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# DISCUSSION PAPER

## ACCOUNTING FOR PLANS WITH ASSET-RETURN PROMISE

[MONTH] 2019

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EFRAG welcomes comments on its proposals via the 'Questions to Constituents' at the end of each section. Such comments should be submitted through the EFRAG website by clicking [here](#) or should be sent by post to:

EFRAG  
35 Square de Meeûs  
B-1000 Brussels  
Belgium

Comments should arrive no later than [Comment Deadline Date]. EFRAG will place all comments received on the public record unless confidentiality is requested.

## EFRAG Research Activities in Europe

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This paper is part of EFRAG's research work. EFRAG aims to influence future standard-setting developments by engaging with European constituents and providing timely and effective input to early phases of the IASB's work. Four strategic aims underpin proactive work:

- engaging with European constituents to understand their issues and how financial reporting affects them;
- influencing the development of International Financial Reporting Standards ('IFRS Standards');
- providing thought leadership in developing the principles and practices that underpin financial reporting; and
- promoting solutions that improve the quality of information, are practical, and enhance transparency and accountability.

More detailed information about our research work and current projects is available on the EFRAG website.

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# Executive Summary

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ES1 To be completed



## Questions to Constituents

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### To be completed

EFRAG invites comments on all matters in this Discussion Paper, particularly in relation to the questions set out below. Comments are more helpful if they:

address the question as stated;

indicate the specific paragraph reference to which the comments relate; and/or

describe any alternative approaches that should be considered.

All comments should be received by [Submission date].

### Question 1 - [Title of first question]

[The Discussion Paper contains a number of questions. This is the explanatory text for the first question, and should be replaced.]

[This is the actual text of the first question.]

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### Question 2 - [Title of second questions]

1 [This Discussion Paper goes on to discuss other issues, which could include:

Lettered sub-paragraphs; and

Even sub-paragraphs of these.]

[This is the actual text of the first question.]

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## CHAPTER 1: INTRODUCTION

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- 1.1 When IAS 19 *Accounting for Retirement Benefits* was originally developed, it was mainly designed to cover traditional defined benefit plans, where amounts to be paid as retirement are determinable, and defined contribution plans where amounts to be paid as retirement benefits are determined by contributions to a fund together with investment earnings thereon.
- 1.2 However, now, a growing range of plans - often referred to as 'hybrid' plans - are designed to incorporate features that were not envisaged when IAS 19 was developed. Among others, such plans are introduced by entities to reduce their exposure to pension risks. They differ from traditional typical defined benefit plans, however, they still satisfy defined benefit plan classification criteria provided by IAS 19. Therefore, IAS 19 defined benefit plan accounting applies to them. This issue is common in some European jurisdictions e.g. in Germany, Netherlands, Belgium and Switzerland.
- 1.3 This paper addresses possible amendments to the accounting requirements in IAS 19 *Employee Benefits* for one type of such plans i.e. plans under which the final benefit depends on asset-return promise, which is defined as a benefit which amounts to the higher of the return on an identified item or group of items – such as a portfolio of equities; and a minimum guaranteed return.
- 1.4 As part of the introduction, a summary of how pension accounting developed over time and some statistics on pension plans is provided below. The current guidance and a brief comparison of current IFRS and US GAAP guidance is provided in Appendix 1.

### Evolution of pension accounting<sup>1</sup>

- 1.5 Historically, reporting for pensions focused on the pension cost rather than on measuring an entity's rights and obligations under the plan. The pensions were viewed as a gratuity act from the employer for past services. Consequently, the employer was not seen to have a present obligation, and the pension cost was linked to the cash outflows. The pension benefits were paid entirely at the employer's discretion and could be discontinued at any time. The cost was measured either by the pension benefit paid; or by the contribution paid in a funded scheme. The cost could also include the guaranteed return, if the contributions were not segregated to buy securities.
- 1.6 For defined benefit plans, two broad groups of accounting schemes evolved: a *terminal funding method*, where the projected cost of retirement was recognised only at the time an employee retires, and *pay-as-you-go methods*, where the cost of retirement benefits was recognised only at the time that cash payments were made to employees on or after retirement.
- 1.7 Over time, the gratuity theory was challenged by the view that a pension is a 'deferred pay' and that employees accepted lower wages in exchange for future expected income. This led to the conclusion that an entity should account for the cost to provide the future employee benefits. That accounting change was driven by governments granting tax

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<sup>1</sup> This section draws from Napier, C. (2008) *The logic of pension accounting*

deduction for pension costs. As a result, the annual cost of pension provision was measured based on actuarial calculations (when the firm was using internal funding) or through contributions to external funds, also determined based on actuarial calculations. In this last case, the cost would still correspond to the cash outflow of the period.

- 1.8 In the 1970's, the accounting theory further developed by introducing the notion that pension benefits are an exchange for total services provided over the employee's working life with the employer. However, while the employer's side of the exchange was identifiable – i.e. the promise to pay benefits – the employee's side was less clear. It was suggested that the employee accepted to provide services in exchange of the future pension promise and, since it was not possible to allocate benefits to specific units of services, the objective of accounting should be to spread the value of the benefits to the full period of service. Moreover, stock market declines with abnormally high price inflation led to deficits on actuarial valuations. This initiated further research on pension accounting.
- 1.9 The evolution of the accounting theory, summarised above, led to changes in the accounting and reporting requirements.
- 1.10 The original International Accounting Standard on pensions, IAS 19 *Accounting for Retirement Benefits in the Financial Statements of Enterprises*, issued in January 1993 by the IASC – the predecessor of the IASB, was oriented towards measuring the pension cost in the income statement. The standard clearly distinguishing between accounting and funding objectives, introduced a dual model i.e. it required classifying a retirement benefits plan as either defined contribution or defined benefit. For defined benefit plans, the use of pay-as-you-go and termination funding methods was prohibited and, instead, the standard required charging the pension costs to income systematically over the expected remaining working lives of the employees. Nevertheless, the standard remained flexible enough to permit entities choosing an actuarial method used to determine the retirement benefit from a wide range of *accrued benefit* or *projected benefit valuation methods* and, in particular, to decide whether or not to use salary projections in measuring the pension expense.
- 1.11 Similarly, the US Accounting Principles Board ('APB') Opinion No.8 *Accounting for the Cost of Pension Plans* was issued in 1966. It focused mostly on the treatment for the cost attributed to past or prior service and recommended spreading the costs over a period up to 40 years. The Opinion recommended that the accounting impact of actuarial gains and losses should be accounted for by spreading them over between ten to twenty years, or by adjusting the cost by an estimate of the average actuarial gains and losses arising over several years. That treatment was also influenced by tax rules, that limited the deductibility of these components. In 1985, the US SFAS 87 *Employers' Accounting for Pensions* was issued which required the assessment of the projected benefit obligation based on future compensation levels. The projected benefit obligation was determined as the actuarial present value as of a date of all benefits attributed by the pension benefit formula to employee service rendered prior to that date.
- 1.12 IAS 19 *Employee Benefits*, revised in 1998, moved closer to a balance sheet approach. The standard kept the dual model, but prohibited the use of the accrual valuation method. Similarly, the FASB revised SFAS No. 87 in SFAS 158 *Employers' Accounting for defined Benefits Pensions and Other Postretirement Plans*, published in 2006, which required

measurement of the liability by comparing the fair value of the plan assets with the projected benefit obligation rather than the accrued benefit obligation.

- 1.13 Under current IAS 19 guidance, an entity uses an actuarial technique (the projected unit credit method) to estimate the ultimate cost to the entity of the benefits that employees have earned in return for their service in the current and prior periods and then discounts that benefit in order to determine the present value of the defined benefit obligation.
- 1.14 As presented above, the accounting requirements shifted from just reporting the pension cost and focused on measuring the pension liability. The measurement of the pension liability shifted from a variety of permitted actuarial methods to a single permitted project unit credit method.
- 1.15 However, recently, the employers have tended to shift from defined benefit to defined contribution schemes<sup>2</sup> - see also the sub-chapter on statistics below. Statistical analyses indicated that greater costs of administering defined benefit plans relative to defined contribution plans were associated with new adopters favouring defined contribution plans. Furthermore, greater economic instability in industries led new pension plan adopters to be more likely to choose defined contribution plans rather than defined benefit plans, presumably because the former represented less risk for the employer. In addition, higher capital/labour ratios, lower company sizes, and lower proportions of blue-collar workers within an industry favoured adoption of defined contribution plans among new adopters.
- 1.16 Nevertheless, in some cases, entities provide minimum guarantee returns, which could be below the historical level of returns on the plan assets. This is often led by local legislation requirements.
- 1.17 Moreover, newly introduced pension schemes, which evolved in order to reduce the risks to which employers are exposed under defined benefit plans, are seen as having elements of both traditional defined contribution plans and traditional defined benefit plans. Such schemes, sometimes referred to as 'hybrid plans', include shared-risk plans, cash balance plans, security-linked plans, and plans with asset-return promise. Consequently, concerns have been raised about the application of the defined benefit accounting requirements to such plans. For example, IAS 19 requirements may result in recognising a defined benefit obligation even in cases when a further outflow of resources has a remote probability of occurring. Also, the requirements are perceived to be too costly and too complex to apply.

## Statistics

- 1.18 Within the European Economic Area ('EEA'), to some extent, entities are moving away from offering defined benefit pension schemes to defined contribution schemes.
- 1.19 The table below thus shows the cost to defined benefit schemes in percentage of the cost to defined contribution plans for listed entities within the EEA countries<sup>3</sup>. The table shows that from 2010 to 2014 there was a decline in the cost to defined benefit plans relative to the total costs to defined contribution plans and defined benefit plans among

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<sup>2</sup> Douglas L. Kruse, Pension Substitution in the 1980s: Why the Shift toward defined Contribution?

<sup>3</sup> Only entities for which costs to both plans were higher than zero in the S&P Capital IQ database were chosen for the statistics.

the entities included in the statistics. This could be an indication of a trend among entities to terminate defined benefit schemes.

	2010	2011	2012	2013	2014
Entities	865	931	969	1 007	1 048
Average	41%	38%	36%	36%	34%
1st quantile	16%	13%	11%	12%	11%
Median	36%	31%	30%	29%	27%
3rd quantile	65%	59%	54%	57%	53%
95th percentile	91%	89%	90%	87%	85%
97.5th percentile	95%	93%	94%	92%	91%

1.20 However, it was noted in an IASB staff paper for the November 2015 IASB meeting<sup>4</sup> that converting defined benefit plans into pure defined contribution plans is difficult for some entities because of pension regulations or because introducing them may make it more difficult to retain employees.

1.21 The following table illustrates the ratio of costs for defined benefit plans to the combined costs for defined contribution plans and defined benefit plans. The table shows the average median over the period. Since the table is based on the country of incorporation of the parent entity, and groups operate in different jurisdictions, the figures may not provide an exact depiction of the situation in each country. Countries where the average number of entities was less than 30 have been marked with an asterisk.

Country	Average median (%)	Country	Average median (%)
Portugal*	77	France	23
Liechtenstein*	74	Sweden	20
Austria	72	Poland*	20
Malta*	57	Hungary*	14
Spain*	55	Greece*	13
Belgium	50	Finland	11
Norway	50	Denmark*	10
Ireland*	47	Slovenia*	9
United Kingdom	42	Latvia*	7
Luxembourg*	41	Lithuania*	6
Netherlands *	34	Slovakia*	6
Cyprus*	30	Romania*	4
Germany	29	Croatia*	3
Iceland*	28	Bulgaria*	2
Italy	27	Estonia*	No data
Czech Republic*	24		

1.22 The table indicates that there could be significant differences between entities incorporated in different jurisdictions in relation to the significance of costs related to defined benefit schemes compared with costs related to defined contribution plans.

1.23 If entities providing “pure” defined benefit plans want to reduce their risk exposure but cannot – or do not want to – replace these schemes with defined contribution plans, they

<sup>4</sup> Agenda Paper 15A for the November 2015 IASB meeting.

could introduce ‘hybrid plans’. These should still be accounted for as defined benefit plans, but would share risks related to the final benefit an employee will receive from the employer<sup>5</sup>.

- 1.24 From the IASB staff paper for the November 2015 IASB meeting, it appears that hybrid plans, of which some may be of the types included within the scope of this Discussion Paper, are as common as traditional defined benefit plans and pure defined contribution plans in the EEA countries<sup>6</sup>. Within the EEA, hybrid plans are particularly common in specific jurisdictions such as Belgium, Germany, and the Netherlands.

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<sup>5</sup> Another form of risk reduction would be to partly or wholly re-insure the pension obligations.

<sup>6</sup> The IASB staff paper bases this observation on the fact that in a study performed by using data collected by EIOPA, 55 plans, out of a total of 156 types of occupational plans were classified as traditional defined benefit plans; 51 were classified as pure defined contribution plans with no guarantees; 9 plans were classified as defined benefit plans in which benefits are mostly determined by the contributions paid and the results of their investments, but the employers have the responsibility for the minimum guarantees; 21 were classified as plans operated like defined contribution plans but provided guarantees; 16 plans were classified as plans with both defined benefit components and defined contribution components; and 4 plans were classified as ‘Others’. It should thus be noted that the data on which the IASB staff paper’s conclusion is based is derived from on information on pension plans and products with a focus on occupational and personal pensions. Such pension plans and products often are not within the remit (or on the balance sheet) of a particular employer. The IASB’s study simply count the number of plans – not how many employees are covered by the plans. In addition, the EIOPA data does not distinguish between pension plans offered by employers and pension plans offered directly to employees. It can therefore not be concluded from the data collected by EIOPA that hybrid plans are offered as frequently by entities in the EEA as “normal” defined contributions plans or defined benefit plans.

## CHAPTER 2: DESCRIPTION OF THE PLANS WITHIN THE SCOPE

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### Definition of pension plans included in the scope

- 2.1 This Discussion Paper deals with the reporting of post-retirement pension plans that meet the following characteristics:
- (a) They include an asset-return promise; and
  - (b) The plan holds the plan assets upon which the benefits are dependent.
- 2.2 For the purpose of this Discussion Paper, an asset-return promise is defined as a benefit which amounts to the higher of the return on an identified item or group of items – such as a portfolio of equities; and a minimum guaranteed return.
- 2.3 The plan does not need to transfer exactly the returns generated by the plan assets. A plan would not be excluded from the scope because it promises a benefit equal only to a share of the returns.
- 2.4 However, an obligation must have arisen to the entity under the plan. If the entity has discretion in including any portion of the asset returns in the benefits, then a plan would not fall into the scope. An obligation can arise from the law, the terms of the plan or established past practices.
- 2.5 The scope does therefore not include plans with a minimum return guarantee unless they also include a benefit based on the return of identified items. For example, a plan where the sponsor pays a fixed contribution and only guarantees a return of 4% p.a. would not be included in the scope of the project.
- 2.6 A plan that includes an asset-return promise is fundamentally different from a plan that promises only a guaranteed return. For one thing, the entity cannot use any excess return to reduce its contributions under the plan.
- 2.7 EFRAG initially considered a scope that would include also plans that specify the pool of assets, but where the entity does not hold the assets. There is a different risk exposure in the two cases – the entity that holds these assets is only exposed to the risk that the returns do not exceed the minimum guarantee. On the other hand, the entity that does not hold these assets is also exposed to the risk that the return earned on the alternative investment is lower than the return on the specified items.
- 2.8 However, there is also the possibility that the return earned on the alternative investment exceeds the return on the specified items, which would allow the sponsoring entity to pay less contributions.
- 2.9 It is debatable if, from a conceptual perspective, the different exposure to risks (and rewards) should result in a different accounting treatment. EFRAG considers that more work is needed to assess if the approaches explored in this Discussion Paper would also be valid for plans where the entity does not hold the assets upon which the benefits are dependent.

- 2.10 As a consequence of the decision in the paragraphs above, the plans must be funded. In other words, it is necessary that the entity settles regularly the contributions specified in the terms of the plan. However, it is not necessary that the entity immediately funds any projected shortfall due to expectation about the guarantee becoming effective.
- 2.11 The Discussion Paper addresses the measurement of the pension obligation for the plans in scope. EFRAG has concluded that the measurement of plan assets at fair value in the statement of financial statements is useful and provides relevant information.
- 2.12 EFRAG acknowledges that there are reservations about other aspects of pension accounting. EFRAG also acknowledges existence of other types of plans, referred to as hybrid plans. The Discussion Paper describes this in Chapter 7. EFRAG has considered that the issues around the plans with an asset-return promise can be addressed without a fundamental rethinking of IAS 19. The IASB Agenda consultation did not show constituents' support to fundamentally review the Standard, which was significantly amended in 2011.
- 2.13 The IASB is currently considering possible amendments to IAS 19 for pension benefits that depend on asset returns. Thus, this project may contribute in practical ways to the future standard-setting activities of the IASB, which is the main objective of EFRAG research activities.
- 2.14 Some have called for a new accounting approach for plans that share characteristics of both defined contribution and defined benefit plans – often referred to 'hybrid' plans. A survey of defined benefit plans in Europe - although not comprehensive - has shown a wide range of terms and conditionalities. It may be unfeasible to develop a solution that applies equally well to all of the variety of schemes, or it could require a high level of complexity.

