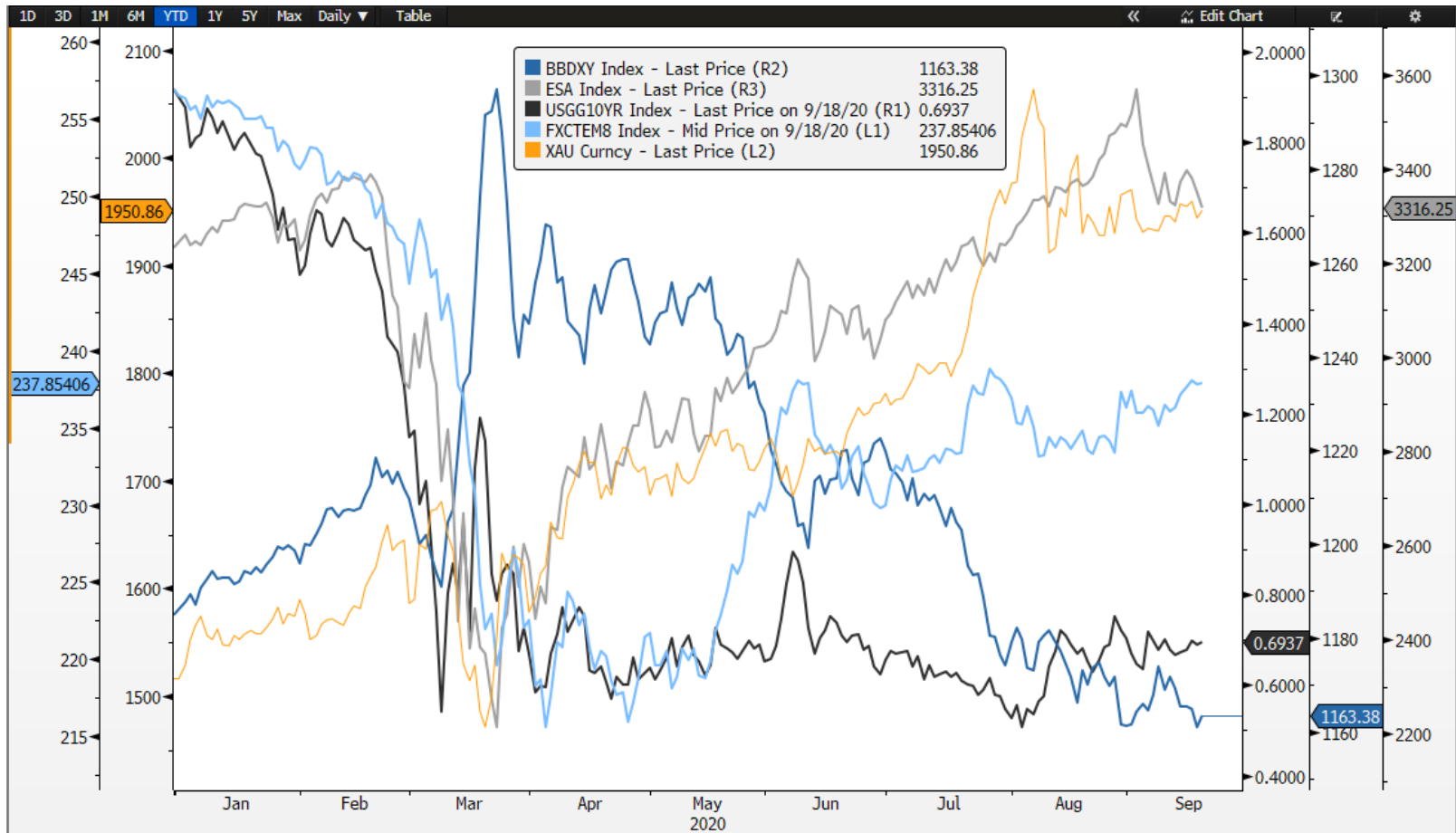


Market Condition 3Q 2020

Akira Hoshino
Head of FX, Citi Japan

What Happened Macro Picture



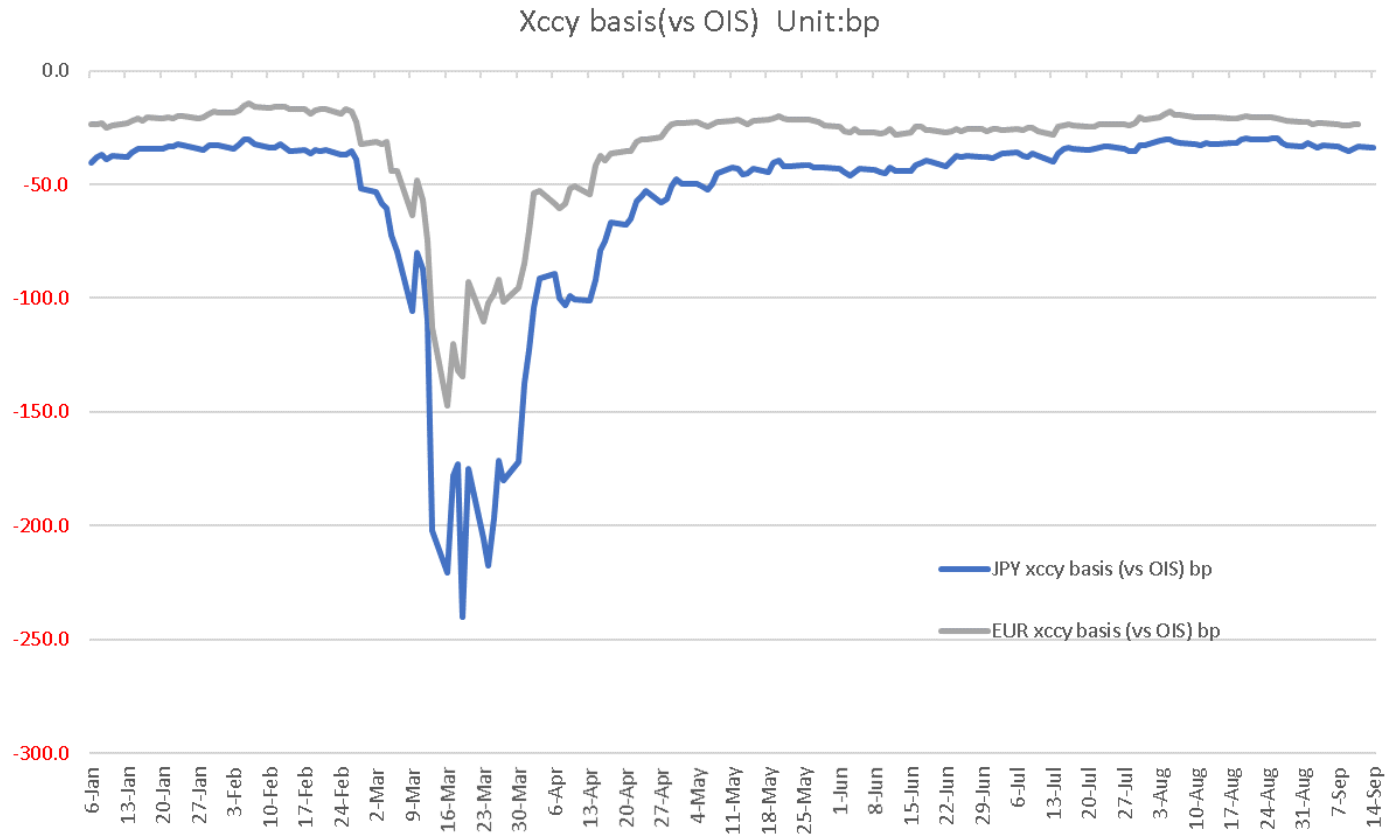
Source : Bloomberg, Citi

