SWEDBANK FÖRSÄKRING AB

2013 European Embedded Value

Content

1 Introduction

European Embedded Value (EEV) is a measure of the consolidated value of shareholders' interests in the covered business. EEV comprises the free surplus, required capital and value of in-force. The value of future new business is not included in EEV. The calculation of EEV is based on various economic and non-economic assumptions, such as swap rates, mortality rates, lapse rates and expenses. Further details of the various assumptions underlying EEV can be found in section 10.

The embedded value of Swedbank Försäkring AB (SFAB) has been calculated in accordance with the European Embedded Value Principles and Guidance published in May 2004 and October 2005 by the European Insurance CFO Forum. SFAB's EEV is based on a market consistent bottom up approach to EEV. An external review of the EEV has been carried out by Towers Watson. Its opinion forms part of this report and can be found in section 12.

This report, which covers the reporting year 2013, is the first time that EEV has been published externally by SFAB.

2 Overview of results

- EEV of Swedbank Försäkring AB amounted to SEK 6 894m at year-end 2013.
- The EEV earnings for 2013 were SEK 1 671m, producing a 30% return on the opening EEV.
- The operating EEV earnings were SEK 749m, resulting in an operating return of 14%.
- The value of new business written in 2013 was SEK 325m. The APE margin and PVNBP margin amounted to 17.2% and 2.9% respectively.

3 Covered business

The covered business includes all business written within and legally contained in Swedbank Försäkring AB with the exception of the group life business, non-life business and business where Swedbank acts as a distributor of third party insurance business (white-label products). The key types of products within the covered business are:

- Unit-linked and investment portfolio business
- Traditional business with a premium-back guarantee ('Traditional Pension Premium Guarantee')
- Traditional business with a step-up guarantee ('Traditional Pension')
- Long-term disability business
- Term insurance business

4 EEV results

The reported EEV is split by net asset value (NAV) and value of in-force (VIF). The NAV comprises free surplus and required capital. The VIF comprises the present value of future profits (PVFP) in a certainty equivalent scenario, an allowance for the time value of options and guarantees (TVOG), frictional costs of required capital (FC) and an allowance for the cost of non-hedgeable risks (CNHR). The following table shows the EEV at year-end 2013 and 2012 with its components:

EEV results (SEKm)	2013-12-31	2012-12-31	Change
Net asset value	**2 385**	**2 182**	**203**
Free surplus	466	459	7
Required capital	1 919	1 723	196
Value of in-force business	**4 509**	**3 356**	**1 153**
Present value of future profits	5 815	4 667	1 149
Time value of options and guarantees	-18	-72	54
Cost of non-hedgeable risks	-1 098	-1 100	3
Frictional costs of required capital	-190	-139	-52
European Embedded Value	**6 894**	**5 537**	**1 356**

The EEV increased from SEK 5 537m to SEK 6 894m. The main drivers of the change in EEV are explained below:

- The past year was characterised by strong equity market returns. The MSCI world index increased by 27% and the Swedish stock market (SIXPRX) by 28% in 2013. As a result, unit-linked funds and investment portfolios increased on average by 13% and 14 % respectively. Swedbank's traditional products 'Traditional Pension' and 'Traditional Pension Premium Guarantee' also saw strong growth in policyholder assets with average returns of 11% and 9% respectively. The positive market performances led to an increase in EEV of approximately SEK 500m.
- Interest rates increased over the year with the 10-year Swedish swap rate increasing from 2.05% to 2.87%. At the same time modelled inflation rates decreased. Higher interest rates and lower expected inflation rates have a positive effect and the EEV increased by about SEK 423m.
- Value of new business amounted to SEK 325m.
- Positive non-economic experience variance of SEK 151m was another driver of the change in EEV. The positive experience variance stems mainly from positive persistency experience.
- The time value of options and guarantees has decreased over the year due to lower implied equity and swaption volatilities along with higher interest rates.

VIF has not been modelled for the long term disability and term insurance business as they are immaterial.

