

STAFF PAPER

December 2015

Accounting Standards Advisory Forum

Project	Research Project: Post-employment benefits		
Paper topic	Global trends in pensions		
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Purpose and structure of the paper

1. In this research project, we have 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, and whether and when a fundamental amendment to IAS 19 *Employee Benefits* might be needed.
2. The purpose of the paper is to provide information about trends in pension plans.
3. The paper is structured as follows:
 - (a) key findings;
 - (b) discussions at the Interpretations Committee and ASAF; and
 - (c) details of the information gathered and staff analysis.

Key findings

4. We have analysed statistical data and anecdotal information gathered from various sources and held informal discussions with stakeholders, including actuaries and pension accounting specialists. Our key findings are as follows:

- (a) Hybrid plans are as common as traditional defined benefit (DB) plans and pure DC plans in Europe. The use of hybrid plans is particularly common in specific jurisdictions (eg Germany, the Netherlands, and Switzerland). EFRAG is starting research on pension accounting (IAS 19) and the scope of EFRAG's new research may include issues about collective defined contribution plans in the Netherlands, Swiss pension plans and cash-balance plans.¹
- (b) Similar plans exist or their use may be increasing in other jurisdictions (eg Canada, Mexico, South Africa). We note that the impact of problems in accounting for such plans often becomes obvious when either (or both) of the following applies:
 - (i) the plans are not pure DC plans (eg entities provide guarantees); or
 - (ii) future benefit levels depend on returns on assets. The expected return on the assets might be different from the discount rates used in IAS 19. (If the expected return is close to the discount rate (eg bond rates), the impact of the problems tends to be less obvious.)
- (c) There is a global trend of a decrease in traditional DB plans and an increase in DC plans and hybrid plans. In particular, there is a significant trend of transition from DB plans to DC plans in the UK, the US and Japan. The information gathered implies that traditional DB plans will be less common and DC plans will be predominant. However, some traditional DB plans have been converted into cash-balance plans or other new types of hybrid plans, typically in the US and Japan. This is because converting DB plans into pure DC plans is difficult for some entities because of pension regulations or because

¹ Under "collective defined contribution plans", employees do not have individual accounts. The plans have pooled assets that are usually managed by boards, which include representatives of employers, employees and retirees. It is expected that the pension risks (eg investment risks) will mostly fall on plan members. However, employers may make contributions to cover a deficit, in some cases.

Typical hybrid plans including "Cash balance plans" are explained in Appendix A of this paper.

introducing them may make it more difficult to retain employees. We expect that cash-balance plans and other hybrid plans will become more common than traditional DB plans, because of these trends.

- (d) In some jurisdictions (eg China, India, Singapore, Indonesia, Turkey, Spain), pure DC plans are predominant. We did not observe any evidence that imply this situation is expected to change in these jurisdictions.

Past discussions by the Interpretations Committee and ASAF

5. The Interpretations Committee noted the importance of the issues related to contribution-based promises because of the increasing use of plans with these features. The Interpretations Committee attempted to improve the financial reporting for such plans. However, it was unable to identify a suitable scope for an amendment that would both:
 - (a) improve the accounting for a sufficient population of plans in such a way that the benefits would exceed the costs; and
 - (b) limit any unintended consequences that would arise from making an arbitrary distinction between otherwise similar plans.
6. The Interpretations Committee acknowledged that reducing diversity in practice in the short term would be beneficial. However, the Interpretations Committee decided to remove the work on this topic from its agenda at its May 2014 meeting because of the difficulties encountered in progressing the issues.
7. Agenda Paper 5A at the September 2012 Interpretations Committee meeting summarised the results of the staff's outreach. That paper explains that:
 - (a) plans with a guaranteed return are common in Germany, the Netherlands, Belgium, Switzerland and Israel and may exist in Korea and Mexico; and
 - (b) cash-balance plans are common in the US, Japan and the UK.

A summary of the staff's outreach and details of these plans above is presented in Appendix A of this paper.

