Office of the Superintendent of Financial Institutions Canada
Bureau du surintendant des institutions financières Canada

Discussion Paper on OSFI's Proposed 2012 Changes to the Minimum Capital Test / Branch Adequacy of Assets Test For Federally Regulated Property and Casualty Insurance Companies

Office of the Superintendent of Financial Institutions (OSFI)
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A. INTRODUCTION

This discussion paper has been prepared in order to consult with federally regulated property and casualty insurance companies (P&C insurance companies) and other interested stakeholders, on the key considerations and recommendations for proposed changes that would be implemented in the 2012 Minimum Capital Test (MCT) and the Branches Adequacy of Assets Test (BAAT). The Office of the Superintendent of Financial Institutions (OSFI) is currently assessing how it will revise the current capital regime for P&C insurance companies and is seeking industry input regarding the potential changes.

Key recommendations that are under consideration in this discussion paper include:

1. Amending the MCT/BAAT calculations to apply the claims margin to the discounted best estimate claim liabilities only; i.e., excluding the Provision for Adverse Deviation (PfAD).
2. Removing the capital factor on balances due from OSFI registered affiliated reinsurers.
3. Revise the asset factors on bonds and preferred shares in order that they have greater granularity by rating and term to maturity.
4. Introducing a capital factor on all collateral held as security for unregistered reinsurance.
5. Initiate a proposed methodology to determine capital requirements for interest rate risk under a standardized approach.
6. Implementing a foreign exchange risk capital requirement, more robust than currently exists under the BAAT, to be applied to both the MCT and BAAT

By means of this discussion paper, OSFI's Capital Division is initiating industry consultations that are designed to take place during the remainder of 2010 and early 2011. The objective is to be in a position to issue formal draft guidance regarding the changes by spring 2011.

B. BACKGROUND AND PURPOSE

On September 30, 2009, OSFI's Capital Division met with the Insurance Bureau of Canada (IBC) to discuss our preliminary views on the proposed MCT/BAAT policy initiatives. The IBC subsequently discussed the initiatives with their Financial Affairs Committee (FAC) and notified OSFI that they were in agreement with the proposed changes and were prepared to proceed with a Quantitative Impact Study (QIS).

A follow-up conference call was held with the IBC on November 12 to:

- obtain confirmation on OSFI's proposal to improve the MCT/BAAT,
- establish a timeline for the work,
- determine how to proceed with the QIS, and
- discuss any other concerns the IBC and its members may have had.

From this call, it was decided to proceed with a data request, as opposed to a QIS. This would enable OSFI to determine the impact on the capital requirements and the sensitivity of the proposed changes.

A draft data request letter was subsequently provided to the Canadian Council of Insurance Regulators (CCIR) and the IBC for comment. The IBC provided comments in their letter of February 8, 2010, which were discussed in a subsequent conference call.

On April 30, 2010, OSFI's Insurance Capital Division sent the data request letter and a worksheet to the P&C Insurance Industry requesting December 31, 2009 data that was not already available to OSFI through the P&C-1 and P&C-2 returns in order to analyze the capital impact of the proposed changes.

Completed worksheets were received at the end of June 2010 and OSFI has completed the analysis of the impact of the proposed changes based on the data received.

The response rate to the data call was positive with 72 of 95 Canadian P&C insurance companies that OSFI regulates, representing 91% of industry capital available, submitting responses. The corresponding numbers for the foreign P&C insurance companies were 34 of 91 branches, representing 61% of net assets available.

For the subset of companies that responded to the data call, the aggregate MCT ratio (total capital available over total capital required) as at December 31, 2009 was 226.7%, versus a Canadian industry-wide ratio of 231.7%. The corresponding ratio for the BAAT sample was 316.4% versus an industry-wide total of 353.2%.

This discussion paper has been prepared to consider the key proposed changes to the MCT/BAAT Guidelines to ensure that we continue to have an appropriate risk based test for capital purposes. The end result will be an updated Canadian risk-based capital framework for property and casualty insurance companies that reflects the industry's risks.

C. PROPOSED CHANGES AND RECOMMENDATIONS

Each of the proposed changes in this section is presented first with a brief background of the change and a review of the data received, followed by considerations of the impact on the industry of the change and OSFI's recommendation and rationale.

