

Technical Advice on CSDR Penalty Mechanism ESMA CP



February 29, 2024

https://www.esma.europa.eu/sites/default/files/2023-12/ESMA74-2119945925-1634_CSDR_Consultation_Paper_on_Technical_Advice_on_Penalty_Mechanism.pdf

Final

Overview of ICMA's feedback in this consultation

ICMA and its members welcome the opportunity to review the EU CSDR Penalty Mechanism and to make constructive suggestions to enhance its effectiveness. However, we are disappointed that the proposals put forward in the consultation are not only disproportionate in their calibration but are unsupported by any data or analysis. Furthermore, there is no acknowledgement of the causes of settlement fails nor the economics of failing, both of which are required in assessing both the usefulness of a penalty mechanism and the appropriate calibration.

The response was prepared by ICMA's CSDR Settlement Discipline Working Group, which consists of a broad range of members representing sell-side and buy-side investment firms, custodian banks, as well as financial market infrastructures. Working Group members include operational experts, market infrastructure specialists, as well as bond and repo traders. ICMA has also been keen to include feedback from its trading communities (as represented by its Secondary Market Practices Committee and the European Repo and Collateral Committee) since penalties have a direct impact on market pricing and liquidity.

In its response, ICMA makes the following key points:

Settlement efficiency observations and drivers

- ICMA and its members support industry and regulatory efforts to improve settlement efficiency across the EU bond markets.
- However, it is important to understand the causes of settlement fails in order to prescribe the correct tools to address them. For example, penalties will not resolve fails due to market structural issues or a lack of liquidity in the underlying security.
- ICMA observes improved settlement efficiency rates for bonds in the EU since 2022.
- ICMA attributes these improvements to a combination of increased focus by market participants on settlement processes as well as higher interest rates.
- Regression modeling on settlement data from January 2015 shows very clearly that the short-term interest rate (the natural cost of failing) is by far the strongest driver of settlement efficiency. The analysis further shows that there is a statistically meaningful negative relationship between settlement fails and the quantum of securities held under the ECB bond purchase programmes (ie "collateral scarcity").
- There is a very weak negative correlation with the introduction of penalties. This is possibly because they were introduced at a time of changing monetary policy with the end of quantitative easing and rapidly rising interest rates. This would suggest that either penalties in themselves have no impact, or, more likely, that a longer observation period is necessary.
- Perhaps unsurprisingly we observe brief dips in settlement efficiency rates in times of market stress. From the data we conclude that these occur independently of other factors, including the cost of failing. In other words, neither high interest rates nor penalties would have prevented the drop in settlement efficiency seen during the start of covid crisis, and which was largely due to back offices

adjusting to lock-down.

Proportionality and impacts

- ICMA points to the TMPG Penalty Framework used in the US Treasury market as an example of an effective penalty mechanism. This is calibrated to short-term rates (ie the natural cost of failing) and has proven to be successful in addressing “behavioural” fails.
- The increases in penalty rates that ESMA propose are extreme, are unsupported by any analysis, and would be highly distortive with adverse impacts for market liquidity and pricing. This would create additional costs for investors in the secondary market and issuers in the primary market, making the EU uncompetitive relative to its global peers.
- The penalty rates proposed would also create adverse behavioural incentives, making being failed-to economically attractive.
- There is no economic rationale for progressive rates.

Recommendations

- More work needs to be done in identifying the causes of settlement fails in the EU bond markets, with a focus on targeted and proportionate tools to address these.
- Settlement discipline measures also need to be assessed in light of the EU’s ongoing political discussion on a potential shortening of the settlement cycle to “T+1”, which would likely have direct impacts on settlement efficiency, particularly in less liquid or cross-border markets, such as bonds.
- Implementing the existing penalty mechanism, that was introduced only two years ago, has been a highly expensive exercise for the industry, impacting both EU and non-EU investment firms. To institute the changes that ESMA proposes would likely require a similar scale of investment and resources. This could be better used in addressing structural impediments to settlement efficiency, which are the main cause of settlement fails in the EU. In this context, we would very much welcome a renewed focus of the EU authorities on the important structural barriers to further post-trade integration and consolidation that persist in the EU, and which have been well documented since the early 2000s.
- In light of all of these factors, ICMA and its members see no justification in instituting any material changes to the current settlement mechanism. Based on its modelling, ICMA suggests **keeping the penalty rates at or close to current levels and for ESMA to observe the data over a longer period**, particularly as interest rates move lower, quantitative tightening begins. This would not only provide more information about the effectiveness of a penalty mechanism, but it would allow us **to assess what the appropriate floor for the cost of failing should be, and so the optimal calibration of penalty rates**.

ICMA would add that it looks forward to ESMA consulting with stakeholders on other tools to improve settlement efficiency. It is here that ICMA and its members believe that a meaningful and sustainable improvement to EU settlement efficiency can be made, far beyond the relative limitations of a penalty mechanism. In addition, we would also very much welcome a renewed focus of the EU authorities on the important structural barriers to further post-trade integration and consolidation that persist in the EU, and which have been well documented since the early 2000s. The recent consultation within the ECB’s AMI-SeCo is a welcome first step in this direction.¹

¹ See: <https://www.icmagroup.org/assets/documents/Regulatory/Repo/AMI-SeCo-survey-on-post-trade-barriers-ICMA-ERCC-response-060224.pdf>

Finally, ICMA would welcome the opportunity to discuss with ESMA the points made in this response, as well as the analysis underpinning ICMA's recommendations.

ICMA promotes well-functioning cross-border capital markets, which are essential to fund sustainable economic growth. It is a not-for-profit membership association with offices in Zurich, London, Paris, Brussels, and Hong Kong, serving around 620 members in 67 jurisdictions globally. Its members include private and public sector issuers, banks and securities dealers, asset and fund managers, insurance companies, law firms, capital market infrastructure providers and central banks. ICMA provides industry-driven standards and recommendations, prioritising three core fixed income market areas: primary, secondary and repo and collateral, with cross-cutting themes of sustainable finance and FinTech and digitalisation. ICMA works with regulatory and governmental authorities, helping to ensure that financial regulation supports stable and efficient capital markets.

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Chapter 3: Alternative parameters, when the official interest rate for overnight credit charged by the central bank issuing the settlement currency is not available

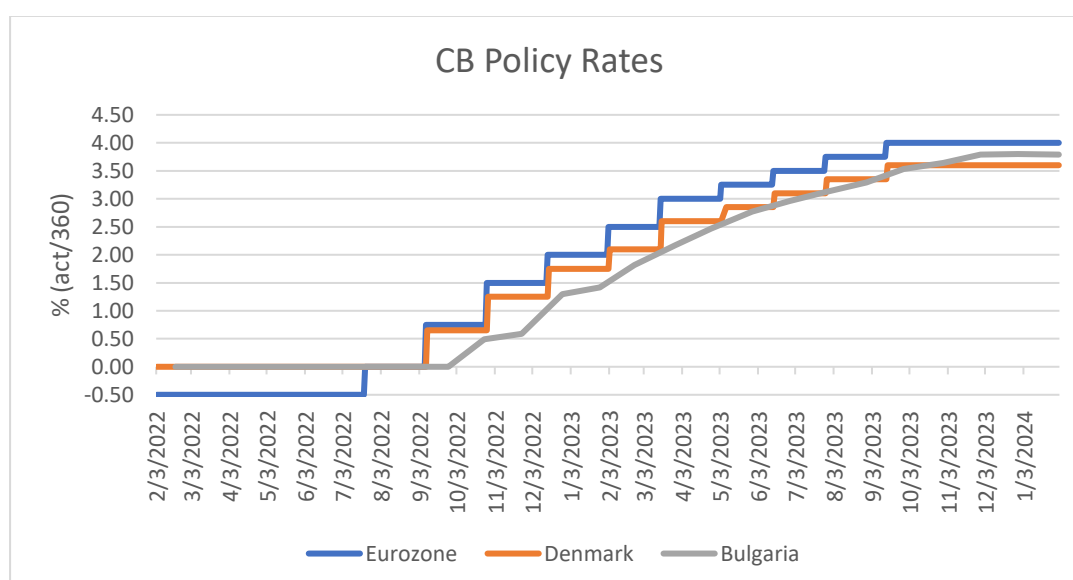
Q1: Do you agree with ESMA's proposal? Which Option is preferable in your view?
Please also state the reasons for your answer.

ICMA questions the validity of these proposals, not least as these are designed to address a specific scenario (fails due to insufficient funds) in the case of two relatively minor currencies (Danish Krone and Bulgarian Lev): one of which is pegged to the Euro, while the other is expected to join the Euro from 2025. To put this into perspective, the total notional value of Danish and Bulgarian government debt traded in Europe in H1 2023 as a percentage of overall traded sovereign debt is 0.1% and 0.02% respectively.²

Standardizing the approach for calculating these charges will require significant work by affected (I)CSDs and their participants, while offering little or no value, thereby violating ESMA's "proportionality rule". ICMA would also point out that the central bank or money market reference rates for DKK and BGN are similar to, and move closely with, the ECB marginal lending facility rate (see Figure 1). Furthermore, as also noted by ESMA, the spot FX rates for EURDKK and EURBGN are in a very tight range. This can be seen in Figures 2 and 3, noting that since February 2022, EURDKK has moved in a 0.4% range and the EURBGN in a 1.5% range.

ICMA would also note that the penalty rates proposed under Option 4 are extreme, in total violation of the "proportionality rule", and most likely an error. The rates proposed appear to simulate those experienced under extreme market stress, such as those observed at the height of the 1993 ERM crisis. This is clearly illustrated in Figure 4 which compares the range of the progressive penalties as an annualized money-market rate (act/360) with historical EUR, DKK, and BGN benchmark rates. ICMA would urge ESMA and other policy makers not to use Option 4 as a point of reference for any sensible discussion about appropriate or proportionate penalty calibrations.

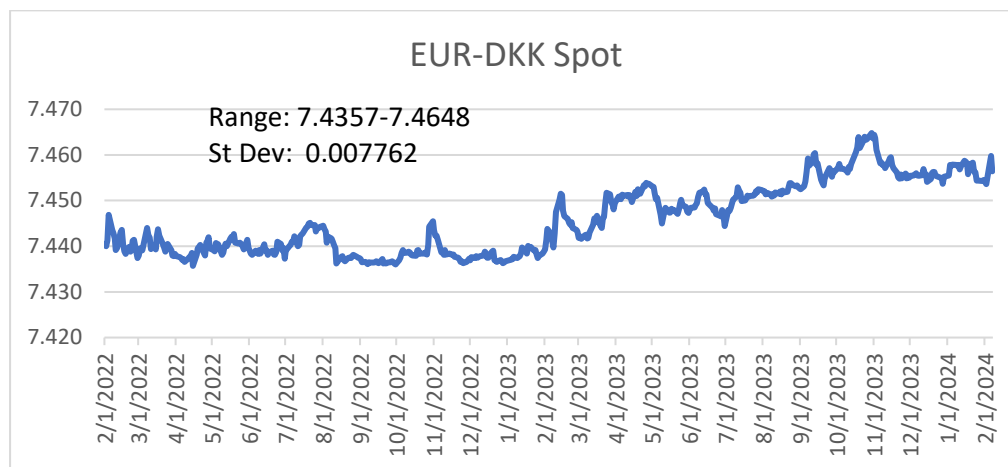
Figure 1: Central Bank Policy Rates



Source: ICMA analysis using Bloomberg data

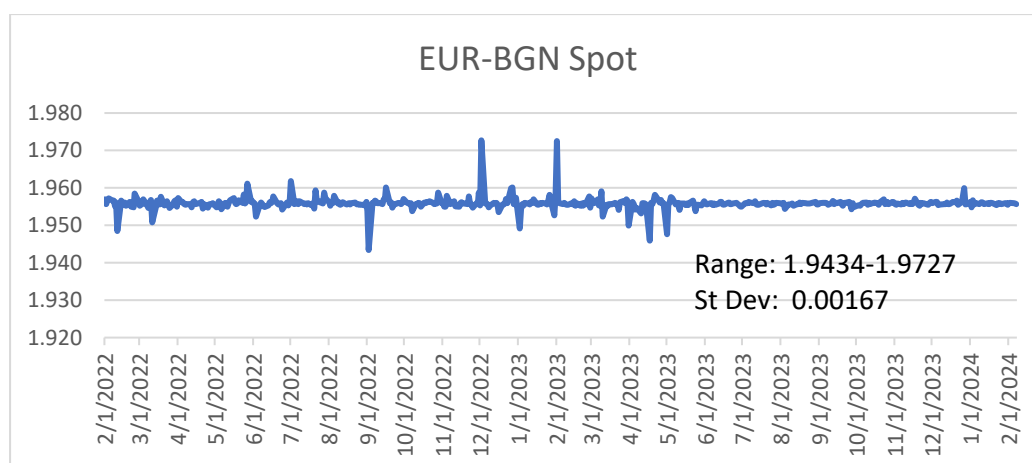
² See: [European Secondary Bond Market Data: H1 2023](#), ICMA, October 2023

