Milliman 2009 Pension Funding Study

Five Years of Pension Gains Wiped Out in 2008

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Key Findings

- Record losses in funded status
- 2008 asset losses erase five years of gains
- Losses continue in first two months of 2009
- Pension expense dropped for second year – large increase expected in 2009
- Employer contributions up slightly with big increase expected in 2009 and 2010
- Equity allocations decreased significantly due to market declines

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- Milliman 100 companies
  - U.S. public companies with defined benefit plans that file reports with the SEC
  - Companies with the largest DB plan assets
  - Total pension assets of over $900 billion
- Analysis of Key Pension Data
  - Footnote disclosures
  - Earnings statement
  - Balance sheet

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- Companies included
  - Annual reports release by 3/12/2009
  - Includes 12 companies with Measurement Dates other than 12/31
- Companies excluded - private companies, mutual insurance companies, U.S. subsidiaries of foreign parents
- Pension information includes
  - U.S. qualified pension plans
  - Non-qualified plans (mostly unfunded)
  - Foreign plans (often unfunded)
- Does not reflect funded status of U.S. qualified plans under ERISA

Funded Status Plummets During 2008

- PBO funded status dropped by a record amount during 2008 due to asset losses – turning a $65b surplus at end of 2007 into a $255b deficit at the end of 2008, a $320b loss
- Balance sheet losses of $298b during 2008 when $22b of gains in OPEB funded status are netted against the pension losses
- 2008 losses reversed gains of $238b over the prior five years and exceeded the losses of 2001 ($169b) and 2002 ($182b) during the "perfect storm"
- Number of companies with calendar-year fiscal years in a surplus position at the end of 2008 down to 4 from 51 at the end of 2007

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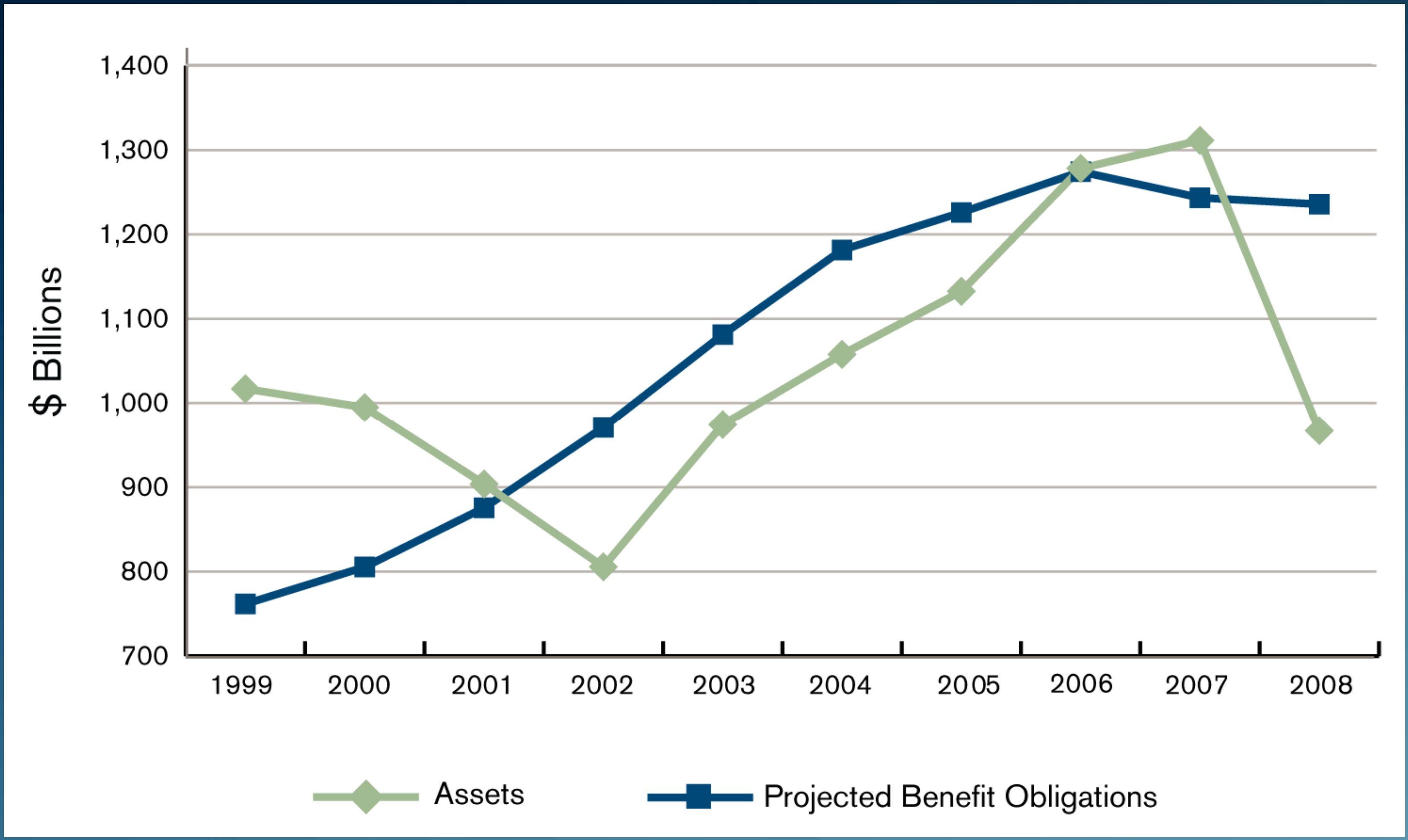
Funded Status Plummets in 2008

