AVIVA plc
Impact of European Embedded Value (EEV)

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Disclaimer

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Agenda

- Evolving financial reporting journey
- Headline messages
- Key impacts on the Group's results and KPIs
- Explanation of key EEV principles affecting Aviva
- Q&As

Evolving financial reporting landscape

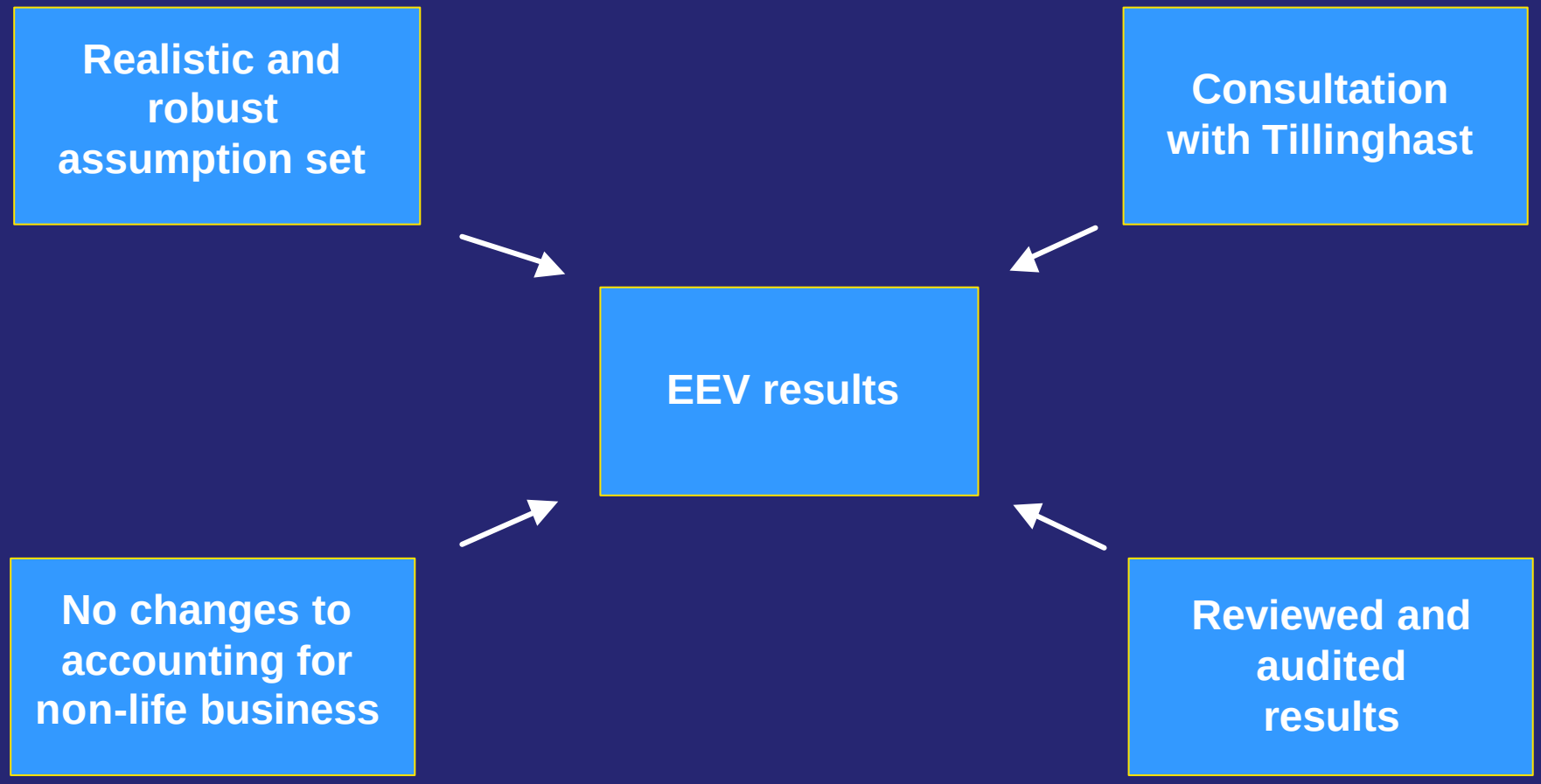
European Embedded Value Principles

- Why EEV?
  - Based on traditional embedded value which is commonly used and is well established and understood
  - Addresses criticisms of traditional embedded value:
    - Comparability and transparency
    - Reflecting risks inherent in business (e.g. options and guarantees)
- Why now?
  - Reduce uncertainty
  - Provide a stable platform for value based supplemental reporting during a period of significant and ongoing change to statutory basis reporting

Headline messages

- No changes to underlying fundamentals or economics of our business:
  - Minimal impact on operating profit
  - No impact on capital or solvency requirements
  - No impact on statutory profits or dividend policy
- Refinement of our current approach:
  - Overall impact on net asset value of 4.4%
  - Includes funding of life element of pension fund deficit
  - Explicit quantification of options and guarantees and cost of additional capital
- Clarity and transparency in disclosures
- Best measure of value added for long term business
- Alignment of reported results to current management practices

