

FRTB

Special report 2020

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Getting the fundamentals in place

It's Sunday March 8, 2020 – the eve of one of the wildest weeks of trading in modern financial markets. The chief risk officer (CRO) of a large regional bank has an idea of what's in store after a deal between major oil-producing nations to bolster slumping crude prices collapsed in acrimony on Friday evening, prompting a working weekend of sleepless nights.

The lender is a sizeable one, with a sophisticated markets business; most of its trading desks have opted to model their own market risk capital requirements under the Fundamental Review of the Trading Book (FRTB) – which entered force on schedule in 2019 – rather than relying on regulator-set standardised approaches.

Fast forward to the end of April, and every market in which the bank operates, from equities to agricultural commodities, is crashing and whipsawing. The firm has suffered more than 30 backtesting exceptions, sending its trading desks crashing out of eligibility to model their own capital requirements, and forcing it onto the static grid-based approach, with predefined risk weights for different assets it holds – almost all of them higher. This is forcing them to jettison positions and sell inventory into a firestorm, right at the moment clients most needed it to be there as a market-maker.

The capital relief its local regulator is offering as a makeweight in the interim is time-limited, and the bank will soon see requirements balloon to the point where making markets on even vanilla products is uneconomic.

Welcome to a future alternate reality in which FRTB entered force in time for the Covid-19 crisis, but few were ready for it.

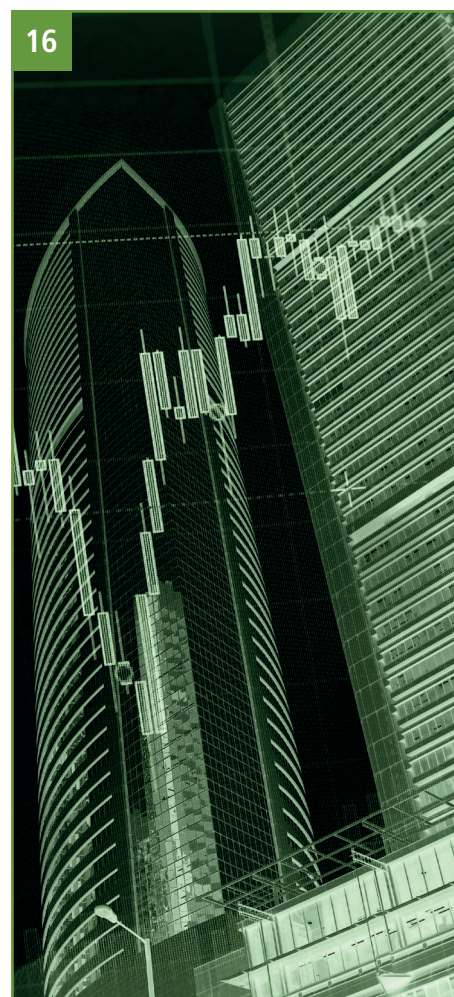
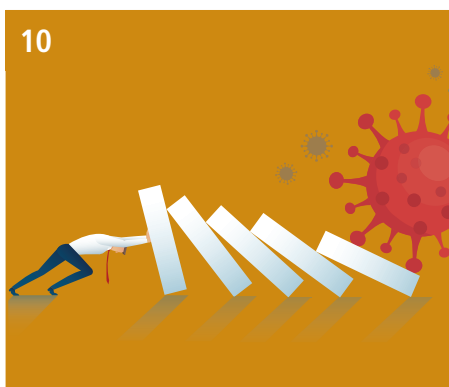
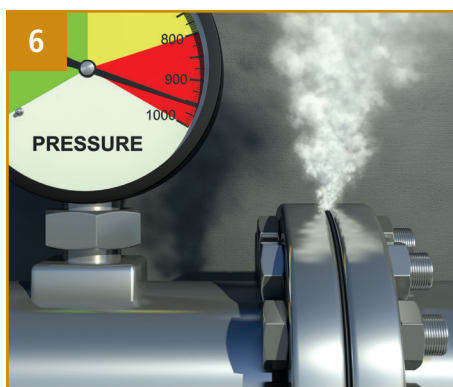
The sole saving grace for the CRO is that, in part by forcing capital higher to begin with, FRTB would have nixed some of the procyclical effects of the previous market risk capital regime – the consequence of a double-counting effect that persists between two measures of trading book risk contained in the previous regimes under Basel II and 2.5. But most market risk experts suggest that wouldn't be enough to negate the attendant jump in requirements that will come with an enforced switch back to the standardised approach to capital calculation banks will incur as a result.

For many years during FRTB's troubled gestation, regulators knew that making the internal models approach too operationally complex and capital-intensive would mean few outside the biggest banks wanted to use it – with the potentially dire consequence that all mid-sized and even some larger banks would wind up focusing liquidity provision solely on liquid benchmarks, leaving them all exposed to the same risks and underlyings when asset prices collapse.

Many warned at the time that such flaws were a consequence of an aggressive timetable at the time of writing the rules, and would lead to suboptimal outcomes – and so it proved. FRTB's initial timetable proved unworkably optimistic – it was hived off from the rest of Basel III, then cracked open and rewritten by a new Market Risk Working Group led by the Bank of England's Derek Nesbit, under whom banks report having earned a fairer hearing for their concerns.

Already, the start of the new regime had been pushed back to 2022; with final implementation now delayed to 2023 along with the rest of Basel III as a consequence of Covid-19, gauging the impact remains a way off – and, even then, its true final cost will not become clear until it is thoroughly road-tested in the next market meltdown.

Tom Osborn
Editor, Risk Management, *Risk.net*



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Covid-19 and Libor pressure

Industry leaders discuss the pressures FRTB is placing on banks' data infrastructure and systems, how FRTB may constrain banks' ability to manage future volatility, and the potential complications to implementation caused by such factors as the Covid-19 pandemic and the transition away from Libor

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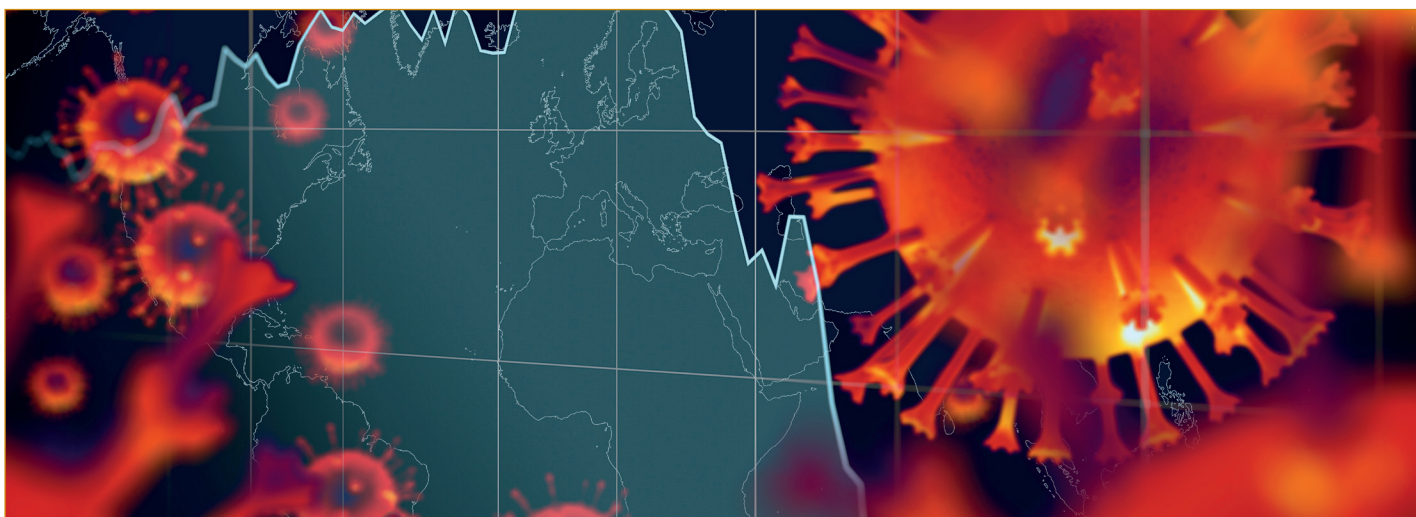
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FRTB implementation

Covid-19 and Libor pressure

Industry leaders discuss the pressures FRTB is placing on banks' data infrastructure and systems, how FRTB may constrain banks' ability to manage future volatility, and the potential complications to implementation caused by such factors as the Covid-19 pandemic and the transition away from Libor



Bloomberg

Essan Soobratty
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What impact has the Covid-19 pandemic had on banks' FRTB preparations?

Essan Soobratty, Bloomberg: Regulators providing additional time for compliance because of the Covid-19 pandemic affords banks the flexibility to reprioritise resources in the short term where necessary without falling behind in their FRTB implementation. Despite this, banks have mostly continued along their established pre-Covid trajectories. This extension is being viewed as less of a delay and more an opportunity to continue at a pace that allows for a more strategic implementation.

Eugene Stern, Bloomberg: It is useful to separate risk modelling issues from operational ones. On the one hand – the operational side – the pandemic has resulted in a one-year delay to Basel III implementation and delays to many national supervisors' FRTB deadlines. Banks that may have fallen behind on the original dates now have time to catch up.

On the other hand, some banks that were close to being on schedule have been able to pause and address the issues arising out of the Covid-19 pandemic.

These banks will now need to ensure they refocus on FRTB to meet the new deadlines. In a few years, we may find the legacy of the crisis to be on the risk modelling side, through immediate issues such as negative commodity prices, or more long-term questions about improving our risk models to handle the market volatility we have seen this quarter.

David Cassonnet, ActiveViam: Institutions with FRTB projects in their current and near-future pipelines have kept them because they do not want to lose budget for this year – especially those that need to meet the December 2020 revised Capital Requirements Regulation (CRR II) deadline. Since regulators had already delayed the FRTB implementation by a year, some banks had a late start. For example, to be ready for January 2022, a parallel run in 2021 will be required for one year – which means development of the systems during 2020 – so it has to be started now.

Some banks have already chosen their risk/valuation engines or are migrating their existing solutions to handle sensitivities/profit-and-loss (P&L) computations and see FRTB as something to be tackled using the lowest-cost solution. We see this as a mistake and a missed opportunity. The extra time can be used to create a holistic approach, inclusive of everyday risk management. While a cheaper solution may tick the box, one that provides the ability to combine internal risk management – which a bank needs to do anyway – with regulatory compliance will provide the most cost savings and benefits in the long run.

