

**National Pensioners' and Senior Citizens'
Federation, Incorporated May 1, 1954**

SUBMISSION TO:

Industry Canada

Responsible Priorities for Bankruptcy Protection

**THE ECONOMIC CASE FOR
LEGISLATION FOR
PENSIONERS AND DISABLED EMPLOYEES**

A BETTER OUTCOME

A BETTER ECONOMY

A BETTER CANADA

JANUARY 27, 2011

We thank Industry Canada senior officials for meeting with us and seriously examining our persuasive research in support of this submission.

The two main issues that we are advocating for legislation remedy arise from resolutions L-5 and L-6 at our October 2010 Convention:

L-5 – Pensions and Bankruptcies

Be it resolved that the Federal bankruptcy laws be amended to place pension plan deficits at preferred status above unsecured claims when corporations are liquidated or restructured.

Submitted by USCO Executive, Toronto

L-6 – Disability Benefits and Bankruptcies

Be it resolved that the Federal bankruptcy laws be amended to put self-insured long-term disability benefit claims at super-priority above all creditors when corporations are liquidated or restructured.

Submitted by USCO Executive, Toronto

Simply stated, we believe that in bankruptcy protection the workers and retirees that built the enterprise usually over decades of hard work, have to be equitably protected with other creditors.

It is predictable that we would favor pensioners and the disabled in our efforts. However, our research proves that our objectives not only produce a fairer outcome for workers, past and present, but also assists in achieving re-structured enterprises. This contrasts the current bias in the courts that is partial to liquidation. Is this not the objective of bankruptcy protection legislation in advanced industrialized nations in the G-20?

The outcome of our recommended legislation amendments will produce stronger economic outcome for business, relieve the government of deeper guaranteed income supplement (G.I.S.) obligations and enhance National G.D.P. We believe that sound economic policy, especially that which relieves expenditure (G.I.S.), is precisely what our government strives for. Further, we caution against any reliance on flawed or insufficient or exaggerated input offered by the financial services industry in support of their embrace of the legal status quo.

Economic Benefits of NPSCF Policies for Bankruptcy Reform

- Priority for Defined Benefit Pension Plan (DBPP) deficits over unsecured creditors at insolvent corporations is good social policy, since it protects the pension income for retirees at insolvent employers and protects the taxpayers, who are funding the Guaranteed Income Supplement for low income retirees.
- More importantly, due to the vested interests enhanced by Credit Default Swaps (CDSs) to liquidate companies for profit, priority status for DBPP deficits provides a countervailing force to deter liquidations and to promote restructuring as ongoing concerns. The policy change will cause fewer liquidations and not more contrary to conventional wisdom.
- DBPP deficits are 4% of the investment grade corporations' debt and equity capital structure and so the impact of priority for DBPP deficits on the cost of credit is small.
- Priority status for employee benefits raises the cost of credit by about 20 basis points for investment grade corporations with DBPP's, causing a Canadian bond market loss of - \$3.6B, or -1.4% of the Canadian bond market capitalization.
- Priority status for employee benefits causes a present value of higher interest costs pre-tax for corporations with DBPP's estimated at -\$13.1B, or -0.6% of the equity market capitalization.
- Pension plans are more likely to be fully funded and more prudently invested.
- Priority for pension deficits, in short, will provide both social and net economic benefits.

Defined Benefit Pension Plan Deficits are Manageable Component of Capital Structure

- DBPP deficits at all public corporations with bonds and DBPPs at December 31, 2008 are estimated to be 20% of the actuarial liabilities of the DBPPs. This means total DBPP deficits are estimated to be \$51 billion. (DBPP liabilities and deficits from Phillips Haeger North Submission on Bill C-501, November 2010 (PHN Submission).)
- The DBPP deficit is about 16% of the \$315 billion of Canadian bond market capitalization and DBPP deficit combined for corporations with DBPPs (Canadian bond market capitalization from PHN Submission and DEX Corporate Bond Index, November 2010)
- The DBPP deficit is 4% of the about \$1,300 billion of total capital equal to the sum of Canadian bond market capitalization, DBPP deficit and common equity at book value for corporations with DBPPs (Common equity at book value from OSFI Financial Institutions Balance Sheet, June-August 2010 and Statistics Canada - Non Financial Corporations National Balance Sheet Accounts, November 2009.)

