

An actuary's perspective on the current funding crisis

Johnny Cashman

Fellow of the Society of Actuaries in Ireland

Outline

- State Regulation
 - Actuarial Funding Certificates
 - Funding Proposals
 - Inter-valuation Requirements
 - Section 49 (3) Applications
- New Pensions Board Guidelines
- Investment Strategy Case Study
- Options for Trustees & Employers
- Contingent Assets

*From Mount
Street with Love*

State Regulation

State Regulation

- Triennial Actuarial Funding Certificates
- Funding Proposals arising from triennial AFCs
- Annual Actuarial Statements
- Funding proposals arising from negative Actuarial Statements where a Funding Proposal **is not** currently in place
- Funding proposals arising from “Off-Track” Actuarial Statements where a Funding Proposal **is** currently in place
- Section 49(3) Applications

Actuarial Funding Certificates (AFCs)

- Under Pension Act 1990 (PA90)
 - AFCs must be submitted every 3 years to the Pension Board
 - No later than 9 months after its effective date
 - Purpose is to clarify whether the scheme's assets would cover its liabilities had the scheme been wound up at the effective date

Funding Proposal arising from Negative Triennial AFC

- If the Actuarial Funding Certificate is Negative
 - A Funding Proposal must be submitted to the Pension Board, with the AFC to which it relates
- **A Funding Proposal is designed to restore the scheme's solvency by the next AFC date (i.e. 3 years from its effective date)**
- In certain circumstances the Pension Board may allow a longer period than 3 years to rectify the under-funding of the scheme

Funding Proposal arising from Negative Triennial AFC

- Funding Proposal must be signed by Scheme Actuary, Employer, Scheme Trustees
- Normally the Funding Proposal must be submitted to Pension Board within 9 months of its effective date
- However, **Guidelines 3 October 2008 gives 18 months for Funding Proposals in respect of AFCs with effective dates between 31/12/2007 and 31/12/2008 inclusive**
- Normal Deadline applies for Funding Proposals in respect of AFCs with effective dates on or after 01/01/2009
- Note: AFCs must still be submitted within 9 months of effective date extended reporting period refers to Funding proposals only

Funding Proposal arising from Negative Triennial AFC

- AFCs must still be submitted within 9 months of their effective date
- The extended reporting period refers to Funding Proposals only
- The Funding Proposal i.e. the contributions payable commences from the effective date of the AFC which gives rise to the Funding Proposal

Funding Proposal arising from Negative Triennial AFC

- If AFC at 01.01.08 is negative.
- AFC must be submitted to Pensions Board by 30.09.08.
- Funding proposal must be submitted to Pensions Board by 30.06.09.

- If AFC at 01.01.09 is negative.
- AFC must be submitted to Pensions Board by 30.09.09.
- Funding proposal must be submitted to Pensions Board by 30.09.09.

Die Another Day

Inter-valuation Requirements

Inter-valuation Requirements

Negative Actuarial Statement where no Funding Proposal currently in place

- Each Trustee Annual Report (TAR) must contain an Actuarial Statement
- Actuarial Statement states whether the Actuary was satisfied at the last day of the reporting period that the scheme would satisfy the Funding Standard
- If the Actuarial Statement is negative, the scheme must prepare & submit an AFC to the Pension Board within 12 months of the end of the reporting period
- Effective date of this AFC must be no earlier than last day of the reporting period
- If the AFC is negative it must be accompanied by a funding proposal

Inter-valuation Requirements

Negative Actuarial Statement where no Funding Proposal currently in place

- Guidelines 3 October 2008 gives 18 months for Funding Proposals in respect of AFCs with effective dates between 31/12/2007 and 31/12/2008 inclusive
- Normal Deadline applies for Funding Proposals in respect of AFCs with effective dates on or after 01/01/2009 i.e. 12 months after the effective date of the negative actuarial statement
- Note: AFCs must still be submitted within 12 months of effective date. The extended reporting period refers to Funding Proposals only

Inter-valuation Requirements

Negative Actuarial Statement where no Funding Proposal currently in place

- If no Funding Proposal is currently in place
- If Actuarial Statement at 31.12.07 is negative
- AFC with effective date not earlier than 31.12.07 must be submitted to Pensions Board by 31.12.08
- Funding Proposal must be submitted to Pensions Board by 30.06.09.

Inter-valuation Requirements

Negative Actuarial Statement where no Funding Proposal currently in place

- If no Funding Proposal is currently in place
- If Actuarial Statement at 31.12.08 is negative
- AFC with effective date not earlier than 31.12.08 must be submitted to Pensions Board by 31.12.09
- Funding Proposal must be submitted to Pensions Board by 30.06.10 if AFC effective date is 31.12.08
- Funding proposal must be submitted to Pensions Board by 31.12.09 if AFC effective date is 01.01.09 or later

*You Only Live
Twice*

Existing Funding Proposal
Off-Track

Inter-valuation Requirements

“Off-Track” Actuarial Statement where a Funding Proposal is in place

- If a Funding Proposal is already in place (either a 3-year or later date), the TAR must contain an actuarial statement as to whether the Funding Proposal is “on-track” at last day of the reporting period
- If “on-track”:
 - Statement is Positive
 - No further action is required

Inter-valuation Requirements

“Off-Track” Actuarial Statement where a Funding Proposal is in place

- If not “on-track”:
 - Statement is “Off-track”
 - The scheme must submit an AFC and revised Funding Proposal to the Pension Board within 12 months of the end of the reporting period
- Effective date of AFC must be between last day of reporting period and the day before the last day of subsequent reporting period
- If revised proposal is envisaged to cover a period in excess of 3 years, a new/further application to the Pension Board will be required under s49(3) of PA90

Inter-valuation Requirements

“Off-Track” Actuarial Statement where a Funding Proposal is currently in place

- If a Funding Proposal is currently in place
- If Actuarial Statement at 31.12.07 is “off-track”
- AFC with effective date not earlier than 31.12.07 must be submitted to Pensions Board by 31.12.08
- Revised Funding Proposal must be submitted to Pensions Board by 30.06.09.

