

# IFRS17. Analysis of movements and experience variance in Life Insurance

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# Analisi dei movimenti ed experience variance IFRS17 nelle assicurazioni sulla vita

Luca Bianchi



### The author chooses to present only results with few comments to facilitate discussion



### Balance sheet - Assets (1/3)

### Example

### Transition date 1.1.2022

			Transition	
Entity			Transition	
Financial assets backing technical pro	visions	Amounts are in thousands €		
NON-Linked		IFRS4 & IAS39	Unit Linked	IFRS4 & IAS39
AFS government bonds at amortized cost	fixed rate	3.620.505	Securities - governn fixed rate	34.997
AFS government bonds	variable rate	100.794	Securities - governnvariable rate	7.993
AFS corporate bonds	fixed rate	1.063.354	Securities - bonds fixed rate	7.497
AFS corporate bonds	variable rate	1.800.609	Securities - bonds variable rate	3.359
TOT bonds		6.585.262	Securities - equities listed	38.572
AFS equities listed		75.332	Securities - equities unlisted	-
AFS equities unlisted		5.118	Securities - mutual funds - equities	642.237
TOT equities		80.451	Securities - mutual funds - bonds	457.684
Mutual funds - equities		33.804	Securities - mutual funds - money mai	r 33.987
Mutual funds - bonds		440.431	Securities - mutual funds - other	814.439
Mutual funds - other		424.005	TOT mutual funds	1.948.347
TOT mutual funds		898.240	TOT securities B	2.040.764
AFS structured		165.974		
TOT AFS financial assets	А	7.729.926		
Derivative financial - swaps	С	8.295		
Tot investments backing technical pr	ovisions (A+B+C)	9.778.985		

### Balance sheet - Assets (2/3)

Example

Transition date 1.1.2022;

Q4 2022; Q2 2023

	Entity							
	Financial assets backing technical provisions	transition			Amounts are in thousands €	transition		
	NON-Linked, classified at OCI	IFRS17 & IFRS9	Q4 2022	Q2 2023	Unit Linked (classified at P&L)	IFRS17 & IFRS9	Q4 2022	Q2 2023
	Recyclable OCI - government bonds	3.718.216	3.366.869	3.278.689	FV through P&L - government bonds	42.990	38.783	40.678
/	historical cost & accrued interest	3.718.216	4.399.413	4.197.051	FV through P&L - unsubordinated corporate bonds	9.616	7.802	7.692
	fair value adjustments	4.042 -	1.024.566 -	911.632	FV through P&L - subordinated corporate bonds	1.240	1.270	1.193
	impairment -	4.042 -	7.978 -	6.729	FV through P&L - equities	38.572	33.340	37.067
	Recyclable OCI - unsurbordinated corporate bonds	1.194.110	1.116.758	1.041.067	FV through P&L - mutual funds	1.948.340	1.970.420	2.037.328
	historical cost & accrued interest	1.194.110	1.345.683	1.259.176	FV through P&L - other funds	7		-
	fair value adjustments	13.839 -	223.335 -	212.507	Tot financial assets at fair value through P&L	2.040.764	2.051.615	2.123.957
	impairment -	13.839 -	5.590 -	5.603				
	Recyclable OCI - surbordinated corporate bonds	151.278	146.398	144.439				
/	historical cost & accrued interest	151.278	166.233	164.224				
	fair value adjustments	374 -	19.169 -	19.273				
	impairment -	374 -	666 -	512				
	TOT financial assets at FV through recyclable OCI	5.063.604	4.630.024	4.464.195				
	TOT financial assets at FV through non-recyclable OCI	-						
	TOT financial assets at FV through OCI D	5.063.604	4.630.024	4.464.195	TOT financial assets at FV through OCI	0		
	NON-Linked, classified at P&L							
	Fair Value through P&L - government bonds	3.084	2.595	2.513				
	Fair Value through P&L - unsubordinated corporate bonds	252.416	268.668	262.008				
	Fair Value through P&L - subordinated corporate bonds	1.432.132	1.114.969	1.092.240				
	Fair Value through P&L - mutual funds	898.240	879.601	856.174				
	Fair Value through P&L - Debt instruments	2.585.871	2.265.833	2.212.936				
	Fair Value through P&L - equities	80.451	82.918	42.981				
					Tot financial assets at fair value through			
	TOT Fair Value through P&L - non linked	2.666.322	2.348.751	2.255.917	<b>P&amp;L</b> E	4.707.086	4.400.367	4.379.874
	Derivative financial - swaps F	8.295	23.301	11.715				
	Tot investments backing technical provisions (D+E+F)	9.778.985	9.053.692	8.855.784				
		5.778.365	5.055.052	0.033.704				



### 6

### Balance sheet - Assets (3/3)

Example

Transition date 1.1.2022;

#### Q4 2022; Q2 2023



	·					
	Entity		transition			
	Other assets	IFRS4 & IAS39	IFRS17 & IFRS9	Q4 2022	Q2 2023	
	Insurance receivable	5.420	-			Insurance receivable
	Reinsurance recoverable	29.620	29.818	12.919	10.424	Ceded Present Value Future Cash Flows
	Reinsurance fulflilment cash flows	29.620	29.818	13.026	10.207	
	Reinsurance reserve/ best estimate	29.620	29.818	12.612	10.191	
	net premium reserve non linked	23.097	10.883 -	2.767 -	4.661	PVFCF remaining coverage - non actuarial
	outstanding claims non linked	4.786	13.765	10.537	9.894	PVFCF remaining coverage - actuarial
	net premium reserve unit linked	1.717	5.170	4.842	4.958	Ceded LIC
	outstanding claims unit linked	20				
	Reinsurance risk adjustment	-		413	16	
	Reinsurance CSM (loss component)	-		106	218	
	Policyholders loans	403	-			
	Current TAX assets	24.500	24.500	26.566	27.195	
	Other receivable	135.357	135.357	145.038	145.217	
	Employee loans	61	61	55	50	
	Prepaid and recov.taxes and social security	126.407	126.407	142.069	143.496	
	Other receivable	8.389	8.389	2.901	1.641	
	Accrued income and prepaid expenses	500	500	14	30	
	Other non current assets	39.251	39.251	2.205	2.675	
	Deferred participation assets	-	-			
	DPA fair value adjustments - equities	-				
	DPA fair value adjustments - derivative	0_				
Λ	Deferred Tax Assets	150.325	5.533	513.085	480.036	DTA on insurance and reinsurance financial reserves
	DTA - fair value adjustments - FVTOCI	141.427		390.511	352.413	
	DTA - fair value adjustments - FVTPL	7.588		122.574	127.623	
	DTA - fair value adjustments - derivative	1.310				
	DTA - other	27.368	27.368	185.155	3.959	
	Deferred tax assets	177.693	32.901	698.240	483.995	
	Tot other assets	377.204	232.009	872.049	659.082	
	Cash and cash equivalents	122.599	106.846	98.023	201.934	
	Cash at bank	106846,4431	106.846	98.023	201.934	
	Reinsurance receivable	15752,9963	-			
	Acquired Value in Force	200.901				
	Tot assets	10.514.729	10.147.659	10.036.682	9.727.224	
	in accounting system	10.514.730	10.147.659	10.036.682	9.727.224	
	delta	1	0	-	-	



### Balance sheet -Liabilities (1/3)

Example Transition date 1.1.2022; Q4 2022; Q2 2023

Entity					
	Amounts are in thousands €				
	IFRS4 IFF	RS17. Transition	Q4 2022	Q2 2023	change
Share capital	84.598	84.598	84.598	104.598	-
Share premium account	435	435	435	435	-
Revaluation reserve (*)	209	12.629 -	876.559 -	790.999	85.560
Reserve - Fair Value through OCI	209	12.629 -	876.559 -	790.999	85.560
government bonds	128	2.796 -	708.795 -	630.667	78.127
corporate bonds	81	9.833 -	154.503 -	147.012	7.491
subordinated bonds	-		13.261 -	13.320	- 59
Reserve - Fair Value through non recyclable OCI	-	-			
Reserve - Fair Value through OCI - overlay assets	-	-			
Cash flows hedge reserves	-	-			
Translation reserve	-	-			
Employee benefits obligations	-	-			
Insurance financial reserve (*)		12.420	816.745	737.631	- 79.114
Change in fair value of underlying items - VFA (non recyclable)	-	-			
Change in economics - BBA (recyclable)	_	-	3.446	2.384	- 1.062
Change in economics - PAA (recyclable)	_	_			2.002
Financial Reserve - VFA (recyclable)		12.420	813.299	735.247	- 78.052
Reinsurance financial reserve	-		1.947 -	2.609	- 663
Change in fair value of underlying items - VFA (non recyclable)	_		1.5 17	2.005	-
Change in economics - BBA (recyclable)	_		1.947 -	2.609	- 663
Change in economics - PAA (recyclable)			1.547 -	2.005	- 003
Financial Reserve - VFA (recyclable)	-				
	-	-			-
Net gains or losses recognized in equity (*)	209	208 -	61.760 -	55.977	5.783
Undated sub-debt classified as equity	-	-			
Consolidated reserves and other	289.125	301.015	588.920	599.461	10.541
Statutory reserves	96.941	96.941	375.984	375.984	-
FTA reserves, net of taxes	-	16.070	16.070	16.070	-
Consolidated reserves	125.183	125.183	125.183	125.183	-
Retained earnings	67.000	62.821	65.238	75.779	10.541
Changes in accounting policies	-	-	6.444	6.444	- 0
Non recyclable OCI - gains or losses on disposal	-	-			-
Other impacts on net earnings	-	-			-
DP SA adjustments	-	-			-
SA adjustments - Treasury stock	-	-			-
SA adjustments - accrued interest on deeply sub debt	-	-			-
FV adjustments - FVTPL	-	-			-
FV adjustments - FVTPL as option					_
FV adjustments - derivative					
	-	-			-
Impairment - FV through recyclable OCI	-	-			-
Retained earnings	289.125	301.015	588.920	599.461	- 10.541
Profits and losses of the period	- 4.180	-	10.540	14.573	4.033
terre and losses of the period	4.100	-	10.540	14.373	
Minority interests	-	-			-
Fot Equity	370.187	386.257	622.733	663.090	40.357
					-
nsurance technical provisions	9.356.667	9.503.606	8.545.428	8.238.161	- 307.267

### Balance sheet -Liabilities (2/3)

Example Transition date 1.1.2022; Q4 2022; Q2 2023

		IFRS4 I	FRS17. Transition	Q4 2022	Q2 2023
Embedded derivative	ed	368.226			
Fair value adjustments through recyclable OCI		354.931			
Fair value adjustments through non recyclable OCI		-			SVILU
Fair value adjustments at FVTPL		31.248			
Provisions for impairment- securities at FVTOCI R (**)	-	17.953			
Derivative instruments - Fair Value adjustments	di	8.246			
Tot Insurance and Financial Liabilities		9.733.138	9.503.606	8.545.428	8.238.161
Provisions for liabilities and charges		2.537	2.537	1.989	2.201
claims and litigation		2.415	2.415	1.867	2.079
other		122	122	122	122
Sub- debt at amortized cost		58.387	58.387	58.387	58.387
Sub- debt at FVTPL		-	-		114.356
Liabilities arising from reinsurance transactions	~	16.199	-		
Other financing liabilities		-	-	-	116.127
Liabilities arising from derivative swaps		219	219		-
Deferred Tax Liabilities		240.647	103.014	743.370	534.303
Deferred tax liabilities at Fair Value through OCI		150.893	5.626	-	-
Deferred tax liabilities at Fair Value through P&L		27.775	1.555	7.129	3.573
Fair value adjustments		26.220	-		
Fair value adjustments on derivative instruments		1.555	1.555	7.129	3.573
Deferred tax liabilities on insurance financial reserve				362.996	327.456
Deferred tax liabilities fair value adjustments - derivative		154	-		
Deferred tax liabilities SA adjustments			2.914.289	2.914.289 -	2.914.289
Local GAAP vs IFRS17 BBA			35.397 -	35.397 -	35.397
Local GAAP vs IFRS17 VFA			2.878.892	2.878.892 -	2.878.892
Deferred tax liabilities other		61.825	3.010.122	3.287.534	3.117.563
Other liabilities		93.292	93.639	64.775	232.854
Amount due (owed) to employees		137	137	270	439
Accrued payroll and other taxes		39.897	40.244	33.802	41.969
Current account advances from controlled entities		40	40	40	272
Other payables		51.693	51.693	27.974	185.005
Supplier accounts (payables)		1.526	1.526	2.690	4.649
Deferred income				-	520
Tot other liabilities		350.356	196.872	808.146	767.157
Tot Liabilities		10.514.605	10.147.659	10.036.682	9.727.224
in accounting system		10.514.605	10.147.659	10.036.682	9.727.224
delta		-	-		

