

Retiremen Section News

3 Chairperson's Corner By Randall Dziubek

5 A View from the SOA's Staff Fellow for Retirement

By Andrew Peterson

6 Perspectives from Anna: Learnings about FinTech from the 2018 Pension Research Council Symposium

By Anna M. Rappaport

14 Insights on Fintech, 401(k) plans and the 2018 Pension Research Council Symposium

An Interview with Stacy Schaus

18 Insights on Fintech, Robo Advice and the 2018 Pension Research Council Symposium

An Interview with Gary Mottola

21 Aging and Retirement Strategic Research Program Launching This Year

By Steven Siegel

- 22 Retirement Adequacy in the United States: Should We Be Concerned? Interview with Julie Curtis and Deb Tully
- 26 An Interview with John Cutler

- 27 An Enhanced Social Security Annuity By John Cutler
- 30 An Interview with Anna M. Rappaport
- 31 An Interview with Tim Driver
- 32 Working Longer to Improve Retirement Security: Improving Public Policy By Anna M. Rappaport and Tim Driver

An Enhanced Social Security Annuity

By John Cutler Page 27

Retirement Section News

Issue 96 • October 2018

Published three times a year by the Retirement Section of the Society of Actuaries.

475 N. Martingale Road, Suite 600 Schaumburg, Ill 60173-2226 Phone: 847-706-3500 Fax: 847-706-3599 www.soa.org

This newsletter is free to section members. Current issues are available on the SOA website (www.soa.org).

To join the section, SOA members and non-members can locate a membership form on the Retirement Section webpage at https://www.soa.org/retirement/

This publication is provided for informational and educational purposes only. Neither the Society of Actuaries nor the respective authors' employers make any endorsement, representation or guarantee with regard to any content, and disclaim any liability in connection with the use or misuse of any information provided herein. This publication should not be construed as professional or financial advice. Statements of fact and opinions expressed herein are those of the individual authors and are not necessarily those of the Society of Actuaries or the respective authors' employers.

Copyright © 2018 Society of Actuaries. All rights reserved.

Publication Schedule

Publication Month: February 2019 Articles Due: Oct. 30, 2018

2018 SECTION LEADERSHIP

Officers

Randall Dziubek, ASA, EA, MAAA, Chairperson Deborah Tully, FSA, MAAA, EA, FCA, Vice Chairperson John Eng, FSA, EA, and Mathieu Laurendeau, FSA, FCIA, Secretary Ruth Schau, FSA, EA, FCA, Treasurer

Council Members

Laurie Alook, FSA, FCIA James D. Anderson, FSA, MAAA, EA Bonnie Mudd Twohig, FSA, MAAA, EA Nathan Zahm, FSA Brett Dutton, FSA, EA, FCA, Appointed Member David R. Cantor, ASA, EA, Appointed Member Faisal Siddiqi, FSA, FCIA, Appointed Member

Newsletter Editor

Mathieu Laurendeau, FSA, FCIA mathieu.laurendeau@aon.com

Program Committee Coordinators

Brett Dutton, FSA, EA, FCA 2018 SOA Annual Meeting & Exhibit Coordinator

SOA Staff

Andy Peterson, FSA, EA, MAAA, Staff Partner apeterson@soa.org

Jane Lesch, Section Specialist jlesch@soa.org

Julia Anderson Bauer, Publications Manager jandersonbauer@soa.org

Kathryn Baker, Staff Editor kbaker@soa.org

Julissa Sweeney, Graphic Designer jsweeney@soa.org

Chairperson's Corner

By Randall Dziubek

or my last Chairperson's Corner before I turn in my gavel, I wanted to talk about an issue that has been a source of frustration for many of us in the actuarial retirement community for many years yet has oddly fascinated me. I'm referring to the ongoing debate regarding the use of financial economics principles for financial reporting and funding of retirement systems. My frustration does not arise from the existence of financial-economics-based rules for U.S. private sector plans nor the lack of them in the public sector. Rather, it lies in the inability of our profession to effectively debate and agree on the applicability of these principles in our work as retirement actuaries.

In March 2018, the Actuarial Standards Board (ASB) issued an Exposure Draft for Actuarial Standard of Practice (ASOP) No. 4—Measuring Pension Obligations and Determining Pension Plan Costs or Contributions.

Among other less controversial modifications to ASOP No. 4, section 3.11 calls for actuarial funding valuations to "disclose an obligation measure to reflect the cost of effectively defeasing the investment risk of the plan." This value is referred to as the Investment Risk Defeasement Measure (IRDM).

The Exposure Draft received 62 comment letters from major actuarial firms, retirement systems, national retirement organizations, actuarial organizations, and individual actuaries and interested parties.

Most of the comments addressed the IRDM in some fashion. Some I would classify as "middle of the road" and generally limited their scope to suggestions for improvements or modifications to the language of the Exposure Draft. The name of this value (IRMD) seemed to draw consistent disapproval—although this is not a valid reason to dismiss the entire concept.

Many other commenters strongly opposed the requirement to disclose such a value in funding reports, while others hailed it as an important and necessary step forward for our profession. The vast difference of opinion is remarkable but not surprising, since this has been the case for a decade or more. The purpose of this article is not to debate the fine points of the Exposure Draft but instead to offer observations on the inability to reach consensus on this topic within our profession.

First, while my personal opinion is not necessarily important or relevant in this discussion, I will say for the record that I believe the benefits of requiring such a disclosure in actuarial funding reports outweigh the possible negatives. My position has certainly evolved over time due in part to actively engaging in this debate through my work on the Society of Actuaries (SOA) Retirement Section Council, and interaction with intelligent people with differing viewpoints. These interactions often took place at actuarial meetings, participating in volunteerism, or just having a drink with an old colleague.

Many of my fellow actuaries in the public sector retirement space, as well as retirement system leaders, oppose the required disclosure of a "settlement"-type value in actuarial funding reports. Their reasons are expressed in many of the comment letters and vary from philosophical to technical.

Regardless of the final version of ASOP No. 4, we need to continue to work together as a profession to continually move us forward.

Having practiced in the public plan arena for 15 years now, I have witnessed the relentless and often misleading attacks on public retirement systems by those who I believe are sometimes motivated by objectives other than the best interests of plan members or society. Yes, some of these critiques are factual and well-intentioned, but many are less so. Public plan practitioners are right to be leery of how a disclosed settlement-type value might be used to possibly elevate the attacks on public pensions. Public plan actuaries also have the opportunity and privilege to meet with many of the people who benefit from these plans—water and park department employees, municipal employees, firefighters, police officers and many others. Many of us are concerned that future benefit levels for these public servants, or even the very existence of these plans, will be too heavily influenced by misinformation and political agendas rather than facts.

However, I also believe our profession is capable of disclosing this information, describing it appropriately in our reports, using our public platforms to educate the users of our reports



on its meaning, and effectively refuting misstatements by those using this information incorrectly.

The California Public Employees' Retirement System (CalP-ERS) discloses a version of this number in 4,000 public agency reports across the state. I have spoken with many agencies across California regarding the meaning and applicability of this value. Questions from these agencies are generally resolved with nothing more than a relatively short conversation. Yes, our critics sometimes use this information to attack the richness of public sector plans, but they have been calculating their own solvencytype values for years without needing to reference ours.

In addition, the City of New York disclosed versions of these numbers for several years under the previous chief actuary Bob North, who stated in his comment letter "the world did not end, nor did the City of New York."

That said, I also do not believe the world would end if the ASB decides to remove this requirement from ASOP No. 4. This would be less significant for private plans as their reports already contain similar information. While public plan reports typically do not include a settlement-type value, public plan actuaries are for the most part doing great work identifying risks within these systems, partnering with the systems to develop responsible funding policies and, when asked to do so, evaluating and helping to implement creative plan designs that mitigate risk. I will acknowledge that there are significant challenges within the public sector, and advances do not always occur with the

speed one might hope. However, public plan actuaries have dealt with these challenges throughout their careers and are well-positioned to navigate them.

In support of public plan actuaries, the SOA continues to effectively engage in the discussion of these topics and provide valuable educational content and resources that contribute to the security and stability of these public plans. The winning entries for the recent Call for Models contest sponsored by the SOA for public plans are great examples of this. You may recall discussion of this contest in my previous Chairperson's Corner. The winning entries are now available on the SOA website, and the Retirement Section Council is in the process of recording podcasts with the winning authors. Other contest entries were awarded honorable mention and will also be available soon.

So, if by chance the ASB were to remove this required disclosure from ASOP No. 4, I believe public plan actuaries with the support of actuarial organizations like the SOA would continue to provide responsible assessment and communication of system risks.

I suspect the lack of agreement within our profession is not driven by extreme philosophical differences between us as we see in our political landscape. While there are passionate actuaries on both sides of the argument who devote their time to advancing this debate and reaching some consensus, it seems many others are content to remain entrenched in their positions, not adding to the conversation, and not being receptive to considering arguments from the other side.

For now, we must all let the ASB do its job and make the decisions that must be made. Regardless of the final version of ASOP No. 4, we need to continue to work together as a profession to continually move us forward. If you have a strong and informed position on this or any other actuarial issue, look for ways to share your thoughts in a productive and effective manner. Join an SOA section, attend annual actuarial meetings, participate in SOA, Conference of Consulting Actuaries (CCA) or American Academy of Actuaries webcasts, or, like I did three years ago, run for a seat on an SOA council. I know I have grown as a person and improved as an actuary through my time on the Retirement Section Council. While I did not succeed in solving all of the world's retirement related issues, I am grateful to the SOA for providing me and others a place to try. ■



Randall J. Dziubek, ASA, is deputy chief actuary of valuation services at CalPERS. He can be reached at randall.dziubek@calpers.ca.gov.

A View from the SOA's Staff Fellow for Retirement

By Andrew Peterson

have some important personal news to share, in what will be my last staff fellow column for the *Retirement Section News*. After having served as the SOA staff fellow for retirement for the last 10 years, I have been asked to assume a new role leading the SOA's international department operations. I'm looking forward to this new assignment and the opportunities it will bring to continue serving SOA members and further the growth of the actuarial profession around the globe. Yet, at the same time, it is a bittersweet change as I will move on from my primary focus of working with retirement/pension actuaries.

The SOA is a member-driven organization, and over the last 10 years I have enjoyed the opportunities that being a staff fellow have presented to work with many of you members who have volunteered on various Retirement Section activities—whether participating on the council or various operational teams, presenting at meetings, writing newsletter articles, overseeing research projects and much more. It has been a privilege to get to know so many different people from a variety of backgrounds while seeking to enhance the intellectual capital of SOA retirement actuaries. It has also been a privilege to represent the profession and the SOA through speaking and participating at various meetings, whether actuarial events or industry events, or participating in media interviews and meeting with staffers on Capitol Hill.

Prior to working at the SOA, I always valued my actuarial credentials, particularly given the intense amount of work it took to obtain them. But since working here, I've come to value the importance of being a part of a profession; that being an actuary means more than just being a smart person, but also involves being part of a profession that subscribes to a code of conduct, professional standards, ongoing professional development and discipline for members when needed. As such, I'm glad I was able to persevere (with support from my wife and co-workers) when the exam process seemed impossible and push through to completion. I am proud to be an actuary, an SOA member and privileged to serve you, the SOA members, in my SOA staff role.

