ISDA. Safe, Efficient Markets

Building resilience and competitiveness of EU derivatives markets

Post-Trade Risk Reduction

Executive Summary

Post-Trade Risk Reduction (PTRR) services would significantly strengthen the resilience and competitiveness of Europe's growing derivatives markets, if fully deployed.

Their benefits have been clearly acknowledged by the European Securities and Markets Authority (ESMA), in cooperation with the European Systemic Risk Board (ESRB), who have advocated for the creation of a coherent regulatory framework for these services.

The current EMIR 3 legislative proposals mark a crucial opportunity to establish this framework.

PTRR services include portfolio compression and portfolio rebalancing which enable counterparties to manage their exposure to certain types of risk in existing derivatives portfolios (such as counterparty risk, operational risk and systemic risk) without altering their fundamental market positions. To achieve this, the services often require insertion of technical, market-risk neutral, output transactions into existing netting sets.

A study by ESMA in November 2020[1], carried out with the ESRB, identified that PTRR services complement central clearing in helping to mitigate risks and complexity on the derivatives market, so supporting the aim of reforms put in place by the G20 after the 2008 financial crisis.

ESMA also stated that, in order for PTRR services to achieve their full potential, the non-price forming output transactions that result from such exercises require a well-framed derogation from the EMIR clearing obligation. The exemption would apply only to the non-price forming transactions that result from PTRR exercises. This paper sets out a model for establishing this framework, based on ESMA's recommendations and ISDA's response to the authority's consultation.

In particular, under this model **every** trade that is required to be cleared today under the EMIR clearing obligation would remain under the same obligation and not be impacted by the proposed derogation. PTRR services produce an additional, non-price forming, counterparty risk-reducing set of transactions, some of which would take advantage of the derogation from the clearing obligation.

The need for market participants to have access to the best possible risk-reduction techniques has been reinforced by recent developments. These have highlighted the importance of tackling counterparty risks and the liquidity stress of volatile margin demands driven by market turbulence – a risk which can be significantly dampened for market intermediaries by PTRR counterparty rebalancing.

A limited and targeted derogation from the clearing obligation would:

- Increase the effectiveness of PTRR rebalancing exercises that reduce counterparty risk, so flattening potential spikes in margin requirements
- Remove barriers to a wider range of market participants using PTRR services

[1] ESMA Report on post-trade risk reduction services with regard to the clearing obligation: 10 November 2020: link

- Enable new levels of risk exposure transfer from the uncleared to the cleared market, so directly supporting the G-20 financial stability objective of increased central clearing of derivatives risks

Reticence to date in unlocking the benefits of PTRR has largely been due to its complexity and concerns that it could lead to reduced clearing of risk. These have now been addressed, providing a basis to move forward:

- Complexity - Regulators in recent years have identified the necessary framework to supervise the technical, non-price forming, transactions resulting from PTRR services to ensure that a derogation would complement, and do not undermine, the G-20 push for central clearing

- Cleared risk – A derogation would be accompanied by a requirement that the result of any rebalancing exercise results in a reduction in uncleared bilateral risk between the counterparties.

With the EMIR review, Europe is facing a decisive moment for determining the future structure of its derivatives markets, at a time when international developments underscore the importance of tackling systemic risk, when other jurisdictions are exploring the potential of PTRR services, and when policymakers are pursuing an agenda of seeking to strengthen the attractiveness of EU markets[2].

THE BENEFITS OF PTRR SERVICES IN A TIME OF CRISIS

Post-trade risk reduction has become increasingly established as a means to reduce risks in the derivatives market. The main forms of PTRR are:

- **Portfolio compression** – the practice of tearing up offsetting trades between multiple, interlinked counterparties and simplifying trading relationships though new contracts – reducing the size of gross exposures, and so cutting down systemic risk, and in particular operational risk.
- **Portfolio rebalancing**, reduces risk exposures between counterparties by introducing new transactions into netting sets. While not affecting market risk, these transactions reduce counterparty risk in affected netting sets. This reduction of risk has the knock-on effect of reducing liquidity strains from rapid margin demands, particularly in times of market stress.

Both of these forms (compression or rebalancing) can be either bilateral or multilateral.

