



SOCIETY OF ACTUARIES



Conference Report
Building the Foundations for
New Retirement Systems

September 28–29, 2006



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Conference Report

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Introduction

On September 28–29, 2006, the Society of Actuaries Pension Section Council held a kick-off conference for its *Retirement 20/20* project, titled “Building the Foundations for New Retirement Systems.”

Retirement 20/20 is an initiative of the Pension Section Council. The initiative began in late 2005 in reaction to the decline in defined benefit plans. Its purpose is to design a new system from the ground up. While defined contribution plans are an alternative to defined benefit plans, we believe that existing traditional plans (both defined benefit and defined contribution) are not ideal answers; and we believe there is a better way. *Retirement 20/20* seeks to find solutions that meet the economic and de-

Transition is not easy

At this stage, *Retirement 20/20* is focusing on what we need new retirement systems to do. We realize that this focus leaves a big piece of the puzzle out of the picture, namely: how do we get from where we are today to where we need to be?

We know that transition issues are not inconsequential and could derail the success of any new retirement systems. However, at this stage we also believe we need a better picture of where we are going—what the new system might look like—before we can determine what might need to be done to get us there.

mographic needs for the 21st century in North America. While we ultimately will deal with specific design ideas/risk sharing models and transition issues, that is not where we are starting. The first part of the process, including the September conference, focuses on fundamentals.

The purpose of the Conference was to elucidate core ideas, rather than develop specific proposals for change or ideal plan designs. It sought to examine the stakeholders in the system, what the system must accomplish to meet their needs, what risks these stakeholders can

take on and what role they can play in the system. It sought to determine what the system needed to accomplish, unconstrained by the structure of the existing retirement system and its regulatory structures. This report identifies key ideas that came out of the conference. The Pension Section Council will follow up and test the validity of these ideas.

Building the Foundations for New Retirement Systems

The September conference brought together a diverse group of about 60 individuals with expertise in retirement issues, including actuaries, attorneys, economists, employers and public policy professionals. The focus was on *what could be*, on principles rather than specific solutions, on what we need to achieve, not how to achieve it. This conference included attendees from the United States and Canada.

The conference was structured to consider three fundamental questions for each of the four basic stakeholder groups (society, individuals, markets and employers, discussed below). Panels for each stakeholder group considered the following three questions:

- Who has what **needs**?
- Who bears what **risks**?
- Who should or could play what **roles**?

To be sustainable, any retirement system must meet the core needs of all stakeholders (sometimes referred to as the “what’s in it for me?” test). Stakeholders will have conflicting needs, so another principle of any retirement system should be that it doesn’t violate the core needs of any stakeholder group. The conference used panelists representing various stakeholders to identify these tensions. Audience discussion also contributed to the understanding of needs, risks and roles.

The conference focused on **needs**, **risks** and **roles** for these four stakeholders:

- **Society:** By society, we mean society as a whole (all taxpayers/citizens). This includes both current and future generations since there are intergenerational cost and risk-bearing issues.
 - In this framework, governments (politicians) are agents of taxpayers/citizens.
 - A social insurance system (e.g. Social Security, C/QPP) is a way to address the needs of society. As such, the current role of any social insurance system was not discussed, but rather what society needed the system in total to achieve. From that, future steps can discuss what the role of social insurance should be.
- **Individuals:** Individuals are the ultimate users of retirement income. They have the need to prepare for retirement and spend income during their retirement years. They face the risks of retirement and need to find ways to pool or hedge those risks.

- **Markets:** Markets have two roles. They are the place where retirement assets are both accumulated and decumulated. They also have the ability to hedge risks.
- **Employers:** Employers (and the shareholders they represent) employ individuals and need to attract, retain, motivate and retire these individuals. Today, employers have a significant role in the retirement system in the United States and Canada.

Conference participants spent the last afternoon looking at four key attributes of any retirement system. Using what they understand about needs, risks and roles for the four stakeholders, they considered the following

- Retirement age/retirement process,
- Social balance,
- Voluntary vs. mandatory systems and
- Role or risk pooling.

There were two keynote speakers, Bradley Belt and Dallas Salisbury, whose views are incorporated into the discussion of needs, risks and roles presented in the main report.

Throughout the two-day meeting we polled the audience on key issues. An addendum to this report (forthcoming) will show highlights of these questions.

Headlines

During the conference, there were six themes that emerged from the discussions. These themes do not necessarily touch specifically on needs, risks and roles but they illuminate some principles we need to address in the development of new retirement systems.

The six themes are:

- Systems should align stakeholders' roles with their skills;
- Systems should be designed to self-adjust;
- Systems should consider new norms for work and retirement and the role of the normative retirement age;
- Systems should be better aligned with markets;
- Systems should clarify the role of the employer; and
- Retirement systems will not succeed without improvements in the health and long-term care systems.

Systems should align stakeholders' roles with their skills

As participants discussed in depth what role different stakeholders could play in the system, one theme quickly emerged: align each stakeholders' skill set with their roles, and specifically with realistic expectations about those roles. Participants cited several examples where it does not currently happen:

- It's not realistic to expect individuals to be experts in retirement planning, particularly investments. One participant cited 13 years of research on the knowledge of individuals as investors and provided several salient conclusions, that "first ...the focus on educating participants is an admirable goal, but it hasn't been working. Second, as structured currently, defined contribution plans are not working well for many participants ... Third, on paper, 401(k) plans and defined contribution plans provide the right incentives, the right investments, the right educational tools and in many cases, even investment assistance and advice, but in reality human nature gets in the way." Conference participants questioned whether individuals would ever be skilled investors, due to lack of knowledge but also inclination.

Other participants cited the work of behavioral economists, who've both noted difficulties individuals have with retirement planning and have helped sponsors of retirement savings plans make those plans work better (e.g., auto-enrollment, "auto-pilot" investments) . One participant noted that we need to decide what level of financial education is appropriate: "Do we expect people to be able to

drive the car, or do they have to know how to fix it in order to drive it?” Historically, the defined contribution system has expected participants to not only drive the car, but to be able to fix it (choose the investment policy) and create the map to know where to drive it (set a level of contributions to provide adequate retirement income). Is such expert knowledge required or legitimately expected? Or can we design systems that work in spite of participants’ inertia and lack of knowledge?

Another level of this discussion is how much individuals are able to prepare for and handle the risks of retirement given their circumstances. Participants noted that women often have additional difficulty saving for retirement (many women spend time out of the labor force) and are more exposed to longevity risk and the death of a spouse.

- During the conference, the role of the employer in the retirement system was discussed. Participants considered whether the employer has the right skill set to operate pension plans, with their complex legal and financial attributes. Employers exist to create value in their core businesses; do the sponsorship and operation of pension plans enhance this value or detract from it?

Litigation risk with regard to the management of any retirement benefit plan was also discussed. Employer representatives repeatedly echoed comments that the threat of litigation is a significant concern in the operation of retirement plans.

One participant noted that it is the mere threat of a lawsuit which is potentially damaging, particularly for large employers.

Other participants brought up the shorter lifespan of corporations relative to traditional defined benefit pension plans. Is it rational for employers to sponsor retirement plans and operate them in a way that creates residual liabilities long after they are gone?

However, other participants noted that people do better saving for retirement when

“ [W]hy would any reasonable person think that people not trained in investments would be able to make these decisions in any sensible way? ... I’ve been teaching investments for 35 years, so to me it’s second nature. But let’s take an area like medicine ... Now I consider myself a reasonably well informed consumer of medical services, but I wouldn’t dream of diagnosing my own illnesses ... even if my doctor said ‘You know performing minor surgery is really not such a big deal. I can give you the equipment and a brochure and you can take care of it on your own.’ Well you laugh, [but] that’s what we’re doing now with 401(k) plans. ”

—CONFERENCE PARTICIPANT

their employer is involved. One participant quoted an EBRI statistic that over 77 percent of people making between \$30,000 and \$50,000 save in an employer defined contribution plan if one is offered. But, if no plan is offered, in that same income group, only 5 percent of people save. Others noted that individuals trust their employers and want them to continue to play a role in the system. Most participants agreed that individuals do better if an employer has a role in the retirement system. The question was how to best align the skills and needs of the employer with the role, and to provide roles and opportunities that met the different needs of employers.



Going Forward

Aligning stakeholders' roles with their skills requires a fundamental reexamination of existing structures. Just because it has been done this way does not mean it is the best way to do it. But this represents changes to the system, which should be discussed openly by all stakeholders involved.

What can we reasonably expect from stakeholders without a great deal of knowledge and training? While it is always easy to say "should" (individuals should take more responsibility for retirement, employers should see the value in sponsoring a retirement plan) maybe we ought to be realistic about what can be done and about the consequences of various courses of action.

Systems should be designed to self-adjust

Any system that is to survive should be self-adjusting. Quite simply, the system should be built to be flexible to adapt to changing conditions. For example, increased longevity and the evolution of global competition have changed what we need from a retirement system. This has put pressure on today's system and is part of what is causing it to falter. If today's system had self-adjusted, then it might be as sustainable as it was 30 years ago.

