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Melbourne Mercer Global Pension Index



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Letter from MCFS

The Melbourne Centre for Financial Studies (MCFS) is delighted to be a partner in the research which has resulted in the Melbourne Mercer Global Pension Index.

MCFS is a not-for-profit consortium of Monash University, RMIT University, the University of Melbourne and Finsia (Financial Services Institute of Australasia) which was established in 2005 with seed funding from the Victorian Government. Funding for MCFS is also derived from corporate sponsorship and through research partnerships such as the one with Mercer which has led to this report.

The Mission of MCFS is:

To build links between academics, practitioners and government in the finance community to enhance research, practice, education and the reputation of Melbourne's financial institutions and universities, and of Australia as a financial centre.

This project, which provides an opportunity to reflect on alternative international retirement systems through comparative data, will contribute to enhancing the level of policy discussion and research surrounding both public and private pension systems. We believe it will be of interest to government, industry and academics and contribute to the debate on how we best provide for the ageing population. In particular, the nature of the Index provides some insight to the challenge of balancing the adequacy of benefits with the sustainability of pension systems, a matter of increasing concern in the post-Global Financial Crisis environment.

As part of its role in the project, MCFS has convened an expert reference group to ensure that the final Index represents an independent and unbiased view. Many thanks to the members of the reference group:

- Syd Bone, Chairman, Melbourne Centre for Financial Studies
- Jeremy Duffield, Managing Director, Vanguard Investments Australia
- Dr Vince FitzGerald, Chairman, Allen Consulting
- Assoc Prof Roger Gay, Monash University
- Prof Richard Heaney, RMIT University
- Assoc Prof Matt Pinnuck, The University of Melbourne
- Ian Silk, Chief Executive, AustralianSuper

Thanks also to the Department of Industry Innovation, and Regional Development for supporting this pilot study.



Professor Deborah Ralston

Director
Melbourne Centre for Financial Studies

Preface

This report represents research that compares eleven different retirement income systems around the world. It is the first time that these systems, some of which are regarded as incorporating best practice features, have been compared in respect of the adequacy of benefits, long-term sustainability and the integrity of the private sector component.

It is expected that the results will, at least in part, be controversial. Of course, any comparison between systems in different countries is bound to lead to debate and discussion. There is no perfect retirement income system as the best arrangements for a particular country will depend on its social, economic, political, cultural and historical circumstances. Notwithstanding these differences, we believe that there are certain features that are desirable in all retirement income systems, whatever their contexts, and it is on these features that we have endeavoured to concentrate in this research.

We have also tried to be as objective as possible. Whilst individual researchers and commentators may have personal preferences, the index includes more than forty indicators which are scored from objective data with, in the vast majority of cases, no opportunity for subjective assessment.

The over-riding purpose of all retirement income systems should be to enable our older citizens to have access to adequate financial resources in retirement and thereby to live their later years with dignity. Of course in many countries this objective is becoming more problematic due to ageing populations and increasing longevity. It is our hope that this research will lead to an improvement in retirement income systems world-wide through a consideration by governments and policymakers of the importance and relevance of the indicators used in this report.

The preparation of an international report of this nature requires input and hard work from many individuals and groups. I would like to thank each and every one of them.

First, the financial support of the Victorian Government for this project is greatly appreciated. Without its funding, the initial concept of such an index would not have moved from an idea to reality.

Second, the Melbourne Centre for Financial Studies has played a pivotal role in this project, particularly in establishing an expert reference group of senior and experienced individuals who provided very helpful suggestions and comments throughout the project.

Third, our Mercer colleagues around the world have been invaluable in providing information in respect of their countries' retirement income systems, checking our interpretation of the data, and providing incisive comments on draft reports.

Finally, it should be recognised that this report is the result of a pilot study. It is hoped that in the future this study will be expanded to include more countries and an even broader range of indicators. For example, it may be useful to include a measure of total operating cost, despite the difficulty of comparing total costs across such diverse systems.

As we look to the future, we would value your feedback, suggestions and comments so that the next report may be of even greater value than this initial report. Notwithstanding any shortcomings in this pilot study, my hope is that you enjoy reading the report and that it provides new insights into the provision of retirement income to our older citizens.




Dr David Knox

Worldwide Partner
Mercer



Chapter 1
Executive
summary

A faint, light blue illustration of an elderly person with a cane is visible in the background. The person is shown from the side, walking towards the right. The cane is held in their right hand. The overall style is minimalist and uses a monochromatic color palette.

Retirement income systems perform a critical role for both individuals and societies as most countries grapple with the social and economic effects of ageing populations.

Retirement income systems perform a critical role for both individuals and societies as most countries grapple with the social and economic effects of ageing populations. Yet, as the OECD (2009b) notes: “classifying pension systems and different retirement income schemes is difficult.”

Furthermore, comparing retirement income systems is certain to be controversial as every system is different and has arisen from each country’s particular economic, social, cultural, political and historical circumstances. There is no perfect system that can be applied universally around the world. However there are certain features and characteristics of retirement income systems that are likely to lead to improved benefits, an increased likelihood of future sustainability of the system, and a greater level of confidence and trust within the community.

This pilot study of eleven countries has confirmed that no system is perfect. Indeed no country’s system has an index value above 80, which we consider represents an A-grade

retirement income system. However, several countries have an index value between 65 and 80, which represents a B-grade system and – with some adjustments or improvements – these countries could be re-classified as A-grade systems. (The changes that would raise these systems to the A-grade level are discussed in Chapter 6.)

We believe that none of the countries in this pilot study has an E-grade system, which would be represented by an index value below 35. A score between 35 and 50, which represents a D-grade system, indicates a system that has some sound features but where there exist major omissions or weaknesses. A D-grade classification may also occur in the relatively early stages of the development of a particular country’s system.



The following table summarises the results:

Grade	Index value	Countries	Description
A	>80	Nil	A first class and robust retirement income system that delivers good benefits, is sustainable and has a high level of integrity.
B	65–80	Netherlands Australia Sweden Canada	A system that has a sound structure, with many good features, but has some areas for improvement that differentiate it from an A-grade system.
C	50–65	UK USA Chile Singapore	A system that has some good features, but also has major risks and/or shortcomings that should be addressed. Without these improvements, its efficacy and/or long-term sustainability can be questioned.
D	35–50	Germany China Japan	A system that has some desirable features, but also has major weaknesses and/or omissions that need to be addressed. Without these improvements, its efficacy and sustainability are in doubt.
E	<35	Nil	A poor system that may be in the early stages of development or a non-existent system.

The following table shows the overall index value for each country, together with the index value for each of the three sub-indices: adequacy, sustainability and integrity. Each index value represents a score between 0 and 100.

The overall index value represents the weighted average of the three

sub-indices. The weightings used are 40 percent for the adequacy sub-index, 35 percent for the sustainability sub-index and 25 percent for the integrity sub-index. The different weightings are used to reflect the primary importance of the adequacy sub-index which represents the benefits that are currently being provided together with some important benefit

design features. The sustainability sub-index has a focus on the future and measures various indicators which will influence the likelihood that the current system will be able to be maintained in the future. The integrity sub-index has a focus on the private sector system and therefore has a more restrictive scope than the other two sub-indices.

Country	Overall index value	Sub-index values		
		Adequacy	Sustainability	Integrity
		40%	35%	25%
Australia	74.0	68.1	71.0	87.8
Canada	73.2	76.2	64.2	80.9
Chile	59.6	48.9	54.1	84.5
China	48.0	64.7	38.5	34.7
Germany	48.2	60.8	44.3	33.7
Japan	41.5	39.2	34.4	55.2
Netherlands	76.1	80.5	62.5	88.2
Singapore	57.0	51.7	68.9	49.1
Sweden	73.5	68.5	75.2	79.1
UK	63.9	56.6	56.4	86.3
USA	59.8	49.2	69.4	63.4
Average	61.4	60.4	58.1	67.5

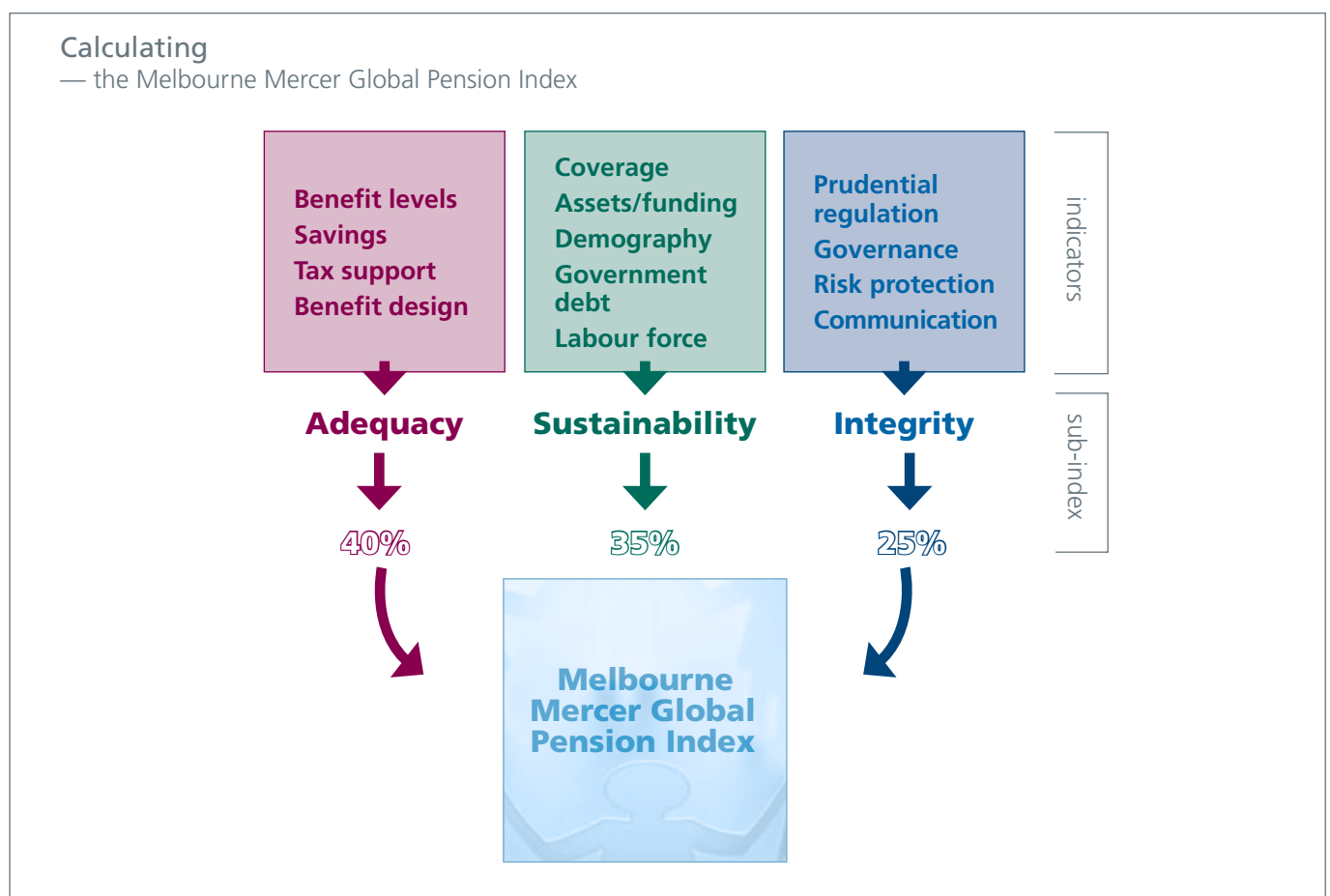
We considered standardising the three sub-index values to provide the same mean and standard deviation for each sub-index. Whilst such a process

caused changes to the overall index value for some countries, the changes were small and did not result in a change to the grade assigned to any

country's retirement income system. Hence, in the interests of simplicity and overall comprehension, we decided not to standardise the sub-index values.



The following diagram presents a high level summary of the index.

