# 2007 Market Consistent Embedded Value

Supplementary information – 13 February 2008



# Market Consistent Embedded Value

Supplementary information regarding Market Consistent Embedded Value 2007 of the life insurance business of Storebrand Group

# MAIN FEATURES

- Embedded value of Storebrand Livsforsikring AS (SBL) before consolidation of SPP was NOK 21,690 million at yearend 2007.
- At the end of 2007, SBL acquired SPP. This acquisition has been reflected in the year-end 2007 embedded value for the life insurance business of Storebrand Group.
- Embedded value of SPP was NOK 13,134 million at year-end 2007.
- Total market consistent embedded value (MCEV) 2007 for Storebrand Group (including SPP) was NOK 29,940 million.
- During 2007 the embedded value of SBL was restated using a bottom-up market-consistent approach. Also, new life insurance legislation in Norway, affecting the profit-sharing mechanisms, was reflected in the restatement of the embedded value as at 31 December 2006.
- The look-through value of NOK 4,156 million arising in the group's asset management company and induced by the life insurance business is included.
- Embedded value earnings (pre acquisition of SPP) for financial year 2007 were NOK 2,609 million, representing 14 % return on the restated opening embedded value.
- The embedded value calculations are compliant with CFO Forum European Embedded Value Principles and based on a methodology developed working closely with Tillinghast.

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# I. INTRODUCTION

The purpose of this document is to provide further information on the disclosure of the embedded value 2007 for Storebrand Group. It includes business written in Storebrand Livsforsikring AS (SBL) and the recently acquired Swedish life insurance business SPP (including Euroben Ltd.).

Storebrand adopted the European Embedded Value Principles for the year-ends 2004 to 2006. During 2007, the methodology has been revised from the previously applied top-down approach to allowing for risk via a bottom-up market consistent approach. The impact of this change in methodology is included in the restatement of the embedded value at 31 December 2006. An embedded value is an actuarially determined estimate of the value of the company excluding any value attributable to future new business. The calculation of embedded values requires the use of a number of assumptions with respect to the business, operating, and economic conditions, and other factors, some of which are determined by economic conditions and financial markets. Although the operating and demographic assumptions used represent estimates which Storebrand considers reasonable, actual future operating conditions and actual future experience may vary from that assumed in the calculation of the embedded values, and such variations may be material. Consequently, the inclusion of embedded value information herein should not be regarded as a representation by Storebrand, Tillinghast, or any other person, that the stream of future after-tax profits used to determine the embedded values will be achieved.

# **II. OVERVIEW OF RESULTS**

The results in this section are presented in NOK. An exchange rate of 0.84 has been applied to amounts in SEK consistent with the annual accounts of Storebrand Group.

The total embedded value as at 31 December 2007 for the life insurance business of Storebrand Group after capital movements is NOK 29,940 million. The present value of future profits amounts to NOK 28,412 million (including look-through profits of NOK 4,156 million), while shareholder surplus is NOK 7,478 million and cost of capital is NOK 248 million. The embedded value is reduced by a cost of volatility of NOK 5,701 million.

# Embedded value for Storebrand Group

| NOK mill.                       | <b>MCEV 2007</b> |  |
|---------------------------------|------------------|--|
| Total shareholder surplus       |                  |  |
| at market value                 | 7,478            |  |
| Cost of capital                 | -248             |  |
| Present value of future profits | 24,256           |  |
| Cost of volatility              | -5,701           |  |
| Look-through profits            | 4,156            |  |
|                                 |                  |  |
| Total embedded value            | 29,940           |  |
|                                 |                  |  |
|                                 |                  |  |

As an effect of the holding company structure in Sweden, whereby part of the profits can be transferred to the group as a tax-free group contribution, it is currently expected that the effective tax rate for profits arising in SPP will be zero. Therefore, a tax rate of 0% has been applied for SPP. The current tax legislation in Norway leads to an effective tax rate of 0% for profits arising in SBL and the group's asset management company.

