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DISCUSSION PAPER

ACCOUNTING FOR PLANS WITH ASSET-RETURN PROMISE

[MONTH] 2019

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These bodies, while encouraging debate on the issues presented in the paper, do not express any opinion on those matters at this stage.

Copies of the Discussion Paper are available from the websites of those bodies issuing it. A limited number of copies of the Discussion Paper will also be made available in printed form, and can be obtained from EFRAG and [other participants].

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 [\[here-insert hyperlink\]](#) or should be sent by post to:

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

Foreword

To be completed



EFRAG Research Activities in Europe

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. [EFRAG carries out this research work in partnership with National Standard Setters in Europe to ensure resources are used efficiently and to promote stronger coordination at the European level]. 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

ES1 To be completed



Questions to Constituents

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:

- a) address the question as stated;
- b) indicate the specific paragraph reference to which the comments relate; and/or
- c) 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.]

Question 2 – [Title of second questions]

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

- a) Lettered sub-paragraphs; and
 - i) Even sub-paragraphs of these.]

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

CHAPTER 1: INTRODUCTION

Evolution of pension accounting¹

- 1.1 Over time, the focus on pension accounting has moved from reporting the cost of pension to measuring the rights and obligations under the plan.
- 1.2 Historically, employees were required to contribute a given percentage of their pay, and the employer might also make contributions. The cost recognised by the employer was effectively the cash paid in a given period. The pensions would be based on length of service and career average pay.
- 1.3 The pensions were viewed as a gratuity act from the employer for past services. Therefore, the pension cost was linked to the cash outflow as the employer was not seen to have any obligation. 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.
- 1.4 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 benefits. The accounting change was also brought by governments granting tax 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.
- 1.5 The US Accounting Principles Board ('APB') Opinion No.8 *Accounting for the Cost of Pension Plans* was issued in 1966. This 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. This treatment was also influenced by tax rules, that limited the deductibility of these components.
- 1.6 From the 1940s to the 1970s, in countries where external funding through employer-sponsored pension plans was the norm, new and improved schemes tended to be defined-benefit in form.
- 1.7 As from 1971, 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 – the promise to pay 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,

¹ Where not mentioned, this section draws from Napier, C. (2008) *The logic of pension accounting*

the objective of accounting should be to spread the value of the benefits to the full period of service. This was also influenced by changes in US laws that codified employer sponsors' duties and obligations associated with the operation of a pension plan.

- 1.8 In 1974, stock market decline in UK with abnormally high price inflation led to deficits on actuarial valuations. This initiated further research on pension accounting.
- 1.9 The UK SSAP 24 *Accounting for Pension Costs* was issued in 1988 and stated that the accounting objective was to recognise the cost of providing pensions on a systematic and rational basis over the period during which the employer benefits from the employees' services. Entities needed to consider if the funding arrangements were in line with the objective. However, UK SSAP 24 had difficulties in dealing with two issues: the first was the treatment of actuarial gains/losses - which could be spread over time - and the second was that the pension cost could be assessed on the basis of assumptions that were different from those used to determine the contributions (for instance, in relation to the return on plan assets). When some entities stopped making contributions to plans that had a surplus generated by the increase in the value of the plan assets, they would still report a 'normal' pension cost under SSAP 24. On the other side, the smoothing mechanism could lead to reporting an asset for a plan with a deficit, or a liability for a plan in surplus.
- 1.10 The accounting research started to move the focus away from the pension cost to the pension liability. The US SFAS 87 *Employers' Accounting for Pensions* was issued in 1985 and required the assessment of the Projected Benefit Obligation ('PBO') based on future compensation levels. The PBO 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.
- 1.11 Entities had to consider the possibility of assets and liabilities arising due to differing amounts between the amounts contributed up to the balance sheet date and the net pension expense. SFAS 87 also required to recognise a minimum pension liability equal to the negative difference of the fair value of the fund assets and the Accumulated Benefits Obligation ('ABO'), determined on the same basis as the PBO but without considering future salary increases.
- 1.12 Since SFAS 87 required the disclosure of different potential measures of pension liability, it was possible to study the value relevance of different pension measures, and some studies found the PBO to be the most relevant. Some support of this outcome came from research suggesting that there was an 'implicit contract' between employees and their employer. The implication of this was that pension expectations would be based on final salaries rather than current salaries that would accrue to employees if the employer were to terminate the pension plan immediately.
- 1.13 The original International Accounting Standard on pensions, IAS 19 *Accounting for Retirement Benefits in the Financial Statements of Enterprises* (IASB, 1983) was oriented towards measuring costs for the income statement, and was flexible enough to permit companies the choice of whether or not to use salary projections in measuring the regular pension expense. However, a revised IAS 19 *Employee Benefits* (1998) moved closer to a balance sheet approach. Similarly, UK SSAP 24 was replaced with FRS 17 *Retirement Benefits* (2000). Also, in the US, 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 PBO rather than the ABO.

- 1.14 Under IAS 19, 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. However, under customary funding practices in some countries such as Netherlands, Canada, a current unit credit method is used which excludes any allowance for the effect of future salary increases².
- 1.15 Pension accounting continued to give rise to challenges for financial reporting, for various reasons. These included the great uncertainties that often affect the amount of pension benefits, the very long time over which they are paid and the complex arrangements for funding them that exist in many countries. Due to these challenges in financial reporting, in 2008, EFRAG and the European standard-setters, as part of Europe's 'Pro-active Accounting Activities in Europe' (PAAinE) initiative, published a Discussion Paper *The Financial Reporting of Pensions*. This Discussion Paper focussed on the accounting for pension benefits that are related to employment. The Discussion Paper set out views on how pension arrangements including the obligation to provide pensions (including lump sums payable at or near retirement) were best reflected in financial statements.
- 1.16 From above, we see that there was a shift from reporting the cost of pension to measuring the pension liability. There has also been a shift of pension plans from defined benefit to defined contribution plans³. Statistical analysis of manufacturing company choices indicated that greater costs of administering defined benefit plans relative to defined contribution plans were associated with new adopters favouring defined contribution plans. Greater economic instability in an industry led new pension plan adopters to be more likely to choose defined contribution plans than defined benefit plans, presumably because the former represented less risk for the firm. 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.

Current guidance

- 1.17 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.
- 1.18 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 not legal or constructive obligation to pay further contributions if the fund does not hold

² Report on funding rules and actuarial methods, prepared by OECD Consultant Mr. Colin Pugh.

³ Douglas L. Kruse, Pension Substitution in the 1980s: Why the Shift toward defined Contribution?

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.
- 1.19 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.
- 1.20 For a defined benefit plan under IAS 19, an entity promises employees a specific benefit at retirement. To provide that benefit, the entity makes payments, i.e. contributions and the amount of the contributions is a computation based on actuarial valuations. The entity bears all 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 (i.e., the projected unit credit method). This estimated amount is then discounted to present value using market yields on high quality corporate bonds.
- 1.21 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. Since the employees only receive their employee benefits upon retirement, a liability is recognised, i.e. a pension obligation. 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.
- 1.22 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.
- 1.23 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.
- 1.24 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 presentation⁴.
- 1.25 The table below provides some insight on current requirements for employee benefits under IAS 19 and ASC 715⁵.

⁴ PwC's IFRS and US GAAP: similarities and differences 2018

⁵ 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*

Title	IAS 19	ASC 715
Defined benefit versus defined contribution plan classification		
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> ⁶ 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.
Measurement of benefit obligation		
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 mutually compatible. It takes into account estimated future salary increases.	Unlike IAS 19, <i>each</i> assumption is a best estimate assumption judged on its own. It reflects estimated future salary increases.
Discount rate	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.	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.
Plan assets		
Asset ceiling	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.	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.
Valuation of assets	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	Like IAS 19, plan assets are primarily measured at fair value. However, unlike IAS 19, plan assets used in plan operations (for

⁶ 'Post-employment benefits' include benefits payable after employment but before retirement; 'post-retirement benefits' are benefits payable after retirement.

