

Covid-19 and CSDR Mandatory Buy-Ins: The Combined Impact on Market Liquidity in Europe

Executive Summary

As European wholesale capital markets react to the unexpected economic consequences of Covid-19, AFME is committed to engagement with policy makers across Europe to help support resilient and liquid capital markets in both the short and long-term. Recovery from the crisis will require not only positive interventions of public authorities, but also an assessment of the impact of Covid-19 on existing and impending regulations. AFME strongly believes the introduction of CSDR mandatory buy-ins in February 2021, represents a significant threat to the functioning of secondary markets, which will be further magnified by Covid-19. This note intends to provide data on the observed impacts of Covid-19, insights on how mandatory buy-ins might impact market liquidity, and the combined implications. The note focuses primarily on fixed income markets, where, due to the comparatively larger average notional, the effect is likely to be more pronounced, however these same principles apply to all asset classes.

AFME and its members share the aspiration of improving settlement efficiency in Europe, and support the introduction of a mandatory penalties for late settlement and a buy-in mechanism underpinned by EU regulation. We strongly believe that adjusting the buy-in regime from a mandatory obligation to an optional right of the investor, underpinned by law, would achieve the same policy objective whilst avoiding the potentially damaging impact on market liquidity.

Impact of Covid-19 on Market Liquidity and Volatility

The Covid-19 outbreak is stress-testing the entire financial system and its institutional architecture, creating a wide variety of shocks for market participants to absorb simultaneously. First quarter trading volumes in secondary markets have increased in comparison to Q4 2019.

Trading	1Q 2020	4Q 2019	%Chg (latest)
Equity (ADV in EUR bn)	60.9	42.5	14.7%
Corporate (ADV in EUR bn)	73.9	54.8	34.9%
Sovereign debt (ADV in EUR bn)	79.1	62.9	25.8%
FX (thousand weekly contracts)	67.6	47.4	42.6%
Fixed income swaps (cleared trades)	32.6	23.3	39.9%
Repo (cleared trades)	32.7	31.1	5.1%

Sources: BigXYT, Traxx

One of the key lessons of the current crisis has been the clear demonstration of the fragile nature of market liquidity, and that it can be significantly damaged by external factors. Research published by AFME in April 2020¹ has shown a significant widening in spreads across a variety of asset classes for the year to date.