Risk modelling lead at a European global banking group: On one hand, Covid-19 led to a change in the regulatory agenda with a postponement of activities related to the updated CRR II at least to year-end. This slippage is adding even more complexity to an approval process that, since the outset, has

always been aimed at moving targets, while the European Central Bank has currently not communicated any postponement to the Q3 2021 deadline for applications. This would clearly put any project management office under severe strain – even before the Covid-19 pandemic. On the other hand, banks will need to rethink priorities and redirect resources. While the reporting requirement will apply in EU form in Q3 2023, uncertainty as to how the ‘own funds requirement’ implications of the reform are applied might de-prioritise FRTB-related implementations to avoid sunk costs in the absence of clear and crystallised regulatory guidance.



David Cassonnet
Director of Business Development
activeviam.com

Considering the requirement for value-at-risk (VAR)-based backtesting, to what extent will FRTB constrain banks’ abilities to manage future volatility?

David Cassonnet: VAR backtesting requirements should not impact banks’ ability to manage future volatility. Capital requirements governance and processes should be run in parallel with actual business risk management governance and processes. This means implementation of VAR backtesting is not mutually exclusive, with the ability to manage future volatility. If the two processes are robust and well established, one should support the other.

Eugene Stern: FRTB is a capital model, and managing capital is not the same as managing volatility. Capital models should be asking what sort of event a bank needs to be able to survive (or not), and the position in which it might find itself after the deadline. Market risk capital models have been moving away from straight volatility forecasting at least since the financial crisis that began in 2007–08, after which we saw the introduction of stressed VAR. FRTB is another step in this direction, with stressed expected shortfall (SES) for internal models, as well a standardised approach (SA), serving as either a floor or a binding capital calculation, with no volatility model at all. The VAR backtesting requirement should be seen as incentivising banks to avoid resting their market risk capital frameworks on volatility models that might not be very robust.

Risk modelling lead: The CRR II transposition of the Basel Committee on Banking Supervision text contains a definition of VAR to be used for backtesting purposes that is much more restrictive than the Basel 16 and the Basel 19 versions of the standard. In particular, the requirement is for such VAR not to include any non-modellable risk factors (NMRFs). The corresponding actual and hypothetical P&Ls are inclusive of both modellable risk factors and NMRFs, which is like comparing apples with pears. However, a bank is allowed to disregard any exception that might be induced by the missing risk factors in case there is sufficient SES capital set aside for NMRFs. While such a set-up – despite its statistical incoherence – can ensure sufficient capitalisation across all types of risk factors, it is difficult to see how such VAR could be used for business steering or for risk management purposes. A metric used to measure risks and manage market volatility must be based on the full set of risk factors moving jointly according to their interrelationship in the market.

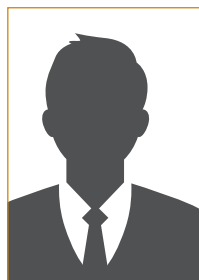
The Basel Committee on Banking Supervision’s Basel III April monitoring report sparked debate over banks’ varying assessments of capital requirements. What can regulators do to ensure a level playing field?

Risk modelling lead: They should approach banks perceived as outliers and conduct a deep-dive on the reasons for such divergence.

What are the pros and cons of the different FRTB approaches to calculating market risk capital, and how have these changed in the current environment?

Eugene Stern: The first thing to note is that both the SA and internal models approach (IMA) to FRTB are quite prescriptive, certainly compared with most banks’ capital modelling under Basel 2.5. In both tracks, a tension can be observed between the pros of best practices and the cons of higher costs, as well as potential over-standardisation. Bloomberg tries to help banks attain best practices in risk modelling without having to bear the full cost of building the data and analytics platforms in-house, while also giving them the flexibility to make their own choices on model configuration and data mappings.

David Cassonnet: From our FRTB working group in Europe, the Middle East and Africa, clients have told us the decision to perform the SA or the IMA may have been influenced by a local regulator, so not all banks are able to choose freely. Generally speaking, whether IMA is preferable to SA is a desk-driven decision, contingent on the composition of the underlying portfolio. The ability to take out or insert a set of trades, change values and test the capital charge is key here. Banks may opt for the SA if they have not laid the groundwork – quantitative analysis and backtesting – for the IMA. While this may work operationally, it may not be the best way to optimise the FRTB calculations and therefore the bank’s capital.



Risk modelling lead at a
European global banking group

Risk modelling lead: The IMA is applied at desk level, and quantitative standards such as the P&L attribution test and backtesting need to be met on a permanent basis. Failure to meet them means downgrading to a typically more punitive SA. Market events such as those experienced throughout the Covid-19 pandemic can easily lead to the failure of both tests with subsequent aggravation of risk-weighted asset (RWA) density with all the problems induced by RWA procyclicality.

The new default risk capital seems an improvement over the Basel 2.5 incremental risk charge, removing most of the double-counting it embedded.

What pressures does FRTB place on banks’ data infrastructure and systems?

David Cassonnet: Institutions with global operations and numerous front-office systems and risk management processes will need to be mindful of finding a way to bind them altogether.

A ‘de-siloed’ approach is the way to go here, as each bank function (front office, risk, finance) needs to examine something different, but all of the pieces impact the capital charge. A risk manager would want the ability to drill down into the sensitivities and examine the impact. A desk manager may want to

perform what-if analysis on how the addition or subtraction of new business lines would impact a portfolio. A tool that affords the ability to isolate a slice of risk; change a book, desk or set of trades; refresh data on the fly so only the most recent data points are updated; and provide a real-time view into risk provides all of these things. For its part, a regulator would want to see real-time reports.

To provide the most up-to-date information, you need those departments to effectively communicate with one another. In the IMA, for example, banks need to match risk-theoretical P&L with the hypothetical, and actual P&L to maintain their IMA status. This involves a number of complex tasks including aligning different data models and data sources and sourcing NMRFs. This places enormous pressure on the entire banking ecosystem from the front office through to risk and finance. Even institutions that aim at proactively managing, explaining and optimising FRTB calculations will encounter difficulties without an overlay across their systems that aggregates all the necessary data and makes it visible in one place.

Essan Soobraty: The quantity and variety of data required for effective FRTB implementation introduces a number of governance and operational challenges, especially if banks are to achieve the necessary alignment required for many FRTB workflows.

Adding to these data management challenges is the need to implement the large volume of desk-level calculations required across both SA and IMA. These data management and computing challenges have forced banks to accelerate upgrades to their systems and the underlying technology.

Banks continue to explore a mix of on-premises development, third-party cloud deployment and, increasingly, hybrid implementation.



Bloomberg

Eugene Stern
Head of MARS Market Risk
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Eugene Stern: Every bank is facing challenges, as all are being pushed beyond their comfort zones by some aspect of the new rules. The key for all to realise is that solving for FRTB requires having access to a risk platform that ensures consistency, scalability and accuracy across all asset classes. From this point of view, particular business challenges are simply requirements for that platform, and banks that frame the question that way should be well positioned to decide whether they are best positioned to build out the required platform themselves or to integrate components provided by a vendor or strategic partner.

What complications does the transition away from Libor pose within the FRTB framework?

Essan Soobraty: From a data perspective, during the transition from interbank offered rates to new risk-free rate benchmarks, there have long been concerns around the ability of banks to evidence the necessary real price observations to satisfy the risk factor eligibility test for new benchmark rate instruments.

In releasing their June 2020 FAQ, the Basel Committee mitigated some of those concerns by permitting banks to include observations from old and new benchmarks for one year following discontinuation of the old benchmark.

There are other requirements in FRTB where the transition from old to new rates will continue to complicate risk analytics and calibration that rely on normalised time series data.

How can banks navigate the remaining implementation challenges of FRTB?

David Cassonnet: Regulatory compliance is not just about providing top-of-house or per-desk metrics. You have to explain those metrics. A bank would want a flexible solution that allows them to keep their best-of-breed calculation engines and perform predictive analytics on top. To fully satisfy regulators, it is better if business users can monitor risk intraday, as new transactions occur, so they have more time to analyse the impact of market moves, for example, and make necessary adjustments (such as data quality issues). Some analysis cases also require the ability to modify raw data – under what-if assumptions – and see the impact on official metrics, again at various levels of granularity. This requires tools that can handle not only the sheer volume of data the new regulations call for, but even more data generated by those assumptions. The point of doing all that is critical, not just a fancy optional feature, because it is the only way to understand some of the impacts of regulatory compliance, such as testing desk eligibility to the IMA over time. It also allows a bank to look at trading activity and how a series of trades would impact risk capital consumption. Running complex data analytics at scale on moving data, as business activity is occurring, is an unparalleled risk management advantage.

Essan Soobraty: Banks that have adopted a strategic approach to implementing FRTB in terms of acquiring and managing data in a way that benefits the organisation beyond FRTB already see benefits across trading, risk and back-office operations.

An example of an area presenting continued challenges for banks is the need to analyse their positions in funds by applying the Basel Committee's look-through criteria and treat underlying positions in funds (and index products) as if the bank held the underlying positions directly. The challenges relate to acquiring data and also in computing the risk analytics. Addressing these challenges in a timely and strategic manner benefits the trading and risk operations today, and takes the bank further along its path to FRTB compliance.

Prioritising investment in the data, systems and technology that benefit the organisation beyond FRTB will allow banks to remain on a firm trajectory towards eventual FRTB compliance. Banks with IMA decisions yet to be finalised will continue to move towards a state of IMA compatibility that provides them with flexibility to pivot as needed.

Eugene Stern: We still see a lot of variation among banks in FRTB plans and readiness. Nonetheless, we can highlight two themes. First, even with the shift in the regulatory calendar, there is still not much time left. While different banks have different key problems left to solve, in many cases the 'low-hanging fruit' has already been picked, and the challenges that remain are significant. Banks need to identify and prioritise the key remaining hurdles of data, analytics, technology and operations, then decide which challenges they can solve on their own and which they need help with. Second, it's important to remember that FRTB development won't stop with the first go-live date. Some banks initially going live with SA have plans to build out IMA in the future, while others expect to upgrade their data and modelling infrastructures over time. ■

>> Some panellists' responses to our questionnaire are in a personal capacity, and the views expressed herein do not necessarily reflect or represent the views of their employing institutions



EU urged to pass permanent market risk capital relief

The Council of the European Union agrees temporary changes, but the chair of the European Central Bank's single supervisory mechanism, Andrea Enria, wants legislators to trust supervisors. By Samuel Wilkes

Banks are expecting European Union legislators to pass a legal amendment that will give supervisors the power to temporarily lower a multiplier used in the calculation of trading book capital requirements. But there is growing pressure to make this discretion for supervisors permanent.