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### Balance sheet -Liabilities (3/3)

Example Transition date 1.1.2022; Q4 2022; Q2 2023

Entity		
Technical Provisions		Amounts are in thousands €
		IFRS4 & IFRS9
Traditional portfolios (IFRS4)		7.241.506
Outstanding claims	non linked	52.610
Pre claim reserves	non linked	7.188.896
Unit linked - insurance contracts (IFRS4)		2.115.161
Outstanding claims	assets not held in unit	16.927
Pre claim reserves	assets held in unit	2.098.233
Traditional portfolios - investment contracts at amortized co	st (IFRS9)	-
Unit linked - investment contracts at fair value (IFRS9)		-
Tot Technical provisions		9.356.667

Entity					
Technical Provisions		Amounts are in thousands €			
		IFRS17. Transition	Q4 2022	Q2 2023	change
Traditional portfolios BBA		144.669	130.092	120.106	- 9.986
Fuflilment cash flows		135.300	124.470	113.803	- 10.667
PVFCF (Present Value of Future Cash Flows)		129.361	120.127	109.977	- 10.150
BBA - LRC (liability for remaining coverage)	Term, LTC, DD	108.573	105.401	95.303	- 10.098
BBA - LIC (liability for incurred claims)	Term, LTC, DD	20.787	14.725	14.674	- 52
BBA - non actuarial	Term, LTC, DD	-			-
Risk adjustment	Term, LTC, DD	5.940	4.344	3.827	- 517
CSM - Contractual Service Margin	Term, LTC, DD	9.369	5.622	6.302	681
Traditional portfolios VFA		9.358.937	8.415.335	8.118.055	- 297.280
Fuflilment cash flows		9.073.133	8.208.637	7.953.360	- 255.277
PVFCF (Present Value of Future Cash Flows)		9.062.089	8.175.969	7.922.545	- 253.424
VFA - LRC (liability for remaining coverage)	Participating and unit	9.007.834	8.109.302	7.832.864	- 276.438
VFA - LIC (liability for incurred claims)	Participating and unit	48.750	53.612	69.012	15.400
VFA - non actuarial	Participating and unit	5.505	13.055	20.669	7.614
Risk adjustment	Participating and unit	11.044	32.668	30.815	- 1.853
CSM - Contractual Service Margin	Participating and unit	285.804	206.698	164.695	- 42.003
					-
Tot Technical provisions		9.503.606	8.545.428	8.238.161	- 307.267
Fuflilment cash flows		9.208.433	8.333.108	8.067.164	- 265.944
PVFCF (Present Value of Future Cash Flows)		9.191.450	8.296.096	8.032.522	- 263.574
Risk adjustment		16.984	37.012	34.642	- 2.370
CSM - Contractual Service Margin (A)		295.173	212.320	170.997	- 41.322



# Financial statements (1/7)

Revenue gross of				experience variance on	(rei	withdrawal cognition) of loss	
reinsurance	expected claims	change of RA	CSM recognized	premiums&commissions	DAC amortization	component	Tot revenue
GM	17.558	557	864	5.600	513	2.716	27.807
VFA	37.828	1.650	14.986	-	543 -	2.633	52.374
Total	55.386	2.207	15.849	5.600	1.056	84	80.181

#### Example: Q2 2023. P&L

[insurance] revenue and insurance result. Gross of reinsurance. Here, the GM - EXP gap on premiums & commissions has been included in actual claims so that its net contribution to P&L is nil.

Financial statement gross of reinsurance	revenue	actual claims	actual commissions	actual expenses	total claims&expenses	DAC amortization	Tot gross Insurance result
GM	27.807 -	21.493	7 -	1.362 -	22.848 -	513	4.447
VFA	52.374 -	3.585 -	21.441 -	11.533 -	36.559 -	543	15.273
Total	80.181 -	25.077 -	21.434 -	12.895 -	59.406 -	1.056	19.720



## Financial statements (2/7) Financial statem

<b>Financial statem</b>	ent		thereof investment		
gross of	Tot gross insurance	gross investment	income on underlying	insurance finance expense	
reinsurance	result	income	items	(1)	Tot gross Investment result
GM	4.447	-	0	- 1.834	- 1.834
VFA	15.273	145.621	141.365	- 141.365	4.257
Total	19.720	145.621	141.365	- 143.198	2.423

### Example: Q2 2023.

P&L. Investment result and total result. Gross of reinsurance

Financial statement			underwriting expenses not							
gross of	Tot gross Insurance	Tot gross	in scope of fulfilment cash		other non - underwriting					
reinsurance	result	investment result	flows	provisions for litigation	net expenses	other	current taxes	deferred taxes	Tot other	Tota
GM	4.447 -	1.834							-	2.613
VFA	15.273	4.257							-	19.530
Out of business			- 4.223 -	212 -	20	- 233	-	- 2.621	- 7.309 -	7.309
Total	19.720	2.423	- 4.223 -	212 -	20	- 233	-	- 2.621	- 7.309	14.834



# Financial statements (3/7)

				experience variance on		withdrawal (recognition) of loss	
Ceded revenue	expected claims	change of RA	CSM recognized	premiums&commissions	DAC amort. (N/A)	component	Tot revenue
GM	- 1.055 -	39 -	508	- 853		-	2.455
VFA (N/A)				-			
Total	- 1.055 -	39 -	508	- 853	-		2.455

### Example: Q2 2023. P&L

(Ceded) Reinsurance revenue and insurance results

							withdrawal	
						(rec	ognition) of loss	Tot ceded
Financial statement outward reinsurance	ceded revenue ceded actual claims		actual commissions	actual expenses	total claims&expenses	DAC amortization	component i	nsurance result
GM -	2.455	1.169	-	-	1.169		50 -	1.236
VFA (N/A)	-							-
Total -	2.455	1.169	-	-	1.169	-	50 -	1.236



# Financial statements (4/7)

			thereof investment	
	Tot ceded insurance	gross investment	income on underlying	Tot ceded Investment
Financial statement outward reinsurance	result	income	items insurance finance expense	result
GM	- 1.236		975	975
VFA (N/A)	-			-
Total	- 1.236		975	975

Example: Q2 2023. P&L

#### Reinsurance investment and total results

				underwriting expenses not						
	Tot ceded ins	surance	Tot ceded	in scope of fulfilment cash		other non - underwriting				
	result	lr Ir	investment result	flows	provisions for taxes	net expenses	other	deferred taxes	Tot other	Tot P&
GM	-	1.236	975							261
VFA (N/A)		-	-						-	-
Out of business									-	-
Total	-	1.236	975	-	-	-	-	-		261

Financial statement net of reinsurance	Tot Insurance result	Thereof revenue	Tot Investment result	other	Total	
GM	3.211	25.353 -	858	-	2.352	
VFA	15.273	52.374	4.257	-	19.530	
Out of business	-			7.309 -	7.309	
Total	18.483	77.727	3.398 -	7.309	14.573	



# Financial statements (5/7)

Example: Q2 2023. P&L.

Detail of investment result: realized investment income

recognized to P&L			
Gross investment income	realized	unrealized	Total
Assets at FVTPL	43.113	41.312	84.425
Assets at OCI	73.483	- 12.286	61.197
Tatal	110 500	20.025	445 634
Total	116.596	29.025	145.621

	Realized	thousand €							
Gross investment income	accrued income	equity÷ nds	derivative	transaction fees	disposa	l bonds	disposal equities	exchange rates	tot realized
FVTPL	27.852	1.833	12.107	-	-	1.204	2.535	- 10	43.113
OCI	76.401		-		-	2.918			73.483
Total	104.253	1.833	12.107	-	-	4.122	2.535	- 10	116.596
Realized Investment income				118.193	Capital gains	-	1.597		116.596



# Financial statements (6/7)

Example: Q2 2023. P&L. Detail of investment result. Unrealized investment income

recognized to P&L			
Gross investment income	realized	unrealized	Total
Assets at FVTPL	43.113	41.312	84.425
Assets at OCI	73.483	- 12.286	61.197
Total	116.596	29.025	145.621

Profits and losses	change in Fair	thousand € change in Fair	change in							OCI change in Fair Value -
	and Mutual	-	-	exchange		impairment reversal	tot unrealized	assets held in		bonds and Mutual
Gross investment income	Funds	equities	derivative	rates	interest expenses	(allowance)	non linked	unit	tot unrealized	Funds
Assets classified at FVTPL	- 24.268	7.888	- 11.538	-	299	-	28.218	69.529	41.312	
Assets class. At OCI				-	13.677	1.390 -	12.286		- 12.286	123.657
Total	- 24.268	7.888	- 11.538		13.976	1.390 -	40.504	69.529	29.025	123.657



thousand €

and Mutual

123.657

123.657 -

Funds

-

change in Fair

Value - PVFCF

114.360 -

958 -

115.317

Source 3120

tot net

unrealized

114.360

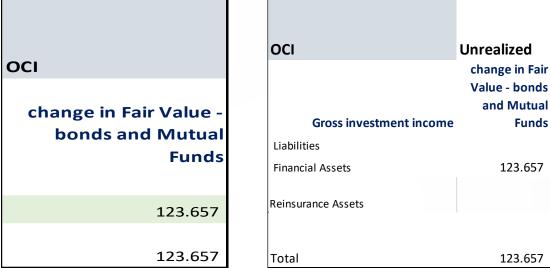
123.657

958

8.340

### Financial statements (7/7)

Example: Q2 2023. Net investment income recognized to OCI (instead of to P&L). Details



(*) OCI				
				change gross of
	closing 31/12/22	closing 30/6/23	change	Deferred tax
Reserve-fair value OCI	- 876.559	- 790.999	85.560	123.677
GM reinsurance assets	- 1.947	- 2.609	- 663	- 958
Tot asset side	- 878.505	- 793.608	84.897	122.719
Insurance financial reserve	816.745	737.631	- 79.114	- 114.360
VFA portfolio	813.299	735.247	- 78.052	- 112.824
GM portfolio	3.446	2.384	- 1.062	- 1.535
Net	- 61.760	- 55.977	5.783	8.359



### Financial effects on technical provisions

		(*) OCI							
					closing 31/12/22	closing 30/6/23	change		nge gross of Deferred tax
		Reserve-fair	value OCI		- 876.559	- 790.999	85.560		123.677
mple: Q2 2023.		GM reinsura	nce assets		- 1.947	- 2.609	- 663	-	958
ails of		Tot asset si	de		- 878.505	- 793.608	84.897		122.719
rance finance		Insurance fir	nancial reserve		816.745	737.631	- 79.114	-	114.360
		VFA portf	folio		813.299	735.247	- 78.052	-	112.824
ense		GM portf	olio		3.446	2.384	- 1.062	-	1.535
		Net			- 61.760	- 55.977	5.783		8.359
Technical provisi	Technical provisions financial effects				t	housand €			
Insurance Fin		A contracts	GM contracts	tot Insurance finance expense	Reinsurance	Risk Adjustment	CSM accretion	Variable fee	to
go to FVTPL		173.295	1.534	174.829 -		189	110 -	31.930	142.22
go to FVTOCI		112.824	1.535	114.360	958	-	-	-	115.31
Total Compreher	nsive								257.54
		286.119	3.070	289.189 -	18	189	110 -	31.930	