Title	IAS 19	ASC 715
	in an orderly transaction between market participants at the measurement date.	example, buildings, equipment, leasehold improvements) are measured at cost less accumulated depreciation.
Expense recognition		
Cost recognised	The defined benefit plan cost is made up of the following components: Service cost – current service cost, past service cost and gain or loss on settlements (profit or loss) +/- Net interest on net defined benefit liability/(asset) (profit or loss) +/- Remeasurements (other comprehensive income ('OCI'))	The periodic cost of defined benefit plans is made up of the following: Current service cost (profit or loss) + Interest cost (profit or loss) - Expected return on plan assets (profit or loss) +/- Actuarial gains and losses (OCI) + Prior (past) service cost (OCI) +/- Gain or loss on curtailment and settlement (profit or loss)
Past (prior) service cost	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).	Initially recognised in OCI and then amortised into income over future periods.
Interest	The discount rate is applied to the net benefit obligation to calculate a single net interest cost or income.	Unlike IAS 19, instead of net interest, an entity recognises (i) interest cost (based on the 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).
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.	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.
Presentation in the income statement		
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 ⁷ , all components of net benefit cost must be aggregated and

⁷ 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.

Title	IAS 19	ASC 715
		presented as a net amount in the income statement. Post adoption of ASU 2017-07, there are specific presentation requirements.

Statistics

- 1.26 Within the EAA entities are, to some extent, moving away from offering defined benefit pension schemes to defined contribution schemes.
- 1.27 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 EAA countries⁸. The table shows that from 2010 to 2014 there was a decline in the cost to defined benefit schemes relative to the costs to defined contribution plans among the entities included in the statistics⁹. 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	363%	268%	338%	206%	191%
1 st quantile	20%	15%	13%	14%	12%
Median	57%	46%	43%	41%	38%
3 rd quantile	183%	143%	117%	135%	113%
95 th percentile	957%	787%	869%	671%	566%
97.5 th percentile	2 083%	1 423%	1 528%	1 148%	1 029%

- 1.28 However, it was noted in an IASB staff paper for the November 2015 IASB meeting¹⁰ 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.

⁸ Only entities for which costs to both plans were higher than zero in the S&P Capital IQ database were chosen for the statistics.

⁹ When comparing the percentages for entities for which data is available for both 2010 and 2014, a t-test for paired observations gives a p-value of 0.0053 when testing whether the average percentage in 2014 is less than the percentage in 2010 (one-sided test). In addition, a simple sign test shows that there was almost zero percent chance ($p < 0.01$) that the number of entities that had increased the proportion of defined benefit costs was higher than the number of entities that had decreased the proportion from 2010 to 2014. As only entities with both defined benefit schemes and defined contribution plans were included in the statistics, it is questionable whether the results can be generalised.

¹⁰ Agenda Paper 15A for the November 2015 IASB meeting.

- 1.29 The following table illustrates the ratio of costs for defined benefit schemes to costs for defined contribution 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 percentage	Country	Average median percentage
	%		%
Liechtenstein*	7 645	France	31
Cyprus*	613	Poland*	29
Portugal*	605	Sweden	26
Austria	261	Hungary*	17
Malta*	198	Greece*	15
Spain*	123	Finland	12
Czech Republic*	106	Slovenia*	11
Belgium	104	Denmark*	11
Norway	102	Latvia*	8
Ireland*	93	Lithuania*	7
Luxembourg*	84	Slovakia*	7
Iceland*	74	Romania*	5
United Kingdom	72	Croatia*	4
Netherlands	53	Bulgaria*	2
Germany	42	Estonia*	No data
Italy	37		

- 1.30 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 plans¹¹.
- 1.31 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 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 with the employee.
- 1.32 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

¹¹ For example, using a Mann-Whitney U Test to test that generally the cost of defined benefit schemes relative to the cost of contribution plans in 2014 was lower for the entities incorporated in Finland than those incorporated in Austria gives a p-value of nearly 0 (p<0.01).

plans in the EAA countries¹². Within the EAA, hybrid plans are particularly common in specific jurisdictions such as Belgium, Germany, and the Netherlands.

¹² The IASB staff paper bases this observation on the fact that in a study performed 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 study on which the IASB staff paper's conclusion is based simply count the number of plans – not how many employees are covered by the plans. In addition, the EIOPA study 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 EAA as "normal" defined contributions plans or defined benefit plans.

CHAPTER 2: DESCRIPTION OF THE PLANS WITHIN THE SCOPE

Definition of pension plans included in the scope

- 2.1 This Discussion Paper deals with the reporting of post-retirement benefits that meet the following characteristics:
- a) They include an asset-return promise; and
 - b) The sponsoring entity 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 investible 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 investible 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 include 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 all plans with an asset-return promise regardless of whether the reporting entity holds the assets on which the benefits depend. 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 investible items.
- 2.8 However, there is also the possibility that the return earned on the alternative investment exceeds the return on the specified investible 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 the approaches explored in this Discussion Paper would also be valid for plans with asset-

return promise where the entity does not hold the assets upon which the benefits are dependent, However, this would require to introduce additional assumptions in the illustrative examples about the actual returns on the alternative investments, and how the entity would use any excess or cover any shortfall. For simplicity, EFRAG concluded to limit the scope to those plans where the entity holds the assets upon which the benefits are dependent.

- 2.10 As a consequence of the decision in the prior paragraph, the plans must be funded. In other words, it is necessary that the entity pays 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 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 scope of the Discussion Paper is substantially aligned to the one that the IASB is considering for a limited project. 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 lack 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 be too costly and complex to apply.
- 2.18 Examples considered by EFRAG TEG and EFRAG PAP have shown that the current requirements in some circumstances may result in a net liability not being recognised even though it is expected that pension assets are insufficient to cover the pension obligation at retirement.

The IASB's activities

- 2.19 The IASB current plan is 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 by which the expected return is set at the level of the discount rate for the obligation. 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.
- 2.20 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'¹³. 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 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.
- 2.21 The IASB is currently collecting input on the proposed scope for its project to introduce targeted amendments to IAS 19.

¹³ 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).

CHAPTER 3: ILLUSTRATIVE EXAMPLE

Description of the example

- 3.1 In this chapter, Discussion Paper will describe an example used to illustrate the application of alternative approaches to the accounting for a plan with an asset-return promise.

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 accumulated benefit is paid off at the end of the service period. If the beneficiary dies before retirement, the benefits are paid to the entitled heir.
- 3.6 The accumulated benefit is equal to the total contributions and the return generated on the plan assets. Entity X guarantees a minimum return of 5.5 per cent p.a., cumulated over the entire service period. The promise is therefore 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 inspired by published return assumptions for US public pension plans¹⁴. 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.

¹⁴ 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 Fund¹⁵, which is a large US pension fund for which return date 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%	8.0%	7.5%	7.0%	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 Curve¹⁶. 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.

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%

¹⁵ Source: <http://imd.unjpspf.org>.

¹⁶ 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.

- 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 approach

- 3.14 For the purposes of the illustration of Fair Value approach, EFRAG assumed that fair value of pension obligation is a sum of fair values of its two components i.e. the obligation to pay the contributed amounts together with any returns (or losses), and the minimum return rate guarantee.
- 3.15 The fair value of the obligation to pay benefits, 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 derive from Black's valuation model. The model requires provision of several rates, which have been assumed at the following levels:
- a) Risk free rate at 0.25% - this rate is assumed not to change during the term of the plan;
 - b) Available forward rate at $\frac{1}{2}$ of the high quality corporate bond rate for each particular year;
 - c) Standard deviation of the 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 total benefits at retirement.
- 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. 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, so 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 which is not considered in the illustrative example.