Figure 2: EUR-DKK spot rate



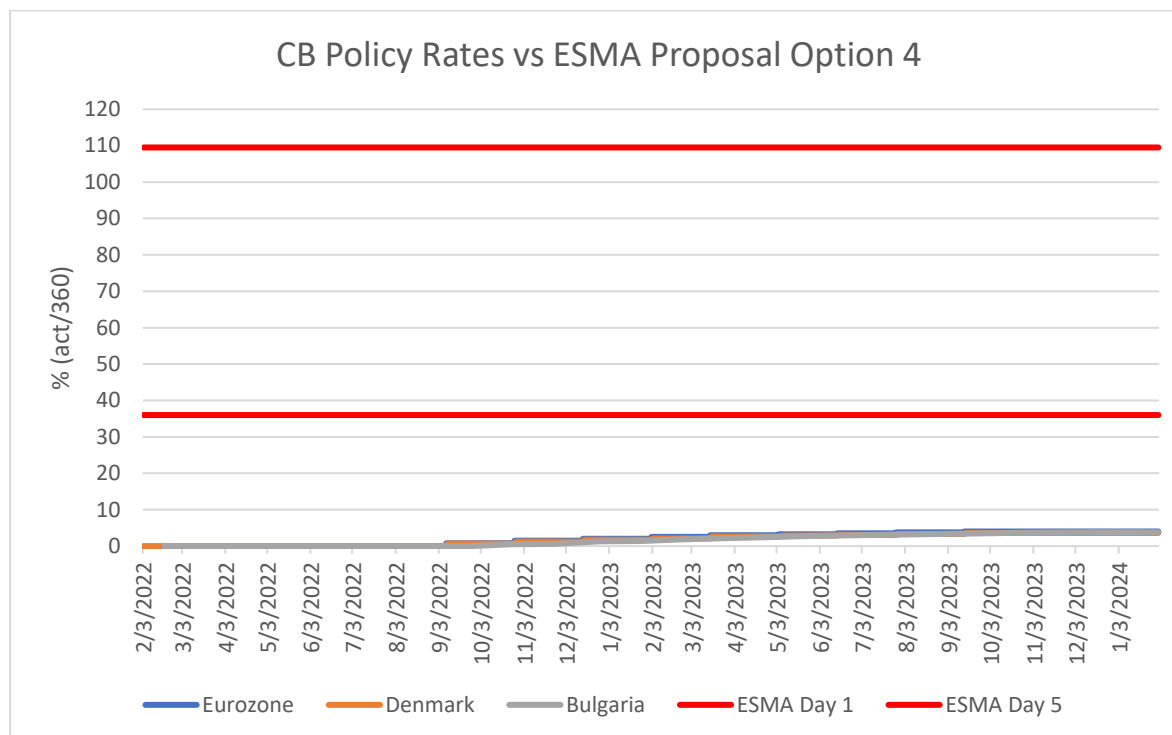
Source: ICMA analysis using Bloomberg data

Figure 3: EUR-BGN spot rate



Source: ICMA analysis using Bloomberg data

Figure 4: ESMA Option 4



Source: ICMA analysis using Bloomberg data and ESMA proposal

Q2: Do you have other suggestions? If yes, please specify and provide arguments.

ICMA would propose that in light of the considerations outlined in the response to Q1, retaining the current methodology as provided in the [ECSDA Framework](#) with respect to DKK and BGN (ie using the Bulgarian National Bank Base Interest Rate and the Danish National Bank Proxy Rate) is the most sensible approach. These are relatively easy to source or calculate, achieve ESMA's objective of providing an incentive to borrow cash to avoid a settlement fail, and ensures consistency with the penalty charges for fails due to insufficient EUR funds.

Q3: Do you agree with the approach followed for the Option you support to incorporate proportionality in the Technical Advice? If not, please provide an indication of further proportionality considerations, detailed justifications and alternative wording as needed.

In the case of penalties for insufficient cash, the basis of "proportionality" would imply using the shortest available official central bank policy rate for the relevant currency, or a proxy rate based on publicly available money market rates, consistent with the ECSDA guidelines.

Q4: What costs and benefits do you envisage related to the implementation of each Option? Please use the table below. Where relevant, additional tables, graphs and information may be included in order to support some of the arguments or calculations presented in the table below.

Please refer to the answers to Qs 1-3 which outline, very clearly, why there seems very little point in spending a lot of time and expense in order to replace a methodology that already serves the original intent of the regulation well, for a relatively minuscule subset of total transactions settled on EU (I)CSDs.

As outlined in the response to Q1, ESMA's Option 4 should be dismissed as a probable error unless the intention of the proposal is to simulate market conditions experienced under extreme market stress.

Please also note that ICMA has chosen not to use the tables provided in the consultation paper as we felt that these were too restrictive or did not identify the most salient points.

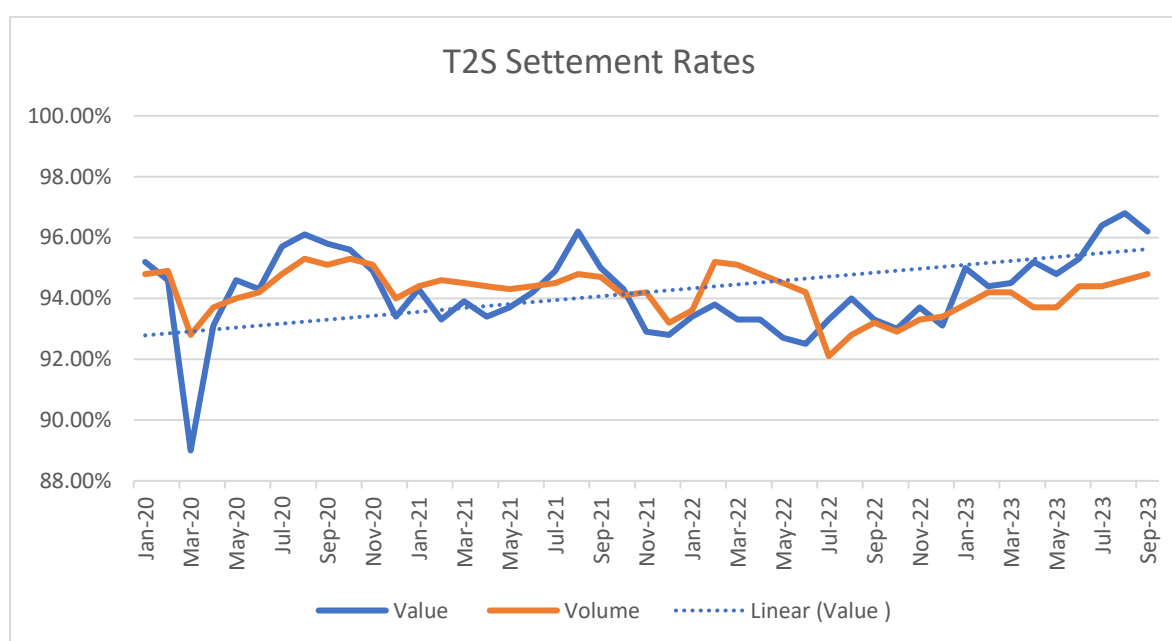
Chapter 5: Alternative methods for calculating cash penalties, including progressive penalty rates

Impact of current penalty mechanism

Q15: Based on your experience, what has been the impact of CSDR cash penalties on reducing settlement fails (by type of asset as foreseen in the Annex to Commission Delegated Regulation (EU) 2017/389 since the application of the regime in February 2022? Please provide data and arguments to justify your answer.

ICMA identifies a clear improvement in settlement efficiency rates in the EU over recent years. This is highlighted by settlement efficiency data from T2S³ (see Figure 5) as well as from Euroclear (see Figure 6a). Between January 2022 (the month before CSDR penalties went live) and January 2024, we see the settlement fails rates, in terms of value, fall from 6.6% to 3.8% in the T2S data and from 7.4% to 3.9% in the Euroclear data (ie the incidence of fails has almost halved).

Figure 5: T2S settlement efficiency rates



Source: ICMA analysis using ECB data

With respect to bonds, there is no evidence to suggest that the penalties in themselves have directly contributed to the observed improvements in settlement rates since 2022.

When it comes to addressing settlement fails, it is important to understand the different drivers of fails, and, therefore, the relevance and effectiveness of applying cash penalties.

The cause of settlement fails can be categorized as:

- (i) Behavioural fails (where parties elect to fail)

³ See: https://www.ecb.europa.eu/stats/payment_statistics/transactions_processed_by_t2s/html/index.en.html

- (ii) Fails due to error (eg mis-bookings, late confirmations)
- (iii) Structural fails (cross-border cut-off times, corporate actions, trading or settlement restrictions, underlying market liquidity)

It can be argued that the first two causes of fails could be addressed by providing economic disincentives to failing, making it desirable to borrow or cover securities where parties are short, and incentivizing improvements in settlement processes and operational resources in order to minimize errors.

If we are to consider the usefulness of cash penalties in the context of economic incentives to improve settlement efficiency, the starting point is to understand the economics of failing. Before even considering whether a penalty mechanism is appropriate, it needs to be acknowledged that, in a normal interest rate environment, failing is expensive.⁴ In fact, as a general rule, there is little or no economic incentive to fail on the settlement of a securities transaction. When a party fails to deliver the securities that they have sold to a counterparty, not only do they no longer have the benefit of any income or returns from the security, but they are forced to fund it, with the cost being the relevant interest rate.⁵ If they are able to manage their cash balances in a timely fashion, we can assume that this will be at a rate close to prevailing overnight money market rates. In a worst-case scenario, they will be overdrawn with their custodian bank, who will charge them an overdraft rate (these can vary, but a general assumption is that this will be at least 100bp, or 1%, above the money market rate).

Penalties are therefore an add-on to the natural cost of failing. Their relevance, and impact can only sensibly be considered in the context of prevailing interest rates. This dynamic is central to the inception and design of the TMPG (Treasury Market Practices Committee) penalty charges applied to settlement fails in the US Treasury market since May 2009.⁶

ICMA's observation, and analysis, is that settlement efficiency rates in EU bond markets have improved in line with the general, and quite pronounced, increase in interest rates which started in 2022. For example, the cost of failing a EUR bond has increased by 450bp (annualized) since July 2022. This is quite clearly illustrated in Figures 5 and 6. The equivalent CSDR penalty rates are 25bp for SSA and 50bp for non-SSA bonds respectively, which questions their relevance in a normal rate environment. In other words, there is already more than enough of a natural disincentive to failing without relying on the add-on of penalties.

ICMA would further attribute the observed improvement in settlement efficiency rates in the EU to a much greater industry-wide focus on settlement processes and operational efficiency as a consequence of the introduction of CSDR, and therefore an indirect outcome of settlement discipline. One could argue that the threat of mandatory buy-ins, along with the roll-out of cash penalties, have already provided the desired effect of reducing the number of settlement fails caused by error, even if the former is never implemented and the latter loses its relevance in a normal rate environment.

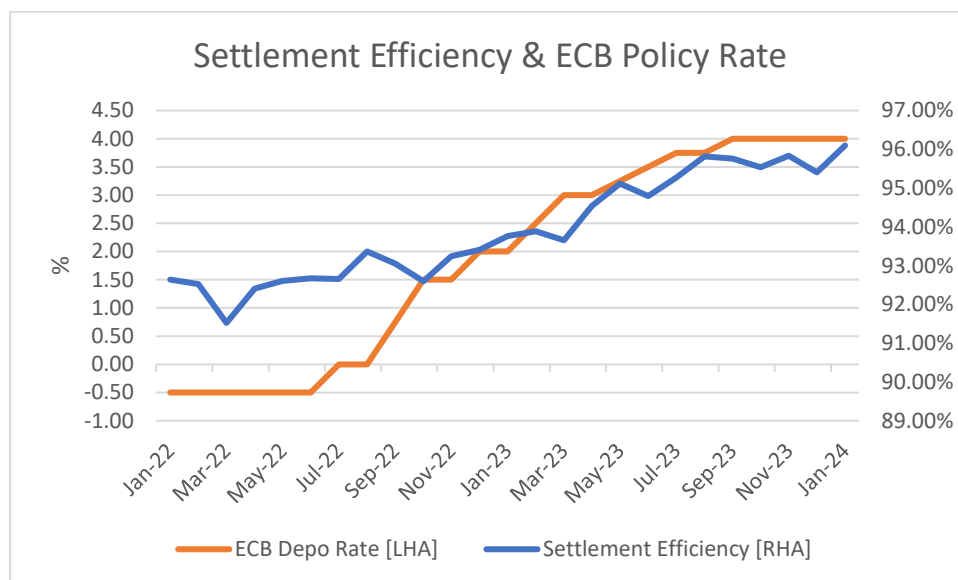
⁴ It should also be noted that for G-SIBs there is also a capital cost applied to aged fails which also needs to be factored into the "natural cost" of failing.