### The issue with the pension plans included in the scope

- 2.15 Concerns have been raised about the application of the accounting requirements for the type of plans included in the scope. The main concern derives from the requirements to project the benefits using the expected rate of return and to discount them back using market yields on high quality corporate bonds. When the benefit is based on the return of specified assets, the use of different rates is perceived to create an accounting mismatch.
- 2.16 In other words, when the benefit is linked to the return of the plan assets, many would argue that the measurement of the obligation, including the rate of discount, should reflect the economic linkage to the value of the plan assets. This perceived disalignment is also due to the fact that the plan assets are carried at fair value, which means that their accounting reflects the actual returns and not the projected returns.
- 2.17 Another concern is that the existing IAS 19 requirements may still result in recognising a net liability when the likelihood that the entity needs to pay additional contributions for past periods is low or remote. This occurs when the guarantee is set at a level which is significantly lower than then expected returns. In these circumstances, the requirements are perceived to generate numbers that do not reflect economic reality. In addition, the requirements are considered to be too costly and complex to apply in those circumstances.

- 2.18 On the other hand, the existing requirements can also result in not recognising a net liability when the assets held in a pension scheme would be expected to be insufficient to cover the payments to the employee at retirement for the service provided to date. For a pension plan within the scope of this project under which an employee's service in later years will not lead to a materially higher level of benefit than in earlier years, such a scenario could happen:
- (a) When the guaranteed return is higher than the actual return and the discount rate is higher than the guaranteed return. This could be the case if the contributions are invested in government bonds. In this scenario, the assets held will generate a return that is lower than the guaranteed return. At retirement, the amount of the pension benefits will thus exceed the fair value of the plan assets.
  - (a) When the actual return in the past has been higher than the guaranteed return, but the guaranteed return over the total expected period of service is expected to be higher than the total actual return. In such cases, the measurement of the pension obligation is based on the guaranteed return and may thus be lower than the fair value the plan assets are measured at.
- 2.19 In both cases, the asset ceiling will result in the pension liability being measured at nil. However, this may not reflect the fact that it is not expected that the plan assets will be sufficient to finance the retirement payment.

### The IASB's activities

- 2.20 Currently, the IASB considers a feasibility project on whether it would be possible to eliminate inconsistencies in the measurement of pension benefits that depend on asset returns. The IASB is seemingly only investigating an approach where the expected asset returns are capped at the level of the discount rate for the obligation (i.e. high quality corporate bond rate). This approach is illustrated in detail as the capped asset return approach. The scope of the IASB project is narrower than the scope of this Discussion Paper in terms of approaches explored.
- 2.21 The IASB is currently collecting input on the proposed scope for its project to introduce targeted amendments to IAS 19.
- 2.22 Prior to this, the IASB has done some research on pension plans. In 2015, the IASB staff gathered information about trends in pension plans to assess whether the IASB should consider addressing the issues about contribution-based promises and other features that arise in 'hybrid plans'<sup>7</sup>. The key findings were as follows:
- (a) Hybrid plans are as common as traditional defined benefit plans and pure defined contribution plans in Europe;
  - (b) Similar plans exist or their use may be increasing in other jurisdictions (e.g. Canada, Mexico, South Africa). However, these plans are not pure defined

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<sup>7</sup> Note that the IASB did not define the term 'hybrid plans'. They mentioned that 'hybrid plans' intended to include plans that incorporate features of both defined contribution and defined benefit plans (IASB staff paper 15A November 2015).

contribution plans (e.g. entities provide guarantees); or (ii) future benefit levels depend on returns on assets;

- (c) There is a global trend of a decrease in traditional defined benefit plans and an increase in defined contribution plans and hybrid plans. In particular, there is a significant trend of transition from defined benefit plans to defined contribution plans in the UK, the US and Japan; and
- (d) In some jurisdictions (e.g. China, India, Singapore, Indonesia, Turkey, Spain), pure defined contribution plans are predominant.

2.23 In 2004, the IFRS Interpretations Committee ('IFRS IC') issued a Draft Interpretation D9 *Employee Benefit Plans with a Promised Return on Contributions or Notional Contributions*, to provide guidance on how to apply the requirements of IAS 19 to an employee benefit plan with a promised return on actual or notional contributions.

2.24 The model in the Draft Interpretation D9 required entities to measure benefits with a variable return at the fair value of the underlying reference assets and those with a fixed return using the projected unit credit method. Moreover, an additional liability would be recognised if the fair value of the underlying reference asset was larger than the amount under the IAS 19 model.

2.25 However, the IFRS IC removed this project from its agenda because it was unable to reach a consensus on a suitable scope for an amendment that would both:

- (a) improve the accounting for a sufficient population of plans such that the benefits would exceed the costs; and
- (b) limit any unintended consequences that would arise from making an arbitrary distinction between otherwise similar plans.

## CHAPTER 3: ASSUMPTIONS OF ILLUSTRATIVE EXAMPLE AND IAS 19 APPLICATION

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### Assumptions and description of the example

- 3.1 This chapter specifies the assumptions of an example which is used to illustrate the application of alternative approaches to the accounting for a plan with an asset-return promise in chapter 4. This chapter also illustrates the application of defined benefit accounting under IAS 19 to the illustrative example.

### Terms of the plan

- 3.2 Each year, Entity X makes a basic contribution to the employee's pension account. In the first five years of employment, the basic contribution is 0.5 per cent for the part of the salary below the threshold and 2.5 per cent for the part above. After the first five years, the percentages change to 1 and 5 per cent, respectively.
- 3.3 The salary threshold is initially set at 50,000 CU and is adjusted each year based on the annual inflation rate.
- 3.4 The employee can make a supplementary contribution, which cannot exceed 30 per cent of the employee's gross salary for the year. Entity X makes an additional matching contribution corresponding to the supplementary contribution made by the beneficiary as long as the matching contribution does not exceed its own minimum contribution. Entity X will not match supplementary contributions exceeding its own minimum contribution. For the purpose of the example, the employee's contribution is always equal to employer's basic contribution.
- 3.5 The pension account is held by Entity X, which makes the decisions about how the funds are invested. The final benefit entitlement is settled at the end of the service period. If the beneficiary dies before retirement, the benefits are paid to the entitled heir.
- 3.6 Entity X guarantees a minimum return of 5.5 per cent p.a., cumulated over the entire service period. The final benefit entitlement is therefore the total contributions plus the higher of the actual return on the plan and the guaranteed return.
- 3.7 The contributions to the plan are paid at the end of the year.

### Financial assumptions

- 3.8 Expected return assumptions are based on published return assumptions for US public pension plans<sup>8</sup>. The table below shows that in the first years, it is expected that the return will be 8 per cent per year and would increase to 8.5 per cent in the later years. However, that expectation is later revised, and it is instead expected that the return will start to decline.

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<sup>8</sup> See: <http://www.pionline.com>, <https://www.twosigma.com>, and <http://www.nasra.org>.

- 3.9 The actual return is based on the return of the United Nations Joint Staff Pension Fund<sup>9</sup>, which is a large US pension fund for which return data is available. For Year Eleven (which corresponds to year 2017) the return of Financial Year Ten (2016) is reused.

Financial year - Asset rates											
Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
8.0%	13.9%	13.9%	13.9%	13.9%	13.9%	13.9%	13.9%	13.9%	13.9%	13.9%	13.9%
8.0%	8.0%	-24.9%	-24.9%	-24.9%	-24.9%	-24.9%	-24.9%	-24.9%	-24.9%	-24.9%	-24.9%
8.0%	8.0%	8.0%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%
8.0%	8.0%	8.0%	8.0%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%
8.0%	8.0%	8.0%	8.0%	8.0%	-3.9%	-3.9%	-3.9%	-3.9%	-3.9%	-3.9%	-3.9%
8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	12.7%	12.7%	12.7%	12.7%	12.7%	12.7%
8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	7.5%	15.5%	15.5%	15.5%	15.5%	15.5%
8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	7.5%	7.0%	3.2%	3.2%	3.2%	3.2%
8.5%	8.5%	8.0%	8.0%	8.0%	8.0%	7.5%	7.0%	6.5%	-1.0%	-1.0%	-1.0%
8.5%	8.5%	8.0%	8.0%	8.0%	8.0%	7.5%	7.0%	6.0%	6.0%	5.2%	5.2%
8.5%	8.5%	8.5%	8.0%	8.0%	7.5%	7.0%	6.5%	6.0%	5.5%	5.0%	5.2%

- 3.10 The return on high quality corporate bonds is based on the US Treasury High Quality Bond Yield Curve<sup>10</sup>. The table below shows the interest rate per year used to discount the lump-sum amount to be paid at the end of Year Eleven to the end of the various financial years:

Financial year											
	0	1	2	3	4	5	6	7	8	9	10
Discount	5.45%	5.89%	6.97%	4.14%	3.88%	3.21%	1.54%	1.21%	1.59%	1.69%	1.67%

- 3.11 Based on the assumptions, the cumulative return at the end of the plan, i.e. Year Eleven, will be lower than the guaranteed return. Therefore, the entity will need to pay an additional contribution to cover the shortfall for 651 CU. It is assumed that the shortfall is paid at the settlement date.

### **Salary and service assumptions**

- 3.12 The beneficiary is expected to work for Entity X for eleven years. The initial salary is 57,000 CU and is expected to increase every year based on the annual inflation rate. In addition, every second year the salary will increase by approximately 2.1 per cent (in addition to the inflation). The additional increase is therefore expected to apply for the salary for Year Three.

<sup>9</sup> Source: <http://imd.unjspf.org>.

<sup>10</sup> The data used is available here: <https://www.treasury.gov>. The discount factor used in Financial Year One is the High Quality Corporate Bond rate from December 2006 for bonds with a maturity of ten years. Linear interpolation is used to estimate the interest rate on bonds with a maturity of 1 to 9 years.

	Financial year									
	1	2	3	4	5	6	7	8	9	10
Inflation	1.30%	1.50%	2.00%	3.00%	3.80%	3.80%	3.80%	3.80%	3.80%	3.80%
Increase		2.10%		2.10%		2.10%		2.10%		2.10%

- 3.13 The beneficiary makes supplementary contributions equal to the maximum amount Entity X will match. In the first three years, the employee's and entity's contributions amount to:

EUR	Year One	Year Two	Year Three
Employee contribution	425	431	467
Entity X's contributions	850	861	935

### **Additional assumptions for the Fair Value Based approach**

- 3.14 For the purpose of the illustration of Fair Value Based approach, EFRAG assumed that fair value of pension obligation is a sum of fair values of its two components i.e. the total contributions made increased by the accumulated returns and the minimum guaranteed return related to the contributed amounts.
- 3.15 The fair value of the first component assumes own credit risk of Entity X to be negligible. Consequently, the fair value of that obligation is measured at fair value of the plan assets (or payable contributions).
- 3.16 The fair value of the return rate guarantee calculations derives from the Black's valuation model. The model requires estimating several rates, which have been assumed at the following levels:
- Risk free rate at 0.25% - this rate is assumed not to change during the term of the plan;
  - Available forward rate at  $\frac{1}{2}$  of the high quality corporate bond rate for each particular year;
  - Standard deviation of the plan asset returns at 11.76% - standard deviation is assumed not to change during the term of the plan.

### **Additional assumptions for the Fulfilment Value approach**

- 3.17 In order to compute the pension obligation, inflows relate to both expected future employer and employee contributions and outflows are the expected final benefit entitlement.
- 3.18 The value of the guarantee is derived from the Black's valuation model and is recomputed at each reporting period. Refer to the assumptions in paragraph 3.16 above. The value of the guarantee is based on the accumulated employer and employee contributions that have been made and not on expected future contributions. Therefore, at Year Zero, the value of the guarantee is zero as no contributions have yet been made.

## Limitations in the illustrative example

- 3.19 The illustrative example has some limitations compared to a real life pension plan. In a typical pension plan, there would be many employees and there could potentially be plan amendments or curtailments occurring. However, in the illustrative example, there is only one employee and so there is no plan amendment or curtailment and therefore no past service cost.
- 3.20 The employee is initially assumed to work for eleven years and the benefit is immediately paid at the end of the period of service. There is no revision in the demographic assumptions. In real life, the calculation would be impacted by changes in assumptions about mortality and employee turnover.
- 3.21 Furthermore, benefits under a defined benefit plan may be subject to vesting conditions, such as the completion of a service period. In the illustrative example, the likelihood of meeting the vesting conditions has not been considered.

## Application of IAS 19 model for defined benefit plans

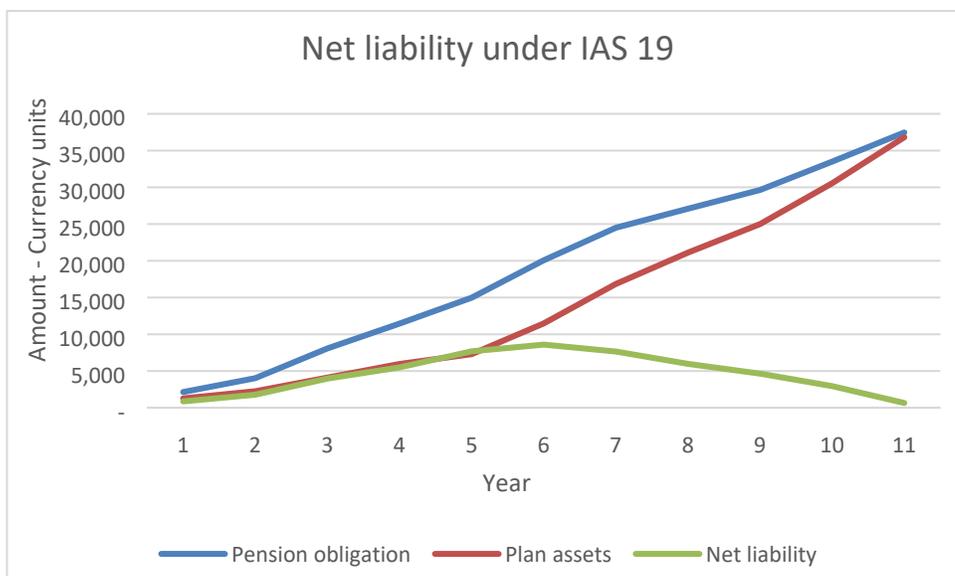
- 3.22 EFRAG notes that providing detailed figures for each year in this Discussion Paper would be excessive and may confuse readers of the Discussion Paper. Therefore, for IAS 19 and the alternative approaches, EFRAG has focussed on providing figures for one year only, i.e. for Year Three, and providing some additional comments to understand how the different approaches impact the amounts recognised.
- 3.23 For IAS 19 and the alternative approaches, EFRAG has also included a graph for the net liability position each year and graphs relating to amounts recognised each year in the statement of comprehensive income.

## Statement of financial position

- 3.24 If we take Year Three of the example in this Discussion Paper, under paragraphs 63 and following of IAS 19, the net liability is as follows:

	Currency units
Plan assets	4,105
Pension obligation	8,073
Net liability	<u>3,968</u>

- 3.25 The graph below shows the actual net liability that has been recognised in the statement of financial position each year for IAS 19:



3.26 In the above graph, the pension obligation is higher than the plan assets in all years. From Years Nine to Year Eleven, the pension obligation is calculated based on the guaranteed return. The fact that the pension obligation is higher than the plan assets is caused by the expected return rate or the guaranteed rate (whichever is higher) being higher than the discount rate.