### Example: Q2 2023.



# Analisys of movements (1/2)

			insurance finance	insurance finance	non - eco	expected premiums	commissions	Experience	Exporionee
		shawaa						Experience	Experience
Traditional nortfolion CN4		change	expense to OCI	expense to P&L & VFA	assumptions	actual new business	on premiums	variance	variance
Traditional portfolios GM	-	9.986							
Fuflilment cash flows	-	10.667							
PVFCF (Present Value of Future Cash Flows)	-	10.150							
BBA - LRC (liability for remaining coverage)	-	10.098	1.535	1.534	4.132	6.707	- 1.216 -	5.232	
BBA - LIC (liability for incurred claims)	-	52							
BBA - non actuarial		-				-			
Risk adjustment	-	517		189	- 162				12
CSM - Contractual Service Margin		681		110	- 3.786				5.220
Traditional portfolios VFA	-	297.280							
Fuflilment cash flows	-	255.277							
PVFCF (Present Value of Future Cash Flows)	-	253.424							
VFA - LRC (liability for remaining coverage)	-	276.438	112.824	173.295	38.611	520.924	- 6.043 -	40.688	
VFA - LIC (liability for incurred claims)		15.400							
VFA - non actuarial		7.614				7.614			
Risk adjustment	-	1.853		-	- 544				341
CSM - Contractual Service Margin	-	42.003		- 31.930	- 36.396				41.309
		-							
Tot Technical provisions	-	307.267							
Fuflilment cash flows	-	265.944							
PVFCF (Present Value of Future Cash Flows)	-	263.574							
Risk adjustment	-	2.370							
CSM - Contractual Service Margin (A)	-	41.322							





# Analisys of movements (2/2)

	expected claims &	actual non-distinct	bow wave	CSM release	Risk Adj release	тот	Check
	expense in scope	invest. component					
Traditional portfolios GM						- 9.986	ОК
Fuflilment cash flows						- 10.667	ОК
PVFCF (Present Value of Future Cash Flows)						- 10.150	ОК
BBA - LRC (liability for remaining coverage)	- 17.558	-				- 10.098	ОК
BBA - LIC (liability for incurred claims)	-	52				- 52	ОК
BBA - non actuarial						-	ОК
Risk adjustment					- 557	- 517	ОК
CSM - Contractual Service Margin			-	864		681	ОК
Traditional portfolios VFA						- 297.280	ОК
Fuflilment cash flows						- 255.277	ОК
PVFCF (Present Value of Future Cash Flows)						- 253.424	ОК
VFA - LRC (liability for remaining coverage)	- 37.828 -	1.037.532				- 276.438	ОК
VFA - LIC (liability for incurred claims)		15.400				15.400	ОК
VFA - non actuarial						7.614	ОК
Risk adjustment					- 1.650	- 1.853	ОК
CSM - Contractual Service Margin		-	250 -	14.736		- 42.003	ОК
Tot Technical provisions						- 307.266	ОК
Fuflilment cash flows						- 265.944	ОК
PVFCF (Present Value of Future Cash Flows)						- 263.574	ОК
Risk adjustment						- 2.370	ОК
CSM - Contractual Service Margin (A)						- 41.322	ОК



## Modello VFA (1/24)

#### Example

Participating contracts shaped as endowment at single premium. The [risk neutral] fund returns are **lower** than the yield curve used for discounting future cash flows: that's the current situation at June 2023

, begun on 2<sup>nd</sup> half 2022

€ thousands Valuation 6/23	Segregated fund
Avg yield change from 3/22	2,00%
Premiums	1.000.000
average	20
contracts incepted	50.000
Recurrent Commissions	0,50%
front end loading	0,70%
fee commission income	1,10%

#### Direct work - new business - participating business (including part of hybrid products)

€ thousands

expenses						
sum assured	0,05% annual	New business margin	4,94% risk neutral			
fixed	0,01 annual	Initial CSM	5,16%	2,06%		
claims	0,008 per event	Liquidity premium (IFRS17)	0,71%	if LP were = SII_VA		
initial on off	100					
spread real world vs r	isk neutral	0,80%				

Direct work - new business - participating business (including part of hybrid products)									
€ thousands		Solvency II							
expenses									
sum assured	0,05% annual	New business margin	4,90% risk neutral						
fixed	0,01 annual		5,28% real world						
claims	0,008 per event	Volatility Adjust. (Solvency II)	0,21%						
initial on off	100								
spread real world	vs risk neutral	0,90%							



Compared to March 2022:

- The entity is keen to apply a front end loading on premium because the policyholder can recover it thanks to long term higher asset returns
- The gross management fee is lower because the interest recognized to policyholders should be higher for avoiding lapses motived by comparison against alternative investments and also to avoid extreme PHB effects in the valuation of SII Best Estimates
- The IFRS17 liquidity premium becomes significantly greater than SII volatility adjustment because the first is more sensitive to unrealized losses driven by spread widening and equity fall.
- This explains why the accumulation profits are greater than in SII: LP>VA entails higher asset returns over the first 10 years of projection (10 bp on average) which, although fully recognized to policyholders, generate an increase of expected volumes under management in Solvency II
- However, the spread of average asset return between real world and risk neutral is 90 bp in SII vs 80 in IFRS17: 10 bp makes the real world NBM 4 bp greater (5.28% instead of 5.24%)
- The CSM starts high thanks to a high LP: 5.16%; if IFRS17\_LP were equal to SII\_VA, the initial CSM would be only 2.06% of initial consideration (Initial premium initial commission)

## Modello VFA (3/24)



additional	surrender penalty	n.claims	lives	deaths	surrenders	spot rate	eiopa fw risk	bonus rate	fee income	fund return	t
death benefit							free + LP			risk neutral	
15,0%			50.000								0
14,0%	1,5%	150	49.850	0,20%	0,1%	4,69%	4,69%	2,02%	1,10%	3,12%	1
13,0%	1,0%	4.126	45.725	0,30%	8,0%	4,48%	4,27%	2,06%	1,10%	3,16%	2
12,0%	0,5%	4.282	41.443	0,40%	9,0%	4,21%	3,67%	2,01%	1,10%	3,11%	3
11,0%	0,0%	4.331	37.112	0,50%	10,0%	3,99%	3,34%	1,94%	1,10%	3,04%	4
10,0%	0,0%	4.281	32.832	0,60%	11,0%	3,84%	3,24%	1,84%	1,10%	2,94%	5
9,0%	0,0%	4.142	28.690	0,70%	12,0%	3,75%	3,27%	1,90%	1,10%	3,00%	6
8,0%	0,0%	3.645	25.045	0,80%	12,0%	3,68%	3,28%	1,72%	1,10%	2,82%	7
7,0%	0,0%	3.204	21.841	0,90%	12,0%	3,64%	3,33%	1,83%	1,10%	2,93%	8
6,0%	0,0%	2.813	19.028	1,00%	12,0%	3,61%	3,38%	2,12%	1,10%	3,22%	9
5,0%	0,0%	19.028	-	1,10%	100,0%	3,59%	3,43%	2,14%	1,10%	3,24%	10

t	Sum assured	death claims	surrender	expenses	fee expense	tot outflows	present value	best estimate	risk adjustment	assets	gross investment
	& local NPR		claims			in scope bel		gross			income
0	993.000			100				923.453	24.825	999.900	
1	1.010.021	2.330	996	1.001	5.065	9.392	8.971	957.398	23.100	1.021.704	31.197
2	945.517	3.525	81.397	1.000	5.154	91.076	83.430	907.217	20.645	962.914	32.286
3	874.204	4.360	86.027	925	4.823	96.135	84.945	844.387	17.799	896.726	29.947
4	798.037	4.991	88.671	845	4.456	98.963	84.620	773.608	14.762	825.024	27.260
5	718.981	5.413	88.863	763	4.064	99.102	82.076	699.603	11.713	750.178	24.256
6	640.212	5.641	87.302	681	3.663	97.287	78.019	625.216	8.800	675.396	22.505
7	568.492	5.679	77.522	600	3.256	87.056	67.598	558.660	6.131	607.386	19.046
8	504.843	5.627	68.842	528	2.894	77.892	58.534	499.364	3.762	547.290	17.796
9	449.144	5.516	61.247	465	2.578	69.806	50.745	446.412	1.716	495.107	17.623
10	-	5.349	453.709	360	2.294	461.711	324.514	0	-	49.437	16.041



						additional	additional
t	profit & loss	accumulat.	profit & loss	accumulat.	fund return	profit & loss	accumulat.
	Local		IFRS17		real world	Local	
0		_					
1	11.683	11.683	8.558	8.558	3,92%	11	11
2	5.715	17.398	7.788	16.346	3,96%	100	112
3	5.125	22.523	6.969	23.314	3,91%	182	294
4	4.465	26.988	6.373	29.687	3,84%	250	543
5	4.209	31.196	5.585	35.273	3,74%	318	862
6	3.988	35.184	4.819	40.092	3,80%	382	1.244
7	3.710	38.894	2.503	42.594	3,62%	439	1.683
8	3.553	42.447	1.571	44.165	3,73%	496	2.179
9	3.516	45.963	2.814	46.979	4,02%	555	2.734
10	3.474	49.437	2.458	49.437	4,04%	619	3.353

Modello	VFA	(5/24)
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Coverage u	nits table							
	non-distinct	capital at risk	risk premium	overhead&	carrier and	carrier and	carrier and	Coverage
t	investment		(B)	fee expenses	weight (A)	weight (B)	weight (C)	units
(	component (A)			(C )	80%	15%	5%	
0	993.000	148.950	297,90	6.066	100%	100%	100%	100%
1	1.010.021	141.403	424,21	6.154	87%	82%	87%	86%
2	945.517	122.917	491,67	5.748	73%	66%	73%	72%
3	874.204	104.904	524,52	5.301	61%	51%	60%	59%
4	798.037	87.784	526,70	4.827	49%	39%	49%	47%
5	718.981	71.898	503,29	4.344	38%	28%	38%	37%
6	640.212	57.619	460,95	3.856	29%	20%	29%	27%
7	568.492	45.479	409,31	3.423	20%	13%	20%	19%
8	504.843	35.339	353,39	3.043	13%	7%	13%	12%
9	449.144	26.949	296,43	2.653	6%	3%	6%	6%
10	-				0%	0%	0%	0%

Variable fee table												
t	insurance finance	underlying items	underlying items	change Fair Value	Vai	riable fee						
	expense before VF	(share of assets)		underlying items								
0	D			E		VF: E - D						
1	43.338	0,950	949.905	29.637	-	13.701						
2	40.895	0,947	967.554	30.575	-	10.320						
3	33.305	0,944	908.991	28.270	-	5.035						
4	28.184	0,941	843.819	25.652	-	2.532						
5	25.097	0,938	773.873	22.752	-	2.345						
6	22.900	0,935	701.416	21.042	-	1.858						
7	20.500	0,932	629.469	17.751	-	2.749						
8	18.595	0,929	564.262	16.533	-	2.062						
9	16.855	0,926	506.791	16.319	-	536						
10	15.299	0,923	456.984	14.806	-	493						

t	CSM before	CSM	Loss
	changes		
0	51.622,17	51.622,17	-
1	37.921,57	37.921,57	-
2	22.328,33	22.328,33	-
3	13.671,67	13.671,67	-
4	8.694,69	8.694,69	-
5	4.621,32	4.621,32	-
6	1.731,18	1.731,18	-
7 -	1.460,76	-	1.460,76
8 -	3.082,34	-	3.082,34
9 -	2.452,41	-	2.452,41
10 -	1.638,17	-	1.638,17





