UNIVERSITY OF CALGARY

THE SCHOOL OF PUBLIC POLICY

SPP Research Papers

Volume 10 • Issue 8 • May 2017

POLICY REFLECTION: LETTER OF CREDIT USAGE BY DEFINED BENEFIT PENSION PLANS IN CANADA

By Norma L. Nielson and Peggy L. Hedges

SUMMARY

There is an argument to be made for letting corporations hold off on contributing to their employees' defined benefit pension plans, as long as there is a guarantee the cash will come eventually. That is the reason that provincial governments began allowing creditworthy companies to instead provide a letter of credit, backed by a Canadian bank, guaranteeing the cash deposit, and secured by the company's line of credit or some similar facility. Sometimes circumstances are such that a company needs all the cash it can get to grow, or perhaps to manage through tough economic times.

Given the sluggish recovery from last decade's financial crisis and the difficulty for pension funds to grow amid persistent low interest rates, it perhaps is understandable that more companies are using standby letters of credit as IOUs for their employee pensions. The letters provide the companies more flexibility with their capital, and diminish the risk that, should returns to pension funds rise again to more normal rates, there could be "trapped surplus."

It is, however, harder to make a case for why public sector companies and Crown corporations have begun using letters of credit in place of cash deposits to pensions. They certainly do not face the same pressure for capital flexibility, given their revenue is frequently assured, and they face no competition that would pressure them to redirect capital for strategic purposes. And yet, research shows that this is happening, at least to some degree. That should give policy-makers pause.

Unfortunately, there is a troubling lack of data available as to which organizations have been using letters of credit in place of cash contributions to pension funds. Clearly they are proving useful for some companies, and that the exact reasons vary widely. We observe some companies using the letter of credit option that would appear to have plenty of capital flexibility, so the rationale for their use might not be what the policy anticipated. Meanwhile, it is unclear why so many other companies have chosen not to avail themselves of this temporary

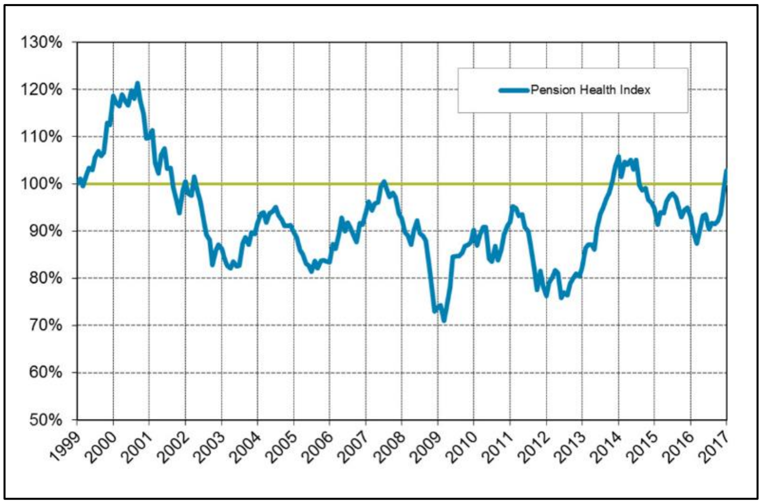
pension-funding relief, despite the advantages it offers for avoiding the risk of trapped surpluses. There also remain restrictions on who can underwrite these credit guarantees — regulations do not consider foreign banks and insurance companies acceptable, for example — raising the cost for companies that arrange letters of credit.

Taken together, it would seem that there are signs that the policy changes allowing pension-funding relief might be serving their purpose and might be helping companies that could use it, but there is a worrying lack of information to be sure how well they are working and what problems may loom. It certainly seems like a close review is in order. When a Crown corporation is writing IOUs to its defined-benefit pension fund, that is surely a sign that policy-makers are not keeping a close enough eye on the outcomes this policy has led to.

INTRODUCTION AND JUSTIFICATION

Pension plans have gotten a bumpy ride early in the new millennium. The aftermath of the financial crisis combined with low interest rates and declining mortality trends continue to have a negative impact on the solvency of many defined benefit (DB) plans.[1] Several measures could be used to demonstrate the impact, but all show essentially the same thing. Mercer Canada publishes one of the longest-running series aggregating data on this in its Mercer Pension Health Index. Specifically, it shows the ratio of assets to liabilities for a model pension plan (rather than an actual one); Figure 1, below, illustrates the index across the time series 1999–2017. Despite the fact that 2017 has seen this index return to around 100 per cent, the figure offers quite a compelling image of the bumpy ride most defined benefit plans have followed.

FIGURE 1 PENSION HEALTH INDEX 1999–2017



Source: Mercer Canada, "Hope on the Horizon for Pension Plan Sponsors in 2017," news release, December 21, 2016, https://www.mercer.ca/en/newsroom/hope-on-the-horizon-for-pension-plan-sponsors-in-2017.html.

A fleeting rise in Canadian 10-year bond yields, as well as some recovery in equity returns during 2013, saw the index peek its head above 100 per cent for a short time. However, when bond returns settled back down at all-time lows, plan solvency again sank. While this particular index looks as if it might stabilize nearer to 100 per cent as interest rates show signs of returning to historical norms, the volatility has been a challenge.

In examining the public policy issues surrounding pensions, care must be taken to look beyond the federal regulation conducted by the Office of the Superintendent of Financial Institutions (OSFI), as it oversees only plans sponsored within federally regulated industries. Around 90 per cent of Canada's pension plans are regulated provincially and, not surprisingly, Ontario oversees the largest share of those. The latest report from the Financial Services Commission of Ontario,[2] dated Dec. 31, 2016, showed that the median solvency ratio — the ratio of assets to liabilities — had spiked from 79 to 91 per cent in the