Inter-Valuation Requirements

“Off-Track” Actuarial Statement where no Funding Proposal currently in place

- If a Funding Proposal is currently in place
- If Actuarial Statement at 31.12.08 is “Off-Track”
- AFC with effective date not earlier than 31.12.08 must be submitted to Pensions Board by 31.12.09
- Revised Funding Proposal must be submitted to Pensions Board by 30.06.10 if AFC effective date is 31.12.08
- Revised Funding Proposal must be submitted to Pensions Board by 31.12.09 if AFC effective date is 01.01.09 or later

Section 49(3) Applications

- Pension Board can specify a date later than 3 years from the effective date of the AFC giving rise to the need for the Funding Proposal, for restoration of solvency
- Note: Triennial AFCs are still required when a Funding Proposal with a specified date of longer than three years is in place
- Various requirements set out in guidelines on S49(3) applications in February 2009

*Never Say Never
Again*

New Pensions Board Guidelines

Changes to Supervision of DB schemes

- longer periods for recovery plans i.e. **greater than ten years**
- replacement recovery plan can extend **beyond the end date of the original plan**
- **voluntary employer guarantees**

Changes to Supervision of DB schemes

The Pensions Board will reject recovery plans which fail to demonstrate an appropriate investment approach

New Guidelines

Pensions Board will pay particular attention to:

- Contribution rate v 10-yr proposal level;
- Guarantees from employer;
- Investment strategy;
- Exceptional circumstances

New Guidelines - Term

- Beyond original effective date
- Reasons why the pre-existing funding proposal is no longer expected to meet its objective
- Average future working life of the active members

New Guidelines – Investment Strategy

- no single "best" investment strategy
- investment strategy is the responsibility of trustees
- evidence that trustees have "fully considered" the effect of potential losses on the security of member benefits.
- Pensions Board will "have regard to" issues including the matching of liabilities with appropriate assets

New Guidelines - Minimum Contributions

- The Board expects that the proposed contribution rate (or amount) is at least equal to the “ongoing” contribution rate i.e. the aggregate of
 - (a) the “normal” contribution rate (or amount) necessary to fund the benefits under the scheme if the scheme had neither a deficit nor surplus, and
 - (b) the contribution rate (or amount) necessary to fund any deficiency in the scheme over the working life of its active members.

New Guidelines – Salary Increases

Where **failure to meet standard** (or the reason for an existing funding proposal going off-track) is **wholly or partly due to salary increases**, the Board is only likely to consider granting an extension **where the increases could not have been reasonably foreseen at the previous valuation.**

The Board will not normally consider applications unless the salary increases are **reasonably spread among the employees** (as distinct from the scheme members).

New Guidelines – Uninsured Death Benefits

Where **failure to meet the standard** (or the reason for an existing funding proposal going off-track) is **wholly or partly due to the payment of uninsured death or disability benefits**, the Board is only likely to consider granting an extension in **exceptional circumstances**, and the **Trustees** will be **required to demonstrate why** the circumstances of their scheme should be considered as **exceptional**.

The Board will also require an explanation of **why the benefits had been uninsured**, and whether there has been **any recent change to the scheme's insurance practice**.

New Guidelines – Variable Contributions

Pensions Board will consider variable contribution applications

- **initial rate of contribution calculated as for any ‘fixed contribution’ funding proposal**
- **contribution may subsequently be recalculated by the scheme actuary**
- **contribution rate paid by the employer may then be varied accordingly, without the need for the Board’s consent.**
- **Changes in contributions must be notified to the Board**
- **Contributions cannot be reduced below initial rate of contribution without a new application to the Board.**

Regulation

- Large number of schemes and trustees with 98% of schemes having less than 50 members
- Most trustees are non-professional
- Relies on Notification of Solvency position to Pensions Board and to Members
- Normally there is no Debt on the Employer on Wind-up
- No Insolvency Insurance Fund
- No prescription of investment strategy
- Target Solvency only 100%

Casino Royale

Investment Strategy Case Study

Case Study

- 31st December 2006
- Minimum Funding Standard
- 55% of the liability was in respect of pensions in payment
- 45% of the liability was in respect of active and deferred members' liabilities
- Coverage for actives and deferreds 131%
- Asset split 73% Equities, 9% Property, 13% Fixed Interest, 5% Cash

Case Study

- Quite mature scheme
- Asset allocation out of line with liability profile
- Why?
- Seeking Equity Risk Premium
- Make Cost of Scheme Affordable
- Strong Employer Covenant so short-term volatility acceptable

Case Study

- Maintained asset split up to 31st December 2008. Equities 69%(73%), Fixed Interest 18% (13%).

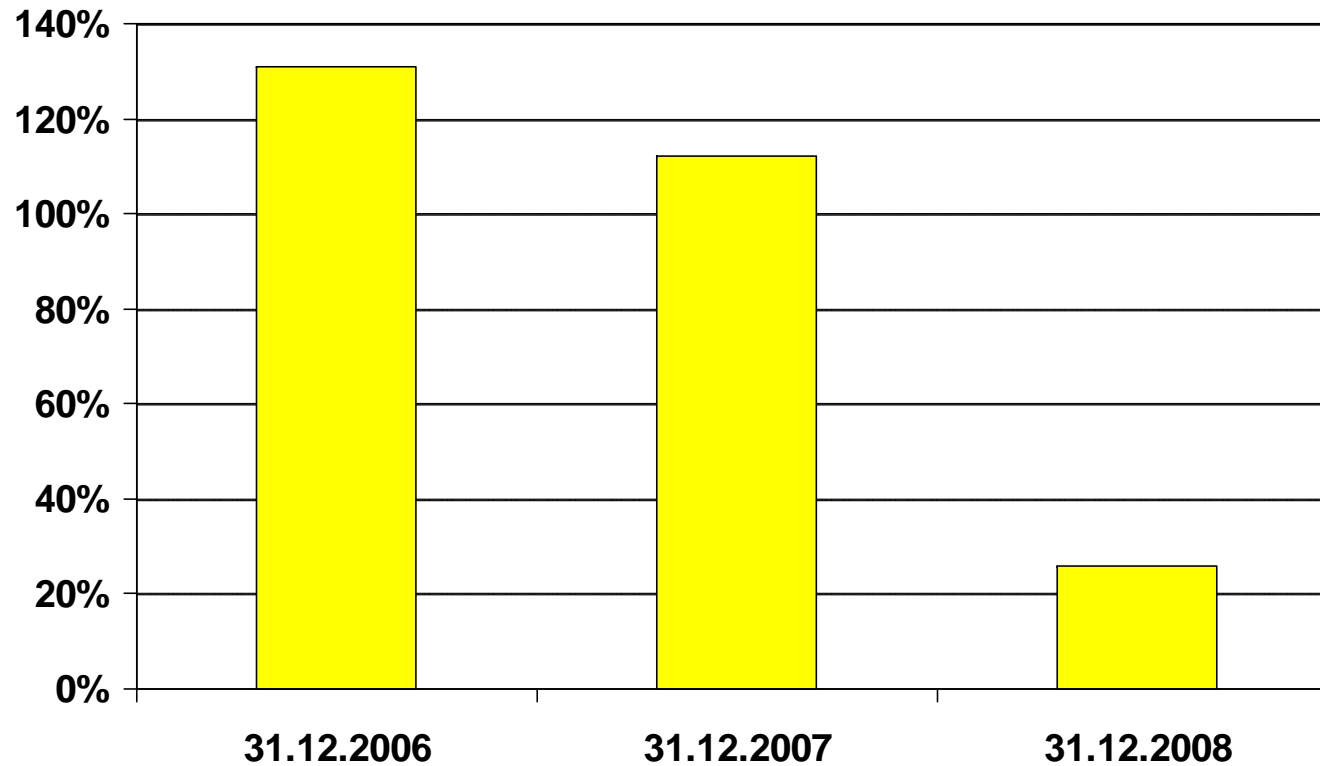
Coverage for Active & Deferred Liability

31.12.06	131%
31.12.07	112%
31.12.08	26%

Case Study

actual investment strategy

Coverage % for Actives and Deferreds



*Why Gentlemen
Prefer Bonds –
Government Bonds*

Alternative Investment Strategies

Case Study

- Alternative Investment Strategy 1
- Pensioner liability 100% Bonds; Active and Deferred liability 100% Equity.