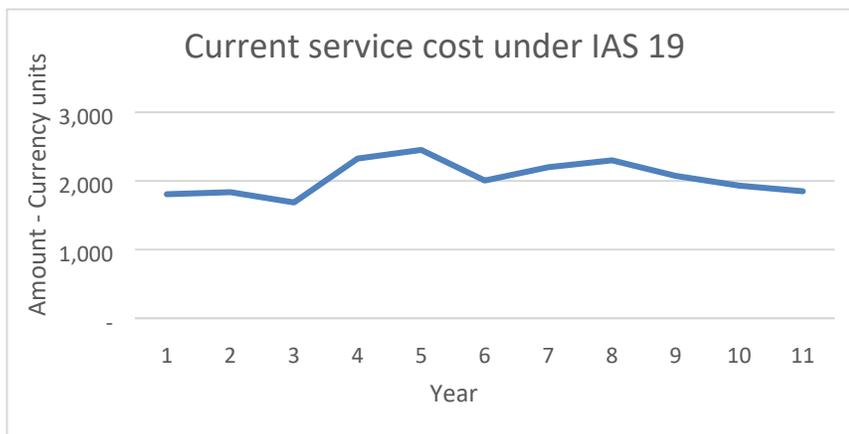
### Pension income and costs in comprehensive income

#### Current service cost

3.27 In Year Three of the example in this Discussion Paper, the current service cost under IAS 19.125 is as follows:

Currency units	
Current service cost	1,686

3.28 The graph below shows the actual current service cost that has been recognised in profit or loss each year under IAS 19:



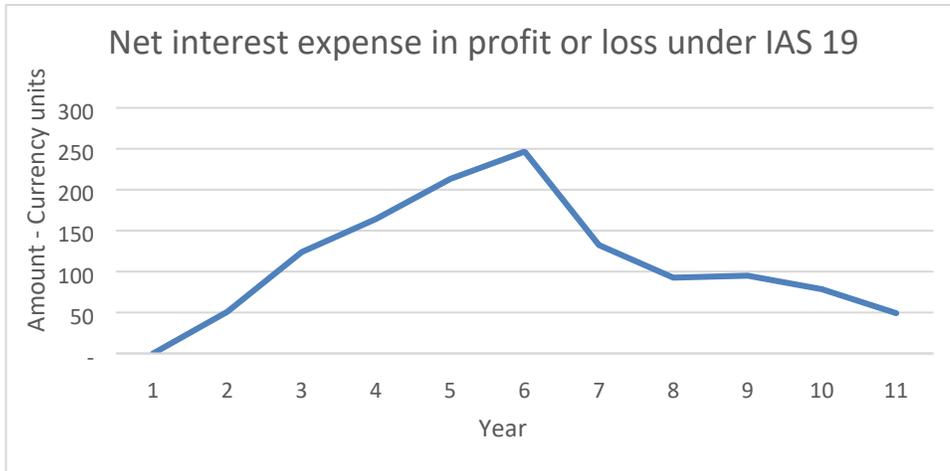
- 3.29 As can be seen in the above graph, the current service cost is not linear due to the changes in actual and expected assets returns and discount rates yearly even though there is a backload correction. This impacts the projection of the estimated final benefit entitlement and therefore the current service cost.

### Other pension income and costs

- 3.30 In Year Three, the following elements are recognised in the statement of comprehensive income. (Note that positive amounts are income while negative amounts are expenses):

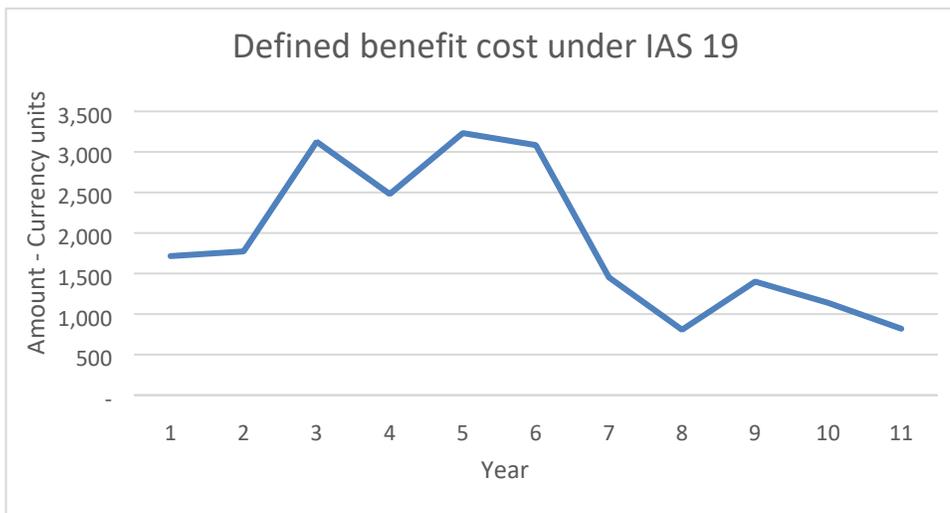
	Currency units	Currency units
<b>Profit or loss:</b>		
Current service cost		-1,686
Return on plan assets	157	
Interest expense	-281	
Net interest expense		-124
<b>OCI:</b>		
Remeasurement relating to return on plan assets		298
Remeasurement relating to actuarial gains and losses		-1,613
Total comprehensive income		-3,125

- 3.31 The return on plan assets is the income from the assets each year using High Quality Corporate Bond rate at the start of the period. [IAS 19 paragraph 125]
- 3.32 The interest expense for the pension obligation is computed by multiplying the opening balance of the pension obligation by the High Quality Corporate Bond rate at the start of the period. [IAS19 paragraph 123]
- 3.33 The remeasurement relating to return on plan assets is the difference between the interest income applying actual return on plan assets and the return on plan assets recognised in profit and loss. [IAS 19 paragraph 125]
- 3.34 The remeasurement relating to actuarial gains and losses result from decreases and increases in the opening balance of the defined benefit obligation due to changes in estimated final benefit entitlement and the effect of changes in the High Quality Corporate Bond rate. [IAS 19 paragraphs 127-128]
- 3.35 The graph below shows the actual net interest (i.e. net of interest income from the plan assets and interest expense from the pension obligation) that has been recognised in profit or loss each year under IAS 19:



3.36 From Year One to Year Six, each year the net pension liability increases and therefore the net interest expense also increases. As from Year Seven, the net interest expense gradually decreases. This is mainly due to a decrease, by more than 50 per cent, in the High Quality Corporate Bond rate in Year Six.

3.37 Furthermore, the graph below shows the defined benefit cost under IAS 19:



## CHAPTER 4: ALTERNATIVE APPROACHES

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### Capped Asset Return approach

#### The approach

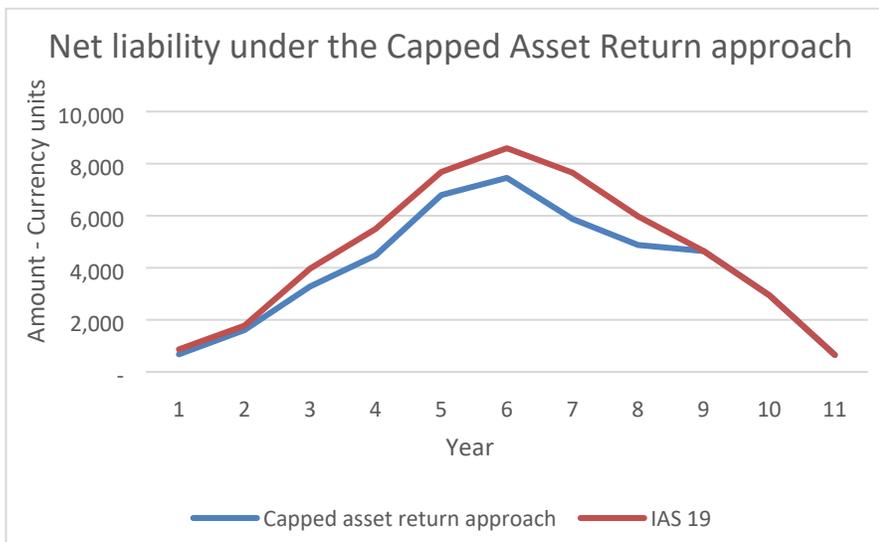
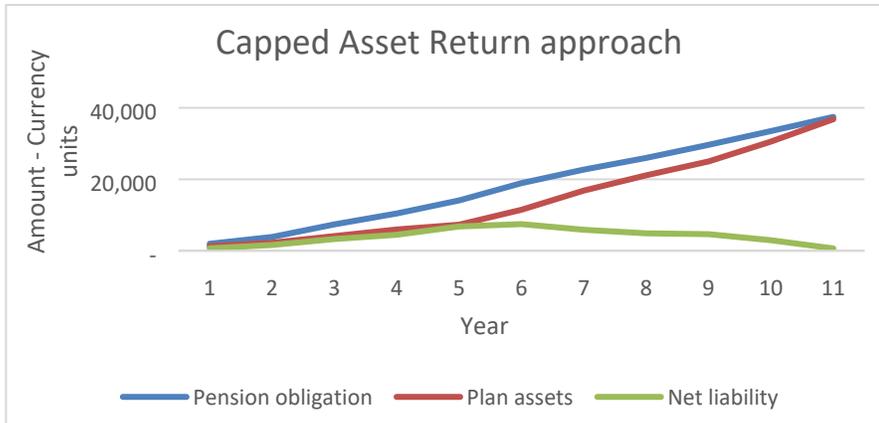
- 4.1 One main criticism of the application of IAS 19 to pension plans with an asset-return promise is that benefits are projected using the expected rate of return and then discounted using the yields on High Quality Corporate Bonds.
- 4.2 A relatively simple solution is to cap the expected asset return rate to the High Quality Corporate Bond rate.
- 4.3 Under this approach, the entity first projects the final benefit entitlement using the capped rate and compares this amount to the final benefit entitlement based on the guaranteed rate. The higher of these two amounts is used to determine the pension obligation at the reporting date and the service cost. Capping the expected rate of return potentially leads to a lower nominal value of expected final benefit entitlement compared to IAS 19. Consequently, a lower amount will be attributed to periods of service in accordance with paragraph 70 of IAS 19, and lower recognised current service cost. Apart from the above, the computation is similar to that under IAS 19.
- 4.4 Instead of capping, the expected return could be set equal to the High Quality Corporate Bond rate. The results of such an approach would be similar to capping when the expected returns exceed the High Quality Corporate Bond rate, but would be different when the expected returns are lower.

#### Statement of financial position

- 4.5 In Year Three, the net pension liability is as follows:

	Currency units
Plan assets	4,105
Pension obligation	7,386
Net liability	<u>3,281</u>

- 4.6 The graphs below show the actual net liability recognised in the statement of financial position for the Capped Asset Return approach in comparison with IAS 19:



4.7 Based on the above graphs, it can be noted that the trend of the net liability year by year under the Capped Asset Return approach is similar to that under IAS 19. However, the net liability under the Capped Asset Return approach is lower than that under IAS 19 in most years due to the final expected benefit entitlement being lower, as explained below, and the plan asset amount being the same for both IAS 19 and the Capped Asset Return approach.

4.8 The pension obligation is computed in the same way under the Capped Asset Return approach as under IAS 19. However, there is a difference in the rate used to project the asset returns in order to compute the estimated final benefit entitlement the employee will receive upon retirement. Under IAS 19, the expected asset return rate is used to project the asset returns, which is higher than the High Quality Corporate Bond rate used to cap the asset returns under the Capped Asset Return approach. As a result, the asset return amount included in the estimated final benefit entitlement is lower for the Capped Asset Return approach compared to IAS 19. Consequently, as the same High Quality Corporate Bond rate is used to discount the pension obligation to present value for both approaches, the pension obligation of the former approach is lower than the latter one.

4.9 From Year Nine till Year Eleven, the guarantee becomes effective. Consequently, the net liability is computed based on the accumulated guaranteed amount for both approaches, thereby resulting in the same amounts for both the Capped Asset Return approach and IAS 19.

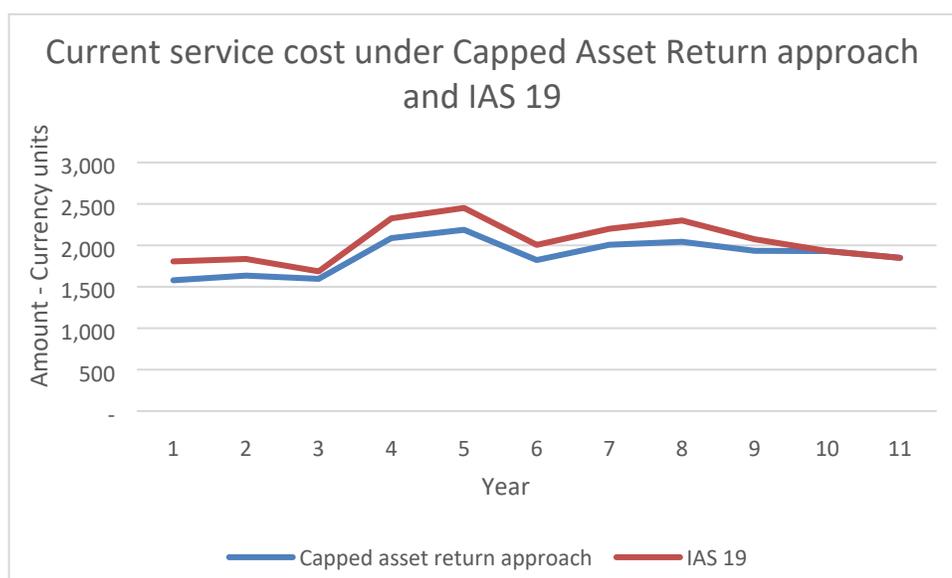
## **Pension income and costs in comprehensive income**

### **Current service cost**

4.10 The methodology for computing the current service cost is the same as under IAS 19. In Year Three, it is as follows:

<b>Currency units</b>	
Current service cost:	1,596

4.11 The graph below shows the actual current service cost recognised in profit or loss each year for both the Capped Asset Return approach and IAS 19:



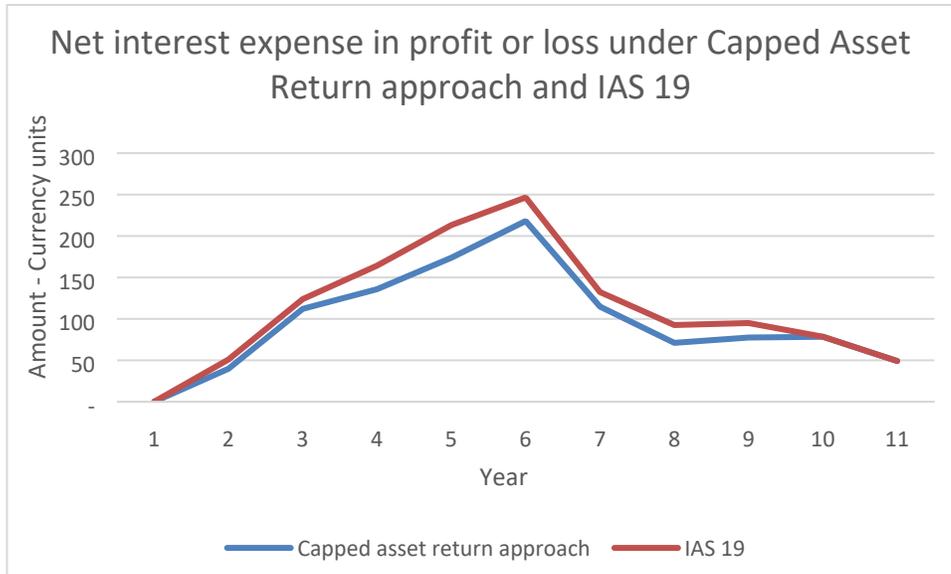
4.12 As can be seen in the above graph, the current service cost under the Capped Asset Return approach is lower than that under IAS 19 even though the computation methodology is the same. The current service cost is a portion of the expected amount that the employee will receive upon retirement. Based on paragraphs 4.7 to 4.9 above, the estimated final benefit entitlement is lower under the Capped Asset Return approach compared to IAS 19. Consequently, the current service cost is also lower for the former approach compared to the latter one.

### **Other pension income and costs**

4.13 In Year Three, the following elements would be recognised in the statement of comprehensive income following the approach. (Note that positive amounts are income while negative amounts are expenses):

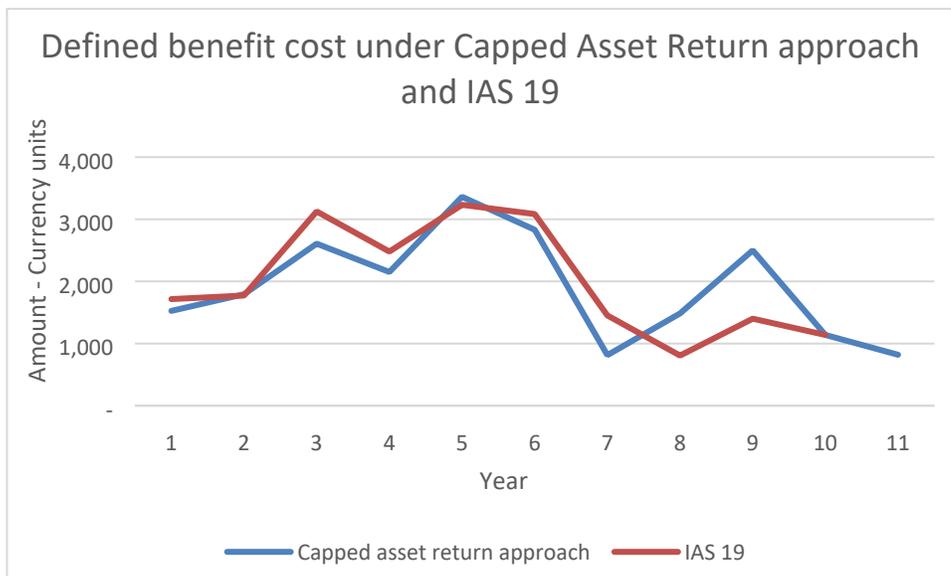
	Currency units	Currency units
<b>Profit or loss:</b>		
Current service cost		-1,596
Return on plan assets	157	
Interest expense	-269	
Net interest expense	<u>          </u>	-112
<b>OCI:</b>		
Remeasurement relating to return on plan assets		298
Remeasurement relating to actuarial gains and losses		-1,197
Total comprehensive income		<u><u>          </u></u> -2,607

- 4.14 The return on plan assets is the same as under IAS 19, i.e. income from the assets each year using the High Quality Corporate Bond rate at the start of the period.
- 4.15 The interest expense for the pension obligation is computed by multiplying the opening balance of the pension obligation by the High Quality Corporate Bond rate at the start of the period. The interest expense is smaller than under IAS 19 because of the lower pension obligation under the Capped Asset Return approach.
- 4.16 The remeasurement relating to return on plan assets is the same as under IAS 19, i.e. it is the difference between the interest income applying actual return on plan assets and the return on plan assets recognised in profit and loss.
- 4.17 The remeasurement relating to actuarial gains and losses comprises the same components as under IAS 19, i.e., it results from decreases and increases in the opening balance of the defined benefit obligation due to changes in estimated final benefit entitlement and the effect of changes in the High Quality Corporate Bond rate. In the example, the actuarial loss is significantly lower than under IAS 19. This is due to the significant decrease in the High Quality Corporate Bond rate. Under IAS 19, the decrease in the rate affects the loss when the nominal value of the estimated final benefit entitlement – which is not affected by the change in the rate – is discounted at a much lower rate. This results in a significant increase in the value of the pension obligation. Under the Capped Asset Return approach the change in the High Quality Corporate Bond rate also decreases the value of estimated final benefit entitlement. The decrease in the estimated final benefit entitlement partially offsets the effect of the lower discount rate.
- 4.18 The graph below shows the actual net interest (i.e. the net of interest income from the plan assets and interest expense from the pension obligation) that has been recognised in profit or loss each year for both the Capped Asset Return approach and under IAS 19:



4.19 Both under the Capped Asset Return approach and IAS 19, the net interest expense recognised in profit or loss is computed based on the High Quality Corporate Bond rate. However, since the net liability under the Capped Asset Return approach is lower than that under IAS 19, the net interest expense computed is also lower under the Capped Asset Return approach.

