Research Report

Overseas Research on Application of International Accounting Standard 19 and Its Implications

March 2011

This is an English translation of "国際会計基準（IAS19）の適用に関する海外調査と示唆" except for its appendix. The original was issued in Japanese.

The Japanese Society of Certified Pension Actuaries

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Preface

This research report was prepared based on the field research on application of the International Financial Reporting Standards (IFRS, mainly IAS 19 employee benefits) in four European countries in September 2010.

In Japan, the accounting standard for post-employment benefits similar to the then US standard and IAS 19 was adopted from fiscal years starting after April 2000. Recently, as a part of the convergence to minimize the differences between the overall Japanese standards and IFRS, a project is underway to further revise the accounting standard for post-employment benefits. In 2008, the EU announced a judgment that the Japanese standards were equivalent to IFRS. The exposure draft (Step one of the longer project) issued by the Accounting Standards Board of Japan (ASBJ) in March 2010 included the proposal to mostly erase the remaining differences between the Japanese standard and IAS 19 regarding the valuation of post-employment benefit obligations, which is closely related to our business activities. The current schedule is to reach a conclusion by the end of March 2011.

Meanwhile, the position document (interim report) issued by the Business Accounting Council of the Government of Japan in June 2009 considered it appropriate to permit application of IFRS as issued by IASB on a voluntary basis as early as possible. It set a target of around 2012 as the timing for making a decision on compulsory application. Along with this, the Regulation of Consolidated Financial Statements was amended in December 2009, and accordingly, application of IFRS on a voluntary basis to consolidated accounting report of listed companies that satisfied certain requirements started from the fiscal year ended in March 2010.

Based on these developments, at its meeting in December 2009, the Board of Directors of JSCPA authorized field research to be carried out in European countries which have already introduced IFRS.

Among our Committee members, Akihiro Hotta, Takahito Hombe, Takeshi Toyodome, Masashi Kitano and Takashi Ogawa volunteered to participate, so six people including myself were going to undertake research. This became the Research Team on IFRS adoption, which started specific planning from April 2010. Takahito Hombe became a team leader. All the members were committed to making the most of what they had despite their busy business schedules.

The Committee also has Japanese Standards Team (led by Kenichi Kusakabe) and International Standards Team (led by Akihiro Hotta). The former watches the Japanese standards amendments and is currently reviewing the entire text of the actuarial practice standards of JSCPA corresponding to the convergence project. The latter watches the amendments of IFRS (mainly IAS 19). Both Teams supported this research, and I expect its results to be utilized in their activities.

Major countries were picked up for our research that have defined benefit plans where there is a good likelihood of interviewing appropriate people. We eventually chose UK, Germany,

Netherlands and Switzerland. In setting up the places to visit, the following people kindly provided great support. I would like to take this opportunity to extend my appreciation to them.

Gary R. Hibbard	Chair, Pensions and Employee Benefits Committee of IAA*
Alfred E. Gohdes	Chair, Accounting Standards Subcommittee of PEBC of IAA
Motohide Ozawa	Former member, Technical Committee of Employee Benefits of ASBJ
Ryo Matsubara	Full member, JSCPA
Akihiro Hotta	Member, the Committee
Takuma Fukuhara	Member, the Committee
Takanobu Miwa	Member, the Committee
Shinichi Nasukawa	Member, the Committee

*IAA: International Actuarial Association

We believe the necessary information was obtained efficiently as we were able to interview many people in leading positions, and the places we visited were diverse in the following aspects:

- Three types of companies: audit firms, actuarial consulting firms and preparers of financial reports
- EU: UK, Germany and Netherlands belong to EU, while Switzerland does not.
- Currency: Pound sterling (UK), Euro (Germany and Netherlands) and Swiss Franc (Switzerland)
- Pension plan: Trust scheme in UK and foundation (legal personality) in other three countries. However, in Germany, other schemes including book reserve are also popular. The design of benefits and funding standards vary depending on the country.
- Accounting standards: In UK the difference between the local standard (FRS17) and IAS 19 is small. Various differences exist in other countries.

The research was based on the questionnaire e-mailed in advance. Utilizing the face-to-face interview, we not only gathered the answers but also tried to grasp the background. I would like to thank people who kindly accepted an interview for sparing their valuable time.

Since the research is based on interviews, it does not necessarily reflect statistical facts, and we may have misinterpreted some points. We summarized the results by exchanging information among research members during and after the field trip in order to avoid such problems as far as possible.

I sincerely hope these research findings and implications contribute not only to members of JSCPA but also to the many people who are interested in accounting for post-employment benefits.

March 2011

Yasuyuki Fujii, Chair
Accounting Standards Committee of JSCPA

Research Members

	Name	Company
Chair	Yasuyuki Fujii	The Sumitomo Trust & Banking Co., Ltd.
Team Leader	Takahito Hombe	Russell Investments
	Akihiro Hotta	Deloitte Touche Tohmatsu LLC
	Takeshi Toyodome	Nippon Life Insurance Company
	Masashi Kitano	The Sumitomo Trust & Banking Co., Ltd.
	Takashi Ogawa	Mizuho Trust & Banking Co., Ltd.

Back row, from left, Akihiro Hotta, Takeshi Toyodome, Masashi Kitano, Takashi Ogawa
Front row, from left, Yasuyuki Fujii, Takahito Hombe

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This English version does not contain Appendix.

I. Research Method

1. Research period

September 6-14, 2010

2. Research member

We split into two parties considering the locations of the places we visited.

Party A : UK, Germany and Netherlands

Yasuyuki Fujii	(Sumitomo Trust & Banking)
Akihiro Hotta	(Deloitte Touche Tohmatsu)
Masashi Kitano	(Sumitomo Trust & Banking)

Party B: UK, Germany and Switzerland

Takahito Hombe	(Russell Investments)
Takeshi Toyodome	(Nippon Life Insurance)
Takashi Ogawa	(Mizuho Trust & Banking)

3. Places to visit

Places we visited to research are as follows.

	Actuarial consulting firms (5)	Audit firms (12)	Preparers of financial reports (2)
UK (9)	Hewitt Associates Mercer Towers Watson	Deloitte Ernst & Young KPMG PricewaterhouseCoopers	BP Unilever
Germany (5)	Hewitt Associates Towers Watson	Deloitte Ernst & Young KPMG	—
Netherlands (3)	—	Deloitte Ernst & Young KPMG	—
Switzerland (2)	—	Ernst & Young KPMG	—

4. Interviewees

Interviewees are as follows (titles omitted).

