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IASB Research Project - Pension Benefits that Vary with Asset Returns Project Update

Objective

- 1 The objective of this paper is:
 - (a) to provide an update on the status of the IASB's research project *Pension Benefits that Vary with Asset Returns*;
 - (b) to discuss the proposed 'capped' ultimate cost adjustment model (**the 'capped' approach**); and
 - (c) how the 'capped' approach applies to defined benefit plans with benefits that vary with asset returns with the use of an illustrative example, and how it compares to the outcome of the existing requirements of IAS 19 *Employee Benefits*.
- 2 The example provided in this paper is based on the IASB's educational paper presented at the December 2020 IASB meeting (see [Agenda Paper 08-02](#)).

The IASB project

The reason for the project

- 3 Entities are shifting from traditional defined benefit plans to 'hybrid plans'. In some hybrid plans, the benefits paid to employees depend, wholly or partly, on the return on a specified pool of assets.
- 4 For these plans, which depend on asset returns, assuming they are classified as defined benefit plans (DB plans), IAS 19 requires projecting the benefit to employees on the basis of an assumption of future performance of the specified assets and then measuring the defined benefit obligation (**the DBO**) by discounting the benefits back to their present value using a rate which is determined by reference to market yields on high quality corporate bonds.

Criticism to IAS 19 defined benefit model

- 5 There are two concerns regarding the measurement required by the existing IAS 19 requirements:
 - (a) Attribution of the asset is not faithfully depicted - the measurement of the DBO is not similar to the fair value of the underlying reference assets that determine the amount of the payment to employees; and
 - (b) In many cases, the underlying reference assets are held by the plan and these incorporate the market price of risk inherent in the plan asset cash flows. However, the present value of the defined benefit obligation does not incorporate the market price of this risk. As a result, even if an entity does not expect to pay additional contributions for employee contribution for past and present periods, the entity would recognise a net liability.

- 6 Following the 2015 IASB Agenda Consultation, the IASB considered whether it was feasible to eliminate this measurement inconsistency of pension benefits that depend on asset returns, without performing a comprehensive review of IAS 19.

Description of 'capped' approach

- 7 The IASB has decided to focus on a 'capped' ultimate costs adjustment model regardless of whether reference assets are held by the plan. The IASB clarified also that the objective of their project is to assess whether the capped approach can be developed in a way that the approach:
- (a) would have sufficient effect to be worth the costs of developing, exposing, finalising and implementing any resulting changes to IAS 19;
 - (b) would not require a significant amount of work for stakeholders, the IASB and the staff; and
 - (c) does not have unintended consequences.
- 8 Under the 'capped' approach, the projected cash flows of the DBO that vary **only** with the asset returns are capped so that their rate do not exceed the discount rate specified under IAS 19. For example, where the expected rate of return on the reference assets is 5% and the discount rate specified by IAS 19 is 3%, applying the cap would result in the entity both projecting and discounting the benefits at 3%.
- 9 The cap would apply only to the benefits that vary with the level of returns on specified assets. If the plan provides other benefits, such as coverage of medical costs, these other benefits would be separately measured using the general requirements in IAS 19.

Future steps

- 10 In February 2021, the IASB is expected to complete its review of the research and discuss an initial analysis of how the 'capped' approach could be introduced into IAS 19.

EFRAG's discussions

EFRAG research project

- 11 In May 2019, EFRAG published its discussion paper *Accounting for Pension Plans with an Asset-Return Promise (the DP)*, which is available on EFRAG's website [here](#). In the DP, EFRAG presented three alternative models that could be applied to post-retirement employee benefits promising the higher of the return on an identified item or group of items and a minimum guaranteed return (i.e. an asset-return promise).
- 12 One of the discussed models, a Capped Asset Return approach, is similar to the approach discussed by the IASB.
- 13 In EFRAG's DP, the plan assets would be measured at fair value (similarly to the existing IAS 19 requirements). However, the DBO also considers the effects of the return rate guarantee being effective. The IASB, in turn, considered that the minimum guaranteed returns are typically below the historical level of returns on plan assets and are often led by local legislation requirements. Consequently, the IASB Staff, presented the main feature of the 'capped' approach (that is capping the expected future asset return rates with the discount rate) without considering the minimum return rate guarantee.
- 14 In the conclusion of the DP, EFRAG assessed that, when the expected return rate of the plan assets is higher than the discount factor of the pension obligation, the Capped Asset Return approach would remove the perceived issue resulting from using a discount factor that is different from the expected return rate.

