# INTERNATIONAL ACTUARIAL ASSOCIATION

**Pensions and Employee Benefits Committee (PEBC) Meeting**
**Part 1: Thursday, April 20, 2017 – 13:30 – 18:00**
**Part 2: Friday, April 21, 2017 – 8:00 – 10:00**
**Budapest, Hungary**
**Minutes**

*The list of attendees is posted at the end of these minutes.*

## Part 1: Thursday, April 20, 2017 – 13:30 – 18:00

### 1. Opening of the meeting

Yasuyuki Fuji, Chair of the Pension and Benefits Committee (PEBC), opened the meeting and welcomed all attendees. Following introductions of committee members and observers.

### 2. Minutes

The minutes of the last meeting held on 20 and 21 November 2016 in Cape Town, were approved as presented.

### 3. Background

To set the context for the two days of meetings, the Chair led a discussion of various relevant IAA and committee structural and operational matters.

- **Reminder of IAA strategic plan**

The Committee was reminded of the importance of orienting its work to the IAA's strategic plan. As such, each item in the agenda reference the related strategic purpose

- **Overview of MOUs**

The Chair provided an overview of the various activities with organisations for which the IAA has a Memorandum of Understanding as well as other supranational associations.

- **Work plan**

The current workplan for the Committee is provided in the material for this meeting. The Chair stated the importance of the relationships with the various supranational bodies and commended the efforts by several of the Committee members to maintain and grow these relationships.

### 4. Update

- **Webinars**

The chair provided a summary of the webinars as well as invited committee members to share ideas on future webinars

- **Appointments**

The committee was provided information on the appointment of Christelle Dieudonné as OECD relationship manager as well as Esko Kivisaari as IOPS delegate

## 5. Funding Monograph

Charles Cowling led a discussion on the pension funding monograph which has now been through the IAA's design team to improve its presentation. This version of the document which was approved at the previous PEBC meeting (in Cape Town) is now going through formal IAA review ahead of potential publication later this year.

Charles has been in correspondence with Pablo Antolin from the OECD and will be presenting on the monograph at the OECD's June meeting in Paris. It is hoped that the OECD will agree to a joint publication of the monograph – which may then delay the publication timetable as it will also have to go through an OECD approval process. It was agreed that a joint publication with the OECD would be preferable if possible, but in any event, we should seek to publish the document in 2017. However, it would be would be worth a delay of 6 months if this means we could publish jointly with the OECD.

It was also agreed that the monograph should be proposed for a session at the ICA congress in Berlin next year. Charles agreed to investigate the process for submitting a paper and then make the necessary submission.

## 6. De-Risking

Heidi Rackley led the discussion of a potential project to better understand retirement plan risk transfers and risk-sharing mechanisms. The committee decided to prepare a paper for the June 2018 International Congress of Actuaries presenting a country-by-country analysis of steps being taken within each country to (1) reduce private-sector employers' defined benefit pension plan risks and (2) improve workers' retirement outcomes in defined contribution plans. The focus will be on measures actually being implemented within the country, whether they are meeting objectives, and what problems are arising. A high-level discussion of important proposals actively being considered or issues on the horizon may also be included.
The following PEBC members are participating in the drafting group to prepare analysis for their countries:

| PEBC Member | Country |
|---|---|
| John Newman | Australia |
| Philippe Demol | Belgium |
| Giora Alyagon | Israel |
| Kenji Sekine | Japan |
| Jan Kars | Netherlands |
| Bob Scott | United Kingdom |
| Joe Nichols and Heidi Rackley | United States |

Given the continuing evolution in this area, the paper will ideally be a living document, updated periodically for new developments within each country and to add additional countries

## 7. Pension & Employee Benefits Accounting Subcommittee

Jason Malone updated the Committee on PBAS activities which was discussed in more details at the PBAS meeting on April 19th

The main focus of the work has been on the projects currently underway at the IASB including the discount rate project, an amendment of IAS 19/IFRIC 14 and the upcoming hybrid project. The subcommittee also discussed at great lengths a question from the Ecuadorian association on the use of the American bond market to determine the accounting discount rate.

## 8. OECD

Christelle Dieudonné updated the committee on OECD activities since the Cape Town meetings. Details of the discussion can be found in the report provided for the committee meeting.