Participants discussed three things in particular around the issue of system self-adjustment:

- Systems should be self-adjusting based on our evolving ideas on how we use human capital. Retirement systems should adjust as we work (and retire). If we are working longer, or having several careers, then we should have systems—retirement and others—that support these new ideas about work and life. Today's

“There's no reason actuarially why we can't build in some caveat in the design of plans [public or private] that [says], look if [costs get] way over here, then automatically two or three things happen ... Seems to me that we might be able to constrain the risk (the risk being variance) by having some of these default options that, if we get into bad times, [adjustments] automatically occur.”

—CONFERENCE PARTICIPANT

traditional pension plan assumes retirement is an event: one day you are working, the next day you are not. Tomorrow, we may need people to move between periods of work, study and leisure at different stages of their lives. Going forward, we need retirement plans that permit more flexibility in how and when benefits are paid, and that can adjust as conditions for workers change as well.

- Systems should self-adjust based on how long we are living. One example where systems do not adjust is retirement age. The typical private sector plan retirement age—65—was set by the Committee on Economic Security in 1935 and considered actuarial estimates of life expectancy in 1935. Today, despite increased life expectancy, we still use it because it is enshrined in statute. As we live longer, this combination of a fixed retirement age with increased longevity has increased the cost of defined benefit pension plans over and above that of inflation. A simple self-adjustment to retirement age would keep the cost of the system affordable but would also keep the promises in line with those made to prior generations.
- Family structures are also changing, which may change the informal support that can be provided by family members at retirement. One panelist cited fewer marriages, more single parent households and lower birth rates (particularly in

Canada). As family structures change, retirement systems, which have historically assumed some informal or formal role for the family in retirement, may have to adjust to reflect changing family dynamics.

- One aspect of risk in any system is variance: how much do the results vary from the “norm” or “expected” value. Systems should limit risk by constraining variance within the system. If conditions arise such that the costs of a system start to rise above certain tolerance levels, benefits are adjusted so that all parties—payers and payees—share in the burden. One example of this is Canada’s CPP plan. In this plan, if costs rise above a certain level, contributions increase but benefits are also constrained, by limiting the amount of inflationary increase beneficiaries receive. In this way, the variance in the cost of the system is limited and shared by all parties.

Making the system work better for politicians

Ideas such as self-adjusting systems and aligning skills with roles could help improve the efficiency of our political process. Why? Taxpayers entrust politicians with designing and managing our retirement system. If the system is designed in ways that politicians’ success is aligned with (and not against) public interest, both politicians and the system can do a better job.



Going Forward

Self-adjustment will often shift risk from one stakeholder to another. When we look at this idea, we must consider the following:

- What parts of the system should self-adjust (e.g., social insurance, private plans)?
- What characteristics should be considered for self-adjusting (e.g., retirement age, benefit levels)?
- How much should risk be shifted, and how much should any change in the risk be shared between stakeholders in the system?
- How do these adjustments change the needs, risks and roles of the various stakeholders? In particular, if significant risk is shifted to individuals, how does this affect their needs at retirement? Does this increase the aggregate level of retirement assets needed to achieve the same level of risk protection?

Systems should consider new norms for work and retirement and the role of the normative retirement age

Conference participants continually discussed issues of work and retirement, particularly retirement age. Retirement age in this context was both full retirement age—the age at which full benefits are payable (currently 65 for most private plans and gradually increasing to 67 for U.S. Social Security) —and earliest eligibility age (varies, but often age 55 for private plans and currently age 62 for U.S. Social Security). Studies have shown that both the full retirement age and the early retirement age affect people’s decisions to retire.

“[T]he need is clear. Many people are going to work longer, if they can. The risk is that workers won’t be able to work longer due to ill health or disability or because employers won’t want them or because the closer they get to retirement, the better retirement is going to look.... What is the appropriate role of the various stakeholders (government, society, employers and workers) in extending work life and ensuring appropriate opportunities are available ... and in discouraging the early [commencement] of pension benefits?”

—CONFERENCE PARTICIPANT

On one side, participants argued that there was no need for a retirement age—the system can be set up to adjust benefits to be actuarially equitable at whatever age participants choose to retire. As the retirement experience may vary based on needs—later retirement for knowledge workers, earlier retirement for physical laborers—not having a set retirement age may more easily meet this need. However, other participants pointed out that retirement ages send signals to individuals as to what age is appropriate

for retirement. If we, as a society, want to encourage longer work, then increasing retirement ages is an important tool to drive behavior change. In particular, early retirement age may act more as a “target” for individuals, much more so than the age at which full benefits are payable.

The role of work at older ages was discussed from many different points of view. From the individuals’ point of view, the discussion centered on how much longer society can expect, on average, individuals to work or to wait to collect benefits. We already know that many people are not able to work longer, due to the type of job, disability or

“I’m a big believer in neutrality ... when I hear people say ‘well, we shouldn’t encourage early retirement’ I agree with that. But, when I start hearing we should encourage people to work longer, that will very quickly morph into we should punish people who retire at the age they wanted to retire and that’s not the job of the system to do.”

—CONFERENCE PARTICIPANT

family needs (e.g., caring for partner/parent). However, participants agreed that if you push out retirement, we have to extend eligibility ages for and provisions for disability income in light of this changing environment. Other questions that were raised include, from the employers' point of view, do you want to have an older workforce? What sort of challenges does that bring? Are there any special challenges in managing an older workforce with or without retirement plans? In this new process, would retirement plans play a more important role (to manage out those workers who cannot work but retain those who can) or do they become a hindrance (use severance packages and individual contracts to choose who you retire and who you retain)? How do you make sure the system supports those who want to work longer without penalizing those who cannot?



Going Forward

The changing nature of retirement—from an event to a process—is being driven by increases in lifespan, preferences and expectations and is in turn driving many changes we see today in the retirement system. Understanding how this is evolving, including where new social norms are headed, is critical to establish a successful new retirement system.

Not everyone will be able to work longer. We need to look carefully at what the different needs for retirement will be based on different individual characteristics. Stakeholder roles may need to change to support those different norms. For example, employers may be more involved in helping those physically no longer able to work after retirement, whereas society may encourage as many people as possible to work longer.

Systems should be better aligned with markets

Several participants felt strongly that the system should look to markets to pool and hedge risks, and not leave those risks to the employer, the employers' shareholders or the employees. Today's system is a seesaw—most risk either lies with the employer (and its shareholders, in a traditional DB plan) or with the individual employee (in a DC plan). It is probably too unsophisticated of a way to deal with risk, although defined benefit plans do pool certain risks well (e.g., longevity risk for annuities). Several participants also argued that employers should not be bearing risks that do not add to shareholder value, and that if employers make promises, they should properly price the commitments they are making.

“*[Market] discipline [is] a necessary, but not sufficient, condition for a successful retirement system. Number one, policy makers should stop “improving” on market pricing. Two, we need more complete markets including mortality and inflation securities. And three, while waiting for more complete markets, plan designers and regulators should make and price benefits more in line with the securities that are already available.*”

—CONFERENCE PARTICIPANT

The principal focus of the discussion was that any new retirement plan designs should work with the markets and utilize the ability of the markets to effectively pool and hedge risks. The arguments made by several conference participants were that capital markets offer efficient pricing and risk bearing and therefore should be utilized as much as possible. Any system that does not use market mechanisms and does not work

within market frameworks (e.g., transparent costs) may not be accepted by the markets and may fail. Participants also discussed the value of having groups approach the market rather than having individuals make their own market contracts.

However, it was noted that today's markets are not complete. Markets do not hedge all the risks they can hedge, and there may be some risks for which the cost of the market hedge may be beyond what individuals are able to pay. Markets also cannot provide the kind of hedging instruments needed to construct products or plans to protect individuals. The example of longevity bonds was discussed. Longevity bonds are issued to hedge systematic longevity risk (the risk that the average person lives longer than expected). To date, several firms have attempted to issue bonds but with little interest in the market to purchase them. The

“*I would certainly urge caution in putting too much faith in either the markets or the public sector ... history is replete with examples of markets overshooting and governments overreacting. [H]aving said that, I do believe that prudently regulated markets are better than wholly unregulated markets. It's a calibration that's very difficult to achieve.*”

—CONFERENCE PARTICIPANT

incompleteness of the model for inflation-linked bonds in the United States was also discussed (the TIPS market).



Going Forward

Other than through insurers, most of the market focus has been on short-term financial risks. Retirement systems present longer risks than most risks the market pools or hedges. This would argue for new market instruments to better meet retirement risks. Markets may not be able to hedge all risks, or may be only able to hedge them at a price individuals cannot afford.

What can the markets do well, what are the markets currently unable to do (but may be able to do in the future) and what are markets simply unable to accommodate? Where markets cannot hedge risks, should they be borne by individuals? Should they be shared with other generations? When is transferring risk from one stakeholder to another appropriate?

