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# Retirement design for the future

*A Mercer position paper: Complete report*

## MERCER



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## Introduction

Over the past three years, Mercer has carried out extensive work analyzing the challenges facing retirement systems around the world, and the changes that will be necessary to meet these challenges. This work has culminated in three major policy publications, two in conjunction with the World Economic Forum and the OECD, and the other with sponsorship from the Melbourne Centre for Financial Studies. Together, these studies paint a picture of retirement systems under significant stress.

The demographic challenges facing retirement systems around the world are well-known and researched. Consider these United Nations statistics found in the recent Mercer and World Economic Forum report, *The Future of Healthcare and Pensions in a Rapidly Ageing World*.

- From 2007 to 2050, the proportion of people aged 60 or older in the world will double.
- By 2050, old-age dependency ratios in all regions of the globe will increase dramatically as the population ages and the workforce declines or grows more slowly.

And while the demographic trends are fairly predictable, our work with the WEF and the OECD identifies other factors that will have a significant effect on retirement systems in the future but whose impact is highly uncertain, including economic factors (for example, capital market performance and real economic growth), technological developments, and attitudes by governments, individuals and other stakeholders towards social welfare. All this creates enormous challenges for retirement systems – particularly pay-as-you-go public plans, as well as the private pensions of companies where growth of underfunded retiree benefits outstrips business growth. With the pressure on public retirement plans, the private sector will face increasing expectations to come to the rescue.

**Are retirement systems meeting this challenge?** With the sponsorship of the Melbourne Centre for Financial Studies, Mercer developed the first-of-its-kind index to evaluate and compare the diverse retirement systems in countries around the world, including public and private plans. Judging from the 2009 Melbourne Mercer Global Pension Index's scores of 11

countries' retirement systems,<sup>1</sup> the answer is “no” or “rarely” at best. The index evaluates retirement systems on the basis of desirable characteristics in three major areas: the **adequacy** of benefits, the long-term **sustainability** of the system and the **integrity** of private-sector arrangements. On a simple letter-grading scale (A to E), no country earned the top grade and seven received either a “C” (major risks or shortcomings) or “D” (major weaknesses and omissions).

**How are retirement systems falling short?** The Melbourne Mercer Global Pension Index found these common shortcomings in many retirement systems:

- Failure to require a minimum income stream, leaving participants vulnerable to outliving their resources
- “Leakage” from the retirement system, leaving participants who have used accumulated assets for other purposes without adequate retirement income
- Significant gaps in private plan coverage and low contribution levels for some of those with plans, leaving many workers with no or inadequate private pensions
- Lack of portable or easily transferred benefits, undermining the savings of participants who change employers
- Inflexible arrangements, preventing a gradual transition to retirement
- Inadequate protections, leaving participants exposed to fraud, mismanagement or a plan sponsor’s insolvency

While these reports focus on the challenges to retirement systems as a whole, we also hear consistently from Mercer clients around the world that “the system is broken”. Among the major problems they cite are:

- Retirement systems that are thickets of cumbersome legislation and a patchwork of prior “fixes”, creating excessive complexities and costs.
- Defined contribution systems which place responsibility on individuals that they are ill-equipped to meet
- Volatility and adverse timing of deficit funding requirements in defined benefit plans, and
- Competing vehicles which accomplish much the same purpose within the same system

**So what’s the solution?** Clearly, current retirement systems leave room for improvement, and the demographics are such that they *must* improve. To succeed in the future, a retirement system must fulfill its critical role – ensuring older people have adequate financial resources in retirement – even as societies grapple with the social and economic effects of aging populations. As Mercer’s joint work with the World Economic Forum notes, achieving a solution requires a shift from tactical to strategic thinking and a new focus on overall retirement planning.”

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<sup>1</sup> The 11 countries are Australia, Canada, Chile, China, Germany, Japan, Netherlands, Singapore, Sweden, the United Kingdom and the United States.

This report continues Mercer's strategic work, setting a framework to address the challenges facing retirement systems and to create success going forward. This broad outline is a global prototype that can be applied and adapted to the economic, political and social circumstances of different countries.

