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**REGULATORY CHANGES RELATING TO MARKET AND OPERATIONAL RISK  
ASSESSMENT – CANADA – VAR MODELING FOR SECURITIES DEALERS**

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## Value at Risk (VaR) modeling for securities dealers

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## VaR modeling for securities dealers

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### Issues for discussion

- Why consider permitting VaR modeling
- Proposal objectives
- Comparison study performed
- Proposal details
- Rule drafting
- Other considerations





## VaR modeling for securities dealers

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### Why consider permitting VaR modeling

- The IDA assesses the risks (i.e., market risk, credit risk, operational risk and concentration risk) assumed by each of its Member firms through:
  - ➔ Regular risk assessments that lead to the preparation of the Risk Trend Report
  - ➔ Interim desk review work and annual field work performed to validate the accuracy of reported financial capital levels
- The IDA also assesses the ongoing effectiveness of risk based capital usage rules



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### Why consider permitting VaR modeling

- Capital usage rules include:
  - ➔ Capital requirements for positions and offsets held in a Member firm's proprietary trading account (market risk)
  - ➔ Margin requirements for positions and offsets held in a client account (credit risk)
  - ➔ Capital and margin requirements for excess exposures to any one counterparty or commodity (concentration risk)
  - ➔ Capital requirements relating to insurance coverage (fraud risk)





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### Why consider permitting VaR modeling

- Changes have been made over the past decade to increase the sophistication of capital usage rules, particularly those that relate to market risk and credit risk assessment
- Current strategy based rules approach for addressing market risk is unsustainable as:
  - The rules have been found to be overly conservative in that the number of permitted offset strategies within an issuer product group is limited and issuer risk diversification is not considered; and
  - The rulemaking and compliance burden associated with the strategy-based rules is increasing due to the increasing number and complexity of securities products.



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### Why consider permitting VaR modeling

- Current counterparty credit risk categorization approach (i.e., AIs, ACs, REs and Other) for addressing credit risk is unsustainable as:
  - Categorization is not always reflective of the credit risk
  - Categorization has lead to unintended regulatory results (i.e., immediate capital hits relating to borrow / lend transactions)
- Efforts have been made to try to optimize existing requirements but the existing requirements are no longer adequate to properly address market and credit risks





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### Why consider permitting VaR modeling

- In light of this the IDA has reviewed the ongoing effectiveness of its capital formula; specifically, the ability of the capital formula to properly address risks assumed by the Member firm
- Permitting the optional use of VaR modeling to determine the capital requirements for positions and offsets held in a Member firm's proprietary trading account is the first initiative resulting from this review



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### Proposal objectives

- To permit the optional use of VaR modeling for determining the capital requirement associated with a Member firm's proprietary inventory security positions, provided certain conditions are met
- To make the regulatory capital requirements that apply to the market risk associated with a Member firm's proprietary inventory security positions consistent with those that apply to other Canadian financial institutions





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### Capital formula comparison study performed

Risk Type	OSFI Requirements		IDA Requirements
<b>Market risk</b> [proprietary inventory positions]	VaR modeling permitted	VaR modeling permitted	Fixed margin rates for unhedged positions; strategy based rules for hedged positions
<b>Credit risk - Institutional clients</b>	Relatively simple standardized approach	Proposed credit rating based approach	Relatively simple standardized approach based on counterparty classifications
<b>Credit risk - retail clients</b>	Relatively simple standardized approach	Proposed credit rating based approach would yield similar results to <b>IDA Requirements</b> as would assess value of credit risk collateral	Same as <b>Market risk</b> requirements above
<b>Operational risk</b>	No current capital requirement	Proposed capital requirement	No current capital requirement



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### Proposal details

- The use of VaR modeling will be permitted if:
  1. The Member firm provides the greater of (a) \$10 million and (b) 25% of the calculated VaR capital requirement, as its minimum capital requirement; and
  2. The Member firm certifies that the VaR modeling methodology it uses complies with the Basle Capital Accord recommended qualitative and quantitative standards; additional standards to be met with respect to liquidity risk assessment will be added





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### Rule drafting

- Rules drafting will only involve making a minor addition to Regulation 100.12 to permit optional use of VaR modeling where a higher minimum capital requirement and model certification are provided
- Most of the comments received to date have not been on whether or not to allow the optional use of VaR but whether the proposed \$10 million minimum capital requirement is appropriate (i.e. barrier to entry or necessary operational reserve to support modeling approach)



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### Other considerations

- Reliance on other regulators? (**No**)
- IDA staffing needed to support the use of VaR modeling? (**Yes; costs to borne by those opting to use VaR**)
- Non-consolidated versus consolidated VaR modeling (**Non-consolidated**)
- Internal model verification required? (**Yes; either by internal audit staff or other independent expert**)





## VaR modeling for securities dealers

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### Other considerations

- Implementation options
  - ➔ VaR modeling with a lower threshold concentration test than currently set out in Schedule 9
  - ➔ VaR modeling for certain markets only (i.e., debt, listed equities and related derivatives only or permitted for all securities / markets)

