

# CONSULTATION PAPER

P006 - 2011  
July 2011

## Proposed Revision to the Risk Based Capital Framework

- Financial Resources Adjustment,  
Reinsurance Adjustment,  
C2 Risk Requirements

MAS

Monetary Authority of Singapore

## **PREFACE**

As part of the ongoing refinement of the the Risk Based Capital (“RBC”) Framework for insurers, the Monetary Authority of Singapore (“MAS”) commenced a review of areas relating to credit risks arising from insurance contracts, and contagion risk arising from intra-group transactions. The following proposals touch on changes to the financial resources adjustment, the reinsurance adjustment and the C2 risk requirements under our RBC framework.

2      MAS invites interested parties to forward their views and comments on the proposals made in this paper. Electronic submission is encouraged. Please submit your written comments by 11 August 2011 to:

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Monetary Authority of Singapore  
10 Shenton Way  
MAS Building  
Singapore 079117

Fax: 6229 9694  
Email: [rbc2011@mas.gov.sg](mailto:rbc2011@mas.gov.sg)

3      Please note that all submissions received may be made public unless confidentiality is specifically requested for the whole or part of the submission.

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## 1 INTRODUCTION

1.1 As part of the ongoing refinement of the Risk Based Capital (“RBC”) Framework for insurers, the Monetary Authority of Singapore (“MAS”) commenced a review the credit given for reinsurance ceded, the treatment of investments in related parties and the treatment of unsecured amounts due from related parties.

### ***Credit Risk arising from Contracts of Insurance***

1.2 Insurers are exposed to credit risk as part of the insurance business arising from the receipt of premiums from their insureds and the reinsurance recoverables due from the reinsurers. Under the current RBC framework, these amounts due from the insureds or reinsurers are subject to a credit risk requirement. We have reviewed the risk requirements for these and the specific proposals are set out in Sections 2 (Reinsurance Recoverables on Paid Claims) and 3 (Outstanding Premiums and Agents’ Balances).

### ***Contagion Risk arising from Intra Group Transactions***

1.3 The insurance industry has been growing in complexity, diversity and global reach, including the formation of groups that span across different jurisdictional borders. Consequently, intra group transactions have also increased and these include management services and group wide reinsurance programs. Arising from the recent financial crisis, it can be seen that such intra group transactions may introduce contagion and reputational risk. As such, to address intra-group risks, we have reviewed the capital treatment of exposure to related parties under the RBC framework.

1.4 Section 4 (Unsecured Amounts Due From Related Parties) sets out the proposals in relation to the deposits held in related banks, inclusion of unsecured amounts due from related parties arising from contracts of insurance in the financial resources adjustment as well as the consideration of the credit rating of the counterparty in determining the financial resources adjustment.

1.5 Credit for reinsurance ceded has been given under the current RBC framework in the form of capital relief for the direct insurer. It is important that this capital relief be given only when the reinsurance arrangements result in an effective insurance risk transfer from the insurer to the reinsurer. The amount of credit given should commensurate with the amount of insurance

risk transferred. Section 5 (Adjustment to Financial Resources for Reinsurance Ceded) deals with the exposure to related parties from outward reinsurance arrangements by removing the recognition given to the reinsurance arrangements between a branch and its Head Office, removing the concession given to related parties in the computation of the reinsurance adjustment and the inclusion of claims liabilities in the computation of reinsurance adjustment.

## 2 REINSURANCE RECOVERABLES ON PAID CLAIMS

2.1 An insurer will record a receivable due from its reinsurer once the claim on a (reinsured) policy has been paid by the insurer. This receivable will be reflected as an increase in the insurer's assets as reinsurance recoverables on paid claims. Similar to other asset items under the RBC framework, reinsurance recoverables on paid claims are subject to an asset risk requirement to account for the credit risk posed by the reinsurers. Currently, this asset risk requirement is calculated based on:

- a) Period that the recoverable has been outstanding;
- b) Registration status of the reinsurer (i.e. registered, authorised, related/Head Office or unregistered); and
- c) Financial strength rating of the reinsurer.

2.2 MAS had issued a public consultation paper on the proposed changes to the risk requirements for Outstanding Premiums and Agents' Balances in December 2008<sup>1</sup>. As both reinsurance recoverables on paid claims and outstanding premiums pertain to receivables arising from contracts of insurance, the calibration of risk requirements to account for the credit risk posed to the insurer should be consistent. As such, **we propose to align the tiers of period that the reinsurance recoverables on paid claims has been outstanding with those for outstanding premiums**. This would also give insurers the incentive to collect the outstanding amounts on a timely basis as failure to do so may lead to liquidity and capital concerns.