Basis of preparation



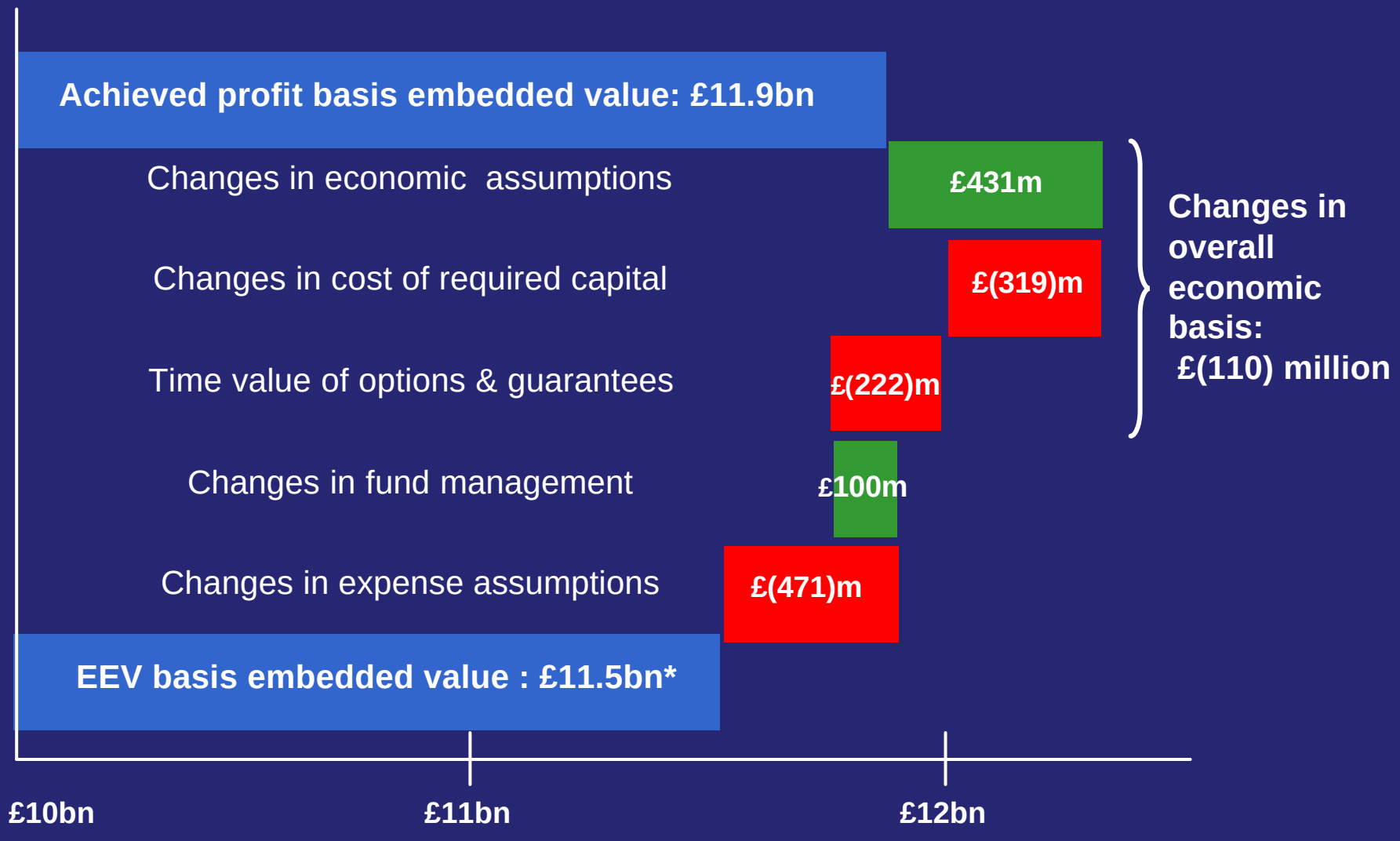
Achieved profits results will no longer be reported

Restatement for EEV

	30 June 2004		31 December 2003	
Key performance indicators:	**EEV**	**Achieved profits***	**EEV**	**Achieved profits***
New business contribution post required capital	£251m	£246m	£474m	£472m
Operating profit	£1,145m	£1,130m	£1,906m	£1,907m
Total shareholders' funds	£10,544m	£11,054m	£10,752m	£11,165m
Return on capital employed	14.1%	13.4%	13.1%	12.7%
Net asset value per share	474p	496p	484p	502p
NAV % change	(4.4%)	-	(3.6%)	-

*** As previously reported**

Change in embedded value at 30 June 2004



•Total shareholders' funds of £10.5bn comprise embedded value of £11.5bn (shown above), non-life net assets of £2.6bn, other assets of £0.2bn, subordinated debt of £(2.8)bn and a deduction for minority interest of £1.0bn.

Nic Nicandrou

Group Financial Control Director

EEV Principles

One common set of 12 principles covering:

1. What is EEV
2. Business coverage
3. Definitions
4. Free surplus
5. Required capital and cost of capital
6. Value of inforce covered business
7. Financial options and guarantees
8. New business and renewals
9. Assumptions
10. Economic assumptions
11. Participating business
12. Disclosures

Key:

- **No change**
- **Small change, as previously substantially compliant**
- **Introduced changes to previous methodology**

