

## Liquidity in corporate bond markets in market stress situations. October 2019.

The International Organization of Securities Commissions (IOSCO) in June 2019 published the final report that analyses corporate bond market liquidity in market stress situations. The report is structured into eight chapters.

The first chapter is an introduction in which it is outlined that in order to analyse stress situations in corporate bond markets, further analysis on the liquidity structure of these markets and the behaviour of the participants in them during market stress situations is required.

From the start, it is recognised that there is no universal definition of stress situations. The previous study identified these episodes based on the stress level of individual bonds or on the events that affect the bond market as a whole.

There are several studies on this matter. For example, Bessembinder et al (2018) argue that market stress occurs on days on which the volume of transactions between clients and intermediaries exceeds the average of six months of that bond by more than two standard deviations, while Bao et al (2018) point out that a stressed market for a bond occurs when the credit rating of a bond is downgraded. On the other hand, Di Maggio et al (2017) and Choi et al (2018) identify the period around the collapse of Lehman Brothers as a time of market crisis. Similarly, in addition to the bankruptcy of Lehman Brothers, studies by the French institution Autorité des Marchés Financiers (AMF) in 2015 and Spain's National Securities Market Commission (CNMV) in 2017 identify the European debt crises of 2010 and 2012 as a reflection of the stress conditions in the markets.

This report adopts an inclusive definition of market stress as a whole. Specifically, stress conditions are identified as situations in which a sudden and abrupt shift in attitude towards one or more financial assets among market participants results in a significant increase in the demand for liquidity (sale of financial assets) on one side of the market which could coincide with the offer of said liquidity on the other side of the market being restricted or disappearing significantly. As a consequence, the normal functioning of the market is disturbed because some participants have difficulty finding the liquidity they need to operate from their positions and/or towards new positions and price movements are strengthened as a result of the need for these participants to increase or reduce their offers and requirements in order to find liquidity.

In the preparation of this report that took place between June and November 2017, the working group conducted interviews, discussions and a round table meeting with market participants in order to assess their understanding of current liquidity conditions in the markets for corporate bonds, shed some light on the empirical observations that follow on from the literature and obtain information about the way in which liquidity could evolve during market conditions that will suffer greater stress in the future. This report combines the results of these discussions with those of academic, regulatory and industry studies.

The second chapter refers to certain previously carried out studies which emphasise that corporate bond markets are an important part of capital markets globally and as a consequence there is a growing concern about the operation and liquidity of these markets. The report indicates that in order to address these concerns, IOSCO undertook a series of projects in 2014 aimed at improving the understanding and functioning

of corporate bond markets.

In 2017, IOSCO published a report which examined liquidity in corporate bond markets and in 2018 it published a report that set out some recommendations for improving the regulations on information dissemination and transparency. Also in 2017, the IOSCO Board commissioned the Emerging Risk Committee that studies how liquidity could behave in corporate bond markets in market stress situations.

The Board's objective was to improve the IOSCO members' understanding of the behaviour of corporate bond markets in market stress situations, responding to the following questions:

- Who could be forced to sell and who could sell opportunistically in times of market stress?
- Who could be buying under these conditions and for what reasons? and
- What are the implications of these behaviours for liquidity and pricing?

The characteristics of liquidity are defined and established in the third chapter. It is indicated that market liquidity refers to the ability of buyers and sellers to carry out transactions in a market in a specified period without causing a significant or abrupt movement in the price or otherwise disturbing the market.

Market liquidity includes concepts such as the size of the transaction, the execution time and transaction costs (margin between supply and demand and the price of the transaction). Market liquidity therefore exists in a continuous flow, from abundant (ease of transaction, with no or minimal effect on prices and high immediacy) to scarce (difficulty in negotiating, with a partial or significant effect on prices and low immediacy) or non-existent (inability to carry out transactions at any price over time).

The focus of this report focuses on market liquidity, but when deemed appropriate, the debate is extended to the impact of liquidity financing on market liquidity.

Liquidity in corporate bond markets in normal situations and market stress situations are analysed in the fourth and fifth chapters respectively. The fifth chapter incorporates an analysis of various academic studies as well as others developed by securities market regulators and supervisors such as the AMF, the Financial Conduct Authority (FCA) of the United Kingdom, the CNMV, the Commissione Nazionale per le Societá e la Borsa (CONSOB) of Italy and the European Commission, in addition to other studies carried out by industry participants.

The sixth chapter presents ten case studies from the last twenty-five years that demonstrate how debt markets, including corporate debt markets, have shown signs of significant resistance and even anti-cyclical behaviour. In each case, bond markets, including corporate bond markets, were very resistant to the evolution of the situation.

The seventh chapter summarises the observations of the work group in this study regarding the behaviour of markets in stress situations, while the eighth chapter presents the conclusions of this study.

There is an executive summary of the study carried out at the beginning of the report, which outlines that corporate bond market liquidity under normal conditions (that is, not in market stress situations) is important for the efficient allocation of risk capital and has been the subject of great attention by regulatory bodies and the academic community. In recent years, corporate bond markets have evolved as a result of post-crisis financial regulations, changes in risk aversion of intermediaries and supply and demand patterns (in turn influenced by financial reforms and the evolution of monetary and fiscal policies in advanced economies).