According to the EEV Principles, profits or losses to service companies for managing the covered business are to be valued on a look-through basis. The value of look-through profits arising in the asset management companies within Swedbank Group is SEK 209m as at year-end 2013 (year-end 2012: SEK 178m). Note that the EEV and VNB reported in the analysis of EEV earnings include the value of look-though profits.

Total IFRS equity of SFAB at year-end 2013 amounted to SEK 2 850m (year-end 2012: SEK 2 545m), with the amount allocated to covered business of SEK 2 385m (year-end 2012: SEK 2 182m), reflected in EEV results above.

An implied discount rate (IDR) of 6.6% at year-end 2013 has been derived for SFAB. The approach for deriving the IDR is described in section 9.

5 Value of new business

The value of new business (VNB) represents the value added from new business sold in the year. VNB is calculated at the valuation date with opening economic assumptions and closing non-economic assumptions. New business is defined as the sale of new contracts and increases to existing contracts during the reporting period. Only increases above levels already accounted for in the value of in-force are taken into account. VNB includes the value of expected renewals on those new contracts and expected future contractual alterations to those new contracts.

The following table shows the value of new business written in 2013:

Value of new business (SEKm)	2013-12-31
Value of new business	325
New sales (APE)	1 889
New business margin (%APE)	17.2%
Present value of new business premium (PVNBP)	11 258
New business margin (%PVNBP)	2.9%

In addition to VNB, the table above shows annual premium equivalent (APE) and present value of new business premiums (PVNBP). These measures are defined in section 9.

VNB is reported for the first time in 2013.

The internal rate of return for the new business amounts to 18.8%.

6 Analysis of EEV earnings

The following table shows the movements in EEV from year-end 2012 to year-end 2013.

Analysis of EEV earnings (SEKm)	Free surplus	Required capital	VIF	EEV
Opening EEV	**459**	**1 723**	**3 356**	**5 537**
Value of new business	-173	99	399	325
Expected existing business contribution (reference rate)	4	15	125	144
Expected existing business contribution (in excess of reference rate)	0	0	91	91
Transfers from VIF and required capital to free surplus	538	-12	-526	0
Experience variances	59	-44	136	151
Assumption changes	0	0	38	38
Other operating variance	0	0	0	0
Operating EEV earnings	**427**	**58**	**264**	**749**
Economic variances	-106	139	890	923
Other non-operating variances	0	0	0	0
Total EEV earnings	**321**	**196**	**1 153**	**1 671**
Closing adjustments	-315	0	0	-315
Closing EEV	**466**	**1 919**	**4 509**	**6 894**

- **Opening EEV** is the EEV at year-end 2012. The required capital has been determined as 130% of the minimum statutory solvency margin.
- **Value of new business** as shown in the EEV earnings of SEK 325m includes the unwinding to year-end 2013. The negative contribution to free surplus from new business amounts to SEK -173m

and is due to required capital (SEK -99m) and profits on new business during the reporting period mainly consisting of the acquisition costs.