Systems should clarify the role of the employer

Employer plans have been a key source of retirement income after social insurance for many U.S. and Canadian citizens. However, changes in the regulatory environment, both for taxation and accounting, have caused many employers to question whether they can continue to provide traditional defined benefit plans. Today, the only alternative for employers wishing to sponsor a plan is a defined contribution plan. Participants discussed at length what role the employer should have in the retirement system. Many participants were open to thinking of employer solutions outside of the defined benefit and defined contribution paradigm.

Participants discussed several principles regarding the role of the employer:

- What role do retirement plans serve for employers? There was an acknowledgment that retention and orderly retirement of employees was a key goal of plans. Most employers noted, however, that in terms of attraction of employees, younger employees only consider whether the employer has a retirement plan or not, and not what the plan looked like or what level of benefits were provided.
- Retirement plans must meet corporate goals. Participants noted that there has to be a reason why employers sponsor retirement plans, other than tradition. If retirement plans do not meet corporate goals, then the employers' role should be different (e.g., facilitate entry into plan run by a third-party). Similarly, the ability of retirement plans to assist in the attraction, retention and retirement of employees must not conflict with the employer's core business.
- Companies exist in a global economy. Many countries do not have employer-sponsored retirement (or, for the United States, health care) plans. It is difficult to justify the cost of plans for many employers given global competition.
- One goal of retirement systems might be the redistribution of income, from more

to less wealthy individuals. But does it make sense for employers to redistribute wealth? Employers' goals may work against this social goal, such as rewarding the most productive workers. If employers are part of a retirement system, how much can you expect them to support the social goals of retirement systems as well?

“ [W]hy do we feel this compulsive urge to jump in the middle of [employees'] retirement plan when we don't feel it anywhere else?... [U]ntil we can give answers to what is in it for the corporation, I think what you're going to hear from [outside] directors over and over is we don't want to be the deep-pocketed player in the game. We want to be an interested bystander. ”

—CONFERENCE PARTICIPANT

- Statutory frameworks for both funding and accounting must align with employer cost frameworks. One point discussed is whether the pricing of traditional defined benefit plans under the current accounting system overstates costs for younger workers and understates costs for older workers. This framework may be discouraging traditional defined benefit plans because the employer's cost does not equal the employee's perceived value. This is simply one example of how the cost of the system, as set by funding and accounting bodies, should align with the employers' view of the costs; if they do not, then employers may not be inclined to sponsor plans.



Going Forward

We need to rethink the possible roles of the employer in the system. Conference participants noted studies that have shown that employees trust information received from their employer more than information received from other sources. And employers note the role of retirement systems in helping them to retain and retire employees. The group pooling and purchasing that have taken place through employer systems are valuable, but could those be accomplished by other means? Could the employer role simply be to act as a conduit to retirement plans, not as the sponsor of the plan?

The role of work and retirement ages was discussed earlier. Work at older ages will not become the rule rather than the exception unless it is embraced by employers. Keeping workers in the job market requires workers and employers to understand the benefits of work at older ages. It also requires the system to permit employers to differentiate between those workers who are able to work longer and those who cannot.

Retirement systems will not succeed without improvements in the health and long-term care systems

Finally, conference participants felt strongly that any retirement system redesign will fail unless changes are also made to the health care (particularly in the United States) and long-term care systems. Several participants noted the ballooning deficits for Medicare (health care) and Medicaid (health and long-term care) noting that there would likely be cutbacks in those programs going forward. In addition, most private employers in the United States no longer offer health care benefits to retirees (particularly future retirees) and many in the room predicted health care benefits for government retirees would soon disappear in the United States with the introduction of new accounting standards for those benefits.

Will Retirement 20/20 tackle issues in the health care and long-term care systems?

The Retirement 20/20 project is focused on finding solutions for retirement income. There are no plans to consider necessary revisions to the health care and long-term care systems. Health care affects everyone—children, workers and retirees—and would need to be considered for society as a whole, not just from the point of view of retirees. Long-term care is a complex system in and of itself with issues that go beyond those facing retirement income. Both of these are significant projects which deserve their own dedicated experts working on them. Retirement 20/20 does not have the resources, or the experts, to devote to these issues.

The Pension Section Council will encourage others to take on the challenge of addressing health care and long-term care. We will communicate broadly that changes to the retirement system cannot succeed without also addressing these other vital components of retirement protection.

Several concerns were raised that we can create the most perfect retirement systems in the world but it will not work if the health care and long-term care systems are not aligned as well to meet it. Participants cited recent studies showing that individuals will not annuitize their income—protecting them from outliving their assets—because they are concerned about needing large sums to cover medical costs.

In addition, the instability and rapidly rising costs of health care are decreasing future retirement benefits. Employers noted that they have limited budgets to spend on employee benefits, and as health care costs continue to escalate, they are often cutting the retirement benefits to be able to continue to pay for health care for current employees.

Report on the Conference

Society's Needs, Risks and Roles

In discussing the needs, risks and roles for society, participants honed in on four key issues: society must ensure that the retirement system is adequate, affordable, sustainable and robust. Conference participants may have differed on exactly how one would achieve any of those objectives, but several themes about the roles of employers, individuals and markets that were to be repeated throughout the conference came through in the initial discussions of society's role. Note that in this case the retirement system is not simply social insurance (Social Security or OAS/C/QPP) but all sources of retirement income.

Society's risks fall along two lines, economic and political. Economic stability has many characteristics, including efficient allocation of economic resources. Society also faces risk when other stakeholders fail. Examples of this include individuals who fail to save adequately for retirement and employer-sponsored plans that ultimately become bankrupt.

Society's role is to ensure economic success and political stability, which aligns with its two greatest risks. Society also sets up the regulatory structure to ensure that all stakeholders understand how the system operates, but to build trust in the system and to minimize the risk that other stakeholders may fail. Finally, discussion throughout the conference returned to the need for society to address imperfections in the system. Some of these imperfections were failings of other stakeholders, for example, individuals to adequately prepare for retirement and markets to provide vehicles for the pooling and hedging of risk. Other imperfections related to social imbalance (the redistribution of wealth) or to protect against the moral hazard of poverty at old age.

As we started the discussion of society, tensions quickly arose between what society may need, and what other stakeholders may be able to accomplish.

Society's Needs

Adequate

Adequacy ensures that the most vulnerable members of society are protected by providing a minimum benefit above poverty level. This might be accomplished by promoting redistribution of wealth from wealthier to less wealthy citizens. There was significant discussion as to whether an employer-based system could or should do that (could you ask employers to redistribute wealth when their goal was to compensate employees?).

Affordable

Goals of adequacy and affordability are often at odds, but there was agreement that the system cannot succeed if it is too expensive. However, the cost of retirement cannot absolutely be decreased without, for example, decreasing the standard of living in retirement or decreasing how long someone is retired. The social cost of retirement also cannot crowd out other social needs, such as education, infrastructure and defense.

One way to improve affordability is to pool and hedge risks more efficiently. Markets pool and hedge many risks, and several conference participants urged system designers to put risks into the hands of the markets. However, others acknowledged that markets were incomplete (i.e., are not currently able to handle many retirement risks) or might set a cost for hedging the risk that might be unaffordable. There may be ways society can mitigate costs; e.g., by creating pools to go to market to get the best possible price.

Sustainable

Sustainability works at several levels. First, the system should be able to operate successfully without having to be completely redesigned for each new generation. Retirement is planned for and saved for over decades, and people close to retirement are not able to readjust to complete overhauls of the system. This brings into focus another headline from the conference: the importance of self-adjusting systems. For a system to be sustainable it must adjust with conditions—a sustainable system is not one that never changes. But those changes must be understood, anticipated and well-communicated.

Another aspect of sustainability is equitability. Society must prudently manage its resources with respect to all its citizens, not just retirees, including children, workers, near-retirees and retirees. For a retirement system to succeed, society must be able to balance the needs of the retirement system with other needs.

Similarly, no generation of retirees should benefit measurably more or less than any other generation. Ensuring equitable risk and reward sharing may require a redefinition of the rules of retirement. For example, retaining an age 65 retirement age ensures that future generations enjoy a longer retirement than their parents or grandparents, since individuals are living longer. A sustainable system would have each generation of retirees retired for an “equivalent” period of time, be that in terms of number of years or proportion of adult life spent in and out of the labor force.

Finally, politically sustainable systems work by building trust among all stakeholders. For the system to succeed all participants must believe they are or will benefit from the system. One speaker noted that in the United States, after 9/11, there has been a declining trust in institutions. If you don't trust that your contributions to a pension plan or taxes paid into Social Security will be returned to you in the form of equivalent benefits, you will not be willing to participate.

Robust

A robust system is by definition able to withstand many shocks including economic and political shocks. Economically, some of the characteristics mentioned were avoiding moral hazards and perverse work incentives (or disincentives), creating shared economic growth and productivity, ensuring a smoothly functioning labor market and ensuring diverse sources of retirement income. Politically, characteristics suggested included a fair system that covers a great majority of participants and promotes collective responsibility.