New technical transactions that are created by PTRR exercises are market-risk neutral, and non-price forming.

(A more detailed explanation of how these services work can be found in the Annex to this paper)

These services are popular – with over approx. €1,000 trillion in derivatives exposures eliminated through portfolio compression exercises in the last 15 years.

Similarly, portfolio rebalancing can reduce the kinds of large margin calls made between financial market participants at the height of Covid-related market turmoil in March 2020, and through the extreme volatility that characterised at least part of 2022.

[2] Informal Meeting of the Heads of State of Government: Versailles Declaration: 10-11 March 2022: link

This is reflected in the fact that, during that period, gross variation margin paid and received by counterparties rose exponentially more than the effective net margin requirements that different counterparties needed to meet. In net terms, calls on variation margin increased only by a factor of 2-3 times compared to normal market condition; but the gross amount of variation margin paid and received rose from around 3-4 times the net amount (i.e., the situation in normal market condition) to some twelve times the net amount[3].

Broadly, during March 2020, around USD 260bn of liquidity[4] was being utilised each and every day in settlement of these obligations arising from variation margin requirements on bilateral trading. Large offsetting bilateral credit risks will have contributed materially to these amounts. This created liquidity stresses at exactly the moment when funding markets were less liquid.

Rebalancing exercises are also intended to mitigate the kind of liquidity strains we have witnessed in the energy derivatives market as a result of the Russian invasion of Ukraine, by helping market intermediaries to manage counterparty risks while leaving their overall market positions unchanged.

HOW PTRR SERVICES BENEFITS ARE RESTRICTED BY THE EMIR CLEARING OBLIGATION

Many market participants use PTRR services today, however their full potential in terms of risk reduction is not being harnessed.

This is because of their interaction with the EU's clearing obligation, established by the EMIR framework, for certain derivatives contracts.

A barrier arises because new output transactions created by PTRR exercises (transactions which are inherently non-price forming) must, generally, be cleared. Unfortunately, if the portfolio of older contracts that they intend to address consists of uncleared bilateral exposures, clearing the new transactions undermines the whole process, as these risk-reducing output transactions become detached from the risks they are trying to rebalance or reduce. In other words, if the original risks that need to be hedged are in a bilateral portfolio, then the output transactions from the PTRR services also need to be booked into that bilateral portfolio – which, for transactions subject to the Clearing Obligation, is not possible.

This problem was clearly recognised by the European Securities and Markets Authority in a report on PTRR services it published in November 2020[5].

The report, prepared in cooperation with the European Systemic Risk Board, highlighted that this barrier has undesirable consequences:

- **Complexity in the market:** It forces traders to turn to types of instruments not covered by the EMIR clearing obligation to execute PTRR transactions for reducing counterparty credit risk on uncleared portfolios. These products, such as swaptions, are more complex, less standardised and less efficient than the simple plain vanilla derivative contracts that could otherwise be used

[3] ISDA / EBF Response to the ESMA PTRR consultation: June 16 2020: link

[4] ISDA / EBF Response to the ESMA PTRR consultation: June 16 2020: link

[5] Report to the European Commission: Report on post-trade risk reduction services with regard to the clearing obligation: 10 November 2020: link

- **Exclusion of smaller firms:** This additional complexity means PTRR services become less accessible to market participants, as only those sophisticated firms with large enough compliance and internal management systems can handle PTRR services using the more complex transactions.

The overall effect, recognised by ESMA, is that fewer firms use these techniques to reduce their risk than would otherwise be the case meaning **greater counterparty credit risk and liquidity requirements for uncleared portfolios**.

A limited and conditional derogation from the clearing obligation would permit the use of less sophisticated derivatives products for PTRR purposes – opening up the possibility for a wider range of market participants to use these services and more efficient PTRR for those already using the services.

Additionally, the current requirement for technical, non-price forming, transactions to be cleared holds back the roll-out of new PTRR exercises – "**bilateral risk reduction**" - that **would further serve the EU's goal of managing a greater proportion of derivatives risk through central clearing**. Such services would have the purpose of transferring linear counterparty risks which exist within complex bilateral portfolios from the non-cleared space to the centrally cleared space in clearinghouses. At present, however, the requirement to clear the PTRR technical output transactions **would make this risk transfer impossible**.

