The evolution of Collateral Management

A journey to modernizing the collateral infrastructure in Canada

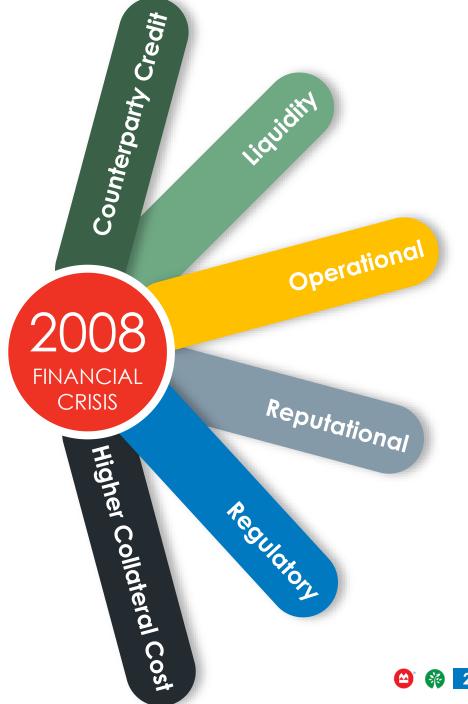




Collateral Management Defined

Historically defined as:

The process of managing assets pledged by one party to another to mitigate credit risk between the parties and to minimize the effects of potential default.





... the effectiveness and efficiency in utilizing a single piece of collateral, to most benefit the organization.

Regulatory Evolution

2013 2014 2015 2017 2018 2019 2010 2020 NOW **JUL 2010 JAN 2013 MAY 2014 JAN 2015 MAR 2017 SEP 2018** 2019 **JAN 2020 FUTURE** UMR OSFI adopts Basel III Dodd-Frank OSFI adopts OSFI adopts Canadian **Basel Capital** Canadian Act enacted Basel III LCR NCCF banks Variation Basel Adequacy banks Reform under the Margin rules Guideline for Requirements required required Total Loss FRTB 2024 Obama **SEP 2013 OCT 2014** to begin completed to begin administration Basel & OSFI adopts reporting Absorbing reporting IOSCO first LCR first NSFR in response Basel III NSFR Capacity Leverage to the global publish (TLAC) Requirements financial crisis in effect marain **OCT 2018** requirement 2010/2011 OSFI Leverage T+1 initiative standards Basel (non-CCP Requirements (NI 24-101) OTC Guideline for Total Loss derivatives Absorbing (UMR) Capacity (TLAC)

First phase completed SEP 2016

To date, post-GFC regulations (Dodd-Frank Act, Basel, UMR, etc.)

have increased collateral requirement by

\$1 trillion across

global financial institutions

UMR Initial Margin rules phased in

SEP 2022 (after COVID-19 delays)

Final phase

completed

NSFR Requirement led to a move of ~5-10% from <6m MMKT funding to >6m MMKT





Potential new regulatory requirements could have adverse impacts on collateral management causing unintended market consequences.