⁵ This is based on the assumption that virtually all outright securities transactions are settled on a delivery-versus-payment (DVP) basis.

⁶ See: <https://www.newyorkfed.org/medialibrary/media/research/epr/10v16n2/1010garb.pdf>

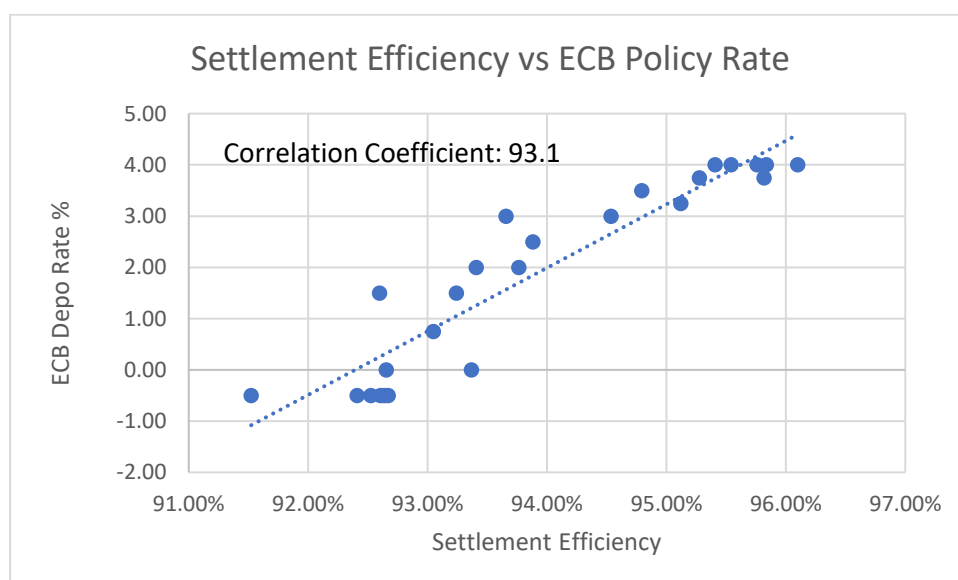
Meanwhile, higher interest rates have done their job in addressing any behavioural incentives for failing. This is clearly illustrated in Figures 6a and 6b, which shows the relationship between short term rates and settlement efficiency (using data provided by Euroclear⁷)

Figure 6a: Euroclear Settlement Efficiency and ECB Policy Rate



Source: ICMA analysis using Euroclear and Bloomberg data

Figure 6b: The relationship between Settlement Efficiency and interest rates



Source: ICMA analysis using Euroclear and Bloomberg data

⁷ As per Euroclear internal methodology. Settlement Efficiency calculates as percentage of settled instructions that settled on intended settlement date.

Regression modelling also confirms, that the most significant factor influencing settlement rates is short-term interest rates (as rates go higher, settlement rates improve). The next significant factor is central bank purchases, which has a negative relationship, meaning that as the quantum of securities held by the ECB increases, this has an adverse effect on settlement efficiency. We can attribute this to the effects of 'collateral scarcity'.⁸

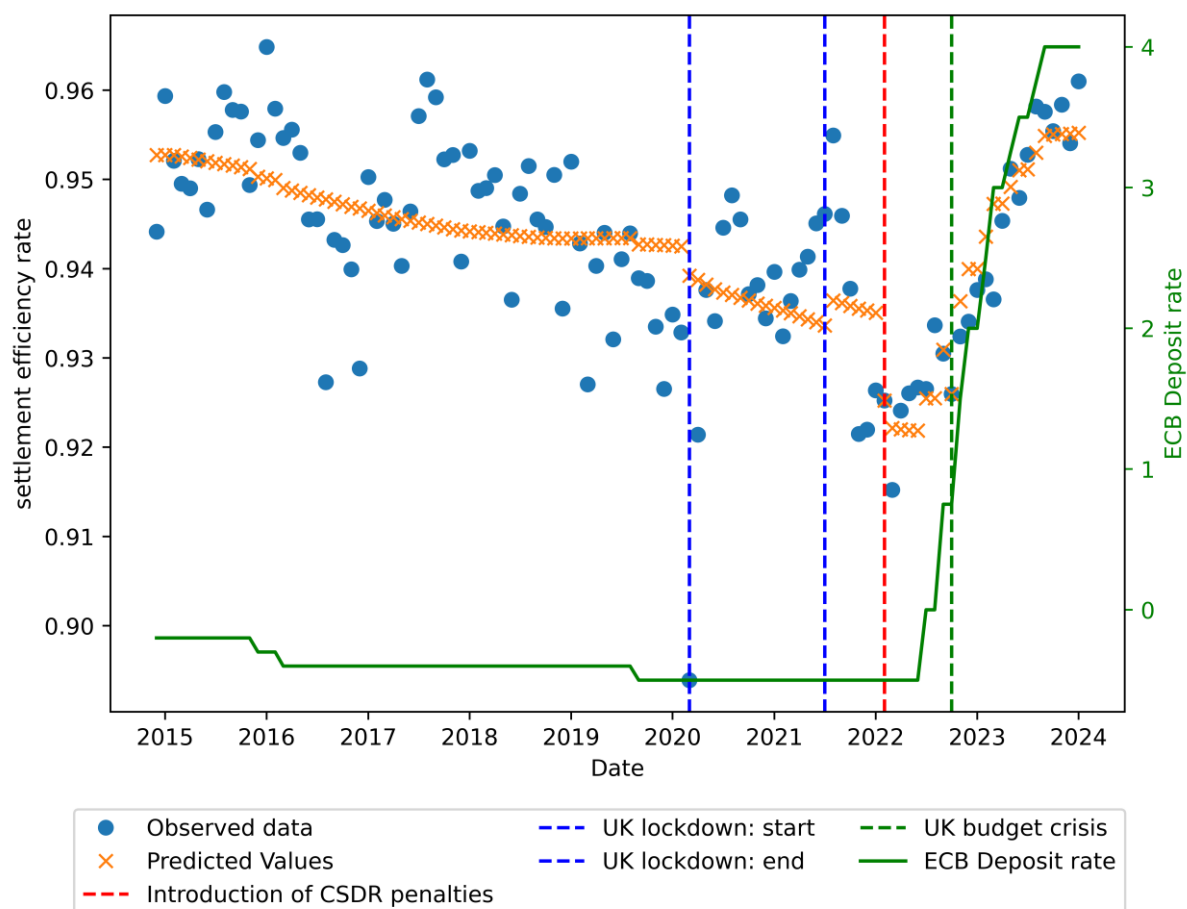
There is a very weak negative correlation with the introduction of penalties. This is possibly because they were introduced at a time of changing monetary policy with the end of QE and rapidly rising interest rates. It would be interesting to keep the penalty rates at or close to current levels and observe the data over a longer period, particularly as interest rates move lower and QT begins. In the case that settlement efficiency recedes, this would not only give us more information about the usefulness of a penalty mechanism, but it would allow us to assess what an appropriate floor for the cost of failing should be and so the calibration of the appropriate penalty rate (similar to the TMPG framework).

Finally, we used dummy variables to assess the impact of macro shocks on settlement efficiency. Not surprisingly we observe brief dips in settlement efficiency rates, but we can conclude that these occur independently of other factors, including the cost of failing. The modelling suggests that neither high interest rates nor penalties would have prevented the drop in settlement efficiency seen during the start of covid crisis, and which was largely due to back offices adjusting to lock-down.

The results of the modelling for settlement efficiency are provided in Figures 7.

⁸ Quantitative monetary policy measures, such as the combined holdings of the ECB PSPP, CSPP and PEPP, also have a statistically significant effect on settlement efficiency. This effect is negative with weak magnitude. For every additional € million increase in ECB holdings, settlement efficiency reduces of a ten-millionth of a percent ($\frac{1\%}{10,000,000}$).

Figure 7: Regression modelling for features impacting settlement efficiency



	coef	std err	t	p	R-squared: 0.456	
					0.025	0.975
intercept	0.9542	0.002	488.794	0	0.95	0.958
ECBDFR	0.0072	0.001	6.584	0	0.005	0.009
PSPP_CSPP_PEPP	-3.47E-09	9.47E-10	-3.66	0	-5.35E-09	-1.59E-09
CSDR Penalties	-0.0126	0.005	-2.725	0.008	-0.022	-0.003
Ukraine Invasion	0.0029	0.01	0.307	0.76	-0.016	0.022
UK lockdown	-0.0031	0.003	-1.104	0.272	-0.009	0.002
UK budget	-0.005	0.009	-0.54	0.59	-0.023	0.013

Source: ICMA analysis using Euroclear and Bloomberg data

Q16: In your view, is the current CSDR penalty mechanism deterrent and proportionate? Does it effectively discourage settlement fails and incentivise their rapid resolution? Please provide data and arguments to justify your answer.

ICMA would refer to the arguments and analysis presented in the response to Q15, as well as the importance of recognizing the causes of fails when considering the appropriate calibration of a penalty mechanism, or indeed whether it is even necessary.

Given that the observed improvement in EU settlement efficiency rates correlates closely with higher interest rates (the natural cost of failing), it could be argued that at current, relatively high, interest rate levels, and given the ongoing industry efforts to improve settlement processes and operational efficiency, a penalty mechanism is effectively redundant. So, in this respect, it could equally be argued that the existing penalty rates, with respect to bonds, are indeed proportionate and that raising them in the current interest rate environment would have little or no effect in reducing settlement fails further.

What the observations in the data seem to suggest is that the current penalty rates may be too low in a lower interest rate environment. ICMA would therefore suggest that ESMA closely monitor settlement efficiency rates as interest rates move lower (which they are priced to do for EUR, USD, GBP and other currencies over the course of 2024 and 2025). Should the positive correlation between settlement efficiency and interest rates hold, and an uptick in settlement fails is observed, this would justify recalibrating the penalty rates higher to compensate for the reduced natural cost of failing (similar to the underlying dynamic of the US TMPG framework).

In the meantime, ICMA and its members would encourage ESMA to focus its attention on the structural causes of fails, which cannot easily or effectively be addressed by higher interest rates or settlement discipline measures.

Q17: What are the main reasons for settlement fails, going beyond the high level categories: “fail to deliver securities”, “fail to deliver cash” or “settlement instructions on hold”? Please provide examples and data, as well as arguments to justify your answer.

As outlined in the response to Q15, the reasons for settlement fails can be grouped into three main categories:

- (i) Behavioural fails (where parties elect to fail)
- (ii) Fails due to error (eg mis-bookings, late confirmations)
- (iii) Structural fails (cross-border cut-off times, corporate actions, trading or settlement restrictions, underlying market liquidity)

Given the natural cost of failing in a positive interest rate environment, ICMA would attribute the majority of the observed improvement in settlement efficiency rates since 2022 to the lack of any economic incentive for failing and to industry-wide efforts to improve settlement processes and operational efficiency.

ICMA would therefore attribute the vast majority of remaining observed fails to structural issues, which cannot be addressed by economic incentives (interest rates or penalties) and which require more targeted solutions.

ICMA would further add that with only two years of data, at a time when interest rates have increased significantly, as well as heightened underlying market volatility (which also puts pressure on settlement efficiency), it is too early to draw any meaningful conclusions about the causes for structural fails from the data. This view is shared by the recent analysis of the European CSD Association's analysis of settlement efficiency.⁹

Q18: What tools should be used in order to improve settlement efficiency? Please provide examples and data, as well as arguments to justify your answer.

As outlined in the responses to the previous questions, cash penalties, as a substitute for or a supplement to the natural cost of failing (ie current short-term market interest rates) can be effective in addressing behavioral fails as well as fails caused as the result of error in very low interest rate environments.

ICMA would also point ESMA to contractual remedies that can help to disincentivize fails, such as those in the ICMA Secondary Market Rules & Recommendations (SMR&Rs).¹⁰ The SMR&Rs, which are widely used by investment firms active in the non-centrally cleared, international bond markets, provide non-failing parties with the contractual right to claim from a failing counterparty any costs arising from a settlement fail¹¹ as well as the right to issue a buy-in (or sell-out);¹² although in the case of the latter this is more a tool for managing counterparty credit risk rather than a form of "settlement discipline".