Application of IAS 19 model for defined benefit plans

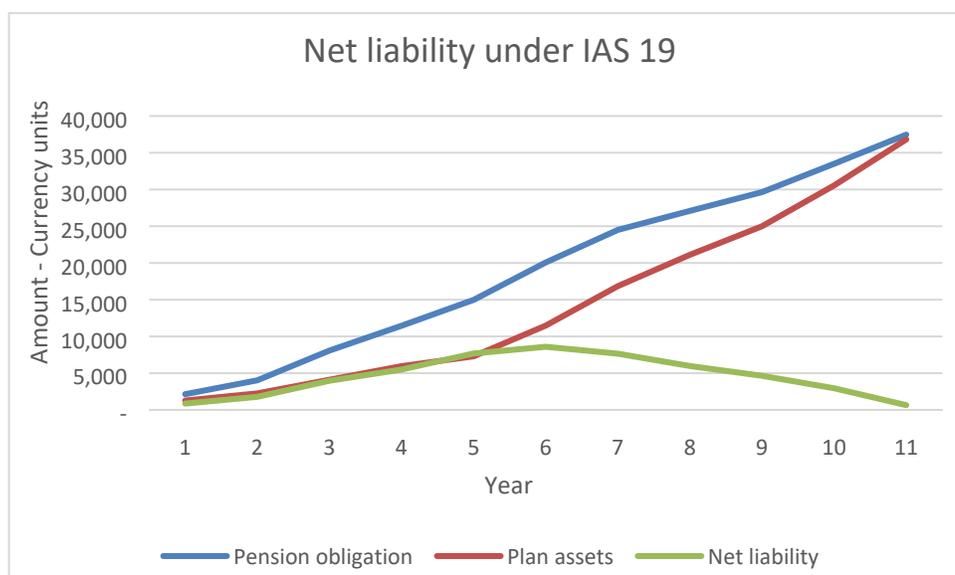
- 3.22 EFRAG notes that providing detailed figures for each year in this Discussion Paper would be excessive and may confuse readers of the Discussion Paper. Therefore, for IAS 19 (and also the alternative approaches), EFRAG has focussed on providing figures for one year only, i.e. Year Three and providing 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, the net liability under IAS 19 is as follows:

	Currency units
Plan assets	4,105
Pension obligation	8,073
Net liability	3,968

- 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 Eleven, the pension obligation is calculated based on the guaranteed return. The fact that the pension obligation is higher than the pension assets is caused by the expected return rate or the guaranteed rate (whichever is higher) being higher than the pension obligation discount rate.

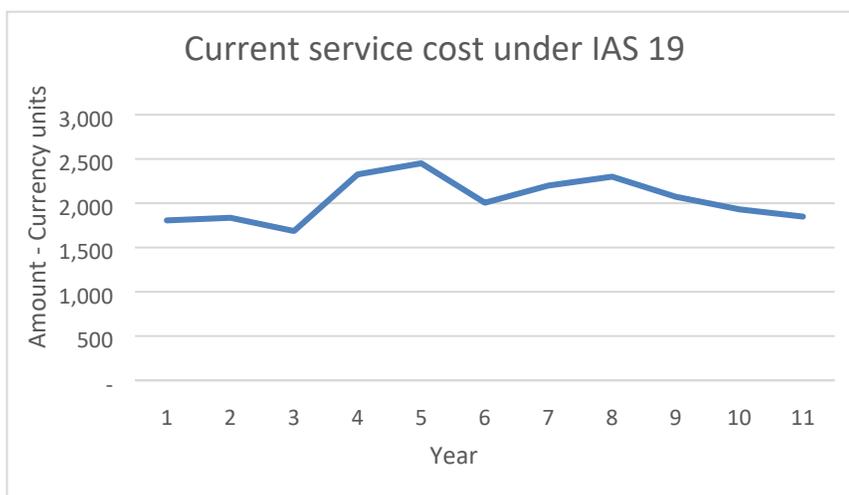
Pension income and costs in Comprehensive income

Current service cost

3.27 If we take Year Three of the example in this Discussion Paper, the current service cost under IAS 19 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 discount rates of the asset returns yearly. This impacts the projection of the total benefits at retirement and therefore the current service cost.

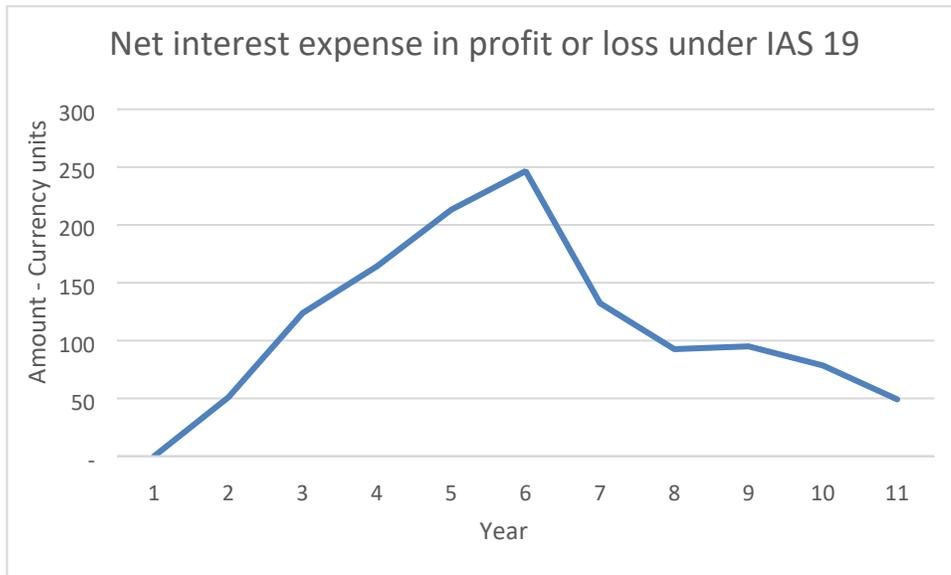
Other pension income and costs

- 3.30 Taking Year Three of the example in this Discussion Paper, 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
Profit or loss:		
Current service cost		-1,686
Return on plan assets	157	
Interest expense	-281	
Net interest expense		-124
OCI:		
Remeasurement relating to return on plan assets		298
Remeasurement relating to actuarial gains and losses		-1,613
Total comprehensive income		-3,125

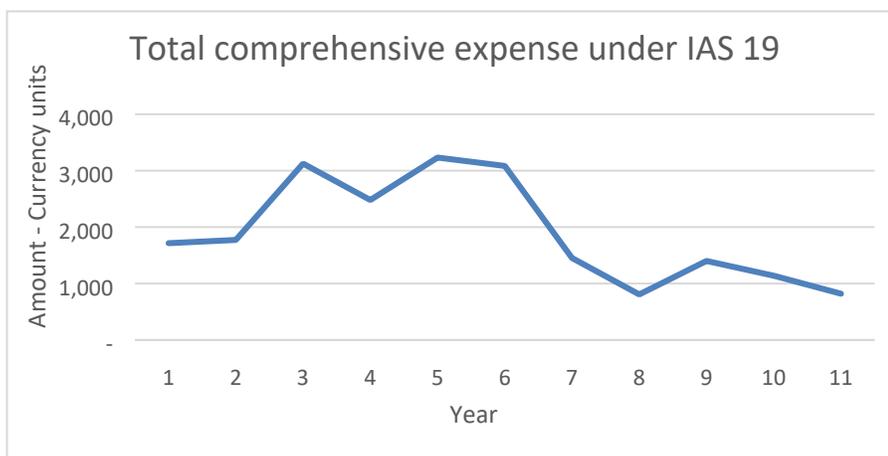
- 3.31 The return on plan assets is the income from the assets each year using High Quality Corporate Bond Rate for the year.
- 3.32 The interest expense for the pension obligation is computed by multiplying the opening balance of the pension obligation by the High Quality Corporate Bond Rate for the year.
- 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.
- 3.34 The remeasurement relating to actuarial gains and losses relates to the effect of changes in estimates concerning the total benefits at retirement and the effect of changes in the High Quality Corporate Bond discount rate.

- 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 pension obligation increases and also the plan assets and therefore the unwind of the interest expense and interest income from the plan assets also increase. As from Year Seven, the net interest expense gradually decreases. This is 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 actual comprehensive expense of the pension plan under IAS 19:



CHAPTER 4: ALTERNATIVE APPROACHES

Capped Asset Return approach

The approach

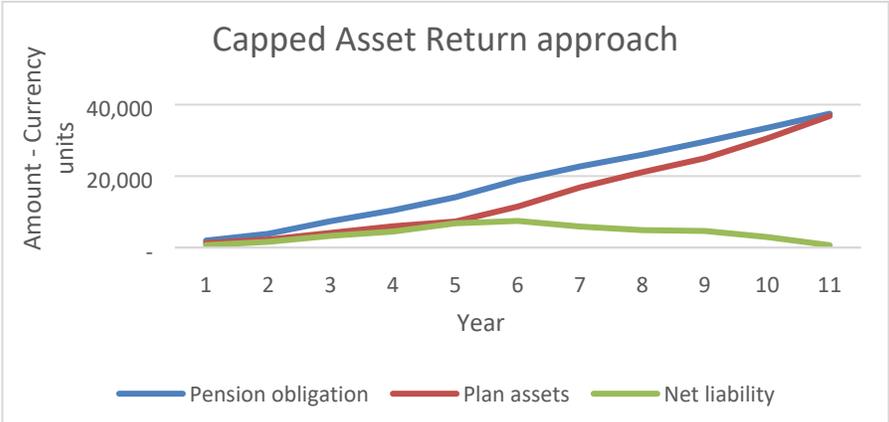
- 4.1 One main criticism of the application of IAS 19 to pension plans with an asset-return promise is that benefits are projected using the expected rate of return and then discounted using the yields on high quality corporate bonds.
- 4.2 A relatively simple solution is to align the two rates by including a cap on the expected rate of return equal to the discount rate. More generally, the expected return could be set at that level; since it is likely that the expected returns exceed the High Quality Corporate Bond Rate, in practice a cap mechanism would achieve the same results.
- 4.3 Under this approach, the entity first projects the total benefits at retirement by using the capped rate and compares this amount to the total benefit at retirement based on guaranteed rate. The higher of these two amounts is used to determine the pension obligation at the reporting date and the service cost. Apart from the above, the computation is similar to that under IAS 19.

