

I. Traditional Embedded Value (TEV)

I.2. Detaillierte Struktur

In diesem Abschnitt stellen wir die einzelnen Komponenten des Traditional Embedded Value anhand von Excel-Templates detailliert vor. Die angegebenen Zahlen sind (hoffentlich konsistente) Beispielzahlen ohne Bezug zu einer real existierenden Lebensversicherungsunternehmung.

1. Overview

1.1. Components of TEV

CHF 1000	200 6	Change	2005 (restated)	Change	2005 (original)
Risk Discount Rate	7.50%		7.50%		7.50%
Adjusted Net Asset Value	2357700	118580	2239120	0	2239120
Free Surplus	1240200	-36518	1276718	0	1276718
Required Capital	1117500	155098	962402	0	962402
Net Present Value of Future Profits	1330000	155000	1175000	70000	1105000
Individual	430000	55000	375000	20000	355000
Traditional	400000	50000	350000	20000	330000
Unit Linked	30000	5000	25000	0	25000
Group	900000	100000	800000	50000	750000
Traditional	900000	100000	800000	50000	750000
Unit Linked	0	0	0	0	0
Cost of Capital	-281000	-29000	-252000	-10000	-242000
Individual	-78000	-16000	-62000	0	-62000
Traditional	-67000	-12000	-55000	0	-55000
Unit Linked	-11000	-4000	-7000	0	-7000
Group	-203000	-13000	-190000	-10000	-180000
Traditional	-203000	-13000	-190000	-10000	-180000
Unit Linked	0	0	0	0	0
Administration Expense Overrun	-60	-20	-40	0	-40
Traditional Embedded Value	3406640	244560	3162080	60000	3102080

1.2 Return on TEV Change in FX rate 0%

CHF 1000 LC 1000	200 6		2005 (restated)	
	CHF	LC	CHF	LC
TEV	3406640		3162080	
Net Capital Inflows	-400		-350	
Dividends paid	-100		-150	
Net capital Inflows	-300		-200	
Return on TEV	7.7%			

LC = Local Currency

Return on TEV in 2006 := (TEV(2006) - Net Capital Inflow(2006) - TEV(2005))/TEV(2005)

1.3 Value of New Business (VoNB) after Cost of Capital at Point of Sale

CHF 1000	200 6	Change	2005 (restated)	Change	2005 (original)
Risk Discount Rate		7.50%		7.50%	
Value of New Business after Cost of Capital at Point of Sale					
Individual		3000		1500	
Traditional	10000	2000	9000	500	8500
Unit Linked	9000	1000	8000	0	8000
Group		16000		1000	
Traditional	16000	1000	15000	1000	14000
Unit Linked	0	0	0	0	0
			32000		30500

2. Adjusted Net Asset Value (ANAV)

2.1. Modified Statutory Balance Sheet

CHF 1000	Ass ets			Liabi ties	
	2006	2005 (restated)		2006	2005 (restated)
Subsidiaries	1000000	1000000	Shareholders' funds	1800000	1690000
Branches	100000	100000	Technical reserves (traditional)	21900000	21300000
Remaining investments for trad. business	22500000	22000000	Technical reserves (unit linked)	1500000	1400000
Unit linked assets	1500000	1400000	Other liabilities	3000000	3200000
Activated initial costs	100000	90000			
Other assets	3000000	3000000			
Total statutory balance sheet	28200000	27590000		28200000	27590000
Unrealized gains for trad. business	1850000	1630000	Additional technical reserves	-1000000	-940000
Individual	800000	690000	Individual	-300000	-280000
Property	0	0	Group	-700000	-660000
Equities	100000	90000			
Bonds	700000	600000	Pre-tax undisclosed surplus	2850000	2570000
Other	0	0	Individual	1100000	970000
Group	1050000	940000	Group	1750000	1600000
Property	0	0			
Equities	150000	140000			
Bonds	900000	800000			
Other	0	0			
Total modified statutory balance sheet	30050000	29220000		30050000	29220000

Different valuation methods:

Bonds: Amortized cost values in statutory balance sheet and market values in modified balance sheet

Equities: Lower of market and cost values in statutory balance sheet and market values in modified balance sheet

Residual: Shareholders' funds and pre-tax undisclosed surplus

2.2. Amount of pre-tax undisclosed surplus allocated to the ANAV resp. to the NPVFP

CHF 1000	Percentage allocated to the ANAV		Amount allocated to the ANAV		Amount allocated to the NPVFP	
	2006	2005 (restated)	2006	2005 (rest.)	2006	2005 (rest.)
Pre-tax undisc. surplus			250000	230000	2600000	2340000
URG for trad. business			250000	230000	1600000	1400000
Individual			100000	90000	700000	600000
Property	100%	100%	0	0	0	0
Equities	100%	100%	100000	90000	0	0
Bonds	0%	0%	0	0	700000	600000
Other	0%	0%	0	0	0	0
Group			150000	140000	900000	800000
Property	100%	100%	0	0	0	0
Equities	100%	100%	150000	140000	0	0
Bonds	0%	0%	0	0	900000	800000
Other	0%	0%	0	0	0	0
Addition. techn. reserves			0	0	1000000	940000
Individual	0%	0%	0	0	300000	280000
Group	0%	0%	0	0	700000	660000

If policyholders should participate in a component of the pre-tax undisclosed surplus, this component has to be allocated to the NPVFP

If only shareholders should participate in a component of the pre-tax undisclosed surplus, this component has to be allocated to the ANAV

If a component of the additional reserves is a necessary reserves strengthening, this component has to be allocated to the NPVFP

If a component of the additional reserves is a "free reserve", this component can be allocated to the ANAV or to the NPVFP