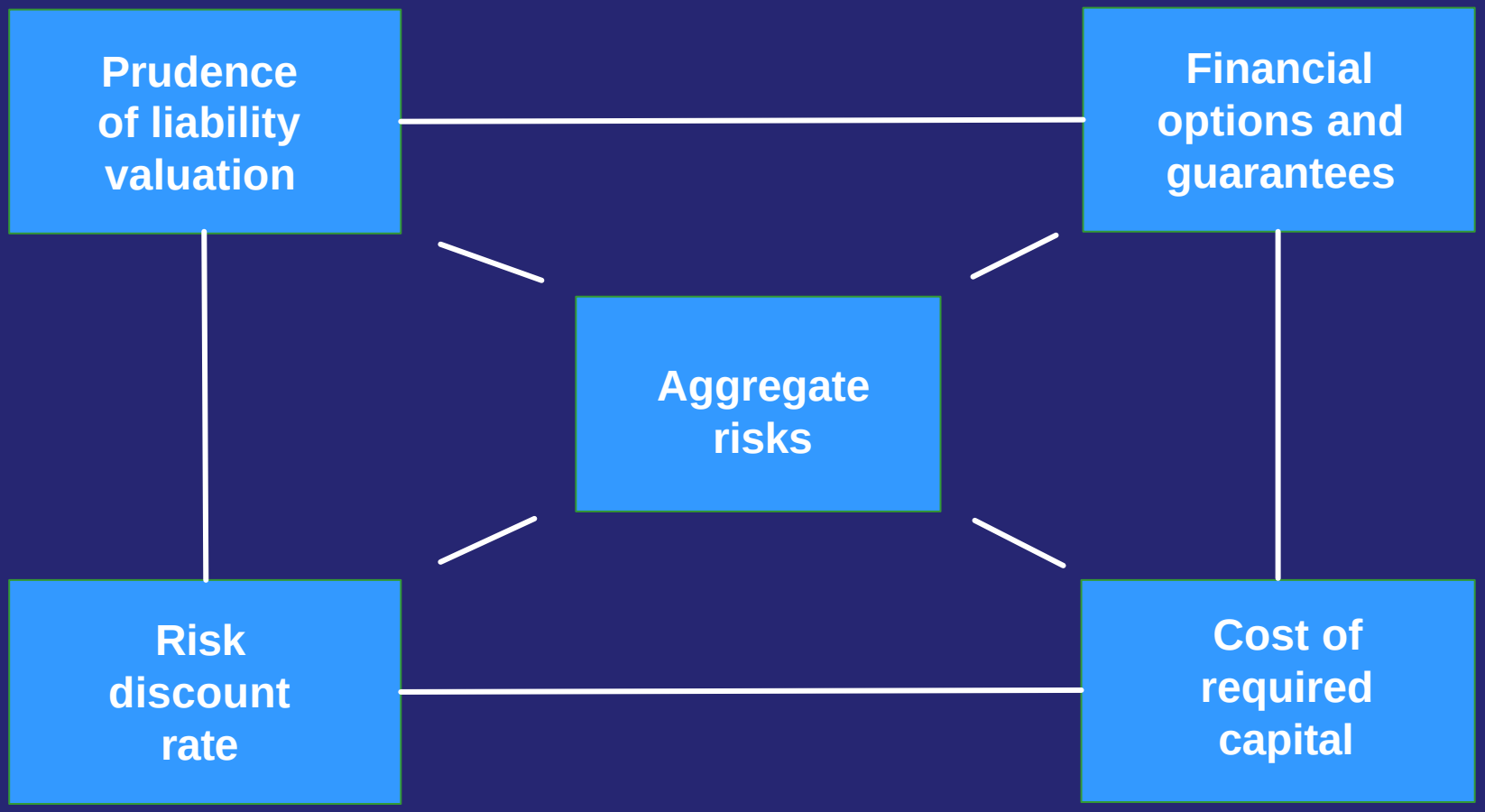
EEV Principles

Key areas of change:

- Impact of change in overall economic basis
  - Principle 5: Required capital
  - Principle 7: Financial options and guarantees
  - Principle 10: Economic assumptions
- Impact of look through principle
  - Principle 9: Assessment of appropriate projection assumptions
- Improved disclosures
  - Principle 12: Disclosures

Impact of changes in overall economic basis

Allowance for risk in EEV calculations



Principle 5: Required Capital

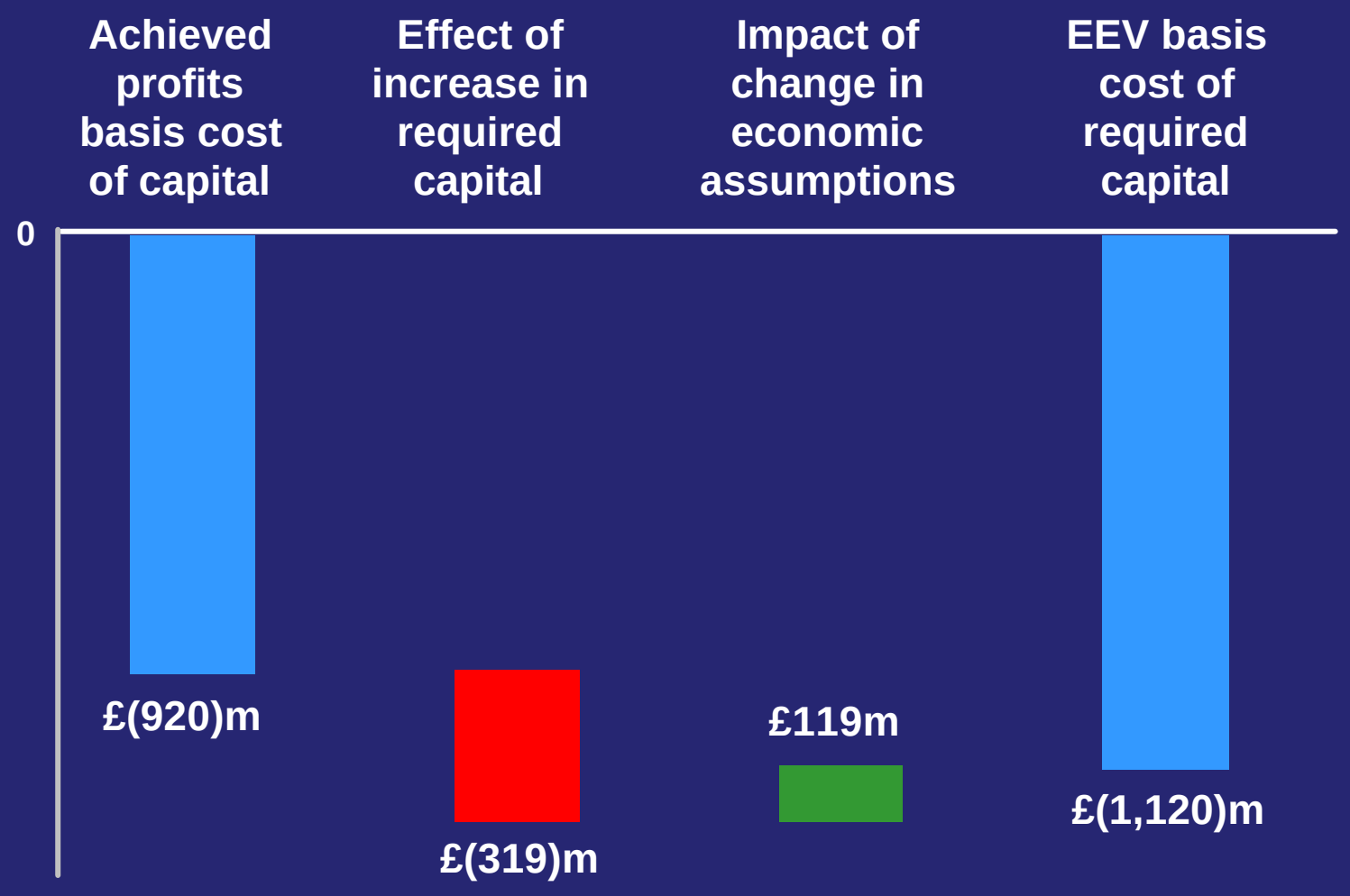
- Capital requirements higher of:
  - Target levels set by reference to own internal risk assessment and internal objectives
  - Minimum capital level (i.e. level of solvency capital at which local regulator empowered to take action)
- Required capital across all the Group's businesses varies depending level of operational, market and currency risk between 100% and 200% of EU minimum or equivalent
- Total level of required capital across the life businesses is £4.0 billion at 30 June 2004
- Equivalent to a group average of 135% of EU minimum solvency
- Net worth at 30 June 2004 equivalent to 170% of EU minimum solvency