- The DBPP deficit is 2% of the about \$2,300 billion of total enterprise value equal to the sum of Canadian bond market capitalization, DBPP deficit and common equity market capitalization for corporations with DBPPs (Common equity market capitalization at TSX/S& P Composite price to book value times the common equity at book value, November 2010)
- With DBPP deficits at such small percentages of corporations' debt and equity capital structure, priority for DBPP deficits over unsecured creditors at insolvent corporations is a manageable change in government policy for the economy as a whole. Fortunately, only a small % of corporations with bonds and DBPPs will go bankrupt.
- To mitigate concerns about the retroactive nature of CCAA or BIA amendments on specific corporations in financial distress, there could be a transition clause that says the new priority for pension deficits applies only to new bonds issued and existing bonds rolled-over.

Cost of Credit Impact is Small for Investment Grade Corporations

- Figure 1 shows the cost of credit impact on investment grade bonds for all employee benefits being at priority status above unsecured bonds is about 20 basis points (bps)
[Urquhart Presentation to Industry Minister Tony Clement Roundtable Dec.10, 2010](#)
- This is equal to 0.20%. The average 5 to 10 year term corporate bond interest rate would rise from 3.40% to 3.60%.
- There is general agreement on the cost of credit impact in submissions to the House of Commons Standing Committee of Industry Science and Technology presented in the week of Nov. 16, 2010, amongst the professionals who did research on this factor. Phillips Haeger North, a money manager owned by the Royal Bank Financial Group, estimates an increase of 14 bps to 33 bps in the cost of credit for investment grade corporations. Towers Watson estimates the impact to be 25 bps

[Phillips Haeger & North Submission on Bill C-501 November 2010](#)

[Towers Watson Report on Bill C-501 October 2010](#)

- (PHN Submission and Towers Watson Report on Bill C-501, October 2010.)
- Using the 20 bps impact, priority for employee benefits causes an estimated loss of -\$3.6B, or -1.4% of the bond market capitalization for public corporations with bonds and DBPPs.
- Using the 20 bps impact, priority for employee benefits causes a present value of higher interest costs pre-tax estimated at -\$13.1B, or -0.6% of the equity market capitalization for public corporations with bonds and DBPPs.
- The combined impact of priority for employee benefits on the enterprise value is estimated -\$16.7 billion, or -0.7% of the enterprise value equal to the sum of bond and equity market capitalization for public corporations with bonds and DBPPs.

Figure 1: Comparison of Cost of Credit Estimates by Urquhart, Phillips Haeger North and Towers Watson

Comparison of Reports on Impact of Priority for DBPP Deficits Priority in Bankruptcies

| | Urquhart November 2010 (1) | Phillips Haeger North November 2010 (2) | Towers Watson October 2010 (3) |
|--|----------------------------------|---|--------------------------------------|
| Investment Grade (IG) Bonds | | | |
| % of Bonds with DBPPs | 95% | 95% | |
| % of DBPPs in Deficit | 92% | 92% | |
| Impact on IG Bonds with DBPPs | 19 bps | 14 bps to 33 bps (4) | 25 bps |
| Impact on All IG Bonds | 17 bps | 12 bps to 29 bps | |
| Junk or Below Investment Grade Bonds | | | |
| % of Bonds with DBPPs | 95% | 95% | |
| % of DBPPs in Deficit | 92% | 92% | |
| Impact on Junk Bonds with DBPPs | 90 bps | 150 bps to 200 bps | 100 bps |
| Impact on All Junk Bonds | 79 bps | 131 bps to 175 bps | |
| Impact on Canadian Credit Market (Pre-Tax) | | | |
| Impact on Current Bond Valuations (\$ Billions) | -\$3.6 | -\$ 1.8 to - \$ 4.3 | |
| Impact on Corporations' Interest Costs (\$ Billions) | -\$13.1 | -\$ 7.2 to - \$17.4 | |
| Overall Impact (\$ Billions) | -\$16.8 | -\$ 9.0 to - \$21.7 | |
| Impact on Current Bond Valuations (%) (4) | -1.4% | - 0.7% to - 1.6% | |
| Impact on Market Equity of Corporations (%) (5) | -0.6% | -0.3% to -0.8% | |
| Overall Impact on Enterprise Value of Corporations (%) (6) | -0.7% | -0.4% to -0.9% | |