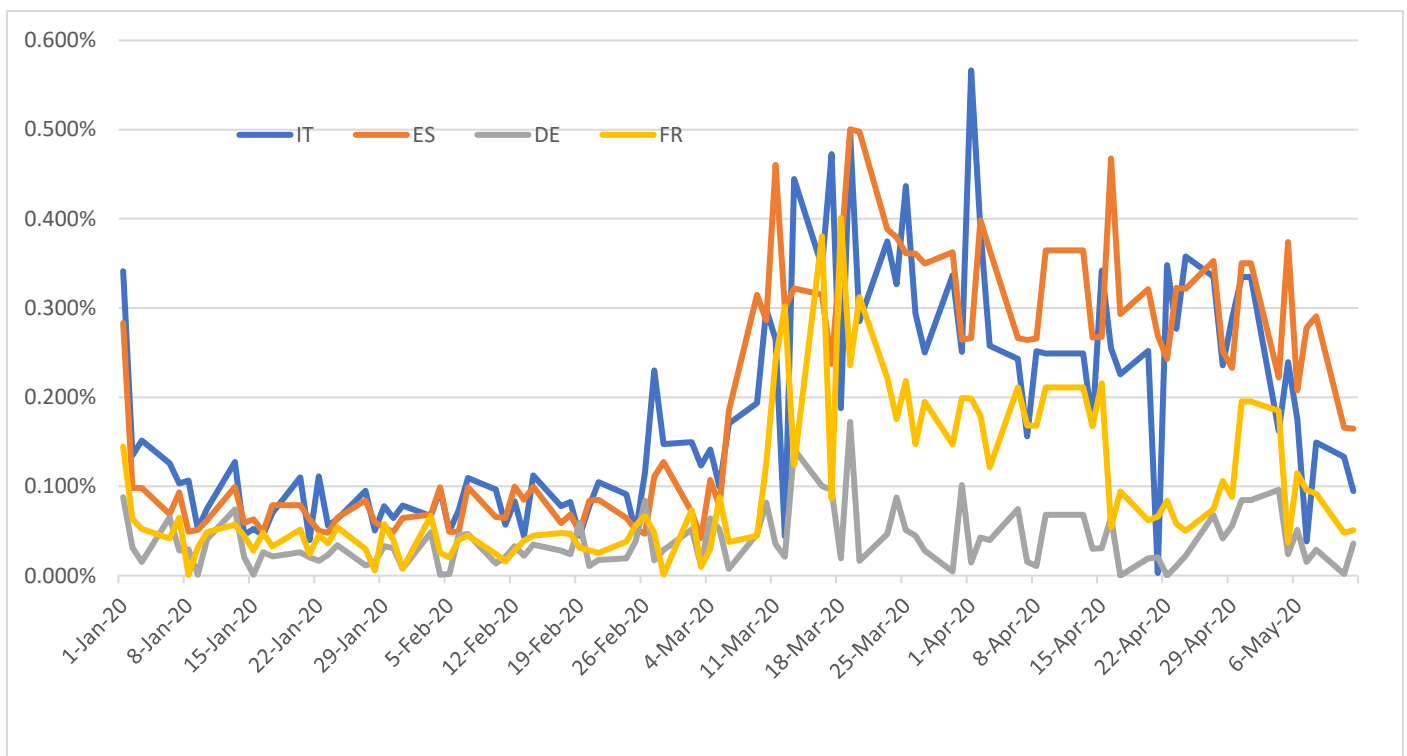
Spreads	11/05/2020	31/03/2020	01/01/2020	bps Chg
Corporate				
European AAA	92	136	53	+40
European High Yield	652	866	308	+334
Sovereign				
5Y German CDS	11	14	5	+6
5Y Italian CDS	145	104	57	+88
5Y UK CDS	25	28	13	+12
Securitisation				
3-5Y AAA PanEurope CMBS	n/a ²	126	93	+33
1-4Y AAA PanEurope Auto ABS	n/a	60	17	+43
1-4Y AAA PanEurope Credit Card ABS	n/a	131	79	+52

¹ <https://www.afme.eu/Portals/0/DispatchFeaturedImages/AFME-%20Impact%20of%20COVID-19%20on%20European%20Capital%20Markets-1.pdf>

² n/a indicates that at the time of writing, this data was not available.

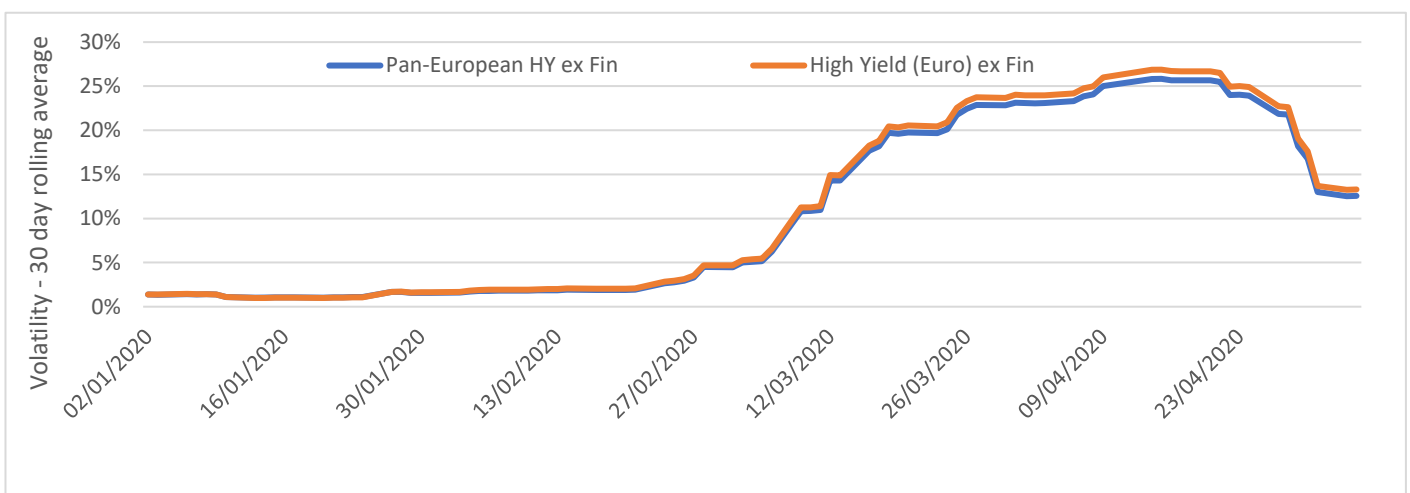
5-8Y AAA Spanish RMBS	n/a	192	55	+137
3-5Y AAA Dutch RMBS	n/a	42	17	+25
3-5Y UK RMBS (Prime)	n/a	99	77	+22
1-4Y BBB PanEurope credit card ABS	n/a	354	251	+102
3-5Y BBB PanEurope CMBS	n/a	322	247	+75
5Y AAA US CMBS	n/a	268	152	+116
US ABCP	n/a	7	9	-2
Banks				
T1 CoCo	602	674	316	+286
HY CoCo	614	683	335	+280

