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Pension Section News

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A View From the SOA's Staff Fellow for Retirement

By Andrew Peterson

The actuarial profession relies on the actuarial standards as an important tool in maintaining the self-governing aspect of our profession. Many pension actuaries practicing in the United States will be aware that the Actuarial Standards Board (ASB) has recently done significant work on the Actuarial Standards of Practice (ASOPs) that impact pension work. Changes and updates have been made to all the core ASOPs that inform pension actuarial practice within the last five years and a new "risk" ASOP is currently in process.

Additionally, the ASB is (as of July 2015) considering whether an additional ASOP specifically focused on public plan actuarial practice should be developed. The ASB issued a request for comments in July 2014 with a mid-November deadline that generated 55 responses (found here). Then in May 2015, the ASB took the unusual and added step of announcing a public hearing and inviting interested parties to testify. The hearing took place July 9 and included both another round of written comments submitted beforehand and verbal testimony from 16 individuals, most of whom were actuaries, but not all.

I had the privilege of attending this unique (and historic) event, so I thought a brief report to our readers would be of interest. An additional article is available via the Enrolled Actuaries Report's summer issue and, of course, the written comments submitted make for interesting reading.

FORMAT

The event was held at the Ronald Reagan Building and International Trade Center in Washington, D.C., and while the meeting room didn't have the aura of many of the Congressional meeting rooms, the event had a similar feel to a Congressional hearing. The ASB and its Public Pension Task Force (Bob Meilander, Alan Milligan, Frank Todisco and Mita Drazilov) were seated at a table at the front. Each person testifying was invited to a table facing the ASB and task force members, where they were given five minutes to provide their prepared statements. Then, the ASB and task force members were given a few minutes to ask questions of the person testifying. After the formal testimony period was completed, they moved into a short period where those who signed up at the start of the hearing could also testify. There was then a call-back period where they called back select speakers for additional questions from the panel. The event lasted about 3.5 hours, so it was an intense afternoon with much information covered.

KEY THEMES & RANDOM OBSERVATIONS

Much of the testimony mirrored the submitted comments, but I expect the value gained by the ASB and the task force was the ability to interact with the speakers through the question-and-answer sessions. I will highlight a few themes and some of my random observations from the event:

- There was a significant call for and acknowledgement that disclosures on risk need to improve, but nearly universal agreement among the actuaries testifying who currently work with public pension plans that disclosing a risk-free or market value liability is not the way to do that. Some did acknowledge that they do use a market liability for select calculations—e.g., withdrawal liability type calculations.
- Many speakers referenced the draft ASOP on risk and urged the ASB to finish it.
- There was acknowledgment by some that the financial economics/market-value debate which has been a significant ongoing discussion for pension actuaries over a number of years has prompted more focus on and led to better discussions about risk in the public pension arena.
- There was general (but not universal) agreement that the ASB could write principle-based statements that would weed out specific "fringe" practices (e.g., ultimate EAN method, perpet-

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Chairperson's Corner

By Aaron Weindling

The June meeting of the Pension Section Council included a joint session with the American Academy of Actuaries' Pension Practice Council. This group is analogous to our own Pension Section Council. We each recapped our current slate of activities to keep the other group informed and to explore topics for potential collaboration. Although news about conflict between our parent organizations may attract attention, members of the pension groups work hard to maintain a good relationship. We periodically coordinate the logistics for our meetings to allow joint sessions such as this one. Our volunteers come from the same pool of actuaries. In fact, the same individuals often contribute to activities sponsored by both organizations. One pension group—the Pension Finance Task Force—is even jointly sponsored by the Academy and the SOA.

The majority of our meeting, though, focused on more typical agenda items: reviewing ongoing Pension Section activities and identifying additional pursuits. Our overriding objectives are to deliver value to section members and to foster engagement among the community of pension actuaries. We spent a fair amount of time reviewing a survey prepared by the communications team that you have by now received. By the time you read this, we will have received and tabulated the results, but they are not available as of the time of writing. Perhaps the current vice chairperson and my successor, Julie Curtis, will have some interesting findings to share with you in the next issue of this publication.

We formed two new project oversight groups (POGs) at our meeting. One group, chaired by Julie Ocaya, will explore ways in which we can better utilize other media (particularly social media) to communicate with our members. The second, chaired by Grace Lattyak, will develop a series of podcasts to provide overviews of pension topics outside the expertise of the target audience. For example, the first such podcast will discuss multi-employer issues for pension actuaries who do not practice in that area. POGs such as these are temporary work groups established for a specific purpose. POG participation is not limited to council members, section members or even actuaries. If you've considered volunteering, POGs represent a great way in which to get involved.

Continuing with the topic of volunteering, we heard from Beth Bernardi, the SOA's director of member engagement. She called in to discuss the concept of micro-volunteering. This structure identifies very clearly defined volunteer tasks of limited scope—just a couple of hours. It enables new volunteers in particular to contribute in a meaningful way without the fear of overcommitting. Council members responded with interest to this idea. You may see some volunteer opportunities arranged in this manner in the future.

This is the last column I am to write as chair of the Pension Section Council. I've benefited both personally and professionally from the experience, and it's been an honor to meet and work with fellow council members. The terms of two noteworthy members, Monica Dragut and Martin McCaulay, end at the same time as mine. Special thanks to them for their efforts over the last few years. ■

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ual negative amortizations). These are sometimes used in developing contribution allocation procedures and have been particularly subject to public criticism. However, my sense was that there wasn't full agreement from those testifying about where the line should be drawn in that area or what specifically constitutes "fringe."

- There were numerous references made to the work completed by the various actuarial organizations in this area, including the SOA's Blue Ribbon Panel report, the Conference of Consulting Actuaries' white paper on public pension plan funding practices, and the American Academy of Actuaries' issue brief on principles for funding public pension plans. In addition, the panel asked a number of questions of the speakers about recommendations made in the reports. This showed me the importance of these sorts of efforts.

- There were several questions from the panel about who needs the additional disclosures that some were advocating for and concerns were raised about who should pay for additional disclosures some may view as being primarily for the benefit of stakeholders beyond the "intended users" (e.g., should plan assets be used to pay for something that investors, politicians, taxpayers, etc. may want but plan trustees don't think is needed?).

- A majority view of the actuaries testifying supported the view that the ASOPs should uniformly apply to all pension plans—e.g., the ASB should not create a separate public pension ASOP. However, several individuals argued that the lack of uniform regulatory control in the public plan arena creates a need for potentially separate standards.

The time spent on this work is probably one of the most important but also thankless volunteer roles in the actuarial profession.

These thoughts reflect some of my personal observations from the event. I expect that if you were to talk to someone else who attended, they might have found other aspects to highlight. It certainly was an interesting and important discussion for our profession and I don't envy those on the ASB and the Public Pension Task Force as they evaluate the input they received and decide how to proceed. The time spent on this work is probably one of the most important but also thankless volunteer roles in the actuarial profession. So let me express my thanks to those doing this work … and we'll stay tuned to the news coming out of the ASB as they move forward on this very important issue.

As always, if you have feedback on this topic or other activities of the SOA Pension Section Council, please contact me. ■

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Increasing Retirement Age: Report of the CIA Task Force

By Faisal Siddiqi

In 2012, the Canadian Institute of Actuaries (CIA) created the Task Force on Retirement Age to conduct a review of issues related to retirement ages in light of evidence of Canadians' increasing life expectancies and apparent willingness to work longer. The CIA requested a document that discussed the consequences, reasons, pros and cons, and the transition issues of raising the retirement age for many well-known Canadian public and private sector arrangements.