Assets drop to 2003 levels



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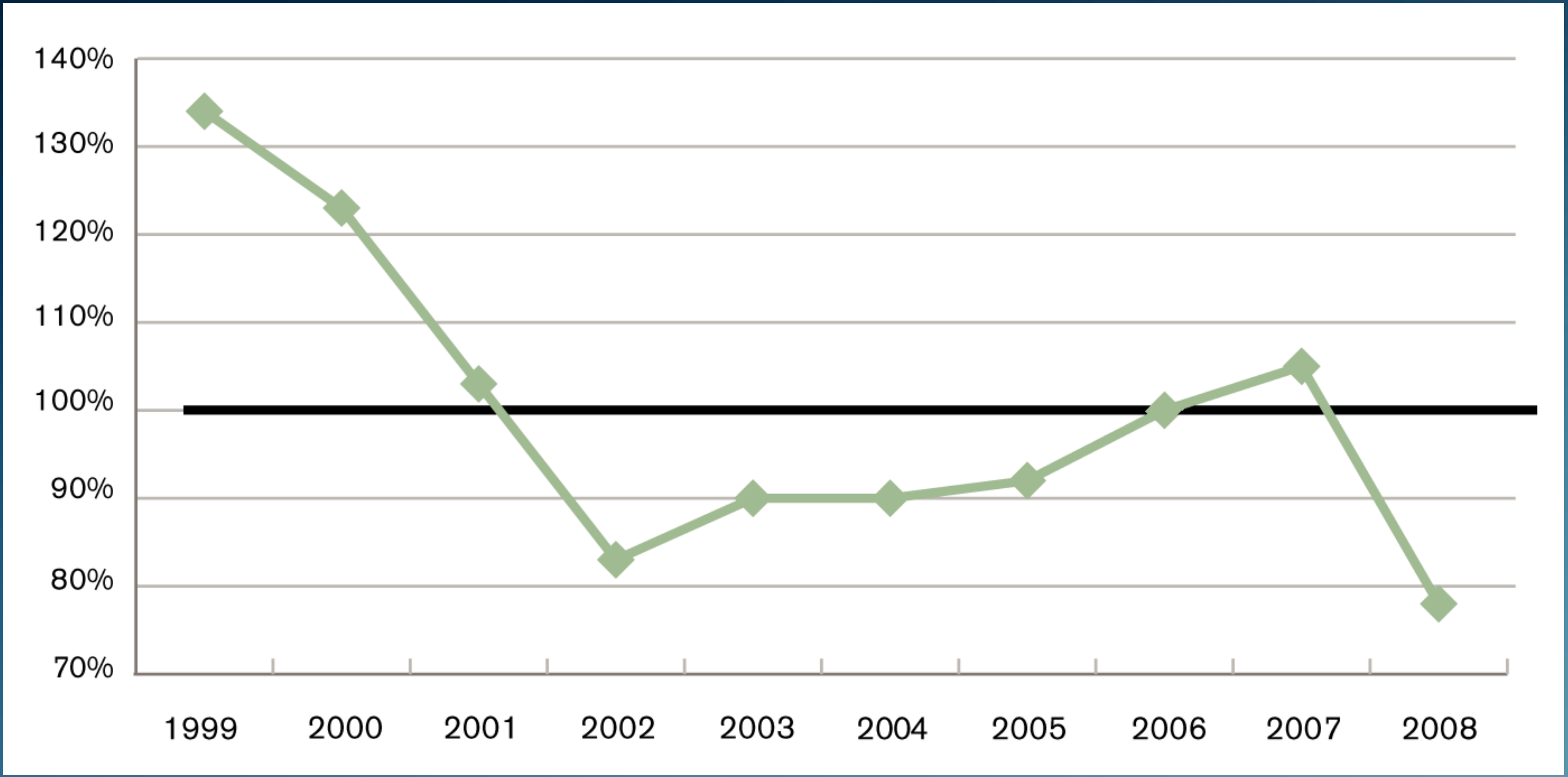
Funded Status Plummets in 2008

