SOCIETY OF ACTUARIES

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# *Dynamic Financial Condition Analysis Update*

***by James F. Reiskytl***

What is DFCA ("Dynamic Financial Condition Analysis")? Is it Dynamic Solvency Testing? Dynamic Financial Analysis? Viability Analysis? Viability Reports? Yes, it is the concept underlying each of these and it is quite likely that you may be doing this type of analysis for a product, a line of business, or the whole company and have created your own name for it. DFCA (and each of these other efforts) focuses on risk analysis, risk management and planning. The variability in actual practice by actuaries can also be quite diverse—including everything in the range from a back of the envelope approach to an issue to a full-blown cash flow analysis.

Current DFCA efforts and possible future uses are highlighted in this report. For some it will be an update. For others hopefully it will tweak your curiosity so that you will want to learn more, follow-up, and maybe even begin doing it when appropriate at your company.

## Your Questions/ Suggestions

If after reading this, you have any questions/suggestions or descriptions of current use of DFCA, please send them to James Reiskytl (Northwestern Mutual Life Insurance Company), chair of the Society of Actuaries Task Force on DFCA at his *Directory* address or via e-mail, to any of the DFCA editors (listed on page 99 of the *Yearbook*) or to Kevin Long at the Society office who would like to hear from you.

## Canada

Dynamic Capital Adequacy Testing (DCAT) is required in Canada for both life and property casualty business. Regulators want well-run companies with well-informed management and boards of directors. One part of this effort is an annual financial condition report that is presented to the board of directors, and is later filed with the Office of the Superintendent of Financial Institutions.

This report continues to evolve with increased emphasis and reliance on individual company assumptions and experience and fewer standardized assumptions. Its value to management depends substantially on the quality of the actuarial analysis, explanation of the results and the changes over the past year.

Overall, it seems to be well accepted by the key parties. They are actively trying to make it valuable and useful—and not simply something else that must be done.

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## United States

Pete Hepokoski, Vice President of the Society of Actuaries' Finance Practice Area, in working with his Advancement Committee, has identified various ways to encourage the use of Dynamic Financial Condition Analysis. These include (1) revising the introduction to the DFCA Handbook to make it more user friendly; (2) possibly creating a new column in the Actuary on frequently asked questions about DFCA—(these might also be added to the Handbook); (3) increasing the focus on its use as a management tool; (4) preparing more examples of possible reports; and (5) developing a new name.

## CAS Success/Possible Joint Seminar

Many Casualty Actuarial Society (CAS) members consider dynamic financial analysis to be a fundamental tool and as such, it is increasingly becoming more widely used. Casualty business can be quite volatile, so this type of analysis is essential for understanding, assessing and improving risk management.

Their DFA seminars have been very popular. The SOA is looking into the possibility of a joint seminar with the CAS next year with one day focused on either life and annuity or casualty topics and a second day on common topics of interest such as assets and modeling techniques.

## Unified Valuation System Viability Report

The Academy of Actuaries Valuation Task Force has proposed that the NAIC's Life and Health Actuarial Task Force (LHATF) consider three fundamental concepts for future actuarial valuation, one of which is an internal "viability report" to management and the Board. This annual report would involve dynamic financial analysis of a company's viability based on its business plan. It would include new business and would "stress" the plan and overall company financial results under various economic scenarios. A description of the current draft of a possible future viability analysis is available from the Academy of Actuaries office.

The LHATF is interested in this concept and plans to establish direction for this possibility by year end.

## Future NAIC Financial Reporting

A NAIC task force chaired by Terry Vaughn, Insurance Commissioner of Iowa, is taking a fresh look at effective regulatory oversight in the next century. The task force has drafted a set of objectives and is reviewing the statutory statement to see if it appropriately supports these criteria. It is also looking at various ways that companies assess and manage risks to determine what, if any, place DFCA may have in their future efforts. The Society of Actuaries Financial Reporting Section initial response includes consideration of an internal management "viability analysis."

### SOA Big Tent Concept

Howard Bolnick's "Big Tent" concept of actuaries "as the leading professionals in the global financial services industry" is built on broadly defined financial risk analysis and management. Arguably, rigorous risk management is becoming increasingly essential for financial enterprises to be successful. DFCA supports his concept and this need. In fact, a number of companies are already using this analysis as part of their capital allocation and other business decisions.

### SOA Research

The SOA Website describes the results of recent studies, many of which could be quite useful for DFCA. These studies are summarized as part of the DFCA presentation at the last Valuation Actuary Symposium. You may contact Syed Ali at the Society office for specific needs or to determine what is "in the works" to be released soon.

### Handbook

Copies of the Dynamic Financial Condition Analysis Handbook published in a loose-leaf binder format for easy addition of periodic updates are available through Beverly Haynes in the SOA Books Department (Phone 847/706-3526; Fax 847/706-3599). The cost is $40 for the complete handbook. Updates are $15.

An order form for the Handbook is also available through *www.soa.org.*

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# *Setting the X Factor Percentile— Commentary*

***by G. Thomas Mitchell***

Alan Sturm raised a question on the Society of Actuaries Website on Larry Gorski's XXX Select Factor article in the May, 1999 issue of *The Financial Reporter*, which I believe is summarized as follows:

"In setting the X factor (a multiple of tabular mortality rates used in reserving), conservatism would indicate a percentile (in the distribution of claims) vs. expected claims at or less than 50%, not greater than 50% as indicated in the article."

I believe this involves a distinction between two processes:

1. Setting the X factor prospectively where there is significant relevant experience available. In the case of fully credible experience, one would want to use a percentile somewhat lower than 50% to reflect appropriate conservatism.

2. Reviewing a previously set X factor, to determine if it might be inadequate. Here the X factor would be rejected if actual experience is statistically significantly higher than the X factor. Hence a percentile greater than 50% would be used. The other view would require that in event of random higher claims, the factor would be reset annually to a level somewhat higher than actual claims indicate, even though evidence would point at this possibly (or probably) being by chance. This could lead to bizarre results on small blocks.