By necessity, this global model omits details that require country-specific solutions. For example, transition from current retirement systems will vary from country to country; take place over different time frames; and require a number of "tough" political decisions. In addition, the details of many economic and risk-management issues will need to be addressed in each country's context. Even where this paper expresses a preferred approach to certain issues, significant discussion will be necessary to develop details.

Several aspects of the model will be politically controversial. But, rather than second-guess what may be – or may not be – politically feasible, and which will in any case vary significantly from country to country, we have felt it best to present a "blank sheet of paper" approach to facilitate a focused discussion, with the full expectation that moving towards improved systems will involve social and political tradeoffs.

We hope that the ideas contained in this report will stimulate and shape global debate, as employers, governments, financial institutions, retirement professionals, academics and other interested parties address the fundamental challenges for retirement provision in the future.

**And in the meantime**, what is the best path for plan sponsors to take in managing their plans through current systems structures?

In Mercer's view, current discussions are too often cast in limited terms: in particular, "should my plan be DC or DB?" Mercer believes this is the wrong question. It is time for a back-to basics approach to plan design. The better questions which sponsors need to be asking are:

- What types and levels of risk are best borne by each of the stakeholders to the plan, which stakeholders can best manage each risk (even though they may not ultimately bear the risk), and how risks might be shared among the stakeholders with better results than assigning them exclusively to one party or another? And how can we, within the existing regulatory framework, accomplish these risk-sharing goals, even if it involves pushing the envelope?
- What are the human capital goals for my plan? Many companies assign their retirement plans a low profile in attracting and retaining talent, while others position their plans more prominently in their total rewards strategy, with retirement plan design more directly reflective of business objectives and competitive positioning. Companies need to be specific about where they are on this spectrum, and the consequences for the structure of their plans.
- All plan sponsors should focus more on flexible retirement arrangements, and individual ownership of standard of living in retirement, as powerful tools for managing both human capital and financial outcomes of retirement plans. It is almost a truism that as life span

lengthens (a global phenomenon), people will have to work longer in order to have a retirement system with sustainable costs. What has received less attention is the power of the retirement age, for individuals, and employers, as a lever to manage risk and reward.<sup>2</sup> The lever is largely used passively now, with a sense of failure if “adequacy” is not attained at a specific age. What is needed is more focus on the active use of retirement age as a lever to help manage and balance other risks which stakeholders to the plan may bear.

- Finally, how can we simplify plan design? One lesson from the past, from around the world, is that complexity does not pay dividends, for sponsors or participants. It is more likely to produce confusion and cost. Simple, transparent designs should be the order of the day.

From discussions of these issues, sponsors will develop a view of their preferred model to structure retirement benefits on a “back to basics” basis, which may look quite different from the structure which has evolved over time. At that point a gap analysis with current plans is in order, and then an action plan to move from the current state to a better position. Multinational employers will want to do this analysis twice: once to set the preferred framework to apply globally, and then again to achieve best practice in implementing that framework in each country in which they sponsor retirement plans.

We trust that the framework presented here will help in organizing and focusing discussions around the direction in which retirement systems should develop to best serve the needs of the societies they are imbedded in, and also in provoking a fresh look at current designs and how they could be improved even within existing regulatory structures.

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<sup>2</sup> Interestingly, while employers and individuals have generally not seized on the power of changing expectations about retirement age, many governments have done so, with retirement age for social benefits pushed back in numerous countries.



## Fundamentals of Mercer's approach

The complexity of retirement systems reflects their diverse stakeholders whose perspectives inevitably conflict: individual employees and retirees, labor organizations, employers, financial institutions, governments, and others. Even within each class of stakeholders, goals and perspectives often diverge. For example, individuals' ability to understand and manage long-term financial affairs can vary because of differences in financial position, risk tolerance, employment stability, accumulated wealth, anticipated income, alternative sources of wealth or income, expectations for a "good" retirement lifestyle, and many other factors. Moving to the macro-societal level, accumulated savings have major effects on capital markets, and there are important trade-offs between savings and consumption.

No system can completely satisfy all these perspectives, and increasing flexibility to accommodate differences adds complexity. Yet even with ample choices, individuals – including some experts – often prove incapable of creating and managing a long-term financial plan that navigates uncertainties in income, life events and financial markets. So any proposed framework for moving forward will need to make choices.