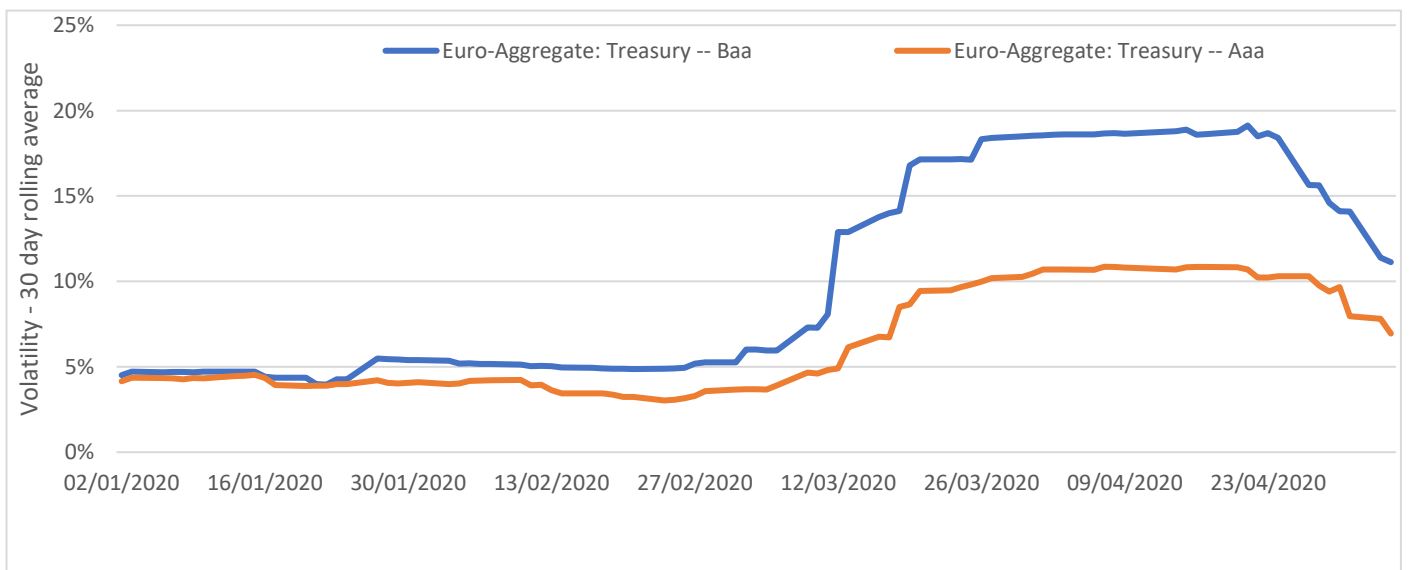
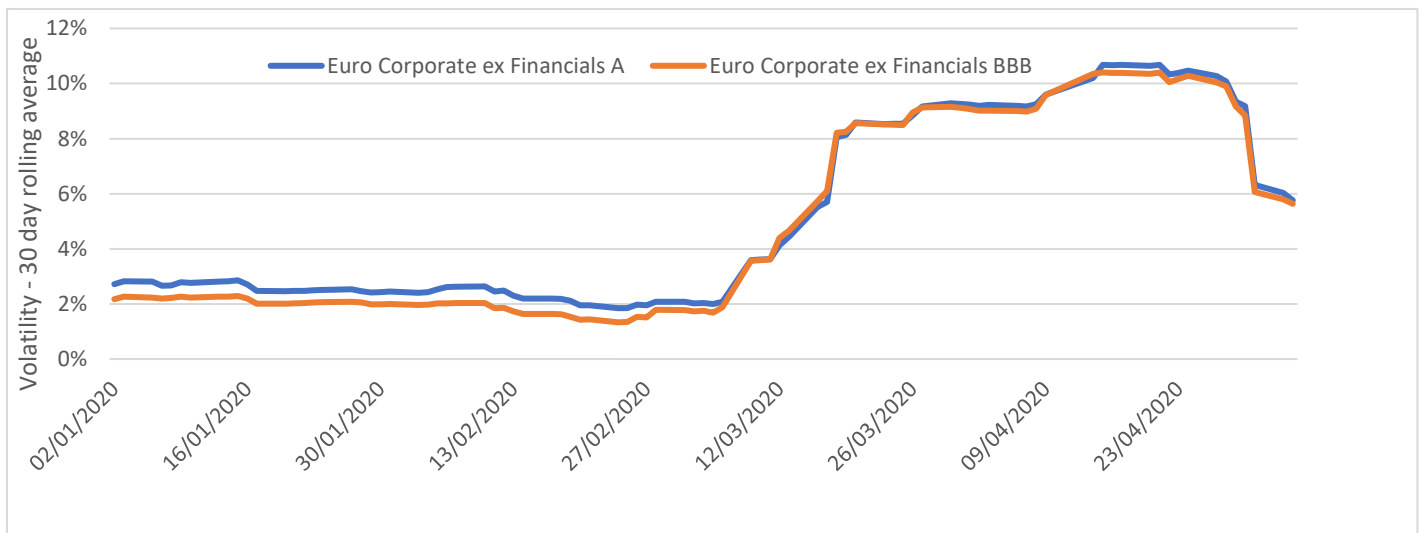
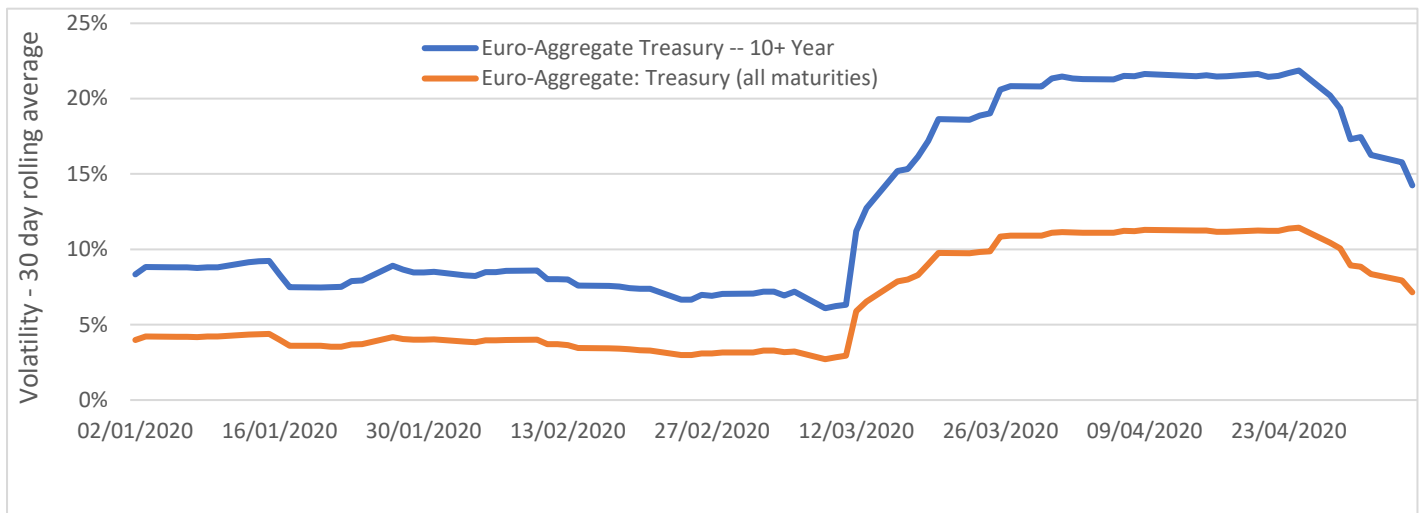
We also note the widening of bid-offer spreads, as illustrated in the below graph, which tracks the difference between closing bid price and closing offer price on selected 5Y benchmark government bonds in key Eurozone markets.