Improving practices for matching settlement instructions in a timelier fashion would also help to reduce the incidence of unnecessary fails caused by errors, allowing any inaccurate instructions to be identified and corrected before the settlement deadline. While Article 6 of CSDR goes some way to improving the trade confirmation process, potentially more could be done to enforce this. ICMA would cite the SEC requirements for same day allocation, confirmation, and affirmation as a reference point.

With respect to structural fails, particularly those caused by a lack of securities, and therefore usually the result of market or security illiquidity, ICMA would point ESMA to the significant work that it has undertaken with its members and the wider industry with respect to optimizing settlement efficiency.¹³ In particular this work focuses on three main tools:

- (i) Shaping of settlement instructions;
- (ii) Partial settlement and auto-partialling; and
- (iii) Auto-borrowing functionality offered by some (I)CSDs.

ICMA's continued focus on promoting the wider adoption and application of these three particular tools is based on their potential impact in terms of settlement efficiency, recognizing the significant scope for improvements in terms of market coverage and usage, as well as the relatively limited effort required to

⁹ See: [Settlement efficiency considerations](#), ECSDA, November 2023

¹⁰ <https://www.icmagroup.org/market-practice-and-regulatory-policy/secondary-markets/icmas-rules-and-recommendations-for-the-secondary-market/>

¹¹ This will usually be due to a failing buyer having insufficient funds but can also apply in the case of a failing seller in a negative interest rate environment (where the non-failing buyer is effectively penalized for being long cash).

¹² See: [ICMA Buy-in Rules: A webinar explainer](#)

¹³ See: [Optimising settlement efficiency, ICMA, February 2022](#)

effect these improvements. In short, all three tools are seen as relatively quick wins that could make a substantial difference if implemented and utilized on a systemic scale.

ESMA should also note that these three tools have been incorporated into market best practices both for the international bond markets (through the ICMA Secondary Market Rules & Recommendations)¹⁴ and the European repo market (through the ICMA ERCC Guide to Best Practice in the European Repo Market).¹⁵

Best practices with respect to “pair-offs” are another area of settlement processes that could benefit from streamlining. This is the process whereby matching receipts and deliveries in the same security with the same counterparty are effectively netted in order to eliminate the mutual dependency of physical settlement for both transactions. ICMA is currently exploring with members whether additional best practices and guidance can further facilitate the process.

ICMA would also point to the work being undertaken by the ECB Advisory Group on Market Infrastructures and for Securities and Collateral (AMI-SeCo) on addressing barriers to securities post-trade integration in Europe,¹⁶ which builds on and expands the barriers identified by the Giovannini¹⁷ and European Post-Trade Forum (EPTF)¹⁸ reports. Removing these barriers and facilitating greater harmonization and efficiencies across the EU’s highly complex and fragmented post-trade ecosystem will be a key contributor to a sustainable improvement in EU settlement efficiency levels.

Finally, settlement fails also need to be considered in the broader discourse around market liquidity and resilience. Fails are often a symptom of deeper issues related to the ability to trade or borrow securities, which is a function of underlying market structure, as well as exogenous impacts such as central bank purchase programs or market shocks. Not only will cash penalties not address liquidity issues, but disproportionally calibrated penalty rates will only erode market liquidity further, as highlighted in the responses to subsequent questions.

In short, there is a wealth of potential initiatives and interventions that could have a measurable impact on improving settlement efficiency in the EU, particularly those that focus on addressing the structural rather than behavioural causes of fails, and not least when the cash penalties become redundant. ICMA would encourage ESMA to look more closely at the benefits of such tools, particularly in the context of the political decision to shorten EU settlement cycles to “T+1”, which will put further stress on the EU’s fragmented settlement ecosystem, with the potential to undermine the improvements in settlement efficiency we have observed over the past two years.

Q19: What are your views on the appropriate level(s) of settlement efficiency at CSD/SSS level, as well as by asset type? Please provide data and arguments to justify your answer.

In many respects this is an impossible question to answer, as the optimal attainable settlement efficiency levels will be dependent on underlying market structure and the structural causes of

¹⁴ See: <https://www.icmagroup.org/assets/f76d6c3270/ICMA-Rule-Book-Jan-2023-edition.pdf> Section Section 340 Best practices in support of settlement efficiency

¹⁵ See: <https://www.icmagroup.org/assets/ERCC-Guide-to-Best-Practice-November-2023-FINAL-2-Nov.pdf> Chapter 2

¹⁶ See: <https://www.icmagroup.org/assets/documents/Regulatory/Repo/AMI-SeCo-survey-on-post-trade-barriers-ICMA-ERCC-response-060224.pdf>

¹⁷ See: [Cross-Border Clearing and Settlement Arrangements in the European Union, The Giovannini Group, November 2021](#) and [Second Report on EU Clearing and Settlement Arrangements, The Giovannini Group, April 2003](#).

¹⁸ See: [EPTF Report, May 2017](#)

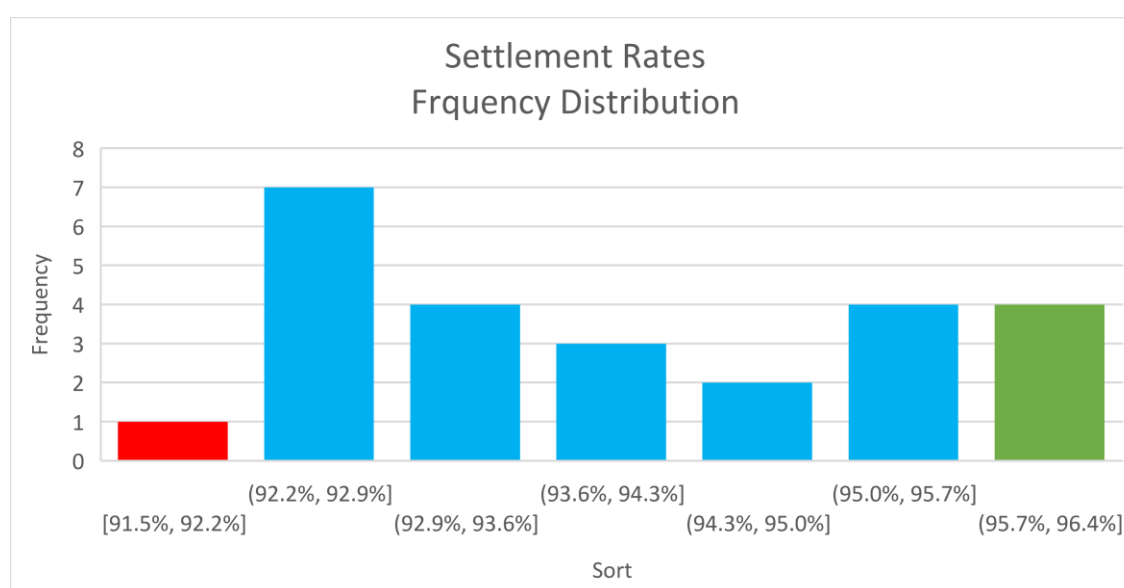
settlement fails, including relative liquidity. As discussed in the responses to previous questions, the natural cost of failing, potentially supplemented with penalties (where justified), will go a long way to addressing behavioural fails or those caused through error.

Improving the remaining incidence of settlement fails will require more targeted structural remedies and interventions, such as improving CSD interoperability or harmonizing settlement cut-off times. As the Giovannini work clearly illustrates, these are not overnight fixes, suggesting that improvements in settlement efficiency rates, beyond those affected by the economic cost of failing, will likely improve gradually over time. However, the potential “quick wins” presented in the response to Q18 could have a more immediate impact on sustainably improving settlement efficiency rates in the EU.

Ultimately, as recognized by ESMA in its consultation paper, achieving 100% settlement efficiency rates is not possible, particularly in markets for less liquid securities. Creating an environment where failing is disproportionately economically punitive will only change the way in such securities are traded and priced, eroding liquidity further and creating additional costs for investors and, ultimately, issuers. Thus, at some point there is a trade-off between having a strict “no-fails market” driven by settlement discipline measures and having a deep, liquid, globally competitive market that is attractive to investors and issuers. This also needs to be borne in mind in the context of the political decision to shorten EU settlement cycles to “T+1”, which will put further stress on the EU’s fragmented settlement ecosystem, and make timely settlement of trades even more challenging.

Perhaps one point of reference for identifying the “natural level” of settlement efficiency, and therefore the percentage of fails that can be addressed by the natural cost of failing (interest rates plus penalties) is to look at the distribution of observed settlement efficiency rates over a meaningful period of time. Using Euroclear data from January 2015, this would suggest that we are currently at or very close to the optimal level of settlement efficiency in light of existing structural impediments or market liquidity. This is highlighted green in Figure 8.

Figure 8: Settlement rates frequency distribution



Source: ICMA analysis using Euroclear data

Q20: Do you think the penalty rates by asset type as foreseen in the Annex to Commission Delegated Regulation (EU) 2017/389 are proportionate? Please provide data and arguments to justify your answer.

The proportionality of the rates proposed in the Annex to Commission Delegated Regulation (EU) 2017/389 needs to be assessed in light of (i) the natural cost of failing and (ii) the cost of borrowing securities to avoid or cure a settlement fail.

To assess the proportionality of the penalty rates, we convert them to an actual/360 equivalent rate (consistent with interest rates and repo or borrow rates).

Type of fail	Rate	Act/360 % equivalent
Settlement fail due to a lack of debt instruments (SSA)	0.10bp	0.25%
Settlement fail due to a lack of other debt instruments	0.20bp	0.50%

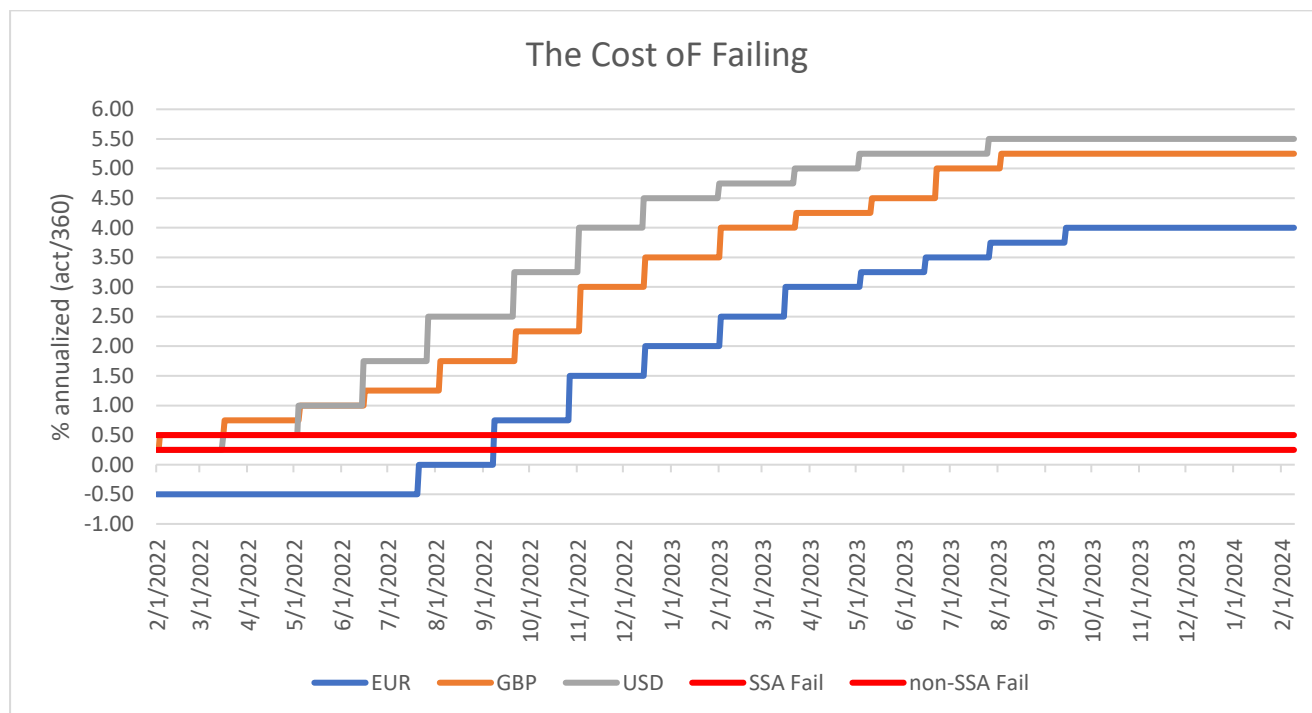
With respect to the penalty rates for bonds, these appear to be relatively low with the natural cost of failing when interest rates are low but are dwarfed in significance as rates move higher. Based on the observed improvement in settlement efficiency since interest rates began rising, and the identified positive correlation between settlement efficiency and interest rates, this would seem to suggest that the current penalty levels for bonds are proportionate for now (with interest rates doing the work of addressing behavioural or error-related fails), but may warrant revising higher in a lower interest rate environment.

