMRF's 2009 investment return was 24.5% on a market basis, it was only 5.9% on an actuarial basis.
- This difference is due to the use of five-year smoothing that spreads the difference between the assumed return and the actual return over five years.
- Because of the 2008 losses, IMRF began the year with $3,600 million of unrecognized losses for actuarial purposes. It ended the year with $473 million of losses which will be recognized in the 2010 through 2013 period.

Impact on Funding Value

- The five-year smoothing delays the recognition of both market gains and losses.
- In 2009, IMRF's actuarial funding value decreased from 84.3% to 83.2%.
- On a market value basis which does not reflect any smoothing, IMRF's funding level increased from 70.4% to 81.6%.

The Magnitude of the Unfunded Liability

	Billions	
	2009	**2008**
■ Actuarial Liability	$27.3	$25.6
■ Actuarial Assets	22.7	21.6
■ UAAL	4.6	4.0
■ Market Value of Assets	22.3	18.0
■ UAAL on Market Basis	5.0	7.6

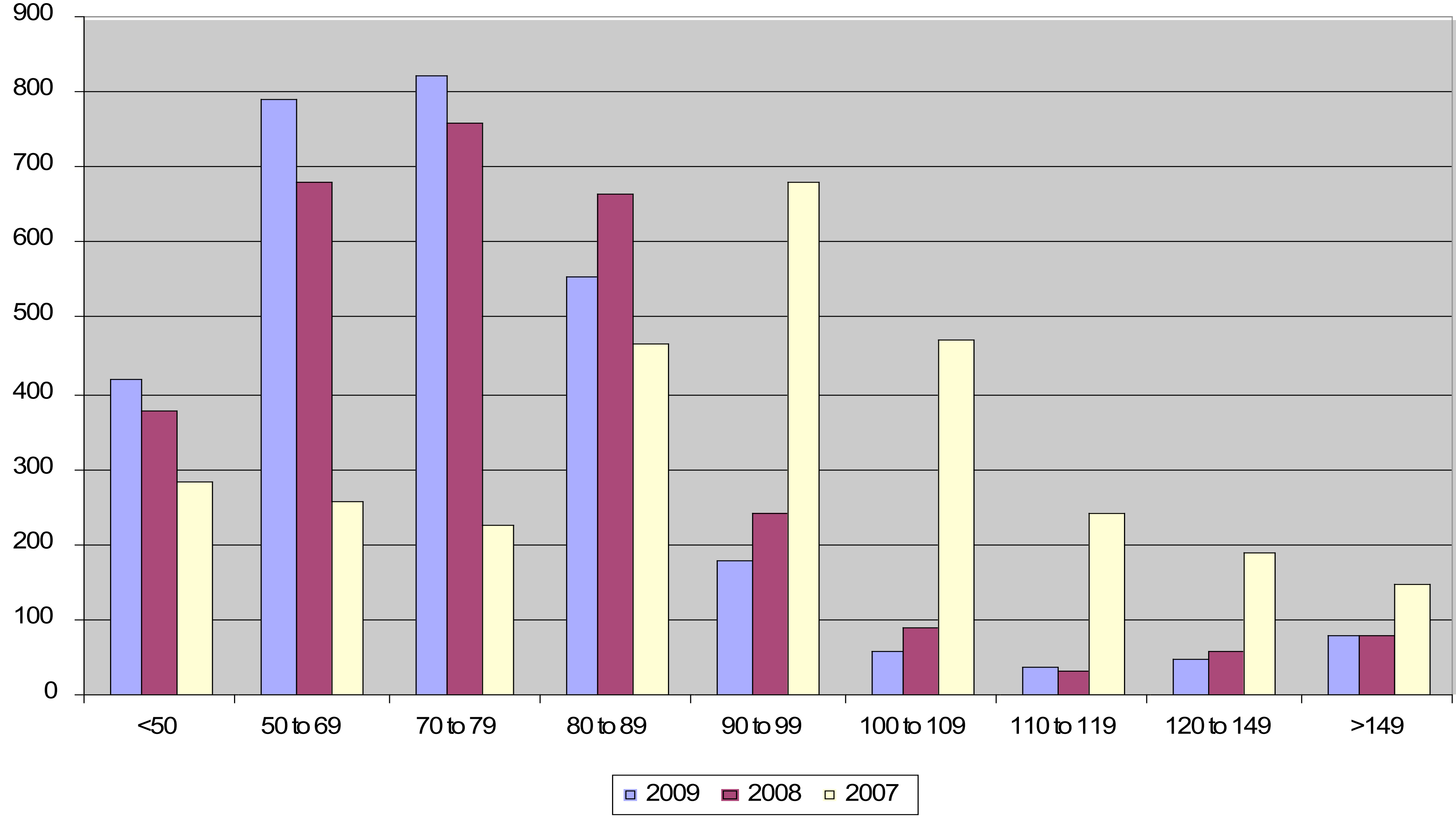
Funded Status of Large Public Pension Plans