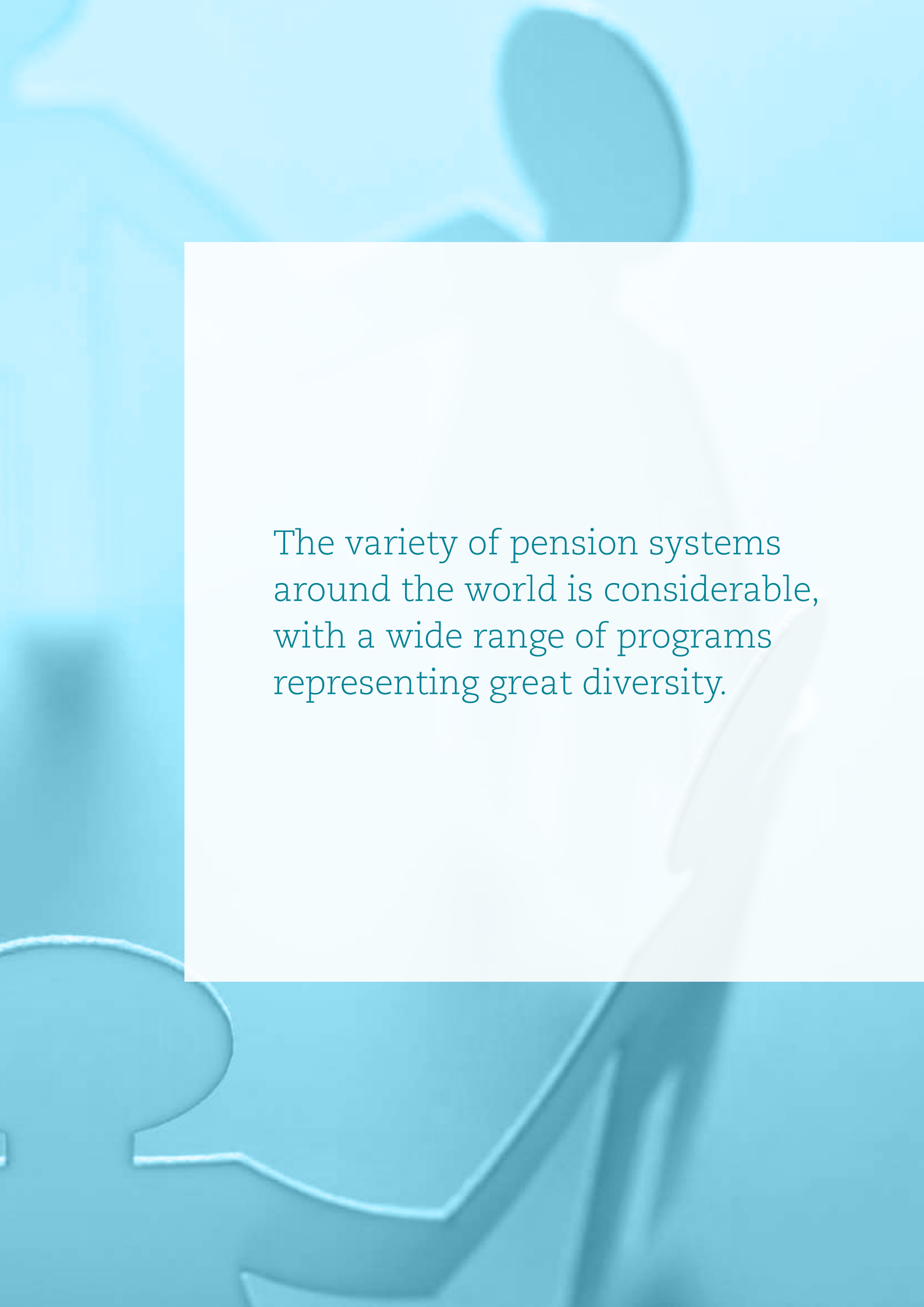


The final chapter makes several suggestions to improve each country's retirement income system. Although each system reflects a unique history, there are some common themes as many countries face similar problems in the decades ahead. These common challenges include:

- Increasing the state pension age to reflect increasing life expectancy, both now and in the future
- Promoting higher labour force participation at older ages, particularly as many individuals now remain in good health for longer periods
- Encouraging higher levels of saving, both within the pension system and beyond
- Increasing the coverage of employees in the private pension system
- Promoting a diversity of retirement income products, including but not limited to annuities



Chapter 2
Introductory
comments



The variety of pension systems around the world is considerable, with a wide range of programs representing great diversity.

The variety of pension systems around the world is considerable, with a wide range of programs representing great diversity. The OECD (2009b)¹ notes: “As a result [of this diversity], classifying pension systems and different retirement income schemes is difficult.” In addition, the lack of readily available and comparable data in respect of many countries provides additional challenges for such a comparison.

This situation is gradually improving and the OECD in particular has made significant progress in recent years. Nevertheless it must be recognised that reliable data in respect of some key indicators remains a significant issue. For this reason, this report uses a wide variety of data sources.

This data challenge should not, however, prevent the comparing of retirement income systems. This topic, within the context of our ageing populations, is too important to be ignored. Furthermore, there is no doubt that policies and practices adopted in some countries provide valuable lessons, experience or ideas for the development or reform of pension systems in other countries.

This pilot study, which compares the retirement income systems of eleven countries spread over five continents, highlights both the considerable diversity and the positive features that are present in many systems. Notwithstanding these highlights, the study also confirms that no pension system is perfect and that every system has some shortcomings. In Chapter 6, suggestions are made for improving the efficacy of each country’s retirement income system. In that respect it is hoped that this study will act as a stimulus for each of the countries in the study (and indeed, other countries as well) to review their retirement income system and to consider making improvements so that future retirement incomes for their citizens can be improved.

¹ OECD (2009b), Pensions at a Glance 2009, p19



In its influential report *Averting the Old Age Crisis*, the World Bank (1994)² recommended a multi-pillar system for the provision of old-age income security comprising:

Pillar 1: A mandatory publicly managed tax-financed public pension

Pillar 2: Mandatory privately managed, fully funded benefits

Pillar 3: Voluntary privately managed fully funded personal savings

More recently, the World Bank (2005)³ has extended this three-pillar system adding a zero pillar (or safety net) which represents a basic or social pension, as well as a fourth pillar. This new fourth pillar includes personal savings, home ownership and other assets which are held outside the pension system but which, nevertheless, can play an important role in financially supporting the individual during retirement.

Park (2009)⁴ in a recent Asian Development Bank paper suggests that a well designed pension system will have the following characteristics:

- Broad-based in terms of both coverage and the range of risks covered
- Sustainable over time in terms of its actuarial and financial soundness
- Robust so that it can withstand macroeconomic and other shocks
- Affordable from individual, business, fiscal and macroeconomic perspectives
- Providing reasonable levels of post retirement income
- Providing a safety net for the elderly poor

This list suggests a multiple set of objectives for any pension system and as Park correctly notes, different societies will need to decide on the relative importance of each objective at a particular time. Furthermore, these priorities are likely to change over time as a society's economic and demographic circumstances change. Nevertheless they provide a useful checklist.

As many commentators have noted, the 'best' system for a particular country at a particular time must take into account that country's economic, social, cultural, political and historical context. In addition, regulatory philosophies vary over time and between countries. There is no pension system that is perfect for every country at one particular point in time. There are, however, some characteristics of all pension systems that can be tested or compared to give us a better understanding of how each country is tackling the provision of retirement income.

The Melbourne Mercer Global Pension Index has grouped these desirable characteristics into adequacy, sustainability and integrity. This study represents the first time that a range of countries' retirement income systems have been considered from these three distinctive but complementary perspectives.

² World Bank (1994), *Averting the Old Age Crisis*, Oxford University Press

³ Holzmann and Hinz (2005), *Old Age Income Support in the 21st Century*, The World Bank

⁴ Donghyun Park (2009), *Ageing Asia's Looming Pension Crisis*, ADB Economics Working Paper Series No. 165

Adequacy

The adequacy of benefits is perhaps the most obvious way to compare different systems. After all, the objective of any pension system must be to provide retirement income. Thus this sub-index will consider both the minimum level of income provided (that is, 'pillar zero' in the World Bank model) as well as the net replacement rate for a median-income earner. It is recognised that an analysis focussing exclusively on benefits provided to a median-income earner does not represent the full spectrum of different income levels and that a more complete picture could be provided by considering benefits replacing a range of income levels. However, a more comprehensive approach would add considerable complexity to the comparison and risk distraction from focussing on adequacy for the majority of workers.

Critical to the delivering of adequate benefits are the design features of the private pension system (or the second and third pillars in the World Bank taxonomy). Whilst there are many features that could be assessed, we have considered the following four, each of which represents a feature that will improve the likelihood that adequate retirement benefits are provided:

- Are there taxation incentives for the median-income earner to make additional voluntary contributions to the system?
- Is there a minimum age at which plan members can access their benefits, thereby limiting the leakage of benefits before retirement?
- Can a member's entitlement be easily transferred or maintain its real value should the member's circumstances change (for example, a change of employment)?
- Is part (or all) of the retirement benefit required to be taken as an income stream (or product) during the retirement years?

In addition, we have factored in savings from outside formal pension programs in recognition of the fact that, as the World Bank notes, the fourth pillar (i.e. household savings) can play an important role in retirement.

Sustainability

The long-term sustainability of the current retirement income system in many countries has been raised as a concern, particularly in the light of the ageing population and the increasing old age dependency ratio. This sub-index therefore brings

together several measures that will affect the sustainability of current programs. Whilst some demographic measures, such as the old age dependency ratio (both now and in the future) are difficult to change, others such as the state pension age, the opportunity for phased retirement and the labour force participation rate amongst older workers can be influenced, either directly or indirectly, by government policy.

An important feature of sustainability is that the long-term risks are shared or, to put it another way, involve all the relevant stakeholders. Hence, this sub-index also considers the level of pension assets, the coverage of the private sector system and the sharing of mandatory contributions between employers and employees. Finally, given the key role that the public provision of a pension plays in most countries, the existing level of government debt represents an important factor affecting a system's long-term sustainability.

Integrity

The third sub-index considers the integrity of the private sector pension system. After all, as most countries are relying on the private system to play an increasingly important role in the provision of retirement income



over the longer term, it is critical that the community has confidence in the ability of private sector pension providers to deliver retirement benefits in future years.

This sub-index therefore considers the role of prudential regulation, the required governance, the level of protection available to members from a range of risks and the level of communication required to be provided to members.

Selection of countries for inclusion in the index

This pilot study of the index includes a basket of eleven countries from the Americas, Europe and the Asia Pacific region, with a diversity of experience and pension systems to reflect the considerable range of approaches adopted around the world. The availability of comparable and reliable data from international sources (for example, from the OECD) and the presence of a Mercer office in each country (to collect information and to confirm our findings) represented additional criteria in the selection of countries.

The countries included in the Melbourne Mercer Global Pension Index are:

- Australia, which has a three-pillar retirement income system including a mandatory system managed by the private sector
- Canada, which has a well established and integrated pension system comprising both public and private sector pillars
- Chile, which was the first Latin American country to introduce pension reform in 1981 and is often cited as an important example of pension reform
- China, which is the world's most populous nation and has had significant pension reform in recent years
- Germany, which represents Europe's largest economy and has a system that relies heavily on book reserving, thereby introducing different features and issues
- Japan, which has a well established pension industry but is now facing challenges associated with an ageing population that are more pressing than in most countries
- The Netherlands, which does not have the typical European system but has features that are often positively regarded, including the use of collective funds and solvency requirements
- Singapore, which represents a special case with its long established and fully funded Central Provident Fund
- Sweden, which represents a Scandinavian system that is in transition from a pay-as-you-go basis to a fully funded defined contribution approach
- The United Kingdom, which has a very well developed pension industry, including a strong annuity market, but which is also undergoing significant change
- The United States of America, which is not only the largest economy in the world but has a range of regulatory structures and approaches

Of course, it would have been desirable to include even more countries, but in view of the pilot nature of this initial study, this was not possible. It is hoped that this research will be extended in the future thereby allowing more countries to be included in the index.

Before proceeding, two countries need special comment.

China's economy has been growing at a significant rate for many years and is likely to continue to do so into the future. However, in China there is great diversity between the fast-growing industrial and commercial growth in the urban areas compared with some other parts of the country. Many of the indicators used in this report reflect the significant pension development that has occurred in urban parts of China, but not necessarily in the whole country. For example, membership of the mandatory pension scheme is only 20.5 percent of the labour force⁵. Nevertheless the available data have been used so that a comparison can be made with other countries.

The Singaporean system is very different from the other systems included in this pilot study. The Central Provident Fund was established in 1955 and has received significant contribution rates from both employers and employees for many years, with current contribution rates for private sector employees of 14.5 percent by employers and 20 percent by employees, capped at just above average earnings. Whilst most of these contributions are paid into an Ordinary Account, some are paid into a Special Account or a Medisave

Account. The Ordinary Account can be used to buy a home or pay for insurance, investment and education. In contrast to this flexibility, the Special Account is for old age, contingency purposes and investment in retirement-related financial products and the Medisave Account can be used for hospitalisation expenses and approved medical insurance. For the purposes of this study, it is noted that some – but not all – of the contributions are dedicated for retirement purposes.

The construction of the index

In the construction of the index, we have endeavoured to be as objective as possible in calculating each country's index value. Where international data are available, we have used that data. In other cases, we have relied on information provided by our Mercer colleagues in each country. In these instances, we have not asked them to assess the quality of their country's system. Rather we have asked them objective questions to which, in many cases, there is a yes/no answer. Of course, in some countries there is more than one system or different regulations in different parts of the country. In these cases, we have concentrated on the most common system or taken an average position.

The answers to some of these objective questions may be neither yes nor no, but "to some extent". For most questions, we have therefore adopted a three-point scoring system with 0 for "no"; 1 for "to some extent" and 2 for "yes". Of course, a score of 1 for "to some extent" may represent a range of answers. However this simple approach avoids the problems inherent in defining the difference between a score of say, 2 or 3 on a five-point scale. We agree with Kekic (2007)⁶ who noted in developing the Economist Intelligence Unit's index of democracy that a three-point scoring system represents "a compromise between simple dichotomous scoring and the use of finer scales." Kekic also noted that "The problems of 1–5 or 1–7 scoring scales are numerous" and that these problems "are magnified when attempting to extend the index to many regions and countries." His conclusion was that although two- and three-point systems do not guarantee reliability, they make it more likely.

