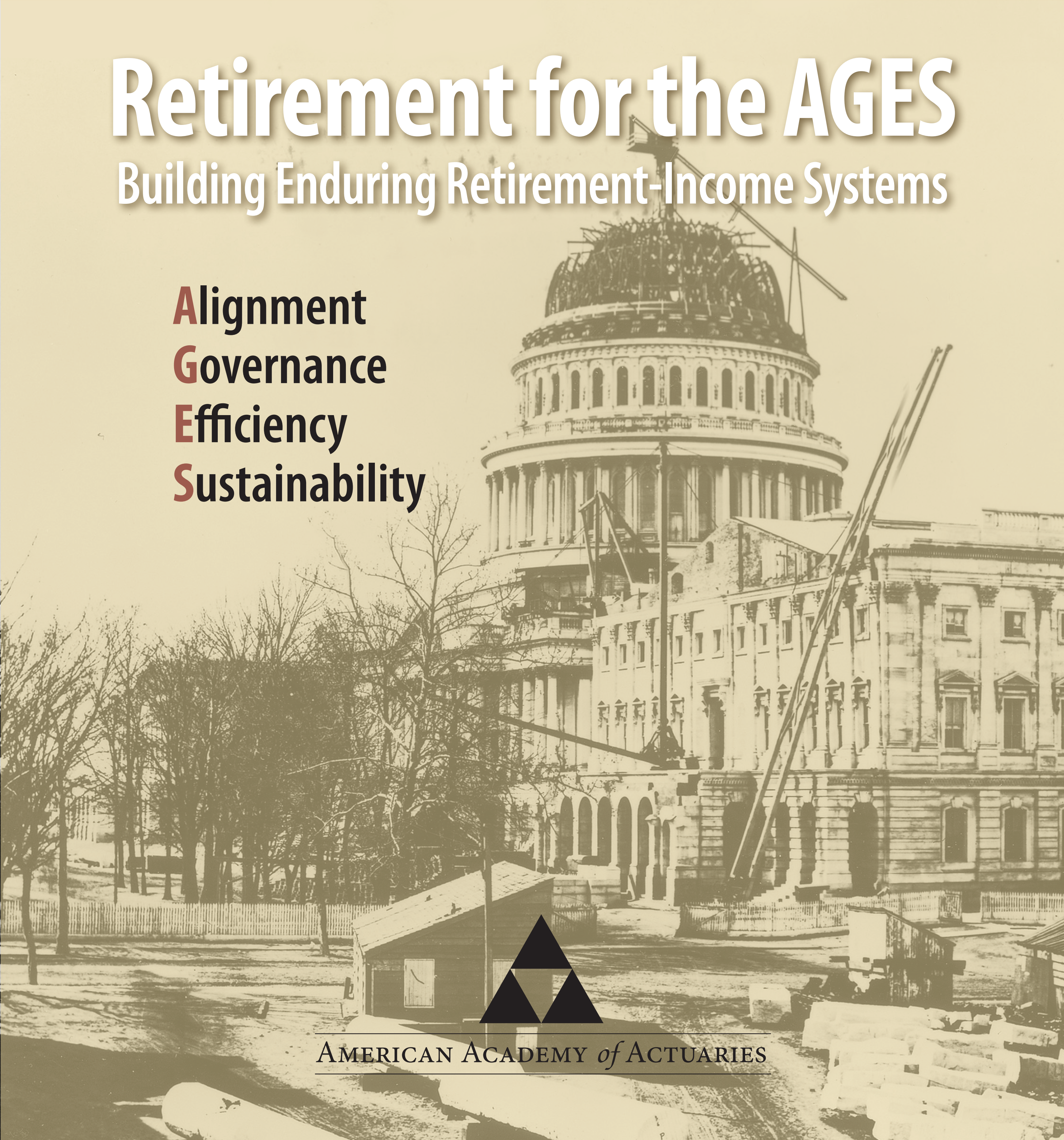
A PUBLIC POLICY MONOGRAPH

Retirement for the AGES

Building Enduring Retirement-Income Systems



Alignment
Governance
Efficiency
Sustainability

American Academy *of* Actuaries

A Public Policy Monograph

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Building Enduring Retirement-Income Systems

January 2014

Forward Thinking Task Force
American Academy of Actuaries

AMERICAN ACADEMY *of* ACTUARIES

The American Academy of Actuaries is a 17,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

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CONTENTS

Overview

On the heels of a 30-year shift in how Americans prepare for and manage retirement, the "Great Recession" of the past decade underscored the shortcomings of the current U.S. retirement system.[1] Subsequently, many have experienced a general loss of confidence in their abilities to live comfortably in retirement, especially in the wake of reduced home values and reports of companies that have pared retirement benefits. While Social Security has formed a solid foundation for Americans' retirement incomes, millions of retirees rely on the government program as their primary source of income. More needs to be done both to help American workers prepare for retirement and retirees manage their financial resources. Through a careful reconsideration of the rules surrounding employer-provided retirement plans, more individuals can attain secure and sufficient retirement incomes.