Principle 5: Required capital by business unit

Average required capital levels	Business units
100%	UK non-annuity business
115%	France, Italy, Spain
150%	Ireland, Poland, Netherlands
200%	UK annuity business

Principle 5: Required Capital continued

Analysis of cost of capital at 30 June 2004



Principle 7: Financial Options and Guarantees

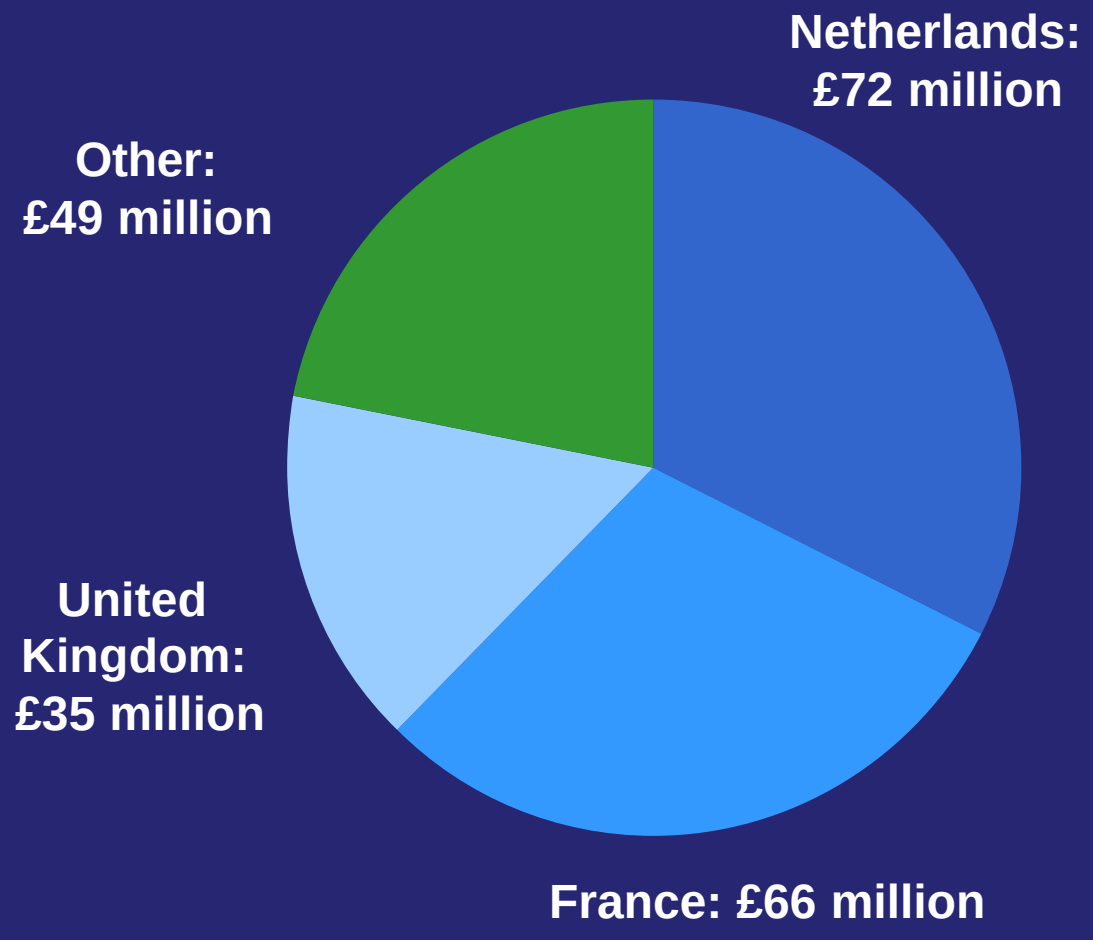
- Under Achieved Profits methodology option and guarantee costs were allowed for as follows:
  - Explicit valuation of the “intrinsic value”
  - Implicit valuation of the “time value” via the risk discount rate

- EEV principles require explicit valuation of the time value of options and guarantees:
  - Based on stochastic techniques consistent with underlying economic assumptions
  - Volatility assumptions and correlation factors in line with long-term historic data