⁵ OECD (2009c), Pensions at a Glance, Asia Pacific Edition, p41

⁶ Laza Kekic, The Economist Intelligence Unit's index of democracy, The World in 2007



In terms of assessing a pension system, the advantages of the three-point system are that if a country's system adopts a particular feature the full score will be achieved and if the feature is absent, there will be a score of zero. A partially positive response will score 1, irrespective of whether it applies to, say, 25 percent or 75 percent of the system. In either case, the feature is not uniformly present so that a full score is not achieved.

Each country's overall index value is calculated by taking 40 percent of the adequacy sub-index, 35 percent of the sustainability sub-index and 25 percent of the integrity sub-index. This weighting was adopted with the following factors in mind:

- The major aim of a retirement income system is to provide adequate benefits to retirees; hence this index is the most important as it measures both the current benefits and some important benefit design issues.
- The provision of retirement incomes is a long-term issue, particularly in the context of ageing populations. Hence the sustainability of the current system over the longer term is considered to be significant.

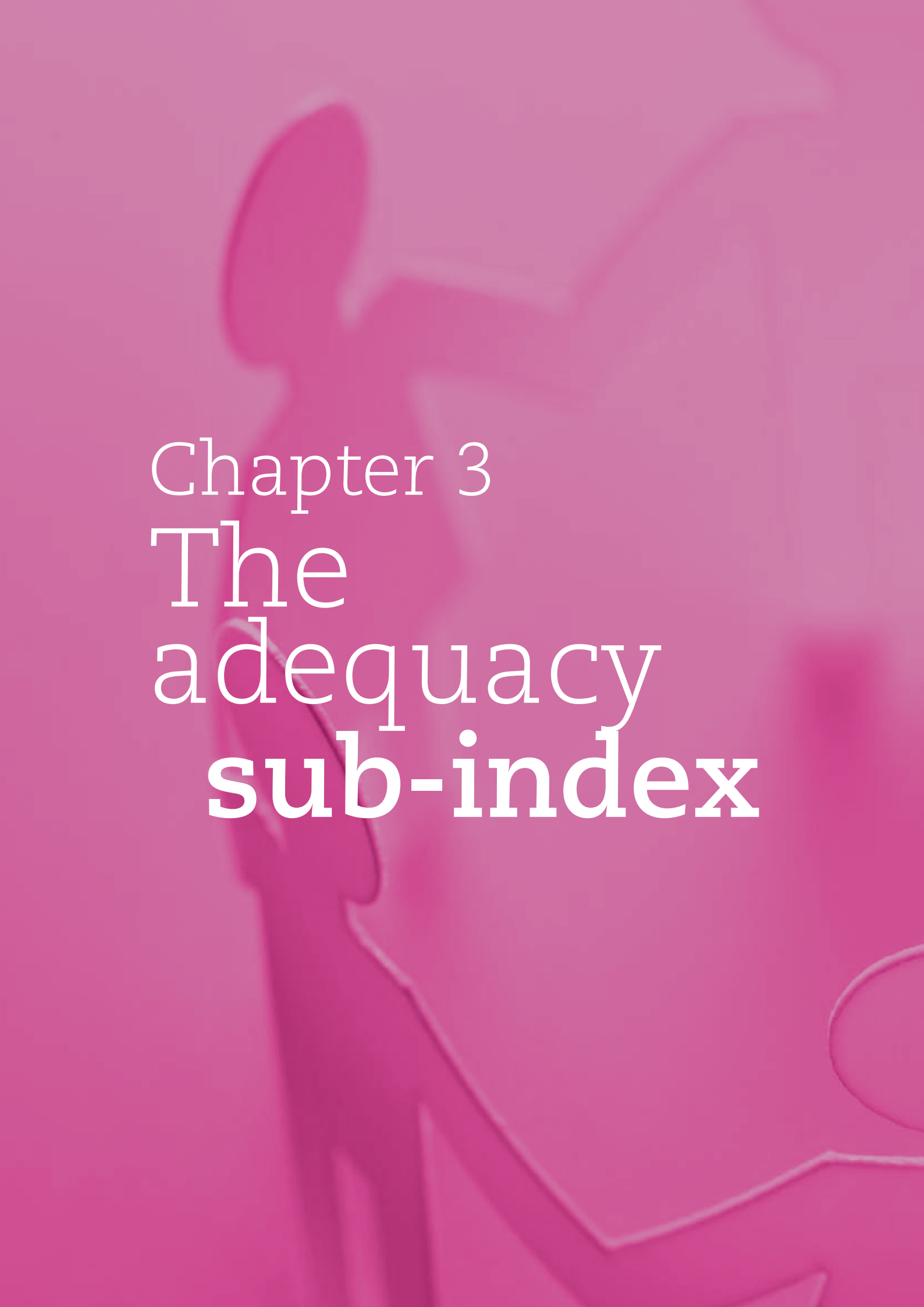
- The role of the private sector is becoming increasingly important in many countries as governments pass on some responsibility in respect of the provision of retirement income to individuals. In these circumstances, confidence in the private sector system is critical.

The robustness of the results is also worth noting. Re-weighting of the sub-indices (for example with an equal weighting for each) does not provide any significant changes in the overall results.⁷

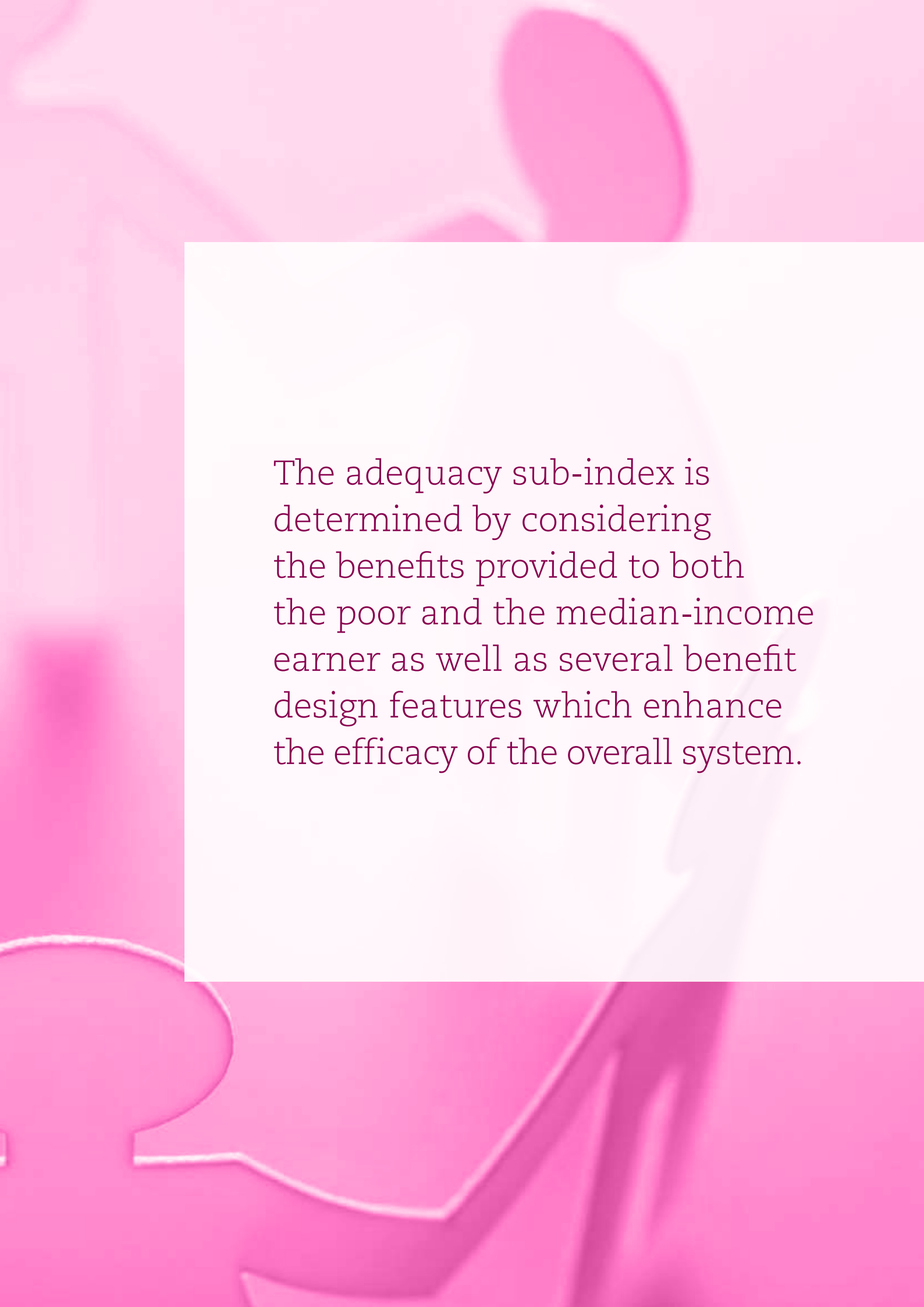
It is acknowledged that living standards in retirement are also affected by a number of other factors including the provision and costs of health services (through both the public and private sectors), the provision of aged care and the level of home ownership. However some of these factors can be difficult to measure within different systems and, in particular, difficult to compare between countries. It was therefore decided, within this pilot study, to concentrate on indicators that directly affect the provision of retirement income, both now and in the future. Therefore the index does not claim to be a comprehensive measure of living standards in retirement; rather it is focused on the provision of retirement income.

Finally, the Global Financial Crisis will have an ongoing effect on some of the indicators that are included in the index. For example, we have witnessed a decline in the value of assets held by pension plans and an increase in government debt in many countries. Of course, most of these changes have not yet worked their way into the index due to the delays in obtaining comparable international data. It is also expected that prudential regulation, governance and the need for greater transparency will increase, thereby affecting the integrity sub-index in future years. These recent influences highlight the fact that it would be expected that each country's index value will change over time due to changing economic conditions as well as government decisions.

⁷ The attachments provide the data used in respect of the indicators in each sub-index so that readers may, if they so choose, calculate the effect of changing the weights.



Chapter 3
The
adequacy
sub-index



The adequacy sub-index is determined by considering the benefits provided to both the poor and the median-income earner as well as several benefit design features which enhance the efficacy of the overall system.

The adequacy sub-index is determined by considering the benefits provided to both the poor and the median-income earner as well as several benefit design features which enhance the efficacy of the overall system. The household saving rate has also been included as non-pension savings can represent an important source of retirement income.

The countries with the highest value for the adequacy sub-index are the Netherlands (80.5) and Canada (76.2), with Japan (39.2) having the lowest value. Whilst several indicators influence these scores, the level of the minimum pension (expressed as a percentage of the average wage) and the net replacement rate provided for a median-income earner are the most important.

Full details of the values in respect of each question in the adequacy sub-index are shown in Attachment 1.

Question A1

What is the minimum pension, as a percentage of the average wage, that a single aged person will receive?

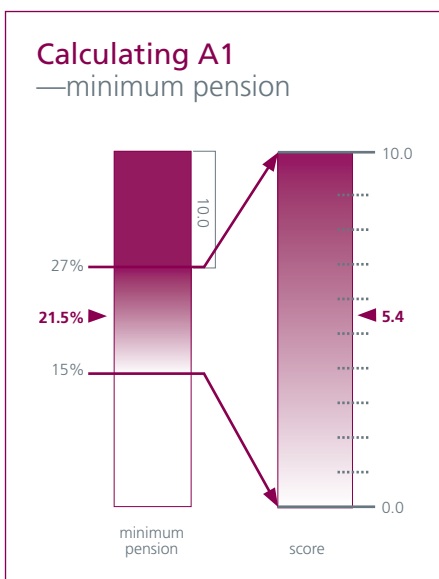
Objective

An important objective of any retirement income system is to provide a minimum pension to the aged poor. In terms of the World Bank's recommended multi-pillar system, it represents the non-contributory or 'zero pillar', which provides a minimum level of income for all aged citizens. It should be noted that this minimum pension assumes no work experience, but will often require a minimum period of residency which can range up to forty years.



Calculation

There is no correct answer as to what the minimum pension should be, as it depends on a range of socio-economic factors. However, it is suggested that a minimum pension below 27 percent⁸ of national average earnings does not adequately meet the poverty alleviation goal. Hence a minimum pension below 27 percent will score less than the maximum value, with a zero score if the pension is 15 percent or less of average earnings, as such a pension would offer very limited income provision. Minimum pensions of 27 percent of average earnings or higher received the maximum score of 10.



Commentary

The minimum pension for most countries is between 18 percent (the US) and 40 percent (China). Singapore has very modest public assistance available whilst the 2008 reforms in Chile introduced a basic solidarity pension.