2.3 In addition, **we are proposing to subject reinsurance recoverables on paid claims that have been outstanding for more than 180 days for facultative reinsurance or 270 days for treaty reinsurance to a risk factor of 100%, ignoring the registration status and financial strength rating of the reinsurer**. This is because the longer the period of time that these recoverables are outstanding, the higher the risk an insurer faces with respect to its recoverability, regardless of the registration status or financial strength of the reinsurer.

2.4 Lastly, upon comparing the risk requirements for outstanding premiums with the risk requirements for reinsurance recoverables on paid claims, we noted that the risk requirements for outstanding premiums were lower than

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<sup>1</sup> A copy of the consultation paper as well as MAS' response to feedback received can be found at [http://www.mas.gov.sg/publications/consult\\_papers/Reports\\_and\\_Consultation\\_Papers.html](http://www.mas.gov.sg/publications/consult_papers/Reports_and_Consultation_Papers.html)

the risk requirements for reinsurance recoverables on paid claims due from an authorised reinsurer or unregistered (re)insurer. Arguably, this is not a fair basis as the credit risk posed by reinsurers, compared to that posed by a party where premium is outstanding, should in general be equal or lower due to the regulation of the reinsurers.

2.5 However, the consequences of non-collection of the reinsurance recoverables on paid claims are more severe than non-collection of outstanding premiums as an insurer could be exposed to liquidity and capital shortfall. Furthermore, for outstanding premiums, an insurer has the right to terminate the insurance coverage and hence, the policy liabilities associated with that policy if it does not receive the outstanding premiums from its client. This makes the credit risk posed by reinsurance recoverables on paid claims higher. As such, taking into consideration that reinsurers are subject to a certain level of oversight by insurance regulators, **we propose to align the risk requirements for outstanding premiums with the risk requirements for reinsurance recoverables on paid claims from authorised reinsurers.** This entails amending the reinsurance counterparty factor from 100%, 150%, 200% for registered, authorised and unregistered reinsurers to 75%, 100%, 150% respectively. Please see Annex A for the proposed risk requirements on reinsurance recoverables on paid claims.

**Proposal 1:** To align the tiers for the period that reinsurance recoverables on paid claims have been outstanding with that of the period that for outstanding premiums

**Proposal 2:** To subject reinsurance recoverables on paid claims that have been outstanding for more than 180 days or 270 days for facultative and treaty reinsurance respectively to 100% risk requirement, ignoring the registration status or financial strength rating of the reinsurer

**Proposal 3:** To amend the reinsurance counterparty factor in the calculation of risk requirements for reinsurance recoverables on paid claims from 100%, 150%, 200% to 75%, 100%, 150% for registered, authorised and unregistered reinsurers respectively

### 3 OUTSTANDING PREMIUMS AND AGENTS' BALANCES

3.1 In the December 2008 consultation paper on the proposed changes to the risk requirements on Outstanding Premiums and Agents' balances, no consideration was given for the credit rating of the counterparties. We acknowledge that this would not create the right incentive for proper credit risk management since an insurer would be subject to the same risk requirements regardless of the credit rating of the counterparty. As such, **we propose to include the credit rating of the counterparty as an additional factor into the calculations of the risk requirements for Outstanding Premiums and Agents' Balances.** For avoidance of doubt, for any counterparty that is an individual or a corporate without a credit rating, the risk factor of 100% will apply, i.e. no changes to the proposed risk requirements from the December 2008 consultation paper. The proposed risk requirements, incorporating the credit rating of the counterparty, are set out in Annex B.

**Proposal 4:** To include the credit rating of the counterparty as an additional factor in the calculations of the risk requirements for Outstanding Premiums and Agents' Balances, except for the last tier of the outstanding period where the risk factor of 100% will apply, regardless of the credit rating of the counterparty



## 4 UNSECURED AMOUNTS DUE FROM RELATED PARTIES

4.1 Currently under the RBC framework, insurers are required to deduct all unsecured amounts owing by a related party<sup>2</sup> from the net assets as financial resources adjustment (“FRA”). This FRA reduces the amount of financial resources of the insurer that is available to meet the risk requirements, i.e. it is akin to a deduction from capital. Only unsecured amounts due from related parties arising from a contract of insurance (i.e. outstanding premiums and reinsurance recoverables on paid claims) are exempted from being deducted.

