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NERA Trading and Capital Markets Regulatory Update

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Basel II Trading Book Capital Update

Crisis-Based Capital Rule Adjustments

After years of design, discussion with the industry, and refinements, Basel II trading book capital requirements took a sudden turn toward increased weight in early 2009.¹ Significant proposed increases, driven by a ratcheting-up of specific risk charges for securitization positions and the addition of a new “stressed” Value at Risk requirement, represented efforts by the Basel Committee to bolster capital for certain complex “price risks” that they perceived to have been under-charged, particularly in the context of a systemic financial crisis.

The early 2009 proposals, whose capital impacts had only been minimally analyzed at the time of release, were also part of a zealous overall shift in Basel capital ideology. The more aggressive trading book proposals and a flurry of other capital adjustments and work seem at least partly an attempt by Basel to remain in the forefront of financial capital regulation. Countless recent US and European speeches have called for increased capital, though Basel leadership is rarely mentioned.

¹ See “Revisions to the Basel II market risk framework - consultative version,” January 2009, available at <http://www.bis.org/publ/bcbs148.htm>.

Rule Impact Analysis

By summer of 2009, Basel groups presiding over the trading book charges had completed some meaningful quantitative analysis with respect to their earlier proposals. The results of a trading book impact study were released by Basel on 15 October 2009.² Though the study reports that trading book capital charges, on average, would roughly double as a result of the proposed frameworks, the study was not comprehensive and a large dispersion of institution results was reported. Additionally, the study appears to have derived charges under the proposed framework by using market data from 2006, rather than the more volatile current period. These hypothetical 2006 charges were compared to 2008 current charges to arrive at capital increase estimates. Given this, and a host of other short-cuts, the estimated capital increases reported by the study appear somewhat low, especially for larger trading institutions.

In fact, some industry sources familiar with the quantitative study reported that estimated capital levels under the early 2009 proposals may have increased total risk-based capital requirements for certain US Financial Holding Companies with large complex trading books by five times or more. Even some less trading-centric U.S. universal banks may have faced a doubling or tripling of total firm capital requirements, solely as a result of the proposed trading book changes. With knowledge of these untenable results, in July 2009 Basel issued revised trading book rules that retreated somewhat from the earlier 2009 proposal, but further complicated rules in the process.³

The Problem of Splitting Economic Hedge-Sets

From an economic standpoint, the most problematic aspect of the early 2009 proposal had been the blunt standardized specific risk charges required for trading book “securitization” positions (including the subset known as “re-securitizations”).⁴ Specifically, the rule required trading book securitization positions be charged gross individual specific risk charges, based on look-up tables derived from the banking book’s standardized securitization framework. This approach subjectively split-up many securitization positions from their hedges for capital calculation purposes. Previous trading book internal capital model proposals, including a refined Value at Risk (VaR) measure and the Incremental Risk Charge (IRC) had retained the ability to model risks at the portfolio level, and thereby reflect diversification benefits. However, the new splitting-up and application of gross charges to individual positions of securitization hedge-sets led to massive potential increases in capital requirements.

Though from a total price risk standpoint, all hedge-sets beyond perfect back-to-back matches encompass some level of basis risk, the impact of charging regulatory capital on a gross basis to opposite sides (e.g., long vs. short) of hedge sets not only removes incentives to hedge, it severely penalizes such hedging. It seems clear that the existing scale and ongoing importance of trading book securitization hedge-sets was initially under-estimated by rule-writers, but as the estimated capital impact under proposed rules became clear, Basel was forced to devise a work-around for the final version of the rule issued in July 2009.

² See “Analysis of the trading book quantitative impact study,” October 2009, available at <http://www.bis.org/publ/bcbs163.htm>.

³ See “Revisions to the Basel II market risk framework - final version,” July 2009, available at <http://www.bis.org/publ/bcbs158.htm>.

⁴ Securitizations may include asset-backed securities, mortgage-backed securities, credit enhancements, etc. For a full definition of “securitization,” see page 120 of “Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework - Comprehensive Version,” June 2006, available at <http://www.bis.org/publ/bcbs128.htm>.