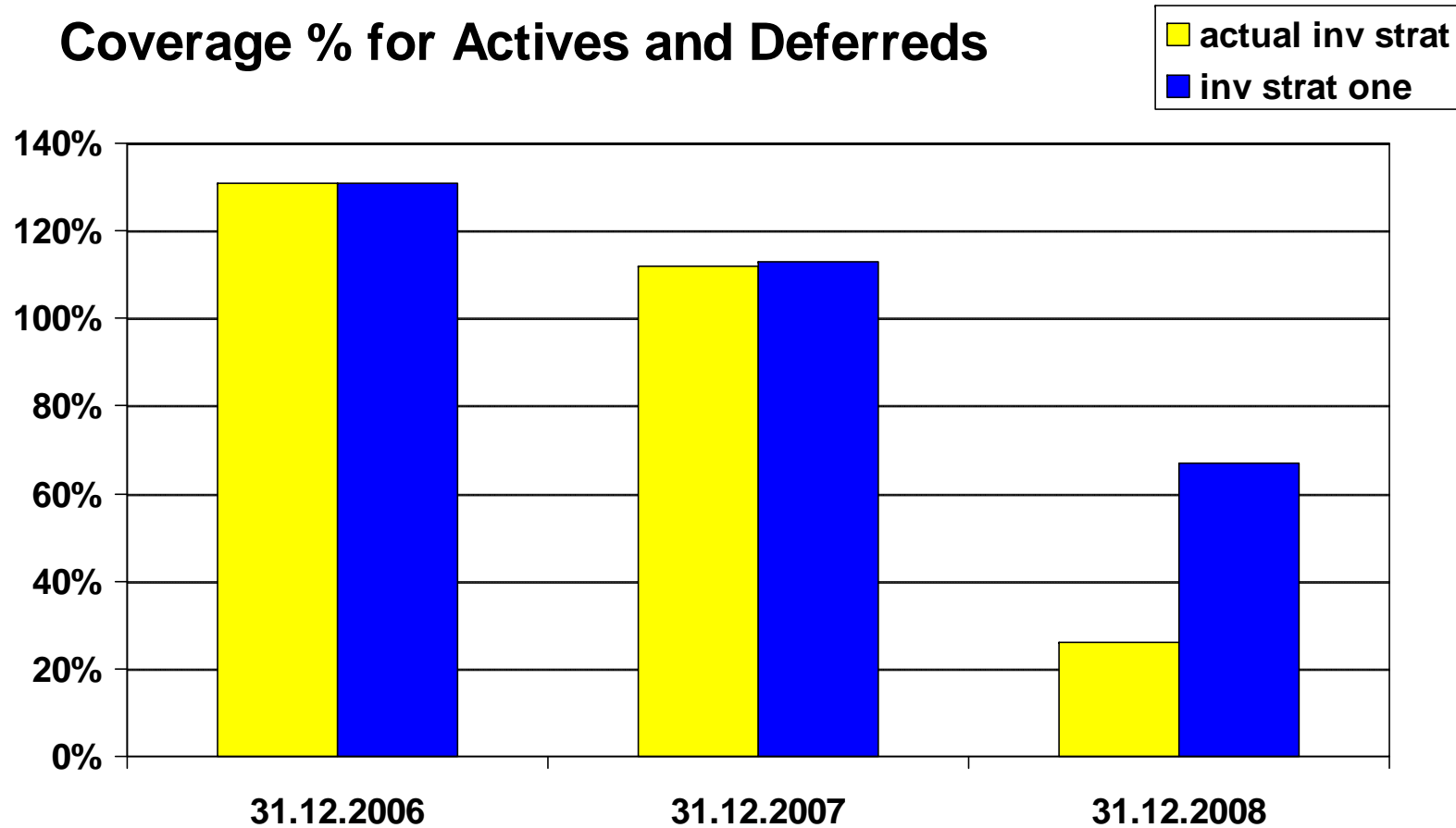
Coverage for Active & Deferred Liability