Lowest year-end ratio in last ten years



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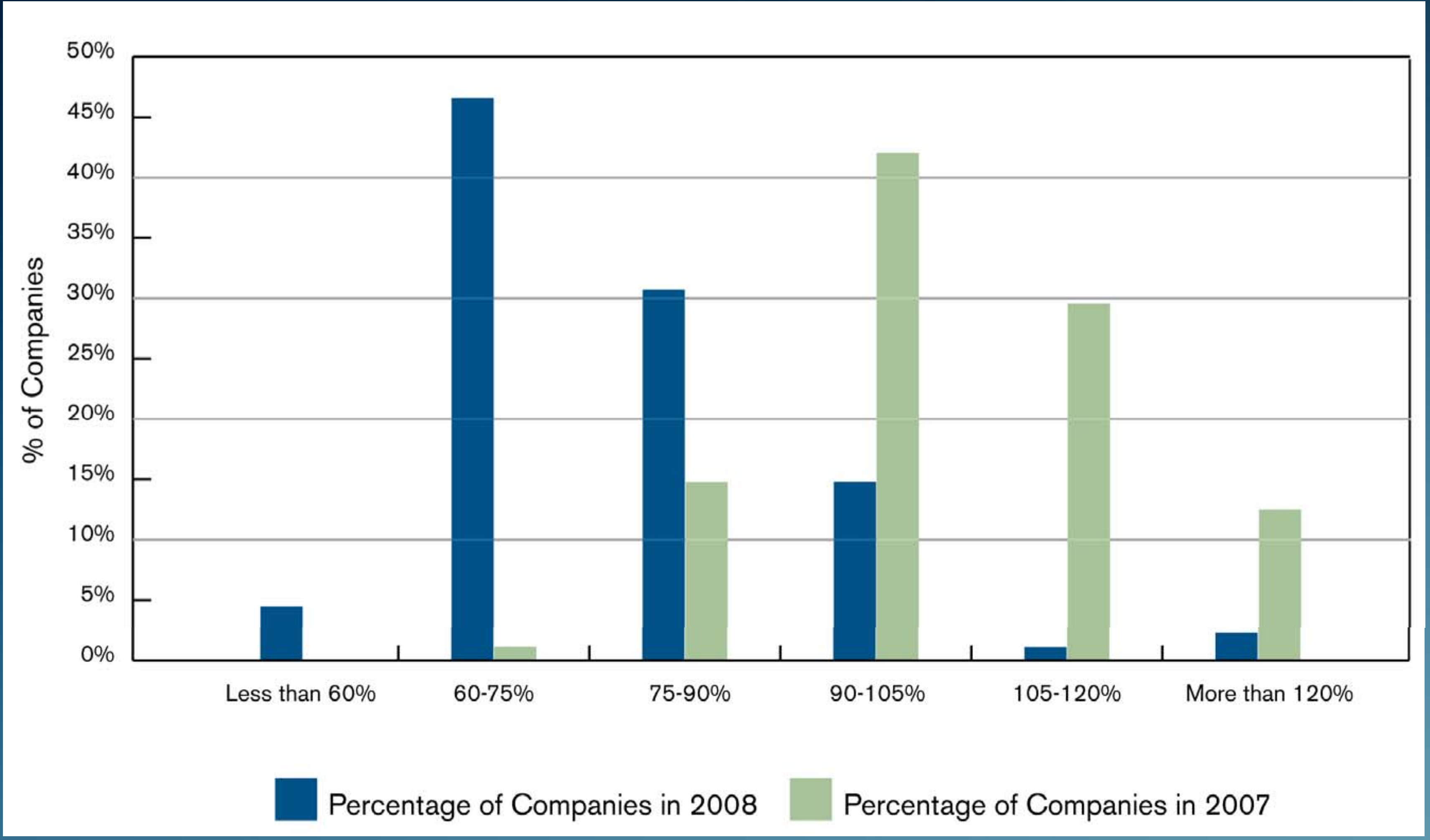
Funded Status Plummets in 2008

Median funded status of 77% at end of 2008



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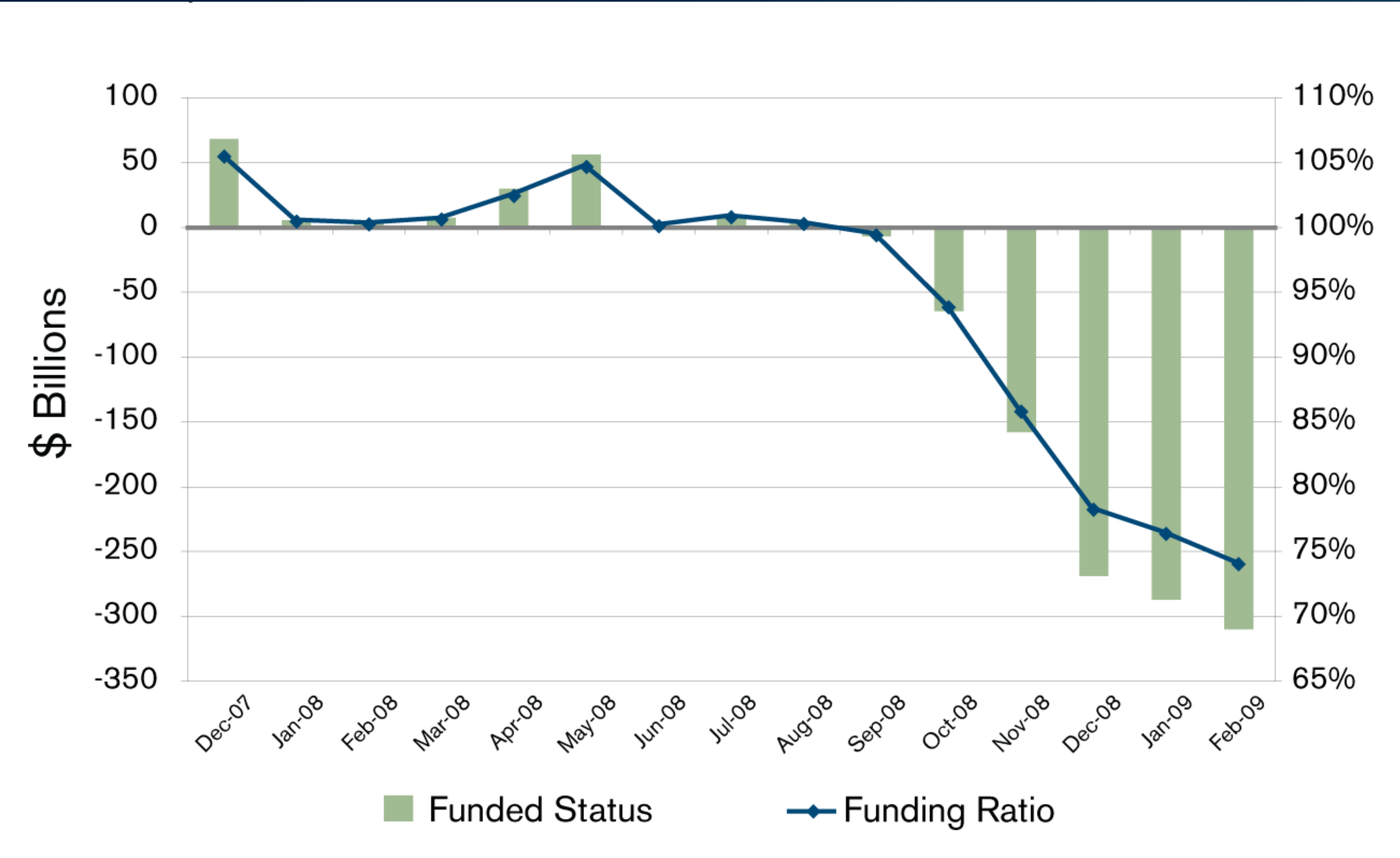
Funded Status Losses Continue into 2009

