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EUROPEAN INSURANCE
AND OCCUPATIONAL PENSIONS AUTHORITY

Insight into the DB-part of the stress test

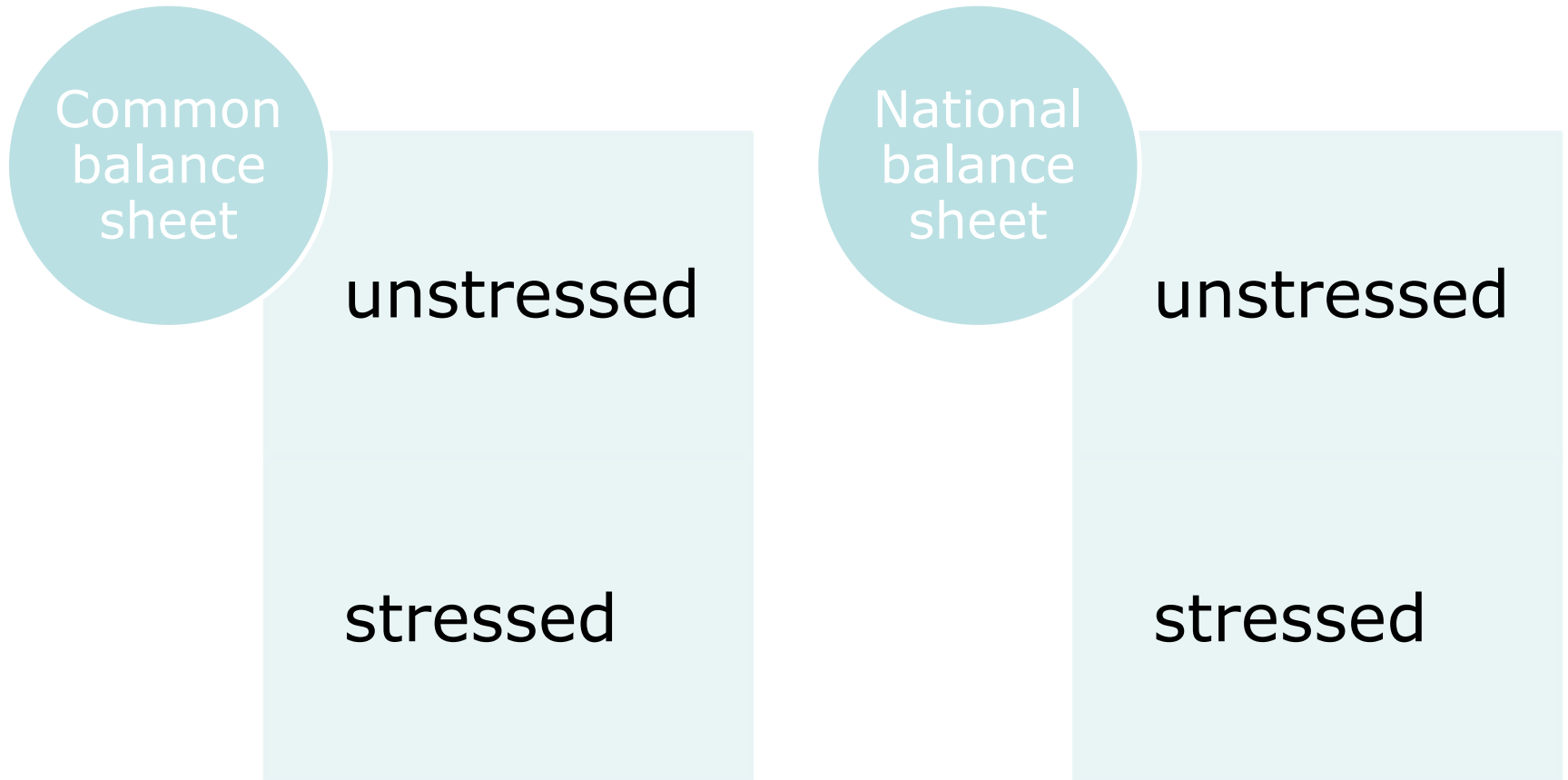
EIOPA 2017 IORP Stress Test Launch Event
Frankfurt, 18 May 2017 Marius Wenning (Bafin)