Society's Risks

For the retirement system, society's greatest risks are ones that governmental institutions continually face: economic and political. Retirement systems can support (or detract from) the economic and political stability of a country. Failure to ensure adequate retirement income may lead to economic and political instability.

Society faces several economic risks, including inflation, inefficient allocation of resources, falling or unequal distribution of economic growth, dysfunction of capital markets and lack of adequate labor force participation. Labor force participation may be key in the future, as the retirement of the baby boom moves many of today's workers into retirement without similar numbers of younger workers to take their place. Whether this need for labor force participation drives higher retirement ages is to be seen.

Politically, society wants to encourage social stability. Large numbers of poor elderly or mid-life participants worried about their financial future can increase voter unrest and lead to social instability. A well functioning retirement system can ensure political harmony so the economy and other areas of society have a chance to thrive.

Finally, society has a risk when the systems it creates fails. This can happen in several ways. For example, in a voluntary system, the system fails if insufficient numbers

of retirement plans are established. The system fails when various stakeholders—individuals, employers, markets—don't perform their assigned role (e.g., employers elect not to sponsor retirement plans) or fail in that role. Finally, the system can fail because participants in the system don't understand their role, e.g., individuals understanding the need to save for retirement.

Society's Roles

Society's foremost role is to ensure against its risks: namely, to ensure that systems are economically and politically stable, and to ensure that the systems it creates don't fail. A unique role that society has, which is different from other stakeholders, is to address imperfections in the system. One set of imperfections is the shortcomings of various stakeholders.

During the markets panel, participants also talked about society's role to provide oversight to capital markets. First, markets today aren't complete around several key retirement risk issues (e.g., longevity and inflation risk). Society should encourage markets to develop instruments that can hedge and pool those risks, and society (in the form of its government) may be able to issue market instruments to aid in hedging. Second, to the extent markets aren't complete around other risks, individuals (and their employers on their behalf) have a harder time devoting resources to retirement because they are using funds to pay for other costs. One example in the United States is health care. Finally, society needs to ensure that benefit designs that are taken to the markets can be efficiently priced. When markets cannot efficiently price a benefit provision, they may overestimate the cost (and embedded risk) in that provision.

Finally, during the employer panel, many participants noted that sharply escalating health care costs in the United States were forcing employers to make decisions whereby they traded health care costs today at the expense of retirement benefits tomorrow. Employers were choosing to spend benefit dollars to meet health care needs today and were consciously choosing to fund less to retirement to meet those health care needs. While this decision meets with approval from current employees, it could be putting the future retirement of many of these same individuals at risk. In the United States, society must consider whether the current costs of the health care system are appropriate given that they are taking away funding for other social needs, including retirement.

Tensions

One of the most fundamental tensions with society is, simply, what role should society play? Participants had different points of view regarding how much society should, or should not, be involved in the retirement system. This section captures the characteristics of this tension, as well as illustrating where the goals of society may conflict with the goals of other stakeholders.

1. **Society has only one pot of money to spend.** If society spends more on retirement, it has less for other purposes (children, defense, etc.). How do you balance the needs of all the citizens with limited resources?
2. **Affordability and adequacy are often in tension.**
 - a. Great attention is paid to adequacy when times are good, and promises can be made then for benefits that are too large when circumstances change. This is particularly acute for any benefits financed from taxes (social insurance, but also typically public pension systems for government workers).
 - b. Tensions arise when adjustments are made, e.g., in the form of means testing, which may be well-purposed but may have the effect of disenfranchising middle-and upper-income participants (who then may have less political stake in the success of any system) as well as encouraging lower-income participants to not save at all to guarantee the floor level of protection.
3. **How much should society rely on families to provide support?** Should children be responsible for their old age parents and should society enforce a level of responsibility? What about people who don't have children to take care of them in their old age?
4. **When should individuals retire?** Different stakeholders have different ideas about the appropriate retirement age.
 - a. Differences were noted between retirement ages in the private and public sector. If society should be encouraging later retirements, shouldn't this extend to the public sector and the private sector alike? More generally, shouldn't public sector and private sector benefits be aligned?
 - b. Individuals expect to retire at younger ages as their parents did, but society may need them to work longer, particularly if it is facing labor shortages (which may threaten global economic competitiveness). However, not all individuals may be able to work longer. How do you change expectations and handle differentiated retirement ages? How do you set up a fair system that considers people differently?

- c. While society may want most individuals to work longer, employers may only want some individuals to work longer, not all. Should employers be forced to create job opportunities for all older workers, even if they only need some older workers to remain in the workforce?
5. **Retirement systems can support wealth preservation, longevity protection or inflation protection but not all three equally.** Longevity and inflation protection are important society goals, but individuals (particularly wealthy individuals with political clout) prefer wealth preservation. How do you balance these competing interests?
 6. **Markets may not be able to hedge all risks** (or hedge the risks at a cost individuals can afford). Is it appropriate for society to hedge these risks (generally by shifting them intergenerationally to tomorrow's taxpayers)? How much can you ask current generations to bear hedging costs for their grandparents? Should society put more pressure on markets to develop affordable solutions that keep hedging out of the hands of future generations? Should society force individuals to hedge through market mechanisms, even though that may be more costly than asking future generations to hedge that risk?
 7. **Society has goals of wealth redistribution**, yet if the system goes through employers, can we ask them to contribute to wealth redistribution? If the system is focused on individual savings, how do you accomplish wealth redistribution? Would that have to be abandoned and at what social cost (e.g., political instability)? If we retain an employer-based system, should social insurance plans do more to redistribute wealth?
 8. **Poor countries don't worry about funded systems but wealthy countries may need to**, particularly those where birth rates have fallen. Yet, wealthy countries compete with poor countries in the global economy, and cost of retirement benefits can be a burden, especially in a system that is employer-based. How does society balance the need for a retirement system with the need to ensure its economy remains globally competitive?
 9. **Society wants systems that help people lead better lives, but how much choice can society remove from individuals?** What is the line between social good and individual choice? This includes the choices made by employers (if they sponsor retirement programs).

Individuals' Needs, Risks and Roles

In discussing needs, risks and roles for individuals, one point was repeated many times: individuals are diverse. Not all individuals have the same needs, not all individuals face the same degree of risks (or even the same risks), and therefore no individual will play, or can be expected to play, the same role in his or her retirement. One attendee expressed some frustration at the end of the session that we hadn't gone through and definitely answered the question of "how much risk can the individual absorb." But in retrospect, the question might not have been answered because how much risk different individuals can absorb varies widely based on personal characteristics. Retirement 20/20 will explore the commonality of needs, risks and roles and point out how they may change based on personal characteristics.

The conference focused mostly on how needs, risks and roles vary based on individual circumstances. Participants considered how key characteristics of the system, such as retirement age, expectations of work in retirement and ability to bear risk vary widely based on individual circumstances such as marital/family status, income, education and type of employment. Also discussed briefly was that an individual's birth cohort (e.g., early baby boom, generation X) may be a factor in the degree of retirement risk they face as it relates to their degree of participation in the economic growth of the late 20th century.

One role that most people agreed that individuals weren't able to handle was investor; there was near universal agreement that the evidence shows that individuals do a poor job investing assets for retirement. Many people discussed how it may be unrealistic to ask someone to manage a portfolio of investments, given how difficult that is for highly trained professionals to do (the analogy given was requiring someone to know how to fix a car in order to be able to drive it). One concern with giving more retirement planning responsibility to individuals is the effect of economic myopia, which is discussed at length in the section on markets.

Individuals' Needs

What individuals need varies based on circumstances, but more critically, what certain individuals need may drive changes in the system in ways that are not good for other individuals.

What individuals need is to fund their retirement, including lifetime income, long-term care and health care. As a corollary to that, most individuals need some degree

of protection (either through pooling or hedging) against the risks of retirement. What degree of risk pooling or hedging is needed will vary based on individual characteristics, including family status, income level, presence of a retirement plan, workforce expertise (desk job or manual labor) and home ownership. The debate about individual needs quickly evolves into a discussion of what level of risks should be covered and how much of that risk should the individual be expected to bear.

Participants discussed at length the relationship of retirement age and individuals' needs. Today, over 50 percent of retirees in the United States and Canada ask for the Social Security benefit at the earliest possible age (age 62 in the United States). There is a clear tendency by many people to take benefits at the earliest age possible. Increasing the retirement age has very little public appeal but studies show that pushing back the date of retirement is the equivalent to additional savings. However, not every job can be done at older working ages (e.g., physically demanding jobs).

Individuals do not as a whole make good retirement planning decisions. Individuals may need help planning for retirement, depending on the nature of the retirement system and the degree to which benefits are automatically accumulated and distributed (without individual action). To date, that retirement planning expertise has been focused on the well-off, who face different issues in retirement (i.e., tax and estate planning) than lower and middle income individuals.