While my direct focus with retirement actuaries will be stopping, I'm thankful that I will continue to be able to serve SOA members with a focus on our members outside of the U.S. and Canada. As I write this in early July, my change has just been announced publicly and so the SOA will begin immediately recruiting for my replacement. Information about the staff fellow job responsibilities is posted at soa.org in the "About SOA" and "Careers at SOA" section of the webpage. Due to advance print deadlines, it's possible that the role will be filled by October when you are reading this. But if not, I would encourage interested individuals to apply for what I believe is one of the more unique jobs for retirement actuaries. I have found it to be both intellectually stimulating and personally rewarding. It's a position where you can make a difference while serving members. If you have interest, I would welcome dialoguing about the role.

In the meantime, I encourage you to support the ongoing efforts of the Retirement Section Council and the other section committees. They are great groups of individuals and have been most enjoyable to work with over the last 10 years. And if you are working outside of the U.S. or Canada, I welcome ideas for how the SOA can improve our service to our members and support the growth of the profession.



Andrew Peterson, FSA, EA, MAAA, is senior director— International at the Society of Actuaries. He can be reached at *apeterson@soa.org*. Perspectives from Anna: Learnings about FinTech from the 2018 Pension Research Council Symposium

By Anna M. Rappaport

ach year the Pension Research Council sponsors a symposium on an important current topic in retirement system evolution. I love these symposia because I always learn something new, and they make me think. They include a combination of papers from academic, policy and business sources, and discussion by a diverse group of experts. The papers become available on the Pension Research Council website as working papers later in the year, and generally they are included in a book published the following year.

The 2018 topic is *"The Disruptive Impact of FinTech on Retirement Systems."* As an actuary and phased retiree, I have personally seen the evolution of absolutely amazing technology in my lifetime, and the options available to me in my personal and professional life have changed completely because of access to technology. But there is always a lot of technology that I do not know about, and often it amazes me. So this symposium offers a great opportunity to learn about technology today and its impact on retirement systems.

Many different ideas/themes were discussed in the papers and symposium. They included a focus on the perspective of the consumer, robo advice services and what they offer, decumulation issues, the range of tools available in the market, big data and health, improving outcomes and regulation.

Some points that were of interest to me include:

A WIDE RANGE OF OPPORTUNITIES AND DEVELOPMENTS

• Technology is used in the financial industry in many different ways. Some services have been around for a long time, and some are new or evolving. Emphasis was primarily on the new or evolving.

- Investment advice has been supported by automated models for a long time, but today's robo advisers may offer a complete package and a front end that allows direct access by an internet-enabled device. Delivery may be fully automated or combined with interaction with an adviser.
- Retirement planning, saving and management require many decisions. Automated tools integrated with advice or free-standing can be very helpful, and they are evolving. Tool development may take into account where individuals are and how they see things, data analysis and retirement planning theory. Theory often is poorly matched to human behavior. Detailed information about tools was not provided in the symposium.
- Tools can be provided in the form of apps, as part of integrated services from robo advisers and other firms, by startups and from other sources. Tools can be provided directly to consumers, to customers of financial service companies, to employee benefit plan participants as part of plan administration services, to employees as part of financial wellness offerings from employers, etc. Some tools offer broader financial planning and others have much more specific solutions.
- A strategy or tools could operate on a particular pool of assets, or all of a person's or household's assets. There are approaches for aggregation of assets and information. They offer benefits and also risks with regard to data security.
- Support for decumulation is evolving and is much less welldeveloped than support for accumulation.
- Analysis of big data can assist insurance and other financial service organizations in improving their processes, products and services. Several examples were provided.
- There is a wide variety of tools that provide support with specific decisions. Some may be offered through robo services, some from specialized services and some may be free-standing. Examples of issues addressed by these tools include Medicare Part D analysis, Social Security optimization, retirement income, life insurance purchase, traditional vs. Roth IRA analysis, spend-down support, and annuity analysis. Tools are offered by a wide variety of different organizations.
- Consumers need a way to figure out which tools are suitable and reliable. Plan sponsors who want to provide tools to employees have the same challenge. The symposium pointed out the need for some type of independent evaluation of advisory services and tools, something like



a *Consumer Reports* for financial services. The Society of Actuaries (SOA) has conducted two studies of retirement planning software in the past and found wide variations in capabilities, assumptions and results. They also found that some software had problems.

- Cybersecurity in regard to employee benefit plans is a hot issue today.
- As processes become more automated, legal requirements may need to be clarified and/or adapted.
- The companies in the FinTech space include startups that are primarily in this space, big banks, partnerships, mutual funds and others. Some of the working papers present a review of multiple organizations in FinTech.

For more information on benefit plans, see the following symposium paper:

• Benefit Plan Cybersecurity Considerations: A Recordkeeper and Plan Perspective

For a summary of multiple organizations or comments about specific advisers, see the following papers:

- The Economics of Complex Decision Making: The Emergence of the Robo Adviser
- Matching FinTech Advice to Participant Needs: Lessons and Challenges
- Decumulation and the Regulatory Strategy for Robo Advice

INFORMATION ABOUT ROBO ADVICE

- The use of robo advisers offers the chance to automate part or all of the investment management decisions, and potentially other planning decisions. Robo advisers have packaged tools that advisers and investment managers have been using for many years and offer increased access. There are a variety of business models and services offered. All of the services use computer-driven algorithms to make decisions. The most common are investment decisions. Some decisions are made automatically and others allow some choices.
- Robo advice can be viewed as part of a continuum. This is a different perspective than the idea that it is a revolutionary and abrupt change.
- Some of the trends affecting robo advice include
 - More firms entering the market and international growth
 - Traditional firms entering the market
 - Hybrid models
 - Use of own firm investment products within the accounts managed
 - Growing diversity in specific offerings
- Robo advice is considerably cheaper than conventional inperson advice, but the cost of investment management still includes the charges in the underlying investments. There is a wide variation in the costs of different services. One paper compares charges and finds a range of 0 to 89 basis points, with 25 to 30 basis points as typical.
- A big question with regard to robo advice is the extent to which it is digitizing delivery, analysis and implementation. It was observed that the more successful models use highertouch delivery with more analysis.
- Robo advice as a separate service has evolved into robo advice as a component of integrated services. They are today often combined with advice provided by an adviser.
- While these services have grown, they still represent only a very small fraction of the total investment management business.
- Providing automated services for the decumulation period is much more challenging than for the accumulation period. There are about 1,000 firms providing some type of service in the U.S. in the accumulation period but many fewer for the decumulation period. There are a few firms in other countries as well.

A big question with regard to robo advice is the extent to which it is digitizing delivery, analysis and implementation.

- Robo advice is a way to bring investment advice services to investors with very low balances, but the investor must be motivated to seek the advice. It should also be noted that the individual with a very low balance needs to invest the funds, but they also have a variety of other household financial management and planning issues and questions not related to investing the funds.
- There is variation in what services are included in automated advice packages, how they interact with advisers in hybrid models, in the investments used and in the underlying algorithms that are used to choose the asset mix.
- There is variation in the span of advice. Some approaches consider the specific account only, whereas others allow for aggregating information about other assets, sometimes only for the individual and sometimes for the household. Some focus on investments only and some on a broader range of issues. Some consider the accumulation period only while others consider decumulation also.
- The customer for the robo advice may be the consumer directly, a benefit plan, or a financial adviser. Some of the robo programs are available to advisers from different firms and some are provided by a single firm only.
- Robo advisers are subject to legal requirements for fiduciaries.
- Robo advisers have limitations, and we should be realistic in thinking about the role that they might play.
- Target date funds may be viewed as a parallel to the investment portion of a robo adviser.

For more information, see the following symposium papers:

- The Economics of Complex Decision Making: The Emergence of the Robo Adviser
- The Transformation of Investment Advice: Digital Investment Advisers as Fiduciaries
- Matching FinTech Advice to Participant Needs: Lessons and Challenges

ADDRESSING DECUMULATION ISSUES

- There is no consensus among experts about the right approach for the decumulation period.
- Many people who have had money in a 401(k) plan (or other employer plan) during the accumulation period will move their money out of the plan at retirement. They were never responsible for their own investments without a structured set of options until retirement, making it more challenging to manage assets post-retirement. In the future, there may be more money that stays in employer plans during the retirement period.
- Individuals are faced with many decisions at the beginning of the decumulation period. This is a challenging time for consumers. They need to consider assets from all sources as well as the family situation. Situations like family members needing help are rather common and can be easily overlooked in planning. Social Security claiming is a very important decision for many households. All this means complexity, and it can be difficult to understand interacting decisions. Holistic thinking is important for a good result.
- The individual has time to learn during the accumulation period and to change strategies as they go along. In contrast, there are decisions needed at the time of decumulation that must be made at one time. Some are irreversible and can't be changed.
- Individuals who had longer-term employment in organizations with benefits are in a very different situation when they are on their own without an employer and without employer-provided benefits. Not only do they need to provide for their own insurance and investments, but they also no longer have the employer to preselect and monitor vendors, design programs, etc. They are faced with dealing with a huge and bewildering marketplace.
- There is support for the idea that people should have access to a "retirement paycheck." There was little discussion of annuities in the papers, but some of the floor discussion focused on the importance of annuities and the possibility that they can play a big role for some people. In any case, service providers should offer approaches to retirement paychecks.
- Some firms are working on how to support the decumulation period. Some have been working on this for several years. Most robos are not focused on this area now. Some expect to add services in the future. The paper "Decumulation and the Regulatory Strategy for Robo Advice" includes a listing of a number of different services that provide support for the decumulation period.

- Some of the specialized automated tools available at the time of retirement include Social Security timing evaluation, Medicare Part D plan evaluation, annuitization support and spend-down support. There was discussion of the types of tools available.
- Today a small number of firms offer specialized services for decumulation, and this may increase. A firm interviewed for one of the papers had a service to pay out income that can be turned on and off.
- Hybrid approaches that include an adviser are particularly well-suited for the decumulation period. This seems to be the most likely model for decumulation.
- Decumulation generally happens when people are older. Many people are faced with cognitive decline during the period of retirement.
- For accumulation, there is widespread acceptance of fees based on assets under management. There are big questions about the appropriate business and compensation models for the decumulation period.

For more information, see the following symposium papers:

- The Big Spend Down: Digital Investment Advice and Decumulation
- Decumulation and the Regulatory Strategy for Robo Advice

A DECUMULATION CASE STUDY

One of the panelists in the panel on retirement startups was Elizabeth Kelly from United Income. *UnitedIncome.com* is a hybrid service targeted on helping retirees manage their assets in the decumulation period. There are three levels of service one free, a self-service approach with a \$10,000 asset minimum for 0.50 percent of assets, and a full-service approach with a \$300,000 asset minimum for 0.80 percent of assets. Fees are adjusted for higher asset levels.

The free service includes financial planning and Social Security advice, self-service and online support. The self-service approach adds investment management, a United Income paycheck and technical support. The full-service support adds access to a personal financial adviser, an annual check-up with financial adviser, and financial and retirement concierge services.

For more information, see UnitedIncome.com.

IMPROVED OUTCOMES, FINANCIAL RESPONSIBILITY AND DECISION-MAKING

- One of the big questions today on which there will be future study is whether robo advice improves outcomes. Future studies will provide more insight and data. Today it is hard to find evidence and challenging to get data about the firms. One difference in services observed is that they are very different in their inclusion of international investments. One study found that any advice improved outcomes. Prior research showed that saving more is the biggest factor in improving retirement outcomes.
- Efforts to improve decision making can be embedded with robo advice or separated.
- It is important to start with a clear understanding of what decisions need to be made.
- While robo advisers offer the ability to reach underserved populations and people with relatively low asset balances who would usually not be served by traditional advisers, there is a big problem of how to reach them. Many such people are unlikely to seek out this advice. In addition, if the advice is primarily focused on investments, many in this group have household daily financial management problems that are a barrier to doing well with retirement savings and longer-term financial management.

