Post-trade risk reduction has become increasingly common as a means to reduce risks in the derivatives market. Portfolio compression is a case in point: offsetting trades between multiple parties are torn up, which reduces the size of gross exposures, in turn reducing systemic risk. Over €1,000 trillion in derivatives exposures has been eliminated in this manner.

Regulators recognize the value of compression. Under the European Market Infrastructure Regulation (EMIR), market participants with more than 500 over-the-counter (OTC) trades on their books are required to examine the possibility of performing portfolio compression twice a year.

However, EMIR simultaneously disincentivizes use of this service by requiring administrative trades that result from compression, and which fall under the clearing mandate, to be cleared. This limits the ability of participants to perform compression and reduce risk.

The same is true of other post-trade risk reduction services like counterparty rebalancing. This involves inserting new, market-risk neutral transactions into netting sets to reduce risk exposures between counterparties. This decreases counterparty credit risk and therefore reduces systemic risk. However, those new transactions are required to be cleared if they are subject to the clearing obligation, preventing counterparty rebalancing risk reduction from taking place. As a result, counterparty rebalancing today is only limited to FX derivatives, which are not subject to the clearing obligation. Over €100 billion in counterparty credit risk has been reduced in this manner.

ISDA, the EBF, ICMA and ISLA believe EMIR should be amended as part of the Regulatory Fitness and Performance program (REFIT) to allow non-price forming, market-risk neutral transactions that result from post-trade risk reduction services to be exempted from the clearing obligation.
FOREWORD

The role of central counterparties (CCPs) in derivatives clearing is still growing, further to the Group-of-20 nation’s (G-20) commitment to clear standardized derivatives. An increasing portion of OTC derivatives trades are centrally cleared in the European Union, although this figure is behind that of the US as certain rules are still being phased in, and thus has further potential for clearing. The same applies to the risk management within CCPs. Experience on how to improve risk management in CCPs is still growing, along with their more central role in the financial system. This is recognized in the European Commission’s (EC) review of EMIR, proposed in May 2017, which attempts to further simplify the rules and make them more proportionate.

Compression of outstanding notional trades has increased as part of the more central role of CCPs. Still, the administrative treatment of compression and other related services does not recognize their risk-reduction effect for CCP members. This report suggests policy-makers should take this into account when examining developments in derivatives markets. Opponents may argue that it may further increase the central role of CCPs and their systemic nature, but this is the subject of another review of EMIR, which strengthens the powers of the European Securities and Markets Authority (ESMA) and the European Central Bank (ECB) in monitoring CCPs.

Regulation does not necessarily recognize the risk-reduction nature of compression, which this publication analyzes. The associations argue that proper incentives should be created in this sense. Compression reduces counterparty risk and systemic risk, which is central to the debate now in the context of the draft regulations on resolution and tightened supervision of CCPs (EMIR 2.0). The drafts under discussion should thus allow for further changes, depending on progress in risk management techniques within CCPs, which is still very much an expertise in progress.

Karel Lannoo

General Manager
European Capital Markets Institute
INTRODUCTION

With more and more demands being placed on bank capital and collateral\(^1\), post-trade risk reduction services are increasingly being used to free up balance sheet resources and reduce risk exposures. For example, compression works to significantly decrease gross derivatives positions, while leaving market participants with the same overall market exposure.

Hundreds of trillions of dollars in derivatives notional have been torn up as a result of compression – and the risk-mitigating benefits of compression have been recognized by regulators. This has been particularly important in reducing outstanding notional exposures in the non-cleared derivatives market, helping to reduce systemic risk.

However, compression could be made much more efficient by entering into a new non-cleared transaction that offsets residual exposures in the non-cleared portfolio after compression, while simultaneously recreating the desired market exposure by entering into a new cleared transaction. This will help meet the regulatory and political objective of ensuring a greater share of risk involved in derivatives trading is cleared through CCPs. It will also result in greater capital and collateral efficiency, which could be put to other, more beneficial uses.

Similarly, counterparty rebalancing involves entering into new transactions to reduce risk exposures between counterparties, which helps to reduce systemic risk.

In both cases, the offsetting transactions are non-price forming, market-risk neutral, purely administrative in nature, and do not create new risk. Nonetheless, they would currently be required to be cleared under EMIR if they fall under the clearing mandate. There is currently no ability for ESMA to provide exemption from clearing for these risk-reducing transactions.