Sources of data

OECD (2009b), Pensions at a Glance 2009, Table III.1, for OECD countries

OECD Pensions at a Glance – Asia Pacific Edition 2009, Table 1.2 for China

Chile: Mercer calculation (using government website figures)

Singapore: Mercer calculation (using government website figures)

Weighting

The major objective of any nation's retirement income system is to provide income support for its older citizens. The level of actual benefits therefore represents the major measurable outcome from the system. Hence this measure (which considers the income provided for the poorest in the community), together with the next measure (which calculates the income for a median-income earner), represent the two most important components within the adequacy sub-index. This indicator is given a weighting of 20 percent in the adequacy sub-index.

⁸ This level has been chosen as it represents the OECD average for first tier benefits as mentioned in OECD (2009b), p157.

Question A2

What is the net replacement rate for a median-income earner?

Objective

In *Averting the Old Age Crisis*, the World Bank suggested that a target replacement rate for middle income earners from mandatory systems should be:

- 78 percent of the net average lifetime wage
- 60 percent of the gross average lifetime wage
- 53 percent of the net final year wage
- 42 percent of the gross final year wage

It also noted that “The government should not necessarily mandate the full pension that might be desirable for individual households.”⁹ That is, these targets could be met through a combination of mandatory and voluntary provisions.

The OECD produces measures of the net replacement rate for an individual earning the median-income (revalued with earnings growth) throughout

his/her working life. Median income is used as it is a better representation than the average earnings, which are skewed upwards by the highest income earners.

It should be noted that these calculations assume no promotion of the individual throughout their career; that is, the individual earns the median income throughout. Therefore replacement rates based on lifetime median income will be higher than when expressed in terms of final salary for most individuals.

The OECD expresses a target replacement rate of 70 percent of final earnings¹⁰ which includes the mandatory pension for private sector workers (publicly and privately funded) and typical voluntary occupational pension plans for those countries where such schemes cover at least 30 percent of the working population.

This indicator for the adequacy sub-index should only include mandatory components of a retirement income system for private sector workers, as voluntary plans that only include 30 percent of the working population do not represent a good indicator of the total system.

The target benefits from a mandatory system should be less than 70 percent of final earnings to allow for individual circumstances and some flexibility. An objective of between 45 percent and 65 percent of final earnings is considered reasonable. Using the ratios between lifetime earnings and final earnings, the target for a net replacement rate (i.e. after allowing for personal income taxes and social security contributions) for a median-income earner from a mandatory system should be within the range of 70–100 percent of median lifetime earnings (revalued with earnings growth).

A net replacement rate below 70 percent of lifetime earnings suggests a significant reliance on voluntary savings whereas a figure above 100 percent does not provide the flexibility for individual circumstances and may suggest overprovision. The OECD average for a median-income earner is 71.8 percent of lifetime earnings¹¹.

⁹ World Bank (1994), p295

¹⁰ OECD (2009a), OECD Private Pensions Outlook 2008, p121

¹¹ OECD (2009b), Pensions at a Glance 2009, p121



Calculation

The maximum score for this indicator is obtained for any country with a result between 70 percent and 100 percent. Interestingly, no country lies within this range, with only the Netherlands lying above it at 105.5 percent. Any replacement rate outside this range scores less than the maximum with a zero score being obtained for a result less than 20 percent or more than 150 percent.

For China and Singapore, the OECD data lists the net replacement rate for mean income earners; we have therefore performed a positive adjustment to these figures in order to align them with the other results based on median-income earners.

Commentary

With the exception of the Netherlands and Singapore, all countries have a result between 40 percent (Japan) and 64 percent (Sweden), which is considered to be below the desired level. The Singapore result is particularly low due to the nature of their Central Provident Fund and the ready access by members to most of their funds for a range of purposes prior to retirement. On the other hand, the Netherlands result may be considered to produce a pension that is slightly too high for a median-income earner, and not provide the appropriate individual flexibility.

Sources of data

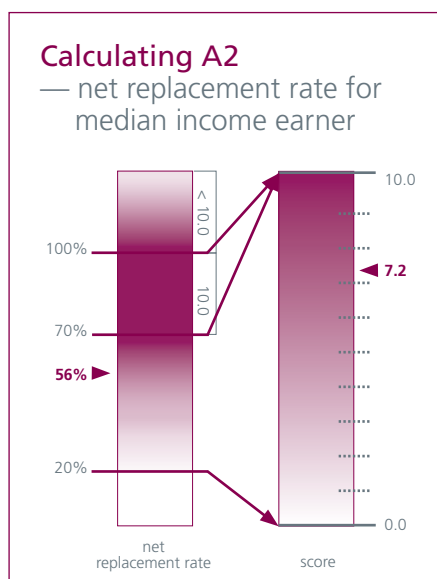
OECD (2009b), *Pensions at a Glance 2009*, p121, for OECD countries

China and Singapore: OECD *Pensions at a Glance – Asia Pacific Edition 2009*

Chile: Mercer calculations based on estimated median income

Weighting

As noted in the commentary for Question A1, these results represent a major outcome to assess any retirement income system. As this indicator is likely to reflect the benefits provided to a broader group of retirees than the previous question, this indicator is given a higher weighting in the adequacy sub-index, namely 25 percent.



Chapter 3

The adequacy sub-index

Question A3

What is the household saving rate in the economy?

Objective

The living standards of the aged will depend on the benefits arising from the pension system (which were covered in the previous two questions) as well as the level of household savings outside the pension system. In some countries, these savings may represent an important factor in determining the financial support available to the aged.

Calculation

The rate of household savings is not readily available and we have therefore used data from the Economist Intelligence Unit and calculated the saving rate in the following way:

$$\text{Household saving rate} = \frac{(\text{PDIN} - \text{PCRD})}{\text{PDIN}}$$

where:

PDIN = Personal disposable income

PCRD = Private consumption

To provide some longer-term perspective than may be present in annual figures, we have averaged the 2007 and 2008 measurements.

The calculated household saving rates ranged from minus 17 percent (Chile) to plus 20 percent (Singapore). We have provided a maximum score for any country with a saving rate of 15 percent or higher, and a zero score for any country with a saving rate of less than minus 10 percent.

Commentary

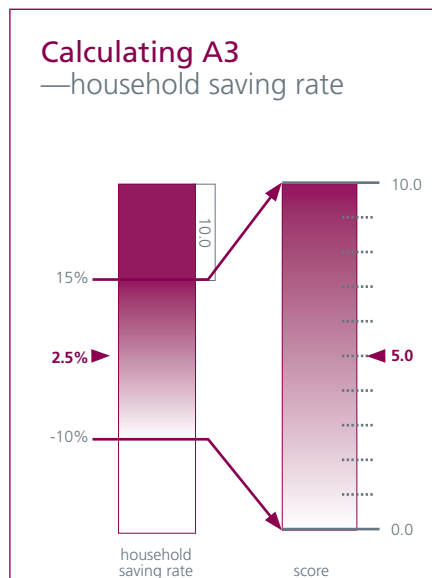
The household saving rate includes mandatory social security or private sector savings and therefore this measure is not restricted to voluntary savings. Nevertheless, it provides some indication of the level of current income that is being set aside from current consumption.

Source of data

Data provided by the Economist Intelligence Unit.

Weighting

The weighting for this measure has been set at 15 percent for the adequacy sub-index, compared to 45 percent for the sum of the two previous indicators. This indicates the potential importance of household savings, although some of this saving will be used for other purposes. It is also recognised that most voluntary household saving will be carried out by higher income households so that this measure is unlikely to assist those at lower and median income levels.





Question A4

Does an individual on the median wage receive any direct (or immediate) taxation support from making voluntary contributions towards retirement savings in the private sector?

Objective

The level of total retirement benefits received by an aged person will depend on both the mandatory level of savings and any voluntary savings, which are likely to be influenced by the presence (or otherwise) of immediate taxation incentives which are designed to change personal behaviour.

Calculation

This indicator was based on a two-point scale with a maximum score for “yes” and zero for “no”.

It should be noted that this indicator is only concerned with immediate taxation incentives at the point of contribution. There is a range of other taxation measures in respect of investment income and benefits that may also encourage contributions. However, immediate taxation support is the one most likely to affect savings behaviour.

Commentary

Most countries offer some taxation incentive for voluntary contributions with China, Japan and Sweden being the exceptions.

Source of data

The answers were sourced from Mercer consultants in each country.

Weighting

Taxation incentives represent an important measure that governments can introduce to encourage pension saving and long-term investments. Such incentives provide a desirable factor in the design structure of retirement income systems and we have therefore given this measure a weighting of 10 percent for the adequacy sub-index, which represents the same weighting as the other desirable design indicators discussed below.

Question A5

Is there a minimum access age to receive benefits from the private pension plans¹² (except for death, invalidity and/or cases of significant financial hardship)? If so, what is the current age?

Objective

The primary objective of a private pension plan should be to provide retirement income; hence the availability of these funds at an earlier age reduces the efficacy of such plans.

Calculation

The first question was scored on a three-point scale with a score of 2 for “yes”, 1 if it was applied in some cases and 0 for “no”. The second question was scored on a two-point scale where for those who said “yes” to the first question; there was a score of 1 for age 60 and 0 for age 55. Australia and China scored 0.5 as age 60 applies to some members.

A maximum score is achieved if a minimum access age exists and this age is at least 60.

Commentary

Many countries have introduced a minimum access age, while others have access provisions described in each plan's set of rules. In some cases, early access is not prohibited although the taxation treatment of the benefit discourages such behaviour.

Source of data

The answers were sourced from Mercer consultants in each country.

Weighting

Ensuring that the accumulated benefits are preserved until retirement represents an important feature of all pension plans. Hence, this desirable feature has also been given a 10 percent weighting in the adequacy sub-index.

Question A6

Can a member's benefit entitlements be transferred to another private pension plan on the member's resignation from an employer?

If yes, are the benefits normally transferred at the accrued value?

If no, do the retained benefits normally maintain their real value?

Objective

Most individuals do not stay with a single employer throughout their working life. It is therefore important that the value of an individual's accrued benefit in a private pension plan is maintained following an individual's change of employment.

Calculation

The first question was scored on a three-point scale with a score of 1 for “yes”, 0.5 if it was applied in some cases and 0 for “no”. The important follow-up question was also scored on a three-point scale with a score of 2, 1 or 0 depending on the answers.

¹² Private pension plans include both defined benefit and defined contribution plans and may pay lump-sum or pension benefits. They also include plans for public sector and military employees.



Commentary

There is considerable diversity to the extent that the real value of members' benefit entitlements can be transferred or retain their real value after changing employment. For example in Australia, Chile, and the Netherlands the value of the benefits are maintained and can be transferred, where appropriate. On the other hand in Germany, where such transfers are possible, they do not occur very often.

Source of data

The answers were sourced from Mercer consultants in each country.

Weighting

Maintaining the real value of a member's benefit entitlements during a member's working life represents an important feature of all retirement income systems. Hence, this desirable feature has also been given a 10 percent weighting in the adequacy sub-index.

Question A7

Is part or all of the retirement benefit from the private pension arrangements required to be taken as an income stream?

Objective

The primary objective of a private pension system should be to provide income during retirement. Of course, this does not imply that a lump-sum payment is not a valuable benefit. It often is. However, this indicator focussed on whether there were any requirements in the system for at least part of the benefit to be taken as an income stream.

Calculation

This indicator was based on a three-point scale, using 2 for "yes", 1 for to some extent and 0 for "no".

Commentary

There is considerable variety across countries with some requiring most or all of the benefit to be converted into a lifetime annuity (e.g. the Netherlands and the UK) whereas many countries have no requirement at all (e.g. Australia, Chile and China).

Source of data


The answers were sourced from Mercer consultants in each country.

Weighting

The requirement that part of a member's retirement benefit be turned into an income stream (which need not necessarily be a lifetime annuity) represents a desirable feature of a retirement income system and therefore, as with the other desirable design features, a weighting of 10 percent has been used in the adequacy sub-index.



Chapter 4
The
sustainability
sub-index



The sustainability sub-index is determined by considering a number of indicators which influence the long-term sustainability of the current system.

The sustainability sub-index is determined by considering a number of indicators which influence the long-term sustainability of the current system. These include measuring the importance of the private pension system, the length of expected retirement both now and in the future, the labour force participation rate of older workers and the current level of government debt¹³.

The countries with the highest value for the sustainability sub-index are Sweden (75.2) and Australia (71.0), with the lowest values being for Japan (34.4) and China (38.5). Whilst several indicators influence these scores, the level of coverage of private pension plans, the level of pension assets and the projected demographic factors tend to be the most important.

Full details of the values in respect of each question in the sustainability sub-index are shown in Attachment 2.

Question S1

What proportion of the employed workforce are members of private pension plans?

Objective

Private pension plans (including pension plans for public sector employees and the military) represent an important pillar within all retirement income systems. Hence, a higher proportion of coverage amongst the workforce increases the likelihood that the overall retirement income system is sustainable as it reduces reliance on government expenditure in the future.