4.20 The graph below shows the defined benefit cost under the Capped Asset Return approach compared to IAS 19:



4.21 In the above graph, in Year Nine, the difference between the Capped Asset Return approach and IAS 19 can be explained by the fact that the estimated final benefit entitlement is calculated based on the guaranteed return in that year. The pension obligation is therefore the same under both the Capped Asset Return approach and IAS 19. In the previous period, the pension obligation is higher under IAS 19 than under

the Capped Asset Return approach. Hence, the adjustment under the IAS 19 approach is higher than under the Capped Asset approach.

## Fair-Value-based approach

### The approach

- 4.22 Measuring both plan assets and pension obligation at fair value would reduce or remove accounting mismatches. Moreover, it would better reflect the linkage between the plan assets and the pension obligation.
- 4.23 There are, however, many ways in which such an approach could be applied. A discussion on the approach used in this paper for illustration, is provided below. In this paper, the value of the defined benefit obligation is measured at a sum of the fair value of contributions accumulated to date, and the fair value of minimum return rate guarantee for those contributions.
- 4.24 The Fair Value Based approach explored in this Discussion Paper separately reflects the total contribution paid increased by accumulated returns (first component) and the value of the guarantee (second component) i.e. to bifurcate the 'higher of' promise and account for it as a separate financial instrument. Also the fair value is calculated based on the plan formula i.e. on already contributed amounts together with related returns, which are guaranteed to be not less than the minimum level.
- 4.25 In calculation of the fair value of the first component, own credit risk and the likelihood of modifications or curtailments were excluded. EFRAG notes that IFRS 13 *Fair Value Measurement* defines fair value of a liability as the price that would be paid to transfer the liability in an orderly transaction. Accordingly, a 'pure' fair value measurement should, for example, take into account the likelihood of any possible modification to the terms of the plan. However, in its Discussion Paper *Preliminary Views on Amendments to IAS 19* (March 2008), the IASB argued that a measurement, that would reflect possible changes in the plan, would misrepresent the entity's obligation.
- 4.26 In the illustration, the fair value of the obligation to pay the contributed amounts together with any returns, is measured at fair value of the plan assets.
- 4.27 Regarding the second component the calculation takes into account that the cumulative returns from contributions made in some years could exceed the minimum guaranteed return and these surpluses could be used to offset any deficits between the cumulative returns and the minimum guaranteed returns related to contributions made in other years. The considered models included intrinsic option value approach, measurement of the fair value of variable return to fixed return swaption and the guaranteed return component based on a floorlet instrument i.e. an instrument which pays when the cumulative asset return rate is expected to drop below the reference rate. The formula derives from Black's valuation model<sup>11</sup> and, additionally, due to limitations of the model, considers that in final periods the measurement is based on the expected plan deficit or, when the plan assets exceed the guaranteed amount, is capped at zero.

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<sup>11</sup> That model was first presented in a paper written by Fischer Black in 1976.

- 4.28 The elements affecting defined benefit cost in a period are:
- (a) Employer's contributions payable in a period recognised in profit or loss;
  - (b) A change in the guarantee's fair value that relates to the current period's contribution (employee's and employer's) recognised in profit or loss;
  - (c) Interest cost on unwinding the guarantee component, which is recognised in profit or loss; and
  - (d) Other elements of remeasurements recognised in OCI, which generally include changes in the fair value of guarantee that relate to past contributions.

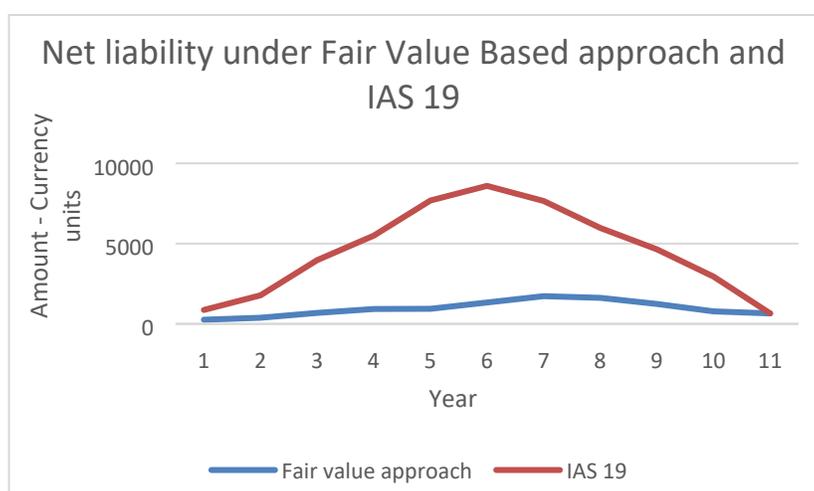
### **Statement of financial position**

4.29 In Year Three, the net liability is as follows:

	Currency units
Plan assets	4,105
Pension obligation	4,787
Net liability	682

4.30 The pension obligation value comprises value of the total contributions made increased by accumulated returns, measured at 4,105 CU, and the value of the minimum return guarantee, measured at 682 CU.

4.31 The graph below shows the actual net liability that has been recognised in the statement of financial position in accordance with Fair Value Based approach and compares it to IAS 19:



4.32 Under the Fair Value Based approach, the actual net liability represents only the minimum return guarantee as the first component of the obligation equals the fair value of the plan assets. Under IAS 19, the pension obligation is, partially because of the backload correction, higher than the plan assets in the earlier years.

## Pension income and costs in comprehensive income

### Current service cost

4.33 Under the approach current service cost includes:

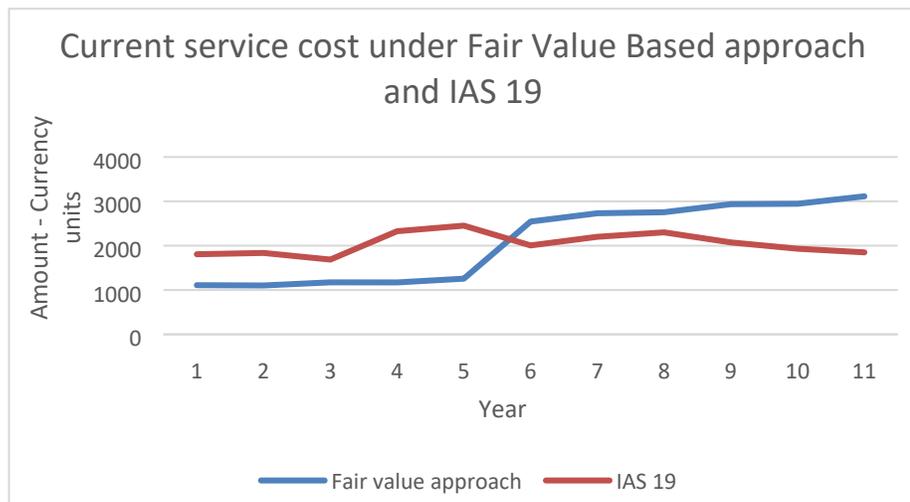
- (a) Employer's contribution for the period based on which the return would be determined; and
- (b) The fair value of the guaranteed return promise linked to the employer's and employees' contributions for the period.

4.34 EFRAG considers that the mentioned components of current service cost reflect the additional salary that the entity would have to pay to the employee for him to be able to purchase a pension plan with the same conditions. EFRAG deems this to be a good proxy for the value of the employee's service, which cannot be directly measured.

4.35 In Year Three, the current service cost is as follows:

	Currency units
Current service cost:	1,173
Employer contribution for the period	935
Value of the guarantee	238

4.36 The graph below shows the actual current service cost that has been recognised in profit or loss each year for both the Fair Value Based approach and under IAS 19.



4.37 As can be seen in the above graph, under the Fair Value Based approach, the current service cost increases in Year Six mainly due to increases in contribution level. This may be compared to IAS 19 model, where the final benefit entitlement is evenly allocated to service years.

### Other pension income and costs

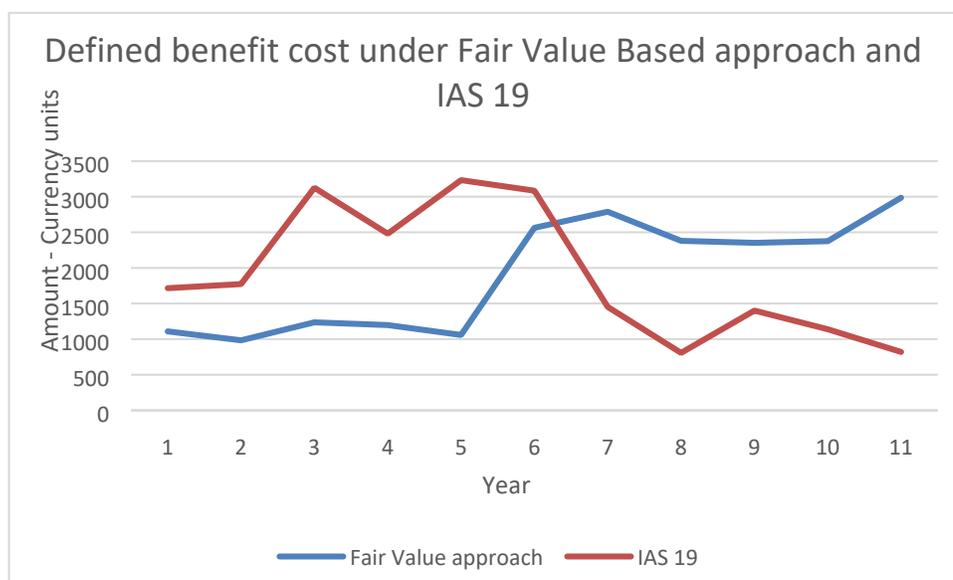
4.38 In Year Three, the following are elements to be recognised in the statement of comprehensive income (Note that positive amounts are income while negative amounts are expenses):

Currency units	
<b>Profit or loss:</b>	
Current service cost	-1,173
Interest expense	-11
<b>OCI:</b>	
Other remeasurements	-52
Total comprehensive income	-1,236

4.39 The interest expense is determined by applying the discount rate to the opening balance of the carrying amount of the net liability.

4.40 Other remeasurements comprise the remeasurement of the asset return rate guarantee in regard to past employer's and employee's contributions.

4.41 Furthermore, the graph below shows the defined benefit cost of the pension plan compared to IAS 19.



4.42 In the graph above, compared to IAS 19 model, under Fair Value Based approach the cost increases in Year Six, mainly due to increase in the level of contributions. The variability of the defined benefit costs under the Fair Value Based approach is due to the time value related to the guarantee which decreases over time and the remeasurement of the value of guarantee which increases in the later years because of low actual returns.

## Fulfilment Value approach

- 4.43 EFRAG has considered that pension plans with an asset-return promise and insurance contracts share a number of characteristics:
- (a) Both obligations may have a long-term duration and therefore there is uncertainty about the amount and timing of the cash flows;
  - (b) Both deliver a benefit promise from the sponsor to the beneficiary;
  - (c) Both include actuarial estimations about financial and non-financial risk. There are estimations on cash inflows and outflows over the life of the insurance contract or pension plan. In addition, the actuarial assumptions are unbiased; and
  - (d) Some insurance contracts, in addition to insurance coverage, provide the policyholder with a portion of the return of a pool of underlying assets. This participation feature is similar to the asset-return promise.
- 4.44 Therefore, one alternative would be a Fulfilment Value approach which relies on concepts from IFRS 17 *Insurance Contracts*, without being fully aligned to it.
- 4.45 It is not necessary to include a full comparison of the Fulfilment Value approach to the model in IFRS 17. However, one fundamental difference is that the measurement of insurance contracts includes a contractual service margin, that represents the unearned profit that the entity recognises as it provides services. In a pension plan, the entity is receiving services from the employee and does not recognise a profit.

### The approach

- 4.46 There are no changes to the measurement of the plan assets compared with IAS 19. They are thus measured at fair value.
- 4.47 The pension obligation includes:
- (a) Expected future cash flows, considering the life of the pension plan, which comprise the following:
    - i) Inflows in the form of future contributions made by the employer and the employee and the value of the guarantee (for all paid contributions to date). The contributions made by the employer and the value of the guarantee are used as a proxy to measure the value of future employee services ;
    - ii) Expected outflows in the form of estimated final benefit entitlement;
  - (b) The above are discounted to present value using a discount rate that reflects the plan assets because the cash outflows are based on the returns on plan assets.
- 4.48 Unlike IAS 19, no backload correction is applied under the approach. Furthermore, EFRAG considers that in addition to the above components in paragraph 4.47 above, a risk adjustment would be required which relates to non-financial risk (i.e. an outflow) and computed separately. Refer to paragraphs 4.54 to 4.55 for more information. In this Discussion Paper example, no risk adjustment is included.

- 4.49 EFRAG considers that expected future cash flows are looked at from an entity's perspective. EFRAG also considers that the computation of the cash flows should be unbiased and be probability-weighted (i.e. expected value). These future cash flows are updated each reporting period. EFRAG notes that in the example in this Discussion Paper, we only have one scenario.
- 4.50 EFRAG has considered that the service cost should reflect the value of the employee services. Since this cannot be directly measured, EFRAG considers that the future contributions made by the employer and the value of the guarantee (for all paid contributions) could be used as a proxy. In addition to this, future employee contributions would also be part of the expected inflows as this is an expected cash inflow arising due to the pension plan.
- 4.51 EFRAG considers that the discount rate for the pension obligation would reflect the rate of the plan assets because there is a link with the asset-return promise. However, even though there is a linkage with the plan assets, EFRAG considers that the discount rate for the pension obligation would reflect only relevant factors. That is, the liability discount rate would be consistent with observable current market prices (if any) for financial instruments with cash flows whose characteristics are consistent with those of the pension obligation, in terms of, for example, timing currency and liquidity.
- 4.52 For example, an adjustment to the liability discount rate would be made if the duration of the assets is different from the expected duration of the pension obligation. Therefore, the pension obligation discount rate may not be identical to the discount rate of the plan assets. If observable market rates are not available, the entity would need to estimate the appropriate rates.
- 4.53 However, in the example in this Discussion Paper, the same discount rate as the plan assets are used to discount to present value the expected inflows and outflows, relating to the pension obligation. We note that the projected unit credit method is not used in this approach.
- 4.54 EFRAG considers that the characteristics of the pension obligation discount rate does not relate to only financial risks but also to non-financial risks. Therefore, EFRAG considers that a risk adjustment could be included in the measurement and would relate to relate to the uncertainty of the amount and timing, due to these non-financial risks, for an entity to fulfil its pension obligation. For example, there could be uncertainty about mortality assumptions which may affect the amount and timing of the total benefits at retirement. Therefore, the risk adjustment would be an additional amount on top of the discounted value of expected future cash flows, such that the total is equal to the level of certainty equivalent for that entity with respect to non-financial risks.
- 4.55 Note that EFRAG has not considered these non-financial risks, e.g., risks relating to mortality, employee turnover, etc in the example in the Discussion Paper because there is only one employee and one scenario up to the end of the pension plan. Therefore, in the example in the Discussion Paper, there is no risk adjustment. However, in general the risk adjustment could convey information to the users about the amount charged by the entity for the uncertainty arising from the non-financial risk about the amount and timing of cash flows. The risk adjustment would be remeasured at each reporting period.

