



Equitable Growth, Finance and Institutions

# COVID-19 Notes

## Finance Series



### COVID-19 Outbreak: Capital Markets Implications and Response<sup>1</sup>

March 25, 2020

*The COVID-19 crisis is an extraordinary supply and demand shock to the global economy with far reaching and uncertain ramifications. Emerging Markets and Developing Economies (EMDEs) are highly exposed, and capital markets are one of the main transmission channels of this on-going, global, systemic shock. This note identifies the impact of this evolving crisis on EMDE capital markets to date, assesses the different policy actions that policy makers have taken in response, and outlines some aspects of the assistance that the World Bank can provide to help alleviate the financial and economic damage from the coronavirus pandemic.*

*Countries with high public- and private-debt levels, high foreign-investor participation, as well as less-developed domestic capital markets are most vulnerable. The private sector is highly exposed to the current crisis, especially small- and medium-sized firms, BBB-rated corporates and firms with heavy reliance on foreign exchange debt.*

*Policy responses are focused so far on emergency measures designed to alleviate the liquidity and credit squeeze, as well as to normalize the extreme market volatility. Emergency assistance to private debt issuers has been part of measures directed to firms broadly and include tax relief and regulatory forbearance. So far, specific measures for listed corporates have been more limited.*

*The World Bank can play a role in the capital market response by (i) advising on the applicability of emergency responses to countries and assessing longer-term consequences, (ii) identifying low-hanging reforms to address structural bottlenecks and (iii) helping to identify reforms that could accelerate the recovery.*

#### 1. What is the impact of the COVID-19 Outbreak on Capital Markets?<sup>2</sup>

**The initial impact of the COVID-19 outbreak on international and domestic capital markets has been acute, with sharp price adjustments observed across fixed-income and equity markets.** The outbreak to date has resulted in the following developments.

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<sup>2</sup> Annex 1 provides an overview of the financial market impact.



- **Global financial market volatility and repricing:** Investors struggled to assess the rapidly evolving impact of the outbreak, despite unprecedented global policy actions. A sharp repricing took place across global financial markets with lower rated, less liquid asset classes facing the largest price adjustments. Investor flight towards the safest assets has been strong as valuations and investor appetite for riskier assets has all but vanished. The crisis has been accompanied by a sharp supply shock to oil prices, which has amplified price moves in some other asset markets.
- **Liquidity crunch across global financial markets:** The capital markets- banking nexus accentuated capital flight and market moves in many EMDE markets. Firms and individuals, seeking liquidity, tapped any available credit lines in the banking system, thereby forcing banks to sell liquid securities and reduce trading limits, just as asset-management companies similarly attempted to sell assets to cover redemptions (see section 2).<sup>3</sup> Reduced asset valuations will also pose a significant challenge for other market participants, such as money market mutual funds, particularly for those where investments are marked to market. In addition, the significant volatility and decline in price transparency is also contributing to reduced investor confidence.
- **Capital outflows and currency depreciation versus the US dollar (USD):** The surge in demand for US dollars to cover collateral positions precipitated a depreciation of most currencies versus USD. Driven by the global liquidity crunch and increased risk aversion, capital markets in EMDEs experienced capital outflows at unprecedented levels.<sup>4</sup>
- **Low or no activity in some bond markets:** The primary market for new bond issues has closed for many issuers, which is a key concern, especially for lower-rated sovereigns and private sector issuers. In this environment, private sector borrowers will increasingly rely on bank funding, which puts pressure on bank credit lines.
- **Large impact also in smaller, less developed capital markets:** This has occurred mainly via the government bond market. Borrowers who have relied heavily on external borrowings are most vulnerable, especially those with less developed local currency bond markets.

### *Impact for EMDE government issuers*

**The COVID -19 crisis brings significant challenges to EMDE government issuers.** Debt managers are confronted with volatile funding markets while facing increased financing needs, higher funding costs, large foreign capital outflows and uncertain investor behavior. It will be critical for debt sustainability that governments carefully assess how to finance their fiscal response, particularly in the context of already high public debt vulnerabilities in many countries.

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<sup>3</sup> While the decline in liquidity has been driven by the financial market volatility, more structural issues such as lack of hedging tools, higher inventory and market-making costs, and stricter regulations may be exacerbating some of the market moves as well as the “lockdown”, which may be affecting financial intermediaries ability to serve markets.

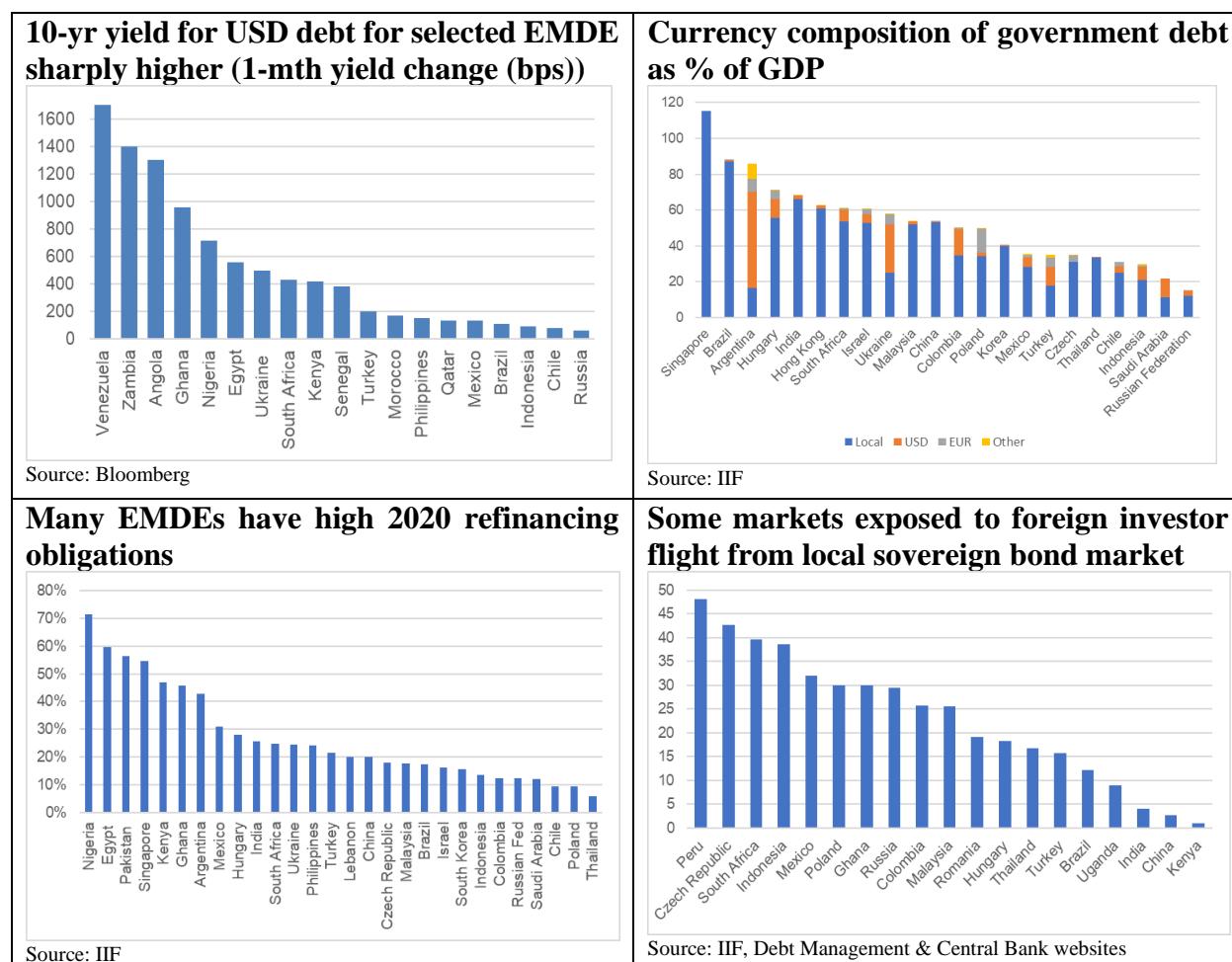
<sup>4</sup> According to most recent IIF data, cumulative capital outflows since the COVID-19 episode began in late January are already twice as large as in the global financial crisis and dwarf stress events such as the China devaluation scare of 2015 and the “taper tantrum” in 2014.



**In the current environment, accessing the international debt market will be costly or impossible for many EMDE government issuers.** As a result, issuers may need to focus their increased funding requirements on the domestic capital market. Increasing risk aversion in financial markets globally and a preference for short term liquidity will also likely result in a higher cost of funding for the sovereign in many domestic markets, and especially those with less diversified investor bases. This comes at a time, when sovereign funding needs are increasing, both to finance new public interventions and to roll over existing external borrowings. This increased activity of the sovereign in the domestic capital market will likely have a negative impact on other non-sovereign issuers and their ability to access the domestic debt market.