In general, an allocation of a component of the pre-tax undisclosed surplus to the ANAV increases the TEV more than an allocation to the NPVFP because of surplus participation

2.3. Legal Quote Shift from ANAV to CoC in Group Life

CHF 1000	Legal Quote Shift from the ANAV to the CoC		Amount allocated to the ANAV		Amount allocated to the CoC	
	2006	2005 (restated)	2006	2005 (rest.)	2006	2005 (rest.)
Pre-tax undisc. surplus			15000	14000	135000	126000
URG for trad. business						
Group			15000	14000	135000	126000
Property	90%	90%	0			
Equities	90%	90%	15000	14000	135000	126000
Bonds	0%	0%	0	0	0	0
Other	0%	0%	0	0	0	0
Additional techn. reserves						
Group	0%	0%	0	0	0	0

The amount allocated to the CoC can be used to reduce the part of CoC which is financed by shareholders

2.4 Breakdown of the Adjusted Net Asset Value (ANAV)

CHF 1000	2006	Change	2005 (rest.)
Shareholders' funds	1800000		1690000
(1) Amount of pre-tax undisclosed surplus allocated to the ANAV	115000		104000
(2) Present value of recurring income in the non-operating account	1000000		1000000
(3) Present value of recurring expenses in the non-operating account	-400000		-400000
Deferred taxes of 22% on the sum of (1), (2) and (3)	-157300		-154880
Adjusted Net Asset Value	2357700		2239120

In this example, ANAV is determined without "locked in" effect

Ad (1): $115000 = 100000$ (Individual; see 2.2.) + 15000 (Group with Legal Quote; see 2.2. and 2.3.)

2.5 Breakdown of the shareholders' funds

CHF 1000	2006	Change	2005 (rest.)
Share capital (paid-up and unpaid)			
Unpaid share capital			
Legal reserves			
Special reservs			
Retained profit			
Annual profit			
Shareholders' funds			

2.6 Sensitivities of the ANAV

CHF 1000	ANAV	Abs. change	Rel. change
Base Case			
Market value of equities decrease by 10%			
Market value of property decrease by 10%			

3. Net Present Value of Future Profits (NPVFP)

3.1. Components of the NPVFP

CHF 1000	200 6	Change	2005 (restated)	Change	2005 (original)
Net Present Value of Future Profits	1330000	155000	1175000	70000	1105000
Individual	430000	55000	375000	20000	355000
Traditional	400000	50000	350000	20000	330000
Unit Linked	30000	5000	25000	0	25000
Group	900000	100000	800000	50000	750000
Traditional	900000	100000	800000	50000	750000
Unit Linked	0	0	0	0	0
Administration Expense Overrun	-60	-20	-40	0	-40
NPVFP after Adm. Exp. Over.	1329940	154980	1174960	70000	1104960

3.2. Breakdown of the NPVFP Individual before Adm. Exp.Over.

CHF 1000	200 6	Change	2005 (restated)
NPVFP Individual			
Traditional			
Endowments			
Annuities			
Term			
Disabilities			
Other			
Unit Linked			
Product 1			
Product 2			
Product 3			

4. Relative share of total CoC financed by shareholders

CHF 1000	2006					
	Required capital	Difference of Zillmer reserves and assets	Reserves for future bonuses	Reserves for terminal bonuses	Legal quote shift from the ANAV to CoC	Relative share financed by shareholders
Individual	387500	100000	130000	0	0	40.64516%
Traditional	365000	100000	130000	0	0	37.0%
Unit Linked	22500	0	0	0	0	100.0%
Group	730000	0	190000	0	135000	55.5%
Traditional	730000	0	190000	0	135000	55.5%
Unit Linked	0	0	0	0	0	0.0%
Total	1117500	100000	320000	0	135000	50.3%

The amount of required capital is often determined according to the EU solvency concept

Relative share financed by shareholders := (Required Capital - Diff(Zr, Za) - ResfB - RestB - LQShift)/Required Capital

CHF 1000	2005 restated					
	Required capital	Difference of Zillmer reserves and assets	Reserves for future bonuses	Reserves for terminal bonuses	Legal quote shift from the ANAV to CoC	Relative share financed by shareholders
Individual	0	0	0	0	0	0.0%
Traditional	0	0	0	0	0	0.0%
Unit Linked	0	0	0	0	0	0.0%
Group	0	0	0	0	0	0.0%
Traditional	0	0	0	0	0	0.0%
Unit Linked	0	0	0	0	0	0.0%
Total	0	0	0	0	0	0.0%

CHF 1000	2005 original					
	Required capital	Difference of Zillmer reserves and assets	Reserves for future bonuses	Reserves for terminal bonuses	Legal quote shift from the ANAV to CoC	Relative share financed by shareholders
Individual	0	0	0	0	0	0.0%
Traditional	0	0	0	0	0	0.0%
Unit Linked	0	0	0	0	0	0.0%
Group	0	0	0	0	0	0.0%
Traditional	0	0	0	0	0	0.0%
Unit Linked	0	0	0	0	0	0.0%
Total	0	0	0	0	0	0.0%

5. Cost of Capital (CoC)

CHF 1000	2006			2005 restated			2005 original		
	Total of CoC	Shareholders' share of total CoC in %	Shareholders' share of total CoC	Total of CoC	Shareholders' share of total CoC in %	Shareholders' share of total CoC	Total of CoC	Shareholders' share of total CoC in %	Shareholders' share of total CoC
Individual	-192149	40.6%	-78000						
Traditional	-181149	37.0%	-67000						
Unit Linked	-11000	100.0%	-11000						
			0						
Group	-365902	55.5%	-203000						
Traditional	-365902	55.5%	-203000						
Unit Linked	0	0.0%	0						
			0						
Total	-558050	50.3%	-281000						