	Company name	Interviewee
UK	BP	Angus Bantock, Gary Hibbard
	Deloitte	Richard Bradshaw, David Robbins, Shinichi Shibata
	Ernst & Young	Heather Buttle, Nancy Stockmeyer, Lawrence Wong
	Hewitt Associates	Martin Lowes, Kirsten Miller, Simon Robinson
	KPMG	Alex Burton, Lynn Pearcy
	Mercer	Warren Singer, Brian D Waite
	PricewaterhouseCoopers	Tony de Bell, Richard Davis
	Towers Watson	Mark O'Brien, Christine Farmer
	Unilever	Noel Mulvihill
Germany	Deloitte	Hartmut Moormann
	Ernst & Young	Lars Hesemann
	Hewitt Associates	Philopp Derr, Rainer Goidbach, Dieter Oppermann
	KPMG	Susanne Jungblut, Karsten Knauf
	Towers Watson	Alfred E. Gohdes
Netherlands	Deloitte	Gerben Huijsman, Hiroya Yasuda
	Ernst & Young	Casim Snoeks, Jeroen Vernooij, Kiyonobu Ikeuchi
	KPMG	Kees Bergwerff, Alexander C. van Stee
Switzerland	Ernst & Young	Elisa Alfieri, Thomas Gisler, Frank Meisinger
	KPMG	Susanne Haas

5. Research procedure

We e-mailed the following questionnaire in advance.

Questionnaire

September 2010, JSCPA

Research Team on IFRS Adoption in Major Countries
of Accounting Standards Committee
of the Japanese Society of Certified Pension Actuaries

1. Are there any significant differences between IAS 19 and the local GAAP regarding DBO measurement, DB accounting approaches?
2. Has the diversity in measuring DBO grown compared with the local GAAP? If yes, in what points?
3. Please tell us about anything interesting that occurred when IAS 19 was introduced to EU in 2005, such as difficulties and challenges.

4. Which is a dominant way for discounting DBO, using yield curve directly or a single weighted-average rate?
5. How do you calculate a single weighted-average discount rate?
6. How are discount rates disclosed when yield curve is directly used for DBO measurement?
7. Who prepares yield curves?
8. How are yield curves developed?
9. How much does it cost to purchase yield curves?
10. How are discount rates set for pension plans when the entity has two or more plans?
11. When yield curve is directly applied, how is interest cost calculated?
12. What is the role of actuaries in the process of deciding discount rates?

13. How do you deal with the relationships among financial assumptions (salary increase, inflation and discount rate)?
14. What kinds of mortality table are usually adopted (with adjustment?) for DBO measurement?
15. Are expected future improvements of mortality rates reflected in DBO measurement?

16. Please tell us the examples of short-cut and approximation (para 51/IAS 19).
17. How do you consider about materiality when using data before the end of the reporting period (para 56,57/IAS 19)?
18. What kinds of actuarial technique are often used for roll forwarding the valuation to the end of the reporting period (para 56,57/IAS 19)?
19. When roll forwarding, is the yield curve replaced by the one that is marked to the market at the end of the reporting period?
20. What is the actual criterion for judging the materiality of back loading (para67/IAS 19)?
21. To what extent is the straight-line basis attribution used for covering the back loading?

22. Are there any problems with IFRIC 14 (Asset Ceiling, Minimum Funding Requirement)?
23. Please tell us actual actuarial methods for DBO measurement of hybrid plans.

24. Are there any cases where actuaries get involved in narrative descriptions?
25. How do you deal with the situation where the entity's policy is different from the actuary's view?

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Questionnaire

September 2010, JSCPA

26. Are there practical standards, guidelines or notes for actuarial works on DB accounting for IAS 19 (or for the local GAAP)?
27. Are they (standards, guidelines, notes) compulsory, optional or educational?

28. Are actuarial services for DB accounting provided mainly by actuarial firms? Or by other kinds of firm or self-employed actuaries?
29. How many full actuaries does your firm have for DB accounting business?
30. How many clients does your firm have for DB accounting business?
31. How many actuaries write signature to one actuarial report for DB accounting?
32. What is the average fee for one actuarial report for DB accounting?
33. How does your firm manage the busy season for DB accounting actuarial works?
34. Are there any cases in which actuaries or actuarial firms were accused in DB accounting business?
35. Is there any possibility that actuaries should compensate personally for damages in DB accounting work?

36. Are there any cases where actuaries do not get involved in measuring DBO? If yes, please tell us the case.
37. What is the role of actuaries who appointed by (foreign) subsidiaries for the purpose of consolidated accounting?
38. What is the role of actuaries who appointed by the HQ for the purpose of consolidated accounting?

39. Are there any cases where actuaries do not get involved in auditing the DB accounting? If yes, please tell us the case.
40. From what viewpoints do actuaries audit DB accounting?

41. How does corporate management get involved in pension management in respect of formality and reality?
42. Do you think that actuaries meet their client's expectations?
43. What are actuaries expected to do?

44. What is currently the dominant method for recognizing actuarial gains and losses, deferred (corridor approach), P&L immediate or OCI?
45. Which do you think investors have so far attached importance to, net income or comprehensive income (or other accounting items)?
46. Is OCI taken into account for a dividend policy?
47. Is OCI that arises from DB accounting taken into account for a dividend policy?
48. In what way do you think investors are using the information on DB accounting in making corporate analysis?
49. Do you think investors will change their perspectives following the amendments to IAS 19?

50. What do you think the vital points in the Exposure Draft for the amendments to IAS 19? For your information, our comment letter to IASB about the ED is attached.

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II. Executive Summary and Implications for Japan

In applying IAS 19 in Japan, we summarize matters we believe to be of great interest in the context of the current accounting practice for post-employment benefits in Japan, and describe implications for Japan based on the research findings.

1. Underlying interest rate for discount rate

Paragraph 78 of IAS 19 states "The rate used to discount post-employment obligations shall be determined by reference to market yields at the end of the reporting period on high quality corporate bonds. In countries where there is no deep market in such bonds, the market yields (at the end of the reporting period) on government bonds shall be used." This leads to the issue of whether a reference rate shall be on high quality corporate bonds or government bonds.

In all the countries we visited, the discount rate is determined by referring to market yields on high quality corporate bonds. Since these countries have life term annuity in general, it seems difficult, compared with government bonds, to estimate market yields over the long term for the benefit payments. Nevertheless, they somehow estimate a yield curve on high quality corporate bonds and use it as the discount rate.

Also in Switzerland (which use Swiss Franc), one of the countries we visited, we believe the bond market is smaller than that of Japan, but they use market yields on high quality corporate bonds as a reference. In Switzerland, they add a spread of high quality corporate bonds to government bonds (spread of corporate bonds) to a yield curve of government bonds in estimating a yield curve of high quality corporate bonds.

Based on these findings, we can conclude that it is natural in developed countries in Europe for the discount rate to be determined by referring to market yields on high quality corporate bonds, and for various measures to be taken on a practical level to estimate a yield curve of high quality corporate bonds. We believe this serves as a useful reference for Japan.

