CFO Forum

Market Consistent Embedded Value Principles

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Introduction

Principle 1: *Market Consistent Embedded Value (MCEV)* is a measure of the consolidated value of shareholders' interests in the *covered business. Group Market Consistent Embedded Value (Group MCEV)* is a measure of the consolidated value of shareholders' interests in covered and non-covered business.

G1.1 *The MCEV Methodology (MCEVM)* described here is applied to the calculation and reporting of the *MCEV* of the covered business.

G1.2 Adjustments must be made to ensure all covered business has been included appropriately. An example of such an adjustment might be in respect of a reinsurance or loan arrangement within the group to avoid distorting the *MCEV*.

G1.3 *Principles* 1 to 17 relate only to *covered business* with the exception of reference to *Group Market Consistent Embedded Value (Group MCEV)* in *Principle* 17 which measures the consolidated value of shareholders' interests in *covered* and *non-covered* business.

G1.4 Except where they are not considered material, compliance with Principles (shown in **bold**) is compulsory and any non-compliance with underlying Guidance should be explicitly disclosed.

G1.5 A statement should be included to confirm that the methodology, assumptions and results have been subject to external review, stating the basis of the external review and by whom it has been performed.

Coverage

***Principle 2*: The business covered by the *MCEVM* should be clearly identified and disclosed.**

G2.1 The *MCEVM* should, where material, include, as a minimum, any contracts that are regarded by local insurance supervisors as long-term life insurance business.

G2.2 The *MCEVM* may cover short-term life insurance such as group risk business and long-term accident and health insurance business. Where mutual funds and short-term healthcare are regarded as part of or ancillary to a company's long-term life insurance business, then it may be regarded as *covered business*.

G2.3 The *MCEVM* may be applied by group companies that are not predominantly long term insurance companies. For example the *MCEVM* may be applied to *covered business* provided by non-insurance groups and operations such as banking groups and pension funds.

MCEV Definitions

***Principle 3: MCEV* represents the *present value* of shareholders' interests in the *earnings distributable* from assets allocated to the *covered business* after sufficient allowance for the aggregate risks in the covered business. The allowance for risk should be calibrated to match the market price for risk where reliably observable. The *MCEV* consists of the following components:**

- ***Free surplus allocated to the covered business***
- ***Required capital; and***
- ***Value of in-force covered business (VIF).***

The value of future new business is excluded from the *MCEV*.

G3.1 *MCEV* represents the sum of the values of components defined in *Principles* 4, 5 and 6.

G3.2 The value of future new business should be excluded from the MCEV. *Principle* 10 defines new business and, by implication, existing business.

G3.3 The concept of mark to market is to value insurance liabilities and therefore the shareholders' interest in the earnings distributable from assets allocated to the *covered business* as if they are traded assets with equivalent cash flows. However, most insurance liabilities are not traded. As assets are generally traded with an observable market price, asset cash flows that most closely resemble the insurance cash flows (from the shareholders' perspective) are used.

G3.4 Financing types of reinsurance and debt, including subordinated and contingent debt can create a leveraging effect. Such debt should normally be deducted from the *MCEV* at a value consistent with that which markets would place on debt with similar characteristics. The deduction can be made to either the *free surplus* or the *VIF* and where material should be disclosed.

G3.5 Liabilities of the in-force *covered business* are dictated by local regulatory requirements.

FREE SURPLUS

***Principle* 4: The *free surplus* is the market value of any assets allocated to, but not required to support, the in-force *covered business* at the valuation date.**

G4.1 *Free surplus* is determined as the market value of any excess of all assets attributed to the *covered business* but not backing liabilities over the *required capital* to support the *covered business.*

G4.2 *Free surplus* not formally allocated to *covered business* should not be included in the *MCEV*.

REQUIRED CAPITAL

***Principle* 5: *Required capital is the market value* of assets, attributed to the *covered business* over and above that required to back liabilities for *covered business*, whose distribution to shareholders is restricted.**

G5.1 The amount of *required capital* should be presented from a shareholders' perspective and so should be net of funding sources other than shareholder resources, for example subordinated debt or policyholder funds.

G5.2 The level of *required capital* allocated to each regulated entity should meet at least the shareholders' portion of the level of solvency capital at which the supervisor is empowered to take any action. It would also include any amount "*encumbered*" by local supervisory or legal restrictions that prevents its distribution or removal from supporting the *covered business*.

G5.3 The *required capital* should include amounts required to meet internal objectives. The internal objectives could be based on an internal risk assessment or that capital required to obtain a targeted credit rating.

VALUE OF IN-FORCE *COVERED BUSINESS*

Principle 6: The value of in-force *covered business (VIF) consists of the following components:*

- ***Present value* of future profits (where profits are post taxation shareholder cash flows from the in-force covered business and the assets backing the associated liabilities) *(PVFP)***
- ***Time value of financial options and guarantees* as defined in *Principle* 7**
- ***Frictional costs of required capital* as defined in *Principle* 8**
- **Cost of residual *non hedgeable risks* as defined in *Principle* 9.**

G6.1 Projected liabilities and cash flows should be net of outward risk reinsurance.

G6.2 The *PVFP* should include the value of *renewals* of in-force business.

G6.3 The *PVFP* before allowance for the *time value of financial options and guarantees* should reflect the *intrinsic value of financial options and guarantees* on in-force *covered business*. The *time value* of financial *options and guarantees* is discussed under *Principle* 7. If the split of the VIF into PVFP and *time value of financial options and guarantees* is disclosed then consistent assumptions should be used for the *time value* of *financial options and guarantees* and the basic projection of *PVFP*.

FINANCIAL OPTIONS AND GUARANTEES

***Principle* 7: Allowance must be made in the *MCEV* for the potential impact on future shareholder cash flows of all *financial options and guarantees* within the in-force covered *business*. The allowance for the *time value of financial options and guarantees* must *be* based on *stochastic techniques* using methods and assumptions consistent with the underlying embedded value. All projected cash flows should be valued using economic assumptions such that they are valued in line with the price of similar cash flows that are traded in the capital markets.**

G7.1 The valuation of *financial options and guarantees* should take as a starting assumption the actual asset mix at the valuation date.