### *Unsecured amounts arising from contracts of insurance*

4.2 Regardless of whether the exposure arises from a contract of insurance, or from an unsecured loan or guarantee, the contagion risk posed to the insurer should the related party fail, is the same. As such, **we propose to subject the unsecured amounts due from a related party arising from a contract of insurance to a similar deduction (as those unsecured amounts arising from non-contracts of insurance) from financial resources.** We recognise that it is not practically possible to collect any outstanding amounts immediately due to the need for the preparation and reconciliation of the statements. As such, **we propose to deduct such amounts from financial resources only if such amounts are outstanding for three months or more after they are recorded in the books of the insurer.**

### *Credit Rating to be taken into consideration for FRA*

4.3 Credit risk arising from unsecured amounts due from related parties would differ, as such, consideration should be given to the credit rating of the related party in applying the FRA, i.e. an amount due from a higher rated related entity should result in a lower deduction from financial resources as compared to the same amount due from a lesser rated related entity. **We propose to include the financial strength rating or credit rating of the counterparty as a factor in determining the FRA for all unsecured balances due from a related party.** The counterparty risk factors to be used are to be consistent with those currently used for calculation of risk requirements of the various asset classes under the RBC framework.

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<sup>2</sup> These include deposits placed with related banks, unsecured loans and holdings of unsecured bonds issued by a related party. The Insurance (Valuation & Capital) Regulations 2004 will be amended to include equity securities held in related parties in the computation of FRA.

***Concession for deposits placed in related banks***

4.4 Deposits placed with related banks are subjected to FRA since they are unsecured amounts due from the bank. However, we recognise that insurers could have place deposits in related banks for operational reasons with possible synergies in doing so, unlike investments held in the form of equity and debt securities. As such, **we propose to grant a concession of 5% of assets, for deposits held with related parties if the counterparty is at least A- rated, from the deductions under FRA.** The minimum A- rating requirement was chosen based on the current Class B counterparty risk class under the RBC framework. A minimum rating would mitigate but not eliminate the possible contagion and reputational risks of placing deposits with a related bank.

**Proposal 5:** To deduct unsecured amounts due from related parties and arising from contracts of insurance from financial resources only if these are not collected within three months

**Proposal 6:** To include the financial strength rating or credit rating of the counterparty as a factor in the calculations of the deductions to be made for all unsecured balances due from related parties

**Proposal 7:** To grant a concession of 5% of assets to deposits held with related parties from the deductions under FRA

## **5 ADJUSTMENT TO FINANCIAL RESOURCES FOR REINSURANCE CEDED**

5.1 Outward reinsurance is a form of risk management used by insurers, where a portion of the risks assumed by the insurer is transferred to the reinsurer. Insurers that are part of a larger group would typically reinsure within the group for capital management and risk management purposes. There are economies of scale in doing so as well, especially if the group is purchasing reinsurance protection for the risks taken on at a group level. Credit for reinsurance ceded, in the form of capital relief for the insurer, has been given under the current RBC framework where insurers present the policy liabilities net of reinsurance. However, to account for the credit risk arising from these reinsurance arrangements, insurers are required to compute a reinsurance adjustment and deduct it from financial resources, in a manner similar to FRA.

### ***Reinsurance arrangement with Head Office or arranged by Head Office***

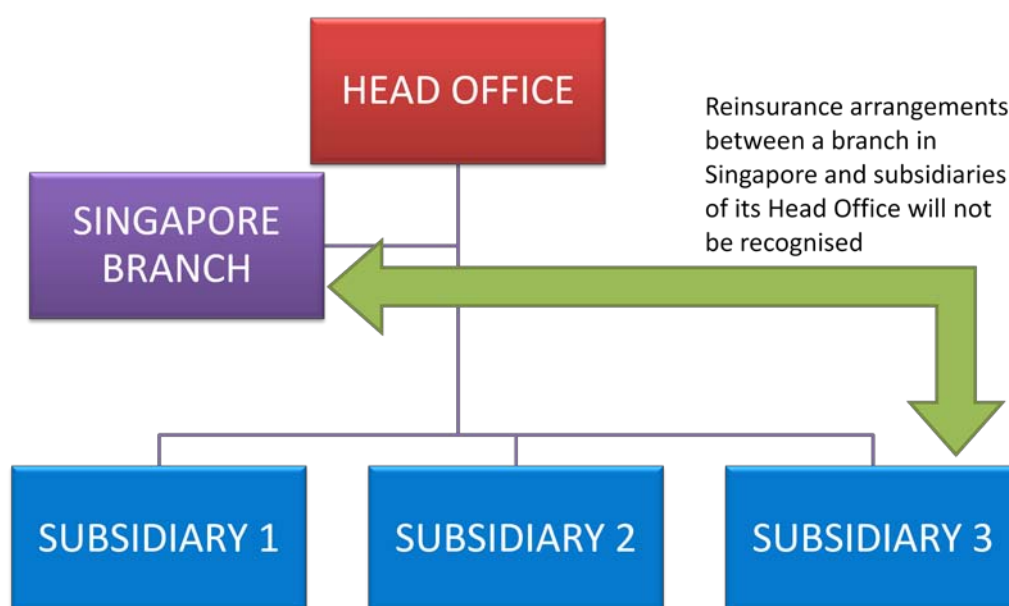
5.2 The current RBC framework gives recognition to a branch's reinsurance arrangement with its Head Office as long as there is a written agreement between the branch and the Head Office. We have reviewed this position and are of the view that as the Head Office and its branch in Singapore are considered as a single legal entity, such a transaction does not result in effective risk transfer. As such, **we propose to remove the recognition of the reinsurance arrangement between a Head Office and its branch in Singapore, regardless of whether there is a written agreement between them.**