Retail dominates



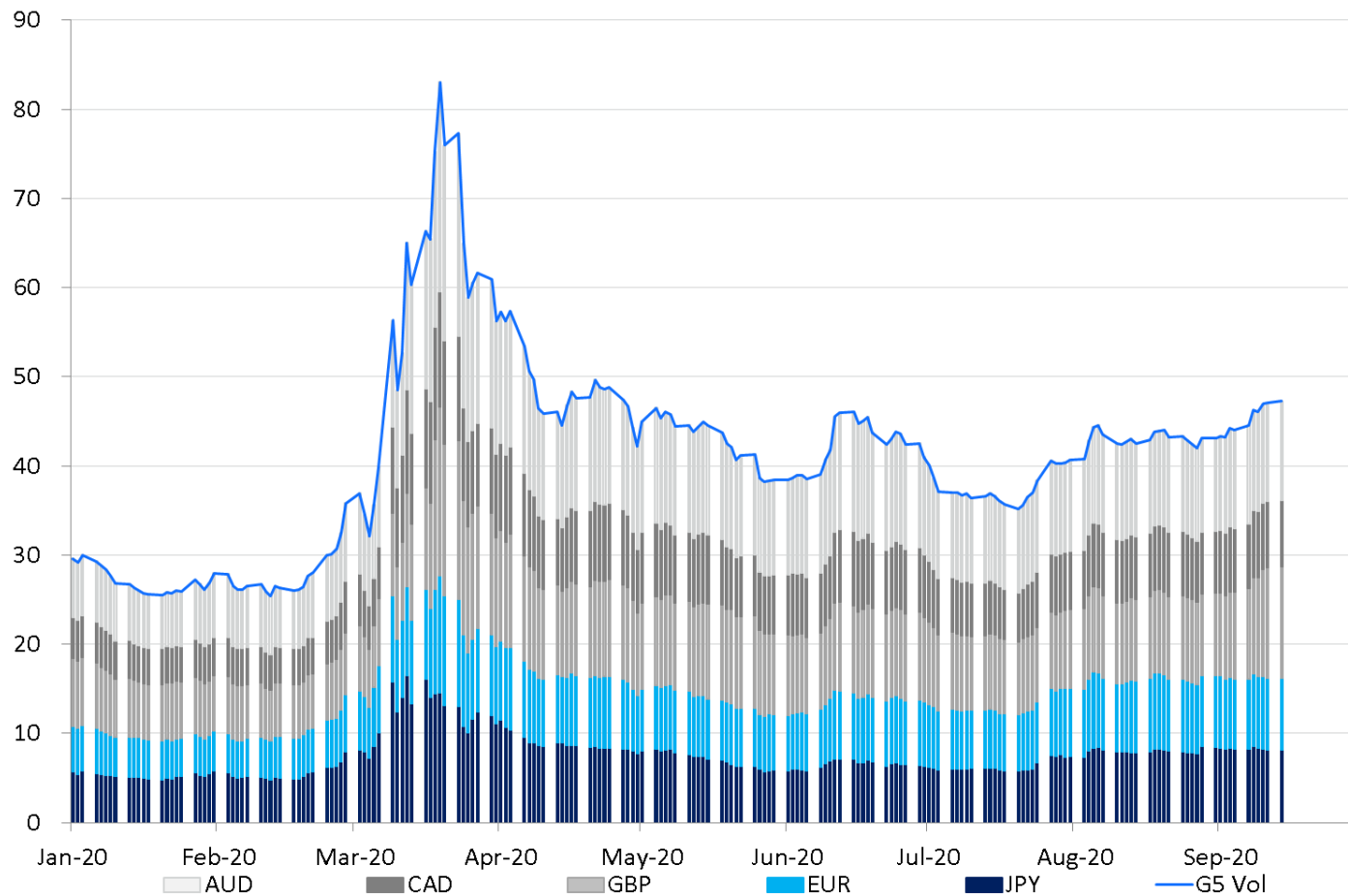
Source : Bloomberg, Citi

Liquidity



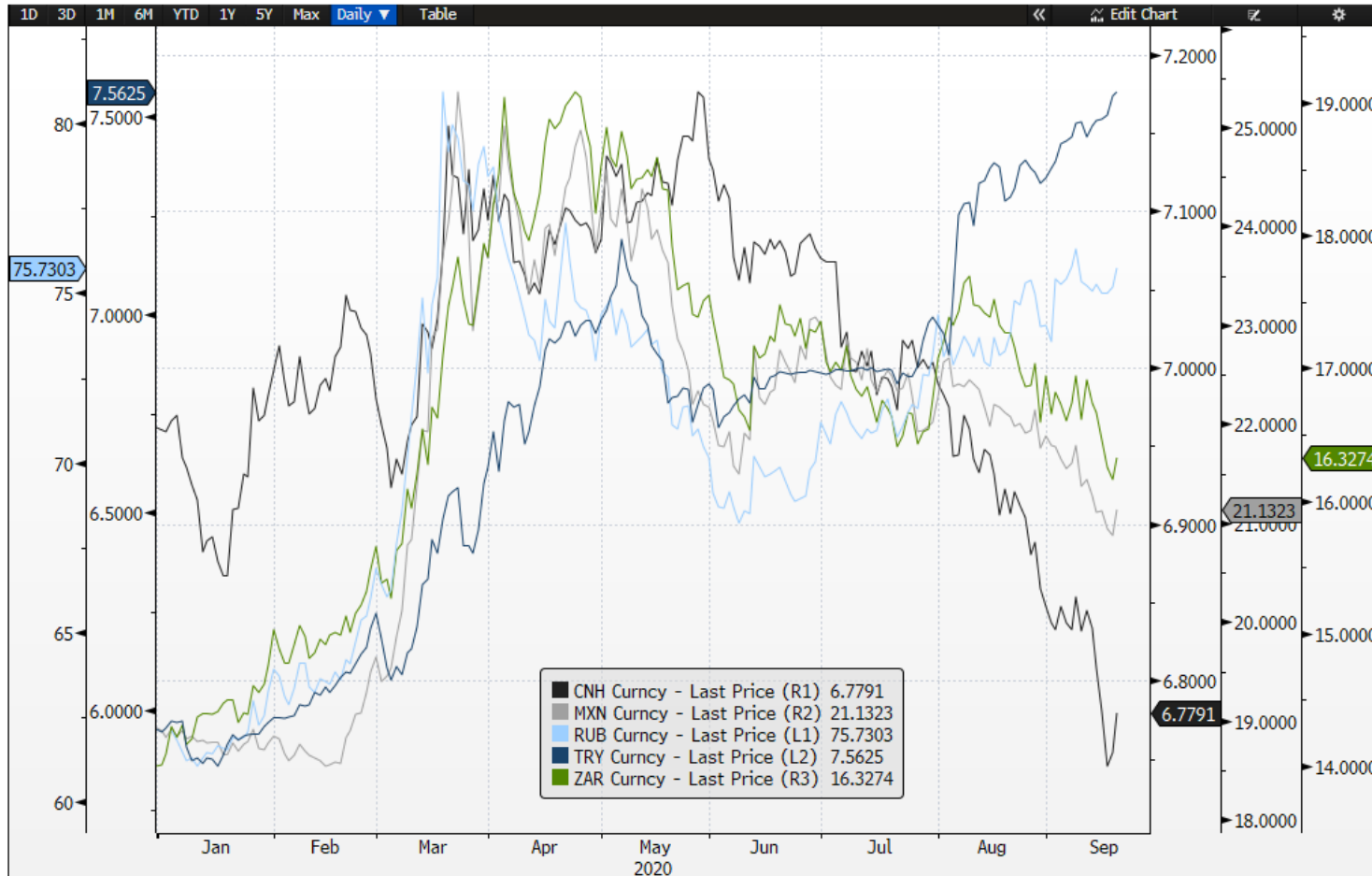
Source : Citi

Volatility



Source : Citi