The task force completed its review and issued a report in May 2013 as CIA Document 213038. It concluded that it would be difficult to recommend one retirement age, formula or approach, deciding instead to assist the CIA to take a position on the issue in terms of presenting considerations for determining appropriate retirement ages. The task force report discusses the effect of raising the retirement age for the following plans/programs in Canada and related transition issues in light of certain key impacts:

1. Old Age Security/Guaranteed Income Supplement (OAS/GIS)

   Impact: the projected cost of these programs as a percentage of gross domestic product (GDP)

2. Canada/Quebec Pension Plan (C/QPP)

   Impact: effect on long-term contribution rates

3. Defined benefit (DB) plans

   Impacts: early retirement subsidies in public plans (especially federal) and legislative provisions imposing constraints on retirement-age changes

4. Defined contribution (DC) plans

   Impact: effect of increased longevity

5. Other government income programs—health coverage

   Impact: long-term cost

The overall conclusion of the task force was that no true crisis exists in any of the five programs reviewed with respect to retirement age, for the following reasons:

- a natural tendency for retirees and employees to adjust to demographic shifts without legislation;
- no anticipated increase in the projected cost of OAS/GIS or contribution rates to the C/QPP due to stability in the average age at which pensions commence;
- the limited degree to which health care costs increase purely due to aging;
- a decreasing percentage of the Canadian population eligible to receive lucrative early retirement subsidies in private defined benefit plans; and
- existing members of public service plans being largely unaffected by or subject to any meaningful change in their plans.

BACKGROUND INFORMATION AND DEFINITIONS

The task force established the following definitions:

- **Retirement age:** the age at which workers elect to retire, which is evidenced by exiting the labor force
- **Entitlement age:** the age at which a recipient is entitled to retirement benefits under a particular plan or program (but perhaps with a reduction from "full" benefits)
- **Baby-boom generation:** the cohort in Canada born before and after the peak in live births in 1959 (some variations in beginning and ending year exist); certainly, it was agreed that baby boomers would all be 65+ by 2031
- **Aged-dependency ratio (ADR):** the ratio of those age 65 or more to those age 20 to 64

The report includes a number of graphs illustrating increases in the age of Canada's population and Canadians' life expectancy from 1921 through 2006. The aging trend is primarily due to a number of factors: ever-improving life expectancy, continued aging of the baby-boom cohorts, and the low fertility rate of Canadian females now at 1.68 children per female, well below the rate of 2.1 required for population replacement. In addition, recent mortality studies suggest that mortality improvements for individuals over 65 of 0.5 to 1.0 years every 10 years. A surprising conclusion from the data is that the median age of the Canadian population is expected to remain stable and to start decreasing very slightly and very slowly only after 2050 if at all, after the baby-boom generation has passed. The passing of the baby boom is offset by the ever-increasing life expectancy of the remaining population. Table 2 of the report, reproduced below, shows the profile of the Canadian population over the next 20 years. It illustrates the rapid shift in Canada's demographics and that those 65+ will represent almost 25 percent of the Canadian population by 2036.

Age	1956	1976	1996	2016	2036
Under 20	39.4%	35.6%	26.7%	21.1%	20.2%
20–64	52.9%	55.8%	61.1%	62.4%	55.0%
65+	7.7%	8.6%	12.2%	16.4%	24.8%
ADR	14.6%	15.4%	20.0%	26.3%	45.1%
Inverse ADR	6.8%	6.5%	5.0%	3.8%	2.2%

The affordability of social programs in Canada depends upon the ADR. Table 3 of the report shows the ADR and inverse ADR.

Year	ADR	Inverse ADR
1956	0.146	6.9
1976	0.141	7.1
1996	0.200	5.0
2016	0.263	3.8
2036	0.451	2.2

Based on the above tables, Canada has a rapid shift in ADRs, which may impact the affordability of Canada's social programs. Canada can afford these program but only in a growing Canadian economy. Canada has the second highest increase in the aged-dependency ratio between 2010 and 2050 of the Organization for Economic Cooperation and Development (OECD) nations. Only Italy's is higher. Canada is higher than both the United States and United Kingdom.

PROJECTED COSTS OF SOCIAL SECURITY

The two most important social security programs in Canada are the OAS/GIS and C/QPP public retirement programs, and health care.

OAS/GIS costs are paid from general revenues (from taxpayers). Currently $36.5 billion (2012), this cost is projected to increase to $108 billion in 2030 (41 percent increase from baby-boomer retirements, 32 percent from longevity increases and 27 percent from inflation). OAS/GIS increases with the consumer price index (CPI), a standard measure of price inflation. Meanwhile, GDP, from which OAS/GIS are paid, normally increases faster than CPI. As a result, and notwithstanding projected increases in the ADR, OAS/GIS costs as a percentage of GDP are projected to remain relatively stable, increasing from 2.3 percent of GDP currently (2012) to 3.1 percent in 2030 and then returning to 2.6 percent of GDP in 2050. Changes to the OAS/GIS retirement age from 65 to 67 has mitigated some cost increases but further changes in the retirement age should not be necessary to maintain cost stability. Similar cost stability is reflected in projections for the C/QPP programs in the 25th CPP and QPP actuarial reports. The CPP is sustainable at 9.9 percent of pay and QPP at 10.8 percent of pay (as at 2017). The CPP has adjusted its early/late adjustment factors to reflect increases in life expectancy.

With respect to health care, it is well established that costs rise with age. However, the cost impact of aging is only about 1 percent per capita per year and most reports on the impact of aging on health care costs indicate that even a low level of economic growth can support an expansion of health care services. Further, with increases in longevity, health care costs that occur toward the end of life are delayed and aggregate health care expenditures are pushed downward. Therefore, as far as population aging is concerned, health care costs are sustainable.

RAISING THE ENTITLEMENT AGE AND PUBLIC POLICY

A question arises as to whether it would be good policy to raise the entitlement age, i.e., normal retirement age of Canada's social security programs, notwithstanding their cost sustainability based on the analysis provided in the report. To address this question, reference is made to a 1999 paper prepared by Brown and Bilodeau in which a model is developed to determine a macroeconomic indicator of an optimal age at retirement. This model was based on a fraction for which the numerator is total demand for consumption of goods and services by all members of society and the denominator the total supply of goods and services by the country's working population. The balancing variable in the model was the retirement age and the model projected that from 2017 to 2034 Canadians should retire between ages 60.3 to 60.9 to keep supply and demand of GDP in balance.

Brown and Bilodeau noted that the denominator of this ratio can increase with increases in the labor force (e.g., due to increases in immigration or the rate of labor force participation) or increases in capital investment leading to higher rates of productivity growth (currently 0.9 percent per year). Brown and Bilodeau's analysis indicated that with a 1.29 percent increase in productivity, no increase in retirement age would be required to maintain equilibrium. With flat productivity, the retirement age would need to rise to only 65.7 by 2046 for equilibrium. Essentially, from the model's perspective, no change in retirement age would be needed to maintain balance, although Brown and Bilodeau indicated that due to increasing life expectancies, male and female retirement ages would need to increase from 65 currently to around 74 by 2041 to maintain a constant period of payout for social security benefits (i.e., equal to 1966 levels when the C/QPP were introduced).

THE SHIFT IN RETIREMENT AGE PRIOR TO ANY CHANGE IN OAS ELIGIBILITY AGE

The average age at which people leave the labor force has been 63.4 for men and 62.2 for women (2009). These ages are expected to increase to 64 by 2030. This is not expected to impact the economy, as many retirees have continued to work in some fashion and continue to contribute to the economy. The percentage of working retirees age 60–65 in 2006 was 22.7 percent for men and 13.1 percent for woman.

