27th International Congress of Actuaries



Pensions and economic values

Cliff Speed Bacon & Woodrow

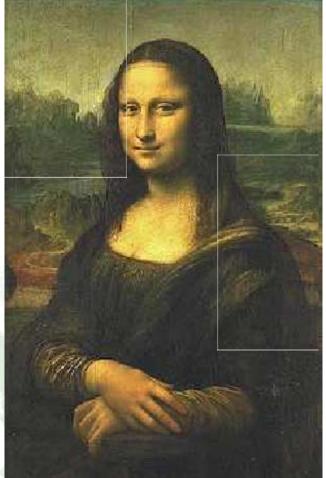
New Millennium. New Challenge for Actuarie

Three stages of information

Actuarial valuations values of liabilities and assets

Asset liability modelling interaction: liabilities vs investments

Model economic value interaction: pension vs sponsor



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Legally ...



But economically ...

Contributions COM Pension **Surplus**

Economic value modelling

- Models pension within company
- Identifies all stakeholders
- Values their stakes allowing for risk
- Uses market methods and no "free lunches"

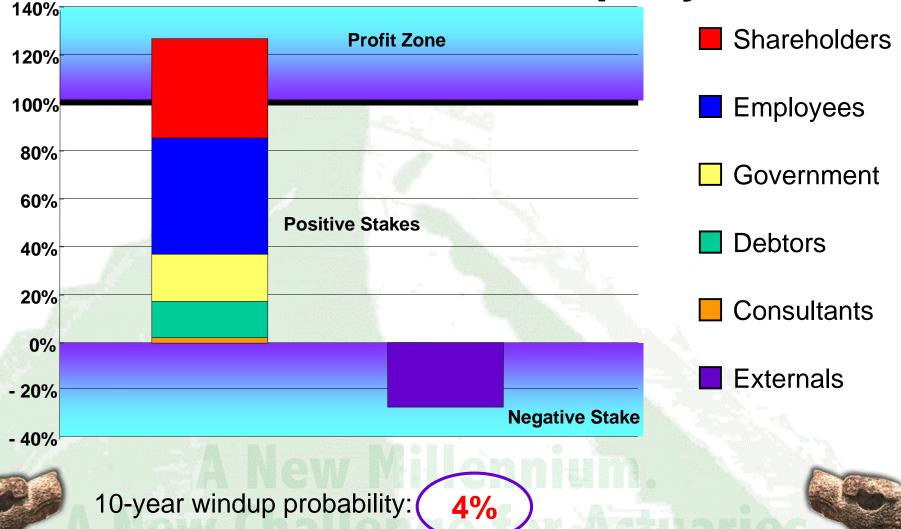
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Cash flows are the key

- Identify all company and scheme cash flows
- Project for 10 years
- Apportion to stakeholders
- Discount to get value of stakes
- Check: Total = Company + Pension (MV)

Results – XYZ company



Now do strategy testing

Base strategy \Leftrightarrow Stakes A

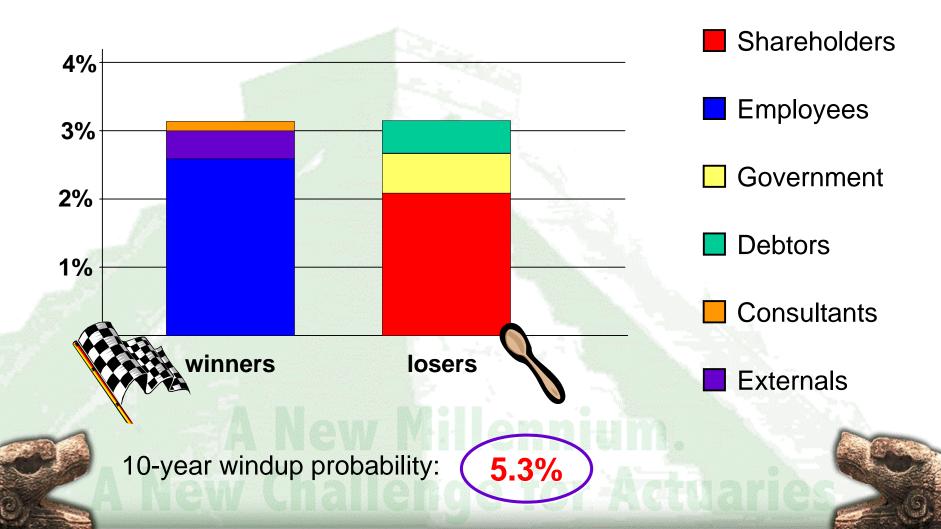
New strategy ⇔ Stakes B

- compare change between Stakes A and Stakes B
- to give winners and losers
- and effect on credit rating

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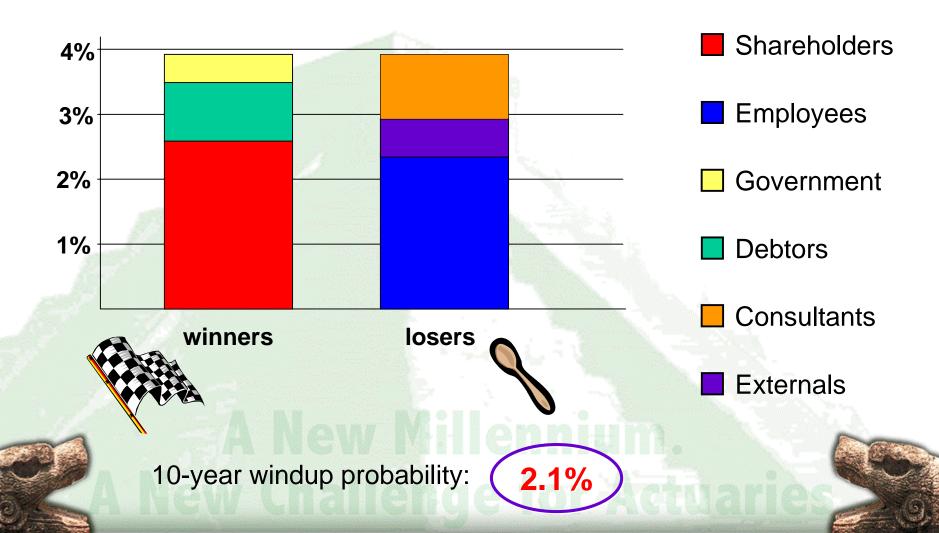
What if ...

Increase pace of funding





Invest more in bonds



EVM Strengths

- It is objective
 - "marked to market"
 - no actuarial judgement
- Automatic allowance for financial market risks
- It deals with complicated options and interactions

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Conclusion

- Pensions are debt
 - sponsor's financial strength important
- Investing in a company
 - solvency of pension scheme is important
- Pension scheme is
 - part of the capital structure
 - often largest tranche of debt
 - relevant to valuation of debt and equity

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