5.3 A more common approach is to include the risks written by the branch in Singapore in the Head Office's reinsurance arrangements with third party reinsurers. For the avoidance of doubt, we will maintain recognition of such reinsurance arrangements of a branch provided that the branch is included in the coverage.

### ***Reinsurance arrangement with Subsidiaries and Downstream Entities***

5.4 There are instances where insurers purchase reinsurance protection from its subsidiary or for branches, a subsidiary of its head office (as shown in the figure below). This could be due to business reasons where business is reinsured from a booking office back to the originating office for better control. We are of the view that such a reinsurance arrangement would not constitute

effective risk transfer as the risk continues to be retained in the consolidated accounts of the insurer. Furthermore, in the event that the subsidiary runs into financial difficulties, the insurer in Singapore, being the parent company (or a branch of the parent company), would be expected to inject capital in the subsidiary, negating the effect of risk transfer to the subsidiary via the reinsurance arrangement. As such, **we propose not to give credit for reinsurance ceded to downstream entities<sup>3</sup> by requiring insurers to make adjustments in the calculation of the reinsurance adjustment.**



### ***Registration status of the reinsurer***

5.5 The current RBC framework has distinguished the credit given for reinsurance ceded based on the registration status of the reinsurer where the credit given for a direct insurer reinsuring with a registered reinsurer is more favorable than that for reinsuring with an authorised reinsurer, which in turn is more favorable than reinsuring with an unregistered reinsurer. In one of the factors applicable for reinsurance adjustment and risk requirements, registered reinsurers have been given 100% recognition whereas authorised reinsurers are given 50% recognition only. Unregistered reinsurers would not be given any recognition at all. The rationale for the distinction is that registered reinsurers are subject to MAS' supervision and are subject to the

<sup>3</sup> The downstream entity would be limited to that of related entities as defined in the Companies Act (Cap. 50). For branch operations in Singapore, this would include subsidiaries of the Head Office.

RBC framework<sup>4</sup>. For authorised reinsurers, while they are not subject to MAS' supervision since they do not have a commercial presence in Singapore, they maintain a statutory deposit with MAS that is commensurate with the amount of business they write from Singapore.

5.6 A concession was previously granted for reinsurance ceded to Head Office or related parties which were unregistered by allowing the insurers to classify these counterparties in the same category as authorised reinsurers. This concession was given in recognition that most foreign insurers in Singapore rely on their head office or parent company for reinsurance management. While the risk management systems and controls, and the capital strength of the insurance groups had been assessed at the application stage, these may have changed and it would not be prudent to conclude that the credit risk posed from these groups would be lower. Furthermore, it can be seen from the recent financial crisis that the financial strength of insurance groups can deteriorate very quickly. As such, we **propose to remove the concession given for reinsurance ceded to Head Office and/or related parties that are unregistered and to consider only the registration status, i.e. registered, authorised or unregistered, and the financial strength rating of such entities for the purpose of credit given for reinsurance ceded.**

#### ***Addition of Claims Liabilities to Reinsurance Adjustment***

5.7 It is currently defined in the Insurance (Valuation & Capital) Regulations 2004 ("the Regulations") that the reinsurer's share of the liabilities for the calculation of Reinsurance Adjustment is taken to be the reduction in policy liabilities for life insurance business but is restricted to only the reduction in unearned premium reserves for general insurance business. This definition does not fully capture the credit risk of reinsurers for general insurance business as the reduction in unexpired risk reserves and claims liabilities is not included in the calculations.

5.8 To account for the full credit risk from reinsurers, **we propose to include claims liabilities into the calculation of reinsurance adjustment.** We noted from the information in the statutory forms<sup>5</sup> that claims liabilities constituted about 47% of the total policy liabilities for general insurers and this

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<sup>4</sup> The Offshore insurance fund ("OIF") for reinsurers incorporated in Singapore is subject to simplified solvency requirements whereas the OIF for reinsurers incorporated outside Singapore is exempt from risk requirements.