The task force report contains some analysis on retirement ages and the transition from work to retirement, citing a

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study by the Régie des rentes du Quebec in which the retirement age was defined as the age after which 50 percent or more of a person's income comes from retirement pensions and savings rather than employment income. The Régie observed this age to be between 59 and 60 (later for self-employed workers). The report also covers some general trends in retirement ages and income, employment status and working in retirement as well as data from OECD countries on retirement ages.

The report also reviews a number of international reports, concluding from the data that "we should expect that Canadian workers will stay in the labour force longer, regardless of public policy."

RECENT CHANGES TO OAS/GIS AND C/QPP

In 2012, the Canadian federal government introduced changes to the OAS/GIS to increase the eligibility age and introduce the option of delaying retirement. The eligibility age for the basic OAS pension and GIS will increase gradually from 65 in April 2023 to 67 in January 2029. The Spouse's Allowance eligibility age will increase from age 60 to age 62. Starting July 2013, the OAS pension can be deferred for up to five years with an actuarial increase of 0.6 percent per month of delay, with the objective of encouraging longer labor force participation.

The normal C/QPP retirement age is 65. Pensions can start earlier or later by up to five years with a constant 0.5 percent per month adjustment factor. Starting in 2011, the adjustment factor for early retirement was gradually increased to 0.6 percent per month over the period Jan. 1, 2012, to Dec. 31, 2016. For postponed pension commencement, the increase adjustment factor will grow to 0.7 percent per month for retirements on and after January 2014, as indicated in the following table.

Effective date	Decrease factor	Increase factor
January 2014	0.56%	0.70%
January 2015	0.58%	0.70%
January 2016	0.60%	0.70%

This means that in the future, if a person starts a CPP pension at age 60, it will be reduced by 36 percent. Pension payments starting at age 70 will increase by 42 percent. Slightly different rules apply to QPP benefits.

In addition, the Work Cessation Test was removed. Now for both the CPP and QPP, additional contributions are required with slightly more pension benefits earned (actuarial equivalent). For the CPP, the report notes that for each additional year the retirement age is increased, it will result in 0.3 percent lower contributions.

RETIREMENT AGE AND DB PENSION PLANS

Defined benefit plans may encourage early retirement by allowing unreduced pensions to be paid before normal retirement age (usually 65) if certain age and service criteria are met. Alternatively, plans may not encourage early retirement by not offering such incentives.

> In the public sector, DB plans cover 82 percent of the workforce and participation rates are high with age 60 as a typical retirement age.

Unsurprisingly, early retirement incentives are popular among plan members and unions and, sometimes among employers for downsizing programs. However, many of these incentives have been removed over the last 10 to 15 years with the result that workers have deferred early retirement for a variety of reasons including insufficient pension savings, high levels of economic uncertainty and job enjoyment.

Most defined benefit plan members retire within one or two years of the plan's unreduced retirement age, subject to applying some common sense comparison of the pension payable versus employment earnings to be forgone on retirement.

The report incorporates a thorough review of early retirement incentives in defined benefit plans. The report notes that in the 1980s and 1990s, employees wanted "Freedom 55" and to abruptly stop working whereas employers benefited from younger, better-educated employees entering the workforce. Employers could afford the significant costs of early retirement pensions due to high interest rates and rapid economic growth.

The report notes that conventional wisdom has evolved, with employees taking more interest in longer careers, wanting to work longer and looking for more gradual transitions through phased retirement versus abrupt work stoppage. For employees, retirement age is increasingly a personal choice. For their part, employers are increasingly motivated to retain knowledgeable and experienced staff, to contain the cost of subsidized early unreduced pensions and to sponsor scalable pension plans to meet the needs of a scalable workforce. In the private sector, only one-third of employees have a workplace pension plan with only 20 percent participating in DB plans, most of which are expected to adjust their retirement age and eligibility ages in an actuarial neutral way, similar to CPP and OAS plan changes. In the public sector, DB plans cover 82 percent of the workforce and participation rates are high with age 60 as a typical retirement age. The report suggests that early retirement incentives in public sector pension plans are unlikely to change due to taxpayers being poorly informed about their cost and pensions being considered part of the "deal" for working in the public sector—i.e., slightly lower pay than in the private sector compensated by generous guaranteed pensions. In addition, and unlike private sector pensions, public sector pension costs are not valued on a marked-to-

market basis with the result that their true costs are understated or incorrectly valued.

The report suggests that in terms of public policy and the sustainability of pension plans, Canada's problems are less severe or dire due to low public debt, abundant natural resources, strong banking systems, partially funded C/QPP plans and modest public pension benefits. However, population aging is still an issue in Canada, which could be addressed by some combination of later retirement, less private borrowing and more retirement savings. The report suggests that the high cost of early retirement incentives could be addressed by amendments to the Income Tax Act to remove permitted subsidies for early retirement benefits (e.g., the 30/60/80 value), or through collective bargaining changes with public sector unions to reduce contributions and early retirement incentives. The report notes that some changes have occurred in the public sector, including 50 percent cost-sharing, conditional indexing, shared-risk pension plans and gradual increases in retirement ages.

RETIREMENT AGE AND DC PENSION PLANS

By definition, defined contribution plans, registered retirement savings plans or other capital accumulation type plans do not provide a guaranteed pension at retirement. Instead, an individual's retirement income from these vehicles depends upon their accumulated contributions, investment income and bond yields if or when annuities are purchased. Consequently, in a DC plan, any age is an unreduced retirement age. If individuals defer retirement and market rates and investment income are favorable, retirement incomes can increase. Earlier retirement and/or poor investment performance will result in less retirement income. The report notes that DC plan benefits are easily portable. Members typically work for multiple employers in a career, are often self-employed, and work as contract employees or part time. The report addresses DC retirement ages minimally, concluding that they are probably driven by social security retirement ages more than by anything else.

With respect to other government programs (provincial welfare, workers compensation, employment insurance, LTD and STD almost all of which are provincially funded) raising the retirement ages beyond 65 will mean those programs cover older workers and become more costly. This provides little incentive to the federal government to be concerned.

In conclusion, though there is a trend for longevity increases in Canada and there are some public policy reasons to entertain increasing retirement ages under various Canadian programs, there is still no compelling reason to do so with a broad-brush stroke in Canada. ■

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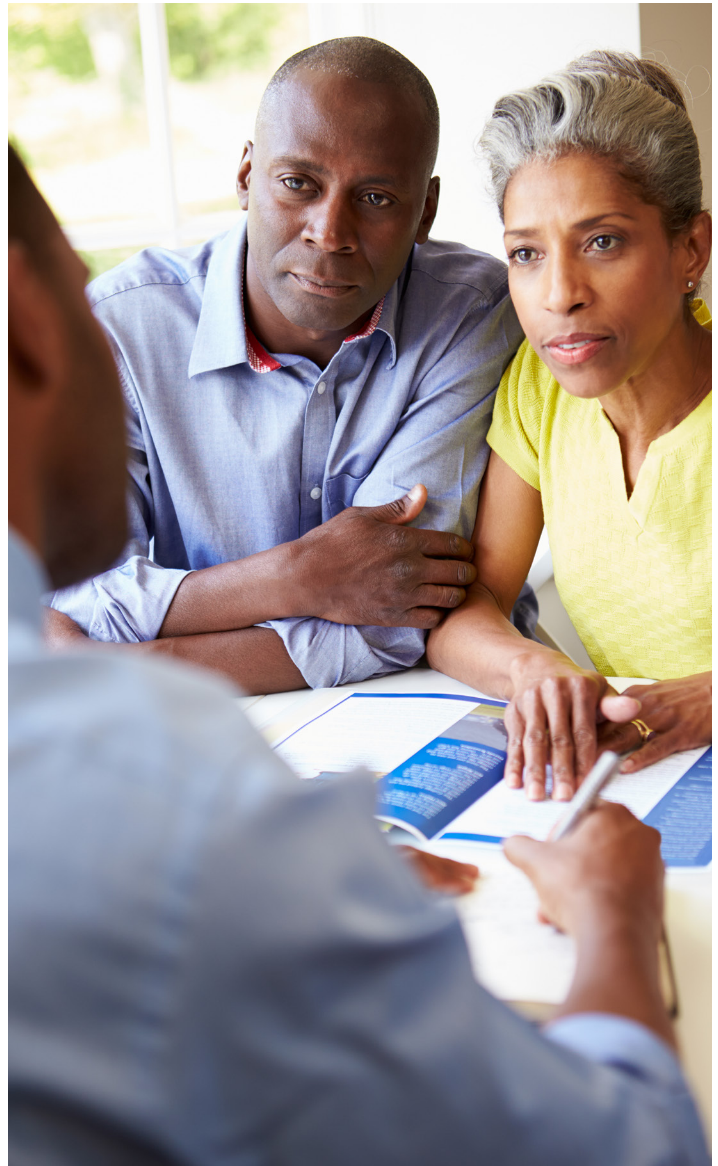
How Well Are Americans Nearing Retirement Doing?

