

Submission to the Joint Expert Panel- Alberta British Columbia Pension Standards Review

The views and opinions expressed in this submission are those of bcIMC and its senior management team. They may or may not reflect the views of bcIMC's pension clients.



Investment
Management
Corporation



February 2008

Executive Summary

Occupational pension plans are an important pillar in Canada's retirement system. In fact, they provide the primary source of retirement income for many Canadian families. Occupational plans are also an important source of long-term capital and can help increase Canada's competitiveness in the global economy. Unfortunately, as noted in the Committee's discussion paper, occupational plans are currently in decline, especially defined benefit pension plans. In particular, some private companies have closed their defined benefit plans to new entrants and a growing number of sponsors are contemplating taking similar actions.

The above trends pose a number of social concerns. Key issues are as follows:

- **Reduced retirement income from occupational plans-** Defined Benefit (DB) pension plans provide some significant advantages over Defined Contribution (DC) pension plans and private savings. DB plans provide their members with higher and more predictable retirement income.¹ DB plans can mitigate or eliminate inflation and longevity risks.² DB plans are more "efficient" pension schemes in that they can provide greater retirement benefits for a given level of contribution. Even if every DB plan that closes is replaced by a new DC plan, aggregate retirement income paid from occupational pension plans will decline and more Canadian families will bear the risk that they will outlive their retirement money.
- **Potential demise of DB plans and loss of an important source of long-term investment capital-** DB plans have long investment time horizons and over the past 30 years have emerged as being an important source of capital for governments, companies, industrial development and infrastructure. As more private sector employers close their DB Plans, there will be increased pressure put on governments to follow suit and wind up the public sector DB plans (i.e., in order to "level the playing field" in terms of employee benefits).³ Therefore, issues and concerns affecting private sector pension plans have broader social implications. If DB plans are going to survive, it is important that decision-makers find solutions for the problems facing private sector sponsors. The demise of DB plans would represent a reduction in long-term capital and would decrease Canada's competitiveness in the global economy.

¹ Waring and Siegel, Don't Kill the Golden Goose! Saving Pension Plans, *Financial Analysts Journal*, Volume 63, number 1

² Longevity risk is that the beneficiary will live longer than anticipated and outlive their savings.

³ For example, in 2007 the Canadian Federation of Independent Business prepared a research paper entitled, *Canada's Pension Predicament: The widening gap between public and private sector retirement trends and pension plans* which argues this position.

- **Increased reliance on income assistance from government-** Private individuals are not compensating for the decline in occupational pension plans with higher personal savings. In addition, retail investors face very high management fees and frequently lack the knowledge or expertise to choose appropriate investment strategies for their retirement savings. The decrease in occupational plans, and DB pension plans in particular, implies that future generations of Canadians will have lower and less secure retirement income than those of the past. Ultimately, this means that more individuals will become dependent upon government assistance during their retirement years.

The regulatory framework and accounting standards affect the stability of the sponsor's contribution rates and the impact that the pension plan has upon the company's financial statements (e.g., balance sheet risks). These issues can affect the plan's investment strategies and the willingness of the private sector employers to provide a DB plan. As such, the regulatory environment and accounting rules will play critical roles in determining both the long-term cost and sustainability of DB plans.

Although well-intended, changes made by some other jurisdictions have had some unintended consequences and have exacerbated the problems facing DB plans and their sponsors. For example, rather than helping DB plans to survive, regulatory and accounting changes made in the UK have had the opposite effect and accelerated their demise. These changes have also had a detrimental impact on the UK's capital markets by creating excess demand for long-dated bonds. Arguably, these accounting and regulatory changes have not helped to increase the transparency of DB plans but rather reflect misplaced confidence in the accuracy and precision of actuarial valuations. Given the adverse consequences experienced in some other jurisdictions, the British Columbia Investment Management Corporation ("bcIMC") applauds the decision by the BC and Alberta governments to establish an expert panel (the "Expert Panel") to examine broader policy issues before initiating legislative and/or regulatory changes.

In this regard, bcIMC is pleased to provide the following submission to the Expert Panel. We have made nine general recommendations. They are as follows:

Recommendation #1: The goal of the regulatory framework should be to encourage the establishment and maintenance of well-funded final salary DB pension plans. This is because these plans provide the greatest benefits, both for the members and for society.

Recommendation #2: There needs to be greater clarity in terms of the ownership of the plan's surplus. Specifically, the party that bears funding risk should get the benefits of a pension surplus. The preferred structure is where funding risks and rewards are shared by both stakeholder groups (i.e., plan members and employers).

Recommendation #3: There needs to be a fundamental change in the way that regulators approach the issue of wind up and solvency valuations. There should be incentives for private sector sponsors to join multi-employer DB plans.

Recommendation #4: Asset and liability smoothing mitigates short-term funding problems and helps fiduciaries adopt a longer-term perspective in terms of the plan's investment policy and risk appetite. As such, smoothing provides important financial benefits and should be maintained.

Recommendation #5: The federal government should be encouraged to modify the *Income Tax Act* to encourage sponsors to hold larger asset cushions, reflecting the uncertainty as to future costs.

Recommendation #6: Larger pension plans face lower costs and have increased investment opportunities. Employers/sponsors should be encouraged to join multi-employer plans rather than managing their DB plans on a separate basis.

Recommendation #7: There is significant uncertainty as to actual expenditures of a final salary DB plan and, as such, it is not possible to design a liability matching strategy. Pursuing the so-called liability matching strategy reduces accounting risks but may pose much greater economic risks than are currently anticipated by its proponents. Therefore, the approach should not be encouraged by the regulatory environment.

Recommendation # 8: Capital markets are very dynamic and opportunities and risks are constantly evolving and changing. As such, the rules governing the pension investments should be based on principles rather than historical restrictions.

Recommendation #9: Pension legislation should maintain current fiduciary standards and continue to require that fiduciaries manage the plan assets with the goal of maximizing long-term investment performance. This reduces the cost of the pension promise, which is critical for the long-term survival of the DB plan. Trustees can still pursue social policy reforms through a program of active ownership and engagement.

Background material supporting the above recommendations is included in the text of this submission. If desired, bclMC would be pleased to follow-up with a presentation to the Expert Panel.

Background:

The British Columbia Investment Management Corporation (bcIMC) manages assets on behalf of 11 public sector pension plans. As at December 31, 2007 bcIMC had approximately \$85 billion under its administration, 77% of which was pension money. This makes bcIMC the largest pension fund manager in Western Canada.

Final salary defined benefit (DB) pension plans are facing some significant challenges and appear to be approaching a crossroad. Specifically, some private sector employers have closed their DB plans to new entrants and considerably more are considering taking similar actions. The decline in DB plans is not only happening in Canada but has also occurred in other jurisdictions, such as the US and the UK. DB plans have been an important pillar in Canada's retirement system. Therefore, the current trend raises some obvious social concerns.