8. At the December 2014 ASAF meeting, ASAF members generally welcomed that fact that the IASB is carrying out a research project on post-employment benefits. Many stated that the use of contribution-based promises or other new types of pension promises is increasing, whereas the use of traditional DB plans is decreasing in many jurisdictions.
9. Following the Agenda Consultation 2011—2012, the IASB identified this project as a longer-term project because of its complexity. We do not suggest a change of this priority at this stage. We will give further thought to the scope and priority of our research work on this topic when we have considered the feedback to be received in the ongoing Agenda Consultation, as explained in Agenda Paper 15C.

Details of the information gathered and staff analysis

Analysis of statistics

10. Our analysis of statistical data provided evidence about the current and increasing importance of contribution-based promises or other new pension plan designs.
11. Various organisations provide statistics about pension plans. The Organisation for Economic Cooperation and Development (OECD) provides information about private pension plans in OECD, and some non-OECD countries, covering Asia-Pacific, African, North and South American and European. The European Insurance and Occupational Pensions Authority (EIOPA) provides a database about private pensions in 31 countries in the European Economic Area (EEA). We also identified other useful data.
12. These databases do not always use a consistent classification of pension plans and do not always contain sufficiently detailed information to observe a ratio of hybrid plans among pension plans, but they are useful for identifying global trends in pension plans.

The OECD data

13. Based on the data about the geographical distribution of pension assets, we expect that pension accounting may have a significant impact in the US, the UK, Australia, the Netherlands, Japan, Canada and Switzerland, but we also note that the ratio of pension assets in other countries to overall pension assets increased from 2003 to 2013.
14. We also noted that the OECD data implies that the use of pension plans with a guaranteed return is common in many European jurisdictions and Mexico. For example, 100 per cent of the plans in Switzerland are classified as hybrid plans. Moreover, a majority of the plans in Mexico, Denmark and Iceland are DC plans with guarantees (ie not pure DC plans). We also noted that the OECD data implies that the use of pensions with guaranteed returns increased in Korea and Nigeria from 2007 to 2012. (See Appendix B of this paper for further details of the OECD data.)

The EIOPA data

15. The EIOPA data classified the 156 types of occupational plan, as follows:
 - (a) 55 plans were (traditional) DB plans;
 - (b) 51 plans were classified as pure DC plans with no guarantees;
 - (c) 9 plans were DB 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;
 - (d) 21 plans are operated like DC plans but provide guarantees (eg a minimum rate of investment return, a guarantee of a certain annuity purchase price);
 - (e) 16 plans have two separate DB and DC components, but they are treated as part of the same scheme (ie ‘bundled’ plans); and

(f) 4 plans were classified as ‘Others’.²

This indicates that 50 types of plan among the 156 types of occupational plans in the samples used in the data are neither typical traditional DB plans (55 plans) nor pure DC plans (51 plans).

16. Consequently, we think that the data described in the previous paragraph indicate that “hybrid plans” are as common as pure DC plans and as traditional DB plans in the EEA.
17. According to the EIOPA database, contribution-based promises are particularly common in Germany and Belgium and DC plans with guarantees are common in Sweden and France.

Movement to DC plans and cash balance plans from traditional DB plans

18. The FASB had been considering the issue of measurement of cash-balance plans including the issue of attribution of benefits to periods of service. On 13 August 2014, the FASB decided not to undertake a project on accounting for cash-balance plans, mainly because the FASB had not identified a technically feasible, cost-effective alternative that would narrowly address the measurement of cash-balance plans.³
19. The Financial Accounting Standards Advisory Council (FASAC) considered some data on pension plans presented by Towers Watson on June 11, 2015.⁴ The data is primarily based on Towers Watson clients and explains key trends in the US and other countries. It indicates that:

² Source: The EIOPA’s Database <https://eiopa.europa.eu/regulation-supervision/pensions/database-of-pension-plans-and-products-in-the-eea>

³ Source: The FASB’s website: http://www.fasb.org/cs/ContentServer?c=FASBContent_C&pagename=FASB%2FFASBContent_C%2FProjectUpdatePage&cid=1176164287126

The FASB decided to add a project to its technical agenda to improve the presentation of net benefit cost in an employer’s financial statements, as of June 29, 2015. http://www.fasb.org/jsp/FASB/FASBContent_C/ProjectUpdatePage&cid=1176166200001#background

⁴ The material is available on the following website: http://www.gasb.org/cs/ContentServer?c=Document_C&pagename=FASB%2FDocument_C%2FDocumentPage&cid=1176166109926

- (a) there is a transition from DB to DC in the US, the UK, and Japan; and
- (b) some DB plans have been converted into cash-balance plans or other ‘hybrid’ plans.