In choosing how to design a prototype retirement system, Mercer has followed these basic principles:

- The system should have a simple, transparent design and predictable costs.
- Compulsory saving is essential to ensure universal coverage and adequate retirement income. Tax incentives should encourage additional voluntary savings.
- The system should be funded to avoid intergenerational subsidies and financial risks from demographic shifts.
- Individuals should need to make only a limited number of key decisions, though the system may offer additional options for discretionary decisions.

- The system should ensure predictable outcomes through two features:
  - A default, risk-managed investment option that employees are strongly encouraged to use, though other investment choices should be available
  - A regulated system of retirement distributions that provides a minimum level of income for life, with flexible withdrawal of funds exceeding the amount needed to provide the minimum benefit
- Government-run, social security retirement programs should be limited to basic, subsistence-level state pensions or means-tested safety nets.
- The system should have no or minimal “leakage,” reserving funds solely to provide retirement and death benefits.
- Governance should be at arm’s length from the government where possible, but some aspects should be closely regulated to ensure quality and protect participants.
- Administration should be cost-effective, with some degree of competition to ensure fair pricing and continuous quality improvements.

This set of principles leads to a framework, with a significant mandate to promote adequate contributions, a strong posture of risk management, and a disciplined draw-down of benefits to balance predictable outcomes with predictable costs. While this system may differ radically from many countries’ current arrangements, it ultimately should prove more robust and adaptable.

The framework presented here is just a starting point; supplemental analyses exploring different aspects of the system will be published at a later date. We welcome discussions with interested parties on this framework and its underlying rationale.

#### Defined benefit or defined contribution?

Is the best approach to a future retirement system defined benefit or defined contribution? From our perspective, this is the wrong question. Current defined benefit and defined contribution approaches (with some exceptions) divide the territory too sharply – risks and consequences. Mercer’s model calls for the best of both: fixed cost (which is generally associated with “defined contribution”), predictable outcomes (which is generally associated with “defined benefit”) and strong risk management as the connecting tissue between the two.

The main shortcoming of most current “defined benefit” and “defined contribution” systems is that the middle piece, risk management, is assigned solely or predominantly to one stakeholder: individuals, sponsors, the government or a financial institution, to name the major stakeholders. And, as the recent financial crisis has shown, none of the major players can manage these risks on their own, and there is a weakness in governance structures which inhibits creative approaches to sharing risks. Sharing of risks can be done in one of two ways:

- Joint participation in outcomes (each or several stakeholders bearing some of the pain or the gain)
- Slicing benefits and assigning risks according to the necessity of the outcome to each stakeholder (so for example, individuals might be asked to bear essentially no risk on

benefits which provide them a minimal standard of living, but considerable or all risk on all benefits which provide them a standard which is beyond the “comfortable”).

It is this middle ground which our model seeks to attain. Using today’s terminology, our model tilts more to the “defined contribution” side, with the “defined benefit” management of outcomes imbedded in the workings of the default investment fund and the structured paydown mechanism. As a global model, this is appropriate since a majority of countries do not have defined benefit structures and traditions to work from.

For those countries which have a defined benefit tradition, it would of course be possible to develop the model in “defined benefit” terms. Such a DB model would need to be collectively based, have a very simple benefit formula, and offer flexibility in accumulating and paying benefits. To meet employers’ need for predictable costs, the system also would have to reduce risks, using one of several approaches:

- Plans could be invested to match assets and liabilities, with the liabilities fully – but not overly – funded at all times. The risk-management tools to do this are increasingly available and accepted.
- Plans could pursue moderately aggressive investments by offsetting the added risk with some combination of required funding of liabilities plus a capital buffer for adverse experience. Alternatively, a safety valve for adverse performance could take the form of reduced benefits – an approach adopted by collective plans in the Netherlands – or by adjusting retirement age, a lever that to this point has been little used.
- Benefits could be linked to asset performance – the strategy used by variable annuity plans in the United States.