## Modello VFA (6/24)

- Although the initial CSM is high enough for offsetting VFA negative adjustments, this task fails from year 7, when, as consequence, IFRS17 must recognize a loss recognition
- Prolonged negative VFA adjustments are due to the continuous excess of economic (financial) changes of best estimates (PVFCF) as of the investment income generated by the underlying items mainly due to the significant impact of unwinding of interest rates, more significant than the asset yields
- The first time a loss recognition is recognized, its impact on P&L matches the total amount
- From the second year of loss recognition, its impact on P&L matches the variable fee which is not possible to use for mitigating the insurance finance expense:
  - Formally, the insurance finance expense is negatively adjusted with a contribution to profits, anyway the corresponding impact on loss recognition is recognized as losses

26	Mo	odello	> VFA	. (7/2	24)		t 0 1 2 3 4 5 6 7 - 8 - 9 - 10 -	CSM before C changes 51.622,17 51.622, 37.921,57 37.921, 22.328,33 22.328, 13.671,67 13.671, 8.694,69 8.694, 4.621,32 4.621, 1.731,18 1.731, 1.460,76 - 3.082,34 - 2.452,41 - 1.638,17 -	57 - 33 - 67 - 69 - 32 - 18 - 1.460,76 3.082,34	SVI	ILUPPO INIZIATIVE ATTUARIALI
Revenue	e table										
t	: INS	SURANCE SERVICE						Reversal (o recognition) o			
	death	expenses	Tot (F)	DAC	Dac release (G)	CSM	Loss	loss component (LS	) CSM release (H)	Risk Adj release (I)	Revenue
-				100		51.622	-				Rev: (F+G+H+I+LS)
1	. 298	6.066	6.364	90	10	32.648	-	-	5.273	1.725	13.373
2	424	6.154	6.578	73	17	18.707	-	-	3.621	2.456	12.672
3	492	5.748	6.239	58	15	11.226	-	-	2.445	2.846	11.546
4	525	5.301	5.826	45	13	6.967	-	-	1.728	3.036	10.604
5	527	4.827	5.354	33	12	3.589	-	-	1.032	3.049	9.447
6	503	4.344	4.847	23	10	1.289	-	-	443	2.913	8.213
7	461	3.856	4.317	15	8	-	1.461	- 1.461	_	2.668	5.533
8	409	3.423	3.832	9	6	-	3.082	- 2.062	_	2.369	4.146
9		3.043	3.396	4	5	-	2.452			2.046	4.911

4

-

1.638 -

493

-

10

296

2.653

2.950

-

4.177

1.716



# Modello VFA (8/24)

#### **Financial Statements**

t	revenue	claims &	gross	thereof on	insurance	Dac amortiz.	P&L	accumul. P&L
		expenses	investment	underlying	finance			
0			income	items	expense		-	-
1	13.373 -	6.364	31.197	29.637	- 29.637	- 10	8.558	8.558
2	12.672 -	6.578	32.286	30.575	- 30.575	- 17	7.788	16.346
3	11.546 -	6.239	29.947	28.270	- 28.270	- 15	6.969	23.314
4	10.604 -	5.826	27.260	25.652	- 25.652	- 13	6.373	29.687
5	9.447 -	5.354	24.256	22.752	- 22.752	- 12	5.585	35.273
6	8.213 -	4.847	22.505	21.042	- 21.042	- 10	4.819	40.092
7	5.533 -	4.317	19.046	17.751	- 17.751	- 8	2.503	42.594
8	4.146 -	3.832	17.796	16.533	- 16.533	- 6	1.571	44.165
9	4.911 -	3.396	17.623	16.319	- 16.319	- 5	2.814	46.979
10	4.177 -	2.950	16.041	14.806	- 14.806	- 4	2.458	49.437



## Modello VFA (9/24)

### Balance sheet

t	Assets (AS)	Best estimate Ri	sk Adjustment	CSM	Technical	own funds	profits
					provisions (TP)	AS-TP	(losses)
0	999.900	923.453	24.825	51.622	999.900	-	
1	1.021.704	957.398	23.100	32.648	1.013.147	8.558	8.558
2	962.914	907.217	20.645	18.707	946.569	16.346	7.788
3	896.726	844.387	17.799	11.226	873.412	23.314	6.969
4	825.024	773.608	14.762	6.967	795.337	29.687	6.373
5	750.178	699.603	11.713	3.589	714.905	35.273	5.585
6	675.396	625.216	8.800	1.289	635.305	40.092	4.819
7	607.386	558.660	6.131	-	564.792	42.594	2.503
8	547.290	499.364	3.762	-	503.125	44.165	1.571
9	495.107	446.412	1.716	-	448.128	46.979	2.814
10	49.437	0	-	-	0	49.437	2.458



## Modello VFA(10/24)

The aggregate IFRS17 profits are greater than Solvency II because – amongst the effects of liquidity premium assumptions being higher than volatility assumptions - there is an additional gross investment income by 10 bp

- Liquidity premium and volatility adjustment have the effect reduce the probability of default, hence their level makes expected profits higher
- We assume that expected investment income reacts to the assumptions about liquidity premium or volatility adjustment with an elasticity of 20% (50% of LP vs VA → 10 bp delta of investment income

Single prer	mium participati	ng contracts										
Own funds; profits&losses. Risk neutral												
Before reinsurance												
	IFRS17 Local&IFRS4 Solvency II											
year	Own funds	Profits	Own funds	Profits	Own funds	Profits						
	(losses) (losses) (losses)											
0 (day 1)	0		6.900		31.956							
1	8.558	8.558	11.682	11.682	24.386	24.386						
2	16.346	7.788	17.384	5.702	20.704 -	3.682						
3	23.314	6.969	22.486	5.102	22.302	1.598						
4	29.687	6.373	26.920	4.434	26.229	3.927						
5	35.273	5.585	31.090	4.170	30.050	3.820						
6	40.092	4.819	35.031	3.941	34.090	4.041						
7	42.594	2.503	38.687	3.656	36.849	2.758						
8	44.165	1.571	42.181	3.494	40.054	3.206						
9	46.979	2.814	45.631	3.450	44.635	4.581						
10	49.437	2.458	49.031	3.400	49.031	4.395						



## Modello VFA(11/24)

#### Example

Participating contracts shaped as endowment at single premium. The [risk neutral] fund returns are **lower** than the yield curve used for discounting future cash flows: that's the current situation begun on 2<sup>nd</sup> half 2022

Premiums	1.000.000
average	20
contracts incepted	50.000
Recurrent Commissions	0,50%
front end loading	0,10%
fee commission income	1,40%

Direct work - ne	w business - partici	pating business (including	part of hybrid products)
€ thousands			
expenses			
sum assured	0,05% annual	New business margin	5,74% risk neutral
fixed	0,01 annual		0,00%
claims	0,008 per event	Liquidity premium (IFRS17)	0,35%
initial on off	100	Initial CSM margin	4,96%

## Modello VFA (12/24)



t	fund return	fee income	bonus rate	eiopa fw risk	spot rate	surrenders	deaths	lives	n.claims	surrender penalty	additional
	risk neutral			free + LP							death benefit
0								50.000			15,0%
1	1,53%	1,40%	0,13%	0,51%	0,51%	0,1%	0,20%	49.850	150	1,5%	14,0%
2	1,57%	1,40%	0,17%	1,93%	1,22%	8,0%	0,30%	45.725	4.126	1,0%	13,0%
3	1,52%	1,40%	0,12%	2,01%	1,48%	9,0%	0,40%	41.443	4.282	0,5%	12,0%
4	1,45%	1,40%	0,05%	2,01%	1,61%	10,0%	0,50%	37.112	4.331	0,0%	11,0%
5	1,35%	1,40%	0,00%	2,01%	1,69%	11,0%	0,60%	32.832	4.281	0,0%	10,0%
6	1,41%	1,40%	0,01%	2,09%	1,76%	12,0%	0,70%	28.690	4.142	0,0%	9,0%
7	1,23%	1,40%	0,00%	2,18%	1,82%	12,0%	0,80%	25.045	3.645	0,0%	8,0%
8	1,34%	1,40%	0,00%	2,32%	1,88%	12,0%	0,90%	21.841	3.204	0,0%	7,0%
9	1,63%	1,40%	0,23%	2,40%	1,94%	12,0%	1,00%	19.028	2.813	0,0%	6,0%
10	1,65%	1,40%	0,25%	2,48%	1,99%	100,0%	1,10%	-	19.028	0,0%	5,0%

t	Sum assured	death claims	surrender	expenses	fee expense	tot outflows	present value	best estimate	risk adjustment	assets	gross investment
	& local NPR		claims			in scope bel		gross			income
0	999.000			100				925.329	24.975	999.900	
1	997.260	2.301	983	1.000	5.001	9.285	9.237	920.772	23.096	1.005.874	15.258
2	916.245	3.416	78.877	989	4.995	88.277	86.165	850.266	20.469	933.349	15.752
3	831.411	4.146	81.816	907	4.587	91.456	87.508	775.918	17.482	856.042	14.150
4	744.871	4.658	82.763	821	4.159	92.402	86.673	699.089	14.353	776.019	12.378
5	658.958	4.961	81.444	735	3.724	90.864	83.548	622.302	11.271	695.600	10.445
6	575.858	5.074	78.526	649	3.295	87.545	78.848	547.761	8.378	617.835	9.780
7	502.701	5.021	68.550	567	2.879	77.018	67.888	482.682	5.778	548.391	7.575
8	438.396	4.886	59.781	495	2.514	67.676	58.303	426.185	3.509	488.041	7.327
9	382.793	4.701	52.199	432	2.197	59.530	50.081	376.902	1.584	436.447	7.936
10	-	4.474	379.514	343	1.919	386.250	317.077	0	-	57.381	7.184

## Modello VFA (13/24)



Coverage u	inits table							
	non-distinct	capital at risk	risk premium	overhead&	carrier and	carrier and	carrier and	Coverage
t	investment		(B)	fee expenses	weight (A)	weight (B)	weight (C)	units
	component (A)			(C )	80%	15%	5%	
0	999.000	149.850	299,70	6.001	100%	100%	100%	100%
1	997.260	139.616	418,85	5.984	86%	81%	86%	85%
2	916.245	119.112	476,45	5.494	72%	64%	72%	71%
3	831.411	99.769	498,85	4.980	59%	49%	59%	57%
4	744.871	81.936	491,62	4.459	47%	37%	47%	45%
5	658.958	65.896	461,27	3.944	36%	26%	36%	35%
6	575.858	51.827	414,62	3.447	27%	18%	27%	26%
7	502.701	40.216	361,94	3.009	19%	12%	19%	18%
8	438.396	30.688	306,88	2.629	12%	7%	12%	11%
9	382.793	22.968	252,64	2.262	5%	3%	5%	5%
10	-				0%	0%	0%	0%

Variable fee t	able									
t t	insurance finance	underlying items	underlying items	change Fair Value	Ń	/ariable fee	t	CSM before	CSM	Loss
	expense before VF	(share of assets)	u	underlying items	-			changes		
0	D			E		VF: E - D	0	49.596,27	49.596,27	-
1	4.728	0,950	949.905	14.496		9.767	1	59.363,39	59.363,39	-
2	17.771	0,947	952.562	14.917	-	2.854	2	47.691,77	47.691,77	-
3	17.108	0,944	881.081	13.357	-	3.751	3	35.740,29	35.740,29	-
4	15.573	0,941	805.536	11.648	-	3.925	4	25.083,78	25.083,78	-
5	14.077	0,938	727.906	9.798	-	4.279	5	15.590,72	15.590,72	-
6	13.004	0,935	650.386	9.144	_	3.859	6	8.114,34	8.114,34	-
							7	1.094,50	1.094,50	-
7		0,932	575.822	7.060		4.880	8 -	3.616,33	-	3.616,33
8	11.179	0,929	509.455	6.806	-	4.373	9 -	5.123,48	-	5.123,48
9	10.246	0,926	451.926	7.348	-	2.898	10 -	5.086,83	-	5.086,83
10	9.348	0,923	402.841	6.631	-	2.718				