Individuals' Risks

All individuals face similar risks in retirement. These include outliving assets (longevity risk), inflation risk, death of a spouse, premature retirement risk, employment risk, disability risk, investment risk, health care risk and long-term care risk.

The individual risk issue becomes more difficult because the wide diversity in types of individuals leads to a different level of risk experienced by different segments of the population. Participants discussed in particular different family types, income levels, education levels and physical demands of different jobs. This diversity means that different people have a different level of risk but are also more or less able to handle that risk. For example, some unmarried people are more vulnerable financially in retirement, and education level impacts earnings and disability rates.

At the same time, demographic changes mean more individuals are vulnerable to these retirement risks. Changes over the last 35 years include: a smaller percent of households have married couples, smaller family sizes and unequal growth in income at different level of income (lowest 50 percent of households have 2.5 percent of wealth). In addition, risks are not randomly distributed among all individuals. A

greater proportion of the risks are borne by individuals with lower incomes. In addition, those individuals may already be less able to mitigate the risk, as access and participation in retirement plans is often a function of income and type of employment.

Economic risks in particular depend partly on timing, including when an individual enters and leaves the workforce. One participant also discussed emerging evidence that your birth cohort has an effect on your economic wealth as well; individuals who are part of the early baby boom (the first years of the baby boom cohort) are much better prepared financially for retirement relative to individuals born later in the baby boom because they were able to take advantage of growing employment and housing markets to help them in their wealth accumulation.

Finally, as retirement systems change, individuals are more exposed to disability risks. Traditional pension plans (defined benefit) often contained an insurance feature that provided a “full retirement income” even if the participant became disabled early in his or her career. Defined contribution plans, however, don’t contain those insurance protections. Individuals not only face disability risk which may force them into retirement before they planned (and with fewer savings than they planned) but also the risk that they become disabled early in their careers with no way to save for retirement for themselves or their spouses.

Individuals’ Roles

The debate on individuals’ roles ties back somewhat to the level of risk individuals have and are able to bear. The other facets of the role have to do with how well individuals are, in general, able to handle the process of accumulation and decumulation of wealth. In other words, how much should retirement vehicles operate without individual action (or intelligent individual action) and how much should they operate automatically?

One panelist cited surveys showing poor investment understanding by participants in DC plans over a period of many years. Individuals are saving sooner but generally are aware that they are not saving enough to maintain their current living standard into retirement. Human behavior gets in the way of making the right investment decisions even when information is available. The concepts of automatic participation in DC plans and automatic employee contribution increases and automatic investment choices were discussed (some of this is part of the new pension legislation). Participants agreed it would help but were not sure if this was the whole answer. Also discussed was the concern that much of the activity and research to date has focused on the accumulation phase; the decumulation or payout phase is more complex than the accumulation phase.

Countering this were discussions that employers face legal risk (real or perceived) if they decide to make certain decisions for employees. Many employers believe that self-directed 401(k) type plans potentially provide less litigation risk (at least today) because participants are completely responsible for their own bad outcomes. If the employer was making investment decisions for employees, and there was any sort of a less-than-optimal outcome, the employer may face a lawsuit.

Participants also discussed whether it was helpful to individuals to have set retirement ages. Some individuals believe that since any benefit can be made actuarially equivalent, no fixed retirement age would benefit the system. This would make it easier for knowledge workers to remain on the job as long as possible, while workers in physically demanding jobs would still be able to retire early. However, other participants brought up the role that set retirement ages play in signaling to individuals the appropriate age at which to retire. If individuals are not given any retirement age, they will likely retire at younger ages even though their employer benefits and social insurance aren't designed to cover early retirement.

Tensions

Differences between individuals lead to many tensions. In that case, society may be asked to step in and determine what the best solution would be.

1. **Wealthy individuals want more personal control (less forced pooling).** Tensions arise between the needs of the individuals unable to cope with many retirement risks and the desires of individuals who are better off (from a wealth standpoint) who want choices that permit them to determine what they do with their wealth. For example, wealthy individuals may want to pass wealth onto the next generation, and since they often face fewer risks and have greater wealth, they are able to do so if this is their choice. However, offering these well-off individuals choice may come at the expense of less wealthy individuals who benefit more from systems that automatically pool risk (e.g., traditional defined benefit plans, social insurance). Society will have to determine to what degree wealth accumulation and decumulation vehicles are a matter of choice/individual control, and to what degree wealth accumulation and decumulation are automatically pooled to share risk between those who are more and less well off.
2. **Individuals are poor at making long-term choices, yet often prefer systems that force more decision making.** Individuals often voice a preference for the 401(k) type plans which allow them control over contribution level, investment decisions and distribution of funds. Yet, studies show that most

individuals don't contribute nearly enough to meet their future retirement needs. And, studies by behavioral economists and others show that individuals don't always make the best long-term decision.

3. **Society wants to protect individuals from making bad choices**, as those who are least fortunate and then make bad choices will be more likely to turn to society for assistance as their resources diminish. One example is individuals outliving their assets. A degree of annuitization may be important to society, but well-off individuals may prefer not to annuitize to pass wealth to heirs and minimize their taxes.

Another set of tensions arises from diminished expectations. Individuals want “what their parents had.”

1. **Individuals may want plan design features that are no longer appropriate**, either for their employers or for society. Subsidized early retirement benefits and even retirement at age 65 are features that most participants currently see as their right, even though they may mean plans don't achieve what employers and society need them to achieve.
2. **Benefit levels were established in the post-WWII economy**, which was growing rapidly and faced little global competition. These levels are likely unsustainable today.

One participant connected the fact that participants in defined contribution plans tend to work longer and save more, which may be in line with social and employer needs. Individuals may not get the plan design they want, or think they need, which will create tensions between individuals and their employers and society at large since these savings may still not provide an adequate retirement.

Finally, individuals may have risks they need to have hedged but the markets are unable to hedge at a price that is attractive to individuals. In this case, society may need to step in to find other forms of risk hedging that may not be as efficient as the markets but are done at a cost individuals can afford. One example is systematic longevity risk (the risk each generation lives longer than the last). Systematic longevity risk can add greatly to the cost of an individual in pooling or hedging his idiosyncratic longevity risk (the cost that he will live longer than someone else in his generation). The markets could hedge that risk—by offering longevity bonds to insurers—but to date there hasn't been interest in these instruments. Society could hedge that risk by issuing these instruments itself or through schemes that pass on that risk to future generations (Social Security and the OAS/C/QPP systems do that currently).

Markets' Needs, Risks and Roles

The markets in this terminology refer to both the capital markets (equity and debt) and financial institutions (e.g., banks and insurance companies). Markets may have a primary role to play in any retirement system, as the natural place in a free market for hedging and pooling of risk to occur. During the conference, much of the discussion about markets focused on whether markets were complete and if stakeholders are able to use markets efficiently.

Markets' Needs

Market needs for retirement systems are similar to market needs for other market transactions: transparency, liquidity and market participants.

One key, unspoken market need is for all stakeholders to understand and accept market pricing. One key tension in this area is that market pricing for retirement issues is difficult for many stakeholders to accept. Retirement income is a long-term commitment, and the market has indices to price (value) these (e.g., long-term Treasury bonds). However, behavioral economics has shown that individuals are often subject to a form of economic myopia, whereby amounts that are payable in a distant future are discounted at a higher rate than the current market rate. The effects of this myopia, and the difficulties it creates when markets function in the retirement system, were discussed in light of defined benefit plan deficits, projected deficits in social insurance systems and individual expectations of future income provided by defined contribution plans.

1. **Defined benefit plans:** One observation was that markets may not have truly taken into account deficits run by defined benefit plans. One participant observed that just because something is disclosed does not mean that markets focus on (or correctly evaluate) what was disclosed. The past practice of pricing plans incorporating equity returns without regard to market risk may have encouraged myopia on the part of plan sponsors. This practice sets the price for the plan at a level that plan sponsors saw as reasonable, but one that did not truly reflect the market cost of the plan (for example, the cost required for someone else to take over the plan). This tension is leading many employers and shareholders to reevaluate the worth of defined benefit plans in light of market pricing discipline.
2. **Social insurance:** There was a discussion about future deficits in Social Security and Medicare (U.S.), with many other countries facing deficits in their social insurance and old-age medical assistance programs. The U.S. Congressional Budget Office estimates the cost of the Social Security income program is currently 4

percent of GDP and will grow to 6.4 percent by 2050. Medicare is now 2.4 percent of GDP. By 2050 Medicare will be 7 percent to 22 percent of GDP, depending on whether it grows at the rate of GDP or up to 2 percent per annum faster. Yet, markets seem not to be adjusting bond prices in light of these looming deficits. Participants questioned whether capital markets are not proficient at discounting long-term risks (large unfunded liabilities) for either employer or social systems or if they are simply savvy enough to realize that the promised benefits will be reduced to match the available funds (politicians will revoke promises made).

