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EUROPEAN INSURANCE
AND OCCUPATIONAL PENSIONS AUTHORITY

Quantitative assessment of further work on solvency of IORPs

EIOPA Pensions Stress Test & Quantitative Assessment
Launch Event
Frankfurt, 19 May 2015

This presentation ...



- ... is meant to provide an overview
- ... is meant to provide practical information
- Technicalities of Reporting Spreadsheet will be covered later in this event
- Questions?

Objectives of Quantitative Assessment



- Quantitative Assessment (QA) will facilitate EIOPA advice on solvency of IORPs
- QA will produce data on six examples of potential prudential frameworks based on holistic balance sheet (HBS)

- Participants submit data to national supervisors by **10 August 2015**
- Participants will communicate with national supervisors, not directly with EIOPA

- Technical Specifications
- Reporting Spreadsheet
- Qualitative Questionnaire
- Supporting Spreadsheets („helper tabs“)

QA Technical Specifications (1)



- QA is based on „holistic balance sheet“ (HBS)
- Technical Specifications deal with valuation of HBS and calculation of Solvency capital requirement (SCR)
- Valuation also used for HBS in stress test

QA Technical Specifications (2)



- Examples of supervisory frameworks are derived from 2 Baseline Scenarios
- Information is requested on value of best estimate of technical provisions using adjustments to the risk free interest rate curve
- Valuation date is 31/12/2014

QA Technical Specifications (3)



- Balancing item approach
- Benefits and contributions to be included in cash-flows
- Risk Margin: More flexibility

QA Technical Specifications (4)



- Principle based approach to valuation of sponsor support
- SCR: Modified approach to calculation of loss absorbing capacity
- SCR: Not all (sub-)modules are mandatory

Spreadsheet and Word template, asking for additional information on

- Risk margin
- Sponsor support
- Cash flows to be included in technical provisions
- Impact of potential prudential frameworks
- Methodology of deriving values for potential future frameworks
- etc.

- Reporting Spreadsheet includes DB/hybrid stress test and QA
- In the remaining part of this presentation we will look into the part of the Reporting Spreadsheet dealing with QA

Reporting Spreadsheet - Overview



Excel window: EIOPA-15-393-IORP_ST15_Templates-(20150508)-BigBen.xls [Geschützte Ansicht] - Excel

GEHÜTZTE ANSICHT Vorsicht — E-Mail-Anlagen können Viren enthalten. Wenn Sie die Datei nicht bearbeiten müssen, ist es sicherer, die geschützte Ansicht beizubehalten. [Bearbeitung aktivieren](#)

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Big Ben Pension Fund	2014 - GBP (MILLIONS)																
2	IORP	IORP Quantitative Assessment & Stress Test spreadsheet index EIOPA-15-393-IORP_ST15_Templates-(20150508)																
3																		
4		Content	Exercise	Sheet	GoTo													
5		This sheet	QA & ST	P.Index	GoTo													
6		Explanations on the structure and content of this spreadsheet	QA & ST	P.Readme	GoTo													
7		1. Participant information	QA & ST	Participant	GoTo													
8		2. Information related to the national regime	QA & ST	CurrentRegime	GoTo													
9		3. Holistic balance sheet information																
10		Common part of the holistic balance sheet for all scenarios	QA & ST	CommonData	GoTo													
11		4. Stress test scenarios	ST	StressTestScenarios	GoTo													
12		5. Baseline scenarios																
13		Baseline Scenario 1	QA	BaselineScenario1	GoTo													
14		Baseline Scenario 2	QA	BaselineScenario2	GoTo													
15		6. Examples of supervisory frameworks																
16		Results Example 1 derived from the baseline scenario	QA	Example1	GoTo													
17		Example 1 which may be completed by the participant	QA	Example1.alt	GoTo													
18		Results Example 2 derived from the baseline scenario	QA	Example2	GoTo													
19		Example 2 which may be completed by the participant	QA	Example2.alt	GoTo													
20		Results Example 3 derived from the baseline scenarios	QA	Example3	GoTo													
21		Example 3 which may be completed by the participant	QA	Example3.alt	GoTo													
22		Results Example 4 derived from the baseline scenarios	QA	Example4	GoTo													
23		Example 4 which may be completed by the participant	QA	Example4.alt	GoTo													
24		Results Example 5 derived from the baseline scenario	QA	Example5	GoTo													
25		Example 5 which may be completed by the participant	QA	Example5.alt	GoTo													
26		7. Overview of results																
27		Overview of results stress test	ST	Overview.ST	GoTo													
28		Overview of results quantitative assessment	QA	Overview.QA	GoTo													
29		8. Spreadsheet template qualitative questionnaires																
30		Common part questionnaires quantitative assessment & stress test	QA & ST	Qual.QA.ST	GoTo													
31		Stress test qualitative questionnaire	ST	Qual.ST	GoTo													
32		Quantitative assessment qualitative questionnaire	QA	Qual.QA	GoTo													
33	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#