	Investment Strategy 1	Actual Strategy
31.12.07	113%	112%
31.12.08	67%	26%

Case Study

investment strategy one

Coverage % for Actives and Deferreds



Case Study

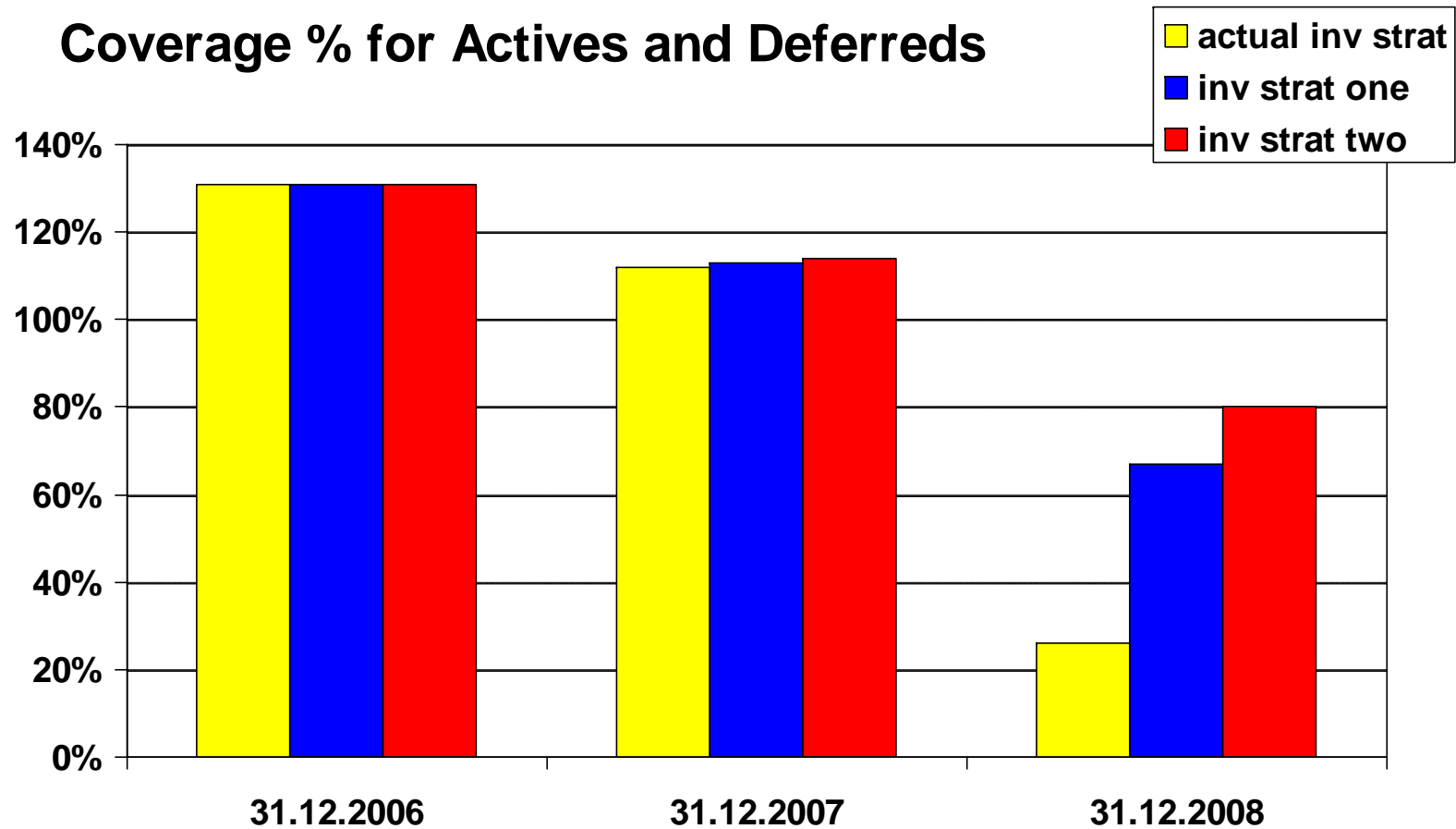
- Alternative Investment Strategy 2
- Pensioner liability 100% Bonds; Active and Deferred liability 75% Equity, 25% Bonds.

Coverage for Active & Deferred Liability

	Investment Strategy 2	Investment Strategy 1	Actual Strategy
31.12.07	114%	113%	112%
31.12.08	80%	67%	26%

Case Study

investment strategy two



Case Study

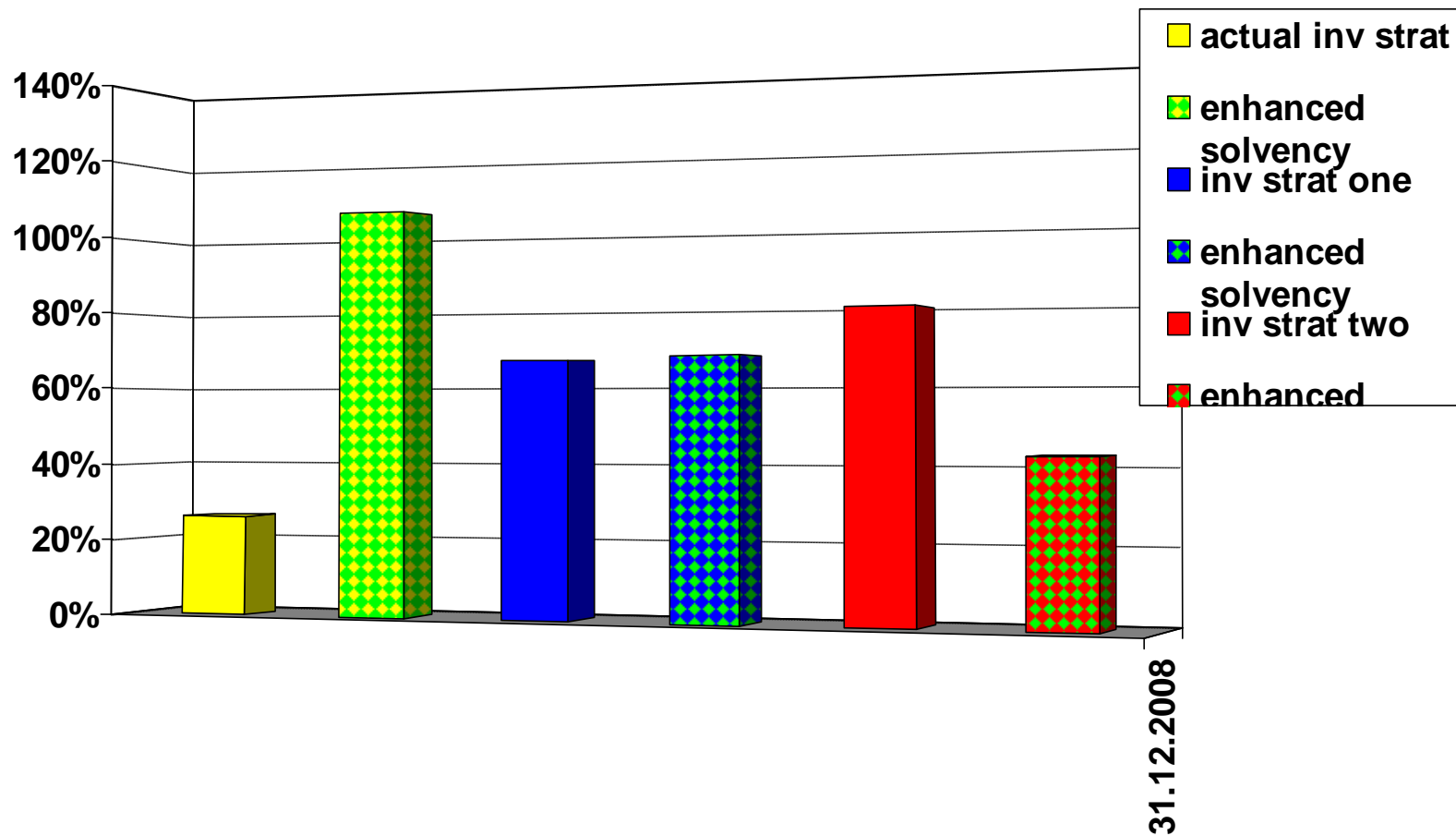
What if Equity returns had been 7.75% p.a. instead of -3.6% (2007) and -44.0% (2008)?