This **bilateral risk reduction** between market participants cannot exist today owing to the clearing obligation. As such, it would complement the existing multilateral rebalancing provided through PTRR.

ESMA, in its report, **recommended a derogation** for output transactions resulting from compressions of uncleared trades; for portfolio rebalancing, it recommended a broader derogation, covering transactions resulting from rebalancing of uncleared portfolios, as well as transactions resulting from exercises covering both centrally cleared and uncleared trades.

It is also worth noting that the current EMIR approach of capturing these non-price forming transactions under the clearing obligation is out of step with evolutions in the treatment of PTRR exercises in other EU legislation, most notably in MiFIR[6].

Portfolio compression service providers are already exempt from trading and best execution requirements under MiFIR, while ongoing discussions in the context of the current review of that legislation are exploring the possibility of exempting a broader range of PTRR services from the Derivatives Trading Obligation (DTO). This would be a positive outcome to further remove existing barriers to the use of PTRR services by market participants.

[6] Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012: Recital 27:
"The obligation to conclude transactions in derivatives pertaining to a class of derivatives that has been declared subject to the trading obligation on a regulated market, MTF, OTF or third country trading venue should not apply to the components of non-price forming post-trade risk reduction services which reduce non-market risks in derivatives portfolios including existing OTC derivatives portfolios in accordance with Regulation (EU) No 648/2012 without changing the market risk of the portfolios. In addition, while it is appropriate to make specific provision for portfolio compression, this Regulation is not intended to prevent the use of other post-trade risk reduction services": link

HOW THE EU HAS EXPLORED THIS QUESTION SO FAR

The ESMA report from November 2020 explored whether transactions that directly result from PTRR services should be exempt from the EMIR clearing obligation, notably recognising the value of PTRR services for risk management and the potential for an exemption to increase their accessibility for market participants[7]. ESMA said that an exemption from the CO would be "justified" based on its analysis.

Notably, ESMA concluded that *"a limited and qualified exemption from the clearing obligation would further reduce not only risk in the market, but also its overall complexity"*[8].

ESMA's findings, which followed a public consultation process, included that rules could be put in place to mitigate any risk that an exemption might enable circumvention of the EMIR clearing obligation – one of the most important reforms put in place by the G-20 in response to the great financial crisis.

Its recommendations included tightly framing the scope of the exemption, insisting that providers of PTRR services are independent and neutral, and ensuring monitoring of the impact of any derogation.

ESMA also said that it would continue to assess the need to regulate PTRR service providers – noting that, while oversight and supervision of PTRR service providers was not formally part of the remit of its study, it was an important aspect of the overall question of how to treat such services.

Specific proposals from ESMA on operationalising a derogation from the clearing obligation are incorporated into the policy proposal set out later in this paper.

The ESMA study fed into a report from the European Commission, published in April 2021[9], on whether an exemption should be granted. The Commission report acknowledged ESMA's findings, noted that the regulator had performed an "extensive and thorough analysis", and said that further assessment should be taken forward to inform a final decision.

The Commission report also clarified a key test that any exemption from the EMIR clearing obligation would normally need to pass: *"Generally, certain OTC derivatives should only be exempted from the clearing obligation where the risks of granting such an exemption are smaller than the risks of keeping the situation as it is today."*

This caution reflects how the use of central clearing has been a key part of the global remodelling of OTC derivatives markets following the 2008 financial crisis, with the Commission report identifying it as a "key element" of the EU's G-20 commitments.