Following a public consultation in 2015, the EC published proposed changes to EMIR in May 2017. These set out a number of modifications to reduce costs and improve efficiency while maintaining financial stability. Providing a clearing exemption to transactions created via compression would be perfectly in line with these goals.

ISDA, the EBF, ICMA and ISLA therefore believe that an amendment to EMIR should create the ability in EMIR Level 1 to either scope derivatives transactions resulting from post-trade risk reduction services (like portfolio compression exercises) out of the clearing obligation, or permit ESMA to do so.

\(^1\) A major focus of regulators following the financial crisis has been the development of a regime for the clearing of derivatives, which in the EU has been implemented through EMIR. Under EMIR, market participants are required to clear derivatives subject to the clearing obligation (which applies to certain credit and interest rate derivatives), requiring provision of collateral on an initial and daily basis by clearing members and their clients. EMIR also requires collateralization of derivatives transactions that are not suitable for mandatory clearing or are entered into by counterparties that are not required to clear. Furthermore, the repo market is also a source of collateral demand. Repos – in particular, short-term repo transactions – are also cleared at CCPs (ICMA’s point-in-time survey shows that about 30% of outstanding repos by value are cleared across CCPs. Alternatively viewed, about 70% of repos by flow volume, which is concentrated in short-term transactions, are CCP cleared, according to the ECB’s money market survey). Repos are also a key enabler of clearing of derivatives by ensuring that clearing participants have available the necessary cash and/or securities to place as margin with CCPs.
POST–TRADE RISK REDUCTION IN EMIR AND MIFID II/MIFIR

Transactions that result from post-trade risk reduction services like compression are currently treated differently under EMIR and the revised Markets in Financial Instruments Directive and regulation (MIFID II/MIFIR).

EMIR

EMIR regulatory technical standards (RTS) require market participants with more than 500 OTC derivatives outstanding to have policies to analyze the possibility of performing a portfolio compression exercise twice a year.

EMIR Level 1 – adopted in 2012 – does not contain any exemption from various EMIR requirements (such as clearing or collateralization of non-cleared trades) for transactions resulting from portfolio compression, or post-trade risk reduction services more broadly. It also does not provide scope for ESMA to provide for an exemption.

A number of respondents to ESMA consultations on the clearing obligation have suggested that transactions generated as part of post-trade risk reducing initiatives such as multi-portfolio compression runs or counterparty risk rebalancing should be exempted from the clearing obligation.

However, ESMA concluded that other than in the case of covered bonds, the clearing obligation applies to all derivatives trades that are entered into or novated. EMIR Level 1 provides for "no other cases...for which ESMA could add conditions leading to a different treatment and there would be no legal basis to carve out specific provisions for other types of trades"\(^2\). Transactions created to enable portfolio compression exercises are therefore not exempt from the clearing obligation.

MIFID II/MIFIR

MIFIR – adopted in 2014 – states that transactions that are components of post-trade risk reduction services\(^3\) should not be subject to the trading obligation, even if they belong to a class designated as subject to the MIFID trading obligation. Such transactions are described as non-price forming, reducing non-market risks without changing the market risk of the portfolios.

Portfolio compression services providers do not have to comply with the trading obligation, trade transparency requirements or best execution requirements for the purpose of transactions created in the course of portfolio compression exercises.

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\(^3\) Recital 27 of MIFIR: “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”
POST-TRADE RISK REDUCTION – HOW DOES IT WORK?

Portfolio Compression

Derivatives dealers transact with each other in the interbank market to manage their trading risks. Over time, a dealer builds up a portfolio of trades with other dealers (see Figure 1).

Figure 1: Net Market Exposure of Dealer Portfolio

In the simple bilateral form of compression, the dealer agrees with each other dealer to compress trades so that offsetting positions are cancelled and only the net amount remains – with no change to overall market exposures (see Figure 2).

Figure 2: Dealer Portfolio After Compression

However, compression is much more efficient on a multilateral basis, as trades across multiple dealers involved in a compression cycle can be offset, reducing the open risk in bilateral relationships. Again, there is no change to overall market exposures (see Figure 3).
In this way, dealers are able to reduce risks in their portfolios.