In response to the above issues and concerns, the Alberta and British Columbia governments have established an Expert Panel to conduct a public review and make recommendations to help sustain private occupational pension plans.

While there are some notable structural differences between public and private DB plans, public sector fiduciaries face many of the same issues and concerns as their private sector counterparts. More importantly, bcIMC believes that the survival of public sector plans is ultimately dependent on resolving the challenges facing private sponsors. Specifically, if the private sector abandons the DB model, it will become increasingly difficult for government to justify providing DB plans for public sector workers. It seems unlikely that, over the long-term, public sector workers will be given a retirement benefit that is perceived to be unaffordable in the private sector.

bcIMC's submission focuses on two key areas:

- Regulatory, accounting and legal changes/approaches that are needed to help address structural problems facing DB plans. Overall, bcIMC believes the primary goal of pension legislation should be to create incentives for employers to establish and maintain well funded occupational pension plans (Recommendations 1-5); and,
- Changes to enhance investment performance and reduce the long-term cost facing DB plans. Pension plans have two sources of income: contributions and investment returns. Enhancing investment returns reduces long-term costs, which benefit both the plan's stakeholders, as well as broader society (Recommendations 6-9).

While the problems facing DB plans can be very complex, many have a common cause. Specifically, many of the current problems facing DB plans have developed from decision-makers placing undue confidence in the accuracy and precision of actuarial forecasts. As such, a critical change that is needed for the survival of DB plans is greater recognition that the actuarial valuation is just an estimate and that actual

pension expenditures may deviate significantly from the actuarial forecast. This issue is examined further in the next section.

Actual Funding Status versus Actuarial Estimate

Final salary DB plans are complex financial arrangements and actuaries are given a difficult, if not impossible, assignment. Specifically, they are asked to provide a single dollar estimate of the value of the plan's assets and its liabilities at a designated point in time. The actuary must also assess the adequacy of the current contribution rates in meeting the pension promise.⁴

Estimating a plan's funding status requires that actuaries use a series of simplifying assumptions. For example, when examining a DB plan on a going-concern basis, the actuary must estimate the impact that economic variables will have on asset and liability growth over the next 50 or 60 years. This includes issues such as future salary increases, rates of inflation, and investment returns. The actuary also needs to make some simplifying assumptions regarding how the plan's membership and demographic profile will change over this time period. This includes forecasting issues such as mortality and withdrawal rates, both for the present and the future.

Actuaries typically employ static and conservative assumptions for these key valuation drivers. For example, the valuation might assume that future inflation will be 2.5 percent per annum, wage increases will be 0.5 percent above the rate of inflation, and investment return will be 3.0 percent above salary increases. In terms of the plan's membership, withdrawal and mortality rates might be estimated from past experience or based on industry experience. A key demographic assumption that is rarely acknowledged is that the expenditure forecast is restricted to current members. Therefore, estimates of future expenditures implicitly assume that the plan has been closed to new members, even if it operates on a going-concern basis.

Given the long periods of time covered by the actuarial forecast, small changes in the key assumptions can make an enormous difference in terms of the plan's estimated funding status. For example, a 50 basis point change in the expected returns for one of bclMC's large public sector clients would lead to over a billion dollar change in their expected funding status.

The sensitivity of the actuarial valuation to the underlying assumptions illustrates their importance in estimating the plan's funding status. It also means that the accuracy of the forecast is contingent on the accuracy of the actuarial assumptions. For example, if the actuarial assumptions underestimate salary growth, or overestimate investment income, all else being equal, the valuation will overstate the plan's funding status. Conversely, if actual salary growth is less than expected, or actual investment returns are better than assumed, the plan's actual results could turn out much better than was forecasted in the actuarial valuation.

⁴ The actuary may provide several estimates using different methodologies, such as solvency, going-concern and entry-age basis. However, under each of these methodologies, the objective is to express the funding status as a single estimate rather than a range of possible outcomes.

A review of the historical results indicates that a plan's actual results may deviate significantly from its actuarial assumptions and that these differences can last for extended periods of time. For example, during the 1960s and 1970s, wage increases were much higher than expected while investment returns were much lower than expected. In addition, there has been a marked increase in life expectancy since the 1960s, reflecting improved health care, as well as increased participation by women in the labour force. Not surprisingly, most DB plans experienced a significant deterioration in their funding status during the 1960s and 1970s. This was because the plans' actual experiences turned out to be much less favorable than the assumptions that were employed to estimate the plans' funding statuses.

The opposite situation has occurred during the past 27 years. Specifically, since the early 1980s, salary increases have generally been lower than expected and investment returns have significantly exceeded the actuarial assumptions. As a result, most DB pension plans did better than implied by the assumptions and experienced a dramatic improvement in their funding status since the 1980s. In other words, **despite current concerns about the cost of DB benefits, the actual cost of these benefits over the past 27 years has actually been much lower than had been expected.**

During the period 1981 to 2005, one of bclMC pension clients conducted 8 actuarial reviews. While the plan's assumptions were adjusted periodically, the valuation reports consistently overestimated salary increases and underestimated the plan's investment return during this 24-year period. Over time, and in 2005 dollars, the actuarial reports overestimated salary growth by \$2 billion and underestimated investment return by \$1.8 billion.⁵

There are two key points to note regarding the actuarial valuation. They are as follows:

1. The actuarial valuation is an estimate of a plan's funding status at a designated point in time. The funding status is estimated using a series of simplifying assumptions and the plan's actual results can be expected to deviate from the assumptions. There will also be some unanticipated demographic changes in the plan, such as new members. In bclMC's opinion, a valuation should be viewed as being our best "guesstimate" of funding status and therefore, there should be increased recognition that the plan's actual results will likely differ significantly from the actuarial valuation. Therefore, decision-makers should not design a policy framework that relies on the accuracy of the actuarial forecast; and,
2. The underlying purpose of actuarial valuation is to assess the general health of the pension plan and the adequacy of its current contribution rates. As such, the valuation and actuarial assumptions impact the plan's funding through contribution rates but they will not have any impact on the plan's current or future payment obligations.

⁵ Investment return would have been \$1.2 billion higher if the analysis ended in 2002, before the full impact of the equity market correction.

Regulatory Issues and Concerns

Recommendation #1: The goal of the regulatory framework should be to encourage the establishment and maintenance of well-funded final salary DB pension plans. This is because these plans provide the greatest benefits, both for the members and for society.

Empirical studies indicate that DB pension plans earn higher and more stable rates of return than DC plans.⁶ As such, DB plans are a more efficient pension scheme and can provide a higher level of retirement income for a given level of contribution. Stronger returns not only benefit the stakeholders but also reflect that the plan's assets are being invested more effectively and are generating stronger income and dividend streams. As such, stronger returns imply a better deployment of the pension capital, which is another social benefit of DB plans.