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[7]Report to the European Commission: Report on post-trade risk reduction services with regard to the clearing obligation: 10 November 2020: *"ESMA concludes that the benefits of allowing certain PTRR transactions to be exempted from the clearing obligation would reduce risk in the market, allow for legacy trades to be compressed, increase participation in PTRR services of counterparties less interested to participate today (due to complex structures) and overall reduce complexity in the market by using simpler trades for rebalancing.*
ESMA is of the view that, in the absence of compelling evidence or reasoning to the contrary, those positive effects outweigh, inter alia, the increased operational burden on market participants and regulators and the increase in gross risk in the non-cleared netting sets (in case of portfolio rebalancing)": link

[8] "ESMA Releases Report on Post Trade Risk Reduction Services": link

[9] Report from the Commission to the European Parliament and the Council on whether transactions that directly result from post-trade risk reduction services should be exempted from the clearing obligation for OTC derivatives under EMIR: 12 April 2021: link

The Commission said that some aspects of ESMA's report required *"further quantitative assessment and analysis in order for the Commission to be able to make a more informed decision on any potential proposal for legislative change".*

Its overall conclusion was that further work was needed "*in particular on the definition of PTRR services and to collect more quantitative evidence."*

It suggested at the time that this could feed into a general EMIR assessment report that the Commission is required to submit to the European Parliament and to the Council **by 18 June 2024.**

THE URGENCY TO ACT

Since the European Commission's report in 2021, there has been a hardening policymaker focus on the functioning of margin calls, and on preserving financial stability during what is now expected to be prolonged difficult period ahead.

Recent problems of liquidity stress in energy markets have been highlighted at EU summit level[10] [11].

Also at the highest political level, EU leaders have underlined the importance of *"creating more integrated, attractive and competitive European financial markets, enabling the financing of innovation and safeguarding financial stability",* as part of a broader agenda of fostering investment[12].

Interlinked with this, the Commission has published its legislative review of EMIR (EMIR 3), which seek to spur more clearing of euro-denominated trades to take place within the EU[13].

The plans raise the prospect of traders needing to manage the complexity that comes with dividing activities between different (EU and non-EU) clearinghouses, and with having to manage risks across different, split, netting sets of transactions – further underscoring the need for the most effective risk-management techniques.

These reflections are taking place in an international environment that is not static: other financial centres are also thinking about their future competitiveness just as acutely as the EU.

The UK government, through its Wholesale Markets Review and the Financial Services and Markets Bill, has already moved to exempt PTRR services from the clearing obligation, on the grounds that they are market-risk neutral. In its own consultations, it found a majority of respondents backed the move, alongside "clear conditions that transactions have to meet in order to benefit from the exemption".

The UK's Financial Services and Markets Bill[14] would hand discretion to the UK FCA to specify which PTRR services may be exempt, and any related conditions. This is expected to be consulted upon in 2023.

[10] European Council meeting: Conclusions: 20-21 October 2022: link
[11] While there are no Commodity derivatives under the clearing obligation, there are other issues like off-market transactions resulting from PTRR exercises that could benefit from regulatory clarity.
[12] Informal Meeting of the Heads of State or Government: Versailles Declaration: 10-11 March 2022: link
[13] Commissioner McGuinness announces proposed way forward for central clearing: 10 November 2021: link
[14] Financial Services and Markets Bill: link

A SUGGESTED POLICY APPROACH

Even though market participants have generally embraced central clearing[15], maintaining incentives to centrally clear OTC derivatives is a crucial part of international regulators' efforts to uphold financial stability.

As such, and as set out by ESMA in its recommendations, a derogation from the EMIR clearing obligation for non-price forming output transactions arising from PTRR exercises needs to be tightly framed, and needs to be placed within a structure of monitoring and supervision that allows its use and impact to be closely tracked and analysed.

This exception would cover contracts resulting from PTRR exercises, where the reduction of risk would be more efficient if these new technical transactions (which only exist because of the PTRR exercises) are retained in bilateral portfolios rather than put through clearinghouses.

Within this, to qualify for an exemption:

- **PTRR technical transactions would have to be market-risk neutral and non-price forming –** ensuring that there is no resulting change in the directional market risk of portfolios, or possibility for market participants to engage in price negotiation. This would ensure PTRR services are used only for their intended purpose of reducing offsetting credit risk – and not for trading purposes.
- **The PTRR exercise would have to be executed as a single, multilateral transaction –** executed as a single legal transaction and binding on an "all or nothing" basis across all participating firms in the cycle. In other words, there is no discretion for participants in deciding which trades to execute; they can only be fully accepted or rejected as a whole.
- **The transaction should be performed by independent PTRR service providers –** who are not affiliated with market participants, again ensuring no possibility of "gaming" the derogation for purposes other than risk reduction.
- **Each PTRR rebalancing exercise would have to result in a reduction in uncleared bilateral counterparty credit risk between the counterparties concerned**.