Navigation bar: P.Index | P.Readme | Participant | CurrentRegime | CommonData | StressTestScenarios | BaselineScenario1 | BaselineScenario2 | Example1 | ...

Status bar: BEREIT 120%

Reporting Spreadsheet – CommonData (1)



Excel window: EIOPA-15-393-IORP_ST15_Templates-(20150508)-BigBen.xls [Kompatibilitätsmodus] - Excel

Formulas: M106

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1			Big Ben Pension Fund								2014 - GBP (MILLIONS)														
2			IORP								Common part of the HBS														
3																									
4			I - holistic balance sheet																						
5																									
6																									
7			Assets								Liabilities														
8			Sponsor support and PPS								Total balance sheet value														
9		HBS.11.1	Investments (other than assets held for pure DC)			113																			
10			Property (including for own use)			6																			
11			Equities			46																			
12			equities listed			43																			
13			equities non-listed (incl. participations)			3																			
14			Bonds			52					Excess of assets over liabilities														
15			Government Bonds			28																			
16			EU			23																			
17			non-EU			6					Risk margin														
18			Corporate Bonds			24					Best estimate - Total (without pure DC)														
19			non-financial corporate bonds			8																			
20			financial corporate bonds			16																			
21			covered bonds			0																			
22			non-covered bonds			16																			
23			Structured notes			0																			
24			Collateralised securities			0																			
25			Loans and mortgages			0																			
26			loans			0																			
27			mortgages			0																			
28			Derivatives			0																			
29			Deposits other than cash equivalents			5																			
30			Residual investment funds			0																			
31			Other investments			5																			
32			(Re-)insurance and SPV recoverables			0																			
33			Assets held for pure defined contributions			0					Pure defined contributions liabilities														
34			Deferred tax assets			0					Deferred tax liabilities														
35			Other assets (excluding pure DC)			6					Other liabilities														
36		HBS.11.8	Intangible assets			0																			
37			Own shares			0																			

Bottom tabs: P.Index, P.Readme, Participant, CurrentRegime, CommonData, StressTestScenarios, BaselineScenario1, BaselineScenario2, Example1, ...

Reporting Spreadsheet – CommonData (2)

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Reporting Spreadsheet – Baseline Scenarios (1)

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Reporting Spreadsheet – Baseline Scenarios (2)



EIOPA-15-393-IORP_ST15_Templates-(20150508)-BigBen.xls [Kompatibilitätsmodus] - Excel																											
DATEI START EINFÜGEN SEITENLAYOUT FORMELN DATEN ÜBERPRÜFEN ANSICHT ENTWICKLERTOOLS																											
G5																											
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y			
68																											
69																											
70																											
71																											
72																											
73																											
74																											
75																											
76																											
77	SCR 5.21	SCR 5.33																									
78																											
79	SCR 5.30	SCR 5.42																									
80		SCR 5.22																									
81		SCR 5.39																									
82		SCR 5.22																									
83		SCR 5.39																									
84	SCR 5.22																										
85	SCR 5.34																										
86	SCR 5.22																										
87	SCR 5.34																										
88	SCR 5.36																										
89		SCR 5.36																									
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91		SCR 5.55																									
92		SCR 5.52																									
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94		SCR 5.52																									
95																											
96		SCR 5.52																									
97																											
98		SCR 5.64																									
99																											
100		SCR 5.90																									
101																											

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Reporting Spreadsheet – Baseline Scenarios (5)



Excel spreadsheet showing the reporting template for EIOPA, titled "EIOPA-15-393-IORP_ST15_Templates-(20150508)-BigBen.xls [Kompatibilitätsmodus] - Excel". The spreadsheet is divided into several sections, including "II - Capital requirements", "Main results of the capital requirement calculations", and "Loss-absorbing capacity of technical provisions and security mechanisms".

