



SOCIETY OF ACTUARIES

Article from:

The Actuary Magazine

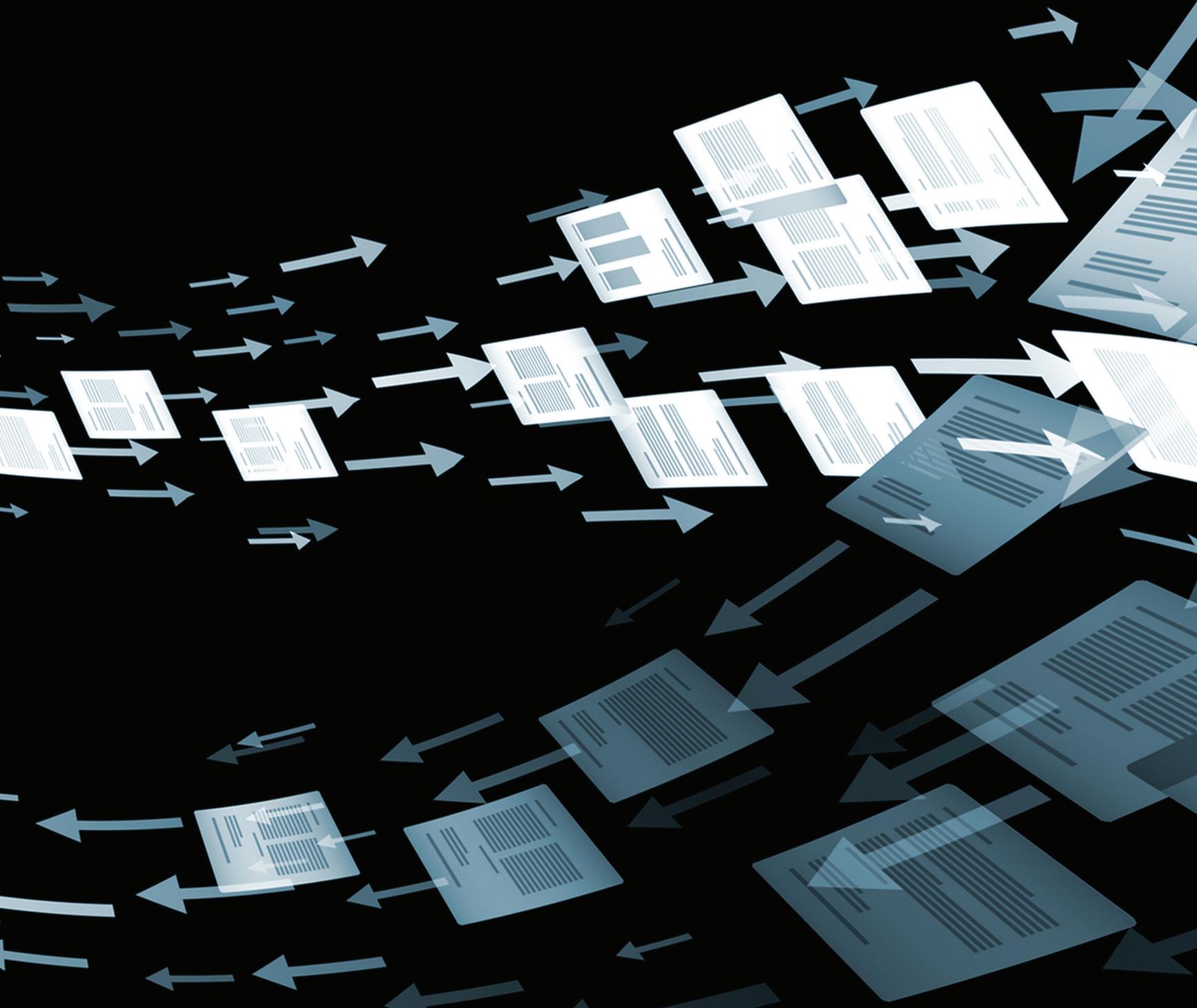
December 2012/January 2013 – Volume 9 Issue 6

THE SOA RES

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RESEARCH PORTFOLIO: DIVERSE INVESTMENT



THE SOA INVESTS IN A UNIQUE PORTFOLIO OF ASSETS THAT IS WELL DIVERSIFIED AND SHOWS CONSISTENT POSITIVE GROWTH. HERE'S A DESCRIPTION OF THIS AMAZING PORTFOLIO. BY C. IAN GENNO, STEVEN C. SIEGEL AND SARA TEPPEMA.