- 4.56 EFRAG considers that the value of the guarantee consists of both the intrinsic value and the time value of money and forms part of the fulfilment cash flows. It effectively represents uncertainty relating to financial risk. EFRAG considers that, as stated above, this would also form part of the value of employee service because the entity has guaranteed the employee benefits. It is computed based on employer and employee contributions that have already been made and not on expected future contributions. The implication of not considering the value of the guarantee for future contributions is to remove the straight-line allocation of benefits that have a materially higher level in later years than in earlier years. In the example in this Discussion Paper, the value of the guarantee is included in the cash flows rather than being adjusted in the discount rate. The value of the guarantee is measured separately and it is remeasured at the end of each reporting period.
- 4.57 Further explanations are provided below when illustrating the example in this Discussion Paper.

### **Variations of the Fulfilment Value approach considered**

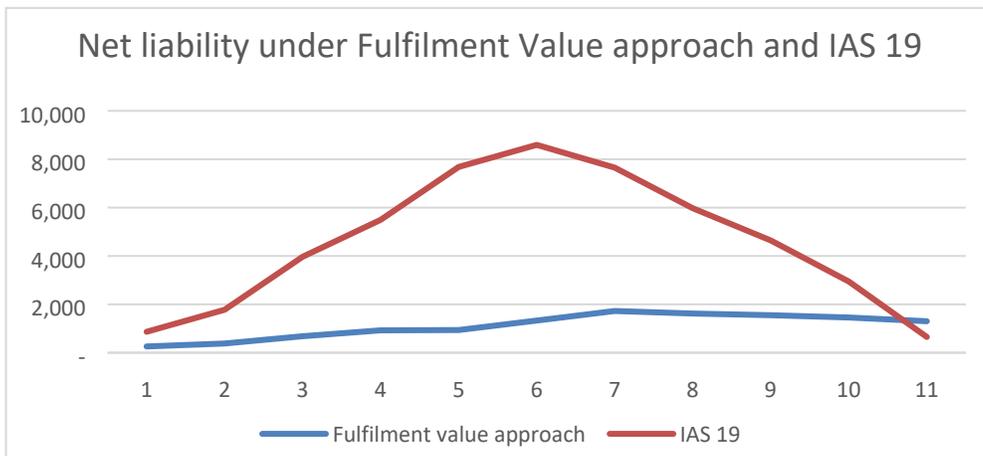
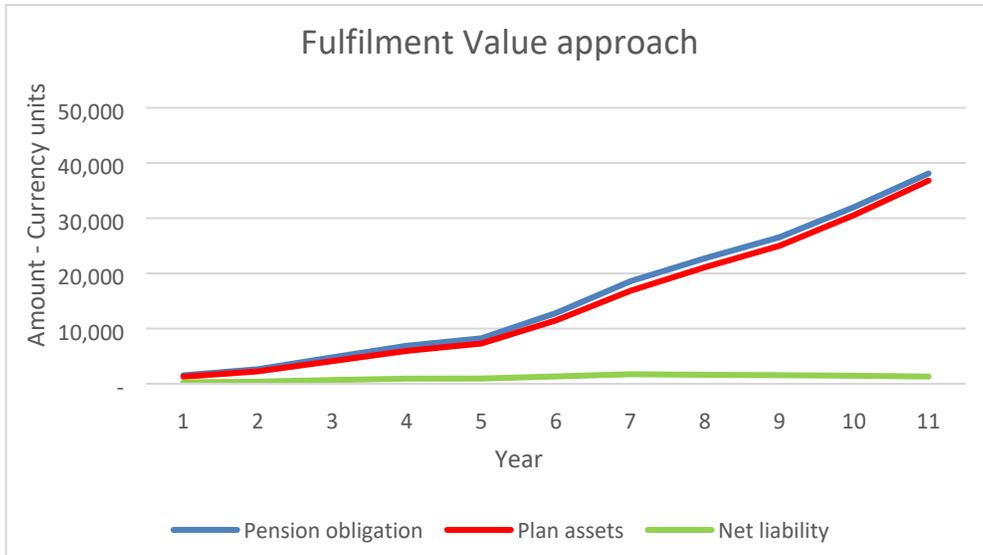
- 4.58 EFRAG considered some variations of the Fulfilment Value approach as follows:
- (a) Considering only the employee contributions as inflows and not including the employer contributions. However, EFRAG considered that inflows represented future services that the entity expected to receive and therefore, using employer contributions was a good proxy to measure that future service for reasons explained in paragraph 4.50.
  - (b) An approach similar to the Fulfilment Value approach, considered in this Discussion Paper, except that the value of the guarantee is computed based on all expected employer and employee contributions to be made over the life of the pension plan. As a reminder, in this Discussion Paper, the value of the guarantee is computed based on employer and employee contributions that have already been made. EFRAG considered the latter computation to be relatively simpler and less complex compared to computing the value of the guarantee over the life of the pension plan, and allocating the amount to the years of service.

### **Statement of financial position**

- 4.59 In Year Three, the net pension liability is as follows:

	<b>Currency units</b>
Plan assets	4,105
Pension obligation	4,787
Net liability	<u>682</u>

- 4.60 The first graph below shows the net pension liability and its components recognised in the statement of financial position for the Fulfilment Value approach. The second graph compares the net liability to IAS 19.



- 4.61 In the example, since the same discount rate is used for both the plan assets and the pension obligation, the net liability under the Fulfilment Value approach is effectively the value of the guarantee. Again the discount rate for both the plan assets and the pension obligation may not be the same. Refer to explanation in paragraphs 4.51 to 4.52.
- 4.62 The net liability under the Fulfilment Value approach is lower than that under IAS 19. This is because of the lack of the backload correction and the use of the expected return rate of the plan assets when discounting the pension obligation.
- 4.63 As a summary, under IAS 19, the pension obligation is the accumulated portion of service already rendered by the employee which is discounted using the High Quality Corporate Bond Rate while the Fulfilment Value approach is more forward looking, i.e., the pension obligation is the present value of inflows and outflows considering the life of the pension plan (the discount rate used reflects the plan asset rate).

## Pension income and costs in comprehensive income

### **Current service cost**

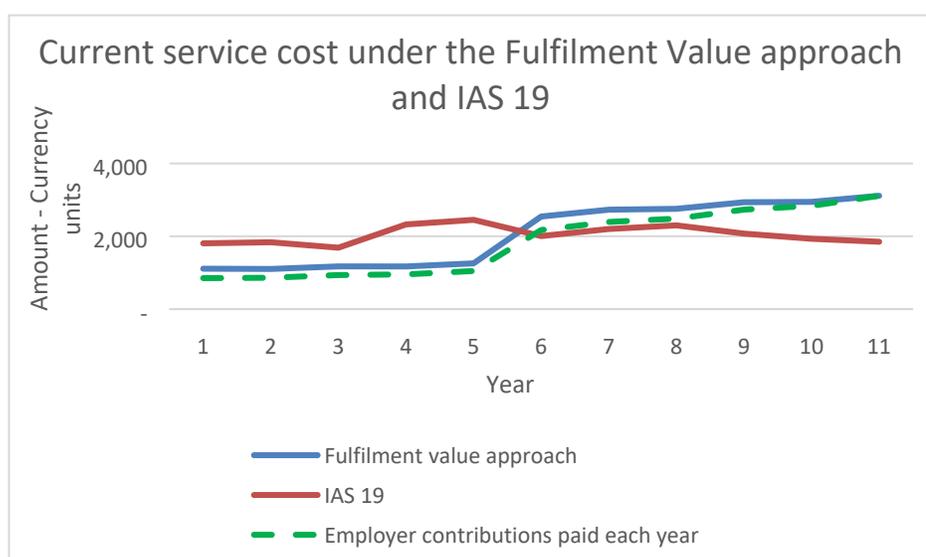
4.64 The current service cost per year under the approach, consists of:

- (a) the contributions made by the employer in each reporting period; and
- (b) fair value of guarantee on the asset return-promise relating to both employer and employee contributions made in each reporting period.

4.65 In Year Three, the current service cost is as follows:

<b>Currency units</b>	
Current service cost:	1,173
Employer contribution for the period	935
Value of the guarantee	238

4.66 The graph below shows the actual current service cost that has been recognised in profit or loss each year for both the Fulfilment Value approach and under IAS 19:



4.67 As can be seen in the above graph, the current service cost from the Fulfilment Value approach mainly follows the employer's contributions which increase over time.

4.68 As explained above, the main difference with IAS 19 is the lack of backload correction and the fact that under IAS 19 the projections and the discounting are done at different rates.

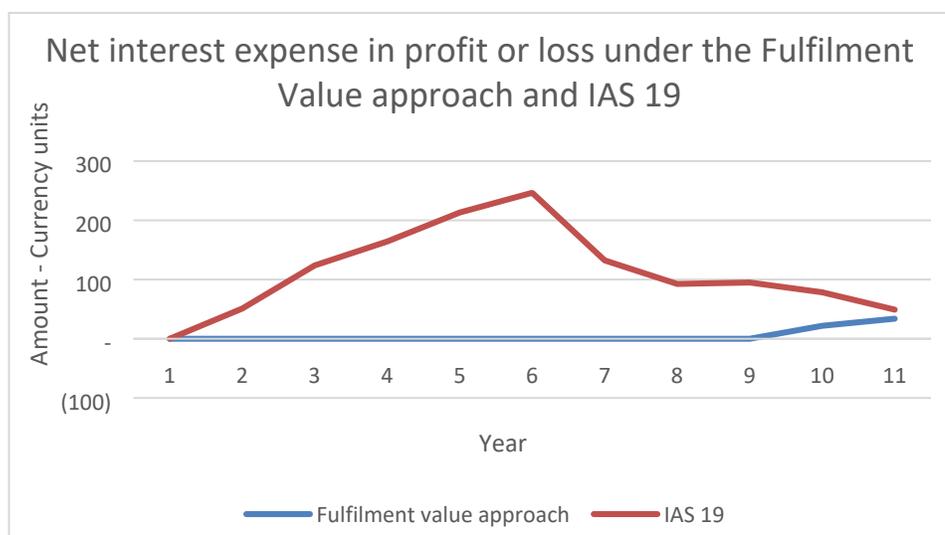
### **Other pension income and costs**

4.69 In Year Three, the following are elements that EFRAG considers to be recognised in the statement of comprehensive income (Note that positive amounts are income while negative amounts are expenses):

	Currency units	Currency units
<b>Profit or loss:</b>		
Current service cost		-1,173
Return on plan assets	454	
Interest expense	-454	
Net interest expense	<u>          </u>	0
<b>OCI:</b>		
Remeasurement of the guarantee		-63
Total comprehensive income		<u><u>-1,236</u></u>

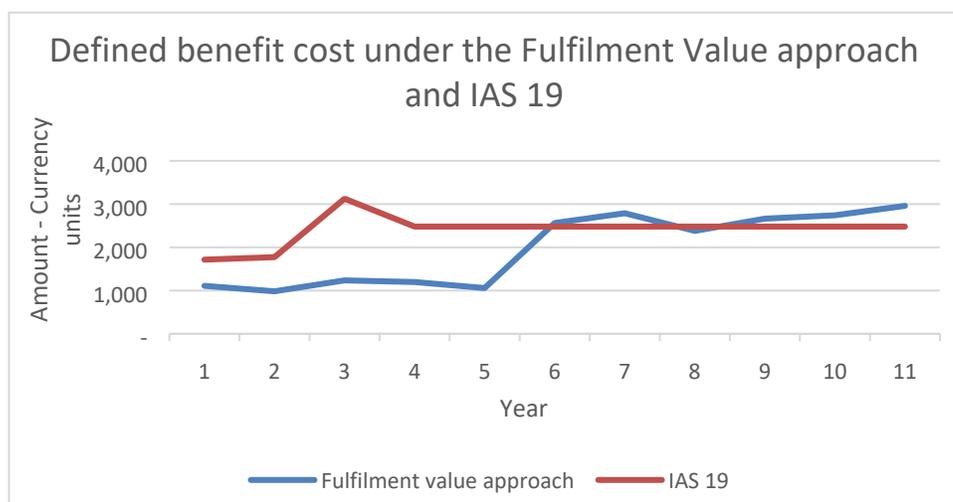
- 4.70 The return on plan assets is computed the same way as in IAS 19 and is the same amount. This represents the income from the assets each year using the actual asset rate of the year. The only difference with IAS 19 is presentation in the statement of comprehensive income as the plan asset return is split for presentation purposes into return on plan assets in profit or loss and remeasurement relating to return on plan assets in other comprehensive income while there is no split under the Fulfilment Value approach.
- 4.71 The interest expense for the pension obligation is the change in the pension obligation caused by the time value of money and changes in financial assumptions. Note that this amount incorporates accretion of interest, changes in the discount rates and changes in future estimates due to changes in rates (in this case representing a change in the total benefits at retirement which is payable just after Year Eleven). In the example, the net interest is zero as, in the particular example, the pension obligation is the same as the plan assets in terms of amount and the discount rate being used. However, there this will not always be the case. In those circumstances it would be relevant to consider whether all interest movements for the net liability should be recognised in profit or loss or should be split between profit or loss and other comprehensive income. The split would be consistent with the requirements in IAS 19. In order to split interest rate changes between profit or loss and other comprehensive income, there would be challenges which include (i) on what basis the plan assets should be split between profit or loss and other comprehensive income, (ii) whether and on what basis the accumulated amounts in other comprehensive income would be zero, and (iii) whether there should be recycling of amounts from other comprehensive income to profit or loss.
- 4.72 The value of the guarantee is recomputed at each reporting period based on the accumulated employer and employee contributions that have been made. The remeasurement of the guarantee represents the remeasurement of past contributions that were made and also an implicit time value component. EFRAG considers that, similar to the interest movements described above, the change caused by the time value of money could be recognised as part of interest expense in profit or loss and the other components relating to changes in discount rates and changes to the nominal value of the guarantee could be recognised in other comprehensive income. In the example in this Discussion paper, the whole remeasurement of the guarantee is recognised in other comprehensive income. EFRAG notes that there is no value of the guarantee under IAS 19.

- 4.73 The graph below shows the actual net interest expense (i.e. the net of interest income from the pension assets and interest expense from the pension obligation) that has been recognised in profit or loss each year for both the Fulfilment Value approach and under IAS 19:



- 4.74 Up to Year Nine, the plan assets and the pension obligation (excluding the guarantee) are the same amount in the example. The discount rate used to unwind interest for both the plan assets and the pension obligation (excluding the guarantee) is also the same. Therefore, the net interest expense is zero. However, as from Year Nine, the plan assets are lower than the guaranteed benefits. Therefore, the interest income is also lower than the interest expense.

- 4.75 Furthermore, the graph below shows the actual comprehensive expense of the pension plan for the Fulfilment Value approach compared to IAS 19:



- 4.76 In the graph above, under the Fulfilment Value approach, the total comprehensive expense increases over time. This is mainly because it reflects the employer's contributions being the proxy for employee service, which also increase over time.

## CHAPTER 5: ASSESSMENT OF THE SOLUTIONS

The approaches discussed in Chapter 4 each have their advantages and disadvantages. This chapter describes these by listing differences in how the approaches meet the qualitative characteristics of useful financial information included in the IASB's Conceptual Framework for Financial Reporting.

### Summarised assessment of the approaches

5.1 The assessments of the various approaches considered in this Discussion Paper are summarised in the table below. The table, and the following explanations, include only parameters that distinguish the approaches. This means that the table does not reflect general assessments on the extent the different approaches meet the qualitative characteristics. It also, for example, means that the assessment does not cover issues that could arise from not being able to clearly define the types of pension plans for which an approach should be applied. The scope of the approaches considered in this paper is explained in Chapter 2. An unclear scope would thus affect all the approaches.

Qualitative characteristics	IAS 19	Capped Asset Return approach	Fair Value Based approach	Fulfilment Value approach
The information is relevant:				
• The approach always reflects how the pension obligation will be settled	✗	✗	🟡	✗
• The economic covariance between plan assets and pension obligation is reflected	✗	🟡	✓	✓
• A net liability is always recognised when the assets held in a pension scheme would be expected to be insufficient to cover the payments to the employee at retirement for the service provided to date	✗	✗	✓	✓
•				
• Current service cost reflects the value of the pension the employee has earned in the period	🟡	🟡	✓	✓
• Information is relevant for assessing stewardship	✗	🟡	✓	✓

The information is a faithful representation	✓	✓	☺	✓
Requirements can be applied retrospectively	N/A	✓	☺	☺
Similar elements of pension plans are accounted for similarly to plans under IAS 19	N/A	✓	✗	✗
The information is easy to understand	✗	✗	✓	✗
Implementation of the approach will not be costly	N/A	☺	✗	✗
Information will not be costly to provide on an ongoing basis*	✗	✗	✗	✗

\* Although all the approaches have been marked with an 'X', the costs associated with them are assessed to vary.

Symbol	Explanation
✗	The approach does not reflect the qualitative characteristic.
✓	The approach reflects the qualitative characteristic.
☺	The approach reflects to some extent the qualitative characteristic / whether the approach reflects the qualitative characteristic depends on the circumstances.
N/A	The effect is not relevant to consider for the approach.