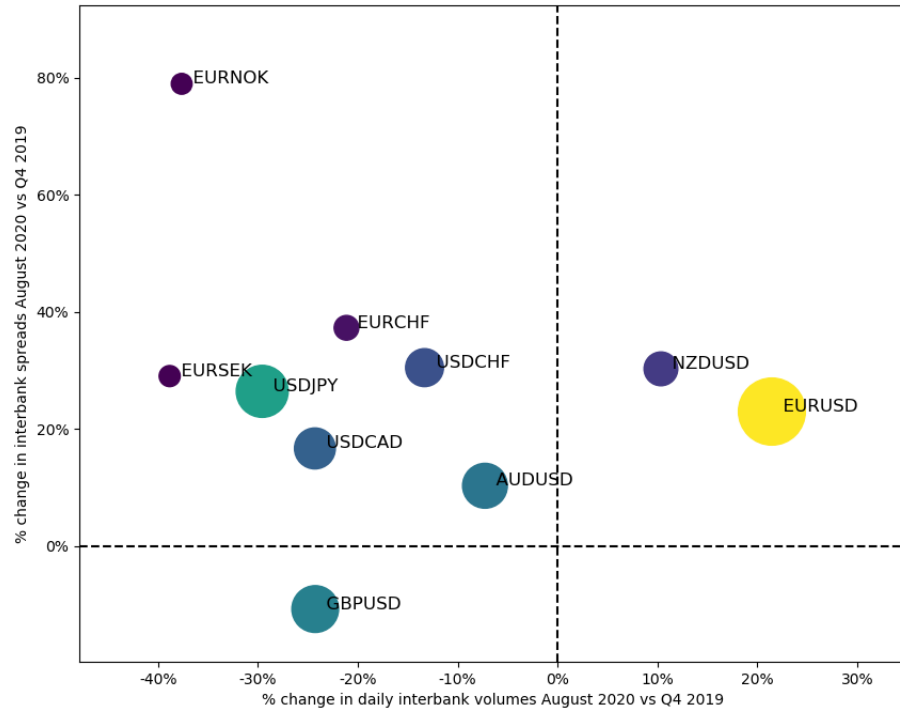
EM Diverse



Source : Bloomberg, Citi

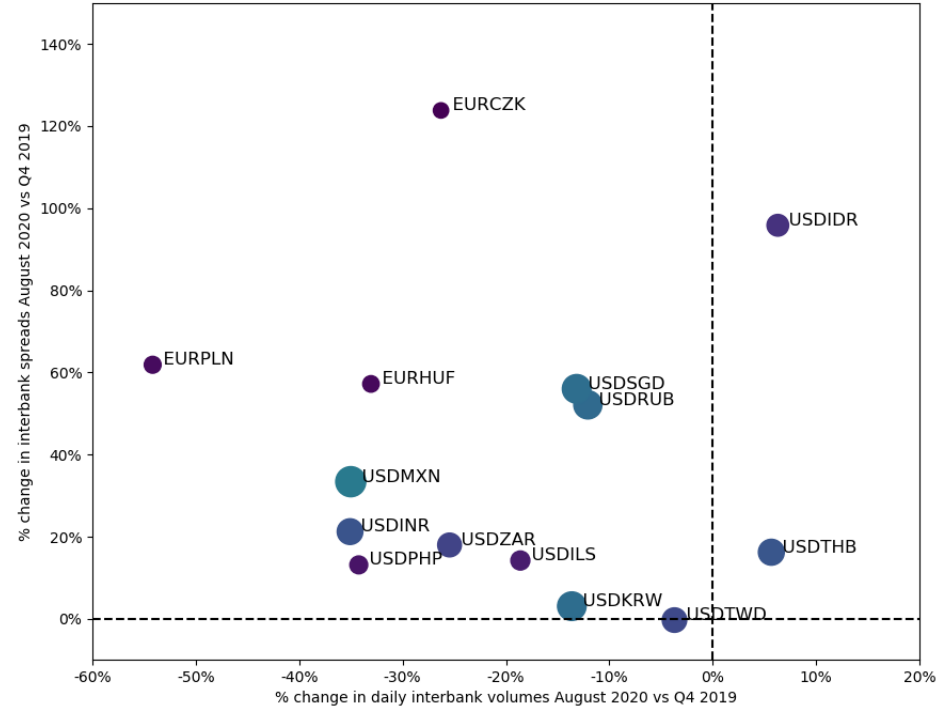
Microstructure Spreads

Changes in G10 Liquidity August 2020 vs Q4 2019



