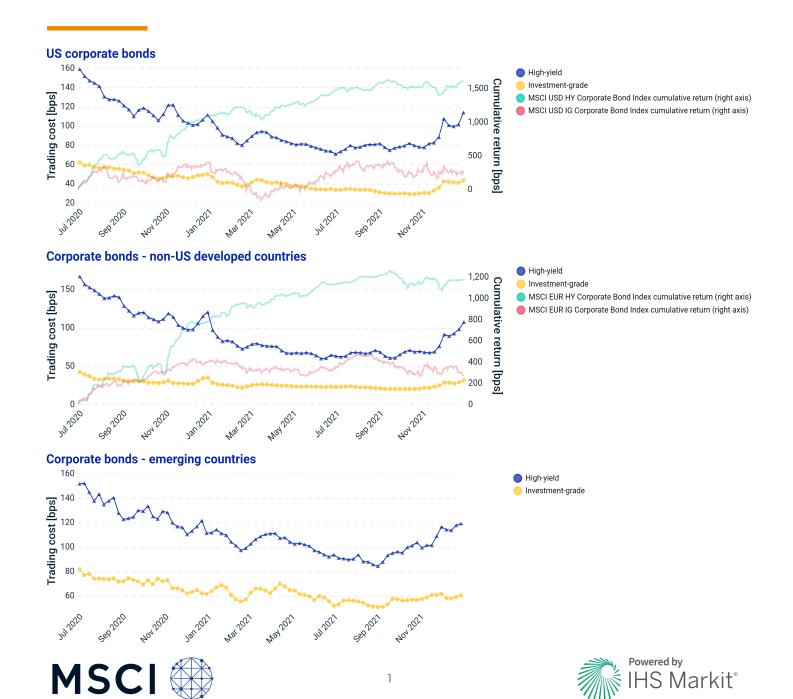
2021 Q4, Data through December 31, 2021

Quarterly report highlighting the behavior of key liquidity indicators in global markets

Corporate bonds liquidity - Cost of forced selling of USD 10 million

- Towards the end of 2021 a significant increase was observed in transaction costs for corporate bonds across all regions for both high-yield and investment-grade bonds.
- The most marked increase was observed for non-US developed countries' bonds.
- In addition to increasing costs, the typical quoted sizes also decreased significantly, especially for investment-grade bonds.



2021 Q4, Data through December 31, 2021

Quarterly report highlighting the behavior of key liquidity indicators in global markets

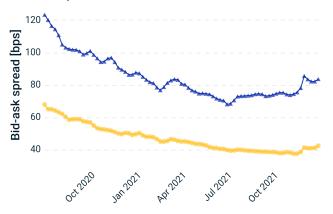
US corporate bonds





- Investment-grade
- MSCI USD HY Corporate Bond Index cumulative return (right axis)
- MSCI USD IG Corporate Bond Index cumulative return (right axis)

Bid-ask spread



Market impact



Depth at best price



Quoted price uncertainty





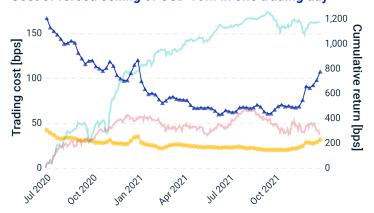


2021 Q4, Data through December 31, 2021

Quarterly report highlighting the behavior of key liquidity indicators in global markets

Corporate bonds - non-US developed countries

Cost of forced selling of USD 10M in one trading day

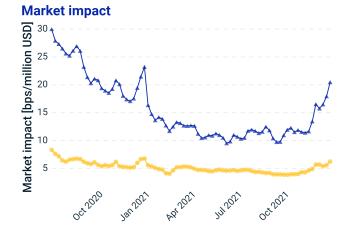


High-yield

- Investment-grade
- MSCI EUR HY Corporate Bond Index cumulative return (right axis)
- MSCI EUR IG Corporate Bond Index cumulative return (right axis)

Bid-ask spread

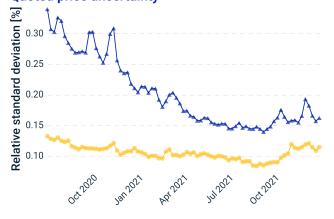




Depth at best price



Quoted price uncertainty







2021 Q4, Data through December 31, 2021

Quarterly report highlighting the behavior of key liquidity indicators in global markets

Corporate bonds - emerging countries

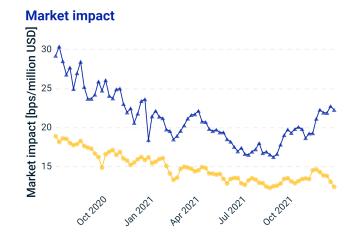






Bid-ask spread







Quoted price uncertainty





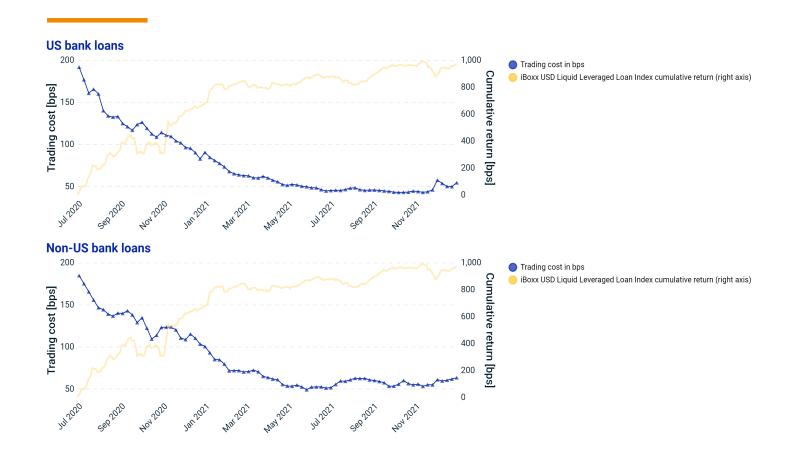


2021 Q4, Data through December 31, 2021

Quarterly report highlighting the behavior of key liquidity indicators in global markets

Bank loans liquidity - Cost of forced selling of USD 10 million

- The liquidity of bank loans was relatively stable as compared to corporate bond liquidity in Q4 of 2021.
- · Only a moderate increase was observed in transaction costs.
- The typical quoted sizes decreased significantly for both U.S. and non-U.S. bank loans.







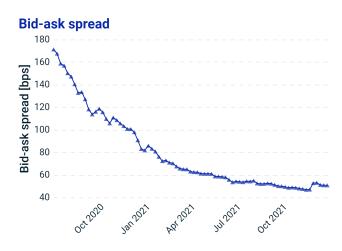
2021 Q4, Data through December 31, 2021

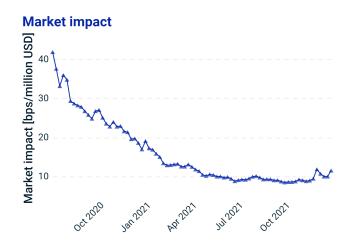
Quarterly report highlighting the behavior of key liquidity indicators in global markets

US bank loans

















2021 Q4, Data through December 31, 2021

Quarterly report highlighting the behavior of key liquidity indicators in global markets

Non-US bank loans