## 9. IOPS

Esko Kivisaari updated the committee IOPS activity since the Cape Town meeting.

## 10. AAE

### 10.1 AAE report

Falco Valkenburg reported on the work of the AAE Pensions Committee.

In January the revision of the European IORP Directive (IORP ≈ pension fund) became a fact. Member States have two years to transpose the Directive into national legislation. Some important novelties in the Directive are:

- Fit and proper requirements
- Introduction of Key Functions (including an Actuarial Function)
- Own Risk Assessment
- Information requirements (Personal Benefit Statement)
- "*equitable spread of risks and benefits between generations*"

This year the second European Stress Test for IORPs is conducted. They agree in principle with the aim to assess all elements of a pension arrangement as well as all elements of the financing arrangement. From a technical perspective they are not happy with the current technical specifications. They have suggested to look in the first place to the development of cash flows rather than focusing on a valuation approach. The European Insurance and Occupational Pensions Authority has included a high level cash flow analysis in the current stress test in order to start building experience with such an approach. Publication of the report is foreseen for the second half of December.

The European Commission is developing a proposal for a Pan-European Personal Pension product. The AAE is following this development with great interest. As such a product if a third pillar product the AAE Pensions Committee and the AAE Insurance Committee are working closely together.

### 10.2 Negative interest rates – Technical Consequences

Christoph Krischanitz and Esko Kivisaari presented to the committee European thinking on how to handle low and even negative interest rates. The issue has been quite a lot discussed within the Actuarial Association of Europe especially in the context of Solvency II, the European prudential regime on insurance.

Christoph talked on the theoretical problems of negative rates. Negative rates are problematic because many models used by actuaries do not work with negative rates. The easiest example of this is already the calculation of the discounted present value of a perpetuity. Also tools often

used like excel formulas cannot handle negative rates. For example, duration and modified duration cannot be calculated under negative rates.

Esko discussed the extent to which rates can go negative. It is clear that at least there will be the lower limit of -100 %. It can however be argued that this is not a rational lower limit. The argumentation starts from the idea that storing money as cash I apparently an alternative. Holding cash creates at least storage and insurance costs. The amounts of these costs generate a possible lower limit for interest rates.

## 11. Global Pension Index

Jason Malone led a discussion on the Melbourne Mercer Global Index which ranks the pension systems around the world. The discussion was not to explain the model but rather whether or not the committee should be interested in the practice of ranking systems. The discussion brought forward other examples of surveys that ranked pension systems and the realization that if a grade is not provided there is a limited marketing impact. The conclusion of the committee was to revisit in Chicago with more information from other surveys provided globally.

## 12. Future Life Expectancy

Charles Cowling led a discussion on recent papers on mortality and longevity. This covered both a recently published paper (in the Lancet) entitled "*Future life expectancy in 35 industrialized countries*" and the latest research and tables published by the CMI in the UK.

The paper published in the Lancet projected further significant increases in longevity across the industrialized world over the next 2 decades (taking life expectancy for women out beyond 90 years). This paper is particularly interesting for the causality issues raised (all of which have implications for current and projected longevity assumptions used by pension plans):

Early life expectancy gains in South Korea, which has the highest projected life expectancy, and previous to that in Japan, were driven by declines in deaths from infections in children and adults; more recent gains have been largely due to postponement of death from chronic diseases. These gains were due to broad-based inclusive improvements in economic status and social capital (including education) in both countries, which improved childhood and adolescent nutrition (e.g., as seen by South Korea and Japan having achieved some of the largest gains in adult height over the past century), expanded access to primary and secondary health care, and facilitated rapid scale-up of new medical technologies. South Korea has also maintained lower body-mass index and blood pressure than most western countries, and lower smoking in women. Finally, South Korea and Japan might have lower health inequalities (e.g., for cancer and cardiovascular disease mortality, and for self-reported health status) than some of their western counterparts, especially for women. Other countries with high projected life expectancy are benefiting from one or more major public health and health-care successes. Examples include high-quality health care that improves prevention and prognosis of cardiovascular diseases and cancers, very low infant mortality, low rates of road traffic injuries and smoking (e.g., Australia, Canada, and New Zealand), and low body mass index (e.g., French and Swiss women) and blood pressure (e.g., Canada and Australia).