Three sources say the Council of the EU has agreed to the amendment put forward by members of the European Parliament (MEPs) in response to the extreme market volatility caused by the Covid-19 crisis. The rule change, which allows supervisors to modify how the backtesting of banks' internal models is integrated into capital requirements, is expected to be in the final legislative text.

"Currently we are expecting this [amendment on backtesting] is going to end up in the final law," says an industry source, who has seen compromise proposals agreed between the council and parliament.

Banks currently calculate capital requirements for market risk based on global standards agreed by the Basel Committee on Banking Supervision in 2009, known as Basel 2.5. Part of the calculation of market risk-weighted assets (RWAs) is driven by a quantitative multiplier – added on top of a base multiplier of three – that ranges from zero to one and gradually increases the more times a bank's value-at-risk (VAR) measures underestimate losses in a single trading day over the most recent 250 trading days.

Recent market volatility caused by disruptions to European economies from the coronavirus pandemic has caused banks to clock more exceptions because VAR doesn't have enough volatile days in its calibrated time series to predict the sudden whipsawing of the market. As a result, the multiplier increases market RWAs at a time when regulators are encouraging banks to deploy their balance sheets to continue providing credit during the economic crisis.

Representatives from the parliament and council have been undertaking an accelerated legislative process to rapidly finalise amendments to the EU's bank capital laws, known as the Capital Requirements Regulation (CRR), which will alleviate capital requirements in the face of the economic fallout from the pandemic.

The European Commission's (EC's) original proposals, dubbed the CRR quick fix and published on April 28, didn't include permission for supervisors to exclude backtesting exceptions. However, MEPs added provisions that would allow this, as long as the exceptions aren't due to deficiencies in a bank's internal model.

Three sources say the council has now agreed to the parliament's rule change, and are expecting the rule to become law within days. That will allow supervisors including the European Central Bank's (ECB's) joint supervisory teams (JSTs) to soften the VAR exceptions multiplier.

“If there is a major spike in volatility, this is a systemic issue, this is not something that can be attributed to the model of this or that bank. So I think it should be squarely in the hands of the supervisor to decide if there is a market event that warrants switching off this multiplier, or whether it is an idiosyncratic problem of the quality of a single bank’s internal model that would instead deserve the multiplier”

Andrea Enria, European Central Bank

“Our view is that it will be almost certainly voted [in],” says a head of market risk modelling at a eurozone investment bank. “We are wondering how to best approach our JST to see what the next steps are to reset [multipliers].”

Risk.net did not receive comment from the council before the publication of this article.

A step towards permanency?

The original market risk amendment, proposed by parliamentary rapporteur Jonás Fernández of the Socialist and Democrats grouping, would have expired at the end of 2020. But there is a growing debate about giving supervisors this discretion on multipliers on a permanent basis instead.

Bankers point out that the international standards produced by the Basel Committee, which the CRR backtesting regime is based on, permit supervisors not to count backtesting breaches in market risk capital multipliers if they are a result of exceptional market volatility.

The chair of the ECB’s single supervisory mechanism (SSM), Andrea Enria, is also keen to be handed this power on a permanent basis. Speaking at a press briefing on June 9, Enria said lawmakers “could be a little bit more confident” in relying on supervisors to make their own assessment of the VAR multiplier, rather than constraining their discretion in the legislation.

“If there is a major spike in volatility, this is a systemic issue, this is not something that can be attributed to the model of this or that bank,” said Enria. “So I think it should be squarely in the hands of the supervisor to decide if there is a market event that warrants switching off this multiplier, or whether it is an idiosyncratic problem of the quality of a single bank’s internal model that would instead deserve the multiplier.”

Supervisors in Switzerland and the US already have this discretion, and have used it to exclude coronavirus-linked exceptions in the backtesting results of the banks they oversee.

However, CRR did not include this power. As a result, both the SSM and the UK’s Prudential

Regulatory Authority (PRA) had to offset rises in the VAR multiplier by adjusting other parts of the calculation process for calculating market risk capital requirements. The UK has left the EU, but agreed to abide by EU rules until at least December 31, 2020.

The alternative adjustments used by the SSM and PRA were imperfect, causing some perverse outcomes and preventing some banks from fully offsetting increases in market risk capital requirements resulting from the backtesting multiplier.

There is some support for Enria’s stance among European lawmakers. The industry source says the final version of the quick fix has altered the original Fernandez proposal, so that supervisors will retain their discretion to exclude backtesting exceptions that are not the result of model deficiencies for an extra year, until the end of 2021.

That alteration was made by Markus Ferber and Othmar Karas, MEPs from the European People’s Party (the largest grouping in the parliament), in a series of amendments tabled on May 28. It is possible that they intend the one-year extension as a stepping-stone to making this supervisory discretion permanent. The industry source says Ferber and Karas have also inserted into the final version of the quick fix a recital (introductory text) urging the EC to review whether the temporary discretion to discount backtesting breaches should become permanent.

Second quarter results

EU legislators are now racing to try to finalise the CRR quick fix before banks have to publicly report their second quarter results, which the largest EU banks are expected to begin reporting from July 29.

To help rush the law through, two industry sources say the council and MEPs began negotiating the final proposal before the parliament had finalised its own version of the text. On June 9, the parliament’s economic and monetary affairs committee (Econ) approved their final draft proposals. Trialogue negotiations would normally take place after that vote, when both



legislatures have finalised their own draft versions of the rules.

Instead, the Econ version of the text already includes input from the council, and a plenary session of the parliament is scheduled to approve the final package on June 19, completing the legislative process. The EC will then transpose the CRR quick fix into the EU’s rulebook, known as the official journal.

“There is going to be a vote in the European Parliament plenary next week,” says the industry source. “We expect the CRR quick fix to be published into the official journal before the end of June, so that banks can benefit from it in the second quarter.”

Banks are assuming the ECB and PRA will withdraw their imperfect market risk relief measures adopted in April and March (respectively), as they will be able to directly lower the quantitative VAR multiplier instead. However, the regulators are unlikely to confirm this until the CRR quick fix becomes law.

The ECB’s relief is currently scheduled to expire in October, and the PRA’s ends in September. Since it could not alter the quantitative multiplier, the ECB had on April 16 allowed banks to cut a qualitative multiplier instead.¹

“Currently, banks are allowed to disregard the qualitative add-on as an offset to the increase in the multiplier due to the over-shootings,” says the head of market risk modelling at the eurozone investment bank. “Now, if they allow you not to count over-shootings, my reading [of the situation] is that the qualitative add-on has nothing to counterbalance and goes back to where it was [before April 16].”

The ECB and PRA declined to provide comment to *Risk.net* for this article. ■

Previously published on Risk.net

¹ ECB (April 2020), ECB Banking Supervision provides temporary relief for capital requirements for market risk, <https://bit.ly/2Xbrua0>



Regulators and banks clash over capital impact study

The Basel Committee on Banking Supervision and the European Banking Authority call out two banks for using “overly conservative” survey assumptions. By Samuel Wilkes

The Basel Committee on Banking Supervision and the European Banking Authority (EBA) have taken exception to the results offered by two major banks in their latest monitoring exercise, and have screened them out of the sample – sparking fresh controversy over the capital impact of new trading book capital rules on fund-linked structured products.

Regulators appear to suspect the banks of gaming their inputs to make the potential increase in capital requirements for some products appear prohibitive.

“There is huge debate around the treatment of investments in funds at the moment and I’m not surprised this hasn’t settled yet,” says a head of market risk modelling at a European investment bank. “The Basel Committee obviously feels cynical banks are inflating those numbers so the banks can put pressure on legislators to be a bit more lenient on banks [when implementing the new global standards into local law].”

On April 8, the Basel Committee published its biannual study monitoring the impact on banks of its latest capital standards, Basel III, which includes upcoming trading book capital rules.¹ The EBA simultaneously published its own study assessing the impact of Basel III reforms on European

“The mandate approach is quite complicated to operationalise and implement”

FRTB specialist at a European investment bank

banks. These results also contribute to the Basel Committee’s report.²

The Basel Committee and EBA took issue with how the two banks capitalised all their fund-linked trades under the most punitive method of the regulator-set standardised approaches, thus suggesting the heaviest capital requirements would be needed – all the alternative methods available would produce lighter requirements.

“Specifically, the banks treated all trading book positions in equity investment in funds that may no longer be allowed to be modelled, using the most conservative standardised approach, ie: the ‘other bucket’ treatment subject to the highest applicable risk weights,” states the Basel Committee in its quantitative impact study. “They assumed that they are unable to use other treatments such as the index treatment or the mandate-based approach.”

Hobson’s choice?

The rules allow banks to use their own internal models to calculate capital requirements for fund-linked trades – but banks say it is impossible to meet the requirements within the rules. They require banks to have frequent information on the composition of the fund – but just how frequent is not known, as the Basel Committee doesn’t provide further details. And banks fear the typical monthly updates they receive from asset managers won’t be sufficient.

So it is likely banks will need to rely on regulator-set standardised approaches. The index-based approach, which offers the lowest risk-weight to funds, is available only to funds that closely track indexes. To qualify, a fund would need to show less than 1% difference in annualised returns from its tracking index over the past 12 months.

Otherwise, a fund must use one of two approaches: be capitalised using the mandate-based approach, which relies on the stated investment mandate of a fund; or use the punitive 'other bucket' approach – named for this category in the standardised equity risk-weights table – and generally regarded as by far the most punitive of the three.

"I have seen examples where the 'other bucket' would be multiples: four, five times more than any of the two other approaches," says an FRTB specialist at a second European investment bank.

Bucket envy

It's easy to surmise that regulators want to exclude the results of the two outlier banks for using the 'other bucket' approach because of its dramatic effect on their submissions. The bucket carries a flat 70% risk-weight – the worst possible for an equity class – and receives no diversification benefit. The degree to which this can influence banks' capital requirements is evident in the Basel quantitative impact study.

Because the two banks used only the other bucket approach, both Basel and the EBA decided to create two sets of results: one they call a "reduced estimation bias", whereby the market risk impact for the two banks is set to zero; and a "conservative estimation", which includes the two banks' entries.

Basel found that under the former, European banks would be required to hold 1.3% more Tier 1 capital for market risk than they do today – and under the latter, the increase in minimum required capital jumped to 2.5% from FRTB.

Narrowing-in on the minimum capital requirements for market risk alone, the reduced estimation bias found global systemically important banks saw a weighted average increase in market risk capital resulting from FRTB of 50.6%. If the two outlier banks were included, the weighted average increase is 62.2%.