For more information, see the following symposium paper:

• Matching FinTech Advice to Participant Needs: Lessons and Challenges

TECHNOLOGY, BIG DATA, HEALTH AND ETHICS

- Big data enables genetic testing, and the cost of testing has dropped dramatically. Technology and big data enable a variety of health research that can improve health treatment and outcomes and also can enable improved underwriting by insurance companies.
- Fear of the consequences of negative information may lead some people to decline to get tested.
- Genetic testing and research are an area of information that raises ethical issues related to the use of genetic information in underwriting and for other purposes. Individuals can anti-select when they have information. There is a big question about the extent to which insurers may obtain and use genetic information. They may even be able to require testing. Under current federal law, genetic information is banned from use in health underwriting, but not in

underwriting of life, disability and long-term care policies. This is an evolving area.

• Ethical issues related to data and privacy are not limited to health.

For more information, see the following symposium papers:

- Ethics, Insurance Pricing, Genetics and Big Data
- FinTech Disruption—Opportunities to Challenge Financial Responsibility
- How Medical Advances and Health Interventions Will
 Shape Future Longevity

ADDRESSING CUSTOMER NEEDS/UNDER STANDING CUSTOMER SEGMENTS

- It is important to recognize where people are. Much of the theory assumes that people are "Econs." The reality is that few people are "Econs"; many people have problems with financial literacy, and it is not uncommon for people to have problems doing basic tasks such as balancing their checkbooks.
- The basic problems for many households include managing regular spending, managing debt, household budgeting and saving modestly. Until people get some of these issues under control, they are not really ready for retirement planning and investment advice. Many employers have recognized this and adopted financial wellness programs. Some have integrated retirement planning into financial wellness. These are not technology issues but set the context for the challenges to be addressed.
- While robo services offer the potential to reach a great deal of the underserved market as well as people not in employer plans, there is a great problem getting them to sign up for these services.
- People have different needs depending on life cycle status, recent events and personal challenges. They have different capabilities and interests based on their personal literacy and the extent to which they focus on financial issues longer term. It was not specifically discussed at the symposium, but SOA research indicates that many retirees plan for the short term, focusing primarily on having cash flows to pay for regular bills.
- Some individuals are accustomed to making purchases and travel arrangements using the internet and others are not. Some are accustomed to banking over the internet.



- There are particular challenges in using technology-based solutions with an aging population.
- Some of the algorithms are pretty standard for all or most customers. Others are tailored to the customer situation. Products vary with regard to how much tailoring they do.
- Some of the specific issues with regard to an older population include:
 - A lack of trust leads to non-adoption of financial online opportunities.
 - They are more likely to have cognitive issues.
 - Many seniors feel socially isolated.
 - A number do not drive or have cars.
 - Some are digitally marginalized.
 - A lack of digital confidence heightens concerns with regard to fraud.
 - Digital literacy is a problem for some.
 - Mental models influence what each individual is comfortable with.

Note that the SOA research with individuals age 85 and older confirms the lack of trust and reluctance to use different approaches to handling financial matters.

For more information, see the following symposium paper:

• Designing for Older Adults: Overcoming Barriers toward a Supportive, Safe, and Healthy Environment

REGULATORY QUESTIONS/ISSUES

Several of the discussions included a focus on legal issues, and how the law applies to automated approaches. The papers offer analysis, but also raise questions. Some key points:

- Fiduciary rules apply to robo advisers.
- Two major areas of regulation are fiduciary rules and disclosure. Conflicts of interest can be a concern, but it is not as big an issue as with traditional advisers.
- The Securities and Exchange Commission (SEC) regulates Registered Investment Advisers (RIAs). Robo advisers must register just as human advisers must register. FINRA does not have jurisdiction over many of the robo advisers.
- It was asserted that the regulations allow flexibility to accommodate multiple business models.
- Regulatory compliance guidelines were issued by the SEC for robo advisers on Feb. 23, 2017. The SEC focused on the need for adequate disclosure about the robo adviser and the services it provides, the need to ensure that the services provided are suitable for the customers, and the need to adapt compliance programs to the automated environment. The SEC has defined areas of disclosure.
- Data security/privacy issues create regulatory concerns and challenges. Employee benefit plan sponsors are fiduciaries and are subject to specific legal requirements that apply. The Department of Labor is involved in addition to securities regulators.
- There should be something like an airline "black box" that generates a record that can be reviewed with regard to the advice given and processes used. Such records would allow regulators to audit the systems and the advice given.
- There are some big general questions: What is different about automated approaches? Should there be more or

There are particular challenges in using technologybased solutions with an aging population. different supervision of the algorithm(s) for robo vs. traditional advice and why? It was noted that the potential to look at outcomes is different for different approaches.

For more information, see the following symposium papers:

- The Transformation of Investment Advice: Digital Investment Advisers as Fiduciaries
- Decumulation and the Regulatory Strategy for Robo Advice
- The Big Spend Down: Digital Investment Advice and Decumulation
- Benefit Plan Cybersecurity Considerations: A Recordkeeper and Plan Perspective
- The Economics of Complex Decision Making: The Emergence of the Robo Adviser

CHALLENGES

- There is no accepted quality metric for financial services.
- Individual consumers have trouble comparing what different services provide, their costs and their limitations. They do not have a good way to evaluate different services. It may be challenging to compare costs. Even experts may find understanding the differences in services to be difficult.
- There can be a tension between working to make things more efficient vs. "walking in the customer's shoes" and trying to make the approach most useful to the customer.
- When things do not work out well, it may be the result of the service and its algorithms, the customer's decisions or the market.

I see a strong link between the 2018 symposium and the 2016 symposium, "Financial Decision Making and Retirement Security in an Aging World." Some of the issues and challenges raised in 2016 included recognizing and dealing with cognitive decline, conflicts of interest, and advice being available to only a part of the population.

SOME PERSONAL PERSPECTIVES AND A WISH LIST

I started to study to be an actuary in 1958 and became an FSA in 1963. During my career, technology has enabled many advances in the retirement system, but there remain many gaps in providing a secure retirement that works for all Americans. Many of the advances are not considered when we talk about FinTech today because they are well-established and accepted. Some examples of the advances include:

- Defined contribution management including daily valuation, a wide range of investment options and the ability of the individual to process transactions online automatically is all dependent on technology.
- Many of the investment strategies available today are dependent on modeling that is totally dependent on having large computational capability. The strategies that were first used for defined benefit plans, and later to help develop target date and other funds, are now used in robo advisers and can be directly accessed by smaller investors.
- Computing power has been made available to individuals through personal computers, tablets and cellphones.
- Planning and support tools are technology-dependent.

These are just a few examples.

As I look at the retirement system today, some of the gaps that remain include:

- Many people do not have access to employer-provided retirement savings.
- Many people have no or small amounts of retirement assets.
- Not enough planning for the post-retirement period.
- Many people do not have the knowledge to manage well for the long term and they are not using any advice.
- Of those who wish to use advice, they are not well-prepared to know what is good and what is not.
- Many people are unprepared for major shocks and particularly major long-term care risk.

Technology will not solve any of these challenges, but it can enable solutions that would not be feasible without technology. It can often enable much more economical solutions, but they are not always best fitted to individual needs.

MY WISH LIST

This is a personal list, partly inspired by the papers and discussion, and also inspired by where I am and the work that I have done. One of the benefits of participating in a Pension Research Council symposium is being able to add new ideas to what we know and believe, and to integrate them into our dreams.

- I would like to see more people planning for the longer term and planning in a way that takes their total household situation into context.
- I would like to see tools structured so that seniors find them easier to use. (To me, a lot of technology and particularly cellphones, are designed as if there are no seniors or technology-challenged individuals.) It is sad to see tools that are not user-friendly to the people who need them most.
- I would like to see more people covered by employersponsored plans, and more people without such coverage saving for retirement on their own.
- Since Social Security is all that many people have, we need to keep it strong and recognize the need to serve lowerincome Americans. I would like to see most Americans considering the range of options before they claim Social Security. I would like to see all of them having good information about the options.
- I would like to see more people using advice that they can get at a reasonable price, which is relevant to their needs, and which they can be confident about.
- I would like a way for the average person to be able to see a catalogue or directory of tools and robo advisers with information vetting them from a neutral source. This would be something like a *Consumer Reports*.
- I would like to see much more policy focus on addressing the gaps in the retirement system today, and a focus on the details that are important.
- I would like to see a realistic assessment of what can be expected of the average person and what can not. I would like to see decent solutions for those who can't properly prepare for retirement.

I believe that technology can help enable solutions to some of these challenges. It does not provide magic solutions, but some of the applications that exist today seem like magic compared to what was available when I started out as an actuary. I also have a personal wish that it be easier to understand much of this technology.



Anna Rappaport, FSA, serves as chairperson of the Committee on Post- Retirement Needs and Risks. She is a past president of the SOA and a globally recognized expert on both financial and nonfinancial aspects of retirement.



Professionalize Your Analysts with the Certified Actuarial Analyst (CAA)



Benefit from:

- Enhanced technical and analytical abilities
- High business focus and academic rigor
- Addition of actuarial dimension to employees' skillset
- Augmented ability to analyze data sets and communicate financial concepts

Learn more at CAA-Global.org and continue building to the future.

CAA Global is a joint venture of the Institute and Faculty of Actuaries (IFoA) and the Society of Actuaries (SOA)

Insights on Fintech, 401(k) plans and the 2018 Pension Research Council Symposium

An Interview with Stacy Schaus



Stacy Schaus, CFP[®], is an executive vice president in the Newport Beach office and leads PIMCO's Defined Contribution Practice, working primarily with plan sponsors and consultants.

he Pension Research Council 2018 Symposium was titled, "The Disruptive Impact of FinTech on Retirement Systems." Stacy Schaus was one of the panel moderators at the 2018 Pension Research Council Symposium. This interview provides some insight from Stacy. The papers offer a view of an extremely important developing area. In this interview, Stacy shares with us her personal insights on the conference and its implication for 401(k) plans.

Can you tell us a little about your background and prior work on 401(k) plans?

My career has focused on defined contribution plans such as 401(k)s since 1991 when I was a consultant at Hewitt Associates

(now Aon and, separately, Alight) in Lincolnshire, Illinois. At Hewitt, I built the defined contribution (DC) investment team and founded Hewitt Financial Services and the Personal Finance Center to deliver brokerage windows for DC plans and personal financial support (e.g., retirement rollover counseling, annuity purchase, college funding and budgeting).

In 2006, I joined PIMCO in Newport Beach, California, to launch their DC practice. I work with plan sponsors and consultants on defined contribution plan design. To capture insights from the DC consultants on current and future trends, we conduct annually the PIMCO Defined Contribution Consulting Support and Trends Survey.¹ The 2018 survey captures data, trends and opinions from 77 consulting firms, the highest number in the 12-year history of the study. These firms advise on over \$4.4 trillion in U.S. DC assets, accounting for almost 60 percent of all U.S. DC assets (\$7.69 trillion, according to ICI Retirement Market Statistics, March 2018).

I have also published over 100 articles on DC issues and two Wiley books, including *Designing Successful Target-Date Strategies for Defined Contribution Plans* (2010) and *Successful Defined Contribution Investment Design* (2017). Both were written to help plan sponsors as they evolve their DC plan offerings.