G7.2 Where management discretion exists, has passed through an appropriate approval process and would be applied in ways that impact the *time value of financial options and guarantees*, the impact of such management discretion may be anticipated in the allowance for *financial options and guarantees* but should allow for market and policyholders' reaction to such action. The management discretion should assume that the shareholders pay out all claims even if the assets of the company are exhausted. Management discretion is subject to any contractual guarantees and regulatory or legal constraints. The application of such discretion must consider the environment arising in the future projection which will likely be different from the current environment, but any changes from current decision rules (for example regarding flexible crediting rates or policyholder bonuses) must be supported by appropriate approvals.

G7.3 Dynamic policyholder behaviour should, where material, be in the allowance for the *time value of financial options and guarantees*.

G7.4 The techniques used to calculate the allowance for the time *value of financial options and guarantees* should incorporate an allowance for stochastic variation in future economic conditions consistent with *Principle* 15. The economic projection assumptions should be consistent with how the capital markets would value such cash flows and *Principles* 12, 13 and 14.

FRICTIONAL COSTS OF REQUIRED CAPITAL

***Principle* 8: An allowance should be made for the *frictional costs of required capital for covered business*. The allowance is independent of the allowance for *non hedgeable risks*.**

G8.1 *Frictional costs* should be applied to the *required capital* as defined in *Principle* 5.

G8.2 *Frictional costs* should reflect the taxation and investment costs on the assets backing *required capital*. The allowance for taxation should be based on the taxation rate(s) applicable to investment earnings on assets backing the *required capital*.

G8.3 The *required capital* should be projected appropriately over the lifetime of the underlying risks. Approximate projection methods such as the use of key capital drivers to determine the run off pattern of the *required capital* may be used.

COST OF RESIDUAL *NON HEDGEABLE RISKS*

***Principle* 9: An allowance should be made for the cost of *non hedgeable risks* not already allowed for in the *time value of options and guarantees* or the *PVFP*. This allowance should include the impact of *non hedgeable non financial risks* and *non hedgeable financial risks*. An appropriate method of determining the allowance for the cost of residual *non hedgeable risks* should be applied and sufficient disclosures provided to enable a comparison to a *cost of capital methodology*.**

G9.1 The *best estimate assumptions for non hedgeable risks* used in the calculation of the *time value of options and guarantees* and the *PVFP* should reflect at least the mean expectation of outcomes of that risk variable. The total *MCEV* should allow for the mean impact of all *non hedgeable risks* on shareholder value. The additional cost of residual *non hedgeable risks as* defined in *Principle* 9, should therefore take account of any additional cost that arises due to the difference between these two measures. This difference will result because of:

- Asymmetries in the impact of the risks on shareholder value; and
- Risks that are not allowed for in the *time value of options and guarantees* or the *PVFP* (e.g. operational risk).

G9.2 An allowance for uncertainty in the best estimate of shareholder cash flows as a result of the *non hedgeable risks* (both *symmetric and asymmetric risks*) should be considered.

G9.3 The cost of *non hedgeable financial risks* should allow for any areas where the calibration of the model to the market does not fully mitigate the market risk. This may occur when market assumptions are required where there is no market or where the market is not sufficiently deep and liquid.

G9.4 Regardless of the methodology used to determine the allowance for the cost of residual *non hedgeable risks*, it should be presented as an equivalent average cost of capital charge. A single average charge should be calculated across all residual *non hedgeable risks*, such that the *present value* of charges levied on the projected residual *non hedgeable risk based capital* equates to the cost of residual *non hedgeable risks*.

G9.5 The residual *non hedgeable risk based capital* should be determined using an internal economic capital model. The assessment of the economic capital can be performed using a variety of methods such as:

- The use of a model to project the distribution of profits and losses arising from the residual *non hedgeable risks*
- The use of reasonable approximations such as an approach of aggregation of standard capital charges for each residual *non hedgeable risk* based on appropriate shock scenarios.

The capital determined should be consistent with a 99.5% confidence level over a one year time horizon, to meet the associated risks. Allowance for management actions can be made where appropriate.

G9.6 The residual *non hedgeable risk based capital* should be projected appropriately over the lifetime of the underlying risks. Approximate projection methods such as the use of key capital drivers to determine the run off pattern of the residual *non hedgeable risk based capital* may be used.

G9.7 An allowance should be made for diversification in the cost of residual *non hedgeable risks* and in determining the equivalent average charge on the *cost of capital methodology*:

- Diversification benefits within the *non hedgeable risks* of the *covered business* should be allowed for provided the benefit is identifiable and quantifiable
- Diversification benefits between hedgeable and *non hedgeable risks* of the *covered business* should not be allowed for
- Diversification benefits should not be allowed for between *covered* and non-*covered business*.

The allowance should reflect management's internal view of diversification benefits within portfolios of business and between portfolios and businesses at a group level. Management should monitor industry practice and ensure that the internal view is in line with the industry view.

G9.8 The method and basis on which allowance has been made for the cost of residual *non hedgeable risk* should be disclosed. The equivalent cost of capital charge, the definition, method of determining and amount of the associated capital on which the residual *non hedgeable risk* costs are applied should also be disclosed.

New Business and *Renewals*

***Principle* 10: New business is defined as that arising from the sale of new contracts and in some cases increases to existing contracts during the reporting period. The value of *new business* includes the value of expected *renewals* on those new contracts and expected future contractual alterations to those new contracts. The *MCEV* should only reflect in-force business, which excludes future new business. The *value of new business* should reflect the additional value to shareholders created through the activity of writing new business.**

G10.1 New business is defined as *covered business* arising from the sale of new contracts (and, as noted in G10.2, certain increases to existing contracts) during the reporting period, including cash flows arising from the projected *renewal* of those new contracts.

G10.2 The *VIF* valued under *Principle* 6 should anticipate *renewal* of in-force business, including any *foreseeable* variations in the level of *renewal* premiums but excluding any value relating to future new business. New business should include recurring single premiums and changes to existing contracts where these are not variations in the *VIF*. To distinguish between new business and existing business, the following are examples of indications that premium represents new business:

- A new contract has been signed
- Underwriting has been performed
- A new policy or new policyholder details have been entered on administration systems
- Incremental remuneration has become due to the distributor/salesperson
- The pricing basis for the premium allows for the full cost of their marketing and distribution.

G10.3 The presence of *renewal* premiums in pricing assumptions is an example of evidence that *renewals* would be included in the *value of new business*. *Renewals* should include expected levels of:

- Contractual *renewal* of premiums in accordance with the policy conditions at the valuation date, including any contractual variation in premiums
- Non-contractual variations in premiums where these are *foreseeable* ; for example, premiums expected to increase in line with salary or price inflation
- *Recurrent single premiums* where the level of premium is pre-defined and *foreseeable*.