- Impact of the "time value" is a reduction in embedded value across the businesses of £222 million at 30 June 2004

Impact of time value of options and guarantees across business units

As at 30 June 2004 - Total: £222 million



- United Kingdom: No-MVA guarantees on unitised with-profit business
- France: Guaranteed crediting rates and surrender values on traditional business (including AFER)
- Netherlands: Maturity guarantees on UL products and interest rate guarantees on traditional products
- Proactive approach to minimise costs of time value of options through management actions

Principle 10: Setting the risk margins

	30 June 2004
• Based on group WACC calculation	
– Actual equity/debt ratio	70%/30%
– Cost of equity using equity risk premium of 3% and market assessed ß averaged over 2 years	9.5%
– Actual cost of debt	4.1%
• Group WACC adjusted by 10b.p. for risks allowed for elsewhere in EEV basis	7.9%
• Risk margin = adjusted group WACC	7.8%
minus risk free rate	5.1%

- Risk margin of 2.7%
  - Same at each balance sheet date
  - Applied to UK and major European businesses

Principle 10: Changes in economic assumptions

	EEV basis	Achieved profits basis
Risk discount rate equivalent to	RFR pre tax + 2.7%	RFR pre tax + range 2.6% to 7.3%
Risk free rate (RFR)	UK: gilt rate EU: standard eurozone 10 year bond	UK: gilt rate EU:10 years local government bonds
Equity risk premium	Standardised at 3.0%	2.0% - 3.0%
Property risk premium	Standardised at 2.0%	1.5%
Future expense inflation	2.5% - 4.9%	2.5% - 4.9%

Impact of changing economic assumptions is an increase of £431 million

Impact of the look through principle

Impact of the look through principle on the embedded value at 30 June 2004

	Fund Management	Service Companies	Total
	£m	£m	£m
United Kingdom	51	(429)	(378)
France	38	(11)	27
Other Europe & International	11	(31)	(20)
	100	(471)	(371)

EEV incorporates results of subsidiary undertakings providing in-house administration, investment management and other services to life businesses.

Most significant are:

- UK life service company
- Morley Fund Management – UK
- Aviva Gestion d' Actifs – France

Principle 9: Reduction on UK Life's EV

- Key reductions on the embedded value are:

	30 June 2004 £m	31 December 2003 £m
Maintenance expenses and normal project allowance	176	182
Increase in pension scheme contribution from 11% to 25%	121	117
Pension scheme deficit funding	132	137
	429	436

Principle 9: Treatment of UK life service company

- Cost base of UK life service company, Norwich Union Life Services (NULS) includes:
  - operating trading costs, including acquisition and maintenance costs
  - project expenses such as product development, distribution capability, regulatory compliance
  - one-off project costs, such as reorganisation and severance costs

- Management Service Agreement (MSA) governs recharging structure between service and product companies:
  - acquisition costs
  - maintenance expenses
  - project costs incurred for the product companies

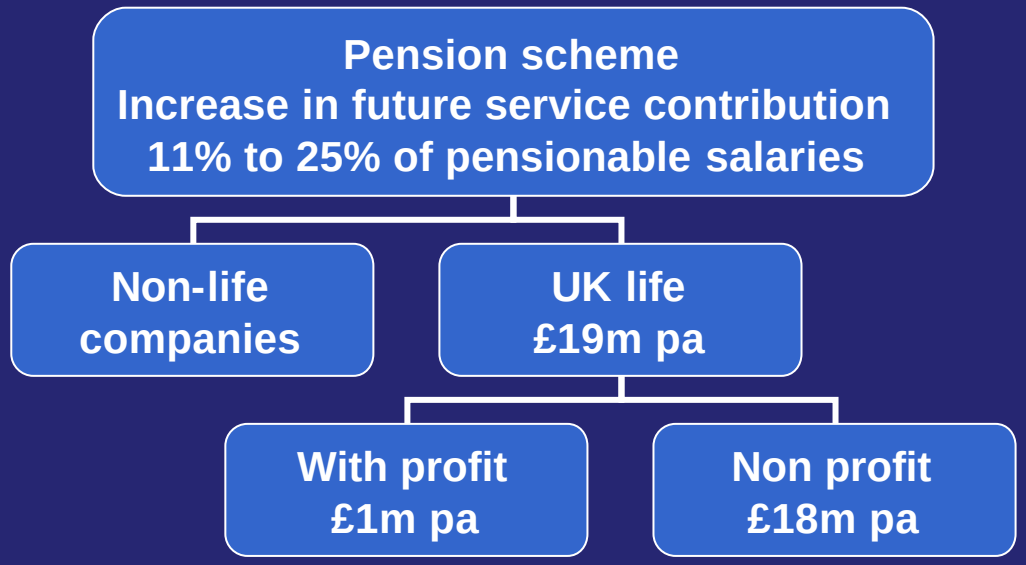
- Actual costs greater than recharges under MSA