# Modello VFA(14/24)

Revenue tabl											
								Reversal (or			
t	INSURA	ANCE SERVICE						recognition) of			
	death	expenses	Tot (F)	DAC	Dac release (G)	CSM	Loss	component (LS)	CSM release (H)	Risk Adj release (I)	Revenue
-				100		49.596	-				Rev: (F+G+H+I+LS)
1	300	6.001	6.301	90	10	50.545	-	-	8.818	1.879	17.008
2	419	5.984	6.403	73	17	39.491	-	-	8.201	2.626	17.246
3	476	5.494	5.970	58	15	29.009	-	-	6.732	2.988	15.705
4	499	4.980	5.479	45	13	19.870	-	-	5.214	3.128	13.834
5	492	4.459	4.951	33	12	11.974	-	-	3.617	3.083	11.662
6	461	3.944	4.406	23	10	5.975	-	-	2.140	2.892	9.448
7	415	3.447	3.861	15	8	757	-	-	338	2.600	6.807
8	362	3.009	3.371	9	6	-	3.616	- 3.616	-	2.270	2.030
9	307	2.629	2.936	4	5	-	5.123	- 2.898	-	1.924	1.967
10	253	2.262	2.514	-	4	-	5.087	- 2.718	-	1.584	1.385



## Modello VFA(15/24)

#### Financial Statements

t	revenue	claims &	gross	thereof on	insurance	Dac amortiz.	P&L	accumul. P&L
		expenses	investment	underlying	finance			
0			income	items	expense		-	-
1	17.008 -	6.301	15.258	14.496	- 14.496	- 10	11.460	11.460
2	17.246 -	6.403	15.752	14.917	- 14.917	- 17	11.662	23.122
3	15.705 -	5.970	14.150	13.357	- 13.357	- 15	10.512	33.634
4	13.834 -	5.479	12.378	11.648	- 11.648	- 13	9.072	42.706
5	11.662 -	4.951	10.445	9.798	- 9.798	- 12	7.347	50.053
6	9.448 -	4.406	9.780	9.144	- 9.144	- 10	5.668	55.721
7	6.807 -	3.861	7.575	7.060	- 7.060	- 8	3.453	59.174
8	2.030 -	3.371	7.327	6.806	- 6.806	- 6	- 826	58.348
9	1.967 -	2.936	7.936	7.348	- 7.348	- 5	- 386	57.961
10	1.385 -	2.514	7.184	6.631	- 6.631	- 4	- 580	57.381



## Modello VFA(16/24)

#### Balance sheet

t	Assets (AS)	Best estimate Ris	k Adjustment	CSM	Technical	own funds	profits
					provisions (TP)	AS-TP	(losses)
0	999.900	925.329	24.975	49.596	999.900	-	
1	1.005.874	920.772	23.096	50.545	994.414	11.460	11.460
2	933.349	850.266	20.469	39.491	910.227	23.122	11.662
3	856.042	775.918	17.482	29.009	822.408	33.634	10.512
4	776.019	699.089	14.353	19.870	733.313	42.706	9.072
5	695.600	622.302	11.271	11.974	645.546	50.053	7.347
6	617.835	547.761	8.378	5.975	562.114	55.721	5.668
7	548.391	482.682	5.778	757	489.217	59.174	3.453
8	488.041	426.185	3.509	-	429.694	58.348 -	826
9	436.447	376.902	1.584	-	378.486	57.961 -	386
10	57.381	0	-	-	0	57.381 -	580



## Modello VFA(17/24)

Own funds	; profits&losses	Risk neutra	I			
	Before reinsura					
	IFRS17		Local&IFRS4		Solvency II	
year	Own funds	Profits	Own funds	Profits	Own funds	Profits
		(losses)		(losses)		(losses)
0 (day 1)	0		900		36.581	
1	11.460	11.460	8.614	8.614	51.753	51.753
2	23.122	11.662	17.104	8.490	54.150	2.397
3	33.634	10.512	24.631	7.527	55.433	1.282
4	42.706	9.072	31.147	6.516	56.303	870
5	50.053	7.347	36.642	5.494	56.547	245
6	55.721	5.668	41.977	5.335	57.004	457
7	59.174	3.453	45.690	3.713	56.130 -	875
8	58.348 -	826	49.646	3.956	55.602 -	528
9	57.961 -	386	53.654	4.008	56.478	875
10	57.381 -	580	57.381	3.727	57.381	903



# Modello VFA(18/24)

#### Example

Participating contracts shaped as endowment at single premium. The [risk neutral] fund returns are **greater** than the yield curve used for discounting future cash flows: that was the typical situation until 2021

- H		
	Premiums	1.000.000
	average	20
	contracts incepted	50.000
	Recurrent Commissions	0,50%
	front end loading	0,10%
	fee commission income	1,40%

Diroct work now business	norticipating bucinocc	(including part of bybrid products)
DILECT MOLY - HEM DUSIHESS -		(including part of hybrid products)

€ thousands

expenses			
sum assured	0,05% annual	New business margin	3,24% risk neutral
fixed	0,01 annual		0,00%
claims	0,008 per event	Liquidity premium (IFRS17)	0,35%
initial on off	100	Initial CSM margin	0,00%

# Modello VFA (19/24)



38

	/										
t	fund return	fee income	bonus rate	eiopa fw risk	spot rate	surrenders	deaths	lives	n.claims	surrender penalty	additional
	risk neutral			free + LP							death benefit
0								50.000			15,0%
1	1,12%	1,40%	0,00%	-0,99%	-0,99%	0,1%	0,20%	49.850	150	1,5%	14,0%
2	1,16%	1,40%	0,00%	0,43%	-0,28%	8,0%	0,30%	45.725	4.126	1,0%	13,0%
3	1,11%	1,40%	0,00%	0,51%	-0,02%	9,0%	0,40%	41.443	4.282	0,5%	12,0%
4	1,04%	1,40%	0,00%	0,51%	0,11%	10,0%	0,50%	37.112	4.331	0,0%	11,0%
5	0,94%	1,40%	0,00%	0,51%	0,19%	11,0%	0,60%	32.832	4.281	0,0%	10,0%
6	1,00%	1,40%	0,00%	0,59%	0,26%	12,0%	0,70%	28.690	4.142	0,0%	9,0%
7	0,82%	1,40%	0,00%	0,68%	0,32%	12,0%	0,80%	25.045	3.645	0,0%	8,0%
8	0,93%	1,40%	0,00%	0,82%	0,38%	12,0%	0,90%	21.841	3.204	0,0%	7,0%
9	1,22%	1,40%	0,00%	0,90%	0,44%	12,0%	1,00%	19.028	2.813	0,0%	6,0%
10	1,24%	1,40%	0,00%	0,98%	0,49%	100,0%	1,10%	-	19.028	0,0%	5,0%

t	Sum assured	death claims	surrender	expenses	fee expense	tot outflows	present value	best estimate	risk adjustment	assets	gross investment
	& local NPR		claims			in scope bel		gross			income
0	999.000			100				1.017.455	24.975	999.900	
1	996.005	2.298	982	999	4.995	9.274	9.367	998.119	23.089	1.001.825	11.199
2	913.576	3.406	78.647	988	4.980	88.022	88.520	914.390	20.456	925.425	11.621
3	828.028	4.129	81.483	905	4.568	91.086	91.135	827.986	17.465	844.611	10.272
4	741.499	4.637	82.389	820	4.140	91.986	91.571	740.199	14.338	761.409	8.784
5	655.975	4.938	81.076	733	3.707	90.455	89.587	653.546	11.258	678.111	7.157
6	573.217	5.051	78.166	648	3.280	87.145	85.803	570.255	8.368	597.747	6.781
7	500.396	4.998	68.236	566	2.866	76.667	74.976	497.464	5.770	525.982	4.902
8	436.385	4.864	59.507	494	2.502	67.367	65.349	434.157	3.502	463.507	4.892
9	380.179	4.669	51.843	431	2.182	59.125	56.839	378.958	1.579	410.037	5.655
10	-	4.433	375.997	342	1.901	382.673	364.308	-	-	32.449	5.084

## Modello VFA (20/24)

39

Coverage u	nits table							
	non-distinct	capital at risk	risk premium	overhead&	carrier and	carrier and	carrier and	Coverage
t	investment		(B)	fee expenses	weight (A)	weight (B)	weight (C)	units
c	component (A)			(C )	80%	15%	5%	
0	999.000	149.850	299,70	5.994	100%	100%	100%	100%
1	996.005	139.441	418,32	5.968	86%	81%	86%	85%
2	913.576	118.765	475,06	5.473	72%	64%	72%	70%
3	828.028	99.363	496,82	4.960	59%	49%	59%	57%
4	741.499	81.565	489,39	4.441	47%	37%	47%	45%
5	655.975	65.597	459,18	3.928	36%	26%	36%	35%
6	573.217	51.590	412,72	3.432	27%	18%	27%	26%
7	500.396	40.032	360,28	2.996	19%	12%	19%	18%
8	436.385	30.547	305,47	2.613	12%	7%	12%	11%
9	380.179	22.811	250,92	2.243	5%	3%	5%	5%
10	-				0%	0%	0%	0%

Variable fee ta	ble					[				
							t	CSM before	CSM	Loss
t	insurance finance	underlying items	underlying items	change Fair Value	Variable fee					
	expense before VF	(share of assets)		underlying items				changes		
0	D			E	VF: E - D		0 -	42.530,24	-	42.530,24
1 -	10.063	0,950	949.905	10.639	20.702		1 -	21.828,67	-	21.828,67
2	4.293	0,947	948.728	11.005	6.713		2 -	11.863,15	-	11.863,15
3	4.683	0,944	873.601	9.697	5.014		3 -	4.803,86	-	4.803,86
4	4.198	0,941	794.779	8.266	4.068		4	169,72	169,72	-
5	3.802	0,938	714.201	6.713	2.912		5	3.045,95	3.045,95	-
6	3.854	0,935	634.034	6.340	2.487		6	4.825,78	4.825,78	-
7	3.876	0,932	557.101	4.568	692		7	4.244,68	4.244,68	-
8	4.060	0,929	488.638	4.544	485		8	3.418,15	3.418,15	-
9	3.926	0,926	429.207	5.236	1.311		9	3.413,23	3.413,23	-
							10	2.554,51	2.554,51	-
10	3.715	0,923	378.464	4.693	978			,	,	

S. I. A. s.r.t. SVILUPPO INIZIATIVE ATTUARIALI



# Modello VFA(21/24)

Revenue table											
								Reversal (or			
t	INSURA	NCE SERVICE						recognition) of			
	death	expenses	Tot (F)	DAC	Dac release (G)	CSM	Loss	component (LS)	CSM release (H)	Risk Adj release (I)	Revenue
-				100		-	42.530				Rev: (F+G+H+I+LS)
1	300	5.994	6.294	90	10	-	21.829	20.702	-	1.886	28.892
2	418	5.968	6.387	73	17	-	11.863	6.713	-	2.633	15.749
3	475	5.473	5.948	58	15	-	4.804	5.014	-	2.990	13.968
4	497	4.960	5.457	45	13	134	-	3.898	35	3.127	12.530
5	489	4.441	4.930	33	12	2.339	-	-	707	3.080	8.729
6	459	3.928	4.387	23	10	3.553	-	-	1.273	2.890	8.560
7	413	3.432	3.845	15	8	2.934	-	-	1.311	2.598	7.762
8	360	2.996	3.357	9	6	2.103	-	-	1.316	2.268	6.946
9	305	2.613	2.918	4	5	1.577	-	-	1.837	1.923	6.683
10	251	2.243	2.494	-	4 -	0	-	-	2.555	1.579	6.632