G10.4 Any variation in premium on *renewal* of in-force business from that anticipated, including deviations in non-contractual increases, deviations in *recurrent single premiums* and re-pricing of premiums for in-force business, should be treated as an experience variance on in-force business and not as new business.

G10.5 The projection assumptions used to value new business should be consistent with those used to value in force business.

G10.6 The contribution from new business ideally would be valued using point of sale assumptions. However, this is not practical in all cases and notably non economic assumptions tend to be updated less frequently than daily. Therefore assumptions can be chosen as of different dates with clear disclosure of the timing required.

G10.7 The *value of new business* should be calculated on a post tax basis, after *time value of financial options and guarantees, frictional costs of capital*, costs of *non hedgeable risks* and net of minority interests.

G10.8 Where new business margins are disclosed, these should be calculated as the ratio of the *value of new business (VNB)* to the *present value of new business premiums (PVNBP).* Alternative calculations of new business margins may be disclosed as further information.

PVNBP should be calculated:

- By projecting the premiums expected in each future year, using assumptions and projection periods that are consistent with those used to calculate the *VNB*. The *PVNBP* may be calculated on a deterministic basis.
- Using premiums before reinsurance, unless there are specific situations where this approach would be misleading.
- Using the same definition of new business as is used in the calculation of *VNB* and, where appropriate, other reported sales figures.
- By discounting the projected premiums using the reference yield curve as defined in *Principle* 14. Where the premium projection period is longer than the period for which reliable *reference rates* are available, adjustments should be made that are consistent with the equivalent adjustments used in calculating the *VNB.*
- At the point of sale. This does not require assumptions to be at the point of sale; rather these should be treated consistently with the timing used in the *VNB*.

Assessment of Appropriate Non Economic Projection Assumptions

***Principle* 11: The assessment of appropriate assumptions for future experience should have regard to past, current and expected future experience and to any other relevant data. The assumptions should be *best estimate* and *entity specific* rather than being based on the assumptions a market participant would use. Changes in future experience should be allowed for in the *VIF* when sufficient evidence exists. The assumptions should be *actively reviewed*.**

G11.1 The projection assumptions should be *best estimate assumptions* of each component of future cash flow for each policy group. Relevant data can be internal to the company or external, for example from experience analyses or inputs to pricing bases.

G11.2 *Best estimate assumptions* should be internally consistent. They should, where appropriate, be based on the *covered business* being part of a going concern.

G11.3 The assumptions should be *actively reviewed*, and updated as appropriate, at least annually.

G11.4 Projection assumptions should be considered separately for each *product group*.

DEMOGRAPHIC ASSUMPTIONS

G11.5 Appropriate allowance should be made in the *VIF* for demographic assumptions such as mortality, morbidity, *renewals* and future levels of withdrawals of in-force business. Such allowance should be based on past evidence and expected future experience consistent with the assessment of other projection assumptions.

G11.6 Dynamic policyholder behaviour should be considered in the allowance for the *time value of financial options and guarantees*.

EXPENSES

G11.7 Future expenses such as *renewal* and other maintenance expenses should reflect the expected ongoing expense levels required to manage the in-force business, including investment in systems required to support that business and allowing for future inflation.

G11.8 Favourable changes in unit costs such as productivity gains should not normally be included beyond what has been achieved by the end of the reporting period. In certain circumstances such as start-up operations, it may be appropriate to assume that unit costs will reach their expected long-term levels within a defined period. For *clarity*, *the additional expenses before the long term level should be included in the VIF*. The extent to which such changes in unit costs have been anticipated should be separately disclosed.

G11.9 The nature and impact on shareholder value of any exceptional development and one-off costs excluded from the unit cost base should be separately disclosed.

G11.10 Overheads should be allocated between new business, existing business and development projects in an appropriate way consistent with past allocation, current business plans and future expectations.

G11.11 *Holding companies'* operating expenses (including allocation of overhead expenses) relating to the operation of the existing *covered business* should be allocated to the expense assumptions.

G11.12 All expected expense overruns affecting existing *covered business*, including *holding company* operating expenses, overhead costs and development costs such as those incurred in start-up operations, in the current year must be allowed for.

G11.13 Where costs of managing the *covered business* are incurred within *service companies*, profits or losses to the *service companies* are to be valued on a *"look through" basis,* so as to give a *best estimate* of the impact on future shareholder cash flows of the expenses to the group of running the *covered business*. Actual and expected profit or loss to an internal group company on services provided to the *covered business* should be included in allowances for expenses in the *MCEV*. Where an external *service company* is used, the actual and future expected fees or charges should be allowed for in calculating the *MCEV*.

G11.14. Company pension scheme deficits should be allocated to the *covered business* expense assumptions in an appropriate way.

TAXATION AND LEGISLATION

G11.15 Allowance in the projection must be made for all taxes and regulations in the relevant jurisdiction affecting the *covered business*. These should follow the local treatment and be based on *best estimate assumptions*, applying current legislation and practice together with known future changes.

G11.16 The tax rates should consider the cash flows and tax position of the company.

Economic Assumptions

***Principle* 12: Economic assumptions must be internally consistent and should be determined such that projected cash flows are valued in line with the prices of similar cash flows that are traded on the capital market. No smoothing of market or account balance values or unrealised gains is permitted.**

G12.1 Economic assumptions should be updated for each reported calculation of *MCEV*.

INFLATION

G12.2 Where appropriate market instruments are available price inflation assumptions should be derived from them. In other markets, the price inflation assumption should be modelled considering a reasonable spread compared to the *reference rates*. Other types of inflation should be derived on a consistent basis.

SMOOTHING

G12.3 Asset values on which to base *MCEV* calculations must be consistent with values observable in investment markets and not be smoothed. Unrealised gains should be allowed for in the projections used to determine the projected shareholder cash flows. For the avoidance of doubt, this does not preclude the projection of book values according to local regulations if following a *distributable earnings* approach, in which case a portion of the unrealised gains are reflected in *VIF* rather than *free surplus*.

G12.4 Investment returns must be those actually earned on a market basis over the period.

INVESTMENT RETURNS AND DISCOUNT RATES

***Principle* 13: *VIF* should be discounted using discount rates consistent with those that would be used to value such cash flows in the capital markets.**

G13.1 Where cash flows do not depend on, or vary linearly with market movements, an alternative method can be used which assumes that assets earn, before tax and investment management expenses, *reference rates* as defined in *Principle* 14 and all the cash flows are discounted using *reference rates* which are gross of tax and investment management expenses.