Overview Documents related to DB/hybrid part



- IORP Stress Test Specifications
- Annex “Technical Specifications Common Balance Sheet”
- DB/hybrid Reporting Template *
- DB/hybrid Questionnaire
- Yield Curves
- Word Response Template DB Questionnaire *
- Helper tabs sponsor support/pension protection scheme

Specifications Stress Test DB/hybrid Four Balance Sheets

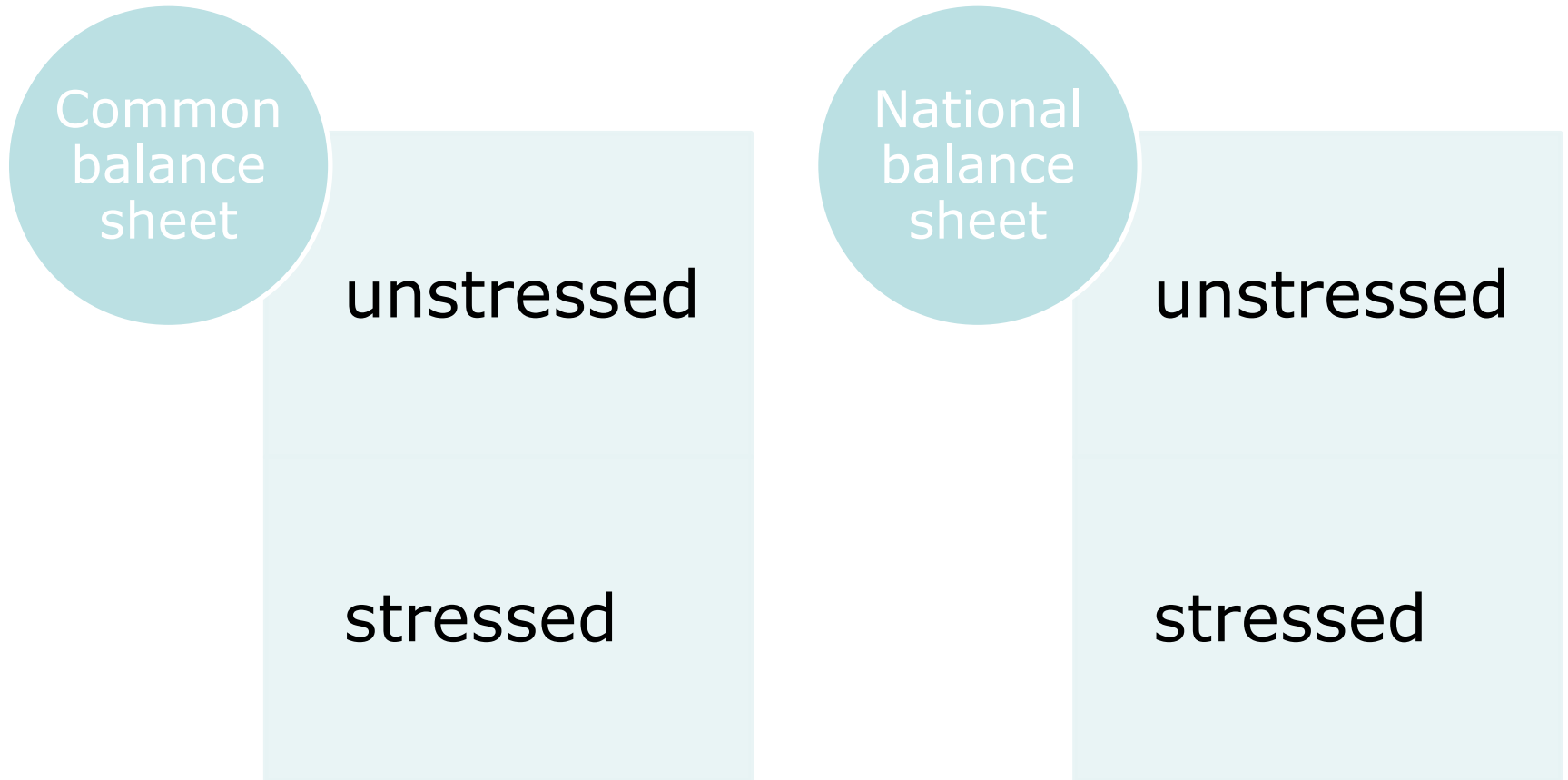


- NBS (stressed/unstressed) is based on national valuation standards
- NBS is supplemented by national funding requirement, subordinated loans are excluded
- NSA can be asked for guidance for stressed NBS

- CBS is based on a common European standard
- CBS is market consistent, includes all security and adjustment mechanisms
- CBS does not include a funding requirement, subordinated loans are excluded

Specifications Stress Test DB/hybrid

Two stressed Balance Sheets



- Technical Specifications for CBS as a separate document/Annex
- Changes compared to EIOPA's 2015 IORP Stress Test (partly based on EIOPA's opinion):
 - No separate category „mixed benefits“ on CBS
 - No „surplus funds“ recognised on CBS
 - New simplification for risk margin
 - Excess of assets over liabilities is non-negative
 - Conditions for balancing item approach reviewed
 - Sec. and benefit adj. mechanisms not always valued

DB/Hybrid Reporting Template Sheets with no input required



- P.Index: Hyperlinks to other sheets
- P.Readme: Explanations on the structure and content of the Reporting Template
- Overview: Provides an overview of results of stress test in NBS and CBS
- Warnings: Warnings may indicate that input in Reporting Template should be reviewed

DB/Hybrid Reporting Template Sheet „Participant“



Participant information	
Institution name	-
Institution abbreviation	-
