

CSDR Settlement Discipline

Cash compensation in the case of bond markets

An ICMA Briefing note

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Context

The EU's CSD-Regulation¹ introduces a mandatory buy-in requirement² in the case of settlement fails in financial securities transactions, including for transactions not cleared by a CCP.³ In the event that the buy-in cannot be successfully executed, the regulation requires that the failing transaction be settled by means of a "cash compensation" process. This is essentially a forced cash settlement of the failing transaction, at the end of the designated buy-in timeline.

The Regulatory Technical Standards (RTS)⁴ provide a methodology for determining the market reference price to calculate the "market value" for the transaction at the end of the buy-in timeline, and therefore the differential (or "cash compensation") to be settled between the parties.

The consistent feedback from ICMA's members is that the methodology outlined in the RTS is inadequate from the perspective of bond markets. This briefing note seeks to highlight the perceived inadequacies of the CSDR cash compensation framework from the perspective of bonds, as well as to outline the work that the industry is undertaking in an attempt to agree a more suitable model and the challenges related to this.

CSDR and market liquidity

It is broadly recognized that the CSDR mandatory buy-in provisions, intentionally or otherwise, create additional market risk for both investors and liquidity providers whose trading activity falls under its scope. Hence, much of the industry work related to the CSDR buy-in regime is as much focused on risk mitigation for market participants as it is on the practicalities of implementation. In particular, increased risks for market-makers, that are difficult both to quantify and hedge, become a deterrent to providing pricing, especially for securities that the market-maker may not hold in inventory. This has serious implications for market liquidity and efficiency given the naturally dealer-centric structure of bond markets.

Post-CSDR, if market-makers, and other liquidity providers, are to continue to show prices in securities that they do not hold in inventory, and if investors are to be able to rely on similar levels of liquidity to those they experience today, it is important that as much risk be taken out of the mandatory buy-in framework as possible, including the cash compensation process, and that market participants can have a degree of comfort that these will not produce random outcomes.

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0909&from=EN>

² <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R1229&from=EN>

³ This is currently expected to come into force from February 1, 2021

⁴ See Article 32

The risks arising from cash compensation

In non-cleared bond markets, where contractual buy-ins are widely relied upon (such as those that form part of the ICMA Secondary Rules & Recommendations), there is degree of flexibility in the application of the buy-in process, both in terms of the timing of initiating the buy-in and also in concluding the process. Furthermore, where a buy-in may not be possible, an alternative remedy can usually be negotiated between the parties, including the possibility of cash settlement.

In a forced cash settlement situation, which CSDR prescribes, over which neither of the parties has control, either with respect to the timing or the applicable reference price, this creates additional risks for both the seller and the buyer.

It is also important to consider that in the case where a buy-in is not possible, this suggests that the market for the underlying security is extremely illiquid (and potentially stressed), that there is no trading taking place in the security, and that establishing a fair market value may be near to impossible.

Risks for the seller

The main risk to the seller is in the case that the cash compensation reference price is set at a level significantly higher than their tolerance range for what constitutes fair market value (i.e. where they are likely to have the position marked on their books). In this case they will incur a hefty realized loss in the form of the cash compensation differential payment to the buyer.

It could be argued, however, that the seller will face a similar risk in the buy-in process, where the buy-in execution price is likely to constitute a significant premium to the fair market value.⁵ In the case of contractual buy-ins such as the ICMA Rules, this premium is largely the result of the buy-in being executed for *guaranteed delivery*, which infers an increased risk for the party selling into the buy-in for which they require additional remuneration. In the case of the CSDR buy-in (where guaranteed delivery is not required), this is more likely to be due to the signaling effect of a *distressed buyer* in the market, which will result in a temporary revaluation higher of the underlying security. However, the counter argument is that regardless of any buy-in premium, the buy-in cost is the result of an actual transaction that was executed “on the terms most favourable to the failing [party]”.⁶

Another potential, and not insignificant risk, to the seller arises from the seemingly asymmetric provisions for the payment of the cash compensation between the parties, which only provides for the payment to be made from the seller to the buyer in the case that the market value has increased, and not from the buyer to the seller where the market value has decreased.⁷ However, this is widely interpreted to be the result of a drafting error in the Level 1 regulation, and is expected to be remedied by contractual arrangements between trading parties that will facilitate symmetrical differential payments in the case of both buy-ins and cash compensation.

⁵ This overlooks any additional costs such as a commission or spread paid to a buy-in agent, or related fees or commissions related to the use of a broker or trading venue; all of which are likely to be comparatively immaterial.

⁶ Article 24 of the RTS

⁷ Article 33 of the RTS

Risks for the buyer

In the case of a buy-in, the buyer is indifferent to the price at which the buy-in is executed, since they will receive their securities while also being made economically whole through the buy-in differential payment, which will include any associated costs of the buy-in (such as agent fees or brokerage).⁸

However, in the case of cash compensation, and conversely to the situation of the seller, the main risk facing the buyer is in the case that the cash compensation reference price is set at a level lower than their tolerance range for what constitutes fair market value (and again where they are likely to have the position marked on their books).