## The information is relevant

- 5.2 One of the main characteristics of useful financial information is that it is relevant. Information should thus have the potential to make a difference when deciding to provide resources to an entity (e.g. by buying shares in the entity or providing a loan) and when assessing the stewardship of the entity's management.
- 5.3 When assessing whether to provide resources to an entity, the future cash flows that would be received from the entity in return (the expected cash flows), would often be considered together with the uncertainty related to this expectation (the variance in expected cash flows). Relevant information is thus information that can make a difference in the assessment of the future cash flows.
- 5.4 When it comes to providing information useful for predicting future cash flows, the following observations could be made:
- (a) It could be argued that the most useful information for making predictions about the expected future cash flows should reflect how the pension obligation would be settled. None of the approaches reflect this. Similar to the approach included in IAS 19 the approach under which the expected return is set to equal the discount factor and the Fulfilment Value approach reflects an estimate of the resources needed to fulfil the obligation to the employee, and not the amount that the entity

would pay to transfer the obligation and the associated risks to a third party. The approaches reflect how most pension obligations are settled, but may not always reflect the most likely manner of settlement for all plans. In addition, under the approach which estimates future benefits by capping the expected return to the discount rate, there may be situations where the measurement of the pension obligation is (is not) based on the guaranteed return even though it is expected that the actual return will be higher (lower) than the guaranteed return. The Fair Value Based approach would also not reflect how the pension obligation is likely to be settled. As noted above, the Fair Value Based approach presented in this Discussion Paper is a modified Fair Value Based approach. A 'pure' fair value model would reflect what an entity would need to pay to an external party to take over the pension obligation – which would not necessarily represent the outflow of resources the entity would incur if it settles the pension plan directly with the employee.

- (b) If the variance in reported profit or loss over time should be an indicator of the variance of the expected net cash inflows, economic covariances that impact future cash flows should be reflected in the measurement of assets and liabilities (that will be reflected in profit or loss). For the pension plans considered in this Discussion Paper, the promised benefits depend on the return on plan assets if this is higher than the minimum guaranteed return. In these cases, the only cash outflows occur when the employer is making its contribution. Accordingly, fluctuations in profit or loss resulting from applying different measurement bases to the pension assets and the pension obligation would not reflect the economic covariance between the assets and the obligation. The covariance between plan assets and the pension obligation is best reflected under the Fair Value Based approach (because both the assets and the obligation will be measured at fair value) and the Fulfilment Value approach. The covariance will be less visible when the model under which the expected return is capped to the discount rate. Under this approach, different measurement bases are used for the pension assets and the pension obligation. However, in cases in which an employee's service in later years will not lead to a materially higher level of benefit than in earlier years and the (uncapped) expected return rate is higher than the discount rate the approach could appropriately reflect the covariances. The approach therefore better reflects the covariance than when the requirements for defined benefit obligations included in IAS 19 is applied for the types of pension plans included in the scope of this Discussion Paper.
- (c) Some financial statement users – such as the employees of the entity – may be particularly interested in assessing whether a pension plan is underfunded. For these financial statement users, it may therefore be relevant to reflect in the financial statements if the outflow of resources an entity would have when settling the pension obligation is expected to be higher than the inflows it would receive from selling the plan assets at that moment. As described above in paragraph 2.18, the requirements included in IAS 19 would not always result in a net liability being recognised when the assets held in a pension scheme would be expected to be insufficient to cover the payments to the employee at retirement for the service provided to date. Such an outcome could occur under the same circumstances when the asset return is capped to the discount rate. For example, under the capped asset return approach, the discount rate can be higher than the guaranteed return rate, which, again, is higher than the expected actual return rate as the

actual expected return rate is only capped to the discount rate. If the discount rate is higher than the expected actual return rate, the two rates are not similar. Both the Fair Value Based approach and the Fulfilment Value approach would, on the other hand, always result in the recognition of a net liability in such circumstances.

- (d) In order to make predictions about future margins and hence future cash flows, information about pension cost related to a particular period could be useful. The cost related to a particular period could be defined in different ways. Under the Fair Value Based approach and the fulfilment value approach, current service cost represents the contribution of the employer for the period and the value of the guaranteed return provided by the employer for both the contributions of the employer and the employee. When an employee's service in later years will lead to a materially higher level of benefit than in earlier years, IAS 19 and the capped asset return approach will result in current service cost representing a proportion of the total pension benefit, it is expected the employee will receive at retirement. This is also a measure of the cost related to a particular period. However, as exemplified above under (c), the measurement of the pension obligation, and hence the current service cost, may not reflect the actual outflow of resources expected. It could therefore be argued that this measure is less useful when making projections about future cash flows than the measure resulting when applying the Fair Value Based approach or the fulfilment value approach.

- 5.5 For the assessments of management's stewardship, it could be argued that for the pension plans included in the scope of this Discussion Paper, the financial statements should reflect that the entity is providing the employee with a right to receive the higher of a fixed return and a variable return. This promise has a value. Therefore when assessing the staff expenses of an entity, it would be useful for the assessment of stewardship to have the value of the right to transform a variable return into a fixed return (if higher) reported in the financial statements. Under both the Fair Value Based approach and the Fulfilment Value approach, the value of the right would be reflected. The approach under which the expected return on plan assets is capped to the discount factor would not reflect the value of the right.

### The information is a faithful representation

- 5.6 Another main characteristic of useful financial information is that it reflects what it purports to represent – faithful representation.
- 5.7 When it comes to faithful representation, it can be observed that the approach capping the expected return to the discount factor is based on IAS 19 requirements for defined benefit pension plans. To the extent that it assesses that IAS 19 results in reliable information this would then also be the case for the approach capping the expected return to the discount factor. Since in most cases there are no observable market prices for pension obligations, the fair value needs to be estimated. This estimation may be more complex than the estimations required under the approach capping the expected returns to the discount factor, and potentially less reliable.
- 5.8 The Fair Value Based approach may accordingly result in information that is less reliable than the approach capping the expected returns. The Fulfilment Value approach involves actuarial estimates for a plan that could be for many years and an entity would need to determine the expected value, i.e., probability-weighted mean of a full range of possible

outcomes without undue cost or effort. Changes in the actuarial estimates made in subsequent periods can be significant but this does not necessarily mean that the estimates were wrong when they were made. Assumptions are reviewed and updated each reporting period to consider current conditions at the end of the reporting period. It is therefore assessed that it is possible to make sufficiently reliable estimates under the Fulfilment Value approach.

### Requirements can be applied retrospectively

- 5.9 Financial information is most useful when it can be compared between entities and with past financial information of the same entity.
- 5.10 If a new approach for accounting for types of pension plans is introduced, it may reduce comparability between financial years of an entity (unless restatement of prior financial statements is made). Whether the information will be comparable with past years will therefore partly depend on the transition requirements, but also on whether it would be possible to gather the information necessary to restate previous years in accordance with the new requirements.
- 5.11 The information needed for calculating the pension obligation in accordance with the approach under which the expected return is capped to the discount factor, should in principle have been collected for the IAS 19 calculations. Changes in the pension scheme could result in retrospective application would not be possible under this approach, but it would generally be possible to apply the approach retrospectively.
- 5.12 On the other hand, it may be difficult to apply the Fair Value Based approach retrospectively unless a sufficient time gap between the finalisation of new requirements and the effective date is introduced that would allow entities to collect the data used for presenting comparative figures under the new requirements while still reporting under the old requirements. Part of the information needed would be available from the calculation required under IAS 19, but some input may be more difficult to collect retrospectively.
- 5.13 An entity may be able to apply the Fulfilment Value approach retrospectively, but it would depend on the extent to which the entity has information, e.g., relating to cash flows from prior years. It can be noted that IFRS 17 requires retrospective application unless impracticable. If impracticable, there are two other approaches which could be used instead.

### Similar elements of pension plans are accounted for similarly to plans under IAS 19

- 5.14 In this regard to whether financial information is comparable between entities, it could – in relation to pension plans within the scope of this Discussion Paper - be assessed whether the new approach provides information that is comparable with the information resulting from applying IAS 19 to pension plans outside the scope of the project. In assessing this, it is considered whether similar elements of pension plans are accounted for similarly under a proposed new approach and IAS 19.
- 5.15 For the pension plans included in the scope of this Discussion Paper, it could thus be assessed whether the fixed-rate return element – that is the minimum guaranteed return

- would be accounted for similarly under the approaches considered above and IAS 19. In situations in which the guaranteed return would de facto determine the amount to be paid by the entity to the beneficiary (because the guaranteed return would be higher than the variable return), the pension obligation would then be measured similar to how it would have been measured under IAS 19.

- 5.16 Under the approach capping the expected return to the discount rate, this element is accounted for similarly as under IAS 19. The variable element is accounted for differently under the approach than how it would be under IAS 19. However, if this 'variable' element is considered sufficiently different from other elements accounted for in accordance with IAS 19, a different accounting treatment may not impair comparability. Conversely, the Fair Value Based approach is different from IAS 19, so some elements of the pension obligation would be accounted for differently than similar elements in a pension scheme accounted for under IAS 19.
- 5.17 The information under the Fulfilment Value approach would be comparable for plans that are within the scope of this project. However, comparability may be affected for plans that apply IAS 19. For example, the treatment of similar elements of pension plans under IAS 19 and under the Fulfilment Value approach are different as follows:

IAS 19	Fulfilment Value approach
Discount rate applying high quality corporate bond rate.	Discount rate reflects current markets and the extent to which there is dependence on the asset returns.
Attributions of benefits on a straight-line basis when an employee's service in later years will lead to a materially higher level of benefit than in earlier years.	Attributions of benefit reflect the contributions of the employer and a value of the guarantee for each period.
No risk adjustment.	Risk adjustment included in measurement.

### The information is easy to understand

- 5.18 Information which is unnecessarily complex is less useful to understand than less complex information.
- 5.19 If it is assumed that information is easy to understand if it is easy to explain what it means by means than how it is 'computed'.
- 5.20 The approach capping the expected return to the discount rate would not be easy to understand. It would be difficult to explain what the figures represent without explaining how they are calculated. When a backload correction is included in the computations, it can be explained as the total expected return, capped at the discount rate, on all contributions that on a straight-line basis that can be attributed to the current and past years, discounted by the interest on high quality corporate bonds. However, in cases in which an employee's service in later years will not lead to a materially higher level of benefit than in earlier years and the (uncapped) expected return rate is higher than the discount rate the figures resulting from the approach could relatively easily be reconciled with the contributions to the pension scheme. In such situations, the figures would thus

be easier to explain than those resulting from applying the requirements in IAS 19 for defined benefit plans.

- 5.21 The figures resulting from applying the Fulfilment Value approach may also not be easy to explain. This is partly because the amount reflects expectations about the future salary and various assumptions, for example, assumptions relating to the pension obligation discount rate.
- 5.22 Under the Fair Value Based approach, the pension obligation would represent the amount that the entity would have to pay to transfer the obligation to a third party, without considering own credit risk and likelihood of modifications or curtailments. It would thus be relatively easy to explain what the figures resulting from applying that approach would represent.

### The information will not be costly to provide

- 5.23 Financial information can be costly to prepare. Therefore the cost of providing the information should also be taken into account before requiring particular information.
- 5.24 The three suggested approaches may all be as costly or costlier to apply than the requirements in IAS 19 for defined benefit obligations.
- 5.25 There will be cost associated with implementing any of the three suggested approaches. However, as the capped asset return approach would be quite similar to the current IAS 19 requirements, it could be expected that this approach will be significantly less costly to implement than the Fair Value Based approach and the fulfilment value approach.
- 5.26 The capped asset return approach could also be expected to be the least expensive approach to apply on an ongoing basis. The approach would require the pension obligation to be measured in accordance with IAS 19 – only with a capped return rate - and would, accordingly, be as costly as IAS 19 to apply.
- 5.27 The Fair Value Based approach may need the use of some unobservable input and could be costlier than the estimations required under IAS 19. Measuring the fair value of the pension obligation would require an estimate of the fair value of the assets held and a fair value of the guaranteed return promise. While the former will anyway have to be estimated in order to measure the pension assets, the measurement of the guarantee can be complex and hence costly. Option pricing models and/or stochastic simulations could be used for the estimation, however, issues could arise with estimating volatility (over a long period) or the sensitivity to the considered scenarios.
- 5.28 It is similarly assessed that the fulfilment value approach, on an ongoing basis, will not be less costly to apply than the requirements in IAS 19 for defined benefit plans.

## CHAPTER 6: DISCLOSURE REQUIREMENTS

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- 6.1 IAS 19 prescribes extensive disclosure in relation to defined benefit plans. Entities are required to provide information about the following:
- (a) The nature of the benefits provided;
  - (b) A description of the risks to which the plan exposes the entity;
  - (c) A reconciliation of the movements in the period for the net defined liability/asset;
  - (d) A disaggregation of the fair value of the plan assets;
  - (e) The significant actuarial assumptions used to determine the defined benefit obligation;
  - (f) A sensitivity analysis for each significant actuarial assumption;
  - (g) A description of any asset-liability management strategies;
  - (h) Information about the maturity profile of the defined benefit obligation.
- 6.2 Plans with asset-return promise as defined in this DP are specific in relation to the nature of benefits provided, which include both a minimum return guarantee and a promise based on the return on the underlying assets. EFRAG considers that a description of these characteristic would be covered by the disclosure requirement in 6.1.a above.
- 6.3 The entity is exposed to the payment of additional contributions to the extent that the minimum guarantee exceeds the future expected returns. EFRAG considers that disclosure of the relationship between the two and the likelihood of the guarantee exceeding the future expected return would be covered by the disclosure requirement in 6.1.b above.
- 6.4 EFRAG considers that the entity should disclose its approach in determining the expected return on the plan assets, and, if a reasonable change in that assumption would lead to an increase in future contributions, what the effect would be on the contribution in the next annual reporting period.
- 6.5 EFRAG notes that in its current Disclosure Initiative project, the IASB has selected IAS 19 as one of the IFRSs for its Standard-level review of existing disclosures. At this stage, EFRAG considers that, regardless of the measurement of the defined benefit obligation, the disclosure requirements in IAS 19 are appropriate for plans with an asset-return promise.
- 6.6 Some additional disclosure could be needed under the approaches explored in this DP. In the capped asset return approach, EFRAG considers that, if the entity is capping the projection rate at the discount rate, the fact should be disclosed and the entity should indicate that the nominal value of the benefits is higher than the undiscounted defined benefit obligation. However, there should not be a requirement to determine this higher amount.

- 6.7 In the Fair Value Based approach, EFRAG considers that the entity should comply with the applicable disclosure requirements in IFRS 13 *Fair Value Measurement*, subject to the appropriate aggregation and consideration of materiality. IFRS 13 requires entities to disclose information about the valuation techniques and inputs used to develop the measurement.
- 6.8 The illustration of the fulfilment measurement approach in this DP has not been fully developed and EFRAG considers that additional disclosures may be needed once the approach is articulated in the details. For instance, if the approach would require or allow the entity to split the interest rate changes between profit or loss and OCI then the entity would be required to indicate the fact and explain the basis for the split.

## CHAPTER 7: OTHER POSSIBLE APPROACHES AND THEIR IMPLICATIONS

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### Introduction

- 7.1 One of the concerns that was raised about the application of IAS 19 requirements to these types of plans is that, everything being equal, an increase in the expected rate of future returns (which is used to project the total benefit at retirement) increases the pension obligation at the reporting date, although the entity will not need to pay additional contributions.
- 7.2 In this chapter, EFRAG briefly describes other possible approaches to address the reporting for plans with an asset-return promise.

### D9 Employee Benefits Plans with a Promised Return on Contributions or Notional Contributions

- 7.3 In the past, the IFRS Interpretations Committee ('IFRS IC') explored an approach under which the sponsoring entity would first determine the liability for the guaranteed promise using the IAS 19 requirements, The entity would then compare this amount to the fair value of the plan assets upon which the benefits were dependent; if the latter amount would be higher, the entity would accrue an additional liability equal to the difference between the two.
- 7.4 IFRS IC published in 2004 the draft Interpretation D9 *Employee Benefits Plans with a Promised Return on Contributions or Notional Contributions*. The Committee noted that projecting the benefits at the higher of the expected return and guaranteed return rate was not appropriate, because the discount rate in IAS 19 does not reflect the expected return. For this reason, the Committee concluded that the projection of the benefits should be based on the guaranteed rate, and the return-based promise should be measured on a stand-alone basis. The Basis for Conclusion stated that the proposed approach acknowledged the nature of these type of plans as defined benefit plans, but reduced the complexity.
- 7.5 Draft Interpretation D9 also specified that if the benefits were subject to vesting conditions (such as completing a minimum period of service), the probability of forfeiture would be incorporated in the measurement of the asset-return promise. Also, the adjustment due to the recognition of the additional liability would be treated as a separate pension cost.
- 7.6 Reactions to Draft Interpretation D9 were mixed. Some respondents noted that the split of the liability into the components failed to capture the time value of the option. The Committee eventually decided not to finalise the Interpretation.
- 7.7 This was due mainly to a scoping issue. The IFRIC concluded that it could not find a consensus on a suitable scope that would at the same time improve the accounting for a sufficiently large population of plans and avoid arbitrary distinction between economically similar plans.