G13.2 Where cash flows contain *financial options and guarantees* such that they do not move linearly with market movements, asset cash flows can be projected and all cash flows discounted using risk-neutral stochastic models. Alternative approaches, for example using deflators, may also be used. In either method, the *reference rates* should be used as risk free rates.

REFERENCE RATES

***Principle* 14: The *reference rate* is a proxy for a risk free rate appropriate to the currency, term and liquidity of the liability cash flows.**

- **Where the liabilities are *liquid* the *reference rate* should, wherever possible, be the swap yield curve appropriate to the currency of the cash flows.**
- **Where the liabilities are not *liquid* the reference rate should be the swap yield curve with the inclusion of a liquidity premium, where appropriate.**

G14.1 In evaluating the appropriateness of the inclusion of a liquidity premium (where liabilities are not *liquid)* consideration may be given to regulatory restrictions, internal constraints or investment policies which may limit the ability of a company to access the liquidity premium.

G14.2 Where the available financial market data used to set the *reference rate* is shorter than the projected liability cash flows, the data should be extended using an appropriate methodology, for example:

- Assuming that either spot or forward rates remain level at the longest available term; or
- If there exists a relevant government bond yield curve which is longer than the financial market data used to set the *reference rate*, this could be used to extend the data by maintaining a constant margin from the end of the available data and assuming it remains level thereafter.

G14.3 Where the financial market data used to set the *reference rate* is not available at all durations between the longest and shortest, the intermediate data points can be calculated by interpolation using an appropriate methodology. If the financial market data used to set the *reference rate* is not available at the very short end, other appropriate market information should be used instead.

G14.4 Where a company invests in fixed-income assets which have a yield different to the *reference rates*, the company should make appropriate adjustments to the projected asset cash flows to ensure that the asset cash flows, discounted at the *reference rates*, equal the market value of the assets.

G14.5 Where companies have businesses in territories and or currencies where swap curves do not exist or do not provide a robust basis for producing *reference rates* then a more appropriate alternative, such as the government bond yield curve, may be used.

STOCHASTIC MODELS

***Principle* 15: Stochastic models and the associated parameters should be appropriate for the *covered business* being valued, internally consistent and, where appropriate, based on the most recent market data. Volatility assumptions should, wherever possible, be based on those implied from derivative prices rather than the historical observed volatilities of the underlying instruments.**

G15.1 Stochastic models should cover all material asset classes.

G15.2 The calibration of the model should be based on market values such as equity option implied volatilities, swaption implied volatilities and the initial swap rate curve for market-traded contracts that are as similar as possible in nature to the option and guarantees contained within the liabilities. The model should reproduce these values to a high degree of accuracy.

G15.3 Volatility assumptions should be based on the most recently available information as at the valuation date. Where there are concerns over the depth or liquidity of the market or if the market displayed unusual characteristics as at the valuation date then less recently observed measures and expert opinion should be considered.

G15.4 The duration to maturity and the "moneyness" effect on the market implied volatilities should be taken into account where material and practical.

G15.5 Correlations of asset returns and yields should be based on an analysis of data covering a sufficient number of years which is considered to be relevant for setting current expectations. The methodology used to derive the correlations should not normally change from year to year. Companies should, where possible, check the reasonableness of their correlations against externally available correlations.

G15.6 *Closed form solutions* can be used where such methods are sufficiently accurate.

PARTICIPATING BUSINESS

***Principle* 16: For *participating business* the method must make assumptions about future bonus rates and the determination of profit allocation between policyholders and shareholders. These assumptions should be made on a basis consistent with the projection assumptions, established company practice and local market practice.**

G16.1 Where regulatory/contractual restrictions or bonus participation rules are clear they should be applied to projections of *participating business*.

G16.2 Projected bonus rates should be consistent with the projected future investment returns used.

G16.3 Where the company has an established bonus philosophy, this should be applied to projections of *participating business*.

G16.4 Where management has discretion over allocation of bonuses, including the realisation of unrealised gains, projection assumptions should have regard to the past application of discretion, past external communication, the influence of market practice regarding that discretion, any payout smoothing strategy in place and any guidance from the local supervisory.

G16.5 It is possible that some of the assets *(residual assets)* allocated to the *participating business* would remain at the end of the projection (after all bonuses have been allocated) as unallocated surplus. This surplus should not be negative. Acceptable valuation treatments are to assume that such unallocated surplus would be distributed over time via final bonus to existing business, or as bonuses to both existing and future new business, and to value any shareholders' participation in its distribution at discounted value. All assets backing *participating business* should be assumed to be realised within the projection period.

G16.6 Where investment income on assets backing *required capital* is subject to profit participation with policyholders, this may lead to an additional source of frictional cost of *required capital*, in addition to those mentioned in *Guidance* 8.2.

Disclosure

***Principle* 17: *MCEV* results should be disclosed at consolidated group level using a business classification consistent with the primary statements, with clear description of what business is covered by *MCEVM* and what is not. Except where they are not considered material, compliance with the *MCEV Principles* is compulsory and should be explicitly disclosed.**

G17.1 Compliance with the *MCEV Principles* is compulsory and should be explicitly disclosed. When the *MCEV* is referred to and *Principles* have been complied with but underlying Guidance has not been complied with in its entirety, the areas of material non-compliance and reasons for non-compliance should be specifically and separately disclosed.

G17.2 *MCEV* is to be calculated at least once a year. It is an option to disclose the *MCEV* or *VNB* more frequently.

G17.3 The following items should be disclosed as a minimum in the format shown. Additional disclosures to enable understanding of the reasons for movement in *MCEV*, and future sustainability of earnings on *MCEV*, are encouraged.

ASSUMPTIONS

17.3.1 How economic and other business assumptions (e.g. mortality, persistency, expenses and future asset allocation) are determined for each significant territory.

17.3.2 The market *reference rates* (for example rates at five year intervals) for each of the significant territories. The methods used to extend the curves where a sufficiently deep market does not exist should be described. Similarly if short duration rates are based on other market information then this should also be disclosed. Where the *reference rates* are not based on the swap curves (as they do not exist or do not provide a robust basis) this should be disclosed with the alternative method used. If the *reference rates* include a liquidity premium then the liquidity premium should be disclosed along with, as appropriate, the method to derive the premium and the liability classes where allowance is made.