- Expected existing business contribution (reference rate) reflects the unwinding of the discounting on the VIF with the opening reference rate. Additionally, the risk-free return on the components of the net asset value is also included.
- Expected existing business contribution (in excess of reference rate) reflects the additional return on the opening EEV expected by the management during the reporting period based on real world investment returns described in section 10.1.4. The excess return also includes the release of the allowance for TVOG and CNHR for 2013.
- Transfers from VIF and required capital to free surplus reflect expected profits that were included in the VIF at the previous year-end and expected to be transferred into the free surplus over the reporting period. The total impact on the EEV earnings is zero.
- Experience variances result from deviations between actual and expected profits regarding operational and demographic assumptions such as mortality, lapses and expenses. In addition, this item includes profits that have occurred during the year from the non-modelled business. The experience variance of SEK 151m is mainly a result of positive experience variance with regards to lapses (SEK 112m) and profits from long-term disability business (SEK 68m) which was partly offset primarily by negative experience on commissions and fees.
- Assumption changes are defined as changes from year-end 2012 to year-end 2013 non-economic assumptions. The assumption changes of SEK 38m are mainly a result of risk runoff changes impacting the CNHR (SEK -97m), lowered expense assumptions (SEK 98m), increased surrender fees for occupational pensions (SEK 26m) and changes in persistency assumptions (SEK 11m).
- Other operating variances denote changes in investment strategy and model improvements and corrections. However, no such changes were performed during 2013.
- Operating EEV earnings is the sum of the earnings items listed above.
- Economic variances, which amounts in total to SEK 923m, include the deviations between actual and expected investment return (SEK 500m) and the effect of changing the economic assumptions from the start of the year to the end of the year (SEK 423m). The change in economic assumptions results in a decrease in the time value of options and guarantees due to higher interest rates and lower equity and swaption implied volatilities. The positive variance between expected and actual investment returns is an effect of a very strong equity performance during 2013.
- Other non-operating variances typically include changes in the regulatory environment and changes in tax regime. However, no such changes were applicable for 2013.
- Total EEV earnings are calculated as the sum of operating EEV earnings, economic variances and non-operating variances.
- Closing adjustments reflect dividends (SEK -100m) and other capital movements (SEK -215m).
- Closing EEV is the EEV for SFAB at year-end 2013.

7 Sensitivities

The following table shows the sensitivity of the EEV to important financial market parameters and to operational and demographic assumptions.

Sensitivities (SEKm)	EEV	Change	Change in %
Base value	6 894		
1. 100 basis points increase of interest rates	7 035	141	2%
2. 100 basis points decrease of interest rates	6 709	-184	-3%
3. 10% fall in equity market values	6 514	-380	-6%
4. 25% multiplicative increase in implied swaption volatilities	6 867	-26	0%
5. 25% multiplicative increase in implied equity volatilities	6 890	-4	0%
6. 10% proportionate decrease in lapse rates	7 122	228	3%
7. 10% decrease in future administration expenses	7 227	334	5%
8. 5% decrease in mortality rates for products with mortality risk	6 903	9	0%
9. 5% decrease in mortality rates for products with longevity risk	6 881	-13	0%

Sensitivity 1: A parallel shift upwards of 100 basis points is applied to the observed market swaps rates and the reference rate is then constructed as described in section 10.1.1. Inflation rates are assumed to be unchanged in the stress as the real interest yield curve is adjusted accordingly.

Sensitivity 2: A parallel shift downwards of 100 basis points is applied to the observed market swaps rates and the reference rate is then constructed as described in section 10.1.1. Inflation rates are assumed to be unchanged in the stress as the real interest yield curve is adjusted accordingly.

Sensitivity 3: A 10% decrease in market values of all equity holdings at the valuation date.

Sensitivity 4: A 25% multiplicative increase in implied swaption volatilities.

Sensitivity 5: A 25% multiplicative increase in implied equity volatilities.

Sensitivity 6: A permanent 10% proportionate decrease in lapse rates.

Sensitivity 7: A 10% decrease in future administration expenses.

Sensitivity 8: A permanent 5% proportionate decrease in mortality rates for products exposed to mortality risk.

Sensitivity 9: A permanent 5% proportionate decrease in mortality rates for products exposed to longevity risk. The sensitivity is shown after applying management actions where it is assumed that the pricing basis is adjusted following a longevity shock.

8 Reconciliation of IFRS equity to EEV net asset value

The following table shows a reconciliation of the IFRS equity to EEV net asset value for the life insurance business at year-end 2013:

Reconciliation (SEKm)	
IFRS equity	**2 850**
Adjustments for non-covered business (group life)	-407
Adjustments for non-covered business (non-life & white-label products)	-59
DAC and other intangible assets	0
Goodwill	0
EEV Net asset value	**2 385**

9 Methodology

European Embedded Value (EEV) is 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 EEV consists of the following components:

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

The VIF comprises the present value of future profits (PVFP) in a certainty equivalent scenario, an allowance for the time value of options and guarantees (TVOG), frictional costs of holding required capital (FC) and an allowance for cost of non-hedgeable risks (CNHR).