Notes:

(1) <http://ismymoneysafe.org/pdf/UrquhartPresentationtoIndustryMinisterTonyClementRoundtableDec.10,2010.pdf>

(2) http://ismymoneysafe.org/pdf/PH&NSubmissionBillC-501_ENG.pdf

(3) <http://ismymoneysafe.org/pdf/TowersWatsonReportC-501October2010>

(4) Reverse engineered number from the impact on all IG bonds

November 10, 2010 (\$ Billions)

| | |
|---|---------|
| (4) DEX Corporate Bonds MV With DBPPs | \$264 |
| (5) Market Equity of Corporations with Bonds | \$2,032 |
| Price to BV of S&P/TSX Composite | 2.0 |
| Book Equity of Corporations with Bonds | \$1,016 |
| (6) Enterprise Value of Corporations with Bonds | \$2,296 |

Source: Diane A. Urquhart

- There is no impact on international competitiveness since most other countries have at least preferred status in their bankruptcy laws or have a public pension insurance scheme. Figure 2 shows that Canada is amongst 14 countries, out of 53 countries examined by World Bank

and OECD studies, that have neither preferred status in their bankruptcy laws or have a public pension insurance scheme.

Figure 2: 14 Countries with No DBPP Deficit Protection in Insolvencies

Bulgaria
Canada
Cyprus
Czech Republic
Egypt
Estonia
Greece
Latvia
Lithuania
Malaysia
Portugal
Singapore
South Africa
Tunisia
United Arab Emirates

Brief Comment On Super-Priority Versus Preferred Status

- For average recovery rates of 42% or better of total capital, super-priority for DBPP deficits would not seriously impact the secured bank loan recoveries in insolvencies. This is because the sum of loans and the DBPP deficits is estimated to be 42% of the total loans, bonds and DBPP deficits for all corporations with DBPPs in the Canadian economy (Loans from OSFI Financial Institutions Balance Sheet and Statistics Canada - Non Financial Corporations National Balance Sheet Accounts.)
- The unsecured creditor, however, will make a much lower recovery at the bankrupt corporations with DBPPs that have deficits. In my analysis, the 20 bps impact on investment grade bond interest rates assumes the worst case of zero recovery on these unsecured bonds. The increase in the cost of credit for all bond owners occurs in order to compensate for the lower recovery rates for unsecured bonds at insolvent corporations, when pensioners get paid ahead of the bond owners.
- The cost of credit impact is so low because the credit default rate amongst investment grade companies is only 4% over an average 10 year period since 1920 and the average recovery rate on unsecured bonds is 45% for the period 1987 to 2009 according to Moody`s Report on Corporate Default and Recovery Rates, 1920-2009.
- If DBPP deficits get preferred status rather than super-priority, the secured creditors would be better protected.

The New Credit Default Swap Market Encourages Liquidations Over Restructurings

- The credit default swaps (CDS) innovation has changed the idea that all creditors are losing money in a bankruptcy and that all creditors must accept an equal compromise so that the business may be restructured as an ongoing concern.
- Unregulated and non-transparent CDSs provide an incentive for bond owners to seek a court filing for bankruptcy protection in order to trigger an insurance settlement, that results in no loss of money on their investment. The credit default damages are reimbursed in a cash settlement shortly after the bankruptcy protection filing.
- The insured bond owners get to keep their bonds and fully participate in the bankruptcy proceeding. The old dynamic of preferring a restructuring as an ongoing concern over liquidation no longer applies, since bond owners that were either fully hedged or short the bonds are not persuaded by the need to restructure as an ongoing concern or be worth nothing on liquidation.
- In fact, liquidation becomes the preferred option for these combo CDS- bond owners, because liquidation permits the corporation to walk from the pension deficits, whereas these are not compromised for ongoing concerns.
- So a new business model is borne and it is called profit from bankruptcies, at the direct expense of retirees. Furthermore, the bias towards liquidation over restructured ongoing concern causes job losses.
- It is obviously bad public policy to allow hedged or net short CDS players to trigger bankruptcy filings and liquidations that make more profit for them than the uncertainty of restructurings as ongoing concerns.