By the Committee on Post-Retirement Needs and Risks



The Survey of Consumer Finances (SCF) from the Federal Reserve Board provides a picture of the economic status of Americans and includes analyses by age group, education and other factors. The survey is repeated every three years and includes a great deal of detailed data. "The Wealth of Households: An Analysis of the 2013 Survey of Consumer Finances," from the Center for Economic Policy and Research, also provides a very interesting perspective on the middle wealth quintile of Americans age 55–64.

The report shows that in 2013, the middle group nearing retirement is not as wealthy as the group nearing retirement in 2010, and is actually less wealthy than similar groups going back to 1995. This report provides data on average net worth and average net worth outside of primary residence for the middle quintile for Americans age 55–64 from 1989 forward.

Year	Average net worth (000s) (includes both financial and nonfinancial values)	Average net worth excluding primary residence (000s)
1989	$175.3	$62.8
1992	184.6	105.1
1995	181.9	89.8
1998	199.5	107.9
2001	237.3	127.7
2004	319.3	160.7
2007	289.8	136.1
2010	197.7	100.6
2013	168.9	89.3

Source: Figures 2A and 3A in "The Wealth of Households: An Analysis of the 2013 Survey of Consumer Finances," from the Center for Economic Policy and Research

In contrast, in 2013, recent retirees, those age 65–74, were a little better off than recent retirees in 2010. The average net worth for the middle quintile rose from $229,000 in 2010 to $239,000 in 2013. This was down from $271,000 on 2007. All values include financial and nonfinancial wealth.

"Segmenting the Middle Market: Retirement Risks and Solutions, Phase 1," an earlier study from the Society of Actuaries' Committee on Post-Retirement Needs and Risks, has provided information on the financial and nonfinancial wealth of middle income market segments defined earlier. That study offers the following results:

Wealth of Middle Income Households—Age 55 to 64
Analysis based on 2010 Survey of Consumer Finances

Household type	Number of households	Median income	Est. median net worth	Nonfinancial assets	Financial assets	Nonfinancial assets (%)
Middle mass household segments (25% to 75% of all households)						
Married	5.7 million	$82,000	$277,000	$181,000	$96,000	65%
Single female	2.7 million	32,000	41,000	34,000	7,000	82
Single male	1.8 million	44,000	76,000	63,000	13,000	83
Mass affluent household segments (75% to 85% of all households)						
Married	1.1 million	$146,000	$1,241,000	$671,000	$570,000	54%
Single female	.5 million	64,000	185,000	117,000	68,000	63
Single male	.4 million	85,000	339,000	214,000	125,000	63

Source: "Segmenting the Middle Market: Retirement Risks and Solutions, Phase I," from Committee on Post-Retirement Needs and Risks
Note: Financial assets exclude the value of defined benefit pensions and Social Security.

This study was conducted twice: once with 2007 SCF data and once with 2010 SCF data. Conclusions from the two studies were similar, and it is believed they are still valid. The main conclusions for this work include the following:

- For the middle income market, nonfinancial assets (e.g., equity in primary residence, autos and some other property) are often much larger than financial assets.
- Married couples are much better off than single individuals. Single males have greater assets than single females.
- Many households without defined benefit plans will not have adequate resources for retirement. They will need to manage very carefully and may have to substantially reduce their standard of living.

The question has been raised with the Committee on Post-Retirement Needs and Risks whether this study will be updated with the 2013 SCF data. At present there are no plans to update it. However, other work will provide added insights into some of these issues. The committee is currently working with the University of Southern California on an update of the Older Americans Study, which will provide much more information in response to the issue of how well off Americans nearing retirement are. That report will provide new insights and is expected to be available within the next year.

SUMMARY AND CONCLUSION

The Committee on Post-Retirement Needs and Risks is concerned about understanding how well middle class Americans are prepared for retirement and how well they are doing in retirement. The "Segmenting the Middle Market" work offered insights into the financial status of this group. The SCF analysis shows a continued decline in the situation of middle quintile people nearing retirement age. Together these two studies offer a picture of the situation for middle income Americans, and indicate that our prior conclusions are still valid. The new SCF data also reinforces the concerns that many people will enter retirement without enough money. ■

Good Tool for Helping Clients and the Public

By the Committee on Post-Retirement Needs and Risks

"Managing Post-Retirement Risks: A Guide to Retirement Planning" has been produced by the Society of Actuaries' Committee on Post-Retirement Needs and Risks and is commonly referred to as the Risk Chart. In its third edition, the Risk Chart provides a comprehensive discussion of various post-retirement risks and strategies for managing such risks. Both individuals and plan sponsors should find the chart helpful in understanding these risks and in designing plans to manage them.

For each identified risk, the discussion includes some background, a discussion of how well the risk can be predicted, some strategies for the management of the risk and its consequences, and additional comments. The risks include the commonly discussed risks such as longevity, inflation, interest rates, and stock market changes. In addition, risks include seldom discussed risks such as business continuity, post-retirement employment, changes in public policy, unexpected health care needs, lack of available facilities or caregivers, loss of ability to live independently, change in housing needs, change in marital status, unforeseen needs of family members, and bad advice, fraud or theft. After the discussion of the risks is a discussion of related planning issues. In this article, we will mention a few of the issues that people often do not think about.

One section discusses public policy risk. Some of the elements of public policy risk include increases in taxes, new kinds of taxes, reductions in benefits from public programs, increases in Medicare contributions, tougher standards to qualify for Medicaid, and unknowns under the Affordable Care Act. Some of the strategies mentioned in connection with this risk are using tax-exempt bonds, Roth IRAs and Roth 401(k)s. The discussion of Roth includes conversions from taxable IRA's.

The section on housing needs discusses whether the housing accommodates aging. It also discusses special housing for the elderly, including housing targeted at people with certain health or mental conditions. The discussion of strategies and housing includes some mention of long-term care insurance and Medicaid, but points out that most special housing is financed out-of-pocket by the individual. The discussion includes a focus on paying off a mortgage, taking a reverse mortgage and the use of continuing care retirement communities.

Another section, "Other change in marital status," discusses divorce and the resulting impact on benefits. The Employee Retirement Income Security Act of 1974 (ERISA) provisions with regard to splitting pension benefits are mentioned as are the use of prenuptial agreements for couples with children from prior marriages who marry at older ages. ■

Behavioral Economics is Important to All of Us

An interview with Tom Toale

WHY IS BEHAVIORAL ECONOMICS IMPORTANT TO PROFESSIONALS INTERESTED IN RETIREMENT PLANS?