2. Estimation of yield curve

In all the countries we visited, the yield curve used under IAS 19 is the one estimated by actuarial consulting firms. If the same yield curve is obtained no matter who estimates it, we can all use the same yield curve estimated by someone. However, it is, in fact, not that simple to estimate a yield curve of high quality corporate bonds that is appropriate for measuring DBO*. Starting from the selection of data, the estimation model to interpolation/extrapolation method, the scope of consideration is quite broad.

For example, in some places we visited, they tried various measures (e.g. elimination of a financial sector whose spread of corporate bonds jumped, change in the timing to collect reference data in order to reflect a delay in rating update) in creating data universe during the financial crisis in 2008.

The world economy is globalizing, and effects are transmitted instantly. We have observed cases where a crisis that occurred in a certain country or region had a significant influence on a financial market of a geographically distant country or region. The financial crisis in 2008 is said to have had a limited impact on the high quality corporate bond market in Japan. However, from 1997 to 1998 (Asian currency crisis (1997), Japan's financial crisis (1997) and Russian debt crisis (1998)), the spread of high quality corporate bonds in Japan was high. We must bear in mind that the same thing might happen in the future.

Points to remember when estimating a yield curve of high quality corporate bonds can be summarized as follows. First, it is necessary to understand the characteristics of a corporate bond market as well as its surrounding environment. Without such understanding, it is difficult to select the optimal universe. Next, it is necessary to consider a reasonable estimation model of a yield curve and interpolation/extrapolation method. Various factors need to be considered then, such as work efficiency and impact of a chosen method on DBO. Lastly, it is important not to adhere to a selected approach but to review it in response to changes in the surrounding environment and make changes as necessary so that such approach serves the principle purpose.

* DBO is a commonly used abbreviation for Defined Benefit Obligation under IAS 19. DBO is a correspondence to post-employment benefit obligations under the Japanese standard or Projected Benefit Obligation (PBO) under the US standard.

Reference: Yield curve of high quality corporate bonds

In general, it is necessary to keep the following points in mind when estimating a yield curve of bonds.

i. Most of bond dealings are negotiation transactions, and all the specific results of transactions are not necessarily made public.
ii. There are some bonds with no active trading.
iii. When there is no active trading or when the market is in turmoil, it is difficult to estimate prices of tradable bonds with public bid/ask information only.

In addition, the following points need to be considered in the case of a yield curve of corporate bonds.

iv. Since the amount of negotiable corporate bonds with long remaining periods is smaller than that of government bonds, the level of estimation by extrapolation is higher.
v. Bonds that no longer meet the criteria of being high quality can remain in the universe for a time due to a delay in rating change by rating agencies.

It is important to keep in mind that a yield curve of high quality corporate bonds is estimated under such constraints.

In particular, it is necessary to pay careful attention to a spread of corporate bonds during the time of economic turmoil such as financial crisis.

In Europe's corporate bond market, the credit risk of financial institutions increased during the financial crisis in 2008, and the spread of corporate bonds of financial institutions expanded significantly. It is also said that the effect of changes in the short-term liquidity premium due to a worsening balance of supply and demand was not small. The spread of corporate bonds expanded greatly due to the short-term supply-demand relationship as many investors became risk-averse and dumped bonds out of concern for a depletion of liquidity. Reviews of ratings by rating agencies may be delayed compared with the reality, and this point attracted attention in particular at the end of fiscal year in December 2008.

3. How to determine discount rate

How to select an approach to determine the discount rate is influenced by various factors such as the shape of a yield curve (flat or steep), conditions of a yield curve such as stability (whether a change in a shape through time is significant), convenience (workload to estimate the time of benefit payment, compatibility with roll forward) and suitability with asset management strategies.

In the countries we visited, the yield pickup approach has been commonly used so far. This approach does not reflect any changes in the shape of a yield curve. But since yield curves in Europe have been relatively flat, the effect of a difference in approaches to determine the discount rate was minimal, so that this approach has been popular given its ease of use in practice.

However, changes in the economic environment triggered a shift from an approach that cannot reflect a change in the shape of a yield curve to approaches that do. Furthermore, some countries we visited also adopted the sample cash flow approach. This approach seems to allow both reflection of a change in the shape of a yield curve and convenience.

In fact, the sample cash flow approach requires selection of cash flows to be used as samples, but since there are lots of similarities in the design of benefits in these countries (e.g. life annuity and straightforward benefit formula), it may be possible to classify cash flow characteristics by using the relatively small number of parameters. Meanwhile, in the case of the Japanese system, it seems quite difficult to adopt a similar approach since classifying future cash flows is not easy for the following reasons: (1) the lump-sum post-employment benefit system is widespread, (2) a pension system is in place where an employee receives a lump-sum withdrawal payment or a lump-sum optional payment, (3) the benefit formula often varies by plan and may discontinuously jumps, and therefore the effect of employee turnover is significant.

However, we need to consider the fact that the sample cash flow approach that allows for better rationality and convenience is actually used and the attitude to review an approach in response to changes in the environment. As the relationship between development of actuarial approaches and the consistency in accounting is not explicit, such an attitude implies it is important to keep thinking of a better way to achieve an principle objective or changing an approach to be used in accordance with changes in the environment, rather than sticking to the same approach.

Also, the approach used to determine the discount rate is not unrelated to asset management

strategies. In particular, when a strategy to increase the correlation between assets and liabilities is adopted, the approach used to determine the discount rate becomes more important. Under such a strategy, conditions must be developed that allow asset management to easily follow changes in DBO associated with changes in interest rates. For example, when a strategy to offset benefits with cash flow from management of bonds (cash flow matching strategy) is used, it may be more important to reflect the yield curve in valuing DBO as much as possible.

4. Role of actuaries in the process of determining the discount rate

As is well known, the discount rate is determined by a preparer of financial reports, not an actuary. However, in the countries we visited, actuaries are involved in various aspects of the entire process of determining the discount rate. For example, actuaries are involved in the selection of data universe used in estimating a yield curve. Actuaries' communication with clients is also considered important.

The role of actuaries in the countries we visited can be summarized as follows. First, it is to propose a discount rate that is considered reasonable. Second, it is to explain the calculation process of the proposed discount rate and its reason. Third, it is to guide clients until the final discount rate is determined. It becomes important to make sure they understand the information provided. The people actuaries communicate with may include concerned parties such as auditors as necessary. Fourth, it is to submit a proposal for review when a review becomes necessary due to changes in the environment. Changes in the environment include significant changes in the economic environment, personnel organization and expected cash flow due to changes in pension plans.

In reality, it is rare for the discount rate proposed by actuaries to not be accepted. Formally, clients agree to the advice of actuaries in determining the discount rate, but in fact, clients (small enterprises in particular) leave determination of the discount rate entirely to actuaries.

