

EFRAG SECRETARIAT ANNEX TO EFRAG'S DISCUSSION PAPER

ACCOUNTING FOR PENSION PLANS WITH AN ASSET-RETURN PROMISE

MAY 2019
(UPDATED)



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INTRODUCTION

- 1 On 15 May 2019, EFRAG published its [Discussion Paper](#) *Accounting for Pension Plans with an Asset-return Promise* ('the DP'). The DP explores alternative accounting treatments for post-retirement employee benefits (pension plans) promising the higher of the return on specified assets held by the plan and a minimum guaranteed return (referred to as an 'asset-return promise'). The DP considers the following three alternatives for accounting for the plans in the scope of the project:
 - a) A Capped Asset Return approach;
 - b) A Fair Value Based approach; and
 - c) A Fulfilment Value approach.

- 2 In the DP the effects of applying the three approaches and the current requirements in IAS 19 are illustrated by applying the approaches to a simplified examples. The numerical effects are shown for one year in the DP. This annex provides fully developed illustrative examples under IAS 19 and three alternative approaches proposed. The figures provided below are the results of applying the approaches from Year One to Year Eleven for the following:
 - a) Statement of financial position;
 - b) Defined benefit cost (as part of statement of comprehensive income) with a split between profit or loss and other comprehensive income;
 - c) Reconciliation of the plan assets and the pension obligation; and
 - d) Contributions made.

Statement of financial position:

(amounts in brackets are debit entries)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Plan assets	(1,275)	(2,249)	(4,105)	(5,958)	(7,295)	(11,478)	(16,848)	(21,114)	(25,002)	(30,557)	(36,816)
Pension obligation	2,140	4,026	8,073	11,453	14,976	20,072	24,500	27,088	29,644	33,501	37,466
Net pension liability	865	1,777	3,968	5,495	7,681	8,594	7,652	5,974	4,642	2,944	651

Defined benefit cost (as part of the statement of comprehensive income):

(amounts in brackets are gain or profit entries)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Profit or loss:											
Current service cost, gross	2,231	2,266	2,153	2,803	2,974	3,091	3,397	3,542	3,440	3,349	3,406
Employee discretionary contribution (treated as negative service)	(425)	(431)	(467)	(477)	(523)	(1,086)	(1,197)	(1,242)	(1,366)	(1,418)	(1,557)
Current service cost	1,806	1,836	1,686	2,326	2,451	2,006	2,200	2,300	2,074	1,931	1,849
Interest income	-	(75)	(157)	(170)	(231)	(234)	(177)	(204)	(336)	(423)	(510)
Interest expense	-	126	281	334	444	481	309	296	431	501	559
Net interest expense	-	51	124	164	213	247	132	93	95	78	49

OCI:

Actual returns on asset less interest income in P&L

Actuarial differences on obligation

Remeasurements, net

	-	393	(298)	(253)	464	(692)	(1,602)	(335)	547	(878)	(1,079)
	(91)	(507)	1,613	243	104	1,524	722	(1,251)	(1,315)	7	(0)
Defined benefit cost	1,715	1,773	3,125	2,480	3,232	3,084	1,452	807	1,400	1,139	820

Roll forward of net pension liability:

(amounts in brackets are debit entries)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Plan assets:											
Opening balance	-	(1,275)	(2,249)	(4,105)	(5,958)	(7,295)	(11,478)	(16,848)	(21,114)	(25,002)	(30,557)
Employer and employee contributions	(1,275)	(1,292)	(1,402)	(1,430)	(1,569)	(3,257)	(3,591)	(3,727)	(4,099)	(4,255)	(4,670)
Interest income in P&L	-	(75)	(157)	(170)	(231)	(234)	(177)	(204)	(336)	(423)	(510)
Investment return in OCI	-	393	(298)	(253)	464	(692)	(1,602)	(335)	547	(878)	(1,079)
Closing balance	(1,275)	(2,249)	(4,105)	(5,958)	(7,295)	(11,478)	(16,848)	(21,114)	(25,002)	(30,557)	(36,816)

Pension obligation:

Opening balance

Service cost, gross

Interest expense

Actuarial differences

Closing balance

	2,140	4,026	8,073	11,453	14,976	20,072	24,500	27,088	29,644	33,501
	2,231	2,266	2,153	2,803	2,974	3,091	3,397	3,542	3,440	3,349
	-	126	281	334	444	481	309	296	431	501
	(91)	(507)	1,613	243	104	1,524	722	(1,251)	(1,315)	7
Net pension liability	865	1,777	3,968	5,495	7,681	8,594	7,652	5,974	4,642	2,944

Contributions made

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Employer contributions	850	861	935	953	1,046	2,171	2,394	2,485	2,733	2,837	3,113
Employee discretionary contribution	425	431	467	477	523	1,086	1,197	1,242	1,366	1,418	1,557
Total contributions	1,275	1,292	1,402	1,430	1,569	3,257	3,591	3,727	4,099	4,255	4,670

CAPPED ASSET RETURN APPROACH

Statement of financial position:

(amounts in brackets are debit entries)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Plan assets	(1,275)	(2,249)	(4,105)	(5,958)	(7,295)	(11,478)	(16,848)	(21,114)	(25,002)	(30,557)	(36,816)
Pension obligation	1,951	3,857	7,386	10,437	14,089	18,933	22,722	25,989	29,644	33,501	37,466
Net pension liability	676	1,608	3,281	4,479	6,795	7,455	5,875	4,875	4,642	2,944	651

Defined benefit cost (as part of the statement of comprehensive income):

(amounts in brackets are gain or profit entries)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Profit or loss:											
Current service cost, gross	2,003	2,066	2,063	2,564	2,711	2,908	3,204	3,285	3,300	3,349	3,406
Employee discretionary contribution (treated as negative service)	(425)	(431)	(467)	(477)	(523)	(1,086)	(1,197)	(1,242)	(1,366)	(1,418)	(1,557)
Current service cost	1,578	1,635	1,596	2,087	2,188	1,823	2,007	2,043	1,934	1,931	1,849
Interest income	-	(75)	(157)	(170)	(231)	(234)	(177)	(204)	(336)	(423)	(510)
Interest expense	-	115	269	306	405	452	292	275	413	501	559
Net interest expense	-	40	112	136	174	218	115	71	78	78	49
OCI:											
Actual returns on asset less interest income in P&L	-	393	(298)	(253)	464	(692)	(1,602)	(335)	547	(878)	(1,079)
Actuarial differences on obligation	(53)	(274)	1,197	181	537	1,483	294	(294)	(58)	7	(0)
Remeasurements, net	(53)	119	899	(72)	1,000	791	(1,308)	(629)	488	(871)	(1,079)
Defined benefit cost	1,526	1,794	2,607	2,151	3,361	2,831	814	1,485	2,500	1,139	820

Roll forward of net pension liability:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Plan assets:											
Opening balance	-	(1,275)	(2,249)	(4,105)	(5,958)	(7,295)	(11,478)	(16,848)	(21,114)	(25,002)	(30,557)
Employer and employee contributions	(1,275)	(1,292)	(1,402)	(1,430)	(1,569)	(3,257)	(3,591)	(3,727)	(4,099)	(4,255)	(4,670)
Interest income in P&L	-	(75)	(157)	(170)	(231)	(234)	(177)	(204)	(336)	(423)	(510)
Investment return in OCI	-	393	(298)	(253)	464	(692)	(1,602)	(335)	547	(878)	(1,079)
Closing balance	(1,275)	(2,249)	(4,105)	(5,958)	(7,295)	(11,478)	(16,848)	(21,114)	(25,002)	(30,557)	(36,816)
Pension obligation:											
Opening balance		1,951	3,857	7,386	10,437	14,089	18,933	22,722	25,989	29,644	33,501
Service cost, gross	2,003	2,066	2,063	2,564	2,711	2,908	3,204	3,285	3,300	3,349	3,406
Interest expense	-	115	269	306	405	452	292	275	413	501	559
Actuarial differences	(53)	(274)	1,197	181	537	1,483	294	(294)	(58)	7	(0)
Closing balance	1,951	3,857	7,386	10,437	14,089	18,933	22,722	25,989	29,644	33,501	37,466
Net pension liability	676	1,608	3,281	4,479	6,795	7,455	5,875	4,875	4,642	2,944	651
Contributions made											
Employer contribution	850	861	935	953	1,046	2,171	2,394	2,485	2,733	2,837	3,113
Employee discretionary contribution	425	431	467	477	523	1,086	1,197	1,242	1,366	1,418	1,557
Total contributions	1,275	1,292	1,402	1,430	1,569	3,257	3,591	3,727	4,099	4,255	4,670

Notes:

In Year Two, there is a negative remeasurement in OCI on the plan assets, because the actual asset return rate is lower than the high-quality corporate bond rate. Actually, in Year two, the return is negative. This remeasurement increases the total defined benefit cost. There is a also a positive actuarial difference on the obligation, because the high-quality corporate bond rate increases from 5.89% to 6.97% in Year Two. This remeasurement decreases the total defined benefit cost.