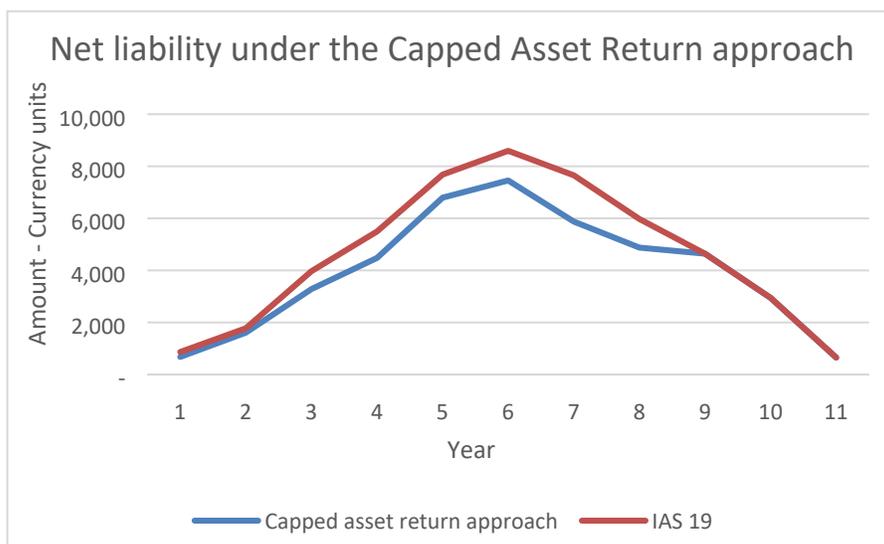
Statement of financial position

- 4.4 If we take Year Three of the example in this Discussion Paper, the net liability is as follows:

Currency units	
Plan assets	4,105
Pension obligation	7,386
Net liability	3,281

- 4.5 The graphs below show the actual net liability that has been recognised in the statement of financial position for the Capped Asset Return approach and a comparison with IAS 19:





- 4.6 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. The net liability under the Capped Asset Return approach is lower than that under IAS 19. This is because in this example, the High Quality Corporate Bond Rate used to project the asset returns under the Capped Asset Return approach is lower than the expected asset returns used for IAS 19.
- 4.7 As from Year Nine, the guarantee becomes effective. The net liability is computed based on the accumulated guaranteed amount for both approaches, thereby explaining the same amounts for both the Capped Asset Return approach and IAS 19 till Year Eleven.

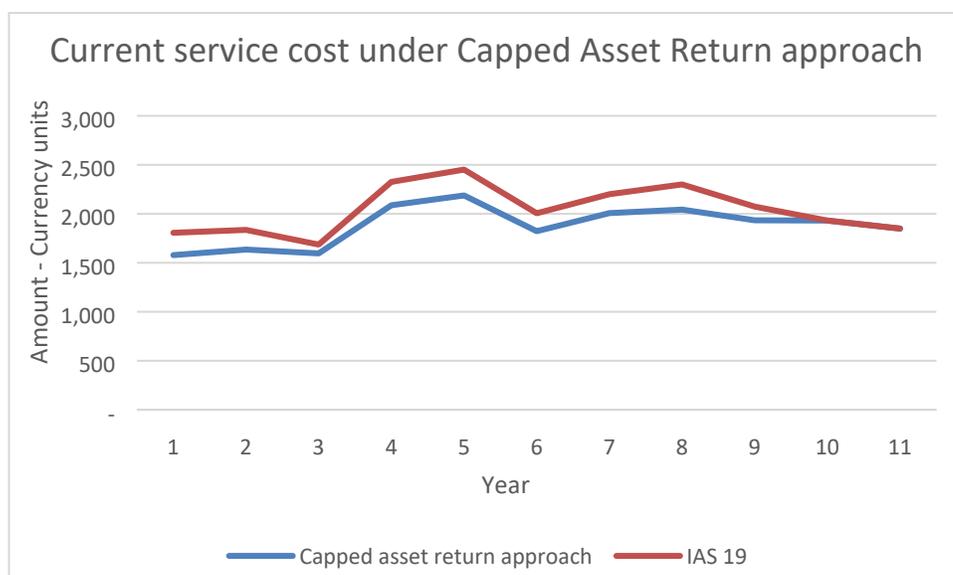
Pension income and costs in Comprehensive income

Current service cost

- 4.8 If we take Year Three of the example in this Discussion Paper, the current service cost is as follows. The methodology of computing this amount is the same as in IAS 19.

Currency units	
Current service cost:	1,596

- 4.9 The graph below shows the actual current service cost that has been recognised in profit or loss each year for both the Capped Asset Return approach and under IAS 19:



- 4.10 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 for the same reasons explained in paragraph 4.6 above.

Other pension income and costs

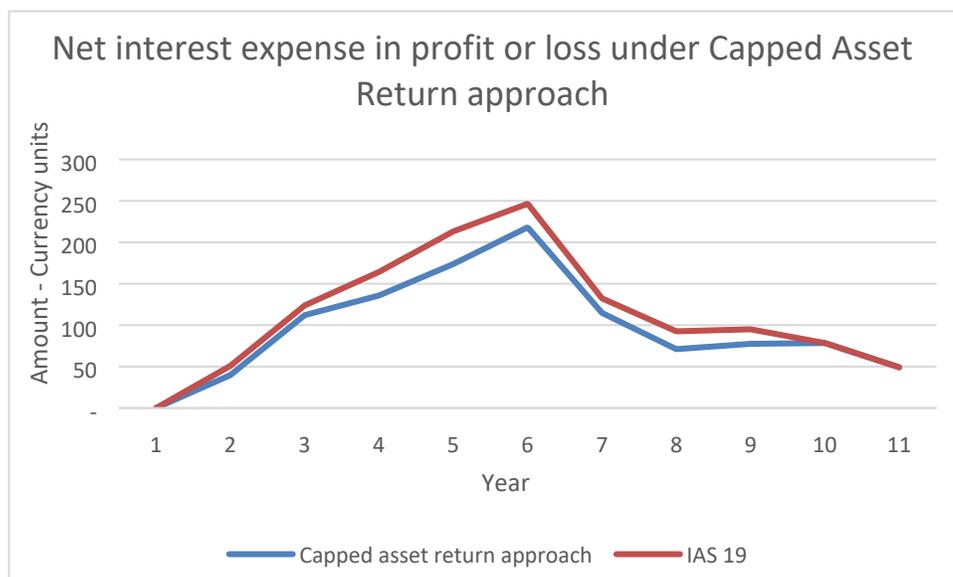
- 4.11 Taking Year Three of the example in this Discussion Paper, the following are elements that EFRAG considers to be recognised in the statement of comprehensive income (Note that positive amounts are income while negative amounts are expenses):