17.3.3 The methods used to derive volatilities and correlations should be disclosed. Changes in the methods used since the last reporting period should also be disclosed.

17.3.4 Where relevant, the foreign exchange rates used.

METHODOLOGY

17.3.5 A clear, brief description of the *covered business*. Where *covered business* includes business in several IFRS segments or where *covered business* does not constitute a full IFRS segment sufficient qualitative and quantitative disclosure should be made to ensure that a full understanding of:

- The IFRS value of the business included in *covered business*; and
- The *MCEV* value of the business

by IFRS segment is available.

17.3.6 Treatment of consolidation adjustments, including inter-company arrangements such as reinsurance or loans associated with *covered business* and allocation of *holding company* and overhead expenses to *covered business*.

17.3.7 For companies *writing participating business*, the approach used to determine future bonuses and the treatment of any *residual assets*.

17.3.8 The method used to determine the level of *required capital*. For each significant geographical segment disclosed, the level of required capital expressed as a percentage of the level of solvency capital at which the supervisor is empowered to take action.

17.3.9 Where material, the management actions included in determining the *time value of financial options and guarantees*.

17.3.10 The basis on which allowance has been made for *frictional costs*. The allowance for costs of investment expenses and taxation should be discussed. If any caps are applied to the costs incurred this should be disclosed. Where approximate methods have been used to project the required capital this should be disclosed together with a brief description of the basis of projection.

17.3.11 The method and basis on which allowance has been made for residual *non hedgeable risks*. The risks allowed for should be described including the nature of the risk and whether the impact on shareholder value is *symmetric or asymmetric*. The *non hedgeable risks* for which there is sufficient allowance in the *time value of options and guarantees* or the *PVFP* should be explicitly described. For the implied cost of capital charge, the definition, method of determining and amount of associated capital on which the residual *non hedgeable risk* costs are applied, including the allowance for management actions, should be disclosed. A description of the allowance for diversification should also be disclosed.

17.3.12 The method used to determine the *value of new business* including:

- The definition of new business
- Any changes in the definition of new business and the impact of such changes on the *value of new business*
- The basis of the new business calculation with regard to timing of assumptions and valuation;
- Any changes in the timing of assumptions and valuation and impact of such changes on the *value of new business*; and
- Where there are material impacts on value related to interactions between new business and existing business, the basis for presenting impacts should be described.

17.3.13 The published new business premium volume and whether it is consistent with the definition of new business. Where *PVNBP* values are disclosed, a description of how the underlying assumptions have been set should also be provided including details of where premiums before reinsurance have not been used. In addition, where *PVNBP* is being used to compare new business volumes from one period to another, offices should report separately:

- The total amount of single premiums
- The total annualised amount of annual premiums; and
- The average annual premium multiplier, being (*PVNBP* – total amount of single premiums) / total annualised amount of regular premiums.

17.3.14 The basis on which any disclosure of prior year comparatives on current assumptions has been made.

17.3.15 The nature, amount and impact on shareholder value of any exceptional development and one-off costs excluded from the unit cost base for each significant territory, where material.

17.3.16 The extent to which future productivity gains are anticipated including the impact on shareholder value.

17.3.17 The approach used to allow for tax.

17.3.18 The nature of, and techniques used to value, *financial options and guarantees*. The amount of, and reason for, any alteration to the allowance for *financial options and guarantees* made under *Principle* 7. A summary of the characteristics of the models used should be provided such as the calibration and convergence.

17.3.19 The basis of translation used for foreign exchange.

17.3.20 Where material, the treatment and deduction to *MCEV* for financial types of reinsurance and debt as required by *Guidance* 3.4.

Analysis of *MCEV earnings;* Reconciliation of opening and closing values

17.3.21 The opening and closing *MCEV*, together with a breakdown of the change in the *MCEV* over the period. Presentation of the breakdown is prescribed in Appendix A.

17.3.22 The analysis should include only *covered business*.

17.3.23 The analysis is on a net of taxation basis with movements disclosed on a line- by-line basis as described in Appendix A.

17.3.24 The analysis should be presented separately between *free surplus, required capital* and *VIF*, to better explain the movement in capital flows.

17.3.25 The expected existing business contribution to *MCEV earnings* should be determined at a rate representing managements' expectation of the business. Such an expectation may consider real world earned rates of return, the projected change in the cost of *financial options and guarantees* and the release of the residual *non-hedgeable risk* allowance. The methodology and assumptions in determining the rate should be disclosed.

17.3.26 The expected existing business contribution to *MCEV earnings* should be presented in two components:

- The earnings assuming assets earn the beginning of *period reference rates*; plus
- The additional earnings consistent with managements expectation for the business.

17.3.27 Any significant variance between the actual experience and that anticipated in the projection assumptions should be identified and explained (variance analysis). The effect of any significant change to the method or approach for reassessing expected experience should also be quantified and disclosed (model changes). Similarly, any significant impact resulting from changes in experience assumptions should be disclosed and explained (assumption changes).

17.3.28 There is no requirement to separately disclose economic experience variances and changes in economic assumptions. The *MCEVM* implicitly includes allowance for changes in economic assumptions over time (as market consistent) and an explicit split is not a natural subdivision. The presentation of economic variances should include the impacts of financial market conditions being different at the end of the reporting period than those included in the expected existing business contribution and new business value, net of the impacts of the expected management actions in response to those changes. If management has made changes to crediting strategies they should be included in the 'Other operating variances'.

17.3.29 Movement items not part of total *MCEV* earnings should be shown as either opening or closing or if merited both opening and closing adjustments in a manner designed to best reflect the economic return the company has achieved in the period. Opening and closing adjustments may be further subdivided as “Capital & Dividend flows”, “Foreign Exchange variance” and “Acquired/Divested Business” where appropriate. No other items should be included in opening or closing adjustments. Changes to models to reflect improvements or rectify errors (where no restatement is made) should be included in the “Other operating variance” line.

17.3.30 The primary drivers of the “Other operating variance” and “Other non operating variance” lines in Appendix A should be disclosed where material. Mandatory local regulatory changes including taxation, as well as fundamental business reorganisations such as in a court-approved scheme of reorganisation, would in normal circumstances be shown in “Other non operating variance.” The impact of management actions in these areas including taxation planning actions could be reflected in “Other operating variance”.

17.3.31 The amount of any positive or negative earnings in respect of services provided to the covered business by another part of the Group that is not reflected in the reported *MCEV* or *value of new business* should be disclosed.