- 15 EFRAG also identified several weaknesses of the approach as follows¹:
- (a) A net pension liability would not be reflected in all situations under which the plan assets are insufficient to cover the pension obligation;
 - (b) In many cases, the economic covariance between plan assets and the pension obligation would still not be appropriately reflected. This is because plan assets and pension obligations would be measured differently; and
 - (c) The employee's right to receive the higher of the return on plan assets and the minimum guaranteed return would not be reflected in a complete manner.
- 16 The EFRAG Secretariat thinks that, if the IASB takes the standard setting process, these issues should be addressed.

'Capped' Approach - application example

- 17 The example ([Agenda Paper 08-02](#) of the December 2020 IASB meeting) considers a post-employment benefit plan where some or all benefits paid to employees vary with the return on a specified pool of assets. IAS 19 does not provide guidance specific to such benefits. To apply the general requirements in IAS 19, an entity makes an estimate of the ultimate costs on the basis of an estimate of the return on the specified pool of assets. In practice, those estimated return rates are often higher than bond rates. The benefits are then discounted back using the rate specified in IAS 19 (i.e. high-quality corporate bond rate or **HQCB rate**).
- 18 Under the 'capped' approach, the projected benefits that vary with the asset returns would be capped so that the return rates do not exceed the discount rate specified under IAS 19. This cap would apply only to the benefits that vary with the level of returns on specified assets. If the plan provides other benefits, such as coverage of medical costs, these other benefits would be separately measured using the general requirements in IAS 19.
- 19 The IASB Staff explained that such approach would:
- (a) focus on a specific type of benefit so there would be no need to identify a subset of post-employment benefit plans;
 - (b) not require a fundamental change of the requirements of IAS 19;
 - (c) be consistent with the general net interest approach of IAS 19;
 - (d) also apply to plans with a combination of various benefits, measured in different ways.
- 20 The initial assumptions, and the details of the models and approach are explained in Appendix to this document.

IAS 19 DB model with no straight-lining adjustment

- 21 For the purpose of comparison, we provide the application of the IAS 19 requirements for DB plans without straight-lining adjustment. This would result in the following net pension liability (asset) scheme:

¹ For the details, please see the EFRAG's DP.

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Year	Opening balance	Service cost	Net interest	Deficit (excess) returns	Contribution paid	Closing balance
1	0	6,729			(6,000)	729
2	729	6,762	17	(101)	(6,129)	1,278
3	1,278	7,195	30	(209)	(6,629)	1,664
4	1,664	7,230	38	(330)	(6,771)	1,832
5	1,832	7,692	42	(457)	(7,323)	1,786
6	1,786	7,730	41	(599)	(7,480)	1,478
7	1,478	8,224	34	(750)	(8,090)	896
8	896	8,264	21	(916)	(8,264)	0

- 22 For example, in Year 1, the service cost of CU6,729 is determined by projecting 6,000 at 4% over the remaining 7 years and discounting the amount back at 2,31% for the same period. No value is attributed to the guarantee.

'Capped' approach without straight-lining adjustment

- 23 The application of 'capped' approach without straight-lining adjustment results in the following net pension liability (asset) scheme:

Year	Opening balance	Service cost	Net interest	Deficit (excess) returns	True up	Contribution paid	Closing balance
1	-	6,000	-			(6,000)	-
2	-	6,129	-	(101)	101	(6,129)	-
3	-	6,629	-	(209)	209	(6,629)	-
4	-	6,771	-	(330)	330	(6,771)	-
5	-	7,323	-	(457)	457	(7,323)	-
6	-	7,480	-	(599)	599	(7,480)	-
7	-	8,090	-	(750)	750	(8,090)	-
8	-	8,264	-	(916)	916	(8,264)	-

- 24 In the example, the capped rate equals the discount rate because the discount rate is always lower than the expected return on the plan assets. Consequently, in Year 1, the projection of CU6,000 using the return rate capped at 2.31%, and then discounting back the future value using the discount rate (HQCB rate of 2.31%), results in the same amount (i.e. CU6,000) being recognised as service cost.

True-up adjustment

- 25 Based on the actual return of 4% and the benefit originally projected using the capped rate of 2.31%, the **true-up adjustments** in Year 2 equals CU6,000 x (4.00% - 2.31%) = CU 101.4. This exactly offsets the deficit (excess) returns on the plan assets. As a result, the closing balance of the net defined benefit liability is nil at the end of each year.