5. Mortality

In the countries we visited, life annuity is prevalent, and therefore the effect of mortality is significant. Since the mortality has been continuously improving, and this trend is expected to

continue, interest in mortality is very high. An improvement in the future mortality is incorporated in the process of DBO calculation by using the mortality tables by generation.

In Japan, since most post-employment benefit plans consist of lump-sum, fixed-term annuity or life annuity with a guarantee period, the effect of changes in the mortality is limited. Therefore, the mortality is not considered to be an important assumption, and it is not common to incorporate a future improvement of mortality in calculation. However, even in Japan, in a plan whose benefits are greatly influenced by changes in the mortality, there may be room for further consideration about reasonably incorporating an expected improvement in the mortality in the future, like in Europe.

In the countries we visited, finely-tuned responses are not taken on a practical level when making assumptions with no great impact. For example, the impact of a difference in employee turnover on DBO is not so big since life annuity benefits are prevalent and a benefit formula is straightforward. Therefore, regardless of the size of a corporation, many respondents said that they commonly used a uniform employee turnover for all ages or a model turnover. This is in stark contrast to Japan where, since many plans are influenced greatly by employee turnover, calculation of employee turnover rate by plan based experience has been established on a practical level.

6. How to measure DBO as of the end of the reporting period

In the countries we visited, it is not common to calculate DBO by directly using the data as of the end of the reporting period. The approach commonly used is to calculate DBO by using the data before the end of the reporting period, roll forward it until the end of the reporting period and make adjustments based on the sensitivity analysis to reflect the discount rate at the end of the reporting period.

The fundamental idea of roll forward is the same in these countries, but there are some differences on a practical level. The biggest difference is the age of the data to be used for roll forward. In general, the date of origination for roll forward seems to be affected by the current funding standards and tax practices. In the countries we visited, accounting treatment varies in line with these differences on a practical level.

In UK, since full actuarial valuation is usually implemented every three years for funding purposes, and companies are allowed to use roll forward for other years, the date of origination for DBO's roll forward for accounting purposes is often set at three years before at the maximum. In

Germany, since companies are allowed for tax purposes to use the data of three months before, the date of origination for roll forward is set at three months before in principle.

We felt there was a slight difference by country or by plan in how much they would reflect experiences in roll forward. This indicates that they think of roll forward flexibly considering the size or stability.

For adjustments made to reflect changes in the discount rate, these countries use the sensitivity analysis of DBO.

In Japan, it is common to roll forward DBO measured by the data of approximately one year ago while considering practical efficiency and influences and make adjustments to reflect the impact of changes in the discount rate. We confirmed that the approach basically similar to the one in Japan was adopted for the practice of IAS 19 in the countries we visited.

7. Actuarial practice standards for post-employment benefits accounting

Official interpretation of IFRS is provided by IFRIC. Therefore, there is no mandatory actuarial practice standard for IAS 19 in the countries we visited. However, they have working-level guidelines for actuaries as follows. This may be helpful in considering the shape of Japan's actuarial practice standard.

i. UK: They apply the actuarial guidance note for the local GAAP that is similar to IAS 19.
ii. Germany: The society of actuaries creates a non-mandatory guideline for all the members. It is virtually mandatory since the members are required to follow the guideline unless there is a clear and sufficient reason for not doing so.
iii. Switzerland: The working group (actuaries also participate), established by the Institute of Certified Public Accountants and Tax Accountants, summarizes examples on a practical level and their implications and publishes them in authoritative journals. They function as the de facto standard. However, they do not cover all the standards.

8. Valuation of DBO and attribution of benefits

For judgment of back loading that is considered difficult to implement in Japan, since a benefit formula is straightforward in the countries we visited, we believe there are few plans that may become problematic.

In countries other than UK, it is often the case that the DBO valuation method stipulated by IAS 19 is considered unfit for each country's plan. However, DBO valuation is practiced based on the situation in each country. This may be useful for Japan on a practical level.

For example, for attribution of period of benefits under a cumulative benefit plan, the straight line method is uniformly applied. These countries share the idea that there is no description in IAS 19 that assumes such a plan, but there is a slight difference in responses between the countries we visited and interviewees as to why the straight line method is used. One reason is that since a cumulative benefit plan can be considered as an average salary proportionate plan by changing the formula, DBO should be evaluated in a manner that produces a same result to that of an average salary proportionate plan. The other reason is that it is back loading. We may be able to take it that back loading under IAS 19 is properly handled as a result of using the straight line method.

In Germany, DBO under the unique DC plan (a plan that provides guarantee of principal for retirement while holding the balance of DC) is evaluated in a unique manner not stipulated in IAS 19. That is, they define DBO as the plan asset or DBO of the guaranteed portion, whichever is greater. Under the current IAS 19, since any plan other than pure DC shall be treated as DB, this plan is classified as DB for accounting purposes. However, there is no description in IAS 19 about a DBO valuation method that matches such plan, so they evaluate DBO in their own way since "there seems to be no factor that precludes this type of valuation."

9. IFRIC 14

In the countries we visited except for Germany, they believe that the current IFRIC 14 has some incompleteness or ambiguities. In Germany, it is interpreted that there is no stipulation equivalent to the minimum funding requirement. Meanwhile, in UK, they feel little inconvenience on a practical level.

In Japan, when we try to apply IFRIC 14 to the Japanese system, questions arise such as “What is an equivalent of the minimum funding requirement?” “There may be no stipulation equivalent to the minimum funding requirement,” and “There are some ambiguities that make any judgment difficult.” We found that similar questions arose in other countries as well.

10. Involvement of actuaries for post-employment benefits accounting

What should actuaries involved in accounting-related activities for post-employment benefits be aware of? We would like to think of a few points after finishing the interviews.

First, they should properly calculate DBO in accordance with the accounting standards and report it. This is, in a sense, a minimum requirement.

Then, they will be required to explain the calculation process, meaning and characteristics of the relevant figures. The relevant figures of accounting for post-employment benefits are usually very important figures for financial reports. Actuaries need to consider various ways to ensure that clients accurately understand the meaning of the figures reported. Reporting in documents is important, but direct communication can also be an effective measure. When clients need to make decisions on something, it is important for actuaries to support this decision-making process.

Actuaries are also required to help prepare disclosure information. Qualitative disclosure information for accounting for post-employment benefits is expected to be further expanded, and therefore, the support of experts will be in greater demand than ever. Disclosure information helps people understand data in financial reports and is an important investor relations tool to help investors properly understand the post-employment benefit plans of companies. In order for information for accounting for post-employment benefits to be reflected correctly in the valuation of a company, ideally disclosure information should be prepared based on proper advice and support from experts. The actuaries themselves should also be aware of this fact and measure up to such expectations.