Did you know that the Society of Actuaries invests in a unique portfolio of assets? This portfolio is well diversified and shows consistent positive growth. Best of all, you receive dividends from it year after year. What's this highly profitable, "no strings attached" investment? It's none other than our wide-ranging and leading-edge actuarial research.

The SOA recently reviewed its research strategy, and how it manages its portfolio of

practitioners in our traditional areas of practice;

- Research that fosters further new thinking and developments in actuarial science (typically led by academics and others working in the pure science and its applications); and
- Research that expands the boundaries of our profession, rethinking the roles that actuarial science and actuaries can play, thereby creating new opportunities for actuaries.

THE PRACTICE RESEARCH PORTFOLIO: EXPANDING BOUNDARIES FOR THE PROFESSION

For many actuaries, experience studies are the best known of the SOA's varied research efforts. For others, the benefits of practical research projects may be more applicable to their daily responsibilities. Simply put, practice research has historically focused mainly on research efforts that help actuaries do their jobs better.

Looking forward, the SOA will continue this focus—but also aspire to use practice research to expand the boundaries of our profession, and invest in research projects that are broader and deeper (and likely larger in scope) than those of the past. To support this initiative, the board has identified three specific types of research that expand boundaries and reach different audiences:

The SOA supports research that advances actuarial knowledge, expands boundaries of actuarial science, and develops intellectual capital for use by existing and future generations of actuaries.

research assets. In this article, we describe the key conclusions of this review and how we're currently implementing a new research strategy. With this new strategy, we forecast continued strong profits and bullish performance for our research portfolio.

A NEW STRATEGY

In October 2011, the SOA board discussed and approved a new strategy for all of our research and intellectual capital, following a comprehensive review by a team of SOA volunteers and staff. A key element of our new research strategy is to achieve an appropriate balance between:

- Research that develops intellectual capital for immediate use by

The first step to implement this new strategy, with work ongoing throughout 2012, was to focus on the concept of expanding boundaries for the profession, to broaden our practice research portfolio. The next step involved a comprehensive review of the success of, and learning from, the SOA's data-driven staff research function, which had been tested as a pilot within the U.S. retirement practice in 2011 and 2012; the SOA board decided in October 2012 to make this in-house research function permanent, and to explore how to expand this to include Canada as well as other areas of practice. And for 2013, the board is reviewing how experience studies are conducted, and is formulating a new strategy for this important component of research.

- Expansion of practice: research that expands actuarial practice into new or nontraditional areas, or research that stays within traditional practice areas but extends that practice in new ways;
- Public policy: research that informs the development of government policy at the state, provincial or national level; and
- Societal interest: research that informs the public and has the potential to raise the visibility of the actuarial profession in the media.

In recent years, the SOA practice research function has operated primarily through practice area research committees. Six research committees—focusing on Finance,



Health, Life Insurance (combining the efforts of several life insurance-related section councils), Retirement, Risk Management, and Postretirement Needs and Risks—receive direct funding from the SOA, in addition to funds designated for research by various section councils. Other non-practice-specific sections, such as Forecasting and Futurism and Entrepreneurial Actuaries, also sponsor smaller research projects with their own funds.

THE RESEARCH EXECUTIVE COMMITTEE

In 2012, the SOA formed the Research Executive Committee (REC), a group of volunteers with significant and diverse SOA research experience that will manage our new research strategy. The REC's responsibilities include:

- Setting an overall research agenda for the SOA and recommending research budgets, based on input from the research committees, section councils, other groups working on research, SOA members and other interested stakeholders;
- Recommending funding of research proposals that seek to expand boundaries for the profession, via a new Research Expanding Boundaries Funding Pool (REX Pool);
- Collaborating with the research committees, section councils and other groups to identify and develop new research projects to address unmet needs;
- Setting quality standards for published research;
- Developing an overall strategy for more effective distribution and communication of research results to target audiences and stakeholders; and



- Monitoring the success of research projects, and finding ways to leverage success.