Opponents to Priority Change Have Not Done Any Research on Cost of Credit

[Canadian Council of Chief Executives Bill C-501 Myths and Reality June 10, 2010](#)

[Canadian Bankers Association on Bill S-216 Before Senate Banking Trade and Commerce Committee on Nov. 17, 2010](#)

[Insolvency Institute of Canada Task Force on Pension Reform May 12, 2010](#)

[CAIRP Commentary on Proposed New CCAA & BIA Legislation](#)

[Senator Percy Mockler Presentation on Bill S-216 June 17, 2010](#)

[Letter from Scott Reid MP Lanark-Frontenac-Lennox & Addington to Sheila Hauner May 30, 2010](#)

UK Court Decision for Super-Priority of Pension Deficits Confirms Small Bond Market Impact

[UK Court Decision Won by UK Pension Regulator, UK PPF and UK Pension Trust on Super-priority Dec. 10, 2010](#)

- This decision gives the UK Pension Regulator the right to demand payment of up to the full pension plan deficit as an administrative expense from the insolvency estate.
- An administrative expense is effectively a super-priority for up to the full pension plan deficit.
- According to Figure 3, the UK Corporate Bond Market was down just -0.62% on the December 13, 2010 trading day after the announcement of this unexpected court decision on Dec. 10, 2010. This decline generally validates the -1.4% decline in the Canadian bond market of pension deficits being super-priority in Canada. On January 14, 2011, the UK Corporate Bond Market is trading above the point where it traded on Dec. 10, 2010 before the court decision.
- This court decision adopts the authority of the Financial Support Direction (“FSD”) and Contribution Notice (“CN”) regimes created by the UK Pensions Act 2004 to apply to both ongoing concerns and corporations in administration or insolvent liquidation.
- Justice Briggs has concluded that if the UK Parliament sought for its insolvency legislation to cause pension deficits to be treated pari passu with unsecured creditor claims and not to be administrative expenses, then the insolvency legislation should have specifically said that the Financial Support Direction (“FSD”) and Contribution Notice (“CN”) regimes created by the UK Pensions Act 2004 were not applicable to corporations in administration or insolvent liquidation.
- Justice Briggs makes the following points about the arguments that his decision will prevent a beneficial business rescue, and thereby kill the goose that might still lay the golden egg.
 - Administrators concerned about there not being enough money in the estate to cover both their expenses for executing the business rescue or insolvent liquidation and the CN monetary demand, may apply to the court to obtain a priority charge ahead of the CN monetary demand.
 - While the UK Pension Regulator has authority to demand payment of the full pension deficit, it also has the discretion to make a CN monetary demand that is reasonable in the circumstances to enable a beneficial business rescue that allows for a better financial outcome for the UK pensioners or UK PPF in the future due to an ongoing concern being able to make future employer contributions to the pension plan.
 - In Point 164, Justice Briggs says: "The Regulator and its supporters sought to meet the Administrators’ case about the damage which the FSD regime would do to the rescue culture, if its financial consequences constituted administration expenses, by two main submissions. The first was that it was nothing short of alarmist to suggest that financial consequences of anything approaching the full £2.1 billion section 75 debt would be visited upon a target in administration. The target’s liability was no more than to provide