**Sovereign issuers will also be affected by the need to provide explicit or implicit support to the corporate sector.** Companies with high debt will also likely affect the sovereign through demand for liquidity channels (asset repurchases, repos) and the need for direct or indirect state support. This can also have direct implications on the cost of funding for the sovereign and future public debt levels, as the sovereign may need to give implicit or explicit state-guarantees.

**Table 1: Overview of EMDEs government debt markets**

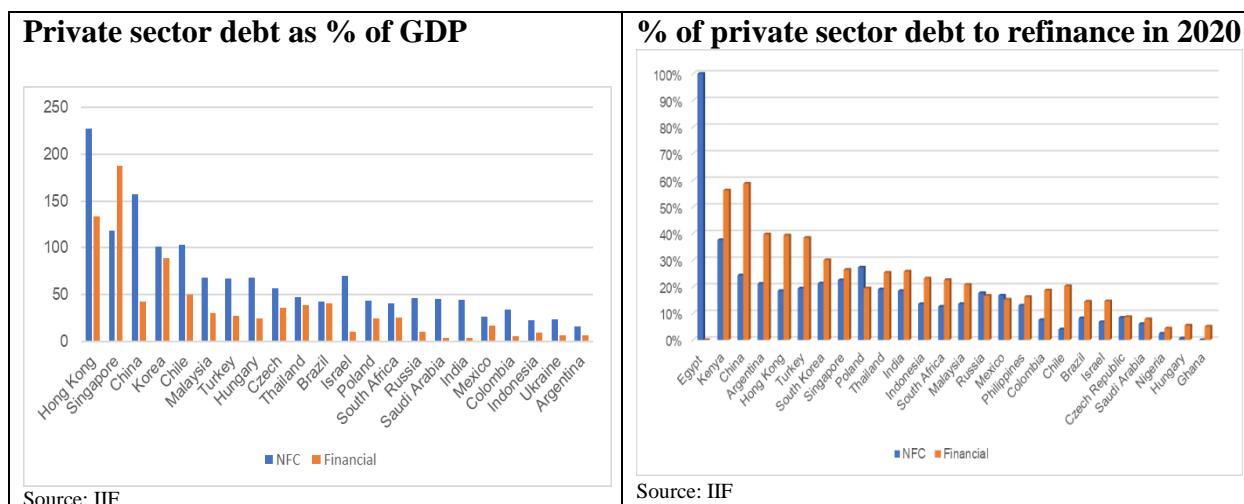




### *Impact for EMDE non-government/corporate issuers*

**The private sector is highly exposed to the COVID-19 crisis, which compounds vulnerability in the wider capital market (see table 2 for country exposure).** The speed of the deterioration of private balance sheets — caused by the economic shutdown for both financial and non-financial borrowers— is likely to have far-reaching consequences across EMDEs. Corporate issuers, particularly those with lower credit ratings, will likely have even greater difficulties accessing international capital markets, compared to the sovereign issuer, due to low investor demand and a prohibitively high cost of funds. In addition, the current crisis is likely to be accompanied by a string of credit rating downgrades, which will put extra pressure on EMDE debt and equity markets.

**Table 2: Overview of EMDEs private sector vulnerabilities**



**Corporate issuers tend to have higher refinancing needs, as their debt tends to be focused at shorter maturities when compared to the sovereign.** Some private sector borrowers, who borrow in international capital markets, will likely need to resort to the domestic capital market or to banks to bridge funding needs in coming months, due to significant refinancing obligations. This will likely affect the functioning of the domestic capital market and induce higher domestic funding costs. In many cases, private sector borrowers will lose access to financial markets altogether, driven by credit-rating downgrades and reduced investor demand.

**Many corporate issuers are likely to face problems servicing current debt obligations, which could have serious consequences for several EMDE capital markets.** The ongoing business disruption can also trigger covenants and accelerate payments. In this case, companies can be obliged to restructure debts, negotiate new covenants and, or deposit (additional) collateral. Some corporate issuers will also need to restructure their debt given large refinancing obligations. This is expected to be the case in countries where SOEs are important issuers in the market. For companies that can't get over these hurdles, there will be defaults, leading to a spike in



insolvencies, which will have ramifications for wider capital market functioning and investor confidence.

### *Impact for EMDE equity markets*

**Equity capital markets are also severely affected by the on-going crisis.** Severity of overall impact on EMDEs depends on how large the respective equity market is in the economy and the level and diversity of domestic and foreign investor participation. Equity issuers in the tourism, services, and consumer sectors are likely to be most affected. In addition to the disruption of sharp revaluations and increased volatility, drops in equity valuations worsen leverage ratios of companies and their capacity to raise new debt. The poor performance of equity markets reduces the capacity and incentives of firms to raise new capital and adversely impacts overall confidence in the equity market. However, the sharp drop in equity valuations can also bring opportunities for some listed companies with cash available, those with risk appetite to get new loans and those open to mergers and acquisitions.

### *Impact on investors*

**The COVID-19 crisis is likely to have an enduring effect on investor confidence.** Higher risk aversion will drive investors to adopt more conservative investment strategies, such as shorter maturity or shift focus to higher-rated investments in an environment of declining private- and public-debt credit quality. The impact on the corporate sector and investor confidence altogether will delay the pace of development for countries whose markets are at an earlier stage of development. In the pensions sector, the significant decline in equity and debt valuation will also likely affect pension payments.

## **2. How are policy makers responding?**

**The policy response to COVID-19 is unprecedented.** It is broadly focused around three main areas: (i) injecting liquidity, (ii) reducing market volatility and (iii) alleviating disruptions to the flow of credit to the real sector.

### *Measures addressing shortage of liquidity*

**Liquidity responses by Central Banks so far have ranged from traditional policy tools to more targeted, unorthodox interventions.** Central banks' initial responses were based on policy interest rate cuts, adjustment of reserve requirements and capital buffers, and Emergency Liquidity Assistance (ELA), such as standing facilities, with these measures implemented by most advanced economies and EMDEs. More targeted and unorthodox responses have been taken by some central banks (e.g. US Federal Reserve, ECB and some of the larger EMDEs) to alleviate the pressures exacerbated through the capital markets-banking nexus. Central banks in emerging market economies have less flexibility than in advanced economies, given their higher macro-fiscal vulnerability and, or poorer operational and institutional arrangements in money markets. The latter will make central banks' liquidity assistance more costly and less effective.



**In some jurisdictions, extraordinary liquidity measures have included:** i) opening-up central bank liquidity injection operations to non-banks, such as mutual funds, pension funds, insurance companies and brokers; ii) broadening eligible collateral for repo transactions with the central bank beyond government debt to corporates; and iii) outright purchases of government bonds and corporate securities. For the latter, credit quality has been different depending on the country. The US Federal Reserve announced plans to also purchase higher-risk commercial paper and commercial loans asset-back securities (see details in table 3 below and annex 2).

**In some countries, debt management offices have provided, or are expected to provide, liquidity via net redemptions, asset purchase programs, repo facilities or debt-liability-management exercises.** Several debt management offices, such as in Turkey and Brazil, operate with cash buffers that allow them to reduce the rollover ratio of maturing debt. Debt offices may also provide repo facilities and conduct active liability management transactions to provide liquidity directly, via buybacks, or indirectly, via switches. They may also accept less liquid instruments in exchange for others, such as T-Bills or benchmark bonds that can be traded more easily by market participants.

**Table 3: Liquidity measures to address different beneficiaries**

Liquidity target	Response measures and examples
Scaled-up general liquidity interventions	<p>In addition to traditional tools,</p> <ul style="list-style-type: none"><li>• <b>Extending the eligible counterparty list</b> for central bank operations beyond banks, including non-bank financial institutions (NBFIs), and even corporates with a strong credit worthiness in some cases (e.g. the US Federal Reserve)</li><li>• <b>Expanding the list of eligible collateral for central bank operations.</b> These include a wide spectrum of bonds in addition to government bonds, including financial institutions bonds, investment grade corporate bonds (such as Japan, South Korea and Colombia), asset backed securities from mortgages to consumer loans, depending on the country, and in some cases commercial paper and SME debt (e.g. US Federal Reserve)</li><li>• <b>Lengthening the tenor of repo operations and expanding the size of interventions.</b> Overnight repo liquidity facilities have been extended to as much as 3-6 months (Colombia, South Africa, Malaysia, India)</li><li>• <b>Central Bank outright purchase of bonds:</b> government bonds (South Africa), and corporate bonds (US Federal Reserve)</li><li>• <b>FX swaps lines</b> that several central banks have set up with the US Federal Reserve and domestically with banks and NBFIs such as insurance companies, pension funds and mutual funds with foreign exchange exposure (Colombia, India, Indonesia).</li></ul>
Government bond markets liquidity measures	<ul style="list-style-type: none"><li>• <b>Reduction of funding rate</b> applied to the Temporary Securities Transfer Operations that some debt management offices/Ministries of Finance carry out with Market Makers (e.g. Colombia).</li><li>• <b>Debt Management Office/Ministries of Finance temporarily reducing new issuance, amending the auction schedule or withdrawing from the government bond auction market</b> to avoid further stretched liquidity and market volatility (e.g. Brazil, Colombia).</li></ul>



**Growing risk aversion and the overall drive for liquidity is also resulting in outflows from collective investment schemes, such as money-market mutual funds.** Some markets have restricted or suspended withdrawals from these funds, and some central banks have added money-market mutual funds and other collective investment schemes to central-bank-liquidity facilities (US Fed, Colombia). Additionally, in some cases, regulations limiting intra-group liquidity support have been relaxed, as in Colombia. There have also been cases of suspension of open-ended fund redemptions, for example, property funds in the UK<sup>5</sup>.