	Wilshire	Illinois	IMRF
	2009	2009	2009
Number	57	5	
Funded Status			
Actuarial	72%	50.6%	83.2%
Market	59%	38.8%	81.6%

Individual Employer Funded Status

- Available in April: GASB disclosures
  - Show funded status of each employer plan for the last three years
- Reflects **actuarial** funded status using five year smoothing of investment returns subject to 20% corridor.
- Footnote on schedule discloses the funded status on market basis.
- For most employers:
  - Actuarial funded status decreased since 5.9% actuarial return achieved was less than assumed 7.5%.
  - Market value funded status increased significantly for most employers due to the 24.5% return.

Actuarial Funded Status of Regular Plan by Employer



Projected Funding Status Through 2013

- The actuarial funded ratio is estimated to increase from 83.2% in 2009 to 84.2% in 2013, assuming
  - IMRF earns 7.5% in 2010 through 2013, and
  - that actuarial liabilities grow consistent with the actuarial payroll inflation assumption
- The market based funded ratio is estimated to increase from 81.6% in 2009 to 84.5% in 2013.

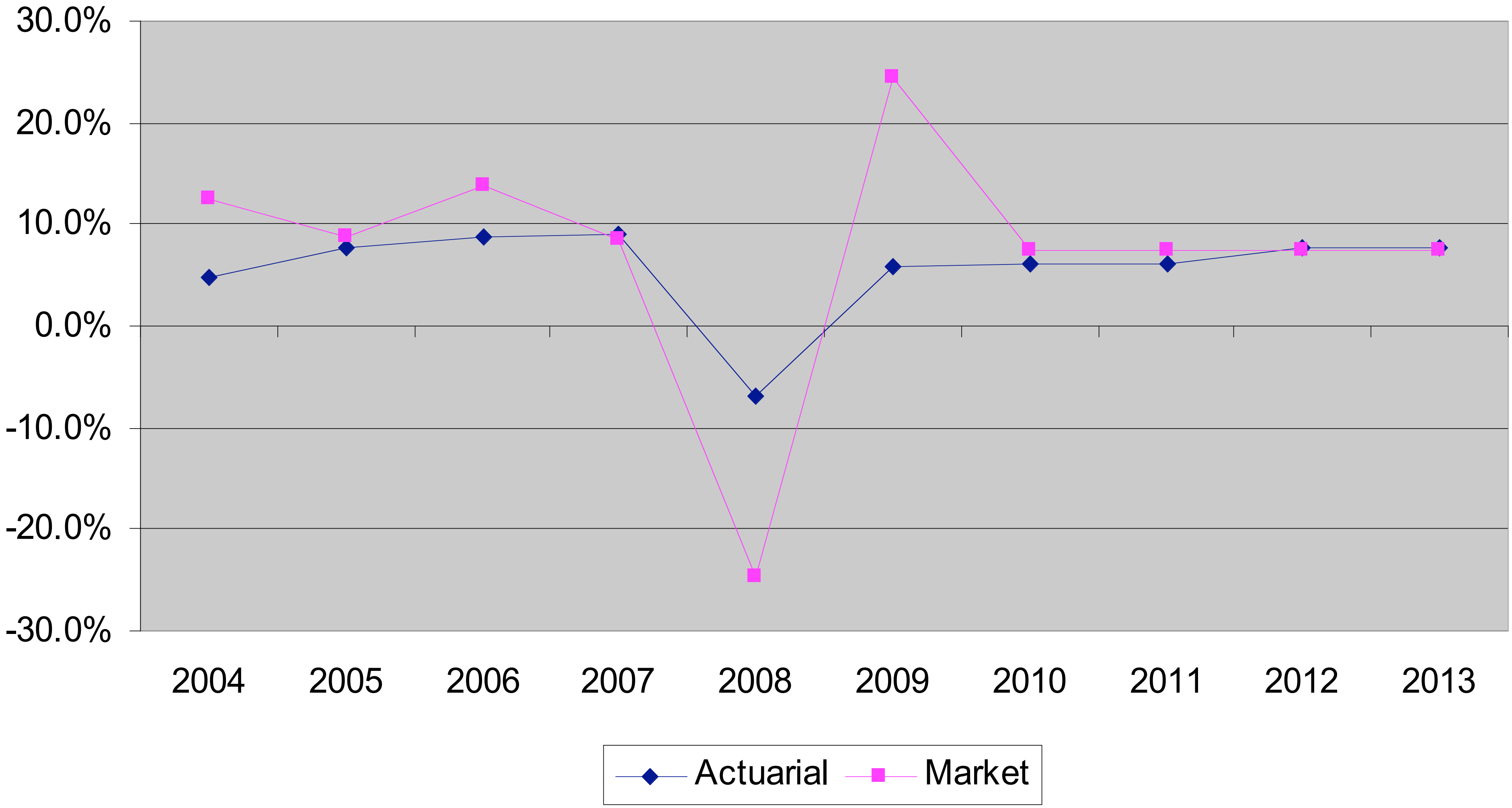
Actuarial vs. Market

- While the five-year smoothing delays the immediate recognition of the full impact of market value fluctuations, it does not eliminate their impact.
- IMRF began 2009 with $3,600 million of unrecognized losses.
- While 2009’s exceptional investment returns decreased the amount of unrecognized losses to $473 million, these losses will put downward pressure on actuarial funded status and upward pressure on employer contribution rates through 2015.

Impact of Unrecognized Gains on Future Actuarial Returns

- The $473 million of unrecognized investment losses will be flowed through IMRF’s asset valuation and rate setting calculations over the 2012 to 2015 period.