An understanding of behavioral economics will help practitioners be aware of the "*Predictably Irrational*" (to quote the title of a very good book on the topic) responses people tend to have to choices, and how those choices can be influenced. The fascinating thing is not just that humans are irrational but that their irrational responses can, to an extent, be predicted by the way in which those choices are presented. These choices include what and how much to spend or save, whether to have salad or pizza for lunch, and whether we watch NPR or Fox News. And changing the way those choices are presented can change their responses! This knowledge can help us influence clients, plan sponsors and colleagues, enabling them to make better (more rational) decisions.

WHAT IS MEANT BY FRAMING AND DECISION ARCHITECTURE?

Framing refers to how we present a choice to another, and how that presentation affects their choice. A relatively early study (Levin and Gaeth 1988) indicated that meat described as "80 percent lean" (a positive frame) was perceived more favorably than the same meat presented as "20 percent fat."

Decision (or choice) architecture is closely related and can refer to the manner in which, for example, "either/or" choices are presented. Default options are probably the most well-known examples; if the default choices on your new hire orientation package are "yes, participate in 401(k) plan," participation will be higher than would be the case for a "check yes or no" format. Designs like this are popularly known as nudges. Choice architecture can also refer to a conscious decision to limit choices. While more choices are (in traditional economics) always better, in many situations—e.g., investment options for 401(k) plans—an excess amount of choice can lead to paralysis or selection of the safe or familiar investment—a money market fund or corporate stock.

AS YOU LEARNED ABOUT BEHAVIORAL ECONOMICS OVER THE YEARS, DID ANYTHING SURPRISE YOU?

I have believed that behavioral economics had something to contribute to many fields since I was in grad school 30 years ago—when it was still somewhat of a heresy. But even I am surprised by the amount of change in behaviors that something as simple a change in a default election can elicit. Changing the default election for organ donation on a license application to yes or having a clerk ask if an applicant wishes to be a donor have significantly improved donor rolls. I am also surprised to see myself fall into traps—I'll drive a couple of extra miles to save 10 cents a gallon if gas is cheap, but not if it's $3.75 a gallon. Why? The savings in the latter case is not a "just noticeable difference," as discussed in the Weber-Fechner law. But it's still 10 cents—so I am clearly being irrational!

ARE YOU FAMILIAR WITH "THE BEHAVIORAL ECONOMICS GUIDE 2015"? HOW CAN ONE GET A COPY? ARE THERE ARE ANY ITEMS THAT MIGHT BE OF PARTICULAR INTEREST TO ACTUARIES?

I have reviewed it and it's very well done. Copies may be downloaded at *http://www.behavioraleconomics.com/*. The site has a wealth of interesting information. I found the listing of behavioral science concepts to be particularly helpful. There is still not a standard vocabulary of concepts—the "just noticeable difference" I referred to above, used by many practitioners, is treated as a subset of the "Mental Accounting" concept in the guide.

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DOES "THE BEHAVIORAL ECONOMICS GUIDE 2015" INCLUDE A LIST OF DEFINITIONS OF TERMS? ARE THERE SOME THAT WE OFTEN DO NOT THINK ABOUT WHICH MIGHT BE OF INTEREST?

Precommitment is an interesting idea—that if we want to achieve a goal, precommitting to it publicly will help. The guide discusses the well-known Save More Tomorrow™ program in the 401(k) arena. Another example likely occurs when plan sponsors amend their defined benefit plan's investment policy to adapt a liability-driven investment policy when funding reaches a stated level—or when I promise my daughter I'll come to Chicago to see a show she's curating! Inertia helps here—the effort involved in formulating a new strategy, for example—as does the cost of moving from an accepted plan of action to a new one—not seeing the show would have highly adverse consequences. The guide points us to a website—stickK (*www.stickk.com*) —that uses "commitment contracts" to help people attain their goals.

Confirmation bias occurs when we seek out information to test our feeling or hypothesis—seeking information from a source that is likely to support our belief. Depending on our views on the Second Amendment, we may turn to Fox News or NPR for information—and be gratified to learn that our opinions are reasonable!

The IKEA effect, if only due to the name! While the endowment effect holds that simply owning something increases its value in our eyes (a predictably irrational belief), the IKEA effect holds that invested labor further increases our valuation of that thing. This may be a factor in why frozen defined benefit plan sponsors continue with risk-seeking investment portfolios when their plans become fully funded—most investment committees have invested a lot of time and energy in getting the most important decision—asset allocation—right, though I have not looked for academic validation for this belief yet.

WHAT CAN WE LEARN FROM BEHAVIORAL ECONOMICS ABOUT ANNUITY PURCHASING?

Let's focus on individuals considering purchasing a simple life contingent annuity—fixed payments for the lives of the primary annuitant and spouse. We'll limit ourselves to two issues:

Framing: Framed as an investment, an annuity may not always be a good deal—if you die right after purchasing it, the return will be zero. But if the annuity is framed as an income stream you cannot outlive, that objection may become less important. Jeff Brown and collaborators have done extensive work on this issue (see references).

Anchoring: If boomers like me get past this objection, we then notice that the amount we get in a monthly benefit is low—and we may then blame current interest rates. While this is of course correct, our experiences decades ago, when Treasury rates were in the teens, may—if we're not careful—provide an unrealistic "anchor" to our expectations for "normal" interest rates.

WHAT ABOUT SOCIAL SECURITY CLAIMING?

Clearly there are many people for whom claiming Social Security benefits at a relatively early age makes sense—job loss and ill health among them. However, for relatively healthy people who don't "need the money," the annual benefit increase granted for deferring claiming would seem an overwhelming reason to delay. Very often, this does not happen.

Framing is a factor here, as well. A breakeven analysis is frequently used to help individuals make their decision. This is framed as "if you live past 84, delaying benefits is a good idea, but if you don't think you will, then claim them ASAP." Given this framing—"if you don't think you'll live past 84, claim now"—and a profound misunderstanding of longevity, from a traditional economic perspective, most people opt to take Social Security too soon.

WHAT ARE SOME OF YOUR FAVORITE BOOKS ON THESE ISSUES?

The ones that got me interested in these issues are *Advances in Behavioral Finance*, edited by Richard Thaler, and the less intimidating *The Winner's Curse*, which he wrote. More recent books I've enjoyed include *Thinking Fast and Slow* by Daniel Kahneman, *Nudge* by Thaler and Cass Sunstein and *Predictably Irrational* by Daniel Ariely—the historical import of the title alone still impresses me. It was the realization that not only are individual decisions sometimes irrational (as early behavioral economists such as laureate Herbert Simon correctly asserted in discussing "bounded rationality"), but that traditional economists were content a simple error term handled the issue. The concept that those decisions were *predictably* irrational—that with insight into issues like framing, behavioral economists could predict those irrational responses—was I think the insight which validated this as a legitimate field of study.

The Society of Actuaries also has sponsored two research projects on behavioral finance matters affecting retirement related decisions; this information is available here.

HAS BEHAVIORAL FINANCE INFLUENCED RETIREMENT PLAN STRUCTURE AND HOW?

It has had a significant effect on defined contribution plans. The idea that "too much" choice both reduces participation and hinders effective investment selection has caused service providers and sponsors to focus on offering a limited number of diversified investments. Save More Tomorrow™ (SMarT), a concept designed by Thaler and Shlomo Benartzi, addresses several behavioral economics heuristics in an attempt to increase participation and savings rates.

It is also having an effect on the management of defined benefit plans. One is in the area of "mental accounting." Plan sponsors—and until recently

An understanding of behavioral economics will help practitioners be aware of the *"Predictably Irrational"* responses people tend to have to choices, and how those choices can be influenced.

analysts and rating agencies—have been more tolerant of pension debt (underfunding) than they have been of publicly floated debt (it's even been referred to as "soft debt"). This tolerance is evaporating as rating agencies and management become more cognizant that pension underfunding is a real risk. This has led sponsors to float public debt to fully fund—and in some cases terminate—their defined benefit plans.