Loss of $41b during January and February of 2009

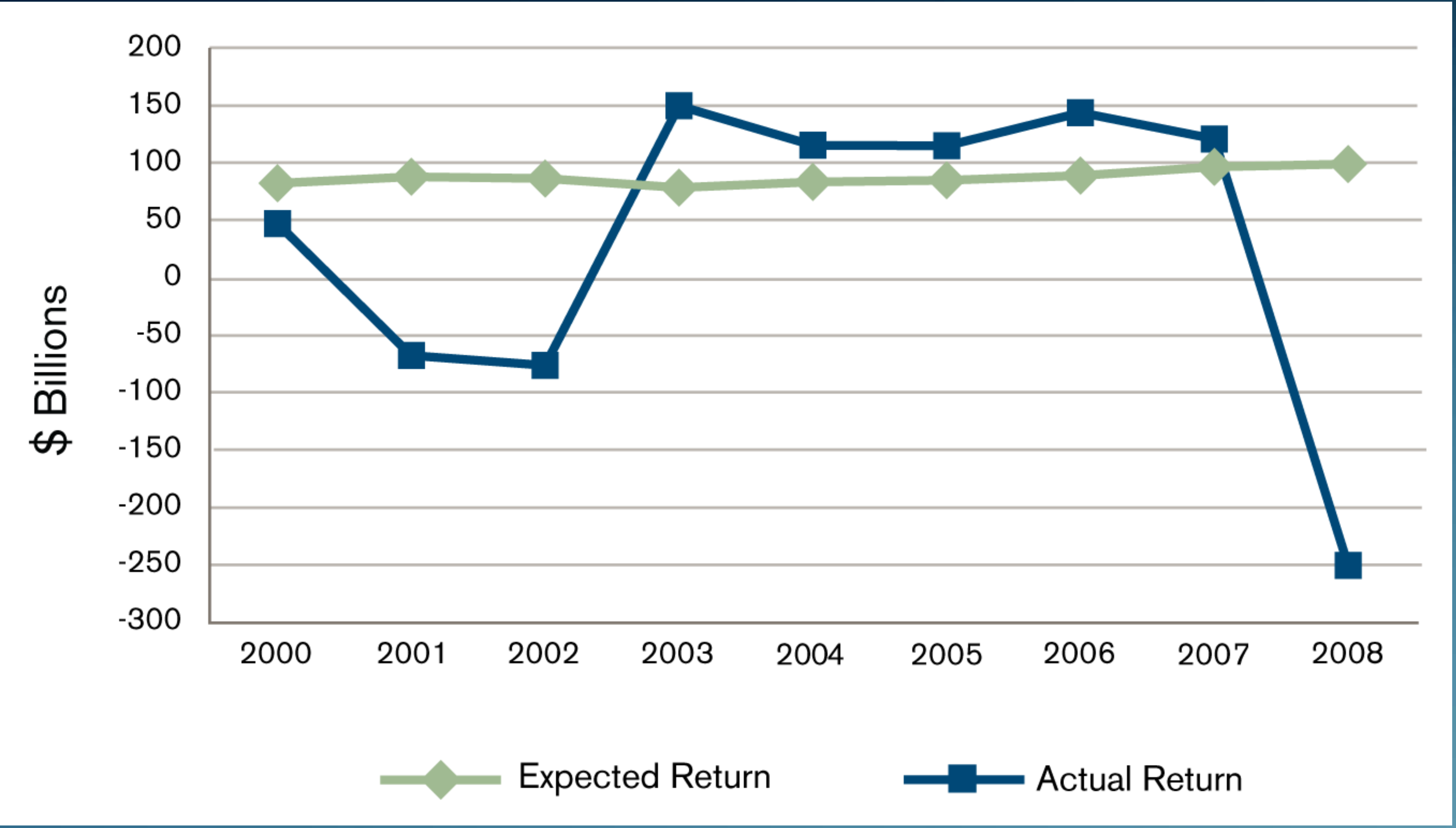


Record Asset Losses

- Actual return on assets of negative 18.9% for 2008 fiscal years
  - Expected return decreased slightly to 8.1% in 2008 from 8.3% the prior two years
  - Assets projected to drop to $883b as of 2/28/09, a 35% drop from the peak of $1.35 trillion at the end of October 2007 and the lowest level since July 2003
  - Over the past five years, actual rate of return has been about 4.7%, since 1999 actual returns have averaged 3.3%

Record Asset Losses in 2008

Actual return of negative $250b



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Pension Expense Declines In 2008

- Pension expense of $10.4b for 2008, down from 2007 expense of $18.9b – compared with pension *income* of $13.1b in 2001
- Second year of decline in expense after five years of increase
- 25 companies with pension income in 2008, up from 21 in 2007—compared with 64 in 2001
- Losses in funded status projected to increase pension expense (and charge to earnings) by $70 billion in 2009 fiscal years