# Historic embedded value

|                                 |          | SE       | BL        |           | SPP       | Group     |
|---------------------------------|----------|----------|-----------|-----------|-----------|-----------|
| NOK mill.                       | EEV 2005 | EEV 2006 | MCEV 2006 | MCEV 2007 | MCEV 2007 | MCEV 2007 |
| Total shareholder surplus       |          |          |           |           |           |           |
| at market value                 | 5,512    | 5,977    | 5,977     | 6,931     | 5,431     | 7,478     |
| Cost of capital                 | -711     | -986     | -102      | -106      | -142      | -248      |
| Present value of future profits | 8,614    | 10,813   | 13,831    | 16,864    | 7,392     | 24,256    |
| Cost of volatility              | -1,158   | -1,259   | -3,143    | -4,863    | -839      | -5,701    |
| Look-through profits            | -        | -        | 1,943     | 2,863     | 1,292     | 4,156     |
| Тах                             | -232     | 0        | 0         | 0         | 0         | 0         |
| Total embedded value            | 12,025   | 14,544   | 18,506    | 21,690    | 13,134    | 29,940    |

# Embedded value restatement as at 31 December 2006

During 2007, the methodology for the embedded value calculations was changed from a top-down "real world" approach to projecting investment returns and allowing for risk via a bottom-up market consistent approach. The main changes related to this change in methodology have been the following:

- The stochastic economic scenarios are now arbitrage free, i.e. they do not include any risk premiums on assets, and are calibrated to reflect market prices.
  For example, implied volatilities are used (except for real estate, where no implied volatility can be observed) in the market-consistent approach, instead of historic volatilities as in previous years.
- The cost of holding required capital is calculated as the frictional cost on capital. Due to an effective tax rate of 0%, the cost of capital only reflects the cost of future asset management expenses on required capital.
- No additional allowance for non-hedgeable risk has been made. Storebrand Group will follow the recommendations of the CFO Forum expected to be published in 2008 and will include this in its 2008 MCEV.

Additionally, there has been a restatement of the embedded value to reflect the recent changes in Norwegian life insurance legislation, which have a major impact on the way profits are allocated. Previously, profits were based on the total surplus. From 2008 onwards, the insurance portfolio will be split into several portfolios (including the separation of underlying assets). For each of those portfolios different profit-sharing rules apply. The regulatory limitations to shareholder participation in profits for each of these portfolios are described below.

 Fee based business (group pension business): a fee for the interest rate guarantee, which is derived individually based on available buffer capital for each insurance contract, is charged to the employer. A fixed margin on this fee has been capitalised in the embedded value. Additionally, a margin on risk premiums is allocated to shareholders. While any positive surplus (after deduction of margins) accrues to the policyholders, losses have to be covered by the shareholders.

- "20/80 portfolio" (mainly paid up policies): 20% of investment surplus and 100% of negative risk surplus (after depletion of risk buffer capital) and 100% of expense result are allocated to the shareholders. A portfolio-specific margin on reserves is targeted, though not exceeded.
- "35/65 portfolio" (traditional retail life savings and annuity business): 35% of all profits are allocated to shareholders. A portfolio-specific margin on reserves is targeted, though not exceeded.
- Non participating business (typically risk products, DC and Unit Linked): all profits accrue to shareholders.
- Additionally, profits and deficits from the shareholder portfolio are distributed to the shareholders.

Due to the split into different sub-portfolios, the possibility of cross-subsidies in the business have been significantly reduced, specifically:

- Assets are split and will in the future develop (and be managed) independently based on the individual financial strength of contracts in each sub-portfolio.
- Buffer capital (additional statutory reserves or "tilleggsavsetning") cannot be shared across all insured but is only available on an individual contract level (i.e. policyholder level or scheme level for group business).

It should be noted that the new profit-sharing rules have been applied in the embedded value models from 1 January 2007, although they will not be implemented in practice until 1 January 2008. The impact of this simplification on the restated embedded value for the year-end 2006 is not material.

The overall impact of the restatement of the embedded value is NOK 2.0 billion.

#### 2007 Embedded value earnings analysis

The embedded value and embedded value earnings shown in this section represent SBL only, unless stated otherwise.



The movement from 31 December 2006 to 31 December 2007 shows embedded value earnings of NOK 2,609 million (before acquisition of SPP, synergy effects, dividend and other capital transfers and after taking into account look-through profits for SBL). This represents a return on opening embedded value of 14%.