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Learn More about Outsourcing Employee Benefit Services

By Anna M. Rappaport

One of the topics studied by the 2014 ERISA Advisory Council was "outsourcing employee benefit plan services." The report is available on the ERISA Advisory Council website, and offers a variety of interesting insights into this topic. While many actuaries have some knowledge of this topic, this report offers some interesting insights and is a chance to learn more about an important current business topic.

The recommendations are in five major categories:

A. Educate plan sponsors on current practices with regard to outsourced services

B. Clarify the legal framework under Employee Retirement Income Security Act of 1974 (ERISA) for delegating fiduciary responsibility to service providers

C. Provide additional guidance on the duty to select and monitor service providers

D. Facilitate the use of multiple employer plans and similar arrangements as a means of encouraging plan formation

E. Update and provide additional guidance on insurance coverage and ERISA bonding of outsourced service providers.

As an actuary, I thought about outsourcing as a way to get work done, but not generally as a way to transfer responsibility. Employers who sponsor benefit plans assume significant responsibility for their management, and serve as fiduciaries. One of the big questions is whether and when that fiduciary responsibility can be transferred or delegated.

CONFUSION ABOUT OUTSOURCING

The report includes a discussion of outsourcing investment services including investment strategy, asset allocation, underlying investment management, manager selection and monitoring, and proxy voting. A development noted is the "outsourced chief investment officer." The report also discusses outsourcing the plan administrator and named fiduciary roles. Contracting practices are also discussed in the report. One of the big issues discussed is how much responsibility can be delegated and in what cases fiduciary responsibility can be delegated. This is very important to plan management. A section of the ERISA Advisory Council report focuses on where the buck stops:

"Based upon the oral and written testimony from a number of witnesses, the Council learned that the provisions under ERISA that govern outsourcing arrangements are (i) complex, (ii) not widely understood by plan sponsors and other fiduciaries, and (iii) not clear in several key respects. Thus, plan fiduciaries face challenges in determining who is ultimately liable for what or, in other words, where "the buck stops." However, the Council believes that the Department can play a key role in better defining the roles and responsibilities of plan sponsors, named fiduciaries, and service providers to whom key plan responsibilities are outsourced. This can be accomplish by (i) clarifying whether, by naming the named fiduciary in the plan document, the "buck" essentially stops at the named fiduciary rather than the employer, (ii) defining the scope of fiduciary liability when the fiduciary outsources plan services to non-fiduciary services providers, and (iii) explaining how the co-fiduciary provisions interact with the general fiduciary duty provisions in the outsourcing context and the knowledge requirement."

DISCUSSIONS ABOUT MEPS

The report also discusses multiple-employer plans (MEPs) as a special type of outsourcing provider. MEPs allow full outsourcing of benefit management, and for a true multiple-employer plan, audits and filings are conducted at the plan and not the employer level. A big question today is the future of open MEPs. These are plans that permit unrelated employers to join a MEP, but they are not recognized by the Department of Labor as a single plan, so each employer is separately subject to plan filing and audit requirements. The ERISA Advisory Council report points to testimony in-

dicating that MEPs will be advantageous to small employers if the rules are liberalized so that they are treated as a single plan. Some individuals believe that the increasing availability of MEPs will increase the availability of pension benefits for small employers. However, there are available various types of prototype plans that are efficient and easy to implement. Therefore, it is unclear how much such arrangements will increase small employer offering of benefits unless there is a mandate. Clearly, advocates for these plans are asserting that they can increase small employer benefit offerings.

However, liberalizing such arrangements can have downsides. Other types of multiple-employer benefit arrangements, particularly multiple-employer welfare arrangements (MEWAs) have been subject to abuse. That leaves open the question of what types of protections are needed in such MEPs. The ERISA Advisory Council identified areas where MEP administration/operation can be improved. The report stated:

> "Based upon the testimony, the Council believes that MEPs, including open MEPs, may prove helpful in increasing retirement plan coverage of employees who work for small businesses. The Council recommends that the Department take several actions with respect to MEPs, including: (i) consider the benefits of multiple employer arrangements in facilitating plan formation in rulings and interpretations; (ii) consider developing a sample structure for MEPs that will help ensure that conflicts of interest, prohibited transactions, and fiduciary independence and disclosure are in place; and (iii) develop safe harbors for MEP sponsors and adopting employers that would not expose them to liability from acts of non-compliant adopting employers."

Later on the report stated:

> "The Council does recognize that there are "bad actors" in the retirement MEP marketplace. In fact, the Department of Justice and the Department of Labor have recently addressed situations involving such bad actors. However, given the potential advantages of MEPs, the Council recommends that the Department consider how open MEPs may be used, while still protecting the interests of participants and beneficiaries. This tension between balancing the benefits of outsourcing against potential downsides for participants is most prevalent in the area of vendor oversight. One of the fundamental benefits of a MEP is that the plan sponsor can relieve itself of many of the obligations of plan administration by having those obligations assumed by the MEP sponsor. Where the MEP sponsor is also a vendor, there is clear potential for a conflict of interest."

CONCLUSION

The ERISA Advisory Council report increased my knowledge about outsourcing, and also pointed out important business issues and questions to me. It is clear there are areas where regulatory guidance is fuzzy, and where evolving practices leave open questions. I recommend the report to actuaries and suggest that this is an important area to contemplate. ■

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What is Required to Improve Retirement Income Security?

By Paul J. Donahue[1]

There is widespread agreement among actuaries, economists and pension regulators that promotion of lifetime income is the single most critical element of improving retirement security. According to the American Academy of Actuaries:

> In today's aging society, the widespread assurance of lifetime income is the single most important step needed to improve the retirement security of older Americans. The American Academy of Actuaries believes that retirement security can and should be significantly improved by the promotion of lifetime income, and that actuaries have an important role to play. The Academy has identified lifetime income as a top public policy issue and strongly supports initiatives that will lead to more widespread use of lifetime income options.[2]

This essay sets out views on the economic realities from an employer's perspective[3] underlying employer-based benefits and identifies three regulatory reforms critical to increasing the take-up of lifetime income in employer-based benefit plans. Without these reforms, there is no clear path to statistically significant increase in the take-up of lifetime income. As necessary as these regulatory reforms are, more plan sponsor and participant education will also be needed.

THE ECONOMIC FOUNDATION: EMPLOYERS SEEK MAXIMUM BANG FOR THEIR BENEFIT BUCKS

To remain competitive in the global economy, "it is imperative that companies find ways to control labor costs."[4] A primary reason labor costs have been increasing rapidly is the rising cost of benefits.[5] Cornell ILR School professor Kevin Hallock "suggests employers can optimize the salary/benefits formula by thinking carefully about how much benefits are worth to specific workers, versus how much they actually cost."[6]

Regulatory reforms are critical to increasing the use of lifetime income in DC plans.

Exhibit I.
Comparison of employee costs to employee valuation[7]

Benefit	Estimated employer cost to provide specified benefits as a percentage of payroll[8]	Percentage of employees considering benefit extremely or very important[9]
Health insurance	12.8%[10]	86%
Life insurance	.3%	43%
Disability insurance	.45%	44%
Defined benefit pension	10%	50%
Defined contribution pension	4.5%	75%

As Exhibit I shows, a dollar spent on a defined benefit plan benefit is not cost-effective as an employee recruitment and retention tool compared to other benefits.[11] Almost as many employees view life and disability insurance as important as a defined benefit plan, though life and disability insurance each cost the employer less than 5 percent of the cost of a defined benefit plan. Additionally, 25 percent more employees consider a defined contribution plan important as consider a defined benefit plan important, though the DC plan costs the employer less than half as much as a defined benefit plan.