The Pension Practice Council of the American Academy of Actuaries seeks to assist in formulating public policy to help sustain the U.S. retirement-income system. The Academy's new initiative, *Retirement for the AGES* (**A**lignment, **G**overnance, **E**fficiency, and **S**ustainability), is intended to provide a framework for well-functioning retirement plans that meet the needs of each of the stakeholders in the retirement-income system. The initiative is based on four key principles:

- Alignment — A retirement-income system should align stakeholders' roles with their skills. Important tasks, such as financial analysis, investment management, and retirement plan administration, should be the responsibility of those who have the knowledge and experience to perform them well. Choices for individuals should be structured and defined in a way that helps them make informed decisions.

- Governance — Making and implementing good decisions is essential for successful retirement plans. Good governance helps balance the complex needs of various stakeholder groups, as well as oversees

Retirement for the AGES

This initiative focuses on principles for retirement plan design and does not address the concepts of adequacy and universal coverage. Adequacy involves a level of judgment that includes a host of unique facts and characteristics. As a result, any generalized concept of what constitutes an adequate level of retirement income is inherently subjective. Metrics are available to measure adequacy, but setting targets or goals for a retirement system will involve public-policy decisions. Universal coverage also involves choices to be addressed by our elected officials. A retirement system may be more efficient if coverage is broad-based, but provisions to encourage or require participation must balance voluntary incentives and requirements. In both of these areas, policy decisions should be guided by the *Retirement for the AGES* principles.

[1] "Retirement system" has different meanings in different contexts; it can refer generally to a nationally recognized retirement income system, supported by public policies, that represents the savings and investment options available to the general population. The U.S. retirement system long has been portrayed as a "three-legged stool" or supported by three pillars: Social Security, employment-based defined benefit and contribution plans, and individual savings. Retirement system can also refer to public sector plans that are pension, annuity, or retirement funds or systems maintained by a state or local government.

For purposes of *Retirement for the AGES*, "retirement-income system" refers to a broad national retirement security system, including Social Security, employment-based private and public plans, and individual savings. Public sector or private pension systems will be referred to as "plans" or "plan structures" as appropriate to the context.

significant administrative and investment functions.

- Efficiency — Risk pooling, accurate pricing, appropriate use of guarantees, and other financial techniques should be adopted or incorporated to ensure that a retirement-income system is efficient and maximizes income while avoiding excessive risk to stakeholders.

- Sustainability — Roles and skills, good governance, and financial efficiency should be structured to support a sustainable retirement-income system that provides income to the population at large. Costs should be allocated appropriately among individuals, employers, and society, as well as across generations. The system should be able to withstand the financial shocks of recessions or times of extraordinary inflation.

The main objective of *Retirement for the AGES* is to facilitate retirement security for all Americans. An evaluation of public policies and a retooling of the U.S. retirement-income system will enhance individuals' retirement incomes in a sustainable way. This initiative builds on the extensive work done over the past several years by the Society of Actuaries through its Retirement 20/20 initiative.[2]

Strengthening the U.S retirement-income system would yield enormous gains. The nation as a whole benefits from retirees' sustained incomes through higher economic performance, reduced reliance on taxpayer and charitable organizations, and less dependence on family members. Additionally, an orderly exit of aging participants from the workforce with secure incomes should provide more stability in employment patterns and career progression for younger workers.

The U. S. retirement-income system is in the midst of a major transformation in pension coverage from employer-sponsored defined benefit programs to 401(k) plans and other similar programs that are funded mainly by individuals.[3] *Retirement for the AGES* provides the principles needed to maximize the success and sustainability of that transformation.

The U.S. should improve policies governing its retirement-income system, which is primarily employer-based and voluntary (except for Social Security). If public policymakers cannot develop rules that enable all individuals the opportunity to create adequate retirement income, many could be left with little or no income in retirement beyond Social Security. The longer it takes to make changes, the harsher the consequences that all concerned could face. If the basic principles of *Retirement for the AGES* are used as the foundation of a new retirement-income system, it will contribute to the well-being of all Americans in retirement today and for the generations to follow.

A shift of burden in responsibility for retirement risk from employers to individuals in the U.S. retirement-income system over the past generation has created a new paradigm, which should be examined fully. Policymakers must look to retool rules, regulations, and practices to: ensure the alignment of stakeholders' roles with their skills and competencies; establish good governance

[2] That effort brought together select employers, employee representatives, interested government stakeholders, and financial market participants to identify the best ideas from retirement systems around the world. Starting with a clean slate, the Retirement 20/20 initiative developed basic principles and then identified best practices that reflected those principles.

[3] 401(k) Plans in 2010: An Update from the SCF, Boston College Center for Retirement Research Issue Brief, July, 2012.

structures for retirement programs; and encourage efficiencies in plans to lower costs in order to sustain the U.S. retirement-income system into the foreseeable future. *Retirement for the AGES* was conceived to provide principles for such an aligned, efficient, well governed, and sustainable retirement-income system. The American Academy of Actuaries will be building on these foundational principles, further developing concepts and tools to assist policymakers, retirement plan stakeholders, and the public at large to develop a secure retirement-income system for the *AGES*.