Hedge-Set 1

Position/Hedge	Description	Required Specific Risk Charge	Economic Hedge Reflected?
CDO Security	Long BBB rated CDO tranche referencing traditional corporate bonds & ABS	Standardized Re-Securitization <i>(ABS reference makes CDO a re-securitization)</i>	No
CDS Protection Contracts	CDS protection purchased referencing traditional corporate bonds also referenced by CDO	Incremental Risk Charge Model <i>(assuming specific risk is VaR modeled)</i>	No

Hedge-Set 2

Position/Hedge	Description	Required Specific Risk Charge	Economic Hedge Reflected?
CLO Security	Long BBB rated CLO tranche directly referencing commercial real estate loans	Standardized Securitization <i>(Real estate loan reference assets makes CLO ineligible for correlation trading portfolio)</i>	No
Purchased Total Return Swap	Bank pays total return on Barclays BBB CMBS Index & receives LIBOR + 100	Standardized Securitization <i>*Gross charges applied to both position and hedge</i>	No

Hedge-Set 3

Position/Hedge	Description	Required Specific Risk Charge	Economic Hedge Reflected?
CDO Security	Long AA rated CDO tranche referencing traditional corporate bonds	Comprehensive Risk Model <i>(as a correlation trading position)</i>	Yes
CDS Protection Contracts	CDS protection purchased referencing traditional corporate bonds also referenced by CDO	Comprehensive Risk Model <i>(as liquid hedge to correlation trading position)</i>	Yes

Stressed VaR with Multiplier

The other major change to Basel's trading book pillar 1 capital framework in 2009 was the addition of a stressed VaR (SVaR) requirement. This new additional charge appears to have survived the July 2009 rule revisions, and is captured within the October impact study results. Though requiring an additional VaR capital charge based on an appropriate stressed look-back period addresses traditional VaR pro-cyclicality concerns, the rationale for the required SVaR multiplier, which currently starts at 3 and can climb to 4, is not explained. Future adjustments to VaR multiplier requirements may be forthcoming, as Basel seeks to calibrate overall resulting trading capital charges in coming months.

Though the SVaR addendum represents a new systems burden, most regulated institutions are familiar enough with VaR model requirements and maintain the necessary data and infrastructure to expeditiously implement an SVaR for regulatory purposes. This, along with the portfolio nature of VaR measures, which allow capture of diversification benefits, has kept industry resistance against SVaR relatively modest.

Final Remarks on Basel Trading Book Capital Requirements

Regulatory vs. Firm Approaches

By this time, financial industry participants have come to accept that significant additional capital will likely be required for regulated institutions, particularly with respect to trading and securitization positions. However, most industry participants have long argued for a conceptually consistent approach, whose scale and rationale can be communicated across a firm from traders to risk managers to board members. Given the complexity of current trading positions and portfolios, perhaps such a unified approach is not plausible. However, the further splintering of Basel trading book charges, along with the required use of a myriad of multipliers, scalars, and floors, has clearly complicated any intuition behind the charges. The fractured nature of the trading book framework will almost certainly leave a large gulf between regulatory capital and institutions' actual internal risk and capital approaches. This seems to make meeting the "use test" requirement, that the bank's internal risk measurement model for capital be closely integrated into day-to-day risk management, virtually impossible.

Tight Implementation Timeline

Challenges regarding implementation and associated capital planning with respect to trading book capital rules increase each day. With a required implementation date of 31 December 2010, and an impact study covering key aspects of the rule due only in March 2010, firms will have little time to build and test new models, much less effectively plan for any resulting capital changes. The ultimate scale of charges will likely depend significantly on rule interpretations by supervisors.

Does Basel Matter?

Finally, beyond detailed rule issues, it remains unclear if legislators in the US, Europe, and other jurisdictions will fully rely on Basel risk-based capital as a constraining standard for financial institution capital. In the US, under various proposed legislation, larger firms deemed Tier 1 Financial Holding Companies may need to comply with currently undefined standards that will likely exceed Basel-based charges. It is possible that in the end some non-Basel statutory rules may end up as the binding capital constraint for some financial institutions. Even more broadly, the size and scope of activities allowed by various financial institutions is under discussion in some countries. Over time, trading positions within companies controlling insured depositories could be reduced legislatively, should a Glass-Steagall-like paradigm be revived.



Other Developments: Federal Reserve Model Validation Guidance

In coming weeks, the Federal Reserve Board is expected to issue new supervisory guidance (i.e., SR Letter) on Model Validation requirements. Though piecemeal model guidance exists within other Federal Reserve issuances and manuals, the forthcoming letter aims to provide more consistent and comprehensive expectations regarding model validations for Federal Reserve supervised firms. To date, many banking firms, even those that are not National Banks, have relied on the Office of the Comptroller of the Currency's (OCC) outdated 2000-16 model validation issuance as a guide.⁷ The pending Federal Reserve letter, developed over the past several months, is likely to become the new US regulatory standard.