II - Capital requirements

Own funds	Own funds compared to capital requirement
Excess of assets over liabilities	SCR OF-SCR MCR OF-MCR
Total own funds (OF)	

Main results of the capital requirement calculations

Risk module	Net risk	Adj	Gross risk	Diversif	Exposure
Market risk	0	-31	32	-6	37
Counterparty default risk	0	-68	68	0	68
Pension liability	0	-19	20	0	20
Intangible asset risk	0	0	0	0	0
Operational risk	0	-1	1	0	1
Basic SCR (BSCR) before intangible asset risk	0		90		
Basic Solvency Capital Requirement (BSCR)	0		90		
Solvency Capital Requirement (SCR)	0		90		

Loss-absorbing capacity of technical provisions and security mechanisms

Adjustment loss-absorbing capacity	LAC applies to specific risks	LAC applies to IORP as a whole
Part of the max. sponsor support available	109	
Part of the maximum PPS available	152	
Discretionary / Conditional Liabilities	59	
Adjustment for loss-absorbency (AdjTS)	-89	
Net deferred taxes in the HBS	0	
Magnitude of the DT shock	0	
Post stress net deferred taxes	-	
Deferred taxes adjustment (AdjDT)	-	
Adjustment for loss-absorbency (Adj1)	-89	
Maximum value for Adj2	230	
Adjustment for loss-absorbency (Adj2)	-1	
NAV*	-	
Total adjustment for loss absorbency (Adj)	-90	

The spreadsheet also includes a section for "Allocation of HBS items to Adj" with the following details:

- Legally enforceable sponsor support
- Non-legally enforceable sponsor support
- Pension protection scheme
- Pure conditional benefits
- Mixed benefits
- Pure discretionary benefits
- Ex post benefit reductions
- Reductions in case of sponsor default

The bottom of the spreadsheet shows a navigation bar with tabs for "P.Index", "P.Readme", "Participant", "CurrentRegime", "CommonData", "StressTestScenarios", "BaselineScenario1", "BaselineScenario2", and "Example1".

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Reporting Spreadsheet – ExampleX.alt



Excel spreadsheet titled "EIOPA-15-393-IORP_ST15_Templates-(20150508)-BigBen.xls [Kompatibilitätsmodus] - Excel". The spreadsheet is a reporting template for pension funds, specifically for "Big Ben Pension Fund". It is divided into several sections: "I - Holistic balance sheet", "II - Capital requirements", and "Loss-absorbing capacity of technical provisions and security mechanisms".

Section I: Holistic balance sheet

Assets	Liabilities
Sponsor support and PPS	Total balance sheet value
Sponsor support	119
Contingent assets	
Non-legally enforceable sponsor sup.	119
Other	
Pension protection scheme	
Investments (excluding pure DC)	- Risk margin
(Re)insurance / SPV recoverables	Best estimate of TP - Total (without pure DC)
Unconditional benefits	Unconditional benefits
Pure conditional benefits	Pure conditional benefits
of which: ex ante benefit reductions	of which: ex ante benefit reductions
Mixed benefits	Mixed benefits
Pure discretionary benefits	Pure discretionary benefits
Ex post benefit reductions	Ex post benefit reductions
Reductions in case of sponsor default	Reductions in case of sponsor default
Assets held for pure DC	Pure defined contributions liabilities
Deferred tax assets	Deferred tax liabilities
Other assets (excluding pure DC)	Other liabilities
Items with loss absorbing capacity:	Tiering of financial assets
Max value of ex-post benefit reduction	Financial assets
Maximum sponsor support value	Liabilities to be covered with financial asset
Maximum PPS value	Financial assets - Liabilities

Section II: Capital requirements

Own funds	Own funds compared to capital requirement
Excess of assets over liabilities	SCR OF-SCR MCR OF-MCR
Total own funds (OF)	119 0 119 0 119

Section III: Loss-absorbing capacity of technical provisions and security mechanisms