20. According to the data, in the US there were 246 traditional DB plans at the beginning of 1998. Among these DB plans, 99 plans were converted into hybrid plans and 113 plans were closed to new members or new accruals by 2013. This means that only 34 plans among 246 traditional DB plans are still open for new employees in 2013. According to this data, there were 49 hybrid plans at the beginning of 1998. 84 hybrid plans, including those moved from traditional DB plans, existed and were still open for new employees in 2013.
21. According to the data provided by the US Department of Labor, the ratio of DC plans among all plans increased from 54.0 per cent (2002) to 61.2 per cent (2012) in the US. The ratio of cash balance plans among DB plans increased from 23.7 per cent (2002) to 31.7 per cent (2012).⁵
22. The government statistics in Japan also indicate a similar trend toward cash-balance plans. They indicate that, among Japanese entities with 1000 employees or more, 53.3 per cent of the DB plans were cash-balance plans according to the data published in 2012, whereas that ratio was 49.7 per cent in the data published in 2007.⁶ The data also indicates that most of the cash-balance plans refer to government bond rates to determine benefits to plan members. This feature reduces the impact of accounting problems, because the government bond rates to determine benefits tend to be close to the discount rate to be used in pension accounting.

⁵ Source: Table A1, Number of Pension Plans, Total Participants, Active Participants, Assets, Contributions and benefits by type of plan, 2002 and 2012, obtained from [the webpage of the US Department of Labor](#). Amounts of assets were used to calculate the ratios in this paragraph.

⁶ Source: Survey of retirement benefits (National Personnel Authority of Japan): http://www.jinji.go.jp/toukei/taisyokukyuufu/taisyokukyuufu_ichiran.htm

23. In the UK, the number of DC plans significantly increased in 2014 because of a change in the UK pension regulations.⁷ Hybrid plans with many varieties exist but are not very common in the UK. 330 plans are hybrid plans, whereas 5530 DB plans exist, according to the data provided by the Pensions Regulators.⁸
24. The above evidence, combined with information we have obtained in informal outreach, shows that there is a strong global trend towards DC plans. A global survey by PwC also indicates that most multinational entities intend to use DC plans and freeze DB plans.⁹ However, it seems that it is not easy for some entities to use pure DC plans, because of wanting to retain employees and because of difficulty in reaching agreement with plan members and because of regulations to protect plan members.
25. Consequently, we expect that traditional DB plans will continue to decrease and cash-balance plans and other hybrid plans may continue to increase.

Country snapshots

26. To confirm our overall understanding of plans used in each jurisdiction, we used data from Mercer (a human resource consulting firm).¹⁰ This includes information about typical benefit practices and hybrid alternatives in many countries in North and South Americas, Asia-Pacific, Africa, Central and Eastern Europe and Western Europe. The data indicates that:
 - (a) hybrid plans exist in Brazil, Canada, Mexico, the US, Japan, South Africa, France, Germany, Switzerland and the UK; and

⁷ Source: Occupational Pension Schemes Survey 2014, the UK Office for National Statistics: http://www.ons.gov.uk/ons/dcp171778_417405.pdf

⁸ Source: The Pension Regulators' webpage: <http://www.thepensionsregulator.gov.uk/doc-library/dc-trust-a-presentation-of-scheme-return-data-2014>

⁹ Source: A PwC survey of global multinationals, obtained from the website: <http://www.pwc.com/gx/en/services/people-organisation/publications/global-pensions-survey.html>

¹⁰ Source: Introduction to Benefit Plans around the World - A Guide for Multinational Employers, 2015 Edition (Mercer)

- (b) pure DC plans are predominant in China, India, Singapore, Indonesia, Turkey, Spain, Portugal, Hungary and Romania.