Why is this topic of FinTech important?

Innovations and continued evolution in FinTech are likely to enhance and possibly revolutionize the way people save and plan for retirement. "Robo-advice" is one example of FinTech and may include managed accounts within DC plans or full robo-advisor platforms in the retail market. These programs may include automated asset allocation and rebalancing, contribution rate suggestions, retirement income forecasting and possibly decumulation advice. As discussed during the conference, even the most advanced robo programs often offer human assistance via electronic chat or telephone.

As the moderator for Session III: "New Roles and Responsibilities for Plan Sponsors and Regulators," I shared perspectives on managed accounts from PIMCO's *DC Consulting Support and Trends Survey*. Notably, while the government has approved managed accounts as a qualified default investment alternative (QDIA), only 3 percent of the participating consultants recommend this default type, while the majority of consultants (87 percent) recommend target-date funds as a DC plan's investment default. In this year's study, we also asked consultants to share their view on managed accounts.

Figure 1 summarizes the consultants' views. At least half strongly agree or agree with the view that managed accounts produce better-performing portfolios than do-it-yourself

Figure 1 Q: What is your firm's view on managed accounts? (n=70)



Source: 2018 PIMCO Defined Contribution Consulting Support and Trends Survey

investors (68 percent) and that the impact of personalization improves outcomes relative to target-date funds (50 percent). Yet the majority disagree on the notion that managed account costs relative to target-date funds are justified/ reasonable given the value to participants (51 percent) and two-fifths disagree that participants tend to add personal information, rendering the advice of managed accounts more valuable (41 percent).

As FinTech advances, perhaps the personalization of advice models may become more automated. This may facilitate more frequent inclusion of outside assets, incorporate behavioral risk preferences, and reflect spending patterns and health data (e.g., to project longevity). Costs of managed accounts or robo advice may also be driven downward as FinTech improvements continue.

What are your major takeaways from the papers and discussions?

FinTech is unlikely to replace human interaction any time soon. Discussant Kent Smetters of Wharton noted that hiring a professional certified financial planner (CFP) can be more valuable than robo advice, as the CFP can help people more holistically with issues ranging from basic budgeting to retirement financing. FinTech tools can be more efficient, but fall short of solving for lifecycle needs.

Jill Fisch, University of Pennsylvania Law School, and Marion Laboure, Harvard University, shared a paper on "The Economics of Complex Decision Making: The Emergence of the Robo Advisor." Similar to Kent Smetters' observations, they noted that robo solutions offer advantages such as anytime access, economies of scale and lack of conflict of interest. But they also have disadvantages, including the lack of the "warm body effect" (i.e., the value in talking to someone, which can make people less risk-averse), reduced effectiveness relative to an advisor in informing investors, and less flexible approaches to risk tolerance (i.e., risk preference is not stable).

What surprised you the most? What was the most concerning or eye-opening?

I found the discussion of cybersecurity and genetic data particularly eye-opening and concerning. Papers by Tim Rouse of SPARK, David N. Levine and Allison Itami of the Groom Law Group, and Ben Taylor of Callan Consulting were particularly notable. "Benefit Plan Cybersecurity Considerations: A Recordkeeper and Plan Perspective," addressed the issue of cybersecurity. Ben Taylor observed that "data is the new oil" and stressed the



need to vigilantly protect participants against data breaches and data attacks.

Columbia University Medical School Professor Robert Klitzman spoke on the topic of, "*Ethics, Insurance, Pricing, Genetics, and Big Data.*" He discussed the ethical issues around the use of genetic information. He notes in his paper that genetic testing company 23andMe has sold genetic data (e.g., it sold data of about one million consumers to a pharmaceutical company for \$60 million in 2015). Concerns about discrimination could lead individuals to avoid genetic testing, e.g., insurance availability or pricing. Also, those who know their genetic information (e.g., the probability of getting Alzheimer's disease) may buy insurance that creates an adverse selection risk for insurance companies.

What is particularly important to people who are either leaving benefit plans with assets or retaining assets in plan?

Several speakers acknowledged the need for improvements in the retirement spending phase. Steve Polansky and Peter Chandler of FINRA discussed their paper with Gary Mottola, "*The Big Spend Down: Digital Investment Advice and Decumulation.*" They noted that the majority of robos today do not focus on decumulation, although some offer services relevant to decumulation. They pointed out that one firm offers an automatic withdrawal feature that investors can activate and that the same firm offers a more sophisticated approach to drawdowns that considers required minimum distributions. Another firm, they noted, offers a "hybrid robo service" (FinTech plus human support) that can help address more complex questions, such as determining the sequencing of withdrawals from taxable and non-taxable accounts.

Did PIMCO's *DC Support and Consulting Trends Survey* offer any insights into retirement and use of advice?

Yes, as the moderator for Session III, I shared insights on what the consultants suggest. Retirees may be more likely to retain their assets in a DC plan rather than rolling this money into an individual retirement account (IRA). DC plans may offer investments (e.g., stable value or custom strategies) that are not available in an IRA, and they may have access to institutional pricing and the benefit of a plan sponsor's oversight of the investment lineup. About 20 percent of DC assets are held by participants aged 60 or over, according to the Employee Benefit Research Institute.

The PIMCO survey shows that the majority of consultants (64 percent) believe DC plans should offer a separate retirement income tier to their participants. This may be "in communication only (tier may use many of the same offerings as the others tiers)" or "fully set up as a separate tier." The majority of consultants support or actively promote target-date funds, cash management (such as stable value), income/multi-sector fixed income for retirees and managed accounts. It is notable that managed accounts or "robo advice" falls lower on the list of support by consultants, perhaps again reflecting the concerns with relative value of the managed account advice (see Figure 2).

How can these developments improve retirement security?

FinTech in its broadest definition can increase retirement security immensely. If one considers the enormous investments already made in the past few decades in DC recordkeeping, participant communication channels, and advice and education, one can already see dramatic improvements in retirement security. The combined adoption of auto-plan enrollment, auto-deferral escalation, and automatic dynamic portfolio management (e.g., target-date funds) is a salutary example. Collectively, these advancements—all facilitated by technology—are leading millions of participants to far greater wealth accumulation potential than would have otherwise occurred.

Yet, the final roundtable session, "The Future of Retirement Startups: Challenges and Opportunities," revealed FinTech

Figure 2 Q: What is your firm's position on the use of the following investment and insurance retirement income strategies?* (n=67)



 $^{*}\mbox{Responses}$ ordered by the sum of "Actively promote" and "Support client interest"

Source: 2018 PIMCO Defined Contribution Consulting Support and Trends Survey

can help address an enormous and growing retiree need: generating sustainable income in retirement. Debra Whitman of AARP referred to this as the "Big Spend Down," stating that it is a huge, complex and complicated issue. Rhian Horgan of internet startup Kindur.com explained their value proposition will be to help those considering retirement to know if they are ready, and assist in the process to help clients enjoy this phase of their lives. Elizabeth Kelly of United Income Inc. shared that the myriad of questions one faces when considering retirement creates fear, with the result being many people reduce their spending. A noteworthy observation made by all on the panel is that retirement presents decisions never previously considered. Examples included the election of Social Security and Medicare benefits. Clearly, FinTech will provide new decision-making and support services, leading to better outcomes for many.

Note: Joseph Healy, senior vice president and DC Specialist at PIMCO, contributed to this article.

ENDNOTE

1 https://www.pimco.com/en-us/dc-survey

Insights on Fintech, Robo Advice and the 2018 Pension Research Council Symposium

An Interview with Gary Mottola



Gary R. Mottola, Ph.D., is the research director for the FINRA Investor Education Foundation and a social psychologist with over 20 years of research experience, much of which was spent in the financial services industry.

ary Mottola was one of the authors of papers presented at the 2018 Pension Research Council Symposium on Fin-Tech. This interview provides some insight from Gary.

Can you tell us a little bit about your background and interest in this topic?

I am a social psychologist by training, and my work on retirement and 401(k) plans dates back to my time at Vanguard. I spent 11 years at Vanguard, first working in the Marketing Research Department of their defined contribution business and then working as a researcher in their Center for Retirement Research, where I studied 401(k) participants' investment behaviors. In 2010, I began working as the research director at the FINRA Investor Education Foundation (*www.FinraFoundation* .org), where I focus on better understanding financial capability (a component of which is planning ahead), financial fraud, and improving financial disclosures. At the FINRA Foundation, we help Americans build financial stability, invest for life goals, and guard against fraud—so deepening our understanding of, and informing the field about, the factors, traits and behaviors that influence retirement security in the U.S. is an important part of our work. Last, I have authored and co-authored many articles, chapters, and issue briefs focusing on retirement, investor behavior, and financial capability.

What are your major takeaways from the papers and discussions?

One big takeaway is that the concept of a pure robo adviser (also known as a digital investment adviser) likely will not work for decumulation-at least at this point in time. As technology progresses, this may change, but right now decumulation appears too complicated to handle without some human intervention at some points in the decumulation process. As one of the discussants, Peter Shena, noted, some problems are just too complex for robos. As a result, we are seeing a big increase in the rise of the hybrid model-part robo adviser and part human adviser. This increase is not focused on the retirement market, it's a general phenomenon, but one that's particularly relevant to decumulation advice. Jill Fisch also echoed this sentiment when she noted that the demise of the human adviser has been greatly exaggerated. Related, it is also evident that robo advisers, researchers, investor advocates, and regulators have started thinking deeply about important issues related to robo advisers and decumulation, and this is very promising.

Another takeaway was that the definition of robo advisers differed from presentation to presentation. This is not necessarily a problem because it is, in fact, hard to define a robo adviser. That said, it is important for people to understand that definitions vary and to be cognizant that the definition a researcher uses can affect his or her insights and findings.

What are the major findings in your paper and why?

First, I should note that I co-authored this paper with two of my colleagues, Steve Polansky and Peter Chandler. So what did we find?

In short, robo advisers offer opportunities and challenges, both of which we need to be aware of. From an opportunity standpoint, robo platforms offer promise in their ability to provide decumulation services to large numbers of investors, including those with relatively small accounts, at relatively low cost compared to a traditional human adviser. In addition, as with automation and accumulation services, decumulation robo platforms hold out opportunity to steer investors away from behaviors that can prove detrimental to the spend-down phase such as overconfidence, loss aversion, mental accounting, problematic framing, and more. In short, they can take emotion out of decumulation decision making. Robo consumers will also have a lot of choices. Even at this early stage, there are variations in services, investment selection, decumulation strategies, assumptions, costs, and more—and while these variations are a good thing, they do introduce complications for investors.

From a challenges perspective, robo developers frankly admit that there is no clear winner when it comes to decumulation strategies. An effective decumulation strategy basically requires a full scope financial plan, as opposed to an investment plan for a single account. This requires the robo to take into account a much broader range of factors, including possible multiple investment accounts, multiple streams of income, spouse or partner financial circumstances, when to start claiming Social Security, and health and longevity issues, to name just a few. In light of these complexities, investors and robo firms alike can expect trial-and-error along the way. In addition, investors face the potential challenge of shifting from a relatively passive approach to investing to one where they need to engage actively with the advice platform—be it pure robo or hybrid—as they enter and go through the decumulation phase.

One big takeaway is that the concept of a pure robo adviser (also known as a digital investment adviser) likely will not work for decumulation at least at this point in time.