Adjustment loss-absorbing capacity	LAC applies to specific risks	LAC applied to IORP as a whole	HBS items with LAC
Part of the max. sponsor support available	0	-	Legally enforceable sponsor support
Part of the maximum PPS available	0	-	Non-legally enforceable sponsor support
Discretionary / Conditional Liabilities	0	-	Pension protection scheme
Adjustment for loss-absorbency (Adj1)	0	-	Pure conditional benefits
Net deferred taxes in the HBS	0	-	Mixed benefits
Magnitude of the DT shock	0	-	Pure discretionary benefits
Post stress net deferred taxes	0	-	Ex post benefit reductions
Deferred taxes adjustment (Adj2)	0	-	
Maximum value for Adj2	0	-	
Adjustment for loss-absorbency (Adj2)	0	-	

The spreadsheet includes various formulas and references to other sheets (e.g., "Example1", "Example2", "Example3", "Example4"). It also features a "Status of this sheet" section with checkboxes for "Not filled" and "Completing quantitative assessment".

Reporting Spreadsheet – Overview.QA



EIOPA-15-393-IORP_ST15_Templates-(20150508)-BigBen.xls [Kompatibilitätsmodus] - Excel

DATEI START EINFÜGEN SEITENLAYOUT FORMELN DATEN ÜBERPRÜFEN ANSICHT ENTWICKLERTOOLS

Formulas: =WENN(P59="Filled";SUMME(Example5ISU10);"-")

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1			Big Ben Pension Fund																		
2			IORP																		
3																					
4																					
5																					
6			Overview of outcomes																		
7				Current regime	Baseline Scenario 1	Baseline Scenario 2	Example 1	Example 1 Alternativ	Example 2	Example 2 Alternativ	Example 3	Example 3 Alternativ	Example 4	Example 4 Alternativ	Example 5	Example 5 Alternativ	Example 6				
8																					
9			Availability	QA	Filled	Filled	Filled	Not filled	Filled	Not filled	Filled	Not filled	Filled	Not filled	Filled	Not filled	Filled	Not filled			
10			>> goto index	GoTo	GoTo	GoTo	GoTo	GoTo	GoTo	GoTo	GoTo	GoTo	GoTo	GoTo	GoTo	GoTo	GoTo	GoTo			
11																					
12			Assets																		
13			Investments	113	113	113	113	-	113	-	113	-	113	-	113	-	113	-			
14			Sponsor support	0	91	49	91	-	49	-	91	-	91	-	91	-	91	-			
15			Pension protection scheme	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-			
16			(Re-)insurance recoverables	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-			
17			Other assets	6	6	6	6	-	6	-	6	-	6	-	6	-	6	-			
18			Total assets	119	210	169	210	-	169	-	210	-	210	-	210	-	119	-			
19																					
20			Liabilities																		
21			Best estimate technical provisions	154	194	156	201	-	159	-	201	-	194	-	201	-	201	-			
22			unconditional benefits		201	159	201	-	159	-	201	-	201	-	201	-	201	-			
23			non-unconditional benefits (incl. pure DC)		0	0	0	-	0	-	0	-	0	-	0	-	0	-			
24			ex post benefit reductions/reductions in case of sponsor default		-6	-3	0	-	0	-	0	-	-6	-	0	-	0	-			
25			Risk margin		16	13	16	-	13	-	16	-	16	-	16	-	16	-			
26			Other liabilities	0	0	0	0	-	0	-	0	-	0	-	0	-	0	-			
27			Total liabilities	154	210	169	217	-	172	-	217	-	210	-	217	-	217	-			
28																					
29			Excess of assets over liabilities	-35	0	0	-6	-	-3	-	-6	-	0	-	-97	-	0	-			
30																					
31			Solvency Capital Requirement (SCR) at the 99.5% level	0	0	0	69	-	46	-	67	-	0	-	11	-	0	-			
32			- gross solvency capital requirement		90	67	90	-	67	-	90	-	90	-		-	90	-			
33			- loss-absorbency technical provisions and security mechanisms		-90	-67	-22	-	-21	-	-24	-	-90	-		-	-90	-			
34			Surplus (SCR)	-35	0	0	-75	-	-49	-	-73	-	-75	-	-108	-	0	-			

Example4 Example5 Overview.ST Overview.QA Qual.QA.ST Qual.ST Qual.QA Warnings

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Thank you!

Any questions?