This type of DB system would share the major characteristics of Mercer’s framework – a mandatory collective system with a strong focus on risk management. Which is to return to our original point – “DC or DB” is not the question. The focus needs to be on predictable costs, predictable outcomes, and the institutional and governance arrangements to support the risk management necessary to join the two together.



## Overview of Mercer's framework for retirement systems

Mercer's framework has the following key components:

- **Accumulation phase.** Universal participation is mandatory in an individual-based system. Mandatory contribution levels – estimated at 10 percent of covered wages – are set to achieve a targeted benefit of 50 percent of final covered wages over a working lifetime of full employment. Additional voluntary contributions are tax-encouraged. The system grants individuals investment control but has a strong focus on risk management through professionally managed default investment funds and improved financial and investment literacy.
- **Payout phase.** Benefit payout includes three components:
  - a *managed spend-down* withdrawal during the first 15 years of retirement, which provides a core benefit of approximately 50% of the median national wage, with limited indexing for inflation
  - a *lifetime benefit* commencing at the end of the managed spend-down, targeted to be equal to the benefit paid in the final year of the managed spend-down; the amount required to fund this benefit is accumulated through annual *mandatory set-asides* from the managed spend-down account over 15 years
  - a *discretionary benefit*, available to spend as individuals choose, paid from the funds exceeding the amounts needed for the managed spend-down and lifetime benefits.
- **System administration and governance.** All aspects of administration during the accumulation and the retirement phases will be performed by centralized, private, for-profit organizations, with close supervision by government regulators



## Mercer's framework for retirement systems: Accumulation phase

### Coverage

Participation in the retirement system is required for all employees, regardless of the type of employer. No one – not even the self-employed – can opt out. Mandatory participation is essential to avoid coverage gaps, particularly since this system will replace all but means-tested social security for the poor or a low universal basic state pension. Compulsory contributions also minimize intergenerational and income-related cross-subsides within the retirement system. This may initially create challenges for the lowest wage earners and increase some employers' labor costs. However, in many countries, reduced payroll costs for social security should partially offset the impact, and labor markets should adjust during the transition period.

### Contributions

Contributions begin immediately on entry into the workforce, with no minimum age. The contribution rate is set to achieve a targeted benefit at a target retirement age, with some protection against post-retirement inflation:

- The **target retirement age** is set 15 years below an employee's life expectancy, based on year of birth and expected mortality improvement. An individual's target retirement age is determined on entering the workforce and remains unchanged for that person's entire career. This avoids the need to restructure the system for current participants whose life expectancy unexpectedly improves during their careers, though employees in this situation may elect to postpone retirement. However, the target retirement age for new entrants will be reset as longevity projections change. Alternatively, the target retirement age could be set upon attaining a certain age at midcareer. This approach avoids locking in a view on mortality improvements too early.

- The **targeted benefit** equals 50 percent of an individual's projected covered wages at retirement, assuming reasonable salary growth and some indexing to protect against post-retirement inflation. Each country will cap covered wages at a level that balances the goals of limiting the tax subsidy for the wealthy, while ensuring they have a significant stake in the system. Mercer's preference is to have the wage cap set around the 90th percentile of earnings, adjusted each year.

Preliminary modeling indicates that a contribution rate of about 10 percent of covered wages should achieve the targeted benefit at retirement, assuming contributions are made over a full career.

Required contributions will not be graded for age or "ramped up" (except, perhaps, as required for transition to the new system). Maintaining a single contribution rate is simpler and assures full participation as early as possible, which can be critical to achieve adequate accumulations.

**Employee or employer contributions.** Contributions can be structured as all-employer, all-employee or a mix of the two. This is essentially a political decision,

since all three alternatives are economically equivalent. However, Mercer favors a combination of employer and employee contributions to ensure that both parties have a stake in the system.

**Tax-favored savings incentives.** The system should be tax-incentivized during the accumulation period to compensate individuals who are being forced to save instead of consume. Additional tax incentives should be available to encourage voluntary contributions above the required rate, allowing individuals to supplement the modest target benefit, to provide a "buffer" against adverse investment experience, to "make up" for reduced benefits from years of non-employment, or other additional needs at the individual's discretion. The particular tax incentives must be set on a country-by-country basis, reflecting the nature of the local tax system.