**The current situation makes preexisting operational, institutional and regulatory bottlenecks, which limit market liquidity in EMDEs, more evident.** For example, several EMDEs lack efficient operational and regulatory frameworks for efficient money markets, such as unreliable collateral management frameworks and poor trading and settlement infrastructure. Additionally, shortcomings in government debt markets, such as segmentation of Treasury-bill and Treasury-bond markets and weak primary and secondary market architectures, are worsening market disruptions. Higher dependency on borrowing in hard currencies of some emerging market governments and corporations will need to decline. In the short term, this could result in a shift to domestic-market financing and, in some cases, debt restructuring and reprofiling.

#### *Measures addressing market volatility and disruptions*

**Many regulators and exchanges are adopting new or utilizing existing measures to reduce market volatility and disorderly market functioning.** These include temporary trading halts (in the United States stock and futures markets and several EMDEs exchanges); requirements for more transparency on short-selling, eliminating naked short-selling operations (in the E.U.) or temporary prohibition of short-selling (in Malaysia and several European countries).

**The COVID-19 crisis also poses significant operational risk, business and market continuity.** Responses commonly seen so far include: regulatory relief, for example, extension of submission deadlines on financial reporting; simplification of or waiving regulatory requirements (in China, Malaysia, United States); or adjustments to primary dealer and market making programs for government bond markets (South Africa, Brazil), and business continuity plans, such as remote services.

**Measures on targeted market disclosure, financial reporting, and valuation have also been put in place to ensure investors are informed of the impact of COVID-19 on listed issuers.** While regulatory relief is necessary to deal with challenges of market disruption, such relief only applies to non-essential regulatory requirements that do not have a material impact on investor protection. Some regulators have started to require or recommend proper disclosures on impacts of COVID-19 (China, European Union, Brazil).

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<sup>5</sup> Source: <https://www.morningstar.co.uk/news/200554/kames-property-fund-suspended.aspx>



### 3. What role can the WBG play?

In the short term, the WBG can offer support in four key areas related to capital markets: (i) advising on applicability of emergency responses to countries and assessing longer-term consequences; (ii) identifying low-hanging reforms to address structural bottlenecks that could alleviate the current situation; (iii) helping to identify reforms that would accelerate the recovery once the crisis has passed; and (iv) helping in developing liquidity and/or guarantee facilities that would improve access to capital markets at lower rates and longer tenors for sovereigns, corporate issuers and state-owned enterprises that are mission critical for the economy during the recovery phase.

These measures are focused on several key areas of the capital markets:

- **Public Debt Market:** The government debt market lies at the heart of domestic capital markets and policy makers should focus efforts on getting this market back to “normal” as soon as possible. Debt managers will likely need to implement emergency, unorthodox measures in the short term<sup>6</sup> to ensure adequate funding and a minimal level of functioning in the primary and secondary markets. Once this episode has passed, debt managers will need to intensify efforts to normalize the government debt market. These measures may focus on re-designing the issuance plan strategy, re-profiling of the redemption profile to reduce refinancing risk and debt service costs, conducting liability management operations, rebuilding the yield curve, reviewing primary-dealer regulations, increasing transparency and predictability, and reviewing vulnerabilities in market infrastructure. It is also likely that debt managers will need to re-engage with investor bases. Initially, they will need to evaluate the impact of the COVID-19 crisis on the foreign and domestic investor base and begin the process of investor re-engagement.
- **Money Markets:** Properly functioning money markets are critical to a well-functioning capital market. Authorities should concentrate efforts on improving money-market functioning, in order to create adequate foundations for the recovery of capital markets. Authorities may need to address pre-existing bottlenecks, such as the lack of a solid repo-market framework, as well as issues around liquidity management. This may be challenging in an environment where banks hold reserves in excess of their operational needs, which is a common situation in less developed capital markets.
- **Developing innovative solvency/liquidity frameworks for issuers:** Many countries may lack technical capacity in areas of solvency and liquidity frameworks. Countries will need to develop solid standard frameworks, as well as innovative solutions in areas, such as debt/equity restructuring, interest payment moratoria.

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<sup>6</sup> The EFI FCI Long Term Finance and MTI Global Macro and Debt teams are joining efforts to provide crisis-response policy support on public debt management and government securities markets for LICs and MICs impacted by the developing COVID-19 crisis. The work will focus on four key areas as follows: (i) meeting increased funding needs and changing financing conditions, (ii) preserving investor confidence, (iii) mitigating operational risks and (iv) managing specific fiscal risks.



- **Developing guarantee/liquidity facilities:** Many countries will need to do debt reprofiling and restructuring of government and SOE debt. In addition to advice, they will need multilateral guarantees and/or liquidity facilities to access the market or lower their financing costs. Additionally, advice and operational support will be needed in supporting implicit or explicit state guarantees in customized structures with senior/subordinated portions, for critical capital markets participants.
- **Developing innovative, blended-financing models for the recovery:** This would be linked to ongoing work to mobilize institutional investors for SDGs (infrastructure or other assets).



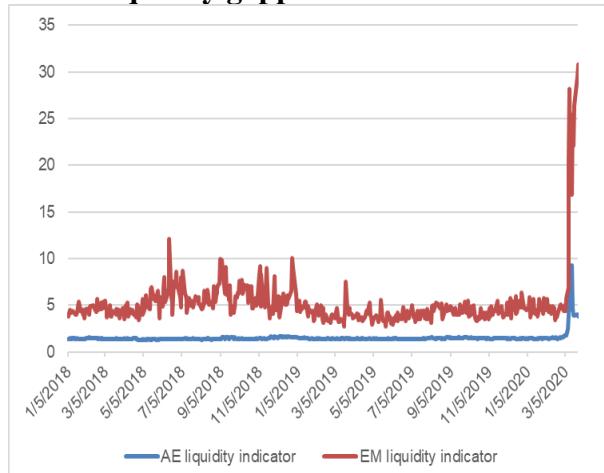
## Annex 1 – Table 4: Overview of financial market impact

## Market overview of key EM indices

Emerging Markets	MtD	QtD
MSCI EM	-20%	-28%
MSCI EM small cap	-27%	-35%
MSCI Frontier	-24%	-28%
MSCI Asia	-17%	-23%
Shanghai composite	-5%	-10%
MSCI EMEA	-25%	-37%
MSCI LATAM	-38%	-49%
GBI EB GD	-14%	-18%
ELMI+	-6%	-9%
EM FX spot	-9%	-15%
EMBI GD	-18%	-17%
EMBI GD IG	-13%	-2%
EMBI GD HY	-23%	-25%
CEMBI BD IG	-9%	-7%
CEMBI BD Non-IG	-19%	-19%

Source: Bloomberg, JP Morgan, Barclays, Merrill Lynch

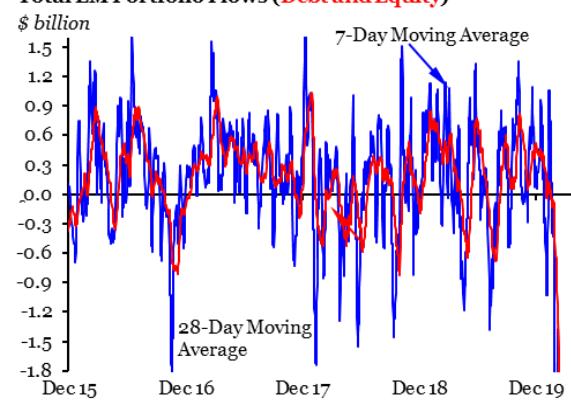
## EM bond liquidity gapped wider



Source: Indicators based on selected AE and EM 10-year bid-ask spreads as indicated by Bloomberg.