Employer Contributions Increase Slightly

- Employer contributions increased to $29.7b in 2008, only slightly higher than contributions of $27.2 in 2007
- Contributions continued to exceed expense, by a cumulative $207b over the past nine years
- Funded status losses and provisions of Pension Protection Act of 2006 projected to increase contribution requirements for 2009 to more than $50 billion
- Plan sponsors may defer some of 2009 contribution requirement into 2010 when contribution levels may exceed $75 billion

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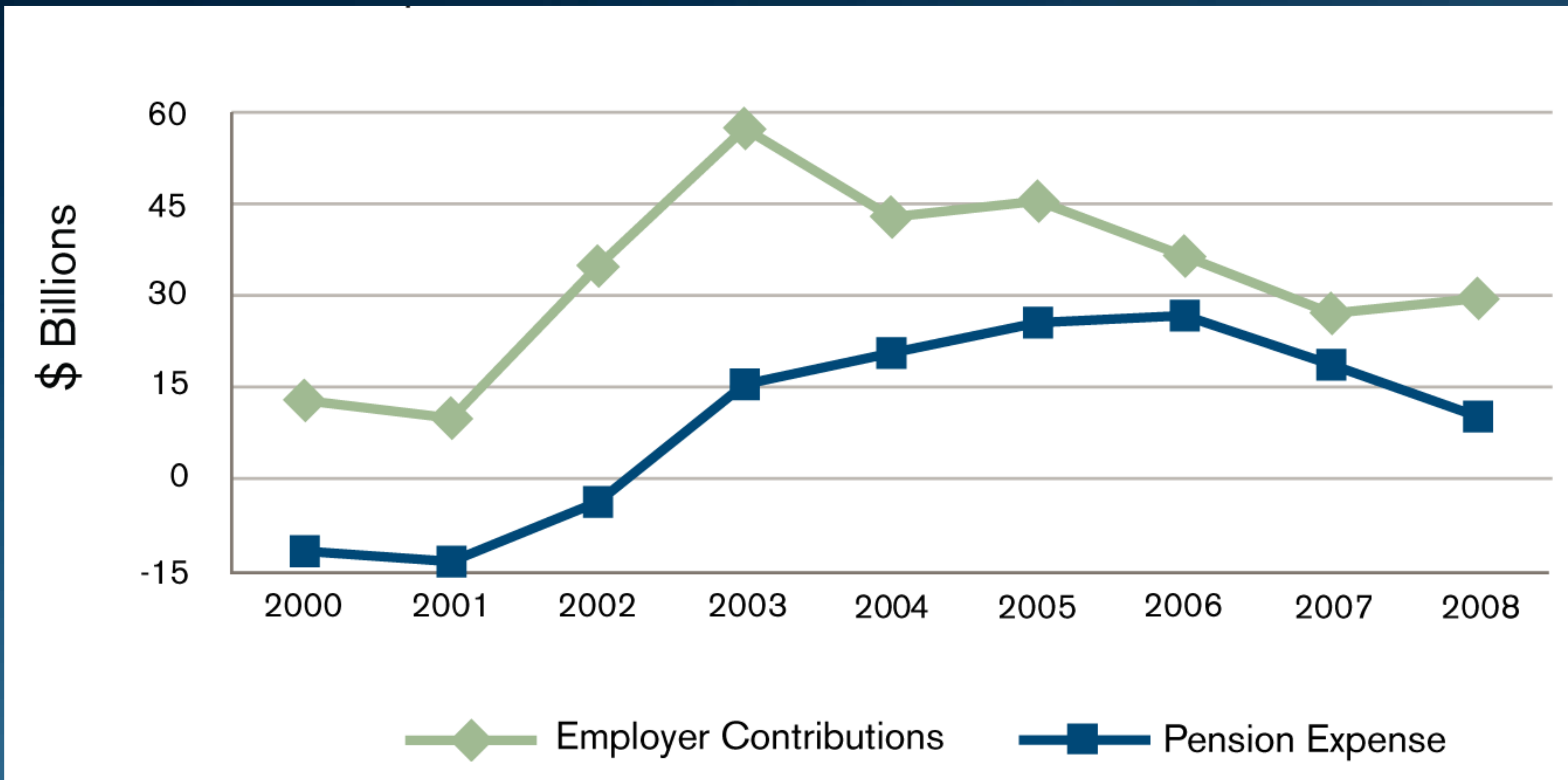
Pension Expense and Contributions

Second consecutive drop in pension expense



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Higher Discount Rates but Lower Expected Returns

- Median discount rate up to 6.3% at the end of 2008, up from 6.2% in 2007 and the low of 5.5% in 2005 – after incremental declines from 7.5% at the end of 1999
- Increase in discount rates lowered liabilities by 2.2%
- Median expected return on assets dropped slightly to 8.1% in 2008
- Only seven companies continue to use an expected return of at least 9.0%