**Application to Specific Products**

When applied to OTC derivatives such as interest rate swaps, some features of the product serve to add a degree of complexity to the compression process.

In particular, dealers trade very similar but not identical products with each other. For example, a dealer may execute a trade with Counterparty A on which the dealer receives interest payments on the 21st of the month, and then the following day executes another trade with the same counterparty where the dealer pays interest, but on the 22nd of the month.

The risks on these trades almost, but not exactly, offset each other. However, the difference in payment dates means these two transactions cannot be cancelled against each other. Only trades with identical details can be cancelled against each other.

However, in a multilateral compression cycle, the compression service provider can look for other 21st and 22nd of the month trades between other dealers and, where the exposures offset those of the original dealer and Counterparty A, can enable these cancellations, reducing the exposures.

Current EMIR rules do not impede compression, provided the only action taken is the cancellation of trades. However, compression would be considerably more efficient in some scenarios if new trades could be booked into an existing non-cleared portfolio. In the following simplified example (see Figure 4), Dealers A, B, and C have open positions with each other (note Party A vs Party B is, by definition, exactly opposite to Party B vs Party A, etc).
Figure 4: Matching Dates

The total net open positions of each firm in this scenario are:

- Party A = 0 (being +50 facing Party B and -50 facing Party C)
- Party B = +50 (being -50 facing Party A and +100 facing Party C)
- Party C = -50 (being +50 facing Party A and -100 facing Party B)

From the point of view of Party A, it would be simple to cancel the positions with payment dates on the 21st and the 23rd that offset against Parties B and C. If positions with payments on the 25th between Parties B and C are also cancelled, then this leaves the exposure as shown in Figure 5.
Figure 5: Cancelling Trades

Overall net positions are unchanged, but there are far fewer gross positions making up this exposure.
However, it is still the case that the gross exposures are larger than the net exposures.

Counterparty A has offsetting exposure of 50 with payments on the 22nd, but there are no offsets between Parties B and C for the same date. Likewise, Party C has a long exposure on the 22nd, which is in the opposite direction to its short exposure on the 24th.

To resolve these issues, increase the efficiency of compression and reduce the risks in non-cleared portfolios (and therefore reduce systemic risk), it would be beneficial to allow the parties to book trades into their non-cleared portfolios with an exactly offsetting opposite trade in their cleared portfolio.

For example, Parties B and C would book a trade where Party B sells 100 units of exposure with payments on the 24th to Party C in its non-cleared portfolio (and therefore, Party C books a long position in its non-cleared portfolio with Party B), while simultaneously booking the opposite trade (where Party B buys 100 units of exposure with payments on the 24th from Party C) into their portfolios facing the CCP.

This reduces risk in the non-cleared portfolios, while moving that risk to the cleared portfolio as shown in Figure 7.
### Figure 7: Moving Risk to Cleared Portfolio

<table>
<thead>
<tr>
<th>Pay Date</th>
<th>21st</th>
<th>22nd</th>
<th>23rd</th>
<th>24th</th>
<th>25th</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Party A vs Party B</strong></td>
<td>Buy</td>
<td>100</td>
<td>Sell</td>
<td>50</td>
<td>Total = +50</td>
</tr>
<tr>
<td><strong>Party B vs Party A</strong></td>
<td>Buy</td>
<td>100</td>
<td>Sell</td>
<td>50</td>
<td>Total = -50</td>
</tr>
<tr>
<td><strong>Party A vs Party C</strong></td>
<td>Upright</td>
<td>50</td>
<td>Down</td>
<td>50</td>
<td>Total = -50</td>
</tr>
<tr>
<td><strong>Party C vs Party A</strong></td>
<td>Up</td>
<td>50</td>
<td>Down</td>
<td>50</td>
<td>Total = +50</td>
</tr>
<tr>
<td><strong>Party B vs Party C</strong></td>
<td>Buy</td>
<td>100</td>
<td>Sell</td>
<td>100</td>
<td>Total = 0</td>
</tr>
<tr>
<td><strong>Party C vs Party B</strong></td>
<td>Buy</td>
<td>100</td>
<td>Sell</td>
<td>100</td>
<td>Total = 0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pay Date</th>
<th>21st</th>
<th>22nd</th>
<th>23rd</th>
<th>24th</th>
<th>25th</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Party A vs CCP</strong></td>
<td>Buy</td>
<td>Total = 0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Party B vs CCP</strong></td>
<td>Buy</td>
<td>100</td>
<td>Sell</td>
<td>Total = +100</td>
<td></td>
</tr>
<tr>
<td><strong>Party C vs CCP</strong></td>
<td>Buy</td>
<td>100</td>
<td>Sell</td>
<td>Total = -100</td>
<td></td>
</tr>
</tbody>
</table>
The total net open positions of each firm remain the same as their original opening position.