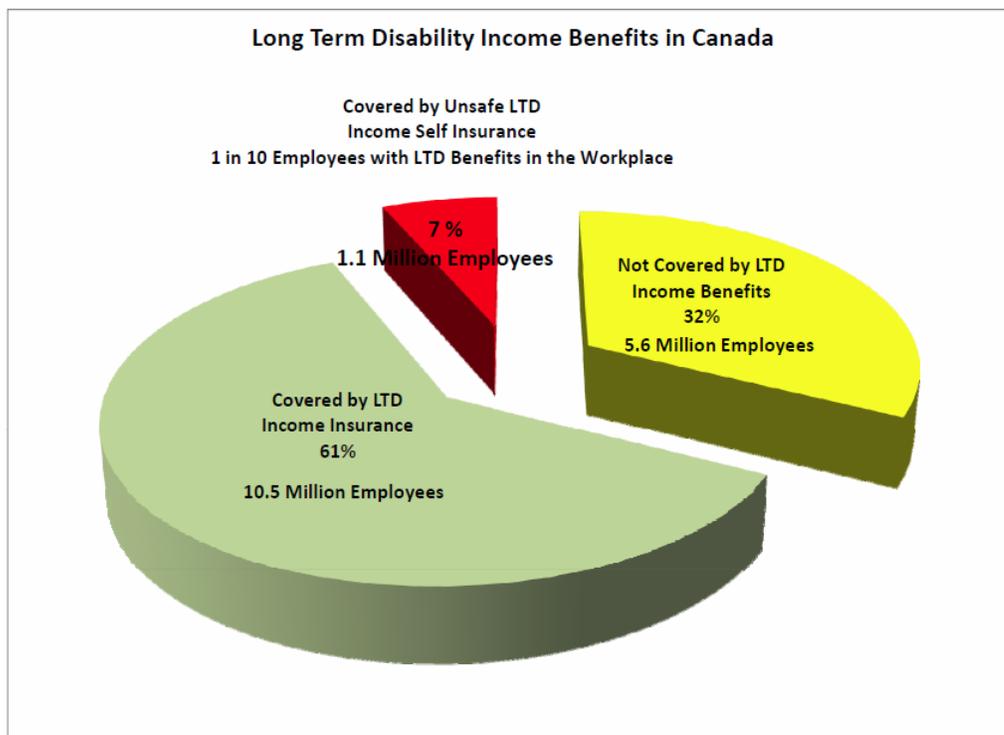
Impact of Priority on the Junk Bond Market

- The impact on junk bonds is higher than on the investment grade bond market. The junk bond market is very small in Canada and individuals and pension funds are not generally investors in this segment of the bond market. My estimated impact of the cost of credit increase within the junk bond market is 90 bps.
- This compares to 100 bps estimated by Towers Watson for BBB credits that fall into junk status. Tower Watson says that priority may trigger this credit rating downgrade and higher cost of credit.
- PHN has a much higher cost of credit for the speculative portion of the bond market saying the cost of credit could increase by 150 bps to 200 bps. There is no analytical backup for this high estimate.

Self-Insured Long Term Disability Income Benefits

- Self-insured long term disability (LTD) income benefit plan deficits need to get distinct treatment and higher priority than pension deficits at insolvent corporations because Health and Welfare Trusts, and the new Employee Life and Health Trusts, are not regulated like pension plans.
- According to Canadian Life and Health Insurance Association 2009 statistics in Figure 4, there are 1.1 million Canadians covered by self-insured long term disability income benefits at work.