- EEV treatment looks through to underlying cost base

- Reduction in embedded value of £176 million at 30 June 2004

Principle 9: Increase of pension scheme funding

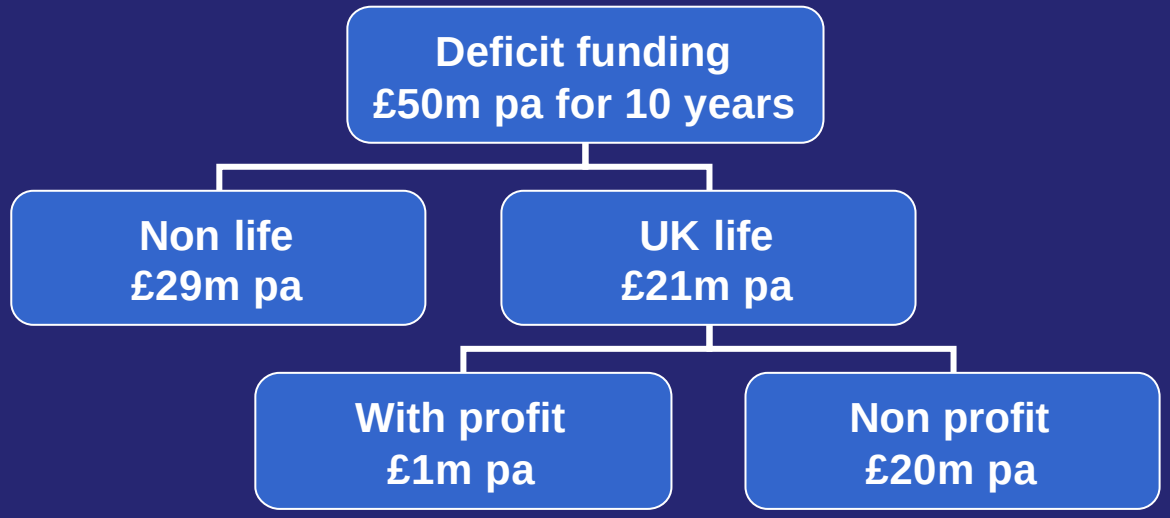
- Future obligations of UK life pension scheme for future service costs included within EEV:



- Reduction in EV at 30 June 2004: £121m (31 December 2003: £117m)

Principle 9: Inclusion of pension scheme deficit funding

- Future obligations of UK life pension scheme for pension scheme deficits included within EEV:



- Reduction in EV at 30 June 2004: £132m (31 December 2003: £137m)

Changes in reporting operating results

Change in reporting operating results

Analysis of profit and loss account result

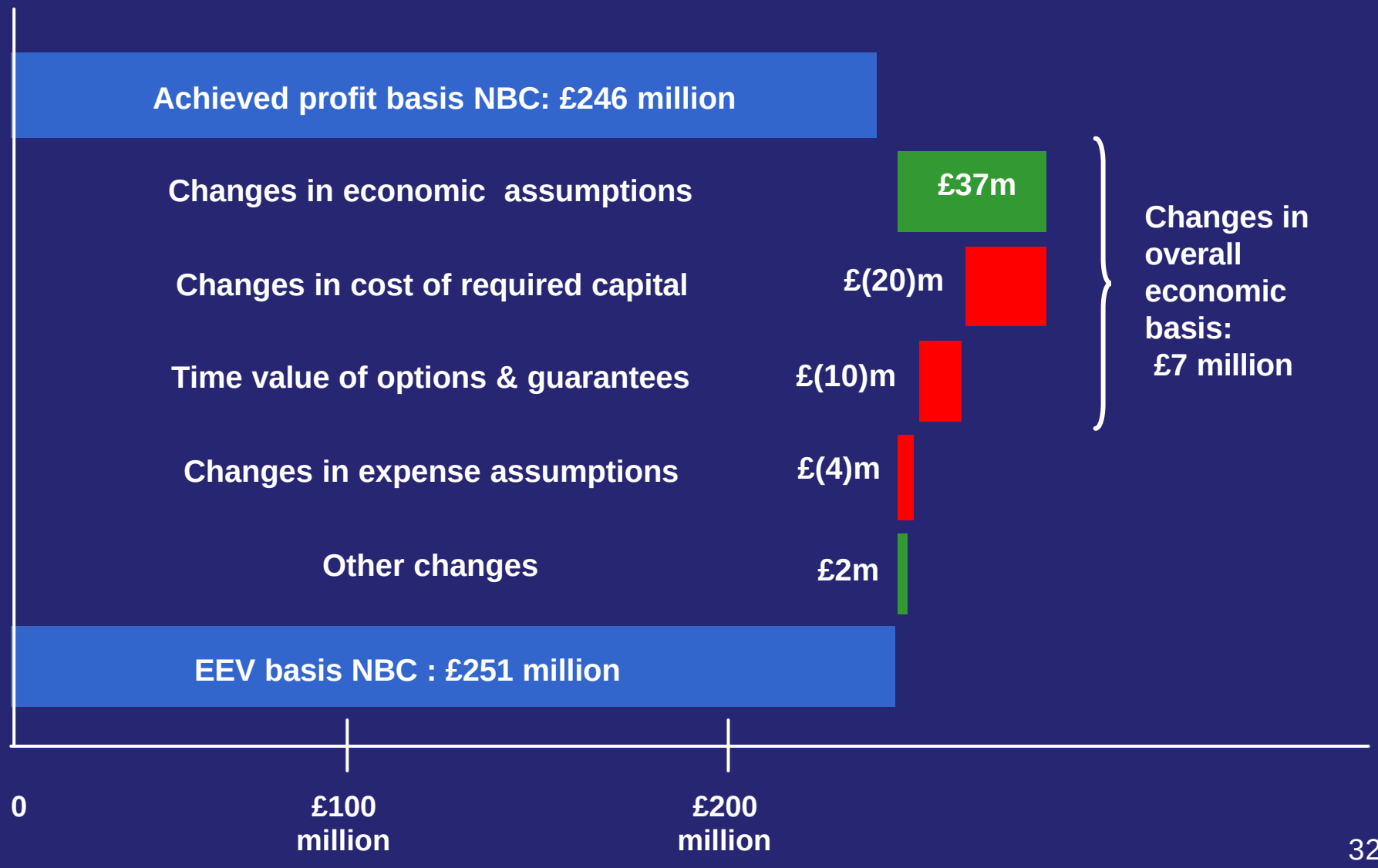
	30 June 2004		31 December 2003	
	Results on EEV	Results on AP	Results on EEV	Results on AP
	£m	£m	£m	£m
Life operating return				
- Life businesses	792	800	1,522	1,555
- Equity release	21	-	31	-
- Non insurance service and holding companies	(26)	-	(75)	-
- Fund management service companies	12	-	18	-
Life EEV operating return	799	800	1,496	1,555
Fund management	10	17	(4)	10
General Insurance & Health	646	646	972	972
Non-insurance	8	(15)	8	(64)
Central costs	(318)	(318)	(566)	(566)
Operating profit	**1,145**	**1,130**	**1,906**	**1,907**