<sup>5</sup> Figures presented as at 31 December 2009.

proposal effectively increases the reinsurance adjustment by about 100%. It is not the intention to simply increase the amount of capital required with this proposal. As such, **we propose to revise the factors used for the registration status of the reinsurers from 0%, 50% and 100% for reinsurers that are registered, authorised and unregistered respectively to 0%, 25% and 50% respectively.**

5.9 The proposed computation for Reinsurance Adjustment is set out in Annex C.

**Proposal 8:** To remove the recognition of the reinsurance arrangement between a Head Office and its branch in Singapore, regardless of whether there is a written agreement between them

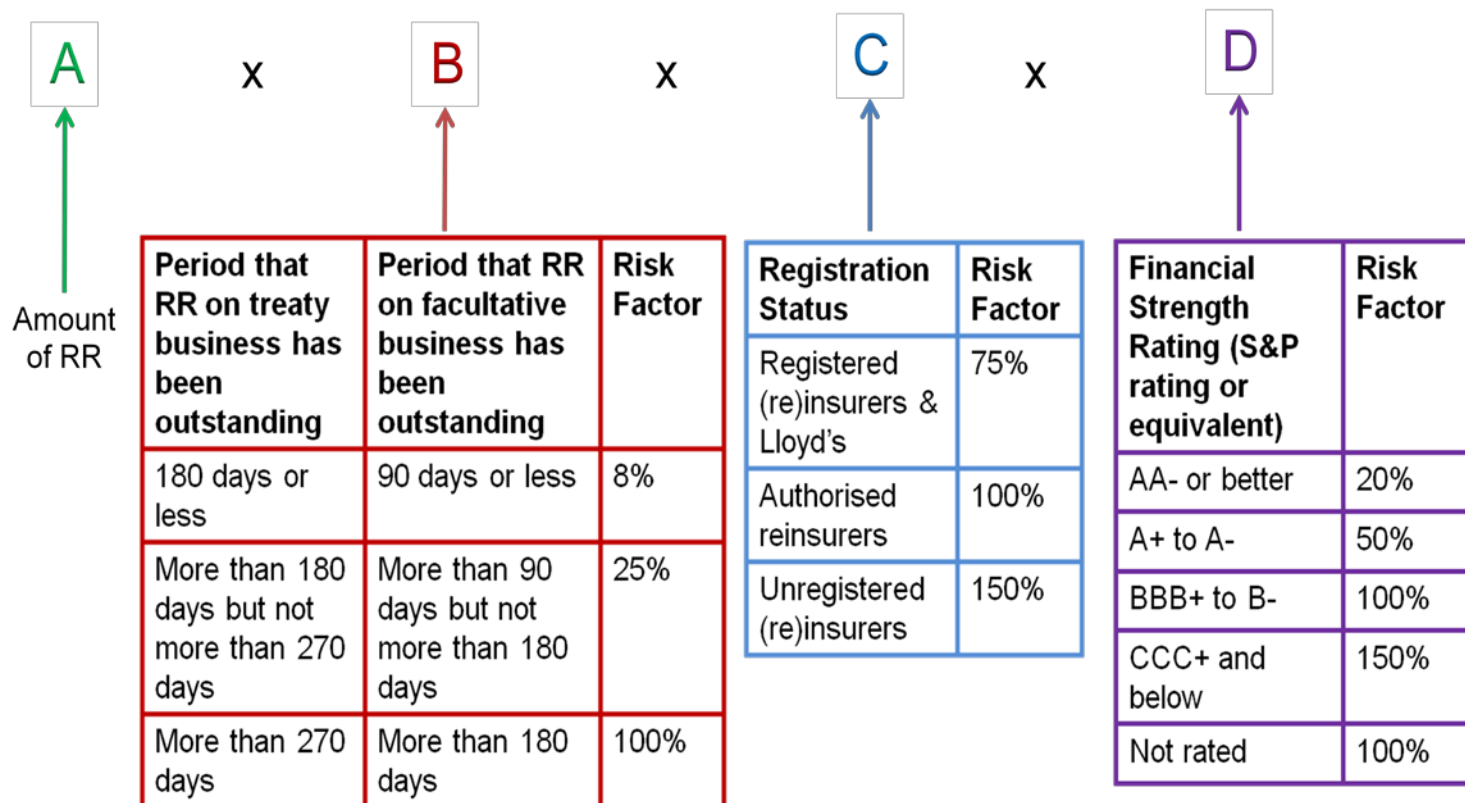
**Proposal 9:** To remove the concession given for reinsurance ceded to Head Office and/or related parties under the Reinsurance Counterparty Factor

**Proposal 10:** To include claims liabilities in the reinsurer's share of the liabilities for general insurance business for the calculation of the Reinsurance Adjustment

**Proposal 11:** To amend the reinsurance counterparty factor in the calculation of reinsurance adjustment from 0%, 50% and 100% to 0%, 25% and 50% for registered, authorised and unregistered reinsurers respectively