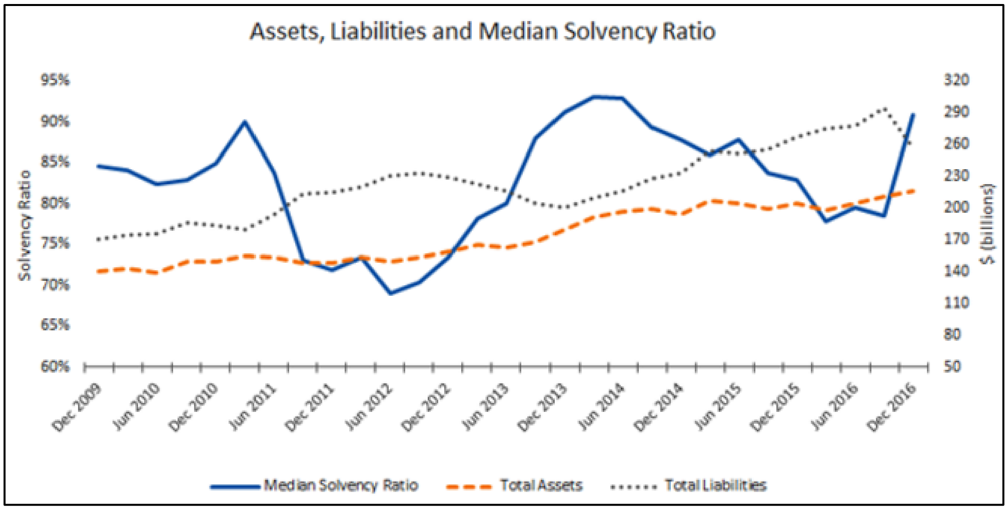
---

1 For example, with the prevailing low interest rates, the purchase of a 30-year strip is roughly $0.41. In 1980, the strips could be purchased for roughly $0.05.

2 Financial Services Commission of Ontario website, "Quarterly Update on Estimated Solvency Funded Status of Defined Benefit Plans in Ontario," December 31, 2016, https://www.fsco.gov.on.ca/en/pensions/actuarial/Pages/solvency-funded-estimate-reports.aspx.

fourth quarter. Even at 91 per cent, however, the gap between assets and liabilities, as can be seen in the right-hand scale in Figure 2, is approximately $50 billion – the difference between $260 billion in liabilities and approximately $210 billion in assets.

FIGURE 2 HISTORIC PLAN SOLVENCY IN ONTARIO



Source: Financial Services Commission of Ontario.

Pension solvency has remained an issue for a number of years and it has long been acknowledged that the need to forecast costs introduces both imprecision and volatility into pension-cost estimates. Furthermore, the volatility observed over the last decade has encouraged even financially sound corporate sponsors to revisit pension-plan design and/or funding policies. To manage the negative impacts of this volatility, a series of smoothing rules were created within actuarial valuation methods. These methods — at least to the extent allowed by accounting standards — are used to value pension assets and liabilities in most jurisdictions for solvency valuation purposes. While the advantages of smoothing have been questioned, particularly in reference to the impact on the accuracy and transparency of financial statements, there are choices (albeit restricted ones) a company can make in determining how it might report. Despite these concerns and the general trend toward mark-to-market accounting standards, smoothing methodologies persist. They offer value by constraining the types of smoothing that can occur and managing it in a way that provides some consistency across firms.[3, 4]

The political and economic realities of the financial crisis endangered many defined benefit pension plans and pushed short-term public policy to incorporate added flexibility. Policies were implemented by various regulators to reduce the negative impacts of those events. The authors, in 2005, reported on some of these in-progress legislative changes; specifically, that some plan sponsors were being allowed extra time to deal with the shortfall and/or were allowed to use an irrevocable standby letter of credit (SBLC) to fund shortfalls.

---

3 As an earlier reviewer noted, the adjustments to the hypothetical wind-up liabilities to arrive at the solvency funding target depend on the jurisdiction. We recognize this is the case, but is beyond the intent of the paper. Hence, we concede one of the main advantages of smoothing is that it provides sponsors a longer period in which to plan for changes in contributions.

4 Differences exist in International Financial Reporting Standards (IFRS) and U.S. GAAP that further complicate the matching of the value of long-term commitments to individual financial years. A complete discussion of these differences is beyond the scope of this paper.

In that same article, we questioned whether sponsors would take advantage of the SBLC and under what circumstances. This paper revisits the use of SBLCs by pension fund sponsors, incorporating data collected directly from regulators alongside results published in the *Global Pension Risk Survey–Canadian Survey Findings*, published by Aon Hewitt in 2013 and 2015, and in *A Profile of Defined Benefit Pension Plans* in British Columbia, published in June 2015 by the Financial Institutions Commission of British Columbia (FICOM). All sources indicate that, indeed, some companies have taken advantage of the funding relief offered and have used SBLCs in particular. Others have not. The Aon Hewitt surveys in both 2013 and 2015 reported that 19 per cent of funds surveyed used SBLCs. That did not change. Meanwhile in 2013, 61 per cent of funds surveyed indicated they would not use SBLCs; that percentage increased to 69 per cent in the 2015 survey. Unfortunately, neither survey probed further to ask why SBLCs would not be used.

In this paper we examine several research questions:

1. What evidence indicates those who used SBLCs have done so for cash flow reasons? For example: If the sponsor is underfunded, is in a growth phase and conserving cash, or is a smaller, cash-constrained private company.
2. What evidence indicates those who used SBLCs have done so for flexibility? For example: To avoid trapped surplus if a funding shortfall is expected to be temporary.
3. Does the evidence suggest any other reasons that might not have been anticipated when the policy was initially developed?
4. In instances where evidence is available, are there specific reasons that firms who could have used these vehicles were disinclined to make use of them and, if so, what were they?

Following an examination of the available evidence, we discuss the implications for continuing, modifying, or eliminating this policy option.

STRUCTURE OF THE PAPER

Following a brief overview of key accounting changes that have occurred, we describe the relevant regulations in Canada. In our review of available evidence on the use of SBLCs to fund shortfalls, we present findings regarding the number of funds seeking remedy and discuss the extent to which published financial statements provide insight into potential motivations for use. We conclude by discussing policy issues that remain unresolved in this area and would benefit from further research and debate.