Presentation of true-up adjustment

- 26 The IASB Staff has not proposed whether to present the true-up adjustment in profit or loss or in the other comprehensive income (the OCI). They noted however that the nature of this adjustment is different from the components of defined benefit cost presented in the OCI (see paragraph 127 of IAS 19) because this adjustment does not arise on the change of actuarial assumptions. Moreover, the true up adjustment is determined by the actual return in the current period and is not subject to further remeasurements.

- 27 On the other hand, they noted that the true-up adjustment seems to be similar in nature to the deficit (excess) returns on the plan assets, which is recognised in the OCI. Finally, it may prove to be complex to separate the true up adjustment from actuarial gains and losses arising from revision of assumptions such as employee turnover or reassessment of vesting conditions.

Remeasurements under 'capped' approach without straight-lining adjustment

- 28 The following table illustrates how the reported amounts change for the 'capped' approach, if at the end of Year 4:

- (a) the actual return for Year 4 is 2% instead of 4%;
- (b) the entity revises its expected returns for Years 5 to 8 from 4% to 3%; and
- (c) the entity revises the discount rate from 2.31% to 1.95%.

Year	Opening balance	Service cost	Net interest	Deficit (excess) returns	True up	Contribution paid	Closing balance
1	-	6,000	-			(6,000)	-
2	-	6,129	-	(101)	101	(6,129)	-
3	-	6,629	-	(209)	209	(6,629)	-
4	-	6,771	-	60	(60)	(6,771)	-
5	-	7,323	-	(280)	280	(7,323)	-
6	-	7,480	-	(365)	365	(7,480)	-
7	-	8,090	-	(455)	455	(8,090)	-
8	-	8,264	-	(553)	553	(8,264)	-

- 29 In Year 4, the service cost and net interest are not affected, because they are determined using the assumptions at the beginning of the period.
- 30 However, the entity would recognise a deficit return of CU60 as the difference between the actual return of 2% and the interest income calculated using the discount rate of 2.31% at the beginning of the period. As in the original calculation, the entity would also recognise a negative true up adjustment of the same amount.
- 31 Please note that under the DB model of IAS 19, an entity would need to recognise an actuarial gain of CU1,107 - mostly driven by the revised expected returns that result in lower projected benefits at the end of the period of service.
- 32 **It should also be noted**, that the above outcome results from the following assumptions:
- (a) the expected returns exceed the minimum return guarantee;
 - (b) the plan holds the underlying pool of assets – in some plans, the benefits are calculated based on the value of reference assets, which are not held by the employer;
 - (c) there are no vesting conditions;
 - (d) employees receive the full amount as a lumpsum at the end of the period of service – for some plans, the employees receive on retirement a right to annuity payments;
 - (e) the assessment required in paragraph 70 of IAS 19 does not require straight-lining adjustment (see paragraphs 13(c) and 120 of the Basis for Conclusions of IAS 19).

Minimum rate guarantee

- 33 In the example, it is assumed that the actual returns on the asset always exceed the minimum guaranteed return. Even under this assumption, it could be argued that

the minimum guarantee has a value that should be incorporated in the measurement of the defined benefit obligation.

- 34 However, it should be noted that neither IAS 19 nor the capped approach attribute any value to an out-of-the-money minimum rate guarantee.

Questions for EFRAG TEG members

- 35 Do you have comments on the application of the 'capped' approach as presented by the IASB?
- 36 Do you consider that the issues discussed in paragraph 15 above should be addressed by the IASB in the standard-setting process?
- 37 Do you foresee any unexpected consequences of introducing such an approach to the requirements of IAS 19?

Agenda Papers

- 38 In addition to this cover note, Agenda Paper 08-02 – ap6-pension-benefits-that-vary-with-asset-returns – the IASB Staff paper presented in December 2020 at the educational session of the IASB meeting, has been provided.

Appendix: the Capped Approach - application example – details for the calculations

Terms and conditions of the plan

- 1 The example assumes a plan with the following main terms and conditions:
 - (a) the plan is funded by contributions from the employer only. Contributions are made at the end of each year;
 - (b) the contributions are equal to a fixed percentage of the salary in the current year of service;
 - (c) there are no service or other vesting conditions;
 - (d) early leavers are not considered;
 - (e) the employees' accounts are credited each year with:
 - (i) the contributions made by the employer; and
 - (ii) the higher of:
 - the return of a specified underlying pool of assets; and
 - a minimum guaranteed return.
 - (f) the employees receive a lumpsum at the end of program.

