

Market liquidity: myth and reality

Current changes in the functioning of bond markets are leading to the perception of a structural and general deterioration in their liquidity, which could pose risks to the stability of the financial system.

This Focus shows that, in fact, the situation is much more nuanced and the deterioration is not necessarily where we believe it to be. Traditional indicators, for sovereign debt for example, appear to contradict the perception of market players. The deterioration in liquidity only affects certain market segments, and has a greater impact on its volatility and average level than on its price. It is also driven by cyclical and structural factors whose impact on the soundness of the financial system needs to be assessed over the medium term. Nevertheless, the current transition period could result in a more effective organisation of bond markets, a provision of liquidity services that is more resilient to shocks and whose price better reflects the reality of the risks incurred and, lastly, better management by investors of the risk of a liquidity dry-up. Actions by public authorities and market players could play a useful role in making this favourable scenario become a reality.

How is market liquidity measured?

The market for a financial asset is generally considered to be liquid when it allows the instrument to be bought or sold at any time, for significant amounts and without its price being noticeably or sustainably affected.

Liquidity, therefore, has many aspects that cannot be assessed using a single criterion; hence the wide range of indicators used to measure it. These indicators are not always available, however, and the frequency of this availability varies according to the bond market segment observed, due to the prevalence of over-the-counter trading using “voice-based” methods.

What do these indicators tell us today?

On markets for which traditional indicators can be calculated and monitored, they appear to contradict the perception of market players, at least for sovereign debt markets. Price indicators for the liquidity service traditionally provided on bond markets by market-makers (typically their bid-offer spreads) show that liquidity is abundant, whereas investors are complaining that it is deteriorating and weakening.

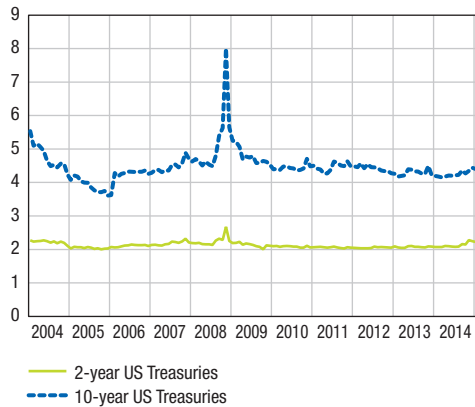
However, volume indicators show more clearly a deterioration in the average level of liquidity available:

- the average unit size of transactions and the amounts associated with market-makers' prices are down, with a recent increase in the sensitivity of price changes to the quantities of securities traded;
- this phenomenon tends to be self-sustaining, since the reduction in the average size of transactions implies that any larger transaction is likely to have a significant impact on the price. This therefore leads market players to split their orders and market-makers to limit the quantities they quote continuously in real time;
- its magnitude varies across market segments and jurisdictions.

Bid-offer spreads

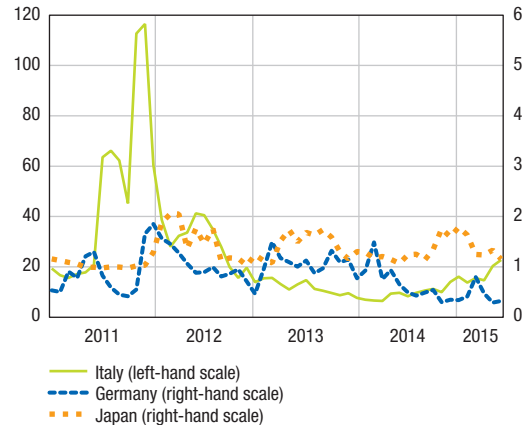
US Treasuries

(1/256 bp)



Euro area and Japan

(bps)



Source: Committee on the Global Financial System – CGFS (BIS).

This results in an effect known as “**liquidity bifurcation**” as liquidity tends to be concentrated on specific market segments, or even specific securities and scarcer on others (e.g. sovereign bonds vs corporate bonds, on-the-run securities vs off-the-run securities).¹

At the same time, this deterioration in liquidity appears to be accompanied by a greater fragility. This assumption has been fuelled by some recent and unpredictable episodes, which could not be explained by the mere analysis of fundamentals or economic data. These events have been characterised by a sudden resurgence of volatility and have led to very violent swings in the price of these assets, which are generally considered to be the most liquid.²

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What is the origin of this transformation?