Figure 4: Canadians Covered by Long Term Disability Income Benefits at Work



- CCAA settlement procedures and the March 31, 2010 Nortel court precedent decision have denied litigation/ mediation and remedy for breach of fiduciary duties of the trustees supervising trust accounts at restructuring and insolvent corporations.
- The November 9, 2010 Ontario Superior Court of Justice and January 7, 2011 Court of Appeal of Ontario decision on the Nortel HWT wind-up distribution decision causes future pensioners life insurance premiums, that are a legal obligation of the employer, to be a legal obligation of the Health and Welfare Trust (HWT). These court decisions are contrary to Income Tax Act and CRA Rules preventing the pre-funding of future life insurance premiums in HWTs. The decisions are also contrary to accepted insurance and actuarial practices that restrict legal obligations to incurred claims in terminated insurance or self-insurance contracts.
- LTD wage loss replacement and medical reimbursement claims are extremely small relative to pension deficits and other creditor claims since only 0.90% of employees are LTD.
- Wage loss replacement + medical reimbursement is about 2.75% of payroll (\$642 wage loss replacement cost per employee per year according to Aon Consulting Canada Benefit Trends Survey 2009, \$650 medical cost per employee per year @ PV of \$7200 medical cost per disabled person per year based on Nortel experience.)
- Self-insurance of disabled wage loss replacement saves estimated \$64 to \$128 per employee per year (From %'s in the Journal Of Compensation And Benefits, Long-Term Disability Program—Self-Insured Vs. Fully Insured, Barry J. Goldberg and William M. Mon, November/December 2003.)
- Actuarial liabilities for self-insured LTD plans are estimated at \$5B to \$9B, compared to private sector DBPP liabilities of \$415B (self-insured LTD plan actuarial liabilities from Urquhart analysis and DBPP actuarial liabilities derived from Statistics Canada Employer Pension Plans Trusteed Pension Fund Assets, 2009 Q4.)
- There is no way of knowing the degree of LTD funding in trust accounts, but say LTD deficits are 75%. Then there is a \$3B to \$6B deficit for all self-insured LTD wage loss replacement plans, compared to \$51B deficits or 20% of private sector DBPP liabilities.
- If Nortel is typical, the LTD deficits are about 5% of total pension deficit, severance and LTD claims combined, so the cost of credit impact is miniscule at about 1 bps. This means if the cost of credit was 3.40% before it is 3.41% after.
- The overall impact of the bond price decline and higher corporation interest costs is \$0.8B = 5% * (-\$3.6B bond market + -\$13.1B lower corporation profits pre-tax from higher interest from priority for all employee benefits as noted above.)

Contact Information

Diane A. Urquhart

Tel: (905) 82207618

Cell: (416) 505-4832

Email: urquhart@rogers.com

APPENDIX

International Research Finds Employee Benefits Have Small Impact on Cost of Credit

[Watson Wyatt, Cardinal - Corporate pension funding and credit spreads, June 2005](#)

"The unfunded pension leverage effect on credit spreads appears to be economically significant. Using sample mean values in Table 4 we derive the average investment grade and aggregate spread predicted by the model for each year, as reported in Table 7. For instance in 2002, when the relative size of pension deficits was highest (2.70%), the average predicted spread was 1.8% in the investment grades sample and 2.8% in the aggregate sample. Keeping everything else constant but setting the pension deficit to zero, the model in 2002 predicts spreads which are respectively 16 and 40 basis points lower, implying a 9% decrease in the investment grades sample and a 15% shift in the aggregate one. Conversely in 2003, when the average ratio of pension deficit to enterprise value was 1.85%, the model predicts spreads 20 basis points higher in the investment grades sample and 30 basis points higher in the aggregate one (this is respectively a 20% and a 30% shift) if the relative size of pension deficit is set to 5% while everything else stays constant. These numbers suggest that cross-sectional variation in spreads driven by pension deficits could potentially become very large in the presence of substantial unfunded liabilities."

[University of Melbourne - Employee entitlements and secured creditors June 2009](#)

Abstract:

Corporate failures and consequent default on obligations have, in some circumstances, led to significant losses for employees with accumulated unpaid leave entitlements. The Australian government responded initially to this problem by implementing a government-funded compensation scheme. Subsequently it announced a proposal involving legislating for seniority (maximum priority) of entitlements in corporate liquidation which has not been implemented. This paper analyses and provides quantitative estimates of the consequences of changing creditor priority in this manner. Contrary to conventional wisdom and arguments mounted in opposition to such a change, the effect on corporate funding costs would be extremely small. The paper argues that legislation to effect such a change warrants further consideration as a complement to the existing compensation scheme.

CONCLUDING COMMENTS

This article examined the link between default risk and defined-benefit pension funding using an econometric specification that builds upon traditional accounting-based ratio models and market-based structural models of CDS premia. In addition to considering the firm's leverage in a structural context, pension leverage is modeled in a similar vein. The empirical tests were carried out using 1-, 5-, and 10-year CDS instruments associated with North American and European reference entities for the period 2003 to 2007.