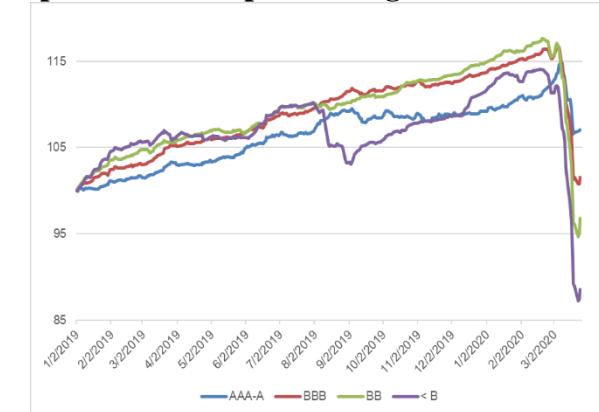
## Total EM portfolio flows stronger than 2008

## Total EM Portfolio Flows (Debt and Equity)



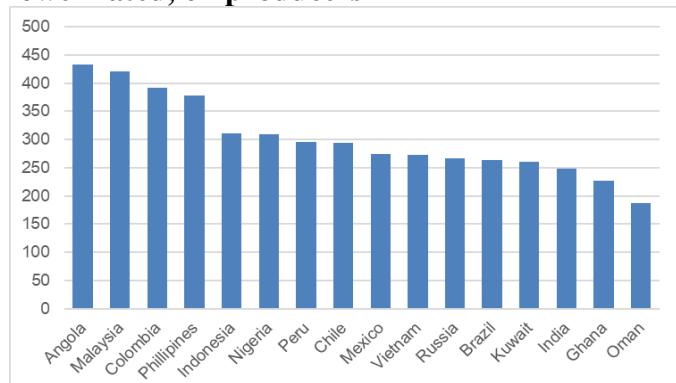
Source: IIF

## Lower rated corporate EM bonds most exposed after outperforming since 2018.



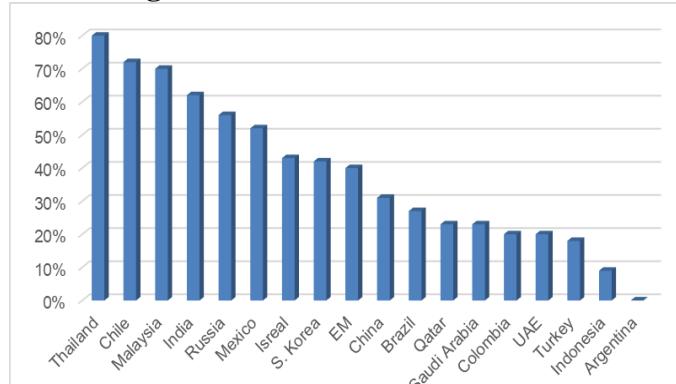
Source: Merrill Lynch, Bloomberg

## 5-yr sovereign CDS higher across the board led by lower rated, oil producers



Source: Bloomberg

## EM corporate markets are highly exposed - % with rating at BBB+ or less



Source: Bloomberg, S&amp;P, BNP



## Annex 2: Selected country response examples by policy response (as of March 25, 2020)

This “living table” contributes to the global knowledge on how countries are responding to the COVID-19 crisis by documenting real-time actions in a key area of response – capital markets. It focuses on three categories of responses (see Note 1) and a number of representative countries (see Note 2) and intends to reflect the most updated information (as of March 25 2020).

### Note 1 – Response Categorization

Risk	Measure sub-groups
<u>Liquidity</u>	<ol style="list-style-type: none"><li>1. Immediate liquidity relief, such as<ul style="list-style-type: none"><li>• rate cut &amp; ELA</li><li>• relaxation measures for liquidity (including broaden eligible counterparties for liquidity repos: NBFIs (money market mutual funds, insurance companies, investment banks/brokers etc.; expand range of eligible collateral assets beyond government bonds - similar to ECB, US and other emerging markets current measures; extend tenor of repos – similar to emerging markets)</li></ul></li><li>2. Liquidity risk management/liquidity support to collective investment schemes<ul style="list-style-type: none"><li>• Restriction or suspension of a) redemptions in mutual funds (including money market mutual funds), b) withdrawal of deposits from large corporations, c) call of credit lines</li></ul></li></ol>
<u>Market</u>	<ol style="list-style-type: none"><li>1. Market fluctuation:<ul style="list-style-type: none"><li>• Trading halt, price support, etc.</li><li>• Restrictions on short-selling. This includes more transparency on short-selling or temporary prohibition of short-selling.</li><li>• Suspension of redemption of mutual funds.</li><li>• Temporary capital control</li></ul></li><li>2. Market disruption / Business continuity:<ul style="list-style-type: none"><li>• Regulatory relief. This include extension of submission deadlines, simplification of regulatory requirements (such as waiving documentation requirement, adjusting market maker obligations to provide more flexibility to the market and NT, change of government bond market regulations)</li><li>• Business continuity. This includes responses to ensure market functioning during the impacted period.</li></ul></li><li>3. Market disclosure, financial reporting, and valuation</li></ol>
<u>Credit</u>	<ol style="list-style-type: none"><li>1. Public debt management (government bond market), such as<ul style="list-style-type: none"><li>• Responses in government bond market</li><li>• Increased focus on prudent sovereign funding and debt management</li></ul></li><li>2. Support to borrowers. This includes programs to support corporate issuers such as programs to buy bonds of highly rated corporates (in addition to other type of programs that are addressed more generally to corporates such as tax relief, fiscal programs to lend to businesses, including SMEs, or to bailout specific sectors such as airlines and hotels), and programs to support debt restructuring of corporate issuers</li><li>3. Credit quality, insolvency and restructuring<ul style="list-style-type: none"><li>• Potential additional programs to deal with insolvencies</li><li>• Restructuring of corporate debt</li></ul></li></ol>

**Note 2 – Countries covered**

Advanced countries/economies: Canada, European Union, Japan, South Korea, United Kingdom, United States

Developing countries/economies: Brazil, China, Colombia, India, Malaysia, Mexico, Peru, South Africa, Turkey

**Note 3 – Information sources:**

1. Official information published in government websites
2. Global and national news outlets, and financial information providers
3. Reports and notes from market participants
4. In some cases, information was provided directly by WBG experts with country expertise

Risk type	Measure tool	Country	Policy body	Details of the response
<b>Liquidity</b>				
Immediate liquidity relief	Rate cut	Australia	Reserve Bank of Australia (central bank)	<ul style="list-style-type: none"><li>• The RBA has cut its cash rate by 50bps in March 2020, reaching the effective lower bound of 0.25%.</li></ul>
Immediate liquidity relief	Rate cut	Brazil	BCB (central bank)	Cut its benchmark interest rate by 50 basis points to a record-low 3.75%
Immediate liquidity relief	Rate cut	Canada	Bank of Canada (central bank)	<ul style="list-style-type: none"><li>• 50 basis point rate cut to 0.750% on March 13, 2020</li></ul>
Immediate liquidity relief	Rate cut	China	PBOC (central bank)	<ul style="list-style-type: none"><li>• Feb 17, 2020 - The PBOC cut the 1-year medium-term lending facility (MLF) rate by 10bp.</li><li>• Feb 20 , 2020- The PBOC cut the 1-year and 5-year loan prime rate (LPR) by 10bp and 5bp, respectively.</li><li>• Mar 13 - The PBOC announced a 50-100bp cut in the required reserve ratio (RRR) for</li></ul>
Immediate liquidity relief	Rate cut	Japan	Bank of Japan (central bank)	<ul style="list-style-type: none"><li>• None, with Policy-Balance rate at -0.10% and YCC target at 0.00% already</li></ul>
Immediate liquidity relief	Rate cut	Malaysia	BNM (central bank)	<ul style="list-style-type: none"><li>• BNM reduced the Overnight Policy Rate by 25 basis points to 2.50 per cent (2nd rate cut since Jan 2020)</li></ul>
Immediate liquidity relief	Rate cut	Mexico	Banxico (central bank)	<ul style="list-style-type: none"><li>• Lower by 50 basis points the target for the overnight interbank interest rate to 6.5%</li></ul>