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

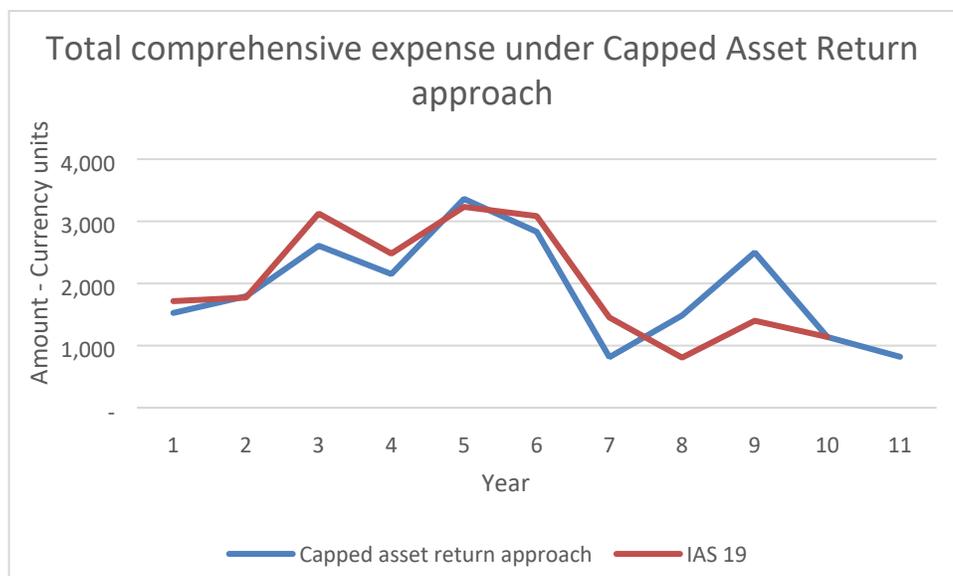
- 4.12 The return on plan assets is the same as under IAS 19, i.e., income from the assets each year using the High Quality Corporate Bond Rate for the year.
- 4.13 The interest expense for the pension obligation is computed by multiplying the opening balance of the pension obligation by the High Quality Corporate Bond Rate for the year. However, the difference with IAS 19 is that the pension obligation amount in this

approach is computed based on a projection of benefits using High Quality Corporate Bond Rate (or the guaranteed amount if higher) while under IAS 19, the expected rate of asset return is used.

- 4.14 The remeasurement relating to return on plan assets is the same as in 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.
- 4.15 The remeasurement relating to actuarial gains and losses is also the same as in IAS 19, i.e., it relates to the effect of changes in estimates concerning the total benefits at retirement and the effect of changes in the High Quality Corporate Bond Rate.
- 4.16 The graph below shows the actual net interest (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 Capped Asset Return approach and under IAS 19:



- 4.17 Both the interest income and interest expense recognised in profit or loss are 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 therefore also lower under the Capped Asset Return approach.
- 4.18 The graph below shows the actual comprehensive expense of the Capped Asset Return approach compared to IAS 19:



Fair Value approach

The approach

- 4.19 It could be argued that 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.
- 4.20 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.
- 4.21 It is possible to measure the full plan at fair value. However, it may be considered most relevant to only consider the liability for the completed service period. So, rather than allocating the full fair value on a straight-line basis, 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.
- 4.22 When a pension plan includes a 'higher of' option (e.g. the employee will receive the higher of the actual return on plan assets or 5.5 per cent return), the plan obligation can be measured at fair value in its entirety and reflect the most likely outcome (e.g. the actual return or the 5.5 per cent return). Another approach would separately reflect the obligation to pay the contributed amounts together with the asset returns (first component) and the value of the option (second component) i.e. to bifurcate the 'higher of' promise and account for it as a separate financial instrument. This latter approach has been considered to illustrate the Fair Value approach. Consequently, this fair value is estimated at the sum of fair values of the plan obligation to pay the contributed amounts together with any actual returns, and the guaranteed return component.
- 4.23 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.

- 4.24 Furthermore, non-vested benefits are recognised, but the fair value measurement should reflect the likelihood that the benefits do not vest i.e. it would mean that the measurement would be based on an expected value approach where the probability of different outcomes is reflected in the measurement. However, in cases where only a small number of employees are covered by a pension plan, which is in our case, this measurement may not be the best estimate of what will be the ultimate cost of providing the post-employment benefit.
- 4.25 Consequently, 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.
- 4.26 Regarding the second component of fair value, the work carried out to identify potential measurement solutions revealed a wide range of approaches. This included considering whether the fair value should be calculated for each period independently or for the entire period. However, when the guaranteed minimum return is separately measured for each contribution and not for the sum of the total contributions made, this may result in the net liability value being overstated. A more correct calculation should therefore take 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. In this paper, EFRAG considered the guaranteed return component to be measured 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 model¹⁷ 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.
- 4.27 The measurement is not adapted to reflect how the pension obligation will be settled. Unless, an entity is going to pay another party to transfer the obligation, a fair value measurement would not reflect how the obligation is settled, but a modified fair value could reflect this. Such a modified fair value could make use of relevant market factors when, for example, considering the time value of money and at the same time take into account how the entity is most likely to settle the obligation.
- 4.28 The elements affecting total comprehensive income 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;

¹⁷ That model was first presented in a paper written by Fischer Black in 1976.

- 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.

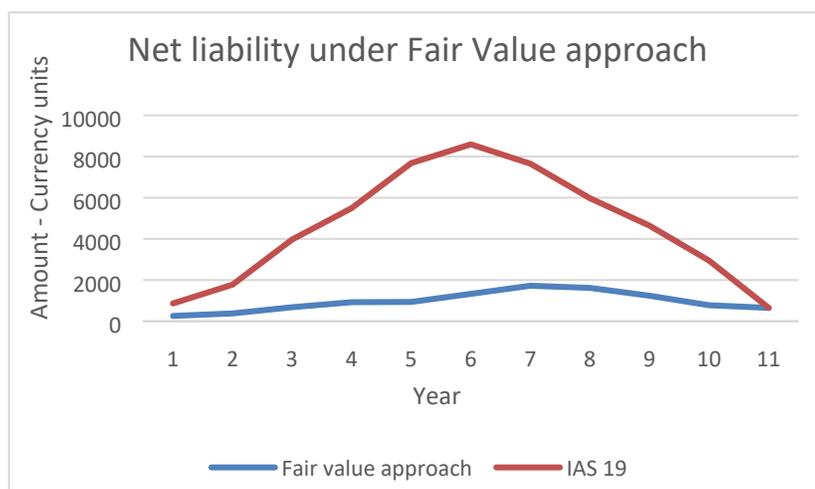
Statement of financial position

4.29 If we take Year Three of the example in this Discussion Paper, 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 obligation to pay the contributed amounts together with asset returns, measured at 4,105 CU, and rate guarantee value, 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 approach and compares it to IAS 19:



Pension income and costs in Comprehensive income

Current service cost

4.32 EFRAG considers that current service cost includes:

- a) 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 amount above.

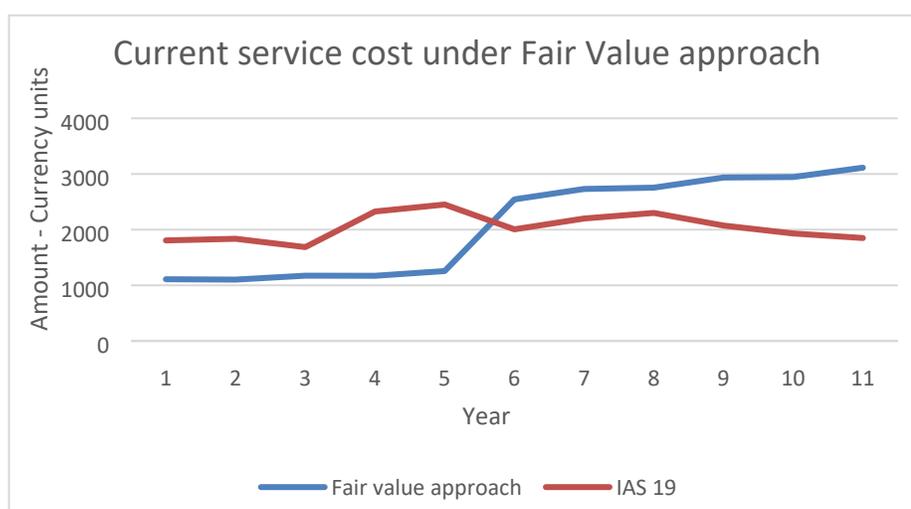
4.33 EFRAG considers that the mentioned components of current service cost reflect the additional salary that the entity would have to pay to the employee for him to be able to

purchase a pension plan with the same conditions. Since the fair value of employee's service cannot be reliably measured, in EFRAG's opinion such an approach would best reflect the cost of a service agreement between an employer and an employee if no other reward conditions had been agreed.