SFAB's EEV is based on a market consistent bottom-up approach to EEV.

EEV earnings are defined as the change in EEV before capital movements and dividends. The EEV earnings are split between the expected return (unwinding of discounting and excess return above the reference rate), value of new business, experience variances, assumption changes, other operational variances, economic variances and other non-operating variances. EEV operating earnings are defined as EEV earnings excluding economic variances and non-operating variances.

Covered business is the business written within and legally contained in SFAB. The group life, non-life business and business where Swedbank acts as a distributor of third party insurance business are excluded from covered business.

Value of New Business (VNB) reflects the additional value to shareholders created through the activity of writing new business. New business is defined as the sale of new contracts and increases to existing contracts during the reporting period. Only increases above levels already accounted for in the value of in-force are taken into account. VNB includes the value of expected renewals on those new contracts and expected future contractual alterations to those new contracts.

VNB is calculated after allowing for TVOG, FC and CNHR using opening economic assumptions and closing operating and demographic assumptions. VNB is valued after tax at the valuation date.

Net Asset Value is defined as the market value of assets allocated to the covered business in excess of statutory policy reserves and other liabilities at the valuation date. It is made up of the required capital and free surplus.

Required Capital is the portion of assets held in excess of statutory liabilities whose distribution to shareholders is restricted in order to meet insurance obligations. The required capital is determined as the larger of the solvency capital to meet the statutory minimum required level and the capital required to meet internal objectives. SFAB has set the required capital to the amount of capital required to maintain a solvency margin ratio of 130%, which exceeds the minimum statutory requirement of 100%.

Free Surplus is calculated as the net asset value less the required capital.

Value of In-Force (VIF) is defined as the present value of future profits (PVFP) less the time value of options and guarantees (TVOG) less the frictional cost of holding required capital (FC) less the cost of non-hedgeable risks (CNHR).

Present Value of Future Profits (PVFP) is the certainty equivalent present value of future profits under a single scenario, reflecting future cash flows arising from the existing covered business. Risk-free rates are used for the investment yield assumptions and the discount rates. The intrinsic value of options and guarantees is included in the certainty equivalent present value of future profits.

The stream of future after-tax profits is determined using best estimate assumptions for future operating conditions regarding such items as expenses, taxation, lapses and mortality rates.

Time Value of Options and Guarantees (TVOG) is derived as the difference between the average PVFP based on the future cash flows under 3 000 risk-neutral scenarios and the certainty equivalent PVFP.

TVOG is evaluated for SFAB's products with guarantees. Allowance is made for management actions in the stochastic scenarios, including dynamic asset allocation in accordance with the dynamic asset strategy adopted by SFAB and the collectivisation of the financial risk for policies with a collective conditional bonus fund.

Frictional Cost of holding required capital (FC) reflects the taxation on expected return and the frictional investment management costs in relation to the required capital. Frictional investment management costs are set to zero since the assets covering required capital is held at a deposit account at Swedbank AB at zero cost.

Cost of Non-Hedgeable Risks (CNHR) is an allowance for non-hedgeable risks not already reflected in the TVOG or PVFP. The EEV Principles require sufficient allowance to be made for the aggregate risks in the covered business and sufficient allowance for certain risks may not have been made within the PVFP, TVOG and FC. These include an allowance for uncertainty in the best estimate of the cash flows related to non-hedgeable risks, including lapse, expense, mortality, longevity and catastrophe (CAT) risk. The CNHR also includes allowance for the illiquidity of the Swedish swap market.

The allowance for CNHR has been made by using a cost of non-hedgeable risk capital approach for the reflected risks. The risk capital has been derived using recent Solvency II standard formula stress scenarios, with aggregation of risk capitals using the relevant Solvency II standard formula correlations to allow for diversification between the risks. No allowance is made for diversification between non-hedgeable and hedgeable risks, nor between covered and uncovered business. Future management actions are allowed for in the longevity risk stress where it is assumed that the pricing basis would be adjusted following a longevity shock. The risk capital relating to the illiquidity of the Swedish swap market is calculated by shifting the illiquid part of the yield curve. Future risk capitals are estimated using selected risk drivers. The cost of capital charge is set to 4.0% per annum.