The second estimate is close to the level sources say were found by a secret industry study organised last year by the International Swaps and Derivatives Association.

Just how large one of those banks' capital increase is from FRTB can be inferred from comparing the results of the two sets. In the reduced estimation bias sample, the maximum increase in market risk capital requirements for an individual bank is 204.3%. When the two banks' increase in capital is included, the maximum capital increase an individual bank faces from the FRTB jumps to 374.5%.

In a previous article for *Risk.net*, banks said they found the other bucket approach led to their capital requirements for those products increasing by many multiples from today. One bank found it increased 21 times and another quoted 75 times.



The BIS, home of the Basel Committee

Mandate benefits

If banks opt for the mandate-based approach, they must work out the capital treatment to be applied to a fund by following indications of the fund's investments within its mandate. Banks must then assume the fund is invested to the maximum extent allowed under its mandate in the asset class carrying the highest risk-weight, and then progressively in assets carrying lower risk-weights. It must be calibrated to the most punitive hypothetical portfolio possible under the fund's mandate.

Two bank sources say the capital reduction from using the mandate approach compared with the other bucket approach depends on whether the hypothetical portfolio implied in the mandate carries a diversification benefit between asset classes.

"But [the mandate approach] might not be as beneficial; it really depends on the portfolio," says the FRTB specialist at the second European investment bank.

The diversification benefit will depend on how many indications a fund gives in its mandate. A senior risk manager at a third European investment bank says in most instances they would expect four indications, which limits the chances of a fund benefitting from diversification.

This would lead to a risk-weight for the fund that is not materially different to the other bucket approach. The mandate is typically written in two or four lines, says the senior market risk manager, adding that if there are four indications, it must be the worst possible portfolio with those indications. So, it would give an unrealistic outcome because it is made of four elements and it is always biased

towards the worst possible quality, whereas a fund might have a thousand elements.

"The diversification is completely vanished [compared to what we assume today]," says the risk manager, "because there are only four items and because you make assumptions that the asset manager took the riskiest configuration of its portfolio in all asset class categories, which is typically not the case."

Resource cost

One drawback to the mandate-based approach is that it is more costly to implement, according to the senior risk manager and the FRTB specialist at the second bank. Staff need to regularly check all funds' mandates and calibrate their capital requirements to the worst possible portfolio.

"The mandate approach is quite complicated to operationalise and implement," says the FRTB specialist at the second bank. Because the fund mandate is not granular and does not specify what allocation must be made, respondents must make the most punitive assumptions. "I have not heard a bank in equity trading say that this mandate approach is feasible," says the specialist.

The senior market risk manager at the third European investment bank says it is not considering implementing the mandate-based approach in the future: "You may be saving some risk-weighted assets with the mandated approach, but the level is still much higher than today and on top of that it is cumbersome to implement." ■

Previously published on Risk.net

¹ BIS (April 2020), Basel III monitoring report, <https://bit.ly/3hS11Qw>
² EBA (April 2020), Basel III monitoring exercise, <https://bit.ly/39Hgu9V>

FRTB comes too late for Covid-19 crisis

Expected shortfall would stop Basel 2.5 duplicate capital charges, but backtesting is still a problem. By Samuel Wilkes

In a parallel world, regulators had already introduced their much-trumpeted overhaul of market risk rules, FRTB, at the start of 2019. The old, stop-gap method for calculating market risk-weighted assets (RWAs) was discarded. And not a moment too soon. Amid the chaos of the coronavirus pandemic, bankers could at least take comfort that they were no longer subject to Basel 2.5 with its flawed and procyclical methodology.

Or not. In reality, years of regulatory wrangling have delayed FRTB, leaving risk heads cursing the inadequacies of the current regime and playing a futile game of 'what if'.

"Had we accelerated FRTB, we would have been better from a market risk capital perspective today," says the head of market risk at a global investment bank.

And yet, there are murmurs of disquiet about FRTB. Bankers are questioning whether its supposed fix for the procyclicality of today's regime will be as effective as hoped.

The problem centres on value-at-risk, the long-established method for estimating financial risk.

Need to know

- A double-counting defect in the methodology for calculating market risk capital has reared its head during the current spell of volatility.
- The methodology is supposed to account for losses banks would face in normal conditions and in a crisis scenario – but as current conditions are a crisis scenario, the requirements are partly duplicated.
- Incoming FRTB rules, long delayed by regulators, promise to address the problem by replacing the overlapping requirements with a single measure of risk.
- But the new rules could still lead to higher capital from backtesting exceptions.

FRTB does away with VAR as a measure of a bank's trading book exposure and replaces it with expected shortfall, which is thought to be a more accurate gauge of tail risk.

VAR is not banished entirely, though. Under the new regime, the accuracy of banks' risk models is backtested using VAR. During periods of volatility, banks fear that the failure of these tests could force them to stop using their own models and adopt a standard formula for calculating RWAs. The formula is far more conservative and would result in higher market risk capital requirements for many banks.

So, rather than flattening out wild swings in regulatory capital, FRTB could perpetuate them.

"The question is: would I get an increase in RWAs in a crisis under FRTB that is milder than today's rules?" says a head of risk modelling at a European investment bank. "It is very difficult to say."

The market turmoil wrought by the coronavirus outbreak has exposed a double-counting defect in Basel 2.5. To calculate minimum market risk capital requirements, banks add together two versions of VAR. The first is regular VAR, which estimates the losses a bank's portfolio would suffer if it was subject to the worst trading day in the past year. The second is an estimate of losses for the same portfolio if it was subject to the worst trading days in the bank's history, known as stressed VAR.

For most banks, stressed VAR is calibrated to the financial crisis of 2007–08, while, for some European banks, it is set to the sovereign debt crisis between 2010 and 2012.

Stressed VAR was inserted into the capital framework after the financial crisis, when it became evident that the old methodology of using VAR alone severely underestimated capital requirements. VAR is based on recent historical data and so is unable to predict sudden extreme loss events.

A long-standing criticism of Basel 2.5 is that as soon as markets collapse, banks' VAR numbers increase to reflect losses during a crisis. So, as well

as holding a stressed capital add-on, banks also face capital increases in their normal VAR during times of volatility.

"We are in a stress environment that is as big in terms of VAR requirements as the 2007–08 period. This has created a double-counting effect, which we never thought would happen so soon. So that has been a shortcoming," says the head of market risk at the global investment bank.

Banks complain the increase in capital is proving a nuisance at a time when supervisors are pressuring them to free up capital and increase lending to businesses to help boost virus-ravaged economies.

Stress scenario

Bankers estimate VAR is usually at a level from one-quarter to one-half of stressed VAR under normal market conditions. But the recent upheaval is causing VAR to shoot up, almost to a par with stressed VAR, say two bankers.

"What is happening is that we have got a crisis, and VAR is getting to the same level as stressed VAR," says the head of modelling at the European bank. "Typically, VAR and stressed VAR can be in a ratio of one over two or three."

A head of market risk at a second European investment bank says it is possible for banks to lower VAR by exiting loss-making positions, which should stop capital requirements jumping so high.

However, the head of modelling says the benefit of derisking is small. Selling inventory at today's prices would result in realised losses, and there's no guarantee of finding a buyer in a panicked market. To offset derivatives positions using hedges is also expensive. Even if they are able to exit positions, banks may find that once they enter into the same exposures in the future, VAR would just jump again.

VAR is calibrated using an aggregate of losses from the previous 250 trading days, or fewer for some firms. If a bank were to use the maximum length of historical data – a year – then it means positions that suffered heavily in March this year will increase the



level of VAR until the observed trading days exit the time series, which would be after March 2021.

"VAR being higher will stay for some time, depending on your recalibration of VAR," says the head of risk modelling. "These events are recent and it will take a lot of time for them to exit the typical calibration window of a VAR engine, which could be one year."

It's even possible the current period of turmoil will replace the 2007–08 financial crisis as many banks' stressed VAR reference point. This would put upward pressure on overall capital requirements. But the effect will be limited, says the head of market risk at the second European investment bank.

"Stressed VAR is the worst days of the financial crisis: the Lehman Brothers collapse," the head says. "Can you have even worse than that? We have seen something close, but can that be much higher? There is a bit of double-whammy effect, but I think it is going to be marginal."

Exacerbating the increase in market risk capital is a multiplier applied to both VAR and stressed VAR. The multiplier is based on the results of a backtesting exercise that compares profit-and-loss (P&L) figures with VAR estimates over the previous year. The test is designed to punish banks whose models aren't accurately reflecting risks in their own portfolios (see box: *How big a jump?*).

Banks are experiencing a rise in backtesting breaches because their VAR models have not yet captured the recent period of extreme volatility.

"The combination of these procyclical effects results in a material increase in market RWAs," says Gregg Jones, a director of risk and capital at the International Swaps and Derivatives Association.

Supervisors in the UK, US and Canada have taken steps to nullify the multiplier effect. Most recently, the European Central Bank announced it

would allow eurozone banks to reduce a qualitative multiplier applied to VAR and stressed VAR to offset backtesting exceptions.

FRTB or not to be

The double-counting and procyclicality inherent

in Basel 2.5 are part of the reason that standard-setters devised FRTB. The Basel Committee on Banking Supervision published the first version of the regime in January 2016, with a deadline for jurisdictions to implement the rules into their local laws by the start of 2019.

HOW BIG A JUMP?

Banks apply a multiplier to their value-at-risk and stressed VAR figures depending on the results of a backtest. The minimum multiplier is set at three for all banks as long as they score five or fewer exceptions in the test. The multiplier gradually increases to a maximum of four as breaches rise to 10 and above.

Today's market volatility is causing more exceptions as losses exceed VAR, which further increases the market risk capital requirements on top of VAR rising.

Banks complain backtesting in a crisis doesn't carry out the test's intended purpose, because VAR cannot forecast the future market volatility based on historical data from a calmer past. Rather than being a result of model deficiency, the number of exceptions is more a function of how fast the current market conditions seep into VAR's time series.

Because of this, the head of market risk at the second European investment bank, speaking in the second week of April, says he expects all banks to have reached the maximum number of exceptions. The increase in the multiplier from three to four would in theory represent a 33% rise, translating into a similar hike in market risk capital.

However, the head of modelling at the first European investment bank says supervisors sometimes place an add-on to the multiplier based

on a qualitative review of the bank's treatment of internal models.

If this is the case, the starting point of the bank's multiplier could be 3.5, for example, and would increase to a maximum of 4.5 if the bank clocked 10 backtesting breaches. In that example, the steepest increase in the multiplier would be 28.5%. For desks that are closely watching the capital efficiency of trades, a lower percentage increase would be beneficial.