The initial model revealed that defined-benefit pension risk is a significant determinant of the premia quoted by sellers of 1- and 5-year CDS instruments and thus default risk over these horizons. This lends support to the view that the CDS markets are informationally efficient with regard to pension disclosures. Additionally the analysis justifies the corporate financial perspective regarding the treatment of pension assets and liabilities. An extended model was then formulated to permit closer examination of the pension risk/default risk relationship by country with the implicit assumption being that heterogeneity exists. The empirical results revealed that the pricing of defined-benefit pension risk is associated primarily with the U.S. CDS market (which constitutes over 60% of the sampled firms). This pricing relation is not evident in French, German, and U.K. CDS markets. Cross-country heterogeneity in the pension risk/default risk relation is conjectured to be due to inter-country differences in accounting disclosure, actuarial assumptions, and pension protection mechanisms.

From Exhibit 9 it is also noted that for Canadian firms, pension risk negatively affects CDS premia. This finding is surprising and inconsistent with that for other countries. Canadian observations account for only 6% of the overall sample, and we surmise that perhaps an omitted variable, one that is particularly relevant to the default process of Canadian firms, correlates strongly with our pension risk measure, and the Canadian pension risk coefficient suffers bias accordingly.

[Queen's University, Belfast, McKillop - Pension plan risk impact on financial market, October 14, 2009](#)

Pension deficits & credit risk

Pension risk was also demonstrated to be factored into credit ratings with the analysis highlighting that the greater the pension risk the greater the probability of obtaining a lower debt rating. From a rating agency viewpoint this is positive news, particular at present when agencies are being criticised for a perceived failure to reflect sub-prime mortgage problems in firm specific ratings. Having made this point our analysis offers only a relative perspective and provides little insight into whether ratings agencies systematically under- or over-estimate pension risk in their debt ratings. If we draw parallels from the sub-prime market the more likely scenario is that pension risk has been under-estimated in debt rating estimates.

picture. Our research has suggested that pension risks do indeed impact upon both equity betas and credit ratings and that the market is informationally efficient (subject to certain provisos) in recognising pension deficits. In turn this also has implications for the cost of capital and subsequently corporate investment decisions. More directly additional contributions to pension funds, in an attempt to reduce deficits and meet Pension Protection Fund recovery plans, will diminish the funds available for investment and/or dividend decisions. This interaction between pension contributions, investment decisions and dividend payouts would appear to warrant further investigation.

Pace University, Kadiyala - Impact of bankruptcy law reform on capital markets in Brazil, Feb 2009

2B . The new bankruptcy law

Modeled after US bankruptcy code, the new law, Law No.11101 dated February 9, 2005, went into effect on June 9, 2005. The new law encourages extra-judicial restructuring (recuperação extrajudicial), which is crucial in Brazil where court costs can be very high. The restructuring is a prepackaged mechanism developed by the bankrupt firm in consultation with select creditors, whose outcome is binding upon minority creditors. The new law allows a bankrupt company to alternatively request a court restructuring (recuperação judicial). If the request is granted, the company has 180 days to present the court with a restructuring proposal. All lawsuits and collection procedures are suspended during the 180-day period. Feasibility of the restructuring proposal is influenced by whether it involves a substantial change in corporate governance, and/or changes to the asset structure of the firm.

The new law completely revamped the absolute priority rules. Any new credit that is extended during the restructuring process is given priority over all other claimants. The motive here is to encourage creditors to extend credit at better terms to enable the company to emerge out of bankruptcy, thus avoiding costly liquidation. The second critical change relates to labor credit. Labor's claims rank second in priority, but are severely restricted to not exceed 150 times the minimum wage. The cap on labors' claims is meant to discourage costly and protracted

verification. The new priority rules also give precedence to secured creditors over tax credit and even unsecured creditors take precedence over some tax credits.

The new law affords greater protection to creditors' claims and seeks to improve the efficiency of the bankruptcy process. The principle guiding the change is to encourage economically efficient firms to recover from insolvency while preserving intact the value of assets in these firms.³

The money market rate used in the analysis is the Selic, which is reported at a daily frequency by Bloomberg. The Selic is the basic rate used as reference for monetary policy in Brazil and is the overnight rate on loans guaranteed by federal government securities. The Central Bank in Brazil maintains a target SELIC rate. Data is collected on the target SELIC rate to analyze how the daily SELIC deviated from its target.