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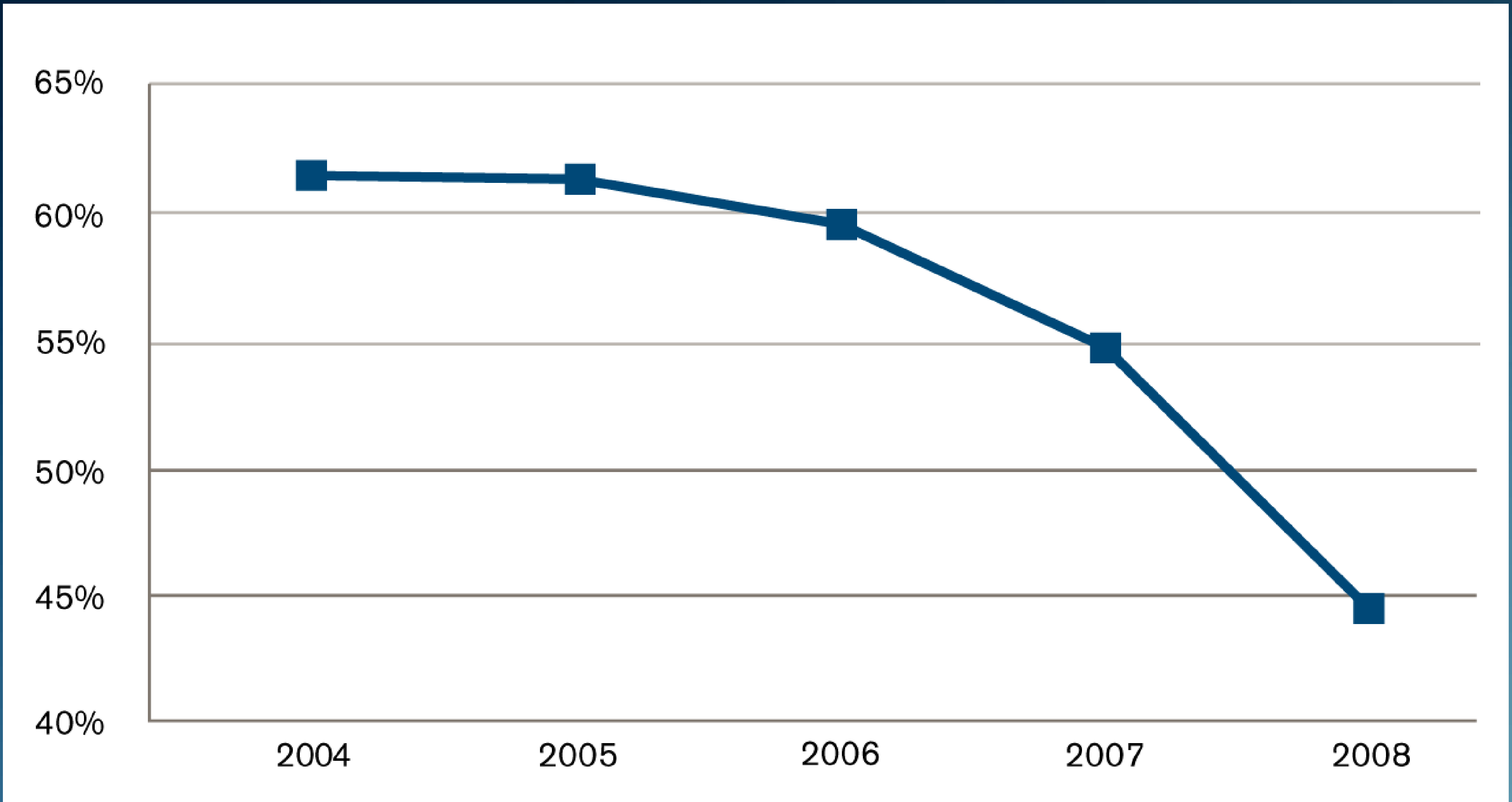
Major Changes in Asset Allocation during 2008

- Decreases in equity investments during 2008 resulted in increases to fixed income and “other” asset classes
  – 44% of pension assets invested in equities – down from 55% at the end of 2007
  – 41% invested in fixed income assets – up from 33% in 2007
  – Remaining 15% of assets invested in “other” asset classes - up from 12% at the end of 2007
  – “Other” asset classes - real estate, private equity, hedge funds, and cash equivalents

Decreases in Equity Allocations

- 52 of the 100 companies had decreases in their equity allocation by more than 10% during 2008 (compared with 11 in 2007)
  - 12 had decreases in their equity allocation of more than 20%
- Asset allocation changes were primarily a result of market declines, not changes in investment policies
- Companies did <u>not</u> de-risk their plans in response to:
  - Improved funded status over the past five years
  - Greater awareness of the benefits of liability-driven investing (LDI)

Asset Allocation – Equities



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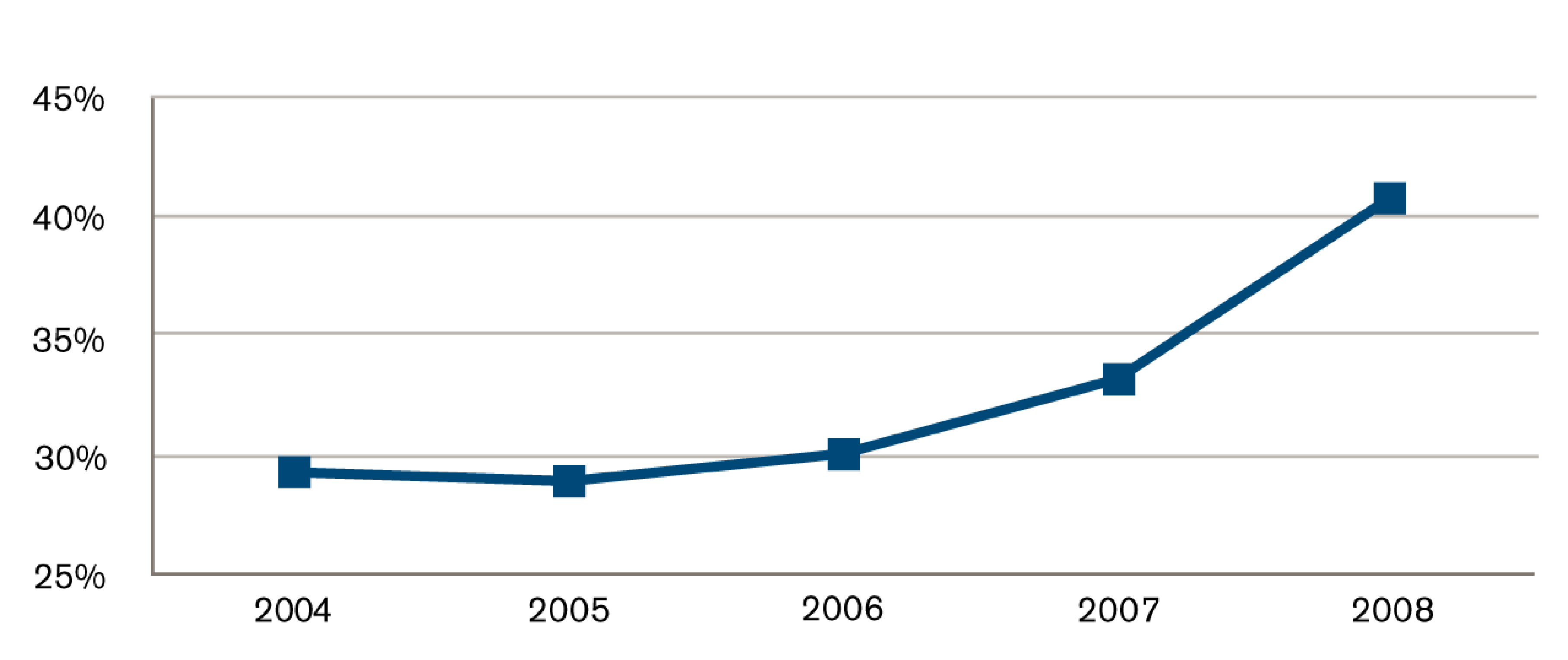
Increases in Fixed Income and Other Allocations