1. Removing Margin on Provision for Adverse Deviations (PfADs)

Background

The margin on unpaid claims factors in the MCT/BAAT is currently applied to the entire claims liability, including the PfAD. Since the PfAD already reflects additional risk factors, an argument was made by the P&C industry that applying the margins to the PfAD results in double counting, and that instead the margin should be applied to the best estimate liabilities only. In

order to assess the impact of this change on the capital requirements, OSFI requested the dollar amount of PfADs by class of insurance, as the margin varies by class. Note that accident and sickness insurance was excluded from the request as the margin factors for this class of business are derived from the life insurance industry's Minimum Continuing Capital and Surplus Requirements (MCCSR).

Data received

Two data fields were requested for this change: the unpaid claims and the margin for adverse deviation, with the net amount (best estimate) being the difference between the two. The PfADs were to be provided by class of insurance given the margin on unpaid claims is 5%, 10% or 15%, depending on the class.

The following table summarizes the data received by class of insurance for the sub-set of Canadian companies that responded to the data call (amounts in $,000).

Class of insurance	Unpaid claims	Margin for adverse deviation	Net amount
Personal property & commercial property	3,171,713	195,653	2,976,060
Automobile – liability & personal accident	19,013,957	2,000,863	17,013,094
Automobile – other	500,650	34,629	466,021
Liability	6,401,876	791,766	5,610,110
Mortgage	282,211	18,373	263,838
All others (excluding A&S)	427,241	50,408	376,833
Total	29,797,648	3,091,692	26,705,956

The following table summarizes the data received for the sub-set of foreign companies submitting a response (amounts in $,000).

Class of insurance	Unpaid claims	Margin for adverse deviation	Net amount
Personal property & commercial property	736,290	54,691	681,599
Automobile – liability & personal accident	3,765,203	484,284	3,280,919
Automobile – other	57,227	1,736	55,491
Liability	2,068,312	241,086	1,827,226
Mortgage	0	0	0
All others (excluding accident & sickness)	195,673	18,135	177,538
Total	6,822,705	799,932	6,022,773

Considerations

Based on the data received, removing the capital charge on PfADs increases the sample MCT ratio by 9.1 percentage points from 226.7% to 235.8%. The corresponding increase on the BAAT ratio is 27.6 percentage points, from 316.4% to 344.0%.

OSFI's Recommendation

OSFI is considering recommending removing the capital risk charge on PfADs under the MCT/BAAT. Therefore, effective January 1, 2012, the margin on unpaid claims would apply to the net amount at risk (i.e., net of reinsurance, salvage and subrogation, and self insured retentions) net of the PFADs. In making this recommendation, OSFI is accepting the industry's position, articulated by the IBC, that the level of conservatism in the PfADs can vary from one company to another and that requiring capital on a conservative level of PfADs represents a form of double counting.

In order to maintain simplicity and a degree of conservatism with unregistered reinsurance, OSFI will continue to require the 10% margin for unregistered reinsurance to be applied to the outstanding losses recoverable including the PfAD.

2. Removing Capital Charges on Balances Due from Registered Affiliated Reinsurers

Background

The MCT/BAAT guidelines provide a capital charge on balances due for reinsurance recoverables and receivables from other insurance entities. Under the MCT, a 2% factor is applied to unpaid claims recoverable from registered reinsurers and a 0.5% capital factor is applied to unearned premiums recoverable and all receivables from registered reinsurers. Under the BAAT, a 2% factor is applied to unpaid claims recoverable from registered reinsurers and a 0.5% capital factor is applied to unearned premiums recoverable.

OSFI is proposing removing these respective capital charges on balances due from OSFI registered affiliated reinsurers. This is due to the fact that it is considered unlikely that a parent company would not allow its affiliates to pay accounts due to one another and that a commitment to group support exists and assets are likely to flow as needed.

Data received

OSFI already had available through page 70.21 of the P&C-1 and P&C-2 returns the data for unpaid claims and unearned premiums recoverables for registered affiliated reinsurance. However a breakdown of receivables into affiliated registered reinsurers for Canadian property and casualty insurers was not available and, as such, these amounts were requested in the data call.

The following table summarizes the reinsurance recoverables data for the sub-set of Canadian and foreign companies submitting a response (amounts in $,000).