Calculation

The rates of coverage ranged from less than 25 percent in China to more than 90 percent of the employed workforce in the Netherlands, Singapore and Sweden. Each country's score was directly related to its coverage, with a maximum score obtained for 100 percent coverage and a zero score relating to zero coverage.

¹³The application of means tests in respect of state pensions also represents an important component of the long-term financial sustainability for many systems. However, the measurement of the financial effect of means testing is problematic and its application varies considerably between countries. It was therefore excluded from this sub-index.



Commentary

Many countries have coverage rates in the 40–60 percent range, indicating a heavy reliance on the social security system for a substantial proportion of the workforce.

Sources of data

OECD (2009b) Pensions at a Glance 2009, p141, for OECD countries¹⁴

OECD Reviews of Labour Market and Social Policies: Chile (2005)

Estimates used for China and Singapore

Weighting

The private pillar represents an important characteristic of a diversified retirement income system, particularly with the financial pressures associated with ageing populations. Hence, this indicator was giving a weighting of 20 percent in the sustainability sub-index, which is the equal-highest weighting.

Question S2

What is the level of pension assets, expressed as a percentage of GDP, held in both private pension arrangements and public pension reserve funds?

Objective

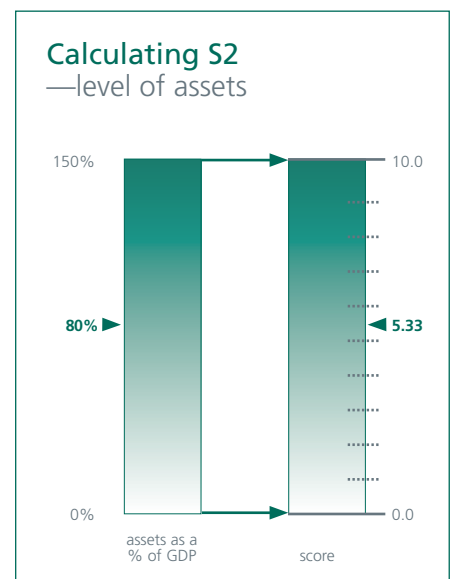
The level of current assets set aside for future pensions, when expressed as a percentage of a country's GDP, represents a good indicator of an economy's ability to meet these payments in the future.

Calculation

We have added assets from both public and private pension funds to calculate the total level of assets held within each country to pay future pensions, irrespective of whether the pensions are paid through public pension provision or from private pension plans. After all, in most countries an individual's retirement income can include both a public pension and a private pension. The types of funds that have been included are:

- Assets held in private pension plans
- Social security reserve funds
- Sovereign reserve funds which have been set aside for future pension payments

The level of assets ranged from 5.6 percent of GDP for China to 149.1 percent for the Netherlands. These scores were then scaled to provide a maximum score for 150 percent of GDP and a minimum score for 0 percent.



Commentary

There is considerable variety in the size of assets set aside for future pensions around the world, reflecting both the importance of any social security reserve funds as well as the second and third pillars in each country's system. In addition, many countries are part-way through a reform process which is expected to increase the level of assets over many decades. In these cases, we would expect the score for this indicator to increase in future years.

¹⁴The German figure used was the voluntary occupational percentage increased by 20 percent of the voluntary personal percentage as the total percentage was not provided.

It should also be noted that the level of private pension assets goes beyond pension funds and includes book reserves, pension insurance contracts and funds managed as part of financial institutions such as Individual Retirement Accounts. These assets have been included as they represent assets set aside for future retirement income.

Sources of data

OECD (2009a), Private Pensions Outlook 2008, p44 and p 103, for OECD countries

OECD (2009c), Pensions at a Glance – Asia Pacific Edition 2009

Estimates for others based on a range of sources:

Chile:

US Social Security Administration
Mercer calculations

China and Singapore:

OECD Private Pensions Outlook 2008

CIA Factbook (for GDP)

Weighting

This indicator shows the level of assets set aside to fund future retirement incomes. It therefore represents a key indicator in the future ability of each country's system to pay for future benefits. Hence, this indicator was given a weighting of 20 percent in the sustainability sub-index which is equal to the highest weighting.

Question S3

- What is the current gap between life expectancy at birth and the state pension age?
- What is the projected gap between life expectancy at birth and the state pension age in 2030? (This calculation allows for mortality improvement.)
(The above calculations are averaged for males and females.)
- What is the projected old-age dependency ratio in 2030?

Objective

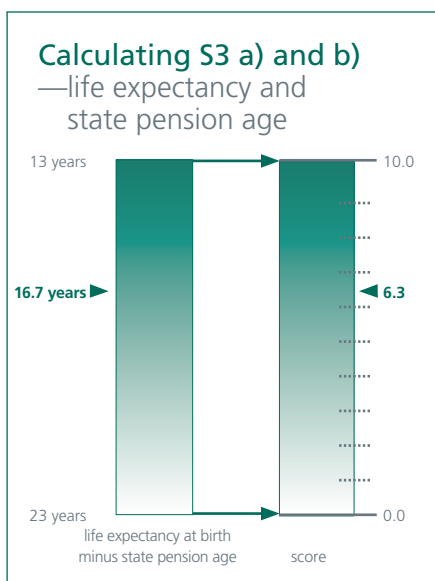
A retirement income system is designed to provide benefits to an individual from when the person leaves the workforce to his/her death. The longer the period, the larger the total benefits will need to be and hence an increased financial strain will be placed on the overall system. Although individuals retire for many reasons, the state pension age represents a useful proxy that guides many retirement decisions. As life expectancy increases, one way of reducing the strain is to encourage later retirement.

In the second question, we project two decades ahead to highlight the fact that many governments have already taken action in respect of the state pension age, thereby reducing the forthcoming pension burden.

The projected old age dependency ratio question highlights the impact of the ageing population between now and 2030 and therefore the likely effects on the funding requirements for pensions, health and aged care.

Calculations

- We have calculated the difference between the life expectancy at birth and the existing state pension age, as used in a recent paper by Park (2009) from the Asian Development Bank. The answers provide an indicator of the average period of pension payment and range from 13.2 in the USA (where the current state pension age is 66) to 22.7 in Japan (where the current state pension age is 60). In view of this range a maximum score is achieved with a difference of 13 years and a zero score with a score of 23 years.
- For 2030, the results range from 14.9 years in the USA (where the projected state pension age will be 67) to 21.2 years in China (where the state pension age remains unchanged). The formula used remains unchanged with a maximum score for 13 years and a zero score for 23 years.



c) The old-age dependency ratio is the population aged 65 and over divided by the population aged between 15 and 65. The projected dependency ratios for 2030 range from 23.7 percent in China to 52.8 percent in Japan.

In view of this range a maximum score is achieved with a dependency ratio of 20 percent or less and a zero score with a score of 60 percent or higher.

Commentary

With the exception of Japan and the USA, all countries have a difference between life expectancy and state pension age of between 15.7 and 18.3 years, thereby highlighting Japan's challenge of a relatively low state pension age and longer life expectancy.

The results for 2030 are different from the previous results, with two countries now having a projected difference in excess of 20 years as China and Japan have not announced an increase in their state pension age.

The projected old-age dependency ratios show the contrasting demographic pressures faced by some countries and, in particular, highlight the challenges faced by Japan.

Sources of data

United Nations (2008), World Population Prospects: Life expectancies

The state pension ages were sourced from Mercer consultants in each country.

Weighting

These demographic-related indicators have a weighting of 20 percent in the sustainability sub-index with a 75 percent weighting for the first two questions and a 5 percent weighting for the projected old-age dependency ratio.

Question S4

What is the level of mandatory contributions that are set aside for retirement benefits (i.e. funded), expressed as a percentage of wages? This may include contributions into public or private sector funds¹⁵.

Objective

Mandatory contributions from employers and/or employees represent a feature of every country's retirement income system. In some countries these contributions are used to fund social security benefits immediately whereas in other cases the contributions are invested, either through a central fund (such as Singapore's Central Provident Fund or a reserve fund) or through a range of providers in the private sector. In terms of longer-term sustainability, the important issue is whether the contributions are set aside to pay for the future benefits of the contributors, irrespective of the vehicle actually used for saving.

Calculation

There is considerable variety in the extent to which the contributions paid are actually invested into a fully funded investment vehicle. The calculation multiplies the level of mandatory contributions by the percentage of these funds that are invested to provide for future benefits.

¹⁵ This question does not include contributions arising from statutory minimum levels of funding for defined benefit plans as these plans do not represent mandatory arrangements.

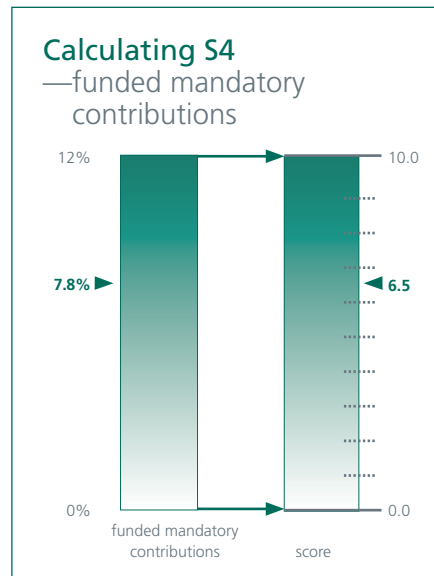
For example, in Australia and Chile the mandatory contributions are fully invested for the individuals concerned. On the other hand, Germany, the Netherlands and the UK adopt a pay-as-you-go basis.

In some cases, neither extreme is adopted. For instance, the Canada Pension Plan adopts a 'steady-state' funding basis so that contributions will remain constant for 75 years. In this case we have assumed that 75 percent of the contributions are invested. In China, only the employee contributions are required to be funded but at the moment many of the individual accounts are notional. Hence 50 percent of employee contributions have been used. We have also used 50 percent in Sweden as they are transitioning from a pay-as-you-go approach to a fully funded one.

In other countries, social security reserve funds are funded by the difference between contributions and current benefit payments or through top-up contributions from the government. Japan and the USA are examples of this approach. In these cases, we have assumed that 20 percent and 33 percent of the

contributions are funded respectively. We have also used 33 percent for Singapore where a high proportion of contributions can be used for a variety of purposes beyond the provision of retirement benefits.

The results of the above calculations have meant that the net funded level of contributions (expressed as a percentage of earnings) range from 0 percent in several countries to 11.39 percent in Singapore. In view of this range, a maximum score would be achieved with a level of 12 percent and a zero score with a level of 0 percent.



Commentary

The level of mandatory contributions paid by employers and employees around the world varies considerably. In some cases, they represent taxation for social security purposes and are not used to fund future benefits. On the other hand, funded arrangements with the associated investment funds provide a better level of sustainability for the system and greater security for future retirees.

Sources of data

Some answers were sourced from Mercer consultants in each country.

Various websites describing each country's social security arrangements OECD (2009a), Private Pensions Outlook 2008

Weighting

This item represents one of several indicators which suggest desirable features of a sustainable system. A weighting of 10 percent in the sustainability sub-index is used for this and the next two indicators.



Question S5

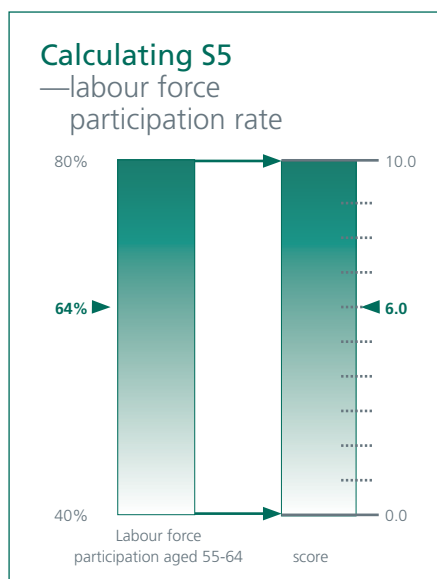
What is the labour force participation rate for those aged 55–64?

Objective

An older labour force means that individuals are retiring later thereby reducing the number of years in retirement and the need to provide retirement income.

Calculation

The percentages ranged between 50.1 percent in the Netherlands and 73.3 percent in Sweden. A maximum feasible score is considered to be 80 percent for this age bracket. Hence a participation rate of 80 percent or more would score maximum results whilst a score of 40 percent or less would score zero.



Commentary

Labour force participation rates at older ages have been declining in many countries until recently, but with the increasing awareness of the pressures associated with an ageing population it is important that governments encourage labour force participation rates at these older ages.

Source of data

International Labour Office (2007), Key Indicators of the Labour Market, 5th Edition

Weighting

This item has a weighting of 10 percent in the sustainability sub-index.

Question S6

What is the level of adjusted government debt (being the gross public debt reduced by the size of any sovereign wealth funds¹⁶ that are not set aside for future pension liabilities), expressed as a percentage of GDP?