- 4.34 If we take Year Three of the example in this Discussion Paper, 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

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



- 4.36 As can be seen in the above graph, under the Fair Value approach, the current service cost increases over time mainly due to increases in contribution level.

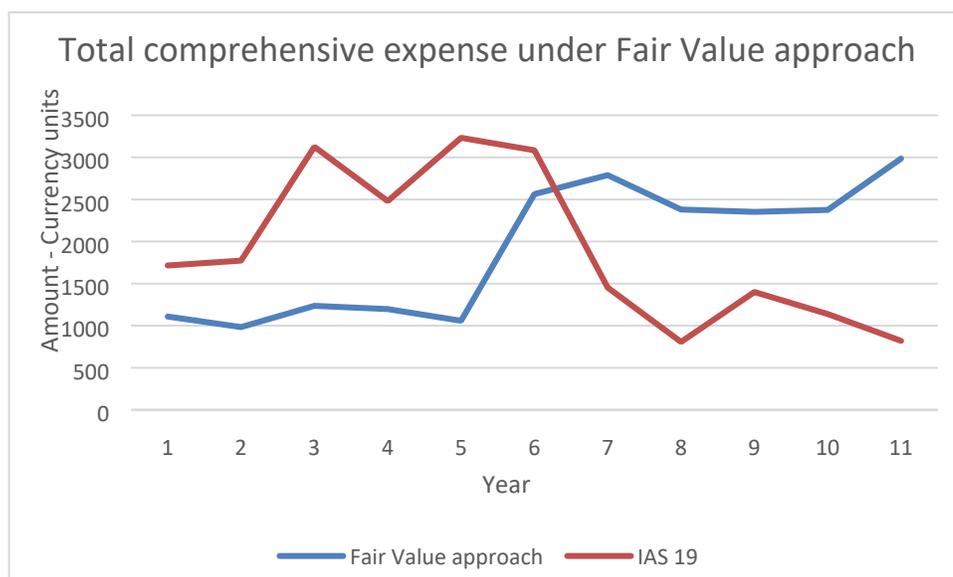
Other pension income and costs

- 4.37 Taking Year Three of the example in this Discussion Paper, 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	
Profit or loss:	
Current service cost	-1,173
Interest expense	-11
OCI:	
Other remeasurements	-52

Total comprehensive income	-1,236
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- 4.38 The interest expense is determined by applying the discount factor to the opening balance of the carrying amount of the net liability.
- 4.39 Other remeasurements comprise the remeasurement of the liability due to a change in the discount factor (which does not apply in this approach), and the remeasurement of the asset return rate guarantee in regard to past employer's and employee's contributions.
- 4.40 Furthermore, the graph below shows the actual total comprehensive income effect of the pension plan compared to IAS 19 approach.



- 4.41 In the graph above, compared to IAS 19 model, under Fair Value approach the charge in profit or loss increases over time, mainly due to the shorter time to maturity, and increases in subsequent years due to the guarantee becoming effective.

Fulfilment Value approach

- 4.42 EFRAG has considered that pensions with an asset-return promise and insurance contracts share a number of characteristics:
- Both obligations may have a long-term duration and therefore be uncertain about the amount and timing of the cash flows;
 - Both deliver a benefit promise from the sponsor to the beneficiary;
 - 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.
- 4.43 Therefore, one alternative would be a Fulfilment Value approach which relies on concepts from IFRS 17 *Insurance Contracts*, without being fully aligned to it.
- 4.44 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

- 4.45 Note that there are no changes to the measurement of the plan assets. IAS 19 would be applied to these plan assets, i.e., at fair value.
- 4.46 For the pension obligation in the example in this Discussion Paper, this includes:
- a) Expected future cash flows over the life of the pension plan which comprise:
 - (i) Expected cash inflows, being the expected future contributions from both the employer and employee expected to be made over the life of the pension plan;
 - (ii) Expected outflows, being the entity's expectation of what the employee will receive, i.e., the expected total benefits at retirement;
 - b) The above are discounted to present value using a discount rate that reflects the plan assets;
 - c) A risk adjustment which relates to non-financial risk (i.e. an outflow) and computed separately. (Note that in this Discussion Paper example, we have not considered the risk adjustment); and
 - d) The value of the guarantee which is computed separately and is based on employer and employee contributions that have already been made.
- 4.47 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 are unbiased and it is a probability-weighted estimate (i.e. expected value). That is, the estimates should not be biased by the intention of attaining a predetermined result or inducing a particular behaviour and the measurement should capture information about a full range of possible outcomes and their probabilities without undue cost or effort. These future cash flows are updated each reporting period. EFRAG notes that in the example in this Discussion Paper, we only have one scenario.
- 4.48 EFRAG considers that expected inflows would represent future services that the employee will provide to the employer in exchange for total benefits at retirement. As this cannot be directly measured, EFRAG has considered that the future contributions (made by both the employer and employee) could be used as a proxy to measure the value of

the future services. This is because EFRAG considers that these contributions are expected to be made towards total benefits at retirement in exchange for services to be provided by the employee.

- 4.49 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. In general, even if there is a link with the asset-return promise, an entity would need to consider factors relating to the pension obligation, i.e., factors that arise from the time value of money, the characteristics of the cash flows and the liquidity characteristics of the contracts.
- 4.50 If the pension obligation is based on assets that an entity holds, EFRAG does not consider that there would be a liquidity adjustment to be made to the liability discount rate because the pension obligation (excluding the value of the guarantee) is effectively the asset amount. However, EFRAG considers that the entity would have to consider other factors not relevant to the pension obligation and make adjustments to the liability discount rate. For example, an adjustment to the liability discount rate would be made if the duration of the assets is different from the duration of the pension obligation.
- 4.51 EFRAG has not considered the risk adjustment in the example in the Discussion Paper as there is only one employee and one scenario up to the end of the pension plan. However, in general, EFRAG considers that there may be a risk adjustment included in the measurement. Since this risk adjustment relates to non-financial risks, this could relate to the uncertainty of the amount and timing to pay out total benefits at retirement because of demographic risks. For example, there could be uncertainty about mortality assumptions which may affect the amount and timing of the total benefits at retirement. The risk adjustment would be a 'buffer' to be used in case the expected outflow amount may not be adequate. The risk adjustment would be remeasured at each reporting period.
- 4.52 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. It is computed based on employer and employee contributions that have already been made. 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.

Variations of the Fulfilment Value approach considered

- 4.53 EFRAG considered some variations of the Fulfilment Value approach as follows:
- a) Considering only the employee contributions as inflows and not the employer contributions. However, EFRAG considered that inflows represented future services that the entity expected to receive and therefore, using both employer and employee contributions was a good proxy to measure that future service for reasons explained in paragraph 4.48.
 - b) An approach similar to the Fulfilment Value approach being considered in this Discussion Paper except that the value of the guarantee is computed based on the expected employer and employee contributions to be made over the life of the

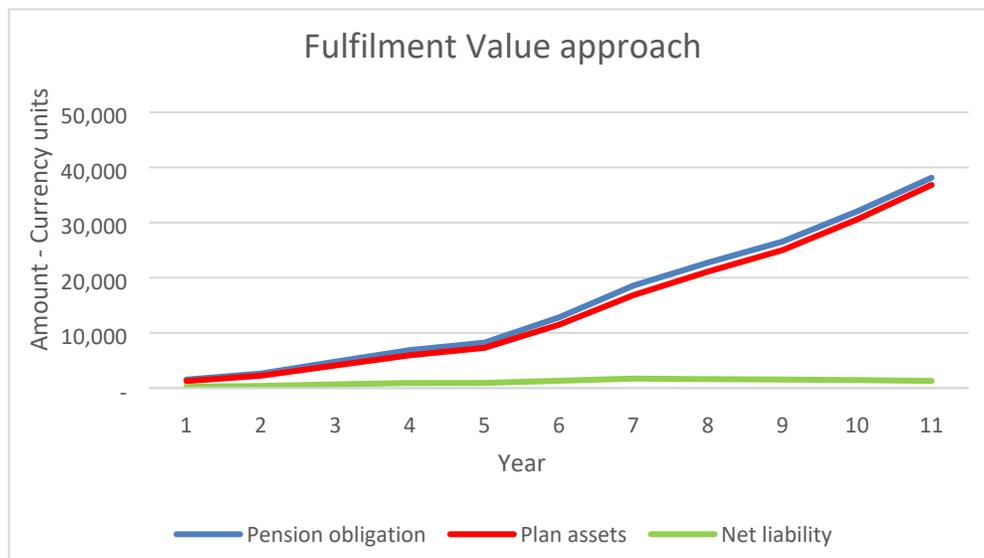
pension plan. As a reminder, in this Discussion Paper, the value of the guarantee is computed based on employer and employee contributions that have already been made. EFRAG considered this computation to be relatively simpler and less complex than computing the value of the guarantee over the life of the pension plan.