# Modello VFA(22/24)

#### **Financial Statements**

t	revenue	claims &	gross	thereof on		insurance	D	ac amortiz.	P&L	a	accumul. P&L
		expenses	investment	underlying		finance					
0			income	items		expense		-	42.530	-	42.530
1	28.892 -	6.294	11.199	10.639	-	10.639	-	10	23.148	-	19.382
2	15.749 -	6.387	11.621	11.005	-	11.005	-	17	9.962	-	9.421
3	13.968 -	5.948	10.272	9.697	-	9.697	-	15	8.580	-	841
4	12.530 -	5.457	8.784	8.266	-	8.266	-	13	7.578		6.738
5	8.729 -	4.930	7.157	6.713	-	6.713	-	12	4.231		10.969
6	8.560 -	4.387	6.781	6.340	-	6.340	-	10	4.604		15.573
7	7.762 -	3.845	4.902	4.568	-	4.568	-	8	4.242		19.815
8	6.946 -	3.357	4.892	4.544	-	4.544	-	6	3.931		23.745
9	6.683 -	2.918	5.655	5.236	-	5.236	-	5	4.178		27.923
10	6.632 -	2.494	5.084	4.693	-	4.693	-	4	4.525		32.449



# Modello VFA(23/24)

#### Balance sheet

	r						
t	Assets (AS)	Best estimate Ris	k Adjustment	CSM	Technical	own funds	profits
					provisions (TP)	AS-TP	(losses)
0	999.900	1.017.455	24.975	-	1.042.430 -	42.530	
1	1.001.825	998.119	23.089	-	1.021.207 -	19.382 -	19.382
2	925.425	914.390	20.456	-	934.845 -	9.421	9.962
3	844.611	827.986	17.465	-	845.451 -	841	8.580
4	761.409	740.199	14.338	134	754.671	6.738	7.578
5	678.111	653.546	11.258	2.339	667.143	10.969	4.231
6	597.747	570.255	8.368	3.553	582.175	15.573	4.604
7	525.982	497.464	5.770	2.934	506.168	19.815	4.242
8	463.507	434.157	3.502	2.103	439.762	23.745	3.931
9	410.037	378.958	1.579	1.577	382.114	27.923	4.178
10	32.449	_		0 -	0	32.449	4.525



# Modello VFA(24/24)

Own funds; profits&losses. Risk neutral										
	Before reinsurance									
	IFRS17		Local&IFRS4		Solvency II					
year	Own funds	Profits	Own funds	Profits	Own funds	Profits				
		(losses)		(losses)		(losses)				
0 (day 1)	-42.530		900		- 58.004					
1	- 19.382 -	19.382	5.820	5.820	- 31.532	- 31.532				
2	- 9.421	9.962	11.849	6.029	- 19.335	12.197				
3	- 841	8.580	16.582	4.733	- 9.128	10.207				
4	6.738	7.578	19.909	3.327	- 169	8.959				
5	10.969	4.231	22.136	2.227	7.310	7.479				
6	15.573	4.604	24.530	2.394	14.109	6.799				
7	19.815	4.242	25.587	1.056	18.765	4.656				
8	23.745	3.931	27.122	1.535	23.018	4.253				
9	27.923	4.178	29.858	2.736	27.990	4.972				
10	32.449	4.525	32.449	2.590	32.449	4.459				



# Ceded Reinsurance (1/9)

Example 1 again. Remind! These are the assumptions about business

Participating contracts shaped as endowment at single premium. The [risk neutral] fund returns are **lower** than the yield curve used for discounting future cash flows

€ thousands Valuation 6/23	Segregated fund
Avg yield change from 3/22	2,00%
Premiums	1.000.000
average	20
contracts incepted	50.000
Recurrent Commissions	0,50%
front end loading	0,70%
fee commission income	1,10%

Direct work - ne	w business - partici	pating business (including par	t of hybrid pr	roducts)
€ thousands				
expenses				
sum assured	0,05% annual	New business margin	<mark>4,9</mark> 4%	risk neutral
fixed	0,01 annual	Initial CSM	5,16%	2,06%
claims	0,008 per event	Liquidity premium (IFRS17)	0,71%	if LP were = SII_VA
initial on off	100			
spread real world vs r	isk neutral	0,80%		

#### 44



# 45 Ceded Reinsurance (2/9)

Example 1 again.

Ceded 40% in quota share. Received back suddenly an initial commission.

The initial net consideration is not paid, rather the cedant entity sets up a deposit liability in its balance sheet and recognize on cash recurrent interests to the reinsurer.

The gross MBM (4.95%) drops down net of reinsurance to 4.78% because the overall balance of reinsurance deal brings losses (obviously, the reinsurer has to gain to accept risks)

€ thousands	
Premiums	400.000
Premiums	400.000
quota share	40%
contracts ceded	50.000
initial commission	
received by cedant entity	5,00%
interest on deposit	95,00%

Reinsurance the p	point of view of cede	ent entity	
expenses			
reins.management	0,005% annual	New business margin	4,78% risk neutral
		Net of reinsurance	0,00%
reinsurance default	0,15% annual		



# 46 Ceded Reinsurance (3/9)

The local GAAP gross NPR is ceded in quota share, consistent with the local regulation.

As regards the formulaic of [ceded] best estimate [PVFCF], compared to the gross PVFCF:

Cash flows in scope allow for (1) interests on deposit and (2) allowance for reinsurance default

Furthermore, the P&L of cedant entity (a) earns an additional investment income originating from the commission received and (b) loses additional expenses to (overhead expenses) to manage the reinsurance treaty

The cedant mitigates its risk adjustment in proportion to the ceded mortality risk whilst expense risk is not ceded at all

t	local NPR	inflows	outflows	net inflows	allowance for	present value	best estimate	save in	commission	additional	additional
	ceded	on claims (d	ep.interest)		reins.default		ceded	risk adjustment	received	invest.income	expenses
0	397.200						277.656	- 8.937	20.000		
1	404.009	1.330	11.773 -	10.443		9.975	301.129	- 8.316		939	20
2	378.207	33.969	12.128	21.840 -	65	19.947	292.217	- 7.432		894	20
3	349.681	36.155	11.174	24.981 -	112	21.974	278.076	- 6.407		802	19
4	319.215	37.465	10.099	27.366 -	164	23.259	260.155	- 5.314		755	17
5	287.593	37.710	8.916	28.795 -	215	23.669	240.016	- 4.217		759	16
6	256.085	37.177	8.196	28.981 -	260	23.033	219.152	- 3.168		790	14
7	227.397	33.280	6.861	26.420 -	276	20.300	200.194	- 2.207		818	13
8	201.937	29.788	6.330	23.458 -	280	17.418	183.679	- 1.354		857	11
9	179.657	26.705	6.177	20.528 -	275	14.722	169.627	- 618		898	10
10	-	183.623	5.530	178.093 -	2.653	123.308	0	-		943	9



# 47 Ceded Reinsurance (4/9)

The ceded P&L figures out as the cash recurrently exchanges between the counterparties. After the initial commission received on cash by the cedant, since then, the reinsurer receives money that is gauged as the "net inflows" (= the balance of cash flows in scope of ceded PVFCF excluding the allowance for default) and the change of local ceded NPR.

The aggregate P&L is adverse for the cedant (of course) by -1676, anyway the cedant has a favor overall balance under the real world economic environment that is worth 2718 so that it earns -1676 + 2718 = + 1042

/										additional	additional
t c	ash exchange	accumulation	other assets	TOT assets	profit & loss	accumulat.	profit & loss	accumulat.	fund return	profit & loss	accumulat.
v	ith reinsurer		contribution	contribution	Local		IFRS17		real world	Local	
0	20.000	20.000		20.000		_	_				
1 -	6.434	13.566	919	14.485	14.485	14.485	3.903	3.903	3,92%	320	320
2 -	3.961	9.604	1.793	11.397 -	3.087	11.397	2.104	6.006	3,96%	306	626
3 -	3.544	6.060	2.576	8.636 -	2.762	8.636 -	456	5.550	3,91%	287	913
4 -	3.101	2.959	3.314	6.272 -	2.363	6.272 -	1.738	3.813	3,84%	274	1.187
5 -	2.828	131	4.056	4.188 -	2.085	4.188 -	1.981	1.831	3,74%	260	1.447
6 -	2.527 -	2.396	4.832	2.437 -	1.751	2.437 -	1.730	101	3,80%	252	1.699
7 -	2.268 -	4.664	5.637	973 -	1.463	973 -	1.519 -	1.418	3,62%	247	1.945
8 -	2.002 -	6.665	6.483 -	182 -	1.156 -	182 -	1.187 -	2.605	3,73%	249	2.195
9 -	1.752 -	8.417	7.372 -	1.046 -	864 -	1.046 -	- 878 -	3.484	4,02%	257	2.451
10 -	1.564 -	9.981	8.305 -	1.676 -	630 <mark>-</mark>	1.676	- 1.808 <mark>-</mark>	1.676	4,04%	267	2.718



# 48 Ceded Reinsurance (5/9)

Unlike direct work, ceded coverage units are not affected by expenses

There's never loss recognition

CSM starts high: initial net consideration (400000-20000=380000) – initial ceded best estimate – initial ceded risk adjustment

Note that ceded work is accounted for in General Model even though direct work is under Variable Fee Model, despite the characteristics of ceded business is clearly participating, likewise the direct work

/	Coverage u	nits table	Ceded reins	urance	
		carrier and	carrier and	carrier and	Coverage
	t	weight (A)	weight (B)	weight (C )	units
		80%	20%	0%	
	0	100%	100%	100%	100%
	1	87%	82%	87%	86%
	2	73%	66%	73%	72%
	3	61%	51%	60%	59%
	4	49%	39%	49%	47%
	5	38%	28%	38%	36%
	6	29%	20%	29%	27%
	7	20%	13%	20%	19%
	8	13%	7%	13%	12%
	9	6%	3%	6%	5%
	10	0%	0%	0%	0%

t	CSM before	CSM	Loss
	changes		
0	93.406,97	93.406,97	-
1	97.790,55	97.790,55	-
2	87.568,42	87.568,42	-
3	75.852,73	75.852,73	-
4	64.186,07	64.186,07	-
5	52.948,77	52.948,77	-
6	42.345,30	42.345,30	-
7	32.459,91	32.459,91	-
8	23.356,22	23.356,22	-
9	14.969,34	14.969,34	-
10	7.214,28	7.214,28	-



# 49 Ceded Reinsurance (6/9)

Revenue ceded to reinsurance is material and is due mainly due to the release of coverage units

Note that expenses are not ceded to reinsurance, neither overhead nor commissions

Revenue	table	9										
t		INSURAN	CE SERVICE	CSM release	Risk Adj							
		death	expenses	Tot (F)	DAC	Dac release (G)	CSM	Loss ; co	mponent (LS)	(H)	release (I)	Revenue
0					-		93.407	-			Rev:	-(F+G+H+I+LS)
1		119	-	119	-	-	83.981	-	-	13.809	621 -	14.549
2		170	-	170	-	-	73.167	-	-	14.402	884 -	15.455
3		197	-	197	-	-	62.113	-	-	13.740	1.025 -	14.961
4		210	-	210	-	-	51.285	-	-	12.901	1.093 -	14.204
5		211	-	211	-	-	41.003	-	-	11.946	1.098 -	13.254
6		201	-	201	-	-	31.429	-	-	10.916	1.049 -	12.166
7		184	-	184	-	-	22.604	-	-	9.856	961 -	11.001
8		164	-	164	-	-	14.481	-	-	8.876	853 -	9.892
9		141	-	141	-	-	6.975	-	-	7.994	736 -	8.872
10		119	-	119	-	-	0	-	-	7.214	618 -	7.951



# 50 Ceded Reinsurance (7/9)

Actual claims and expenses charged to the treaty have been reduced by the additional expenses for reinsurance management: in this way, they increase the losses for the cedant.