Improved disclosures

New business and renewals

- No change to the definition of new business contribution other than the inclusion of equity release business
- New business sales now measured as present value of new business premiums (PVNBP) comprising:
    - 100% of single premiums received in the year; and
    - Discounted value of new regular premiums
- Margins calculated as new business contribution divided by PVNBP
- Margins more meaningful as definition of new business profit and income better aligned

Change in new business contribution after cost of required capital at 30 June 2004



Impact of EEV

New business sales and margins

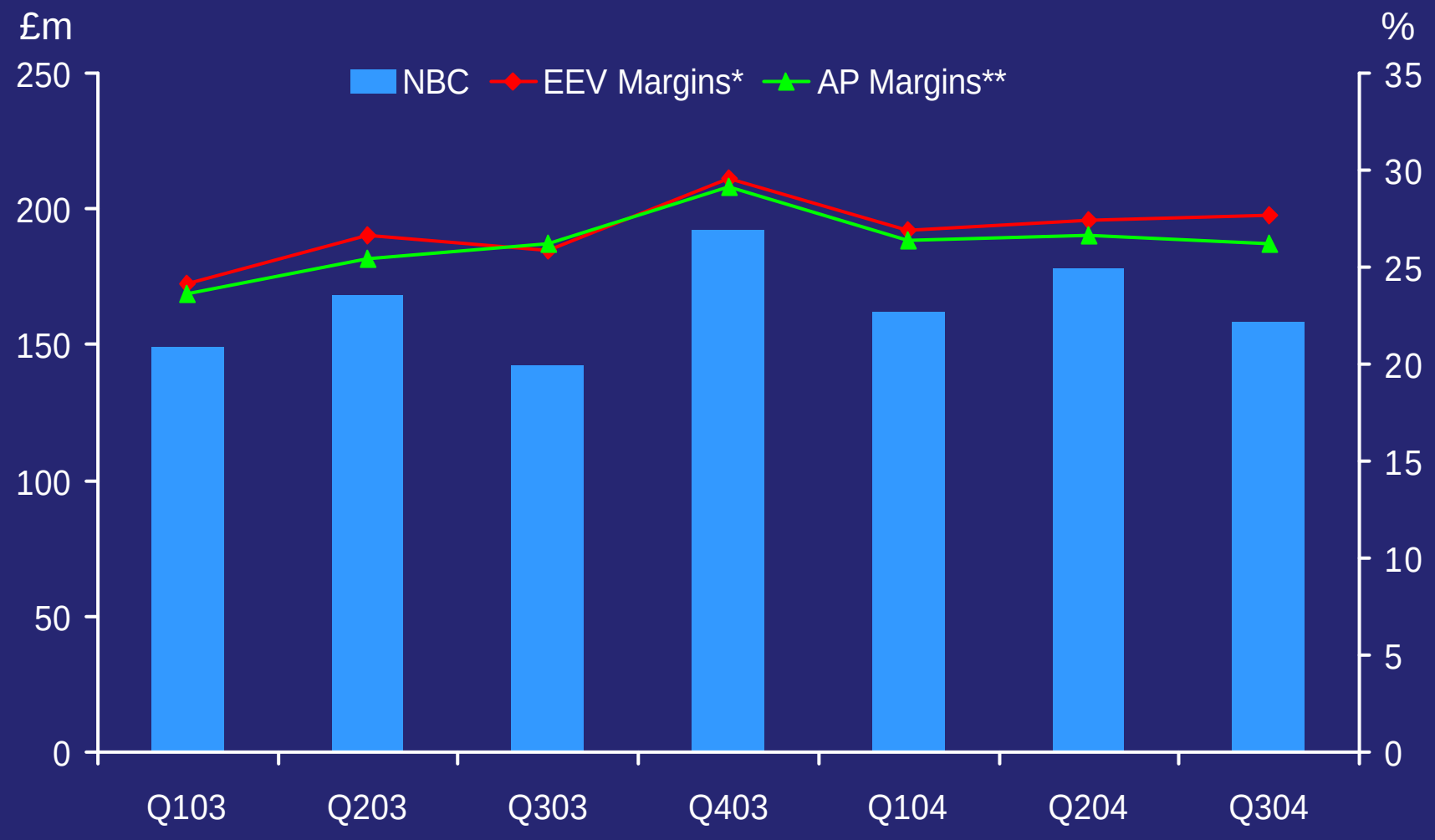
	EEV		Achieved profits	
	30 June 2004	31 Dec 2003	30 June 2004	31 Dec 2003
New business contribution - gross	£338m	£646m	£324m	£621m
New business contribution – net*	£146m	£272m	£143m	£272m
New business sales – PVNBP/ APE	£9,753m	£18,809m	£1,224m	£2,377m
New business margins – gross	3.5%	3.4%	26.5%	26.1%
New business margins – net**	1.7%	1.6%	13.2%	12.9%

* New business contribution and margins on a net basis are reported net of required capital, tax and minority interest

** Calculated as a ratio of new business contribution net of required capital, tax and minority interest to new business sales net of minority interest expressed as a percentage