Alignment

For a retirement-income system to be viable, it should align stakeholders' roles with their skills and "ask" them to do what they are best suited to do within clearly defined roles. Key stakeholders in a retirement-income system are society, employers, and, of course, individuals.[4] Proper alignment, the first principle of the *Retirement for the AGES* initiative, means that the system offers limited and well-defined choices to individuals, that professional advice and services are utilized, and that the core business of the employer is supported. Proper alignment among all stakeholders is critical in designing the features of a retirement-income system. Put simply, proper alignment helps individuals make good retirement decisions throughout their lifetimes for their own benefit and reduces the potential need to rely on support from society at large.

The most common misalignments of roles and skills generally involve individuals and employers. For example, many individuals who have the means do not save enough for retirement. Most people lack the full set of skills needed to plan or invest for retirement, or diversify appropriately in their plans when they make investment choices. Employees could end up with smaller investment returns and retirement accounts than what professionals likely would achieve. In recent years, however, auto-enrollment and target date retirement funds have helped.

Misalignment also occurs when employers are forced to focus on employees' retirement issues that distract them from their core businesses. A better alignment for retirement-income systems should focus on:

- Redefining the employer's role by modifying its functions;
- Improving individual decisions by providing better tools and information; and
- Developing legislation and regulations that enhance financial security systems.

Redefining the Employer's Role

Retirement plans often are used as workforce management tools to attract, motivate, and eventually transition employees into retirement. Employers that sponsor retirement plans provide structure by establishing and administering plans, selecting investment managers, providing educational material to participants, and performing many fiduciary functions.

Some larger employers have the resources to hire or employ the skills necessary to manage plans and perform all these roles, and may want to keep these responsibilities as part of their total compensation programs. For other employers, hiring and maintaining the expertise to administer and manage retirement programs can be a distraction from their core businesses. Administering retirement programs is complicated, and the legal and financial issues are complex. In addition, a retirement plan's long lifespan can create obligations that continue to exist even after the employer does not.

Changing the role of employers within the retirement-income system and creating new delivery mechanisms have the potential to expand participation significantly. The traditional role of the

[4] Retirement 20/20 2006 Conference: "Building the Foundations for New Retirement Systems" and 2007 Conference: "Resolving Stakeholder Tensions: Aligning Roles with Skills."

employer has been to sponsor and contribute into employer-provided plans for employees. A different alignment of roles and responsibilities could also include improving retirement/financial literacy of employees, or just collecting employee contributions for investment in retirement plans managed and administered by a third party.

Providing access to retirement plans and portability of plan benefits are subject to employer control. Currently, access to retirement plans is limited to individuals who work for employers that sponsor plans. Portability is sometimes constrained by employers seeking to retain employees by discouraging turnover. Some suggest that employers do not need to be the plan sponsors, although they would remain essential facilitators. Entities could be created under new regulatory requirements that would increase the opportunity for employee access, keep costs down through economies of scale, and encourage portable benefit design.

Allowing employers the ability to provide their workers with access to retirement plans without having to administer them or act as plan sponsors, and offering new ways to establish and sponsor plans could open up many new possibilities. It also could lead to more standardization for disclosures and fees, as well as greater transparency. The employer always will have a role to play. But to be more effective, that role should be aligned with the employer's core competencies.

Different Role for Retirement Plan

One well-known example of a U.S. industry wide plan is TIAA-CREF, which serves as the retirement plan for universities and select not-for-profit employees/employers. Employers make contributions and direct employee contributions to TIAA-CREF. Participants can purchase a traditional or variable annuity (through TIAA or CREF), which pays out benefits for a lifetime. This benefit provides insurance protection, and TIAA acts essentially as a not-for-profit mutual insurer. The employer is neither a sponsor nor a financial guarantor. And, as long as the participant is employed by an employer that participates in TIAA-CREF, the benefit is completely portable.

Improving Individual Decisions

The U.S. economy has continually developed workers with many specialized skills, but only a few develop financial skills closely aligned with the needs of retirement planning. To a majority of workers, retirement planning and the related financial skills are not part of their core competency. Expecting all individuals to be experts in retirement planning, particularly in the areas of savings levels, investment choices, drawdown strategies, and longevity risks, is not realistic. Just as many do not calculate their own income taxes, why should they be expected to manage their own retirement plans? Retirement plans are complex and require specialized skills. Many individuals:

- Lack the basic financial skills and training required to manage portfolios;
- Are overwhelmed when faced with multiple financial planning choices;
- Have short planning horizons; and
- Face real or imagined competing interests for retirement savings, which leads them to decline to enroll in 401(k) plans or take early withdrawals from retirement accounts that incur tax penalties.

Because it drives market innovation, choice often is viewed as a good thing. But too much unstructured choice can lead to poor outcomes. Individuals could benefit if some investment decisions related to retirement savings were made by professionals. Recent findings in behavioral science have shown financial advantages to workers in retirement plans that feature automatic enrollment and "auto-pilot" investments, also known as target-date retirement funds.[5] While 401(k) plans increasingly utilize these automatic features during the saving phase, these elements generally are not a factor when retirees start withdrawing money – an equally important part of the equation.