Gross investment income equates the additional income originating from the initial commission received

Insurance finance expense equates the unwinding of opening ceded PVFCF and ceded CSM. Note that there's no variable fee ceded to the treaty. The reinsurance default reduces losses (as default is released from the ceded PVFCF)

_									
1	Financial Statem	ents							
	t	revenue	claims &	gross	insurance	reinsurance	Dac amortiz.	P&L	accumul. P&L
			expenses	investment	finance	default			
	0			income	expense			-	-
	1 -	14.549	99	939	17.414		-	3.903	3.903
	2 -	15.455	149	894	16.450	65	-	2.104	6.006
	3 -	14.961	178	802	13.414	112		456	5.550
	4 -	14.204	192	755	11.355	164		1.738	3.813
	5 -	13.254	195	759	10.104	215		1.981	1.831
	6 -	12.166	187	790	9.199	260		1.730	101
	7 -	11.001	172	818	8.216	276		1.519 -	1.418
	8 -	9.892	152	857	7.416	280		1.187 -	2.605
	9 -	8.872	131	898	6.688	275		878 -	3.484
	10 -	7.951	110	943	6.052	2.653	-	1.808 <mark>-</mark>	1.676



# 51 Ceded Reinsurance (8/9)

Balance s	heet -	Reinsura	ance								
				Asset compositio	n						
	t	assets b	est estimate	ceded risk	ceded CSM	cash&interests less	liabilities	own funds	profits	Direct work net	of reinsurance
		(RA)	ceded	adjustment		recurrent cash flows	(LB)	RA-LB	(losses)	own funds	profits (losses)
(	0 4	400.000	277.656	8.937	93.407	20.000	397.200	2.800		2.800	
:	1 4	407.911	301.129	8.316	83.981	14.485	404.009	3.903	3.903	12.460	12.460
:	<mark>2</mark> 3	384.213	292.217	7.432	73.167	11.397	378.207	6.006	2.104	22.352	9.892
:	<mark>3</mark> 3	355.232	278.076	6.407	62.113	8.636	349.681	5.550 -	456	28.865	6.513
	<mark>4</mark> 3	323.027	260.155	5.314	51.285	6.272	319.215	3.813 -	1.738	33.500	4.635
	5 2	289.424	240.016	4.217	41.003	4.188	287.593	1.831 -	1.981	37.104	3.604
	<mark>6 2</mark>	256.186	219.152	3.168	31.429	2.437	256.085	101 -	1.730	40.192	3.089
	7 2	225.978	200.194	2.207	22.604	973	227.397	- 1.418 -	1.519	41.176	984
	<mark>8</mark> 2	199.332	183.679	1.354	14.481	- 182	201.937	- 2.605 -	1.187	41.560	384
	<mark>9</mark> :	176.174	169.627	618	6.975	- 1.046	179.657	- 3.484 -	878	43.495	1.935
1	0 -	1.676	0	-	0	- 1.676	-	<mark>- 1.676</mark>	1.808	47.761	4.266



# Ceded Reinsurance (9/9)

52

							Single prer	mium participat	ing contracts				
							Own funds	s; profits&losses	s. Risk neutra	ıl			
	After reinsurance							Before reinsura	ince				
	IFRS17		Local		Solvency II			IFRS17		Local&IFRS4		Solvency II	
year	Own funds	Profits	Own funds	Profits	Own funds	Profits	year	Own funds	Profits	Own funds	Profits	Own funds	Profits
		(losses)		(losses)		(losses)			(losses)		(losses)		(losses)
0 (day 1)	2.800		26.900	-	- 53.070		0 (day 1)	0		6.900		31.956	
1	12.460	12.460	26.046	26.046 -	- 50.934 -	50.934	1	8.558	8.558	11.682	11.682	24.386	24.386
2	22.352	9.892	28.537	2.490 -	42.476	12.140	2	16.346	7.788	17.384	5.702	20.704 -	3.682
3	28.865	6.513	30.749	2.213 -	- 30.983	9.895	3	23.314	6.969	22.486	5.102	22.302	1.598
4	33.500	4.635	32.689	1.940 -	- 18.604	8.452	4	29.687	6.373	26.920	4.434	26.229	3.927
5	37.104	3.604	34.640	1.951 -	- 7.079	7.704	5	35.273	5.585	31.090	4.170	30.050	3.820
6	40.192	3.089	36.692	2.052	4.218	7.257	6	40.092	4.819	35.031	3.941	34.090	4.041
7	41.176	984	38.741	2.049	13.671	6.694	7	42.594	2.503	38.687	3.656	36.849	2.758
8	41.560	384	40.928	2.187	23.150	6.273	8	44.165	1.571	42.181	3.494	40.054	3.206
9	43.495	1.935	43.356	2.428	33.623	5.892	9	46.979	2.814	45.631	3.450	44.635	4.581
10	47.761	4.266	45.958	2.603	45.958	7.940	10	49.437	2.458	49.031	3.400	49.031	4.395

Gap between IFRS17 own funds and Solvency II own funds rises slightly because Solvency II additional investment income on initial commission is slightly lower, - 10 bp due to the assumption about volatility adjustment that is lower than assumption about liquidity premium by – 50 bp



## Variable Fee. P&L and Balance sheet (1/15)

Line 1:/ impact of new business on business in force PVFCF

TRANSITION_NB	- 238.	239.949
1a_NB_INCEPTION		-
2_0_MUT_ADJ_NB_INCEPTION		239.949
2_1_MUT_EB	- 240.1	133.590

1.893.641

Insurance obligations and delta premiums expenses	non-distinct opening investment bottom up	(change in) interest Change in a allocated to fair value olicyholders UIT a	eco	delta CSM P&L
--	--	--	-----	---------------

- 1.893.641

<u>Comment</u>: this is the "mutualization" defined as marginal effect of the new business on the best estimate of existing portfolio. It's adverse here; however, it's more frequently favour: if so, the increase of CSM is make nil and lent to the new business. Exchange of mutualization is not permitted by IASB at time being.



## Variable Fee. P&L and Balance sheet (2/15)

#### Line 2: expected changes

2_1_N	/IUT_EB				-		2	40.133.590				
2_OPI	en_rfwd_rf	R					3	07.491.355				
	delta		premiums	Insurance obligations and expenses	non-distinct investment component	unwinding of opening bottom up interest rate	interest	Change in fair value UIT	change non- eco assumptions	Variable Fee	delta CSM	P&L
-	67.357.765	-	89.000.000	626.000	20.792.911	223.324				223.324	223.324	

*Premiums:* these are the expected gross premiums

Insurance obligations and expenses: these are "insurance" obligations; as such, they are meant as excess of expected claims in respect of deposit held at the opening balance

Non – distinct investment component: it's the opening deposit expected to be released over the period due to the claims.

Unwinding of opening bottom up interest rate: it is the up to date (i.e. unlocked) <u>opening</u> interest rate (composed by a risk - free component and liquidity premium). Since it's negative at FY2018, its impact is a reduction of the PVFCF, i.e. as it were a profit rather than a loss.

It flows in CSM rather than in P&L, through the Variable Fee



## Variable Fee. P&L and Balance sheet (3/15)

#### Line 3: real world economic environment

	ven_rfwd_rfr ven_rfwd_rw			-				91.355 22.075			
	delta	premiums	Insurance obligations and expenses	non-distinct investment component	unwinding of opening bottom up interest rate	(change in) interest allocated to policyholders	Change in fair value UIT	change non- eco assumptions	Variable Fee	delta CSM	P&L
-	7.830.720								- 7.830.720	- 7.830.720	

This is the overall impact of replacement of the opening risk - free rates (part of bottom up) with opening real - world assumptions for the past 12 years. It's worth noting that real world does not mean "actual" rather opening assumptions according to experience.

This kind of disclosure is not required in IFRS17.

It's a cost so that the variable Fee and the CSM drop down.

However, it is deemed to not generate bias in the measurement of overall variable fee because the remainder economic impacts (see line 7) are measured net of this cost.



## Variable Fee. P&L and Balance sheet (4/15)

#### *Line 4: effect of changes of non – economic assumptions*

22_LAPSE_ASSUMP_CHANGE	-	315.322.075
23_ASS_MORT_CHANGE	-	315.322.075
24_EXPENSE_CHANGE	-	315.322.075
25a_MVMT_MISC_ASSUMP_CHANGE	-	304.025.802

	delta -	premiums	Insurance obligations and expenses	non-distinct investment component	bottom up	interest	fair value	change non- eco assumptions	Variable Fee	delta CSM	P&L	
11.296.273 11.296.273 11.296.273 -								11.296.273		11.296.273	-	

<u>Comment</u>: impact of refresh of non – economic assumptions is a decrease of PVFCF and flows to CSM (increase).

In case GMM were applicable (i.e. not the VFA), the part recognized in CSM would be calculated by using the discount rates and the relevant economic assumptions locked in at inception. The remainder would be recognized to P&L.



## Variable Fee. P&L and Balance sheet (5/15)

#### Line 5: experience variance (1/2)

25a_MVMT_MISC_A	SSUMP_CHANG	E	-		304.025	.802				
25b_MVMT_MISC_E	XP_VAR		-		297.959	.065				
/						·				
delta	premiums	Insurance obligations and expenses	non-distinct investment component	•	interest	Change in fair value UIT	change non- eco assumptions	Variable Fee	delta CSM	P&L
6.066.737	50.960.000				- 44.000.000	•	-		- 44.000.000	
0.000.737	50.960.000		093.203		- 44.000.000			- 44.000.000 -	- 44.000.000	-

*Comment*: experience variance contains 3 different factors which should be dealt with separately in IFRS17.

At time being, these factors have been achieved through expert judgement with the help of accounting posting and actuarial disclosure:

*Premiums*: lower (€ 37 m) than expected (€ 89 m) by - € 52.00 m whose impact on deposit is - € 50.96 m.

The net impact (€ 1040 k) is a potential loss that is recognized in CSM rather than in P&L.

That's the experience variance on premiums (recurrent and top – ups insofar as they did not meet contract boundary at the opening balance). See Later.

Claims of non – distinct investment component: lower than expected (- € 920 k = 19873-20793) whose impact on deposit is -€ 893 k. The potential impact is gain by € 27 m that is recognized in CSM rather than in P&L as "experience variance on deposit". See later



## Variable Fee. P&L and Balance sheet (6/15)

#### Line 5: experience variance (2/2)

<b>25</b> a_l	MVMT_MISC_A	SSUMP_CHANG	E	-		304.025	.802				
25b_	MVMT_MISC_E	XP_VAR		-		297.959	.065				
	delta	premiums	Insurance obligations and expenses	non-distinct investment component	unwinding of opening bottom up interest rate	(change in) interest allocated to policyholders	Change in fair value UIT	change non- eco assumptions	Variable Fee	delta CSM	P&L
	6.066.737	50.960.000		893.263		- 44.000.000			- 44.000.000 -	44.000.000	

Change in interest allocated to policyholders: that's the impact of unit pricing (delta NAV) of the face value of units, calculated as difference in respect to the expected delta NAV (which in turn was equal to the bottom up interest rate less the gross management fee).

It's an economic factor; as such, its impact adjusts the CSM via the Variable Fee. Really, its effect is very near the corresponding gross investment income of assets held in units (the unit underlying items). Since the disclosure of gross investment income of underlying items is not required, we don't show separately the net balance of unit linked investment income.

In addition, it allows for the impact of replacement of expected bonus rates (i.e. the opening contribution of next period risk free + liquidity premium expected investment income to the FDB - lower) with actual bonus rates (i.e. the observed revaluation of reserves net of financial guarantees - higher).

It's part of net investment income and, as such, is part of variable fee for a total amount of € 44 m.