III. Research Findings

1. Estimation of yield curve

Corporate bond or government bond

IAS 19 states "the rate used to discount post-employment benefit obligations shall be determined by reference to market yields at the end of the reporting period on high quality corporate bonds. In countries where there is no deep market in such bonds, the market yields on government bonds shall be used."

In the countries we visited, market yields on corporate bonds, not on government bonds, are used when determining the discount rate. However, there are two approaches to estimate a yield curve. One is to directly estimate a yield curve from the data of corporate bonds, and the other is to estimate a yield curve by reflecting the spread of corporate bonds in the yield curve of government bonds.

When we look at each country, in UK, it is common to directly estimate a yield curve from the data of corporate bonds, and the approach to estimate a yield curve by reflecting the spread of corporate bonds in the yield curve of government bonds is used in a supplemental way as necessary. Germany and Switzerland often use the approach to estimate a yield curve based on that of government bonds by reflecting the spread of corporate bonds.

How to estimate yield curve

When summarizing the results of interviews, the approach to estimate a yield curve by using the data of corporate bonds is implemented as follows.

First, the data source used for the bond market is usually the one of private-sector organizations (iBoxx (bond index of Markit) and Bloomberg, etc.).

The range of data used (universe) is determined specifically by considering matters such as "difference between bid and ask," "whether to include bonds with options" and "whether to set restrictions by amount of issue considering liquidity." However, it is common to exclude an outlier even if it is included in the universe. High quality corporate bonds under IAS 19 are interpreted as those with an AA rating.

Also in UK, apart from corporate bonds, interest rate swap and index-linked bonds may be used as reference.

After determining the universe, it is common to estimate a yield curve by using a famous model* in economics. In some models, a yield curve may decline unnaturally for an ultra long term. In such a case, the corrections can be made to remove such an unnatural decline.

*Models to estimate a yield curve that the respondents to the questionnaire mentioned

- Nelson-Siegel model
- Method that uses spline function
- Svensson method

In estimating a yield curve by reflecting the spread of corporate bonds on the yield curve of government bonds, we found that the yield curve of government bonds estimated by the Central Bank was used in Germany, while estimated by the Swiss National Bank was used in Switzerland. We could not obtain information on how to estimate the spread of corporate bonds in detail.

What we felt strongly during our visit was that the yield curve differs depending on who estimates it, and therefore certain judgment is required and, when appropriate, accompanied by good discussion by the relevant parties (actuaries, management and auditors) .

When we asked how companies had responded during the financial crisis in 2008, they said that questions about the reliability of credit rating were raised, and the interested parties had discussions on whether to exclude the entire banking sector from the universe of high quality corporate bonds. They sometimes corrected data in view of the time lag between the actual market conditions and the timing of rating change. We also heard that as a result of accumulating these judgments, the difference in the level of yield curves estimated by actuarial consulting firms expanded to approximately 1% during the financial crisis.

Who estimate yield curve

We obtained responses from all the countries we visited saying that the yield curve was estimated and provided by actuarial consulting firms. Audit firms also estimate a yield curve on their own for auditing purposes. When a company (preparer of financial reports) directly employs an actuary, such actuary is deeply involved in the estimation process.

Reference material for yield curve

The guidance note (GN) 36 prepared by the Institute of Actuaries in UK has the following descriptions about FRS 17 that is considered markedly similar to IAS 19. The current management body of GN 36 is the Board for Actuarial Standards, an organization of the Financial Reporting

Council.

As is obvious from GN 36, FRS 17 explains about the use of a reasonable proxy. In FRS 17, an approach to add a spread of corporate bonds, as a reasonable proxy, to government bonds is illustrated by an example. FRS 17 also describes that high quality corporate bonds that should be used as the discount rate are bonds with an AA rating. In GN 36, a swap is mentioned as an example of a reasonable proxy as follows.

Since there is no such description in IAS 19, it requires certain interpretation when these are adopted in the practice of IAS 19.

GN36 4.2.2

4.2.2 FRS 17 states that if there is no liquid market in suitable bonds to determine the discount rate, then a reasonable proxy should be used (see paragraphs 32, 33 and 34). It is recognised that for many UK pension schemes, the duration of the liabilities may be longer than the duration of available AA bonds. Further, the liquidity of the corporate bond market will vary by jurisdiction and type and can be expected to vary from time to time. Where a reasonable proxy is required, it should be determined by reference to one or more of:

・an extrapolation of the yields on available AA-rated corporate bonds,

・the yield on interest rate swaps, and

・the yield on other fixed interest or index-linked bonds.

2. Discount rate

Classification of approaches to determine the discount rate used in DBO calculation

IAS 19 stipulates "The discount rate reflects the estimated timing of benefit payments. In practice, an entity often achieves this by applying a single weighted average discount rate that reflects the estimated timing and amount of benefit payments and the currency in which the benefits are to be paid." (paragraph 80)

Summarizing the results of the interviews, it is clear that the approach to determine the discount rate used in DBO calculations can be classified into the following five categories. The name of each approach has been chosen by us for descriptive purposes.

i. Index approach

This approach sets the actual trading performance of high quality corporate bonds or yield value of bond index as the discount rate based on the average timing to estimate benefit payments under a post-employment benefit plan without using a yield curve.

Since this approach uses actual market interest rate of high quality corporate bonds without making any change, it is directly influenced by the degree of dispersion of a reference interest rate. This approach is used in determining the discount rate in some countries, but currently, most companies are shifting to the approaches of referring to a yield curve, such as approaches ii. to v. described below.

ii. Yield pick-up approach

This approach picks up a yield from a yield curve that corresponds to duration as a representative value and sets it as the discount rate.

Since this approach does not reflect the shape of the yield curve, the discount rate will be the same as the one under the direct yield curve approach if the yield curve is flat. Otherwise, a difference will arise.

iii. Sample cash flow approach

This approach determines the discount rate by using sample cash flows.

First, sample cash flows are prepared based on multiple plans with different characteristics such

as duration. Then, the single weighted average discount rates (equivalent to DBO) are calculated by applying the yield curve equivalence approach as described in iv. below to these sample cash flows. The discount rate of each plan is calculated by interpolation (extrapolation in some cases) for the weighted average discount rates obtained from multiple sample cash flows with similar characteristics.

Since this approach does not require cash flow to be forecast in a way that is unique to each plan, unlike approaches iv. and v., it is easy to use in practice.

In some of the countries we visited, we confirmed that they used the sample cash flow approach. Since there are lots of similarities in the design of benefits in these countries (e.g. life annuity and straightforward benefit formula), it may be possible to classify cash flow characteristics in selecting sample cash flows by using a relatively small number of parameters. Meanwhile, in the case of the Japanese system, it seems quite difficult to adopt a similar approach since classifying future cash flows is not easy for the following reasons: (1) the lump-sum post-employment benefit system is widespread, (2) a system is in place where an employee receives a lump-sum withdrawal payment or a lump-sum optional payment, (3) the benefit formula often varies by plan and may discontinuously jumps, and therefore the effect of employee turnover is significant.

iv. Yield curve equivalence approach

This approach calculates the single discount rate that is equivalent to DBO measured by the direct yield curve approach v. and sets it as the weighted-average discount rate.