The maximum possible increase in market risk capital from the multiplier would also be smaller once banks factor in the effect of an incremental default and migration risk charge on top of their VAR and stressed VAR.

Two bankers estimate the total increase in market risk capital requirements across the industry would be roughly 20–35% from both VAR and the multiplier increasing in the current market conditions.

The head of market risk at the second European investment bank estimates the increase in VAR accounts for a 15–20% rise in market risk capital, with the multiplier adding a further 15% to market risk capital.

A UK bank source estimates the total increase in market risk capital of the two together would be 20–30%.

"Basel 2.5 was designed as a short-term fix in answer to the 2007–08 crisis, which revealed shortcomings in banks' market RWAs. FRTB is supposed to be the longer-term solution," says the head of market risk at a third European investment bank.

But concerns from banks and national legislators over the capital impact of the standards led the Basel Committee to revise the original rules and push back their deadlines. The newest version of FRTB was unveiled in January 2019 with an implementation date of January 2022.

Ironically, the coronavirus crisis has forced the Basel Committee to announce a further one-year delay to FRTB, along with other bank capital rules that form Basel III. If jurisdictions follow the Basel Committee's timeline, bank capital requirements will be determined under FRTB from January 2023.

The major difference between Basel 2.5 and FRTB is that banks will now use expected shortfall to measure trading book exposure. Expected shortfall gives more weight to the calculation of losses during tail events. The figure is calibrated to the worst year for a bank's portfolio: for most banks this is the 2007–08 financial crisis, as with Basel 2.5.

The new regime is predicted to force banks to hold higher levels of capital during normal times. Crucially, it is meant to insulate banks from steep rises in capital at a time when banks are under most stress.

"FRTB starts from a higher base because it generally increases capital requirements from today, but at least we would not be seeing this rapid increase as we are seeing under Basel 2.5," says the head of market risk at the global investment bank.

However, the new rules don't completely solve the problem of procyclicality in the calculation of market risk capital, experts say.

Under FTRB, banks using the internal models approach must backtest their loss estimates against P&L figures. Backtesting expected shortfall is a controversial area, and so the new rules stipulate that banks use VAR for backtesting.

There are two backtests: a bank-wide test and a desk-level test. The first requires banks to compare the VAR of all portfolios using internal models against the P&L for these desks, similar to Basel 2.5. Banks apply a multiplier of 1.5 if they fail the test four times or fewer over a 12-month period. The multiplier rises gradually to two if banks clock 10 or more exceptions.

The backtest for individual desks has a potentially greater impact on capital. If, over a 12-month period, a bank's trading desk either clocks 12 exceptions or more at a 99% confidence level, or 30 or more exceptions at a 97.5% confidence level, then it must stop using the internal models approach and switch to the regulator-set standardised approach.

"There would be a capital impact from FRTB in the current market volatility because if your backtesting

fails then you are on the standard approach, which is meant to be more punitive, although that is not entirely clear in all circumstances," says the senior market risk expert at a US investment bank.

Whether the increase resulting from failures of backtesting under FRTB would be higher or lower than the increase banks are seeing under Basel 2.5 depends on the proportion of internal model desks that banks have, says the head of modelling at the European investment bank. Internal model desks that pass the desk-level backtest would still see rises in the bank-wide multiplier as a result of increased volatility.

More desks and banks are expected to use the standardised approach instead of the internal models approach. According to a survey conducted by the European Central Bank in 2019, 40% of banks under their supervision plan to turn off their internal models and solely rely on the standardised approach. A further 20% of banks plan to only have a subset of desks using internal models.

For those banks at least, FRTB guarantees to solve their woes of procyclicality of market risk capital requirements.

"If you are mostly using the standard approach, I don't think market volatility from a crisis is going to have a massive effect," says the head of market risk modelling at the first European investment bank. "If you have a high proportion of desks using the internal models approach, then my expectation is that falling into the standard approach will cost you more than the simple increase in Basel 2.5's multiplier."

time series prior to the coronavirus crisis, but it didn't prove to be a silver bullet.

"This is not a guarantee to prevent exceptions," says the head. "There is always a latency, and what was peculiar [about] this crisis is that it affected all risk factors and all asset classes. At first, we had exceptions driven by the equity market and our model learnt about the equity situation so it wouldn't produce more exceptions for equities. But then corporate credit plummeted, and you might have exceptions because of that."

Another option would be to incorporate into VAR engines a scaling factor based on the losses from previous bouts of severe volatility. Once the VAR lookback period begins to pick up recent upsurges in volatility, the scaling factor will increase the estimated losses in VAR to reflect those seen in past volatile periods, rather than relying on an average of the most recent historical period. A further alternative would be a weighting factor that leans more heavily on the most recent observations in VAR.

Under Basel 2.5, the trade-off with all of these alterations would be that banks' capital requirements would be more volatile and shoot up more quickly once large losses enter.

"It would be a balancing act because they would be generally capital-increasing in more volatile times, but that would be compensated by fewer backtesting exceptions, and in turn you wouldn't then get multiplier increases," says the senior market risk expert at the US investment bank.

"Basel 2.5 was designed as a short-term fix in answer to the 2007–08 crisis ... FRTB is supposed to be the longer-term solution"

Head of market risk at a European investment bank

Response time

Banks are currently exploring ways of minimising breaches of the backtests under Basel 2.5 by making their VAR models respond faster to changing volatility in the future. One option is to shorten the time period VAR is calibrated to – the idea being that a shorter observation period would mean volatile trading days make up a bigger proportion of the aggregated VAR number. This would make the VAR output more sensitive to volatility and more reflective of actual losses.

"In your normal non-stress VAR model you could shorten the lookback window because the shorter it is the quicker the additional new market volatility is going to feed into your final VAR," says the senior market risk expert at the US investment bank.

The head of modelling at the first European investment bank says the bank had recently undergone a model change and shortened its VAR

Banks will need to enter into discussions with regulators about any modifications to VAR methodology designed to reduce the risk of backtesting breaches under Basel 2.5 or FRTB. And the final text of FRTB is, if anything, more prescriptive than Basel 2.5 about backtesting methods. Basel 2.5 allows banks to use any lookback period of one year or less, whereas FRTB explicitly mandates a 12-month period, equally weighted, for backtesting at the trading desk level.

Regulators might not be receptive to such a change, says the market risk expert: "There has been some discussion on possibly changing the VAR methodology so you don't have to mitigate the [Basel 2.5] multiplier, but that is a sensitive topic to discuss with regulators. They would quite rightly respond: 'Why did you not previously think that was a good idea?'" ■

Previously published on Risk.net

Regional focus: Asia

Despite the Basel Committee's one-year reprieve on the deadline for FRTB implementation, Asia's banks have much to contend with before January 2023. In tandem with decisions over modelling approaches, infrastructure, data management and reporting, the region's fragmented markets and the difficulties of integrating FRTB alongside other regulatory requirements, such as uncleared margin rules and the Libor transition, mean a tricky path ahead. As elsewhere, the Covid-19 pandemic has added operational complexity to a host of other challenges for banks in the region



Bloomberg

Revised deadline poses further challenges for Asia-Pacific banks

Essan Soobraty, product manager for regulatory data, New York; Eugene Stern, global head of product, market risk, New York; and Vicky Cheng, head of government and regulatory affairs, Asia-Pacific, Hong Kong, at [Bloomberg](#) explore the additional regulatory and operational difficulties likely to arise as a result of the Basel Committee on Banking Supervision's alteration of the FRTB implementation deadline

Banks in the Asia-Pacific (Apac) region continue to face regulatory and operational challenges in their implementation of FRTB capital requirements, exacerbated by uncertain times and volatile markets despite a new deadline.

On March 27, the Basel Committee on Banking Supervision endorsed a set of measures to provide additional operational capacity for banks and supervisors to respond to more immediate challenges resulting from the impact of Covid-19 on the global banking system. As a result, Basel III's official go-live date – as well as its market risk component, FRTB – has been deferred by one year. In line with the announcements, the four leading Apac financial centres – Australia, Hong Kong, Japan and Singapore – have also made deferrals for Basel III implementation.

New FRTB deadline, higher standards

The Australian Prudential Regulation Authority, for instance, has stressed that FRTB's adjustments to the reallocation of capital across portfolios have merely been deferred, not diluted. Japan's Financial Services Agency has stated that the regulation contents for finalising Basel III remain unchanged.

While banks have more time to prepare, there is an implicit expectation they should be able to meet the new deadline to an even higher standard than before. The Hong Kong Monetary Authority's recent survey on individual bank's preparedness for FRTB implementation helps send an early prompt: while being temporarily relieved of the short-term compliance pressure, firms should start examining their needs and identifying gaps that need to be addressed to fulfil FRTB's requirements. Just as the regulators have emphasised: timelines have changed, but the rules remain and full implementation is expected.

Regulatory fragmentation

As the region works towards the new timeline for FRTB implementation, jurisdictions are also awaiting detailed guidelines and clarification from their respective regulators. Regulatory fragmentation across the Apac markets raises concerns about varying timeline and implementation details, which may lead to unintended challenges such as a mismatch in operations within financial institutions operating across the region.

This will have an impact on firms' regional operations and headquarters. To mitigate this risk, flexible solutions and open communications between regional banks and their headquarters – as well as between banks and local rulemakers – are crucial. Practical implementation challenges should be flagged, assessed and discussed across the board.

Banks with predominantly regional activities in the Apac region, and those with

global footprints, operate against a regulatory backdrop that is increasingly global, yet still fragmented. Regulatory changes over the coming years – and the banking industry's response – will determine how institutions in the region compete and serve their customers locally and internationally. Many global, regional and local market factors will continue to drive decision-making and planning as banks continue their path towards implementation of FRTB requirements.

Sound risk management a key focus for Asia-Pacific regulators

Introduced as a result of the global financial crisis that began in 2007–08, FRTB aims to enhance financial stability, operational resiliency and investor protection through highly evolved and prescriptive risk management practices. A resilient banking system supported by a robust regulatory framework that is able to support the real economy remains important, particularly during times of market stress. Sound risk management is therefore an overarching theme for Apac regulators.

Uncertain markets

Apac banks face an array of common challenges: increasingly volatile and uncertain markets requiring updates to risk systems, and acquiring and managing larger amounts of data. Trading books of varying complexities and localised risks in some markets are recurring themes: volatile commodities, differing levels of transparency, difficulties in deciphering the risk in fund products, and managing the risks in their structured products books.