Source: Reuters

In addition to the deterioration of market liquidity, the Covid-19 crisis has also led to the rapid increase in volatility observed across asset classes. Implied volatility for European equities rose to levels last seen during the 2008-2009 Global Financial Crisis. Fixed income markets are similarly impacted, as shown by the sharp increase in volatility of selected benchmark indices, below.





Source: Reuters

Impact of CSDR on Fixed Income Market Liquidity

The ability of market-makers to offer prices on securities they do not hold in inventory is a key element to a smoothly functioning market. Such trades are likely to represent a reasonable percentage of orders executed on fixed income credit trading desks. Research from the U.K.³ and China⁴ has shown that short sells contribute to higher liquidity and pricing efficiency. A recent study of the corporate bond market by UCLA⁵ noted that dealers “charged a significantly higher price to provide immediacy” in the wake of a large shock.

Market-makers and executing brokers must consider a wide variety of factors before the purchase or sale of a security, including economic data and market trends, the supply of new issues, upcoming maturities of existing bonds which will remove supply from the market, and the relative supply of bonds available for purchase or delivery into a sale.

On this latter point, a market-maker will need to decide when making a bid or offer whether or not they can find a security prior to the contractual settlement date. A market-maker can also choose to run a short position until able to source the securities and manage this risk accordingly, such as hedging through the purchase of a cheaper or more easily available instrument that provides similar economic exposure.

The introduction of a mandatory buy-in regime under CSDR is therefore an important consideration for a trader when considering whether to make a market on a particular security, and if so, then at what price. For securities not held in inventory, or which cannot be readily sourced, the trader may choose to increase the offer price, or not to offer at all, which removes activity and therefore liquidity from the market. The additional costs of CSDR settlement discipline must be incorporated into the price offered.

Whilst the exact pricing impact is difficult to measure in advance of the buy-in regime, there are a number of factors that should be considered. These factors are subject to significant variance depending on prevailing market conditions, each giving rise to a different outcome.

Possible considerations might include:

1. Probability of the trade failing to settle [for 7 business days⁶]
2. Availability of inventory and cost of sourcing it
3. Cost of settlement penalties
4. Cost of the buy-in (i.e. price differential between original and bought-in transactions)

1. Probability of trade failing for 7 business days

ECB analysis estimates that the number of settlement fails for at least one business day is approximately 2-3% of overall settlement volumes. As observed by the Commission, during this recent period of market turmoil, the ECB estimates that settlement volumes have doubled in the last three months, whilst the fail rate has remained broadly consistent. The number of fails will have therefore increased proportionately.

This is an aggregate number across markets and mostly based on relatively liquid instruments such as index-listed equities, which make up the majority of T2S settlement. This therefore probably understates the true volume of fails for less liquid instruments such as corporate bonds, ETFs, and SME market instruments. These instruments, which often settle outside of T2S, generally have a lower settlement rate even in BAU circumstances, and the need for market-makers to provide liquidity is greater.

³ http://wrap.warwick.ac.uk/55474/1/WRAP_Raman_1173295-wbs-100713-nss_jfe_2011_784_resubmission_20121224_revised_manuscript.pdf

⁴ <http://www.fmaconferences.org/Vegas/Papers/shortsellingchinalin.pdf>

⁵ <http://www.econ.ucla.edu/cbml/corporate-bond-liquidity.html>

⁶ Seven business days is the extension period for fixed income securities, as per Article 36 of Commission Delegated Regulation (EU) 2018/1229

Whilst there is no publicly available data on settlement rates by instrument type, AFME believes this would be a worthwhile exercise to be conducted based on information provided to regulators by CSDs and ICSDs in advance of the introduction of a buy in regime.

Because it is not known at the point of execution which trades will ultimately lead to a settlement fail, there will be a pricing impact to all trades. Whilst there are many possible reasons for a settlement fail, it is expected that the vast majority of fails at the end of the buy-in extension period will be due to lack of inventory, although operational issues may also play a role, especially in long settlement chains.