Coverage for Active & Deferred Liability

	Investment Strategy 2	Investment Strategy 1	Actual Strategy
31.12.07	119%	122%	131%
<i>Actual returns</i>	<i>114%</i>	<i>113%</i>	<i>112%</i>
31.12.08	123%	125%	132%
<i>Actual returns</i>	<i>80%</i>	<i>67%</i>	<i>26%</i>

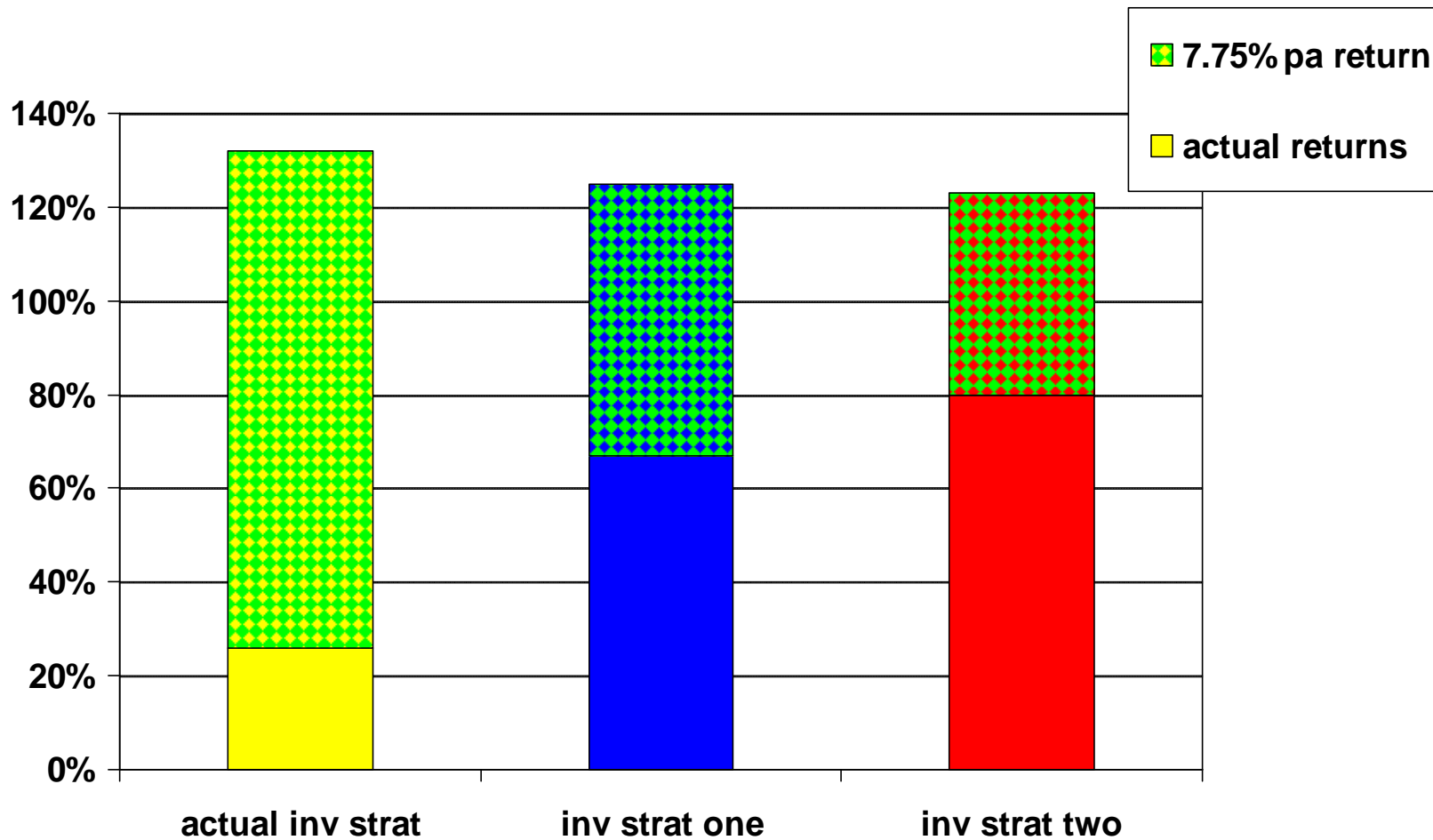
Case Study

equity returns 7.75% p.a.



Case Study

equity returns 7.75% p.a.



Case Study

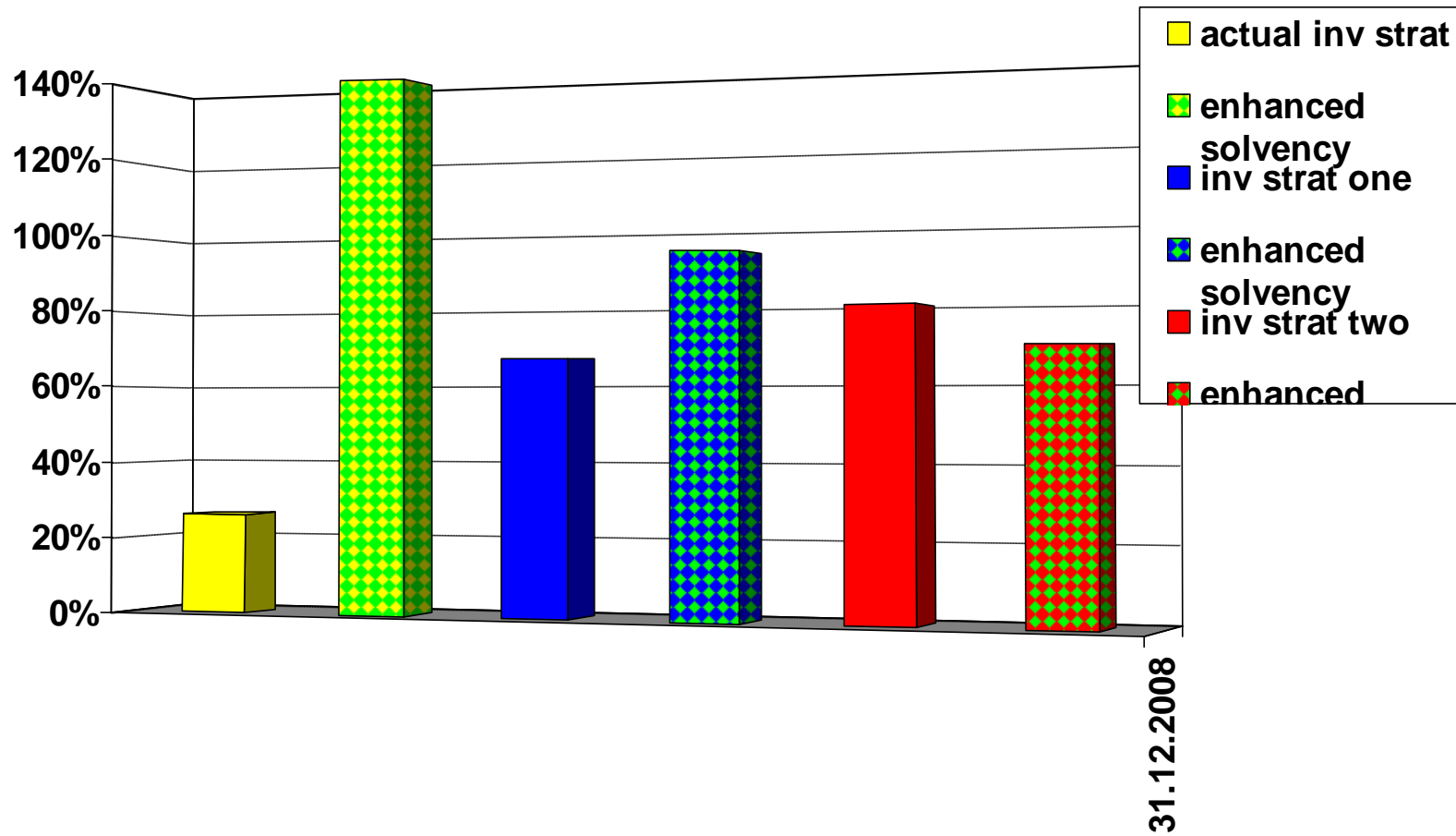
What if Equity returns had been 25% p.a. instead of -3.6% (2007) and -44.0% (2008)?

