Rocio Sanchez-Moyano interviewed Mayada El-Zoghbi, the managing director of the Center for Financial Inclusion, to add a global dimension to inclusive financial systems and the role of digital financial services. Developing countries were the pioneers of microfinance—an innovative, early form of inclusive finance. However, the digitization of the financial system has shifted innovation to developed countries, such as the United States and the United Kingdom, where regulatory and supervisory capacity is more advanced and innovation ecosystems, including technology firms and venture capital funding, are vastly more robust. Emerging countries, such as China, have also been hotbeds of innovation with digital transformation of the financial system. This article provides readers an update on the main trends driving inclusive finance in developing countries and draws parallels between these countries and the United States.

Rocio:
How has financial inclusion changed in the global context in recent years?

Mayada:
The early wave of focus on inclusive financial systems in developing countries focused predominantly on microfinance as a tool for catalyzing access to finance and alleviating poverty. Microfinance was revolutionary at that time because it allowed low-income people to use their social capital, rather than collateral, to qualify for credit. In over 30 years, approximately 140 million people globally were served by microfinance institutions (MFIs). Notably, even in the United States, many community development finance organizations emerged in the ‘90s, modeled after their developing country counterparts, including providers such as Accion, Opportunity International, Grameen, among others.
In the last fifteen years, advances in financial systems have been intricately linked to the technological revolution. Additionally, data-driven solutions have unleashed new business models and product innovations that no longer require physical branches and high staff costs. These tech-driven models, often called digital financial services (DFS), have gained prominence for their potential to accelerate and broaden access and usage by more people in a faster, cheaper, and simpler manner. In the United States, DFS is often referred to as “fintech” broadly as encompassing both new technologies and new entrants to the financial system over the last decade.

**Rocio:**
What are Digital Financial Services (DFS)?

**Mayada:**
According to the World Bank, DFS are “financial services which rely on digital technologies for their delivery and use by consumers.” These services, such as payments, remittances, and credit, are delivered digitally by a variety of service providers, including fintechs, big techs, mobile network operators, banks, microfinance institutions, or others using technology to provide services. Moreover, DFS encompass established instruments, like debit and credit cards offered primarily by banks, as well as new solutions built on cloud computing, digital platforms, and distributed ledger technologies (DLT), spanning mobile payments, crypto-assets, and peer-to-peer (P2P) applications. Thus, DFS have a wide range of applications and include fintechs, such as Ripple, Stripe, Coinbase Square, Propel in the United States, and Akiba in Latin America to M-PESA, the world’s largest mobile money provider in Kenya and other Sub-Saharan African countries. Mobile money plays an outsized role in the developing world and has enabled government-to-person (G2P) transfers to low-income, vulnerable households in the wake of the global pandemic. The 2021 edition of GSMA’s State of the Industry Report estimates that in 2020, 1.21 billion mobile money accounts were registered globally, and 300 million accounts were active and used for merchant payments and international remittances.

**Rocio:**
How do DFS promote financial inclusion?

**Mayada:**
DFS present an even more compelling opportunity to reach excluded groups than microfinance for several reasons. The first, and probably most important, is the significant reduction in transaction

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costs for low-income people and providers. These lower-cost-transaction business models require scale to become profitable, thus incentivizing providers to reach more people with the service. In developing countries, where the banking sectors have traditionally served high-income customers and corporates, DFS have presented opportunities for financial services to reach mass markets and cater to low-income consumers and Micro, Small and Medium Enterprises (MSMEs) that constitute the majority of customers in developing countries.

DFS have many other potential benefits, including the speed of service delivery, shifting loan approval from weeks or days to seconds, increased transparency and security, as the transactions produce a data trail, enabling providers to offer tailored solutions to customers.

The shift to DFS from traditional financial services models has been most pronounced in Sub-Saharan Africa, where, in many countries, such as Kenya, Uganda, Namibia, and Gabon, more than 40 percent of adults had a mobile money account by 2017. Notably, in many Asian countries, where account ownership was higher than in Africa and where state banks dominate the financial system, e-commerce platforms drive fast adoption of DFS, most notably in countries like China and Indonesia.

Rocio:
Have DFS been successful in narrowing gaps between demographic groups?

Mayada:
Despite impressive strides in advancing financial inclusion, 1.7 billion people remain without formal financial services. Of these, 56 percent are women, representing the largest shortfall in DFS in developing countries to date. This gender gap has been persistent since 2011, when Findex first began measurement, at seven percentage points globally and nine percentage points in developing countries.

Some countries have seen impressive progress, including Indonesia, where financial access for women (51 percent) surpasses men (46 percent). India successfully narrowed the gender gap by 14 percentage points (from 20 to 6 percentage points) between 2014 and 2017 through its universal financial inclusion program called the Pradhan Mantri Jan Dhan Yojana. However, despite the remarkable progress, account usage by women in India continues to be nearly half of what other markets have achieved.

7 Ibid.
8 Ibid.
9 https://pmjdy.gov.in/
Mobile money has helped advance women’s financial inclusion in several Sub-Saharan African countries, such as Cameroon, Gabon, Kenya, Liberia, Mali, Mozambique, and Zimbabwe. However, a closer look at the 2017 Findex suggests that mobile money has also contributed to widening the gap in other countries. In both Bangladesh and Pakistan, the growing gender gap in financial access (29 and 28 percentage points, respectively)\(^\text{11}\) has adversely impacted the overall levels of financial inclusion in these countries (see Figure 1).