Risk type	Measure tool	Country	Policy body	Details of the response
Immediate liquidity relief	Rate cut	Peru	Banco de la Republica del Perú (Central Bank)	<ul style="list-style-type: none"><li>On March 19, 2020 the BCRP Board of Directors agreed to reduce the reference interest rate by 100 basis points from 2.25% to 1.25% percent.</li></ul>
Immediate liquidity relief	Rate cut	South Africa	SARB (central bank)	<ul style="list-style-type: none"><li>The South African Reserve Bank announced a 100bps cut in policy rate to 5.25 percent, on March 19.</li></ul>
Immediate liquidity relief	Rate cut	South Korea	Bank of Korea (central bank)	<ul style="list-style-type: none"><li>BoK cut 50bp to a new historical low of 0.75% at an emergency meeting held on 16 March</li><li>Lowered interest rate on Bank Intermediated Lending Support Facility to 0.25%, from 0.50-0.75% previously</li></ul>
Immediate liquidity relief	Rate cut	Turkey	Central Bank of Turkey	<ul style="list-style-type: none"><li>March 17, 2020: Weekly repo rate cut from 10.75% to 9.75%</li><li>Benchmark interest rate reduced by 100 bp</li></ul>
Immediate liquidity relief	Rate cut	United Kingdom	Bank of England (central bank)	<ul style="list-style-type: none"><li>Policy rate cut by 50bp;</li><li>Cut of counter cyclical capital buffer (CCB) to 0%;</li></ul>
Immediate liquidity relief	Rate cut	United States	Federal Reserve (central bank)	<ul style="list-style-type: none"><li>March 3, 2020 - The Fed cut rates by 50bp.</li><li>March 15, 2020 - The Fed cut rates by 100bp to the zero lower bound and announced QE of at least \$700bn, also cut the discount window primary rate by 150bp, the required reserve ratio by 10pt, and the extended discount window borrowing to up to 90 days.</li></ul>
Immediate liquidity relief	Reserve requirements	Brazil	BCB (central bank)	<ul style="list-style-type: none"><li>Reserve requirement rate for deposits down to 25% from 31%</li></ul>
Immediate liquidity relief	Reserve requirements	Malaysia	BNM (central bank)	<ul style="list-style-type: none"><li>The Statutory Reserve Requirement (SRR) Ratio will be lowered by 100 basis points from 3.00% to 2.00% effective 20 March 2020</li><li>PDs can recognize Gov Bonds of up to RM1 billion (apx. \$230mil) as part of the Statutory Reserve requirement compliance up to 31 March 2021. These combined measures will release approximately RM30 bn (USD6.7 bil) worth of liquidity into the banking system.</li></ul>
Immediate liquidity relief	Reserve requirements	Mexico	Banxico (central bank)	<ul style="list-style-type: none"><li>March 20, 2020: Reduce the amount of the DRM held by commercial and development banks and that is mandatorily deposited on a permanent basis at the Central Bank by 50 billion pesos</li></ul>
Immediate liquidity relief	Adjustment of Standing Facilities	South Africa	SARB (central bank)	<p>March 20, 2020: SARB</p> <ul style="list-style-type: none"><li>The Standing Facilities (SF) borrowing rate - the rate at which the SARB absorbs liquidity - will be adjusted to the repo rate less 200bps, from the current repo rate less 100bps. The SARB deems this change necessary in order to encourage the flow of money market liquidity.</li></ul>



Risk type	Measure tool	Country	Policy body	Details of the response
				<ul style="list-style-type: none"> <li>The SF lending rate - the rate at which the SARB provides liquidity to the commercial banks - will be adjusted lower to the repo rate, from the prevailing rate of the repo rate plus 100bps. This will support banks to facilitate their flow of money market liquidity without being penalized.</li> </ul>
Immediate liquidity relief	Adjustment of Standing Facilities	Mexico	Banxico (central bank)	<p>March 20, 2020:</p> <ul style="list-style-type: none"> <li>Reduced cost of Ordinary Additional Liquidity Facility, which offers liquidity to commercial banks via secured credits or repos from 2-2.2 times Banco de México's target for the overnight interbank interest rate to 1.1 times.</li> <li>Establishment of temporary U.S. dollar liquidity arrangements (swap lines) with the Federal Reserve.</li> </ul>
Immediate liquidity relief	Adjustment of Standing Facilities	India	RBI (central bank)	<ul style="list-style-type: none"> <li>Increasing the Standing Liquidity Facility (SLF) from Rs 2,800 crore to Rs 10,000 crore with immediate effect (March 24) to facilitate year-end liquidity management by Standalone Primary Dealers (SPDs, i.e. non-bank PDS)</li> </ul>
Immediate liquidity relief	Central bank liquidity operations	China	PBOC (central bank)	<ul style="list-style-type: none"> <li>Feb 7, 2020 - The PBOC provided Rmb300bn special re-lending to commercial banks.</li> <li>Feb 25, 2020 - The PBOC increased the re-lending and re-discount quota by Rmb500bn; policy bank lending of Rmb350bn.</li> </ul>
Immediate liquidity relief	Central bank operations – repo operations/relaxation measures for liquidity	Colombia	Banco de la Republica (central bank)  The Ministry of Finance and Public Credit – (Treasury)	<p>March 23, 2020 – The BRC announced:</p> <ul style="list-style-type: none"> <li>The CB will buy private debt, with a maturity of less than or equal to three years, for a total value of COP 10 trillion through variable price auctions starting on Tuesday, March 24. Secondly, the Central Bank will buy TES for up to COP 2 trillion. Thirdly, the CB will continue to auction repos with private securities for COP 500 billion on days when there are no auctions of firm purchases of these securities starting on April 1st. Lastly, they will maintain daily repos auctions with public titles for large amounts.</li> </ul> <p>Measures to strengthen the liquidity in Pesos:</p> <ul style="list-style-type: none"> <li>To extend the group of institutions with access to auctions and to the liquidity window of the Central Bank with public debt instruments, by including pension and severance funds managers in both proprietary positions and managed funds.</li> <li>To authorize insurance companies to participate in the auctions of repos with both public debt instruments (and at the liquidity window) and private debt instruments.</li> </ul>



Risk type	Measure tool	Country	Policy body	Details of the response
				<ul style="list-style-type: none"><li>To extend access to funds managed through trusts, stock brokers, and investment management companies to repo auctions and to the window with public debt instruments (in addition to the repo auctions with private debt instruments).</li><li>To extend the maturities of liquidity operations (REPOS) with private debt instruments to 90 days. Until today, the maximum maturity had been 30 days. At the same time, to extend the maturities of liquidity operations (REPOS) with public debt instruments to 60 days. Recently, the maturity had been one day. These measures ensure liquidity of the economy in pesos to a horizon greater than at present.</li><li>The total allotment for liquidity operations (REPOS) with government and private debt instruments is increased from \$20 trillion (t) to \$23.5 t. To date, \$12.3 t have been placed through these facilities.</li><li>The Ministry of Finance and Public Credit – (Treasury) reduced the target of the auction program for the 2020 term by \$ 1.5 billion. The new total auction amount will be COP 23 billion, of which \$ 6.3 billion has been placed to date.</li><li>Auctions of both Short-Term TES Treasury Securities and Long Term TES Treasury Securities in Pesos and UVR are suspended for the remainder of the month of March.</li><li>As of the date (Mar 24<sup>th</sup>), a cost rate of 0% will be applied to the Temporary Securities Transfer Operations that you carry out with all Market Makers in the first market window (3:30 pm to 4:00 pm). The maximum amount to carry out these operations remains at COP 2 billion.</li><li>The quota is extended to carry out simultaneous and / or passive Simultaneous Operations up to an amount of COP 3.5 billion, which represents more than 50% of the average daily volume of this market on transactional platforms.</li><li>To strengthen the formation of prices, the spread between points of purchase and sale is increased to meet the requirement of mandatory quotation, of Market Makers, from 20 to 80 basis points until next April 3.</li></ul>
Immediate liquidity relief	Central bank operations	European Union	ECB (central bank)	<ul style="list-style-type: none"><li>March 12, 2020 - The ECB announced:<ul style="list-style-type: none"><li>New temporary LTROs to bridge funding gaps to June;</li><li>More favorable terms on TLTRO III from June with expanded eligibility and a funding rate as low as 25bp below depo;</li></ul></li></ul>