- If IMRF exactly meets its investment return assumption of 7.5% on a market basis over the 2010 through 2013 period, the actuarial returns will be approximately 6.0%, 6.0%, 7.7% and 7.7% in the period 2010 through 2013.

Actuarial and Market Returns (2010 thru 2013 Projected)



How Do Investment Returns Impact Employer Rates and Retiree and Member Benefits?

- IMRF is a defined benefit plan.
- Final benefits are based upon a formula that covers the final rate of earnings and years of service.
- IMRF's benefits are guaranteed by the Illinois Constitution and can only be changed prospectively by the Illinois legislature for new members.

How are IMRF Benefits Funded?

- There are only three sources of funding
  - Member Contributions
  - Employer Contributions
  - Investment Income
- While member contributions are fixed by statute, investment income varies based upon market returns and employer contributions fund the balance.

IMRF in Equilibrium

B = C + I - E

- Benefits = Final Rate of Earnings x Years of Service
- Contributions = 4.5% from Members and 8.48% from Employers for the Regular Plan
- Investment income less expenses = 8.0% return on investments less .5% for direct investment and administrative expenses

The Impact of Investment Returns on Employer Rates

- Changes in employer rates are impacted by:
  - demographic factors such as mortality rates; age at retirement;
  - benefit changes;
  - wage inflation;
  - but **the most significant is investment returns.**
- As an earlier slide showed, if IMRF meets its actuarial assumed return of 7.5% going forward, it will be approximately 84.2% funded on an actuarial basis in 2013.
- The need to both collect and finance the underfunding will cause employer contribution rates to be higher than the cost of the IMRF program for the foreseeable future unless market returns consistently exceed the 7.5% actuarial assumption.