- 7.8 The D9 approach removes the need to project future returns on the plan assets, therefore eliminating the counterintuitive effect that, when the projection increases, the liability also increases although there is no additional contribution to be paid. Paragraph 148 of the Basis for Conclusion in IAS 19 notes that, in the IASB Board's view, projecting the benefit on the basis of current assumptions of future investment performance is consistent with estimating the ultimate cost of the benefit, which is the objective of the measurement of the defined benefit obligation. However, the assessment of the future returns is judgmental and paragraph 78 of the Basis for Conclusion acknowledges that it could not be determined in an objective way.
- 7.9 The D9 approach would however be less simple to apply if the entity does not hold the assets upon which the benefits are dependent. In that case, the entity needs obtaining the fair value of a notional portfolio.
- 7.10 If this approach was applied to the illustrative example and compared to the outcome of IAS 19, these would be the main differences:
- (a) The net liability would be lower in the first years, because the pension obligation would be based only on the amount of the total guaranteed benefit. The fair value of the pension plans in the first years would be lower than the pension obligation, due to the fact that the rate of contribution increases in the later years);
  - (b) The initial forecast of the D9 approach would include an adjustment to the pension obligation at Year Ten, when the fair value of the plan assets would start to exceed the pension obligation based on the total guaranteed benefit. From that point, the net liability under the D9 approach would be nil;
  - (c) The net liability actually recognised under the two approaches would re-align at Year Nine, when for the first time the total guaranteed benefit exceeds the projected final fair value of the plan assets at retirement. The pension obligation under both approaches is now measured based on the total guaranteed benefit, The adjustment to the pension obligation initially forecast in the D9 approach would not occur;
  - (d) The initial forecast would project the same expected cumulated pension cost – however, the presentation would be different, due to the separate presentation of the adjustment for the recognition of the additional liability;
  - (e) The actual cumulated pension cost would be lower. In the first few years both the service and the interest cost are lower under the D9 approach. The service cost is calculated based on the total guaranteed amount and the interest cost is determined on a lower liability;
  - (f) The cumulated credit balance in OCI at retirement would then be lower – since the positive OCI impact of the decreasing discount rates would be determined on a lower net liability.
- 7.11 In other circumstances (i.e., when at retirement the fair value of the assets exceeds the total guaranteed amount) the cost recognition pattern under the D9 approach may increase significantly in later years.

- 7.12 In substance, the D9 approach separates the obligation in two components – the asset-return promise and the guarantee, and measures them independently. The obligation is then measured based on the higher of these. There are other approaches that treat these two components separately.
- 7.13 If a plan within the scope of this Discussion Paper is split into components, it could be argued that in relation to the return-based promise, the entity is only liable to pay its contribution and the risk of the variability to the returns is borne by the beneficiary. This component could be seen as a defined contribution plan and treated correspondingly. The entity is potentially exposed to additional contributions only for the guarantee - this could be separately accounted for using its intrinsic value, its fair value or another estimate of the potential outflows.
- 7.14 This analysis applies to those plans where the only source of uncertainty is the variability of future returns; in other words, there are no demographic risks. The separation would be more complex if the variability of the benefit at retirement depended on factors such as employee turnover or longevity.
- 7.15 There would still be aspects that would need to be elaborated. The entity could be required to measure only the guarantee related to amounts of contributions already paid; alternatively it could be required to apportion the total expected cost of the guarantee on the period of service using a straight-line method.
- 7.16 EFRAG has not further elaborated on what the measurement basis for the guarantee should be. Option pricing models would normally be used to determine fair values, but it may be complex to apply to guarantees that are affected also by non-financial factors.
- 7.17 We also observe that an intrinsic value approach would result in the entity not recognising any amount on its statement of financial position when the guarantee is out of the money at the reporting date (assuming the plan is funded). This may lead to not appreciating the risk exposure of the entity to future changes in the investment returns, and would require at a minimum robust disclosure in the notes of the characteristics of the guarantee:
- (a) Whether it is a fixed or a minimum return;
  - (b) Their level, and whether it is set on nominal or real terms;
  - (c) The period over which they apply (cumulative or period-by-period);
  - (d) The extent to which they may be reset during the application period.
- 7.18 The different types of risks in a pension plan could be another basis to split plans within the scope of this Discussion Paper into components. Some components would reflect a financial risk only and some would reflect biometrical risks. The components could then be accounted for based on the guidance for similar instruments. The pension plan explained in Chapter 3 and used to illustrate the effects of the various approaches in Chapter 4 could thus be considered to consist of:
- (a) A promise to provide a fixed return on an amount;
  - (b) A promise to provide the return of assets in which contributions are invested.

- 7.19 The first promise would for each of the contribution have a risk profile similar to an issued zero-coupon bond. This component would accordingly be a financial instrument and it could be considered to measure this at amortised cost or at fair value.
- 7.20 The second promise would also be a financial liability. According to the existing guidance for financial instruments, this instrument should be measured at fair value.
- 7.21 The example considered does not include any biometrical risk (or insurance risk). However, such risk could be present in the types of pension plans considered. If, for example, the entity would not have to pay any amount if the beneficiary would be dead before reaching the retirement age. Insurance risk could be accounted for in accordance with the guidance on insurance contracts.
- 7.22 The two components identified above in paragraph 7.18 cannot be measured completely independent initially. That is, the zero-coupon bond cannot, for example, initially be measured at amortised cost or fair value based on the contributions made and the promised minimum return. Such an approach would result in recognising a full liability for the variable return promise and a full liability for the guaranteed minimum return promise. Whereas the plan would only require one of the promises to be fulfilled at retirement.
- 7.23 Instead, the fair value of the promise related to each contribution could be split between the two components mentioned in paragraph 7.18 above based on the relative fair values of these promises. Accordingly, if the fair value of the promise at the time of the contribution would be CU 100 and the fair value of the minimum guarantee return promise would be 20% of the total fair value of the minimum guarantee return promise and the variable return promise, CU 20 would be allocated to the minimum guarantee and CU 80 to the variable return promise. The subsequent measurement of the promises would then be based on these amounts.
- 7.24 The approach would result in the components of a pension plan being accounted for in accordance with existing requirements for similar types of risks. The measurement of the identified component may also be less complex than, for example, the Fair Value Based approach considered in Chapter 4 above, if the split between the various identified components is not subsequently updated. However, when the split is not updated, the measurement of the liability just before it is settled at retirement would not correspond to the amount the entity is paying to the beneficiary when settling the pension obligation. The approach could also result in underfunding not being appropriately reflected and the service cost recognised would generally not correspond to the outflow of resources related to providing the pension plan.

### A component approach splitting a defined benefit part and a defined contribution part

- 7.25 Other types of component approaches could also be considered, including:
- (a) An IAS 19 approach under which the pension plans in the scope of this Discussion Paper are divided into a defined benefit part and a defined contribution part. That is to split the pension plans into the following two components:
    - i) A defined benefit component, and

- ii) A defined contribution component.
- (b) The difference between this model and the D9 model described above is that under the D9 model, the measurement of the total pension obligation would not be based on the component with the highest value. Under this approach, the total pension obligation would be split in two components – for example, by following the approach described above in paragraph 7.23 above. These components would be measured separately following the guidance in IAS 19 for defined benefit plans and defined contribution plans and the total pension liability would be made up of the sum of the two components.
- (c) A combined IAS 19 and IFRS 9 approach under which a plan in the scope of this Discussion Paper is either considered to be:
- i) A defined contribution plan plus a fixed return option (which would be accounted for as a derivative); or
  - ii) A defined benefit plan (based on the fixed return) plus an option (a financial derivative) to convert a fixed return into a variable return.

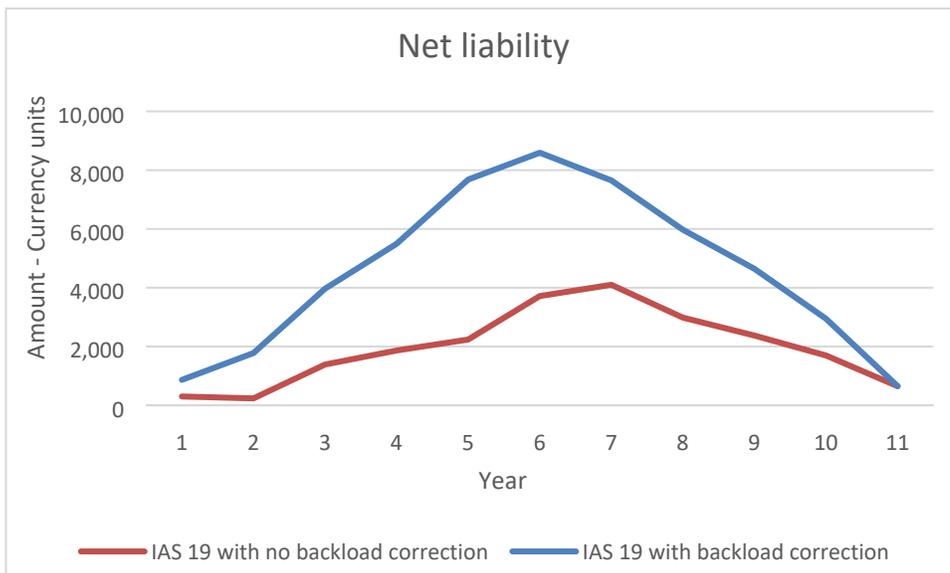
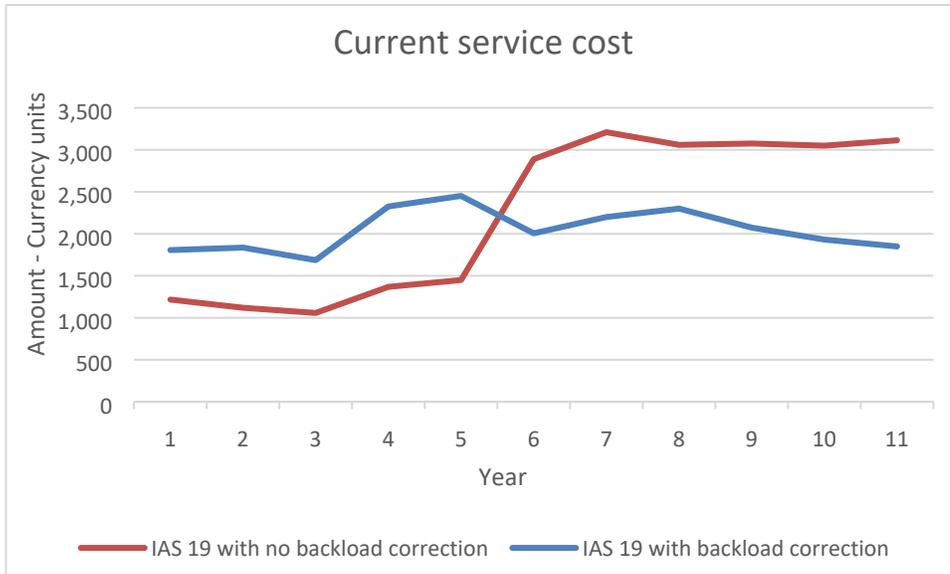
7.26 It might be possible to split the two components in the approach mentioned in paragraph above based on their relative fair values. However, this might be more complex than under the risk-separation model considered in paragraph 7.18 above and would result in the same issues with the measurement not reflecting the outflow of resources needed to settle the liability, including that underfunding may not be appropriately reflected, as described above in paragraph 7.24.

7.27 The variant of the combined IAS 19 and IFRS 9 approach under which the plan is accounted for as a defined contribution plan plus a fixed return option, for the plans considered in this Discussion Paper, would on many aspects resemble the Fair Value Based approach described in Chapter 4. The variant under which the plan is accounted for as a defined benefit plan plus an option to convert a fixed return into a variable return would result in similar issues as when applying the requirements in IAS 19 for defined benefit plans on the plans in the scope of this Discussion Paper.

7.28 EFRAG notes that the difference with this approach and the alternative approaches proposed in this Discussion Paper in Chapter 4 is that none of the alternative approaches make a split between the defined contribution and defined benefit components in order to separately apply the relevant accounting requirements under IAS 19.

### IAS 19 approach with no backload correction

7.29 Another approach considered for pension plans in scope of this Discussion Paper was an IAS 19 approach without applying the backload correction. Therefore, the returns on employer and employee contributions that have been made are projected using expected asset returns and discounted back to present value using High Quality Corporate Bond rate in order to compute the pension obligation and current service cost. If this approach was applied to the illustrative example and compared to the outcome of IAS 19 with backload correction, the outcome would be as follows:



- 7.30 Based on the graphs above, even though the net liability is lower than under IAS 19 with a backload correction, the concerns raised due to applying IAS 19 for pension plans in scope of this Discussion Paper still stand i.e. the lack of economic linkage to the value of the plan assets and recognition of a net liability when the likelihood of an entity paying additional contributions is low. For further explanation, refer to paragraph 2.15.
- 7.31 Furthermore, there would still be a perceived accounting mismatch because one would project the employee benefits using the return of specified assets but discount different rates.

## CHAPTER 8: ISSUES NOT COVERED BY THIS PAPER

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- 8.1 EFRAG acknowledges that concerns have been raised in relation to some of the requirements in IAS 19, that are not addressed in this Discussion Paper. For completeness and clarity, it is appropriate to illustrate these concerns.

### The binary nature of IAS 19

- 8.2 IAS 19 classifies all pension plans using a binary distinction – defined contribution and defined benefit plans. Classification of traditional plans with relatively simple features into the two categories was properly depicting the essential difference.
- 8.3 The definition in IAS 19 does not require to consider whether the sponsoring entity's risks are substantial, although the general materiality requirements apply. When the risk is insignificant, some would argue that these plans are economically similar to plans where the entity's obligation is limited to the contributions. Also, the definition does not further elaborate on the nature of the risk exposure.

### The rise of risk-sharing features

- 8.4 In the last decades traditional defined benefit plans have come under pressure due to a combination of increased longevity of plan participants, reduction in active workforce and decreasing (or even negative, like during the financial crisis) investment yields. At the same time, national governments have tried to increase participation in the second and third pension pillars to avoid excessive pressure on public pensions.
- 8.5 As a result, entities have moved away from traditional plans and have tried to introduce risk-sharing features. Plans with these characteristics - that can encompass a range of different alternatives - are often referred to as 'hybrid plans'.
- 8.6 'Hybrid plans' is not a term used in the IFRSs - as explained above, defined benefit plans are a 'residual' category. If the IASB was to develop an alternative model for these 'hybrids' it should start by either defining them or introducing a positive definition of defined benefit plan (in that case, hybrids would become the residual category).
- 8.7 Some studies refer to 'pure defined benefit plans' when the following features are present:
- (a) The benefit is determined solely on the basis of the final salary or average career salary (instead of current salaries in each year of service); and
  - (b) The benefit is or could be paid as a pension annuity.
- 8.8 These plans are therefore exposed to all the following risks:
- (a) The pre-retirement investment risk;
  - (b) The salary inflation risk; and
  - (c) The post-retirement longevity risk.

- 8.9 One example of the perceived intermediate category is so-called 'defined ambition' (or 'target-benefit') plans, that have been introduced in Canada and the Netherlands. These plans share the funding risk across the participants due to following mechanisms:
- (a) The contributions are fixed or may vary in a narrow range only;
  - (b) Plan members are offered a target benefit at retirement, however the benefits may be adjusted up or down to balance the plan's funding.
- 8.10 The terms of the plan may differ, but in substance there is built-in adjusting mechanism that, based on funding situation of the plan, would result in different scenarios:
- (a) An increase in the sponsors contribution, but capped to a certain amount so the entity is not exposed to unlimited additional outflows;
  - (b) An increase in the participants' contribution;
  - (c) A reduction or deferral of some or all the benefits in the plan.
- 8.11 Conversely, a situation where the plan is overfunded may result in additional benefit, such as an indexation of the benefits. Changes in the status over the life of the plan may also result in reversals of prior adjustments.
- 8.12 Cash balance plans are another type of plan commonly referred to as a hybrid. In a cash balance plan, the sponsoring entity is exposed to the investment risk rather than the plan participants. However, they define the benefit as a stated individual account balance made up by contributions and interest credit, which may be fixed or variable. These are often referred to as "hypothetical accounts" because they do not reflect actual contributions to an account or actual gains and losses allocable to the account.