Accounting for DB Plan Assets and Obligations

Conventional reporting standards (actuarial and accounting) were built upon the expected return on a pension plan's assets. Briefly, these standards may have permitted the full equity premium to be incorporated into the present value of plan liabilities without any risk adjustment.[5] In the mid 2000s, the rules began to change until, in 2013, a revised IFRS

[5] As one reviewer noted, these determinations vary between public- and private-sector plans. While the expected return on assets historically has been used as the discount rate in public sector accounting (where changes are imminent), in most private sector plans, the discount rate is determined by reference to high quality corporate bonds.

standard (IAS 19, amended 2011 or IAS 19R) was adopted in Canada.[6] This standard now requires companies to immediately recognize full actuarial gains and losses in equity (through other comprehensive income) with no amount recorded on the income statement. While many aspects of this are similar to U.S. GAAP,[7] the main difference is that, in Canada, any accumulated unrecognized actuarial gains/losses may not be amortized through net income.[8, 9] To further complicate the comparison, Canadian companies reporting using U.S. GAAP (typically those that are cross-listed on a U.S. exchange) are not required to show the impact of the differences between the standards in their financial statements.[10] With the numerous changes in accounting disclosures, financial analysts and other professionals need to become increasingly sophisticated in their understanding of pension obligations of publicly traded firms, and of the adjustments made for them, in order to adequately assess the impacts of deficits and potential risk-shifting activities.[11]

An Overview of the Canadian Legislation

The province of Quebec was the leader in North America in developing and introducing rules for pension solvency relief.[12] By including in its provincial solvency relief legislation the phrase "such as a letter of credit," Quebec opened the legislative door for the first time

---

6 See: Accounting Standards Board, *FRS 17* (November 2000), http://www.frc.org.uk/images/uploaded/documents/FRS%20171.pdf; Accounting Standards Board, "Amendment to FRS 17 and FRSSE" (November 2002), http://www.frc.org.uk/images/uploaded/documents/FRS%2017%20Amend%20Retirement%20Benefits%20and%20FRSSE%20(June%2002)1.pdf, International Accounting Standards Board (IASB).), "IASB issues amendments to pension cost standard," press release, December 16, 2004, http://www.iasplus.com/pressrel/0412ias19.pdf; and IASB, "IAS 19: Employee Benefits," http://eifrs.ifrs.org/eifrs/bnstandards/en/2016/ias19.pdf.

7 See: "Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans, an amendment of FASB Statements No. 87, 88, 106, and 132(R)," Financial Accounting Series No. 1025-300 (March 31, 2006), http://www.fasb.org/draft/ed_pension&postretirement_plans.pdf, which builds upon Financial Accounting Standards Board (FASB), "Employers' Accounting for Pensions," Statement of Financial Accounting Standards No. 87 (December 1985).

8 While 2011 amendments to IAS 1 allow employers to continue to keep OCI separate, the tendency is for a single statement of comprehensive income.

9 Our thanks to a reviewer who noted that IAS 19 calls for employers to account for their pensions on the basis of cash contributions, except in those jurisdictions where cash contribution requirements are weaker than the accounting basis. Solvency funding requirements and surplus ownership rules have generally resulted in Canada being considered a jurisdiction where benefits could be expected to eventually be determined by the contributions, rather than the specific benefit promises. The introduction of permanent letter-of-credit funding eliminated the possibility of IAS 19 expense falling under IFRIC 14, resulting in solvency rules specifying a "minimum security requirement" rather than a "minimum funding requirement." Thus, employers who might have no intention of using letters of credit would be in a position to argue that the availability of this relief valve is a reason to account for pension expense under the regular rules rather than the IFRIC 14 rules.

10 A more detailed explanation of the differences can be found in the comprehensive document PricewaterhouseCoopers, "IFRS and US GAAP: similarities and differences 2015" (September 2015), http://www.pwc.com/us/en/cfodirect/assets/pdf/accounting-guides/pwc-ifrs-us-gaap-similarities-and-differences-2015.pdf.

11 [9] For a more in-depth discussion, see: Greg Jonas "Consideration of pension-related issues in the credit rating process," presented in Consideration of Pension-Related Issues in Equity Valuation and Credit Ratings, webcast, March 1, 2006; or David Zion, "Equity Analyst's View," presented in Consideration of Pension-Related Issues in Equity Valuation and Credit Ratings, webcast, March 1, 2006.

12 Bill 102 allowed the sponsor of a provincially registered DB plan, at the first actuarial valuation of the plan carried out after Dec. 30, 2004, (1) to combine any new unfunded solvency liability with unfunded liabilities of the same nature determined in earlier valuations; and (2) may qualify to pay down the combined unfunded solvency liability over an extended period. The basic provisions of the reform permitted municipalities and universities to double the amortization period for most unfunded solvency amounts from the usual five-year period to an amortization period of 10 years. Private plan sponsors could utilize the same extension if (1) the employer provided the pension committee with a guarantee, such as a letter of credit, established in accordance with the regulations; or (2) fewer than 30 per cent of active plan members expressed opposition and fewer than 30 per cent of beneficiaries expressed opposition.

to the use of financial-guarantee instruments by Canadian pension plans.[13] In general terms, such instruments result in a "contingent" value added to the assets of a pension plan for purposes of determining plan solvency. For valuation purposes, the "contingency" is treated as if fully realized and thereby an asset of the plan. Table 1 below provides an overview of Quebec's Bill 102 and the other pieces of enabling legislation that have been passed in Canada since then.

TABLE 1 CANADIAN JURISDICTIONS THAT PERMIT THE USE OF STANDBY LETTERS IN MEETING DB PENSION SOLVENCY FUNDING REQUIREMENTS

Province	*Enabling Legislation*	*Effective Dates*	*Notes*
Quebec*	Bill 102	2005-present	First jurisdiction to permit letters of credit in a post-solvency regime. LOCs can be used in lieu of contributions to the provision for adverse deviations, but not in lieu of contributions towards the best-estimate going-concern liabilities.
Federal*	Solvency Funding Relief Regulations under the *Pension Benefits Standards Act, 1985*	2006-present	
Alberta	Section 48.1 of Employment Pension Plans Regulation	2008-present**	First to adopt permanent letter-of-credit rules, thereby eliminating the need for cash funding beyond going-concern requirements.
British Columbia	Bill 38, a new Pension Benefits Standards Act	2011**	2012 amendments state that LOCs are not permitted for collectively bargained multi-employer pension plans.
Manitoba	Pension Benefits Regulation, amendment 205/2011, Sections 4.18.1	2012	
Nova Scotia	Chapter 41 of Pension Benefits Act	2011	
Ontario	Ontario Pension Benefits Act (PBA) passed as Bill 120 in late 2010	2013	

* The 2005 and 2006 Quebec and Federal rules were part of temporary solvency relief packages.
**The authors determined that both Alberta and B.C. had allowed the use of SBLCs on an *ad hoc* basis prior to the legislation being enacted.