Risk type	Measure tool	Country	Policy body	Details of the response
Immediate liquidity relief	Central bank operations	Peru	Banco de la Republica del Perú (Central Bank).  Ministry of Finance of Peru	<ul style="list-style-type: none"><li>Additional QE of €120bn.</li><li>on Mar 24 BCRP announced a Repo auction for 400 million Soles over two years, at an interest rate of 3.24 percent.</li><li>The BCRP so far in March has been carrying out liquidity injection operations such as overnight repos for an average of 1,400 million Soles per day, 6-month repos for 1,400 million Soles and 1 year for 1,500 million Soles. The Central Bank has other additional liquidity injection instruments such as repos against reserve funds, currency substitution repos, credit portfolio repos and foreign currency repos. Likewise, the Central Bank has been evaluating new liquidity injection modalities to apply them if necessary.</li></ul>
Immediate liquidity relief	Central bank liquidity operations	South Africa	Central bank (SARB)	<ul style="list-style-type: none"><li>March 25: As a further measure to add liquidity to the market, the SARB will commence a programme of purchasing government securities in the secondary market. The purchases will be conducted across the yield curve. In addition to providing liquidity and promoting the smooth functioning of domestic financial markets, this will allow the SARB to enhance its Monetary Policy Portfolio (MPP). The MPP is one of the instruments in the SARB's toolkit for managing money market liquidity and can be used to add or drain liquidity from the market. The amount and maturity of the bond purchases will be at the discretion of the SARB.</li></ul>
Immediate liquidity relief	Central bank liquidity operations - repo operations	South Africa	Central bank (SARB)	<ul style="list-style-type: none"><li>March 25: The main refinancing operations will be offered for periods of 7 days to longer-term maturities of up to 12 months.</li></ul>
Immediate liquidity relief	Central bank liquidity operations - repo operations	Turkey	Central bank	<ul style="list-style-type: none"><li>91 day repo auctions announced as an additional liquidity instrument</li></ul>
Immediate liquidity relief	Central bank liquidity operations - repo operations	United States	Federal Reserve (central bank)	<ul style="list-style-type: none"><li>March 12, 2020 - The Fed announced \$1.5tn repo operations.</li></ul>
Immediate liquidity relief	Central bank operations – relaxation measures for liquidity	European Union	ECB (central bank)	<ul style="list-style-type: none"><li>March 18, 2020 - The ECB announced the €750 billion Pandemic Emergency Purchase Programme (PEPP).<ul style="list-style-type: none"><li>Purchases will be conducted until the end of 2020 and will include all the asset categories eligible</li><li>under the existing Asset Purchase Programme (APP). The purchase will also include Greek debt under waiver.</li></ul></li></ul>



Risk type	Measure tool	Country	Policy body	Details of the response
Immediate liquidity relief	Central bank operations – relaxation measures for liquidity	India	RBI (central bank)	<ul style="list-style-type: none"><li>Additional (and brought forward) variable rate repo auctions</li><li>Allowing Standalone Primary Dealers (SPDs, ie non-bank PDS) to be allowed to participate in these auctions</li><li>Introduction of long-term repo operations auctions with long term maturity periods (compared to one day repos) of 1 year and 3 year.</li></ul>
Immediate liquidity relief	Central bank operations – relaxation measures for liquidity	Japan	Bank of Japan (Central Bank)	<ul style="list-style-type: none"><li>Doubled the upper limits on ETF and J-REITs purchases to JPY12trn and JPY180bn, respectively</li><li>Upper limits of outstanding balances in CPs and corporate bonds were increased by JPY1.0trn each, to JPY3.2trn and JPY4.2trn, respectively, to be maintained at least until the end of September</li><li>A new loan provision programme against corporate debt as collateral with 0.0% interest rate and incentive on interest rate on excess reserves was introduced. This will last until the end of September 2020</li></ul>
Immediate liquidity relief	Central bank operations – relaxation measures for liquidity	Malaysia	BNM (central bank)	<ul style="list-style-type: none"><li>Extended the maximum tenor for repo from 365 days to five years and broadening the range of eligible securities under repo transactions (Note: This was not done as part of the immediate Feb/March Stimulus package but end-2019 as there were already signs of liquidity stress)</li><li>PDs can recognize Gov Bonds of up to RM1 billion (apx. \$230mil) as part of the Statutory Reserve requirement compliance up to 31 March 2021.</li></ul>
Immediate liquidity relief	Central bank operations – relaxation measures for liquidity – additional repo windows	South Africa	SARB (central bank)	<ul style="list-style-type: none"><li>On March 20, 2020, the SARB introduced: Additional daily liquidity through Intraday Overnight Supplementary Repurchase Operations (IOSROs) except on Wednesdays when the main repurchase operations take place. The amounts will be decided daily depending on conditions.</li></ul>
Immediate liquidity relief	Central bank operations – relaxation measures for liquidity	South Korea	Bank of Korea (central bank)	<ul style="list-style-type: none"><li>Increased limit of Bank Intermediated Lending Support Facility by KRW5trn to KRW35trn, of which KRW10trn will be used to support areas damaged by COVID-19</li><li>Included bank debentures as eligible assets in open market operations in repurchase agreement</li><li>Expanded eligible collaterals for bank loan provisions to include MBS and special bonds issued by public finance corporates</li><li>Will provide KRW10trn of credit to commercial banks, so they can contribute to a Bond Market Stabilization Fund</li><li>Direct purchase of KTBs worth KRW1.5trn on 20 March</li></ul>
Immediate liquidity relief	Central bank operations – relaxation measures for liquidity	Turkey	Central Bank	<ul style="list-style-type: none"><li>Euro and gold added to the array of swap lines</li><li>Promise by the Central Bank to provide intra-day and o/n liquidity to the banking system as needed</li></ul>



Risk type	Measure tool	Country	Policy body	Details of the response
				<ul style="list-style-type: none"><li>• Reserve requirements reduced by 500 bp for all maturities and types of liabilities (expected to inject up to \$5.1 billion liquidity in FX and gold)</li><li>• Open market operation limits increased for primary dealers</li><li>• In credit transactions, flexibility in collateral requirements</li></ul>
Immediate liquidity relief	Central bank operations – relaxation measures for liquidity	United States	Federal Reserve (central bank)	<ul style="list-style-type: none"><li>• Mar 17, 2020 - The Fed announced 1) Commercial Paper Funding Facility (CPFF) to support the flow of credit to households and businesses; 2) Primary Dealer Credit Facility (PDCF) to offer overnight and term funding with maturities up to 90 days and will be available on March 20, 2020.</li><li>• March 23, 2020 – Fed announced the following actions:  Support for critical market functioning. The Federal Open Market Committee (FOMC) will purchase Treasury securities and agency mortgage-backed securities in the amounts needed to support smooth market functioning and effective transmission of monetary policy to broader financial conditions and the economy. The FOMC had previously announced it would purchase at least \$500 billion of Treasury securities and at least \$200 billion of mortgage-backed securities. In addition, the FOMC will include purchases of agency commercial mortgage-backed securities in its agency mortgage-backed security purchases.</li></ul>
Immediate liquidity relief	Central bank operations – swaps	Colombia	Banco de la Republica (central bank)	<ul style="list-style-type: none"><li>• March 23, 2020 – The BRC announced measure to strengthen liquidity in USD</li><li>• US\$400 million of swaps in US dollars (FX Swaps) will be auctioned for, in which the Central Bank will sell dollars in cash and will buy them in futures (at 60 days). This measure provides temporary liquidity in US dollars to a large group of institutions including not only traditional intermediaries in the foreign exchange market, but also pension and severance fund managers in both proprietary position and managed funds, with the purpose of alleviating pressures in the foreign exchange market.</li></ul>
Immediate liquidity relief	Central bank operations – swaps	India	RBI (central bank)	<ul style="list-style-type: none"><li>• Introduced a 6-month \$2billion sell-buy swap operation to inject USD liquidity into the domestic market</li></ul>
Immediate liquidity relief	Central bank operations – swaps	Japan	Bank of Japan (central bank)	<ul style="list-style-type: none"><li>• Joined six major global central banks in increasing the USD liquidity through lowering liquidity swap rate by 25bp and extending maturity of the liquidity provisions</li></ul>
Immediate liquidity relief	Central bank operations – swaps	United States	Federal Reserve (central bank)	<ul style="list-style-type: none"><li>• March 15 – The Fed opened up swap lines with ECB, BoJ, BoE, BoC , 2020and Swiss National Bank in greater size and lower rate to help USD funding</li></ul>



Risk type	Measure tool	Country	Policy body	Details of the response
				<ul style="list-style-type: none"><li>March 19, 2020 - The Fed is continuing to set up temporary swap lines with other central banks (the Reserve Bank of Australia, the Banco Central do Brasil, the Danmarks Nationalbank (Denmark), the Bank of Korea, the Banco de Mexico, the Norges Bank (Norway), the Reserve Bank of New Zealand, the Monetary Authority of Singapore, and the Sveriges Riksbank (Sweden))</li></ul>
Liquidity support to collective investment schemes	Liquidity support to money market mutual fund	United States	Federal Reserve (central bank)	<ul style="list-style-type: none"><li>March 18, 2020 - Federal Reserve Board broadens program of support for the flow of credit to households and businesses by establishing a Money Market Mutual Fund Liquidity Facility (MMLF)</li></ul>
<b>Market</b>				
Market Disruption and Business continuity	Regulatory relief	China	CSRC (securities regulator), PBOC (central bank), MoF, CBIRC (banking & insurance regulator), SAFE (FX regulator)  Stock exchanges	<ul style="list-style-type: none"><li>Feb 1, 2020, a joint notice by five ministries/commissions includes a regulatory relief clause (Clause 20). Stock Exchanges issued further guidance on the regulatory relief, including extension of release of annual report/performance reports; relaxation of requirements on board meetings</li></ul>
Market Disruption and Business continuity	Regulatory relief	Colombia	Colombian Financial Superintendence SFC	<p>On March 17, 2020 the SFC announced the following measures:</p> <ul style="list-style-type: none"><li>Credit measures (External Circular 007 of 2020) supervised entities will be able to establish new transitory conditions for their loans. Loans to benefit from this measure may not be, as at February 29th, 2020, delinquent for more than 30 days. Changes to the initial loan conditions may contemplate grace periods according to each entity's analysis, during which time the debtor's risk rating as at February 29th, 2020 shall be maintained, reason why the Entity will not require constituting additional provisions during this period.</li><li>Authorized use of the countercyclical and general provisions</li><li>Promoting the use of digital channels for the provision of services (External Circular 008 of 2020)</li></ul>