	MCT	BAAT
Total registered affiliated unearned premiums recoverables	1,443,136	30,117
Total registered affiliated outstanding losses recoverables	5,466,922	136,848
Total registered affiliated other receivables	91,616	Not applicable

Considerations

Based on the December 31, 2009 reinsurance receivables and recoverables data, removing the capital charge for registered affiliated reinsurers increases the sample MCT ratio by 3.1 percentage points from 226.7% to 229.8%. The corresponding increase on the BAAT is 0.8 percentage points, from 316.4% to 317.2%.

OSFI's Recommendation

OSFI is considering recommending a 0% capital factor under the MCT for receivables, unearned premium recoverables and unpaid claims recoverables from registered affiliated reinsurers.

Similarly, for the BAAT, OSFI is recommending reducing the margin factor applied to unearned premiums and unpaid claims recoverables from registered affiliated reinsurers to 0%. Receivables for branches of foreign companies would not be affected by this change since the BAAT is based on an asset vesting regime and receivables are non-vested assets.

3. Review of Asset Factors

Background

OSFI agreed to the industry's request to review the asset factors on bonds and preferred shares related to potential losses resulting from asset default risk and the related loss of income. A primary objective of the asset factor review is to introduce greater granularity in the classification of these securities by rating and term to maturity. In addition, it is designed to more closely align the asset factors with those of the life insurance industry.

Data received

P&C insurance companies were asked to provide the dollar value of their bonds by rating and maturity date (yearly increments up to 5-year cut-off) as set out in the table below. All applicable bonds were to be provided including bonds backing capital and surplus (vested bonds for branches). Bonds, including public bonds and private bonds, in addition to leases and other asset-backed securities that are normally included in the categorization "term deposits, bonds and debentures" were to be incorporated. Government grade bonds attracting a 0% asset capital factor per the MCT/BAAT were excluded.

The following table presents the aggregate bond data received from the Canadian P&C insurance industry submissions (amounts in $,000).

	0-1 years	1-2 years	2-3 years	3-4 years	4-5 years	5 + years	Total
AAA	658,135	572,228	288,886	584,619	302,229	999,917	3,406,014
AA	290,125	499,044	1,059,512	945,313	768,250	1,893,783	5,456,027
A	590,400	954,567	988,290	1,175,332	790,657	3,768,441	8,267,687
BBB	77,694	124,942	84,813	130,450	390,381	777,658	1,585,938
BB	28,192	606	206	206	4,489	30,100	63,799
B	0	0	10,749	2,643	0	31,686	45,078
Other	79,097	4,140	204	48,669	114,414	128,361	374,885
Total	1,723,643	2,155,527	2,432,660	2,887,232	2,370,420	7,629,946	19,199,428

The following table presents the aggregate vested bond data received from the foreign P&C insurance industry submissions (amounts in $,000).

	0-1 years	1-2 years	2-3 years	3-4 years	4-5 years	5 + years	Total
AAA	14,612	36,826	25,221	38,242	17,352	100,498	232,751
AA	71,461	96,767	93,465	107,163	158,600	144,226	671,682
A	91,141	77,997	112,958	67,677	105,993	449,504	905,270
BBB	23,041	39,864	9,788	7,519	5,402	182,980	268,594
BB	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	200,255	251,454	241,432	220,601	287,347	877,208	2,078,297

Preferred share data was requested by rating only and the following table summarizes the data submitted by the Canadian P&C companies only, as the foreign branches submitting responses did not hold any preferred shares (amounts in $,000).

Rating	Amount
AAA, AA, Pfd-1, P-1 or equivalent	1,662,363
A, Pfd-2, P-2 or equivalent	618,817
BBB, Pfd-3, P-3 or equivalent	393,321
BB, Pfd-4, P-4 or equivalent	2,221
B or lower, Pfd-5, P-5 or equivalent or unrated	148,658
Total	2,825,380

Considerations

The asset factors under consideration for adoption in 2012 for the P&C insurance industry are sourced from the MCCSR Standardized Quantitative Impact Study (QIS) – Credit Risk. The following table illustrates the proposed factors under consideration to reflect the industry's request for increased granularity without introducing too much complexity to the MCT/BAAT asset factors. Asset factors currently applicable under the MCT/BAAT are also included for comparison purposes.