Regulation in General

While regulations differ slightly depending on the jurisdiction where a plan is registered, they consistently have two main requirements:

a) The guarantee must be provided in the form of an irrevocable standby letter of credit (SBLC) and must meet specified minimum criteria for both the SBLC and its issuer:[14] The instrument must include terms that match the statutory rules with respect to

[13] Quebec National Assembly, Bill 30: An Act to amend the Supplemental Pension Plans Act, particularly with respect to the funding and administration of pension plans (2006), http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=5&file=2006C42A.PDF.

[14] Examples of this fundamental information include: (1) the name and address of the financial institution that issues it and the name and address of the employer who is the originator; (2) the name of the beneficiary pension fund and the address of the pension committee that administers it; (3) the amount, in Canadian dollars, for which it is issued; (4) the date of its issue and of its expiry; (5) a statement that it is governed by the laws of Quebec and that the standards provided for in the Rules on International Standby Practices, 1998 (publication number 590 of the International Chamber of Commerce) apply to it insofar as those standards are compatible with the provisions of the regulation; and (6) the address, in Quebec, where the payment demand can be made.

automatic renewal and payment in the event of non-renewal; and a stipulation that the amount payable[15] under the letter of credit will be paid to the pension fund upon presentation, before expiry of the letter, of a written payment demand signed by the person authorized by the pension committee to make the demand.[16]

b) The issuer must be a Canadian financial institution with a credit rating of at least A from Standard & Poor's or an equivalent rating specified in the regulations.

As reported by Gavin Benjamin in 2012, for most jurisdictions the SBLC can secure up to 15 per cent of the solvency liabilities of the plan.[17]

WHY LETTERS OF CREDIT?

A financial institution (FI)[18] can provide an SBLC for a pension sponsor to deliver to a pension plan to essentially guarantee the beneficiary (the pension plan) that the plan's sponsor (the purchaser of the SBLC) will fulfill its obligation. Should the sponsor default, the FI that issued the SBLC will provide cash to the pension plan and charge that obligation to the sponsor-client. The sponsor must have or must establish a line of credit or other similar arrangement with the issuing FI that includes an SBLC facility. The availability of an SBLC will depend on the availability of credit lines in the marketplace. Such opportunities are not available to the financially impaired firm that does not qualify for a line of credit.

Advantages to the Plan Sponsor

Issuing an SBLC generally costs less than borrowing the funds to make a plan contribution, thereby allowing the business to direct funds to more productive purposes.[19] This can serve to strengthen cash flows and place companies in a better position to provide future cash contributions to the pension plan, assuming the interim investments had the desired result of growing the business.

The SBLC offers further value with its flexibility. An obvious example occurs when a plan's deficit is considered transitory in nature (for example, if it is due to the impact of low interest rates on the valuation of liabilities). Anecdotally, several other examples have surfaced. In one instance, a parent company's credit line was used, potentially allowing the

---

15 The governmental regulations permit a reduction in the amount of the SBLC if a new valuation shows that it is no longer required. In practice, the plan sponsor, with the consent of the pension fund trustees, would likely request the issuing institution reissue the SBLC in a lower amount.

16 As a side note, the issuing bank must be certain that there is no fraudulent behaviour by any parties to the SBLC. If a bank suspects fraud, it typically will only pay when directed by a court of law. Similarly, the issuing bank will be entitled to repayment of the loan just as it would be if the sponsor used its credit for any other purpose.

17 Gavin Benjamin, "Should letters of credit be part of your pension funding policy?" *Benefits Canada* (June 26, 2012), http://www.benefitscanada.com/pensions/governance-law/should-letters-of-credit-be-part-of-your-pension-funding-policy-30018.

18 Because not all financial institutions issuing letters of credit are licensed as banks, the broader term will be used to avoid confusion.

19 As mentioned later in this paper, there are real and opportunity costs to the company when using SBLCs. Issuance of SBLCs typically reduce the funds available in a line of credit (if it is part of the facility) and fees charged for SBLCs are roughly equivalent to standby fees. The principal benefit of an SBLC in DB plans is sponsor flexibility: a cash contribution cannot be withdrawn if the plan meets solvency requirements or has a surplus, while an SBLC can be returned and cancelled (or allowed to lapse).

firm to avoid transaction costs, currency conversion costs, and/or the tax consequences of transferring actual cash between corporate entities. In another instance, the sponsor was involved in a merger transaction that would shortly change the nature of the pension and its funding requirements. A letter of credit allowed it to remain compliant with all rules while deferring major funding decisions. In such examples, the choice to use SBLCs, rather than cash, offered a valuable short-term solution.

Perhaps one of the biggest reasons that a sponsor may choose to provide a guarantee to its pension funds rather than cash is to avoid problems with "trapped surplus." This can occur in Canada when contributions made by the employer to a pension at one point in time cannot be withdrawn later, presumably when the plan has moved into surplus, despite the fact that the surplus is not needed to assure sound funding of the pension. Even though overfunded plans have not been the norm of late, they can result from periods of high investment returns. The sponsor may also feel that funding a plan to its "going concern" level is sufficient and that anything beyond that (for instance, to meet the separate solvency funding requirement) will ultimately prove unnecessary. In comparison, the simplicity of not renewing a letter of credit is far more appealing than facing the complexity of securing regulatory and participant approval, much less facing a potential lawsuit regarding ownership of a pension plan's surplus. Similar results can be achieved with policy options such as the solvency reserve accounts introduced in Alberta and British Columbia, but these are not universally available. The decision to use SBLCs, then, is not only circumstance-specific but jurisdiction-specific.

Disadvantages to the Plan Sponsor

The obvious cost to the plan sponsor is the fee the bank charges for issuing the SBLC. As well, once an SBLC is issued, it impacts the sponsor's borrowing capacity. In some cases, the sponsor may find its bank somewhat unwilling to facilitate a sizable SBLC.[20] This reluctance arises from a combination of circumstances that relate to bank management and supervision that are discussed elsewhere.