Participant code	-
Country	-
Reporting currency used	-
Reporting unit used	-
Reporting reference year	2016
Year end used	end December 2016
Date of submission	-
National supervisor	-
Contact information	
Name of contact person	-
Name of institution	-
Position / title	-
Phone number	-
E-mail address	-
Name of contact person	-
Name of institution	-
Position / title	-
Phone number	-
E-mail address	-

DB/Hybrid Reporting Template Sheet „Baseline_&_Adverse_Scenario“



1. Investments (other than assets held for pure DC) on common balance sheet	Baseline		Adverse Scenario		
	Level		Level		% change compared to baseline
Property (including for own use)	0		0		%
Global REITs	-		-		%
EU REITs	-		-		%
non-EU REITs	-		-		%
EEA non-listed, unleveraged commercial property	-		-		%
EEA non-listed, unleveraged residential property	-		-		%
Equities	0		0		%
equities listed	0		0		%
Europe	-		-		%
US	-		-		%
other developed	-		-		%
emerging markets	-		-		%
equities non-listed	0		0		%
participations	-		-		%
private equity	-		-		%
other	-		-		%
Bonds	0		0		%
government bonds	0		0		%
EEA	-		-		%
non-EEA	-		-		%
corporate bonds	0		0		%
non-financial corporate bonds	-		-		%
financial corporate bonds	0		0		%
covered bonds	-		-		%
non-covered bonds	-		-		%
structured notes	-		-		%
collateralised securities	-		-		%
Loans and mortgages	0		0		%
loans	-		-		%
mortgages	-		-		%
Derivatives	-		-		%
Deposits other than cash equivalents	-		-		%
Residual investment funds	-		-		%
Other investments	0		0		%
commodities	-		-		%
hedge funds	-		-		%
other	-		-		%
Total investments	0		0		%

2. Information on duration of fixed income assets	
Fixed income assets	Duration in years
Bonds	-
government bonds	-
corporate bonds	-
Loans and mortgages	-
Total fixed income (incl. interest rate derivatives)	-