Thus, a market-maker will likely assign a higher probability that a short sell⁷ will fail and account for this in the pricing.

2. Availability of inventory, and cost of sourcing it

Market-makers generally keep a limited inventory, comprising of the most popular securities. Regulatory restrictions and the costs of keeping inventory have also reduced inventory levels over recent years.

Whilst market-makers and brokers can utilise repo and securities lending markets to cover short sells, it should be noted that the impact of the mandatory buy-in regime on repo and securities lending is a significant unknown and has not been analysed as part of the market impact assessment.

SFTs with a term date of less than 30 days are exempt from mandatory buy-in provisions. However, a holder of securities who currently lends may be concerned that if they want to sell those bonds, they may not be returned in time and thus the outright sale will be subject to buy-in risk. In order to avoid this, they may reduce the amount of lending they engage in, further reducing the supply of securities in the market.

Again, there is no publicly available data on this topic. SFTR regulatory reporting may provide authorities with new insights into the securities lending and repo markets, and the impact of future market disruptions.

3. Cost of settlement penalties

For a fixed income security, the buy-in will be executed on ISD+8 and settled on ISD+10, assuming a standard T+2 cycle.

Therefore, one can estimate that the failing seller will pay settlement penalties for a total of 10 business days. For fixed income securities, the regulatory technical standards (RTS) mandate daily penalty rates ranging from 0.1 to 0.2 basis points. Thus, the overall cost of penalties on a bought-in transaction will be between 1 to 2 basis points.

As set out in the RTS, liquid equities are subject to a shorter extension period and higher penalty rate, leading to expected overall costs of 7 basis points.

The cost of penalties will need to be included by market-makers in the overall cost of the settlement discipline regime and is cumulative to the cost of the buy-in. Because it is not known at the point of execution which trades will ultimately lead to a settlement fail, the pricing impact may be applied to all trades.

⁷ A short sell is defined in this context as a trade in which the market-maker or broker does not have the inventory or has not been able to source the securities at the point of trade.

4. Cost of the buy-in

In the case of a successful buy-in, the seller must pay to the buyer the difference between the original transaction price and the buy-in price. From a trader's perspective, this can be broken into two components:

1. an estimate of how likely the buy-in price is to have moved away from the original trade price and by how much, plus
2. an additional "premium" – i.e. the amount above the prevailing market price that would incentivise a previously reluctant seller to now sell the securities via the buy in agent.

Both factors are related to the volatility of the underlying instrument and can be estimated using data on both price volatility and bid-offer spread volatility.

As illustrated by our data analysis, volatility tends to increase markedly in periods of stress, and the impact is more pronounced on less liquid securities, creating a pro-cyclical effect. In addition, the ability of market-makers to 'lean against the wind' in terms of absorbing shocks between supply and demand has been largely reduced, requiring intervention from Central Banks to provide emergency support facilities.

As the market experiences periods of much higher volatility across a broad range of asset classes, such as during Covid-19, this necessarily becomes an increasingly significant factor to be 'priced-in' by market-makers.

Conclusion

In order to resolve settlement issues for a relatively small population of trades, market-makers will inevitably need to incorporate these additional factors into the price formation methodology of every trade. In many instances, the net effect of these incremental costs is that the final offer price will simply not be economical for the purchaser, and the trade will not be executed. Since the costs are related to the starting bid-offer spread, this impact will be pro-cyclical – i.e. when liquidity reduces and the spread is greater, the price increase will also be greater. This has a potentially compounding effect.

The current crisis shows the potential for significant variations in the relevant data points, and that periods of high volatility and low liquidity will further increase costs for end investors.

During this time of great uncertainty, the European authorities continue to play a critical role in promoting stability and depth in Europe's capital markets. The introduction of mandatory buy-ins at such a time presents a significant risk to Europe's recovery from the Covid-19 crisis.

Adjusting the buy-in regime to an optional right, as opposed to a mandatory obligation, would allow greater flexibility for the end investor whilst preserving the original policy objective and enshrining the rights of the investor into regulation. Allowing the purchasing party the discretion to initiate a buy-in only when it is commercially and economically rational to do so would reduce the frequency of buy-ins and therefore reduce the impact on pricing and liquidity.