2011 Cost of the IMRF Program

	Regular	SLEP	ECO
Retirement	7.58%	11.97%	17.20%
Disability & Death	.28	.29	.29
13th Payment	.62	.62	.62
Total	8.48%	12.88%	18.11%

- A 2011 contribution rate higher than the cost of the program means the employer will be underfunded as of December 31, 2010.
- A 2011 contribution rate less than the cost of the program means the employer will be overfunded as of December 31, 2010.

Reasons for Variances from the Cost of the IMRF Program

- **Over or Under Funded Status**

  If an employer is over or underfunded, the amount is factored into the rate as either an addition or deduction.

- **Cost of an Early Retirement Incentive**

  If an employer has offered an ERI, its cost will be added to the rate.

Preliminary Rate Notices for 2011

- Preliminary rate notices available in April 2010
- Final notices available in November 2010
- Preliminary rate notices reflect phase-in options if applicable
- Employers who were offered a phase-in option have until August 31st if they want to choose the ARC
- IMRF will notify any employers who may have an over funding option in May

Who Received a Phase-in Option for 2011?

- Employers whose 2011 ARC rate was more than 10% higher than their actual 2010 rate excluding ERI or SLEP enhancement components
  - For these employers, the phase-in rate increase was 10% excluding ERI and SLEP enhancements.

- Employers who were over funded at the end of 2008 and who became under funded in 2009
  - For these employers, the 2011 rate increase may be more than 10% higher because the rate must be at least equal to the cost of the IMRF program.

- Employers whose 2011 ARC rate was less than 10% higher that the actual 2010 rate were not eligible for a phase-in rate.

Analysis of 2011 Rate Choices

	Regular	SLEP	ECO
Phase-In Eligible	1,257	42	23
% of Total	41.8%	22.1%	34.3%
ARC	1,751	148	44
% of Total	58.2%	77.9%	65.7%
Estimated Average Employer Rates			
All Employers	11.43%	21.46%	41.21%
Phase-In Eligible	11.02%	19.46%	51.54%
ARC	11.93%	22.10%	38.13%

Things to Consider About Phase-In Options

- Any phase-in options offered for 2012 rates will be based on the actual rate chosen for 2011.
- In the long run, the phase-in option is more expensive than the ARC due to the additional interest that is charged.
- Employers who choose the phase-in rate have to record a net pension obligation for financial reporting.
- For employers who are financially able, IMRF strongly encourages that funding be based on the ARC contribution rate.