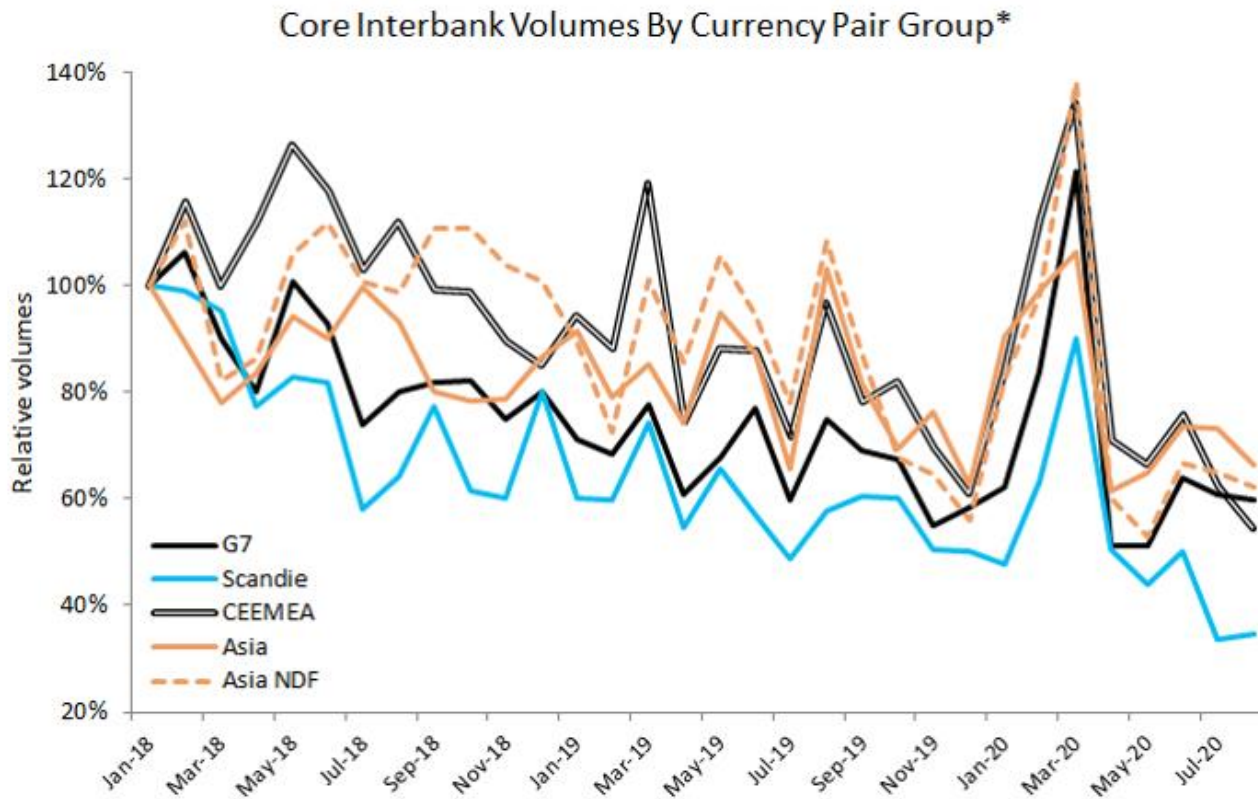
Source: Citi

Changes in EM Liquidity August 2020 vs Q4 2019



Source: Citi

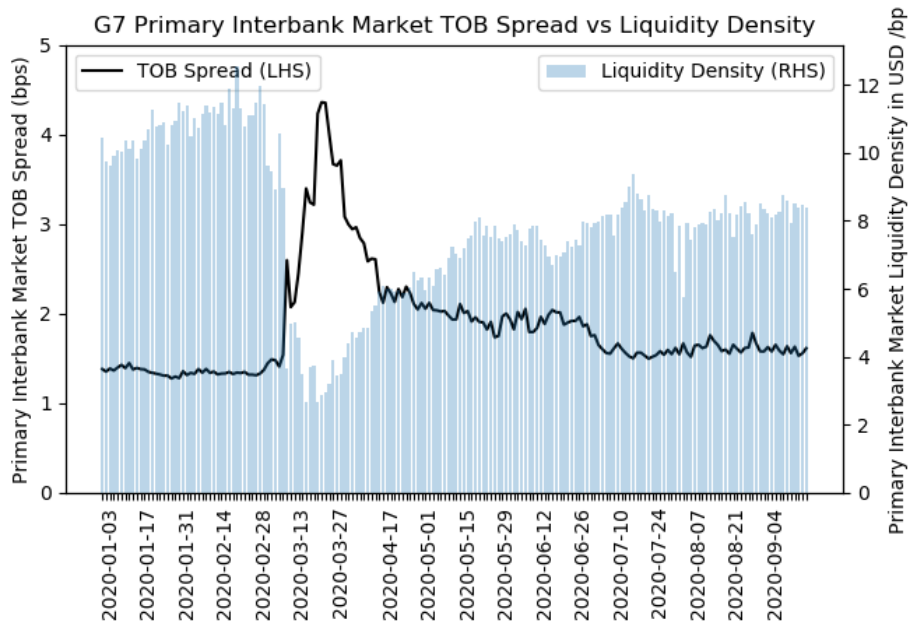
Microstructure High Level Liquidity Changes