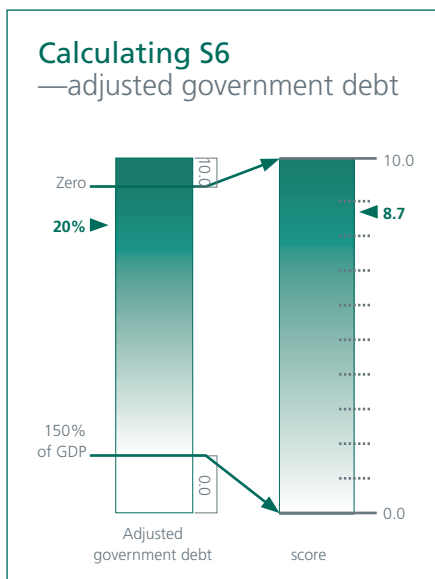
Objective

As social security payments represent an important source of income in most retirement income systems, the ability of future governments to pay these pensions and/or other benefits (e.g. health) represents an important factor in the sustainability of current systems. Clearly, higher government debt increases the likelihood that there will need to be reductions in the level or coverage of future benefits.

Calculation

The level of the adjusted government debt ranges from less than zero for Chile and Singapore to 173.0 percent in Japan. A maximum score was achieved for countries with a negative level of adjusted government debt (i.e. a surplus), with a zero score for countries with an adjusted government debt of 150 percent of GDP or higher.

¹⁶This reduction does not include sovereign reserve funds which have been set aside for future pension payments as these have been considered in Question S2.



Commentary

Government debt may restrict the ability of future governments to support their older populations, either through pensions or through the provision of other services such as health or aged care. Hence, governments with lower levels of debt are more likely to be able to sustain their current pension levels. It should be noted that the data used were for 2008, before the Global Financial Crisis caused many governments to increase their borrowings.

Sources of data

CIA Factbook – latest estimates for 2008 for most countries.

United States: Treasury Direct website¹⁷

SWF Institute¹⁸ – sovereign wealth fund sizes

Weighting

This item has a weighting of 10 percent in the sustainability sub-index, consistent with most of the other desirable features of a sustainable system.

Question S7

What is the split in contributions to mandatory schemes between employers and employees?

Objective

A robust retirement income system shares the risks and responsibilities between all stakeholders, including government, employers and employees. A system that does not include contributions from both employers and employees presents a possible future risk for the system as the potential sources (or levers) for change or increased contributions in times of economic stress are restricted.

Calculation

Although many countries have an even split (i.e.50/50) between employers and employees, this does not represent the only feasible solution. Hence, a maximum score was achieved if at least 30 percent of the total contribution was provided by each of the employer and the employee. If all the mandatory contributions were paid by the employer only (as occurs in Australia) or by the employee only (as occurs in the Netherlands), this resulted in a zero score.

¹⁷ www.treasurydirect.gov/govt/reports/pd/histdebt/histdebt_histo5.htm

¹⁸ www.swfinstitute.org



Commentary

In economic terms, it can be argued that it makes virtually no difference whether the mandatory contributions are paid solely by the employer or the employee or whether they are shared between the two parties. However, in terms of the future sustainability of the system, it is an advantage to have contributions (and thereby participation) from both parties.

Source of data

The answers were sourced from Mercer consultants in each country.

Weighting

Whilst the sharing of mandatory contributions is considered desirable, it is not considered as important as many of the other indicators discussed above. Accordingly, this item has a weighting of 5 percent in the sustainability sub-index.

Question S8

In respect of private pension arrangements, are older employees able to access their retirement savings or pension (in part) and continue working (e.g. part time)?

Objective

A desirable feature of any retirement income system, particularly where there is an ageing population, is to permit individuals to phase into retirement by gradually reducing their reliance on earned income whilst at the same time enabling them to access their accrued retirement benefit through an income stream.

Calculation

This question was given a score of 2 for “yes” and 0 for “no”. However, it is not as simple as that in many countries (e.g. Canada, UK, USA) where it may depend on the particular fund rules. Also, in the Netherlands the current situation is unclear due to some recent court decisions. In Japan, older workers

would be able to receive their pension but their accrual would cease. In these cases, a score between 0 and 2 was given depending on the circumstances and practice. A maximum score was achieved where the answer was yes for the majority of older employees.

Commentary

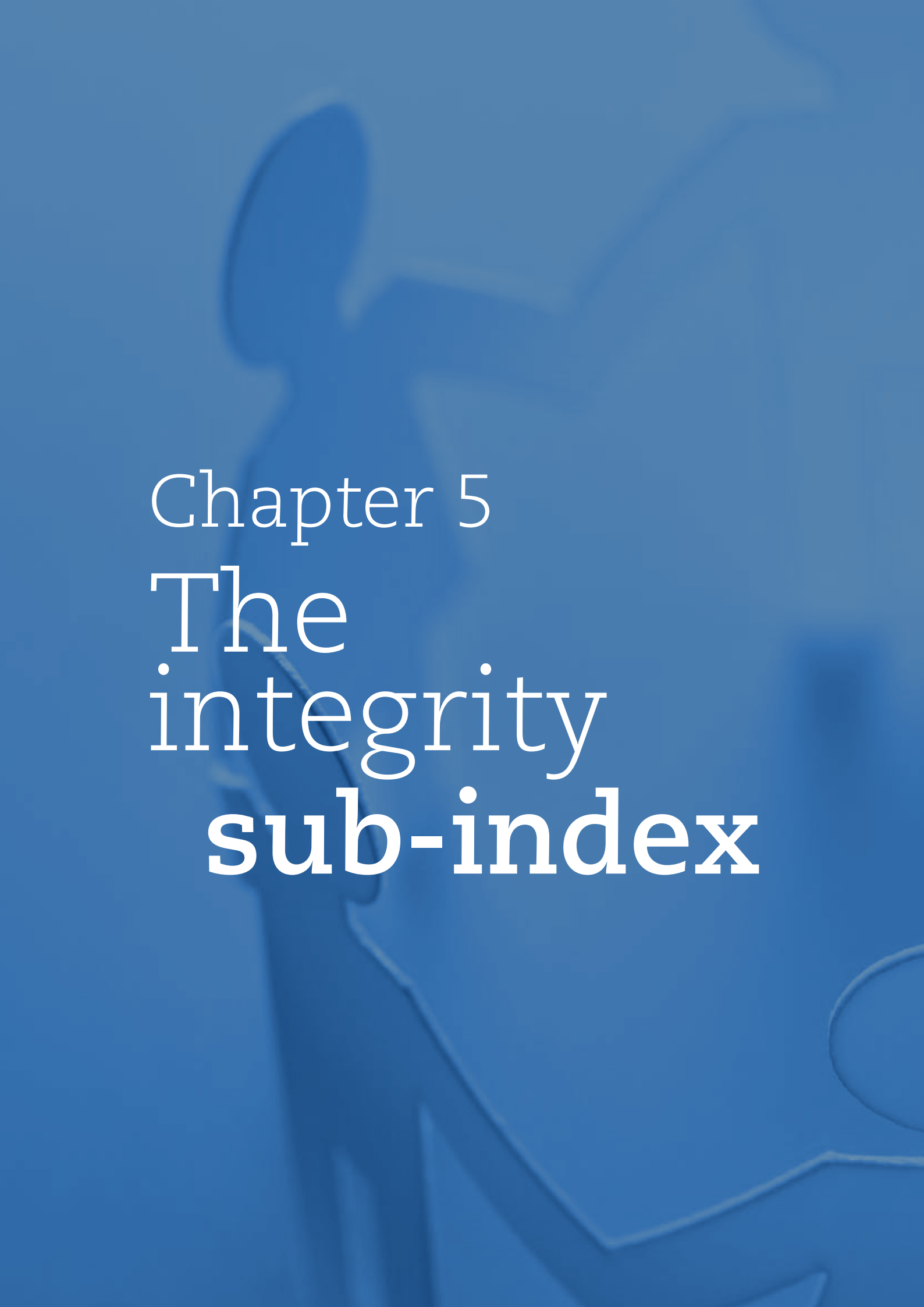
In several countries (including Australia, Singapore and Sweden) employees are able to continue working at older ages whilst also accessing an income stream from their accumulated benefits.

Source of data

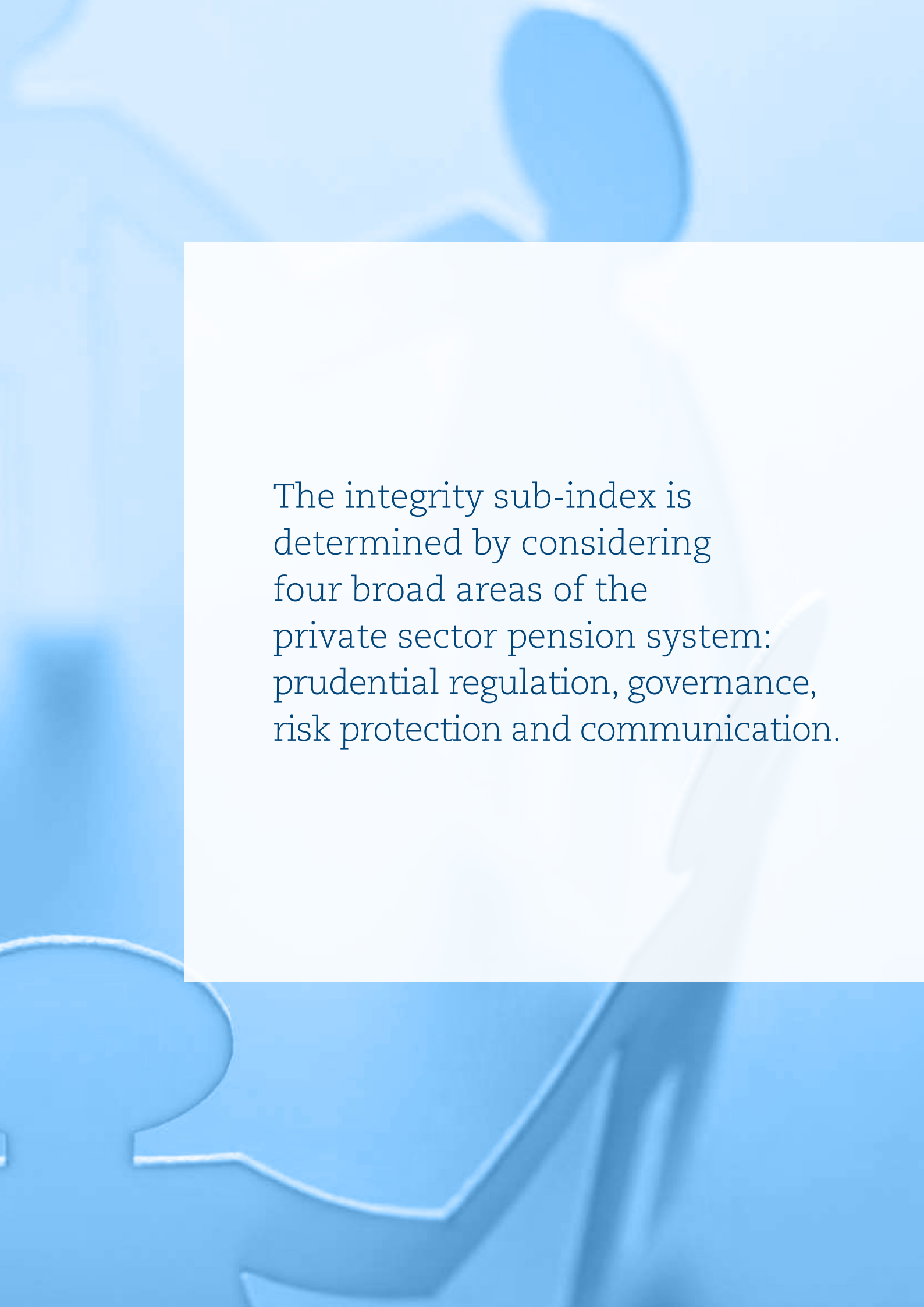
The answers were sourced from Mercer consultants in each country.

Weighting

This item has a weighting of 5 percent in the sustainability sub-index as it is not considered as critical as some of the earlier indicators.



Chapter 5
The
integrity
sub-index

The background features a light blue gradient with several large, semi-transparent blue shapes, including a stylized human figure in the lower-left and a large, rounded shape in the upper-right. A white rectangular box is centered on the page, containing the following text:

The integrity sub-index is determined by considering four broad areas of the private sector pension system: prudential regulation, governance, risk protection and communication.

The integrity sub-index is determined by considering four broad areas of the private sector pension system: prudential regulation, governance, risk protection and communication. As this sub-index is only concerned with the private sector pension plans (i.e. the second and third pillars of the World Bank model), it has a more restricted scope than the previous two sub-indices.

The private sector pillar is, however, important because without it the government becomes the only provider, which is not a desirable long-term outcome. A sound and well regulated private sector pension system, which has the confidence of the community, represents an important component of most countries' retirement income systems.

The countries with the highest value for the integrity sub-index are the Netherlands (88.2), Australia (87.8) and the UK (86.3), with the lowest values being for Germany (33.7) and China (34.7). As noted above, this sub-index covers four areas affecting private sector pension plans and the better scores were achieved by countries with well developed private pension industries.