This is illustrated in Figure 9 which plots the central bank policy rates for EUR, USD, and GBP from February 2022, which can be used as an estimate of the natural cost of failing, along with the equivalent CSDR penalty rates, which are essentially an add-on to the natural cost of failing. As the natural cost of failing increases, one would expect to see penalty rates being decreased (or even suspended).

The second point of reference for assessing the proportionality of penalty rates, as noted by ESMA in the Consultation Paper, is the cost of borrowing securities. As ESMA correctly notes, penalty rates should be an incentive to borrow securities and not an alternative, so should be at a premium to market repo or securities lending rates.

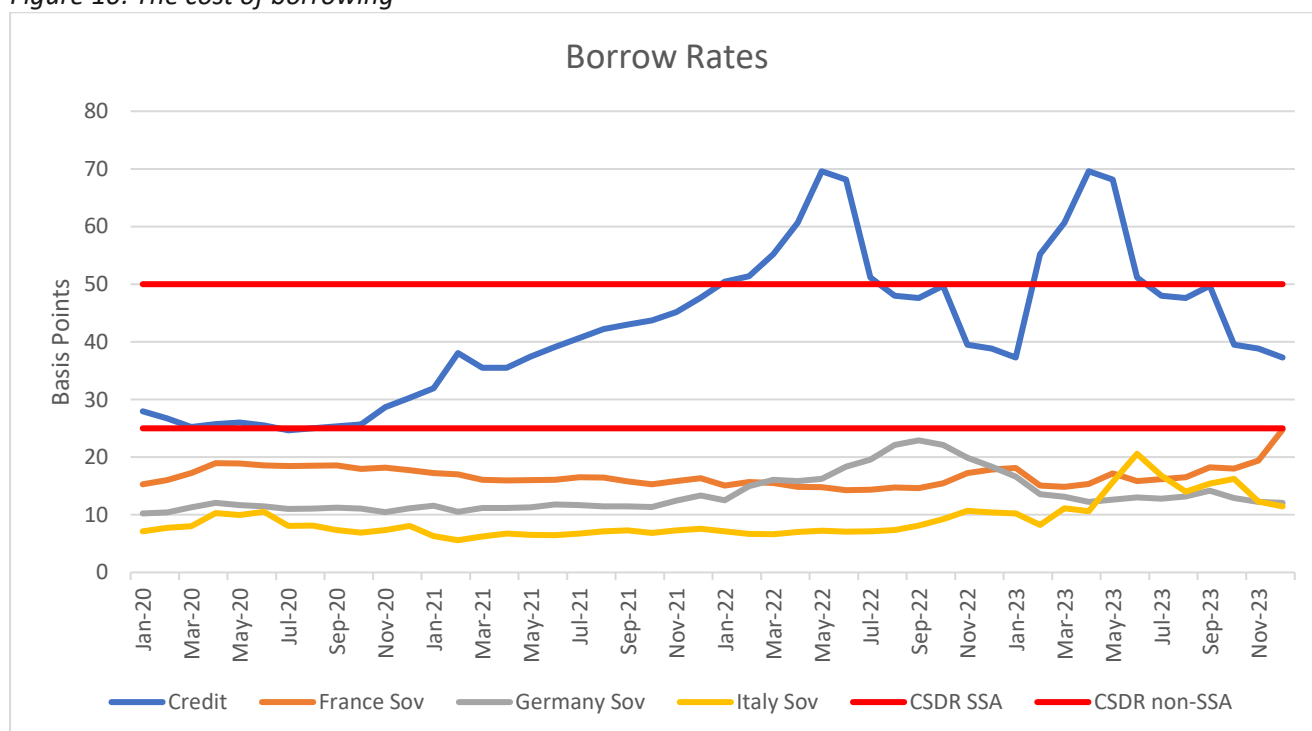
In Figure 10 we use DataLend data to show the monthly average borrow rates (annualized) for corporate bonds (credit) and the three largest Euro sovereign bond markets (Germany, France, and Italy) since January 2020, along with the current CSDR penalty rates for SSA and non-SSA bonds (annualized). When compared to the actual cost of borrowing securities, the data suggests that the current penalty rates are well calibrated, although it could be argued that the rate for non-SSA bonds could possibly be slightly higher (maybe as much as double the current rate), particularly if the objective is to build a premium into penalties. However, this also needs to be assessed in light of the natural cost of failing, which, at current interest rate levels, is the most significant driver for borrowing securities.

Figure 9: The cost of failing since February 2022



Source: ICMA analysis using Bloomberg data and ESMA penalty rates

Figure 10: The cost of borrowing



Source: ICMA analysis using DataLend data and ESMA penalty rates

Q22: In your view, would progressive penalty rates that increase with the length of the settlement fail be justified? Please provide examples and data, as well as arguments to justify your answer.

ICMA and its members see no logical or economic basis for progressive penalties. As discussed in the previous responses, there is normally a natural cost to failing which should address behavioural fails or those caused by errors. If the natural cost of failing is too low (such as in a close-to-zero or negative interest rate environment), then this can be replaced or supplemented by applying penalties. Once the appropriate cost of failing is determined (the inflection point at which an improvement in settlement efficiency is observed in the data) there is no economic rationale for increasing this further. As already established, failing is expensive. And failing for two days is twice as expensive as failing for one day. Failing for a week is seven times more expensive. Furthermore, once the optimal cost of failing is established, one would expect only structural fails to persist which, as previously discussed, are insensitive to the cost of failing.

Applying progressive penalty rates not only fails to understand the economics of failing and the causes of settlement fails, but it introduces unnecessary stress to a market that is most likely already facing liquidity challenges. Accordingly, progressive penalty rates would not provide an additional motivation to settling trades, but rather an incentive to avoiding trades, thereby becoming counterproductive. Increasing the cost of failing will not make an illiquid security any less illiquid; as explained in the response to Q25, this will only make illiquid securities more illiquid.

A further unintended consequence of progressive rates, as recognized by ESMA in its 2015 Technical Advice under the CSDR,¹⁹ is that it would undermine the principle of immunization with relation to chains of interdependent transactions. The current design of the penalty mechanism ensures that a participant in the middle of a chain will receive the same amount as that it would pay as a penalty. While incentivizing each intermediary in the chain to take action to cure the fail, this provides for a way to limit the negative effect the penalty because the amount received and paid are the same. This approach also prevents negative impact on the risk profile of the CSD, trading venue or CCP and simplifies the implementation and management of the penalty mechanism as they only distribute what they collect. Progressive penalties, apart from having no economic basis, would create additional risk for market participants, including intermediaries and infrastructures.

Finally, progressive penalties would introduce an unnecessary level of complexity, with the associated cost and resource drain, not only for implementing CSDs, CCPs, and custodians, but also market participants who need to reconcile penalty credits and debits, as well as pass these on to clients. Furthermore, this would put additional stress on an already dysfunctional claims process that has been born out of the EU's CSDR penalty mechanism.

As well as there not being any economic rationale for progressive penalties, ICMA would also point to the significant investment likely required across the industry to revise the existing mechanism, that was introduced only in February 2022. This would seem to be disproportionate in the absence of any data or cost-benefit analysis to support progressive penalties.

¹⁹ See: https://www.esma.europa.eu/sites/default/files/library/2015/11/2015-esma-1219_-_final_report_csd_r_ta_incl_cba_for_ec.pdf

Q23: What are your views regarding the introduction of convexity in penalty rates as per the ESMA proposed Option 2 (settlement fails caused by a lack of liquid financial instruments)? Please justify your answer by providing quantitative examples and data if possible.

ICMA and its members fail to understand the rationale for introducing convexity to the penalty mechanism. Firstly, as explained in the response to Q22, there is no economic justification for applying progressive penalty rates. In the case that penalties are justified (such as in a very low or negative interest rate environment), there will be an optimal rate at which there are no (or very few) behavioural incentives to fail, rather than borrowing securities, and a strong incentive to minimize fails caused through errors. Consistent with the natural cost of failing, there is not logical reason to increase or decrease this rate based purely on the duration of the fail. The incentive to settle the trade will not change, regardless of how liquid or illiquid the security is, nor will the ability to settle a trade failing for structural reasons be affected by increases or decreases in the cost of failing.

The points made in the response to Q23 with respect to additional and unnecessary risk, complexity, and cost are also highly pertinent with regard to the suggestion of applying convexity to the penalty mechanism.

Q24: Would it be appropriate to apply the convexity criterion to settlement fails due to a lack of illiquid financial instruments as well? Please justify your answer by providing quantitative examples and data if possible.

ICMA would refer to its responses to Q22 and Q23 which highlight very clearly that there is no economic basis for either progressive penalties or the introduction of convexity.

ICMA would again point to the significant investment likely required across the industry to revise the existing mechanism, particularly in the absence of any data or cost-benefit analysis to support progressive penalties.

Q25: What are your views regarding the level of progressive penalty rates:

a) as proposed under Option 1?

b) as proposed under Option 2?

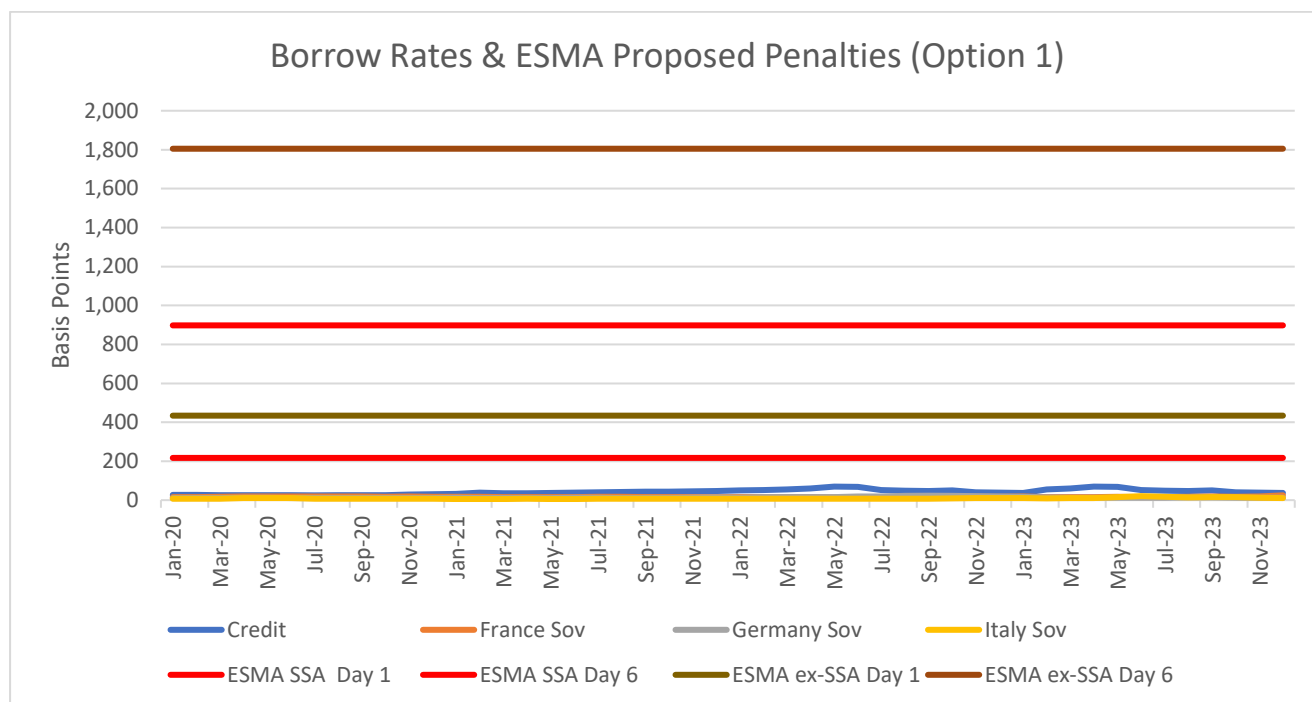
Apart from not presenting any data or a clear rationale for increasing the existing penalty rates, the rates proposed under both Option 1 and 2 are extremely disproportionate. ICMA would be very interested to understand what points of reference ESMA used in determining these levels or any analysis undertaken with respect to the relative cost of these penalties.

It is important to recognize that if these proposed progressive penalty rates were ever applied, this would have serious implications for market pricing and liquidity, making the EU capital markets significantly less attractive to investors and issuers compared with its global peers.