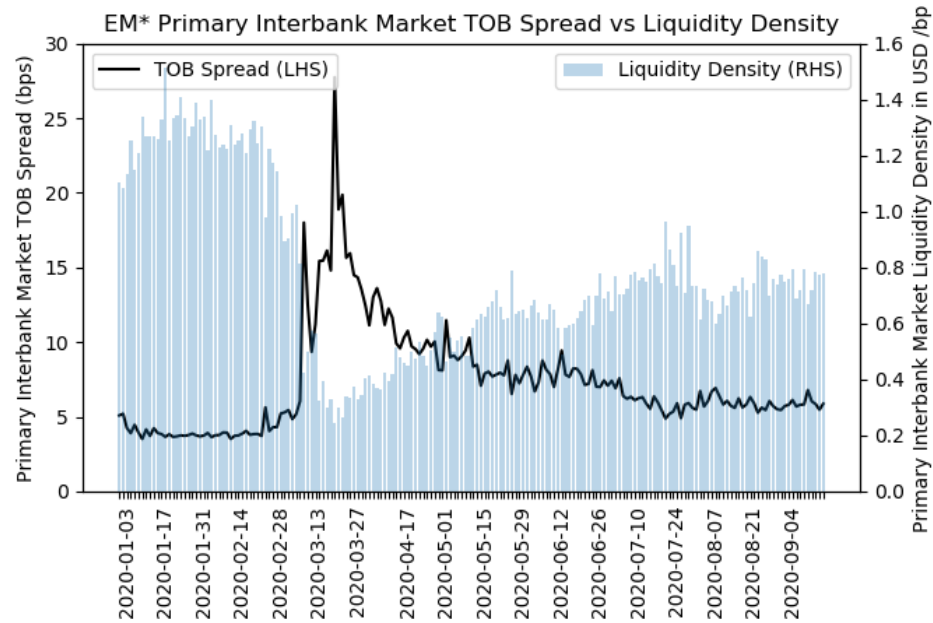
Source: Citi

*Some numbers are derived from estimates. This excludes mid-matching or internalising venues. Numbers are benchmarked relative to January 2018.