Other anecdotal information

27. We have obtained anecdotal information from our informal communication with our stakeholders, including pension accounting specialists and international actuaries. This indicates that problems related to the measurement of hybrid plans have been observed in many jurisdictions and many specialists think that the current IAS 19 is problematic for these hybrid plans.
28. We were told that each jurisdiction has its own variations of post-employment benefits (and other long-term employee benefits) and some stated that the application of IAS 19 does not always reflect the natures of the new types of plans appropriately.
29. In some jurisdictions, it seems the use of new pension designs is increasing and problems are being observed. For example, one specialist informed us that new plans, called Target Benefit Plans or Variable Benefit Plans, are starting to become more common in Canada. We were also told that there is a potential issue about measurement of specific types of plans in South Africa. In Japan, new types of hybrid pension plans for entities may be introduced, according to recent public discussions at the Ministry of Health, Labour and Welfare.
30. A few specialists stated that IAS 19 does not provide the most relevant information even for typical traditional DB plans, because measurement in IAS 19 does not reflect risk premiums properly. They mentioned that transaction prices of annuities or longevity swaps and significant settlement losses imply that the true economic values of pension obligations are higher than the amounts of defined benefit obligations measured under IAS 19. Several specialists mentioned that the use of longevity swaps or other methods of pension risk management may become more common, particularly in the UK but also elsewhere.
31. A few specialists also mentioned broader potential problems, for example with respect to the unit of account, frequency of measurements or practical difficulties

in applying IFRIC 14 *IAS 19—The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction*.

Appendix A: Plans with a promised return on contributions or notional contributions.

Type of plan	Basic features	Variations	Notes	Countries where common
<p>1. Plans with guaranteed return</p>	<p>The employee receives a pension based on the performance of the assets in the plan. The employer provides a guarantee of the minimum performance of the assets in the plan. This guarantee is based on the employer's contributions to the plan.</p> <p>Consequently, under these plans the employee receives a benefit that is the higher of the contributions plus the actual return on the assets in the plan and the guaranteed amount.</p>	<p>The employer will typically guarantee a return of x per cent on contributions.</p> <p>The guaranteed return of x per cent could be a numerical amount or may refer to a reference rate, for example the yield on government bonds in that country, an equity index or a price change index.</p> <p>In some circumstances the employer might guarantee that the benefit will be no less than the contributions made, ie a return of 0 per cent.</p> <p>Usually the guarantee is given only on the employer's contributions.</p>	<p>The employer may also guarantee a return on contributions made by employees, which may be voluntary (this seems however to be rare).</p> <p>Some plans and the associated guarantees are contractual, whereas some are required by law.</p>	<p>Germany, Netherlands, Belgium, Switzerland, Israel</p> <p>(Not common but may exist in Korea and Mexico)</p>