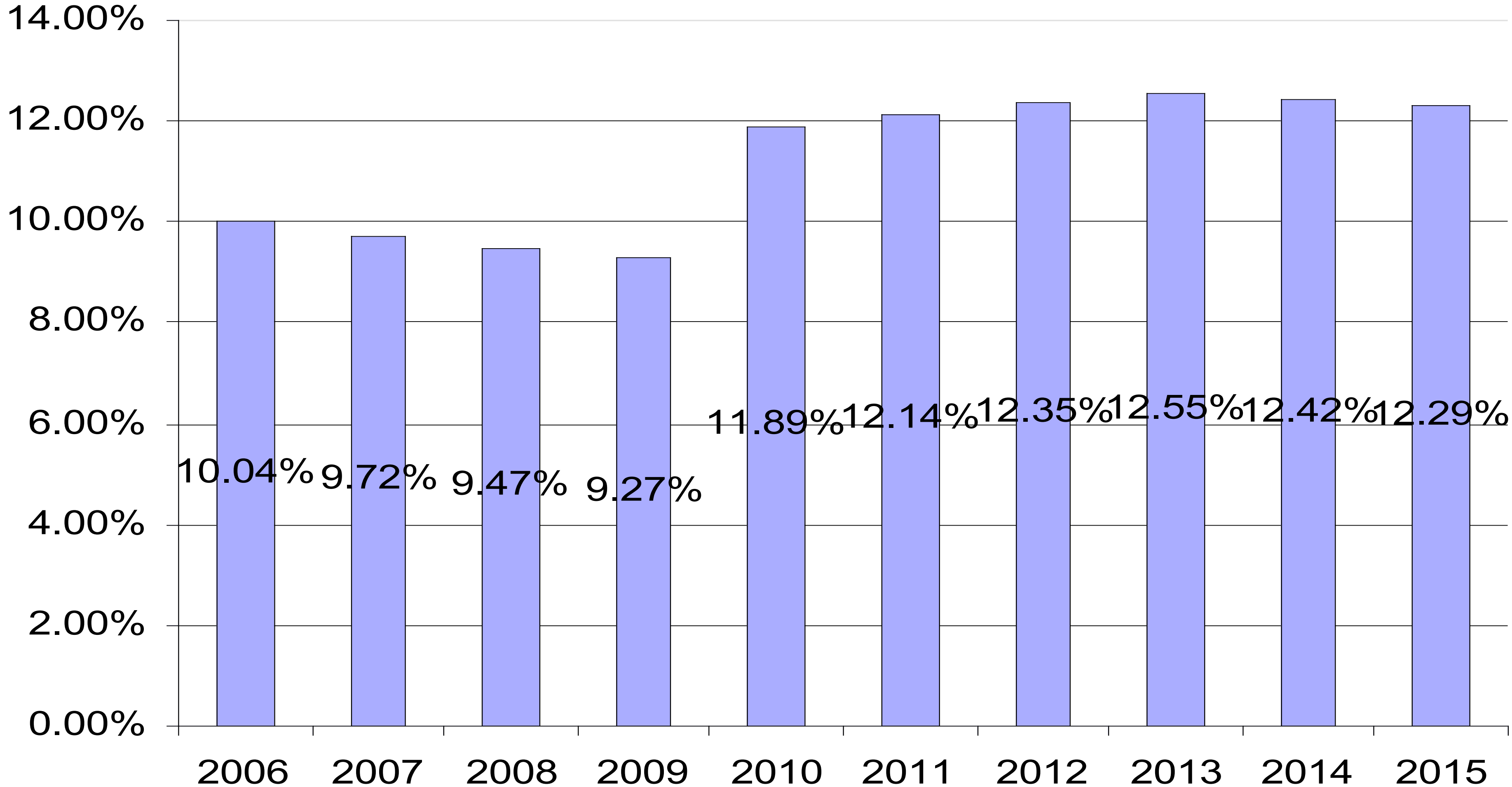
Over What Periods are Under Funded Amounts Recovered?

- If an employer is less than 100% funded on an actuarial basis
  - Instrumentalities – a 10 year rolling period
  - Taxing bodies – a 30 year rolling period
  - ERI – up to 10 years at employer option

