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Payment and Settlement Systems – COVID Response Note[1]

Payment and Settlement Systems form the basis for the processing of digital payments, remittances, Government payments, securities and money market transactions in most economies. They serve both systemically important functions, such as large value inter-bank payments and capital market transactions and the billions of everyday consumer transactions that power commerce. The COVID-19 pandemic may place a unique strain on payment and settlement systems both because of the operational risk that the health aspects of the crisis pose and financial risks that arise from the impact on the financial health of the financial sector. Potential policy responses: include classifying critical payment services as "essential services" and allowed to function – these include Government to Person payments and remittances; encourage shift to digital payments; ensure adequacy of business continuity plans of critical payment systems and payment service providers; and stand available to support the liquidity needs of payment service providers. The choice of policy responses will vary depending on which aspect of a country's payment systems and market infrastructure is in danger and will include legal and regulatory reform and enhanced operational resilience.

Introduction

Although the effects of COVID-19 on payments remain to be seen, some critical aspects of the underlying systems and services are clearly at risk.[2] Lessons learned from the Ebola crisis and previous humanitarian and financial crises suggest that COVID-19 could materially impact payment and settlement systems as well as payment services that are extensively used by individuals, businesses and governments. This note explores these potential impacts and the possible policy responses to mitigate them. It focuses on:

1) Impacts on the availability and smooth provision of cash and non-cash payment services used by individuals, firms and governments;
2) Impacts on Payment and Settlement Systems: operational disruptions and credit and/or liquidity events;
3) Possible policy responses to counter these impacts.

1. Payment services offered to individuals, firms and governments

Payment services may be impaired directly by COVID-19 and indirectly by its impact on the availability of payment systems. The direct impact on payment services are on those that require some form of manual intervention and/or physical presence/interaction, including cash. In contrast, payment services that are mainly or totally digital may experience little or no impact and may even see increased usage, however even these could be indirectly impacted through any operational impact on the underlying payment and settlement systems.

<u>Potential COVID-19 impacts on cash services</u>

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[2] In essence, a "payment system" is the mechanism through which transactions are settled between banks, payment service providers (PSPs) and other financial entities, including funds transfers from their respective accountholders. "Payment services" refers to the tools, instruments and means that banks and other PSPs provide to their customers so that the latter may access their funds (i.e. withdraw cash, pay at merchant locations, transfer funds, etc.).

- Cash distribution and access are likely to experience the largest negative disruptions.[3] As cash is still a vital component of the national payment system of most emerging and developing economies (EMDEs), individuals relying on it, including many beneficiaries of social protection programs and recipients of remittances, could be heavily impacted.

    - While, so far, these operational risks have not yet materialized in a big way and bank branches, ATMs and agents remain open and accessible in most countries.[4] However hampered cash availability can be expected due to the closure of agents[5] whose primary business is classified as "non-essential" or due to localized idiosyncratic behavior of law enforcement agencies. Notably, the physical premises of many small remittance agents that operate mainly on a cash basis (e.g., exchange bureaus) are already being shut down in some sending countries like Malaysia, France, Italy, and Spain; and also, in receiving countries like India.

Potential COVID-19 impacts on digital payment services

- Impact on digital (non-cash) payment services will depend on the extent to which each service involves manual intervention. Effects on the society and economy as whole will also depend on the actual degree of adoption of each non-cash payment service by the population, which nevertheless is likely to vary by region, urban vs. rural, etc.

    - As cheques often involve physical interaction, it is possible that usage will experience an additional downturn.

    - Payments with credit cards, debit cards and prepaid cards *at the physical point-of-sale* very often require a physical intervention (e.g., a clerk introducing the card in the card-accepting device, physically keying a PIN on the device), and therefore may be seen as prone to COVID-19 contagion. Most EMDEs have not developed contactless acceptance devices.

    - This subset of card payments may get a boost from COVID-19. Preliminary data from India, and the United States provide some evidence that e-commerce payments are indeed growing in this juncture. However, this refers to e-commerce payments made via the Internet, mobile banking or apps, but not to other forms e-commerce payments like "cash on delivery" or paying the transaction in cash at agents.[6]

    - Mobile money would also be a convenient way to make and receive payments remotely or without physical contact. However, in many countries, mobile money payments still need to be assisted by the agent or physical merchant. This would raise the same concerns as noted above for card payments at the physical point of sale. Further, mobile money users will face challenges in loading and withdrawing money if many agents are not available.

