

T+1: how trading bonds for different settlement dates will create additional costs for investors

Currently discussions are underway related to the possible shortening of the standard settlement cycle for many financial securities in the UK from T+2 to T+1. This comes in the wake of the US's commitment to move to a T+1 standard settlement from May 2024. While there are numerous operational challenges to address in order to facilitate a successful compression of the time between agreeing and settling a trade, there are also considerations around the impact on pricing and market liquidity of affected securities, particularly in less liquid markets, such as those for corporate bonds.

This is made even more complicated in the case of international securities, that are intended to be traded on a cross-border basis and which could be subject to different 'standard' settlement cycles, particularly if the UK were to move to T+1 in advance of the EU.

It also raises a question about whether or not such instruments would benefit from a shorter settlement cycle, particularly if the outcome is more fails, less liquidity, and higher costs for investors.

Market-making and the cost of funding

Let us walk through the potential impact on a market-maker, who provides liquidity, for example, in corporate bonds that are traded both in the EU and the UK, and who posts prices and responds to requests for quotes on both EU and UK trading venues. Currently, with a standard settlement of T+2 in both the EU and the UK, the trader will be indifferent as to whether she is quoting and trading on either an EU or UK venue – all things being equal, the prices shown will be the same on both venues. Were she to sell a bond on a UK venue and cover it the same day on an EU venue, not only would she be flat from a market risk perspective, but also in terms of settlement.

Now let us think what happens if UK venues were to operate on a shorter, T+1, settlement, while the EU venues still operated on T+2. By way of example, let us pick a bond: TSCOLN 1.875% 11/02/28 (XS2403381069). And let us assume that on November 3 2023 we are happy making a price of 83.60-70 (that is, we will happily buy bonds at 83.60 and sell bonds – even though we do not hold them – at 83.70) for standard T+2 settlement (November 7 2023). So, if a client comes to us looking for a bid via an EU venue, we will show them a bid price of 83.60. But what if the client requests a bid over a UK venue?

In this case we will need to assume that the earliest we can sell the bonds we buy is for T+2 (particularly if most of the liquidity is found on EU venues). Which means that if we are hit by the client at 83.60, we will need to fund the bonds for at least one day. However, we will also earn interest on the bond (effectively its yield) for a day. Given that a price of 83.60 for value November 6 gives a yield of 5.75%,¹ then there is no financing cost so long as our funding rate is no higher than 5.75% (ie we have 'positive carry'). If it is, then we will incur a cost ('negative carry'), so may want to

¹ In reality, we earn the 'running yield': the coupon divided by the dirty price.

consider lowering our bid for T+1 settlement, say to 83.59. If we are going to do this precisely, then we will need to calculate any cost based on our expected funding rate less the income earned on the bond through its yield, then turn this into a 'cents or pence' equivalent, and 'drop' our bid accordingly. But if we did not want to be overly scientific, we could just move our price back a few pence to play safe. Furthermore, if the difference between settlement dates is over a weekend, then we need to move the price by a factor of x3. This would also make Thursday's the most expensive day to buy or sell bonds if you are only able to transact on a UK venue (we can call this the 'Thursday effect').

The same considerations apply to selling a bond, particularly if we are going short in the process. In the same example, we are happy to show a client looking for an offer on a EU venue a price of 83.70. But what if the client requests an offer on a UK venue. Again, we need to assume that the earliest we can cover our short, if we buy it back on the same day, is for T+2. Which means that if we should assume that we are going to be short for at least one day. In this case our cost will be the yield of the bond again (which we effectively pay to the buyer) less the repo rate for borrowing the bond for a day. So, if the repo rate is lower than the yield, then we lose money ('negative carry'). Given that repo rates for corporate bonds are expensive (ie they trade at quite low rates), we can likely expect to incur negative carry every time. Furthermore, the less liquid the bond, the more expensive its repo rate is likely to be (ie even lower), and so the more negative the carry. And this is also assuming that we can borrow the bond. Given the ticket costs, many lenders will have little or no interest in lending a small amount of corporate bonds for a single day, something that also needs to be considered in the context of split settlement cycles. If we assume a repo funding spread of 150bp in our example, meaning that we would borrow the bond for 'tom-next' (ie from T+1 to T+2) at 4.25%, this would move our offer up to 83.71.

In both examples, the additional estimated funding cost incurred by the market-maker is passed on to the investor settling on T+1.

Additional trading costs

It could of course be argued that depending on relative funding costs, any adjustment to the price would be symmetrical, meaning that both the bid and offer should be moved either higher or lower in line. However, there are not only funding costs that the market-maker has to consider, but also any capital and liquidity costs related to an additional day of funding the position, as well as probability and associated costs of failing.

Liquidity in the credit repo market can be patchy, particularly where the free float of a bond might be limited, meaning that bid-ask spreads can be quite wide (which, as we have seen, will need to be factored into the adjusted price for T+1 settlement). However, sometimes it can be quite challenging to source certain bonds in the repo market. This challenge is likely to be amplified by the fact that any repo used to cover the short created by a T+1 sale will (i) likely need to be executed for same-day value (ie the next business day) and (iii) be only for one day. Both of these make lending unattractive to holders, firstly since they may not have enough time to process the repo transaction, and secondly the cost of processing the trade is likely to outweigh any income earned on the repo. The repo economics become even less viable if the trade is for smaller than median size (which for European corporate bonds is less than €1mn notional).

So, going back to our example, a safer assumption is that we cannot cover in the repo market and will have to fail for a day (economically the equivalent of a 0% repo rate). So, to adjust our price, we

should calculate the pence equivalent of being short the (running) yield (5.72%) for a day while earning zero on our cash (since we will not receive this).

In addition, we will also need to price in any ancillary costs of failing, such as CSDR penalties.

Again, these costs will be passed on to the investor settling on T+1, who can also expect an increased probability of receiving their securities a day late.

Conclusion

So, based on this example, and the various consideration related to funding (and settlement fails), it seems reasonable to conclude that dealers may want to consider showing wider bid-offer quotes on a UK (T+1) venue than they would on an EU (T+2) venue for the same bond (and even wider again on Thursdays!). This, of course, will be to the disadvantage of UK based clients, who can expect worse pricing and higher fails than their EU peers – at least until the EU also moves to T+1.

But it also raises additional questions about whether all securities types and markets would benefit from shorter settlement cycles, particularly off-exchange, non-centrally cleared, less liquid such as corporate bonds- particularly if the outcome is more fails, less liquidity, and higher costs for investors.