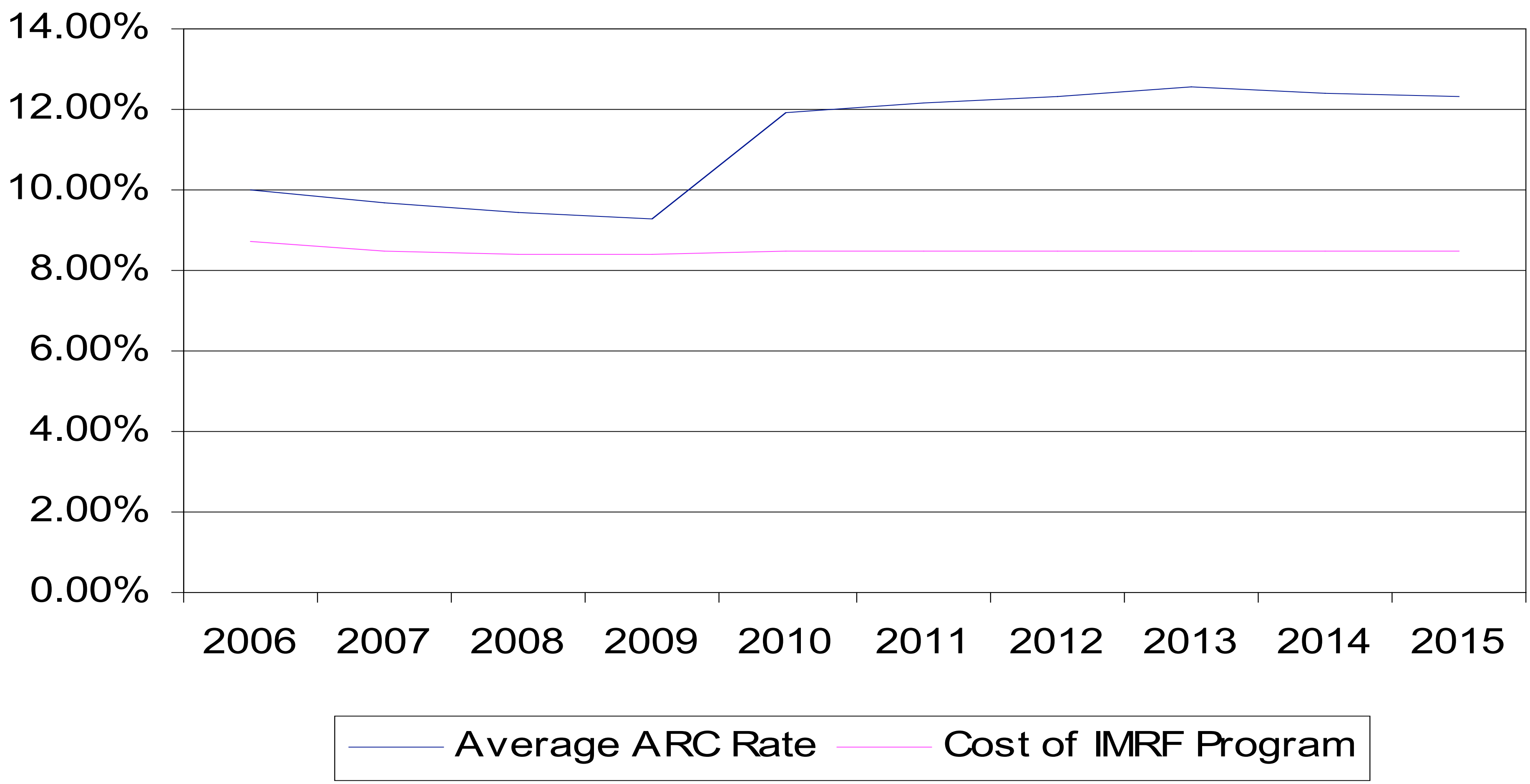
Average Employer Rate Projection for Regular Plan

- For employer rate setting purposes, there is a two-year lag between investment returns and their incorporation into employer contribution rates.
- Assuming investment returns of 7.5% for 2010 through 2013 and actuarial liabilities growing consistent with the actuarial payroll inflation assumption, we would expect employer actuarial required contribution rates to increase moderately through 2013 and begin to decrease in 2014 as the $473 million of unrecognized losses is recognized.

Projected ARC Rates for Regular Plan



Average ARC Rate vs Cost of IMRF Program - Regular Plan



Words of Caution about Average Rate Projections

- Investment returns beyond 2009 are assumed and actuarial liabilities for 2010 and beyond are based on actuarial assumptions.
- The effect on individual employers will vary widely.
- For individual employer’s who chose the phase-in option, there is no way to accurately project the pattern of changes. Once the employer reaches the ARC, contribution rates will increase at less than 10% and eventually begin to decline.
- Actual employer rates will definitely vary from these projections.

Projections for Individual Employers

- In order to assist employers who do multi-year budgeting, IMRF has a simple model to provide ARC projections on an employer by employer basis.
- Most actuarial data remains static. It is difficult to reflect significant changes in payroll and payroll growth rates since reductions in payroll do not necessarily have a linear impact on the actuarial liability.
- Investment returns can be changed from the assumed 7.5% return.

What Might We Expect in 2009 and Beyond?

- Callan Associates Inc.'s, IMRF's investment consultant, estimate of the most probable geometric returns using a 10-year time horizon are as follows:

U.S. Equity	8.5%
Non-U.S. Equity	8.3%
Real Estate	6.8%
Private Equity	9.7%
Fixed Income	4.5%
Cash	3.0%

What Might the Callan Forecast Mean for IMRF?

	Weight	Rate	Weighted Rate
U.S. Equity	38%	8.5%	3.23%
Non-U.S. Equity	20%	8.3	1.66
Real Estate	6%	6.8	.41
Private Equity	6%	9.7	.58
Fixed Income	29%	4.5	1.31
Cash	1%	3.0	.03
"Forecasted Return"			7.22%

Implications for IMRF

- A 7.22% return would leave us short of our assumed actuarial return of 7.5% after expenses.
- It would cause our funding ratio to drop
- It would lead to higher contributions rates in 2012 and later than those previously projected assuming a 7.5% return.
- However, the negative impact would be cushioned by the five-year smoothing for the difference between the actual return and the expected return.