**PROPOSED RISK REQUIREMENTS ON REINSURANCE RECOVERABLES ON PAID CLAIMS (“RR”)**

**Calculation Method**



**Risk Requirements**

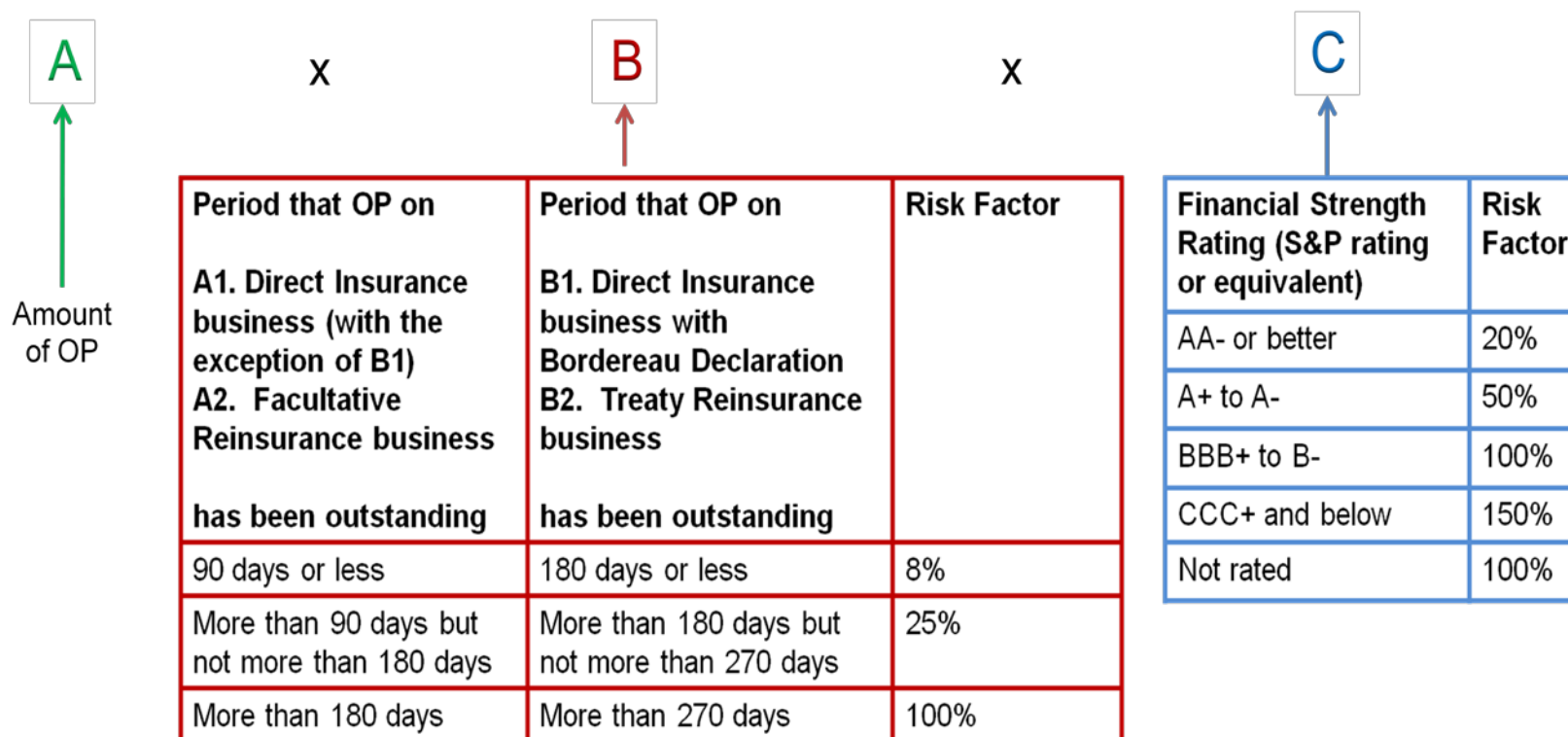
Counterparty Risk Class	S&P or Equivalent Rating	Outstanding Period		Risk Requirements		
		Facultative Reinsurance Business	Treaty Reinsurance Business	Registered & Lloyd's <sup>6</sup>	Authorised reinsurer	Unregistered (re)insurer
A	AAA To A-	90 days or less	180 days or less	1.20%	1.60%	2.40%
		More than 90 days but not more than 180 days	More than 180 days but not more than 270 days	3.75%	5%	7.50%
		More than 180 days	More than 270 days	100%	100%	100%
B	A+ to A-	90 days or less	180 days or less	3%	4%	6%
		More than 90 days but not more than 180 days	More than 180 days but not more than 270 days	9.375%	12.50%	18.75%
		More than 180 days	More than 270 days	100%	100%	100%
C & D	BBB+ to B-	90 days or less	180 days or less	6%	8%	12%
		More than 90 days but not more than 180 days	More than 180 days but not more than 270 days	18.75%	25%	37.50%
		More than 180 days	More than 270 days	100%	100%	100%
E	CCC+ and below	90 days or less	180 days or less	9%	12%	18%
		More than 90 days but not more than 180 days	More than 180 days but not more than 270 days	28.125%	37.50%	56.25%
		More than 180 days	More than 270 days	100%	100%	100%