DB/Hybrid Reporting Template Sheet „Baseline_&_Adverse_Scenario“



3. Common balance sheet	Baseline		Adverse Scenario	
	Level		Level	% change compared to baseline
Assets				
Sponsor support	0		0	%
legally enforceable sponsor support	-		-	%
non-legally enforceable sponsor support	-		-	%
Pension protection scheme	-		-	%
Investments (other than assets held for pure DC)	0		0	%
(Re-)insurance and SPV recoverables	-		-	%
Assets held for pure DC	-		-	%
Deferred tax assets	-		-	%
Other assets (excluding pure DC)	0		0	%
Intangible assets	-		-	%
Own shares	-		-	%
Called-up, but unpaid capital	-		-	%
Members and beneficiaries debtors	-		-	%
Deposits to cedants and (re-)insurance receivables	0		0	%
Deposits to cedants	-		-	%
Insurance & intermediaries receivables <i>of which due for more than 3 months</i>	-		-	%
(Re-)insurance receivables	-		-	%
Receivables (trade, not insurance)	-		-	%
Cash and cash equivalents	-		-	%
Any other assets, not elsewhere shown	-		-	%
Total assets	0		0	%
Liabilities				
Excess of assets over liabilities	0		0	
Risk margin	-		-	%
Best estimate of technical provisions (excl. pure DC)	0		0	%
unconditional benefits	-		-	%
conditional benefits	-		-	%
<i>of which: ex ante benefit reductions</i>	-		-	%
discretionary benefits	-		-	%
ex post benefit reductions	-		-	%
reductions in case of sponsor default	-		-	%
Pure DC liabilities	0		0	%
Deferred tax liabilities	-		-	%
Other liabilities (excl. subordinated loans)	0		0	%
Payables	-		-	%
Contingent liabilities	-		-	%
Any other liabilities not elsewhere shown	-		-	%
Total liabilities	0		0	%
Duration of unconditional pension liabilities in years	-			

DB/Hybrid Reporting Template Sheet „Baseline_&_Adverse_Scenario“



4. National balance sheet	Baseline		Adverse Scenario	
	Level		Level	% change compared to baseline
Assets				
Investments	-		-	%
(Re-)Insurance recoverables, if applicable	-		-	%
Pure DC assets	-		-	%
Other assets	-		-	%
Total assets	0		0	%
Liabilities				
Gross technical provisions	-		-	%
(Re-)Insurance recoverables, if applicable	-		-	%
Net technical provisions	0		0	%
Pure DC liabilities	-		-	%
Other liabilities (excl. subordinated loans)	-		-	%
Total liabilities	0		0	%
Duration of pension liabilities in years	-			
5. Information on subordinated loans				
Subordinated loans	-			

DB/Hybrid Reporting Template Sheet „Baseline_&_Adverse_Scenario“



6. Funding requirements on national balance sheet	Baseline		Adverse Scenario	
	Level		Level	
Funding requirement (higher or unique)	-		-	
Value of items eligible to cover current funding requirements	0		0	
Surplus (higher or unique)	0		0	
Funding requirement (minimum, if more than one exists)	-		-	
Value of items eligible to cover current funding requirements	-		-	
Surplus (minimum)	-		-	

DB/Hybrid Reporting Template Sheet „CF_Analysis“



Cash-flow projections for unconditional benefits (in - of -) using the technical specifications for the valuation of the common balance sheet

Duration from Common BS (years)	0	Value from Common BS	0	Value from Common BS	0
Duration calculated from net cash flows (years)	0	Discounted value of net cash flows	0	Discounted value of net cash flows	0
Absolute difference compared to Common BS (years)	0	% difference compared to Common BS	%	% difference compared to Common BS	%