This consideration is further complicated in the case of the seller in that any losses may not purely be linked to the cash compensation market value. It is likely that they will also have contingent positions and exposures that will require unwinding in the event of cash compensation (which could include interest rate swaps, exchange traded futures, CDS, short bond positions, foreign exchange, or any combination of these or other securities).⁹ At the very least the buyer is likely to incur the bid-ask spread associated with unwinding any contingent exposures, as well as any potential slippage.

A further consideration is that alternatively the buyer may have a mandated requirement to hold the exposure, out of which the cash compensating mechanism inadvertently will be forcing them. In this case they may be forced to replace that exposure immediately, either by purchasing the same or similar bonds, and potentially at a premium to market fair value (themselves becoming a *distressed buyer*).

The CSDR methodology for calculating cash compensation

Article 32(3) of the RTS outlines three methodologies to be used to determine the market value for calculating cash compensation.

Methodology (a)

The first methodology uses the closing price of the most relevant market. This appears to be primarily equity focused (as per MiFIR), and since bonds do not really trade on a particular market.

⁸ Again, we will assume that the buy-in differential payment asymmetry in the regulation is remedied by contractual arrangements between the trading parties and which ensure that the economics of the original transaction are restored.

⁹ Bonds are relative value instruments and are rarely traded or managed on an outright basis.

Methodology (b)

The second methodology uses the closing price of the trading venue with the highest turnover in the relevant security. This is interpreted as applying to bond markets (as per MiFIR), but raises a number of challenges in the case of less liquid market segments, such as credit and emerging markets.¹⁰

Firstly, it may be difficult to establish what is the trading venue with the highest turnover. Bonds are traded across multiple venues, as well as off-venue, which could include with SIs (Systematic Internalisers) and non-SIs. From this perspective, how does one determine the appropriate venue, and on what basis?¹¹

Secondly, even if one could establish the appropriate venue, in all probability there is not likely to be a closing price, given that the underlying security is almost certainly highly illiquid. Any price that is quoted on a venue is therefore likely to be a quote, rather than a print from an actual transaction (otherwise one can only assume that the buy-in agent would have been able to buy the securities). As such, it is either likely to be un-executable (i.e. indicative), or relates to a speculative bid or offer that could be far from fair market value. In either case it is an unreliable point of reference for establishing the cash compensation market value.

In all probability, given that the underlying security is almost certainly going to be highly illiquid, and confirmed by the fact that a buy-in could not successfully be executed, there is unlikely to be any reliable price on any venue which could be used as a credible reference price for the purposes of cash compensation. Given the infrequency with which illiquid bonds trade, there may also be few historical prints that can be referenced. In fact, it may be that the last recorded transaction in the security is the one between the parties that they are now trying to cash settle.

Thus, from a practical perspective, methodology (b) would seem extremely limited in its applicability with respect to bond markets.

Methodology (c)

The third option is for the parties to agree on a pre-determined methodology “approved by the competent authority of the CSD that refers to criteria related to market data, including market prices available across trading venues or investment firms”. While this seems to reflect the methodologies generally employed by CCPs (again, more equity focused), and is potentially intended in this case to apply to instruments that are neither equities or debt, it may provide an opportunity to create what has come to be the industry’s pursuit of the *least-worst* approach for determining cash compensation in the case of non-cleared bond markets.

¹⁰ Closing prices are more readily available in the case of more liquid sovereign bond markets, across a range of venues. However, fails, particularly aged fails, in these securities tends to be rare, and the probability of a buy-in going to cash compensation is extremely low.

¹¹ This is potentially a situation where a Consolidated Tape for bonds could be of some help.

The industry discussions

In response to calls from its fixed income trading community, ICMA established an industry workstream through its CSDR-SD Working Group¹² to focus on establishing potential market best practice for determining the reference price in the case of CSDR cash compensation, particularly in the case of less liquid bonds (in particular, but not exclusively, investment grade and high yield corporate bonds, and emerging markets).

It became clear early on that there was little scope under the CSDR provisions for a satisfactory cash compensation outcome, with the suggestion that the industry perhaps needed to focus a lot more effort and attention on ensuring that the buy-in process worked as efficiently as possible (for instance having more options with respect to buy-in agents, particularly fixed income specialists). However, given the lack of flexibility in the buy-in framework, and the current dearth of buy-in agents, the occurrence of fails going to cash compensation would likely be significant, and therefore some form of workable back-stop would be necessary.

The proposal currently being considered is that the cash compensation reference price be determined based on a pre-agreed methodology of taking a market composite price and adding a pre-determined spread. However, this itself is not straight-forward, and leads to two difficult considerations: (i) what should be the appropriate composite price? and (ii) what should be the appropriate spread?

Composite prices

A number of market data providers produce composite prices for securities. As the name suggests, these are not executable market prices, but typically a weighted average of dealer streamed prices computed on a real-time basis; additional statistical techniques are often employed to remove outlier quotes. The methodology, data sources, and underpinning algorithms vary depending on the composite provider.