## Investment structure

The system encourages investment in a tightly regulated default fund for all contributions but allows alternative investments as well.

### Dependent benefits

To preserve stability of the system's costs and outputs, the targeted benefit is determined on an individual-only basis, without any spousal or family benefits (beyond residual death benefits). This is a significant and potentially difficult change from many current systems. In Mercer's view, however, the advantages of including these benefits are outweighed by the complexity of building them into retirement systems:

- Long-term disability and pre-retirement survivor income benefits for families are insurance-type benefits better addressed outside the retirement system.
- Retirement benefits for spouses raise complex issues in a world that has no predominant or lasting patterns of relationships among "spouses" and wage earners. Given the changing definitions of "spouse," the fluidity of these relationships over a career and diverse earning patterns among families, building these benefits into a retirement system imposes enormous complexity.

## ***Default fund***

**Mandatory first-year investment.** In the first year of an individual's participation (or perhaps longer), all contributions are invested in a default fund. This requirement is designed to prevent new participants from making hasty investment decisions. In addition, this period of mandatory investment in the default fund makes it likely that most employees will continue to use this “safe” option in later years, given studies finding current DC participants tend toward inertia in their investment behaviour.

**Tightly regulated for risk.** The composition of the default investment fund must meet legally mandated risk-management goals designed to produce a reasonable long-term rate of return and to avoid very volatile investments or “bets” on significant excess return. Volatility and risk should decline appropriately as people approach retirement and then progress through the spend-down period.

In each country, a national board should specify very clear risk-management parameters for the default fund. This ensures that even if a country has multiple fund providers, the different default funds will have little variation in risk and return. In any case, the size of the funds and their similar composition will make differences among their returns unlikely, and drive costs down significantly.

## ***Alternative investments***

**Licensed offerings.** After the mandatory default-fund investment period, a participant can direct investments among a broad array of alternative investment funds, including equity funds, bond funds and others licensed to participate in the system. Legislated licensing guidelines should exclude classes of funds with very high-risk investments, very narrow asset types, or costs above a specified, very competitive level. Once licensed, qualifying funds can apply to the system's administrators to be offered as an alternative investment.

**Uniform fund metrics, individualized comparisons.** A major challenge of allowing self-directed investments is to help participants choose among funds, without limiting the number of funds (which would have very significant effects on financial institutions, given the size of the system) or biasing fund selection. To address this challenge, the system will use a uniform set of metrics for comparing funds by costs, variability of return, risk of the fund on a number of measures, and other relevant features. To avoid bias in favor of funds listed first, there will be no default display of funds – other than always listing the default fund first. Instead, each participant selects the variables for displaying funds. For example, an individual might sort funds by expenses, three-year returns, five-year returns and other characteristics.



## Mercer's framework for retirement systems: Payout phase

As noted, the target retirement age reflects projected longevity in a particular country and should be set 15 years younger than a participant's life expectancy. In developed countries, a target retirement age of 67 is in line with current life expectancy. Emerging economies might have a lower target retirement age. For simplicity, this discussion assumes a target retirement age of 67.

At retirement, a participant's accumulated savings are divided into three parts, each with its appropriate investment strategy:

- **Managed spend-down account.** This account provides for structured annual withdrawals for the first 15 years of payment from ages 67 to 82, invested in a spend-down default fund with tightly managed risk characteristics.
- **Lifetime benefit account.** A deferred "lifetime benefit" is funded through an annual "set aside" during the 15 years of the managed spend-down. This benefit begins at age 82 – 15 years after target retirement age. The funds to provide it are invested to the extent possible in fixed-income securities of the appropriate maturities.
- **Discretionary account.** Any funds exceeding the required spend-down and set-aside amounts go into a discretionary account that a participant can invest and spend however desired.

The first two components target minimum benefit amounts, as described below. If accumulated account balances are insufficient to meet both targets, each will be reduced proportionately. Savings exceeding the required targets go to the discretionary account.

In establishing the retirement system, each country will specify the structure, operations and methodology for benefit payments (including pricing mechanisms for spend-down and set-aside benefits) and investment of the non-discretionary accounts.