17.3.32 Supplementary disclosures should show the total *MCEV* movement by geographic segment used for IFRS segmental reporting purposes.

17.3.33 Companies may as a supplementary measure present the movement in *MCEV* as part of pre-tax profits, by grossing up the after-tax movement by attributable shareholder tax, and adding this attributable tax to other tax in the income statement. The approach applied for determining the attributable tax for individual territories, type of business, or other relevant groupings should be applied consistently from period to period unless a change in approach can be justified. The approach applied, distinguishing between the territories, type of business or other relevant groupings should be disclosed.

17.3.34 Where a percentage return on *MCEV* is disclosed this should be calculated on the “Adjusted opening *MCEV*” unless it is materially misleading to calculate the return without including the specific timing of non-return items.

IMPLIED DISCOUNT RATES AND NEW BUSINESS *INTERNAL RATE OF RETURN*

17.3.35 *Implied discount rates (IDR)* are not required by the *MCEV guidance*. However, if they are disclosed a clear, brief description of the IDR and the traditional embedded value calculations underlying its calculation should be disclosed. The IDR should be based on *distributable earnings* and will therefore be net of the *required capital flows*. Companies should disclose the real world assumptions used in calculating the IDR.

17.3.36 *Internal rates of return (IRR)* for new business are not required by the *MCEV guidance*. Where disclosed they should be calculated using *distributable earnings* cash flows and it should equate to the rate that would result if the *value of new business* is equal to zero. If companies disclose an IDR then the IRR should be calculated using methods and assumptions consistent with the IDR calculation. If IDR is not disclosed but an IRR is, then companies should disclose the real world assumptions used in calculating the IRR.

GROUP MCEV

17.3.37 As a minimum standard, a *Group MCEV* should be presented in a suitable format including the *covered business* under the *MCEVM* and the non-*covered business* valued as the unadjusted IFRS net asset value. A mark to market adjustment should therefore not be performed for external borrowings and other items not on a mark to market basis under IFRS relating to non *covered business*. However adjustments may be required to ensure consistency between the value allocated to covered and non *covered business* for example:

- Where the IFRS treatment of pension scheme deficits does not bring in the full mark to market value,
- Where IFRS earnings are before tax; or
- Where IFRS is gross of minority interests.

17.3.38 An analysis of *Group MCEV* earnings should be presented as set out in the template shown in Appendix B.

17.3.39 Movement items not part of total *Group MCEV* earnings should be shown as either opening or closing or if merited both opening and closing adjustments in a manner designed to best reflect the economic return the company has achieved in the period. Opening and closing adjustments may be further subdivided as “Capital & Dividend flows”, “Foreign Exchange variance” and “Acquired/Divested Business” where appropriate. No other items should be included in opening or closing adjustments.

17.3.40 The analysis should present the movement of covered and non-*covered business*. Where financial service groups show a primary IFRS segmentation that includes all *covered business* within the one segment the standard template should still be presented and additional information disclosed to enable an understanding of the interactions between covered and non-*covered business* within the long term business segment.

17.3.41 The analysis should be shown on a net of tax basis with the option for companies to show additional disclosures showing the pre tax analysis.

17.3.42 The total earnings for non-*covered business* should equal the IFRS Net Income plus the relevant constituents of Other Comprehensive Income.

17.3.43 The operating earnings for non-*covered business* should start from the IFRS operating profit with any adjustments made to align more closely with the *MCEV* operating earnings quantitatively disclosed. Sufficient disclosure should be made to provide an understanding of the basis used and to provide a bridge to the company’s IFRS disclosures.

17.3.44 Sufficient note disclosures should be shown to enable an understanding of movements and cross subsidies such as adjustments to non *covered business* earnings to allow for look-through profits counted in *covered business*.

17.3.45 Where a percentage return on *Group MCEV* is disclosed this should be calculated on the “Adjusted opening *Group MCEV*” unless it is materially misleading to calculate the return without including the specific timing of non-return items.

RECONCILIATION TO IFRS NET ASSET VALUE

17.3.46 A reconciliation of the *MCEV shareholder net worth* to the IFRS net asset value should be made for the closing position. This should be performed and disclosed at the same level as the main *MCEV* result and analysis.

SEGMENTATION

17.3.47 For companies with more than one business or geographical area of operation, the business classifications disclosed should be consistent with those used for primary statements.

STATEMENT BY DIRECTORS

17.3.48 The supplementary information should include a statement from the directors that the *MCEV* accounts have been prepared in accordance with the *MCEV Principles*. Where reference is made to the *MCEV Principles* in financial statements, but the *guidance* has not been materially complied with, the areas of non-compliance and reasons for non-compliance should be explicitly disclosed in a separate section.

SENSITIVITIES

G17.4 *Sensitivities* should be provided for total *MCEV* results. The impact on *shareholder net worth* and *VIF* from the sensitivities should be considered. New business values should also be subject to sensitivity disclosures, except where a particular sensitivity is not meaningful to the assessment of new business values. New business sensitivities should assume that the scenario arises after point of sale of the contract.

G17.5 Sensitivities should be calculated at least annually. For companies that publish *MCEV* results more frequently than annually, it is not necessary to update sensitivities for interim periods unless there is a substantial change in the nature of the business that leads to a significant change in the sensitivities during the course of the year.

G17.6 Disclosure of sensitivities is intended to allow an informed analyst to make valid comparisons on different assumption sets. Sensitivity scenarios should include consistent changes in cash flows directly affected by the changed assumption(s), for example future bonus participation in changed economic scenarios. The nature of management actions and policyholder behaviour assumed in the sensitivities should be disclosed.

G17.7 Sensitivities do not apply to non *covered business*. It is only necessary to calculate sensitivities in a single direction unless stated otherwise and unless a movement in the opposite direction gives a significantly different movement in which case both directions should be shown. In some jurisdictions the reserving basis that underlies shareholder distributable cash flows is dynamic, and in theory some or all sensitivities could change not only future experience but also reserving levels. Because modelling dynamic reserves is extremely complex and the effect on value is second-order, it is recommended that in performing sensitivities companies keep reserving bases constant and only vary future experience assumptions, unless it is misleading to do so. In any case, the choice of methodology should be clearly disclosed.

G17.8 The following minimum sensitivities should be disclosed.

