

INITIAL MARGIN REQUIREMENTS PHASES 5 & 6



The European Market Infrastructure Regulation (EMIR) introduced initial margin requirements (IMR) for uncleared over-the-counter (OTC) derivatives, which constitutes the last piece of a series of measures aimed at reducing counterparty credit risk and systemic risk within the derivative markets.

The implementation of these regulatory requirements has been phased in 6 waves between 2016 until 2022, according to the materiality of counterparties' uncleared derivative positions. Whereas the first phases only concerned the largest banks and asset managers at the global level, Phase 5 and 6 will considerably expand the numbers of entities subject to IMR.

As we approach the deadline for the Phases 5 & 6, firms in scope of this regulation (incl. banks, insurance companies and pension funds) face several compliance, legal & operational concerns. The objective of this note is to shed light on the considerations that derivative markets' participants are facing when taking on this new challenge.

David Denayer, Manager

Mahmoud Mseddi, Consultant



REGULATORY BACKGROUND & SCOPE

EMIR, as implemented under the regulation N°648/2012 in the EU, materialises the commitment¹ of G20 countries to draw the lessons from the 2008 crisis and address systemic risks arising from derivatives markets. In this regard, the Basel Committee on Banking Supervision (BCBS), in cooperation with the International Organization of Securities Commissions (IOSCO), proposed a set of recommendations to increase transparency in the OTC derivatives markets while reducing credit and operational risks; namely through the introduction of transactional reporting to accredited trade repositories (under the oversight of ESMA), the mandatory clearing for standardised derivatives and new risk mitigation requirements for uncleared OTC derivatives, including margining requirements for the latter (cleared OTC products being already covered by exchanges).



Margining requirements² were gradually introduced from 2016. The scope of the initial margin³ (IM) requirements includes all entities that are subject to variation margin⁴ (VM) requirements and that have an aggregate average notional amount (AANA) of uncleared derivatives that exceeds the level set at the relevant future phase-in date (e.g. €750 billion since September 2019). This means that most financial counterparties trading uncleared derivatives are subject to this regulation, with very few exceptions.

The Phase 5 (threshold of EUR 50 billion) and Phase 6 (threshold of EUR 8 billion) are yet to be effective, and will bring the majority of financial counterparties within the scope of initial margin requirements. On April 3rd 2020, in the midst of the pandemic outbreak, the BCBS-IOSCO announced the postponement of their implementation (pushing back the deadlines by one year). This delay has been transposed in the EU in late 2020.

The final determinations can only be made after the AANA observation window (March, April and May of the implementation year). However, firms will need to conduct estimates long before the observation window in order to have enough time to prepare, as both counterparties should be in scope of the regulation for the requirements to apply. Bi-lateral disclosure of regime and scope applicability for both counterparties involved in trades is needed well in advance of the gradual phase-in dates to allow for a proper operational (processes & systems) and documentation set-up lead time.

¹ G20 Pittsburgh Summit, September 24-25, 2009 & G20 Cannes Summit, November 3-4, 2011.

² Delegated Regulation 2016/2251, which complements the original EMIR text.

³ IM: collateral that is posted at the initiation of a derivatives transaction to protect against unexpected credit and operational events.

⁴ VM: amount of collateral required to cover the credit risk relating to the portfolio of transactions between a trading pair (takes into account netting of the market values and replacement value).



