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## Innovation in Payments: Opportunities and Challenges for EMDEs (Payments Note)

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**The global economy is undergoing a rapid digital transformation that is changing many conventional notions about our behavior and preferences.** This includes the way in which we—as consumers, as businesses, or in interactions with government—seek out goods and services and pay for them or how we receive money from others or transfer it to family or friends. As the payments industry undergoes radical changes due to digital transformation, users, providers of payment services, and regulators are adapting to the new dynamics at varying paces.

**This note discusses the most significant innovations in payments and their key impacts and implications on users, banks and other payment service providers, regulators, and the overall structure of the payments market.** The note places special emphasis on how Emerging Markets and Developing Economies (EMDEs) can reap the benefits of payment innovations in terms of costs, convenience, accessibility, and inclusion for individuals and firms, and allow them to leapfrog development of their payments markets and effectively support economic activity.

**Payments are probably the financial activity most affected by innovation, undergoing radical changes from various perspectives.** This transformation has been prompted by the adoption of new technologies and business models, by the emergence of new market players, and by changes in the structure of the market. This is having a profound impact beyond the realm of payments and is also affecting the real economy. Changes are significant.

- Payments have become a standalone product, no longer just a supporting function typically offered only by banks as part of a bundle of services and with comfortable profit margins. In other words, payments have become a separate, identifiable service offered by a growing number of providers, including non-banks, exercising downward pressure on fees and margins and upward demand for quality.
- The consumer experience has been transformed as long-standing barriers or deterrents to the use of digital payments are gradually being overcome, helping meet new demands from payers and payees for increased speed and convenience and lower prices.
- In some cases, as with ride-hailing or meal-ordering apps or “one-click” online ordering, the purchase experience has been totally transformed by making the actual payment process “invisible” from the customer’s perspective.
- Payments are increasingly becoming a source and provider of data that is critical for differentiation against competitors and for the provision of other products and services, including—but not limited to—those offered by financial sector entities.
- Innovation in payments has enabled and shaped major developments in the real economy, like the surge of e-commerce—including transactional online services offered by governments—and, in turn, new platform models that have placed additional demands on payment services.

**Competition in payments has increased and is only intensifying, but may paradoxically lead to renewed concentration and an oligopolistic equilibrium.** In essence, payments may evolve once again into a concentrated market served by a relatively limited number of providers. Unlike in the past, these providers could be technology giants and/or large telecommunication firms, rather than banking institutions. The consequences and challenges of this potential outcome are not fully understood.

**While innovation in the area of retail payments has been prolific, it has not fully transmitted to specific payment streams like international remittances and other forms of cross-border payments, some types of government payments, and business-to-business (B2B) payments.**<sup>69</sup> For example, the Committee on Payments and Market Infrastructures (CPMI) reports that cross-border payments lag behind domestic payments in terms of cost, speed, access, and transparency.<sup>70</sup> In the area of government payments, many EMDEs have a long way to go in digitizing their payments and collections effectively, largely due to coordination challenges and other elements that slow down the general use of payment innovations. Here, however, the COVID crisis has accelerated digitalization efforts, for example to facilitate transfer of relief funds while trying to ensure social distancing. Regarding B2B payments, this market segment has certain unique requirements like linkage to invoicing processes and taxation, and payments tend to be for larger amounts. To date, these unique requirements have not been fully met.

**Innovations in payments and their consequences on service providers and the overall payments market are also proving to be a unique challenge for central banks in their various statutory roles in payments.**<sup>71</sup> The regulatory and oversight roles of central banks are already being challenged by the changes in the structure of the payments market resulting from innovations. Furthermore, innovations may even disrupt the traditional divide between central bank money and commercial bank money, and therefore impact all aspects of the central bank's mission, beyond its mandate on payments, including monetary policy and financial stability. Central banks have no choice but to introduce changes in their own work processes and procedures, build new capacities and, more generally, rethink their approach to money. Their role is not diminished by innovation in payments; it is, on the contrary, made even more critical.

**EMDEs can greatly benefit from many of these innovations but will need to carefully consider their multiple facets and implications and develop policies and institutional capacities accordingly.** EMDEs should continue to create an enabling environment for innovation in their financial sector, fostering new products and providers while managing risks and protecting consumers. At the same time, they should not write off proven strategies and methods to accomplish important objectives like financial inclusion and stability. In any case, central banks and other regulators should be duly equipped and prepared to support their country's public and private sector actors so that they can maximize gains from the new reality.

*Innovation in payments can be characterized on three levels, how it materializes, its structural impact, and how the central bank, as payments authority, needs to adapt. The main pillars of innovation in payments include: i) changes to the way payment services are linked to an account; ii) changes to the systems that process payment transactions; and, iii) changes in the way consumers interact with payments and the business model of payment service providers. Thanks to innovations like mobile wallets or super apps—combined with fast payments, APIs, and other technologies—customers now find it more convenient and less costly to make and receive digital payments, while enjoying a smoother user experience. At the same time, innovations are also redefining business models for payments, which in turn is having far-reaching consequences for the very structure of the payments market.*

*The most conspicuous effects of innovation on the structure of the market have been its impact on competition by opening up the payments market to non-banks, by putting downward pressure on payment service fees, and by making real-time payments the new normal. While new entrants challenge incumbents,*

69. There have been also some relevant developments in large-value payments, which have been less visible for non-payments specialists and the general population. These include the adoption of ISO 20022 message standards, cloud-based hosting of the solutions and expanding access to large-value payment systems to participants other than banks.

70. CPMI (2020).

71. These include being operators of payment systems, supervisors of payment services providers, catalysts for change, and overseers of the National Payments System (NPS), which encompasses payment systems, payment services, and payment instruments.

*innovation could end up having a paradoxical, centralizing effect and a tendency to increase concentration, with the major transformation being the shift of dominant market positions from incumbents to big techs. In addition to banks, other payments ecosystem players are deeply impacted by the ongoing changes, and it is especially the case for international and domestic payment card networks and ACH service providers. Government agencies are also significantly affected by the wave of innovation in payments: for interactions with citizens through the provision of government services and programs that involve making payments.*

***Innovation in payments challenges central banks in their typical roles vis-à-vis payments; that is, as operators, overseers, regulators, and catalysts for change.*** They also need to move beyond their typical mandates on payments as innovations continue to redefine money. The combination of traditional and new risks and causes for potential market failures calls for central banks to reassess and renew, not just policies, but also their internal organization, activities and tools, and heighten their level of collaboration and cooperation with authorities and stakeholders.

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