Coverage for Active & Deferred Liability

	Investment Strategy 2	Investment Strategy 1	Actual Strategy
31.12.07	132%	139%	163%
<i>Actual returns</i>	<i>114%</i>	<i>113%</i>	<i>112%</i>
31.12.08	150%	161%	201%
<i>Actual returns</i>	<i>80%</i>	<i>67%</i>	<i>26%</i>

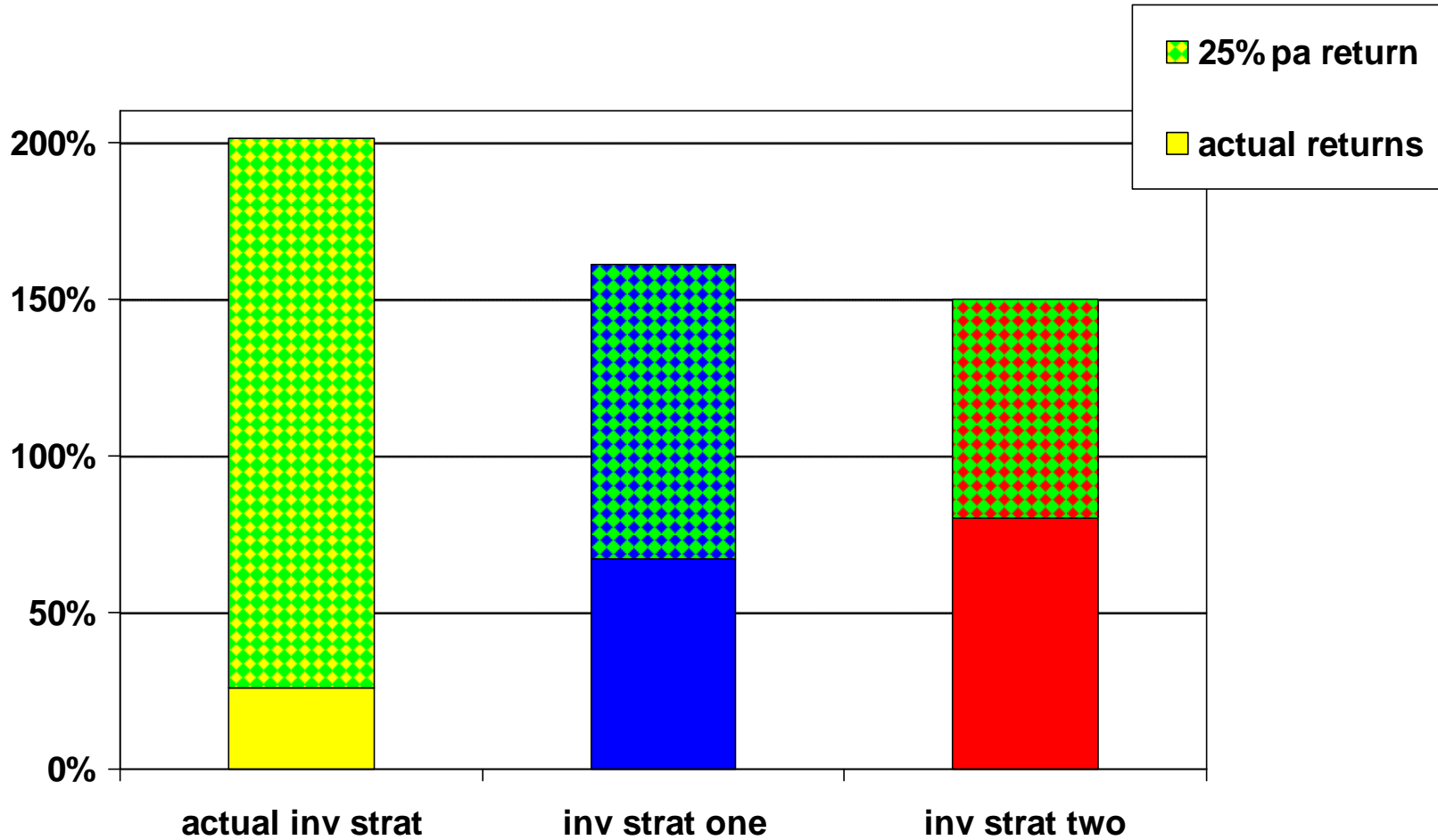
Case Study

equity returns 25% p.a.



Case Study

equity returns 25% p.a.



Case Study

- When the Trustees considered the asset allocation at 31.12.06 the annual funding contribution required as a result of pursuing Investment Strategy 2 was approx. 9 times higher (i.e. an extra €5.6m p.a.) than that required under the current 80%/20% Equity/Bond split.
- When the Trustees considered the asset allocation at 31.12.07 the annual funding contribution required as a result of pursuing Investment Strategy 2 was approx. 4 times higher (i.e. an extra €6.0m p.a.) than that required under the current 80%/20% Equity/Bond split.
- Assumed an Equity Risk Premium of 3% and 2.8% per annum above Bonds respectively

What am I saying?

- Less volatility available but at a price
- Price depends on equity risk premium

*The World is not
Enough*

Trustees' Considerations

Trustees' Considerations

- What level of risk is tolerable?
- How secure is the Sponsoring Employer?
- How strong is State support on failure?
- Should Benefits be scaled back to reflect investment risk appetite and the employer's ability to contribute?