For most of the other years, there is a positive remeasurement in OCI on the assets, because the actual asset return rate exceeds the high-quality corporate bond rate. This reduces the total defined benefit cost. For those years, there is also a negative actuarial difference on the obligation because the high-quality corporate bond rate decreases and, consequently, it increases the liability. This remeasurement increases the total defined benefit cost.

FAIR VALUE BASED APPROACH

Statement of financial position:

(amounts in brackets are debit entries)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Plan assets	(1,275)	(2,249)	(4,105)	(5,958)	(7,295)	(11,478)	(16,848)	(21,114)	(25,002)	(30,557)	(36,816)
Pension obligation	2,447	4,612	7,144	9,511	11,580	16,330	21,438	25,598	29,380	33,362	37,466
Net pension liability	1,172	2,363	3,039	3,553	4,285	4,851	4,590	4,484	4,378	2,805	651

Defined benefit cost (as part of the statement of comprehensive income):

(amounts in brackets are gain or profit entries)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Profit or loss:											
Current service cost, contribution	1,275	1,292	1,402	1,430	1,569	3,257	3,591	3,727	4,099	4,255	4,670
Employee discretionary contribution (treated as negative service)	(425)	(431)	(467)	(477)	(523)	(1,086)	(1,197)	(1,242)	(1,366)	(1,418)	(1,557)
Current service cost, guarantee	1,172	1,055	1,004	884	819	1,394	1,208	922	661	335	-
Current service cost	2,022	1,916	1,939	1,837	1,865	3,565	3,601	3,406	3,394	3,172	3,113
Return on plan assets	-	317	(454)	(423)	232	(926)	(1,779)	(539)	211	(1,300)	(1,589)
Interest expense	-	(317)	454	423	(232)	926	1,779	539	(211)	1,300	1,589
Net interest expense	-	-	-	-	-	-	-	-	-	-	-
Remeasurement of guarantee	-	136	(328)	(370)	(86)	(828)	(1,469)	(1,027)	(767)	(1,909)	(2,154)
Defined benefit cost	2,022	2,052	1,611	1,467	1,779	2,737	2,132	2,379	2,627	1,263	959

Roll forward of net pension liability:

(amounts in brackets are debit entries)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Plan assets:											
Opening balance	-	(1,275)	(2,249)	(4,105)	(5,958)	(7,295)	(11,478)	(16,848)	(21,114)	(25,002)	(30,557)
Employer and employee contributions	(1,275)	(1,292)	(1,402)	(1,430)	(1,569)	(3,257)	(3,591)	(3,727)	(4,099)	(4,255)	(4,670)
Return in profit or loss	-	317	(454)	(423)	232	(926)	(1,779)	(539)	211	(1,300)	(1,589)
Closing balance	(1,275)	(2,249)	(4,105)	(5,958)	(7,295)	(11,478)	(16,848)	(21,114)	(25,002)	(30,557)	(36,816)
Pension obligation:											
Opening balance		2,447	4,612	7,144	9,511	11,580	16,330	21,438	25,598	29,380	33,362
Service cost, gross	2,447	2,346	2,406	2,314	2,388	4,651	4,798	4,649	4,760	4,590	4,670
Interest expense	-	(317)	454	423	(232)	926	1,779	539	(211)	1,300	1,589
Remeasurement of guarantee	-	136	(328)	(370)	(86)	(828)	(1,469)	(1,027)	(767)	(1,909)	(2,154)
Closing balance	2,447	4,612	7,144	9,511	11,580	16,330	21,438	25,598	29,380	33,362	37,466
Net pension liability	1,172	2,363	3,039	3,553	4,285	4,851	4,590	4,484	4,378	2,805	651
Contributions made											
Employer contributions	850	861	935	953	1,046	2,171	2,394	2,485	2,733	2,837	3,113
Employee discretionary contribution	425	431	467	477	523	1,086	1,197	1,242	1,366	1,418	1,557
Total contributions	1,275	1,292	1,402	1,430	1,569	3,257	3,591	3,727	4,099	4,255	4,670