Risk type	Measure tool	Country	Policy body	Details of the response
Market Disruption and Business continuity	Regulatory relief	Malaysia	Security regulator	<ul style="list-style-type: none"><li>Extended deadlines on filing of reports and returns (CIS, Wholesale Funds, REITs, ETFS) and submission of documentation (post issuance structure finance reports, certification of tax for Islamic funds)</li><li>Extension of drawdown on bond issuance from 60 - 90 days from day of lodgment of securities documents with the SC</li><li>Costs alleviation on licensed market participants such as annual licensing fees &amp; training compliance of members</li><li>Waiver of listing fees for one year for firms with less than RM500 mill market capital</li></ul>
Market Disruption and Business continuity	Regulatory relief	India	SEBI (securities regulator)	<ul style="list-style-type: none"><li>Temporary relaxation of compliance requirements for Mutual Funds by extending deadlines by a month; i) extension of reporting (e.g. half year audited financials, disclosure of commissions) due dates ii) postponing implementation of certain policies (i.e. review of investment norms for unlisted bonds &amp; sector limits, risk-management framework on liquid assets)</li><li>Deferring penal provision for non-collection or short collection of margins by brokers by a month</li></ul>
Market Disruption and Business continuity	Regulatory relief	Peru	SBS	<ul style="list-style-type: none"><li>O.M. 10997-2020-SBS Modifications in credit contracts: Companies of the financial system can adjust the conditions in the credit contracts that do not obey to difficulties in the payment capacity.</li></ul>
Market Disruption and Business continuity	Regulatory relief	Peru	SBS	<ul style="list-style-type: none"><li>Through SBS Resolution No. 1260-2020, the SBS announced the extension of the term for the protest of securities for 30 additional calendar days that are held by companies' subject to the control of the SBS, provided that as of March 11 2020 have found a deadline to be protested. The extension extends to all Securities whose expiration of the original protest period is until April 30, 2020.</li><li>Through Multiple Official Letter No. 11160-2020-SBS, the SBS announced:<ul style="list-style-type: none"><li>- Suspend the reporting, specific requests or any other information requested by SBS regulations, with the exception of those expressly detailed in Annex 1, such as Statement of Financial Position, Income Statement, among others.</li></ul></li></ul>
Market Disruption and Business continuity	Regulatory relief	Turkey	Capital Market Board (Securities regulator) President	<ul style="list-style-type: none"><li>Postponement of financial reporting deadlines for mutual funds, investment funds etc.</li><li>Principal and interest payment of firms postponed by three months, additional financing to be considered</li><li>Withholding tax declaration deadline extended by 3 months</li></ul>



Risk type	Measure tool	Country	Policy body	Details of the response
Market Disruption and Business continuity	Regulatory relief	South Africa	NT	<ul style="list-style-type: none"> <li>March 16: temporary suspension of market maker obligations on the ETP</li> </ul>
Market Disruption and Business continuity	Regulatory relief	United States	SEC (Securities regulator)	<ul style="list-style-type: none"> <li>On March 4, 2020, SEC issued an order that, subject to certain conditions, provides publicly traded companies with an additional 45 days to file certain disclosure reports that would otherwise have been due between March 1 and April 30, 2020</li> <li>On March 22, 2020, SEC issued an order that, subject to certain conditions, provides registered transfer agents and certain other persons with exemptive relief for certain regulatory obligations under the federal securities laws through May 30, 2020.</li> </ul>
Market Disruption and Business continuity	Market monitoring and continuity - Digital channels	Colombia	SFC (securities regulator)	<ul style="list-style-type: none"> <li>On March 17, 2020 the SFC announced measures to promote the use of digital channels for the provision of services (External Circular 008 of 2020)</li> </ul>
Market Disruption and Business continuity	Market monitoring and continuity - Digital channels	China	CSRC (securities regulator),	<ul style="list-style-type: none"> <li>CSRC announced measures to promote the use of digital channels for the provision of services</li> </ul>
Market Disruption and Business continuity	Market monitoring and continuity	European Union	The European Securities and Markets Authority ESMA (Securities regulator)	<ul style="list-style-type: none"> <li>The European Securities and Markets Authority (ESMA) provides the following recommendations<sup>7</sup> <ul style="list-style-type: none"> <li>Business Continuity Planning – All financial market participants, including infrastructures should be ready to apply their contingency plans, including deployment of business continuity measures, to ensure operational continuity in line with regulatory obligations;</li> </ul> </li> </ul>
Market disruption/business continuity	Adjustment of market maker obligations in Govt Bonds markets	Mexico	CB (Banxico)/NT	<ul style="list-style-type: none"> <li>March 20, 2020: Amendments to the Market Makers Program, including implementation of swaps of government securities held by market-makers and purchase option of government securities for market-makers</li> </ul>
Market Disruption and Business continuity	Market monitoring and continuity	Peru	SBS	<p>SBS extends limit for electronic operations</p> <ul style="list-style-type: none"> <li>As part of the exceptional measures that have been taking place within the framework of the national state of emergency, the Superintendence of Banking, Insurance and AFP (SBS), through Resolution No. 1662-2020,</li> </ul>

<sup>7</sup> Source: ESMA website <https://www.esma.europa.eu/press-news/esma-news/esma-recommends-action-financial-market-participants-covid-19-impact>



Risk type	Measure tool	Country	Policy body	Details of the response
				<p>expanded the limits applicable to operations with money accounts simplified electronic, with the aim of helping people to carry out transactions, established in the Regulation of Operations with Electronic Money (SBS Resolution No. 6283-2013).</p> <ul style="list-style-type: none"><li>• Securities trading services like transfer of securities, the delivery and payment of dividends, subscriptions and redemptions of mutual fund will be maintained;</li><li>• In general, the services provided by the Lima Stock Exchange, CAVALI, Mutual Fund Management Companies, Fund Management Companies that manage mutual investment funds in securities and Stock Broker Companies, who will continue to work in a restricted and limited manner.</li></ul>
Market – Market Disruption and Business continuity	Market monitoring and continuity - Digital channels	South Korea	Financial Services Commission (securities regulator)	<ul style="list-style-type: none"><li>• The Financial Services Commission has been closely monitoring market developments amid the spread of COVID-19 and has been closely coordinating with other ministries to provide prompt financial support to various industries<sup>8</sup>. E.g.: Telecommuting for employees of financial companies</li></ul>
Market fluctuation	Restriction on short-selling: temporarily increased transparency	European Union	ESMA (securities regulator)	<ul style="list-style-type: none"><li>• ESMA has issued a decision temporarily requiring the holders of net short positions in shares traded on a European Union (EU) regulated market to notify the relevant national competent authority (NCA) if the position reaches or exceeds 0.1% of the issued share capital after the entry into force of the decision.</li></ul>
Market fluctuation	Restriction on short-selling: temporary prohibition	Italy France Belgium Greece Spain	Italian Commissione Nazionale per le Società e la Borsa (Consob) French Autorité des marchés financiers (AMF) Belgian Financial Services and	<ul style="list-style-type: none"><li>• ESMA also provided positive opinion on short-selling ban by securities regulators of a number of EU countries, including:<ul style="list-style-type: none"><li>• Italian Consob for a three-month emergency short selling prohibition<sup>9</sup></li><li>• French AMF<sup>10</sup>, Belgian FSMA, Greek HCMC, for a one-month emergency short selling prohibition<sup>11</sup></li></ul></li></ul>

<sup>8</sup> Source: FSC website [http://meng.fsc.go.kr/common/pdfjs/web/viewer.html?file=/upload/policy1/20200302101005\\_082fd48.pdf](http://meng.fsc.go.kr/common/pdfjs/web/viewer.html?file=/upload/policy1/20200302101005_082fd48.pdf)

<sup>9</sup> Source: <https://www.esma.europa.eu/press-news/esma-news/esma-issues-positive-opinion-short-selling-ban-italian-consob-1>

<sup>10</sup> Source: <https://www.esma.europa.eu/press-news/esma-news/esma-issues-positive-opinion-short-selling-ban-french-amf>

<sup>11</sup> Source: <https://www.esma.europa.eu/press-news/esma-news/esma-issues-positive-opinions-bans-net-short-positions-belgian-fsma-and-greek>