The interest on opening value only represents the unwinding of the risk-free rate used to discount future profits, and is applied to the restated embedded value at 31 December 2006 (after look-through).

The value of new business written in 2007 (based on year-end 2007 assumptions) increases the embedded value by NOK 503 million. The value of new business is based on a marginal approach, meaning that the change in cost of volatility of the in-force business at year-end due to writing new business is attributed to the new business.

Operating variances and assumption changes mainly relate to the following: Within non participating business changes in expenses and charges have a negative effect, while the shareholder margin on fee based business has increased due to change in reserving bases. The net effect of this is an increase in embedded value of NOK 0.7 billion. Overall decrement experience in group pension business has been better than expected with a positive impact of NOK 0.4 billion on the embedded value.

Economic assumption changes and variances can be split into the following main effects: The increase in interest rates in 2007 has lead to higher expected returns and higher expected profits for the shareholders. This is partially offset by the fact that profits are discounted using the higher interest rates. The net effect increases embedded value by NOK 1,2 billion. At the same time the implied equity volatility has increased leading to a higher cost of volatility, having a negative embedded value effect of NOK 1,2 billion. In aggregate, the impact of these effects is an increase in the embedded value of only NOK 42 million. Of the total shareholder profit for the year 2007 of NOK 1.3 billion, NOK 1.0 billion has been retained in the shareholder capital and NOK 0.3 billion has been paid out as a dividend.

The impact of the acquisition of SPP in late 2007 can be divided into the following components:

- The issue of additional capital of the net sum NOK 8.9 billion
- The deduction of the book value of SPP in SBL's accounts of NOK 13.8 billion
- In the next step, the embedded value of SPP of NOK 13.1 billion at 31 December 2007 is added
- As the last step, synergy effects have been taken into account to reflect the proportional decrease of expenses in Storebrand's asset management company due to the additional assets under management from SPP which will be transferred before the end of 2008. The increase of the embedded value of NOK 0.9 billion only reflects the higher assumed look-through profits induced by the business of SBL.

#### Value of new business (VNB):

As SPP was acquired close to end-of-year, no separate analysis has been performed on the value of new business.

The value of new business shown below relates only to the new business written in SBL.

| NOK million                     | VNB 2007 |  |
|---------------------------------|----------|--|
| Present value of future profits | 518      |  |
| comprising                      |          |  |
| - fee based business            | 260      |  |
| - 20/80 portfolio               | 104      |  |
| - 35/65 portfolio               | 53       |  |
| - non-participating business    | 101      |  |
| Cost of capital                 | -1       |  |
| Cost of volatility <sup>1</sup> | -107     |  |
| Look-through profits            | 93       |  |
| Value of new business           | 503      |  |

#### <sup>1</sup>Cost of volatiltiy is calculated on marginal method

|   | 2006     | 20                  | 007                 |
|---|----------|---------------------|---------------------|
| NOK mill.                                     |          | (excl look-through) | (incl look-through) |
| With-profit business for 2006                 |          |                     |                     |
| Fee based business, 20/80 and 35/65 portfolio | for 2007 |                     |                     |
| VNB   | 320      | 317                 | 364                 |
| PVNBP   | 12,950   | 10,679              | 10,679              |
| APE   | 1,540    | 890                 | 890                 |
| APE margin (%)                                | 21 %     | 36 %                | 41 %                |
| Margin on PVNBP                               | 2.5%     | 3.0%                | 3.4%                |
| Defined Contribution and Unit Linked          |          |                     |                     |
| VNB   | 307      | 66                  | 112                 |
| PVNBP   | 7,770    | 2,398               | 2,398               |
| APE   | 1,186    | 248                 | 248                 |
| APE margin (%)                                | 26 %     | 27 %                | 45 %                |
| Margin on PVNBP                               | 4.0%     | 2.7%                | 4.7%                |
| Risk business                                 |          |                     |                     |
| VNB   | 73       | 27                  | 27                  |
| PVNBP   | 712      | 540                 | 540                 |
| APE   | 98       | 49                  | 49                  |
| APE margin (%)                                | 74 %     | 55 %                | 55 %                |
| Margin on PVNBP                               | 10.2%    | 5.0%                | 5.0%                |
| Total   |          |                     |                     |
| VNB   | 700      | 409                 | 503                 |
| PVNBP   | 21,431   | 13,617              | 13,617              |
| APE   | 2,824    | 1,187               | 1,187               |
| APE margin (%)                                | 25 %     | 34 %                | 42 %                |
| Margin on PVNBP                               | 3.3%     | 3.0%                | 3.7%                |