3. **Individual choices:** Discussion about the inability of individuals to make savvy investment choices and to understand the risks of investing continued from the individual session into the market session. Many of the same issues around behavioral economics and the ability of the individual to participate in his or her own retirement planning were discussed in this session.

One example came out in the discussion. One panelist asked: Why isn't the default investment in a DC plan a deferred annuity? Answer: The cost looks too high. Is it too high due to inefficient markets or to economic myopia? Some participants felt the cost is by definition what the market charges and therefore the cost is not too high (just more than what people want to pay, which shows either that people are not saving enough or more likely that long discount periods are distorting their judgment of cost). Other participants thought the cost was too high partly because of statutory interference (in the United States, defined contribution plans offering annuities to participants must follow the "safest annuity" rule). Another participant noted that over 40 years ago markets stopped selling insured deferred annuities to defined benefit plans because they were told they were too expensive (which may be another example of economic myopia and questioned why market pricing would now be accepted).

If economic myopia does affect system stakeholders, this may lead to difficulty in creating complete markets for instruments that would pool and hedge retirement risk. It can lead to a preference for defined contribution rather than defined benefit type plan arrangements. It can also lead individuals to dismiss risk pooling, and may require other stakeholders (e.g., society) to create incentives/mandates for such pooling.

Several panel members noted that capital markets have not developed instruments to facilitate trading key retirement risks (e.g., inflation and longevity). Though insurance companies can pool risks, they cannot call upon the securities markets to distribute the risk broadly or to share the systematic risk. In this case, it may be that we will not

see development of market instruments far in advance of demand. There is a chicken and egg problem: better prices may be discovered with better analytic tools; better tools are not developed unless there is a market demand; market demand awaits better prices. If the chicken and egg await each other in a stalemate, we have what economists call “market failure.” Sometimes markets seem to fail merely because they have not yet matured. Sometimes there are other impediments. In either case, this may be an area where society can accelerate maturity, remove impediments and facilitate development.

Markets’ Risks

Most risks faced by markets center around benefit designs that can’t be priced, statutory/regulatory systems that encourage off-market pricing or behavior that doesn’t maximize market efficiency and interference from other stakeholders in markets. But, this also creates a tension, for the “interference” with the markets could be seen by other stakeholders as a necessary market intervention to ensure that a hedging or pooling system is available at a price which market participants view as affordable.

For example, there was discussion that plan designers should avoid off-market benefit designs and options. The example given was using the 10-year coupon rate for crediting on cash balance accounts since this can not be hedged for longer than one year at a time. The panel said there is a need to make market-related promises.

One theme that emerged several times was the risk to the market, and to the retirement system, of the health care system and long-term care system especially in the United States. As noted above, costs in these systems are growing at a rate that outstrips GDP growth. The more resources devoted to health and long-term care, the less that can be devoted to other obligations. More critically, the instability of increases in those obligations as well as individuals’ inability to pool and hedge their risks for these coverages mean other retirement income risks can only be less effectively hedged or pooled. Partly this is because individuals cannot devote resources to retirement savings or pooled vehicles for fear of short-term changes in cost or coverage that would require more immediate income.

Finally, markets can create economically perfect situations, but other forces, e.g., litigation, can make these economically rational responses infeasible. In this case markets may want other stakeholders (e.g., society) to step in, although that intervention may affect the market pricing.

Markets' Roles

A large amount of discussion took place around what risks markets ought to hedge, and how might the markets move to become more complete. A large discussion was held around the appropriateness of providing inflation protection, with disagreement among conference participants as to the importance of full inflation protection (that is, index all benefits for inflation. There seemed to be agreement that some degree of inflation protection was necessary; the debate was over how much.). The discussion centered on what the difference is between an individual's inflation exposure post-retirement, and whether that requires an income indexed to CPI. In this respect, the inflation discussion is similar to that around other risks: to what degree are individuals exposed to any particular risk and what is the most appropriate way for the market to respond to that risk.

Markets have a role in setting prices, and markets may need policy makers and others to stop trying to improve on market pricing. However, there may be a role for society that overlays the market role ensuring that individuals pool and hedge in the markets. Society can also work to find group pooling arrangements that pool and hedge risk at the lowest possible cost, or even act as a reinsurer to encourage market pooling.

Tensions

Most of the tensions arise from the desire of markets to be the source of all pooling and hedging with the incompleteness of markets and stakeholder needs that go beyond the role markets can fill. As noted earlier this may be shaped by economic myopia and how that affects stakeholder perspectives.

1. **It is not the role of the markets to redistribute wealth.** If society wants wealth redistribution, it has to develop solutions that don't utilize capital markets (e.g., most social insurance systems redistribute wealth from workers to retirees). However, if society wants retirement systems solely based on an individual's own savings for retirement, it cannot expect the markets to further redistribute this money from wealthier to poorer retirees. Society could be left with taxing retirement income to ensure wealth redistribution, which may not be politically feasible given retiree voting power.
2. **Markets may be the most efficient place to hedge risks, but what if markets cannot hedge at a price that is perceived as affordable?** What if markets cannot create hedges as quickly (and in the volume) that individuals need? Should society step in and create non-market hedges? If individuals cannot afford the hedge, or the markets aren't prepared to offer the hedge (or offer it in the quantity needed) then should society create a non-market-based hedge?

Consider longevity risk. Markets can pool idiosyncratic risk (e.g., through annuitization), but the act of pooling idiosyncratic risk often means the pooler (e.g., insurers) takes on systematic longevity risk. Ideally, insurers could turn to markets for instruments to hedge their systematic risk. But today, the markets do not offer this hedge. Social insurance, on the other hand, hedges systematic longevity risk by passing it on to other generations (if the retired generation lives longer than expected, working generations pay more taxes). In the best world, society would make the decision to set up non-market-based hedges based on complete information and transparent pricing. Some might argue that today's off-market hedges aren't transparently priced.

3. **Asking individuals to purchase hedging and pooling directly from markets may require a level of individual sophistication that for most individuals may not be attainable, and also may be less efficient than group pooling.** While markets may be the best place to pool and hedge risk, it may not be most efficient for individuals to directly approach the markets to obtain that pooling and hedging. Most individuals lack the financial understanding to be able to make wise purchasing decisions, and only wealthier individuals can purchase expert advice. An intermediary system may be required, wherein groups approach the markets to purchase annuities rather than individuals. This could also have the attraction (to the markets and individuals) of lowering transaction costs, although individuals would not necessarily get the most customized risk hedge.
4. **Incomplete markets for other products may lead to incomplete markets for retirement hedging vehicles.** Individuals face many risks in their adult working lifetime that they have to hedge. Saving for retirement requires taking resources that might otherwise be used to hedge those other risks and devoting them to long-term saving to prepare for retirement. To the extent that there aren't products to pool and hedge these other risks, individuals will save less for retirement.
5. **There is a discontinuity between the legal benefit promise to individuals and the promise as priced by markets.** A good example of this is the defined benefit system in the United States, where the only legally promised benefit is based on past pay and past service (the benefit accrued to date) but accounting and other measures are based on the cost of the ongoing plan, where benefits based on final pay continue to grow over time. In this case, the accounting cost is higher than the benefit value for younger, shorter-service employees and is lower than the benefit value for older, longer-service employees. This creates tension between the employer and employees because the market price does not equate to the statutorily promised benefit.

Employers' Needs, Risks and Roles

In discussing the role of the employer in the system one thing became very clear. There exists a very large tension around what different stakeholders expect the employer to do in the system, which may, in the U.S./Canadian voluntary retirement system, be driving employers out of the system. Employers want benefits to be a tax-deductible form of compensation. In exchange for that tax deduction, many countries have built regulations around how those benefits are to be provided, including requiring preservation of forms of payments, coverage of wide number of employees, and limits on benefits to the highly paid. This may have the effect of decreasing benefits as a form of compensation, as certain features may not be appreciated equally by all employees. In addition, society wants guarantees on payments of these benefits, which markets may not like unless they are funded immediately, as they represent a long-term financial commitment of these employers to something that is not part of the core business. As such the employers may feel “stuck” with a program that is too complicated, doesn't meet the needs of many of their employees and seen as a drag on profitability by the markets. This reduces the desirability of retirement programs, vis-à-vis other forms of compensation, and can lead to their demise. We see this today as the elimination of defined benefit plans and their replacement by defined contribution plans where the employer's role is often to make a periodic contribution and facilitate the transfer of the employer and employee money.

Understanding this tension is critical to understanding the needs, risks and roles of employers and, if so desired, creating a retirement system which allows employers to play a role without setting up the conditions of its destruction. As many participants at the conference noted, employees do better at preparing financially for retirement if their employer is involved.

Employers' Needs

Employers need a retirement system that supports their primary purpose. This came out in several ways in the discussion, but three themes emerged. First, employers primary purpose is business (or, in the case of public plans, public service), not managing a retirement plan. Second, private employers in particular need to be competitive, domestically and internationally. Finally, private employers in particular need to be responsive to their owners.