	Proposed			Current	
	0-1 years	**1-5 years**	**5 + years**	**0-1 years**	**1 + years**
AAA	0.25%	0.50%	1.25%	0.5%	2.0%
AA	0.25%	1.00%	1.75%	0.5%	2.0%
A	0.75%	1.75%	3.00%	0.5%	2.0%
BBB	1.50%	3.75%	4.75%	4.0%	8.0%
BB	3.75%	7.75%	8.00%	4.0%	8.0%
B	7.50%	10.50%	10.50%	4.0%	8.0%
Other	15.50%	18.00%	18.00%	4.0%	8.0%

The factors proposed for preferred shares are as follows.

	Proposed	**Current**
AAA, AA, Pfd-1, P-1 or equivalent	3.0%	4.0%
A, Pfd-2, P-2 or equivalent	5.0%	4.0%
BBB, Pfd-3, P-3 or equivalent	10.0%	15.0%
BB, Pfd-4, P-4 or equivalent	20.0%	15.0%
B or lower, Pfd-5, P-5 or equivalent or unrated	30.0%	15.0%

Given the distribution of assets submitted by the P&C insurance companies, the impact of applying the above factors to the assets was an increase in the MCT/BAAT ratios. The MCT ratio for the sample companies increased from 226.7% to 228.6%, a 1.9 percentage point increase. The BAAT ratio went from 316.4% to 320.1%, a 3.7 percentage point increase.

OSFI's Recommendation

OSFI is considering recommending implementation of the above proposed asset factors for bonds and preferred shares for the P&C insurance industry. The proposed factors satisfy the industry's request for greater granularity in the factors. In addition, they are further aligned with the life insurance industry proposed factors. Given the life insurance factors are still under discussion, the P&C insurance factors might have to be realigned in the future.

4. Capital Charge on Collateral

Background

Effective January 1, 2011, a capital charge of 0.5% is being applied to letters of credit (LOCs) backing unregistered reinsurance. However, other deposits such as bonds may also be held as security to reduce the margin for unregistered reinsurance. However, no capital charge is currently applied to this collateral under the MCT/BAAT.

Consistent with the philosophy of introducing a capital charge for LOCs, OSFI has decided to examine the impact of introducing capital requirements on all collateral held to reduce or fulfil a capital requirement. In order to perform this analysis, we requested data regarding the amount of other collateral items held as security from unregistered reinsurers and policyholders for self-insured retentions (SIRs).

Data received

Very few P&C insurers reported holding collateral other than LOCs that would be subject to a capital charge. Only 15 of the Canadian companies and 3 of the foreign branches had collateral that would attract a factor other than 0%.

The following table summarizes the data received as at December 31, 2009 for Canadian companies and foreign branches (amounts in $,000).

Collateral assets backing unregistered reinsurance (other than LOCs)	**MCT**	**BAAT**	**Factor**
Cash	158,070	83,028	0.0%
Investment income due and accrued	10,925	14,189	2.0%
Govt. grade term deposits, bonds and debentures	1,906,130	1,553,085	0.0%
Other term deposits, bonds and debentures[1]	396,370	17,079	Same as table in Section 3. Review of Asset Factors
Preferred shares	0	0	Same as table in Section 3. Review of Asset Factors
Common shares	62,375	0	15.0%
Total collateral assets (other than LOCs)	2,533,870	1,667,381	

[1] Although non-government bond data for collateral was received in the same matrix format as presented in Section 3 – Review of Asset Factors, given the fact the capital charge on these collaterals is not material, the aggregate number is presented here for simplicity purposes.

Considerations

Based on the data submitted, the capital impact of introducing this proposed change is minimal. This is due to the fact that the majority of the collateral held for unregistered reinsurance purposes is of very high quality, in particular, government grade term deposits, bonds and debentures, which do not attract a capital charge.

The impact on the sample of Canadian companies that responded to the data request was a decrease in the overall MCT ratio of 0.2 percentage points, from 226.7% to 226.5%. The corresponding change for the branches was a decrease in the BAAT ratio of 0.1 percentage points from 316.4% to 316.3%.

OSFI's Recommendation

OSFI is considering recommending introducing a capital charge for collateral (other than LOCs) held for unregistered reinsurance and SIRs. The asset factors would be consistent with those currently in the MCT/BAAT, with the exception of the factors applicable to other than government grade term deposits, bonds and debentures and preferred shares, which would use the factors proposed in this discussion paper.

Although the impact of the change does not seem material at this moment, due to the high quality of assets held as collateral, the change makes the P&C insurance capital tests more risk based and covers the potential increase in the use of collateral.