Each of the four broad areas (namely prudential regulation, governance, risk protection and communication) represents 25 percent of the integrity sub-index. In each area, several questions have been asked to ascertain the requirements that apply to private sector pension plans in each country.

Full details of the values in respect of each question in the integrity sub-index are shown in Attachment 3.



Prudential regulation

Calculation

With the exceptions of question P2 dealing with the activity of the regulator and question R2 dealing with funding requirements, each question in the integrity sub-index is scored on a three-point scale with a score of 2 for “yes”, 1 if it applied in some cases and 0 for “no”.

Source of data

As the integrity sub-index is based on the operations of the private sector pension industry in each country, all the answers were sourced from Mercer consultants in the relevant countries.

Question P1

Do private sector pension plans need regulatory approval to operate?

Is a private pension plan required to be a separate legal entity from the employer?

Is a private pension plan required to have separate assets from the employer?

Objective

These questions were designed to assess the extent to which a private sector pension plan is required to be a separate entity from the sponsoring employer and hold assets that are separate from the employer.

Weighting

Each question was given a 5 percent weighting in the integrity sub-index, resulting in a total of 15 percent for these three questions.

Question P2

Are private sector pension plans required to submit a written report in a prescribed format to the regulator each year?

How actively does the regulator discharge its supervisory responsibilities under normal conditions? Please rank on a scale of 1–5.

How actively has the regulator discharged its supervisory responsibilities during the past 12 months?¹⁹ Please rank on a scale of 1–5.

The following table was provided to assist in answering the last two questions.

Scale	Description	Examples of activity by the regulator
1	Inactive	Receives reports from plans but does not follow up
2	Active	Receives annual reports, follows up with questions but has limited communication with plans on a regular basis
3	Moderately active	Receives annual reports, follows up with questions and has regular communication with plans, including on-site visits
4	Consistently active	Obtains information on a regular basis from plans and has a focus on risk-based regulation. That is, there is a focus on plans with higher risks
5	Very active	Obtains information on a regular basis from plans and has a focus on risk-based regulation. In addition, the regulator often leads the industry with ideas, discussion papers and reacts to immediate issues

Objective

These questions were designed to assess the level of supervision as distinct from the presence or otherwise of rules and regulations. That is, how the rules are applied.

Calculation

The last two questions were scored on a five-point scale as shown in the table. It is important to note that these questions did not assess the quality of the supervision; rather it considered the activity of the regulator.

¹⁹This question was asked during mid 2009; hence the past 12 months included the Global Financial Crisis.



Governance

Weighting

The first question was given a 5 percent weighting, with the two questions about the activity of the regulator given a total of 5 percent, resulting in a total weighting of 10 percent for these three questions.

Commentary on the prudential regulation results

Most countries scored at least 20 (out of a maximum 25), with China and Germany having particularly low scores. These low scores can be attributed to the fact that the regulations in these two countries do not always require pension plans to be separate legal entities from the employer or to hold separate legal assets. This situation also means that annual reporting to the regulator is often not required.

In respect of the activity of the regulator, it is surprising that the regulator's activity in many countries does not appear to have increased during the Global Financial Crisis. This is of some concern, as the risks in respect of both defined benefit and defined contribution schemes have increased during this period.

Question G1

Is a private pension plan required to have separate governance from the employer?

Do the private pension plan's trustees/executives/fiduciaries have to satisfy any personal requirements set by the regulator?

Are the financial accounts of private pension plans required to be audited annually by a recognised professional?

Objective

These questions were designed to assess the regulatory requirements in respect of various aspects of the governance of the private sector pension plans.

Weighting

Each question was given a 5 percent weighting in the integrity sub-index, resulting in a total of 15 percent for these three questions.

Question G2

Where assets exist, are the private pension plan's trustees/executives/fiduciaries required to prepare an investment policy?

Are the private pension plan's trustees/executives/fiduciaries required to prepare a risk management policy?

Objective

These questions were designed to assess the regulatory requirements in respect of certain functions that may be required in respect of the fiduciaries who oversee private sector pension plans.

Weighting

Each question was given a 5 percent weighting in the integrity sub-index, resulting in a total of 10 percent for these two questions.

Commentary on the governance results

The scores ranged from 10 in Germany, the USA and Singapore to a maximum score of 25 in the Netherlands. Four countries scored 22.5.

The low scores in Germany reflect the absence of any requirement for pension plans to be separate from their sponsoring employer and hence there is no requirement for investment or risk management policies to be established. Although the USA requires separate governance from the employer, there is no requirement to establish any investment or risk management policies.

Question R1

What are the limits, if any, on the level of in-house assets (that is, equity or debt investments in the sponsoring employer) held by a private sector pension plan?

Objective

An essential characteristic of a sound retirement income system is that a member's accrued retirement benefits are not subject to the financial state of his or her employer.

Commentary

Most countries have a restriction on the level of in-house assets held by a pension plan. These restrictions are often set at 5 percent of the plan's assets. The exceptions are Germany, Japan and some defined contribution plans in the USA.

Weighting

This requirement represents a key method of protecting the member's accrued benefits and is therefore given an 8 percent weighting in the integrity sub-index.

Question R2

Is there a minimum level of funding (related to accrued benefits) required for defined benefit plans? If yes, is this minimum level affected by the plan's investment policy?

Are defined contribution plans required to have a minimum level of assets equal to or greater than the members' account balances?

Objective

These questions were designed to assess the level of funding required in respect of both defined benefit and defined contribution plans. Funding levels are critical in securing members' future retirement benefits.

Calculation

As most countries have both defined benefit (DB) and defined contribution (DC) plans, the initial scores were based on the normal three-point scale, with answers provided in respect of both types of plans.



However an additional point was available for DB plans (where there is greater risk of under-funding) if the funding requirements were adjusted in respect of the plan's investment policy. Where countries did not have both types of plans (such as Chile), the score in respect of DC plans was adjusted to provide the total score.

Commentary

Most countries require full funding of DC plans; in fact, many respondents noted that this feature is the essence of such a plan. However the requirements for funding DB plans vary considerably. There are, in effect, no requirements in some countries, such as in Germany and Singapore. In other countries, such as in the Netherlands and the USA, any under-funding requires rectification within a specified period. Only the Netherlands adjusts the funding requirements for DB plans to reflect the plan's investment policy.

Weighting

The funding of a member's retirement benefit in a private sector pension plan represents a basic protection of the member's accrued benefits and this indicator is therefore given an 8 percent weighting in the integrity sub-index.

Question R3

Are members provided with any protection or reimbursement from an act of fraud or mismanagement?

Are the members' accrued benefits protected from the effects of employer insolvency?

Objective

There are many risks faced by members of pension plans. These questions considered what protection, if any, the members receive in the case of fraud, mismanagement or employer insolvency. In this last example, the employer may not pay contributions that are owed.

Commentary

With the exception of the UK (and to some extent Australia and the USA), countries do not provide protection in the case of fraud or mismanagement. However, Canada, Germany, the UK and the USA provide protection in the case of insolvency.

Weighting

Whilst these issues are very important where such incidents occur, experience in most countries suggests that it is not a common event or that its financial effect is relatively minor. Hence each question is given the weighting of 2.5 percent in the integrity sub-index, resulting in a total of 5 percent for these two questions.

Question R4

Do plan members have access to a complaints tribunal which is independent from the pension plan?

Objective

A common way to provide some protection to individuals who receive benefits from a contract with a financial services organisation (such as a bank or insurance company) is to provide them with access to an independent complaints tribunal or ombudsman. As the provision of retirement benefits can represent an individual's most important financial asset, it is desirable that such a provision also exists in respect of private sector pension plans.

Commentary

Only three countries (Australia, the Netherlands and the UK) have a complaints system focused on pension plans, although Canada, Chile and the USA have a process that could be used for this purpose.

Weighting

Whilst this indicator is not as important as funding or in-house asset requirements in respect of protecting members' accrued benefits, it represents a desirable feature of the better pension systems as it provides all members with access to an independent body, should an adverse event occur. It is therefore given a 4 percent weighting in the integrity sub-index.

Communication

Question C1

When joining the pension plan, are new members required to receive information about the plan? For DC plans, is this information required to have a specific section discussing risks?

Objective

It is important that members receive information when joining a pension plan, including a description of the risks they may face, particularly as members of a DC plan.

Commentary

Most, but not all, countries require information to be provided when members join. In many cases, it is a requirement that the potential risks facing the member are discussed in the information.

Weighting

The total weighting for these two questions is 7 percent in the integrity sub-index, with a 5 percent weighting for the first question, which is considered fundamental.

Question C2

Are plan members required to receive an annual report about the plan? Is there a time limit on the provision of this annual report?

For DC plans, are these annual reports required to show the level of administration and investment fees? For DB plans, are these annual reports required to show the level of funding?

Objective

Annual reports present the opportunity for pension plans to communicate with their members, highlighting important contemporary issues that may need to be considered by the members, particularly those approaching retirement. It could be suggested that members of DB plans do not require regular information as some of these members are exposed to a smaller level risk of personal risk than their DC counterparts. Even if this is true, it is important for DB plans to communicate regularly so that members appreciate the value of their accruing entitlement.

Commentary

There is considerable variety in the responses, with China and Germany having no requirements in respect of any of these questions. Most countries require an annual report, with six of them placing a time limit on its provision ranging from 4 to 12 months. For countries such as Chile and Singapore, where no DB schemes exist, the score in respect of DC plans was doubled.

Weighting

Of these four questions, the most important one is whether an annual report about the pension plan is provided to members. Hence this was given a 5 percent weighting in the integrity sub-index. Each of the other questions was given a 2 percent weighting in the integrity sub-index, resulting in a total of 11 percent for these four questions.



Question C3

Are plan members required to receive an annual statement of their current personal benefits from the plan?

Is this annual statement required to show any projection of the individual member's possible retirement benefits?

Objective


Whilst an annual report about the plan is valuable, most members are more interested in their personal benefit. The first question therefore ascertained whether the provision of such information was a requirement whilst the second question considered whether this requirement required any projections about the member's future retirement benefit.

Commentary


About half the countries have a requirement concerning personal statements, with a few requiring some form of projection. As account balances increase and individuals take on greater responsibility for their retirement benefits, the provision of information of this type will become increasingly important to plan members.

Weighting

The first question was given a 5 percent weighting in the integrity sub-index whilst the second question was given a 2 percent weighting in the integrity sub-index, resulting in a total of 7 percent for these two questions.



Chapter 6
A brief
review of
each country



This chapter provides a brief summary of the retirement income system of each country in the pilot study, together with some suggestions that would – if adopted – raise the overall index value for that country. Of course, whether such developments are appropriate in the short term depend on that country's current social, political and economic situation.



Australia

Australia's retirement income system comprises a means-tested age pension (paid from general government revenue); a mandatory employer contribution paid into private sector arrangements (mainly DC plans); and additional voluntary contributions from employers or employees paid into these private sector plans.

The overall index value for the Australian system could be increased by:

- raising the level of mandatory contributions to improve the level of benefits
- introducing a requirement that part of the retirement benefit must be taken as an income stream
- increasing the labour force participation rate amongst older workers
- introducing a mechanism to increase the pension age as life expectancy continues to increase



Canada

Canada's retirement income system comprises a universal flat-rate pension, supported by a means-tested income supplement; an earnings-related pension based on revalued lifetime earnings; voluntary occupational pension schemes (many of which are defined benefit schemes); and voluntary individual retirement savings plans.

The overall index value for the Canadian system could be increased by:

- increasing the level of coverage of employees in occupational pension schemes, possibly through a more efficient system
- introducing a mechanism for ensuring that voluntary retirement savings are preserved for retirement purposes
- introducing a mechanism to increase the pension age as life expectancy continues to increase
- raising the level of household savings

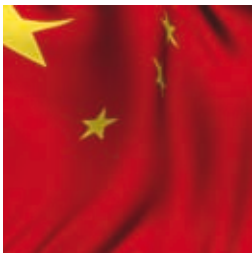


Chile

Chile's retirement income system comprises means-tested social assistance; a mandatory privately-managed defined contribution system based on employee contributions with individual accounts managed by a small number of Administradoras de Fondos de Pensiones (AFPs); and a new framework for supplementary plans sponsored by employers (the APVC schemes).

The overall index value for the Chilean system could be increased by:

- raising the level of mandatory contributions to increase the net replacement for median-income earners
- introducing a minimum access age for the supplementary plans so that it is clear that these benefits are preserved for retirement purposes
- raising the level of household saving
- introducing a requirement that part of the retirement benefit must be taken as an income stream
- continuing to review the minimum pension for the poorest pensioners, notwithstanding the 2008 reforms



China

China's retirement income system comprises a basic pension from a pooled account and quasi-mandatory employee contributions to individual accounts in a second-tier plan. As noted earlier, this system primarily covers urban workers. Supplementary plans are also provided by some major employers.

The overall index value for the Chinese system could be increased by:

- increasing the level of coverage of employees in the mandatory pension scheme
- introducing taxation incentives for employee contributions to the supplementary plans
- increasing the state pension age
- improving the level of communication required from pension plans to members



Germany

Germany's retirement income system comprises an earnings-related pay-as-you-go system based on the number of pension points earned during an individual's career; a means-tested safety net for low-income pensioners; and supplementary pension plans which are common amongst major employers. Most of these plans adopt a book reserving approach, with or without segregated assets.

