

Embedded Value Results at 30 June 2002 for Rentenanstalt / Swiss Life

Introduction

The embedded value results as at 30 June 2002 for the **life** insurance business of the Swiss Life / Rentenanstalt Group (the Group) have been calculated in order to provide further information on the financial progress of the Group. The embedded value results as at 31 December 2001 are also shown together with items contributing to the change in embedded value during the first six months of 2002. The impact of the planned cost reduction programme and sensitivities to changes in certain assumptions have also been calculated.

The book values for entities for which an embedded value has been calculated have been eliminated from the net asset value to avoid double counting.

The embedded value of the life business is defined as:

the shareholders' interest in the net assets of the Group
plus
the value (to shareholders) of the in-force life business
less
the cost of solvency capital.

The shareholders' interest in net assets represents the statutory shareholders' funds plus the after-tax shareholders' share of unrealised capital gains and reserves not required to meet policyholder liabilities.

The value of in-force life business is calculated as the present value of projected future after-tax profits attributable to shareholders arising from the in-force life business (ignoring profits from future new business). The present value is determined using discount rates which incorporate risk margins.

The cost of solvency capital allows for the difference between the risk discount rate and the after-tax investment return on the shareholders' share of the minimum statutory solvency margin.

The value of new business written in the first half of 2002 has been calculated as the present value at inception of projected future after-tax profits to shareholders on the basis of the assumptions used for the 30 June 2002 embedded value. The values shown for new business allow for the cost of solvency capital required to support the solvency margin requirements of the new business.

Results

The base scenario for the embedded value at 30 June 2002 reflects the actual situation as at 30 June 2002. In particular, the calculations are based on the asset allocation at 30 June 2002 after allowing for hedged positions, a BVG minimum interest rate of 4.0% and the latest premium rates for Swiss group business which have been

authorised by the Swiss regulatory authority (the BPV). The calculated embedded values and value of new business for the Group are shown below.

CHF millions	30/06/2002	31/12/2001
Value of shareholders' interest in the net assets	3,199	4,461
Cost of solvency margin	-1,165	-1,003
Value of in-force business	3,918	4,644
Total Embedded Value	5,952	8,102
Value of new business	36	46

The value of new business for the half year to 30 June 2002 is higher (pro-rata) than that for 2001 due to increased new business volumes, lower bonus rates and lower expenses. These positive effects are partly offset by the assumed reduction to future investment returns.

Geographical breakdown

A geographical breakdown of the embedded value results is shown in the following table.

CHF millions	30/06/2002	31/12/2001
Switzerland		
Shareholders interest in the net asset value	1,853	2,895
Cost of solvency margin	-894	-774
Value of in-force business	2,640	3,190
Total Embedded value	3,599	5,311
Value of new business	-14	-31
European Union		
Shareholders interest in the net asset value	1,346	1,566
Cost of solvency margin	-271	-229
Value of in-force business	1,278	1'454
Total Embedded value	2,352	2'791
Value of new business	50	77

The book values of the life insurance companies in Luxembourg, Italy and Spain have been included above as shown in the statutory accounts of the Group.

Economic Assumptions

The important economic assumptions used for the calculations were:

%	30/06/2002	31/12/2001
Switzerland		
Risk discount rate	7.00	7.00
Pre tax investment returns		
Fixed interest	3.25	3.50
Ordinary shares	6.75	7.00
Weighted new money return	4.24	4.86
European Union		
Risk discount rate	8.29	8.32
Pre tax investment returns		
Fixed interest	5.00	5.13
Ordinary shares	8.00	8.13
Weighted new money return	5.61	5.98

Where there are different rates in different countries or products within a country, the rates shown are averages weighted by the value of in-force business.

Other assumptions

Other assumptions including mortality, morbidity, persistency and expenses have been chosen having regard to the recent and expected experience of the individual insurance companies within the Group.

Exchange rates for foreign currencies

Calculations for individual countries have been performed in the local currencies and the results converted using the end of reporting period exchange rates adopted for the Group accounts.

Change in embedded value

The change in embedded value was effected by negative deviations in investment returns which reduced the embedded value (after allowing for associated changes in policyholder bonuses) by CHF 1,220 million.

The reduction in projected future investment returns arising from the reduced exposure to equities, lower interest rates for fixed interest securities and increased risk margins between the risk free interest rate and the risk discount rate reduced the embedded value by CHF 2,000 million.

Increases in group insurance premium rates authorised by the BPV in Switzerland (applicable from 1 January 2003) increased the embedded value by CHF 1,030 million.

The value added by new business written in the first half of 2002 was CHF 36 million.

Other items, including changes to experience assumptions, made up the balance of the change of value.

Effect of Cost Reduction Programme and reduction of the BVG minimum interest rate

The effect on the embedded value and value of new business of implementing the announced cost reduction programme and a reduction in the BVG minimum interest rate to 3.25% is shown below. The value of new business is calculated on the basis of the actual half year 2002 new business volumes but assuming that the planned cost savings have been fully implemented.

Results assuming a 3.25% guaranteed rate and implementation of the cost reduction programme			
CHF millions	Switzerland	European Union	Total
Embedded Value	4,990	2,491	7,482
Value of new business	7	62	70

The announced cost reduction programme envisages a reduction in expenses of CHF 515 million by 2004. CHF 139 million of these expense reductions have already been implemented and are taken into account in the base embedded value at 30 June 2002.

Sensitivities

The sensitivity of the results as at 30 June 2002 (after allowing for cost reductions) has been calculated for changes to some of the key assumptions. The results were:

CHF millions	Switzerland Embedded Value	European Union Embedded Value	Total Embedded Value	Total Value of six months New Business
Base Values	4,990	2,491	7,482	70
Full implementation of a 3% equity backing ratio	-285	-94	-379	-14
1% reduction in risk discount rate	+509	+173	+682	+20
0.5% decrease to assumed investment returns ⁽¹⁾	-845	-276	-1,121	-34
0.5% increase to assumed investment returns ⁽¹⁾	+460	+322	+782	+21
10% increase in market value of equities	+390	+71	+461	0
10% increase in market value of property assets	+601	+23	+625	0

The weighted new money returns for the 3% equity allocation scenario are 4.05% for Switzerland and 5.37% for European Union

(1) The change of 0.5% in investment returns is applied to the whole new money return. The calculations allow for changes to policyholder benefits where appropriate.

External Review

B&W Deloitte, consulting actuaries, has carried out:

- a review of the embedded value methodology and assumptions and also the results as at 31 December 2001, and
- a limited review covering the same aspects as at 30 June 2002.

B&W Deloitte has also reviewed the results of the embedded value sensitivities (for example, the impact of the planned cost reduction programme) for reasonableness using the assumptions provided by Rentenanstalt / Swiss Life. On the basis of the data provided by Rentenanstalt / Swiss Life, B&W Deloitte considers that the embedded value results at both dates are reasonable.

Businesses for which an embedded value has not been calculated

The values at which the major banking and non life insurance companies are included in the embedded value are as follows:

CHF Million	30/06/02	31/12/01
Banca del Gottardo and STG	2,100	2,604
Non life and health insurance	989	989

The Swiss and French companies included under the heading non life and health insurance are:

- La Suisse Accidents (Lausanne) - Switzerland
- Société Suisse Santé – France
- Société Suisse Accidents - France