### **What has the IASB done on the issues?**

- 8.13 During the 2011 revision of IAS 19, in February 2011 the IASB discussed plans with risk-sharing features. The IASB decided not to amend the distinguishing criteria, but to clarify that the existence of a benefit formula does not in itself make a plan qualify as defined benefit, unless the formula gives rise to an obligation to pay additional contributions.
- 8.14 Therefore, if the payment of the benefits specified in the formula are subject to the plan having sufficient assets (and in the absence of that, there is no obligation for the sponsor to contribute additional amount), then the plan is a defined contribution plan.
- 8.15 The amendments also addressed plans subject to conditional indexation, the effect of limits on the sponsor's additional contributions and contributions from employees and third parties.
- 8.16 IAS 19 paragraph 88(c) requires reflecting possible benefits changes that are set out in the formal terms of the plan. During the development of the Amendments there was debate about the inclusion of conditional indexation in the projection of the benefits - some constituents argued against it, because the plan assets do not reflect the conditional indexation until the returns are incorporated in their fair value.

- 8.17 IAS 19 paragraph 91 deals with those plans that meet the definition of a defined benefit plan but where the terms limit the contribution that the entity is required to make. In this case, the cost of the benefit is capped at the maximum contribution.

### **Some possible directions to explore**

- 8.18 Plans with risk-sharing features raise different issues. EFRAG had some tentative discussion on possible directions to explore, but these were not developed further.
- 8.19 IAS 19 requires defined benefit accounting even when the sponsor is unlikely to pay anything more than the recurring contributions. Even if the guaranteed return has been historically well below the expected return of the plan assets, and this is not expected to change in future, the entity still needs to perform the defined benefit calculation. The degree of uncertainty of future cash outflows is incorporated in the measurement of the defined benefit obligation and is not relevant for the classification of the plan.
- 8.20 When the expected return significantly exceeds the guarantee, the economic value of the guarantee may be negligible; it may therefore be argued that the investment risk is not substantial, which under paragraph 30 of IAS 19 is the defining feature of defined benefit plan.
- 8.21 IAS 19 still requires the use of defined benefit accounting and a material pension obligation may still arise due to the use of the projected unit credit method and the difference between the projection rate and the discount rate.
- 8.22 The question arises whether defined contribution accounting should also apply to those plans where the possibility that entity needs to pay further contributions in relation to the current and past services is remote. This would reduce significantly the cost and complexity for entities.
- 8.23 However, this approach would require investigating the following aspects:
- (a) The selection of the threshold. A quantitative threshold would be difficult to determine objectively and assess on an ex-ante basis; qualitative thresholds may be applied differently;
  - (b) A potential cliff effect. The degree of risk changes over time, and a plan risk exposure may move above (or below) the defined threshold. Moving from defined contribution to defined benefit accounting would involve significant complexity;
  - (c) The accounting for plan assets. If the plan is an excess position and the entity has a claim to the excess, defined contribution accounting would result in omitting information about the net asset of the entity in the plan.
- 8.24 It should also be assessed if this approach would be consistent with recent developments in IFRS. In the upcoming Conceptual Framework for Financial Reporting, the IASB has removed the assessment of the probability of future cash flows from the definition of assets and liabilities. The likelihood of future cash flows would now affect the measurement (or, when the variability is significant, it could affect the recognition).
- 8.25 As mentioned above, in some cases the plan terms put a cap to the additional contributions that the entity may be required to pay in relation to current and past

services. It could be argued that this plan is economically similar to a defined contribution plan - in both cases, the entity's exposure cannot exceed a specified amount.

- 8.26 Again, would defined contribution accounting be suitable for this type of plan? In principle, it would be possible to apply the requirements in paragraph 51 of IAS 19 to measure the pension obligation as the difference between the contribution payable to date and the contributions already paid - although a present value calculation would also require an estimation of the timing of the potential additional payments.
- 8.27 However, this approach may result in overstating the liability. This is because the contribution payable is the maximum exposure, but the actual outflows could be lower, or even nil. To avoid a risk of a final reversal of cost upon winding up the plan, the entity would need to project the expected contributions - but then it would reintroduce complexity in the calculation.

### The projected unit credit method and its scope of application

- 8.28 For plans that qualify as defined benefit plans, IAS 19 requires the application of the projected unit credit method. If the employee's service in later years lead to material increases in the benefits, the entity is required to allocate the benefit in a straight-line basis over the projected service period. This is regardless of whether the benefits are vested or not at the reporting date (in other words, whether the employee would be entitled to the benefits if employment terminated at the reporting date).

#### What view does it reflect?

- 8.29 This reflects the view that a post-retirement benefit is a stipulation that covers the full period of service. Historically, pensions were viewed as a gratuity act from the employer - therefore, the pension cost was linked to the cash outflow as the employer was not seen to have any obligation. The cost was then measured either by the pension benefit paid; or by the contribution paid in a funded scheme. The cost could also include the guaranteed return, if the contributions were not segregated to buy securities.
- 8.30 The gratuity theory was then challenged by the view that a pension is a deferred pay and that employees accept lower wages in exchange for future pension benefits. This led to the conclusion that an entity should account for the cost to provide the future benefits. The accounting change was also brought by governments granting tax deduction for pension costs. Cost was measured based on actuarial calculations (when the firm was using internal funding) or contributions to external funds, also determined based on actuarial calculations. In this last case, the cost would still correspond to the cash outflow of the period.
- 8.31 The accounting theory further developed by introducing the notion that pension benefits are an exchange. However, while the employer's promise was identifiable - the future payment of the benefits - the employee's side was less clear. It was suggested that the employee accepts to provide services in exchange of the future pension promise; since it is not possible to allocate benefits to specific unit of services, the objective of accounting should be to spread the value of the benefits to the full period of service.
- 8.32 This line of thinking viewed pensions as an integral part of an 'implicit lifetime contracts' between employees and firms, and led to the notion of projected unit credit method - that

is, the cost should reflect the increase in the current expectation of future benefits, rather than only the increase in the current rights at the reporting date.

### **What are the issues?**

- 8.33 Regardless of whether there is consensus about the view described above, there are concerns on the lack of clarity of the scope of application of the projected unit credit method. Later service can result in higher benefits in different ways:
- (a) The plan may guarantee higher benefits in later years, such as a higher guaranteed return;
  - (b) The plan may increase the percentage of contributions in later years;
  - (c) The plan may determine the level of benefits based on the salary.
- 8.34 A plan may link the level of benefits to the salary in different ways. In the past, plans were commonly offering benefits that depended on the salary of the final year in service, or close to it. Other formulas are career average salary schemes (some include a revaluation adjustment and are referred to as CARE - or career average revalued earnings schemes). In other cases, however, the benefit is calculated in relation to the current salary for each year of service.
- 8.35 In all these cases, a salary increase results in an increase of the benefit for later years of service, but IAS 19 is not clear on whether every such formula requires applying the straight-line allocation. Paragraph 70(b) requires to stop the straight-line allocation at the date when further service by the employee will lead to no material amount of further benefits, other than from further salary increases; however, paragraph 87(b) requires to measure the defined benefit obligation on a basis that reflects any estimated future salary increases that affect the benefits payable.
- 8.36 IAS 19 clarifies the treatment of final salary schemes with an illustrative example of a plan that provides a monthly pension of the final year salary for each year of service. The illustrative example is clear in indicating that the benefit allocated to each year of service should reflect the estimated final year salary. However, this does not solve the issue in relation to career average or current salary schemes.
- 8.37 One additional concern is that the straight-line allocation projected unit credit method results in a pattern of service costs that is quite different from that of cash payments for contributions. If investors are using the service cost as a proxy to project future pension cash outflows, then it may be argued that a similar pattern of recognition could improve the relevance. On the other side, explaining the nature of the difference between the two in the notes could also provide adequate information.

### **What has the IASB been doing on the issue?**

- 8.38 The inclusion of future salary increases in the measurement of the pension obligation was considered by the IFRS IC as part of its deliberations leading to draft Interpretation D9. However, the IFRS IC decided to stop its project because the IASB was undertaking a revision of IAS 19.

- 8.39 Paragraph 120 of the Basis for Conclusions notes that the Board decided not to address the issue of whether the straight-line application in paragraph 70(b) applies to a formula expressed as a constant proportion of the current salary in each year of service.

## APPENDIX 1 CURRENT GUIDANCE

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- A1.1 Current financial reporting requirements related to employee benefits considered in this section are IAS 19 *Employee Benefits* under IFRS Standards and ASC 715 *Compensation – Retirement Benefits* under US GAAP.
- A1.2 IAS 19 distinguishes between two types of post-employment benefit plans:
- (a) defined contribution plans which are post-employment benefit plans under which an entity pays fixed contributions into a separate entity (a fund) and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods;
  - (b) defined benefit plans which are post-employment benefit plans other than defined contribution plans.
- A1.3 The plans covered by this Discussion Paper would (typically) not meet the definition of a defined contribution plan, and would therefore have to be accounted for as defined benefit plans.
- A1.4 For a defined benefit plan under IAS 19, an entity is assumed to promise employees a specific benefit at retirement. To provide that benefit, the entity may make payments, i.e. contributions and the amount of the contributions is a computation based on tax law or budgeting constraint and there are actuarial valuations to compute this. The defined benefit plan can also be unfunded. The entity is assumed to bear costs to the entity of the investment risks. The entity uses actuarial techniques to estimate the expected total benefits that the employees expect to receive at retirement using expected asset return rates only if the benefits depend on asset rates. This estimated amount is then discounted to present value using market yields on high quality corporate bonds.
- A1.1 Each period, employees earn a piece of this estimated amount because of service that they have provided to the entity but they will not receive it until they one day retire. This piece of the estimated amount is recognised as current service cost in the statement of profit or loss and is computed using a projected unit credit method. The projected unit credit method is an actuarial valuation method that sees each period of employee service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final pension obligation. Therefore, since the employees only receive their employee benefits upon retirement, a liability is recognised, i.e. a pension obligation and accumulated as the employee provides the service.
- A1.5 If the employee benefits in later years is materially higher than the earlier years (i.e. backloading), then the current service cost is recognised on a straight line basis based on the number of years of the plan.
- A1.6 The plan assets are assets held by a fund that is legally separate from the reporting entity. These plan assets are measured at fair value.
- A1.7 The net liability for defined benefit plans recognised in the statement of financial position is therefore the pension obligation amount less the plan assets amount and this is

remeasured every reporting period. The entity may also have a surplus in a defined benefit plan, i.e., the plan asset amount being greater than the pension obligation amount resulting in a net defined benefit asset. In that case, the net defined benefit asset would be the lower of the surplus in the defined benefit plan and the asset ceiling which is the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

A1.8 Another set of financial requirements is ASC 715 under US GAAP. There are a number of similarities and differences between IAS 19 and ASC 715. While there are few differences with respect to the measurement of defined benefit plans, there are key differences with regards to cost recognition and presentation<sup>12</sup>.

A1.9 The table below provides some insight on current requirements for employee benefits under IAS 19 and ASC 715<sup>13</sup>.

Title	IAS 19	ASC 715
<b>Defined benefit versus defined contribution plan classification</b>		
Classification	Post-employment plans are classified as either defined contribution or defined benefit plans.	Like IAS 19, <i>post-retirement</i> benefits are classified as either defined contribution or defined benefit plans. However, unlike IAS 19, <i>post-employment</i> <sup>14</sup> benefit plans are not required to be classified as defined contribution or defined benefit plans; instead, they are accounted for based on the type of benefit.
<b>Pension plans that have elements of both traditional defined contribution plans and traditional defined benefit plans (i.e. 'hybrid' plans)</b>		
Guidance	There is no explicit guidance. IAS 19 only makes a classification between defined contribution or defined benefit plan.	There is limited guidance for specific types of plans. For example, for floor-offset plans, the plan is accounted for as two separate plans, (i.e., defined benefit for the guarantee and defined contribution for the base plan). <sup>15</sup>
<b>Measurement of benefit obligation</b>		
Actuarial valuation method to determine the present value of the defined benefit obligation	Projected unit credit method	Like IAS 19, projected unit credit method with the exception of certain cash balance plans for which the traditional unit credit method is used.
Assumptions	Entity's best estimates of future variables and should be unbiased and	Unlike IAS 19, <i>each</i> assumption is a best estimate assumption

<sup>12</sup> PwC's IFRS and US GAAP: similarities and differences 2018

<sup>13</sup> This section has been based on the following documents: (i) PwC's *IFRS and US GAAP: similarities and differences 2018*; and (ii) KPMG's *IFRS compared to US GAAP 2017*

<sup>14</sup> 'Post-employment benefits' include benefits payable after employment but before retirement; 'post-retirement benefits' are benefits payable after retirement.

<sup>15</sup> Canadian Accounting Standards Board paper *Research on Pensions: Hybrid Plans* for the July 2018 ASAF meeting

Title	IAS 19	ASC 715
Discount rate	<p>mutually compatible. It takes into account estimated future salary increases.</p> <p>The obligation is discounted using High Quality Corporate Bond rate, or a government bond rate if High Quality Corporate Bond market not deep enough. The depth of the High Quality Corporate Bond market is assessed at currency level. The currency and maturity of the bonds should be consistent with the currency and maturity of the defined benefit obligation.</p>	<p>judged on its own. It reflects estimated future salary increases.</p> <p>Like IAS 19, the obligation is discounted using a High Quality Corporate Bond rate however there is no guidance when the High Quality Corporate Bond market is not deep. Also, like IAS 19, the currency and maturity of the bonds match the currency and maturity of the pension obligation.</p>
<b>Plan assets</b>		
Asset ceiling	<p>If a plan is in surplus, then the amount recognised as an asset in the statement of financial position is limited to the asset ceiling. This is the present value of any economic benefits available to the entity in the form of a refund from the plan or a reduction in future contributions to the plan.</p>	<p>Unlike IAS 19, there is no limitation on the size of the net pension asset that can be recorded on the statement of financial position. An asset is recognised if the plan is overfunded.</p>
Valuation of assets	<p>Plan assets should be measured at fair value, which is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.</p>	<p>Like IAS 19, plan assets are primarily measured at fair value. However, unlike IAS 19, plan assets used in plan operations (for example, buildings, equipment, leasehold improvements) are measured at cost less accumulated depreciation.</p>
<b>Expense recognition</b>		
Cost recognised	<p>The defined benefit plan cost is made up of the following components:</p> <p>Service cost – current service cost, past service cost and gain or loss on settlements (profit or loss)</p> <p>+/- Net interest on net defined benefit liability/(asset) (profit or loss)</p> <p>+/- Remeasurements (other comprehensive income ('OCI'))</p>	<p>The periodic cost of defined benefit plans is made up of the following:</p> <p>Current service cost (profit or loss)</p> <p>+ Interest cost (profit or loss)</p> <p>- Expected return on plan assets (profit or loss)</p> <p>+/- Actuarial gains and losses (OCI)</p> <p>+ Prior (past) service cost (OCI)</p> <p>+/- Gain or loss on curtailment and settlement (profit or loss)</p>
Past (prior) service cost	<p>Immediate recognition in income for the effects of plan amendments that create an increase (or decrease) to the benefit obligation (i.e., prior service cost).</p>	<p>Initially recognised in OCI and then amortised into income over future periods.</p>
Interest	<p>The discount rate is applied to the net benefit obligation to calculate a single net interest cost or income.</p>	<p>Unlike IAS 19, instead of net interest, an entity recognises (i) interest cost (based on the</p>

Title	IAS 19	ASC 715
Remeasurements/ Recognition of gains and losses	Remeasurements comprise (i) actuarial gains and losses on the defined benefit obligation; (ii) the return on plan assets, excluding amounts included in net interest; and (iii) any change in the effect of the asset ceiling. These remeasurements are recognised immediately in OCI and are not subsequently reclassified to profit or loss.	application of a discount rate to the projected benefit obligation; and (ii) expected return on assets (based on the application of an expected long-term rate of return on assets to the calculated asset value). This comprises (i) actuarial gains and losses on the define benefit obligation; and (ii) the return on plan assets. The guidance permits companies to either (i) record gains/losses in the period incurred within OCI or (ii) defer gains/losses through the use of the corridor approach.
<b>Presentation in the income statement</b>		
Presentation in the income statement	IAS 19 does not specify where service cost and net interest are presented.	Prior to adoption of ASU 2017-07 <sup>16</sup> , all components of net benefit cost must be aggregated and presented as a net amount in the income statement. Post adoption of ASU 2017-07, there are specific presentation requirements.

<sup>16</sup> This amendment to employee benefits is effective for annual periods starting 15 December 2017 (public interest entities) or after 15 December 2018 (other entities); early adoption is permitted.

## APPENDIX 2 GLOSSARY OF TERMS

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A2.1 [TO BE COMPLETED]

## APPENDIX 3 ACKNOWLEDGMENTS

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A3.1 This Discussion Paper was prepared by the staffs of the European Financial Reporting Advisory Group (EFRAG) as part of Europe's proactive work in financial reporting.

A3.2 The project team was assisted by EFRAG Pension Plans Advisory Panel members:

*Nicklas Grip - Chairman of EFRAG Pension Plans Advisory Panel*

*Vincent Caire*

*André Geilenkothen*

*Selim Gogus*

*Heinz Hense*

*Patrice Kalfon*

*Anne Laning*

*Julián Villanueva Lara*

*Gabriel van de Luitgaarden*

*Kazim Razvi*

*Geert De Ridder*

*Jean-François Vaccaro*



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