Microstructure TOB Spread and Liquidity Density



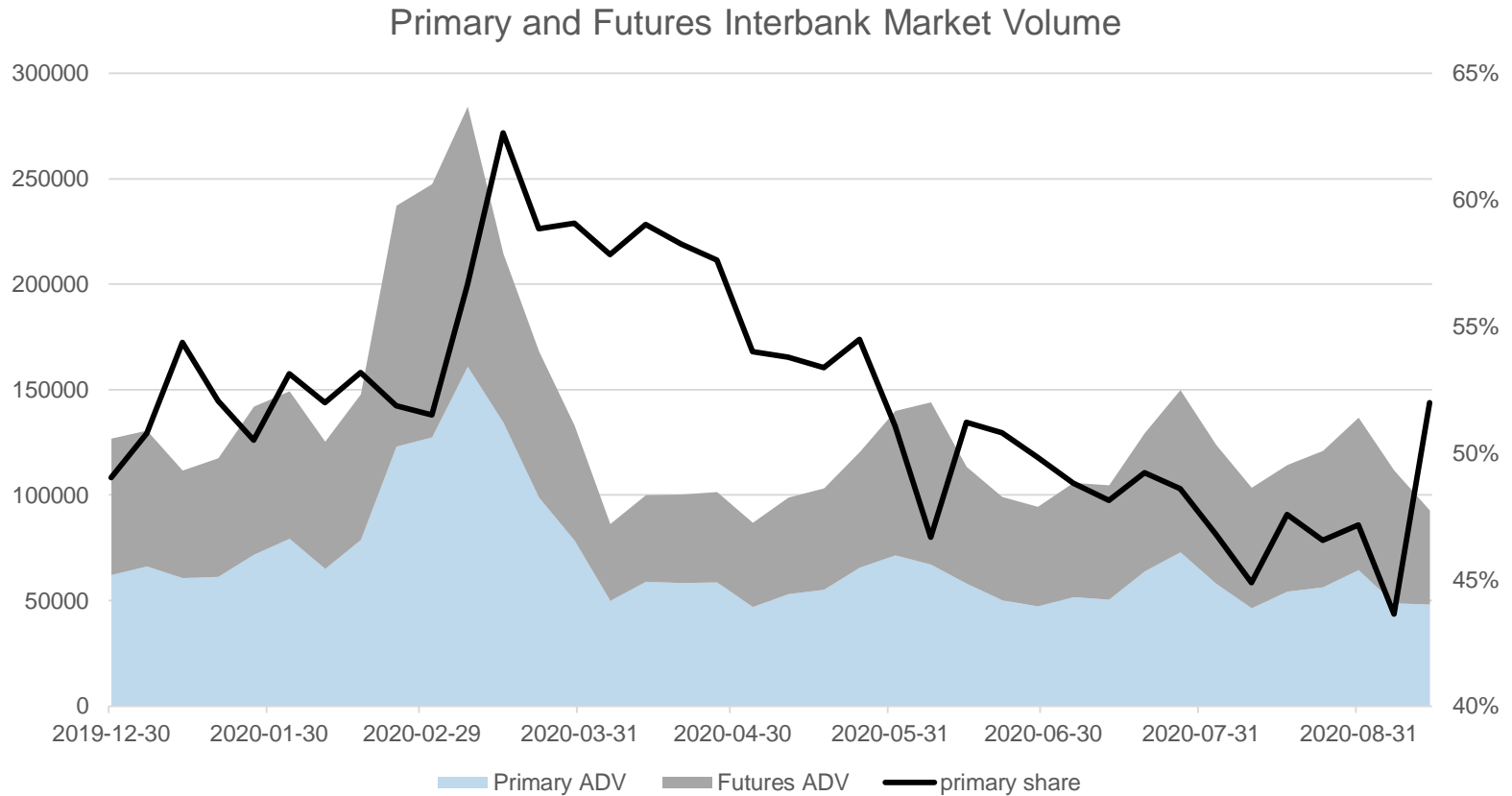
Source: Citi



Source: Citi

*This is a basket of CEEMEA and USDMXN deliverables

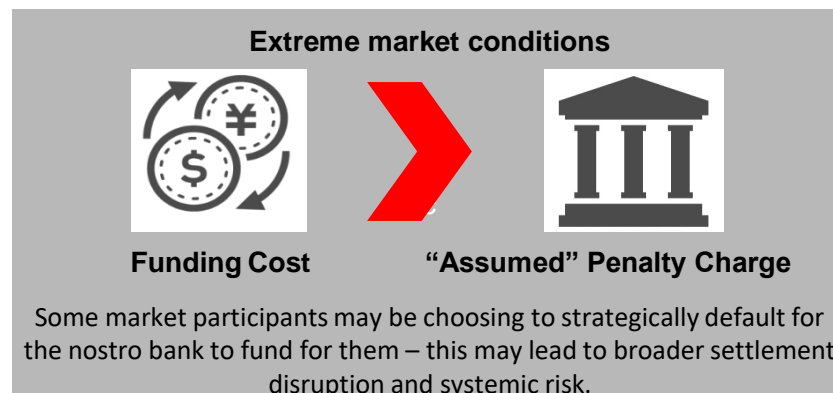
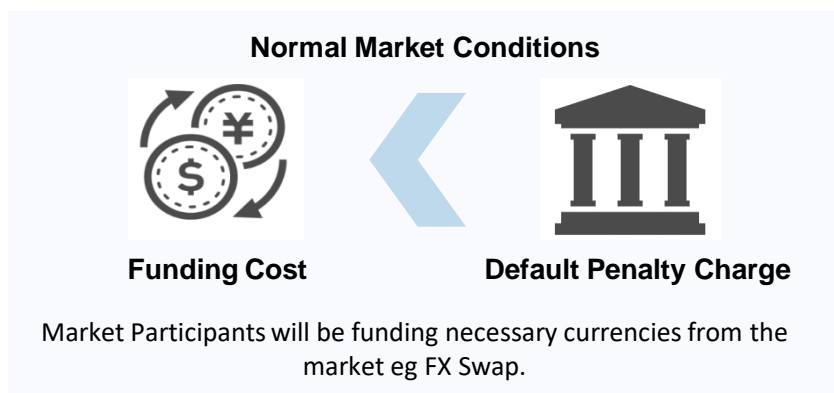
Microstructure Execution Properties



Source : Citi

FX Settlement fails

- Incidents relating to industry-wide settlement fails in TRY were recently again being observed.
- TRY O/N funding cost through FX Swap rose drastically over 1,000% in Aug, which was substantially higher than equivalent onshore funding rates in TRY.
- If market participants choose to strategically or intentionally default on their obligation to timely settle, this not only implies settlement risk with the bilateral counterparty, but could have cascading settlement fails, a systemic knock-on liquidity impact and lead to prolonged market disruption. Resolving claims on failed settlement also take long periods of time as they are managed bilaterally with no common standards.
- Market participants are and should be obliged to make their maximum effort to fund their short position in the interbank market and should not take the option to fail settlement due to high FX swap funding costs.*



* 2013 BCBS FX Supervisory Guidance : Liquidity risk management framework 3.4.1 A bank should appropriately manage its liquidity needs and risk to ensure that it is able to meet its FX payment obligations on time. A bank's failure to meet its FX payment obligations in a timely manner may impair the ability of one, or more, counterparties to complete their own settlement, which can lead to liquidity dislocations and disruptions in the payment and settlement systems.

With respect to the purchase or sale of financial instruments, we may charge you a commission (in case of stock, a commission equal to the transaction price multiplied by a commission rate agreed between you and us in advance and consumption tax, and in case of investment trust, sales commission, trust fees and other fees prescribed for each fund).

Each financial instrument is subject to relevant inherent risk and a substantial amount of loss or liability may occur due to a change in domestic/overseas political, economic or financial environment, market environment such as exchange rates, stock market, commodity market and interest rates, credibility of issuers, and change in underlying assets.