## Variable Fee. P&L and Balance sheet (7/15)

#### Line 6: inflation

26a_MVMT_FIN_VAR	RIANCE		-		2	97.959.065				
41c_INFLATION			-		2	98.616.256				
delta	premiums	Insurance obligations and expenses	non-distinct investment component	unwinding of opening bottom up interest rate		Change in fair value UIT	change non- eco assumptions	Variable Fee	delta CSM	P&L
- 657.192							- 657.192	-	657.192	

<u>Comment:</u> change of assumption about future inflation rates have raised the PVFCF of future expenses. As such, it is treated likewise a change in non – economic assumption, so that it flows in CSM



## Variable Fee. P&L and Balance sheet (8/15)

#### Line 7: economic environment

41c_INFLATION		-		298.616.256					
45_CLOS_RFR		-		311.470.995					
47a_CORPBOND		-		313.865.013					
47b_GOVBOND		-		319.417.362					
48_CLOS_VA		-		331.364.637					
56_CLOS_CLOSING		-		331.364.637					
ot	Insurance bligations and expenses	non-distinct investment component	unwinding of opening bottom up interest rate	interest	Change in fair value UIT	change non- eco assumptions	Variable Fee	delta CSM	P&L
- 12.854.738							-12.854.738	-12.854.738	
- 2.394.018							- 2.394.018	- 2.394.018	
2.00									
- 5.552.349							- 5.552.349	- 5.552.349	

#### Comment:

Changes of discount rate entails reduction (lowering) from year end 2018 to year end 2019 and is worth € 12.85 m (increase of PVFCF)
Changes of credit spread of government and corporate bonds have increased the expected future discretionary benefits, i.e. the future bonus rates that in turn are proportional to the future investment income. The increases are, respectively, € 5.52 m and € 2.39 m.

3. The update of liquidity premium has caused an increase of reserves by € 11.95 m. Note that is temporary set up equal to the Solvency II Volatility Adjustment (VA)

All these components adjust the Variable Fee and hence the CSM (reduction of CSM)



## Variable Fee. P&L and Balance sheet (9/15)

Line 8: impacts on P&L and other impacts on variable fee and on CSM (1/3)

	investment income	delta	premiums	Insurance obligations and expenses	non-distinct investment component	unwinding of opening bottom up interest rate	interest	Change in fair value	change non- eco assumptions	Variable Fee	del ta CSM	P&L
Underlying items								63.000.000		63.000.000	63.000.000	
Otherassets	800.000											800.000
Change in TVOG	-	8.000.000					- 8.300.000			- 8.300.000 -	8.300.000	300.000
premiums actual less premiums expe	cted		52.000.000									
claims actual less daims expected				- 187.800 -	920.061							187.800
premiums&prtf transfer actual		-	37.000.000							-	1.040.000	
claims actual (deposit)					19.872.850						26.798	
claims actual (insurance component) deposit and in insurance				438.200								
component) TOT	1.200.000									- 29.655.776 -	21.923.537	1.287.800

#### Comment:

- Changes in fair value of the underlying items is the main part of gross investment income of financial assets and includes the contribution of both assets held in units and assets backing participating contracts.
- A Little part of investment income refers to assets backing portfolio not subject to Variable Fee Approach (e.g. term insurance) and free assets (i.e. backing risk adjustment and S2 SCR). The amount shown here (€ 0.8 m) relates to only the assets covering this particular HRG' SCR.



## Variable Fee. P&L and Balance sheet (10/15)

Line 8: impacts on P&L and other impacts on variable fee and on CSM (2/3)

	inve stment income	delta	premiums	Insurance obligations and expenses	non-distinct investment component	unwinding of opening bottom up interest rate	interest	fair value	change non- eco assumptions	Variable Fee	delta CSM	P&L
Underlying items								63.000.000		63.000.000	63.000.000	
Otherassets	800.000											800.000
Change in TVOG	-	8.000.000					- 8.300.000			- 8.300.000 -	8.300.000	300.000
premiums actual less premiums expe	cted		52.000.000									
claims actual less daims expected				187.800 -	920.061							187.800
premiums&prtf transfer actual		-	37.000.000							-	1.040.000	
claims actual (deposit)					19.872.850						26.798	
claims actual (insurance component) deposit and in insurance				438.200								
component)	1.200.000											
тот										- 29.655.776 -	21.923.537	1.287.800

- Changes in TVOG is defined as difference between the stochastic and the deterministic dynamic PVFCF. It's not appropriately called as stochastic cost of financial guarantees. Really, that is just one component, the other being the delta between the stochastic vs the non stochastic FDB with an overall implicit contribution of stochastic PHB (dynamic policyholder behaviour) against the dynamic non stochastic run.
  - Its investment component is worth € 8 m. Since it's an increase of best estimate, the CSM goes down correspondingly through the variable fee
  - There's also a residual component, a reduction by € 0.3 m, that is recognized as profit This relates to the changes of management actions that in turn have modified the asset mix and the time pattern of future bonus rates.



## Variable Fee. P&L and Balance sheet (11/15)

Line 8: impacts on P&L and other impacts on variable fee and on CSM (3/3)

	inve stment income	delta	premiums	Insurance obligations and expenses	non-distinct investment component	unwinding of opening bottom up interest rate	interest	fair value	change non- eco assumptions	Variable Fee	delta CSM	P&L
Underlying items								63.000.000		63.000.000	63.000.000	
Otherassets	800.000											800.000
Change in TVOG	-	8.000.000					- 8.300.000			- 8.300.000 -	8.300.000	300.000
premiums actual less premiums expe	cted		52.000.000									
claims actual less daims expected				187.800 -	920.061							187.800
premiums&prtf transfer actual		-	37.000.000							-	1.040.000	
claims actual (deposit)					19.872.850						26.798	
claims actual (insurance component) deposit and in insurance				438.200								
component)	1.200.000											
тот										- 29.655.776 -	21.923.537	1.287.800

- The experience variance of recurrent premiums (and top ups of opening business in force) is a potential loss recognized in CSM. It's worth € 1.04 m
- The experience variance on deposit is a potential gain recognized in CSM. It's lower than € 27 k
- The experience variance on insurance claims and expenses is in favour by € 187.8 k and is recognized in profits and losses The changes of outstanding claims liabilities are info that will be used in 1 out of 4 schemes of profits and losses shown in the next chapter. It is also used for amending the claims paid into claims incurred for the purpose of analysis of changes



## Variable Fee. P&L and Balance sheet (12/15)

#### Presentation of financial statements

There are at least 4 manners to present profits and losses.

Since they shall land at the same result, 3 of them could be used to validate the main one, for example as FRCF controls and for reconciliations.

The last one is the classic revenue accounting scheme in usage for local GAAP.

All the scheme uses the info and data disclosed in the first chapter plus

- the risk adjustment
- the expenses incurred which are not in scope of fulfilment cash flows
- / the coverage units at the beginning and at the end of period
- impact of changes of non economic assumptions separately for EPIFP and future expenses and obligations stemming from past premiums
- transfer of actual premiums from EPIFP to deposit
- insurance finance expense split down in (1) investment component, (2) insurance component, (3) EPIFP

these data need actuarial implementations (the risk adjustment and coverage units have begun) or accounting anges (ref. expenses).



## Variable Fee. P&L and Balance sheet (13/15)

#### Presentation of financial statements

IFRS17 Standard Presentation (main scheme)

Financial Statements - standard presentation			
Revenue	7.431.735		
actual claims	- 208.200		
Gross investment income	63.800.000		
Insurance finance expense	- 63.000.000	<b>P</b>	7 424 725
Dac amortization	- 200.000	Revenue	7.431.735
Change of non - economic assumptions	_	CSM release	5.105.735
change of non-ceonomic assumptions		Change of risk adjustment	1.500.000
Tot P&L	7.823.535	Change in DAC	200.000
Check	ОК	Expected insurance claims	626.000

#### CSM

opening		90.000.000
change in non - eco assumptions		10.639.081
mutualization	-	1.893.641
experience variance on premiums	-	1.040.000
experience variance on deposit		26.798
variable fee	-	29.655.776
tot changes	-	21.923.537
coverage units opening		20,00
coverage units closing		18,50
CSM release	-	5.105.735
closing		62.970.728

Actual Claims	-	208.200
Actual claims and expenses	-	438.200
Stochastic valuations other than economic		300.000
Marketing and other expenses not in scene		
indirecting and other expenses not in scope		
of PVFCF	-	70.000
	Actual claims and expenses Stochastic valuations other than economic Marketing and other expenses not in scope	Actual claims and expenses - Stochastic valuations other than economic Marketing and other expenses not in scope



## Variable Fee. P&L and Balance sheet (14/15)

#### Presentation of financial statements

Actuarial Best Estimate (PVFCF)	IFRS17	Solvency 2
PVFCF opening	250.239.949	250.939.949
Insurance best estimate	30.000.000	
EPIFP	- 23.000.000	- 23.000.000
Non - distinct investment component	231.239.949	
TVOG	12.000.000	12.000.000
best estimate future obligations		261.939.949
PV future expenses not in scope	800.000	100.000
PVFCF closing	339.364.637	340.004.637
Insurance best estimate	25.648.559	
insurance finance expense	20.000	
change non - eco assumptions	- 3.745.441	
expected outflows release	- 626.000	
outflows from expected renewal premiums	-	
EPIFP	- 25.450.000	- 25.450.000
insurance finance expense	50.000	
change non - eco assumptions	- 5.000.000	
expected release	2.500.000	

Non - distinct investment component	331.166.078	
insurance finance expense	84.285.776	
expected release	<mark>- 20.792.911</mark>	
expected premium contribution	86.500.000	
expected cash inflows	89.000.000	
profits	<mark>- 2.500.000</mark>	
experience variance	<mark>- 50.066.737</mark>	
opening deposit	893.263	
premium contribution	<mark>- 50.960.000</mark>	
TVOG	20.000.000	20.000.000
insurance finance expense	8.300.000	
other	<mark>- 300.000</mark>	
best estimate future obligations		345.454.637
PV future expenses not in scope	730.000	90.000
Check 351.364.637		
rophet PVFCF 351.364.637		
Check outcome	ОК	



## Variable Fee. P&L and Balance sheet (15/15)

#### Presentation of financial statements

		sign of P&L	Impact on
Profit & Losses - alternative 1 presentation		impact	P&L
Expected claims and expenses	626.000	1	626.000
Actual claims and expenses	438.200	-1 -	438.200
Stochastic valuations other than economic Marketing and other expenses not in scope of	300.000	1	300.000
PVFCF	70.000	-1 -	70.000
Change on non - economic assumptions	-	1	-
Gross investment income	63.800.000	1	63.800.000
from the underlying items	63.000.000		-
from other financial assets	800.000		-
Insurance finance expense	63.000.000	-1 -	63.000.000
from PVFCF	92.655.776		-
from risk adjustment	0		-
variable fee	-29.655.776		-
Change in risk adjustment	- 1.500.000	-1	1.500.000
CSM release	- 5.105.735	-1	5.105.735
Tot P&L			7.823.535

Profit & Losses - alternative 2 presentation		P&L sign	Profit (Loss)
Revenue	7.431.735	1	7.431.735
Change of deposit	99.926.128	-1 -	99.926.128
[actual] Premium contribution	35.540.000	1	35.540.000
[actual] Claim contribution	20.337.848	-1 -	20.337.848
Gross Investment Income	63.800.000	1	63.800.000
Insurance Finance expense (excluding deposit)	- 21.285.776	-1	21.285.776
Change of DAC	- 200.000	1 -	200.000
Stochastic valuations other than economic	300.000	1	300.000
Marketing and other expenses not in scope of			
PVFCF	70.000	-1 -	70.000
Change of non - economic assumptions	0	1	-
Tot P&L			7.823.535

	REVENUE	
Profit & Losses - alternative 3 presentation	ACCOUNTING	P&L sign Profit (Loss)
Change of Technical Provisions	73.795.416	-1 - 73.795.416
PVFCF	101.124.688	
Risk Adjustment	- 1.500.000	
CSM	- 27.029.272	
Outstanding claims	1.200.000	
Premium income	37.000.000	1 37.000.000
Actual claims (including from deposit)	19.111.050	-1 - 19.111.050
Gross Investment Income	63.800.000	1 63.800.000
Change of DAC assets	-	1 -
Marketing and other expenses not in scope of		
PVFCF	70.000	-1 - 70.000
Tot P&L		7.823.535