The addition of strong automatic features and defaults can help individuals arrive at better retirement plan outcomes. Opportunities exist with tax and other policies that could steer individuals to choices that provide the best outcomes for their personal circumstances.[6]

Pros Can Aid Investors

Towers Watson publishes an annual analysis comparing the average return earned by retirement plans in which investments are managed by professionals with plans in which investments are primarily managed by individual employees. Study findings indicate that the former consistently outperforms the latter by 100 to 200 basis points each year.

Society's Role in Developing a Retirement-Income System

All current and future citizens in society share the costs and benefits of the U.S. retirement-income system. Congress and the administration act as society's agents or representatives and, in this regard, have a key role in the retirement-income system: enabling today's workers to attain a financially secure retirement and not become a financial burden on tomorrow's taxpayers. Beyond ensuring the solvency of Social Security, a mainstay of Americans' retirements, policymakers can provide oversight of the retirement-income system through laws and regulations, and a balance of voluntary incentives and mandatory requirements.

Society often pays a price when individuals' choices lead to suboptimal outcomes. Since the inability to save and invest appropriately, for those who have some means to do so, can lead to significant shortfalls at retirement, society could end up with an increased number of poor, elderly citizens who will need support from government, charities, or family members.

In Summary

Proper alignment of roles and competencies, along with setting realistic expectations about those roles, is a fundamental requirement for designing a well-functioning retirement-income system that benefits all of its stakeholders.

[5] "The Impact of Behavioral Science on Retirement Plans," *Benefits Quarterly. 2013 International Society of Certified Employee Benefit Specialists*, Third Quarter issue.
[6] *Risky Business: Living Longer Without Income For Life*," American Academy of Actuaries Lifetime Income Risk Joint Task Force discussion paper, published in June 2013 identifies many of these opportunities in detail.

Governance

Retirement plans are often complex, and involve various stakeholder groups as well as significant administrative and investment functions. Good governance is essential for retirement plans to be successful. At its core, governance is the process by which decisions are made and implemented. Attributes of good governance within retirement plans include stakeholder participation, transparency, accountability, administration in accordance with legal requirements, adherence to the plan's own policies, and effective delivery of benefits.

Failures of governance policies can affect large numbers of plan participants, taxpayers, and investors. For example, Enron Corp.'s 401(k) retirement plan held an inordinate amount of its assets in company stock.[7] The value of its 401(k) plan plummeted with the stock price as the company went bankrupt. Any pension plan can run into trouble if its governing board sets benefits that fail to receive adequate funding.

The key building blocks for good governance are:

- Clearly defining roles and responsibilities;
- Reducing real and potential conflicts of interest;
- Recognizing and managing competing needs; and
- Staffing boards with financial and other professionals with relevant expertise.

Clearly Defining Roles and Responsibilities

Governing bodies of retirement plans should define their specific responsibilities as well as those of their members. While some members of governing bodies may represent the sponsor's management or employees' interests, these members also may serve as fiduciaries for the retirement plan's participants and must act primarily in their best interests. Similar definitions should also be required for outside experts serving on governing bodies. These responsibilities will reflect applicable laws and regulations.

Retirement plan governing bodies have three primary areas of responsibility:

- Strategic – defining the purpose of the retirement system and the goals of the establishing entity in setting up the retirement plan.
- Financial – ensuring proper funding of the plan by engaging qualified actuaries, investment advisors, and attorneys. The appropriate governing body should prudently manage, monitor, and invest assets associated with the plan, and provide transparent reports so that the stakeholders of the system have a clear understanding of the investments and associated expenses.
- Operational – ensuring that proper payments are made on a timely basis, contributions are collected and submitted on time to the proper parties, and stakeholders are provided relevant and current information regarding the plan.

[7] Before the start of its downfall in 2001, Enron's stock made up 62 percent of the assets held in its 401(k) retirement plan. Many individual Enron employees held even larger percentages of Enron stock in their 401(k) accounts. (Congressional Research Service, Library of Congress).

Additionally, retirement plans should have a transparent framework of procedures to ensure that various governing bodies work together to prevent one body from taking unilateral actions that could harm long-term sustainability. For example, a plan sponsor that approves benefit increases must ensure that the plan can afford those increases and that the proper payments will be made. Each party that plays some role in the oversight of plan functions should strive to coordinate values, goals, and actions.

An important aspect of clearly defined roles and responsibilities for governing bodies and their members is that each body and associated individuals act in accordance with their defined roles and actually carry out their proper responsibilities. For example, a governing body with the responsibility for funding the proper required contributions to a pension plan fails its responsibility when such contributions are missed, delayed, or otherwise avoided.

Reducing Real and Potential Conflicts of Interest

Retirement plans present a potential for conflicts of interest for governing board or committee members, or other plan administrators. Board members or professional staff could succumb to engaging in transactions that directly benefit themselves or friends. Plans should require that board members and staff disclose potential and actual conflicts of interest they may have in conducting plan business.

Board members also may face potential conflicts in their respective roles. For example, employee or union representatives on boards may approve benefits higher than a plan could financially support. Conversely, employer representatives might make higher-risk investments in their plan’s assets in exchange for anticipated lower annual contributions. They also could propose investing the plan’s assets too heavily in their company’s stock. Outside financial experts also could tailor their advice to benefit themselves or the plan sponsor that hires them.