    - It should also be noted that cybersecurity risks (e.g., cyber fraud) could be heightened due to increased use of online and other digital payments, including by first-time users, and the potential relaxation of some risk management measures in the context of the contingency.

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[3] This section focuses on access to cash by individuals through branches, ATMs, agents, etc.
[4] Nevertheless, in some countries physical branches are being closed down (e.g. the Philippines, Jordan, United States).
[5] In many EMDEs, agents are, due to their proximity and other features, the preferred option for accessing cash by many citizens. Agents include mobile money agents, agents servicing government cash transfers programs, agents providing cashback services to cardholders, etc. Large retailer chains as well as small family shops can act as agents.
[6] The latter forms of payment are very often used by individual that do not have a credit card or a transaction account, or whose account does not allow them to make e-commerce payments digitally.

2. Payment and settlement systems

Systemically Important Payment Systems (SIPS) and other Financial Market Infrastructures (FMIs), as well as Retail Payment Systems (RPS), could all be impacted by COVID-19.[7] There could, however, be some differences in the scope and scale of the impact, based on the degree to which the systems interact with households, and micro, small and medium enterprises (MSMEs). The most likely disruptions stem from the materialization of operational risk and of financial risks.

<u>*Potential impact of COVID-19: Operational disruptions*</u>

- Operational disruptions can cause the unavailability or limited availability of a SIPS, which can have impacts on broader financial stability. For example, money market participants would not be able to settle transactions, and as a result liquidity cannot be re-distributed in the banking system. Moreover, other FMIs and RPS that periodically settle the inter-participant balances in a SIPS could be impeded to execute this critical step. In the case of an RPS, its unavailability would impair some of the *payment services* that are used by individuals, firms and governments. For example, the inability to transfer funds could negatively impact commerce and industry, or hampered access to cash could directly affect individuals that rely on remittances as a source of income. Likewise, governments could be impeded to effect critical social cash transfers in a timely manner.

    - It is possible that due to illness, social distancing or government-mandated restrictions on movement, there will be insufficient staff to carry out normal operations of all the components of a system. "home based work" arrangements may not fully mitigate this (e.g., difficult to make critical decisions if system operations cannot be monitored and analyzed effectively working remotely). Moreover, even if a specific payment system does not have staff shortages, its normal operations could still become affected if an interdependent FMI and/or a critical provider (e.g., telecom network operator) is experiencing such a situation.

<u>*Potential impact of COVID-19: Credit and/or liquidity events*</u>

- Materialization of financial risks (i.e., credit and/or liquidity risks) can have systemic effects, especially in SIPS and other FMIs. For example, a default of one participant in a SIPS could result in other participants confronting unexpected losses or liquidity shortages, potentially causing more defaults in the payment systems and the financial system more broadly due to a "domino effect."

    - With COVID-19, credit or liquidity events could occur due to for example financial markets stress, leading to the drying-up of money markets. Likewise, panic sales of assets could lead to a significant reduction in the value of the collateral pledged by participants. This could lead to mandatory provision of additional collateral, which also affects the liquidity of participants.[8]

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[7] FMIs are critically important systems that provide clearing, settlement and recording of monetary and other financial transactions typically initiated by financial institutions. SIPs are a type of FMIs, and in practice are represented mainly by Real-time Gross Settlement (RTGS) systems which are the backbone of a country's financial infrastructure. In RPS, transactions are typically initiated by the customers of banks or other PSPs, and include payment card systems, fast payment systems, automated clearing houses for electronic funds transfers (sometimes including mobile money transfers) and cheque clearing houses for the purposes of processing retail payments.

[8] Post the 2008 global financial crisis international standards for payment and settlement systems have been significantly strengthened, larger EMDEs have adopted these standards but gaps remain in many middle and low-income countries.