FULFILMENT VALUE APPROACH

Statement of financial position:

(amounts in brackets are debit entries)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Plan assets	(1,275)	(2,249)	(4,105)	(5,958)	(7,295)	(11,478)	(16,848)	(21,114)	(25,002)	(30,557)	(36,816)
Pension obligation	2,447	4,612	7,144	9,511	11,580	16,329	21,438	25,598	29,440	33,538	37,466
Net pension liability	1,172	2,363	3,039	3,553	4,285	4,851	4,590	4,484	4,438	2,981	651

Defined benefit cost (as part of the statement of comprehensive income):

(amounts in brackets are gain or profit entries)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Profit or loss:											
Current service cost	2,022	1,916	1,939	1,837	1,865	3,565	3,602	3,407	3,394	3,172	3,113
Return on plan assets	-	317	(454)	(423)	232	(926)	(1,779)	(539)	211	(1,300)	(1,589)
interest expense and changes in estimates	-	(223)	643	666	52	1,269	2,143	860	80	1,570	1,738
Net interest expense	-	94	189	243	284	343	364	321	291	270	149
OCI:											
Remeasurement of the guarantee	-	42	(517)	(613)	(371)	(1,171)	(1,833)	(1,349)	(998)	(2,062)	(2,479)
Defined benefit cost	2,022	2,052	1,611	1,467	1,778	2,737	2,133	2,379	2,686	1,379	783

Roll forward of net pension liability:

(amounts in brackets are debit entries)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Plan assets:											
Opening balance	-	(1,275)	(2,249)	(4,105)	(5,958)	(7,295)	(11,478)	(16,848)	(21,114)	(25,002)	(30,557)
Employer and employee contributions	(1,275)	(1,292)	(1,402)	(1,430)	(1,569)	(3,257)	(3,591)	(3,727)	(4,099)	(4,255)	(4,670)
Return on plan assets	-	317	(454)	(423)	232	(926)	(1,779)	(539)	211	(1,300)	(1,589)
Closing balance	(1,275)	(2,249)	(4,105)	(5,958)	(7,295)	(11,478)	(16,848)	(21,114)	(25,002)	(30,557)	(36,816)
Pension obligation (excluding value of guarantee):											
Opening balance	-	1,275	2,249	4,105	5,958	7,295	11,478	16,848	21,114	25,313	31,234
Accretion of interest	-	102	180	328	477	584	861	1,179	1,372	1,519	1,562
Effect of change in discount rates	-	(419)	274	94	(709)	343	918	(640)	(1,584)	(197)	61
Employer and employee contributions	1,275	1,292	1,402	1,430	1,569	3,257	3,591	3,727	4,099	4,255	4,670
Deficit to be paid by employer	-	-	-	-	-	-	-	-	311	345	(61)
Closing balance	1,275	2,249	4,105	5,958	7,295	11,478	16,848	21,114	25,313	31,234	37,466
Value of the guarantee:											
Opening balance	-	1,172	2,363	3,039	3,553	4,285	4,851	4,590	4,484	4,127	2,303
Accretion of interest	-	94	189	243	284	343	364	321	291	248	115
Current service cost related to guarantee	1,172	1,055	1,004	884	819	1,394	1,208	922	661	335	-
Remeasurement	-	42	(517)	(613)	(371)	(1,171)	(1,833)	(1,349)	(1,309)	(2,407)	(2,418)
Closing balance	1,172	2,363	3,039	3,553	4,285	4,851	4,590	4,484	4,127	2,303	0
Net pension liability	1,172	2,363	3,039	3,553	4,285	4,851	4,590	4,484	4,438	2,980	651
Contributions made											
Employer contributions	850	861	935	953	1,046	2,171	2,394	2,485	2,733	2,837	3,113
Employee discretionary contribution	425	431	467	477	523	1,086	1,197	1,242	1,366	1,418	1,557
Total contributions	1,275	1,292	1,402	1,430	1,569	3,257	3,591	3,727	4,099	4,255	4,670



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