The limited and conditional derogation should also be **paired with a robust supervisory framework for both PTRR service providers and the transactions resulting from PTRR services.**

Some building blocks for this are already in place. Notably, some PTRR service providers are already regulated as MiFID investment firms, which makes them subject to requirements on capital, governance, independence, product development and conflict of interest.

PTRR transactions are also subject to EMIR reporting, and this has been further strengthened with EMIR Refit technical standards published by the Commission in June 2022 – standards which set out clear rules on how transactions resulting from PTRR exercises should be identified and clearly separated in reporting from regular transactions, so significantly strengthening ESMA's ability to monitor the impact of PTRR services.[16]

[15] As can be evidenced that swaps on risk free rates like SOFR and €STR swaps are widely cleared, even without a clearing obligation.
[16] Commission Delegated Regulation (EU) 2022/1855 of 10 June 2022 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards specifying the

This derogation should also be accompanied by an expanded exemption from the DTO under MiFIR, which already applies to portfolio compression services. Current proposals under the MIFIR review of aligning the DTO and CO would address this issue.

Such an exemption from the trading obligation is essential to promoting the use of PTTR services, and it has already been recognised in legislation that portfolio compression transactions are of a non-price forming nature and do not change the overall market risk of a portfolio.[17] This should be reflected with regards to other PTRR services which are also of an administrative nature with the intention to reduce risk.

Current EU co-legislator negotiations on a revision of MiFIR suggest that a future exemption from the clearing obligation could automatically lead to a parallel DTO derogation, thus ensuring that EMIR and MiFIR slot together harmoniously on this point.

CONCLUSION

The in-depth research already conducted by ESMA and the ESRB provides a foundation to move ahead with the policy proposal set out above.

The political and practical imperatives facing the EU create an urgency to do it.

The upcoming EMIR review provides a perfect opportunity to keep the EU at pace with practices that are focused on sound management of risk, on strengthening financial stability, and on simplifying the functioning of derivatives markets.

By contrast, a failure to seize this opportunity risks leaving the EU without the full benefits of a tool to manage market volatility and tackle systemic risk. It also risks leaving it outdistanced by other financial centres in its efforts to promote an internationally attractive and competitive post-trade environment – a goal the Commission itself has clearly linked to strengthening the EU's resilience.

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minimum details of the data to be reported to trade repositories and the type of reports to be used: link and Commission Implementing Regulation (EU) 2022/1860 of 10 June 2022 laying down implementing technical standards for the application of Regulation (EU) No 648/2012 of the European Parliament and of the Council with regard to the standards, formats, frequency and methods and arrangements for reporting: link

[17] Markets in Financial Instruments Regulation, recital 27: link

ANNEX: HOW PTRR SERVICES WORK

Post-Trade Risk Reduction (PTRR) services reduce risk in derivatives portfolios. They involve applying "rebalancing" or "compression" exercises to derivatives contracts outstanding between counterparties, including clearing houses and clearing members.

Such services are provided by independent service providers who are not themselves a participating counterparty.

Portfolio compression is the tearing up of existing transactions between multiple participants and their replacement where necessary with new contracts.

Its aim is to reduce the number of contracts outstanding, the gross notional value of contracts, or another measure of risk without materially affecting the market risk of the portfolio.

Service providers evaluate outstanding contracts between a number of market participants. They look for trades with matching characteristics that can be netted off against one another, and so torn up, to reduce notional amount outstanding.

Coupled with this, service providers use replacement transactions, agreed between the counterparties, to rebuild the original risk profile of the portfolios. This allows large portfolios of transactions to be terminated without materially changing the original risk profile that those trades represented.

It is defined in EU law, under MiFIR, as a *"risk-reduction service in which two or more counterparties wholly or partly terminate some or all of the derivatives submitted by those counterparties for inclusion in the portfolio compression, and replace the terminated derivatives with another derivative whose combined notional value is less that the combined notional value of the terminated derivatives".*

Compression exercises can be carried out bilaterally between two counterparties, or multilaterally between a web of counterparties.