- Credit or liquidity risk events can also manifest in the form of volatility in financial markets including foreign exchange markets which will have a direct link with pricing of remittances and other cross-border payments as participants try to cover their exchange rate risks.[9]

3. *Possible policy responses*

This section describes policy measures and actions that could be implemented by financial authorities – often in coordination with private sector stakeholders – to face and counter the expected impacts of COVID-19 on payment systems and payment services. Annex 1 "Policy measures to ensure operational continuity of SIPS, other FMIs and critical RPS" provide additional details on actions that financial authorities in coordination with payments infrastructures' operators may implement to ensure the continuous functioning of critical payments infrastructure and Annex 2 "Compendium of responses for the provision of payment services during the COVID-19 crisis"" provides a real-time review of policy responses and actions related to the provision of payment services during the COVID-19 crisis[10].

Avoiding operational disruptions of critical payment systems

- Ensure that business continuity plans (BCPs) guarantee the operational continuity of all the critical elements of a system (i.e., hardware, software, network, participant interfaces, transaction monitoring, physical and logical security, etc.). Also, coordinate with other authorities and with critical service providers to secure the provision of network, electricity and other relevant services.

- Ensure that operating a payment system in contingency mode does not exacerbate cyber risks (e.g., if needed, introduce additional/more robust controls for remote access and IT security briefings).

- Prepare to support to payment systems operated by the private sector by sharing technological and human resources (e.g., putting in place collaborative spaces and facilities).

- Ensure the efficacy of crisis decision-making and internal and external communication protocols of critical payment systems, including for potential scenarios under COVID-19 (e.g., countering fake news that are being spread through social media).

Avoiding or mitigating credit or liquidity events in payment systems

- Re-assess risk management tools for credit and liquidity risks (e.g., collateral arrangements, limits, participant default arrangements, etc.) of payment systems to ensure they are robust.

- In line with the overall monetary policy and fiscal policy measures, assess or re-asses the specific needs of critical payment system participants regarding access to sources of liquidity.

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[9] Interviews with market participants indicate thus far the participants are absorbing the exchange rate risks and some countries like Mexico have stepped into to stabilize the foreign exchange markets. The G7 central banks have established swap arrangements to ensure adequate liquidity in their respective currencies, this arrangement has been extended to a few non-G7 OECD countries. During the 2008 financial crisis larger EMDEs also entered into swap arrangements with the US Federal Reserve.

[10] An updated version of Annex 2 is available at: http://pubdocs.worldbank.org/en/914541592327985320/Annex-II-Compendium-of-responses-for-the-provision-of-payment-services-during-the-COVID-19-crisis.pdf

- Just as with operational risks, ensure the availability and efficacy of crisis decision-making and internal and external communication protocols.

Mitigating negative impacts on cash services

- Discuss with sanitary and other relevant authorities' options for keeping in operation at least some of the agent locations whose main line of business is deemed "non-essential" and which otherwise could be required to shut down during the contingency.

- Provide real-time data to the general public on the location of branches, ATMs and agents, together with information on whether they continue to provide cash withdrawal/cash-out services.

- Recommend, or, if necessary, mandate a temporary reduction of fees for accessing cash at ATMs or through agents – including for "off-us" cash withdrawals at ATMs.[11]

- Temporarily increase cash withdrawal limits that may apply to certain transaction accounts or payment products, especially those that are used by population more vulnerable to COVID-19.

- Put in place an effective communication strategy and campaign to inform about all these matters. Among other key features, the communication strategy should aim at countering fake news that may lead to panic or irrational behavior from the population.

Mitigating negative impacts on non-cash payment services

- Identify non-cash payment services that are critical under the current juncture, and work with them to ensure that they remain fully functional. Also, ensure that transaction processing systems (i.e., switches, transaction authorization mechanisms and payment clearing and settlement systems) have sufficient capacity to support a surge in the usage of some digital payment services.

- Recommend, or, if necessary, mandate a temporary reduction of customer fees on critical payment services as a way of supporting users and the smooth functioning of the economy.

- Consider temporarily increasing transaction and balance limits, especially for those accounts/payment products that are used by population more vulnerable to COVID-19.[12] Importantly, make sure that the new limits do not create AML/CFT concerns.

- For mobile money payment services, support users by engaging with mobile network operators to implement a temporary elimination of data charges specific to mobile money transactions.

- Consider requiring all businesses offering essential services – pharmacies, hospitals, grocery shops- to accept digital payments irrespective of the purchase amount and without customer surcharge.