INITIAL MARGIN CALCULATION

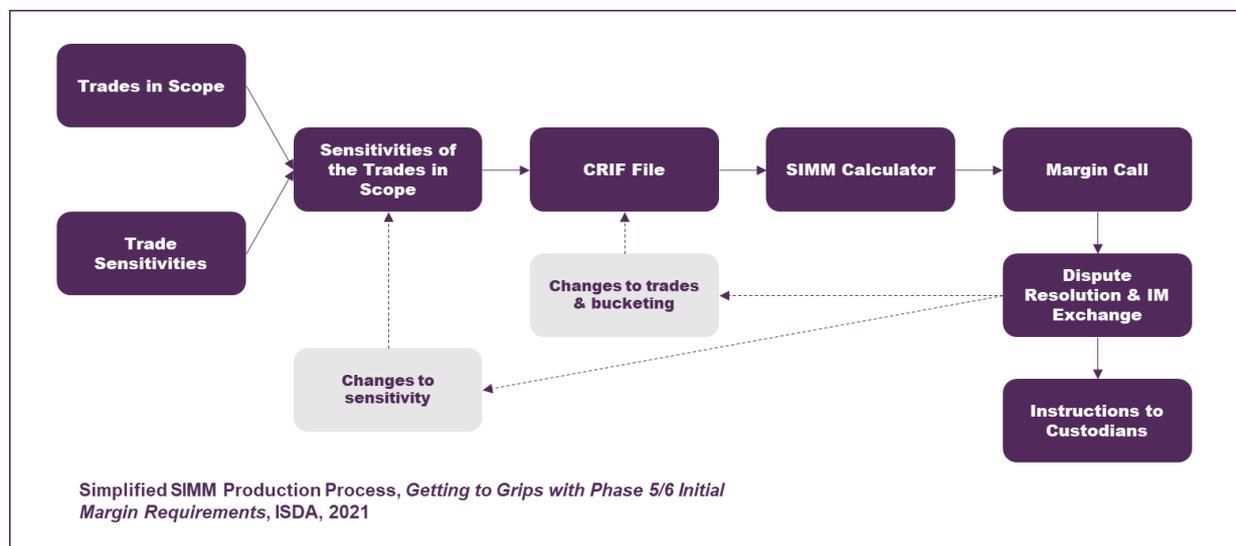
While ISDA has developed a standard modelling approach for this purpose, firms may choose to opt for a table-based methodology depending on their internal capabilities & resource availability. Initial margin is computed on a counterparty non-cleared portfolio-basis and is exchanged at the outset of a transaction between counterparties, and consistently thereafter as trades are added or removed from the portfolio.

Standard Initial Margin Model (SIMM)

The SIMM is a methodology developed by ISDA that uses sensitivities to risk factors as the main input for the IM calculation. It aims at predicting the portfolio value change on a ten-day window at a one-tailed 99% interval. The methodology is very similar to the standardised approach defined under FRTB to compute capital requirements for market risk in the sense that it consists of shocking and aggregating risk factors based on harmonised parameters.

A full data-driven prudential process is conducted to support SIMM's governance, which was ultimately developed to facilitate the implementation of IM requirements among market participants and to reduce disputes over reconciliation issues. An annual recalibration is performed by ISDA to refresh the model's parameters, risk weights and correlations in order to accurately reflect market conditions while avoiding pro-cyclicality. An annual back testing and benchmarking exercise is also performed, using Phase 1 & 2 firms' data, to compare and contrast the outcomes of SIMM against other methodologies. Finally, ISDA also coordinates a quarterly monitoring of this methodology in an effort to support the credibility and continuity of the SIMM usage.

One major characteristic of the SIMM calculation is the Common Risk Interchange Format (CRIF) file, which contains all input relative to the IM calculation for one trade. The file can be uploaded into 3rd Party service providers' calculators or communicated between counterparties, which enhances transparency and increases efficiency in bilateral negotiations and computations.



While counterparties might choose to use their custodian's or 3rd party SIMM calculation services, they may also opt to develop such models in-house. It is, however, important to note that model governance frameworks should be in place for such calculators, which may also require further regulatory pre-approvals (according to technical standards expected in the EU in the upcoming quarters). The outsourcing of the SIMM calculation to a dealer or a 3rd party might also be considered as an outsourcing arrangement under the MiFID regulation, which might entice a legal inducement challenge, among others, that needs to be monitored and mitigated.

As the market seemed to converge towards the adoption of SIMM during the previous phases (at a striking 95% rate),



a shift towards the Grid methodology (see below) is expected during Phases 5 & 6 of this requirement, as smaller market participants lacking the capabilities and/or resource to internally develop or outsource SIMM calculations, will be impacted. An asymmetric approach where two counterparties enter a trade using different IM calculation methodologies is possible although it is expected to generate reconciliation issues. While the CRIF file format allows for more transparency with regards to the input used for SIMM calculations, these gaps may give rise to bilateral disputes stemming from different perspectives with regards to the classification of trade characteristics (for e.g. asset class, risk and buckets sensitivities). Third party vendors offer reconciliation services and back testing in several instances as part of their umbrella of products. While the SIMM is said to encompass a strong fallback regime, The IBOR transition poses an additional challenge in terms of calibration of the SIMM, as counterparties might find difficulties in gathering granular historical data (mainly stressed period, which relates to the 08-09 crisis) related to alternative reference rates.