It will also be important to strike a workable, profitable balance between automated and human advice. The same trial-anderror that can create breakthroughs in service and positive investor outcomes can also create customer frustration and less than satisfactory investor outcomes. Likewise, it is not a given that highly automated solutions can be delivered at low cost, especially over the long term. The most that can be said is that costs will vary by platform and service, as they do with human advice. Customers will need to do their homework to understand what they receive for the fees and expenses they pay, as well as understand what they own and how their investments are managed.

Finally, robos won't solve the financial capability gap that exists in the United States. As evidenced by the FINRA Foundation's National Financial Capability Study, far too many people do not know the basics of risk and reward, or how core investments such as bonds gain or lose value much less the more complicated concepts such as probability (likely to figure in most robo simulations). Financial educators, including those who work for robo advisers, face considerable challenges in explaining decumulation within a robo platform. There is nothing easy about making one's investments last a lifetime.

Did you find any big surprises as you worked on your paper?

I wouldn't say it was a big surprise, but it was a nice surprise. Our paper is based on industry perceptions of the intersection between robo advising and decumulation, and to make this paper work we needed the cooperation and input of industry participants. To this end, we reached out to many robo advisers, retirement income specialists, and investor advocates—and nearly all of them were very happy to share their insights, experiences, and perspectives with us, and we are quite thankful for their generosity. In the end, we spoke with over a dozen industry participants, and we plan on speaking with several more as we continue to update the paper.

What were your favorite papers and why?

As is typical for this conference, all of the papers and presenters were excellent. I really enjoyed Jim Guszcza's presentation, which was based on his paper titled "Data Science and Behavior Design: Implications for Retirement Security." While I was familiar with many of the behavioral concepts he discussed, his perspective—that is, the perspective of a data scientist—and his examples differed immensely from what I am used to hearing. For instance, citing Don Norman, author of *The Design of Everyday Things*, really made me think about how robo platforms can be designed to improve investor outcomes.

Another presentation I really enjoyed was by Cosmin Munteanu. He presented a paper titled "Designing for Older Adults: Overcoming Barriers toward a Supportive, Safe, and Healthy Retirement." His presentation tackled the issue of fraud, which is becoming increasingly important as boomers begin to retire and move money out of retirement plans. Fraudsters see this as an opportunity, and they are targeting these hard-earned retirement assets. Financial fraud is an important issue to the FINRA Foundation, as well. More information on our work on financial fraud and investor protection can be found at *www.SaveAndInvest.org*.

It is also worth noting that the questions and discussions following the presentations are nearly as valuable as the presentations. I find it very helpful to hear how people interpret the findings from the papers and how they think the findings can be used to better investor and retirement outcomes.

What else would you like to tell us?

We can't forget about the role of education. That is, we need to figure where education fits into the robo/decumulation process and what needs to be communicated. For example, investors may need assistance interpreting and utilizing the information that many robo advisers provide to their clients. One obvious example is the use of probabilities from Monte Carlo simulations that are often used by robo advisers to communicate the likelihood that their decumulation strategy will succeed-that is, they won't run out of money. People are not particularly good at understanding and using probabilities for decisions, and the manner in which this information is communicated can potentially affect an investor's decisions. Using graphical displays or natural frequencies (for example, saying 5 out of 10 instead of 50 percent) may be a better means of communicating risk than using probabilities-essentially changing the manner in which risks are framed.

In addition, as one interviewee told us, investors may need to be educated about the general approach that a robo adviser uses for decumulation. He noted that they all have tilts—some programs will lead clients toward the purchase of a fixed indexed annuity for instance. Others will be tilted toward the four percent rule or the automatic de-risking of a portfolio as its market value declines, perhaps resulting in the automatic purchase of a single-premium immediate annuity. A basic understanding of the strategy the adviser uses could help an investor make more informed decisions about which robo adviser best meets his or her needs. This is similar to how a basic understanding of how target-date funds operate—including the glide-path they employ and whether they are 'to' or 'through' retirement—can help investors who are still accumulating assets choose the right target-date fund for their needs.

Last, an investor advocate we spoke with made a point that resonated with us. She noted that by their very nature robo advisers provide accumulation and decumulation advice to a large number of investors—so if the robo adviser makes mistakes then these mistakes will affect many investors. In other words, if robos get it wrong, they get it wrong for lots of people. Of course, the opposite is true, as well. If robos get it right, they have successfully delivered low-cost advice to a large swath of investors. Either way, it is an important point that investors, robo advisers, and regulators need to consider as digital investment advice matures and their market share increases.

<image><section-header>

Aging and Retirement Strategic Research Program Launching This Year

By Steven Siegel

n 2017, the Society of Actuaries (SOA) embarked on a new initiative to identify key themes for actuarial research. The goal of the initiative was to develop a series of strategic research programs focused on research topics and themes that emphasize actuaries' skill sets and thought leadership on important societal issues.

To guide this effort, the SOA formed a Strategic Research Program Initiative Task Force. Throughout 2017, the task force managed evaluation of potential program themes and development of criteria on which the themes could be prioritized. Out of this effort, five program themes were selected for formal development:

- Aging and Retirement
- Actuarial Innovation and Technology
- Mortality and Longevity
- Health Care Cost Trends
- Catastrophe and Climate

As is immediately evident from the list above, these programs span a variety of practice areas and research methods. The programs also have international applicability and are intended to reach a wide range of audiences from SOA members to employers and the public.

In addition to the selection of program themes, it was also decided by the task force to roll out the programs on a staggered basis over the next couple of years in the respective order shown in the bulleted list. As a result, over the course of the first half of 2018, plans have been underway for the launch of the first program—Aging and Retirement.

The first step in the development of the Aging and Retirement program was to identify the different sections and groups that are involved in research related to this area. As this process unfolded, one observation stood out right away—the SOA The SOA has produced an extremely broad range of Aging and Retirement research through a wonderful partnership of dedicated volunteers, researchers and staff.

has produced an extremely broad range of research in this area through a wonderful partnership of dedicated volunteers, researchers and staff.

Early in 2018, a formal program steering committee was recruited with members who have expertise in the diverse range of topics and themes related to SOA research on aging and retirement. The steering committee recruits came from the Retirement Section Council, Committee on Post Retirement Needs and Risks, and the Retirement Section Research Committee, as well as several other SOA entities. The steering committee is being chaired by Anna Rappaport.

The steering committee has been meeting regularly to chart out the course for the remainder of 2018 and 2019. Upcoming activities include:

- Official launch of the program that will coincide with the completion of a new research project exploring generational differences in retirement planning, financial management in retirement, and family dynamics on retirement among other issues. The program launch and generational differences project completion are targeted for early fall 2018.
- Selection of several new research topics under the Aging and Retirement umbrella that will be initiated in the latter part of 2018 and early 2019.

The steering committee is very interested in feedback on future topics and work that Retirement Section members would find valuable. Please contact me at *ssiegel@soa.org* if you have thoughts or questions about the program.

In the meantime, you can find out more about the programs by visiting the SOA website. *https://www.soa.org/strategic-research /default/*.



Steve Siegel, ASA, MAAA, is a research actuary at the Society of Actuaries. He can be reached at *ssiegel@soa.org.*

Retirement Adequacy in the United States: Should We Be Concerned?

Interview with Julie Curtis and Deb Tully

he Retirement Section Council, working together with the Committee on Post Retirement Needs and Risks, commissioned Vickie Bajtelsmit and Anna Rappaport to write a report to help them understand the many different studies on retirement adequacy. The report puts into context and explains the vast difference in conclusions reached by these studies. The report can be downloaded from the Society of Actuaries (SOA) website: https://www.soa.org/research-reports/2018/retire -adequacy-us-concern/. Two members of the project oversight group have been interviewed to provide their perspective on this report.



Julie Curtis, FSA, EA, is recently retired from Boeing, where she was director of Actuarial Services. She now spends much of her time volunteering for the SOA.

What did you find most interesting about the report?

I think that most people would agree that whenever media pundits discuss retirement and late-life financial security, they convey a vague sense of doom. They often imply, or sometimes state outright, that people will not have enough money to retire. Occasionally, there will be an article or television blurb that states the opposite—things might not be so bad after all, and most of us can look forward to a reasonably comfortable retirement. The few optimistic outliers tend to emphasize the uncertainty of the subject, and I think make it difficult for many people to engage in the topic.

There just isn't much literature readily available to the layperson that can help an individual, or even a policymaker, develop an informed conclusion about the nation's "retirement readiness." As a result, many members of the public, and even retirement actuaries, are left with an uneasy feeling that we can't quite define what an adequate retirement is, but the chances are that most people in the United States will not quite achieve it.

Although this report does not try to come up with a single, allpurpose definition or bright-line test for retirement adequacy, it explains some key, commonly accepted measures of adequacy. This report looks at much of the academic literature and explains the results of several key studies. It shows how the studies come to different conclusions and how they measure different aspects of financial security. I found the variation among the key studies fascinating. I also appreciated how the authors of this report explored the different stakeholders within the U.S. retirement system, and how each stakeholder may look at retirement adequacy differently.

What surprised you about the work?

The most surprising and pleasant aspect of the study was how readable it was. The authors distilled a large amount of detailed, often dry, information and presented it in a way that was readily understandable and permitted the reader to draw his or her own conclusions. The report identified the several aspects of retirement adequacy that most researchers in key studies shared, and identified other aspects, such as future health care and long-term care costs, that were considered in some studies but not others.

One of the biggest surprises to me about the risk factors was how few of the key studies described in this report looked at large financial/health system shocks when these studies measured retirement adequacy. I suspect that large shocks are "unknown unknowns" and therefore difficult to quantify. So they were disregarded. A positive surprise was an observation the authors made in section 6 of the report. Based on surveys conducted by the Committee for Post Retirement Needs and Risks, most retirees are surprisingly resilient in accommodating shocks and/or reduced financial circumstances. Despite these setbacks, they continue to indicate that they are content.

What stakeholders do you think will find the report most interesting and why?

I would encourage retirement actuaries to read the report. It provides a strong background for discussing retirement plan designs with clients and within the public policy arena. I think that financial advisers would find the identification of risks extremely helpful. While advisers tend to look at the circumstances surrounding a particular individual, the results of this study could reveal some risks that would not have been considered otherwise. I also think that anyone involved with setting public policy for retirement, savings and social programs would benefit from this report. It is a comprehensive overview of what earlier studies have discovered, and it may help shape the debate over the future direction of retirement plans.

There has been considerable discussion about a retirement crisis in America. Did the report help you to sharpen your perspective about whether there is a crisis or not? How and why?

Spoiler alert—my favorite line in this report is in the conclusion. The authors state, "After careful consideration of this body of research, it is clear that the U.S. retirement system lies somewhere between crisis and serendipity."

This report helped to put my vague unease into focus. I realized that many, perhaps most, people will be fine in retirement—at least for most of their retirement years. The report made me aware that beneath the generally favorable outlook, there are vulnerable groups who might face a crisis, such as the disabled

and the long-term unemployed. The authors also mention that future generations, which will have fewer defined benefits, may not fare as well.

How do you think actuaries can use this report?

In the context of daily work with plan sponsors and other actuarial clients, the report provides a useful overview of the stakeholders within our national retirement system. Seeing the other stakeholders identified broadens the view and reminds all of us that there are more parties affected by retirement plan decisions than just the plan sponsor and participant. The report also clearly identifies many of the financial risks that retirees face after retirement, and how those risks can affect retirement adequacy. The more that risks can be mitigated, the more effective retirement planning can be as a recruitment/ retention/workforce management tool for a plan sponsor, as a tool for financial stability from a public policy perspective, and as a tool to ensure lifelong financial security for the individual.