Initial assumptions

- 2 The plan is initially measured using the following assumptions:

(a) The plan ends with the end of	Year 8
(b) Expected asset returns in each year	4%
(c) Guaranteed rate	1.5 %
(d) HQCB rate	2.31%
(e) Base salary IN Year 1	75,000 CU
(f) Employer contribution rate	8%
(g) Basic salary increases expected in Years 2, 4, 6, 8:	2.15%
(h) Basic salary increases expected in Years 3, 5, 7:	8.15%

Basic observations

- 3 For the given initial assumptions, the expected asset return rates are higher than the guaranteed rate. The plan is therefore not expected to have a deficit and consequently to require additional employer's contributions.
- 4 Furthermore, the HQCB rate is lower than the expected asset return rates, so the 'cap' will apply in all Years.
- 5 The example also considers an alternative scenario with a change in the estimates at the end of Year 4:

Classification of the plan

- 6 Based on the assumed terms, we think that the plan should be classified as a defined benefit plan. The main reason is that the terms include a minimum return guarantee which may trigger an employer's obligation to further contribute to the plan.
- 7 We note also that the fact that, based on the initial assumptions, the expected returns always exceed the minimum return guarantee, does not affect the classification of the plan.

- 8 Furthermore, in accordance with paragraph 70 of IAS 19, the plan formula needs to be assessed whether it allocates a substantially higher benefit to later years of service:
- If not, the benefits should be allocated based on plan formula.
 - Otherwise, the benefits should be allocated on a straight-line basis over the period of service (straight-lining adjustment).
- 9 Regarding the obligation to use the straight-lining adjustment, see also the IASB's considerations in paragraphs 13(c) and 120 of the Basis for Conclusions of IAS 19.

Plan assets

- 10 In the example, the asset side under all approaches would be accounted for in the same way. The scheme for the plan assets is as follows:

Year	Opening balance	Interest income	Excess (deficit) returns	Investment from contributions	Closing balance
1	-			6,000	6,000
2	6,000	139	101	6,129	12,369
3	12,369	286	209	6,629	19,492
4	19,492	450	330	6,771	27,043
5	27,043	625	457	7,323	35,448
6	35,448	819	599	7,480	44,346
7	44,346	1,024	750	8,090	54,210
8	54,210	1,252	916	8,264	64,642

Application of IAS 19 DB model – no straight-lining adjustment

- 11 The service cost is determined by projecting the contribution for the year at the expected return rate to determine the expected benefit and then discounting the benefit back at the discount rate.
- 12 Net interest is determined by applying the discount rate to the opening balance of the net defined benefit liability.
- 13 Deficit (excess) returns are determined as the difference between the change in the fair value of the plan assets and the accrued interest income. It should be noted that IAS 19 requires including the excess return on the plan assets as part of the remeasurements of the net defined liability (asset) which, in turn, should be recognised in Other Comprehensive Income (OCI) and cannot be subsequently recycled to profit or loss.

Application of 'capped' approach – no straight-lining adjustment

- 14 The service cost in the capped approach is determined by projecting the contribution for the year at the **capped** rate to determine the expected benefit and then discounting the benefit back at the discount rate.
- 15 In subsequent periods, the defined benefit obligation would need to be 'true-up' adjusted to reflect the difference between the accrued benefit
- 16 Deficit (excess) returns are determined in the same way as for the DB model with no straight-lining adjustment.

Application of 'capped' approach with straight-lining adjustment

- 17 When the entity applies the straight-lining adjustment, the capped approach results in the recognition of a net defined benefit liability. This is because the service cost in such case anticipates future salary increases.

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Year	Opening balance	Service cost	Net interest	Deficit (excess) returns	True up	Contribution paid	Closing balance
1	-	6,513				(6,000)	513
2	513	6,676	12	(101)	13	(6,129)	982
3	982	6,856	23	(209)	52	(6,629)	1,076
4	1,076	7,055	25	(330)	124	(6,771)	1,179
5	1,179	7,276	27	(457)	229	(7,323)	930
6	930	7,519	21	(599)	375	(7,480)	765
7	765	7,786	18	(750)	562	(8,090)	291
8	291	8,080	7	(916)	802	(8,264)	-

- 18 In Year 1, the entity would determine the service cost as follows:
- (a) projected total benefits using the capped rate CU61,130
 - (b) allocate portions of the total benefits evenly to 8 years CU7,641
 - (c) discount that amount back by using the discount rate of 2.31%
- 19 In the following years, however, to determine the service cost the entity would need to recalculate the value of expected total benefits and consider the actual asset returns for past Years. The should apply when remeasuring the closing value of DBO for the purpose of calculation of true-up adjustment.