The difference between this approach and the direct yield curve approach v. is that it is relatively easy, by using the single discount rate, to implement roll forward for DBO evaluated by using the data as of the date before the end of the reporting period and to make adjustments to reflect the discount rate at the end of the reporting period based on the sensitivity analysis.

v. Direct yield curve approach

This approach calculates DBO by directly using a yield value by duration at each timing of estimated benefit payment.

This approach reflects the timing to estimate benefit payment in DBO calculation in the most rigorous manner, out of the five approaches. It can be said that it has the heaviest workload on a practical level.

The characteristics of these five approaches to determine the discount rate can be summarized as follows.

approach	Uses a yield curve?	Reflects the shape of a yield curve?	Timing to estimate benefit payment	Single/multiple rate
i. Index	No	No	Not specified	Single
ii. Yield pick-up	Yes	No	Duration	Single
iii. Sample cash flow	Yes	Yes	Sample cash flow	Single
iv. Yield curve equivalence	Yes	Yes	Actual cash flow	Single
v. Direct yield curve	Yes	Yes	Actual cash flow	Multiple

Selection of an approach to determine the discount rate and its trend

When we summarize the results of the interview on the selection of the abovementioned approaches to determine the discount rate, approaches i. to iii. are selected more often than iv. and v., and when comparing iv. and v., only major companies adopt v. Meanwhile, since the calculation workload of actuaries increases from i. through v. (v. is heaviest), we can say that relatively simple approaches are used frequently. However, in the countries we visited, the approaches selected have recently been shifting from i. and ii. to iii., iv. and v., which suggests there is a gradual change to an approach that reflects the timing to estimate benefit payment in the discount rate as much as possible.

We also felt that people were becoming more interested in selecting an approach to determine the discount rate. In particular, since the economic environment changed drastically due to the financial crisis that began in September 2008 and the spread of corporate bonds expanded in each country, discussions about whether the selection of an approach to determine the discount rate is reasonable have been frequently held at actuarial consulting firms and audit firms since then. Specifically, the number of cases where audit firms asked the company's management to reveal the basis of their judgment when determining the discount rate increased. And in addition, the number of cases where meetings by actuaries, management and auditors were held to select an approach to determine the discount rate has also been increasing.

Another reason for the heightened interest in how to select an approach to determine the discount rate is its relationship with asset management strategies. An actuary who belongs to a company

(preparer of financial reports) in UK said, “When we adopt the cash flow matching strategy, it may be effective to use the direct yield curve approach for DBO calculation. However, it is not necessary for our company to do that.”

Some interviewees responded that since the interest rate was low and the shape of the yield curve was flat, there was no difference whichever approach was chosen to determine the discount rate.

We had the impression that there was no particularly notable difference among the four countries we visited in terms of how they select the approach to determine the discount rate, other than UK more tending to shift to approaches iv. and v.

As for the consistency of the approach used to determine the discount rate, we heard that, in all the four countries we visited, it did not necessarily mean continuing to use the approach selected. This may be based on the idea that the discount rate is one of the factors of economic variables, and when the economic environment changes significantly, there is a possibility that they may not be able to accomplish the principle purpose of the discount rate if they only continue to use the approach selected. We felt that this idea was prevailing in actuarial practices in these countries.

Duration

Duration means the average timing to estimated benefit payments as well as discount rate sensitivity. We found that the approach mainly used to obtain duration was to use the rate of change of DBO calculated by multiple interest rates.

Difference in perspectives between actuarial consulting firms and audit firms regarding the selection of an approach to determine the discount rate

We had the impression that actuarial consulting firms gave more specific answers than audit firms in the interview, regarding how to select an approach to determine the discount rate.

This may be attributable to a difference in their positions, meaning that actuarial consulting firms advise preparers of financial reports, while audit firms confirm the reasonableness of the discount rate from an auditing perspective.

Determination of the discount rate in the case of multiple plans

As mentioned above, according to paragraph 80 of IAS 19, it is necessary to reflect the timing to estimate benefit payments in determination of the discount rate. Therefore, except for cases where the direct yield curve approach is adopted, when there are multiple plans, it becomes necessary to set

the discount rate for each plan in order to reflect the timing to estimate the benefit payment of each plan. In the interview, many people responded that they set the discount rate for each plan in principle.

Of course, judgment from the perspective of materiality principle of accounting is involved in determining the discount rate. The discount rate needs to be set for each currency area, but for example, companies that have multiple offices in the euro-zone calculate the weighted average discount rate by using the discount rates adopted under the plans in major countries in the euro-zone. And if there is a mixture of large plans and small plans, they apply the discount rate determined under the large plans to the small ones.

Role of actuaries in the process of determining the discount rate

It is needless to say that actuarial assumptions such as discount rate should be determined by preparers of financial reports. However, in all the countries we visited, we found that actuaries propose the discount rate to be used to the management, and in reality, it is rare for the proposed discount rate to not be accepted. As such, we felt that actuaries have established a professional position on accounting for post-employment benefits and played an important role in providing information to the management as well as support for decision-making.

The actual process of determining the discount rate seems to proceed with the involvement of actuaries as follows: (1) accept a proposal of the discount rate from an actuarial consulting firm (multiple firms in the case of large companies), (2) hold discussions with the actuary and record them and (3) hold a three-way meeting among the actuary, management and auditor as necessary.

Disclosure of discount rate

Almost all companies disclose the weighted average discount rate. The same is true in the case where the direct yield curve approach is adopted or the case where different discount rates are determined for each plan. Companies with multiple subsidiaries may disclose discount rates not as a single rate but as a range.

Calculation of interest cost

The respondents said that they calculated the interest cost by multiplying DBO as of the beginning of the reporting period by the weighted average discount rate.

3. Inflation rate

Paragraph 77 of IAS 19 states “Financial assumptions shall be based on market expectations, at the end of the reporting period, for the period over which the obligations are to be settled.”

In UK, since price-indexed bonds are traded in the market, it is common to estimate the inflation rate by referencing them. However, since the inflation rate estimated from the yield of price-indexed bonds (break-even inflation rate) includes factors other than the expected inflation rate (liquidity premium, etc.), certain adjustments are made.

Meanwhile, in countries with no adequate market to reference such as Germany, the long-term target inflation rate set by the Central Bank is referenced. In UK, it is believed that the long-term target inflation rate of the Bank of England contains many political factors and therefore is not appropriate for use in estimating the inflation rate.