### Preretirement-age access and phased retirement issues

One of our basic principles is to prevent “leakage”; therefore, the system allows no voluntary access to funds before target retirement age, except upon death. This may be a difficult position politically, but once the access wall is breached for one purpose, it will be breached for many purposes, undoing the fundamental goal of the retirement system.

Nonetheless, a system that has no provision to allow access to funds for early or phased retirement may be too limiting. As the retirement age goes up with increases in life expectancy, not everyone will have the ability to work longer. For example, some older people experience poor health or simply lack the capacity to continue in jobs with heavy physical demands. Others who wish to retire early and can afford to do so should not be prevented from following this course. Still others may wish to continue working beyond target retirement age.

So the system may need to provide some access to funds before target retirement age, or the facility to postpone drawing down funds until later. The mechanics and conditions will vary by country, according to societal expectations and available alternatives. Regardless of country-specific variations, however, the system could accommodate early, postponed or phased retirement through some simple features:

- The retirement system could have a set age – perhaps 10 years before target retirement age – after which payments within specified limits would be deemed to be on account of “retirement.” This “deemed retirement” age avoids the need to determine if a participant is really “retired” and what is a payment “for retirement.”
- A version of the spend-down period could start earlier – any time after the “deemed retirement” age – and last longer, with the mandatory set-aside adjusted appropriately.
- The system could allow ad-hoc annual payments from discretionary funds any time after the “deemed retirement” age. However, funds treated as discretionary must be limited to reflect the extended spend-down period.

To ensure adequate funding if distributions begin early, the system could provide reduced benefits over a longer period, which some participants may find acceptable. Alternatively, the system could collect higher contributions from employees or employers during the accumulation phase:

- Participants could voluntarily make higher contributions in anticipation of needing benefits at an earlier age. The flaw in this alternative, however, is that the employees most likely to need to retire early – those in jobs with heavy physical requirements – may not be able to afford the additional contributions.
- As a practical or a competitive advantage, employers could offer higher contributions for particular jobs – or even most jobs in certain industries – in anticipation of employees exiting at an earlier age.

## Managed spend-down account

The managed spend-down account allows structured annual withdrawals from ages 67 to 82. At normal retirement age, the funds necessary to provide the managed spend-down are invested in the default fund, which is regulated to reduce risk and volatility and achieve a high probability that the intended benefits can be paid. This use of the default fund is mandatory, with no opt-outs, to ensure adequate funding throughout the spend-down period. If a participant dies during this period, funds remaining in the account revert to the individual's estate.

**Annual spend-down amount.** The structured annual withdrawal is initially set at 50 percent of the median national wage at the target normal retirement age. This amount will increase annually by a set percentage – say, 2 percent – that anticipates some inflation. However, full indexing for actual inflation should not be necessary since consumption is likely to decline as individuals age, though more research in this area is needed. (For this discussion, “consumption” does not include medical and long-term care expenses, which require an insurance or another societal solution outside the retirement system.)

The amount of each year's structured payment is not guaranteed. The spend-down account will be reviewed annually, and payments will be adjusted – up or down – based on investment experience. For example, the structured withdrawal amount could be lowered to ensure that funds do not run out before the 15-year period ends. However, the payout and investment structure should keep annual variations in spend-down limits fairly small – say, 10 percent or less.

Relationship between spend-down limit and targeted benefit  
While the contribution rate targets a benefit that is 50 percent of an individual's covered wages at retirement, the annual spend-down and set-aside target a benefit that is 50 percent of the median national wage. As a result, above-median earners are expected to accumulate savings exceeding the amount needed for the annual spend-down and set-aside, and that excess will become part of their discretionary accounts. Below-median earners, on the other hand, are expected to have an annual spend-down amount that corresponds to 50 percent of their covered wages at retirement – lower than the national median wage – and a proportionate reduction in the set-aside amount.

**No minimum withdrawal required.** The structured payment is the maximum that may be withdrawn, but individuals could choose to withdraw less than the maximum allowed in a given year. The system could have a mechanism to allow increased withdrawals in later years to make up for skipped prior-year distributions, unless this would introduce too much complexity. The spend-down methodology also will prescribe the extent to which excess returns could be shifted to the discretionary account and vice versa.