The REC acts primarily as an executive oversight group (similar to the role of the Education Executive Committee, within the SOA's Education area), to provide overall leadership across all areas of SOA research. The various practice-specific research committees will continue in their key role of initiating and managing research projects. In situations where the REC identifies new research ideas to address unmet needs, or interested parties bring research ideas directly to the REC, the REC will assess these ideas and engage the appropriate research committee for development. To the extent that a research idea does not clearly fall within the scope of a particular research committee—such as in the case of a multidisciplinary research topic—the REC can create a temporary work group to explore the topic and potentially facilitate a research project.

The REC's mission is focused specifically on practice research (rather than experience studies, which are separately managed within the SOA). The REC also wants to support the independence of section councils and other groups that have independent funding, which will continue to have autonomy in deciding how to allocate their own resources in support of specific research pursuits.

SOURCE OF FUNDS: THE REX POOL AND RESEARCH COMMITTEE FUNDING

As outlined above, the REC is charged with recommending funding to support research initiatives that seek to expand boundaries for the actuarial profession, from a specific pool of funding called the REX Pool. The REC also provides funding to support existing research committees.

The REX Pool is available to eligible entities such as established SOA research committees, SOA section councils, committees or task forces of the SOA board, and special ad hoc committees formed by the REC.

Eligible entities are encouraged to submit funding applications to the REC. Applications simply need to describe a well-thought-out idea with a supporting rationale and an approximate estimate for funding. To simplify the process for those seeking REX Pool funding, and facilitate generating as many good research funding ideas as possible for consideration, applications do not need to be in the form of a full traditional research proposal.

The REC has established criteria for the kinds of research ideas it wants to fund. These may

- Does the proposed research represent a new partnership opportunity for the SOA, e.g., with non-actuarial partners and/or co-funders?
- Would the proposed research enhance the stature of the profession (or damage it, if passed up)?

INITIAL REX POOL DECISIONS

The first round of REX Pool funding for research proposals that expand boundaries for the profession was completed in September 2012. The REC allocated its total REX Pool budget of

Creating an **in-house research capability** enables the SOA to deliver new and different types of research products in key practice areas, to complement its existing research initiatives.

include, but are not limited to, the following:

- Does the proposed research expand boundaries for the profession? Through expanded practice? Through public policy? Through societal interest?
- Does the proposed research further an SOA strategic goal?
- Will the proposed research lead to new, unique and relevant insights?
- Will the proposed research address a critical gap in current research?
- Does the proposed research meet a time-sensitive need?
- Could the proposed research garner significant media attention?
- Will the research be of specific interest to certain audiences?
- Is the proposed research multidisciplinary?

\$400,000 (allocated by the SOA board for 2012) to seven diverse ideas that will become new SOA-sponsored (or co-sponsored) research projects:

- 1. Complexity science and behavioral finance:** A study of models of health care behavior and decision making, from a complexity science and behavioral finance perspective.
- 2. Regulatory risk for insurers:** In partnership with the North American Actuarial Council's Collaborative Research Group (NAAC CRG), a study of regulatory risk faced by insurance companies in Canada, the United States and Mexico, and strategies to deal with regulatory risk.

3. Risk adjustment bias in health insurance exchanges: A study of potential bias in risk adjustment methodologies under the U.S. Affordable Care Act's risk adjustment system within health insurance exchanges.

4. 2014 "Living to 100" Symposium: This triennial international symposium brings together researchers and dozens of original research papers with a focus on longevity.

5. Climate change index: This will be phase 2 of a joint project between the SOA, Canadian Institute of Actuaries (CIA), Casualty Actuarial Society (CAS) and American Academy of Actuaries (AAA) to develop an index that can be used as a resource for actuaries and others working in the life, casualty and ERM fields, to develop predictive models and other risk management strategies related to climate change.