Is there anything else you would like to tell us?

This report's scope was limited to looking at key studies on retirement adequacy in the United States, comparing these studies, providing an overview, summarizing key studies and drawing general conclusions. It was not a political study, nor did it speculate on potential future changes in the existing social programs or existing private pension/savings environment.

The authors' conclusions were sound and will be helpful in looking at future changes. But the one thing that struck me most about the conclusions of the paper and of the underlying key studies that were evaluated was how much the nation's current retirement adequacy depends on the continuation of our current social programs. Without the financial support provided by Social Security and Medicare, the current measures of retirement adequacy would be far less favorable.



Deb Tully, FSA, is a senior director at Willis Towers Watson and is currently vice-chairperson of the Retirement Section Council.

What did you find most interesting about the report?

In the professional retirement community, there is frequent debate and discussion around the "retirement crisis" that we face as a society. This report sheds new light on the different constituents and perspectives upon which existing research is based. Understanding the purpose and the intended audience for specific research projects is critical when interpreting and using the results. The report dives into the fact that different studies often use different inputs and methods to evaluate retirement adequacy and, as a result, come to a wide range of conclusions regarding whether and to what extent a retirement adequacy crisis really exists. Current reputable studies range from claiming that we are in the midst of a full retirement crisis to claims that we are in good shape with respect to our retirement system, and the results are directly related to the assumptions and motivations of those sponsoring the studies. The reality is that, on an individual basis, there are winners and losers in our retirement systems. Vickie and Anna highlight this distinction compared with the aggregate view of success that is often the focus of many studies. They point to the fact that, in some cases, we may be overexaggerating the retirement crisis; while, for others, we may not fully capture how challenging

their situations can be. When looking at aggregate or average results, the individual impact can be lost. That said, the studies also often do not reflect the fact that individuals modify their behavior to meet their individual circumstances, and, ultimately, live within their means at whatever measure, averting their own individual retirement crisis. In reality, our systems have some good aspects and some opportunities for improvement. The retirement adequacy report brings this to light by clearly summarizing and pointing out the distinctions in the existing research on the topic.

What surprised you about the work?

The report highlights the fact that the populations most at risk of not being sufficiently prepared for retirement are generally underrepresented in existing studies. This is an important factor to consider as we evaluate these studies. If we are potentially not capturing at-risk populations in retirement adequacy analysis, then we may not be fully reflecting the true extent of the issue that exists on an individual basis. This also raises the interesting question of whether current studies could potentially be overrepresenting some populations who are more likely to be prepared for retirement, depending upon how we choose to define success. For example, as the study notes, it is not surprising that individuals who participate in some form of employer retirement programs, whether defined benefit or defined contribution in nature, are more likely than others to achieve retirement adequacy goals. This population is commonly captured in various studies, likely due to the fact that plan sponsors are often stakeholders in the study and the data on this particular population is readily available. In contrast, data on populations at most risk of not having adequate resources in retirement is not as easily accessible, and those populations may not even be the focus of the studies in the first place given the particular sponsor and audience for the study.

What stakeholders do you think will find the report most interesting and why?

This report potentially appeals to a broad range of constituents. I could see plan sponsors using this as a point of reference as they make defined benefit and defined contribution plan design considerations, and I could also see government entities using this report to better understand potential policy decisions. I even think it would be valuable for individuals to understand the variables that come into play when evaluating their own

retirement readiness and the fact that when they hear sound bites on the topic, they should understand the assumptions and that the broad commentary may not necessarily translate to their own specific situation, as many studies focus on the aggregate societal results and not specific individual circumstances and needs.

There has been considerable discussion about a retirement crisis in America. Did the report help you to sharpen your perspective about whether there is a crisis or not? How and why?

Absolutely. The report highlighted the multiple lenses through which we can potentially define retirement readiness. Our industry has often taken a traditional "replacement ratio" view of retirement readiness, but that doesn't necessarily take into account individual circumstances and the changing spending patterns and needs at different phases of retirement. This report, coupled with the other qualitative research conducted by the Committee on Post Retirement Needs and Risks, provides a more comprehensive perspective on how to evaluate whether we have a retirement crisis and who is truly in need.

How do you think actuaries can use this report?

I think actuaries can use this report as a tool to have more robust discussions with their clients and colleagues around retirement readiness and what that really means. Actuaries are in a unique position to continue the broader societal discussion and debate on retirement adequacy and to bring a balanced perspective to the debate. As actuaries, we are keenly aware of how results are directly impacted by the assumptions made in any analysis. We can play a role in ensuring that constituents evaluating retirement adequacy understand the underlying data and assumptions driving the conclusions in existing research on the topic.

Is there anything else you would like to tell us?

"Retirement Adequacy in the United States: Should We Be Concerned?" is a well-written, easy-to-digest assessment of current research and the various perspectives on this topic. Vickie Bajtelsmit and Anna Rappaport have put forth many thoughtprovoking questions and observations, and any professional in the retirement community would be well-served to take the time to read this report.



An Interview with John Cutler



John Cutler, J.D.

Tell us a little about yourself.

I'm an attorney by training but feel most of what I am working on now puts me in the actuarial space. I can even say "stochastic" without tripping over it. I got into Medigap and long-term care (LTC) insurance via a job at AARP many years ago but also have been in the federal government, mostly developing program and ideas involving insurance products. But that background at AARP also got me into retirement issues.

What interested you in this call for essays?

Probably the Society of Actuaries (SOA) mantra around the idea of the "annuitization of retirement." I'm not sure I recall when

I first came across the concept, but it has been with me ever since. And that got me into thinking for this call for essays that the best way to secure one's retirement is to find a way to move more money into the future. It's not just the pure amount of money (assets) one has but the flow of money each year. There is a lot of research (again, by the SOA!) that shows people won't dip into their assets in retirement. If times are tight and they don't get as much as they need in terms of income they just cut back. So, if you can change the dynamic this psychological problem is overcome.

Did anything surprise you as you did this work?

Probably the amount of work that has already been done across almost all the retirement arenas. The problem really is turning the research into ideas. And the ideas then need to lead to products. And THEN they need to be brought to the consumers. The surprise is not how hard it is to get from A to B and, even then, to C, but rather from C to D, that final step where people buy these wonderful things we invented.

If there is one key point you want your reader to take away from your essay, what would that be?

There are always solutions to problems. In this case, if we worry that people don't have enough savings there are ways to work away at that. Second, while it may sound like I'm proposing a governmental solution here, I'm not. All I'm doing is using a well-liked government program as the platform.

Who do you think might be interested, and what would be needed to move your idea forward? What obstacles would you foresee?

Any number of policymakers should be interested. But for it to get anywhere would require some enterprising member of Congress—or someone in the administration—looking for a hot idea. As for obstacles, if you think back to my A>B>C>D concept, it is not as if the idea couldn't actually be enacted into law or tried out by an agency as a pilot, but we'd also have to figure out how to sell it to the consumer. Like so many other good policy or product ideas that never went anywhere, low take-up rates will kill it.

An Enhanced Social Security Annuity

By John Cutler

Social Security provides what most actuaries like to see in terms of how to address retirement, meaning individuals are best protected by annuitizing retirement. What is desired is a steady flow of income on which people can depend. That Social Security is a government program instead of a private insurer also means the benefit is from a trusted source. That gives an assurance it will be there when needed. It also helps that Social Security is structured as a benefit one cannot outlive. Imagine you had bought a private annuity guaranteed to a certain age, even 100. For many, that source of funds would dry up.

Having said that Social Security is wonderful—and not even getting into how it also is wonderful because it tends to aid poorer individuals more than the rich—it is not enough for many. My proposal does not address how to help the lowest income individuals. It would, however, help those who do not have enough quarters of work to qualify for Social Security.

Right now, tens of millions of people put money aside to protect themselves in retirement. In many cases, they tap it before they wish. In other cases, they could have saved/invested but did not. My proposal pushes—nudges—individuals in the direction they should be going, namely putting more money away in a vehicle that best maximizes their savings dollars.

As we know from Nobel laureate Richard Thaler, people do not act completely rationally. As reported in the *New York Times* when he won the Nobel Prize in Economics, Thaler "did not simply argue that humans are irrational, which has always been obvious but is not particularly helpful. Rather, he showed that people depart from rationality in consistent ways, so their behavior can still be anticipated and modeled."¹

WHY THIS AND NOT SOMETHING ELSE?

What is envisioned here is the creation of a right to buy additional annuity protection through the Social Security system, in essence to leverage the idea that Thaler had to nudge people toward better decision-making.² Now someone will point out that people can already buy annuities. My reply is they can but they don't. Part of this is likely due to companies and brokers that sell annuities not making a compelling case. Another part is the funding requirement. Most annuities are paid (bought) in a lump sum. But that is not the only way to do it. All an annuity really amounts to is money at the front end (either a lump sum or a monthly flow) that triggers a promise to pay a lump sum or flow of money in the future. The Appendix demonstrates what it might cost to create such protection through the private market rather than Social Security.

To achieve more widespread adoption of annuities, the government could wage an educational campaign. Or employers could provide annuities instead of life insurance. None of the various ideas will likely alter the fact that private sector annuities are, in my opinion, simply not constructed or delivered well to expand coverage for the great mass of the public.

An analogy would be how extensive term life insurance is versus whole or universal life. If the annuity industry could have created a term life equivalent, they would have done so and sales would presumably have been as robust as term life, at least if employer interest had been as great as with term life.

ESTABLISHED MODELS

This brings up the question as to what might be the best method for delivering such a product. The model I would propose is the Federal Employees' Group Life Insurance (FEGLI) Program, established in 1954. It is the largest group life insurance program in the world, covering more than 4 million federal employees and retirees, as well as many of their family members.

FEGLI provides group term life insurance. A private entity the Office of Federal Employees' Group Life Insurance—was created to pay claims under FEGLI. Well over 100 life insurance companies participate in the program. They originally split the risk but since there is essentially no longer any risk with a program this large, there is no longer an insurance charge. MetLife receives a management fee to run the program.

Another model is the federal retiree program known as the Thrift Savings Program (TSP). TSP is a defined contribution retirement savings and investment plan for federal employees and members of the uniformed services. It was established in 1986 and offers the same types of savings and tax benefits many private corporations offer under 401(k) plans. What is interesting about this model is that the federal government is the administrator. No brokerage firm is hired to run the program.



HOW IT WOULD WORK

There is no reason FEGLI (or TSP) administrators could not be brought into the picture for identifying annuity companies that would offer their products to Social Security beneficiaries. These insurance products would not be identified by carrier. More important, the rules for how the carriers price and reserve for the annuities would all be the same. There are certainly reasons why competition is good. But for this kind of product approach, it is better we treat it as a commodity product and reduce competition and differentiation to make it accessible and more desirable to Social Security beneficiaries.

If we go back to earlier in this essay, you'll recall that an annuity can be a flow of money at the front end. For this proposal to work, we have to envision a system where people move small bits of change forward over time. A 20-year-old can easily divert \$5 to 10 or so a month into a retirement account . . . or a Social Security annuity.

Social Security actually uses percentages, not dollar figures: You pay 6.2% and the employer pays 6.2% (which is not the same as the Federal Insurance Contributions Act, or FICA, rate since that includes Medicare). That approach would probably be adopted to make it easier. In fact, here is where Thaler comes into play. If you had to grit your teeth and lock down some money you couldn't touch for 40 years, which is psychologically better, \$10 or .3%? Some people will like the idea of a set amount of cash. Others would say setting aside, say, another .3% of income into Social Security makes it an "even" savings of 6.5% of salary. Either works and it is not the final amount that is important but the fact that people default to one or the other and put money away.

