A comparison between FRTB and CAR

After five years of discussion, four quantitative impact studies, and three consultative papers, the Basel Committee on Banking Supervision (BCBS) published their foundational Minimum capital requirements for market risk on January 14th, 2016. Often referred to as the Fundamental Review of the Trading Book (FRTB), the document sets out revised standards and is intended to replace existing global regulatory requirements for estimating regulatory market risk capital. The objective of this series is to provide a Canadian perspective on the new rules by highlighting the key differences and similarities between FRTB and the current Capital Adequacy Requirements (CAR) guidelines that have been adopted by Canadian banks, and potential synergies that can be leveraged between the two regulatory programs. Part 1 provides an overview of the comparison. Part 2 and 3 will focus on the details in the Standardized approach and Internal Models approach respectively.

Synopsis

— The Fundamental Review of the Trading Book (FRTB) rules have recently been finalized and are going to have a huge impact in Canadian banks.

— Compared with the Capital Adequacy Requirements (CAR) guidelines that have been adopted by Canadian banks, FRTB has a more prescriptive definition between banking and trading book, introduces new concepts of risk measures and adds more mandates in model methodology and approval processes.

— However, there are still similar concepts and principles between CAR and FRTB that can be leveraged, which will help ease the pain of FRTB implementation to a certain degree.

FRTB sets out revised standards and is intended to replace existing global regulatory requirements for estimating regulatory market risk capital.
OSFI’s initial CAR guidelines first came into effect on November 1, 2007, with the overall objective of presenting Canadian banks with guidance in adopting the Basel frameworks. The guidelines reflected the requirements set out in the BCBS’s Basel II and III frameworks. It also includes updates of relevant parts of the 1988 Basel Accord and the 1996 amendment to the Accord that sets out a framework for calculating the capital requirements for market risk. Although CAR does not yet reflect the latest Basel III regulatory framework, OSFI’s aim is to ensure the CAR guidelines remain comprehensive and up-to-date, and the intention is to incorporate Basel III capital standards in the future. Future CAR guidelines are expected to reflect the changes stipulated in FRTB, and Canadian institutions will be expected to adopt the revised guidelines in the future. The Basel Committee deadline for implementation of the revised market risk framework is year-end 2019 while OSFI will set out the deadline for Canadian banks.

Chapter 9 of the CAR guidelines includes the most recent requirements for market risk capital. This chapter is drawn from the BCBS Basel II framework and has been effective since April 2014. Under this framework, institutions may choose between two methodologies in measuring their market risks: the standardized approach (SA) or internal models approach (IMA), however, institutions that start to use the models approach for one or more risk factor categories will, over time, be expected by OSFI to extend the models approach to all market risks (CAR 224). The standardized methodology uses a “building-block” approach, which means the capital charge for each risk category is determined separately. On the internal models side, the focus of most internal models is an institution’s general market risk exposure, which is captured by Value at Risk (VaR) and Stressed VaR. Specific risks not captured by VaR and Stressed VaR are measured through Incremental Risk Charge measurement systems.

**Capital adequacy requirements**

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FRTB introduces a new standard for market risk minimum capital requirement. This standard is uniformly applied across jurisdictions. While national and regional banking regulators have yet to publish revisions to existing regulation governing minimum capital requirements for market risk, FRTB proposes significant changes to the way institutions measure and manage their market risk. As a result, there will be a notable impact on capital, and the median market risk capital charge is expected to substantially increase. Not only will institutions need to make significant changes to their operations, but they must do so in a timely manner. National banking regulators are expected to issue final regulations by January 2019, with compliance and reporting by institutions to follow shortly after by year-end 2019. Given the widespread impact and accelerated timeline of the standards, it is critical that institutions start implementation as early as possible.
Key changes from current CAR to FRTB

— **Standardized approach calculation now mandatory:** Both FRTB and CAR offer banks a choice between a standardized approach and an internal models approach for determining capital requirements. However, while CAR states that “In measuring their market risks, institutions may choose between two broad methodologies: the standardized approach or internal models. [BCBS June 2006 par 701 (i)]”, under FRTB all banks must compute the standardized approach capital requirement, as this amount will be used to construct a “floor” on the minimum capital charge to hold.

— **More sophisticated standardized approach:** CAR and FRTB use similarly structured standardized approaches. The capital charge for each defined risk component is determined separately, and the total capital charge is an aggregation of the individual risk component charges (CAR 11, 47; FRTB 47). However, FRTB uses a sensitivity based approach as well as defines more risk classes than CAR. For FRTB, three sensitivities including delta, vega, and curvature must be calculated for each risk class compared with the much simpler calculation under CAR (e.g. in some instances, only risk factors with defined values need to be applied to the positions to calculate the specific risk in CAR). FRTB also incorporates a default risk charge and a residual risk add-on in the standardized approach.

— **More rigorous internal models approval process:** Canadian banks wishing to implement the internal models approach under FRTB will be subject to a more rigorous model approval process than was previously required by CAR. Potentially the most impactful change arising from FRTB regulations is that internal models will be subject to desk-level regulatory approval, as opposed to model-level approval (CAR 185).

— **Switch from VaR to expected shortfall (ES):** The FRTB outlines a shift from previous CAR guidelines in regards to the minimum standards for IMA capital calculation. Expected Shortfall (ES) will take the place of VaR and Stressed VaR as the primary risk measure for capital requirements under the internal models based approach. The purpose of the change is to incorporate tail risk, which is not captured by VaR or Stressed VaR, into capital considerations and to shift to a more robust risk measure. This change is expected to increase capital charges under FRTB.

— **Revised boundary between the trading book and banking book:** Regulatory arbitrage can occur if institutions take advantage of the ability to lower their capital requirements by shifting assets between the banking book and the trading book. While CAR gives guidelines on how to divide instruments between the trading book and the banking book, FRTB establishes a boundary between the trading book and the banking book, clearly setting out which instruments must be included or excluded from the trading book, with the intention of reducing regulatory arbitrage.
What can banks leverage from CAR for FRTB?

Correlation trading portfolio: The definition of the correlation trading portfolio (CTP) is almost identical between the CAR and FRTB guidelines. Banks may leverage their existing correlation trading portfolios definition and financial instrument categorization. However, it must be pointed out that under CAR, the CTP may be capitalized using an internal models treatment but the new FRTB regulations dictate that the CTP’s risk must be captured using the standardized approach. This is largely due to regulatory concerns over the ability of internal models to adequately capture CTP’s risk.

Existing internal models approach: Adapting to the new regulations will come as less of a shock for banks who have been implementing OSFI-approved internal models based market risk management. The general criteria for implementing the internal models approach are the same in both CAR and FRTB, which include solid risk management system, experienced staff skillful in the use of sophisticated models and stress testing methodologies. Banks can build upon the infrastructure they have set up for CAR compliance to meet the new FRTB requirements.

Policies and governance frameworks: Both FRTB and CAR require the use of effective and consistent policies, procedures and documentation. CAR compliant banks can incorporate some of the established practices in the compliance program of FRTB.

Coming up next…..

In the next two parts of the series, we will dive into the details of the comparison in the Standardized approach and Internal Models approach with examples.
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