<sup>6</sup> This refers to the Lloyd's syndicates that are carrying on insurance business under the Lloyd's Scheme or the Lloyd's Asia Scheme established under section 35B of the Insurance Act.



**PROPOSED RISK REQUIREMENTS ON OUTSTANDING PREMIUMS AND AGENTS' BALANCES ("OP")**

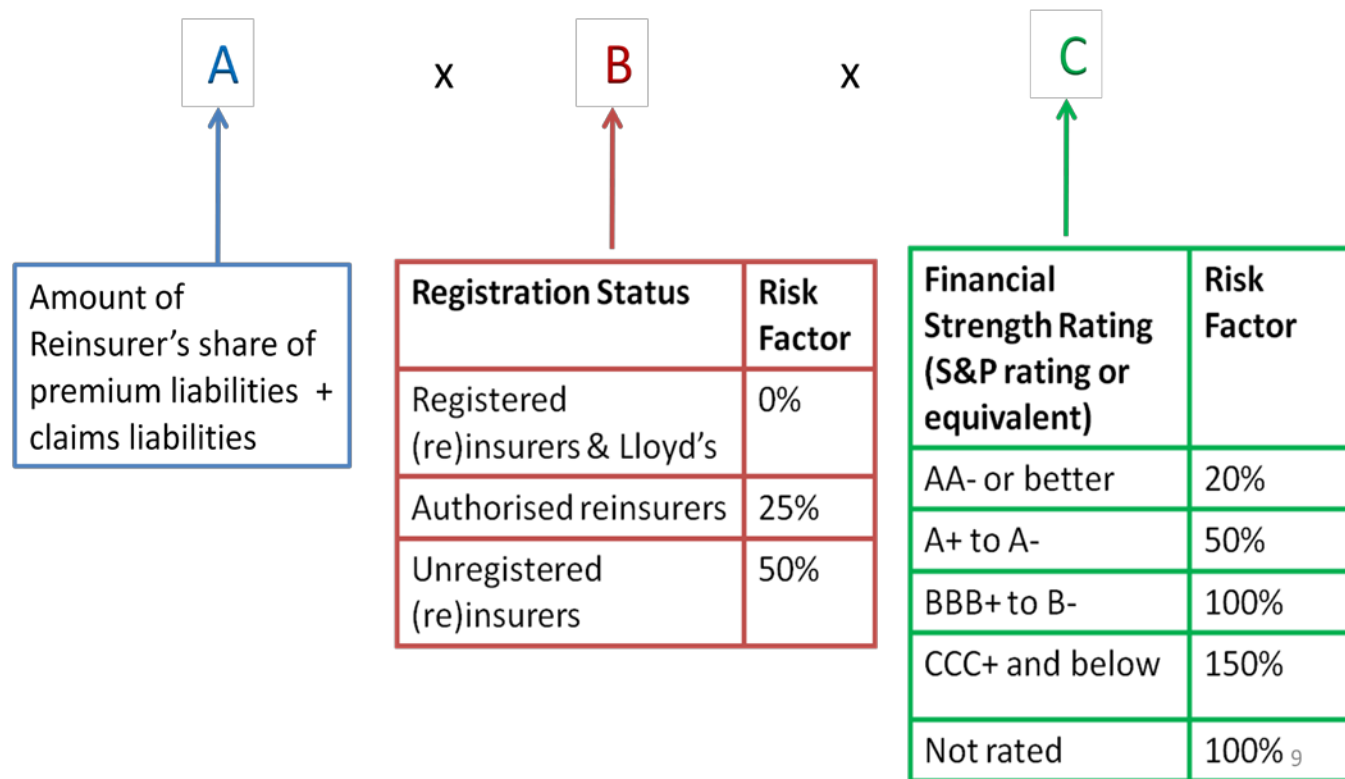
**Calculation Method**

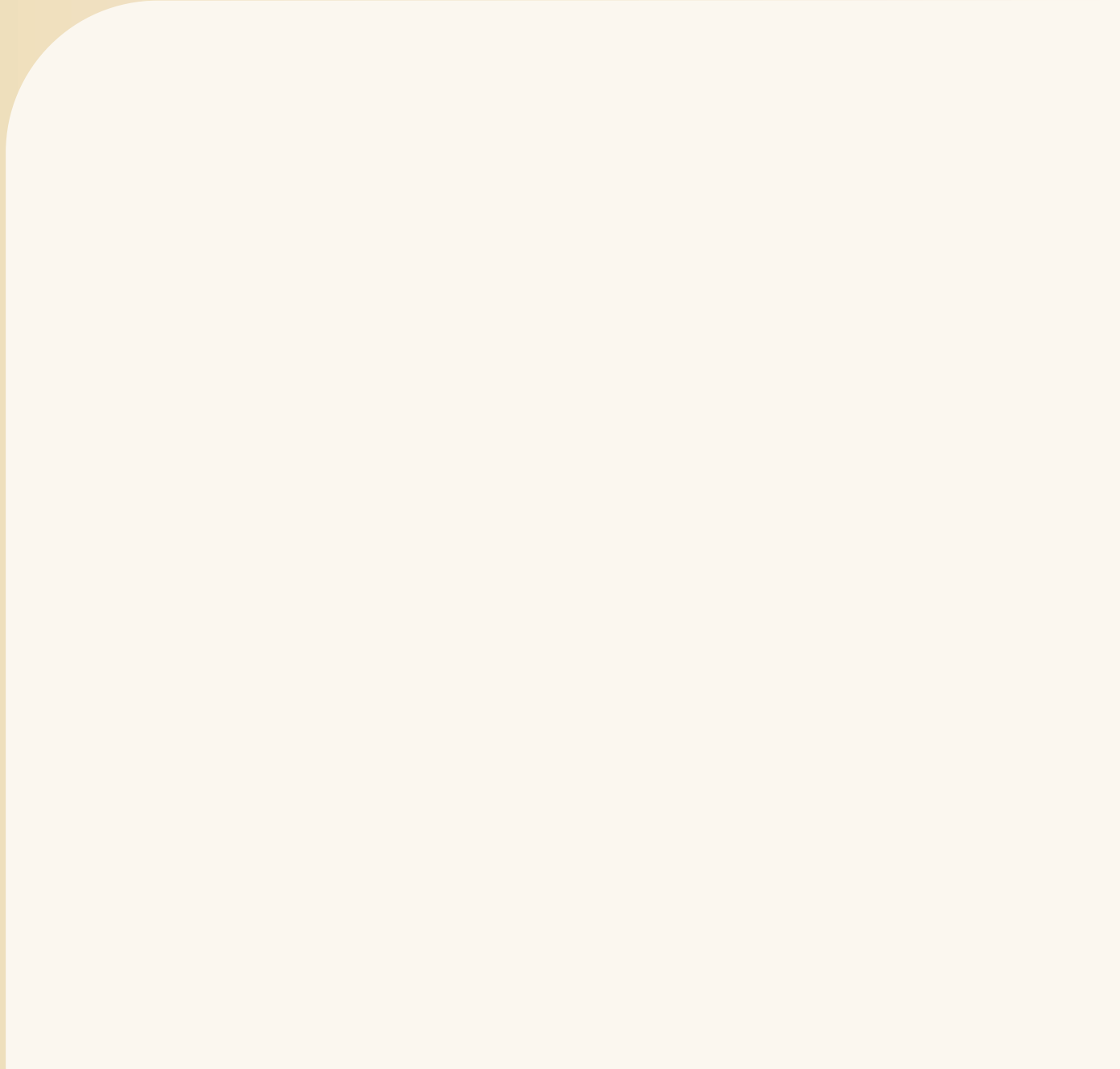


**Risk Requirements**

Counterparty Risk Class	S&P Or Equivalent Rating	Outstanding Period from Accrual Date		Risk Requirements
		A1. Direct Insurance Business (with the exception of B1)	B1. Direct Insurance with Bordereau Declaration	
		A2. Facultative Reinsurance Business	B2. Treaty Reinsurance Business	
A	AAA to AA-	90 days or less	180 days or less	1.60%
		More than 90 days but not more than 180 days	More than 180 days but not more than 270 days	5%
		More than 180 days	More than 270 days	100%
B	A+ to A-	90 days or less	180 days or less	4%
		More than 90 days but not more than 180 days	More than 180 days but not more than 270 days	12.50%
		More than 180 days	More than 270 days	100%
C & D	BBB+ to B-	90 days or less	180 days or less	8%
		More than 90 days but not more than 180 days	More than 180 days but not more than 270 days	25%
		More than 180 days	More than 270 days	100%

**PROPOSED REINSURANCE ADJUSTMENT**





Monetary Authority of Singapore