- Promote immediate enrollment of new merchants that will be accepting digital payments.

[11] "Off-us" withdrawals refer to withdrawals that are made at an ATM belonging to an entity different from the one that issued the card that is being used in the transaction.
[12] In most cases these limits apply to accounts opened through simplified customer due diligence (CDD) procedures.

- Put in place an effective communication strategy and campaign to inform about all the policy actions taken for non-cash payment services and other related matters.

Annex I: Detailed policy measures to ensure operational continuity of SIPS, other FMIs and critical RPS

- In addition to SIPS and other FMIs, financial authorities must identify critical RPS that need to continue operating normally. The criteria to do so should be based on the relevance of the services and access points they provide to the public and vulnerable groups, as well as in interdependencies between FMIs and RPS.

- Financial authorities should evaluate if the regular operation of SIPS and critical FMIs and RPS can be carried out under current circumstances, as well as identify the appropriate time and triggers to migrate to business continuity arrangements.

- Financial authorities and relevant stakeholders must reassess the risk management frameworks for SIPS and other FMIs and RPS, and review if business continuity plans need to be updated to operate under current conditions and that recovery plans will suffice to avoid an eventual winding up of these systems.

    - Financial authorities and relevant stakeholders should review that critical technological, operational and human resources remain available. Particularly, for contingency planning, financial authorities and relevant stakeholders should consider different stages and a reasonable time horizon for each stage. For example, authorities could use a three-stage approach that includes a quick recovery scenario (1 month), and extended scenario (3 months) and a prolonged (end of 2020).

    - Financial authorities should also plan on reviewing business continuity planning of the infrastructure's participants, prioritizing the review of those participants that could be deemed as critical for the adequate functioning of the infrastructure.

    - Authorities should put in place timely measures to protect key human resources from exposure to COVID-19, as well as coordinating with other authorities and service providers to secure the provision of network, electricity and other relevant ancillary services.

    - Review of business continuity plans should include providing a 'Safe environment' to operational staff, which may include ensuring that the technological infrastructure is sanitized, and that staff remains in locations that are free of exposure to COVID-19. For example, some central banks that have moved to contingency mechanisms are dividing response staff into groups and minimizing physical contact between different groups.

    - Stress testing methodologies to measure financial risks must be reviewed to evaluate if current scenarios capture present and expected financial distress, and that current financial arrangements suffice to cover participants' potential default, as well as identify options to alleviate any shortage of resources that would keep a critical FMI to continue operations and services as a going concern.

- Financial authorities must ensure that the critical infrastructures' IT and Cyber security functions remain operative during the contingency.

    - Information security and network communication technology should be considered as critical services, and

    - Exercising cyber-hygiene to critical staff:
        - Particular consideration to the fact that a high number of employees are working from home and might become targets for hackers to invade home networks. Additional controls for remote access and IT security briefings could be introduced.

- Authorities must be prepared to provide contingency support to critical FMIs and RPS.

    - When business continuity and recovery plans are not in place, authorities could assist critical FMIs and RPS to fast-track their development.

    - Financial authorities should evaluate sharing technological and human resources with critical FMIs and RPS, which may include putting in place collaborative spaces and facilities in order to maximize scarce resources.

    - Financial authorities' personnel must be prepared to operate critical FMIs and RPS.

    - Authorities must explore mechanisms to handle materialization of general business risk, which could result in inability of the FMI or RPS to continue with its normal functioning.

    - Validate effectiveness of cyber security crisis response mechanisms and where it does not exist establish one.

    - Lastly, authorities in line with the overall monetary policy and fiscal policy measures evaluate the specific needs of critical payment service providers in terms of access to sources of liquidity and financial assets.

- Crisis decision-making and communication protocols are essential under current circumstances and authorities should ensure their availability and efficacy.

    - Financial authorities should test their crisis decision-making and communication channels with regards to FMIs, both with their FMIs and with other authorities (at the national and international level) and the public, including for potential scenarios under OVID-19 (e.g., countering fake news that are being spread through social media). In case these protocols do not already exist, financial authorities should establish them with high priority.

    - Governance arrangements, including the crisis decision-making and communication protocols of SIPS and other FMIs and RPS, must be reviewed in order to guarantee that timely decision-making can be carried out.