#### New business margins

## Sensitivities for Storebrand Group

| NOK mill.                                 | Total MCEV          | Change | Change in % | Value of                  |        |             |
|---|---------------------|--------|-------------|---------------------------|--------|-------------|
|   |                     |        |             | new business <sup>1</sup> | Change | Change in % |
| Base                                      | 29,940              |        |             | 503                       |        |             |
| 1. Interest rates +1% <sup>2</sup>        | 31,412              | 1,472  | 4.9 %       | 501                       | -2     | -0.4 %      |
| 2. Interest rates -1% <sup>2</sup>        | 27,094              | -2,846 | -9.5 %      | 472                       | -31    | -6.2 %      |
| 3. Equity market values -10% <sup>3</sup> | 28,354              | -1,586 | -5.3 %      | 498                       | - 5    | -0.9 %      |
| 4. Equity and property market values -10% | <sup>3</sup> 27,724 | -2,216 | -7.4 %      | 404                       | -98    | -19.6 %     |
| 5. Salary and expense inflation + 0.5%    | 30,360              | 420    | 1.4 %       | 529                       | 27     | 5.3 %       |
| 6. Maintenance expenses -10%              | 30,598              | 659    | 2.2 %       | 517                       | 14     | 2.7 %       |
| 7. Mortality rates -5% - annuity business | 29,263              | -677   | -2.3 %      | 503                       | 0      | 0.0 %       |
| 8. Mortality rates -5% - life business    | 30,109              | 169    | 0.6 %       | 523                       | 20     | 3.9 %       |
| 9. Lapse rates +10%                       | 29,111              | -829   | -2.8 %      | 465                       | -38    | -7.5 %      |

<sup>1</sup> Value of new business for SBL only

<sup>2</sup> Change in market value of unit funds not considered

<sup>3</sup> The effect of existing hedging assets has been reflected

The sensitivities reflect changes in single assumptions unless stated otherwise.

# Sensitivities 1 & 2:

Parallel shifts of 1 percentage point are applied to the starting yield curve. The market values of bonds are adjusted accordingly.

#### Sensitivity 3 & 4:

The initial market values of all equity and property holdings (including mutual funds in unit linked and defined contribution business) are reduced by 10 % (in sensitivity 3 only equity market values have been reduced). As this is an immediate drop in market values, there is no relief from the dynamic risk management principles. However, the effect of existing hedging assets has been reflected. Sensitivity 5:

Salary and expense inflation rates are increased by 0.5 percentage points.

#### Sensitivity 6:

Future maintenance expenses are reduced by 10 %.

#### Sensitivity 7:

Mortality rates are reduced by 5 % going forward for annuity business only.

#### Sensitivity 8:

Mortality rates are reduced by 5 % going forward for life business only.

# Sensitivity 9:

Future lapse rates increase 10 %.

# **III. METHODOLOGY**

**Embedded Value:** An embedded value is an actuarially determined estimate of the value of the company excluding any value attributable to future new business. It comprises the sum of shareholder surplus, the value of business in force at the valuation date, the cost of holding required capital and the cost of volatility (i.e. the time value of financial options and guarantees).

The shareholder surplus for SBL is based on the published shareholder assets under NGAAP, in addition to the security fund including an allocation of unrealised capital gains attributed to shareholder assets. For SPP, the shareholder surplus equals the shareholder equity less intangible assets and less tax assets.

The value of in-force business is the present value of the projected stream of future after-tax profits that are expected to be generated by the policies in force at the valuation date, assuming assets equal to the technical reserves. The profits are determined on local GAAP using a deterministic projection.

The stream of future after-tax profits is determined using realistic assumptions for future operating conditions regarding such items as expenses, taxation, lapse, surrender, mortality, and morbidity rates. Economic assumptions used are consistent with observable market data.