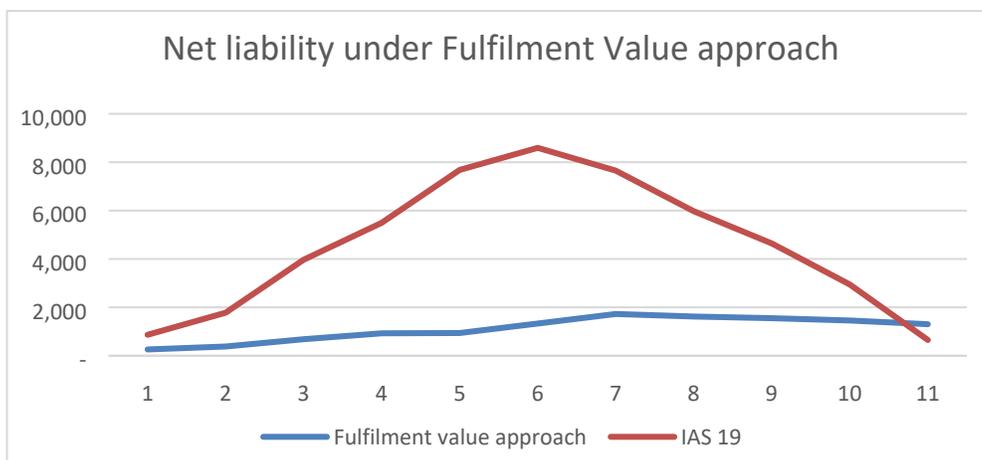
Statement of financial position

4.54 If we take Year Three of the example in this Discussion Paper, the net pension obligation is as follows:

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

4.55 The graphs below show the actual net pension obligation that has been recognised in the statement of financial position for the Fulfilment Value approach and a comparison with IAS 19:





4.56 Since the same discount rate is used for both the plan assets and the pension obligation (excluding the guarantee), these amounts are offset with each other. Therefore, as can be seen in the above graphs, the net pension obligation under the Fulfilment Value approach is effectively the value of the guarantee.

Pension income and costs in comprehensive income

Current service cost

4.57 As stated before, EFRAG considers that both employer and employee contributions are a proxy to measure the value of the future services from the employee. Therefore, when the contributions are paid each year, EFRAG considers that there has been service rendered by the employee. For these reasons, EFRAG considers that the current service cost should represent the part of the total pension benefits the employee has ‘earned’ in the period by providing services to the entity.

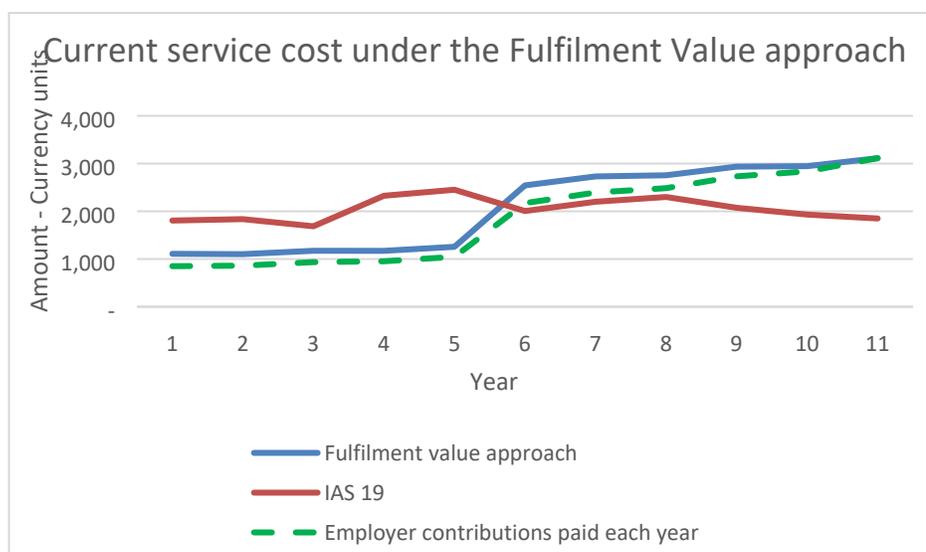
4.58 As a result, the current service cost per year, would consist of:

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

4.59 If we take Year Three of the example in this Discussion Paper, 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

4.60 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:



4.61 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.

Other pension income and costs

4.62 Taking Year Three of the example in this Discussion Paper, 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
Profit or loss:		
Current service cost		-1,173
Return on plan assets	454	
Interest expense	-454	
Net interest expense		0
OCI:		
Remeasurement of the guarantee		-63
Total comprehensive income		-1,236

4.63 The return on plan assets is the income from the assets each year using the actual asset rate of the year.

4.64 The interest expense for the pension obligation is computed by multiplying the actual asset rate of the year by the opening balance of the pension obligation. Note that this amount incorporates accretion of interest, changes in the discount rates and changes in future estimates (in this case representing a change in the total benefits at retirement which is payable just after Year Eleven).

4.65 In the example in this Discussion Paper, the net interest is zero. The pension obligation is the same as the plan assets in terms of amount and the discount rate being used.

EFRAG notes that there could be instances where the net interest would not be zero, for e.g., due to the discount rate of the pension obligation not being the same as that of the plan assets. Refer to paragraph 4.49.

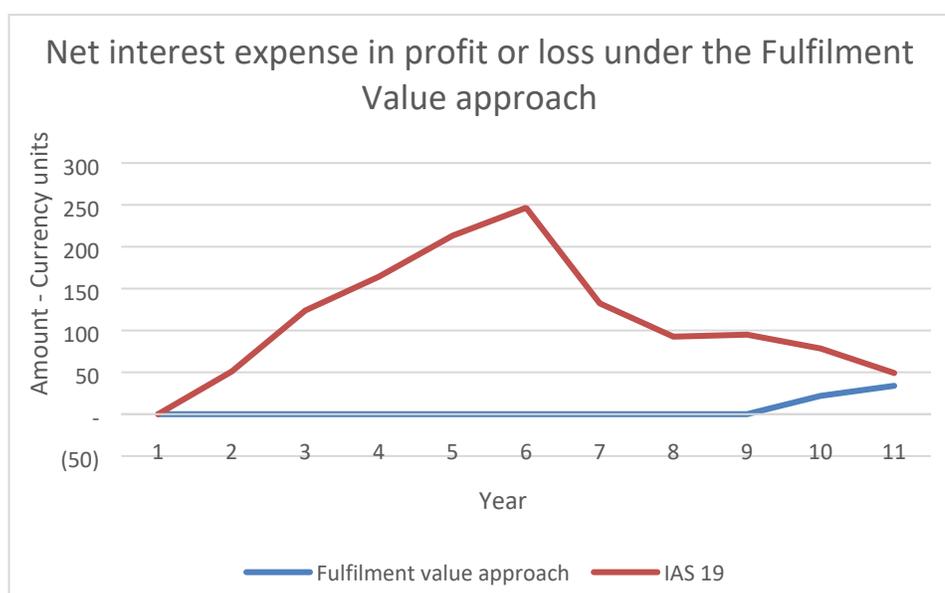
- 4.66 In the example in this Discussion Paper, EFRAG has considered that all interest rate movements for the net pension obligation are recognised in profit or loss. This has been done for simplicity reasons. EFRAG could consider to split interest rate changes between profit or loss and OCI. Amounts recognised in OCI would relate to changes in discount rates for the net pension obligation. However, there would be challenges relating to this split which include (i) on what basis the plan assets should be split between profit or loss and OCI, (ii) whether and on what basis the accumulated amounts in OCI would be zero, and (iii) whether there should be recycling of amounts from OCI to profit or loss.