In addition to cost, respondents to the Aon Hewitt 2013 survey[21] indicated several reasons for not using SBLCs, including their unsuitability as a long-term solution to solvency issues and because SBLCs impose the same constraints on liquidity as do cash contributions. These reasons mirror some of the concerns summarized in Ontario's 2008 *Report of the Expert Commission on Pensions*,[22] including objections that SBLCs "will not generate investment growth for the pension fund" and that "they would be unnecessary if surplus rules were tightened up." Other concerns expressed during that policy review included that the "existence of a letter of credit in favour of the pension fund might prejudice a union's

---

20 Furthermore, while the plan sponsor could turn to another bank to provide an SLBC, it would still need to disclose that such an instrument was outstanding; this could have essentially the same impact on other lines of credit.

21 Aon Hewitt, "Global Pension Risk Survey – Canadian Survey Findings 2013" (October.

22 Government of Ontario, *A Fine Balance: Safe Pensions, Affordable Plans, Fair Rules* (Report of the Expert Commission on Pensions, 2008), 83.

position in negotiations resulting from a sponsor's insolvency" and that "they may be used to defer much-needed payments into the fund."[23]

Advantages and Disadvantages to Plan Trustees

While the SBLC might be considered as good as cash, it is not cash. Without cash, plan trustees are limited in their ability to pursue their investment plans. Therefore, accommodations may be needed to compensate the fund for lost opportunities.[24] The Financial Services Commission of Ontario (FSCO) requires employers to make interest payments (in cash or through an increased letter of credit) with respect to solvency deficiencies supported by a letter of credit.[25] Indeed, some degree of opportunity costs likely will be incurred. While FSCO has implemented one alternative, the system will handle these in any event. Investment returns that are not realized (for whatever reason) will be captured and amortized automatically in the actuarial valuations conducted in future years. The result is a simple "pay me now or pay me later" scenario.

The Data

The researchers have discovered no centralized source where uptake of the letter-of-credit remedy is reported. Whether publicly traded or not, companies are not required to disclose whether they have sought pension funding relief. Regulators disclose to the public only the number of funds utilizing relief.[26] For example, B.C.'s FICOM profile of 199 defined-benefit plans in the province, published in 2015, shows that in 2013 a total of 23 plans used funding relief. Of these, nine opted for a letter of credit. That same report shows a continual increase in the number of pension funds using letters of credit since they were first allowed in 2009. Over the six-year period, a total of 78 funds have requested some form of solvency relief; those choosing to employ a letter of credit in any given year increased from one to 11.

Table 2 below summarizes what data we were able to find and provides some insight into the growing use of SBLCs by defined benefit plans.

---

23 As a reviewer noted, the face value of the SBLC typically is excluded from the solvency balance sheet. As such, where the supervising jurisdiction levies any fee for a deficit position (such as Ontario's Pension Benefit Guarantee Fund), the sponsor would be penalized twice for the deficit. That is, the sponsor would pay a regulatory fee and incur the cost of an SBLC.

24 Relative to the plan assets, the SBLC amount is typically small and, as a result, likely does not materially impact the plan's investment returns and risk.

25 Financial Services Commission of Ontario (FSCO), "Determination of Interest Payments Where Solvency Special Payments Are Covered by Letters of Credit – Regulation 909.s.5" (January 1, 2012), https://www.fsco.gov.on.ca/en/pensions/policies/active/Documents/AGN-003.pdf.

26 Access to the valuation report, which includes additional detail, is limited to plan participants.

TABLE 2 NUMBER OF DB PLANS USING STANDBY LETTERS IN MEETING SOLVENCY FUNDING REQUIREMENTS

Jurisdiction	*2011*		*2014*	
	Plans Using SBLC	*Total Plans Regulated*	*Plans Using SBLC*	*Total Plans Regulated*
Alberta	N/A	*547**	4	546*
British Columbia**	5	163	11	142
Federally regulated	5	360	13	335

* Because individual pension plans (IPPs) exhibit vastly different characteristics than plans covering larger groups of employees, but cannot be distinguished in the reporting, this figure is for plans with more than 10 members.

Sources: Alberta Treasury Board and Finance, "Private Sector Pensions - Superintendent's Lists and Reports" (http://www.finance.alberta.ca/publications/pensions/lists_reports.html); Office of the Superintendent of Financial Institutions, "Federally Regulated Private Pension Plans" (http://www.osfi-bsif.gc.ca/Eng/Docs/ar-ra/1314/eng/p10-eng.html); Statistics Canada, "Registered pension plans (RPPs) and members, by jurisdiction of plan registration, sector and type of plan (British Columbia)" (http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/famil117k-eng.htm).

The researchers, in an effort to try to obtain a more substantial understanding of the circumstances behind these numbers, set out to determine whether large public companies might be using letters of credit to gain pension funding relief and, if so, which ones, and why. We began our study with a pair of industry reports on defined-benefit pension plans in the U.S. and Canada published by DBRS in 2013 and 2014.[27] We identified a total of 59 Canadian companies in the two reports and examined each company's financial statements for the period 2009–13 to determine whether the company had an SBLC facility (stand-alone or as part of a credit facility). We then investigated if the facility had been used to support pension fund deficits. We found that a total of 45 companies had SBLC facilities.[28, 29]

From this sample of 45, we removed seven financial institutions (banks). Because the concept of a bank issuing itself a letter of credit (or swapping one with another bank) presents an atypical situation — and one that cannot provide clear signals as to the value of the public policy — these were omitted from further consideration. Furthermore, two companies that had been acquired were removed as was one Crown corporation.[30] This left us with a sample of 35 companies.

Two of these companies, despite their substantial funding deficits (with solvency ratios around 70 per cent, using DBRS estimated liabilities on a "going concern" basis) had credit ratings better than those of the Canadian banks and a third company had the same A+ rating as most banks. Sponsors in such a situation might question the use of a letter of credit backed by a financial institution to manage the plan's credit risk if the institution has only an equal or riskier credit rating than the sponsor itself; however, a regulator might take some comfort from the fact that the SBLC is a commitment from an independent institution. The flexibility of capital deployment (including concerns about trapped surplus) remains the only likely explanation for their use by these three firms.

---

27 James Jung, Eric Eng, Peter Schroeder, Jay Gu, Jeremy Wu, Caroline McNeill, Hilary Shi, Julie Zhu, and Pam Chang. "Industry Study: Pension Plans: The 401 Slowdown – July 2013" (DBRS, 2013). Also, James Jung Eric Eng, Peter Schroeder, Jay Gu, Jeremy Wu, Julie Zhu, Isabella Chiu, and Kevin Wong. "Industry Study: Pension Plans: Vital Signs Improving – June 2014" (DBRS, 2014).