6. Sustainability of natural resources: An existing SOA working group on natural resource sustainability will bring together actuaries and other experts, to define the issues from an actuarial perspective, develop recommended next steps for the actuarial profession, and provide a report to the SOA membership.

7. Conference on the future of aging and retirement: In partnership with Boston University, the SOA will participate in an international conference on the topic of aging and retirement, with funding going primarily toward a report for SOA members on the discussions and outcomes of this conference.



The REX Pool

FOR MORE INFORMATION on the REX Pool, we encourage you to visit the SOA research website: <http://www.soa.org/Research/Research-Opps/Expanding-Boundaries-REX/default.aspx>

These research ideas have price tags ranging from \$10,000 to \$100,000, and were judged by the REC to create the potential to expand the boundaries of actuarial science. The ideas are at various stages of development; over the next few months, they will follow the normal SOA research process, from Request for Proposal to completed project. Several of these projects have already begun this process.

The REC will review the next round of REX Pool applications in March 2013. For the coming year, the SOA board has budgeted REX Pool funding to increase to \$800,000 for new project investments.

INSOURCING VS. OUTSOURCING: NEW DATA-DRIVEN, IN-HOUSE RESEARCH CAPABILITIES

Throughout 2011 and 2012, the SOA has been conducting a pilot experiment to assess the feasibility of delivering relevant, timely research insights in the retirement area, using an in-house staff researcher, database and modeling tool. (This contrasts with the traditional SOA research approach of relying solely on volunteers and external hired researchers, and analytical tools and data that are developed specifically for each research project.) Joe Silvestri, a seasoned pension actuary, joined the SOA in early 2011 and has been working with a database and modeling tool provided to the SOA by the U.S. government's Pension Benefit Guaranty Corporation (PBGC).¹ Over the course of this pilot period, the SOA has published retirement research reports based

on this database and modeling tool that have garnered considerable attention from U.S. policymakers and the media.

Beginning in 2013, this two-year pilot program will become a permanent staff function within the SOA. As next steps, the SOA will explore engaging a contracted actuary to develop a complementary database and modeling tool to support Canadian retirement research similar to the research with U.S. data. The SOA will also explore what resources are needed to add a similar in-house staff research capability in the health practice area.

Based on lessons learned from the pilot, an ongoing "product line" is being considered, which will include status reports and periodic updates on research issues that the SOA has published papers on; reports on current hot topics, focusing on issues that are of high importance at a given time such as proposed legislation; and fact sheets that would provide brief, data-driven reports for interested stakeholders to develop their own analysis or assessment of implications.

THE FUTURE HORIZON FOR RESEARCH INVESTMENTS

Viewing the SOA's research initiatives as assets for the actuarial profession, it makes sense to periodically review our return on this investment and take steps to optimize its value to SOA members, other interested stakeholders and the broader public. With this responsibility in mind, the REC will be working on an ongoing basis to enhance

the value of SOA practice research and refine its strategy. In addition to the first round of REX Pool funding decisions, the REC has already implemented an enhanced communication plan to ensure SOA research effectively reaches traditional and nontraditional audiences. And it is working toward better defining and measuring the impact of SOA-sponsored research through the development and assessment of key metrics. With these initiatives in place, no doubt we're in for a long-term, bull market on SOA research! 

C. Ian Genno, FSA, FCIA, CERA, is a senior consulting actuary at Towers Watson. He is also a vice president and member of the board of directors of the Society of Actuaries, and chair of the Research Executive Committee. He can be contacted at Ian.Genno@TowersWatson.com

Steven C. Siegel, ASA, is a research actuary at the Society of Actuaries. He can be contacted at ssiegel@soa.org.

Sara Teppema, FSA, FCA, MAAA, is the Society of Actuaries' senior staff fellow for Practice Research. She can be contacted at steppema@soa.org.

ENDNOTES

¹ For more information, please see www.pbgc.gov.