Risk type	Measure tool	Country	Policy body	Details of the response
			Markets Authority (FSMA) Greek Hellenic Capital Market Commission (HCMC)  (all securities regulators)	
Market fluctuation	Restriction on short-selling: temporary prohibition	Malaysia	Securities Commission Malaysia (securities regulator)	<ul style="list-style-type: none"><li>Temporary suspension of intraday short-selling and regulated short-selling</li></ul>
Market disclosure, financial reporting, and valuation	Impact on balance sheets reporting	Brazil	SEC (CVM)	<ul style="list-style-type: none"><li>Securities regulators have instructed listed companies to report the impact that the coronavirus outbreak is likely to have on their balance sheets.</li></ul>
Market disclosure, financial reporting, and valuation	Disclosure on material information	China	Shenzhen Stock Exchange, Shanghai Stock Exchange	<ul style="list-style-type: none"><li>Stock Exchanges requirement on disclosure of donation, material contracts, impacts, extraordinary fluctuation of share price</li></ul>
Market disclosure, financial reporting, and valuation	Market disclosure, financial reporting, and valuation	European Union	European Securities and Markets Authority (ESMA) (securities regulator)	<ul style="list-style-type: none"><li>European Securities and Markets Authority (ESMA) recommends:<ul style="list-style-type: none"><li>Market disclosure – issuers should disclose as soon as possible any relevant significant information concerning the impacts of COVID-19 on their fundamentals, prospects or financial situation in accordance with their transparency obligations under the Market Abuse Regulation;</li><li>Financial Reporting – issuers should provide transparency on the actual and potential impacts of COVID-19, to the extent possible based on both a qualitative and quantitative assessment on their business activities, financial situation and economic performance in their 2019 year-end financial report if these have not yet been finalised or otherwise in their interim financial reporting disclosures</li></ul></li></ul>



Risk type	Measure tool	Country	Policy body	Details of the response
				<ul style="list-style-type: none"> <li>• Fund Management – asset managers should continue to apply the requirements on risk management and react accordingly.</li> </ul>
<b>Credit</b>				
Public debt management/Government bond market	Issuance of new govt bond instruments	Mexico	NT	<ul style="list-style-type: none"> <li>• Adjusted local-currency bond auction program based on new market conditions.</li> <li>• NDF auction program has been upgraded from USD20 billion to USD30 billion. On March 9, the central bank auctioned USD2 billion.</li> </ul>
Public debt management/Go vernment bond market	Govt Liability Management Operations	Brazil	NT	<ul style="list-style-type: none"> <li>• Week of March 16: The National Treasury responded to pressures in the future interest market by announcing a program of repurchase auctions and sale of securities - simultaneous auctions (buying and selling) of public securities – R\$ 11 billion (buying) and R\$ 197 million (selling).</li> </ul>
Public debt management/Go vernment bond market	Govt Liability Management Operations	Mexico	NT (SHCP)	<ul style="list-style-type: none"> <li>• On March 13, 2020, SHCP carried out a government securities swap operation.</li> </ul>
Credit – Support to borrowers	SME finance	Japan	A government task force, with MoF and state-owned Japan Finance Corp.	<ul style="list-style-type: none"> <li>• The government is also to supply JPY1.6trn in financial measures, including a JPY500bn new loan program to SMEs through Japan Finance Corporations, in loans and credit guarantees<sup>12</sup></li> </ul>
Credit – Support to borrowers	SME finance/mortgage	Turkey	President	<ul style="list-style-type: none"> <li>• Support through Credit Guarantee Fund to SMEs doubled (from around USD4 billion to USD8)</li> <li>• Mortgage down payment ratio reduced from 20% to 10% for houses below a threshold</li> </ul>
Credit – Support to borrowers	SME finance	United Kingdom	Bank of England (central bank)	<ul style="list-style-type: none"> <li>• New Term Funding Scheme for SMEs (TFSME) with additional incentives for SMEs. <ul style="list-style-type: none"> <li>• Due pressures for the rate cut in financial institutions the Central Bank, over the next 12 months, offer four-year funding of at least 10% of participants' stock of real economy lending at interest rates at, or very close to, Bank Rate. Additional funding will be available for banks that increase lending, especially to small and medium-sized enterprises (SMEs). Institutions eligible to participate in the TFSME will be banks and building societies that are participants in the Bank of England's Sterling Monetary Framework (SMF) and that are signed up to access the</li> </ul> </li> </ul>

<sup>12</sup> Source: <https://www.japantimes.co.jp/news/2020/03/08/national/politics-diplomacy/shinzo-abe-zero-interest-loan-coronavirus-japan/#.XnuJcqhKhPZ>



Risk type	Measure tool	Country	Policy body	Details of the response
				<p>Discount Window Facility (DWF). The term of each transaction will be for 4 years from the date of drawdown. Eligible collateral will consist of all collateral currently eligible in the SMF: level A, B and C collateral sets (including loan pools). The Bank reserves the right to reject any collateral offered for any reason at any time.</p> <ul style="list-style-type: none"><li>• Lending measure: The quantity and price of funding available from the TFSME will be based on the quantity of sterling loans made by a Participant's TFSME Group to UK resident: households, PNFCs and NBCPs outside of the Participant's TFSME Group.</li><li>• The Bank will charge interest on TFSME transactions equal to Bank Rate plus a Scheme fee (TFSME Fee).</li></ul>
Credit – Support to borrowers	Central bank support to borrowers/SME finance	United States	Federal Reserve (central bank), Treasury	<ul style="list-style-type: none"><li>• March 23, 2020 – Fed announced the following actions:<ul style="list-style-type: none"><li>• Supporting the flow of credit to employers, consumers, and businesses by establishing new programs that, taken together, will provide up to \$300 billion in new financing. The Department of the Treasury, using the Exchange Stabilization Fund (ESF), will provide \$30 billion in equity to these facilities.</li><li>• Establishment of two facilities to support credit to large employers – the Primary Market Corporate Credit Facility (PMCCF) for new bond and loan issuance and the Secondary Market Corporate Credit Facility (SMCCF) to provide liquidity for outstanding corporate bonds.</li><li>• Establishment of a third facility, the Term Asset-Backed Securities Loan Facility (TALF), to support the flow of credit to consumers and businesses. The TALF will enable the issuance of asset-backed securities (ABS) backed by student loans, auto loans, credit card loans, loans guaranteed by the Small Business Administration (SBA), and certain other assets.</li><li>• Facilitating the flow of credit to municipalities by expanding the Money Market Mutual Fund Liquidity Facility (MMLF) to include a wider range of securities, including municipal variable rate demand notes (VRDNs) and bank certificates of deposit.</li><li>• Facilitating the flow of credit to municipalities by expanding the Commercial Paper Funding Facility (CPFF) to include high-quality, tax-exempt commercial paper as eligible securities. In addition, the pricing of the facility has been reduced.</li></ul></li></ul>



Risk type	Measure tool	Country	Policy body	Details of the response
				<ul style="list-style-type: none"><li>March 25, 2020 - Congress readied to pass an estimated \$2 trillion stimulus package aimed at combating the economic consequences of the COVID-19 including loans to support SMEs and other corporates<sup>13</sup>.<ul style="list-style-type: none"><li>The Senate is also poised to approve \$350 billion in loans to small businesses in an effort to keep Americans on payrolls as economic activity across the country comes to a standstill. A major challenge in the negotiations was roughly \$500 billion in corporate aid, much of which will go toward backstopping Federal Reserve loans.</li></ul></li></ul>
Credit quality, insolvency & restructuring	Insolvency regime	European Union countries (Germany and Spain)	Germany Justice Ministry Spanish Cabinet.	<ul style="list-style-type: none"><li>On March 16 2020, the German Government announced a suspension on the duty to file for bankruptcy for companies affected by the coronavirus</li><li>On March 17 2020, the Spanish Government implemented a reform in the same direction (see articles 40.11, 40.12 and 43 of the Royal Decree 8/2020 of 17 March 2020)<sup>14</sup><sup>15</sup> Temporary Employment Regulation File (ERTE) :The Government set a temporary employment regulation which enables companies and SMEs to make suspensions within employment contracts or reduce their working hours due to force majeure, and this can be applied to partial areas of the workplace or its entirety. There is no limit regarding the duration of this regulation, as it is dependent on the amount of time that this force majeure influences business activities.</li></ul>

<sup>13</sup> Source: <https://www.wsj.com/articles/trump-administration-senate-democrats-said-to-reach-stimulus-bill-deal-11585113371>

<sup>14</sup> Source: <https://www.law.ox.ac.uk/business-law-blog/blog/2020/03/directors-duties-financially-distressed-companies-time-covid-19>

<sup>15</sup> Original source: <https://www.boe.es/boe/dias/2020/03/18/pdfs/BOE-A-2020-3824.pdf>