INTEREST RATES AND ASSETS

17.8.1 100 basis point pa change in the interest rate environment
This sensitivity is designed to indicate the impact of a sudden parallel shift in the *reference rates*. The sensitivity should be performed for both a 100 basis point pa increase and decrease in the interest rate environment. It is not performed in isolation from other assumptions. Rather, there are associated impacts on most other economic assumptions. Where possible, when calculating this sensitivity, companies should allow for all consequent movements. However, the level of capital assigned to the business should not be changed in this sensitivity. For some territories with low interest rates, a 100 basis point reduction could lead to negative interest rates. *Reference rates* should not fall below 0% in this sensitivity, even if it creates a variation from the standard of having a parallel shift.

17.8.2 10% decrease in equity/property capital values at the valuation date, without a corresponding fall/rise in dividend rental/yield
This sensitivity is designed to indicate the impact of a sudden change in the market-values of assets. The situation being reflected is the equivalent of a fall of 10% of the absolute amount of the future dividends or rental yields. Separate disclosure of equity and property movements is not mandatory. However, an insurer may chose to disclose separately if the results were significantly different for these asset classes.

17.8.3 25% increase in equity/property implied volatilities at the valuation date
This sensitivity is designed to indicate the impact of an increase in market implied equity/property volatilities on the cost of options and guarantees. The insurer may chose to disclose separately if the cost of options and guarantees is sensitive to one particular asset category. The 25% increase is a multiplicative increase in volatilities.

17.8.4 25% increase in swaption implied volatilities at the valuation date
This sensitivity is designed to indicate the impact of an increase in market implied swaption volatilities on the cost of options and guarantees. The 25% increase is a multiplicative increase in volatilities.

EXPENSES AND PERSISTENCY

17.8.5 10% decrease in maintenance expenses (i.e. the ongoing cost of administering contracts)
This sensitivity is applied to the projected level of expenses. A sensitivity to changes in expense inflation is not required.

17.8.6 10% proportionate decrease in lapse rates (multiplicative, i.e. a base lapse rate of 5% pa becomes 0.9 x 5% = 4.5% pa)
This sensitivity should reflect a single, downwards movement in lapse rates. Separate analysis of contracts that are either positively or adversely affected by reduced lapse rates is not required.

INSURANCE RISK

17.8.7 5% proportionate decrease in base mortality and morbidity rates (disclosed separately for life assurance and annuity business)
It is useful information for companies to disclose separately the effect of mortality on life assurance and annuity business, as the future experience for these different insured populations might vary significantly. However, there are likely to be some contracts whose classification in one category or the other is somewhat arbitrary (due to the availability of different types of benefit within a single contract). The basis for classification should be disclosed where the effect on the sensitivity results is material.

The disclosure should also include a description of whether any future management actions (such as changes to pricing or valuation bases) are modelled in reaction to the changing mortality/morbidity rates. No sensitivity to different trends in increasing longevity is required. An insurer may choose to disclose such a sensitivity providing the basis for the sensitivity calculation is disclosed.

REQUIRED CAPITAL

17.8.8 *Required capital* to be equal to the level of solvency capital
Guidance 5.3 allows *required capital* to be based on economic measures other than solvency capital. In this sensitivity, the amount of *required capital* should be set equal to the level of solvency capital at which the supervisor is empowered to take any action. The level of solvency capital should be disclosed.

Glossary

Active review (of assumptions)
A review involving assessment of the existence and application of new evidence as to the appropriateness of an assumption. The finding and conclusions of such a review should be documented.

Appraisal value
The *appraisal value* is the value of the company based on a projection of future cash flows that shareholders will receive from the company's assets as well as from its current and future operations. The *appraisal value* is commonly defined as the *MCEV* plus the value of future new business.

Asymmetric risk
A risk where equal and opposite movements upwards and downwards result in financial outcomes that are not of equal magnitude.

Best estimate assumption
A *best estimate assumption* should be equal to the mean estimate (probability weighted average) of outcomes of that risk variable.

Closed form solutions
An analytical solution to determine the value of *financial options and guarantees*. An example of a closed form solution is the Black-Scholes formula.

Cost of capital methodology
An approach through which the cost of risk is determined, by taking the *present value* of the cost of capital charges for all future risk based capital requirements until run-off

Covered business
The contracts to which the *MCEVM* has, in line with the *Principles*, been applied.

Distributable earning
The *distributable earning* for each territory is defined as the profit arising under the local *statutory basis* and in addition the *required capital* flows.

Encumbered
Amounts of capital whose distribution to shareholders or removal from supporting the *covered business* is restricted. Such restrictions should include requirements to maintain sufficient capital to avoid intervention in management of the business by the regulator.

Entity specific assumptions
Assumptions that reflect managements' estimate of the future allowing for the nature and experience of the business.

Financial options and guarantees
Features of the *covered business* whose behaviour is asymmetric in relation to observable capital market variables. The following features are examples of *financial options and guarantees*:

- Policyholder related guarantees, or options to change, the level or nature of benefits which may or may not be exercisable at the discretion of the policyholder. Examples of such features may include: guaranteed minimum maturity benefits and inflation linked retirement annuity options
- Fund or company related guarantees or options. Examples of such features may include: shareholder burn through cost for *participating business* and injection or withdrawal of capital from funds that are subject to court or regulators schemes.

Foreseeable
Variations in future non-contractual premiums relating to an existing contract or *recurrent single premiums* creating contracts are *foreseeable* when assumptions regarding their amount and timing can be made that are consistent with other projection assumptions and based on reliable evidence. Where such predictions are made, any future variation in premium levels relating to such contracts should be treated as variance in experience of in-force business rather than as new business.

Free surplus
The market value of any assets allocated to, but not required to support, the in-force business covered by the *MCEVM* as defined in *Principle* 4.

Frictional costs
The additional taxation and investment costs incurred by shareholders through investing the *required capital* in the company rather than directly. Further, frictional cost may be due to any sharing of investment income on *required capital* with policyholders.

GAAP equity
Under the accounting standard applied for reporting the group's primary financial statements (GAAP), the amount reported as consolidated equity or net assets for the group.

Group MCEV – Group Market Consistent Embedded Value
A measure of the consolidated value of shareholders' interests in covered and non-covered business.

Guidance
Guidance providing preferred interpretation is set out under each *Principle*. Compliance with *guidance* is preferred but not compulsory, but the nature of, and reason for, any non-compliance with *guidance* must be explicitly disclosed.

Holding company
A legal entity with a function of being a consolidating entity for primary financial reporting of *covered business.*

Internal rate of return
Internal rate of return is the discount rate that would produce a *value of new business* equal to zero.