One departure from Social Security is that the person can turn the savings on or off but they cannot withdraw the funds prematurely. Whatever they do put into the system goes into a dedicated account they keep for life. They can add to it or not as time goes by. Individual retirement accounts and 401(k) plans can be accessed ahead of time, with a penalty. These could not be accessed early.

A parenthetical note here. If we were in a world where there was only the Social Security system, you might need to build in a way to access the money ahead of time. But with the ability to tap into these other retirement accounts in case of emergency, there is less need to go after the Social Security annuity. This also prevents what has happened politically to retirement accounts. The law now allows people to access their retirement accounts for education or to buy a first home. These are laudable provisions but if anyone thinks they were added because of the hue and cry of the public, they are missing how things work in Washington. These came from the industries that benefit from letting people tap their retirement accounts for those other, nonretirement uses.

TRIGGERING PROVISIONS

The system cannot be kept so pure that there is not an exit plan for some hardships, specifically, in the event of a permanent disability. In that case, it makes sense to allow a diversion of retirement savings.

In essence, there would be only two triggering events. One trigger allows access earlier for permanent disability. The main one is the date you set after retirement for when you want the money to flow. This probably should be no earlier than age 66, the current age for Social Security distributions for those born before 1954. As is scheduled for Social Security itself, the distribution age could be moved to 67 for those born after 1960. As with longevity annuities, the idea is to protect people at older ages. What might be nice is not to require this be a permanent election when they start putting the money away. Frankly, the closer to retirement, the more likely the person would know their financial situation.

One matter open for discussion is whether to make this an autoenrollment option. We know auto-enrollment works. I would suggest we do that here. But the amount we would want to tap becomes an issue. Too low and people sign on but it does not amount to that much when they retire. Too large and they reject the enrollment altogether. We could make it a sliding scale with larger salaries getting a larger percentage put aside.

But I tend to think we should start out simple—and relatively small—until we have more real-world experience.

While a lot of the organizational matters have been set out, there is still a lot missing. For instance, whether to introduce a difference in pricing between males and females, which exists in the

Table 1 Premiums for Annuities With Monthly Payments Equal to the Average Social Security Retirement Benefit, December 2014 (in Dollars)

Sex	Average Monthly Social Security Benefit at Age 65	SPIA Premiums		100% JS Annuity Premiums	
		For a Nominal Fixed Monthly Payment	With 3% Inflation Protection	For a Nominal Fixed Monthly Payment	With 3% Inflation Protection
Men	1,317	263,043	359,045	359,045	471,066
Women	1,033	229,262	321,954	321,594	367,338

Sources: Social Security Administration, "Annual Statistical Supplement to the Social Security Bulletin, 2015," SSA Publication No. 13-11700 (April 2016): Table 5.A1.1, https://www. .socialsecurity.gov/policy/docs/statcomps/supplement/2015/index.html, "Get Your Best Annuity Quotes Instantly Online!" accessed 2016, https://www.immediateannuities.com/.

Notes: While Social Security benefits are gender neutral, annuity premiums and monthly payments are based on the differences in life expectancy between men and women. Equivalent annuity amounts were imputed from these data.

SPIA stands for single premium income annuity; JS stands for joint survivor.

private annuity market but not in Social Security. Other issues include indexing for inflation, survivor benefits and so forth.

CONCLUDING THOUGHTS

Since this is a thought exercise and not in-depth research, the next step would seem to be to flesh this out more. One way to do this is built on work already done by the Social Security Administration, especially that of Dale Kintzel and his colleagues.³ I'd also suggest that while much has been discussed about better structuring 401(k) plans now that we have moved from a defined benefit world to one of defined contributions, we are missing the larger picture: There are other tools we can employ to protect and help people secure their future retirement. A new Social Security annuity would help do so.

APPENDIX

Table 1 illustrates a pretty devastating picture of what it would take to duplicate Social Security, as you can see from a 2015 Social Security Administration publication.⁴ My proposal is not an attempt to displace Social Security but rather a way to augment it. ■

John Cutler, J.D., is an attorney and consultant in the field of aging and long-term care. He consults for the state of Minnesota and volunteers for the Society of Actuaries Post Retirement Needs and Risks Committee and LTC Section, as well as other groups such as AcademyHealth where he is chair of the Long-Term Services and Support Interest Group. He can be reached at *johncutler@yahoo.com*.

ENDNOTES

- 1 Roger Lowenstein, "Exuberance is Rational," New York Times Magazine, Feb. 11, 2001, http://www.nytimes.com/library/magazine/home/20010211mag-econ.html.
- 2 From Lowenstein: "Along with Shlomo Benartzi, a collaborator at UCLA, Thaler cooked up a plan called Save More Tomorrow. The idea is to persuade employees to commit a big share of future salary increases to their retirement accounts. People find it less painful to make future concessions because pain deferred is, to an extent, pain denied. Therein lies the logic for New Year's resolutions. Save More Tomorrow was tried with a Chicago company, and workers tripled their savings within a year and a half—an astounding result." Ibid.
- 3 While it is slightly off-topic, the Social Security Administration has a very detailed analysis of what it would take to create Social Security-like benefits via private annuities. See Dale Kintzel, "Social Security Retirement Benefits and Private Annuities: A Comparative Analysis," Social Security Administration issue paper no. 2017-01 (May 2017), https://www.ssa.gov/policy/docs/issuepapers/ip2017-01.html.
- 4 Dale Kintzel, "Social Security Retirement Benefits."

An Interview with Anna M. Rappaport



Anna M. Rappaport, FSA, MAAA

Tell us a little about yourself.

I am an actuary, a phased retiree, a futurist and an artist. I have been heavily involved as a volunteer in the Society of Actuaries since the mid-1960s and spend a great deal of time on this work now that I am no longer employed on a full-time basis. I also do some consulting and volunteer for some other organizations. I am a 50-year fellow of the Society of Actuaries, a past president, and I chair the Committee on Post-Retirement Needs and Risks. I am an advocate for women's retirement, for better work opportunities for older Americans and for improving the retirement system. In 2017, I won the Lifetime Achievement Award from the Plan Sponsor Council of America.

What attracted you to the essay contest?

I am very concerned about improving the retirement system, and I believe that facilitating better options for older work is an important part of that. I have been focusing on phased retirement and better work options for older individuals for about 20 years, with relatively little progress. While many people seem to understand this is an issue, public policy does not help and it is hard to bring attention to this issue. The essay contest seemed like a great opportunity to remind people that these issues are an important part of improving the retirement system.

I was also encouraged because in 2017 the Canadian Institute of Actuaries asked me to present about working in retirement. Tim Driver and I did a webinar for Actex; I did a presentation for a lawyer's group; and the Government Accountability Office (GAO) did a new study of phased retirement. The topic of working longer came up several times during the 2017 Pension Research Council Annual Symposium discussion. It seemed to me that interest in this topic was building and it was a good time to raise these issues again.

What steps, if any, would help make the ideas in your essay a reality?

The essay is about steps to help make it a reality. It discusses a variety of policy issues and steps that might be taken. One of the controversial issues linked to this topic is increasing retirement ages.

What groups would need to be involved?

Support is needed from policymakers, the business community, aging advocacy groups and the general public.

What else would you like to tell us?

Raising retirement ages makes sense, but it needs to be accompanied by a look at disability benefits and how they work. The two areas need to be considered together. I know this is very controversial, but it makes no sense to me for periods of retirement to continue to grow longer indefinitely.

An Interview with Tim Driver



Tim Driver

Tell us a little about yourself.

I'm an entrepreneur interested in web products that make a social contribution. In my career, I've had the good fortune of working at several companies that transformed their industries and impacted lives. When I joined CNN, where I was a writer and producer, it was still unknown. Making 24-hour news succeed was considered a big, hairy, audacious goal (to those on the outside, anyway). When I joined AOL, where I served as a group director in its Strategic Businesses unit, every day was like jumping into the saddle of a bucking bronco and racing it down a track. As a senior vice president and early board member at *Salary.com*, I got an opportunity to help lead a major shift in how compensation data is collected and shared, for the first time putting it in the hands of employees and leveling the playing field. My 12-year-old, Boston-based firm, Age Friendly Ventures, is

on a mission to make aging easier. This, through its tech and social media products addressing jobs (*Retirement Jobs.com*), care (Mature Caregivers) and living (Age Friendly Advisor)—and through a passion for tackling ageism by teaming with industry, academic and government leaders.

When I am not working, I am enjoying hobbies and activities in and around Boston with my wife of 25 years, a social studies teacher, and our three kids—who are in their high school, college and early career years.

What attracted you to the essay contest?

Most American workplaces aren't age-friendly, and that's making it harder to keep our older citizens engaged in their communities. The fact that Americans are beginning to work longer is a good thing, but we need to make this much easier. If we do, it's a win for our country, employers and citizens. For our country, it means increased productivity and growth. For our employers, low-turnover workers generate satisfied customers. And for our older citizens, sustained engagement drives purpose, health, engagement and income. If we do not take these steps, we increase the risk of people being isolated and lacking the income they need in their later years. The essay contest seems a great way to communicate these points, inspire new research, and accelerate a much-needed cultural shift.

What steps, if any, would help make the ideas in your essay a reality?

As Anna states, these steps are discussed in the essay.

What groups would need to be involved?

A cultural shift is required to successfully change behaviors and make it easier for people to work longer. To succeed, it will require participation from a combination of influencers: policy and lawmakers, researchers, employers, academicians, advocacy organizations and media. I am particularly interested in further building and sharing the data-driven business case for hiring and retaining mature workers.

What else would you like to tell us?

Thank you for this opportunity!

Working Longer to Improve Retirement Security: Improving Public Policy

By Anna M. Rappaport and Tim Driver

ndustrialized countries provide basic retirement benefits through social insurance and other programs to support seniors, as their populations live much longer and their retirement periods grow as well. This often results in a strain on public resources. Working longer improves retirement security and can reduce the cost of public and private retirement programs, but policymakers have often not focused on how to facilitate and support older retirement ages.

Those in the policy community are lagging behind other professionals such as gerontologists, actuaries, economists and retirement planners in talking about the societal importance of longer work. They are not doing much to address barriers to longer work or ways to enable phased retirement.

This essay discusses policy issues. We strongly encourage policymakers to focus on increasing retirement security by encouraging and making it easier for people to work longer. A separate essay, "Working Longer to Improve Retirement Security: Addressing Workplace Issues," discusses issues for employers.

THE SITUATION IN 2017

Longer work is not a focus of the current public policy agenda. The main issue related to later work that gets attention is raising the Social Security retirement age, but there are many additional issues. This essay focuses on a broad range of benefit and legal issues that create barriers to phased retirement and longer work.

The Government Accountability Office conducted a study in 2017¹ during which they interviewed both employers and experts; they found little formal phased retirement. They present evidence that many people work as part of retirement, in effect creating their own phased retirement. They identified both advantages of phased retirement and obstacles; legal issues were found to be particularly important. There have been years of discussion about phased retirement, and the rules were partly clarified and liberalized by the Pension Protection Act of 2006. Under this legislation, defined benefit (DB) plans are allowed to pay benefits to participants who are phasing out starting at age 62. But there has been little use of these provisions, possibly because they are still complex to implement and there remain unanswered questions, and possibly because most of the DB focus has been on freezing or terminating the plans.