At least three main drivers, cyclical as well as structural, can be listed as having a positive or a negative bearing on the bond markets liquidity:

- **Contrasting developments in the supply of and demand for liquidity services:** market-makers, whose balance sheets play a vital role in absorbing temporary imbalances between the supply and demand of securities, have reduced their risk appetite associated with this role in light of the crisis' impacts, particularly since regulatory changes are set to increase the cost of this liquidity provision. They have therefore generally adapted their liquidity provision by reducing it³ and being more selective. At the same time, bond issuance and fixed-income holdings of open-ended funds have risen very significantly, boosting demand for liquidity and raising the risk that, in the case of a shock, large-scale redemptions by investors would increase fire-sales from these funds that the market would find hard to absorb.

¹ This term is generally used on the US Treasuries market. On-the-run generally refers to the most recently issued securities for each maturity. The other securities are referred to as off-the-run, and are less frequently handled by market-makers. When a security is issued, it becomes the new on-the-run, and previous securities are gradually relegated to off-the-run status.

² “Flash rally” on the US Treasuries market: On 15 October 2014, between 9.33am and 9.45am (New York time), the US 10-year benchmark rate plummeted 16 bps before rebounding to offset the entire fall. There was no obvious reason for this movement, which is unprecedented in the recent history of the US Treasury securities market. “Bund Tantrum”: On 7 May 2015, as German government bonds (Bunds) had been experiencing a sell-off for about a fortnight, the 10-year Bund yield climbed sharply by more than 20 bps before falling back to its opening levels. Again, there was no particular reason triggering the movement which occurred on that day.

³ This mainly results in the reduction of their inventories, particularly those of corporate bonds, and reflects a stricter management of their risks and their balance sheet.

- **The development of electronic trading:** this form of trading has changed the structure and the functioning of bond markets which had previously relied exclusively on voice-based and bilateral relations, centred on market-makers. This has resulted in a more efficient matching of buy and sell orders and in an expansion in the range of intermediaries, leading to a reduction in transaction costs and a positive impact on market liquidity. But the development of electronic platforms has also resulted in the emergence of new forms of trading and new players, particularly high-frequency trading (HFT)⁴ firms whose impact on liquidity can be destabilising. These firms, which are very active in stable markets, tend to withdraw their orders during periods of high volatility. The depth of the secondary market on which they trade is therefore volatile and artificial, and many of their strategies are correlated, creating the risk of a spiral that can contribute to “flash crashes”, which have become more frequent in recent years.
- **Unconventional monetary policies pursued by central banks:** by fostering very favourable financing conditions and asset price dynamics after the 2008 crisis, the central banks of advanced economies have largely contributed to bringing liquidity back to satisfactory levels on their markets. However, their massive quantitative easing programmes are also reducing the float of securities on the secondary market, which may contribute to making some segments less liquid. To limit this negative impact, the ECB introduced a securities lending facility alongside the implementation of its public sector purchase programme, which to date has enabled a good level of liquidity in this segment of the European bond market.

■ What support measures should be offered by public authorities and market players?

By increasing competition and ensuring large-scale and rapid matching of buy and sell orders, the development of electronic platforms and the emergence of new players could contribute to reducing the impact of bifurcation and liquidity fragility that are currently observed.

The impact of these liquidity support measures will be especially positive if the authorities and the private sector pursue the efforts already underway, particularly to enhance bond market transparency, develop tools for monitoring liquidity conditions, and improve the capacity of all users to manage and absorb liquidity risk during periods of significant market stress.

It is also important to ensure that bond markets’ access and trading conditions provide a sufficiently rigorous framework for high-frequency trading and support the diversity of market players and the role of traditional market-makers. The capacity of these dealers to act in principal⁵ becomes particularly useful when the market is more volatile. To achieve this, their capacity and willingness must not be excessively constrained and they must have incentives to quote and trade continuously in real time.

⁴ HFT is a trading sub-category referred to as “algorithmic” or “automated”, carried out by arbitrage firms on their own-account, whose order placing and execution decisions are automatically generated by computer programmes.

⁵ As opposed to “agent”, i.e. the capacity of traditional market-makers, bank-dealers, to use their balance sheet in the context of their trading activities.