The certainty equivalent scenario is a single deterministic scenario where it is assumed that all assets earn the risk-free rate of return and all cash flows are discounted with the risk-free rate.

Look-through adjustments for SFAB are expected future profits arising in Swedbank's asset management company which stem from SFAB's covered business. These expected profits are allowed for in the EEV and VNB (referred to in the EEV Guidance as a "look through" basis). The value of the look-through profits are stated in section 4.

Reinsurance has not been considered in the valuation since there are only immaterial amounts of reinsurance within SFAB's covered business.

Annual Premium Equivalent (APE) is a measure for new sales for insurance companies and is defined as the sum of the regular premiums and 10% of the single premiums stemming from new businesses sold during the reporting period.

Present Value of New Business Premiums (PVNBP) is a measure for new sales and is calculated as the sum of single premiums and the present value of regular premiums. The present value of regular premiums is calculated in accordance with VNB using opening economic assumptions and closing operating and demographic assumptions.

Implied Discount Rate (IDR) is defined as the single discount rate which, when applied to a deterministic projection of future shareholder distributable profits using real world economic assumptions as described in section 10.1.4, results in the same value as the one which is produced in accordance with the methodology and assumptions used for calculating SFAB's EEV results.

Internal Rate of Return (IRR) is derived as the single discount rate which, when applied to a deterministic projection of future shareholder distributable profits arising from new business sold in the reporting period using real world economic assumptions as described in section 10.1.4, results in a discounted value of zero.

10 Assumptions

10.1 Economic assumptions

10.1.1 Risk-free reference rate

The risk-free reference rates used for calculating the EEV at year-end 2012 and 2013 have been derived according to the following approach:

- The reference rate is based on Swedish swap rates.
- Swap market interest rates are applied from the liquid part of the risk-free interest rate curve up to the last liquid point (LLP) of 10 years. SFAB does not consider the quoted swap rates beyond 10 years as liquid. No adjustment is made for credit risk or liquidity premium.
- The ultimate forward rate (UFR) is set to 4.2% and the convergence period between the LLP and UFR is set to 50 years. The last observable market point is 30 years.

The reference rate between the LLP and the last observable market point is calculated as a weighted average of implied forward rates from observed market swap rates and the extrapolated forward rate using the Smith Wilson extrapolation technique, where weights decrease linearly between the LLP and the last observable market point. The impact of using a LLP of 30 years compared to using a LLP of 10 years is immaterial on EEV and VNB.

The table below shows the model risk-free reference spot rate curve:

Spot reference rate curve	1	2	5	10	20	30
2012-12-31	1.2%	1.2%	1.5%	2.0%	2.5%	2.8%
2013-12-31	0.8%	1.0%	1.9%	2.8%	3.3%	3.5%

10.1.2 Calibration of economic scenarios

An economic scenario contains information regarding equity and bond returns, yield curves and inflation rates under a defined projection horizon. The time value of options and guarantees has been calculated based on simulated market consistent economic scenarios. Market consistent scenarios are calibrated to fit market prices at the valuation date. The economic scenario generator (ESG) and the calibration used for generating the market consistent economic scenarios have been provided by Barrie & Hibbert (Moody's Analytics). The model parameters are calibrated to fit key economic assumptions at valuation date, such as initial yield curve, implied swaption volatilities, implied equity volatilities for relevant equity indices and correlations between asset classes. For estimating the time value of options and guarantees, 3 000 scenarios have been used.

Interest rates are modelled using a so-called Libor Market Model Plus (LMM+). The calibration of LMM+ requires market implied volatilities for at-the-money swaptions for different maturities and tenors, as well as market implied volatilities for out-of-the-money swaptions with a 10-year tenor.