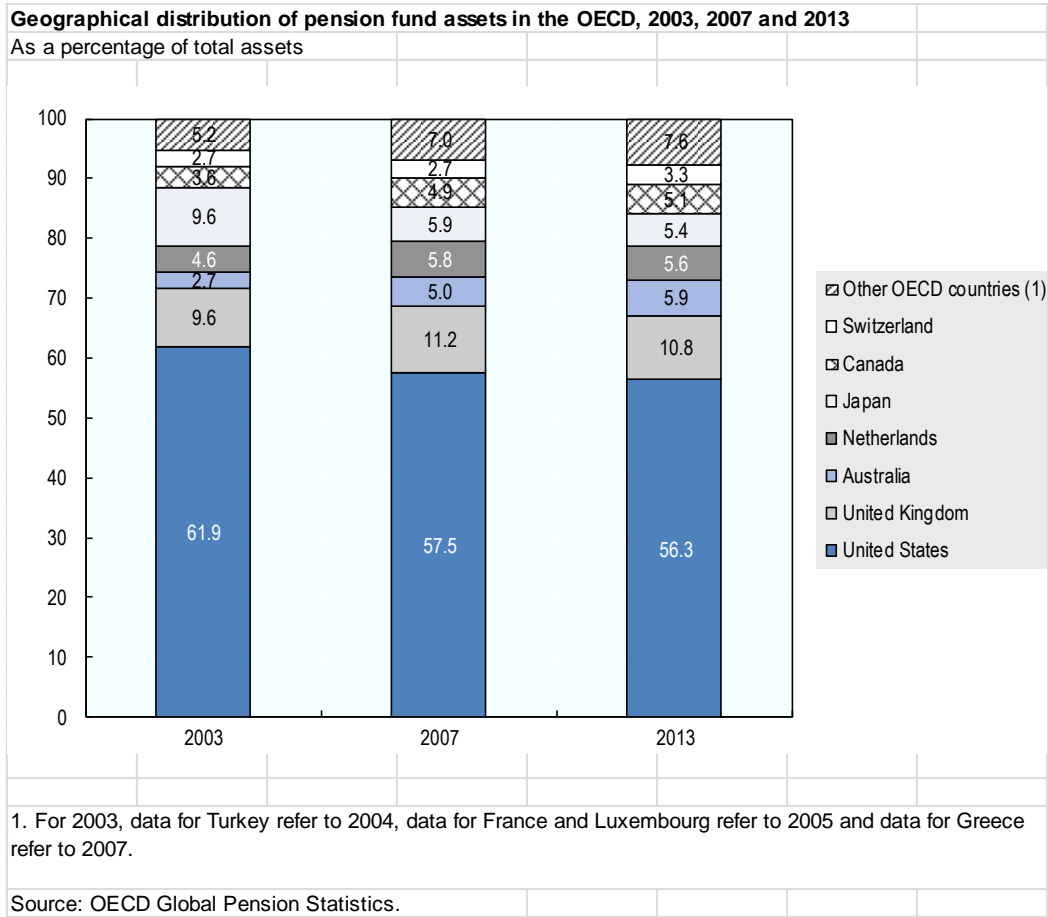
Type of plan	Basic features	Variations	Notes	Countries where common
2. 'Cash balance plans'	<p>The employee receives a guaranteed benefit based on a specified return on 'notional'* contributions by the employer to the plan.</p> <p>*See comment on 'notional' in the Notes column.</p>	<p>The employer will typically guarantee a return of x per cent on contributions.</p> <p>The guaranteed return of x per cent could be a numerical amount or may refer to a reference rate, for example the yield on government bonds in that country, an equity index or a price change index.</p> <p>In some circumstances the employer might guarantee that the benefit will be no less than the contributions made, ie a return of 0 per cent.</p> <p>Usually the guarantee is given only on the employer's contributions.</p>	<p>The plans may be funded or unfunded (for unfunded plans, the contributions and the return on the contributions are notional).</p> <p>If these plans are funded, they may be funded with assets that have a different return than the return promised by the plan. Any return on the assets in the plan that exceeds the amount guaranteed by the employer is an asset of the employer.</p>	US, Japan, UK

(Note)

For further details, refer to [Agenda Paper 5A from the IFRS Interpretations Committee meeting in September 2012](#).

Appendix B—the OECD data

A1. The following chart presents the geographical distribution of pension assets in the OECD, 2003, 2007 and 2013.



A2. The following table presents the relative shares of DB and DC pension fund assets in selected OECD and non-OECD countries, for 2007 and 2012.