**Embedded value earnings:** The embedded value earnings are defined as the change in embedded value, after adjustments for any capital movement, such as dividends or capital injections. The embedded value earnings are split into the following categories: unwinding of the discounting, the value of new business and experience variances and assumption changes split into operating and economic as shown in the analysis of movements above.

**Covered business:** The business covered in the embedded value reporting is the business written within and legally contained in Storebrand Livsforsikring AS, SPP AB and Eurben Ltd. Additionally, profits arising in the group's asset management company, Storebrand Kapitalforvaltning AS, which arise from the life insurance business of Storebrand Group have been included. No other sources of profits from the life insurance business within Storebrand Group are considered. **In-force business and new business:** For the purposes of the embedded value, the in-force business is defined as existing policies including future renewals on existing policies for individual business, and existing schemes for group business. New members of existing group schemes have been allowed for implicitly by assuming leaving members are replaced by new members joining. New business is consequently defined as new individual policies written, and for group business, new business relates to new schemes or schemes which are transferred to Storebrand from another insurer.

**New business value:** The new business value is defined as the after-tax value derived from new business excluding funds that are not yet booked, including the impact of initial acquisition expenses, the cost of required capital and the marginal impact of the new business on the cost of volatility (as described in detail below). It is calculated at point of sale and based on end-of-year assumptions.

**Cost of required capital:** The cost of holding required capital is calculated as the frictional cost on capital. Due to an effective tax rate of 0%, the cost of capital only reflects the cost of future asset management expenses on required capital. No additional allowance for nonhedgeable risk has been made. Storebrand Group will follow the recommendations of the CFO Forum expected to be published in 2008 and will include this in its 2008 MCEV.

Required capital: The amount of required capital for SBL has been set as the greater of Norwegian regulatory capital and internal capital requirements. Life insurance in Norway is subject to two solvency requirement tests, the EU requirement (Solvency I) and the banking requirement (Basel I), both of which must be satisfied. The internal requirement is based on Storebrand's understanding of the level necessary to meet rating agency requirements for Storebrand's targeted rating. As the security fund cannot be distributed immediately to shareholders, it forms part of required capital. As at 31 December 2007 the required capital is set to the regulatory minimum requirement for Norwegian business. For SPP, the required capital has been set as 150% of the EU minimum requirement. The required capital is assumed to be released in line with the run off of the business in force.

### **Capital requirement**

|             | SBL        |            | SPP        |
|-------------|------------|------------|------------|
|             | 2006       | 2007       | 2007       |
| Regulatory  |            |            |            |
| minimum     | NOK 4.1 bn | NOK 4.3 bn | NOK 3.9 bn |
| Internal    |            |            |            |
| requirement | NOK 4.0 bn | NOK 3.9 bn | NOK 5.3 bn |

For SBL, the banking requirement (Basel I) results in the higher of the two regulatory capital requirements.

**Participating business / profit-sharing:** During 2007, the new insurance legislation was implemented. This change has also been taken into account in the restated embedded value for the year-end 2006. The profit-sharing rules are described in the restatement section above.

**Cost of volatility:** The time value of financial options and guarantees (including guaranteed return and the right of policyholders to receive at least the minimum bonus), by Storebrand referred to as the cost of volatility, has been determined using a stochastic model of the underlying with-profit business. It is defined as the difference between the present value of future profits in a certainty equivalent scenario and the average over 1000 stochastic scenarios.

For the new business, the time value of options and guarantees is determined by means of a marginal method, i.e. by attributing to the new business the impact of the new business written during the year on the time value of options and guarantees of the entire portfolio.

The financial options evaluated comprise the interest rate guarantees and the impact of local profit-sharing regulations. No other financial options have been evaluated.

**Look-through adjustments:** Profits arising in Storebrand's asset management company which are induced by the group's life insurance business have been considered in the restated embedded value at year-end 2006, the value of new business written in 2007 and the embedded value at year-end 2007. It should be noted that the transfer of assets covering SPP's liabilities will only be transferred during 2008 and only profits from 2009 onwards have been taken into account.