- 31 of the 100 companies had increases in their fixed income allocation by more than 10% (compared with 7 in 2007)
  - 5 companies had increases in fixed income allocation by over 20%
- 27 companies had increases of more than 5% to “other” asset classes (compared with 9 in 2007)
- Other asset classes - real estate, private equity, hedge funds, and cash equivalents

Asset Allocation – Fixed Income



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What to Expect in 2009 and Beyond

- Impact of 2008 losses in funded status
  - Record increase in pension expense for 2009
  - Significant increases in contribution requirements for several years
  - Possible restrictions on benefits
  - More plan freezes
- Plan sponsors need to set appropriate investment and funding policies using:
  - Projections of funded status, expense and contribution requirements under multiple scenarios
  - Comprehensive asset-liability and risk budgeting study
  - Range of strategies to help mitigate short-term risks and optimize returns to reduce the plan’s long-term costs

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What to Expect in 2009 and Beyond

How does one manage their pension through the current economic crisis?

- Adhere to a long-term investment policy
  – Rebalance portfolios incrementally toward target equity allocations with new cash contributions
  – Buying opportunities typically occur before recovery is evident
- Match the duration of the fixed income portfolio with the duration structure of the liabilities while credit spreads are at historically high levels.
  – Will help to hedge potential interest rate risks when credit spreads narrow to historical norms