- Party A = 0 (being 50 facing Party B and -50 facing Party C)
- Party B = +50 (being -50 facing Party A and 0 facing Party C and +100 facing the CCP)
- Party C = -50 (being +50 facing Party A and 0 facing Party B and – 100 facing the CCP)

However, it will not be possible under current EMIR rules to book the trade created by the compression cycle in the non-cleared portfolio if it is of a class that is currently subject to the clearing obligation.

**Benefits for Managing Risk in Legacy Bilateral Portfolios**

Trades between dealers often include products such as swaptions, caps/floors or other complex products that are not clearable. In some circumstances, existing trades between dealers contain bespoke clauses, customizations and/or accounting constraints that mean they too cannot be cleared.

This means that the new non-cleared transaction (which must be vanilla to perfectly offset the CCP-facing trade) may not be cancelled against the original transaction – but both trades will remain in the non-cleared portfolio.

This is still highly beneficial. Although the new trade will increase the gross position in the non-cleared portfolio, it will have much greater negative impact on the net exposure – and it is the net exposure that drives the vast majority of the riskiness of a dealer portfolio.

However, the ability to book trades into the non-cleared portfolio – with a commensurate offsetting trade facing a CCP – enables the risk (or the vanilla part of the risk) of these trades to be moved to the CCP without compromising the original trade.

Again, it is not possible under current EMIR rules to book the trades created by the compression cycle in the non-cleared portfolio if it is of a class that is currently subject to the clearing obligation.

Each of the scenarios and techniques described above enable dealers to better manage their credit risk profiles while enabling an ever greater proportion of risk to be moved to face a CCP, with commensurate reductions in systemic risk in the EU. In the latter case, it should be remembered that many of the trades that are compressed are trades entered into long before the clearing obligation and/or were not able to be cleared, so dealers are effectively cutting the risk of their legacy bilateral portfolios and allowing this risk (but not the non-standard, unsuitable-for-clearing trades) to be managed by the clearing house.

**Counterparty Rebalancing**

While compression is the best-known and longest-standing form of post-trade risk reduction, counterparty rebalancing also reduces risk for both CCPs and clearing members, while also releasing collateral into the system and limiting costs.

Prior to the large-scale use of central clearing, derivatives dealers could offset risk on a bilateral basis. Now, with the majority of derivatives trades cleared (either on a voluntary or mandatory basis):

- Clearing members cannot offset risk between different CCPs; and
- Clearing members cannot offset their risks in the non-cleared part of the market and the cleared part of the market.
Figure 8: Dealers Can No Longer Offset Risks

In this example, Dealers A and B enter two derivatives trades that could have offset each other (eliminating net risk) prior to the advent of the clearing obligation. Now they cannot. Both dealers therefore have credit risk with each other and with the CCP (although they are market risk neutral).

Figure 9: Risk Offsetting Through Different CCPs Creates Credit Risk

In this example, Dealer B trades an interest rate swap with a regional bank (Counterparty C), with the trade cleared through CCP Y. Dealer B then eliminates its market risk by finding a dealer (Dealer A) willing to take an opposite position, and this trade is cleared through CCP X.

However, Dealer B still faces credit risk against both CCPs and there is a basis (a difference in pricing at the two CCPs for similar products), the risk of which will have to be managed.

This increased risk must be collateralized at the CCP.
Portfolio rebalancing involves participants entering into a series of rebalancing transactions (facilitated by a post-trade risk reduction service provider). This has the effect of reducing net exposures between the counterparties (dealers and CCPs), and hence the size of collateral requirements.