The advantages of DB over DC, however, do not stop with superior investment performance. DC plans generally have lower contribution rates than DB plans, which will also reduce the level of retirement benefits.⁷ DC plans typically invest in mutual fund products and face higher management fees. Therefore, more of the DC plan's proceeds are paid to the financial intermediaries versus providing retirement benefits.

A greater concern is that many individuals are not knowledgeable of investment issues or principles. As a result, they frequently do not select appropriate investment strategies given their circumstances. Significantly, a recent US study concluded that: "...more than half of the participants in 401(k) plans do not follow the prudent investment strategy of diversifying their holdings."⁸ A key advantage of DB plans is that they tend to be managed by investment professionals.

From a plan member's perspective, a key advantage of DB over DC plans is that the former provides the beneficiaries more stable and predictable retirement income. Understanding one's future entitlement can assist in retirement planning by helping members determine how much they will need to supplement their government and occupational pensions with personal savings. In addition, DB plans reduce longevity risks by providing benefits until the member's death.⁹

⁶ Munnell, Soto, Libby, and Prizivalli, Investment Returns: Defined Benefit vs. 401(k) Plans, Center for Retirement Research at Boston College, September 2006, number 52

⁷ Waring and Siegel, Don't Kill the Golden Goose! Saving Pension Plans, *Financial Analysts Journal*, Volume 63, number 1 p. 31

⁸ Munnell, Soto, Libby, and Prizivalli, Investment Returns: Defined Benefit vs. 401(k) Plans, Center for Retirement Research at Boston College, September 2006, number 52, page1.

⁹ Longevity risk is that the beneficiary will live longer than anticipated and outlive their savings.

DB plans also provide benefits to employers. On a fundamental level, most employers would like to ensure that long-standing employees have decent retirement income and can maintain a comfortable standard of living during their retirement years. In addition, offering employees a good retirement package can increase the employer's competitive position, helping them attract and retain good workers. Finally, as noted above, superior investment results enables DB sponsors to provide superior retirement benefits at lower long-term costs.

There are, of course, many challenges associated with providing a DB plan. These issues will be examined throughout this submission. At this time, it suffices to say that from a societal perspective:

- It is better to have a DC pension plan than no occupational plan; and
- DB plans are preferred to DC plans as they are a more efficient source of providing retirement income.

There are three general types of DB plans: flat benefit pension plans; career average plans; and final salary plans. Under a flat benefit scheme, members are provided a specific benefit for each year of their service. Under a career average plan, the member's pension is calculated as a percentage of their lifetime earnings with the company. Under a final salary plan, the member's pension is based on their wages during a specific period (e.g., last five years or best five years).

From a plan member's perspective, the optimal occupational pension plan is a fully indexed final salary DB Plan. Basing the pension entitlement on a member's highest earnings helps protect their pension entitlement from being eroded by inflation during their years as an active member. In turn, indexing protects the purchasing power of the member's pension during their retirement years. While flat rate and career average plans provide the advantage of increased payment certainty, the purchasing power of the pension would be quickly eroded if Canada encountered a period of high inflation, such as was experienced in the 1960s and 1970s. Another criticism of flat benefit and career average schemes is that they are less tax efficient than final salary plans.¹⁰

While flat benefit and career average plans provide the employer a more predictable and stable future cost, the employer may face pressure in the future to adjust the benefits, especially if the value of the member's pension is being undermined by inflation. Therefore, in reality, costs of these schemes may ultimately be less stable than would be anticipated from a structural perspective.

¹⁰ Flat rate and career average pension schemes are viewed to be less tax efficient than final salary plans as members' contributions have the same impact on their RRSP room but the plans provide a lower level of benefits for these contributions.

Recommendation #2: There needs to be greater clarity in terms of the ownership of the plan's surplus. Specifically, the party that bears funding risk should get the benefits of a pension surplus. The preferred structure is where funding risks and rewards are shared by both stakeholder groups (i.e., plan members and employers).

The funding challenges facing plan sponsors have been exacerbated by some controversial legal rulings, which have resulted in an asymmetrical distribution of funding risks and rewards. Specifically, the plan sponsor underwrites funding risks and, as such, their contribution rates will increase if the actuary estimates that the plan's assets are not sufficient to meet its future payment obligations. However, if the plan develops a funding surplus, the surplus funds must be retained in the plan and distributed to the beneficiaries upon its wind up.

The asymmetrical treatment of funding risks and benefits was illustrated in the Monsanto case.¹¹ In this legal action, the Supreme Court of Canada ruled that the sponsor had to distribute part of the pension surplus as a partial wind-up of the pension plan.

Whether or not the above plan actually has a surplus depends upon the accuracy of actuarial assumptions that were used to estimate its funding status. For example, if future salary increases are larger than expected or investment return is lower than assumed, the plan's actual funding status will deteriorate relative to the actuarial forecast. As noted earlier, there is a strong likelihood that a pension plan's actual results will differ from the actuarial guesstimate. Therefore, only time will tell whether the underlying assumptions used in the Monsanto Case were overly optimistic and whether distributing the actuarial surplus after the partial wind up will cause future funding problems for the sponsor.

The Monsanto ruling illustrates the type of problems that emerge from an asymmetrical treatment of funding risks and rewards. As noted by David Dodge, the Governor of the Bank of Canada at the time, the ruling discourages the establishment of new DB plans and encourages current sponsors to run their DB plans in a perpetual deficit position.¹² Why would a private sector employer want to maintain an asset cushion in their occupational plan if they might be required to distribute it to the beneficiaries, even before the plan has fulfilled all of its payment obligations? An asset cushion helps mitigate the consequences of a market downturn and can reduce contribution rate volatility. A healthy regulatory system should encourage pension sponsors to hold significant asset cushions, not funding deficits.

¹¹ *Monsanto Canada Inc. v. Ontario (Superintendent of Financial Services)*, [2004] S.C.C. 54.

¹² Jacqueline Thorpe, "Chief banker demands new regulations: Wake-up call given: Threat seen from the U.S. and emerging markets", *Financial Post*, October 8, 2004:FP4

The public sector DB plans in British Columbia operate on cost-share basis, where the two stakeholder groups (i.e., employers and employees) share funding risks and rewards equally. This not only establishes a symmetrical treatment of funding risks and rewards, it mitigates the impact that adverse experiences have on the employer. Effectively, the employer's funding risks are reduced, as cost increases will be shared by the active members. A cost-shared plan is a more stable pension model as it does not require that the employer bear all of the funding risks.

Recommendation #3: There needs to be a fundamental change in the way that regulators approach the issue of wind up and solvency valuations. There should be incentives for private sector sponsors to join multi-employer DB plans.

Final salary DB plans are complex financial arrangements and no regulatory framework can resolve all of the financial, structural, or intergenerational challenges that are inherent in these schemes. The situation is complicated by the fact that different stakeholder groups (active, retired and employers) may have conflicting interests and regulators must strike an appropriate balance between their respective interests.