The first challenge with using composite prices lies in the fact that they are only as reliable as the prices on which they are based. They may be relatively accurate in some cases (say where the security is liquid),¹³ but less accurate in others (for less actively traded securities). In some situations, where securities are highly illiquid, there may not even be a composite price available. Also, some composites may be more reliable for certain securities or market segments than others. Therefore, it is unlikely that selecting one data provider's composite services would be sufficient in all cases, and that different providers may be preferable depending on the underlying security. But who should decide? Furthermore, a composite price's reliability is likely to change. One touted solution is perhaps to use a composite of composites (i.e. an average of the price provided by several data providers, potentially refined to remove outliers).

Assuming that the market can agree on a range of composite price sources to use, or an average of composites, the next challenge is whether the data providers would be happy for their composite prices

¹² More information on the Working Group's workstreams and discussion can be found on the dedicated ICMA webpage: <https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/Secondary-Markets/secondary-market-practices-committee-smpc-and-related-working-groups/csd-SD-working-group/>

¹³ It is important to draw a distinction between composite prices with respect to more liquid segments of the bond markets, such as sovereign bonds, where closing prices are more readily available and/or determining fair market value is less challenging.

to be used as a reference valuation for determining a financial contract. Could this even stray into Benchmark Regulation territory?

Finally, even if it is possible to use composite prices, these are generally provided as a subscription service by the providers, which means that they are not publicly available. There could be issues with designing a contractual remedy that relies on non-publicly accessible reference data.

Spread

Assuming a composite-based reference price can be agreed, it will be necessary to add to this a spread. There are several reasons for the addition of a spread. Firstly, the composite price may be based on a mid-price, whereas the appropriate reference price used for cash settlement should be the offer-price: i.e. the theoretical price at which the buyer would be happy to sell the securities and/or at which the seller would be required to buy them. So at the very least it will be important to reflect the appropriate bid-offer spread associated with the security or market underlying market (also noting that bid-offer spreads are not static and are highly correlated to market volatility, as well as to other dynamic inputs such as repo rates, hedging costs, and liquidity conditions).

As well as simulating the bid-offer spread around the composite price, it is felt that the spread should probably also build in a degree of additional margin for the buyer to take account of the fact that they will likely also incur consequential losses from cash compensation as a result of needing to replace the exposure (as a *forced buyer*) or through unwinding any contingent positions or exposures, as well as any related slippage.

The next question is therefore what should be the appropriate spread to add to the composite price? This is likely to vary by market currency, sector, and segment, and will probably need to be based on statistical analysis of historical observations. This then leads to considerations around how granular does this need to be (essentially the creation of a spread matrix), and how dynamic (how frequently should it be reviewed and updated?).

An imperfect solution to a problem that currently does not exist

Where the industry discussions have led is to a conclusion that an enforced cash compensation process is far from satisfactory for both parties, and that this further highlights the inadequacies of the CSDR buy-in provisions. Investors have no desire to be forced out of their investments under any circumstances, let alone using a methodology that cannot be relied upon to produce a meaningful valuation. Meanwhile, market-makers and other liquidity providers, who will already face the heightened risk of being bought-in, will further have to consider the additional risks associated with determining the cash compensation reference price.

Accordingly, in the case of cash compensation, the industry is yet again focused on establishing an imperfect solution in an attempt to mitigate market risks that currently do not exist but are being created as a direct consequence of the CSDR mandatory buy-in provisions.

Next steps

It is broadly recognized that the CSDR provisions for cash compensation are not suitable for use in the case of bond markets. However, given the design of the CSDR mandatory buy-in framework, and the nature of bond market liquidity, cash compensation is likely to be a frequent eventuality in the case of settlement fails. Therefore, this weakness in the CSDR design is likely to attract a lot more industry attention as implementation draws near.

It also becomes clear that the ability to reference actual trades or executable prices in determining the cash compensation market value is minimal, and so is more likely to be based on a *synthetic* price. What sources should be used to determine this price, and how, remain open questions, as does the usability of such composite prices.

The necessity to add some form of spread to any derived reference price seems valid. However, determining the appropriate spread to apply comes with its own set of complexities.

Finally, even if there can be some industry agreement on what composite prices are appropriate (and usable), and what spreads should be used in the case of different bond classes, achieving market consensus on these terms and establishing this as market best practice is likely to be challenging. Although, industry bodies, such as ICMA, can and do play an important role in bringing stakeholders together to facilitate such discussions and agreement.¹⁴ There may also be other potential solutions, which could become an acceptable market standard.

It also needs to be remembered that any eventual market solution will need to be approved by the relevant national competent authorities (NCAs),¹⁵ which a requirement that gives rise to its own concerns, not least with respect to the time this may take as well as the need for cross-jurisdictional harmonization.

In the meantime, it would seem to be important to raise awareness of this quite fundamental issue with the broader market, as well as with the regulatory community.

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¹⁴ It is not clear whether ICMA would include any eventual solution in its Secondary Market Rules & Recommendations

¹⁵ As per Article 32(3)(c) of the RTS