Live & Let Die

Options to Redress Deficits

Redress Options

- Immediately redress the deficit
- Fund the deficit over three years
- Fund the deficit over ten or more years
- Scale back future benefits
- Scale back past benefits
- Wind-up in deficit

- Contingent Assets

*A Quantum of
Solace*

Contingent Assets

What are Contingent Assets?

- A contingent asset is an asset, the value of which depends on the occurrence of a specific future event. Examples include:
 - An asset (e.g. a letter of credit or cash held in an escrow account) payable to the scheme in the event of employer insolvency
 - An employer debt payable to the scheme in the event of a scheme wind-up or the funding level falling below a particular level
- Contingent assets may be considered when a scheme fails to meet the funding standard.
- Contingent assets should only be considered where other assets are not available to the trustees. This may occur where the scheme sponsor does not have sufficient assets available to contribute to the scheme, or is not willing to contribute at the level required.

Contingent Assets

An employer may be unwilling to contribute to a scheme

- to avoid inefficient use of **capital**
- because it can't take back any **surplus**
- because it may not receive any immediate **tax** relief on some of the contribution
- it will cede **control** over the investment strategy to the trustees

Contingent Assets

- **Fully Funded** e.g. Escrow Account,
Pledged asset
- **Partially Funded** e.g. Letter of credit
- **Unfunded** e.g. Parent Company
Guarantee

Pensions Board and contingent assets

- The scheme actuary may attribute the value which the asset would have if the contingency of a scheme wind-up were to occur.
- Funding Standard position allow for any restrictions imposed by the **self investment** and **concentration of investment** rules under legislation.
- The asset must have a **measurable value**
- The asset must be **definite and solid**
- The asset (or availability of it) must exist for a **minimum period**

Issues surrounding Escrow Accounts

- Timing of review of Minimum Funding Standard deficit needs to be agreed
- Impact on level of contingent assets arising from this review needs to be agreed in advance
- Investment strategy of escrow account
- Volatility
- What parties fund the escrow account?
 - Local Company?
 - Shareholders?
- Reason why such funding is possible and not simply making additional contributions to the Fund needs to be carefully explained to all parties

Estimated cost of providing a contingent asset

Explicit costs

- Cost of external banking/insurance arrangements estimated at 1% to 3% of the contingent asset required per annum at least. Specific advice required in this area as issues such as banking covenants and securitisation assets will have a major impact.

Implicit costs

- Impact on other banking/loan arrangements
- Reduction in expected return on capital in the business due to constraints on investment freedoms

Double Oh-No!
The End

Conclusion

Conclusion

- New Guidelines - Will they work?
- Take some pressure off by extended time period
- Greater focus on investment strategy
- Greater focus on suitability of DB provision for many Irish schemes
- Schemes are winding-up with deficits
- DC schemes more prevalent

Any Questions?

Appendices

Changes to Supervision of DB schemes

- The Minister for Social and Family Affairs announced some changes to the supervision of defined benefit schemes on Friday 19th December 2008 as follows:
- The Board will allow longer periods for recovery plans (i.e. **greater than ten years**), in appropriate circumstances
- The Board will allow the term of a replacement recovery plan to extend **beyond the end date of the original plan** where the scheme is part-way through a previous recovery plan but is off track due to investment losses
- The Board will take into account **voluntary employer guarantees** in approving recovery plans

Changes to Supervision of DB schemes

- To ensure that these extensions are not seen as a weakening of supervision, the Board will reject recovery plans which fail to demonstrate an appropriate investment approach
- The operation of these proposed changes will be reviewed by the Pension Board no later than 1st January 2011.
- Minister Hanafin and her officials are in ongoing contact with the Board on the various issues relating to defined pension schemes and she has asked the Board keep her informed of the effectiveness of these new measures.

New Guidelines

- **The Pensions Board** revealed when considering whether to extend an existing funding plan, or agreeing a plan of more than 10 years, it **will pay particular attention to** the following issues:
- The extent to which a longer plan reduces the **contribution rate** below the level required for a 10-year proposal;
- The existence and quality of any enforceable **guarantees from the employer**;
- The proposed **investment strategy** of the fund, and the level of exposure to investment risk over the proposed funding plan, and
- Any **exceptional circumstances** setting the scheme apart from other under-funded scheme.

New Guidelines

- The Board may, at its discretion, allow the term of a replacement funding proposal to extend beyond the effective date of the original funding proposal. The documentation supplied to the Board must set out the reason or **reasons why the pre-existing funding proposal is no longer expected to meet its objective.**
- In any event, the Board will only consider an extended period longer than the **average future working life of the active members** where there are no active members or where the active members have a relatively short future average working life and comprise only a minority of the liabilities of the scheme.

New Guidelines

- The Pensions Board admitted there is **no single "best" investment strategy**, and stressed the setting of a pension fund's **investment strategy is the responsibility of trustees**, while the Board only ensures compliance with regulations.
- That said, it warned investment strategy is a "relevant consideration in deciding whether or not to grant an application", and confirmed it would look for **evidence that trustees have "fully considered"** the investment strategy, and **the effect of potential losses on the security of member benefits.**
- Trustees must demonstrate the proposed investment strategy is "grounded in sound risk management and investment principles", and the **Pensions Board will "have regard to" issues including the matching of liabilities with appropriate assets** and the trustees' consideration of the implications of possible investment losses or increased liabilities.

New Guidelines

- **The Pensions Board is willing to consider applications where the proposed contribution rate is variable**
- The terms under which the Board will consider the later date and which must apply to the operation of such a funding proposal would include:
 - i) The **initial rate of contribution**, including the employer's contribution, would be **calculated as for any 'fixed contribution' funding proposal**, and the existing restrictions on weighting contributions towards the end of the period would apply. This rate should be specified in the funding proposal with a proviso such as "or any such higher rate calculated by the scheme actuary and agreed by the employer.
 - ii) The required rate of **contribution**, including the employer's contribution, **may subsequently be recalculated by the scheme actuary** from time to time. Subject to iii) below, the **contribution rate paid by the employer may then be varied accordingly, without the need for the Board's consent**. This revised rate must follow the same structure and be proportionate to the old rate: back-ending of the revision will not be allowed. **Changes in contributions must be notified to the Board.**
 - iii) **Contributions cannot be reduced below** the level of the **initial rate of contribution** referred to in i) above, **without a new application to the Board.**

New Guidelines

- **Notifications** to the Board of **contribution rate increases** must be **accompanied by confirmation by the scheme actuary** that the requirement for the **increase was due wholly or mainly to either or both** of the following:
 - (a) the **performance of relevant markets** in relation to investments made with the resources of the scheme and that the performance of those markets in relation to those investments is not inconsistent with the performance generally of relevant markets for investment in the same period; **or**
 - **(b) one or a number of the following factors:**
 - i) adverse experience relating to **price inflation or rates of interest** underlying the actuarial values over the relevant period;
 - ii) adverse experience relating to **increases in pensionable earnings;**
 - iii) adverse experience relating to the **payment of benefits other than long service benefits.**
- In the **trustee annual report**, the scheme **actuary** will be making a **statement** as to whether or not the proposal is **on track**. The actuary can **only** do so if the **contributions have been increased as required**.