The most relevant points included in the executive summary are as follows:

• The regulations developed after the crisis and the increase in risk aversion by market intermediaries have caused changes in the nature of intermediation. The intermediaries now have less capacity and appetite to

provide liquidity to traders and investors and the proportion of their intermediation that occurs without taking risk (without their own book) has increased. Market participants have indicated that this has made the execution of transactions difficult, which includes the need to operate with smaller blocks and, in this way, more time is required to find counterparties with which to complete the transactions.

• Quantitative easing programmes implemented by several central banks have injected significant amounts of cash into the global financial system, which has encouraged greater activity in the issuance of corporate bonds. This has led to an increase in the size of the bond market in absolute terms. However, in turn, it has reduced the ability of market intermediaries to provide liquidity in these markets. The dimension of the "channel" through which transactions must be carried out is now smaller, both in absolute terms and in relation to the size of the market.

• The prolonged environment of low interest rates after the financial crisis has led to an increase in the number of "tourists" in corporate bond markets, that is, investors who are not traditional investors in corporate bonds but who entered the market simply to "obtain a better return". This higher return may also have stimulated the increase in the issuance of corporate bonds by companies based in emerging markets, with a total issuance (US\$969 billion as of March 2018) now comparable to that of high-yield issuances in the United States (US\$914 billion) and sovereign issuances in emerging markets (US\$913 billion).

Both regulators and those responsible for monetary policy may be concerned that these changes in regulations have affected the liquidity level under normal conditions.

In the IOSCO report entitled "Examination of Liquidity of the Secondary Corporate Bond Markets" published in 2017 and cited above, no substantial evidence was found that liquidity in the secondary corporate bond markets had significantly deteriorated between 2004 and 2015 compared to previous situations in periods when there was no crisis.

There are limited studies on corporate bond market liquidity in situations of stress, although the aforementioned evolution in corporate bond markets is likely to affect the way in which bond market liquidity behaves in situations of stress. The most important consequence of the reforms in the post-crisis phase and the reduction of risk aversion is the decrease in the intermediation capacity of the main intermediaries compared to the increase in size of this market.

This decrease in intermediation capacity implies that the lack of liquidity in periods of stress is likely to be more acute compared to previous periods of stress. This may lead to the need for more pronounced price movements so that bond market operations can take place. However, based on the previous performance of fixed income markets under adverse market conditions, a number of features of the private fixed income market may reduce the likelihood that price movements or shocks in fixed income markets impact on a broader economic tension:

• Liquidity management by corporate debt issuers can significantly improve their ability to continue operating in situations in which primary markets are closed and/or liquidity in secondary markets is reduced. During the preparation of this report, information was received from market participants according to which the financial directors of the companies had been structuring their portfolios in order to minimise their exposure to refinancing risk.

• The resistance of corporate bond markets to sudden price movements is likely to be closely related to the size of leveraged positions within the market. Market participants affirm that there are now fewer leveraged operators in the market, such as alternative investment funds and investment banks, and that their degree of leverage is also lower than it was before the crisis. This implies that there is a lower risk that pro-cyclical sales by these institutions will weaken.

• Unlike short-term money markets which are essential for the continued functioning of the real economy, many companies do not need to have daily access to the primary bond issuance market to finance their activities.

Historically, the corporate bond market has not caused a chain reaction that could have led to systemic stress. On the other hand, in previous cases of stress situations, it was more likely that the tension in the private fixed income markets was due to the amplification of the tension that started in other places, such as in the shortterm money markets, in the real economy or in the banking sector. However, we must take into account the important and eternal warning that applies to the results of financial markets, both in this area and in general, that past performance is not necessarily indicative of future results.

The study indicates that in the event that bond markets suffer a stress episode that leads to large price drops, the critical factor in determining how those markets will react will be the extent to which some of the market participants are willing to do so and the extent to which they have the necessary resources and ability to provide sufficient liquidity on the demand side to contribute to market stabilisation. The scope of this participation would be determined by the business models of the companies, the investment objectives and horizons, the resources likely to be invested and the limitations of their trading activity. These participants can be investment funds, active investors, pension and insurance funds and alternative investment funds. A significant decrease in prices and the consequent profit opportunities can also attract debt investors in difficult situations, venture capital funds and issuers interested in repurchasing their own debt. Some sovereign wealth funds may also choose to participate in this purchase.

The main limitations to the provision of liquidity on the demand side by these participants could be the need to comply with regulatory limits and internal guidelines (such as mandates and approvals of investment committees) and the availability of financing (which may have decreased for market-leveraged participants with the main intermediaries affected by rules after the crisis). Intermediaries and banks are less likely to provide liquidity in situations of stress due to changes in regulations and risk aversion that occurred after the crisis.

## Link of interest:

Final Report: Liquidity in Corporate Bond Markets Under Stressed Conditions