Implied discount rate
In the valuation of a block of business, the *implied discount rate* is the rate of discount such that a traditional embedded value for the business equates to the *MCEV*.

Liquid
A liability is *liquid* if the liability cash flows are not reasonably predictable.

Look through basis
A basis via which the impact of an action on the whole group, rather than on a particular part of the group, is measured.

MCEV earnings
- the change in *MCEV* over a period
- plus the value of distributions from the assets backing the *covered business* (including disposals of *covered business*)
- minus the value of capital contributions to the *covered business* (including acquisitions of *covered business*)
- adjusted to remove the impact of foreign currency exchange rate changes between the main reporting currency and those of the *covered business*.

MCEVM – Market Consistent Embedded Value Methodology
The methodology for calculating and reporting Embedded Value, as set out by the Market Consistent Embedded Value *Principles*.

Non hedgeable risk
Non hedgeable risk is defined to equal *non hedgeable financial risk* plus *non hedgeable non financial risk.*

Non hedgeable non financial risk
Non hedgeable non financial risk is *non financial risk* where deep and liquid capital markets do not exist to hedge such risk.

Non financial risk
Non financial risk is risk that is non financial in nature, such risk includes mortality, longevity, morbidity, expense, persistency and operational.

Non hedgeable financial risk
Non hedgeable financial risk is financial risk where deep and liquid capital markets do not exist to hedge such risk. For example, in developing markets or long dated equity options in developed markets (e.g. US or Europe).

Non hedgeable risk based capital
The level of capital required to support the *non hedgeable risks*. *Guidance* on the calculation of the capital is provided in *Guidance* 9.5.

Participating Business
Covered business in which policyholders have the right to participate (receive additional benefits) in the performance of a specified pool of assets or contracts, fund or company within the group.

Present Value
The value of a future cash flow at the valuation date, discounted at a rate applicable to that cash flow.

Present value of new business premium
The value of future premiums on new business written during the year discounted at a rate applied to that cash flow.

Principle
Compliance with each of the 17 *Principles* is required.

Product Group
A *product group* is a set of contracts with similar risk characteristics.

Recurrent single premium
A contract where premiums can be paid on a regular basis, but there is no contractual obligation as to the frequency and level of the payments.

Reference rates
The reference rates are defined in *Principle* 14.

Renewal
A contract is renewed when a policyholder takes whatever action is required, typically payment of a premium, in order to maintain their benefits under the contract.

Required capital
The *market value* of assets attributed to the *covered business* over and above that required to back liabilities for *covered business* whose distribution to shareholders is restricted as defined in *Principle* 5.

Residual assets
That part of the free assets allocated to the *participating business* which would remain at the end of the projection (after all future bonuses have been allocated).

Service companies
Service companies are companies providing services to the *covered business*, or operations within the *covered business* providing services outside the *covered business*. *Service companies* and their clients can be internal or external to the group.

Shareholder net worth
Shareholder net worth is defined to equal the *free surplus* plus the *required capital*.

Statutory basis
The valuation basis and approach used for reporting financial statements to local solvency regulators.

Stochastic techniques
Techniques that incorporate the potential future variability in assumptions affecting their outcome.

Supplementary reporting
Reporting within financial statements that is:

- Not covered by audit opinion; or
- Produced using a methodology other than that on which the primary financial statements are based.

Symmetric risk
A risk where equal and opposite movements upwards and downwards result in financial outcomes that are of equal magnitude.

Time value and Intrinsic value
An option feature has two elements of value, the *time value* and *intrinsic value*. Intrinsic value is that of the most valuable benefit under the option under conditions at the valuation date. *Time value* is the additional value ascribable to the potential for benefits under the option to increase in value prior to expiry.

Value of new business
The additional value to shareholders created through the activity of writing new business.

Abbreviations

The following abbreviations are used in this document:

Abbreviation	Full term	Defined
MCEV	Market Consistent Embedded Value	*Principle* 1
MCEVM	*MCEV* Methodology	*Guidance* 1.1
Group MCEV	Group Market Consistent Embedded Value	*Guidance* 1.3
VIF	Value of in-force *covered business*	*Principle* 3
PVFP	*Present value* of future profits	*Principle* 6
VNB	*Value of new business*	*Guidance* 10.8
PVNBP	*Present value of new business premium*	*Guidance* 10.8
IDR	*Implied discount rate*	*Guidance* 17.3
IRR	*Internal rate of return*	*Guidance* 17.3

Appendix A – Presentation of analysis of earnings

The following template (including the line item label descriptors) should be used for the primary movement analysis disclosure. The analysis should only include *covered business*.

	Earnings on *MCEV* analysis			
	Free Surplus	***Required Capital***	***VIF***	***MCEV***
Opening *MCEV*				
Opening adjustments				
Adjusted opening *MCEV*				
New business value				
Expected existing business contribution (*reference rate*) [1] [2]				
Expected existing business contribution (in excess of *reference rate*) [1] [3]				
Transfers from *VIF* and *required capital* to free surplus				
Experience variances				
Assumption changes				
Other operating variance				
Operating *MCEV* earnings				
Economic variances				
Other non operating variance				
Total *MCEV* earnings				
Closing adjustments				
Closing *MCEV*				

[1] This represents the following two components:

- Expected earnings on *free surplus* and *required capital*; and
- Expected change in *VIF*.

[2] The earnings assuming assets earn the beginning of period *reference rate*.

[3] The earnings is the component in excess of the *reference rate* reflecting the additional return consistent with the expectation of management for the business.

The analysis is on a net of taxation basis with movements disclosed on a line- by-line basis.

Appendix B – *Group MCEV* analysis of earnings

The following template (including the line item label descriptors) should be used as the standard *Group MCEV* disclosure. An example footnote disclosure has been included that may not apply to all companies.

	Covered business MCEV	**Non *covered business* IFRS**	**Total *Group MCEV***
Opening Group MCEV			
Opening adjustments			
Adjusted opening *Group MCEV*			
Operating *MCEV earnings*			
Non-operating *MCEV earnings*			
Total MCEV earnings			
Other movements in IFRS net equity			
Closing adjustments			
Closing *Group MCEV*			

Example footnote: Non *covered business* reflects CU Xm less profit than IFRS reporting representing asset management profits for managing *covered business* assets that has been modelled with the *covered business MCEV*.

The line items in the tables in Appendix A & B above should be fixed. Additional lines should only be included where these are subdivisions of existing lines. If companies wish to disclose other lines this should be done in supplementary tables and not in these analyses.