The new guidance is expected to be broad, applicable to pricing, risk, capital, and other types of models used within financial institutions. Though certain to include some technical requirements, it is likely to be largely principles and process-based, and therefore subject to supervisor interpretation. Broad areas expected to be addressed include:

- Key components of model validations
- Independence of validations
- Basis for and frequency of model re-validations
- Documentation requirements surrounding validations

Firms below a certain asset size threshold may be exempt from some or all of the requirements, given relatively lower perceived model-dependency. Larger firms supervised by the Federal Reserve should be prepared to compare current model validation policies, procedures, and documentation requirements against the forthcoming requirements and make adjustments where necessary.

⁷ OCC 2000-16, available at <http://www.occ.treas.gov/ftp/bulletin/2000-16.txt>.



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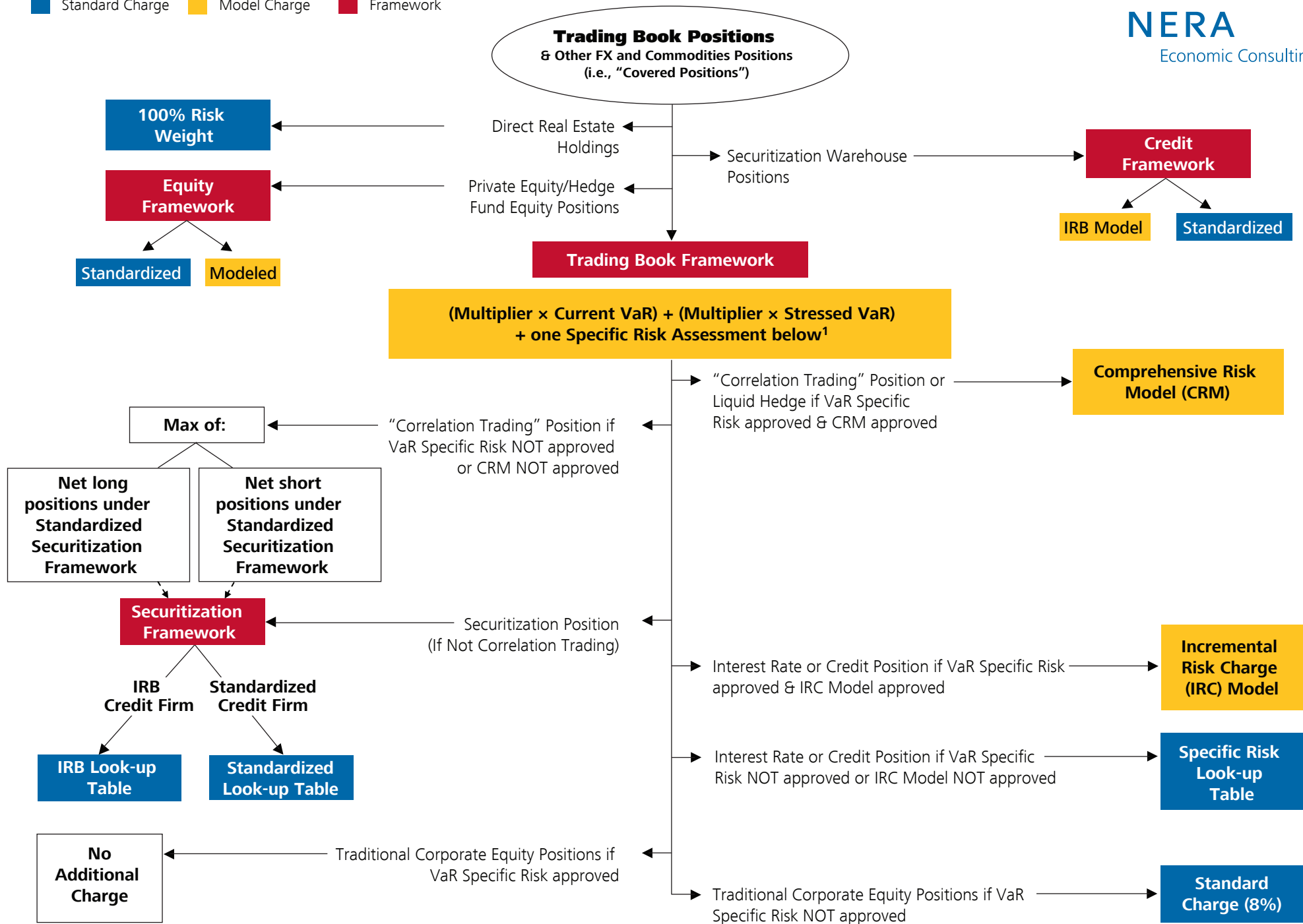
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¹ Positions not encompassing "issuer" risk, such as commodities contracts, do not require a separate Specific Risk charge, only appropriate modeling within VaR.