The issue of solvency illustrates a key structural difference between public sector and private sector DB plans. Obviously, solvency poses little or no concern for public sector DB plans, as there is no risk that the employer will go bankrupt. Rather, the more important concern from a public sector perspective is ensuring that the funding methodology is fair and equitable from an intergenerational perspective (e.g., current pension costs are not being deferred to future generations of workers and taxpayers).

Obviously, there is a risk that private companies might go bankrupt and hence the sponsor may not be able to address future funding shortfalls. The last thing pension regulators want to do is reduce beneficiaries' benefits because a plan is not estimated to have enough assets to meet its current and future payment obligations. Therefore, one of the challenges facing regulators is addressing solvency concerns and ensuring that the plan will have sufficient assets to fulfill the pension promise, even if the employer goes bankrupt.

The traditional approach has been to require that the sponsor retain sufficient assets in the plan to meet all of the estimated payment obligations that have been accrued to date, assuming a conservative investment policy (e.g., restricting investments to fixed income securities).¹³ This approach did not pose a significant concern when interest rates were high (e.g., 1980s and 1990s). However, interest rates have been on a downward trend for the past 27 years and solvency has recently become a major concern. Today, many sponsors find that their plans are estimated to have significant surpluses on a going-concern basis, but large deficits on a solvency basis. As a result, contribution rates must be increased to address the solvency shortfall.

¹³ It can be argued that restricting a plan's investments to fixed income securities is not a low risk strategy unless the payment obligations are fixed and the holdings pose little risk of credit default (e.g., government bonds). This is because the strategy puts all of the holdings in one asset class and increases the plan's vulnerability to key economic risks, such as inflation and rising interest rates.

The weakness of the solvency methodology is illustrated by the fact that a plan's funding status can be highly sensitive to the timing of the review. For example, a plan could be judged to have a sizable solvency surplus on March 31 but found have a large solvency deficit a month or two later (or vice versa).¹⁴ Concern over solvency valuations and falling interest rates is causing some sponsors to adopt investment strategies to mitigate accounting concerns. Ultimately, managing the plan to accounting issues will generally reduce its investment earnings and increase the cost of the benefits to the sponsor. The solvency rules are also causing contribution rate increases and volatility. Therefore, it is not surprising that solvency is a significant concern for some private sponsors and is prompting some to consider winding up their DB plans. From bcIMC's perspective, it makes little sense to have a regulatory requirement that encourages sponsors to abandon DB plans, in order to protect the members from a potential problem that may or may not occur in the future (bankruptcy of the sponsor and insufficient funding).

Ideally, the regulatory environment should encourage sponsors to join multi-employer DB plans. This not only mitigates the solvency concerns, but participating in a larger portfolio provides ancillary financial benefits for the plan (e.g., lower unit costs, expanded investment options).¹⁵ In addition, pension sponsors should be encouraged to hold larger asset cushions, to mitigate solvency risk and to reflect the uncertainty as to future growth of the assets and liabilities. Furthermore, while the solvency assumptions should likely be more conservative than those used for going-concern valuation, they should not be tied to fixed income yields. Finally, some of the solvency risk may need to borne by the plan members and there should be clear rules and guidelines on how benefits are administered and will be adjusted in the event that the sponsor goes bankrupt and there appears to be insufficient money to meet all of the plan's future obligations.

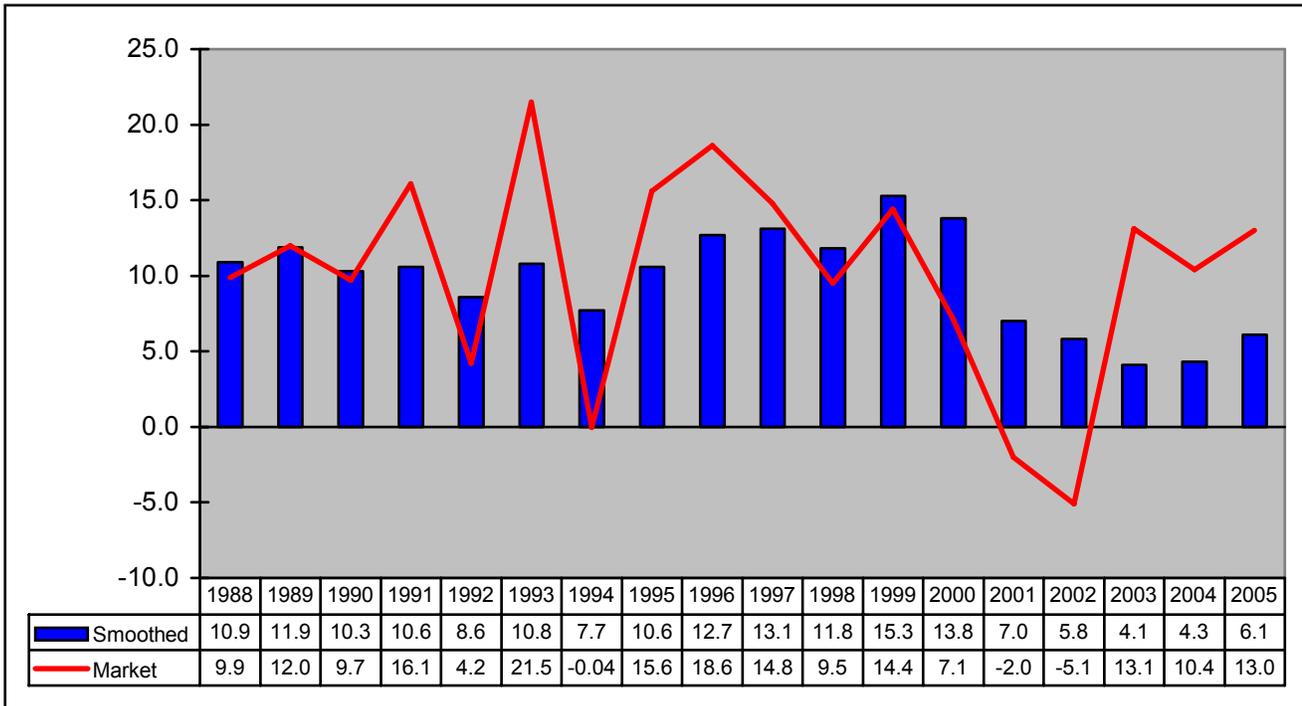
Recommendation #4: Asset and liability smoothing mitigates short-term funding problems and helps fiduciaries adopt a longer-term perspective in terms of the plan's investment policy and risk appetite. As such, smoothing provides important financial benefits and should be maintained.

Asset and liability smoothing does not affect a plan's long-term results or its long-term funding status. Rather, smoothing impacts the plan's short-term results and decreases contribution rate volatility. The impact of asset smoothing is illustrated in the chart on the next page. As expected, the smoothing produces a much more stable return series than the plan's annual market return.

