



SOCIETY OF ACTUARIES

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# Responses to “A Change in Plan”

by Frank Grossman

## THE CASE STUDY

Briefly summarized<sup>1</sup>, Kate the FSA works part-time as an in-house benefits actuary, and has an indirect reporting relationship with Henry the CFO. Her firm sponsors a contributory defined benefit pension plan, with a fairly conservative investment strategy in fixed income instruments and stocks. Kate estimated the appreciable shortfall risk (the chance that the plan’s funded ratio would deteriorate, requiring additional future contributions) using stochastic techniques. The plan trustees recommended a modest increase in future contributions, and senior management proposed that the increase be shared by the plan sponsor and plan members. Kate presented a summary of her findings at several employee town hall meetings.

Senior management subsequently rescinded their decision to increase contribution rates, citing a return to more tranquil market conditions. Preparations for a second round of employee meetings are now under way, and Henry has requested that Kate help explain why the proposed contribution increases are no longer required.

## READER RESPONSES

Comments and suggestions ranged from concerns about Kate’s professional qualifications, to the usefulness of traditional scenario analysis. Responses have been edited for space considerations.

### Only When Qualified to Do So

Though Kate is employed part-time as a benefits actuary, it’s absolutely necessary that she be fully competent per the SOA’s Code of Professional Conduct [COPC].

COPC Precept 2: An Actuary shall perform Actuarial Services only when the Actuary is qualified to do so on the basis of basic and continuing education and experience and only when the Actuary satisfies applicable qualification standards.

There may be additional nation-specific requirements, such as attaining an Enrolled Actuary [EA] designation. As Kate is a “benefits actuary,” she might provide actuarial services associated with health benefits in addition to pension benefits.

As our profession’s membership ages, and the nature of both work and retirement evolve, there may be more “part-time” actuaries in future. One reader specifically noted that Kate needs to “perform sufficient pension continuing professional development [CPD] activities” while at the same time conceding that her ability to do a stochastic shortfall risk study was prima facie evidence of her professional competence.

### Plan Governance

A key issue is the state of the pension plan’s governance structure. Are the senior management team and plan trustees separate and distinct, or overlapping groups? *“Do the trustees ‘report’ to management, or is it the other way around with respect to pension plan decisions, and in particular funding decisions?”* Where exactly does the plan’s decision-making authority, and the concomitant fiduciary responsibility, reside? Situations where plan trustees do indeed have fiduciary responsibility for a single employer plan are not unknown, though this is more frequently encountered outside the United States.

Based on the details of the case, most readers assumed *“that senior management has fiduciary responsibility, and that the trustees do not, and the trustees effectively report to senior management.”*

### Opportunity Knocks

While senior management’s volte-face about their support for additional plan contributions might well be disappointing for Kate, it’s important that she remain open-minded and continue to seek ways to advance the dialogue. Senior management didn’t reject Kate’s analysis, rather their market view

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<sup>1</sup> See the April 2010 issue of *The Stepping Stone* for the complete description.

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changed, and Henry has asked for her help with the coming employee meetings. There’s no indication that Kate will not be participating in the second round.

Kate needs to work assiduously to deepen stakeholder understanding of the pension plan’s dynamics, including the basic fact that actuarial assumptions per se will not alter the ultimate cost of defeasing the firm’s pension obligations. Keeping the lines of communication open and continuing to provide good advice is essential.

One reader recommended that Kate adopt a more flexible attitude, employing an analogy to incorporate Henry’s “more fully funded” phrase. *“Kate could explain the pension funding concept in terms of a mortgage. Someone buying a house takes on a debt, with a minimum level of payments that need to be made. Senior management decided earlier that it would be prudent to pay higher contributions (akin to higher mortgage payments) to protect against a possible downdraft in the markets. ‘More fully fund’ means paying off the mortgage earlier with higher payments than would have been the case under the original schedule.”*

Another suggested, *“I would see the upcoming employee meeting as a training opportunity to describe how defined benefit pension plans work.”* For example, *“Kate might prepare some figures illustrating how the current funding level will change based on actual investment performance in the future using three examples: a low, a medium and a high investment performance scenario. Kate should share what the funding level would be without any additional contributions in each scenario, and also gauge the additional contributions that would be needed if the low example were to happen.”*

A third suggested Kate offer perspective on the recent experience of other plans, such as *“any publicly available metrics on how well private defined benefit pension plans are currently funded, as well as their funding levels at the bottom of market crashes.”*

#### **Assumptions, Economic or Otherwise**

The case provided no indication that Kate’s investment assumptions were unduly pessimistic. Key assumptions were presumably the level of future market volatility and the asset class cross-correlations. There was no indication in the case that these stochastic assumptions were revised by Kate or were inconsistent with the basic pension valuation assumptions.

The case was also silent as to the relative level and general direction of growth of asset market values during the period of the case. (A change in market level would have plainly influenced Kate’s analysis.) What did change, however, was management’s perception of future market risk.

Several readers assumed that a market drop (combined with an increase in realized volatility) had exacerbated Kate’s shortfall analysis, and that a subsequent and dramatic recovery in market valuations (combined with a decrease in realized volatility) spurred management’s decision to forego additional

contributions—a not unreasonable premise based on the “financial market turmoil over the past couple of years.”

### Preparing for the Meeting

Kate needs to land with Henry regarding their presentation, and possibly with senior management and the plan trustees too, *in advance* of the meetings. They may well not agree on every point but they need to be in sync.