The overall index value for the German system could be increased by:

- improving the portability of accrued benefits when individuals change employment
- increasing the labour force participation rate amongst older workers
- requiring a higher level of communication from pension plans to members
- encouraging a greater financial independence between the funding of accrued benefits for employees and the sponsoring employer



Japan

Japan's retirement income system comprises a flat-rate basic pension; an earnings-related pension; and voluntary supplementary pension plans.

The overall index value for the Japanese system could be increased by:

- raising the minimum pension for low-income pensioners
- increasing the level of pension provision and hence the expected net replacement rate for all income earners
- introducing taxation incentives for employee contributions to the supplementary plans and other forms of retirement saving
- announcing a further increase in the state pension age as life expectancy continues to increase
- improving the level of communication required from pension and unfunded retirement plans to members

A brief review of each country



Netherlands

The Netherlands' retirement income system comprises a flat-rate public pension and a quasi-mandatory earnings-related occupational pension linked to industrial agreements. Most employees belong to these occupational schemes which are industry-wide defined benefit plans with the earnings measure based on lifetime average earnings.

The overall index value for the Dutch system could be increased by:

- introducing a minimum access age so that it is clear that benefits are preserved for retirement purposes
- announcing an increase in the state pension age to reflect increasing life expectancy
- raising the level of household saving
- providing greater protection of members' accrued benefits in the case of fraud or mismanagement



Singapore

Singapore's retirement income system is based on the Central Provident Fund which covers all workers, including most public servants. Some benefits are available to be withdrawn at any time for specified housing and medical expenses with other benefits preserved for retirement. From 2009, a prescribed minimum amount will be required to be drawn down at retirement age to buy a lifetime income stream.

The overall index value for the Singaporean system could be increased by:

- raising the minimum level of support available to the poorest pensioners
- continuing to increase the prescribed minimum that must be set aside for retirement purposes
- increasing the percentage of contributions required to be saved for retirement
- encouraging additional savings from above average income earners
- increasing the labour force participation rate amongst older workers



Sweden

Sweden's retirement income system was reformed in 1999. The new system, which applies to people born after 1953, is an earnings-related system with notional accounts. The overall system is in transition from a pay-as-you-go system to a funded approach. There is also an income-tested top-up benefit which provides a minimum guaranteed pension.

The overall index value for the Swedish system could be increased by:

- announcing an increase in the state pension age to reflect increasing life expectancy
- reviewing the benefit requirements around retirement income streams, which currently permit five-year annuities from private plans
- improving the requirements in respect of the annual information provided to plan members



United Kingdom

The United Kingdom's retirement income system comprises a flat-rate basic pension supported by an income-tested pension credit; an earnings-related pension based on revalued average lifetime salary; and voluntary private pensions, which may be occupational or personal. Most of the larger voluntary occupational pensions are contracted out of the earnings-related social security benefit.

The overall index value for the British system could be increased by:

- raising the minimum pension for low-income pensioners
- adjusting the level of mandatory provision to increase the net replacement for median-income earners
- increasing the labour force participation rate amongst older workers
- raising the level of household saving




United States of America

The United States' retirement income system comprises a social security system with a progressive benefit formula based on lifetime earnings, adjusted to a current dollar basis, together with a means-tested top-up benefit; and voluntary private pensions, which may be occupational or personal.

The overall index value for the American system could be increased by:

- raising the minimum pension for low-income pensioners
- adjusting the level of mandatory contributions to increase the net replacement for median-income earners
- introducing a minimum access age so that it is clear that benefits are preserved for retirement purposes
- introducing a requirement that part of the retirement benefit must be taken as an income stream

A faded, light blue background image of a person holding a large umbrella, possibly in a rainy setting. The person is wearing a dark jacket and a hat. The umbrella is open and covers the person's head. The overall tone is soft and muted.

References **and** attachments

Banco Central de Chile
<http://www.bcentral.cl/>

CIA (2009), The World Factbook, CIA.

Economist Intelligence Unit, Market Indicators and Forecasts – [http:// www.eiu.com/](http://www.eiu.com/)

Holzmann R and Hinz R (2005), Old Age Income Support in the 21st Century, The World Bank.

Instituto Nacional de Estadísticas, Chile
<http://www.ine.cl/>

International Labour Office (2007), Key Indicators of the Labour Market, 5th Edition, ILO.

Kekic L (2007), The Economist Intelligence Unit's index of democracy, The World in 2007.

Ministry of Manpower, Singapore
<http://www.mom.gov.sg/>

OECD (2009a), OECD Private Pensions Outlook 2008, OECD.

OECD (2009b), Pensions at a Glance 2009: Retirement Income Systems in OECD Countries, OECD.

OECD (2009c), Pensions at a Glance Asia Pacific Edition 2009, OECD.

Park D (2009) Ageing Asia's Looming Pension Crisis, ADB Economics Working Paper Series No. 165

Singapore Budget 2009
<http://www.singaporebudget.gov.sg/>

Sovereign Wealth Fund Institute
<http://www.swfinstitute.org>

Subsecretaría de Previsión Social, Chile
<http://www.subprevisionsocial.cl/>

United Nations (2008), World Population Prospects
<http://esa.un.org/unpp/>

US Social Security Administration
<http://www.ssa.gov/>

US TreasuryDirect
<http://www.treasurydirect.gov/>

World Bank (1994), Averting the Old Age Crisis, Oxford University Press.



Attachment 1: Score for each country for each indicator in the adequacy sub-index

Question	Score for question	Question weight	Score for each country										
			Australia	Canada	Chile	China	Germany	Japan	Netherlands	Singapore	Sweden	UK	USA
A1	10	20%	6.7	10.0	5.4	10.0	3.3	3.3	10.0	0.0	9.2	3.3	2.5
A2	10	25%	7.8	8.7	5.3	8.5	8.3	4.1	8.9	0.0	8.8	4.9	5.4
A3	10	15%	4.5	6.3	0.0	9.0	7.8	5.0	3.3	10.0	5.4	3.0	6.0
A4	10	10%	10.0	10.0	10.0	0.0	10.0	0.0	10.0	10.0	0.0	10.0	10.0
A5	10	10%	8.3	3.3	5.0	5.0	10.0	10.0	3.3	6.7	6.7	6.7	3.3
A6	10	10%	10.0	6.7	10.0	5.0	1.7	5.0	10.0	10.0	8.3	6.7	8.3
A7	10	10%	0.0	5.0	0.0	0.0	0.0	0.0	10.0	10.0	5.0	10.0	0.0
Adequacy sub-index		100%	68.1	76.2	48.9	64.7	60.8	39.2	80.5	51.7	68.5	56.6	49.2



Attachment 2: Score for each country for each indicator in the sustainability sub-index

Question	Score for question	Question weight	Score for each country											
			Australia	Canada	Chile	China	Germany	Japan	Netherlands	Singapore	Sweden	UK	USA	
S1	What proportion of the employed workforce are members of private pension plans?	10	20%	8.5	5.7	5.4	2.1	7.3	4.5	9.5	9.5	9.5	5.9	5.8
S2	What is the level of assets, expressed as a percent of GDP, held in both private pension arrangements and public pension reserve funds?	10	20%	8.3	7.6	4.3	0.4	1.2	3.1	9.9	3.7	5.9	6.4	9.4
S3	What is the current gap between life expectancy at birth and the state pension age? What is the projected gap in 2030? What is the projected old-age dependency ratio in 2030?	10	20%	5.8	5.8	6.4	5.3	6.5	1.4	6.3	4.5	5.6	6.4	8.5
S4	What is the level of mandatory contributions that are set aside for retirement benefits (i.e. funded), expressed as a percentage of wages?	10	10%	7.5	6.2	8.3	3.3	0.0	2.6	0.0	9.5	7.2	0.0	3.4
S5	What is the labour force participation rate for those aged 55-64?	10	10%	4.3	5.3	3.7	5.1	3.6	6.4	2.5	3.9	8.3	4.9	6.0
S6	What is the level of adjusted government debt (being the gross public debt reduced by the size of any sovereign wealth funds that are not set aside for future pension liabilities), expressed as a percent of GDP?	10	10%	9.1	5.7	10.0	9.9	5.7	0.0	6.1	10.0	7.6	6.5	5.3
S7	What is the split between contributions by employers and employees?	10	5%	0.0	10.0	0.0	9.5	10.0	10.0	0.0	10.0	10.0	10.0	10.0
S8	In respect of private pension arrangements, are older employees able to access their retirement savings or pension (in part) and continue working (e.g. part time)?	10	5%	10.0	7.5	0.0	0.0	0.0	5.0	5.0	10.0	10.0	5.0	5.0
Sustainability sub-index			100%	71.0	64.2	54.1	38.5	44.3	34.4	62.5	68.9	75.2	56.4	69.4



Attachment 3: Score for each country for each indicator in the integrity sub-index

Question	Score for question	Question weight	Score for each country											
			Australia	Canada	Chile	China	Germany	Japan	Netherlands	Singapore	Sweden	UK	USA	
Prudential Regulation (P1 & P2)	Do private sector pension plans need regulatory approval to operate?													
	Is a private pension plan required to be a separate legal entity from the employer?	10	15%	10.0	10.0	10.0	5.0	5.0	8.3	8.3	10.0	8.3	10.0	10.0
	Is a private pension plan required to have separate assets from the employer?													
Prudential Regulation (P1 & P2)	How actively does the regulator discharge their supervisory responsibilities under normal conditions?													
	How actively has the regulator discharged their supervisory responsibilities during the past 12 months?	10	10%	10.0	9.5	8.0	1.0	4.5	8.0	9.5	8.0	9.5	10.0	6.0
	Are private sector pension plans required to submit a written report in a prescribed format to the regulator each year?													
Governance (G1 & G2)	Is a private pension plan required to have separate governance from the employer?													
	Do the private pension plan's trustees/executives/fiduciaries have to satisfy any personal requirements set by the regulator?	10	15%	8.3	6.7	8.3	8.3	6.7	6.7	10.0	6.7	8.3	8.3	6.7
	Are the financial accounts of private pension plans required to be audited annually by a recognised professional?													
	Where assets exist, are the private pension plan's trustees/ executives/ fiduciaries required to prepare an investment policy?	10	10%	10.0	7.5	10.0	2.5	0.0	10.0	10.0	0.0	10.0	10.0	0.0
Governance (G1 & G2)	Are the private pension plan's trustees/executives/fiduciaries required to prepare a risk management policy?													



Continued

Attachment 3: Score for each country for each indicator in the integrity sub-index

Question	Score for question	Question weight	Score for each country										
			Australia	Canada	Chile	China	Germany	Japan	Netherlands	Singapore	Sweden	UK	USA
Are there limits on the level of in-house assets held by a private sector pension plan?	10	8%	10.0	10.0	10.0	10.0	0.0	0.0	10.0	10.0	10.0	10.0	5.0
Is there a minimum level of funding (related to accrued benefits) required for DB funds? If yes, is this minimum level affected by the plan's investment policy?	10	8%	6.0	8.0	10.0	4.0	4.0	8.0	9.0	2.0	6.0	6.0	8.0
Are DC funds required to have a minimum level of assets equal to or greater than the members' account balances?													
Are members provided with any protection or reimbursement from an act of fraud or mismanagement?	10	5%	5.0	5.0	5.0	0.0	5.0	2.5	0.0	0.0	2.5	10.0	5.0
Are the members' accrued benefits protected from the effects of employer insolvency?													
Do plan members have access to a complaints tribunal which is independent from the pension plan?	10	4%	10.0	5.0	5.0	0.0	0.0	0.0	10.0	0.0	0.0	10.0	5.0



Continued
Attachment 3: Score for each country for each indicator in the integrity sub-index

Question	Score for question	Question weight	Score for each country										
			Australia	Canada	Chile	China	Germany	Japan	Netherlands	Singapore	Sweden	UK	USA
When joining the pension plan, are new members required to receive information about the plan? For DC plans, is this information required to have a specific section discussing risks?	10	7%	10.0	8.6	7.1	0.0	3.6	0.0	10.0	0.0	10.0	8.6	8.6
Are plan members required to receive an annual report about the plan? Is there a time limit on the provision of this annual report? For DC plans, are these annual reports required to show the level of administration and investment fees? For DB plans, are these annual reports required to show the level of funding?	10	11%	8.2	8.2	7.7	0.0	0.0	6.4	8.2	5.9	5.9	5.9	8.2
Are plan members required to receive an annual statement of their current personal benefits from the plan? Is this annual statement required to show any projection of the individual member's possible retirement benefits?	10	7%	7.1	7.1	7.1	0.0	5.0	0.0	8.6	0.0	10.0	6.4	3.6
Integrity sub-index		100%	87.8	80.9	84.5	34.7	33.7	55.2	88.2	49.1	79.1	86.3	63.4

Melbourne Mercer Global Pension Index

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