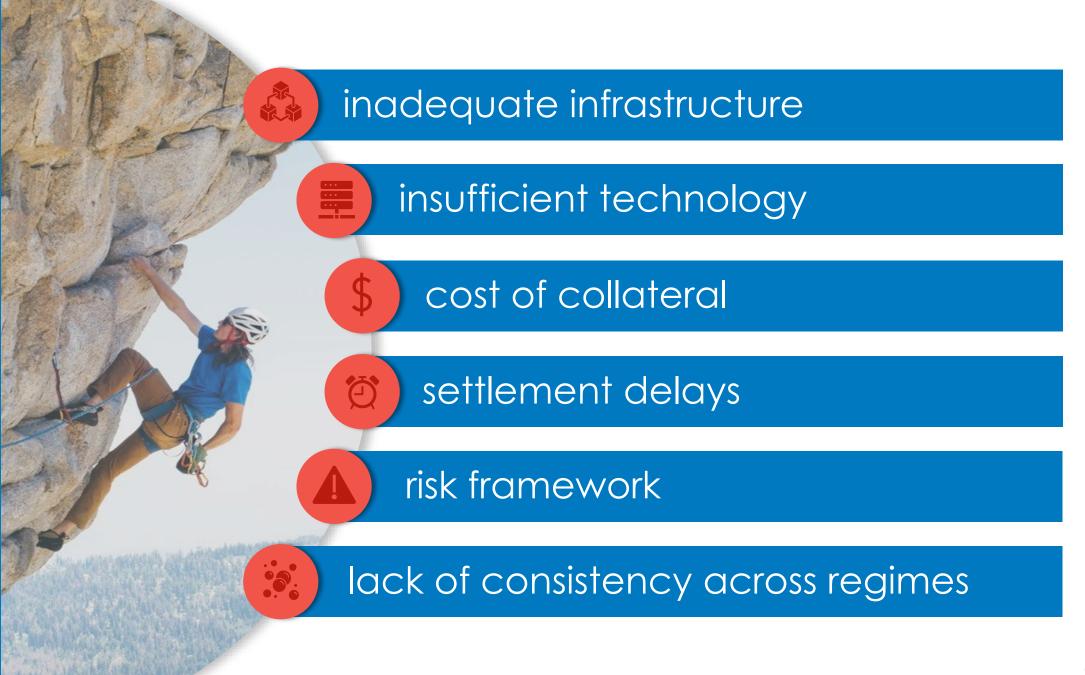
DOMESTIC STABILITY BUFFER

SURCHARGE FOR LARGE BANKS

CAPITAL CONSERVATION BUFFER

MINIMUM CAPITAL LEVELS

Sell-side Concerns Shared Concerns Buy-side Concerns Regulation drives collateral Optimizing the use of collateral Minimizing collateral to meet regulatory requirements requirements. management. and generating returns. Intraday collateral monitoring More collateral needed in terms of operational More collateral is required in IM/VM, which increases the movement and valuation of from both sides. cost of trading derivatives. collateral during market volatility. Higher quality collateral is in Segregated assets: unable to demand. use assets held in custodian BA market disappearance, accounts. (\$91B of C\$ investment) Central Bank intervention, while which will increase demand beneficial in a time of crisis, can Swap dealers are reluctant of other C\$ products in limit the fluidity of collateral. to accept C\$ collateral (in Canada. other jurisdictions). An increase in margin call Disintermediation rises requirements, caused by market Higher legal, technological, as clients seek interest away volatility, and limitations on and operational costs. from banks resulting in infrastructure creates challenges shadow banking. for C\$ collateral to circulate. Potential drag on returns.





Operational Efficiency

to settle trades without delays and minimize failed trades across the street

Intraday Collateral Movement

to be able to price and value intraday collateral, driving robust risk management practices

Clearing

directly reduces
interconnectedness,
thus protecting
market participants
in the event of default

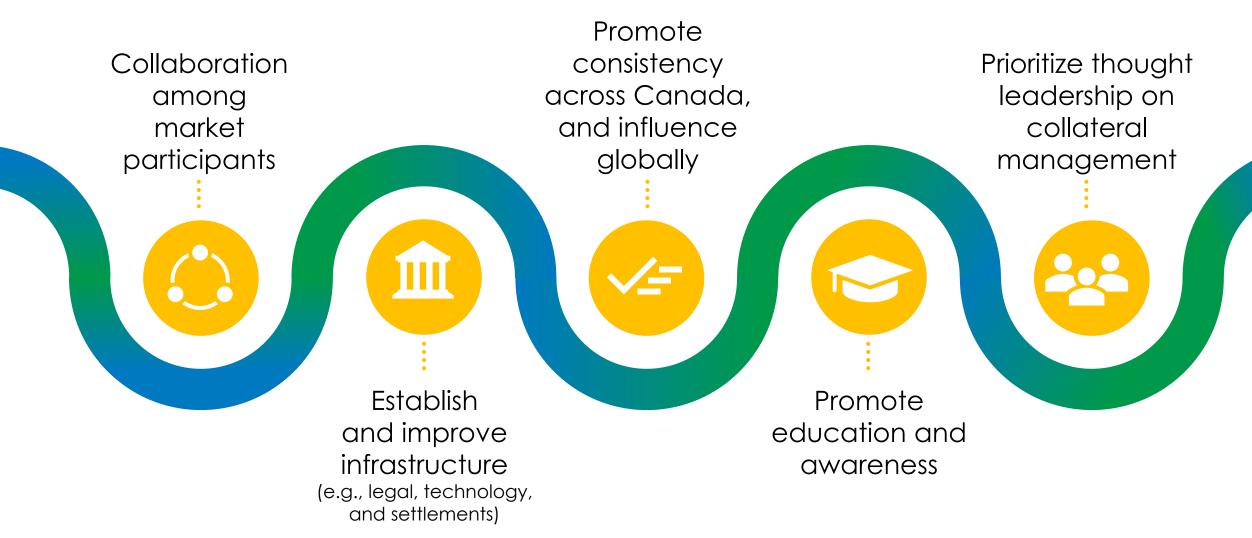
Triparty in Canada

to provide seamless collateral management bringing together repo, securities lending, and margin management

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How do we get there?



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