Data requirements pose challenges

The quantity and variety of data required for effective FRTB implementation introduces a number of governance and operational challenges for banks in the Apac region, especially if they are to ensure many FRTB workflows are aligned.

Adding to these data management challenges is the need to implement the large volumes of desk-level calculations required for both the standardised approach (SA) and internal models approach (IMA). These data management and computing challenges have forced banks to accelerate the upgrading of their systems and the underlying technology. These are common challenges faced by many banks globally, not just those in the Apac region. Banks adopting a strategic approach to implementing FRTB have begun to acquire and manage data that benefits their organisations, and not just for the purposes of FRTB implementation. They are already seeing benefits across their trading, risk and back-office operations.

Modelling structured notes – A major Apac hurdle

One global challenge with particular resonance in the Apac region is the modelling of structured notes and other complex derivatives products. These products are used heavily across the region by large and small banks. Their non-linear nature means they typically incur material charges across all components of FRTB, making it especially important to represent the instruments and model their risks accurately, and capture any capital offsets that arise from hedging so the bank is charged only for the risks it wants to keep on its books. In addition, since pricing structured notes often requires direct Monte Carlo simulation of the payout function, the complexity in computation associated with FRTB poses a particular challenge.



Essan Soobratty

Analysing funds' positions with the look-through criteria

Another area presenting continued challenges for banks in the Apac region and internationally is the need to analyse their positions in funds by applying the Basel Committee's look-through criteria and treat underlying positions in funds as if the bank held the underlying positions directly.

It is not uncommon for banks in Asia to hold positions in funds of varying complexity, liquidity and leverage with exposures across multiple asset classes. These factors compound the challenges in acquiring the necessary data – which must be sufficiently complete and frequently available to be useful for FRTB – and in using risk analytics to compute risk exposure.

Direct analytical challenges include modelling complex securities (for example, many fixed income funds invest heavily in securitisations) as well as capturing derivatives overlays (these do not typically constitute a large part of most funds' holdings, but still play a role, especially for fixed income funds). As with structured notes, the largest indirect analytical challenge coming from funds is the volume of calculations required. Portfolios of 100 or more funds could pose a challenge for small banks even under the SA, and might challenge even a large bank using the IMA.

Important decisions on IMA implementation

Apac banks continue to grapple with important decisions relating to IMA implementation. These decisions include whether to implement the IMA – and, if so, for which desks – or whether they should only implement the SA.

While the majority of banks in the Apac region with implementation programmes under way are focusing only on the SA for now, a number of the larger banks are actively working on preliminary plans for the IMA. Many of these plans incorporate flexibility, allowing banks to pivot if necessary while still working towards IMA compatibility.

Cost versus benefit is an important consideration, but it is neither simple nor the only consideration. In many cases, the perceived benefit is estimated based on assumptions including data availability. For many Apac markets, where the necessary data can be more difficult to obtain, these assumptions are important. IMA implementation is also more complex. For example, correlation trades are driven by risk factors that may be challenging to simulate, prove modellable and pass the profit-and-loss attribution test. This is before taking into consideration the computational power required to model these trades out to multiple liquidity



Eugene Stern



Vicky Cheng

horizons required by IMA. For firms with global footprints, operational workflow complexities are important considerations.

Bloomberg's approach to FRTB – Beyond complying with the rules

In the post-Covid-19 environment, in which market and credit risk must be considered from additional perspectives, Apac banks are approaching FRTB implementation with a holistic mind-set. Banks with implementation plans in place are moving towards full compliance in 2023, while simultaneously making upgrades to systems and acquiring data that benefit their organisations.

Bloomberg continues to work closely with banks across the region in providing access to the foundational reference, pricing and risk analytics data that banks require to better manage their evolving market, credit and liquidity risks. In conjunction with FRTB regulatory datasets designed for specific workflows such as the important classification of exposures under the SA and risk factor eligibility test data for IMA, banks are able to acquire aligned and consistent datasets in formats that are ready to be used and in machine-readable format.

Bloomberg's Multi-Asset Risk System (MARS) offers both SA and IMA analytics as part of its overall risk platform, powered by FRTB-specific data, and extends as far as a full, end-to-end, out-of-the-box calculation of total FRTB capital under SA. MARS also provides a front-office risk module that works in parallel with Trade Order Management Solutions, and runs on the same underlying data and analytics engines as the FRTB calculator. All MARS modules are built on Bloomberg's in-house data and pricing analytics.

The Derivatives Library (DLib) is a comprehensive platform to structure, price and risk-manage complex derivatives, structured products and dynamic strategies. It has unlimited coverage from vanilla to the most complex structures. DLib is fully integrated into MARS, and this allows banks that use it to script and model their structured notes to have them automatically available to any MARS workflow, including SA and IMA under FRTB.

Regardless of systems, Bloomberg's suite of pricing and reference data can be integrated into banks' system infrastructures, while helping them to support risk factor eligibility tests, create classification and bucketing logic, as well as model funds using a full look-through approach. Banks also have the option of running this end-to-end pricing and reference data on the MARS platform.

Implementing FRTB presents numerous challenges for banks. Establishing a strong data foundation and risk calculations is vital. Banks that are able to meet the challenges will reap benefits beyond just complying with a rule; they will have data, analytics, workflows and governance in place to prepare them for the next crisis or an unexpected event, regardless of its source. ■

G-Sibs eye simpler market risk calculations in Hong Kong

The Hong Kong Monetary Authority may need to ease its rules on non-modellable risk factors to incentivise the use of internal models.
By Blake Evans-Pritchard



Global banks in Hong Kong are treading a fine line between seeking a simplified standardised approach (SA) to calculating market risk capital for their trading books – and avoiding the use of internal models because of limited potential cost savings for local subsidiaries.

But the Hong Kong Monetary Authority (HKMA) may not be aligned with their thinking – and Hong Kong’s small group of global systemically important banks (G-Sibs) might need to reconsider.

“Some of the G-Sibs are indicating that they want to use a simplified SA, but will the regulator allow it? I’m not all that sure,” says Kishore Ramakrishnan, a partner at consulting firm Temple Grange Partners.

Under the Basel Committee on Banking Supervision’s FRTB, banks have a choice of methods for calculating capital: a sensitivities-based approach (SBA) set by their regulator; a simplified SA; or – if trading desks pass certain tests – an internal models approach (IMA).

However, FRTB says the simplified SA should only be reserved for smaller entities with non-complex books – a view supported by the HKMA in the FRTB consultation paper it published in June.

Banks must tell the regulator by early next year if they plan to use the simplified SA for calculating market risk, which is why the issue has now started to surface.

Hong Kong looks set to be an early adopter of FRTB, which may result in the local subsidiaries of G-Sibs implementing the new capital rules before their parent banks, with implications for global risk management policies.

Banks using their own models to set market risk capital requirements could face punitive add-ons for risk factors that don’t meet the threshold for stable and observable pricing – so-called non-modellable risk factors (NMRFs).

One of the internal tests measures how accurately a trading desk can model its profit and loss (P&L) – the P&L attribution test. Hiving off NMRFs could make it easier for banks to meet this test, which is a prerequisite for using internal models under FRTB.

"NMRFs are only a relevant issue for banks using the internal models approach. For such banks, the natural alternative would be the SA, which they have to calculate anyway," says a spokesperson for the HKMA, adding that since G-Sibs will be expected to calculate their capital requirements at a consolidated level, they should be able to calculate the SA at their Hong Kong entity level as well, which would feed into group figures.

However, Ramakrishnan says this stance from the regulator hasn't stopped some banks from at least wondering whether some concession might be forthcoming.

He says that at a trading desk level, a number of global banks could meet the other conditions for using the simplified SA; chiefly that market risk-weighted assets must not exceed HK\$1 billion (\$127 million) or 2% of total RWA, and the aggregate notional of non-centrally cleared derivatives must not exceed HK\$6 trillion (\$767 billion).

These banks may simply be hoping the HKMA waives the G-Sib requirement, says Ramakrishnan.

There are currently only two European (HSBC and Standard Chartered) and one US (Citi) G-Sibs that are incorporated as full subsidiaries rather than as branches, and therefore will be subjected to Hong Kong's FRTB rules. HSBC, StanChart and Citi declined to comment for this article.

The HKMA plans to finalise its new FRTB framework in the first half of 2020, taking onboard comments it received during the consultation period, which closed at the end of September. The regulator also plans to run another quantitative impact study before the end of the year. Ramakrishnan says that, following this study, it should become clearer in terms of whether the regulator is likely to grant any NMRF relief.

The problem surrounding how FRTB should treat market instruments for which there is insufficient data is a long-standing one, and particularly relevant to Asia, where certain instruments – such as longer-dated bonds and certain currency pairs – trade only infrequently.

Revisions to the FRTB framework introduced earlier this year sought to ease the NMRF burden: factors are now considered non-modellable if there are fewer than four price observations in 90 days, or 100 observations in the previous 12 months. But banks such as HSBC and StanChart say there are still some instruments in Asia that will fail this test.



"From both perspectives, there is a positive business value to stability, and that is what simplified standardised gives you"

Simon Gleeson, Clifford Chance

Patchy reception

Not only do NMRFs result in higher capital charges themselves, but also risk factors that dip in and out of modellability could result in an entire trading desk failing the backtesting of its internal models. Regulators

would then require the desk to be moved on to the standardised SBA. Too many NMRFs make it harder for banks to pass the P&L attribution test and relying on patchy pricing data can result in banks passing the test at one point in time only to fail it a few months later.

"If it was me running this business, I would be worried about a trading desk where I thought there was a substantial risk that at regular intervals it would fail its P&L validation test," says Simon Gleeson, a lawyer for Clifford Chance, based in London. "Regardless of whether the desk manages to pass the P&L test, if the bank is not convinced it would remain modellable for an extended period of time, then it will have to set aside the standardised amount of capital for that desk, come what may."

By separating the Asian trading desk from trading desks in Europe or the US, global banks may be hoping the difficulty of modelling factors for certain trades does not impact on their ability to use internal models elsewhere in the business.

"Although the Asian trading desk will add to the global figure anyway, by segregating that activity you're minimising the risk that the Europe desk or the US desk will fail P&L validation and be thrown back on to the standardised methodology," says Gleeson.

The obvious fallback if internal modelling does not reliably yield capital benefits that justify the heavy systems costs is to adopt the standardised SBA. However, Hong Kong banks appear to favour the more basic simplified SA, because the SBA would require them to make significant investment in new systems to collect risk sensitivities data.

"A lot of these entities onshore do not have a local risk and technology infrastructure to do the number crunching and run the engine. It is all in their global desks in London or elsewhere," says Ramakrishnan. "The simplified SA doesn't require this complex technical infrastructure to run these numbers or do the number crunching."