To add perspective to how extreme and disproportionate the proposed rates are, we compare the maximum and minimum rates under both options (as an annualized rate) with the historical average monthly borrow rates for credit and the largest sovereign bond markets, previously used in the

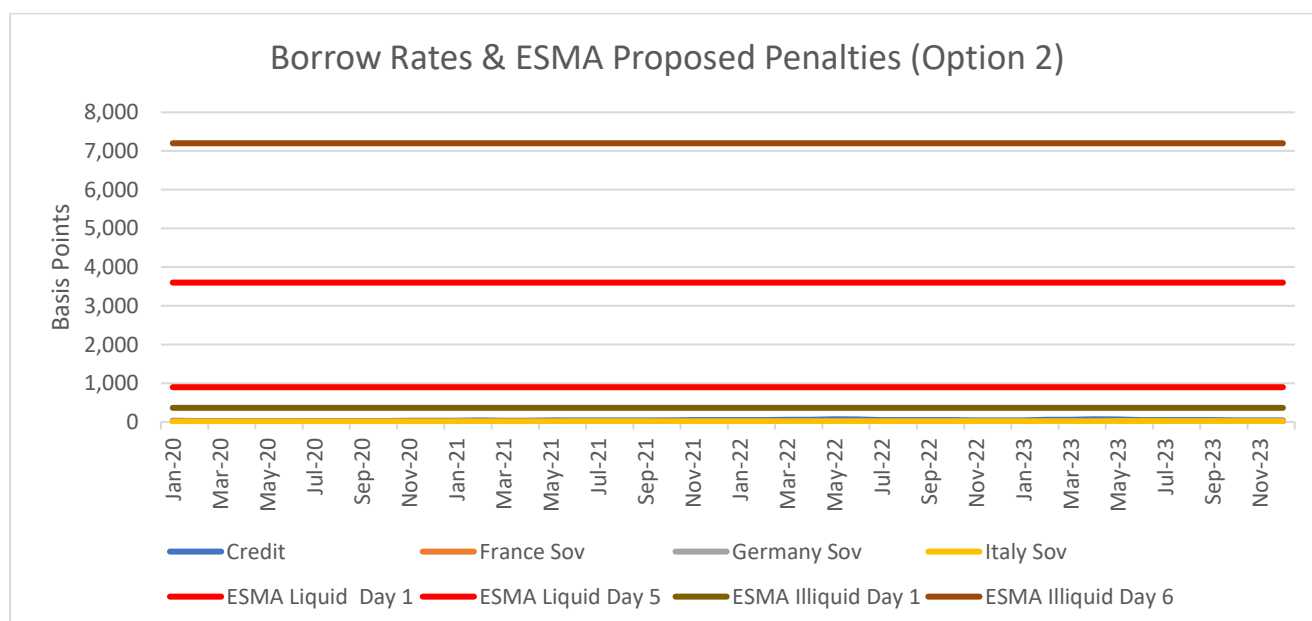
response to Q20 to assess the proportionality of the current penalty rates. These are shown in Figures 11 and 12.

Figure 11: Market borrow rates and ESMA Proposed penalties (Option 1)



Source: ICMA analysis using DataLend data and ESMA proposed penalty rates

Figure 12: Market borrow rates and ESMA Proposed penalties (Option 2)



Source: ICMA analysis using DataLend data and ESMA proposed penalty rates

Optically it is clear that the rates being proposed are not even on the same scale as market rates, illustrating how utterly disproportionate these are (using the scale for the ESMA proposed penalties, it is impossible to discern the market borrow rates, which appear as a flat line along the bottom of the y-axis). However, we can also look at the price impact of applying these proposed penalties to get a sense of how much they would distort the market and affect pricing and liquidity.

In the same way that repo or borrow rates are effectively factored into the price of underlying securities, the cost of failing can also be viewed as an unintended ‘borrow cost’: essentially, the natural cost of failing (current money market interest rates) plus any additional penalties. In the same way that extreme borrow costs can be highly price distortive, so would extreme penalties. And this effect is relatively easy to compute.

To illustrate the price distortion impact of the ESMA proposals, we have chosen two bonds: one SSA and one corporate. The SSA bond is an EU Next Generation (NGEU) bond and the corporate bond is a VW issue.²⁰ In both cases we have selected 5-to-6-year maturities, essentially targeting the middle of the curve, noting that the distortive effect of penalties will be greater on shorter maturities, and less pronounced on longer dated bonds.

In both cases we took an actual market price observed on January 19 2024 (for standard settlement on January 23 2024). We also show the corresponding dirty-price (DP), which includes accrued interest, and the yield-to-maturity (the annualized return from holding the bond to maturity. To calculate the cost of the fail, we converted the annualized fails rates proposed in the ESMA CP to an ‘actual/360’ basis for consistency, which we added to the natural cost of failing (using the ECB deposit rate as the proxy for this). We then calculate the cost of failing for one day and also one week in terms of both the price and yield impact, as well as the actual monetary cost based on the median value of outright transaction sizes for both SSA and corporate bonds (€5mn and €1mn respectively). We also compare this to the cost of failing when the current penalty mechanism went live in February 2022. For illustrative purposes, we have assumed that the EU bond is labelled as Liquid under the MiFIR assessment, while the VW bond is not.

The price effects are shown in the tables in Figure 13. What becomes clear is that even if the fail is for one day, the effective cost of failing is significant, but over subsequent days the impact becomes highly distortive – a product of both the proposed progressive approach and the ultra-high penalties being proposed. We “heat code” where the effective average daily cost of failing, as an annualized rate, is above 500bp, 1,000bp, and 2,000bp, on the basis that the natural cost of failing with respect to EUR denominated securities, in the current interest rate environment, is approximately 400bp (annualized). The impact on price and yield in these cases is meaningful and it is difficult to see how these worst-case scenarios, to varying degrees, would not be built into the market price, across all bond classes, regardless of their liquidity profile. Similar to MBIs, even if the risk of failing, particularly for more than one or two days, is deemed to be low, the cost is so extreme that it needs to be taken into account. This inevitably leads to a widening of the bid-ask spread (with the price and yield changes highlighted in the below tables providing an indication of the scale of such price adjustment), or a reluctance by liquidity providers to show offers in securities that they do not hold in inventory.²¹ Of course, this cost to liquidity is ultimately borne by investors and issuers.

²⁰ NGEU bonds are issued by the European Union to fund recovery investment following the Covid pandemic, while VW is the largest private sector employer in the EU outside of the energy sector.

²¹ ICMA estimates that around 20% of trades in bond markets involve dealers selling securities that they do not hold in inventory.

The analysis also illustrates, very clearly, the impact of interest rates, and the natural cost of failing, by comparing the economics of settlement fails when CSDR penalties were first introduced in February 2022 with that today.²²

Figure 13: Cost analysis of applying proposed penalties to failing bonds

EU 1.625 12/04/29 (EU000A3K7MW2) SD: 1/23/24									
Price: 93.80 (DP: 94.022) / YTM: 2.785%									
B/A spread: 30c									
	Avg Daily Fee	Act/360	Natural rate	Total rate	Adjusted Price	Adjusted Yield	Price Change	Yield Change	Daily cost per €5mn notional
February 2022 interest rates + penalties									
1 D	0.1bp	0.25%	-0.50%	-0.25%	93.795	2.787%	-0.5c	+0.2bp	(€33)
1 W	0.1bp	0.25%	-0.50%	-0.25%	93.764	2.764%	-3.6c	+1.1bp	(€33)
Current interest rates and penalties									
1 D	0.1bp	0.25%	4.00%	4.25%	93.807	2.784%	+0.7c	-0.1bp	€555
1 W	0.1bp	0.25%	4.00%	4.25%	93.847	2.780%	+4.7c	-0.5bp	€555
ESMA Option 1									
1 D	0.6bp	2.16%	4.00%	6.16%	93.812	2.783%	+1.2c	-0.2bp	€804
1 W	1.557bp	5.61%	4.00%	9.61%	93.945	2.761%	+14.5c	-2.5bp	€1,254
ESMA Option 2									
1 D	2.5bp	9.00%	4.00%	13.00%	93.830	2.78%	+3.0c	-0.5bp	€1,698
1 W	5.5bp	19.81%	4.00%	23.81%	94.204	2.71%	+40.4c	-7.5bp	€3,109

VW 4.25 3/29/29 (XS2604699327) SD: 1/23/24									
Price: 102.350 (DP: 105.834) / YTM: 3.740%									
B/A sprd: 40c									
	Av Daily Fee	Act/360	Natural rate	Total rate	Adjusted Price	Adjusted Yield	Price Change	Yield Change	Av Daily cost per €1mn notional
February 2022 interest rates + penalties									
1 D	0.2bp	0.50%	-0.50%	0.00%	102.338	3.742%	-1.2c	+0.2bp	€0
1 W	0.2bp	0.50%	-0.50%	0.00%	102.269	3.756%	-8.1c	+1.6bp	€0
Current interest rates and penalties									
1 D	0.2bp	0.50%	4.50%	4.50%	102.352	3.740%	+0.2c	-0.0bp	€132
1 W	0.2bp	0.50%	4.50%	4.50%	102.361	3.736%	+1.1c	-0.4bp	€132
ESMA Option 1									
1 D	1.2bp	4.34%	4.34%	8.34%	102.363	3.737%	+1.3c	-0.3bp	€245
1 W	3.11bp	11.21%	11.21%	15.21%	102.582	3.689%	+23.3c	-5.1bp	€447
ESMA Option 2									
1 D	1bp	3.60%	3.60%	7.60%	102.361	3.738%	+1.1c	-0.2bp	€223
1 W	9.43bp	33.94%	33.94%	37.94%	103.049	3.590%	+69.9c	-15.0bp	€1,115

²² Before the ECB began raising rates in July 2022, there was no real cost to failing, even with the CSDR penalties.

Similar to the notion of MBIs, anything that systematically distorts markets by creating disproportionate costs and risks to participants will also create adverse behavioural incentives. In the case of these proposed rates that increase, significantly, every day, being failed-to becomes immensely profitable. In fact, in many cases, the economic benefit from not receiving a security will be greater than the returns from the security itself. This could make the proposals self-defeating, creating counterproductive outcomes to the current industry and regulatory efforts to improve settlement efficiency in the EU.

Partialling is an important settlement initiative to reduce fails. In the case that the selling party is unable to deliver the full amount of securities, the purchasing party accepts whatever securities they can deliver, and continues to do so until they receive the full amount. Thus, the settlement will only fail for the amount of securities for which the selling party is insufficient. Extreme penalties, however, create a strong incentive for the purchasing party not to accept partial delivery, and to wait for full delivery, assuming that they have no matching onward delivery themselves. This would allow them to make very high returns from ESMA's proposed penalty rates, while still enjoying the benefit of owning the undelivered securities. Furthermore, every day the fail persists, their profits increase at a growing rate.

For the same reason as not accepting partialing, the proposed penalty rates a disincentive for the purchasing party to agree to 'shaping', which is the practice of splitting large trades into smaller ticket sizes in order to reduce the risk of the entire trade failing. With the penalty rates being proposed, and assuming there is no matching onward delivery, the purchasing party will want to increase the chances of being failed to as much as possible.

High penalties would also be a disincentive to lending securities, whether in the repo or securities lending market, or by participating in the ICSD's automatic securities lending and borrowing facilities. Reducing supply in the lending markets increases the probability of settlement fails., while also reducing market liquidity.

The incentive to use contractual buy-ins also diminishes in the case of extreme penalties. Contractual buy-ins are widely used in the cross-border non-cleared bond markets to force delivery of a failing transaction (or, more accurately, replace the settlement). Buy-ins do not create any additional economic gains for the non-failing party, beyond the economics of the original transaction (they are effectively made whole).²³ However, given the excess profits generated by being failed to, the purchasing party may decide that these more than compensate for the counterparty credit risk from the fail, and hold-off on initiating a buy-in, especially if they are the final party in the transaction chain.

²³ Buy-ins do, however, usually generate a cost to the failing party. This is due to the securities being bought at an above market price in the buy-in process.

Q26: If you disagree with ESMA's proposal regarding the penalty rates, please specify which rates you believe would be more appropriate (i.e. deterrent and proportionate, with the potential to effectively discourage settlement fails, incentivise their rapid resolution and improve settlement efficiency). Please provide examples and data, as well as arguments to justify your answer. If relevant, please provide an indication of further proportionality considerations, detailed justifications and alternative proposals as needed.

ICMA and its members fundamentally and forcibly disagree with ESMA's proposals which are illustratively not only disproportionate in their calibration but fail to recognize the causes of economics of settlement fails. As the data presented in this response shows very clearly, settlement rates improve in higher interest rate environments due to the lack of behavioural incentives to fail and more attention by investment firms to avoiding costly errors. Accordingly, In a normal interest rate environment, such as now, penalty mechanisms effectively become redundant. Instead, the focus needs to be on alternative measures to address structural fails, which cannot be addressed by penalties. In fact, increasing the cost of such fails, particularly to the degree proposed by ESMA, would only create additional market stress, affecting liquidity and pricing, and incentivizing the adverse behavior of market participants already described.