4. Relevance of financial assumptions

Paragraph 75 of IAS 19 states “actuarial assumptions are mutually compatible if they reflect the economic relationships between factors such as inflation, rates of salary increase, the return on plan assets and discount rates.” Thus, it is understood that the rate of salary increase, inflation and the discount rate are correlated. In particular, the rate of salary increase and inflation are believed to be closely related in terms of “Rate of salary increase = Inflation rate + Margin (factors such as promotion)”.
(Note: In general, the rate of salary increase is determined as a uniform rate (annual rate) regardless of age, not as a salary increase index determined by age in Japan.)

However, we heard that since the economic environment is relatively stable, such relationship is not so emphasized. We also heard that although there is a correlation between the rate of salary increase and the inflation rate, there is no direct correlation between the discount rate that directly reflects the market at the end of the reporting period and the rate of salary increase/inflation rate.

From an auditing perspective, whether actuarial assumptions are consistent as a whole and whether each of the assumptions is acceptable are considered.

5. Mortality

Each of the countries we visited has life annuity in general, and the mortality is of particularly high interest compared with Japan where lump-sum payment and fixed-term annuity are prevalent.

Among the countries we visited, in UK, Germany and Netherlands, the standard mortality table is created by generation incorporating future improvement. In Switzerland, although the standard mortality table currently in use does not incorporate future improvement (future improvement may be incorporated separately in calculating DBO), the standard mortality table to be applied from 2011 will incorporate future improvement, the same as in other countries.

In some cases, further improvement may be added to the standard mortality table.

The standard mortality table in these countries is updated approximately every five years, but adjustment of the mortality rate may be made by shifting ages in any year before the regular update.

The cohort method (method to adjust the improvement rate of the mortality that varies by generation) in UK incorporates improvement by 2020, but there are cases where an improvement of approximately 1% (per year) is incorporated for the period after 2020. Also in UK, use of a mortality table that varies by region is widespread.

6. Use of computational short cuts and approximation, roll forward

The method used to calculate DBO in advance before the end of the reporting period and obtain DBO as of the end of the reporting period by making appropriate corrections to it is widely used in each country we visited.

Under the funding standards in UK, full actuarial valuation is required every three years, and calculation by roll forward is permitted for periods other than years of full actuarial valuation. Under the tax law in Germany, the use of data that was generated up to three months before the calculation reference date is permitted. Calculation for accounting purposes is often handled in the same manner. In general, if there is no significant change during the correction period, the amount for accounting purposes is obtained by making adjustments to the discount rate as of the end of the

reporting period by the sensitivity analysis after the period correction by roll forward. However, if such a change is significant, DBO may be revaluated.

If there is little materiality, only expensing of contributions may be charged to the accounting, not DBO calculation.

7. Hybrid plan

In UK, the respondents said that there were few cash balance plans. Career average plan is the mainstream. This is an average salary proportionate plan that re-evaluates past salaries and therefore is considered to be a hybrid plan.

In Germany, they have the unique DC plan (a plan that provides guarantee of principal for retirement while holding the balance of DC) as a hybrid plan. Under IAS 19, this plan is considered to be classified as DB, but a method to evaluate DBO is not proposed. In valuation, they define DBO as the plan asset or DBO of the guaranteed portion, whichever is greater, since "there seems to be no reason that precludes this type of valuation."

In Netherlands, the term "hybrid plan" does not seem common, and there were some cases where the intention of our questions was not understood easily. Most pension plans in Netherlands implement conditional indexation according to financial conditions based on an average salary proportionate plan and are considered to be classified into a hybrid plan in Japan.

In Switzerland, a cumulative pension plan is common that is designed and managed to achieve an amount greater than the principal (credit) plus the guaranteed minimum dividend yield (statutory minimum requirement), and most systems are considered to be a hybrid plan.

When evaluating DBO of a cumulative plan, the "straight line" approach is used based on an idea that it is equivalent to an average salary proportionate plan.

8. Back loading

Many benefit formulas for final salary proportionate plans and average salary proportionate plans (including those with indexation) are in the form of "Amount of pension = Final (average) salary × Years of service × Fixed rate," and it is considered that there is no system that falls under back loading.

There were some opinions that cumulative plans were all treated as back loading. Even in this case, since DBO is calculated by the "straight line" approach, they seemed to believe back loading under IAS 19 was properly handled.

9. IFRIC 14

Paragraph 58 of IAS 19 states that there is a ceiling on the amount that can be presented as DB asset (asset ceiling), and this amount shall be a present value of the economic benefit available in the form of refunds from a plan or reductions of future contributions to a plan. Since questions are raised about in what cases refunds or reductions of future contributions can be used, IFRIC 14 (IAS 19 – The Limit on a DB Asset, Minimum Funding Requirements and their Interaction) was issued in 2007 as the interpretive criteria. However, in Japan, there are some arguments that IFRIC 14 has ambiguities as to the meaning of minimum funding requirements. We asked about the situation in each country based on this background.

In UK, audit firms and actuarial consulting firms generally responded that "Problems were pointed out and examined when IFRIC 14 was issued, but the minimum funding requirement is still a thorny issue." However, we found opinions from preparers of financial reports that "It is quite logical and simple when we think of it under the scheme in UK." On a practical level, minimum funding requirements are understood to be contributions agreed between a trustee and company as of the end of the reporting period.

In Germany, since it is common to consider minimum funding requirements do not exist, no problem occurs fundamentally.

In Netherlands, there are difficulties in how to apply minimum funding requirements and

economic benefit. The reality appears to be that the contents of IFRIC 14 are interpreted in various ways, and as a result, there are many cases where a DB asset is not presented due to the asset ceiling.

In Switzerland, the main issue was how to calculate "economic benefit available as reductions of contributions," but now "IFRIC 14 and Swiss Pension Plans" prepared by the working party of the Swiss Institute of Certified Public Accountants and Tax Accountants is used as a reference for practices. The 2009 revision of IFRIC 14 clarified how to treat prepayments of a minimum funding requirement in response to the conditions in Switzerland.

10. Local GAAP

The local GAAP in UK is in its practical effect almost the same as IAS 19 except for the lack of an option to have a delayed recognition of actuarial gains and losses and the asset ceiling.

In Germany, the local GAAP was based on the tax law standard prior to the amendment in January 2010, and therefore there was a large discrepancy with IAS 19. After the amendment in January 2010, the local GAAP became similar to IAS 19, but there remain some discrepancies such as the uniform discount rate being the seven-year average rate of 15-year bonds.

In Netherlands, only contributions amount were charged to the accounting prior to 2005, but the local GAAP was changed to one that was almost the same as IAS 19 in 2005 when it became obligatory for listed companies in the EU to apply IFRS to their consolidated financial report. However, companies have been permitted to freely choose their method only to charge contributions amount to the accounting from 2010.