**Deterministic projections**: A detailed deterministic model has been used to determine the projected future shareholder cash flows based on a certainty equivalent scenario, whereby it is assumed that all assets earn the risk-free rate of return and all cash flows are, therefore, discounted with the risk-free rate.

**Stochastic projections**: A Monte-Carlo simulation using market-consistent scenarios was used to evaluate the effect of volatility in the capital markets on the earnings of the covered business.

Allowance is made for management actions, including the investment strategy and solvency based dynamic risk management, as well as crediting and buffer capital strategy based on the current profit-sharing strategy adopted by Storebrand. The underlying principles are in line with the strategies developed and executed in recent years in SBL, applying CPPI<sup>1</sup> and OBPI<sup>2</sup>. It has been taken into account that similar principles are applied in SPP in the future. No allowance has been made for policyholder behaviour linked to developments in the capital markets.

<sup>&</sup>lt;sup>1</sup> CPPI = Constant Proportion Portfolio Insurance

<sup>&</sup>lt;sup>2</sup> OBPI = Option Based Portfolio Insurance

# **IV. ASSUMPTIONS**

# **Economic assumptions**

The risk-free rates used in the certainty-equivalent and stochastic projections are based on NOK and SEK swap rates.

The table below shows the risk free yields by currency.

# Spot Yield Curve

| Year | 2    | 007  | 20   | 06   |
|------|------|------|------|------|
|      | NOK  | SEK  | NOK  | SEK  |
| 1    | 5.9% | 4.7% | 4.6% | 3.8% |
| 2    | 5.7% | 4.7% | 4.9% | 4.0% |
| 3    | 5.5% | 4.7% | 5.0% | 4.1% |
| 5    | 5.4% | 4.8% | 5.0% | 4.2% |
| 10   | 5.5% | 4.9% | 5.0% | 4.2% |
| 20   | 5.5% | 4.9% | 5.0% | 4.2% |
| 30   | 5.3% | 4.9% | 4.9% | 4.1% |

The stochastic scenarios have been calibrated to implied volatilities of swaptions at the money. The economic scenario generator (ESG) used for generating the scenarios simulates rates and returns on a monthly basis. A set of correlated standard normal random samples is created based on a specified correlation matrix.

The first random sample generated at each time is for the short rate process (a Cox-Ingersoll-Ross model), which in turn guides the movement of the other asset classes. Asset class returns are produced with no allowance for an asset class specific risk. The stochastic element is then applied by means of the multivariate standard normal samples already derived. The model parameters are calibrated to the market conditions at the valuation dates, i.e. swap rates, swaption prices and equity options prices.

The table below shows implied volatilities for 10 year swaps and different tenures:

# Implied volatilities for option on 10 year swaps at the money

| Year | 2007  |       | 200   | 06    |   |
|------|-------|-------|-------|-------|---|
|      | NOK   | SEK   | NOK   | SEK   | _ |
| 1    | 12.3% | 12.6% | 13.1% | 15.3% |   |
| 5    | 11.6% | 12.6% | 13.4% | 16.3% |   |
| 10   | 11.3% | 12.5% | 12.4% | 16.3% |   |
| 20   | 10.5% | 11.6% | 11.6% | 15.9% |   |
|      |       |       |       |       |   |

Various equity indices are considered in the stochastic models. Equity volatilities are based on implied volatilities of equity options at the money. Real estate volatility is based on historic market data. The following table shows volatility assumptions used for generating stochastic scenarios.

# Volatilities

| 2007 |                           |                      |                |                            |                           | 2006                 |                |                            |
|------|---------------------------|----------------------|----------------|----------------------------|---------------------------|----------------------|----------------|----------------------------|
| Year |                           | SBL                  |                | SPP                        |                           | SBL                  |                | SPP                        |
|      | International<br>Equities | Domestic<br>Equities | Real<br>Estate | Int. and domestic equities | International<br>Equities | Domestic<br>Equities | Real<br>Estate | Int. and domestic equities |
| 1    | 19.0%                     | 24.0%                | 6.0%           | 19.9%                      | 13.2%                     | 18.2%                | 4.1%           | 14.7%                      |
| 10   | 22.0%                     | 28.0%                | 7.0%           | 23.9%                      | 18.4%                     | 24.4%                | 5.5%           | 20.5%                      |

# Inflation

Price inflation for SPP has been set equal to implied inflation for the Swedish market. This implied inflation in Sweden equals approximately 50% of the implied forward rates. For SBL, price inflation is set to be 50% of the 1-year forward rate as a proxy for implied inflation which is not available for the Norwegian market.