¹⁴ The key issue is the level of interest rates. If interest rates fall between the two dates the present value of liabilities increases and asset growth declines.

¹⁵ This issue is examined further under recommendation #6.

**Graph #1: Smoothed versus Market Returns
Fiscal 1988 – 2005**



Source: Actuarial Reports

Smoothing produces two benefits. The first is that it can help mitigate contribution rate volatility. For example, without smoothing, the above plan would have had a large surplus in the mid-1990s, when equity markets were strong and the plan's actual investment return significantly exceeded the actuarial assumption. This, in turn, would have triggered lower contribution rates, or perhaps even a contribution holiday. Unfortunately, without smoothing, the plan would have had a much larger funding deficiency in the period 2001-2003 and contribution rates would have needed to increase significantly to address the unfunded liability. Obviously, the funding problem would have been compounded if the sponsor had taken a contribution holiday during the strong returns of the 1990s. The bottom line is, without asset smoothing, the sponsor's contribution rates would have been "whip-sawed" in response to swings in capital markets.

The second benefit of smoothing flows from the damping impact that it has upon contribution rate volatility. Specifically, because smoothing mitigates the short-term consequences of disappointing investment returns, the sponsors can afford to take a higher level of market risk. Over the long-term, taking higher levels of market risk will enhance the plan's returns and reduce the cost of the pension promise. Therefore, smoothing mitigates contribution rate volatility and enhances the ability of the sponsor to reduce pension costs with higher investment returns.

Despite the above, there is growing pressure on governments and regulators to eliminate asset and liability smoothing and force DB sponsors to value their asset and liabilities on mark-to-market basis. bclMC disputes both the logic and value of this initiative. The approach places undue confidence in the accuracy of actuarial forecasts and encourages pension fiduciaries to adopt lower risk investment strategies to manage their balance sheet risks. Over the long-term, decreasing the level of risk and return will be counterproductive and will increase the long-term costs to the sponsor.

Recommendation #5: The federal government should be encouraged to modify the *Income Tax Act* to encourage sponsors to hold larger asset cushions, reflecting the uncertainty as to future costs.

A significant impediment to building stronger pension plans is the *Income Tax Act* (“ITA”) and restrictions that are placed on the accumulation of pension surplus. While this issue is somewhat outside the mandate of the Expert Panel, the issues and challenges facing DB plans cross jurisdictional lines as pension plans are affected by both federal and provincial legislation.

Traditionally, the ITA has effectively prohibited contributions to registered pension plans if the plan’s assets are deemed to exceed its liabilities by 10% or more.¹⁶ As a result, many plans were compelled to take contribution holidays during the 1990s when their investment returns were strong. As evidenced by the equity market correction of 2001-2003, 10% is a very small asset cushion and a plan’s funding status can be quickly eroded if the plan’s investment returns are weaker than anticipated.

Once again, the underlying problem stems from decision-makers having undue confidence in the accuracy of the actuarial valuation. An asset cushion helps the sponsor deal with the uncertainty of capital markets and the future cost of the pension promise. It can also reduce solvency risks by strengthening the ability of the plan to meet its payment obligations, independent of the future financial health of sponsor. It should be noted that some jurisdictions approach this issue fundamentally differently and encourage their DB plans to maintain large asset cushions to fund their pension liabilities. For example, the Netherlands requires that DB sponsors maintain assets that, on average, are at least equal to 130% of their liabilities.¹⁷

Obviously, pension issues/challenges are inter-related. For example, sponsors will not be willing to hold larger asset cushions in their DB plans unless authorities address the legal problem of the asymmetrical distribution of funding risks and rewards. The health of the pension system depends largely upon its ability to withstand adverse events. This would be facilitated if plans had larger asset cushions.

¹⁶ The contribution rate rule was modified in 2003 and was increased to a maximum of 25% for DB plans that qualify as “shared-cost plans.” Other plans are still subject to the 10% rule.

¹⁷ Blome, s. et al (2007) “Pension Fund Regulation and Risk Management: Results from an ALM Optimisation Exercise”, OECD Working Papers on Insurance and Private Pensions, No.8 OCED Publishing.

Investment Issues

Recommendation #6: Larger pension plans face lower costs and have increased investment opportunities. Employers/sponsors should be encouraged to join multi-employer plans, rather than managing their DB plans on a separate basis.

In 1989, Don Ezra, a Senior Vice President with the Frank Russell Company, undertook a research project to review the relative importance of contributions and investments in the provision of DB benefits. The following is a synopsis of Mr. Ezra's Research Commentary:

In a defined benefit pension plan, how many cents in each dollar of benefit come from contributions and how many cents from investment return? No the answer is not 60/40. This commentary shows that 80 cents or more comes from investment returns; contributions account for the remaining 20 cents of each benefit dollar. This points to the dominance of investment policy when considering the finances of a pension plan.¹⁸

The proposition that investments provides over 80% of a DB plan's funding was estimated based on the assumption that its investment return would exceed the members' annual salary growth by 3% per annum. Obviously a plan's actual results will vary from this assumption and its funding status will be influenced by plan specific factors (e.g., future hiring, mortality and withdrawal rates, investment policy and risk appetite, etc.). For example, OMERS has estimated that 70 cents of each dollar of benefit comes from its investment activities.¹⁹ Regardless whether investing provides 70% or 80% of a DB plan's funding, the above illustrates two fundamental principles in the management of occupational pension plans. These are as follows:

- Pension plans only have two sources of funding: contributions and investment returns. The higher the plan's long-term investment return, the lower contributions that will be needed for a given level of benefits; and,
- Investment return is the most important source of income for a DB plan and strong returns will reduce the long-term cost of the pension promise to the plan sponsor(s). Conversely, pursuing a low risk/low return investment strategy will result in much higher costs/contribution rates to the sponsor.

Given the above, the best way to control the costs of a final salary DB plan is to build a regulatory framework that allows the fiduciaries to enhance their investment results.

¹⁸ Don Ezra, **A Model of Pension Fund Growth**, Russell Research Commentary, June 1989 p. 2

¹⁹http://www.omers.com/Newsroom/News_releases/OMERS_Urges_Pension_Commission_to_Abolish_Costly_Investment_Rules_for_Pension_Funds.htm?DateTime=633283960200000000&PageMode=View

There are significant financial benefits associated with managing larger investment portfolios and this is a key advantage of encouraging sponsors to join multi-employer plans. There are economies of scale in investment management and, as such, larger institutional investors will pay much lower administrative and management fees than their smaller counterparts. Larger funds are more inclined to manage assets internally, which further reduces costs. Larger funds have expanded investment opportunities and can build a more diversified portfolio by increasing their exposure to less liquid asset classes (real estate, mortgages, infrastructure, and private placements). Larger plans tend to be able to spend more money on their management platform and infrastructure, such as risk management systems. Finally, larger plans have a greater influence and impact on issues such as corporate governance, and corporate policies/practices.