Impact on Future Rates

Returns in 2010 thru 2013	7.50%	7.22%
2012	12.35%	12.36%
2013	12.55%	12.58%
2014	12.42%	12.48%
2015	12.29%	12.39%

Impact on Funding Ratios

Return in 2010 thru 2013	7.50%	7.22%
Actuarial Ratio in 2013	84.2%	83.8%
Market Ratio in 2013	84.5%	83.6%

How Have the Markets Performed So Far in 2010

- Through April 30th

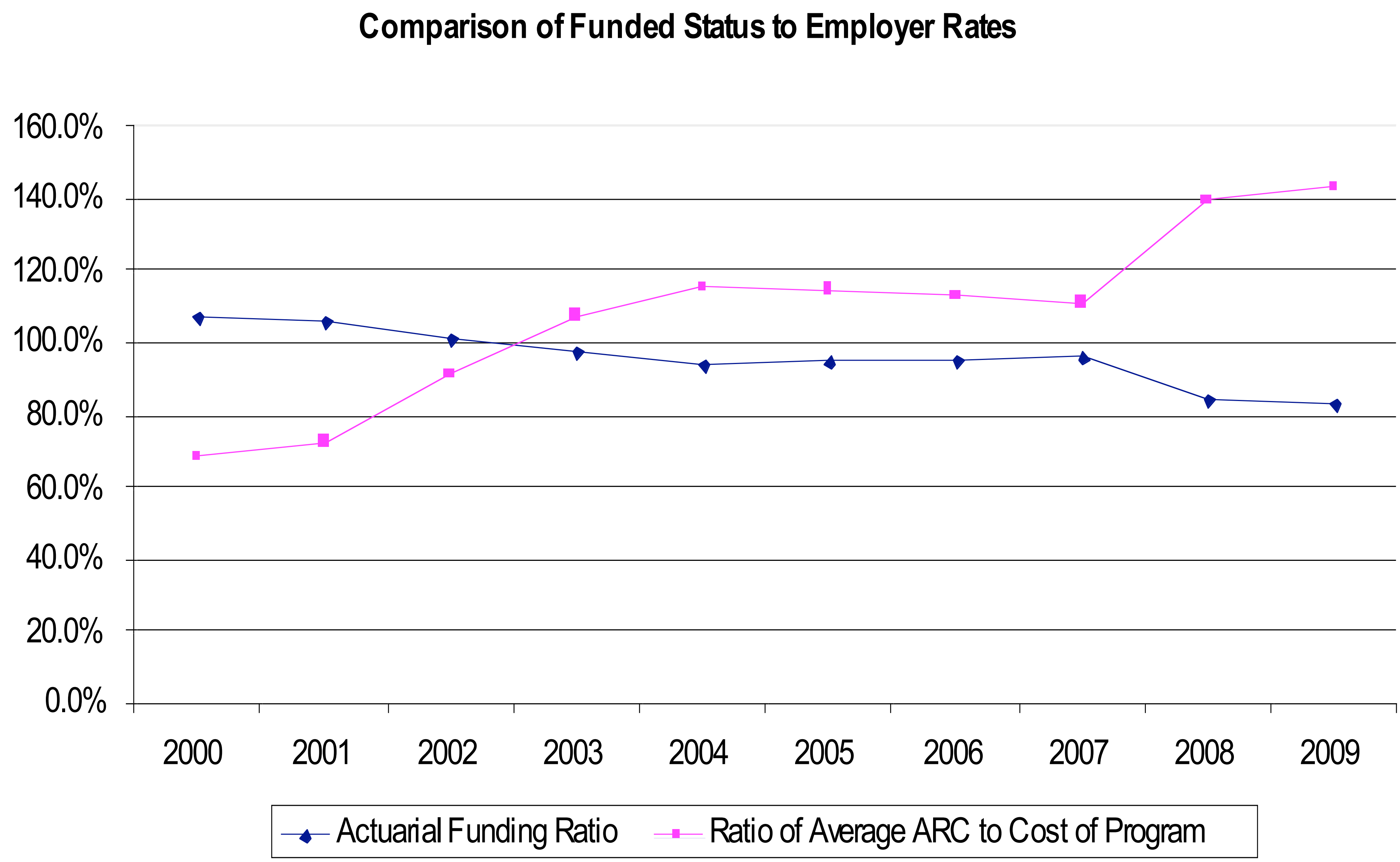
Dow Jones Industrials	5.57%
MSCI EAFE	-.80%
NASDAQ	8.46%
Barclay Aggregate	2.84%
Wilshire 5000	7.93%
US Treasuries	.03%