A different category of conflict of interest involves moral hazards, which can be created by rules or outside influences that shield decision makers from the full consequences of their choices. For example, while the Pension Benefit Guaranty Corp. aids employees by taking over distressed pension plans, the government agency’s guarantee also might encourage plans to make overly risky investments or provide excessive benefits. Plans that utilize excessive cost smoothing make it more difficult to identify underfunding risks. Retirement plans that lack coordinated funding and benefit designs can lead to decisions that threaten the plan’s long-term solvency.

Recognizing and Managing Competing Needs

An inherent tension exists among the various stakeholders in retirement plans. Beneficiaries need some level of benefit security and predictable retirement income, while plan sponsors want to contain costs, or sometimes even lower them. Sponsors also would like to have flexibility in how to invest the plan’s assets, which could increase risks to beneficiaries. Protecting one set of stakeholders from risk often involves shifting that risk to others. For example, defined-benefit plans place the longevity and investment risks on plan sponsors while defined-contribution plans shift those risks to participants.

Well-considered regulation of what is and isn’t acceptable behavior for different stakeholders in retirement plans is one tool for managing these competing needs. For example, proper regulation can specify the qualifications and responsibilities of service providers that advise the plan’s stakeholders and the consequences to them in the event of fraud. The emphasis on well-reasoned regulation is important since over-regulation of one stakeholder can have an adverse impact on its participation in the system.

Participants and plan sponsors need to fully understand the risk/reward tradeoff between benefit security and the possible range of benefits that may adversely affect the ability to retire or maintain one's standard of living in retirement. Retirement plans should have well-understood mechanisms for:

- Handling or mitigating severe financial shocks;
- Dealing with unanticipated benefit reductions; or
- Anticipating and managing potential conflicts of interest.

Self-adjusting mechanisms can be designed to automatically adjust for changes in economic or demographic conditions to facilitate balancing of financial needs and risks. By allowing stakeholders to create a clearly defined set of rules for risk-sharing, self-adjusting mechanisms can help a plan remain viable as demographic and economic changes occur. These mechanisms can also help mitigate problems before they develop into crises by removing pressures that may arise when decisions must be made in stressful circumstances.

Potential Mitigation Strategies

- Think ahead about unintended consequences
- Balance competing interests
- Establish appropriate legislation, regulations, and rules
- Ensure strong oversight carried out through properly designed committee structures and audit functions
- Incorporate disincentives for excessive risk taking within the plan system
- Incorporate self-adjusting mechanisms

Staffing Boards with Professionals

Retirement boards and committees responsible for overseeing plan operations should be composed of knowledgeable experts in the retirement field. Well-functioning committees will include or engage independent retirement and investment experts where needed.

Boards also should include representatives of the key stakeholders, including participants and plan sponsors. Stakeholders' representatives should be balanced in order to lessen their inherent conflicts of interest. Appointments of governing bodies should take place via explicit procedures and transparent mechanisms using a competency-based selection process. Remuneration policy and other terms pertaining to the appointment of board members should be publicly disclosed.

Choosing Professionals

The Ontario Teachers' Pension Plan allows the teacher's union to appoint one teacher to its nine-member board. The school districts and teachers' union each choose half of the remaining members, who are retirement professionals and tasked with bringing professional expertise in pensions or investments to the table.

In Summary

Good governance structures for retirement plans are essential for their long-term financial sustainability. Clearly defining responsibilities and selecting skilled board members can minimize conflicts of interest and conflicting needs within plans.

Efficiency

Retirement-income systems should provide the opportunity for individuals to obtain enough income to live comfortably and securely in retirement, thus precluding their reliance on social safety-net programs or charitable organizations. Retirement income will be greater if costs are minimized.[8] Additionally, the system will be more reliable if variability and risk are low. Efficiency in a retirement-income system promotes maximizing retirement income at sustainable levels of cost and risk.

To be efficient, a retirement-income system should:

- Lower plan costs by allowing smaller plans to group together, and standardizing fees and making them more transparent;
- Enhance participation and coverage by providing consistent opportunities to accumulate retirement assets throughout a working lifetime;
- Minimize leakage during the accumulation and payout phases;
- Encourage pooling and sharing of risks effectively so that funds can provide reliable lifetime income for retirees; and
- Assist narrowing the variability of benefits by fostering the hedging of risks and by allowing for pricing of benefits and guarantees to ensure the best possible result for the most retirees.

Lower Costs

Minimizing costs is easy to appreciate. Everyone wants the dollars that are saved today to produce the largest amount of dollars in retirement and not be wasted on unnecessary costs.

The costs in the U.S. retirement-income system, which is primarily employer-based and voluntary (with the notable exception of Social Security), vary greatly depending on a retirement plan's size. Small plans tend to have higher relative administrative costs than large plans. Many small employers choose not to sponsor plans and cite cost as a key reason.

Economies of scale can decrease relative costs for both administrative and investment-related expenses. By encouraging smaller employers to group together into larger plans, a retirement system can better utilize these economies of scale.