By contrast, projected life expectancy is lower in countries with higher levels of young adult mortality and major chronic disease risk factors, and possibly less effective health systems. These countries also tend to have higher social inequalities, which might lower national life expectancy by affecting the entire population or through the poor health of the worst-off social groups and communities, which in turn affects the national average.7 Notable among poor-performing countries is the USA, whose life expectancy at birth is already lower than most other

high-income countries, and is projected to fall further behind such that its 2030 life expectancy at birth might be similar to the Czech Republic for men, and Croatia and Mexico for women. The USA has the highest child and maternal mortality, homicide rate, and body-mass index of any high-income country, and was the first of high-income countries to experience a halt or possibly reversal of increase in height in adulthood, which is associated with higher longevity. The USA is also the only country in the OECD without universal health coverage, and has the largest share of unmet health-care needs due to financial costs. Not only does the USA have high and rising health inequalities, but also life expectancy has stagnated or even declined in some population subgroups. Therefore, the poor recent and projected US performance is at least partly due to high and inequitable mortality from chronic diseases and violence, and insufficient and inequitable health care.

The latest CMI analysis from the UK had some dramatic conclusions:

- UK national mortality improvements have fallen off a cliff since 2011
  - Highlighted by a "blip" in Q1 2015, but it's much more than this
  - This is not a UK only phenomenon
  - Dramatic shift is a cause for concern in itself – what are the drivers?
  - How does this relate to longevity projections for liability portfolios?
- The deceleration can be partly explained by the reduced contribution to aggregate improvements from circulatory causes
- This has been exacerbated by mortality increases in a range of miscellaneous causes

Therefore, the fall in improvements can be seen as:

  - a reversion to a more typical aggregate rate of change (following a period of unusually rapid improvement); plus
  - the impact of economic austerity (NHS & social care funding)
- Therefore, lower improvements are not likely to be temporary (i.e. they are not a 'blip')
- Are the national trends mirrored in DB pension schemes?
  - Yes, on a lives basis
- Is the recent slowdown universal across the socio-economic spectrum?
  - No!
  - Higher socio-economic group men seeing stable improvements

Charles also drew attention to the excellent work of the IAA Mortality Working Group and the sessions on current developments in ageing and mortality. It was generally agreed that pensions actuaries need to keep themselves up to date on developments in understanding on current and projected longevity.

## 13. Hungarian experience

Gábor Borza (chairman of the Hungarian Actuarial Society, member of the Pension Committee of Actuarial Association of Europe) presented the Hungarian Pension system, highlights are the following:

- Dominated by the PAYG state system, role of private system is limited
- PAYG is generous with high replacement ratios, but benefit levels are low, not sustainable due to poor demographics
- There are actuarial concerns about potential perverse redistribution and the general lack of actuarial considerations when changes implemented
- First pillar bis (mandatory pension fund system – introduced on 1998) was nationalized in 2011. Based on National Bank data, short term positive impact is financed by long term negative
- Private schemes are DC, eligible before retirement age, practically no voluntary and mandatory annuity market
- Limited role for the actuaries in Hungary in the pension business

## 14. Round robin update of national developments

- US – Tonya Manning and Joe Nichols provided the committee with an overview of Stress Testing in the United States. After a brief overview of what is stress testing and where it is required or common practice to perform it, they provided an overview of the proposed Actuarial Standard of Practice (ASOP) from the Actuarial Standard Board of the United States. This ASOP has been in development for the past 5 years after first being proposed in 2012. There are several criticisms on the current drafts as it often doesn't address the real issue as the pension plan might be immaterial to perform such analysis or these tests are already being performed and an ASOP is not required
- Canada – Assia Billig presented a summary of the recent expansion of the first pillar coverage in Canada. The program will now provide more benefits to the citizens but also require a larger contribution from employees and their employers as this program will be capitalize. The inner working of the plan will act as a target benefit plan so that the goal of this expanded portion of the pension plan will be fully funded.
- Japan – Kenji Sekine presented an overview and expected challenges of risk sharing DB plans in Japan, which has just been introduced in January 2017.

## 15. PBSS Colloquium

Abraham Hernández presented a video introducing the PBSS colloquium in Cancun Mexico in 2017.