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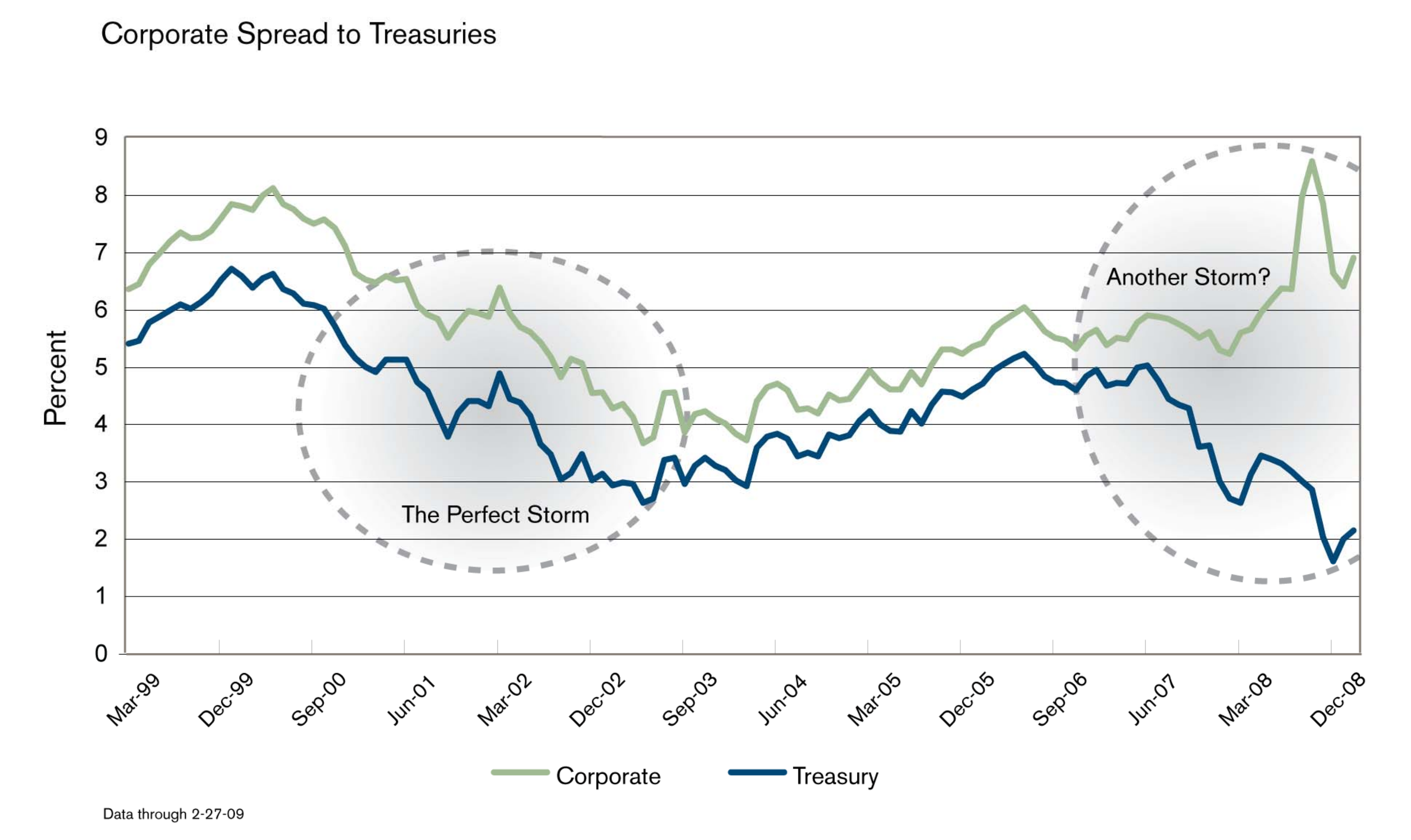
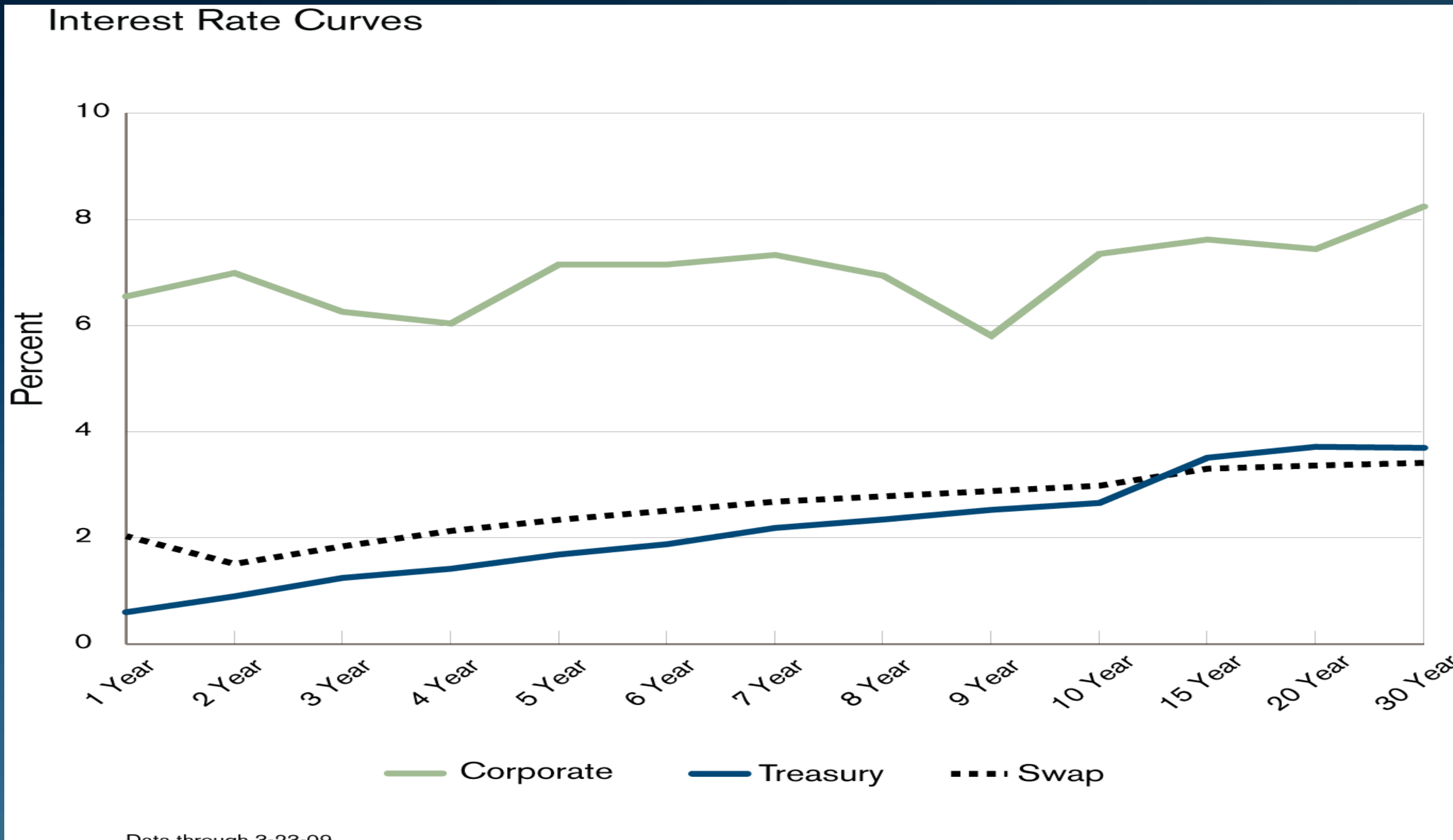
What to Expect in 2009 and Beyond



What to Expect in 2009 and Beyond



What to Expect in 2009 and Beyond

Plan sponsors should

- Balance long-term goals with short-term risks that can affect cash flow, balance sheet, earnings
- Employ risk management practices including liability-driven investing and risk budgeting techniques
- *De-risk* pension plans when funded status improves over time
  - Fixed income allocations and durations should better align with the behavioral characteristics of the plan liabilities
  - Reduce equity allocations
  - Equity allocations should continue to be diversified into a broad array of alternative investments including: real estate, hedge funds, private equity, commodities, and infrastructure

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Questions?

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