The Standardised Approach (The Grid)

This represents the less risk-sensitive approach, compared to the SIMM. It has been issued by the BCBS-IOSCO and follows a table-based methodology. It is considered less accurate and to compensate for this it is calibrated to be more conservative. This simpler method exist for counterparties that choose to not develop a proprietary SIMM calculator nor want to rely on a 3rd party vendors. The Grid determines a gross initial margin requirement as a percentage of the notional of the trade based on the asset class and its duration. The Next-To-Gross Ratio (NGR), which is meant to reflect the effects of diversification and hedging within the portfolio, is then applied to determine a net margin requirement. A proxies' approach is possible in cases where the computation of duration is not straightforward.

IMPLEMENTATION CONSIDERATIONS

Many of the requirements imposed by the EMIR IM requirements will be new for buy-side firms and will therefore introduce compliance, legal and operational challenges. From model governance and accuracy to custody model choice, several facets will impact the implementation of the regulatory requirements.

AANA COMPUTATION

One major difference between the EU and US jurisdiction is the methodology used in computing AANA. While the observation window spanning from March until May 2021 is the same, US rules consider the average gross uncleared transactions notional amount over those 3 months whereas EU rules only look at the end-of-month figures. Gauging which rules apply to firms engaged in a transaction requires sufficient self-disclosures to the relevant stakeholders. It has been also argued that trading activity produces different outcomes under both regimes when computing AANA throughout the observation cycle. In this respect, counterparties might need to compute their AANA under both regimes while trying to determine which set of rules is applicable to them. The identifications of the transactions in scope of the AANA calculation is also contingent to local requirements, as jurisdictions give rise to both temporary and permanent differences (i.e. product exemptions) that are yet to be subject to international equivalence.

The requirements imply that compliance postponement for firms falling below the respective phases' thresholds should be documented. This ties up to the level of consolidation firms adopt when calculating AANA, which can be tricky (e.g., in case of complex portfolios and separately-managed account structures). The AANA calculation is performed at the asset owner level (and not at the asset manager nor portfolio levels). Owners should therefore collect AANAs from each managed portfolio in order to be able to aggregate the values before notifying their swap dealers and asset managers.

Buy-side firms are also encouraged to adopt a pro-active stance in preparing for the IMR and set an internal threshold when measuring AANA, as daily transactions may trigger occasional breaches of the phase 5 or 6 thresholds. With



this in mind, a thorough monitoring of the measure is required to allow for a smooth reaction as firms are approaching the limits. It has also been noted by market participants that the AANA can be reduced by compressing trades and collapsing duplicate ones, for example. This gives a rise to strategic challenges with regards to counterparty selection and transaction initiation. Asset owners, through portfolio managers, might also reach out to clients to determine their desired contribution levels to the portfolio/fund uncleared activities.

In practice, the calculation is performed twice: once in advance of the observation window to assess if a potential thresholds breach would lead to the scoping of the entity, and another time for the “official” computation.

CUSTODIAN RELATIONSHIPS

Custodian relationships should be established from both legal and operational perspectives, with strategic decisions regarding the model to be adopted as counterparties may opt for either a triparty⁵ model or a 3rd party model⁶. This is challenging for dealers and asset managers in a way, as owners of separately managed accounts might use different custodians and set ups, adding up to the complexity of the operating model. The latter requires extra diligence and on-boarding requirements considering that each custodian has its own operational design and specificities. As operational processes are mainly driven by such custodians, and given the increasing complexity of the custody environment, the building and maintaining of internal systems to support the IM exchange will ultimately depend on the central counterparty’s characteristics.