For trading in derivatives, you may be required to pay margin, deposit or collateral ("collateral amount") based on agreement of each transaction. In addition, you may be required to pay additional collateral amount. For such transaction, nominal amount of transaction may exceed collateral amount, etc.

Collateral amount to be paid by you will vary with the contents of collateral agreement. Therefore, we cannot calculate the maximum ratio of nominal amount against the collateral amount at this moment. There is a risk that a loss or liability exceeding the collateral amount may occur due to change in underlying asset. In addition, depending on the type of transaction, the rate we show you for sell and purchase as set out in Article 16.1.6 of the Enforcement Order of the FIEL may differ. In the case that there is an exercise period, please note that there is a limit in period when you can exercise relevant right.

If there is early termination clause such as early cancellation clause or automatic lapse clause, the transaction may be completed prior to the expected completion date.

Before executing any transaction, please carefully read the documents provided prior to the execution of the contracts, prospectus and other materials for customers, etc.

Trade Name, Etc.: Citigroup Global Markets Japan Inc. (Financial Instruments Firm, Director-General of Kanto Local Finance Bureau (Kin-Sho) No. 130)

Association Membership: Japan Securities Dealers Association, The Financial Futures Association of Japan, Type II Financial Instruments Firms Association

In any instance where distribution of this communication is subject to the rules of the US Commodity Futures Trading Commission ("CFTC"), this communication constitutes an invitation to consider entering into a derivatives transaction for purposes of CFTC Regulations § 1.71 and 23.605, where applicable; provided that this communication shall not constitute (1) a binding offer to buy/sell any financial instrument, or (2) a solicitation of an order to enter into any derivative regulated by the CFTC to any person located in the United States.