5. Margin for Interest Rate Risk

Background

The margin for interest rate risk captures the risk of economic loss resulting from market changes in interest rates and the impact on interest sensitive assets and liabilities. Interest rate risk arises due to the volatility and uncertainty of future interest rates. This risk is not currently covered in the MCT/BAAT. OSFI believes it is appropriate to introduce this new margin to improve the risk sensitivity of the P&C insurance capital tests.

Data received

In order to measure the interest rate risk, the following four data points were requested:

- Market value of fixed income assets
- Duration of fixed income assets
- Market value of interest rate sensitive liabilities
- Duration of interest rate sensitive liabilities

Duration is the percentage change in a fixed income security's price for a 100 basis point change in yield, assuming the bonds' expected cash flows did not change when the yield changed. Companies were asked to refer to the following modified duration formula. In instances where the security has no maturity date, such as a perpetual preferred share, the duration is simply 1/yield.

$$\frac{1}{(1+\text{yield}/k)} * \frac{1 * PVCF_1 + 2 * PVCF_2 + \ldots + n * PVCF_n}{k * \text{Market Value}}$$

where,

k = number of periods, or payments, per year (e.g., $k = 2$ for semi-annual payments and $k = 12$ for monthly payments)
n = number of periods until maturity (i.e. number of years to maturity times k)

yield = yield to maturity of the cash flows
$PVCF_t$ = present value of the cash flow in period t discounted at the yield to maturity

Duration of a portfolio of assets is the weighted average duration of the interest sensitive assets in the portfolio. The fixed income assets to be included were all fixed income assets directly subject to interest rate risk, generally classified as debt obligations and preferred shares. Fixed income assets backing surplus are also included as the proposed interest rate risk margin is applied to capital.

The interest sensitive liabilities to be provided were the net discounted claim liabilities reported in the annual return, including claim adjustment expenses. The duration of these liabilities was to be determined based on the formula above, using the cash flows from the liabilities and the discount rate used in determining the liabilities.

The following table illustrates the aggregate data provided in the data request for the Canadian P&C insurance industry (amounts in $,000).

MCT	Assets	Liabilities
Aggregate value	48,347,175	29,842,426
Average duration	4.1	2.5

Similar numbers for the foreign branch P&C insurance companies are as follows:

BAAT	Assets	Liabilities
Aggregate value	12,524,288	6,882,740
Average duration	3.7	2.7

Considerations

The proposed standardized approach to calculating interest rate risk uses a duration methodology that measures the economic impact of a sudden, immediate change in interest rates. The methodology to determine the capital requirements for interest rate risk is based on the following steps:

a) The estimated change in the liability portfolio for the Δy interest rate shock factor increase will be determined as follows:

   Approximate change in value of liabilities =

   (- Duration of liabilities) * Δy * 100% *

   Market value of interest rate sensitive liabilities[2]

b) The estimated change in the asset portfolio for an interest rate shock factor increase of Δy will be determined as follows:

   Approximate change in value of fixed income asset portfolio =

   (- Duration of fixed income asset portfolio) * Δy * 100% *

   Market value of fixed income asset portfolio

c) The capital requirement for an interest rate increase of Δy is determined as the greater of zero and a) – b).

d) Steps a) and b) are repeated for an interest rate decrease of Δy and the capital requirement for an interest rate decrease of Δy is the greater of zero and a) – b).

e) The overall capital requirement for interest rate risk is then determined as the greater of c) or d).

OSFI considered four different interest rate shock factors that could be used for the standardized interest rate risk margin. They were as follows:

1. A flat X% basis point shock factor.
2. An approach based on the current yield curve[3].
3. The yield curve interest rate shock approach as outlined in the Solvency II Quantitative Impact Study (QIS) 5.
4. The OSFI/AMF proposed standardized approach for life insurers regarding interest rate shocks outlined in the *OSFI/AMF Quantitative Impact Study of the New Standardized Approach to Calculating the Solvency Buffer for Market Risk*.

[2] Premium liabilities are not included since the test captures the balance sheet impact of the variation of interest rates, and discounted net premium liabilities are not on the balance sheet.

[3] Similar to that proposed by the Australian Prudential Regulation Authority (APRA) for their interest rate stress test in the July 2010 technical paper, *Review of capital standards for general insurers and life insurers*.