Salary inflation is assumed to be 1.9% above price inflation and is based on an analysis of historic spreads.

**Expenses:** The expenses incurred have been subdivided by line of business and fully allocated into investment, acquisition and maintenance expenses. Maintenance expenses are expressed as per-policy expenses and are assumed to increase with price inflation.

The cost of SPP's and SBL's own pension schemes has been reflected on local GAAP basis.

There are no material services provided by other group companies other than the one reflected in the lookthrough adjustment. Also, there are no material expenses at the holding level that would have to be attributed and none have been taken into account.

No productivity gains are anticipated in the embedded value assumptions. There are no material overhead expenses incurred in other entities. No material expenses have been allocated to development costs.

**Reinsurance and debt:** There are only non-material amounts of reinsurance in Storebrand Group. The market value of the subordinated loans within Storebrand is assumed to be equal to the respective book value of the loan and hence no adjustment has been made to the shareholder surplus.

**Actuarial assumptions:** The assumptions for mortality and morbidity, lapses and paid-ups are based on recent company experience, and have been reviewed for 2007.

**Tax:** In line with current legislation, a tax rate of 0% has been used for SBL and profits arising from asset management. For SPP an effective tax rate of 0% has been used due to the holding company structure in Sweden which allows for tax free group contributions.

# V. RESULTS BY COMPANY

# **Results for Storebrand Livsforsikring**

The embedded value shown below for SBL reflects its value before capital effects, i.e. in order to derive the embedded value shown for Storebrand Group above the embedded value of SPP has to be added and the difference between the book value of SPP in Storebrand's accounts and the additional capital issues has to be deducted.

| NOK mill.                       | MCEV 2007 |
|---------------------------------|-----------|
| Total shareholder surplus       |           |
| at market value                 | 6,931     |
| comprising                      |           |
| - Required capital              | 4,336     |
| - Free surplus                  | 2,595     |
| Cost of capital                 | -106      |
| Present value of future profits | 16,864    |
| comprising                      |           |
| - fee based business            | 8,000     |
| - 20/80 portfolio               | 4,865     |
| - 35/65 portfolio               | 1,086     |
| - non-participating business    | 2,913     |
| Cost of volatility              | -4,863    |
| Look-through profits            | 2,863     |
| Total embedded value            | 21,690    |

# Sensitivities for SBL

| NOK mill.  | Total MCEV | Change | Change in % |
|--|------------|--------|-------------|
| Base   | 21,690     |        |             |
| 1. Interest rates +1% <sup>1</sup>                     | 22,596     | 906    | 4.2 %       |
| 2. Interest rates -1% <sup>1</sup>                     | 19,723     | -1,967 | -9.1 %      |
| 3. Equity market values -10% <sup>2</sup>              | 21,105     | -585   | -2.7 %      |
| 4. Equity and property market values -10% <sup>2</sup> | 20,475     | -1,215 | -5.6 %      |
| 5. Salary and expense inflation + 0.5%                 | 22,345     | 655    | 3.0 %       |
| 6. Maintenance expenses -10%                           | 21,816     | 126    | 0.6 %       |
| 7. Mortality rates -5% - annuity business              | 21,713     | 23     | 0.1 %       |
| 8. Mortality rates -5% - life business                 | 21,859     | 169    | 0.8 %       |
| 9. Lapse rates +10%                                    | 21,079     | -611   | -2.8 %      |