The table below shows model implied volatilities based on market implied volatilities of at-the-money swaptions with a 10-year tenor.

At-the-money swaptions with a 10-year tenor	1	2	5	10	20	30
2012-12-31	28%	27%	23%	21%	19%	16%
2013-12-31	25%	23%	21%	19%	16%	13%

Equity prices are simulated using a constant volatility model. The equity model has been calibrated to forward implied volatilities on at-the-money OMX30 options. In the calibration, the extrapolated 10-year option has been targeted and adjusted for stochastic interest rates effect. The specific model volatility was calibrated to 23% and 22% in year-end 2012 and year-end 2013, respectively.

10.1.3 Inflation

Price inflation rates have been set equal to the difference between nominal interest rates and real interest rates, based on market data. Salary inflation, used to inflate future expenses and premiums arising from occupational pension schemes, is assumed to be 1.5 percentage points above price inflation based on an analysis of historical spreads.

10.1.4 Real world assumptions

Real world assumptions are used in the EEV earnings analysis for calculating the expected existing business contribution in excess of reference rate and for the derivation of IDRs and IRRs. The following risk premiums have been added to the risk-free reference rates used in the certainty equivalent projection:

Corporate bonds	0%
Equity	3%

Investments of SFAB in real estate are immaterial.

10.2 Non-economic assumptions

10.2.1 Expenses

Assumptions on maintenance, acquisition and claims handling expenses are set by considering past, current and expected future experience. Productivity gains are not included beyond what has been achieved by the end of the experience period. All expenses incurred have been allocated between products into acquisition, maintenance and claims expenses in accordance with the activity-based costing analysis recently performed by SFAB. Expenses are translated into per policy costs and are subject to salary inflation.

10.2.2 Demographic

The assumptions for surrenders, paid up and premium reduction rates are based on company experience. The assumptions for best estimate mortality are based on the mortality investigation Dödlighetsundersökning 2006 (DUS06), which was carried out by a working group established by the Research Council for Actuarial Science (Försäkringstekniska Forskningsnämnden (FTN)).

10.2.3 Tax

Tax regulations specify company tax of 22% on returns on shareholder capital and on profits from risk business.

11 Statement of the Board of Directors

The Board of Directors of SFAB confirms that the EEV as at 31 December 2013, and the EEV earnings including the value added by new business in 2013, have been determined using methodology and assumptions which are compliant with EEV Principles and Guidance with the following exceptions:

- Group life business has been classified as non-covered business but according to EEV Guidance 2.1 it should be included within covered business;
- VNB sensitivities have not been disclosed.

The EEV results have been approved by the Board of Directors of SFAB at the last board meeting.

12 Towers Watson Opinion

"Towers Watson has reviewed the methodology and assumptions used to determine the 2013 embedded value results of the Swedbank Försäkring AB (SFAB). The review covered the embedded value as at 31 December 2013, the value of 2013 new business, the analysis of movement over 2013 and the sensitivities shown on the embedded value.

Towers Watson has concluded that the methodology and assumptions used, with the exception of the points noted below, 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 methodology as described in this supplementary disclosure document, which includes a stochastic allowance for the cost of financial options and guarantees, an allowance for the frictional cost of holding required capital and an allowance for the cost of non-hedgeable risks using a cost of capital methodology;
- 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, reliable 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.

We note that SFAB's group life business has been classified as non-covered business but according to EEV Guidance 2.1 it should be included within covered business.

We also note that SFAB has not complied with the requirements of EEV Guidance in relation to the disclosure of sensitivity results, by not providing sensitivity results for the value of new business.

Towers Watson 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 value as at 31 December 2013, the value of 2013 new business, analysis of movement over 2013 and sensitivities. Towers Watson has not, however, performed detailed checks on the models and processes involved.

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

13 Disclaimer

The EEV results includes statements of future expectations that are based on SFAB's current view and assumptions which are exposed to known and unknown risks that could cause actual results to differ materially from those expressed herein. SFAB assumes no obligation to update any forward-looking statement nor any information contained herein.