The last three methods have the advantage of the interest rate shock being based on the current yield curve; however, they are more complicated to apply and may be better suited to a framework using internal models. We recognize that a flat basis point shock factor may not be as effective a shock in all interest rate environments, for example, a 1% shock when interest rates are already 10% is not a significant shock. On the other hand, a flat basis point shock factor has the advantage of simplicity and the level of shock could be gradually adjusted as the interest rate environment changes. For these reasons, OSFI concentrated its analysis on a flat basis point interest rate shock factor.

AM Best in their analysis uses a 120 basis point parallel movement in interest rates as a shock factor to measure interest rate risk. Consideration was given to using a similar shock factor; however, in today's low interest rate environment and for the purposes of introducing and phasing in the capital impact of such a margin for the MCT/BAAT, OSFI determined that a lower factor was appropriate at this time.

OSFI is therefore considering recommending a 75 basis point interest rate shock factor for introduction of the margin for January 1, 2012. As P&C insurers gain familiarity with, and adapt to the new required margin, and as the interest rate environment evolves, OSFI will consider adjusting the interest rate shock factor in future reviews of the MCT/BAAT.

Using the standardized approach and a 0.75% interest rate shock, the impact for the sample set of companies responding to the data request was a decrease in the MCT ratio of 21.0 percentage points from 226.7% to 205.7%. The corresponding figure for the branches was a decrease in the BAAT ratio of 50.1 percentage points from 316.4% to 266.3%. We however expect insurers to mitigate a large proportion of this impact by modifying their investment profile and reducing their interest rate exposure.

OSFI's Recommendation

OSFI is considering recommending the introduction of an interest rate risk capital requirement using the standardized approach outlined above with a 0.75% interest rate shock factor.

The introduction of this interest rate risk margin including future adjustments to the shock factor due to a changing interest rate environment is consistent with the objective of ensuring the MCT/BAAT remain up-to-date risk sensitive tests.

6. Margin on Foreign Exchange Risk

Background

Financial institutions which hold foreign pay securities that are not matched to foreign pay liabilities, have a foreign exchange exposure risk. In the January 2007 revision to the BAAT, an 8% foreign exchange asset/liability mismatch risk factor was introduced for foreign branch P&C insurance companies. However, this was a one-sided test that only captured the mismatch risk when foreign assets exceeded foreign liabilities.

OSFI believes it is now appropriate to introduce a more robust foreign exchange risk requirement for both the MCT and the BAAT. Consistent with this objective, an 8% factor similar to that in the MCCSR is being proposed for 2012.

Data received

P&C insurers were asked to provide their net long and short positions in foreign currencies in order to calculate the capital requirement in a manner consistent with the MCCSR foreign exchange risk requirement. The table insurers were asked to complete was consistent with that of Form 87, Tab 90025 for Canadian life insurance companies, with instructions based on the modified extract of the MCCSR, chapter 9, provided in the data request letter.

The aggregate of the gross exposure positions reported by Canadian and foreign branches of P&C insurance companies as at December 31, 2009 was as follows (amounts in $,000 Canadian dollars). Given the gross exposure by company is based on the higher of the long or short position in currencies for each company, presenting the aggregate gross exposures in specific currencies or by region is not meaningful.

	MCT	BAAT
Gross exposure – A	2,489,663	317,367
Gross requirement – (8% of A) – B	199,173	25,389
Requirement for foreign exchange volatility risk – C	0	0
Total foreign exchange requirement	199,173	25,389
Current foreign exchange requirement (BAAT only)	-	5,294

Considerations

Of the 72 Canadian P&C companies submitting responses to the data request, 40 of them reported an exposure to foreign exchange risk, whereas for the branches, 13 of the 34 had an exposure. The impact on the Canadian companies of introducing the proposed 8% foreign exchange requirement was a decrease in the MCT ratio of 4.9 percentage points from 226.7% to 221.8%. The branches' exposure resulted in a decrease in the BAAT ratio of 5.5 percentage points from 316.4% to 310.9%.

OSFI's Recommendation

OSFI is considering recommending the introduction of a foreign exchange risk capital requirement in line with that contained in the MCCSR for both the MCT and BAAT. Based on the analysis of the data received, a material foreign exchange risk exists and should be appropriately reflected in the capital adequacy tests of P&C insurers.

7. Hedging Strategies

Background

Consistent with the objective to move the MCT/BAAT to a risk sensitive test that encourages good risk management, consideration is being given to commence taking into account the impact of hedging strategies in the capital requirements. Hedging strategies may, to the extent the hedge is effective, reduce the risk being hedged (and therefore may justify reduced capital for that risk or at least no additional capital for the opposite position taken by way of a hedge) but a hedge may also create additional risks (eg. counterparty, operational or market) which require capitalization.