THE RETREAT OF THE DEFINED BENEFIT PLAN[12] IS IRREVOCABLE, DRIVEN BY FUNDAMENTAL ECONOMICS

If participants understood the value of a deferred annuity benefit, they would be electing annuities where available as distribution options in defined contribution plans.[13] This would likely be the case even if there were no regulatory or administrative costs in addition to the cost of the benefit itself. Further, the long-term nature of a defined benefit plan and the absence of fiduciary safe harbors mean there is an additional risk of litigation expenses and damages arising from participant allegations that the plan sponsor has breached its fiduciary duty.

BALANCE SHEET EFFECTS EXACERBATE THE CURRENT COST PROBLEM

In an attempt to control costs, employers moved decades ago away from the actual purchase of deferred annuity segments as the primary funding vehicle for defined benefit plans. In the first stage of this movement away from funding plan benefits as accrued through annuity purchases, plan sponsors kept plan assets in a trust during an employee's working life and purchased annuities at retirement. The next step was to retain all plan assets and liabilities, with no risk transfers to insurers. The Financial Accounting Standards Board's FASB 158 required publicly traded companies to put the funding status of their pension plans on their balance sheets and to recognize certain pension costs as a component of other comprehensive income.[14] This greatly

increased the prominence of unfunded pension liabilities considered by market analysts to be too large compared to the size of the business enterprise.[15] The termination or freezing of defined benefit plans and the transfer of balance sheet assets and liabilities to insurers is a completely rational response to the employee valuation and balance sheet issues.

PLAN SPONSORS WILL NOT VOLUNTARILY ASSUME FIDUCIARY EXPOSURE

Fiduciary exposure is a deferred cost with no current or future benefit. As discussed above, employers need value for their benefit costs to remain competitive in the labor market. As Exhibit 1 shows, defined contribution plans are exceptionally attractive from a cost/benefit perspective. More than 75 percent of employees view a defined contribution plan as important, not far behind health insurance, though the defined contribution costs the employer less than half as much as health insurance.[16]

To increase provision of employment-based lifetime income, significant regulatory changes are required. A plausible case could be made, given the unique characteristics of an annuity investment, that the existing 404(c) regulations require a plan sponsor offer lifetime income as a plan option.[17] In any case, the regulations should be revised to require that DC plans relying on the safe harbor offer lifetime income. There is surely as much justification for such a requirements as for the existing requirement to provide a low-risk, liquid, income-producing fund.[18] Even with such a requirement, but more important without it, there should also be an issuer safe harbor that would enable an issuer of lifetime income annuities to assure an employer that the issuer fell within a safe harbor. It is my view that even a safe harbor which required the employer determine issuer compliance is not enough, in the absence of a requirement that a plan provide a lifetime income option.

Further, Exhibit I and the election experience of the relatively few defined contribution plans that offer lifetime income show employees simply do not appreciate the economic value of annuities.[19] To meaningfully increase provision of lifetime income, plan sponsors will need to have the ability, without incurring additional fiduciary exposure, to allocate irrevocably some or all of the employer match to lifetime income. This would require modification of the 404(c) safe harbor regulation.[20]

Employers rationally do not wish to increase benefit costs in a way that gets no employee credit. Within the last several months, there have been two settlements of employee class action defined contribution plan suits that totaled $92 million.[21] Results like these are not only meaningful financially, but they partially negate, in terms of negative employee perceptions, the value of the benefit plans. The cases are ample evidence of why employers have no appetite whatever for additional fiduciary exposure, regardless of the social utility of taking that risk. For that reason, the two regulatory reforms I propose are essential to enhancing the role of employer-based lifetime income in ensuring the retirement income security of Americans. ■

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ENDNOTES

[1] I am grateful to Anna Rappaport, Anna Rappaport Consulting, and Nan Tecotzky, vice president, MetLife, for comments on earlier drafts.

[2] See also the Society of Actuaries' fact sheet "Reaching Guaranteed Lifetime Income: Tackling Nine Misconceptions"; "Lifetime Income—An Important Focus of Retirement Planning" by Anna Rappaport; and "Lifetime Income Insurance Products and Emerging Issues" from the American Academy of Actuaries.

[3] I do not address social utility of various benefits in my analysis of employer benefit economics. I share the academic consensus that increasing provision of lifetime income is in the national interest, but I do not expect employers to take on an added economic burden imposed by perversely structured benefit incentives because they are socially useful.

[4] "Employee Compensation," Encyclopedia of Management.

[5] Ibid.

[6] "Employee Compensation: Know the True Costs of Employment and Optimize Them to Benefit Employers, Employees," from the Center for Advanced Human Resource Studies.

[7] I wish to emphasize at the outset that this table says nothing about the economic cost/benefit of the benefits listed, nor anything about the relative social utility of the benefits. Further, the data represent averages, presumably for employers who provide, on a normalized basis, all the benefits, and there would be wide dispersion around these numbers for particular employers. Obviously, not all employers provide these benefits.

[8] These are approximations based on data from the Bureau of Labor Statistics' "Employer Costs for Employee Compensation," Table 6, private sector, goods producing and all services, and "Retirement Costs for Defined Benefit Plans Higher Than for Defined Contribution Plans." In the case of health care, see the following note. While I have no doubt the percentages vary materially from what we could calculate with actual compensation figures for employers offering particular benefits, I believe the numbers are good enough to support the arguments I make based on them.

[9] "Views on the Value of Voluntary Workplace Benefits: Findings from the 2014 Health and Voluntary Workplace Benefits Survey," in *EBRI Notes*, p. 4.

[10] *See* The Kaiser Family Foundation's "Snapshot: Employer Health Insurance Costs and Worker Compensation." This is a number for 2010, but I have not projected.

[11] Employees with significant service still accruing service credit in a defined benefit plan are an exception to this generalization. The plan significantly promotes the retention of these employees. However, these are also the accruals most costly for the employer.

[12] I exclude from consideration cash balance plans, which I intend to discuss further in a subsequent essay. I believe that with some relatively modest legislative changes, there could be a greater role for simplified cash balance plans.

[13] http://www.americanbar.org/content/newsletter/groups/labor_law/ebc_newsletter/12_spring_ebc_news/12_spring_aball_ebc_choose.html

[14] *See* Financial Accounting Standards Board's FASB 158.

[15] *See* GM Chief Financial Officer Chris Liddell in Craig Trudell, "GM Puts $2.32 Billion of Stock Toward Funding Pensions," *Bloomberg Business*, Jan. 14, 2011: "You can't have this huge tail wagging the small dog. You can't be a $100 billion pension plan with a car company attached to it. The value of the company should be driven by the quality of the vehicles and the margins we make on them, not [by] what the discount rate is."

[16] Problems evaluating deferral lead participants to undervalue defined benefit plans and to overvalue defined contribution plans. Even in the absence of a match, for each dollar of DC contribution, an employee sees take-home pay go down $.7 and an investment account increase $1. The employee perceives an immediate gain of $.3, since the employee is ignoring future taxes. In a DB plan, the amount of the employer contribution is not visible in the paycheck, the participant is not calculating pay period to pay period benefit accumulations, and even if the employee did do that, the present value of the future benefit would not feel like an immediate increase in wealth. Employers who wish to retain DB plans could greatly increase their value as a retention and recruitment tool by including in pay statements information on benefit accrued and their present value.