ICMA would point to Figures 5 and 6 in the response to Q15 which not only show an improvement in EU settlement efficiency since January 2022, but also a clear correlation with interest rates. This would suggest that the time to increase penalty rates is not now, but, potentially, when interest rates return to much lower levels. But again, this would need to be in response to an observed increase in settlement fails, as well as consideration of other factors such as extraordinary monetary policy, heightened market volatility, as well as the planned shortening of settlement cycles.

Q27: What are your views regarding the categorisation of types of fails:

a) as proposed under Option 1?

b) as proposed under Option 2?

Do you believe that less/further granularity is needed in terms of the types of fails (asset classes) subject to cash penalties? Please justify your answer by providing quantitative examples and data if possible.

As already explained and demonstrated in the responses to previous questions, penalties can only play a limited role in improving settlement efficiency and mainly in a low interest rate environment. This relates to the natural cost of failing, which is broadly indifferent to asset class or underlying market liquidity. It is a blunt economic reality that penalties only play a useful role in replicating or supplementing the cost of failing when market interest rates are too low.

Again, ICMA would point to Figures 5 and 6 in the response to Q15 as a clear illustration of the economic relationship between behavioural settlement efficiency and market interest rates.

When we look at discrepancies in settlement efficiency rates across different asset classes, such as ETFs, High Yield or Emerging Market Bonds, this is due purely to issues inherent in the underlying market structures: such as the creation and redemption process for ETFs, or liquidity conditions for

HY and EM bonds. As already explained, penalties will not address these issues, and may actually exacerbate the problems, particularly if calibrated at extremely high levels (such as those proposed by ESMA). As illustrated in Figure 8 in the response to Q25, charging disproportionate penalty rates, particularly on a progressive basis, will not make an illiquid bond more liquid. In the case of all asset classes and relative liquidity, it will achieve the opposite, penalizing investors and issuers in EU capital markets.

Here, other remedies and interventions are required, as discussed in the responses to previous questions.

Q28: What costs and benefits do you envisage related to the implementation of progressive penalty rates by asset type (according to ESMA's proposed Options 1 and 2)? Please use the table below. Where relevant, additional tables, graphs and information may be included in order to support some of the arguments or calculations presented in the table below.

ICMA would point to arguments, data, and analysis presented in the responses to previous questions which clearly explain that not only do penalties mainly serve a useful purpose in low interest rate environments, but the behavioural incentives for settling trades are broadly indifferent to asset class or market.

Where we see differences in settlement efficiency rates between different asset classes and markets, this is due to structural reasons. Penalties cannot help with this, and ESMA should consider the range of alternative initiatives and tools already outlined in the responses to previous questions, not least Q18.

Q29: Alternatively, do you think that progressive cash penalties rates should take into account a different breakdown than the one included in ESMA's proposal above for any or all of the following categories:

- (a) asset type;**
- (b) liquidity of the financial instrument;**
- (c) type of transaction;**
- (d) duration of the settlement fail.**

If you have answered yes to the question above, what costs and benefits do you envisage related to the implementation of progressive penalty rates according to your proposal? Please use the table below. Where relevant, additional tables, graphs and information may be included in order to support some of the arguments or calculations presented in the table below.

As explained in the responses to previous Questions in this CP, the concept of progressive penalties is economically unsound and will not address the problem that ESMA is seeking to solve. Settlement inefficiencies caused by structural issues require structural solutions. Penalties are the wrong remedy and could create additional stresses and friction to the smooth functioning of the market while

adversely impacting liquidity, particularly if applying the progressive levels of penalties proposed in the paper.

Q30: Another potential approach to progressive penalty rates could be based not only on the length of the settlement fail but also on the value of the settlement fail. Settlement fails based on instructions with a lower value could be charged a higher penalty rate than those with a higher value, thus potentially creating an incentive for participants in settling smaller value instructions at their intended settlement date (ISD). Alternatively, settlement fails based on instructions with a higher value could be charged a higher penalty rate than those with a lower value. In your view, would such an approach be justified? Please provide arguments and examples in support of your answer, including data where available. What costs and benefits do you envisage related to the implementation of this approach? Please use the table below. Where relevant, additional tables, graphs and information may be included in order to support some of the arguments or calculations presented in the table below.

ICMA and its members would challenge the reasoning behind this suggestion and would again point to the causes of settlement fails and the economic incentives to address behavioral or error-driven fails.

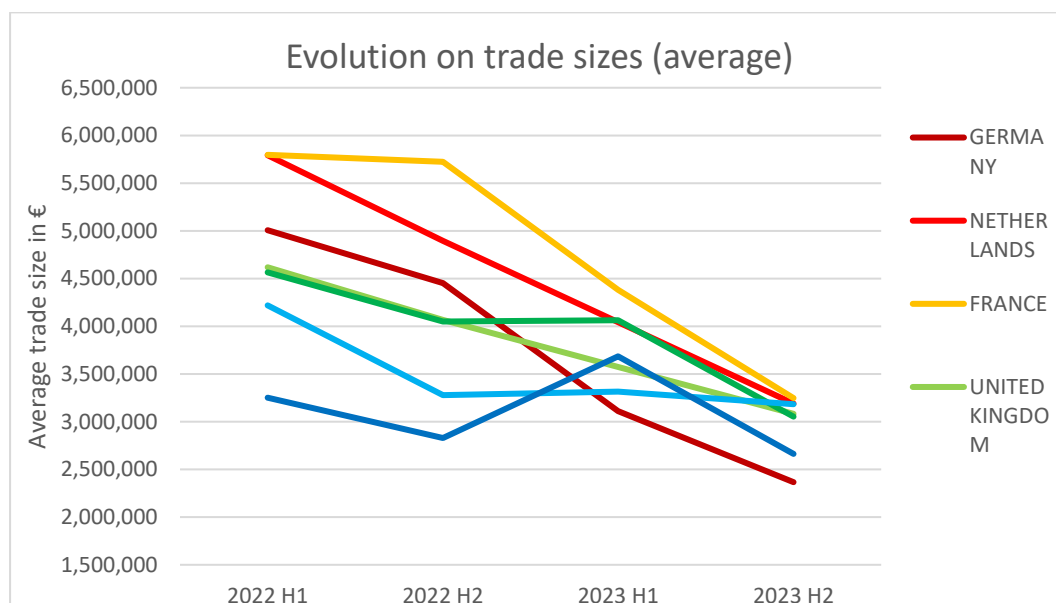
The question seems to infer that settlement fails are more prominent for smaller transactions. While ICMA does not have access to data to verify this, it would agree that there is a logic underlying such an observation. As liquidity in bond markets decreases, as well as an increase in retail participation, we do observe a reduction in median and average trade sizes across the fixed income spectrum over recent years (see Figure 14). In the case of smaller transactions where dealers, or other participants, enter into a short sale, this can create challenges with respect to their ability to cover in the repo or securities lending market. Due to the relatively low returns of lending securities, executing securities financing transactions in very small size is uneconomical for lenders.

Applying higher penalties to fails in smaller lot sizes will not address this structural challenge: rather it will disincentive trading in smaller sizes altogether.

A more targeted, and proportionate approach would be to encourage (I)CSD auto-borrow and lending programs and ensuring that they did not have a minimize size threshold.

An additional argument against this suggestion is the principle of immunization. It is quite common for intermediaries to purchase securities in one relatively large clip, and then sell the securities on in smaller shapes; for example, in the case of fund distributions. In the event of a fail on the inward purchase, this could put the intermediary at risk if they are being penalized for any failing onward deliveries at a higher rate than they are being credited for their failing purchase.

Figure 14: Average secondary market trade sizes for EU sovereign bonds



Source: ICMA European Secondary Bond Market Data: H2 2023

(MiFIR/D post-trade data sourced and aggregated using Proplleant software)

Q31: Besides the criteria already listed, i.e. type of asset, liquidity of the financial instruments, duration and value of the settlement fail, what additional criteria should be considered when setting proportionate and effective cash penalty rates? Please provide examples and justify your answer.

As ICMA has repeatedly highlighted throughout its responses in this consultation, the starting point for any discussion around the value or calibration for a penalty mechanism for settlement fails is an understanding of the cause of fails and the economics of failing.

As mentioned repeatedly, the causes of fails can be broken down into three main categories:

- (i) Behavioural fails (where parties elect to fail)
- (ii) Fails due to error (eg mis-bookings, late confirmations)
- (iii) Structural fails (cross-border cut-off times, corporate actions, trading or settlement restrictions, underlying market liquidity)

It can be argued that the first two causes of fails could be addressed by providing economic disincentives to failing, making it desirable to borrow or cover securities where parties are short, and incentivizing improvements in settlement processes and operational resources in order to minimize errors. Short-term interest rates will provide this economic incentive naturally, since these make failing expensive (a failing seller will need to fund the underlying position without earning any economic benefit from the securities). The higher the interest rate, the greater the incentive to address such fails. However, at some point, this will produce diminishing returns as an optimal level of behavioural incentives and operational efficiency are reached. A good case in point is the US TMPG penalty framework which observed that settlement efficiency rates in US Treasury markets worsened when the

Fed Funds rate was below 3%. This was the basis for setting a dynamic penalty rate that moved in the counter direction to interest rates while ensuring a floor of 300bp annualized.

As explained previously, a penalty mechanism will not address structural fails, where underlying market characteristics and dynamics, as well liquidity conditions, come into play. Here other tools and interventions are required, as penalties are the wrong remedy and could create additional stresses and friction to the smooth functioning of the market while adversely impacting liquidity, particularly if applying the levels of penalties proposed in the paper.

From ESMA's question, it would appear that it is conflating the structural causes of settlement fails with behavioural drivers, which will lead to the wrong tools or interventions being pursued.

Additional considerations to simplify the cash penalty mechanism, while ensuring it is deterrent and proportionate

Q32: Would you be in favour of the use of the market value of the financial instruments on the first day of the settlement fail as a basis for the calculation of penalties for the entire duration of the fail? ESMA would like to ask for the stakeholders' views on the costs and benefits of such a measure. Please use the table below. Where relevant, additional tables, graphs and information may be included in order to support some of the arguments or calculations presented in the table below.

While there is a rationale for using the original value for the duration of the fail (not least that fact that this is how the natural cost of failing is effectively calculated), if this were to be done, it should have been included in the original RTS. The benefit would have been that for many transactions it would also take away the requirement to have a centralized, daily valuation.

However, the work, cost, and time required to make this change is disproportionate to any benefit. Meanwhile, Free-of-Payment transactions would still require an independent valuation.

Q33: How should free of payment (FoP) instructions be valued for the purpose of the application of cash penalties? Please justify your answer and provide examples and data where available.

ICMA and its members do not see any reason to change the existing valuation process outlined on the RTS.

Q34: Do you think there is a risk that higher penalty rates may lead to participants using less DvP and more FoP settlement instructions? Please justify your answer and provide examples and data where available.

The use of DvP and FoP settlement instructions is driven by a number of considerations, not least the underlying transaction type. ICMA does not believe that penalty rates would be a consideration, particularly in light of factors such as counterparty credit risk or cost of capital.

Where higher penalty rates are more likely to affect market participants' settlement behaviour (negatively) is in practices to increase the probability of being failed-to, such as late matching, refusing partials, not shaping ticket sizes, and not participating in the ICSD auto-lending facilities. This is explained in more detail in the answer to Q25.

Q35: ESMA is considering the feasibility of identifying another asset class subject to lower penalty rates: “bonds for which there is not a liquid market in accordance with the methodology specified in Article 13(1), point (b) of Commission Delegated Regulation (EU) 2017/583 (RTS 2)”. The information on the assessment of bonds’ liquidity is published by ESMA on a quarterly basis and further updated on FITRS. However, ESMA is also aware that this may add to the operational burden for CSDs that would need to check the liquidity of bonds before applying cash penalties. As such, ESMA would like to ask for the stakeholders’ views on the costs and benefits of such a measure. Please use the table below. Where relevant, additional tables, graphs and information may be included in order to support some of the arguments or calculations presented in the table below.

As well as increasing the complexity of the EU penalty mechanism, with additional costs and a resource drain on the industry, there is no economic rationale for this proposal. As explained in the answers to previous questions, penalties, as a replacement or supplement to the natural cost of failing (ie short-term interest rates) may be an effective tool for addressing behavioural fails, particularly in low interest rate environments. They will not address structural fails, particularly those that continue for more than one or two days. Perhaps the more pertinent question here is whether penalties should be applied at all after a period of time, regardless of the security’s “liquidity” assessment.