First, employers need a retirement system which understands that the employer's primary reason for existence is its business purpose. The support of any retirement system (or sponsorship of any retirement plan) is secondary to that purpose. Employers

want any retirement plan they sponsor to enhance their business purpose, primarily by allowing them to attract, retain and retire the right people. Employers acknowledged that attraction was generally based only on the existence of a retirement plan not its design. Some participants offered that the plan that might be best at retaining older workers (e.g., a defined benefit plan) may actually be least attractive to younger employees. It was noted that younger employees in particular have very little faith that the retirement plan will be of value to them, partly because they don't see themselves retiring from the job they have as a young adult but also because they have little faith in institutions in general.

Second, employers need to be competitive, both domestically and internationally. Several participants noted the difficulty of employers competing with non-U.S./Canadian based companies where all retirement benefits (and, for U.S. companies, health benefits) are provided by the state. Part of this desire to remain competitive translates to a desire to remain flexible. Employers want to be able to change the design of programs as their needs change, and to offer different benefits to different portions of the workforce. Regulation of plans was cited as an obstacle, both in requiring certain coverage and levels of benefit but also in the sheer additional volume of paperwork that adds costs to the operation of plans.

For example, the subject of phased retirement programs, and the lack of many formal phased retirement programs, was discussed at length. The emerging consensus was that most employers don't want to get locked into any particular design for phased retirement, and would prefer to keep these arrangements as ad-hoc. While this may be most beneficial to employers, it may not be most beneficial to the retirement system as individuals may be confused about their options, and society may have more difficulty designing social insurance systems to complement new working models if those models remain informal.

Finally, private employers need to be responsive to their owners, which for publicly owned companies includes shareholders and, by extension, financial markets. The traditional defined benefit retirement plan in particular is seen today as requiring financial commitments that extend beyond the lifespan of the typical employer (which is much shorter than perceived by prior generations). Moreover, fixed promises are seen as bearing costs exceeding the value of benefits earned today. If employers are to sponsor retirement programs, they need to be responsive to the needs of owners, which may change the role that employers play, particularly regarding any risk they might bear.

Employers' Risks

Employers' risks are concentrated around their ability to run a business. The previous sections discussed what employers needed from a retirement system to be able to run that business efficiently.

However, if employers are to have a role in the retirement system, two of the largest risks they face are around regulations and fiduciary liability. Regulatory risk was touched on briefly in the prior section. It considers whether employers will be able to operate plans easily and in a way that best fits their business needs, including the ability to change the plan as needed to meet current business conditions. Regulations and court rules have, for example, required guaranteed minimum benefits and/or a guarantee of rights and features, dictated ownership of surplus assets, required coverage across a wide range of employees and limited benefits that could be given to the highly paid. Regulations also require paperwork for plan qualification (to ensure that benefits are tax deductible). Many small employers in particular have cited regulation as blocking their ability to sponsor retirement plans. Others cited the Age Discrimination in Employment Act (ADEA) as potentially blocking opportunities to redesign retirement systems in a way that met emerging employment needs (e.g., by pushing out retirement dates).

Most discussion however centered on fiduciary risk. Many employers fear not just a lawsuit, but the suggestion of a lawsuit. Most participants reported that fiduciary responsibilities are not well understood, leading employers to spend resources to understand and protect themselves, but also to employers abandoning plans altogether. Other comments were made that concerns about fiduciary liability led employers to all act in a similar manner, which may be to the detriment of employees and shareholders. Examples cited included plan investment policy and an unwillingness to offer annuity forms of payment from 401(k) plans. Lawsuits can also lead to reputation risk; no employer wants to be the next IBM sued over a change in plan design.

One question participants asked was if employers' risks would increase in the future if they didn't have strong retirement plans today. Would employers be able to retire those people they want to retire and retain those people they want to retain without the right retirement systems to help them? It may be, for example, that those people they want to retire are the most unwilling to retire because they don't have sufficient retirement savings. Additionally, employees who aren't able to retire under defined contribution schemes may believe they have a case to sue their employers because they haven't sufficient resources to retire.

Employers' Roles

Employers have a clearly defined primary role in the business or public sector. That role as producer of goods and services or provider of services to the public is what shareholders and taxpayers expect as the primary duty of these employers. Given this primary role, what is the employer's role with respect to retirement systems? One participant questioned the employer role as a defined benefit plan sponsor since the employer acts as an insurance company without the skill sets to understand or manage that risk. This participant felt management of those risks better belonged to insurance companies, as that is their business.

However, we find that society may need the employer to take a role in the retirement system. Several participants noted that individuals are more likely to save when employer plans are available. One participant quoted EBRI statistics that approximately 77 percent of those making between \$30,000 and \$50,000 save in an employer defined contribution plan if one is offered. However, in that same income group (\$30,000–\$50,000), if no employer plan is offered, only 5 percent save. Another participant noted, much to his surprise, that research indicated people distrust professional financial advisors and much prefer that their employer have some responsibility for securing investment advice.

The question may not be whether the employer has a role, but whether that role should continue to be what it has been traditionally, in the defined benefit system (where the employer takes on risk), or in the defined contribution system (to provide access and possibly some funding but nothing else) or is there something in the middle. One question to be answered is whether the employer ought to be assisting employees with risk pooling type solutions, similar to how employers currently help employees understand investments. That role was not discussed much at the conference as it is not a role that is defined in the system today.

Tensions

Many tensions for employers reflect that employers' primary role is to run their business, which creates tensions with their role in the retirement system. These tensions must be well understood to be able to create an optimal role for employers in the system.

1. **Not all employers have the same needs, can handle the same risks, or can take on the same role.** Smaller employers in particular need to be considered (in the United States, small employers represent 99.7 percent of employers,

employ about 50.1 percent of the private work force and provide about 75 percent of the net new jobs added to the economy). Small employers as a rule have more limited resources at hand, so if systems become too complex (e.g., regulations), they simply cannot afford to participate. Other ways in which employers can vary is by type of employee, industry, location, nature of competition and other economic factors. As such, other stakeholders, particularly society, cannot expect all employers to play the same role or fulfill the same role in the same way. This may point to a need for flexibility of design, multitude of offerings and simplicity in the system to permit as many employers as possible to participate.

2. **Employers face global competitors where health care and retirement are not part of the business model yet they are powerless to even the playing field.** Employers have two choices when faced with these global pressures; they either continue to support the benefits but at a higher cost or they can cease to provide these benefits. They cannot change the basic model whereby the responsibility for those benefits lies with employers. Is this model the best model for the economy (and society by extension) or should society adopt another system? Note that many countries which have state provided health and retirement benefits are considered to be in worse shape in terms of the health of those systems (particularly the retirement systems) given the aging Western economies.
3. **Employers need flexibility, but individuals (and society) want predictability and guarantee of benefits.** Employers face shorter business lifespans than previously assumed. Many employers today will not be in existence 25, 50 or 75 years from today when promised retirement benefits become payable. Employers note that if they are to participate in a system, they want flexibility, particularly in the design and funding of benefits. However, individuals and society, who see these promised benefits as forms of deferred employee compensation, want security that the benefits will be paid. Employers may not be able, or willing, to provide the guarantees that individuals and society want, particularly as often the continued existence of their business may be out of their control (e.g., hostile takeovers).
4. **Employers may be making short-term choices that are not the best for tomorrow's retirement system.** This may be occurring in several ways:
 - a. Managers, who make decisions on behalf of shareholders, often have a very short-term focus. While this may enhance the creative destruction that keeps the core business strong, it may cause managers to shed programs that they don't see benefiting shareholders such as retirement plans. The absence of

those plans could create other problems later, for example if employees don't retire due to lack of financial resources, creating financial pressures on future managers. While many economists would say that's the problem of future shareholders, society may want to balance out concerns for longer-term economic health with short-term economic benefits.

- b. Employers have limited resources for compensation programs, including benefits. Rapidly escalating health care costs have caused many employers, with their employees consent, to shift resources away from retirement plans to health systems. While this keeps today's health care costs manageable and meets employees stated needs today, it potentially threatens the ability of employees to retire in the future.

5. **Employers cannot be expected to redistribute income yet society may want employers to play a large role in providing benefits.** When we discussed the role of society in a retirement system, we discussed ensuring that income is redistributed from wealthy to poor and providing a stable retirement for the majority of its citizens. To the extent that society wants an employer based retirement system, it is probably unrealistic to expect employers to redistribute income from the wealthy to the poor. An employer's goal is to compensate employees effectively; to the extent that they are expected to provide additional compensation to low-paid participants or limit compensation to high-paid participants if done through retirement benefits, this could limit employers' incentives to participate in any retirement system. Several participants noted that, in the United States, the defined benefit system has over recent decades placed lower limits on benefits to the well paid through qualified defined benefit plans, which may have led to their decline, as company management saw decreasing personal value from those plans and therefore may have been more willing to eliminate them. This also prohibits the employers from effectively targeting compensation as they may prefer, and might induce them to target that compensation as cash (which has no restrictions) rather than as benefits.