Since the local GAAP in Switzerland requires companies only to charge contributions amount to accounting, it is significantly different from IAS 19.

11. Topics regarding application of IFRS

The EU obliged listed companies in the EU to apply IFRS as a standard when preparing their consolidated financial reports from January 2005. Of the countries we visited, UK, Germany and Netherlands are members of the EU.

In UK, the local GAAP was changed from SSAP 24 to FRS 17 before the application of IFRS. Since there was little difference between FRS 17 and IAS 19, the impact of the application of IFRS in 2005 was limited.

In Germany, only 1% of companies apply IFRS or US-GAAP. Application of IFRS to consolidated financial report started during the period between 1995 and 2000, and there was no particularly notable change in 2005. Some companies shifted to the DC plan at the time IFRS was applied, but since it is required by law under the DC plan in Germany to have a principal guarantee at the time of retirement, it is treated as a DB plan for accounting purposes.

In Netherlands, since the local GAAP changed the method of contribution based accounting to one that is almost the same as IAS 19 at the time of the adoption of IFRS, companies that did not need to implement IFRS were also affected.

In Switzerland, although it is not a member of the EU, most companies listed on the Swiss Stock Exchange have been obliged to apply IFRS or US-GAAP since 2005.

12. Actuarial practice standards for post-employment benefits accounting

The official interpretation of IFRS is provided by IFRIC. Therefore, there is no mandatory actuarial practice standard for IAS 19 in the countries we visited. The handling of IAS 19 on a practical level varies by country.

In UK, the guidance note (GN) 36 prepared by the Institute of Actuaries exists for FRS 17, the local GAAP. Since there is little difference between IAS 19 and the local GAAP, GN 36 is referenced in implementing IAS 19.

In Germany, there is a guideline on IAS 19, prepared by the Society of Actuaries of Germany 11 years ago, and the members are required to follow this guideline unless there is a sufficient reason not to do so.

In Netherlands, no reference standard exists that can be used in the actuarial practice of IAS 19.

In Switzerland, some implications exist that summarized essential portions of IAS 19, and they

function as the de facto standard. They were created by the working party (actuaries also participate) established by the Institute of Certified Public Accountants and Tax Accountants.

13. Involvement of actuaries for post-employment benefits accounting

Involvement of actuaries who belong to actuarial consulting firms

In all the countries we visited, actuarial consulting firms are the main provider of actuarial services regarding accounting for post-employment benefits. Besides DBO calculation, actuaries who belong to actuarial consulting firms have discussions with clients to determine actuarial assumptions and provide information necessary for preparing financial reports. They also suggest items to be disclosed as necessary.

The clients should make the final decision in preparing financial reports. However, though formally clients accept the advice of actuaries, in fact clients (small enterprises in particular) also leave the determination of the discount rate entirely to actuaries.

Our overall impression was that actuaries have established a professional position.

Involvement of actuaries who are engaged in audit work

Actuaries who belong to audit firms are engaged in audits from the perspective of examining the appropriateness and consistency of actuarial assumptions, reasonableness of calculation results and completeness of data.

However, the degree of their involvement varies depending on the significance of the post-employment benefit plans and necessity, and in many cases, actuaries are not involved.

Involvement of actuaries who do not fall under the abovementioned categories

In the countries we visited, there are some cases where independent actuaries provide actuarial services to companies that own small-size pension plans.

In Netherlands, some people pointed out that since it became possible to choose a contribution based method from 2010, due to the amendment of the local GAAP, the amount of work regarding accounting for post-employment benefits might decrease.

In large corporations, there are cases where they directly engage actuaries in activities related to

their private pension plans.

14. Other matters regarding post-employment benefits accounting

Handling of difference in general actuarial calculation under the current IAS 19

Under the current IAS 19, companies are permitted to choose either delayed recognition of actuarial gains and losses or OCI recognition.

In UK, most companies adopt OCI recognition even under IAS 19 because the local GAAP permits only OCI recognition.

In Germany, most companies included in DAX30 adopt OCI recognition. For companies other than those, delayed recognition is the mainstream.

In Netherlands, although delayed recognition is the mainstream, more and more companies have been adopting OCI recognition recently.

In Switzerland, blue chip companies adopt OCI recognition. Although delayed recognition is the mainstream for companies other than those, more and more companies have been adopting OCI recognition recently.

In the countries we visited, we heard of little number of companies that adopted immediate recognition in their profit or loss account.

Opinions and comments on the exposure draft for the amendments of IAS 19

In UK, the overall stance was positive, but some people were concerned that truly important information might be buried due to the large amount of items to disclose.

In Germany, Netherlands and Switzerland, since many companies adopt delayed recognition of actuarial gains and losses, there are concerns that delayed recognition may be abolished.

Also in Netherlands, IAS 19 was considered unfit for pension plans there to begin with, and there were many negative comments on all the items of the current IAS 19 as well as the exposure draft. In the comment letter to the exposure draft, problems were pointed out by accountants, actuaries and the business community in their joint names. Some respondents believed they should eye the possibility of curve outing from IAS 19.

Status of DBO calculation software

They seemed unable to imagine a preparer of financial reports purchasing DBO calculation software and performing calculations without the involvement of actuaries. Therefore, we could not obtain any specific examples.

Examples of legal proceedings and damages

Although they cannot deny the possibility of an individual actuary or a firm an actuary belongs to being sued, there were few cases (or they have never heard of such cases) where they were indicted in reality.

Involvement of actuaries in accounting for post-employment benefits of foreign subsidiaries

It is common for local actuaries to be in charge of detailed matters regarding DBO calculation and accounting for post-employment benefits of subsidiaries, while actuaries engaged in accounting for post-employment benefits of headquarters (global actuaries) tally the results of each subsidiary.

The specific role of global actuaries is to manage the calculation process, prepare a unified report and confirm the reasonableness of each calculation. Major assumptions taken in the calculation process, such as the discount rate, are often determined at the headquarters based on advice from global actuaries.

However, when a post-employment benefit scheme is of less importance due to its small size, global actuaries may not get involved.

Investors' perspective on net income and comprehensive income

Many respondents to the interview said that current income has been emphasized so far. However, there were some opinions that comprehensive income that includes factors for a change in future contributions should be emphasized as well. We heard of major investment companies conducting corporate analysis by using comprehensive income for such a reason.

Dividend rule and policy

Dividend is provided based on each company's policy within the limitation of the local GAAP or laws and regulations in each country. Therefore, IFRS has no direct impact in this area.

The local GAAP in UK is similar to IFRS. That is, the local GAAP has a presentation classification for OCI, and actuarial gains and losses of post-employment benefits are recognized

immediately in OCI. The dividend limit is determined based on the realized profit, and no adjustment is required when accumulated OCI is negative. When it is positive, that amount can be taken into consideration, provided that it is agreed that the amount will be refunded to the company.

Research Report

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