28 In select cases, letters of credit had been used to support ESOPs, but nothing clearly stated a letter of credit had been issued in support of a defined benefit plan deficit.

29 Letter-of-credit facilities described in company financial statements could be for a number of purposes, including supplementary executive pensions, operations, or other purposes. Obligations relating to supplemental employee retirement plans (SERPs) and RPPs are not differentiated in financial statements (i.e., shown as an aggregate) though underfunded plans are disclosed separately from overfunded plans.

30 Federal Crown corporations may obtain a letter from their ministry in lieu of a letter of credit from a bank. The Government of Canada charges a fee for this similar to an SBLC fee.

This left the researchers with a sample of 32 companies with SBLC facilities where the credit quality of the issuing FI could offer value in allaying credit concerns about the plan sponsor. Using employer contributions and the funded-status information contained in the 2014 DBRS report, researchers investigated each company's financial trends in working capital, long-term debt, and asset growth that might indicate a management strategy of cash conservation for growth rather than for pension contributions. The results were inconclusive. In general, employer pension contributions represented a small part of the overall operating cash flow and total capitalization. At the end of the day, a number of the large public companies examined — with the notable exceptions of Air Canada and Bombardier — had considerable financial slack. For most companies, then, it it appears that the minimum contributions were not onerous and funding relief was not needed for strictly financial reasons.

Despite adequate financial slack and the "employment of new strategies by many defined benefit plans beginning in 2012" that Aon reports as a response to the low returns in the equity and debt markets, these do not explain the trend identified in the 2015 FICOM document. One possible explanation of this disparity is that the FICOM report could be reflecting private company use of SBLCs. The researchers were able to locate one private company that, although it possessed financial slack, had routinely used letters of credit and intended to continue doing so. This demonstrates the serious lack of available information regarding private companies and strongly suggests that changes being considered to policies that relate to such firms should be considered carefully and separately.

Future Considerations

To this point, our paper has been backward-looking, asking how SBLCs have fared in the marketplace and whether the original policy objectives are being achieved. This section pauses to take the opportunity to look forward, to ask what changes can be foreseen that may impact the usage of SBLCs and/or their success in achieving desirable policy objectives. Several such issues we have identified are discussed in the remainder of this section.

Prolonged Low Interest Rate Environment

Undoubtedly, some supporters of the use of letters of credit a decade ago felt the tool would be useful in dealing with market conditions that likely would "return to normal" in time. Most would not have predicted that unprecedented low interest rates would persist for 10 years or more. Further, demographics have played a part. Solvency liabilities exclude allowances for future pay increases and unvested early retirement benefits. With low inflation and many plans now matured (with many closed to new entrants and pensionable salaries frozen for continuing members), settlement liabilities are expected to continue to exceed going concern liabilities. For some of these plans, the solvency stresses will dissipate as some fraction of older, active plan members choose to work past their early retirement date.

Where pension funds are operated as the members' retirement savings, rather than as deposits on a shareholder debt, the trustees are likely to continue to elect a balanced investment strategy. Therefore, an equity risk premium will be very likely, albeit not certain. If and when investment gains emerge relative to annuity prices, cash solvency contributions will be found to have been unnecessary. Thus, the main argument for letters of credit will remain their flexibility in changing circumstances.

Perhaps the proper question to pose today is whether there is value in the use of SBLCs as part of a longer term solution in the pension world.

Economic Challenges Posed by Low Commodity Prices

Can the weakness in Canada's economy today, especially in the commodity sector, be expected to produce a spike in the use of SBLCs by more of the impacted publicly traded firms, such as those involved in exploration and production of oil and natural gas? These companies have been cutting expenses dramatically but may not be able to do such much further. For example, one such firm, TransCanada Corp., put up a $47 million letter of credit in 2014 and planned to put up a $35 million letter of credit in 2015 in lieu of funding its pension in cash. Although this firm was not included in the DBRS report that was the basis of our detailed examination, it provides an example of a firm that has chosen to employ SBLCs as circumstances have changed. SBLCs clearly offer an option to such firms to conserve cash. In terms of cash flow, using their credit in this fashion would impact the amount they could actually borrow, but would result in lower interest payments.

Changes to Funding Requirements for DB Plans

While not entirely independent of the issues discussed above, several Canadian jurisdictions are making significant modifications to the solvency funding requirement for defined benefit plans or with some discussion of eliminating that requirement altogether. Once again, Quebec has led the way with its Bill 57 replacing solvency funding requirements with a stabilization provision that overlays the valuation done on a going concern basis. A deficit calculated based on the going concern liability increased by the margin indicated in the scale below (Table 3), less five per cent, must be funded by the employer. For example, a plan with 40 per cent in variable investments (e.g., equities) that is 50 per cent matched against liabilities is associated with a stabilization provision of 12 per cent. In a year when the valuation of that plan identifies a $1 million deficit based on the going concern liability, the sponsor must fund a stabilization provision of $1,000,000 x (12 per cent – five per cent) = $70,000 over and above its regular contribution. The current service contribution must also be increased by the same stabilization margin (seven per cent in the above example).

TARGET LEVEL OF THE STABILIZATION PROVISION (%)

Assets allocated to variable-yield investments (%)	Duration of the assets/Duration of the liabilities (%)				
	0	25	50	75	100
0	12	10	8	6	5
20	14	12	10	8	6
40	16	14	12	10	8
50	17	15	13	11	9
60	19	17	15	13	11
70	22	20	18	16	14
80	24	22	20	18	16
100	27	25	23	21	20

Source: Regulation to amend the Regulation respecting supplemental pension plans, published in the *Gazette officielle du Québec* (July 13, 2016).

Bill 57 was the product of a two-year consultation process stemming from the 2013 D'Amours report, *Innovating for a Sustainable Retirement System*. The resulting provisions directly recognize the financial risks in the pension's portfolio: interest rate risk and market risk.