Recommendation #7: There is significant uncertainty as to actual expenditures of a final salary DB plans and, as such, it is not possible to design a liability matching strategy. Pursuing the so-called liability-matching strategy reduces accounting risks but may pose much greater economic risks than are currently anticipated by proponents. Therefore, the approach should not be encouraged by the regulatory environment.

Prior to 2000, pension trustees were generally encouraged by their advisors/consultants to hold a balanced portfolio. The debate in terms of investment strategy tended to centre on whether the pension plan should have a 60% or 70% exposure to publicly traded stocks. However, since the 2001-2003 equity market correction, and the general decline in long-term interest rates, there has been growing support for “asset/liability matching” or “liability-driven” investing.²⁰ This support has come from academics, pension consultants, and some market participants. As noted earlier, the approach is also being encouraged by regulatory changes, which are reducing actuarial smoothing and increasing mark-to-market valuations of plans’ assets and liabilities. At a minimum, it is argued that sponsors need to benchmark their results against their liability-matching portfolio in order to assess the risks and benefits of taking an asset/liability mismatch.

The idea that we can devise an investment strategy that will match the plan’s assets and liabilities is intuitively appealing. At first blush, it appears to be a logical step in the evolution of pension fund management. However, a closer examination reveals that the concept is built on questionable assumptions and is fraught with theoretical and practical problems.²¹ Even ignoring the cost implications associated with restricting the plan’s investments to fixed income securities, there is no reason to believe that the so-called liability-matching approach will eliminate market risk or prevent a final salary DB plan from developing a significant funding problem in the future. A greater concern is that if a large number of pension plans decide to follow the approach, increased capital flows to long-term bonds will push interest rates lower and exacerbate the current funding challenges facing private sector defined benefit pension plans, especially given solvency tests.

²⁰ Liability-driven investing is acquiring assets, (e.g., real and nominal bonds) that are anticipated to generate cash flows that will match the plan’s current and future expenditure obligations.

²¹ It is easier to devise a matching strategy for a flat benefit DB plan as there is greater certainty as to future payments. This report focuses on final salary plans as they are viewed to provide greater social benefits.

Asset/liability matching can occur at two levels: a weak and a strong form. The weak version is where the investment manager attempts to match the duration of the plan's assets to its liabilities. Theoretically, if the durations are matched, then the plan should be protected from changes in interest rates.

The strong version of asset/liability matching requires that the manager acquire assets that will generate an income stream that precisely matches the plan's payment obligations. This approach would effectively "immunize" the liabilities. In other words, if income and payment streams are matched, then the plan should be able to meet its pension obligations regardless of what happens in capital markets. Under the strong form of asset/liability matching, the plan sponsor should not be concerned about market risk.

Unfortunately, it is simply is not possible to immunize final salary DB plan. The reasons are as follows:

- As noted earlier, the actuarial forecast is based upon a series of simplifying assumptions and the plan's actual expenditures can deviate significantly from actuarial forecast, even over a long period of time (e.g., 20+ years). Given the high degree of uncertainty and volatility regarding the plan's future expenditures, one cannot immunize the actual payment obligations with the yields from nominal bonds.
- It is generally recognized that real return bonds represent the best matching asset for a final salary plan. This is because both salary increases and the yield from real return bonds are positively correlated with the rate of inflation. This said, the degree of correlation between salary increases and consumer price index will vary by industry and the time period. For example, in the period 1992 to 2005, the correlation between changes in the consumer price index and wage settlements was 0.58 for the entertainment and hospitality industries and 0.81 for construction industry.²² A greater problem is that there is an extremely limited supply of real return bonds and hence few choices in terms of maturity dates. For example, based on the TSX/DEX index, there are currently \$43.2 billion in real return bonds in Canada. In comparison, members of the Pension Investment Association of Canada (PIAC) have over \$890 billion in assets. In addition, many other investors have a desire for inflation-sensitive assets and a natural affinity for real return bonds (e.g., RRSPs, RESP, worker compensation programs, endowment funds, property and casualty insurance, etc.). Therefore, demand for these securities outstrips supply and it is not possible for pension fiduciaries to immunize their liabilities with real return bonds.

²² Statistics Canada, Major Wage Settlements, bcIMC calculations.

As noted earlier, the weak version of asset/liability matching is where the manager attempts to match the duration of the plan's assets with that of its liabilities (i.e., duration matching). If the durations are matched and interest rates decline (increase), both assets and liabilities are expected to increase (decrease) at similar rates. Therefore, proponents of duration matching argue that it will help to protect the plan's funding status from changes in interest rates.

Some proponents of duration matching have criticized pension fiduciaries for benchmarking their fixed income portfolios to broad based market capitalization indices, such as the ScotiaBond Universe (TSX/DEX). They argue this encourages their investment manager to take a significant duration mismatch and hold shorter-term assets. They believe that lengthening the asset duration to match liabilities will reduce funding risks. Some advisors take this one step further and argue that if trustees extend their term and match their liability duration, the trustees can afford to take increased market risk in other areas (e.g., increased exposure to emerging markets, hedge funds, etc.).

Clearly, duration matching decreases short-term accounting risk and mitigates the funding risks of falling long-term interest rates. It is an important consideration, especially given the low interest rate environment and solvency requirements. It will become an even more important consideration for pension trustees if Canada proceeds like other jurisdictions and reduces asset and liability smoothing.

The value of duration matching is much more debatable if one views it from an economic and/or policy perspective. Specifically, there are three structural problems with the underlying concepts and logic. They are as follows:

- 1. Payment uncertainty-** The high degree of uncertainty as to value of future expenditures means that it is not really possible to calculate the duration of the DB plan's liabilities. Rather, the duration calculation is based on the actuarial estimate of future expenditures, including the underlying assumptions, such as no new members. If one assumes that the plan will accept new members and, continue in perpetuity, presumably its liability duration would approach infinity.
- 2. Inappropriate concern over the impact of the discount rate on the liabilities-** Changes in interest rates will have no impact the plan's expenditure obligations. Interest rate changes affect only the actuarial liabilities, via the discount rate that is used to convert future expenditures into present value terms. It should be noted that the plan will hold its liabilities until the payment obligations come due and, as such, the cost will ultimately equal the par value of the liabilities. As such, the impact of changes in the discount rate on the pension liabilities is transitory and merely affects the speed of convergence between the current present value estimate and final payment value.²³ As such, bclMC believes that concerns expressed over the impact that falling interest rates have on pension liabilities are being blown out of proportion.

²³ This concept is examined further in Appendix A

The above situation is directly analogous to holding a bond to maturity. Specifically, if an investor holds a bond to maturity, they will earn the effective yield of the bond and changes in its market value, caused by changing interest rates, are transitory and irrelevant. Significantly, if an investors' intent is to hold a bond to maturity, the correct accounting treatment under the CICA Handbook is to record its value at amortized cost, not its market value.