Pensions Board and contingent assets

- The Pensions Board is satisfied that a contingent asset, that would be available to the scheme at wind-up, is a resource of the scheme and therefore the scheme actuary is entitled to attribute to a contingent asset the value which the asset would have if the contingency of a scheme wind-up were to occur.
- However, in making any valuation for Funding Standard purposes, it will be necessary in making an assessment of the Funding Standard position to allow for any restrictions imposed by the self investment and concentration of investment rules under legislation.

Pensions Board and contingent assets

- ***The asset must have a measurable value*** – the trustees and the scheme actuary will need to place a value on the contingent asset for the purpose of calculating the resources of the scheme in order to determine the scheme's funding position. For some contingent assets this may be straightforward (such as money set aside in an account). For other assets, obtaining a value may be more complex and may require the input of specialist advisers. Depending on the nature of the contingent asset, the actuary may require the trustees to provide a recent independent assessment of the value of the asset by an appropriate professional. The scheme actuary and trustees and other relevant advisers should also consider other factors that may make it prudent to reduce the value being placed on the contingent asset. For example, it may be appropriate to allow for counterparty risk if an asset is provided by a financial institution rated below AA-.

Pensions Board and contingent assets

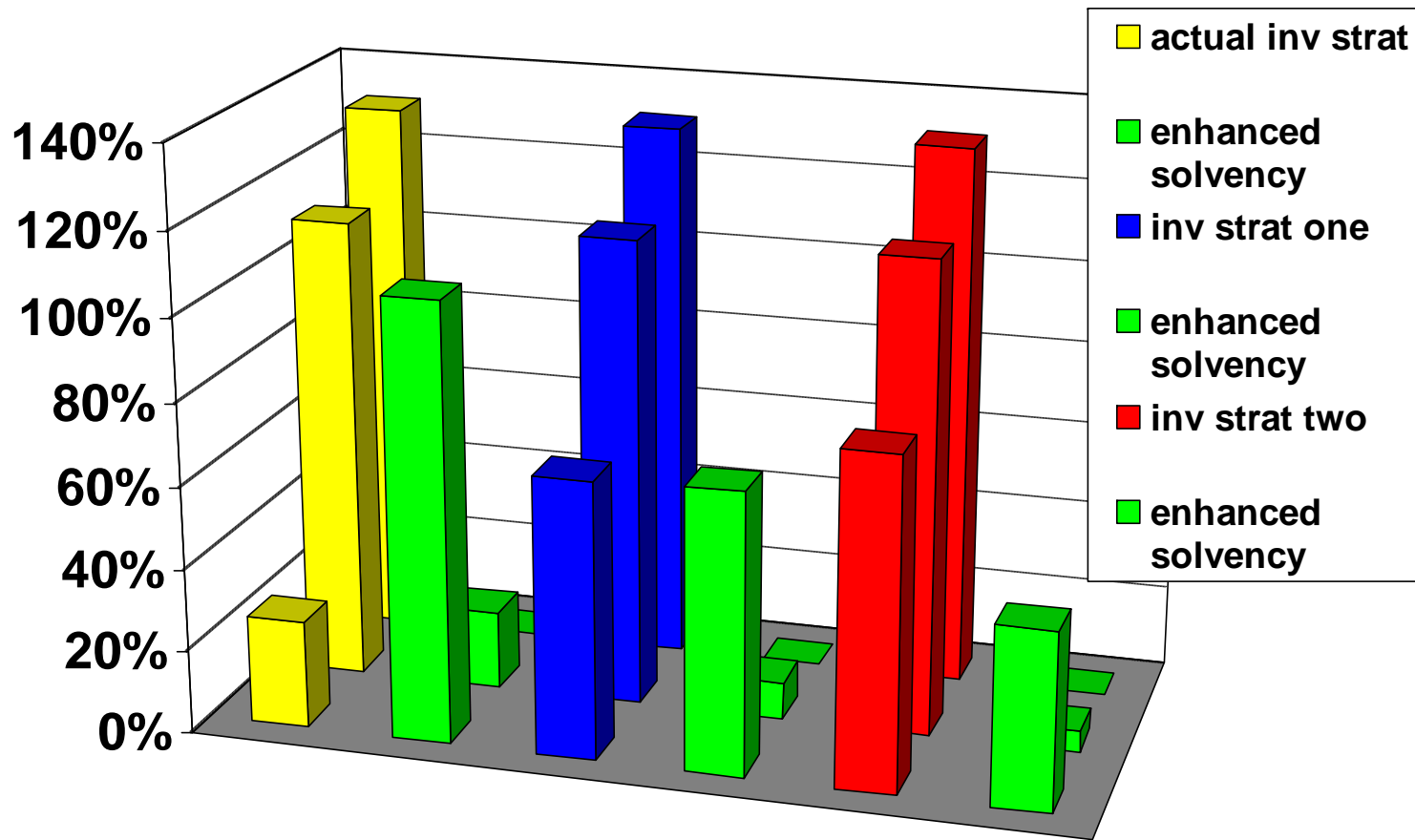
- ***The asset must be definite and solid*** - the trustees must be satisfied that the asset will be available if the contingent event occurs. The trustees should ensure that any agreement to provide a contingent asset is legally enforceable and should specifically address the issue of the early termination of the agreement by the sponsor prior to the minimum specified period. They should also ensure they are aware of any other interests in the asset that exist prior to their agreement. They should ensure that no parties take an interest in the asset that affects the scheme's interest. There may be occasions where an employer provides the trustees with a commitment to honour any liabilities in a wind-up situation. While such a commitment may be of comfort to the trustees it, on its own, would not be real and solid enough to place a value on.

Pensions Board and contingent assets

- ***The asset (or availability of it) must exist for a minimum period***– In circumstances where the absence of the contingent assets would result in the failure of the scheme to meet the Funding Standard, the contingent asset must at least be in place for a period of three years. Trustees should review the contingent asset to ensure that it continues to be appropriate over the period it is in place. In agreeing to a contingent asset with a fixed term, the Trustees should carefully consider the impact on the funding position when the contingent asset ceases to be in place.

Case Study

equity returns 7.75% p.a.



Case Study

equity returns 7.75% p.a.