The first thing Kate needs to do is to collect documentation supporting any intervening change in assumptions and their supporting rationales (e.g. staying with the original contribution rates), or model inputs (e.g. current economic data), and then update her projections.

One actuary cogently targeted Kate’s volatility assumption. “*There seems to be no indication that short-term investment returns have been good enough to improve the shortfall projections if the work were repeated taking them into account. There are two possibilities regarding her assumption about the volatility of future returns.*

1. *That volatility was set higher than past experience as a subjective judgment based on perceptions as to the future of markets. In this event, Kate could reduce the volatility to closer to the long-term experience, rerun the results and, if the numbers supported such a conclusion, report that less pessimistic volatility assumptions demonstrated a lower probability/magnitude of possible future deficits and therefore less need to consider additional funding.*
2. *That volatility was set based on past experience, without any special adjustment to reflect perceptions as to the future of markets. In this event, updating the historical experience for the recent past would have little impact on the volatility assumption. The shortfall analysis would still stand, and Kate would have to explain to Henry*

*that there was no basis for justifying less need for additional contributions purely on the basis of less pessimistic assumptions as to future volatility. It would then be necessary for Kate and Henry to explore further the actual reasoning (by senior management) behind the decision not to make additional future company contributions.”*

The stochastic analysis underlying recommendations can be significantly influenced by seemingly minor changes in methodology or economic assumptions. Three actuaries noted that some serious effort regarding sensitivity testing key assumptions would be well advised.

One respondent observed, “*After running the model with the latest assumptions, if Kate doesn’t agree with what is asked of her, she should not speak to the employees in support of the new direction.*” There were a range of views as to whether Kate needs only to tell the intended audience of her report (i.e. Henry, the senior management team and the plan trustees) of her disagreement, or the plan members too. “*Kate needs to disclose in her report if the plan sponsor is asking her to use assumptions which significantly conflict with her professional judgment.*”

Another reader noted that Kate “*cannot let them think that she is giving actuarial blessing to the plan to not make another contribution*” and then concluded: “*It is our job as actuaries, not just to pass judgment on the choices that managements make (although we can’t bless a bad choice), but to give them alternatives that we can bless.*”

### Reaching Outside the Box

It is critically important for Kate to act impartially when performing actuarial services. “*Is there any conflict of interest with her being an employee and a beneficiary of the plan, and the one doing the funding calculation on it?*” The COPC addresses conflict of interest as follows.



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While a growing number of organizations may express some desire to identify and measure their inherent risks, there is frequently much less interest in paying hard cash now to mitigate the possible future effect of these self same risks.

COPC Precept 7: An Actuary shall not knowingly perform Actuarial Services involving an actual or potential conflict of interest unless:

1. the Actuary’s ability to act fairly is unimpaired;
2. there has been disclosure of the conflict to all present and known prospective Principals whose interests would be affected by the conflict; and
3. all such Principals have expressly agreed to the performance of the Actuarial Services by the Actuary.

The related need to be seen acting impartially prompted some readers to suggest that Kate ought to reach out to an external actuarial firm “*if obtaining independent and objective advice is important.*” An outside actuary might bring additional insight to the discussion, though the additional cost of an external engagement would doubtless be something for Henry to consider.

Two readers thought that Kate might turn to the Actuarial Board for Counseling and Discipline [ABCD] for informal advice given their expertise with “thorny professional problems.”

#### **Wishful Thinking**

Senior management’s decision to forego additional plan contributions was ostensibly based on their view that “*a return to more tranquil market conditions*” had occurred—precluding a return to more “stormy weather.” One reader observed, “*It sounds like management decided not to pursue higher contributions and they are hoping for better returns. ... higher contributions might still be required.*”

Another noted that this change in heart might reflect senior management’s shifting view that precious (financial) resources would be more effectively allocated to “*the plan sponsor’s operations which may lead to better profits to put them in a better position to contribute more to the pension plan in the future.*” Kate is, after all, living in a world of scarce resources (along with the rest of us). That “*larger-sized plans can apply enterprise risk management vigorously as part of their overall risk management measures*” is often a best practice that smaller plans simply cannot afford.

A perennial challenge confounding those in hot pursuit of effective ERM is the all-too-familiar risk/reward trade-off. While a growing number of organizations may express some desire to identify and measure their inherent risks, there is frequently much less interest in paying hard cash now to mitigate the possible future effect of these self same risks. Wishful thinking may work just as well. Until it doesn’t.

#### **Preparing for the Future**

One reader suggested that Kate employ investment return scenario analysis to better define and obtain management support for a pension funding strategy, and to confirm under what conditions the question of higher contribution rates would be revisited. Such an approach would require that plan funding levels would be continually monitored and communicated too. “*By securing agreement to an action plan in advance, Kate can better prepare the group for various contingencies.*”

## **CONCLUDING THOUGHTS**

A sincere thank you to all who contributed their comments and suggestions about Kate’s next step. Thanks, as well, to Stephen Cheng, Steve Lemanski, and Barbara Sheldon for their constructive feedback received while drafting the case; its remaining deficiencies are all my own.

The prospect of additional employee contributions was a plot device supporting the need for the town hall meetings within the case. In point of fact, contributory DB plans are quite rare in the United States for tax reasons. This apparent incongruity did not figure into any of the member responses received.

The contents of this article should not in any way be construed as a definitive interpretation of the various actuarial guidance documents referenced within the article. This hypothetical case study and its discussion are intended for the personal use and (possible) edification of members of the Management & Personal Development Section. ●