- 3. Low compensation for inflation risks-** Interest rates have been on a declining trend for the past 27 years and currently are at 40-year lows. As such, bond holders have very limited potential for further capital gains from declining interest rates. In addition, bondholders are receiving little compensation for taking interest rate or inflation risks. Specifically, over the past couple of years, one year Government of Canada T-Bills have provided similar yields as investors have earned from holding 30-year Government of Canada bonds. Therefore, in bcIMC's opinion, at this time there is not a strong investment rationale for extending the duration of the fixed income portfolio.

The latter point illustrates a key concern that bcIMC has regarding the impact of accounting and regulatory standards. Specifically, to mitigate balance sheet and short-term funding risks, plan sponsors are being encouraged to increase their allocations to bonds and/or to extend the duration of their fixed income portfolios to better match their liabilities. Given current yields and the low return prospects from holding long-term bonds, this may encourage some plan sponsors to try to compensate by taking inappropriate levels of credit risk. A greater concern is that holding long-term bonds increases the volatility of the plan's fixed income returns and increases the plan's exposure to unexpected increases in inflation. If inflation re-emerges in the future, there will be pressure on salaries and actual pension expenses will increase. At the same time, long-term bond prices are highly sensitive to changes in interest rates and rising rates would produce large asset losses. Therefore, while the accounting treatment mitigates short-term risks, rising pension costs and disappointing investment returns would add to the long-term funding problems facing the sponsor.

It is important to note that despite the fact that DB plans are in a state of decline, their asset bases has been growing steadily and they are becoming a more important force in capital markets. Significantly, as shown in the table that follows, pension assets in Canada have been growing much faster than our domestic debt market. For example, in 1993 the assets of occupational pension plans were equal to about 59 percent of Canada's debt market. By 2006, pension assets grew to over 80 percent of Canada's debt market.

Table 1: Canadian Pension Assets versus Domestic Debt Market

Year	Trusteed Pension Assets \$ billion	Domestic Debt Market \$ billion	Pension Assets as % of debt market %
1993	312.9	531.8	58.8
1995	358.0	602.7	59.4
1997	467.2	682.6	68.4
1999	564.5	755.9	74.7
2001	581.5	818.9	71.0
2003	625.9	891.2	70.2
2005	799.6	992.5	80.6
2006	855.0	1,058.1	80.8

Source: Bank of Canada Review

Table 1 examines growth of pension assets against publicly traded debt securities, including money market. Demand and supply issues become a bigger concern if one focuses on the so-called liability matching debt securities (e.g., long-term bonds and real return bonds). As indicated, in the table below, these securities represent a small subset of the domestic debt market and pension assets significantly exceed their value.

Table 2: Liability-Matching Debt Securities

Canadian Bond Market	Market Value (\$ billion)
Bonds maturing in 20 years or more	134.70
Bonds Maturing in 10 years or more	207.32
Real Return Bonds	42.33
Total Bonds	734.64

Source: Scotia Capital (TSX/DEX) Indices

The above table illustrates a potential concern if more pension fiduciaries decide to pursue duration matching as a strategy. Specifically, increased demand for long dated and/or real return bonds can cause prices to rise and yields to fall, which will exacerbate pension plans' funding problems. In the extreme, excess demand for long-dated bonds can result in a perpetually flat or inverted yield curve. Arguably, this has already occurred in the UK, as accounting changes have encouraged pension fiduciaries to reduce their holdings in equities and increase their holdings in long-term bonds. The demand for long-term bonds has grown much faster than the supply and, as a result, prices have risen. Over the past 4 years, UK bond holders have generally faced an inverted yield curve and hence earned greater interest payments by holding shorter-term debt securities than by holding long-term bonds.

Recommendation # 8: Capital markets are very dynamic and opportunities and risks are constantly evolving and changing. As such, the rules governing the pension investments should be based on principles rather than historical restrictions.

Capital markets are becoming increasingly complex and dynamic, especially with the proliferation in investment opportunities (e.g., infrastructure), instruments and products (e.g., derivatives), and strategies (e.g., hedge funds, short-selling). Pension fiduciaries can no longer define their market risk by the weightings of equities in their asset mix nor can they afford to adopt a passive approach in managing the plan's assets. Rather, pension fiduciaries must become active market participants, in order to protect their pension capital and enhance the plan's long-term investment performance.

Section 38 of the *BC Pension Benefits Standards Regulation* (BC Reg 433/93) requires that the assets of a BC pension plan be invested and the investments must be made in accordance Schedule III to the Pension Benefits Standard Regulations, 1985 (Canada), SOR/87-19). Schedule III was drafted a number of years ago and needs to be updated and modernized to reflect the new environment. It is cumbersome legislation, difficult to interpret, and focuses on rules rather than principles. It somewhat arbitrarily restricts pension plans from investing:

- More than 5% of their book value in a single parcel of real estate or Canadian resource property;
- More than 10% of their book value in any one entity;
- More that 15% of their book value all Canadian resource properties; and
- More than 25% of their book value in all real estate and Canadian resource properties.

To the extent that the above rules seek to compel pension plans to hold a diversified investment portfolio, they may have some merit. However, they still have the undesirable effect of substituting the judgment of the legislator for that of plan trustees, as to deciding what constitutes an appropriate level of diversification. In addition, they are static rules and fail to reflect the dynamic nature of capital markets and investment structures.

While the above rules are intended to encourage prudent diversification, the same cannot be said for the following rules:

- A pension plan cannot invest moneys of the plan in securities of a corporation to which are attached more than 30% of the votes that may be cast to elect directors of the corporation unless the corporation in question qualifies as a real estate corporation, a resource corporation or an investment corporation.
- A real estate corporation or a resource corporation must limit its activities to acquiring, holding, maintaining, improving, leasing or managing real or resource property – in other words, it must not carry on an active business.

- An investment corporation must:
 - Hold at least 98% of its investments, and obtain at least 98% of its income, from investments and loans;
 - Not issue debt obligations; and
 - If Schedule III is to be read literally, limit its investments to those permitted to a pension plan (including compliance with the 5% to 25% restrictions noted above) as though the investment corporation were itself a pension plan.

These latter rules have the following disadvantages:

First, since investors can often establish legal structures to circumvent these rules (often involving the use of limited partnerships), whatever was the policy rationale behind these rules they fail to achieve their objectives.

Second, while ineffective, nominal compliance with these rules (and/or the setting up of structures to circumvent them) requires the otherwise unnecessary expenditure of large amounts in legal fees and the setting up of complex structures, creating administrative burdens that bring no advantage to either pension plan beneficiary or regulator.

Third, the restrictions are inequitable as it may be easier and less costly for larger pension managers to establish structures to circumvent the rules.