While a triparty model, by design, typically includes collateral management (through collateral pricing and automated optimization and substitution) in addition to the monitoring of concentration limits (and implied wrong way risks) as a service by the custodian bank or CSD, a 3rd party model requires an independent and often manual management of those aspects. When considering arguments for opting for a triparty model, participants might therefore want to gauge the number of margin calls received and their internal desired level of control over their collateral in terms of eligibility schedule and associated complexity in terms of valuation and optimization capabilities. The triparty model would also allow them to benefit from the proposed intra-day and inter-day allocation automation and booking model standardization for the sake of efficiency. Dealers servicing an increasing client base typically prefer going through Bank Custodians under triparty settings in an effort to standardize and streamline their operational processes. Finally, the increasing volumes enticed by the entry into force of IM requirements may lead scoped firms to re-consider their custodian structure given the increasing volumes to be managed. In this respect, existent custodian relationships that have already been setup for VM may be leveraged to on-board IM custodian service offerings.

3rd party structures are said to be less operationally efficient given the high degree of manual intervention required. As an example, operations teams send asset segregation instructions by fax to CSDs and Custodian Banks, which require another fax communication by the counterparty to release the asset after conducting a manual check. This leaves all involved counterparties exposed to operational risks, leading in turn to delays and settlement failures. While processes are being reinvented with technology (i.e. ISO 20022-compliant SWIFT & FTP instructions replacing faxes), mitigating inherent risks and removing latency thorough back-end integration of the custodian flows is essential to the successful on-boarding of firms in scope of the initial margin requirements while aiming at ensuring a certain level of coordination in a work-from-home environment.

Rising volatility might also reveal deficiencies in end-to-end processes where IM calculations become more frequent,

⁵ Triparty collateral management refers to an agency service where the parties agree to the initial margin amount and a required value (“RQV”) is sent to the triparty provider to fulfil the collateral requirement. The provider carries out other activities, including validating eligibility, monitoring concentration limits, applying haircuts, collateral valuation, optimization, substitutions, automated settlement of collateral from the pledgor’s own account (the “longbox”) to the segregated account, and reporting. (ISDA)

⁶ Third party custodian services refer to the traditional account structure for segregating margin, whereby a three way Account Control Agreement (ACA) or equivalent agreement is in place between the pledgor, secured party, and custodian. In contrast to the triparty structure, the pledgor, its manager, or an administrator values the collateral, selects the collateral to be pledged along with confirming eligibility and concentration limits, attributes necessary haircuts and provides settlement instructions to the custodian. The custodian only provides settlement, segregation, and reporting services. (ISDA)



leading to an increase in margin call notifications and ensuing disputes. In this respect, the adoption of 3rd party vendor solutions, which are often integrated into triparty models with custodian banks, seem to facilitate the streamlining calls by automating flows and facilitating disputes resolution. This is also applicable for the reconciliation of values given the increasing haircuts due to the MTM monitoring of positions. Overall, a deep understanding of the regulatory background requirements and self-capabilities in terms of internal processes is required.

DOCUMENTATION CHALLENGES

This exercise presents an important legal challenge in terms of documentation as it requires a significant lead time once one of the phasing thresholds is breached. An umbrella methodology may be leveraged to facilitate the set-up of the paperwork, which might turn out to be cumbersome when dealing with market participants and custodians from numerous jurisdictions. This simplifies the process further (as ISDA templates are standardized by design) by eliminating the need for drafting documentation from scratch by leveraging existing agreements and focusing on negotiating specificities. Inherently, while negotiating annex documents such as Account Control Agreements (ACA, setting up segregation details) and Eligible Collateral Schedules (ECSs), deviations from the standard wording in the clauses can lead to increased execution and on-boarding time.

Indeed, market participants in scope of the next phases should expect a fair amount of negotiation to be conducted throughout very tight timeframes. This also includes the coverage of aspects related to the segregation of accounts for the regulatory IM and non-regulatory legacy independent amount (IA) and depends on the negotiated contractual terms with the counterparty.