Portfolio rebalancing involves inserting new derivatives transactions into portfolios of participants to reduce risks linked to those trades. These are offsetting trades that rebalance relationships between different counterparties when it comes to exposure of portfolios to certain types of risk, such as interest-rate risk.

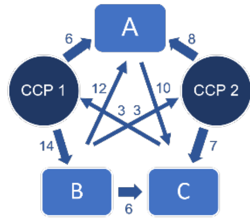
To work, exercises need to be multilateral, not bilateral, so that offsetting transactions can be found among a web of counterparties, such that the total impact of all the transactions across all portfolios is market risk neutral. Overall market-risk exposure is not materially changed by these exercises, and the new transactions are typically simple and collectively risk-neutral swaps – e.g., interest rate swaps.

What this means in practice is that the new transactions reduce overall credit risk exposures between counterparties, and so reduce the size and volatility of margin requirements that are costly to market participants.

Rebalancing exercises are scheduled to take place at specific times. Each participating firm provides information to the sensitivity of its portfolio to the PTRR service provider, and all participants need to agree to the system of new trades that are created to enact the rebalancing. The calculations to make the rebalancing exercise work are based on input data provided by all participants.

Below is a diagram demonstrating multilateral portfolio rebalancing in practice

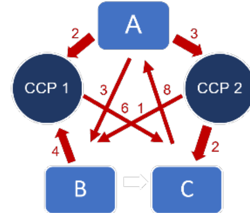
Delta exposure before rebalancing



	A	B	C	CCP 1	CCP2	Net	Sum Abs
A	0	12	-10	6	8	16	36
B	-12	0	-6	14	-3	-7	35
C	10	6	0	-3	7	20	26
CCP 1	-6	-14	3	0	0	-17	23
CCP 2	-8	3	-7	0	0	-12	18
							138

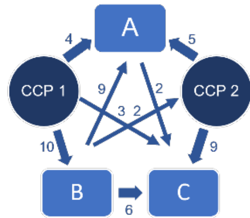
Net = Outstanding market-risk position, Sum Abs = Outstanding counterparty risk position

Add rebalancing transactions



	A	B	C	CCP 1	CCP2	Net
A	0	-3	8	-2	-3	0
B	3	0	0	-4	1	0
C	-8	0	0	6	2	0
CCP 1	2	4	-6	0	0	0
CCP 2	3	-1	-2	0	0	0

Delta exposure after rebalancing

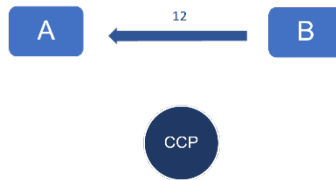


	A	B	C	CCP 1	CCP2	Net	Sum Abs
A	0	9	-2	4	5	16	20
B	-9	0	-6	10	-2	-7	27
C	2	6	0	3	9	20	20
CCP 1	-4	-10	3	0	0	-17	17
CCP 2	-5	2	-9	0	0	-12	16
							100

Net = Outstanding market-risk position, Sum Abs = Outstanding counterparty risk position

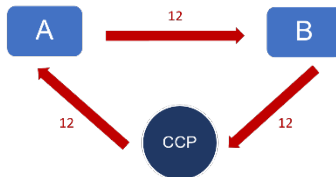
Below is a diagram demonstrating the potential for bilateral portfolio risk reduction in practice

PTRR assessment of linear risk in bilateral uncleared derivatives portfolios



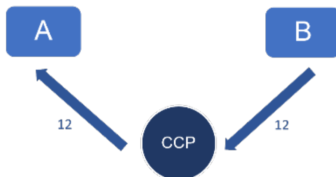
	A	B	CCP	Net
A	0	12	0	12
B	-12	0	0	-12
CCP	0	0	0	0

Add PTRR transactions to transfer linear risk to CCP



	A	B	CCP	Net
A	0	-12	12	0
B	12	0	-12	0
CCP	-12	12	0	0

Linear risk exposure after PTRR exercise



	A	B	CCP	Net
A	0	0	12	12
B	0	0	-12	-12
CCP	-12	12	0	0

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