<sup>1</sup> Change in market value of unit funds not considered
<sup>2</sup> The effect of existing hedging assets has been reflected

| Results for SPP  |                           | MCEV 2007<br>SEK mill. | MCEV 2007<br>NOK mill. |
|--|---------------------------|------------------------|------------------------|
| The embedded value shown below for SPP includes the  | Total shareholder surplus |                        |                        |
| embedded value of SPP's Irish subsidiary Euroben Ltd.  | at market value           | 6,464                  | 5,431                  |
|  | comprising                |                        |                        |
| Only asset management cost synergies and tax synergies are included. No diversification benefits are included. | - Required capital        | 6,250                  | 5,250                  |
|  | - Free surplus            | 215                    | 180                    |
|  |                           |                        |                        |
|  | Cost of capital           | -169                   | -142                   |
|  | Present value of          |                        |                        |
|  | future profits            | 8,798                  | 7,392                  |
|  | comprising                |                        |                        |
|  | - Defined benefit         | 2,886                  | 2,425                  |
|  | - Defined contribution    | 1,667                  | 1,401                  |
|  | - Unit linked             | 3,057                  | 2,569                  |
|  | - Risk business           | 1,188                  | 998                    |
|  |                           |                        |                        |
|  | Cost of volatility        | -998                   | -839                   |
|  | Look-through profits      | 1,538                  | 1,292                  |
|  | Total embedded value      | 15,634                 | 13,134                 |

# Sensitivities for SPP

| NOK mill.                                 | Total MCEV | Change | Change in % |
|---|------------|--------|-------------|
| Base                                      | 13,134     |        |             |
| 1. Interest rates +1% <sup>1</sup>        | 13,700     | 566    | 4.3 %       |
| 2. Interest rates -1% <sup>1</sup>        | 12,256     | -879   | -6.7 %      |
| 3. Equity market values -10% <sup>2</sup> | 12,133     | -1,001 | -7.6 %      |
| 4. Equity and property market values -10% | 12,133     | -1,001 | -7.6 %      |
| 5. Salary and expense inflation + 0.5%    | 12,899     | -235   | -1.8 %      |
| 6. Maintenance expenses -10%              | 13,666     | 532    | 4.1 %       |
| 7. Mortality rates -5% - annuity business | 12,434     | -700   | -5.3 %      |
| 8. Mortality rates -5% - life business    | 13,134     | 0      | 0.0 %       |
| 9. Lapse rates +10%                       | 12,917     | -217   | -1.7 %      |

<sup>1</sup> Change in market value of unit funds not considered

<sup>2</sup> There are currently no material real estate holdings in SPP

# Statement of Directors

The directors confirm that the embedded values as at 31 December 2007, and the embedded value earnings including the value added by new business in 2007, have been determined using methodology and assumptions which are compliant with EEV principles.

# **Tillinghast opinion**

Tillinghast, the insurance and financial services consulting practice of Towers Perrin, reviewed the methodology and assumptions used to determine the 2007 embedded value results. The review covered the European Embedded Value as at 31 December 2007, the value of 2007 new business, the analysis of 2007 embedded value earnings and the sensitivities of the embedded value and new business value. It also covered the restated embedded value as at 31 December 2006 to a market-consistent approach.

Tillinghast has concluded that the methodology and assumptions used comply with the EEV Principles and Guidance, and in particular that:

- the methodology makes allowance for the aggregate risks in the covered business through the bottomup methodology as described in this document, which includes a stochastic allowance for the cost of financial options and guarantees, and a level of required capital based on regulatory and internal capital requirements
- the operating assumptions have been set with appropriate regard to past, current and expected future experience

- the economic assumptions used are internally consistent and consistent with observable market data and
- for participating business, the assumed bonus rates and the allocation of profit between policyholders and shareholders are consistent with the projection assumptions, established company practice and local market practice.

Tillinghast has also performed limited high-level checks on the results of the calculations and has confirmed that any issues discovered do not have a material impact on the disclosed embedded values and new business values. Tillinghast has not, however, performed detailed checks on the models and processes involved.

Tillinghast notes that the results as at 31 December 2007

- are based on a zero tax rate in accordance with the current taxation regime relating to income and capital gains on European (EEA) equities
- include the value of SPP in the year-end embedded value, whereas the embedded value earnings only reflect those from SBL

In arriving at these conclusions, Tillinghast has relied on data and information provided by Storebrand. This opinion is made solely to Storebrand in accordance with the terms of Tillinghast's engagement letter. To the fullest extent permitted by applicable law, Tillinghast does not accept or assume any responsibility, duty of care or liability to anyone other than Storebrand for or in connection with its review work, the opinions it has formed, or for any statement set forth in this opinion.



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