The previously-mentioned custodian onboarding also requires exhaustive documentation to be in place, in addition to the usual internal governance practices taking the form of risk assessments and procurement/third party governance processes. Nonetheless, major custodians are facing a wave of new participants (which will be exacerbated during Phase 6 given the lower scope threshold), leading such institutions to set additional internal deadlines for client on boarding (Euroclear has set a deadline for the end of May 2021 for Phase 5 clients, for example). It has been mentioned that only 20% of market participants will be able to meet the custodian deadlines, as the rollout date for the 5th phase is approaching. It is also expected by the market that those same deadlines are unlikely to be extended for phase 6, leaving a window of 6 months after the September phase 5 target date to finalize the documentation (up until Feb. or Mar. 2022). This, again, encourages the aforementioned monitoring of the AANA measure well in advance of potential breaches.

BALANCE SHEET IMPLICATIONS

From a balance sheet perspective, the exchange of collateral results in reduced counterparty credit exposures at the expense of an increase in asset encumbrance (and liquidity risks to face margin calls). The former is reflected in lower regulatory capital charges as the new standardised approach for counterparty credit risk (SA-CCR) takes into account IM in the determination of the Exposure at Default (EAD).

While the exchange of IM is mutual, since received collateral cannot be reallocated that asymmetry leads to an increase in asset encumbrance levels and requires an increase in the pool of eligible assets. Given the rise in IM volumes to be posted following the introduction of the requirements, Banks – who typically post cash as collateral – are likely to turn into the inclusion of other forms of collateral (e.g. government bonds) into their schedules, initiating potential treasury allocation and operational challenges.

Contrary to centrally cleared derivatives, however, the risk of excessively pro-cyclical margin calls in times of stress is subdued for uncleared OTC derivatives. Indeed, where CCPs recalibrate their IM models daily and will rapidly on-board volatile market conditions (as observed in March 2020 with a surge in IM requirements), the ISDA SIMM approach features a lot of inertia (through the annual recalibration) and is not expected to budge as much in times of market volatility.



In any case, the implementation of IMR will require banks to revise their stress testing practices to better understand the implications of exchanging IM on their risk profile and (re-)assess the impact of stressed markets conditions on their capital and liquidity positions. In a business-as-usual setting as well, it should be noted that the way in which derivative trades are executed and managed also gives room for optimization with regards to capital and margin (e.g. which counterparty to trade with for a given deal, considering existing positions and netting impacts).

HOW AVANTAGE CAN HELP

Avantage Reply can help Financial Institutions under the scope of the 5th & 6th Phases of the Initial Margin Requirements throughout the following aspects:

- > **Gap analysis & roadmap** by evaluating current capabilities and required resource mobilization needs and required preparation steps ahead of the implementation;
- > **Project management** through steering the implementation and ensuring the coordination of the various stakeholders across the institution (i.e. treasury, operations and legal functions);
- > **Advisory** regarding implementation options (i.e. the use of triparty vs. 3rd party models, in-house development and computation of SIMM vs. outsourcing, incl. vendor selection);
- > Post implementation **compliance review** and **quality assurance** with regards to the reconciliation and replication of pricing and SIMM computations.
- > **Impact assessment for capital, liquidity and risk management** through the assessment impacts of IM requirements on counterparty credit risk and liquidity risk (i.e. regulatory reporting, SA-CCR & asset encumbrance, stress testing);
- > **Capital management** via the optimisation of resource allocation to derivative portfolios (and the trade-off analysis between margin and capital);
- > **Collateral management** and **schedule optimization** through an analysis of the treasury portfolio; and
- > **Regulatory watch** of the latest developments.

AVANTAGE REPLY

Established in 2004, Avantage Reply (a member of Reply) is a Pan-European specialised management consultancy delivering change initiatives in the areas of Risk, Compliance, Finance (Capital Management and Treasury, Regulatory Reporting), Compliance and Operations.

With operations in Amsterdam, Brussels, Frankfurt, Lisbon, London, Luxembourg, Milan, Munich, Paris, Rome and Turin, Avantage Reply adapts to the particular needs of its clients. Our consultants advise and deliver pragmatic solutions, supported by comprehensively tested analytical techniques. Avantage Reply's proprietary solutions, methodologies and prototypes have benefited clients in a number of different countries