Principle 8: New business and renewals

Discrete quarterly new business contribution

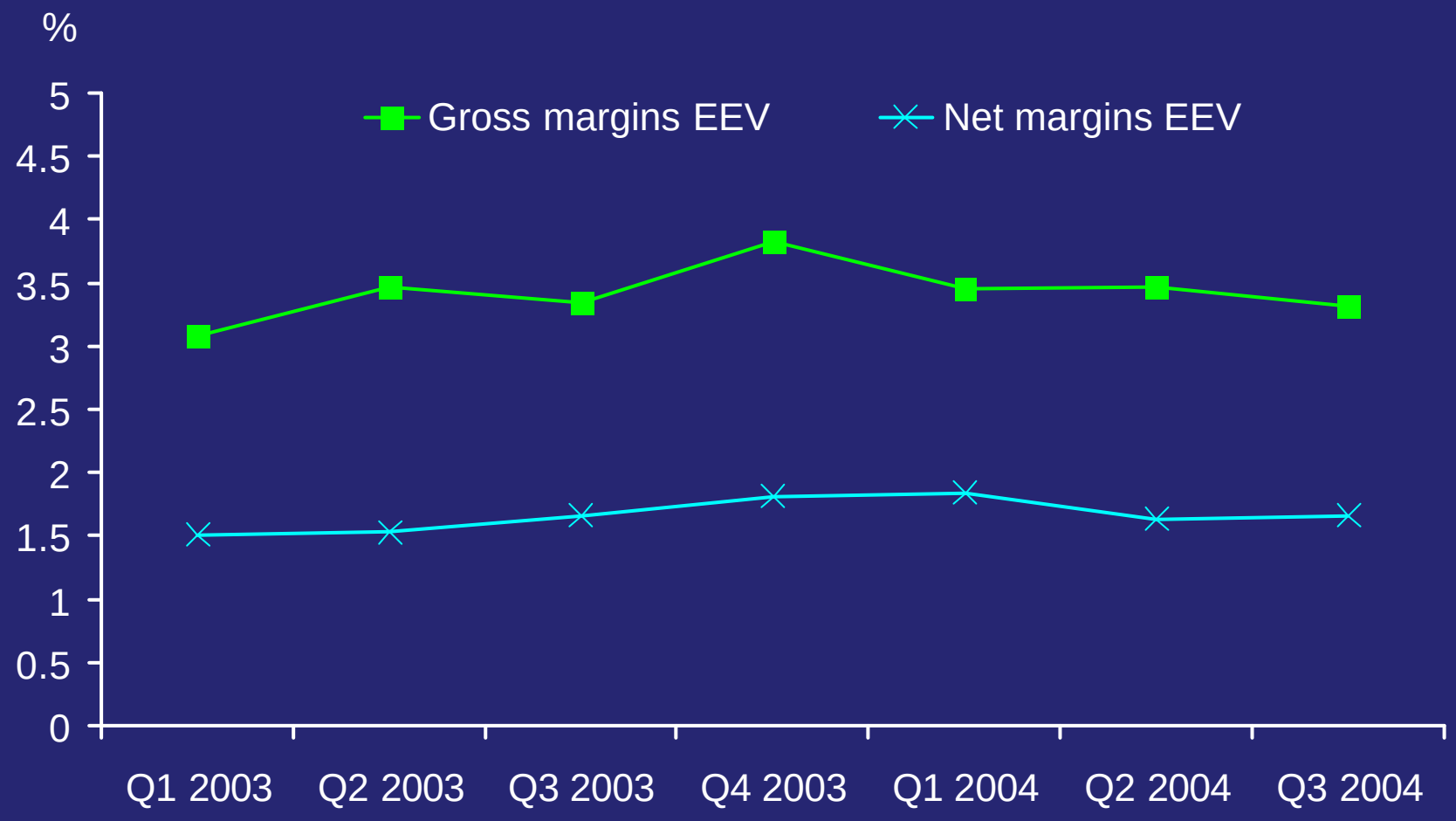


*Margins calculated as NBC on EEV basis over APE

** Margins as previously reported under achieved profits

Principle 8: New business and renewals cont

Discrete new business margins for the Group using PVNBP



Principle 12: New disclosures

There are a number of significant additional disclosures provided in the analyst pack. The following table summarises the new disclosures:

Topic	
New Business	The present value of future new business premiums (page 18).
Reconciliation of movement in EEV	This reconciliation is provided separately for net worth and value of in-force. It provides analysis of the level of working capital invested to generate new business value, the level of capital released by the in-force book of business (page 21).
Required capital/Free surplus	An analysis of the net worth between required capital and free surplus is provided at end of each reporting periods and by business at the most recent balance sheet date (page 22).
Required capital	Detailed disclosure by business of our level of capital to support the in-force business. Also analysis of cost of required capital by business at the most recent balance sheet date (page 22).
Options and Guarantees	Analysis of the time value of the Group's exposure on embedded options and guarantees (page 23).

Principle 12: New disclosures

Topic	
Sensitivity analysis - economic	Significantly extended analysis covering the sensitivities to use of EU minimum in calculations, +/- 1% movement in discount rates, +/- 1% increase in interest rates, +/- 1% movement in equity/property returns, +/- 10% movement in equity/property market values. These are provided for EEV and NBC where relevant (pages 27 and 28).
Sensitivity analysis - non economic	Disclosure of the sensitivities of EEV and NBC of changes to expense, lapse and mortality operating assumptions (page 29).
Segmental analysis of components of Life EEV operating profit	Disclosure of analysis of operating profits by business, detailed experience profits/losses and operating assumption changes by type for all periods covered by the release (page 34).
AP to EEV Bridging	Detailed reconciliations from the AP basis to the EEV basis for all periods of operating profit, embedded value and NBC by territory (pages 36-41).
New business	Restatement on a quarterly basis of EEV NBC, and EEV PVNBP in respect of the most recent seven quarters (pages 43-47).
New business IRR	For each business an analysis of the IRR and disclosure of the initial and required capital components of the calculation both IRR and capital requirements calculated using the higher levels of required capital (page 48).

Summary

- Fully adopted and complied with the EEV principles
- Developed a robust economic assumption set
- Refinement of current approach explicitly quantifies risk
- Best measure of value added for long term business

Questions and answers

AVIVA