Question for EFRAG TEG

- 4.67 Does EFRAG TEG consider that all interest rate movements for the net pension obligation should be recognised in profit or loss? Please explain why or why not.

- 4.68 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.

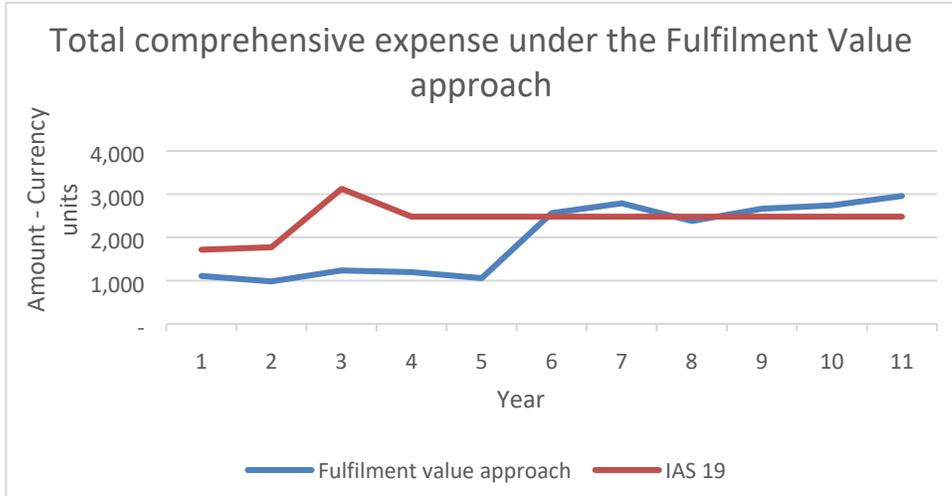
- 4.69 The graph below shows the actual net interest expense (i.e. the net of interest income from the pension assets and interest expense from the pension obligation) that has been recognised in profit or loss each year for both the Fulfilment Value approach and under IAS 19:



- 4.70 Up to Year Nine, the plan assets and the pension obligation (excluding the guarantee) are the same amount. 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.

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



4.72 In the graph above, under the Fulfilment Value approach, the total comprehensive income (in this case total comprehensive expense) increases over time. This is mainly because it reflects the employer's contributions 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 below.

Qualitative characteristics	IAS 19	Capped Asset Return approach	Fair Value approach	Fulfilment Value approach
The information is relevant:				
<ul style="list-style-type: none"> The approach always reflects how the pension obligation will be settled 	✗	✗	☺	✗
<ul style="list-style-type: none"> The economic covariance between plan assets and pension obligation is reflected 	✗	☺	✓	✓
<ul style="list-style-type: none"> Inadequate funding is reflected 	✗	✗	✓	✓
<ul style="list-style-type: none"> 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	✗	✗	✓	✗
Information will not be costly to provide	✗	✗	✗	✗

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 approach would also not reflect how the pension obligation is likely to be settled. As noted above, the Fair Value approach presented in this Discussion Paper is a modified Fair Value 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 different measurement of 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 approach 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. However, even this approach would better reflect 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. Both the Fair Value approach and the Fulfilment Value approach would reflect such a deficit. On the other hand, there could be situations under which the approach capping the expected return to the discount rate would not reflect a deficit.

- 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 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 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 approach retrospectively. 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 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:

- a) is easy to explain what it means;
- b) can be explained by other means than how it is ‘computed’,

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.

- 5.20 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.

- 5.21 Under the Fair Value 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

- 5.22 Financial information can be costly to prepare. Therefore the cost of providing the information should also be taken into account before requiring particular information.
- 5.23 The three suggested approaches may all be as costly or costlier to apply than the requirements in IAS 19 for defined benefit obligations.
- 5.24 The approach under which the expected return would be capped to the discount rate could be expected to be the least costly of the alternatives. 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.
- 5.25 The Fair Value approach may need the use of some unobservable input and could be costlier than the estimations required under IAS 19.
- 5.26 It is also assessed to be more costly than currently to apply the Fulfilment Value approach because, for example, IT systems would need to be changed.

CHAPTER 6: DISCLOSURE REQUIREMENTS

6.1 To be completed

CHAPTER 7: OTHER POSSIBLE APPROACHES AND THEIR IMPLICATIONS

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 the 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 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.

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.

- b) 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.

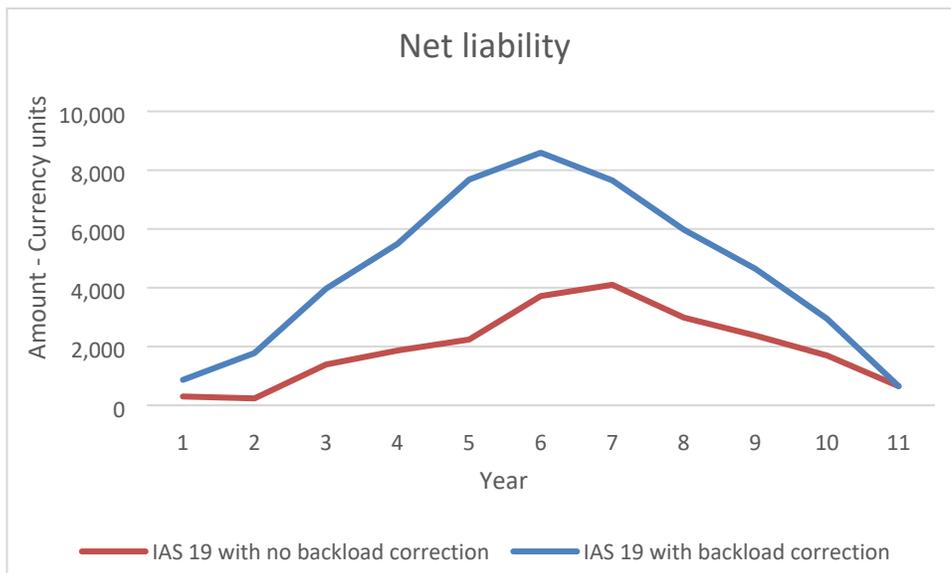
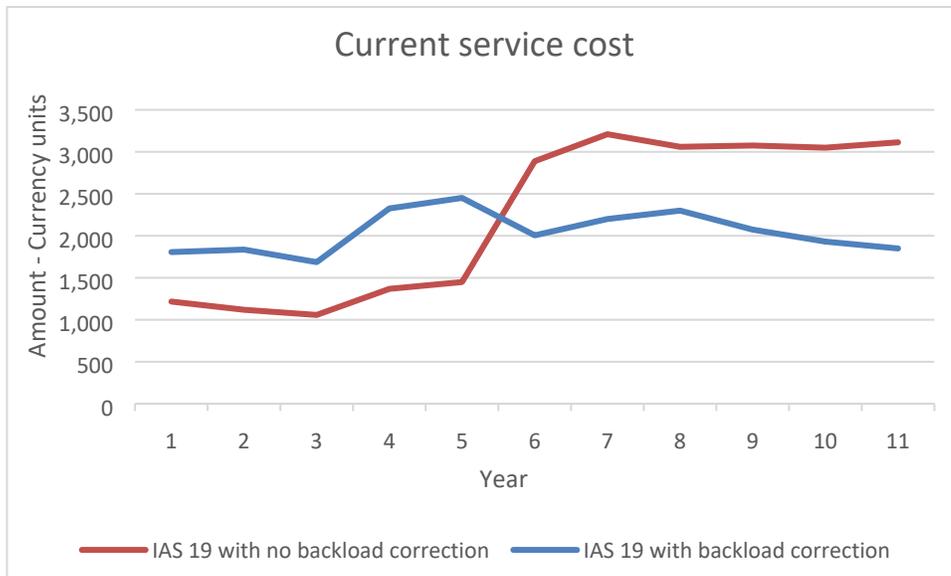
7.26 It might be possible to split the two components in the approach mentioned in paragraph above based on their relative fair values. However, this might be more complex than under the risk-separation model considered in paragraph 7.18 above and would result in the same issues with the measurement 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 would, for the plans considered in this Discussion Paper, would on many aspects resemble the Fair Value 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 to 2.18.
- 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

- 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 defined benefit 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 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 an in-built 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 employer'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 – Acknowledgments

This Discussion Paper was prepared jointly by the staffs of the European Financial Reporting Advisory Group (EFRAG), [Other National Standard Setters] as part of Europe's proactive work in financial reporting.

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