[17] 29 CFR § 2550.404c-1(b)(3)(i)(B)(3) requires that the available alternatives "enable the participant or beneficiary by choosing among them to achieve a portfolio with aggregate risk and return characteristics at any point within the range normally appropriate for the participant or beneficiary." I believe a plan without a lifetime income alternative cannot meet this requirement with respect to participants nearing retirement.

[18] Cf. 29 CFR § 2550.404c-1(b)(2)(C)(2)(ii).

[19] *See* "Towers Watson CEO: Trends Don't Favor Lifetime Income Adoption." According to John Haley, chief executive officer of Towers Watson, only 12 percent of DC plan sponsors offer a lifetime income distribution option, and among the plans that do offer them, the vast majority of plan sponsors report a take-up rate of 5 percent or less.

[20] *See* Jody Strakosch and Melissa Kahn, "Better Outcomes from Defined-Contribution Plans," *The Journal of Retirement*, vol. 2, no. 3 (winter 2015). This excellent article explores a settlor path to allocation of some portion of employer match to lifetime income, and discusses issues of administration. However, I believe it recognizes, in part explicitly, in part implicitly, the need for regulatory relief from fiduciary risk exposure.

[21] *See* "Lockheed Martin to pay $62 mln to settle 401(k) lawsuit" and "Ameriprise Financial Settles ERISA Fee Litigation."

Perspectives from Anna: Thoughts on the Future of Pension Regulation

By Anna M. Rappaport

The 2015 Pension Research Council annual symposium topic was "Implications of the New Regulatory Order for Retirement Risk Management." It was exciting for me because it made me think about things I do not often contemplate. This perspective provides insight into those thoughts. All of the papers will be posted as working papers on the [Pension Research Council website.](#) I encourage you to read the papers and find your own issues of interest.

I have used an idea shared by Emily Kessler, an actuary from the Society of Actuaries staff and one of the discussants in the program. Emily compared the ideas to a cubist perspective and illustrated her point with examples of the work of Picasso and Braque. There are different viewpoints and stakeholder perspectives on the topics. The cubist shows you the object as you might see it from all sides. The papers and discussion provided a perspective that combined multiple, often conflicting, viewpoints. The discussion did not reconcile the different viewpoints but allowed you to see them side by side.

CONTEXT

The background for the symposium is the aftermath of the 2007–09 financial crisis combined with population aging, low financial literacy, and the shift from defined benefit to defined contribution plans.

CAN SYSTEMS FAIL OR BE DISRUPTED?

Since 2008, there has been a growing focus on the possibility of system failure and what is needed to prevent it. There was quite a lot of discussion of systemic risk, or of risks which were large enough to cause significant problems within the system or to cause general system failure.

Concern about system failure leads to an awkward situation with regard to regulation. Two contradictory propositions co-exist. There is concern about the need to strengthen regulation, with a focus on capital requirements, operational risk and liquidity. At the same time, there is concern that regulations are already too complex, too expensive to deal with and confusing, partly because of multiple sources of regulation.

A number of financial institutions have been identified as too big to fail, and designated as "systemically important financial institutions." The insurance companies include Prudential Financial, MetLife and AIG. (Globally there are nine insurance companies on this list.) These institutions are subject to additional regulation. While most insurance company regulation is state-based in the United States, the added layer of regulation is federal. In addition to the focus on economic exposure of very large organizations, there was also a focus on how much damage a single unethical individual could do if well-organized enough.

The regulation of systemically important entities grew up in the world of bank regulation. Several papers looked at the challenges involved in extending these concepts to other types of large institutions (how do the risk transfers implicit in insurance, asset management and pensions correlate to those in banking) and to what extent is regulation needed to prevent their entry as "unauthorized banking" facilities versus what is known about these entities as unique potential contributions to financial instability?

We should also remember that these systems have a variety of guarantee arrangements, which are part of the system. States have state insurance departments which in turn work with state guarantee funds, which could fail. Pensions are guaranteed in the United States up to defined limits by the Pension Benefit Guaranty Corp. (PBGC) which also could fail. There are pension protection funds in other countries as well.

How will changes in the requirements for insurers, asset managers and pension funds affect the underlying retirement system? How will the cost of insuring longevity risk change as a result? These answers will depend on the evolving regulatory system.

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LOCAL OR INTERNATIONAL ISSUES?

The regulatory issues were generally identified as international. There are parallel and similar issues facing regulators in many countries, and the regulators work together in international organizations. Many of the larger financial institutions operate internationally today. Some solutions may be adopted only locally but others will reflect recommended international practice. Within the United States, there is a parallel issue as insurance is regulated primarily by the states, and the state insurance departments work together through the National Association of Insurance Commissioners (NAIC). It seems likely that change is coming. The papers provided some historical context together with identification of some of the concerns today.

THE ISSUES RELATED TO RETIREMENT SYSTEMS, FINANCIAL INSTITUTIONS AND REGULATION

When we think about the retirement system and regulation, we need to think about four sets of institutions: pension funds, insurance companies, banks and mutual funds. Protecting individuals, ensuring sustainability and stability are common concerns across all of these institutions. All are subject to operational risk.

When we think about the retirement system and regulation, we need to think about four sets of institutions: pension funds, insurance companies, banks and mutual funds.

Insurance companies and pension funds are subject to longevity risk. One of the papers offers an international comparison of the regulation of longevity risk, and how it differs between these two types of institutions, country by country. Discussions of longevity risk are often in the context of fixed retirement ages. If they were in the context of fixed periods of retirement, the discussion would be very different.

Liquidity is a concern in all of these institutions, but the requirements and specific issues are very different. Appropriate disclosures are always a concern. One of the papers dealt with this topic.

MARKET VALUES OR SMOOTHING: WHAT ACCOUNTING APPROACH WORKS FOR ME

Pension funds are very long-term arrangements. Traditionally, smoothing was used in pension accounting and measuring costs. It has been demonstrated that this practice did not meet the needs of shareholders well. However, others have argued that smoothing is appropriate as pensions are a long-term arrangement. This debate continues to this day.

One of the papers looked at this issue from the perspective of the individual. That paper, "Accounting and Actuarial Smoothing of Retirement Payouts in Participating Life Annuities," demonstrated that smoothing is valuable to the individual and proposed the use of participating contracts to achieve it. Under the arrangement presented, smoothing proved valuable to multiple stakeholders. Another paper, "Mark to Market Accounting for United States Corporate Pensions: Implications and Impact," examined the results of companies that had adopted market values in their accounting, and compared them to a group of companies that remained with Generally Accepted Accounting Principles (GAAP). That paper found that the change did not seem to matter. The market value impacts were backed out when incentive pay was determined and when analysts were looking at the companies. (This analysis does not consider an early-mover advantage; the very first companies to adopt this approach appear to have received an anomalous benefit from the change.)

ISSUES FOR THE FUTURE OF THE RETIREMENT SYSTEM

A number of other issues were discussed:

- Demographics raise concern in many quarters. In the luncheon speech, Lady Barbara Judge of the U.K. Pension Protection Fund took the position that people need to work longer. Others asked where jobs for seniors would come from and pointed out that people in some jobs wear out.
- The closing panel focused on the importance of risk sharing and pointed out that many public plans have adopted risk-sharing arrangements.
- There was quite a disagreement over the importance of education and its value. Hazel Bateman from the University of New South Wales in Australia pointed out that it is extremely important, but this was countered with discussion indicating that in many situations, individuals simply will not understand the point.
- There was another discussion about the appropriate way to measure benefit adequacy for policy purposes. Andrew Biggs presented his ideas for ways to adjust replacement ratios, and others disagreed.

CONCLUSION

The symposium served to bring out a range of issues, make one think of the uncertain future and point out how different the perspectives on many of these issues are. Thank you to the Pension Research Council for sponsoring this discussion. ■

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