Relative shares of DB and DC pension fund assets in selected OECD and non-OECD countries, 2007 and 2012								
As a percentage of total assets								
	2007				2012			
	Defined contribution		Defined benefit		Defined contribution		Defined benefit	
	Protected	Unprotected	Traditional	Hybrid / Mixed	Protected	Unprotected	Traditional	Hybrid / Mixed
Selected OECD countries								
Australia (1)	..	86.3	13.7	n.a.	..	89.8	10.2	n.a.
Canada (2)	n.a.	2.4	91.1	6.5	n.a.	3.0	92.0	5.0
Chile	n.a.	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.
Czech Republic	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.	n.a.
Denmark	92.1	..	7.9	..	93.7	..	6.3	..
Estonia	n.a.	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.
Finland	n.a.	n.a.	100.0	n.a.	n.a.	n.a.	100.0	n.a.
France (3)	n.a.	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.
Greece	n.a.	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.
Hungary	n.a.	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.
Iceland	73.3	9.6	17.0	n.a.	65.1	9.9	25.1	n.a.
Israel	n.a.	20.9	79.1	n.a.	n.a.	26.1	73.9	n.a.
Italy	28.9	57.6	13.5	n.a.	28.8	63.5	7.7	n.a.
Korea (4)	6.6	n.a.	93.4	n.a.	25.8	n.a.	74.2	n.a.
Luxembourg (5)	n.a.	20.4	79.6	..	n.a.	19.8	58.3	21.9
Mexico (3)	77.4	n.a.	22.6	n.a.	84.6	n.a.	15.4	n.a.
New Zealand (1)	n.a.	73.9	26.1	..	n.a.	78.7	21.3	..
Norway	..	..	100.0	..	..	..	100.0	..
Poland	..	100.0	n.a.	n.a.	..	100.0	n.a.	n.a.
Portugal	n.a.	5.3	94.7	..	n.a.	13.3	84.7	2.0
Slovak Republic	n.a.	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.
Spain (3,4)	n.a.	73.0	0.5	26.5	n.a.	73.0	1.0	26.0
Switzerland	n.a.	n.a.	..	100.0	n.a.	n.a.	..	100.0
Turkey	..	44.3	55.7	..	..	39.9	33.3	26.8
United States (2)	n.a.	35.7	64.3	n.a.	n.a.	38.1	61.9	n.a.
Selected non-OECD countries								
Albania	n.a.	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.
Brazil (3)	n.a.	18.9	81.1	..	n.a.	9.3	74.4	16.2
Bulgaria	n.a.	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.
Costa Rica	n.a.	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.
Hong Kong (China)	n.a.	79.5	20.5	..	n.a.	85.6	14.4	..
Liechtenstein	..	64.3	35.7	..	..	43.8	56.2	..
Nigeria	37.5	n.a.	62.5	n.a.	65.7	n.a.	34.3	n.a.
Pakistan	..	100.0	..	..	..	100.0	..	..
Peru	n.a.	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.
Romania	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.	n.a.
Thailand	n.a.	100.0	n.a.	n.a.	n.a.	100.0	n.a.	n.a.
*.. means not available; "n.a." means not applicable.								
1. Data refer to the end of June of each year								
2. Data refer to occupational plans only.								
3. 2012 data refer to 2011.								
4. 2007 data refer to 2008.								
5. Data only refer to funds under the supervision of CSSF.								

Data source: OECD global pension statistics

<http://www.oecd.org/finance/pensionmarketsinfocus.htm>

(The IASB staff have highlighted some cells in yellow when the numbers indicate that hybrid plans or DC plans with guarantees are common or are becoming more common.)

A3. In the OECD data, pensions are classified as follows:

- (a) ‘Traditional’ DB plan: a DB plan in which benefits are linked through a formula to the members’ wages or salaries, length of employment, or other factors.

- (b) ‘Hybrid’ DB plan: a DB plan in which benefits depend on a rate of return credited to contributions. This rate of return is either specified in the plan rules, independently of the actual return on any supporting assets (eg fixed, indexed to a market benchmark, tied to salary or profit growth, etc), or is calculated with reference to the actual return of any supporting assets and a minimum return guarantee specified in the plan rules.
- (c) ‘Mixed’ DB plan: a DB plan that has two separate DB and DC components but that are treated as part of the same plan.¹¹
- (d) ‘Defined contribution (protected)’: a personal pension plan or occupational defined contribution pension plan other than an unprotected pension plan. The guarantees or promises may be offered by the pension plan/fund itself or by the plan provider (eg deferred annuity, guaranteed rate of return).
- (e) ‘Defined contribution (unprotected)’: a personal pension plan or occupational defined contribution pension plan in which the pension plan/fund itself or the pension provider does not offer any investment return or benefit guarantees or promises covering the whole plan/fund.

¹¹ DC components and DB components are sometimes combined as a single legal plan. Such plans are usually called as ‘bundled plans’ (or ‘mixed plans’). A specialist informed us that mixed (bundled) plans are common in Australia and some jurisdictions. Bundled plans are called ‘hybrid plans’ in the EIOPA data. When we use the word ‘hybrid plans’ in the staff papers, we intend to include plans that incorporate features of both DC and DB plans, but exclude ‘bundled plans’.