Data received

The data for this proposed change was largely qualitative in nature, as respondents were asked to comment on the applicability of introducing Section 3.7 – *Assets replicated synthetically and derivatives*, of the MCCSR. If this section was applicable to current hedging strategies in place, they were asked to quantify the capital impact of its introduction.

Considerations

Based on the responses received from Canadian P&C insurance companies, only seven indicated that they have hedging strategies in place that would impact capital requirements. The overall impact on the Canadian P&C industry of introducing hedging strategies was a 0.6 percentage point increase in the MCT ratio from 226.7% to 227.3%.

All of the foreign branches who responded to the data request indicated that they do not engage in hedging strategies and this section would not apply. Furthermore, none expressed interest in implementing hedging strategies in the future.

OSFI's Recommendation

The consideration of the impact of hedging strategies is consistent with OSFI's objective of increasing the MCT/BAAT's risk sensitivity to encourage good risk management. However, a balance must be achieved with the need to maintain a simple and effective capital adequacy test and the fact hedging is not widely applied within the P&C industry. Therefore, OSFI is recommending a gradual phase-in approach to recognizing hedging strategies.

Given the January 1, 2012 introduction of a foreign exchange risk requirement, OSFI is considering recommending introducing credit for hedging foreign currency risk at the same time. The methodology will be consistent with that of the MCCSR. For example, the calculations and types of hedges permitted, such as options on foreign currency, will be treated in a manner similar to the life insurance industry approach.

OSFI will consider recognizing other hedging strategies in future revisions to the MCT/BAAT and will conduct discussions with companies in the industry that had an interest in hedging strategies to plan future modifications to the MCT/BAAT in this regard.

D. AGGREGATE IMPACT OF THE PROPOSED CHANGES

Based on the recommended proposed changes outlined in this discussion paper, the following table summarizes the aggregate impact of the proposed changes for the participating P&C insurance companies to the data request.

	MCT		BAAT	
Capital / Net Assets Available	20,074,271		3,562,597	
Capital / Margin Required	8,853,474	226.7%	1,125,908	316.4%
PfADs	(340,683)	9.1%	(90,133)	27.5%
Balances due	(117,023)	3.1%	(2,888)	0.8%
Asset factors	(70,397)	1.9%	(13,025)	3.7%
Collaterals	9,843	(0.3)%	281	(0.1)%
Interest rate risk	907,098	(21.1)%	211,868	(50.1)%
Foreign exchange	199,173	(5.0)%	20,096	(5.5)%
Total	588,010	(14.1)%	126,200	(31.9)% [4]
Capital / Margin Required	9,441,484	212.6%	1,252,108	284.5%

OSFI expects that P&C insurers will mitigate the impact of the proposed changes, for example by modifying their investment profile to reduce their interest rate exposure, so that the MCT/BAAT ratios will move back to current levels over time.

E. MOVING FORWARD

This discussion paper outlines OSFI's viewpoints and proposed changes for January 1, 2012 to the MCT/BAAT capital tests for P&C insurance companies. It serves to initiate discussion with the industry and other key stakeholders on the considerations and recommendations contained herein. After receipt of comments, OSFI will take them into consideration in its analysis, together with other changes not related to the data request that are being considered. Revised draft MCT/BAAT guidelines and annual returns reflecting the proposed final changes should be released in early spring 2011 for a two month consultation period. Subsequently, final guideline and annual return documents will be released in September 2011 for a January 1, 2012 effective date.

[4] The percentage point impacts on the MCT/BAAT ratios by proposed change are not additive. The total percentage point impact represents the impact on the MCT/BAAT ratios of the aggregate change in capital/margin required of all the proposed changes.

The proposed 2012 changes will update the MCT/BAAT guidelines to reflect today's risks in the P&C insurance industry. However, in order to ensure the guidelines continue to accurately reflect industry risks there will likely be more changes and calibration forthcoming over the years.

OSFI is looking forward to receiving comments of interested stakeholders on the proposals described in this discussion paper. Written comments should be forwarded by January 14, 2011 to:

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Capital Division
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Written comments may also be sent via email to judith.roberge@osfi-bsif.gc.ca.