Fourth, the complexity and interpretive difficulty of these rules are a source of a considerable amount of legal uncertainty. In particular, the requirement that an investment corporation must limit its own investments to those permitted to a pension plan as though the corporation were itself a pension plan. This means, for example, that an investment corporation must simultaneously make at least ten initial investments so as to comply with the rule that it can invest no more than 10% of its book value in any one entity.

Fifth and most important, the primary concern of the regulatory framework for pension plan investment should focus on enabling pension investors to find investments that will earn sufficient returns and an acceptable degree of market risk to satisfy long-term funding obligations. Since these latter rules narrow the field of possible investments unnecessarily, they run counter to this primary consideration.

As an illustration of these points, OMERS has indicated that the Schedule III investment rules have reduced their annual returns by 100 to 200 basis points per year.²⁴

²⁴ See OMERS web site at:

http://www.omers.com/Newsroom/News_releases/OMERS_Urges_Pension_Commission_to_Abolish_Costly_Investment_Rules_for_Pension_Funds.htm?DateTime=633283960200000000&PageMode=View

Schedule III is federal legislation and, therefore, it is beyond the power of either BC or Alberta governments to amend the regulation. However, if the federal government is not interested in modernizing Schedule III, it is within their power to abandon the requirement that their DB pension plans comply with Schedule III. Rather, they could develop their own rules to govern pension investments. Quebec has already taken this approach and, for example, its pension legislation allows pension plans under its jurisdictions to own more than 30% of the voting shares of a corporation, providing the investee corporation is not the sponsor of the pension plan.

The rules for pension plan investment, whether undertaken by an amendment by the Government of Canada to Schedule III, or the development by BC and Alberta of their own rules in substitution for Schedule III, should be modernized adopting a principle based approach. As such, it should require that pension fiduciaries act in the best financial interest of the beneficiaries, manage the funds in accordance with the prudent person rule and give due consideration to whether the level of return is commensurate to the risk of the investment. There should also be disclosure requirements so that stakeholders have a clear understanding of their plan's investment strategies and risks.

Recommendation #9: Pension legislation should maintain the current fiduciary standards and continue to require that fiduciaries manage the plan assets with the goal of maximizing long-term investment performance. This reduces the cost of the pension promise, which is critical for the long-term survival of the DB plan. Trustees can still pursue social policy reforms through a program of active ownership and engagement.

There is a growing interest in responsible investing and pension trustees face significant pressure from some plan members and groups to avoid investing in certain companies or sectors because of social issues or concerns. These issues may take on increased importance depending upon world events and media coverage. For example, the unpopularity of the wars in Iraq and Afghanistan has led to increased calls for divesting from companies that produce armaments or who have large military contracts. Others, who are concerned about climate change, want to boycott investing in oil, forestry and/or mining companies. Still other members are worried about issues like affordable housing and would like to see the pension assets used to address issues such as homelessness and poverty.

While the members' social consciences and passion are laudable, obviously it would be very difficult, if not impossible, for the trustees of a DB plan to reflect the diverse social views of the plan membership with a set of exclusionary screens. Even more important, investment activity provides the majority of funding for a DB plan. Avoiding certain sectors, or using pension assets to address social problems, could have a detrimental impact on returns and thereby increase the long-term cost of the pension promise. Pension trustees are required by pension statute and common law to act in the best interest of the beneficiaries and it is widely recognized that they cannot sacrifice return to achieve collateral social benefits.

DC plans by their nature are more suited for using exclusionary social screens. Specifically, individual members can decide for their own account on the importance of using social screens and whether or not they will participate via their occupational pension plan. In addition, the impact of this decision on their investment results are passed to the member and the value of their pension (be it positive or negative).

Despite the above, DB fiduciaries can still successfully pursue responsible investing through active ownership and engagement rather than divestiture. Specifically, the fiduciaries can directly engage company managers and directors to promote issues such as protecting the environment, advancing social issues and encouraging good corporate governance (ESG). In fact, bcIMC believes that a program of active engagement is more effective in promoting social changes and that investors lose their “voice “and influence if they sell their shares in response to ESG issues and concerns.

Appendix A

As noted in the submission, one of the current concerns facing DB plans is that falling interest rates have resulted in a significant increase in the value of plan's actuarial liabilities. This appendix looks at this issue and whether this is a legitimate concern or, as bclMC believes, that the importance of falling interest rates on pension liabilities is being viewed out of proportion to its significance.

At the outset, two points should be noted. They are as follows:

1. Interest rates do not have any impact on plan's actual pension expenditures or the actuarial estimate of future expenditures. The impact of changing interest rates on the actuarial liabilities stems from the discounting process that is used to convert future expenditures into their present value terms; and,
2. Since the plan sponsor will hold the liabilities to maturity, changes in the discount rate are transitory and will have no impact on the plan's long-term funding status.

Table 3 below employs a simple example to examine the second issue. Specifically, assume that we owe \$100 and that the payment is due in 10 years (i.e., 2017). If we assume a 5% discount rate, the current present value cost is \$64.46. If we assume a 10% discount rate the current present value cost would be \$42.40.

Table 3: Impact of Discount Rates

Year	Prevailing Present Value	
	5% Discount Rate	10% Discount Rate
2008	64.46	42.40
2009	67.68	46.65
2010	71.07	51.31
2011	74.62	56.45
2012	78.35	62.09
2013	82.27	68.30
2014	86.38	75.13
2015	90.70	82.64
2016	95.24	90.91
2017	100.00	100.00

On one hand, changes in the discount rate would be a significant issue if we were able to sell the payment obligation before the due date. For example, if we believed that interest rates were going to fall, it would be advisable to sell the liability before this occurred and the present value increased. If our interest rate forecast was correct and interest rates subsequently fell, selling the liability will have produced a financial benefit. The logic is that at lower interest rates, it would cost the purchaser more to immunize the payment with fixed income securities. Therefore, they would expect additional compensation to take the liability after the decline in interest rates.

If, on the other hand, we are unable to sell the future payment obligation before maturity, changes in the discount rate are insignificant and transitory. Effectively all that changes is the starting point and the speed by which amortize the present value calculation to its par value. At the end of the day, we will owe \$100 in 10 years and changes in the discount rate are irrelevant. Pension trustees cannot sell their liabilities and will hold them to maturity. Therefore, in bclMC's opinion, the impact of falling interest rates on the plan's liabilities is transitory and concerns over this issue are being blown out of proportion.

The above does not mean that lower interest rates are not a significant concern for pension trustees. In particular, declining interest rates has meant that the plan will not generate as strong returns from fixed income securities and trustees will need to reduce their expected return assumptions.²⁵ Therefore, the impact of falling interest rates is on the asset side not the liability side. Arguably, the current approach double counts the impact of falling interest rates on the plan's funding status.

²⁵ If one assumes that other asset classes have risk premium or discounts relative to bonds, falling interest rates has much broader implications for investment returns and will represent a decline in expected returns from all asset classes.