Appendices

Needs, Risks and Roles (Outline Format)

Society

Needs of Society

1. Adequate.
 - a. Protect most vulnerable members of society by providing a minimum benefit above poverty level
 - b. May promote wealth redistribution
 - i. From wealthy to poor
 - ii. From retirees back to workers
2. Affordable
 - a. Does take resources from other social needs
 - b. Ensures risk pooling and hedging are done by most efficient player in the system (generally the markets but market price may not always be affordable to other stakeholders)
3. Sustainability
 - a. Across generations and within a generation
 - b. Equitable across and within generations
 - c. Does not require society to take money away from needs of others (e.g., children, foreign aid)
 - d. Builds political trust among stakeholders
4. Robust
 - a. Fair
 - b. Cover the great majority of the population
 - c. Create shared economic growth and productivity
 - d. Promote collective responsibility
 - e. Encourage complete markets that can pool risk efficiently
 - f. Ensure diverse sources of retirement income
 - g. Avoids moral hazards and perverse work incentives
 - h. Does not impede labor markets

Risks Faced by Society

1. Economic
 - a. Inefficient allocation of economic resources
 - b. Falling/unequally distributed economic growth & productivity
 - c. Capital market dysfunction/failure
 - d. Inflation
 - e. Adequate labor force participation
2. Political
 - a. Loss of fiscal and political integrity
 - b. Lack of political stability/harmony/solidarity (society does not like having a lot of poor people)
3. System failure
 - a. Low participation by individuals/employers
 - b. Private plan failure/instability
 - c. Lack of knowledge about retirement

Appendices (Cont'd)

Role of Society

1. Address imperfections
 - a. Individual planning horizons/bad individual decisions
 - i. Consumption smoothing
 - ii. Make sure a lifetime of choices were made "properly"
 - b. Lack of financial instruments
 - i. Offer suitable financial instruments if private markets are unable
 - ii. Offer suitable financial instruments if cost in private markets is too high
 - iii. Act as insurer (reinsurer) of last resort
 - c. Moral hazard of poverty at old age
 - d. Unequal distribution of wealth
 - i. Unequal distribution of wealth that could lead to poverty in old age
2. Promote political solidarity/integrity
 - a. Protect all individuals by assuring basic standard of living
 - b. Don't penalize retirees for benefits already earned
 - c. Ensure politicians act responsibly (correctly align political incentives)
 - d. Ensure roles for all stakeholders
 - e. Ensure buy-in by all stakeholders (partly by assuring basic standard of living)
 - f. Ensure risks are shared
3. Regulatory
 - a. Construct risk-sharing rules that apply to all stakeholders
 - b. Ensure fair markets (fair pricing)
 - c. Promote benefit designs that can be transparently priced
 - d. Ensure against market failure
 - e. Ensure complete markets (for retirement and other risks)
 - f. Regulate/supervise financial market intermediaries
 - g. Ensure plan sponsors meet fiduciary obligations
 - i. Provide clear guidance to plan sponsors to discourage frivolous lawsuits (and fear of frivolous lawsuits)
 - ii. Provide clear guidance on the role of and the degree of reliance that may be placed upon default options
4. Promote economic growth
 - a. Share growth and productivity more effectively
 - b. Stabilize markets
 - c. Control inflation
 - d. Create jobs
 - e. Promote an adequate workforce (may mean encouraging workers to work longer both to stabilize retirement systems and larger economy)

Appendices (Cont'd)

Individuals

Needs of Individuals

1. Guaranteed income in retirement
2. Disability protection (retiring before expected due to disability and disability hampering the ability to save for retirement)
3. Health care and long-term care
4. Well planned retirement
5. Stable investments
6. Choice to work or retire
7. Choice of how to enter retirement (including being able to phase into retirement with current employer)
8. Systems that meet differentiated needs of individuals
9. Complete markets to bear risk
10. Ways to take advantage of market pooling and hedging don't require individual expertise

Risks Faced by Individuals

1. Outliving assets
2. Inflation risk
3. Health care risk
4. Loss of spouse
5. Premature retirement risk (40 percent retire before they wanted to/planned to)
6. Age discrimination (availability of employment)
7. Investment risk
8. Long-term care risk

Roles of Individuals

1. Retirement planner
2. Worker
3. Investor

Markets

Needs of Markets

1. Transparency (impacts pricing)
 - a. Fees
 - b. Value of benefit promises
 - c. Governance
2. Benefit designs that permit transparent pricing and market hedging
3. Complete markets
4. Acceptance of market price by all stakeholders

Appendices (Cont'd)

Roles (Responsibilities) of Markets

1. Efficient pricing
2. Efficient risk bearing (risk pooling & risk hedging)
3. Allocation of risk
4. Discipline in pricing
5. Correctly priced retirement risk-taking (private and public)
6. Facilitate ways for individuals/groups to approach the market without being disadvantaged by other players

Risks Faced by Markets

1. Asymmetric information (of market participants)
2. Incomplete information (unsophisticated market users)
3. Failure of other systems
4. Interference of other stakeholders
5. Interference of other non-market forces

Employers

Needs of Employers

1. Be competitive including the ability to be competitive globally
2. Manage their workforce
3. Recruit and retain employees
4. Respond to employee needs and wants
5. Take on risks that benefit shareholders
6. Pool or hedge risks that don't benefit shareholders
7. Flexibility in benefits (design and implementation) used in workforce management
8. Flexibility in role
9. Better definition of fiduciary responsibilities in any retirement system
10. Protection from litigation risk
11. Protection from regulatory risk
12. Concentrate efforts on core business (not management of retirement systems)

Roles (Responsibilities) of Employers

1. Provide jobs
2. Reward shareholders/owners
3. Serve communities
4. Deploy capital in ways that best serve shareholders, employees and communities
5. Balance needs of employees and shareholders

Risks Faced by Employers

1. Litigation risk
2. Regulatory risk
3. Business risk (including global competition)
4. Human capital risk (the ability to attract, retain and retire the right employees)
5. Reputation risk

Appendices (Cont'd)

Conference Participants

Moderators

Robert L. Brown – University of Waterloo
Mary Nell Billings – Fedex Corporation
Michael W. Peskin – Morgan Stanley Investment Management
Anna M. Rappaport – Anna Rappaport Consulting

Speakers

Bradley Belt – former Director, PBGC
Richard Berner – Morgan Stanley
David Blitzstein – United Food and Commercial Workers
Zvi Bodie – Boston University School of Management
Melissa Favreault – The Urban Institute
Wayne Gates – John Hancock Life Insurance Co.
Jeremy Gold – Jeremy Gold Pensions
Robert Holtzmann – World Bank
Ray Kirk – Office of Personnel Management
Judith Knoll – Martin Tractor Company, Inc.
Jean-Claude Menard - Office of the Superintendent of Financial Institutions, Canada
Patricia K. Pou – Mercer Human Resource Consulting
Robert C. Pozen – MFS Investment Management
Sara Rix – AARP, Public Policy Institute
Dallas Salisbury - EBRI

Conference Attendees

Doug Andrews – University of Waterloo
Joseph Applebaum – U.S. Government Accountability Office
Joshua Bank – Mercer Human Resource Consulting
Steve Bonnar – Towers Perrin
Barbara Bovbjerg – U.S. Government Accountability Office
Chantal Bray – Mercer Human Resource Consulting
Anne Button – Deloitte Consulting LLP
Ronald DeStefano – Aon Consulting
Ronald Gebhardtshauer – American Academy of Actuaries
Mathew Greenwald – Mathew Greenwald & Associates
R. Evan Inglis – Watson Wyatt Worldwide
Malcolm Hamilton – Mercer Human Resource Consulting
David John – Heritage Foundation
Sandra R. Kruszewski

Appendices (Cont'd)

Claude Lamoureux – Ontario Teachers' Pension Plan
Joelleen Leavelle – Pension Rights Center
Thomas Levy – The Segal Company
Thomas Lowman – Bolton Partners
George "Sandy" MacKenzie
Christine Mahoney – Mercer Human Resource Consulting
Cynthia Martin – Federal Reserve
Chris Mayer – Principal Financial
Betty Meredith – INFRE
John Moore – CCA Strategies LLC
Charlene Moriarty – Buck Consultants
Elaine Noel-Bentley – Petro-Canada
Robert North – New York City Office of the Actuary
Mitja Che Ng-Baumhacki - AARP
Shaun O'Brien – AARP
Jeannine Markoe Raymond – NASRA
Virginia Reno – NASI
Maria Saaverda – Buck Consultants
Ronald Seeling – CalPERS
Don Segal – CCA Strategies LLC
Martine Sohler – Watson Wyatt Worldwide
Norman Stein – University of Alabama
Ken Steiner – Watson Wyatt Worldwide
Fred Vettese – Morneau Sobeco
Paul Zorn – Gabriel, Roeder, Smith & Co.
Emily Kessler – Society of Actuaries



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