This type of policy change is a growing trend, with the Canadian Association of Pension Supervisory Authorities (CAPSA) planning a review of funding requirements. To the extent that regulations around solvency funding requirements are modified or removed, the risk of trapped surplus likely would be reduced for some plans and sponsors. That could result in a corresponding reduction in the need for sponsors to use SBLCs or other guarantees as a tool to avoid trapped surplus. One is forced to conclude then, that if trapped surplus were the only reason for a public policy authorizing the use of SBLCs, it might warrant closer examination. However, given that this paper reports a wide range of uses for SBLCs, such a change in funding requirements does not automatically demand a change in permissible funding vehicles.

Conclusions and Recommendations

An increase in pension deficits in 2005–06, driven largely by interest rates holding at historically low levels, caused pressure on governments to expand the range of possible options available to plan sponsors to ensure their financial obligations to the plan. A decade ago, legislation emerged to provide new ways in which public policy could balance the needs of creditworthy but cash-strapped firms against the needs of current and future retirees.[31]

[31] The decline in bond yields in 2003 led to surpluses evaporating in valuations as of Jan. 1, 2004. When combined with the *Monsanto* decision from the Supreme Court of Canada, employers saw little reason to fund plans in any way that would create surpluses. One reviewer referred to this as "a perfect storm."

At the 10-year mark, several aspects of this opportunity to use financial guarantees to buttress sponsor promises to pension plans would benefit from some additional work to enhance their robustness and transparency. These include:

1. *Consider expanding the set of institutions qualified to issue financial guarantees.* A careful review of the mechanisms that assess the quality of credit unions or insurance companies should allow them to be incorporated into the legislation or implementing regulation. This step would ensure that the widest possible range of writers would be eligible and would be consistent with developments seen globally. For example, surety bonds are used in the U.K. and elsewhere to provide this precise form of financial guarantee.
2. *Reconsider and clarify eligibility of foreign providers.* From the perspective of the pension plan sponsor, it might be possible to find a lower-cost SBLC at a higher rated foreign bank. While the current legislative proscription facilitates some regulatory oversight of the transaction, it does little to enhance market efficiency. Preventing some highly rated banks from entering the market will tend to raise the cost of the transaction.
3. *Make "housekeeping" changes to implementing regulations.* A third area that was identified during the preparation of this report is the need for regulations to specify the circumstances under which letters of credit are available as a funding option to banks (and any other providers of the financial guarantees). Current provisions requiring the SBLC provider operate at arm's length from the plan sponsor may be sufficient in most jurisdictions. However, the concept of a bank issuing itself a letter of credit (or swapping with another) presents a situation that policy-makers likely did not consider and one that warrants some careful review.
4. *Review the availability of letters of credit to government entities and Crown corporations*. In the public sector environment, the arguments that support the use of SBLCs are weaker. The need for capital flexibility is somewhat diminished where revenues are assured; similarly, competition arguments do not exist, for the most part. Finally, the use of SBLCs to close the gap between going concern and solvency funding requirements is irrelevant for entities that are exempt from the requirement to meet solvency standards. As the solvency funding standards are being reviewed and potentially revised Canada-wide, we may anticipate reductions or even eliminations of the "gap" that is being closed in some cases where SBLCs are being used.
5. *Consider increasing transparency around the use of SBLCs*. Should their use be disclosed in the financial statements of the sponsor as well as in the regulatory filings of the plan? Should the plan's regulatory filings be available more widely than they currently are? Should accounting standards be changed in any way to recognize the SBLC on a sponsor's pension expense on the income statement?[32] These matters deserve discussion in the next review of DB funding policies.

Overall, it appears that the SBLCs offer additional flexibility to firms with high creditworthiness in managing their finances, including a way to deal with changes

[32] It could be argued that pension plan financial statements and valuation reports are quasi-public information because they are available upon request to any plan member, and so these documents ought to simply be posted on the government website. However, a distinction must be made between financial statements of the sponsor and regulatory filings. The information would be included in company financial statements if it is material to financial statement users. A SBLC would be of more concern to creditors than shareholders, and the exact reason for the SBLC (i.e., RPP or SERP) might be irrelevant.

anticipated in the regulatory environment. The SBLCs appear to provide a mechanism to reduce frictions, thereby reducing the distortions in the marketplace that may be occurring because of regulation. In the final analysis, the summary provided by Ontario's Arthurs commission (the Expert Commission on Pensions) appears to remain valid today as in 2008, when the commission found letters of credit to be:

> "… potentially useful tools that would allow corporate sponsors to retain their capital for business purposes for finite periods of time while fully protecting the financial interests of the fund. Indeed, since banks will provide a letter of credit only to a credit-worthy company, their willingness to provide one following a credit assessment of their client — the sponsor — constitutes a strong signal that the sponsor is, in fact, solvent. Conversely, if the bank decides to call the letter of credit, this would amount to a warning to the pension regulator that both the sponsor and the plan may be in difficulty."[33]

Today, it seems the use of SBLCs is an easy way for a sponsor to deal with unusual economic markets and/or to fund temporary deficiencies. However, we have yet to experience any serious tests of the support they provide to pension plans. How do the plan and sponsor respond if it appears likely that the SBLC would not be renewed by the issuing FI? Astute plan trustees would exercise their option prior to its expiration; however, they could be caught short, particularly if circumstance change rapidly.

Sound regulatory oversight and strong governance will continue to be key to ensuring that promises made become promises kept.

[33] Government of Ontario, *A Fine Balance,* 83.

About the Authors

Norma L. Nielson (PhD, University of Pennsylvania) is Professor and Chair in Insurance and Risk Management at the Haskayne School of Business where she teaches courses in life insurance and employee benefits. Prior to joining Haskayne, she spent 20 years in academic positions at Oregon State University, the University of Southern California and Iowa State University. Her research has produced over 50 publications, including articles in such journals as the *Journal of Risk and Insurance* and the *Journal of Pension Economics and Finance*. She has also conducted research projects for the Property & Casualty Insurance Compensation Corporation (PACICC), Alberta Treasury Board and Finance, the Insurance Bureau of Canada and the Law Commission of Canada, in addition to serving as Director of the Risk Studies Centre.

Peggy L. Hedges is a Teaching Professor and Teaching Fellow at the Haskayne School of Business at the University of Calgary, teaching in the areas of Finance and Strategy. She received a BSc and MBA from the University of Calgary and a PhD in Environmental Planning from the University of Strathclyde. Her background includes education and experience in financial services. Her research interests include classroom and pedagogy techniques, small business financing, alternative funding for defined benefit pension plans and risk analysis of catastrophic bonds. She has co-authored two Canadian text-books, one on corporate financial management and the other on investments and portfolio management. She is a Fellow of the Institute of Canadian Bankers and a Fellow of the Canadian Securities Institute.