## 16. PEBC contributions to the ICA

It was reconfirmed that Funding Monograph and De-Risking are to be submitted to the ICA as presentations.

## 17. Next Meeting

The next meeting of the IAA will be in Chicago, United States 3 and 8 October 2017.

| **Attendance:** | | **Part 1** | **Part 2** |
|---|---|---|---|
| Yas Fujii | Chairperson | ✓ | ✓ |
| Charles Cowling | Co-Vice-Chairperson | ✓ | ✓ |
| Jason Malone | Co-Vice-Chairperson | ✓ | ✓ |
| Giora Alyagon | | ✓ | ✓ |
| Urs Barmettler | | ✓ | ✓ |
| Nils Berner | | ✓ | ✓ |
| Barbara D'Ambrogi-Ola | | | ✓ |
| Philippe Demol | | ✓ | |
| Ken Hohman | | ✓ | |
| Jan Kars | | ✓ | ✓ |
| Safia Lekehal | | ✓ | |
| Thomas Levy | | ✓ | |
| Tonya Manning | | ✓ | ✓ |
| John Newman | | ✓ | ✓ |
| Joseph Nichols | | ✓ | ✓ |
| Heidi Rackley | | ✓ | ✓ |
| Ana Ramos Estrela | | ✓ | ✓ |
| Bob Scott | | ✓ | ✓ |
| Kenji Sekine | | ✓ | ✓ |
| Philip Shier | | ✓ | ✓ |
| Odd Svendsen | | ✓ | |
| **Ex-Officio** | | | |
| Christelle Dieudonné | Chairperson, OECD Subcommittee | ✓ | |
| Esko Kivisaari | IAA delegate to IOPS | ✓ | |
| **Executive Committee Liaison** | | | |
| Cathy Lyn | | | ✓ |
| **Observers** | | **Part 1** | **Part 2** |
| Séverine Arnold | Swiss Association of Actuaries | ✓ | |
| Yair Babad | Israel Association of Actuaries | ✓ | |
| Janet Barr | American Academy of Actuaries | ✓ | |
| Rob Brown | IAA Past President | | ✓ |
| Ken Buffin | Institute and Faculty of Actuaries | ✓ | |
| Marius Du Toit | Actuarial Society of South Africa | ✓ | ✓ |
| Ian Duncan | Society of Actuaries | ✓ | |
| Niel Fourie | Actuarial Society of South Africa | | ✓ |
| Don Fuerst | Conference of Consulting Actuaries | ✓ | ✓ |
| Alfred Gohdes | Chairperson, Actuarial Standards | ✓ | ✓ |
| Ted Goldman | American Academy of Actuaries | ✓ | ✓ |

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| Craig Hanna | American Academy of Actuaries | ✓ | |
| Abraham Hernández | Chairman, PBSS Section | ✓ | ✓ |
| Hiroto Ito | Japanese Society of Certified Pension Actuaries | | ✓ |
| Shinryu Kamada | Japanese Society of Certified Pension Actuaries | ✓ | ✓ |
| Arkadi Khachatryan | Central Bank Republic of Armenia | ✓ | |
| John Lowell | Israel Association of Actuaries | ✓ | ✓ |
| Tibor Párniczky | Magyar Aktuárius Társaság | ✓ | ✓ |
| Andy Peterson | Society of Actuaries | | ✓ |
| Morteza Aalabaf Sabaghi | Iran | ✓ | |
| Junichi Sakamoto | Institute of Actuaries of Japan | ✓ | |
| Donald Segal | Conference of Consulting Actuaries | | ✓ |
| Nobu Shimizu | Secretary, PBSS | ✓ | ✓ |
| Ashleigh Theophanides | Actuarial Society of South Africa | ✓ | |
| László Török | Hungary National Bank | ✓ | |
| Falco Valkenburg | Actuarial Association of Europe | ✓ | |
| Diego Valero | Collegi D'Actuarius de Catalunya | ✓ | ✓ |
| Jason Vary | Canadian Institute of Actuaries | ✓ | |
| James Verlautz | Co-Vice-Chairperson, Pensions & Benefits Accounting | ✓ | ✓ |
| Yvanko Yuriy | Society of Actuaries of Ukraine | | ✓ |