

Basel III We Hardly Knew You... Say Hello To "Basel IV"

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REGULATORY RULES GOVERNING BANKS

Is simpler really better?

- *Regulatory rules governing banks are established internationally under the Basel framework.*
- *These regulations have continued to evolve since the financial crisis, incenting ongoing improvement in risk management practices.*
- *The Global Risk Institute, a Toronto membership based risk research institution, has concluded that the most recent set of proposals, sometimes informally referred to as "Basel IV", risk undermining much of the investment made in risk management human capital and technology, as well as perversely incenting banks to hold higher risk assets.*

As bank executives well know, there have been significant revisions to the Basel framework over the past seven years following the global financial crisis. While these revisions focused primarily on more stringent capital requirements (focused on higher quality common equity) and new liquidity requirements (aimed at insuring banks are always well positioned to meet their near term cash requirements), the more recent focus is reviewing the advanced internal risk modelling approaches. Proposals include enhancements to the Standardized Approach (a more simplistic, factor based risk measure), significant restrictions / exclusions on the use of internal models (for example banks and large corporate counterparties), and then also utilizing

the standardized approach as a floor to the more sophisticated model based approaches. While the model based approaches are very detailed and can be quite complex, the Global Risk Institute believes that there is significant risk in over - riding such models in the interest of simplicity and comparability.

The Global Risk Institute is supportive of the Basel progress over the years, and recognizes that the enhancements found through Basel III have strengthened the international banking system.

A quick chronology of the Basel evolution may be helpful:

- *In 1986 the Basel framework introduced the more simplistic, Standardized Approach, made up of factors applied to both on and off balance sheet exposures.*
- *In 1997, usage of internal (Value at Risk) models was introduced for market risk, subject to a significant regulatory vetting and approval process.*
- *In 2008, and just at the onset of the financial crisis, the Basel II framework was being rolled out, which allowed firms to use an internal models based approach for credit risk factors. Risk Weighted Asset reductions that resulted from the implementation of internal models were subject to a Basel 1 floor calculation (i.e. internal models often result in lower capital requirements; the floor restricts how much of a reduction is permitted).*

- *Also, Basel II formalized the Three Pillars of the regulatory capital framework, where the internal calculation of RWAs and capital is the first pillar, a detailed capital adequacy and regulatory review process is the second pillar, and market discipline (i.e. significantly enhanced external disclosure) is the third pillar.*
- *Then following the financial crisis came Basel III, which included a significant review and redefinition of capital (greater emphasis on higher quality, common equity), along with the introduction of the liquidity framework, which defined liquidity ratios and standards.*

So now in 2016, Basel III is significantly implemented, albeit with certain phase-in allowances to accommodate jurisdictions with more ground to make up.

In Canada for example, the Office of the Superintendent of Financial institutions is regulating the banks on an "All In" basis, with most rules now fully implemented.

Still, over the past couple of years there have been a number of studies and consultative documents, covering credit, operational and market risk approaches – and most recently, on March 24, 2016, a Proposal for Comment was released which would significantly restrict the use of models for credit risk. Along with suggesting significant revisions to the capital framework, and in particular the Standardized Approaches, much attention has been given to cross bank and cross jurisdiction comparability; significant differences have been noted in capital requirements across banks, leading regulators to question whether the flexibility allowed through the more advanced internal modeling approaches was undermining market confidence in bank capital.

Regulators who are concerned with inconsistencies, along with the complexities of the models based approach, are proposing to eliminate the advanced model based approach for certain portfolios (e.g. banks and larger corporates), and instituting parameter floors to limit the impact of models in the remaining portfolios. In addition, the proposals

under consideration include a new "output floor" calculation, which would further limit the impact of the more advanced model based approach. Clearly this line of thinking seeks to rebalance the struggle between simplicity and comparability of bank capital calculations on the one hand, versus firm specific, advanced risk based modelling on the other.

The Global Risk Institute understands the competing priorities of the Basel Committee, and their attempts to find the appropriate balance

It is quite possible that their proposals to rebalance in favour of simplicity and comparability could lead to serious, unintended consequences. A significant concern we have is with the use of the revised Standardized Approach to either replace or act as a floor on the advanced model approach. While this would in all likelihood improve comparisons across banks, it does so by disrupting the fundamental relationship between risk management measures with pricing and hedging activities. Significant improvements in risk management practices and risk modeling have been made in recent years, in part due to the regulatory incentives to reduce capital through the model based approaches.

The incentive for banks to continue to invest in best practice, risk measurement models would be reduced by such restrictions and over-rides.

This advancement has included investments by banks in expanding and upgrading their risk management talent; we have also seen the proliferation of academic programs in both risk management and financial modeling. Further, once implemented the model overrides and capital floors could lead to unintended behaviours by banks. When floors cause lower risk assets to attract additional capital, the return on equity of such holdings is reduced and distorted, which could lead banks to rebalance to higher risk assets, with higher returns, to restore their profitability balance. While economically logical, this would be a perverse outcome of the capital framework rules whose central theme is to increase the stability of the banking system.

We would caution against program changes that break the linkage between risk and market based economics.

In fact the leverage rules, which do not take into account risk weightings, are already a concern in this regard, and so adding a second, more direct distortion is a significant concern.

The Canadian Banks, for example, have been using the Advanced Internal Ratings Based Approach for credit risk since 2008, including annual updates and ongoing OSFI reviews; this includes a proper functioning Pillar 2 which allows for regulatory reviews and capital add-ons if there are concerns regarding model based capital calculations. It also includes a regulatory required model vetting process, where both OSFI and a separate model risk group in each bank validates the models and parameters before they are approved for use. We believe this is a more appropriate way to balance the competing objectives of risk based capital vs simplicity and cross-bank comparability.

There are also a number of detailed proposals that update the Standardized Approaches, generally increasing the amount of capital required to be held.

GRI offers a couple of notes of caution. One proposal is to replace the current practice of utilizing external rating agency ratings to drive capital requirements for credits to other banks, with a simple formula that is highly reliant on the bank's capital ratio. Again, we are concerned that there may be unintended consequences from such a change, given that banks credit facilities are generally reciprocal; if one bank's capital ratio goes down, then all banks with credit to that bank would see their RWAs increase, causing their capital ratios to go down. But then, with the credit facilities being reciprocal, the first bank in this example would now have to change their rating of their creditor banks, causing their RWAs to go up once again, and so on. We are not sure this level of pro-cyclicality was intended.

Significant advances in risk management practices and modeling have been made since the financial crisis, resulting from ongoing investments in both human capital and technology by the banks, and incentives by regulators to develop more advanced risk systems. While the regulatory concerns with the current capital approaches may be well founded in some jurisdictions, we believe it is important that regulators and banks continue to incent and invest in ongoing risk model improvements, which are well connected to the actual pricing of products and hedging of risks. A step backwards towards a more factor based approach removes much of the incentive for the continued evolution of risk management best practices, and in fact may lead to significant unintended consequences.



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