## Mandatory set-aside and lifetime benefit

From ages 67 to 82, part of each participant's funds is set aside each year to provide a deferred lifetime benefit commencing at age 82. The annual set-aside will be the amount necessary to reach a targeted lump sum at age 82 sufficient to support the lifetime benefit. The lifetime benefit is not subject to underwriting based on health status or any other condition.

**Lifetime benefit equal to final spend-down limit.** The lifetime benefit is paid as a fixed annual amount, with no indexing for inflation since lower consumption with advanced age is likely to offset any inflation. The benefit is initially set to match the expected final spend-down limit, thus minimizing any change in annual income as participants move from the spend-down to the lifetime benefit phase. For example, if the structured spend-down amount is indexed to increase 2 percent annually, the lifetime benefit would be approximately 135 percent of the initial year's spend-down amount.

**Ensuring sufficiency of set-aside funds.** Funds set aside from ages 67 to 82 are invested in a pooled fund of high-quality bonds, such that the expected cash flow of the pooled fund is closely matched to the expected payments to participants starting at age 82. At age 82, lifetime benefit payments to participants commence from the pooled fund. To ensure the fund stays on track to meet aggregate needs, the lifetime benefit may need annual adjustments to reflect investment or mortality experience:

- In some mature markets, benefit adjustments resulting from investment experience should be minimal: Countries with deep bond markets at longer durations will facilitate the process of setting aside funds in bonds matching the duration of expected payments. In developing economies, such a system may in fact play a role in promoting such a bond market. In those countries without the requisite fixed income investments, the lifetime benefit fund must be managed to minimize, to the extent practical, that variation in payments due to investment experience.
- There will be a cap on how much variation in mortality experience the fund has to manage through benefit adjustments. Any residual variance (on the upside or the downside) beyond this cap should be passed on to the government. Mercer's reasoning is that the cost of significant longevity improvement – that is, people living significantly longer than expected in pricing their benefit – could overwhelm the fund, or any single institution, and arguably should be shared by society as a whole. Pricing of the lifetime benefit should assume realistically conservative mortality, so the government (and society as a whole) has to bear the burden directly in only exceptional cases.

**Administration of pooled fund.** Different countries may prefer different models for who should run the pooled lifetime benefit fund and keep it on track to pay benefits with any necessary adjustments. For example, the system's administrators, private insurance companies or the government could oversee the fund. Each model has pros and cons in terms of credibility and capability to shield a large asset pool from political interference. Any model adopted, however, must ensure efficient pricing and risk pooling.

**Death benefit.** The system does not pay any residual death benefit if a participant dies after starting the lifetime benefit at age 82. However, if an individual dies between ages 67 and 82, there is a policy question about the funds in the set-aside account: Will the funds be forfeited upon death or paid as a residual death benefit? Either option can be economically viable, and a blend of options could be used if it does not introduce excess complexity. Each country will need to make the decision on policy grounds:

- In some cultures, paying the funds as a residual death benefit may be necessary from a political perspective. This approach might be particularly desirable if the set-aside amount is relatively substantial.
- Forfeiting a participant's set-aside account keeps those funds available to pay benefits for others, thus reducing the amount of funds that each participant will need to set aside. This will leave more funds for the managed spend-down or potentially lower the system's overall contribution rate.

## Discretionary account

If an individual's invested contributions at retirement exceed the funds needed for the spend-down account and set-aside amount, the excess is allocated to a discretionary account. Participants have full discretion over how to invest, when to withdraw and how to receive these funds. Any funds remaining in an individual's discretionary account upon death would revert to the individual's estate.

If an individual wants to purchase additional annuity coverage, these voluntary annuity purchases can be fully underwritten by any financial institution licensed to offer annuities. The system administrator should be responsible for facilitating the purchase of annuities on a fully competitive basis.



## Mercer's framework for retirement systems: Administration and governance

The system's operations should be run by private organizations closely supervised by a government agency. Enabling legislation in each country should provide funds for regulatory oversight and specify how the enterprises are compensated.

