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THE TRUTH SEEKING DEBATE

HOW TO MAINTAIN OUR INTEGRITY AND REPUTATION AS UNBIASED TRUTH SEEKERS.

BY KURT J. WROBEL

As a profession that uses quantitative techniques to project future financial events, I have always considered the economics profession a close cousin to the actuarial profession. This connection between the professions has become even closer as economists have put more emphasis on actuarial fields that have taken on greater policy importance, including health insurance and pension policy. In many cases, economists are now publicly commenting on the future projections made by actuaries, and actuaries are taking a

more important role in helping shape policy decisions.

In keeping with these similarities, I think the economics profession and its internal debates have much to teach us about our own profession and the challenges that we will likely face in the future—particularly as our profession’s financial projections are brought into political discussions regarding health insurance and pension reform. As we have seen in both fields, our opinions and projections have been either questioned or

selectively highlighted by individuals across the political spectrum who have a particular point of view that they want emphasized.

This article will focus on the internal debate among economists regarding the difference between unbiased truth seeking and an analysis that merely supports a previously held policy position. Using this as background, the article concludes by highlighting the specific lessons that actuaries can learn from this debate in the economics profession.

THE TRUTH-SEEKING DEBATE

In his weekly podcast “Econtalk,” Russ Roberts—an economist from Stanford’s Hoover Institute—has made the argument that a large percentage of economic research is driven by biased analysis and not by a dispassionate attempt to seek the truth to an economics question. As he suggests, because most economic research attempts to predict future results or explain the historical results from a complex system—the entire output for an economy, for example—it is nearly impossible to isolate the causal variables within a complex system. This effort to develop a clear and credible connection between an action and an outcome is made even more difficult when the total number of observations associated with an outcome is very small.

Considering the challenge associated with explaining a complex system with a lack of sufficient data, the causal relationship between a particular policy change and an expected outcome cannot be easily proved to be right or wrong. This ambiguity then opens the door for researchers to knowingly or unknowingly introduce a level of bias when developing a causal relationship in their modeling. As suggested in the research, this bias often results in seemingly reasonable conclusions that merely reinforce the author’s previously held views and are not based on an unbiased interpretation of all relevant data.

The classic debate on the efficacy of increasing government spending during a recession provides a clear illustration of the problem. In a highly complex system where millions of people are making independent decisions to work, invest and spend

money, it is very difficult to estimate the economic impact of a single factor on the overall result. This estimation is made even more difficult by the lack of observations associated with this question. For example, while a supporter of increased government spending could point to the expansion of government spending in the lead-up to World War II as an important causal factor in ending the Depression, a critic of increased spending could easily highlight the expansion in the U.S. economy after the *reduction* in government spending following World War II. As the economics profession has seen, the advocates and critics then debate other explanatory factors that led to the economic expansion either before or after the war without any conclusive evidence brought forward to prove their position or disprove their opponent’s position. This same kind of debate and lack of clear evidence could also be applied to the stimulus bill passed after the financial crisis in 2008, where both advocates and critics have created stories on why the hoped-for growth did not occur.

As Roberts suggests, the economics profession has too many researchers arguing about questions that cannot be clearly and credibly answered and, in many cases, using only the analytic approaches that confirm their previously held political viewpoint. This biased approach to answering economic questions can be exemplified by blogging website names from researchers that merely reaffirm their political views. In this case, when the economic question cannot be definitively explained and several competing explanations can be developed with different interpretations of the data, the final conclusion among these economists

is all too often predetermined—they will inevitably find data and a scientific approach to justify their position.

While some economists have pursued a biased portrayal of data, the profession has many who actively seek the truth without regard to political considerations. It’s these truth-seeking economists who we can learn from as we become more involved in the public policy debate.

IMPLICATIONS FOR ACTUARIES

With the increased political focus on health insurance and pension reform, I think the lessons drawn from the economics profession are instructive as we become more involved in important policy questions. While many economists have taken definitive positions that are clearly associated with a particular viewpoint, our actuarial reputation has been—but not always—recognized as an unbiased truth seeker.

Although we haven’t had the same public visibility as many notable economists, we have had a recent example where Richard Foster—while chief actuary at the Centers for Medicare & Medicaid Services (CMS)—publicly stood by his original cost including estimates on the Medicare Part D program and the Affordable Care Act (ACA), even when faced with pressure from both political parties. In the 2010 Medicare trustees report, he showed notable forthrightness and principle when he said that the official estimates under current law “do not represent a reasonable expectation for actual program operations in either the short range or long range” and then went on to provide other scenarios based on more reasonable assumptions.



It's principled actions like these that have earned our profession its reputation as an unbiased truth seeker.

With this as background, I think there are several points that we can learn from the economics profession as well as from other actuaries:

Work hard to ensure that the potential variability of a single point estimate is presented in its broader context. As many of us have learned, people like to have a single number when considering a future projection. A single number is comforting, easy to understand, and it helps provide a basis for comparison and for decision-making. The problem, of course, is that a single number does not convey the complete story when considering the range of possible outcomes that could occur from a particular decision. For example, in a relatively simple system with a significant amount of historical experience, an estimate could have a limited range of outcomes and a single point estimate can provide a prudent estimate without the need for a more in-depth consideration of other factors. On the other hand, a single point estimate of a complex system with the likelihood of a highly variable result is much less useful in developing a decision without consideration of the broader context of the potential variability of the estimate. Although this broader context approach is often not popular with decision-makers, by making this variability clear, we are much more likely to make a better decision and ensure that we will preserve our reputation if an unexpected result does occur. This prudent clarification of risk among different point estimates is one of the most important attributes of

MORE ON THE ACA

Learn more about the many facets of the Affordable Care Act (ACA). Read "The Individual ACA Market: What's Next?" in the February/March 2015 issue of *The Actuary*. FSA Kurt Wrobel discusses next steps in the ACA transition phase. Visit <http://bit.ly/1EoFLQy> for the story.