What Has IMRF Earned Year-to-date in 2010?

- Through April 30th, it is estimated that IMRF has earned approximately $1,158 million.
- If we earn our actuarial expected return for the remainder of the year, we would earn approximately $2,317 million or 10.4%
- The average ARC contribution rate in 2012 for the Regular plan would be approximately 12.24%
- IMRF would end the year with approximately $358 million of unrecognized gains.

Why is Full Funding Important?

- Chronic under funding of a defined benefit plan leads to higher rates.
- While IMRF sets rates to recover the under funded liability, the current 30-year rolling amortization pushes that recovery into the distant future.
- The following chart shows the direct connection between employer rates and the funded status of IMRF.
- IMRF believes making additional reserve contributions to reduce an employer’s unfunded liability is a cost effective way to reduce pension expense in the long term.


Comparison of Funded Status to Employer Rates
160.0%
140.0%
120.0%
100.0%
80.0%
60.0%
40.0%
20.0%
0.0%
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Actuarial Funding Ratio
Ratio of Average ARC to Cost of Program

Impact of Public Act 96-0889 on IMRF

- The law creates a second tier for Regular and ECO members who are first hired on or after January 1, 2011.
- It does not impact current active, inactive or retired members in any IMRF plans or future members of the SLEP plan.
- The second tier does not change member contribution rates and maintains a defined benefit for new hires.

Major Provisions of Public Act 96-0889

- Vesting is increased to 10 years
- Normal retirement age is increased to 67
- Early retirement age is increased to 62
- Reduction for early retirement is increased to ½% per month under 67
- Final rate of earnings (FRE) is increased to highest 96 months over last 120 months

Major Provisions of Public Act 96-0889

- Caps FRE at $106,800, increasing annually by 3% or ½ of the increase in the CPI whichever is lower
- Increases surviving spouse benefits to 66.7%
- Limits annual pension increase to 3% or ½ of the increase in the CPI which ever is lower
- Annual pension increase begins at age 67

Estimated Impact of Second Tier on Employer Contribution Rates

- Our actuaries estimate that the initial normal cost of the second tier for the regular plan will be 4.67%, a 38.4% decrease from the current cost of 7.58%.
- Our actuaries estimate that the blended normal cost for both tier one and tier two members on an IMRF wide basis will be 5.95% in 2021, a 21.5% decrease from the current normal cost of 7.58%.
- IMRF employers will not see the impact of the second tier in their contribution rates until 2013.
- The actual reduction for any particular employer will depend on the percentage of tier two employees covered by that employer's plan.

Normal Cost of Tier Two Varies by Vintage Year

IMRF Blended Average Normal Cost by Year

	2011	2013	2015	2017	2019	2021
Without Cap	7.58%	7.35%	6.97%	6.65%	6.36%	6.10%
Effect of Cap	0.00%	0.02%	0.05%	0.09%	0.12%	0.15%
With Cap	7.58%	7.33%	6.92%	6.56%	6.24%	5.95%

Additional Information on Public Act 96-0889

- Additional detail is provided at our website, www.imrf.org, including General Memo 599.
- IMRF and Other Retirement Systems impacted by the Bill are analyzing how it will be implemented.
- Some of the areas of concern are
  - Purchase of service
  - "Grandfathering" of tier one members
  - Surviving spouse benefits
  - Pensionable earnings cap vs. FRE cap
- It is anticipated that a "Trailer" Bill will be introduced to cover "technical" corrections.

Questions

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Thanks for attending this presentation!