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Canadian DST: How it has fared

by J. Helmut Engels

The U.S. actuarial profession is debating whether to introduce Dynamic Solvency Testing (DST) in the United States and what role it should take in the regulatory process. This article offers some insight into how the DST has fared in Canada, what issues have emerged since it was introduced, and how the DST will evolve differently in the United States.

Regulatory environment

The DST was introduced as one part of a series of changes in financial reporting in Canada in 1992. That year, the revised Insurance Companies Act was passed by Parliament. It allowed the reserve methodology to be changed to the Policy Premium Method developed by the Canadian Institute of Actuaries (CIA). It also allowed the regulator to require companies to do the DST. The regulator proceeded to immediately require DST for all life insurance companies. Even if the regulator had not required it, the CIA requires its members to do DST as part of the role of the appointed actuary.

The Canadian regulator was concerned that reserves would be reduced by switching to the PPM reserve method. The regulator tied the acceptance of PPM to a package of changes to enhance solvency protection. They required the DST report and introduced Minimum Continuing Capital and Surplus Requirements (MCCSR), which is the Canadian equivalent of the U.S. risk-based capital requirements.

Acceptance of DST

Although appointed actuaries had expressed some concern prior to 1992 about DST's usefulness and its cost to companies, surprisingly, no further concerns were voiced after DST was required. The profession accepted it and complied.

After three years, the DST process in companies is now much smoother than in the beginning, and the DST analysis work is much more useful. Once a company has a working five-year projection capability as required by the DST, many other uses are suddenly found for such a model. The DST process is proving to have useful side benefits for companies.

Planned changes to DST

After the first two years of the DST requirement, the CIA's Solvency Standards Committee surveyed all appointed actuaries. As a result, some changes will be made in the standard, but the general concept of the DST will not change.

The original standard included 10 suggested scenarios. These were simply scenarios where one assumption was changed at a time. The idea behind this was that these were simple sensitivity tests that would lead to additional testing of material risk sensitivities. However, though they were labeled "suggested scenarios," many people regarded them as "required scenarios." Also, they were regarded as a safe harbor (if you do the 10 scenarios, then you have satisfied all DST requirements).

The DST standard is being revised to replace the 10 suggested scenarios with a list of risks that the actuary must consider when designing the company-specific scenarios to be tested. Also, the CIA is adding a requirement that at

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least three general economic scenarios must be tested. These scenarios would be more realistic, because they have to involve simultaneous changes in several assumptions that are linked.

Reporting

The DST was meant to be a private report to the board and management, not a public report. This was to let the actuary be as frank as possible. It was also assumed that regulators would ask to see the DST report during their periodic examinations. However, by the end of 1993, regulators required all companies to send them the DST within 30 days after it was prepared and presented to the board. In Canada, such reports to the regulator stay confidential and are not available to the public.

An emerging issue in Canada is the form of the opinion that the appointed actuary will sign in the future in the public financial statements. Currently, the opinion refers to the appropriateness of the policy liabilities at the end of the financial year. However, in two years, the CIA intends that the opinion also comment on whether the future financial condition of the company is satisfactory. In other words, the actuary will be giving a public opinion that the company will meet its minimum capital requirements for some period into the future. This is a professional initiative, not a regulatory requirement. It is assumed that the DST will be the primary tool to support giving this enhanced opinion.

This new requirement makes some appointed actuaries uncomfortable. If the actuary does not give an unqualified opinion concerning the company's satisfactory future financial condition, will that result in a "run on the bank," when it was possible that a company could have worked its way out of trouble, given some time? On the other hand, if the actuary does give an unqualified opinion, and the company subsequently gets into financial difficulty, where does that leave the actuary? The CIA has decided it is in the public interest that the actuary publicly disclose an unsatisfactory future financial condition and not hide it in the hope that the company can manage its way out of a known problem.

Differences compared to U.S.

If DST is accepted in Canada as part of regular financial reporting, why shouldn't it be the same in the United States? I think that DST evolved in Canada based on its regulatory framework, which is in some cases different than in the United States; not necessarily better, but just different.

- There is more confidentiality in Canada. Reports to the regulator are not available to the public. Even the MCCSR ratio is still not public. This confidential environment surrounds the DST reporting and allows the actuary to be more adventurous/pessimistic in the DST scenario testing.
- The DST was brought in as one part of a package of changes in financial reporting requirements. This made it more easily accepted by actuaries and company management. It was not an additional requirement just loaded onto existing financial reporting.
- The concept of the appointed actuary (previously called the valuation actuary) has been in place in Canada for several years.
- The 1992 changes to the Insurance Companies Act granted the appointed actuary "qualified privilege." As long as the actuary is following professional standards and regulatory requirements, the actuary cannot be sued for any damages that may result to the company because of his work. This gives the actuary more freedom to be frank in reports to management or the regulators.

Given the different regulatory environments, the DST is not likely to be developed and used in the same way in the United States as in Canada. The DST has proven to be a useful tool during the past three years in Canada. I think it will also prove to be very useful in the United States, even if it evolves quite differently.

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1995 summer seminar calendar

June 12-13	Interest Rate Derivatives	Minneapolis/St. Paul Airport Hilton, Minneapolis
June 13-14	Investment Spring Training	Hotel Macklowe, New York
June 16	Stop Loss and Large Claims	The Copley Plaza, Boston
June 23	Stop Loss and Large Claims	Hotel Vancouver, Vancouver
June 26-28	Spring Meeting-Health & Pension	Hyatt Regency & Hotel Vancouver, Vancouver
June 28	Joint Spring Meeting Day with CIA	Vancouver Trade & Convention Center, Vancouver
July 16-19	Advanced Asset Liability Management Seminar	The Wharton School, Philadelphia
August 17-19	Actuarial Research Conference	Pennsylvania State University, State College