Year	Baseline							Adverse Scenario						
	cash in-flows (future contributions, excluding future sponsor support)	cash out-flows (unconditional benefits excl. future benefit reductions or pure conditional benefits excl. ex ante benefit reductions)	cash out-flows (expenses)	cash out-flows (total)	cash out-flows (total)	net cash flows	net cash flows	cash in-flows (future contributions, excluding future sponsor support)	cash out-flows (unconditional benefits excl. future benefit reductions or pure conditional benefits excl. ex ante benefit reductions)	cash out-flows (expenses)	cash out-flows (total)	cash out-flows (total)	net cash flows	net cash flows
1	-	-	-	0	-	0	-	-	-	-	0	-	-	0
2	-	-	-	0	-	0	-	-	-	-	0	-	-	0
3	-	-	-	0	-	0	-	-	-	-	0	-	-	0
4	-	-	-	0	-	0	-	-	-	-	0	-	-	0

DB Questionnaire

7 Sections (58 Questions)



- Section 1 – General (7)
- Section 2 – Nat. Disc. Rates and Rec. Plans (11)
- Section 3 – Impact Adv. Scenario on Sponsor (22)
- Section 4 – Impact on Inv. Beh. and other potential actions (7)
- Section 5 – Cash-flow analysis (5)
- Section 6 – Simplifications certain stresses (5)
- Section 7 – Other (1)

Yield Curves

Risk Free Rate, Government Bonds

EUR 1	Baseline scenario		Adverse scenario	
	Risk free interest rate curve	Inflation curve	Risk free interest rate curve	Inflation curve
Maturity				
1	-0,302%	1,217%	-0,652%	1,117%
2	-0,261%	1,173%	-0,761%	1,053%
3	-0,208%	1,168%	-0,758%	1,038%
4	-0,123%	1,181%	-0,668%	1,046%
5	-0,024%	1,196%	-0,564%	1,056%
6	0,092%	1,245%	-0,443%	1,120%
7	0,215%	1,292%	-0,315%	1,182%
8	0,341%	1,340%	-0,182%	1,227%
9	0,461%	1,391%	-0,056%	1,274%

Change in yield of government bonds - in basis points			
Adverse scenario			
Maturity	Select country of issuing government:	Simplification:	
	AT	Broad basket European government bonds	Broad basket Eurozone government bonds
1	22	79	85
2	22	79	85
3	30	79	84
4	37	79	83
5	45	79	82
6	46	78	82
7	47	77	82

Yield Curves Corporate Bonds



Change in yield of corporate bonds - in basis points																	
Adverse scenario																	
Maturity	Select type of corporate bond:							Simplification							Simplification		
	Non-financial corporate							All corporate bonds							Broad baskets of corporate bonds		
	Non-financial corporate							All corporate bonds							Non-financial corporate		
	AAA	AA	A	BBB	BB	B	<=CCC	AAA	AA	A	BBB	BB	B	<=CCC	Investment grade	High yield	All
1	32	35	45	50	342	659	921	28	39	60	106	342	659	921	36	574	207
2	32	35	45	50	342	659	921	28	39	60	106	342	659	921	36	574	207
3	32	35	45	50	342	659	921	28	39	60	106	342	659	921	36	574	207
4	32	35	45	50	342	659	921	28	39	60	106	342	659	921	36	574	207
5	32	35	45	50	342	659	921	28	39	60	106	342	659	921	36	574	207
6	32	35	45	50	342	659	921	28	39	60	106	342	659	921	36	574	207
7	32	35	45	50	342	659	921	28	39	60	106	342	659	921	36	574	207
8	32	35	45	50	342	659	921	28	39	60	106	342	659	921	36	574	207
9	32	35	45	50	342	659	921	28	39	60	106	342	659	921	36	574	207
10	32	35	45	50	342	659	921	28	39	60	106	342	659	921	36	574	207
11	32	35	45	50	342	659	921	28	39	60	106	342	659	921	36	574	207
12	32	35	45	50	342	659	921	28	39	60	106	342	659	921	36	574	207

- Word Response Template: 19 of the 58 questions from the DB Questionnaire have to be answered in the Word Response Template
- Helper Tabs: Implement simplifications for valuation of sponsor support, maximum sponsor support and pension protection scheme



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Q&A

<https://eiopa.europa.eu/Pages/Financial-stability-and-crisis-prevention/Occupational-Pensions-Stress-Test-2017>