He adds that the HKMA is reluctant to allow local trading desks to rely too heavily on systems based in the parent jurisdiction: "The HKMA is always insisting on local accountability if something goes wrong. When it comes to traded risk or technology risk, they want people to be accountable here in the region."

Moreover, the perceived capital benefits of SBA over the less cost-intensive simplified SA are comparatively small. Gleeson says bankers describe the SBA as "a very long run for a very short jump".

"I also think that some of it has to do with predictability. From a capital manager's perspective, what you want to know is how much capital you have to commit. If you are a trader, you only take positions if you are confident that you liquidate them when you choose – not when the reg cap model changes," adds Gleeson. "Consequently, from both perspectives, there is a positive business value to stability, and that is what simplified standardised gives you."

But other banks will be closely watching what the HKMA does in terms of NMRF relief for G-Sibs in case setting up a subsidiary in the territory allows them to manage their FRTB capital more efficiently. Over the past few years, banks have been increasingly looking at setting up regional booking hubs in either Singapore or Hong Kong to escape the impact of Brexit and some of the EU's more onerous legislation.

Global banks will have to be careful about the extent to which they arbitrage the FRTB framework in Hong Kong, however, for fear of falling foul of their home regulators.

"I don't think any bank should adopt the simplified approach, considering the poor impression that it would give its regulatory body on the bank's ability to manage risk," says the head of risk at one regional bank. "As such, I am surprised to hear that G-Sib banks would even consider it."

And while it may therefore be difficult for a G-Sib to justify using the simplified SA for its entire local risk book, the debate over NMRFs in Asia is unlikely to go away.

According to one market risk manager from another bank, regulators in Asia are going to have to look quite closely at whether they can find ways to ease the burden when they implement the Basel framework locally. ■

Previously published on Risk.net

Smaller Japanese banks are set to adopt CVA accounting

International Financial Reporting Standards convergence levels the playing field as regional banks start to price in credit risk.

By Chris Davis

More Japanese banks are planning to report the market value of counterparty credit risk in derivatives trades, in a move that could lead to losses but align swap pricing with domestic and international bank peers, dealers say.

A change to local accounting rules, slated for 2021, will sweep away an exemption that has allowed Japan's banks to avoid adjusting their books to reflect the fair value of derivatives portfolios. Swerving this credit valuation adjustment (CVA) has long enabled the country's dealers to offer more competitive swap pricing to clients, undercutting rival banks.

Japan's largest dealers have started to voluntarily report CVA accounting during the past year but smaller firms have not yet fallen into line.

"The new standards remove this exemption and it now seems that everyone needs to think about CVA. That's why second-tier firms have become interested in CVA accounting," says Satoshi Kumeta, head of derivatives valuation adjustments for fixed income, currencies and commodities at Daiwa Securities.

The rule change, announced in July, is part of a wider drive to bring the country's accounting standards in line with International Financial Reporting Standards (IFRS). As well as the exemption removal, the new rules aim to give a clearer definition of the fair value that should be embedded in the price of transferring an asset from one counterparty to another.

By applying the phrase "exit price" to derivatives valuations, the standards will force dealers to incorporate the market price of counterparty credit risk into fair value, says a Tokyo-based consultant.

As a result of the changes, "quite a few Japanese financial institutions are now wondering whether they have to implement market-based credit valuation adjustments", the consultant adds.

Simpler institutions may be able to account for CVA without overhauling their infrastructure, while larger regional banks or those with more exotic books may need to create dedicated derivatives valuation adjustment (XVA) desks, experts say.



The head of an XVA desk at a Japanese megabank confirms smaller banks are now taking an interest in CVA and that "one or two of the larger regional banks have started work on setting up an XVA desk".

The largest regional banking institution in Japan is Bank of Yokohama with total assets valued at ¥16.8 trillion (\$154.8 billion) as of March 31, 2019, according to official data. The next largest are Bank of Fukuoka, and Chiba Bank, with total assets of ¥16.7 trillion and ¥14.9 trillion, respectively. The three banks could not be reached for comment.

Japan's four megabanks have already adopted CVA accounting, with Nomura first to introduce the practice. The remaining three followed suit after an industry working group recommended a stepped shift to reporting CVA in 2017. Previously, banks were not required to report CVA if the calculation was deemed "too difficult or if the impact is not very material", under Accounting Standards Board of Japan rules.

Mitsubishi UFJ Financial Group, Mizuho and Sumitomo Mitsui Banking Corporation included CVA in their latest financial statements published in March, although they have been holding capital against it for years. Mizuho announced a ¥30 billion writedown on its derivatives portfolios in March after it began reporting CVA. For these banks, a key driver for change was the incoming overhaul of regulatory CVA in the new FRTB rules.

To be able to apply the standardised approach for calculating regulatory CVA, banks must have a CVA framework in place that includes the use of credit default swap-based CVA calculations; banks

currently use historical inputs from observed data. If banks are unable to use the standardised approach, known as SA-CVA, they will have to fall back to the basic approach, which could lead to capital charges up to 10 times more punitive for some banks.

A number of banks, particularly ones with large exotics books, are weighing up whether they will need to hedge the profit and loss volatility that could result from pricing in CVA, says Alexandre Bon, head of marketing for Asia-Pacific at Murex in Singapore.

"Definitely those institutions would want to price adequately and, like the megabanks, they would be keen to mitigate the impact on earnings volatility and capital," he says.

The megabanks that have already begun pricing CVA into swap trades have an interest in ensuring their local rivals follow their lead. By not charging CVA on trades, regional banks are able to provide lower swap prices for domestic corporate clients, which tend to trade uncollateralised and therefore attract the most CVA. The megabanks enjoyed this same pricing advantage over international dealers until recently.

"[The megabanks] are trying to educate and convince the other local players to go in the same direction," says Bon. "They are concerned that they will be incorporating CVA in their prices but their smaller local competitors are not. So they are promoting the idea of having a CVA desk and pricing CVA as a sound market practice but also because they would like to have a level playing field." ■

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EBA relaxes modellability hurdles for market risk capital

Flexibility granted for assessing non-modellable risk factors on options, but constraints remain on committed quotes. By Samuel Wilkes

The European Banking Authority (EBA) has dialled back hurdles in a test for determining whether risks are hard-to-model under forthcoming trading book capital rules, but a restriction remains on the way quotes from the market are used in the test.

Derivatives traders are particularly relieved by a change to the way complex risks used to price volatility in options and swaptions will be capitalised, as two previously proposed approaches were found to be impractical.

"It seems the EBA understood our concerns and they acknowledge the two approaches did not make much sense," says a market risk specialist at a European investment bank. "They now say the best way is to keep a principles-based approach and leave flexibility to banks to actually decide how to assess the eligibility of each model parameter."

On March 27, the EBA published a series of technical standards fleshing out rules surrounding the use of internal models for calculating capital requirements under new market risk rules, known as FRTB.

One of the three technical standards lays out the rules of a quarterly test banks must undertake to determine whether they have enough data to accurately model their risk factors. Risk factors that fail the test are deemed non-modellable (NMRFs) and must be capitalised separately using a stressed capital surcharge.

The final FRTB – published by the Basel Committee on Banking Supervision in January 2019 – requires the test to be applied to the underlying inputs of parametric models that are used to represent the risk sensitivities of complex options functions such as curves, surfaces or cubes. But the text is silent on how to determine modellability of the whole function and capitalise different points on the curve if some are modellable and some non-modellable.

Bankers feared it would lead to an all-or-nothing approach, where whole curves would be treated as non-modellable if a single point on the curve failed the test.

The two alternatives the EBA put forward for consultation in June 2019 had aimed to ease the capital impact from this situation by allowing modellable points of a curve to be subject to lighter capital requirements. However, risk managers feared they were too complicated to be practical, and could be subject to conflicting interpretations.

The EBA has instead opted for a different approach that will allow banks to determine themselves how best to assess modellability of the function as a whole. However, this will be subject to dividing the function into maturity buckets and assessing the modellability of each bucket. The threshold per bucket will be at least 100 verifiable price observations over the past year, or at least 24 verifiable price observations over the past year, and no 90-day period that has fewer than four prices.

As long as more than one bucket is modellable, the curve can be capitalised using the expected shortfall method set out in FRTB internal model rules. Those maturities that are classified as non-modellable will be subject to a capital add-on based on the worst 12 months of expected shortfall numbers for that risk factor.

"There is some additional flexibility now, and how we decide to model that [risk factor] will need to be approved by supervisors. As firms document and put in their model applications, I'm sure supervisory scrutiny will be there to ensure they are doing it correctly," says a capital manager at a second European investment bank. "This is a positive change."

The new approach will allow banks to consider simpler methods for assessing the modellability of the whole curve. The market risk specialist at the first European investment bank says an alternative method they envisage implementing would focus on the parameter that is most important for determining the output of their models.

"In a model, there is always one parameter that drives the overall curve or the surface, so that is a good proxy for assessing modellability," says the market risk specialist. "If that is all modellable, then it is a good step for treating the curve as modellable."

They point to the stochastic alpha beta rho model – typically used to price interest rate options and swaptions to represent the sensitivity of the position to volatility – as one model their approach would work for. They say implied volatility is mainly driven by a single parameter: at-the-money volatility. By using this single parameter as a proxy for the whole curve, the bank can simplify both the test and capitalisation of the different points along the single parameter's output.

Stephane Boivin, a senior policy expert at the EBA, confirms the new rules will allow banks to recognise hierarchies in their models, and more generally give them extra freedom to define their own risk factors. Their risk factor definitions, however, need to be justified as eligible to regulators, and to pass two other tests applied to banks' trading desks assessing whether their internal models accurately reflect actual risks and losses.

"This approach doesn't pre-empt the choices banks make in terms of the specification of their risk factors," says Boivin. "The options we had for consultation were a bit restrictive in this respect. Now it is clearer that banks can specify their risk factors as they want, as long as this is consistent in the backtesting, the profit-and-loss attribution test and the risk factor eligibility test."

Two single-sided quotes

Banks say the technical standards on NMRFs are "broadly positive", but highlight one rule that they say will reduce the sources of market pricing used to prove modellability. The idea is that a transaction does not have to have taken place to provide a verifiable price for internal models – a committed quote at which a market participant is obliged to transact could be enough.

The final rules require quotes to have both a bid and ask price from the same day, which can come from different dealers.

"The EBA still wants both bid and ask, but the quote can come from different sources," says the



market risk specialist at the first European investment bank. "So you could have a market-maker that would quote a bid price and another market-maker on another quote that gives you an offer price, and then it would be modellable provided the two quotes are for the same trading day."