This communication is issued by a member of the sales and trading department of Citigroup Global Markets Japan Inc. or one of its affiliates (collectively, the "Firm"). Sales and trading personnel are not research analysts and the information in this communication is not intended to constitute "research" as that term is defined by applicable regulations. Compensation of sales and trading personnel includes consideration of the performance of the department's activities. The views expressed herein may change without notice and may differ from those views expressed by other personnel of the Firm.

The provision of information contained herein is not based on your individual circumstances and should not be relied upon as an assessment of suitability for you of a particular product or transaction.

The Firm may be the issuer of, or may trade as principal in, the financial instruments referred to in this communication or other related financial instruments. The author of this communication may have discussed the information contained herein with others within the Firm and the author and such other personnel of the Firm may have already acted on the basis of this information (including by trading for the Firm's proprietary accounts or communicating the information contained herein to other customers of the Firm). The Firm performs or seeks to perform investment banking and other services for the issuer of any such financial instruments. The Firm, the Firm's personnel (including those with whom the author may have consulted in the preparation of this communication), and other customers of the Firm may be long or short the financial instruments referred to herein, may have acquired such positions at prices and market conditions that are no longer available, and may have interests different or adverse to your interests.

This communication is provided for information and discussion purposes only. Unless otherwise indicated, (i) it does not constitute an offer or recommendation to purchase or sell any financial instruments, (ii) it does not constitute a solicitation if it is not subject to the rules of the CFTC (but see discussion above regarding communications subject to CFTC rules), (iii) it is not a solicitation of an order to enter into any derivative regulated by the CFTC to any person located in the United States, and (iv) it is not intended as an official confirmation of any transaction. The information contained in this communication is based on generally available information and, although obtained from sources believed by the Firm to be reliable, its accuracy and completeness is not guaranteed. Certain personnel or business areas of the Firm may have access to or have acquired material non-public information that may have an impact (positive or negative) on the information contained herein, but that is not available to or known by the author of this communication.

Certain transactions, including those involving swaps and options, give rise to substantial risk and are not suitable for all investors. The Firm does not provide investment, accounting, tax, financial or legal advice; however, you should be aware that any proposed indicative transaction could have accounting, tax, legal or other implications that should be discussed with your independent advisors. Therefore, prior to entering into any transaction, you should determine, without reliance on the Firm, the economic risks or merits, as well as the legal, tax and accounting characteristics and consequences of the transaction and that you are able to assume these risks.

This communication is not intended to forecast or predict future events. Past performance is not a guarantee or indication of future results. This communication may contain such information as projections, forecasts or estimates of cash flows, yields or return, scenario analyses and proposed or expected portfolio composition. Any such information is based upon certain assumptions about events or conditions and is intended only to illustrate hypothetical results under those assumptions (not all of which are specified herein or can be ascertained at this time). It does not represent actual termination or unwind prices that may be available to you. Actual events or conditions are unlikely to be consistent with, and may differ significantly from, those assumed. Illustrative performance results may be based on mathematical models that calculate those results by using inputs that are based on assumptions about a variety of future conditions and events and not all relevant conditions or events may have been considered in developing such assumptions. Accordingly, actual results may vary and the variations may be substantial. No liability is accepted by the Firm for any loss (whether direct, indirect or consequential) that may arise from any use of the information contained herein or derived herefrom.

This communication contains data compilations, writings and information that are proprietary to the Firm and protected under copyright and other intellectual property laws, and may not be redistributed or otherwise transmitted by you to any other person for any purpose.

IRS Circular 230 Disclosure: Citigroup Inc. and its affiliates do not provide tax or legal advice. Any discussion of tax matters in these materials (i) is not intended or written to be used, and cannot be used or relied upon, by you for the purpose of avoiding any tax penalties and (ii) may have been written in connection with the "promotion or marketing" of a transaction (if relevant) contemplated in these materials. Accordingly, you should seek advice based your particular circumstances from an independent tax advisor.

Certain products mentioned in this communication may contain provisions that refer to a reference or benchmark rate which may change, cease to be published or be in customary market usage, become unavailable, have its use restricted and/or be calculated in a different way. As a result, those reference or benchmark rates that are the subject of such changes, may cease to be appropriate for the products mentioned in this communication. We encourage you to keep up to date with the latest industry developments in relation to benchmark transitioning and to consider its impact on your business. You should consider, and continue to keep under review, the potential impact of benchmark transitioning on any existing product you have with Citi, or any new product you enter into with Citi. Citi does not provide advice, or recommendations on the suitability of your product choice including with respect to any benchmark transitioning on any existing product you have with Citi. You should obtain professional independent advice (legal, financial or otherwise) in respect of the suitability of your products in light of benchmark transitioning as you consider necessary.

If any credit ratings are contained in this material (including any attachments), those that have been issued by Japan Credit Rating Agency, Ltd. (JCR) or Rating and Investment Information, Inc. (R&I) are credit ratings that have been issued by a credit rating agency registered in Japan (registered credit ratings). Other credit ratings that are denoted as being unregistered are unregistered credit ratings. Before using unregistered credit ratings to make investment decisions, please carefully read "Explanation Regarding Unregistered Credit Ratings" (<https://www.citigroup.jp/en/about/disclosures/>).