For example, small employers could choose to participate in a regional or national plan sponsored by large financial institutions rather than maintain their own individual plans. While giving up some flexibility over plan features, small employers that join larger plans would benefit from lower costs, which could in turn induce more small employers to join and participate in such plans.

[8] Costs refer to any use of retirement funds other than directly providing income to the retiree, e.g., administrative costs, investment-related costs, and other fees or expenses.

Standardizing fees and making them more transparent also could help lower costs. Participants in retirement plans often do not understand or appreciate the costs because they seldom are transparent. Individual plans, such as Individual Retirement Accounts (IRAs), also have highly variable costs that often are not transparent. Large regional or national plans could be required to disclose all fees and expenses in a standardized fashion, with the disclosures made available to all employers and plan participants. This would encourage competition among providers of these plans, thus driving down costs.

Enhance Participation and Coverage to Provide Consistent Savings Opportunities

Retirement-income system efficiency can be improved by providing individuals the ability to accumulate retirement benefits throughout their entire working lives. Through a combination of payroll deductions and employer-provided benefits, every worker should have the opportunity and be encouraged to put money aside for retirement with every paycheck.[9]

Accumulating sufficient retirement benefits may be more costly when individuals do not participate in employer-sponsored plans, either because they lack access to plans when their employers don't sponsor them, impose waiting periods, or when individuals simply fail to participate of their own accord. A potential remedy is to establish large regional or national plans sponsored by financial institutions that would accept contributions from individuals without employer sponsorship or from self-employed workers and auto-enroll all workers in the plans. Thus, efficiency would be enhanced if age and service requirements for participation in plans were eliminated and participants were able to accumulate additional retirement benefits with every paycheck regardless of age or length of employment – similar to the way Social Security works.

Minimize Leakage

A retirement-income system that meets the *Retirement for the AGES* principles focuses on providing income to individuals throughout their retirement years. An efficient system will minimize leakage – the diversion of retirement assets to non-retirement purposes – during both the accumulation and payout phases. Policies should balance the needs of individuals to access funds for true financial emergencies – such as long periods of unemployment or disability – with the fundamental purpose of keeping the funds invested for retirement.

One beneficial change would be a requirement to communicate retirement savings as future income replacement rather than wealth accumulation. An example is the Department of Labor's proposal that periodic statements from retirement plans include individuals' lifetime stream of payments as well as account balances.

Leakage occurs in at least two ways during the payout phase. First, lump sum distributions that are not rolled into another qualified plan or IRA lose their tax-favored status and might not be used for retirement income. Second, death benefits can transfer large sums to a subsequent generation or to a government through estate taxes (a transfer to a spouse is not considered leakage, as it will provide retirement income for the spouse).

[9] Maximum efficiency is attained when participation is universal. Social Security is a highly efficient system in part because participation is essentially universal. TIAA-CREF is a highly efficient system in part because participation by employees within higher education institutions is almost universal.

Pool and Share Risks Effectively to Concentrate Retirement Income

Retirement security and system efficiency are enhanced when risk is pooled effectively and individuals buy only the guarantees they need. Those with more financial resources, for instance, may need fewer or differently structured guarantees. They might enhance efficiency by using more managed-account options or by using variable annuities for longevity protection.

Retirees with the means can provide death benefits in an amount of their choice by leaving part of the retirement fund in accumulation funds until they die. But a truly efficient retirement-income system will encourage participants to use part of their retirement funds to provide longevity protection that pools longevity risk.

Funds that remain in the retirement-income system for payout throughout the retirement years of a participant could be made more efficient by improving how they provide lifetime income. Many methods can ensure a lifetime of income from a fund, and the two following examples show how highly divergent approaches can accomplish the same objective. The key is that each approach focuses on retirement income that is provided in a secure fashion.

The first option is to self-manage funds for a specific number of years and use a deferred annuity for the remainder of life, also known as longevity insurance. A deferred annuity offers a retiree the opportunity to purchase an annuity for a relatively small premium providing benefits that start at a much later age – e.g., purchasing an annuity at age 65 to start benefits at age 85. The individual would take periodic withdrawals from the self-managed fund for the period before annuity benefits begin. The individual would be exposed to investment risk during these years and the fund might run short or could have surplus money, but the individual would be assured of a lifetime income in the years after attaining age 85.

The second option would be to use an immediate annuity, either with fixed or variable income. The retiree could choose how much of the fund to allocate to the annuity and how much to retain for

Illustrating Pooling Efficiency

Suppose two 65-year olds are ready to retire. Through some prognostication, they know that their average lifetime will be 20 additional years and that one will live 15 more years while the other 25 more years. They do not know who will die first. To assure a lifetime income, each could plan for periodic withdrawals that would last 25 years. If each has $300,000, each can withdraw $1,746 per month (assuming a consistent 5 percent return on investments). The first to die would leave a death benefit of about $165,000, and the second would die as the last payment was made.