Also, as ESMA may be aware, the MiFIR/MiFID liquidity assessments used to determine deferral calibrations for trade reporting are themselves subject to questions around their accuracy, noting that the assessments are made on backward looking data, as well as more general concerns about the data quality of FITRS.

Q36: Do you have other suggestions for further flexibility with regards to penalties for settlement fails imposed on illiquid financial instruments? Please justify your answer and provide examples and data where available.

As explained previously, penalties can only play a limited role in improving settlement efficiency, and then mainly in very low interest rate environments. ESMA should look more deeply at the structural causes of settlement fails, including market liquidity.

Encouraging more lending of securities, such as extending auto-lending/borrowing facilities across all EU CSDs, would be a far more effective solution.

Q37: How likely is it that underlying parties that end up with “net long” cash payments may not have incentives to manage their fails or bilaterally cancel failing instructions as they may “earn” cash from penalties? How could this risk be addressed? Please justify your answer and provide examples and data where available.

While ICMA does not have data to quantify the instances of fails being caused by purchasing party in order to benefit by earning interest on its long cash position, ICMA members report that this does occur.

One effective solution could be to focus on the process for matching to ensure that there is limited scope for such fails. “Auto-partialing” could also play a role in addressing the disincentive to accept partial settlement by purchasers.

Meanwhile, penalties, particularly at the levels proposed by ESMA, would only add to the disincentive to manage fails or bilaterally cancel failing instructions, since this would provide additional income for the purchasing party.

Q38: How could the parameters for the calculation of cash penalties take into account the effect that low or negative interest rates could have on the incentives of counterparties and on settlement fails? Please provide examples and data, as well as arguments to justify your answer.

ICMA would refer ESMA to its response to Q15 which explains and illustrates the high level of correlation between interest rates and settlement fails. In many ways this should have been the first Question in Chapter 5 since this is the central consideration for the usefulness and calibration of a penalty mechanism.

This also underpins ICMA's recommendation to keep the penalty rates at or close to current levels and for ESMA to observe settlement efficiency data over a longer period, particularly as interest rates move lower and quantitative tightening begins. This would not only provide more information about the usefulness of a penalty mechanism, but it would allow us to assess what an appropriate floor for the cost of failing should be, and so the optimal calibration of penalty rates.

Q39: To ensure a proportionate approach, do you think the penalty mechanism should be applied only at the level of those CSDs with higher settlement fail rates? Please provide examples and data, as well as arguments to justify your answer. If your answer is yes, please specify where the threshold should be set and if it should take into account the settlement efficiency at:

- a) CSD/SSS level (please specify the settlement efficiency target);**
- b) at asset type level (please specify the settlement efficiency target); or**
- c) other (please specify, including the settlement efficiency target).**

If ESMA observes different levels of settlement efficiency across (I)CSDs, this would suggest that any differential is likely to be the result of structural issues related either to the CSD, or to the underlying market that is mostly being settled on the CSD. This would warrant a deeper investigation into the actual causes of any discrepancies.

As explained throughout this response, penalizing market participants will not resolve these issues, and may only exacerbate any underlying stresses or frictions.

Q40: Please specify what costs and benefits you envisage regarding the application of the penalty mechanism only at the level of the CSDs with higher settlement fail rates. Please use the table below. Where relevant, additional tables, graphs and information may be included in order to support some of the arguments or calculations presented in the table below.

As explained in the response to Q39, there is no benefit to applying penalties to CSDs with below average rates of settlement efficiency, since the causes are unlikely to be behavioural.

Q41: Do you think penalty rates should vary according to the transaction type? If yes, please specify the transaction types and include proposals regarding the related penalty rates. Please justify your answer and provide examples and data where available. Please specify what costs and benefits you envisage related to the implementation of your proposal. Please use the table below. Where relevant, additional tables, graphs and information may be included in order to support some of the arguments or calculations presented in the table below.

ICMA and its members do not believe that penalties should vary depending on the transaction type. This goes back to the economic justification of a penalty mechanism, which relates to the natural cost of failing and behavioural incentives for timely settlement.

Given the interconnectedness of different transaction types, such as repo and outright bond trades, this would also challenge the principle of immunization for parties who are caught in a fails chain.

However, ICMA does believe that there is a very practical case for providing a one-day “grace period” for settlements related to new issuances, where there may be frequent settlement fails due to inconsistent settlement deadlines across time zones that are not attributable to the transaction participants and/or regarding transactions involving non-trading parties. (This is recognised in Recital 8 of Regulation (EU) 2023/2845: << *Settlement fails the underlying cause of which is not attributable to the participants and operations that are not considered as trading should not be subject to cash penalties or mandatory buy-ins, since the application of those measures to such settlement fails and operations would not be practicable or could lead to detrimental consequences for the market. For mandatory buy-ins, that is likely to be the case for certain primary market transactions [...]* >>)

This case arises where a new bond issue is initially delivered by the issuer into DTCC in the United States, for the new issue underwriters (the delivering trading parties) to settle with the initial primary market investors (the receiving trading parties) in the two international CSDs (ICSDs / Euroclear and Clearstream) in Europe. Such initial delivery by the issuer occurs in the morning in the United States but also then in the afternoon in Europe, due to time zone differences. So onward transfer from DTCC into the ICSDs by the underwriters quite commonly misses the ICSDs’ intra-day cut off times for same-day (‘daylight’) settlement. This has been a long running situation that was not historically perceived as problematic, since the ICSDs back-value next-day (‘overnight’) settlement receipt by the initial primary market investors (enabling timely payment of the issue proceeds to the issuer). In this respect the initial same-day settlement failure typically relates to the delivery from a new issue underwriter’s DTCC account to another new issue underwriter’s ICSD account (as a preliminary to delivery to primary market investors’ ICSD accounts) and is thus both (i) not attributable to the transaction participants (being due to initial issuer delivery in a United States time zone) and (ii) typically regarding transactions involving non-trading parties (as involving just new issue underwriter accounts rather than new issue underwriter accounts and primary market investor accounts).

In this respect it was anecdotally reported to ICMA that primary market investors were being asked in some cases to accept their initial allocation in their DTCC accounts. Primary market investors can then, if they wish, transfer their bonds from their DTCC accounts to their own ICSD accounts as a secondary delivery – with any fails etc being internal to each primary market investor and less impacted by the ICSDs’ cut-off times. It was also suggested, as an alternative, that initial delivery by the issuer occurs

directly into the ICSDs – though the likelihood of practical traction with issuers used to delivery into DTCC (in terms of adopting a new procedure in a different time zone) still remains to be seen.

ICMA's recommended solution in this respect is to allow one day's grace to all transactions on a new bond that are due to settle on that bond's new issue closing date, whether in the primary market or in the secondary market (this would avoid secondary market on-sales from being penalized due to a primary market delay).

The need for such a solution seems likely to grow in importance to the extent the currently relatively low penalty rates for bonds may increase, particularly on the scale proposed by ESMA.

Q42: Do you think that penalty rates should depend on stock borrowing fees? If yes, do you believe that the data provided by data vendors is of sufficient good quality that it can be relied upon? Please provide the average borrowing fees for the 8 categories of asset class depicted in Option 1. (i.e. liquid shares, illiquid shares, SME shares, ETFs, sovereign bonds, SME bonds, other corporate bonds, other financial instruments).

As explained in the response to Q22, borrow rates (or repo specialness) are a good reference point for testing the proportionality of the penalty rate calibration. As ESMA notes, ideally any penalty should be at a premium to the cost of borrowing a security. However, this cannot be viewed in isolation, and other factors such as the natural cost of failing (ie current short-term rates), or capital costs associated with failing, also need to be taken into account. It should also be noted that the cost of borrowing is largely a function of the cost of failing.

If the suggestion here is that penalty rates are determined dynamically based on market repo or borrow rates, ICMA would argue that not only is this unnecessarily complex, but these rates, in themselves, are not the right data points for calibrating penalties.

In its response to Q22, ICMA provides historical average monthly borrow rates from January 2023 for the three largest EU sovereign bond issuers (Germany, France, and Italy) as well as for EU corporate bonds. As discussed in the response to Q22, current penalty rates for fixed income are more or less relatively aligned with these (see Figure 10). However, more important is the natural cost of failing (shown in Figure 9) which currently is relatively high, and which perhaps explains the lack of statistical significance of penalties seen in the regression modeling (see Figure 7 in the response to Q15).

Q43: Do you have other suggestions to simplify the cash penalty mechanism, while ensuring it is deterrent and proportionate, and effectively discourages settlement fails, incentivises their rapid resolution and improves settlement efficiency? Please justify your answer and provide examples and data where available. Please specify what costs and benefits you envisage related to the implementation of your proposal. Please use the table below. Where relevant, additional tables, graphs and information may be included in order to support some of the arguments or calculations presented in the table below.

Given the vast investment and industry effort undertaken to implement the EU CSDR Penalty Mechanism, and which has only been in existence for two years, ICMA would argue that any meaningful overhaul of the model (including progressive rates) would be disproportionate.

In light of the data and analysis presented in this response, ICMA would reiterate its suggestion of keeping the penalty rates at or close to current levels and for ESMA to observe the data over a longer period, particularly as interest rates move lower and quantitative tightening begins. This would not only provide more information about the usefulness of a penalty mechanism, but it would allow ESMA to assess what an appropriate floor for the cost of failing should be, and so the optimal calibration of penalty rates.

Perhaps one area of the Penalty Mechanism that ESMA could look at more closely is the claims process for claiming where settlement fails, and related penalty debits, are caused by a counterparty (usually the result of late matching). Best practice around this has been established by AFME²⁴ and is supported by ICMA²⁵ and other market bodies. However, it is a frequent complaint from members that some firms do not honour the claims, particularly given the absence of any contractual or regulatory weight for the best practice. Even an ESMA endorsement of the Guidelines, say in the form of Level 3 guidance, may help to improve its effectiveness.

Meanwhile, we look forward to ESMA consulting stakeholder on other tools to improve settlement efficiency. It is here that ICMA and its members believe that a meaningful and sustainable improvement to EU settlement efficiency can be made, way beyond the relative limitations of a penalty mechanism.

Q44: Based on your experience, are settlement fails lower in other markets (i.e USA, UK)? If so, which are in your opinion the main reasons for that? Please also specify the scope and methodology used for measuring settlement efficiency in the respective third-country jurisdictions.

While ICMA does not have access to settlement efficiency rates for the USA or UK, anecdotal evidence from members suggests that EU settlement rates are at least on par with both, if not slightly ahead. Given that the USA and UK have the benefit of a single CSD and CCP, compared to the EU's complex and fragmented post-trade landscape, this is highly encouraging.

²⁴ See: [CSDR Settlement Discipline Penalties: Market Practice for Bilateral Claims, AFME, March 2023](#)

²⁵ See: [CSDR Cash Penalty Regime – Best Practice Recommendations, ICMA, February 2022](#)

Of course, when comparing jurisdictions, it is also important to consider the methodologies being used to define settlement fails and measure settlement efficiency, otherwise any comparisons become meaningless.

Q45: Do CSD participants pass on the penalties to their clients? Please provide information about the current market practices as well as data, examples and reasons, if any, which may impede the passing on of penalties to clients.

ICMA has no view on this question.

Q46: Do you consider that introducing a minimum penalty across all types of fails would improve settlement efficiency? Is yes, what would be the amount of this minimum penalty and how should it apply? Please provide examples and data, as well as arguments to justify your answer.

ICMA has no consensus view on this question.

Q47: What would be the time needed for CSDs and market participants to implement changes to the penalty mechanism (depending on the extent of the changes)? Please provide arguments to justify your answer.

Based on the proposals put forward by ESMA in this consultation, including progressive penalties, estimates vary from between 18 months to three years.

However, ICMA would also point to the significant investment that will be required (likely to be comparable with the investment required to implement the existing framework). In view of this and given the limited relative effectiveness of penalties in a high interest environment, as well as the fact that many causes of fails cannot be resolved by the cost of failing alone, ICMA would strongly recommend not making any changes to the mechanism in the near future. Instead, a better use of the industry's time and resources would be on addressing many of the structural challenges that underly settlement inefficiency. This imperative has only become more pressing in light of the political decision to shorten EU settlement cycles to "T+1".

Meanwhile, as already explained, as and when interest rates fall (as they are priced to do over the next 12 to 18 months), if ESMA observes a marked decrease in settlement efficiency rates, which can be correlated with short-term rates, then it should look to increase current penalty rates. By looking at the data, it will also be relatively straight-forward to identify the inflection point in settlement rates, and therefore the appropriate calibration of the penalty rate. Going forward, it would probably make sense to develop a standardized methodology and process for such a calibration to ensure that the penalty mechanism is sufficiently responsive to changes in market conditions.

End