ABOUT THE SCHOOL OF PUBLIC POLICY

The School of Public Policy has become the flagship school of its kind in Canada by providing a practical, global and focused perspective on public policy analysis and practice in areas of energy and environmental policy, international policy and economic and social policy that is unique in Canada.

The mission of The School of Public Policy is to strengthen Canada's public service, institutions and economic performance for the betterment of our families, communities and country. We do this by:

- *Building capacity in Government* through the formal training of public servants in degree and non-degree programs, giving the people charged with making public policy work for Canada the hands-on expertise to represent our vital interests both here and abroad;
- *Improving Public Policy Discourse outside Government* through executive and strategic assessment programs, building a stronger understanding of what makes public policy work for those outside of the public sector and helps everyday Canadians make informed decisions on the politics that will shape their futures;
- *Providing a Global Perspective on Public Policy Research* through international collaborations, education, and community outreach programs, bringing global best practices to bear on Canadian public policy, resulting in decisions that benefit all people for the long term, not a few people for the short term.

Our research is conducted to the highest standards of scholarship and objectivity. The decision to pursue research is made by a Research Committee chaired by the Research Director and made up of Area and Program Directors. All research is subject to blind peer-review and the final decision whether or not to publish is made by an independent Director.

The School of Public Policy
University of Calgary, Downtown Campus
906 8th Avenue S.W., 5th Floor
Calgary, Alberta T2P 1H9
Phone: 403 210 3802

DISTRIBUTION
Our publications are available online at www.policyschool.ca.

ISSN
1919-112x SPP Research Papers (Print)
1919-1138 SPP Research Papers (Online)

DATE OF ISSUE
May 2017

MEDIA INQUIRIES AND INFORMATION
For media inquiries, please contact Morten Paulsen at 403-220-2540. Our web site, www.policyschool.ca, contains more information about The School's events, publications, and staff.

DEVELOPMENT
For information about contributing to The School of Public Policy, please contact Paul Beaudry by telephone at 403-220-4624 or by e-mail at paul.beaudry1@ucalgary.ca.

RECENT PUBLICATIONS BY THE SCHOOL OF PUBLIC POLICY

THE INCIDENCE OF THE CORPORATE INCOME TAX ON WAGES: EVIDENCE FROM CANADIAN PROVINCES
http://www.policyschool.ca/wp-content/uploads/2017/04/Corporate-Tax-McKenzie-Ferede1.pdf
Kenneth McKenzie and Ergete Ferede | April 2017

WHO PAYS THE CORPORATE TAX? INSIGHTS FROM THE LITERATURE AND EVIDENCE FOR CANADIAN PROVINCES
http://www.policyschool.ca/wp-content/uploads/2017/04/Corporate-Tax-McKenzie-Ferede1.pdf
Kenneth McKenzie and Ergete Ferede | April 2017

SOCIAL POLICY TRENDS- INCOME SUPPORT CASELOADS IN ALBERTA
http://www.policyschool.ca/wp-content/uploads/2016/02/Social-Trends-Income-Support-for-April-Issue.pdf
Margarita Gres Wilkins | April 2017

NATIONAL PHARMACARE IN CANADA: 2019 OR BUST?
http://www.policyschool.ca/wp-content/uploads/2017/03/National-Pharmacare-Adams-Smith.pdf
Owen Adams and Jordyn Smith | March 2017

POLICY RESPONSIVENESS AND POLITICAL ACCOUNTABILITY IN CITY POLITICS
http://www.policyschool.ca/wp-content/uploads/2017/03/Policy-Responsiveness-Sayers-Lucas.pdf
Anthony Sayers and Jack Lucas | March 2017

80,000 INACTIVE OIL WELLS: A BLESSING OR A CURSE?
http://www.policyschool.ca/wp-content/uploads/2017/02/Inactive-Oil-Wells-Muehlenbachs-1.pdf
Lucija Muehlenbachs | February 2017

DISCERNING ‘FUNCTIONAL AND ABSOLUTE ZERO’: DEFINING AND MEASURING AN END TO HOMELESSNESS IN CANADA
http://www.policyschool.ca/wp-content/uploads/2017/01/Absolute-Zero-Turner-Albanese-Pakeman.pdf
Alina Turner, Tom Albanese and Kyle Pakeman | January 2017

PUBLIC-INTEREST BENEFIT EVALUATION OF PARTIAL-UPGRADING TECHNOLOGY
http://www.policyschool.ca/wp-content/uploads/2017/01/PIB-Evaluation-Fellows-Mansell-Schlenker-Winter.pdf
G. Kent Fellows, Robert Mansell, Ronald Schlenker and Jennifer Winter | January 2017

MUNICIPAL REVENUE GENERATION AND SPRAWL: IMPLICATIONS FOR THE CALGARY AND EDMONTON METROPOLITAN REGIONS DERIVED FROM AN EXTENSION OF “CAUSES OF SPRAWL” (TECHNICAL PAPER)
http://www.policyschool.ca/wp-content/uploads/2016/12/MRG-Technical-Paper-McMillan.pdf
Melville McMillan | December 2016

MUNICIPAL REVENUE GENERATION AND DEVELOPMENT IN THE CALGARY AND EDMONTON METROPOLITAN REGIONS
http://www.policyschool.ca/wp-content/uploads/2016/12/MRG-Development-Conger-Dahlby-McMillan.pdf
Brian Conger, Bev Dahlby and Melville McMillan | December 2016

THE CORPORATE INCOME TAX IN CANADA: DOES ITS PAST FORETELL ITS FUTURE?
http://www.policyschool.ca/wp-content/uploads/2016/12/Corporate-Income-Tax-Bird-Wilson.pdf
Richard Bird and Thomas Wilson | December 2016

2015 TAX-COMPETITIVENESS REPORT: CANADA IS LOSING ITS ATTRACTIVENESS
http://www.policyschool.ca/wp-content/uploads/2016/12/Tax-Competitiveness-Bazel-Mintz.pdf
Jack Mintz and Philip Bazel | November 2016