If they choose to pool their money, the two could increase their monthly retirement income by 15 percent. Instead of withdrawing $1,746 each per month, each could withdraw $2,008 per month for 15 years, with the survivor receiving $2,008 per month for another 10 years. With pooling, the entire $600,000 is used for retirement income but no death benefits are paid. The death benefit in the first example has been used to increase the payments for both retirees. If longevity is pooled over large numbers of retirees, the effective gains can be even greater, partly due to the large variability of when individuals will die.

periodic withdrawals. The individual is assured of a lifetime income with the portion allocated to the annuity and can either periodically withdraw the remaining funds or leave them in the retirement fund for future death benefits to a spouse or other beneficiary.

Individuals can attempt to self-annuitize by withdrawing principal over their expected lifetimes, but this produces the inevitable variability that some will run out of money while others will die long before their assets are exhausted. Encouraging the allocation of a portion of retirement funds to provide longevity protection would create much greater demand and likely drive product pricing down as the result of enhanced competition and less adverse selection.

Narrow the Variability of Benefits

Efficient and effective retirement-income systems should reduce the variability of potential outcomes to create more reliable streams of retirement income. A more reliable income stream means less need for margins of safety or other contingency planning. More consistent outcomes also place less demand on social programs to support those with inadequate outcomes. Variability comes into play in two key areas: the amount of assets accumulated during a career based on the type of investment assets held, and retirement income based on investment allocation and how assets are withdrawn.

Variability during the accumulation phase can be extreme if assets are put entirely in risky investments. Long-term growth in assets is desirable but extreme volatility is not, particularly as individuals approach retirement age. Investment risk can be hedged by putting a portion of funds in conservative assets, perhaps with that portion increasing as retirement age approaches. During the retirement years, the need for reliability and predictability of income becomes more significant since retirees no longer work and cannot as readily find other sources of income.

Different Framing of Lifetime Income

"When viewed through an investment frame, only about 20 percent of individuals thought a life annuity looked attractive in comparison to a simple savings account. When viewed through a consumption frame, over 70 percent of individuals preferred the annuity. This is a remarkable shift for what is essentially a small change in the way the information is portrayed."

Jeffrey Brown, Professor of Finance in the College of Business at the University of Illinois at Urbana-Champaign at a U.S. Senate Health, Education, Labor and Pensions Committee hearing on Feb. 3, 2011.

More efficiently ensuring that retirement income lasts a lifetime is a key method to lower variability. As mentioned earlier, leakage causes inefficiencies in the system. Withdrawing only investment income and leaving principal invested, for example, as a way for individuals to ensure lifetime income lowers the efficiency of the retirement-income system. It facilitates passing an individual's entire principal to another generation rather than using it for his or her own retirement income.

The inability of a retirement-income system to provide sufficient retirement income for the population creates a significant public-policy challenge. If individuals run out of money, future generations – successive generations of taxpayers – will be called upon to address the shortfall through public programs or some other systemic effort to forestall retirees' financial distress. An efficient retirement-income system will minimize the potential that future taxpayers will bear the burden of supporting today's taxpayers in retirement.

In Summary

Successful retirement-income systems need to efficiently provide reliable retirement income to successive generations of workers. Building economies of scale into plans, providing for consistent savings throughout individuals' careers, minimizing leakage, encouraging the pooling of risks, and lessening variability of income can greatly enhance the effectiveness of a retirement system.

Sustainability

A sustainable retirement-income system designed to last across many generations of workers and retirees would provide optimal value to society, individuals, and employers. In such a sustainable retirement-income system, the stakeholders should be able to fund the system, meet its financial requirements predictably, and rely on it to deliver on retirement benefit promises.

In recent history, the cutbacks and closures of retirement plans of various sizes and types in the United States have suggested that the current system may not be fully sustainable. In many instances, retirement-plan sponsors were unable to continue their financial commitments to their systems. In others, retirement benefits fell short of realizing expected values because of economic downturns. While such failures have varied causes, they demonstrate a lack of sustainability by not delivering on what was obligated or initially promised employees.

Sustainability is the fourth principle in the *Retirement for the AGES* initiative. To be sustainable, a retirement-income system must address:

- Intergenerational equity;
- Cost allocation among stakeholders;
- Market shocks; and
- The balance between sustainability and adequacy of benefits.

Intergenerational Equity

Intergenerational equity means that each generation of employees, taxpayers, and other stakeholders pays for its share of benefits.

Retirement plans are essentially deferred compensation programs. Inadequate funding of these costs can create unsustainable burdens on future generations. For example, many current public and private employer plans were designed between 1930 and 1960 when the far-reaching consequences of an aging population were not yet contemplated. While such systems may have been manageable during good times, many have faltered during the recent economic downturn, which has put pressure on new generations of politicians, taxpayers, and shareholders to cut back unsustainable promises.

Making intergenerational equity a fundamental and constant objective of a retirement-income system, through proper funding of benefits and investment strategies, could help ensure that financial costs and risks are manageable in the future. This would make it possible for public or private retirement plans to be supported long term by their respective decision-makers – whether they are elected

Intergenerational Equity

"The aim of pension plans is to have members pay more or less the same contribution rates for more or less the same pension benefits through all generations of members. Achieving sufficient, sustainable funding of a defined benefit pension plan to answer that objective is no easy feat…it is technically possible to eliminate funding shortfalls through the use of aggressive or overly optimistic assumptions about the future. The temptation to do this must be strenuously resisted since problems are not resolved but merely pushed into the future when they will be even more difficult to address."