In the October/November 2014 issue of *The Actuary*, Wrobel explores the question: Will the exchange populations have sufficient cost predictability to allow insurance organizations to participate in the ACA Exchange Program? Read his article, "The ACA Cost Predictability Question." Access the article at <http://bit.ly/1dsCdnB>.

Health Watch, the newsletter of the SOA's Health Section, has a number of articles on this important topic. Check out "A Comparison Between the ACA Exchange and Medicare Risk Adjustment Programs" by Wrobel, January 2015 issue (<http://bit.ly/1JTkBv0>); "Health Insurer Financial Reporting Post-ACA: What Is the Current Thinking?" by ASA Nancy Hubler, October 2014 issue (<http://bit.ly/1EDy4XV>); and "Implications of Individual Subsidies in the Affordable Care Act—What Stakeholders Need to Understand" by FSA Greg Fann, May 2014 issue <http://bit.ly/1bf3GqX>.

our profession, but receives far too little attention.

The "Value at Risk" metric used in the financial crisis by Wall Street firms to measure the extent of their risk exposure provides a classic example of how relying on a single point estimate can be harmful to decision-makers. By relying solely on this metric and not taking a broader and more holistic view of their risk, many Wall Street firms unknowingly continued to take much more risk than they realized.

Guard against your own bias by actively looking for evidence that disproves your position. After doing a cursory

analysis, it can be easy to "fall in love" with a story that confirms your previously held opinion. Although difficult, every effort should be made to look for quantitative evidence that disproves or draws into question your original position. It's far better to find the competing evidence yourself and reconcile it with your position—or even change your position—than to have someone else find it and call into question your impartiality.

Understand the incentives of those presenting a prediction. Although not often discussed, predictions can often come with embedded biases that need to be considered. As has been seen in



the economics profession, one needs to understand if someone has an incentive to cherry-pick the data in order to support a particular position. In my career, I've found this problem of cherry-picked data to be particularly pronounced among those people who do not have the same broad financial responsibility as most actuaries.

Clearly differentiate between truth seeking and political opinion. When reporting an analysis, we need to clearly differentiate among facts, an impartial analysis based on facts, and an opinion. In some cases, I think it is perfectly acceptable

important policy implications. In contrast, our political opinions are likely to be much less valuable in adding to the broader political discussion. As we've seen in the political discussion on the ACA, there is no shortage of non-technical opinions and cherry-picked data to support one political viewpoint or another.

Show a sense of civility and respect for the public interest. Words and tone are important. When we address an issue of public interest, we need to show respect for the process and ensure that our statements are civil and in keeping with the

consider the known model factors, but will also make allowances and ensure a broader discussion among other factors that are not explicitly included in the model, but could materialize in the future. For example, as we have seen with the extension of the transitional health insurance plans and the subsequent removal of these healthier members from the ACA risk pool, these unknown factors could have a profound impact on the ultimate results.

CONCLUSION

As a profession, we are in a position to influence policy decisions affecting some of the most important aspects of people's lives, including health insurance and retirement security. Consistent with this position of influence, we need to be mindful of the importance of our projections and recommendations for both policymakers and our organizations. In keeping with this level of importance, we need to be vigilant about ensuring that we provide impartial advice that provides both a projection of results and a full and complete qualitative analysis regarding the risk associated with a policy. We also need to appreciate that maintaining our reputation for impartial truth seeking is essential in order to positively contribute to the public policy debate in the areas where we have the most expertise. Considering our country's recent challenges with the presentation of sound, objective technical work in the public policy debate, I think the actuarial profession is in a particularly important position to help achieve this goal. ■

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to offer a political opinion; but I do think it needs to be clearly labeled as an opinion.

Think about what you are adding to the public policy discussion and debate. As we all know, there is no shortage of political opinions offered by policymakers and pundits. As we think about offering actuarial opinions and analysis, I think that we need to consider the additional insight that we can offer to the discussion.

At the risk of being somewhat partial (which qualifies the following as an opinion), I believe that we are in a very unique position to offer the kind of advice that can be valuable to the policy discussion. In addition to our technical skills, we have direct and current experience in working with the pricing and regulatory processes that have very

seriousness of the policy implications. As the economics profession has witnessed, an offhand disrespectful political statement can not only damage an individual's reputation, but also be detrimental to the entire profession.

Ensure a transparent process to discuss key assumptions, exogenous model factors, and the potential variability in predicted results. Because key assumptions are important to develop an accurate prediction, we should ensure complete transparency and help facilitate a wide discussion of these assumptions throughout the organization. This transparency and discussion will help ensure that a diverse range of viewpoints is considered in the process and that no insight is lost in developing the key assumptions. In addition, we should not just