4. Response of the Money market

Figure 2 plots the reported Selic rate, during the period from October 2002, one year prior to the introduction of the new bankruptcy laws, to June 2006, one year after the new bankruptcy law went into effect. In the year prior to the initiation of legislative reform, the Selic averaged 24%. In the year after the law went into effect, the Selic declined to an average 18%. There is a secular downward trend in Figure 2 interrupted by brief periods of a surge in the Selic. The downward trend is predicted if the new bankruptcy law secured the rights of creditors to recover their debts, and thereby lowered the cost of debt. The brief surges in Selic are inconsistent with the hypothesis of a decrease in bankruptcy costs and instead suggest competing influences on the Selic. We isolate the impact of the change in bankruptcy law on the Selic by

conducting event studies around two key dates, Oct 14, 2003 when the new reforms were passed by the Lower House of the Brazilian legislature, and Feb 9, 2005, when the reforms were signed into law by the Brazilian President. The event studies should help to determine whether these two key events conveyed information to the money market.

Results are reported in Table 2. The changes in Selic around the two events associated with the passage of the new law are robust to the inclusion of other events. The deviation of the Selic remains reliably negative on Oct 14, 2003 when the new bankruptcy law enjoyed its first legislative success, and also remains reliably positive when the new rules were signed into law on Feb 9, 2005. Of the three credit rating events, only the upgrade on April 29, 2003 is associated with a *decrease* in the Selic relative to its target. The Selic *increased* relative to its target at the announcement of the ratings upgrade on January 1, 2005. The rating event on September 9, 2004 had no significant impact on the deviation of the Selic from its target.

Tables 1 and 2 confirm that the first legislative success of the new bankruptcy law was credibly expected to lower borrowing costs by affording greater protection to creditors. The subsequent increase in the Selic at the passage of the law appears to reflect greater future demand for credit to finance economic growth.

Decomposing the spreads

Average spreads on US corporate debt across rating categories and maturity buckets are given in Table 1. These values are computed using option-adjusted spread (OAS) bond indices provided by Merrill Lynch.⁵ The period covered is January 1997 to August 2003.⁶ Spreads on AAA debt have averaged about 50 basis points at short maturities and 74 basis points at maturities of seven to 10 years.⁷ Spreads increase significantly at lower ratings down to BBB, and even more so across sub-par investment grade debt, reaching as high as 761 basis points on B-rated bonds at one- to three-year maturities. In addition, the term structures are upward-sloping for the higher-rated investment grade bonds, hump-shaped for BBB debt and downward-

Average spreads are high, especially on low-rated bonds

| Spreads and expected default losses ¹ | | | | | | | | |
|--|-----------|---------------|-----------|---------------|-----------|---------------|------------|---------------|
| Rating | Maturity | | | | | | | |
| | 1-3 years | | 3-5 years | | 5-7 years | | 7-10 years | |
| | Spread | Expected loss | Spread | Expected loss | Spread | Expected loss | Spread | Expected loss |
| AAA | 49.50 | 0.06 | 63.86 | 0.18 | 70.47 | 0.33 | 73.95 | 0.61 |
| AA | 58.97 | 1.24 | 71.22 | 1.44 | 82.36 | 1.86 | 88.57 | 2.70 |
| A | 88.82 | 1.12 | 102.91 | 2.78 | 110.71 | 4.71 | 117.52 | 7.32 |
| BBB | 168.99 | 12.48 | 170.89 | 20.12 | 185.34 | 27.17 | 179.63 | 34.56 |
| BB | 421.20 | 103.09 | 364.55 | 126.74 | 345.37 | 140.52 | 322.32 | 148.05 |
| B | 760.84 | 426.16 | 691.81 | 400.52 | 571.94 | 368.38 | 512.43 | 329.40 |

¹ In basis points. Spreads are averages over the period January 1997-August 2003 of Merrill Lynch option-adjusted spread indices for US corporate bonds. See text for details on computation of expected loss.

Sources: Altman and Kishore (1998); Bloomberg; Moody's Investors Service; authors' calculations. Table 1