Report of the Sustainability Working Group of the Ontario Teachers' Pension Plan, September, 2010.

officials, voters, industry leaders, or employers. It requires attention to proper funding of benefits and investment strategies.

Proper Allocation of Costs

Sustainable retirement-income systems are designed to allocate costs among various stakeholders over long periods of time. Employers consider the burdens that a retirement-income system places on employees as well as on financial stakeholders in business or government. A factor to consider in the design of regulatory frameworks is how tax treatment of retirement funds (incentives/penalties) re-allocates retirement costs to various taxpayers.

The risks inherent in retirement planning increase the difficulty of allocating costs appropriately. Because risk by its nature is uncertain, determining whether stakeholders will bear their share of risk is a challenge. Changing demographics and the recent financial shocks have led many companies to conclude that they had taken on levels of risk that were not compatible with the interests of their stakeholders. Plan designs that permitted more shared risk among stakeholders and lower-risk investment approaches might have mitigated the effect of the downturns generally.

Withstanding Market Shocks

Sustainable retirement-income systems recognize that economies and financial markets are uneven and inevitably experience crises from time to time. The consequences of these crises will affect the stakeholders in retirement plans. Since retirement plans are substantial institutional investors in financial markets, they must be able to withstand sharp drops in the markets, despite the low probability that such downside scenarios will occur.

Traditional retirement plans have not been immune to the financial market downturns of the first decade of the 21st century. Both defined-benefit and defined-contribution plans provided by all types of employers suffered dramatic losses.[10] In such a bad economy, many traditional defined-benefit plans, in which plan sponsors bear all the risk, were cut back or eliminated as employers struggled to stay afloat. Defined-contribution programs, such as 401(k)s, suffered also as some employers reduced contributions and benefits fell short for many workers, especially those about to retire.

Balancing Sustainability and Adequacy

Sustainability is a key consideration when considering the trade-off between long-term survival and the adequacy of benefits. For example:

- Plans can choose to take on little or no investment risk by investing entirely in low-yielding, inflation-linked securities. Such an approach, however, can sacrifice substantial potential benefits, thus reducing adequacy.
- Plan sponsors can ensure their ability to maintain a program by transferring all risk to participants, and have done so with defined-contribution plans. The adequacy of this approach

[10] Substantial losses in defined-contribution accounts can be viewed as a sustainability issue similar to benefits being cut in a defined-benefit plan when the employer feels that the costs or risks are too high.

will vary over time along with the economic ups and downs since it will not result in consistent outcomes for plan beneficiaries.

- Stakeholders with different perspectives may reach agreement on self-adjusting mechanisms that are designed to share the upfront risk. However, the real effects of those adjustments might result in very onerous consequences for one or more stakeholders, which could lead to a cessation or revision of the original terms.

Self-Adjusting Systems: A Sustainable Option for the Future

The number of defined-benefit pension plans that have been frozen or closed in the past decade or two in the United States is staggering, while significant questions have grown regarding the use of defined-contribution plans as the primary retirement vehicle outside of Social Security. In the aftermath of a plan failure of one kind or another, it is more readily apparent what went wrong: a combination of poorly aligned roles and skills, bad governance, and financial inefficiency. Lessons can be learned from these difficulties that would create more sustainable programs.

In fact, there are new system models already in place, primarily through social insurance systems in other countries that use features such as retirement ages and cost-of-living adjustments to change with the system's ability to afford them. Self-adjusting mechanisms are designed to minimize the impact of adjusting benefits while ensuring the long-term survival of the system.

Other Nations Use Auto Adjustments

Many national retirement systems – including those in Brazil, Germany, Sweden, and Japan – have adopted automatic adjustments to benefit levels based on changes in life expectancy. Sweden and Germany have introduced more complex mechanisms. Germany uses a "sustainability factor" based on such things as migration, birth rates, labor force participation, and retirement rates.

At present, the U.S. retirement-income system illustrates the result of a shift of risk (primarily longevity risk and investment risk) to the individual. Part of this shift has been facilitated by public policy. All stakeholders, including policymakers, should emphasize intergenerational equity, inclusion of appropriate assumptions for future financial crises, and incorporation of new designs to self-adjust to future circumstances to enhance sustainability.

In Summary

Workers, employers, retirees, and society all benefit from a retirement-income system that can endure for generations. To remain sustainable, retirement-income systems should focus on fairly allocating costs among stakeholders, withstanding market shocks, ensuring intergenerational equity, and maintaining a balance between adequacy of benefits and sustainability by sponsors.

Conclusion

Adherence to the *Retirement for the AGES* principles when designing or modifying retirement programs will help ensure the sustainability and success of those programs. All stakeholders should understand their appropriate roles and responsibilities associated with the retirement plans, risks will be balanced and shared among the stakeholders, the funding of the system will be used to maximize retirement income and minimize leakage for other purposes, and plans will be designed to mitigate shocks to the system while supporting intergenerational equity. Following these principles will truly result in a retirement system for the *AGES*.