Issues related to later retirement and longer work are concerns in many countries. The Melbourne Mercer Global Pension Index² is a study of pension systems in 27 countries. The 2016 report³ identified several challenges, including "the need to:

- "Increase the state pension age and/or retirement age to reflecting increasing life expectancy, both now and into the future, and thereby reduce the level of costs of the publicly financed pension benefits [and]
- "Promote higher labour force participation at older ages, which will increase the savings available for retirement and limit the continuing increase in the length of retirement."

In the United States, expectations about work in retirement and actual retirement age do not match. According to our observations, about half of retirees work after retirement or phase out in some way and about three-quarters say they want to work after retirement. The 2017 SOA Post-Retirement Risk and Process of Retirement survey found that pre-retirees expected to retire at a mean age of 65, but retirees had actually retired from their main occupation at a mean age of 58.⁴

Issues related to later retirement and longer work are concerns in many countries.

FOCUS ON REHIRE OF RETIREES

Much of the phased retirement today is in the form of hire or rehire of retirees, either by their prior employer or by a new employer. But it is not easy. Some modest policy changes would ease barriers to rehiring retirees and probably not be costly to anyone.

There are complexities involved in the rehire of retirees because of provisions in pension and employment laws and employee benefit plans. Also, these retirees may often want to have creative work arrangements. Rehire by the same employer where there are pensions being paid requires a bona fide termination of employment or the pension plan will be in legal trouble. However, there is no definition of bona fide termination in the law or regulations.

Current employer options with regard to rehire of retirees include:

- Avoid rehire entirely
- Make people wait a period to be rehired
- Limit work of rehires to less than 1,000 hours annually, usually done in connection with a waiting period
- Use a retiree pool
- Engage retirees as consultants
- Use independent contractor arrangements
- Work through third parties, like a temp agency or specialized consulting firm

Pools and third-party arrangements can be limited to a firm's own retirees or they can offer access to a broader pool of individuals. The different methods of handling rehires can be used in combination. For example, a rehired retiree might be an independent contractor, not allowed to work more than a certain number of hours, and not be able to be hired as a contractor until six months have elapsed from termination of employment.

Employers seeking to rehire retirees are faced with a tangle of legal complexities and ill-defined rules. It would be a great help to clarify and define what a bona fide termination of employment is and offer safe harbors so that employers could know what approaches are safe and choose the best ones for them. Ideally, safe harbors should deal with the combination of issues related to termination of employment and age discrimination and serve to keep independent contractor status issues from raising added roadblocks.

For example, an arrangement that does not include a regular ongoing job and involves less than 750 hours of work per year could meet a safe harbor test. Participation in a pool with a limit on total hours worked could also qualify.

ISSUES WHEN DB PENSIONS ARE PRO VIDED

When DB plans are offered, phased retirement can mean partial pension payments or payment of pensions while someone is still working, leading to a number of questions. For example, will reduced benefits be paid to phased retirees, and how will they be calculated? Will pension credit continue for the additional work? When will benefits be recalculated? How will early retirement adjustments be applied if phasing occurs during the early retirement period?

When phasing occurs through rehire of retirees, there are also DB pension issues. Under what circumstances can retirees work and collect benefits? If benefits are suspended or partly suspended, how are benefits recalculated for the added service? These are a few of the technical issues. While the plan sponsor chooses exactly what they wish to do, the statute and regulations define what requirements and limitations apply.

When benefits are provided only through defined contribution (DC) plans, there is no issue of partial pension payments. However, there may be issues of when the employee is allowed to receive plan benefits—at phased retirement or only at full retirement. DC issues are much simpler.

PHASED RETIREMENT FOR FEDERAL EMPLOYEES

Federal employee benefits provide an example to the private sector and also may offer ideas for legislation that can encourage or enable private sector practice. Legislation⁵ enabled phased retirement for federal employees, a program that allows full-time federal employees to work part-time schedules while starting to draw retirement benefits. The program was first implemented in 2014. Agencies were required to sign up for the program. Employees who are eligible for phased retirement and want to continue working on a part-time basis may do so with the agreement of their agencies. During phased retirement, the employee receives a partial pension and will keep accruing additional service credit for their final pension. Employees participating in this program are required to spend 20 percent of their time mentoring other employees.

Take-up of the program has been disappointing. As of June 27, 2017, 252 people had applied and an additional 79 were retired under the program.⁶ But many agencies had not offered the program to employees or had started only recently. The lower-than-expected take-up has also been attributed to lack of flexibility in the program and the need for individual approvals.

When Congress enacted the legislation, it was hoped it would encourage more private sector organizations to offer phased retirement. However, with the experience to date, it is unlikely to do this, and it could have the opposite effect.

POLICY UPDATES TO FACILITATE LONGER WORK

We have suggestions about a number of policy areas⁷ that can be used to facilitate and encourage longer work.

- **Revisit Social Security retirement ages.** This is the issue most commonly cited in discussions of later retirement and phased retirement. Social Security retirement ages strongly influence when people retire and also public expectations about reasonable retirement ages. It is important to integrate discussion of disability benefits into the conversation. While many people are able to work longer, many others are not. The situation also varies by education. Appropriate social benefit eligibility ages are an issue in many countries.
- Develop safe harbors for creative work arrangements and rehire of retirees with focus on bona fide termination of employment. Under current pension law, bona fide termination of employment is important but there is no specific definition of what that means. That has long been a barrier to rehire of retirees, even on a limited basis. Defining it better or offering safe harbors would enable more of the people seeking work in retirement to return to prior employers and make it easier for employers to know what is acceptable. Safe harbors that work well may cross several legal areas.
- Consider a new classification of worker tailored to encore careers. Some employers work extensively with independent contractors. That can be a way to avoid offering individuals benefits and the legal protections extended to employees. The regulations can serve as an inadvertent barrier to using phased retirees as independent contractors. Whether the best way to provide for a range of options for encore careers and rehire of retirees is to provide a special worker category should be explored. Such an effort would be a major step to advancing access to more creative job options.
- **Expand public job training to help people move to encore careers.** Some government agencies currently are involved with identifying training needs, offering and encouraging job training. There are some situations where training would be very helpful in connection with encore careers.
- Provide education for employers and model documentation around encore careers and retiree contracts. Model documents could help both the worker and the organization engaging them to handle the transaction efficiently and smoothly. Contracts can be a major barrier to retiree rehire. A government agency could provide such documents or encourage them in the private sector.
- **Revisit Medicare primary/secondary rules.** These rules require Medicare be secondary to employer-sponsored coverage when an individual has coverage under an employer plan as an active employee or a dependent of an active employee.



Medicare is primary for most Americans when they reach 65, and health care costs tend to rise with age. This rule is a barrier to hiring and retaining people over age 65.

- **Revisit age discrimination requirements.** The GAO study lists the age and disability discrimination regulations as a barrier to phased retirement. Age discrimination is a problem, but this type of regulation can have unintended consequences. It appears quite likely that these requirements are a barrier to innovation and hiring older workers. Barriers can be created by the actual provisions of the law, by actual or feared outcomes in court, and by perceptions. It is a time for a thorough study to understand how effective this legislation is, what, if any, unintended consequences it produces and whether fine tuning is needed.
- Revisit employee benefit plan laws and regulations, including the phased retirement provisions of the Pension Protection Act. Employee benefits law includes provisions that regulate normal retirement ages, discrimination in the provision of benefits, suspension of benefits on return to work, permit payments of benefits to employee working after age 62, and so on. The age requirement set forth in the Pension Protection Act is a problem. A big question is whether these rules can be simplified and which are a barrier to phased retirement. The GAO report discusses barriers related to nondiscrimination requirements and also challenges related to the calculation of benefits.

Note that phased retirement and improvement in the policy environment surrounding it was a topic studied by the 2008 Department of Labor's Advisory Council on the Employee Retirement Income Security Act of 1974.⁸ Barriers to phased retirement and perceptions about barriers were topics of the more recent GAO report. Multiple federal and probably some state agencies have roles in some of these matters or other employment regulation. It is important they work together to resolve these issues and encourage later employment.

In closing, phased retirement, which allows people to gradually move from full-time work to labor force exit, makes a great deal of sense to us. Longer work lives are important to many stake-holders in our society.

FOR MORE INFORMATION

On public policy and employer practices

Rappaport, Anna M. "It Is Time to Revisit Public Policy and Options for Older-Worker Employment," *Journal of Retirement* 2, no. 3 (Winter 2015): 94–103. http://jor.iijournals.com/content /2/3/94.

On employer issues and practices

Rappaport, Anna M., and Mary B. Young. "Phased Retirement after the Pension Protection Act," Conference Board report, 2007.

On individuals

Society of Actuaries. "The Decision to Retire and Post-Retirement Financial Strategies: A Report on Eight Focus Groups," research project, 2013. https://www.soa.org/research-reports/2013/The-Decision -to-Retire-and-Post-Retirement-Financial-Strategies--A -Report-on-Eight-Focus-Groups/.

This essay reflects research discussions with a number of experts on legal issues related to longer work and phased retirement and an extensive interest in later work as an important response to an aging society. The combined experience of the authors includes more than 20 years in different phases of retirement, more than 10 years in facilitating jobs for older workers and many years of pension consulting. Anna M. Rappaport, FSA, MAAA, is the founder of Anna Rappaport Consulting. She can be reached at *anna.rappaport@gmail.com*.

Tim Driver is the founder and CEO of RetirementJobs.com Inc. He can be reached at *tim@retirementjobs.com*.

ENDNOTES

- 1 U.S. Government Accountability Office, "Older Workers: Phased Retirement Programs, Although Uncommon, Provide Flexibility for Workers and Employers," report to the Special Committee on Aging, U.S. Senate, GOA 17-536 (June 2017), https://www.gao.gov/assets/690/685324.pdf.
- 2 Mercer, *Melbourne Mercer Global Pension Index*, reports are issued annually, https://www.globalpensionindex.com/.
- 3 Mercer, 2016 Melbourne Mercer Global Pension Index, October 2016, https://www .globalpensionindex.com/wp-content/uploads/MMGPI2016-Report.pdf.
- 4 Society of Actuaries, 2017 Risks and Process Retirement Survey: Report of Findings, January 2018, https://www.soa.org/research-reports/2018/retirement-risk-survey/.
- 5 Federal phased retirement for federal employees is authorized under Moving Ahead for Progress in the 21st Century Act of 2012, or MAP-21, Pub. L. No. 112-141, 126 Stat. 405, § 100121.
- 6 Nicole Ogrysko, "Is Phased Retirement Starting to Take Off?" Federal News Radio, June 28, 2017, https://federalnewsradio.com/retirement/2017/06/is-phased -retirement-starting-to-take-off/.
- 7 The policy issues discussed are based on the U.S. environment, except where noted otherwise. The general issues related to phased retirement apply in many countries.
- 8 U.S. Department of Labor, 2008 Advisory Council on Employee Welfare and Pension Benefit Plans, "Advisory Council Report on Phased Retirement," 2008, https:// www.dol.gov/agencies/ebsa/about-ebsa/about-us/erisa-advisory-council/2008 -phased-retirement-2.



475 N. Martingale Road, Suite 600 Schaumburg, Illinois 60173 p: 847.706.3500 f: 847.706.3599 w: www.soa.org NONPROFIT ORGANIZATION U.S. POSTAGE PAID SAINT JOSEPH, MI PERMIT NO. 263