**Centralized responsibilities.** The designated organizations will handle all aspects of system operations, either by self-administering or contracting out functions to reputable parties at highly favorable terms. Responsibilities will include these activities:

- Perform recordkeeping and other administrative functions, interfacing with employers, employees, the self-employed, retirees, payroll processors, payment processors and all other involved parties.
- Create and manage the default fund.
- Manage spend-down payments, the mandatory set-aside and the lifetime benefit.
- Provide access to all authorized alternative investment funds.
  - Organizations could offer their own alternative investment options, if desired.
- Report to participants on contributions, investment returns, spend-down payments, account balances and so on.
- Provide basic education on investment and related concepts (such as explaining longevity risk).
  - Organizations will not be required to provide investment advice or help participants develop investment strategies or portfolios.
  - Organizations could offer more in-depth investment or financial and retirement planning services, if they are licensed to do so.

Centralizing these functions builds the volume and sophistication needed to attain world-class levels of transactional efficiency in a technically demanding system. It also allows organizations to develop and maintain the core competencies to create and run the default fund and execute the mechanics of the spend-down process.

**Single operator in small countries.** Organizations will need to be of a minimum size to perform efficiently, so some countries may have a single administrative organization. Countries that can support only one organization may want to set up legal and governance structures similar to those used for utility companies. Alternatively, several smaller countries may wish to create a single multicountry organization.

**Multiple organizations in larger countries.** Countries with the necessary market scale may prefer to have multiple organizations. This raises the question whether to encourage competition or to divide the market by territory or in some other way so organizations are complementary but not competitive. Mercer believes a competitive model is preferable. Competition – in conjunction with strong, appropriate regulatory oversight, and stringent licensing and disclosure requirements – will generate the efficiencies and create the continuous improvements necessary to the ongoing health of the system,.

Having multiple organizations will require conventions for assigning employers or employees to an organization. To prevent fragmentation of account balances, particularly in the spend-down stage, the system also must have mechanisms to handle participants who change employers or move across the boundary between two organizations. These conventions can be developed once a country decides how it wants to structure its administrative organizations.



## Transition

Transition issues will vary significantly from country to country, depending on what system is currently in place. Regardless of circumstances, however, all countries will need to account for certain aspects of the transition:

- Transition will take a significant period of time – a minimum of 10 years in most cases. This is for several reasons:
  - The shift to a mandatory 10 percent contribution, if done all at once, would have a severe impact on a large portion of the workforce. This could significantly reduce consumption – with adverse economic effects – and increase employment costs until compensatory adjustments are made.
  - Setting up the system’s governance procedures, administrative structure, default investment option and payout mechanisms will be major tasks to develop in detail and implement with prudence.
  - In most countries, the transition will entail reductions to existing government programs and taxes, which will take time to design and manage.
- During the phase-in period, individuals and employers could do more than the minimum required. In addition, a “maintenance of effort” requirement should prevent employers that were already contributing more than the phase-in minimum for a particular year from reducing their contributions to the phase-in level. However, employers could reduce their contributions to the ultimate mandatory contribution rate under the new system.
- The transition system must be flexible enough to allow different treatment of existing retirement savings. For example, permitting voluntary transfers of existing retirement accumulations to the system may work better than mandating such transfers. In some countries, various pools of existing accumulations may have different tax status, requiring differences in transition treatment.



## Conclusion

This paper is being released at a time when there is a widespread consensus amongst experts that there is an old-age poverty problem looming on the horizon. The parties we have historically turned to for support are not in a position to prevent it on their own. Many western governments have amassed large levels of debt that must ultimately be repaid. Faced with increased competition and concerns about financial risk, many employers have consistently been scaling back their support of retirement programs.

Although many details remain to be filled in, and they will be filled in in different ways in different countries, a robust framework itself can be a major advantage. It can provide a much-needed focal point for discussions, and facilitate arriving at difficult decisions in a complex area with many interrelated moving parts.

By focusing on a design for broad, policy-driven retirement systems, it is our hope that this framework (along with subsequent deeper analysis and research which Mercer will sponsor) will prove to be a significant contribution to ongoing discussions of retirement system issues around the globe.

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