The rule is softer than the approach the EBA had originally proposed, which would have required the bid/offer prices to come from the same dealer – so-called two-sided quotes. Banks had complained in responses to the June 2019 consultation that this stopped them from using a deep pool of single-sided quotes.

Although the final rule will mean single-sided quotes can be used, two sources warn it will still limit the number of available quotes for the test.

"It's still a constraint, but it is better than [what was first proposed] – getting rid of all the one-sided quotes that are a huge amount of the available quotes," says the market risk specialist.

Single-sided quotes are commonly found in asset classes that trade predominantly over-the-counter, which includes corporate bonds and derivatives.

Jacob Rank-Broadley, a director at technology and data vendor Refinitiv, says the ruling will most likely affect risk factors where committed quotes would have been vital to passing the test.

"If a risk factor is super-illiquid then it shouldn't

be passing the eligibility test, and if it is trading every day then you don't need quote data," says Rank-Broadley. "But the whole point of committed quotes was the fact that you have got this bit in between where the quotes do provide value, [but] you only end up with a bid or offer because there might have only been one or two firms looking for a price on a given day. So our concern is that they have just eliminated that middle ground from being modellable."

The Basel way?

Rank-Broadley says the provision will mean the EU rules are stricter than the Basel Committee's version of FRTB. A Basel FAQ document published in February 2019 defines a verifiable price simply as a committed quote to buy or sell an instrument, rather than referring to two-way quotes.

"Buy or sell doesn't seem quite consistent with what the EU has proposed," says Rank-Broadley. "If we have a scenario where the non-EU based regulators take a more literal interpretation, then you go down a scenario where non-EU banks have a higher likelihood of passing the modellability test and could have lower capital than an EU bank."

Boivin of the EBA says asking for both bid and offer prices will help ensure committed quotes are reflective of actual transactions in the market. By

having a requirement to evidence prices for both a buy and sell order, it provides an additional safeguard against dud quotes being used to prove modellability.

"We don't think it is in the spirit of Basel rules to allow all one-sided quotes to be counted as verifiable prices, so we require bid/offer to ensure committed quotes remain not too far from potential transactions and can, therefore, be counted as verifiable prices," says Boivin.

Having both bids and offers also makes it easier for supervisors to check the quotes aren't based on negligible volumes compared with other orders in the market – a requirement set out in FRTB. The EBA plans for supervisors to use the bid/offer spreads as a gauge to check committed quotes accurately reflect prevailing market conditions by checking against other bid/offer spreads in the market.

"The onus will always be on the bank to provide a justification for the committed quotes they count as verifiable prices for the purpose of the risk factor modellability assessment," says Boivin. "Banks are required to document their approach, in particular what they consider a reasonable bid/offer spread. Competent authorities will then have to check and challenge what banks are doing based on the information provided by banks and any other information they may have." ■

Previously published on Risk.net

EU banks seek delay due to Covid-19 strain

Firms want leeway to fight market mayhem, minus burden of new reporting rules. By Samuel Wilkes



European banks and trade bodies are asking for a delay in applying new market risk reporting rules, thanks to the added pressure of coronavirus on market risk teams, sources have told *Risk.net*.

The International Swaps and Derivatives Association (Isda) is said to be drafting a letter to the European Commission (EC) to request a reporting delay for FRTB. Sources say industry bodies have been submitting requests to supervisors and regulators since March 27. Isda declined to comment on its letter.

"The industry is asking regulators and policy-makers to review the FRTB implementation dates in light of the current environment," says a risk manager at a European investment bank. The rules are slated to take effect at the end of March 2021.

"We are largely on track to implement FRTB, but every day new challenges come in," says Eduardo Epperlein, global head of risk methodology at Nomura. "We could start feeling the strain because business as usual is no longer normal. We are going to have to address a lot of unforeseen events. We don't know how teams will be affected in the future."

The EU plans to implement the Basel Committee on Banking Supervision's latest trading book capital requirements in two phases. Initially, European banks will report the results of two approaches for calculating capital requirements under the framework: a regulator-set standardised approach (SA); then banks' own internal models. European legislators then plan to turn these requirements into risk-weighted capital requirements within a future review of their bank capital laws, referred to as the Capital Requirements Regulation (CRR).

The European Banking Authority (EBA) is currently drafting implementing technical standards (ITS) on the information banks need to report using the SA set out in FRTB. These are scheduled to take effect on March 1, 2021, with the first reporting date on March 31. Reporting for internal models will begin three years after the relevant technical standards are adopted into European law.

But banks warn that preparing for the start of standardised reporting rules is putting added strain on them in turbulent times. Market risk managers are having to make more frequent market analysis and model validations to ensure that they are accurately capturing risks to inform traders.

Banks that implemented the SA adopted by the EC in December 2019 will still need to implement tweaks to systems that arise from the EBA's ITS, says Jouni Aaltonen, a director focusing on prudential regulation at the Association for Financial Markets in Europe (Afme).



Implementation programmes themselves could be affected if staff fall ill or need to care for someone during the crisis.

"With everything that is going on, it is very difficult for banks to undertake implementation projects and for regulators to review the quality of the processes supporting the reporting requirements," says Aaltonen. "Therefore, we are looking at finding a way to delay the reporting requirements. Given that the EBA's technical standards are due by June 2020, even banks that have SA capacity already would still need to tweak their systems to the exact technical standards."

Alternative arrangements

One option Aaltonen suggests is for legislators to delay the adoption of the EBA's ITS. The EBA has until June 30, 2020 to deliver this, but the EC has the option to reject it and request amendments. The EBA would then have six weeks to resubmit. The EC has a four-month window before it has to endorse an ITS. The EBA would also have to amend the date within the ITS.

An FRTB specialist at a second European investment bank says earlier industry requests had asked regulators to delay the reporting rules for the duration lockdown measures are in place.

In Wuhan, China – believed to be where the coronavirus first emerged – lockdown measures began to lift two months after first being enforced, which suggests a relatively short delay would be appropriate. However, it is not certain how long lockdown restrictions in Europe will last. The possibility of a second wave of the virus spreading through Europe cannot be ruled out.

Once the FRTB reporting rules go into effect, banks will have to submit FRTB reports at the end of every quarter. A two-month delay would mean standardised reporting would start on June 30, 2021.

"It is difficult to say at this point in time how long the delay should last," said Afme's Aaltonen. "We don't know how widely the virus spreads and how

"We are largely on track to implement FRTB, but every day new challenges come in ... We could start feeling the strain because business as usual is no longer normal"

Eduardo Epperlein, Nomura

quickly we can start to return to normal. We also don't know if there will be additional lockdowns further down the line. Postponing by one quarter is unlikely to be sufficient for all banks, as some may have to relaunch their change programmes."

Panayiotis Dionysopoulos, head of capital at Isda, suggests mirroring the Basel Committee's delay for jurisdictions to implement the remaining elements of the post-crisis bank capital rules – Basel III, which includes FRTB – which have been delayed by a year.

"The sense we get is, given the uncertainty out there, regulators probably will need to provide some space to manoeuvre to allow banks to meaningfully reprioritise and reorganise," says Dionysopoulos.

"Banks have to know that early, and such a delay should be consistent with the announced postponements of the overall Basel III package."

A further option for legislators would be to amend the level one text of CRR by inserting a new start date for SA reporting, says Afme's Aaltonen.

No delay

In the absence of any delay, banks are hoping supervisors would show leniency at the start of the regime.

"If regulators don't want to delay," says Nomura's Epperlein, "it would be helpful for them to adopt a pragmatic relaxation of the entry criteria for the start of the EU reporting period to support banks through this turbulent period."

"I'm not sure they will delay by much," says the FRTB specialist, who believes supervisors will be less concerned about reporting rules than about capital requirements. "If there is an accident for the first reporting date, then they will probably tell you: 'OK, that's not good, but be on time for the next one.'"

Without giving specific details in relation to FRTB, an EC spokesperson said that various policy initiatives are being adjusted to address the situation and that it is continuing preparatory work on long-term policy priorities. ■

Previously published on Risk.net

Banking's open data revolution falls short

Lax Pillar 3 rules are leading to inconsistent data being collected. By Louie Woodall



The open data revolution promised a lot. The Basel Committee on Banking Supervision's Pillar 3 framework put data on the capital, liquidity and leverage of big banks into the public realm, so their risks could be monitored and executives held accountable. Tearing down these information barriers was meant to promote market discipline.

The periodic data dumps under the Pillar 3 framework are catnip to analysts and regulators. They also provide the raw material for hundreds of *Risk Quantum* articles. But, if the data is flawed, market discipline cannot be enforced. Sadly, much of the information disclosed in Pillar 3 reports is holey, inconsistent and generally of poor quality, according to a recent assessment by the European Banking Authority (EBA).

In some cases, mandatory disclosure templates and tables went partially or entirely unfilled without explanation. Some reports were hidden as appendices in interim reports or buried in obscure corners of firms' websites.

Most frustratingly, for those using the data for comparative analysis, the structure of Pillar 3s and the labelling of templates and tables were found to be inconsistent among institutions. Interdisclosure-period data changes were also calculated differently across firms, frustrating comparisons over time.

These shortcomings aren't just fodder for grumpy data wonks, though. Pillar 3 disclosures are crucial for effective investor scrutiny of financial institutions. It's common on bank earnings calls for analysts to ask about the migration of risk-weighted assets (RWAs), or the reasons capital levels fluctuated or liquidity buffers dipped. Often, executives can point to their disclosures to furnish answers. That's what they're there for.

But banks still keep some data hidden. For example, of the US systemic banks, only JP Morgan, Bank of America and Wells Fargo disclose granular counterparty credit RWA data. Among eurozone systemic lenders, many only provide comprehensive

Pillar 3 data as of year-end and June 30, making quarter-on-quarter comparisons tricky.

One reason for these inconsistencies is that current rules aren't as strict as they could be. For instance, European banks are only required to produce all disclosures yearly. As a result, interim Pillar 3s are often stripped to the bare essentials, without useful context or clarifying detail.

But financial markets move fast, and risk profiles can flip in the blink of an eye. The EBA's efforts to 'optimise' Pillar 3 in the wake of the passage of the updated Capital Requirements Regulation could bring European banks' disclosures into line. The watchdog issued updated public disclosure standards in June, and the first set of reports adhering to these will be published from mid-2021, following a public consultation launched in October last year.


Tougher, less flexible rules may get Pillar 3s into better shape – benefiting banks and stakeholders alike. ■


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