**SCOPE OF EXEMPTION**

As outlined, there are significant reasons why it would be beneficial to introduce a provision exempting post-trade risk reduction services transactions from mandatory clearing requirements. Regulators may wish to ensure that any such exemption (or scope to provide for an exemption) cannot lead to regulatory arbitrage. To avoid the risk of arbitrage, regulators could insist on the following conditions if trades resulting from post-trade risk reduction services are to benefit from such treatment:

- They should be market risk neutral: They are designed to not change the directional market risk of the portfolios concerned, but rather reduce counterparty, operational and systemic risk in respect of existing derivatives transactions.

- They should be non-price forming: While they may involve a new legal transaction (rather than a trading transaction) in order to achieve the identified risk reduction result, participants are not able to post bids or offers, no price negotiation takes place and market risk neutrality means transactions are recorded away from market prices on stale curves.

- They should address second order portfolio risks: They do not offer a vehicle for taking market positions or enter into trading transactions. Their purpose is the reduction of operational, counterparty and systemic risk.

- Single multilateral compound transaction: The risk reduction cycles are binding on an all or nothing basis across all cycle participants and the transaction components are executed as a single compound bulk legal transaction.

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**Figure 8: Dealers Can No Longer Offset Risks**

<table>
<thead>
<tr>
<th></th>
<th>Q1 2017</th>
<th>Q1 2016</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCH Ltd</td>
<td>144,988</td>
<td>91,881</td>
<td>+57.8%</td>
</tr>
<tr>
<td>LCH SA</td>
<td>27,274</td>
<td>20,930</td>
<td>+30.3%</td>
</tr>
<tr>
<td>Eurex</td>
<td>57,977</td>
<td>54,191</td>
<td>+7%</td>
</tr>
<tr>
<td>ICE</td>
<td>46,268</td>
<td>44,204</td>
<td>+4.7%</td>
</tr>
</tbody>
</table>

Source: European Association of Clearing Houses
EMIR should be amended to allow transactions that result from post-trade risk reduction services to be exempt from the clearing obligation.

CONCLUSION

Post-trade risk reduction is an important risk management tool – compression alone has so far led to hundreds of trillions of dollars in gross derivatives exposures being torn up. This reduces systemic risk, and allows banks to use capital and collateral more efficiently.

As it stands, EMIR disincentivizes compression by requiring new non-cleared transactions executed as part of the compression cycle to be cleared, if they fall under the clearing mandate. Allowing for these transactions to be exempt from clearing would increase the gross notional of non-cleared derivatives that can be compressed. A similar requirement also prevents the use of other post-trade risk reduction services like rebalancing.

Introducing a clearing exemption for these transactions under EMIR would further help to reduce systemic risk, and would align EMIR and MIFID II/MIFIR.
ABOUT ISDA
Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 875 member institutions from 68 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association’s Website: www.isda.org Twitter: @ISDA

ABOUT EBF
The European Banking Federation is the voice of the European banking sector, bringing together 32 national banking associations in Europe that collectively represent some 3,500 banks – large and small, wholesale and retail, local and international – employing approximately two million people. EBF members represent banks that make available loans to the European economy in excess of €20 trillion and that securely handle more than 400 million payment transactions per day. Launched in 1960, the EBF is committed to creating a single market for financial services in the European Union and to supporting policies that foster economic growth. Website: www.ebf.eu Twitter: @EBFe

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ICMA is the trade association for the international capital market with over 530 member firms from 60 countries, including banks, issuers, asset managers, infrastructure providers and law firms. It performs a crucial central role in the market by providing industry-driven standards and recommendations for issuance, trading and settlement in international fixed income and related instruments. ICMA liaises closely with regulatory and governmental authorities, both at the national and supranational level, helping to ensure that financial regulation promotes the efficiency and cost effectiveness of the capital market. www.icmagroup.org

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ISLA is a trade association which represents the interests of participants within the securities lending and borrowing markets. Formed in 1989, ISLA has over 140 members comprising of asset managers, banks, insurance companies, pension funds, securities dealers and service providers. The ISLA team now consists of five full-time staff and are guided by an elected board of fifteen professionals who represent firms from all parts of the industry globally. ISLA’s aims include: working with regulators to provide a safe and efficient framework for securities lending; highlighting new market developments; ensuring sound industry practices; enhancing the public profile of the securities lending industry; fostering good communication and co-operation with other trade associations; promoting the use of the Global Master Securities Lending Agreement (GMSLA) as the market standard legal agreement.