![Figure 1](https://www.cgap.org/blog/measuring-womens-financial-inclusion-2017-findex-story)


These variations call for a deeper understanding of the barriers that prevent women, or any specific underserved segment, from being financially included. To begin with, men and women are not at the same starting line on this trajectory. According to the GSMA 2020 Mobile Gender Gap report, women in low- and middle-income countries are 8 percent less likely than men to own a phone and 20 percent less likely to use mobile Internet. Consequently, in low- and middle-income countries, 300 million fewer women are accessing mobile Internet than men.\(^\text{12}\) The primary barrier to mobile ownership and Internet access in Africa and Latin America is affordability, followed by low digital literacy levels for both men and women. GSMA’s latest data show that literacy and skills are the top barriers over affordability in Asia.\(^\text{13}\) While these barriers apply to both men and women, they threaten to exacerbate the inequalities women already experience. Additionally, e-commerce platforms,

\(^\text{11}\) Ibid.
\(^\text{13}\) Ibid.
like Jumia, which offer a suite of services to participating merchants, have requirements for legal registration and bank accounts that women-owned informal MSMEs often lack. Other barriers impeding women’s access to financial services include gender-blind policies that unintentionally favor men, apathy and harassment by male employees and agents, complex documentation requirements by providers, and reliance on male relatives for signatures. Lower workforce participation levels, restrictions on asset ownership due to unequal inheritance laws, and unfamiliarity with English-language menus in apps also deter women from availing formal financial services.

Rocio:
What about in the United States? Can DFS advance financial inclusion?

Mayada:
While women represent the largest underserved segment in developing countries, they are not the most marginalized in developed markets. Notably, the gender gap in developed countries is negligible, at only 1.2 percent in OECD countries. In these advanced markets, financial exclusion is most visible among non-white populations, and the sources of exclusion tend to have a racial and prejudicial basis.

Research from the Boston Consulting Group (BCG) suggests that although Black and Latinx households make up a mere 32 percent of the U.S. population, they are overrepresented among the underbanked and unbanked. Evidence shows that these populations tend to rely on expensive alternatives, such as check cashers and payday lenders, to meet their financial needs. In addition to limited and volatile incomes, rising distrust of banks and other structural barriers to opening accounts, such as “bank deserts” in non-white neighborhoods and complex paperwork with technical jargon, deter income- and language-constrained communities from engaging with banks.

Because DFS do not rely on traditional banking infrastructure, some of the physical barriers that may have limited non-white segments from accessing financial services can be sidestepped. In fact, there is some emerging evidence that DFS are reaching people of color disproportionately. A study by Nielsen showed that Black customers were avid consumers of DFS and were 22 percent more likely to use DFS than the U.S. population average. DFS can help bridge structural barriers, fill existing gaps, and advance financial inclusion.

15 CGAP, “Measuring Women’s Financial Inclusion.”
19 Ibid.
product gaps, and significantly improve accessibility.\(^{21}\) However, despite the promising potential of DFS, most digital innovations utilize artificial intelligence and machine learning for decision-making. To develop the models, DFS providers rely on existing data sets and develop algorithms that predict eligibility. Because existing data trails are often reflective of historical discrimination, there are growing concerns that algorithms built on biased data that do not consider the history of oppression and discrimination within the United States will further exacerbate gaps in financial inclusion.

**Rocio:**

What is necessary to promote DFS?

**Mayada:**

The deployment of DFS varies considerably from traditional financial services. In addition to new regulations, it also requires collaboration across a broader set of government actors, most notably telecoms and financial-sector regulators. Many of the innovations at the heart of DFS would not have been possible without policy and regulatory reforms that have created environments where such innovations can thrive. While regulation continues to lag behind innovation, policymakers in developing countries must be commended for increasingly pursuing “test and learn” approaches that have shortened this lag. This test-and-learn approach builds on experiences in developed markets where regulators have been at the forefront of innovation.

The Consultative Group to Assist the Poor (CGAP) has identified four necessary regulatory enablers to support the growth of DFS in developing countries.\(^ {22}\) The regulatory enablers are non-bank E-Money Issuers who are not subject to the full range of prudential rules applicable to commercial banks; third-party agents, such as retail shops, for last-mile service delivery at a low cost; proportionate anti-money-laundering frameworks and simplified customer due diligence for lower-risk accounts and transactions such as opening and using e-money accounts and conducting over-the-counter transactions with DFS providers; and most important, sound consumer protection rules (such as transparency, privacy, data protection, and platform reliability) to help build a sustainable, inclusive market over the long term.\(^ {23}\)

In addition to the regulatory enablers listed above, an enabling environment for an inclusive DFS ecosystem requires active participation from financial service authorities, central banks, telecommunications authorities, competition authorities, consumer protection authorities, and

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\(^{21}\) BCG, “Racial Equity in Banking.”
other ministries and regulatory bodies.\textsuperscript{24} Efforts to bring these actors together have begun. For example, the International Telecommunication Union’s (ITU) Financial Inclusion Global Initiative (FIGI)\textsuperscript{25} brought together over 60 institutions across 30 countries to propose a series of policy recommendations and thematic reports on digital liquidity, privacy, digital identity, consumer protection, interoperability, and open systems to facilitate the delivery of fully integrated DFS.

The COVID-19 pandemic has made this inter-agency dialogue even more critical. Governments worldwide have leveraged digital means (combinations of national ID, government registry, and national payments systems infrastructure)\textsuperscript{26} to extend cash transfers, wage subsidies, and various social welfare payments to aid low-income, vulnerable households. These programs demanded flexible, innovative approaches and close collaboration between financial and telecommunications-sector regulators, government agencies, and the private sector (especially employers and mobile network operators [MNO]). In the context of the pandemic, given the challenges in tracing informal sector workers and other marginalized persons, various government departments had to come together, overcome administrative hurdles and data sharing restrictions to share social protection lists, and integrate databases for identifying eligible recipients, and remove duplicate and deceased persons.

In Jordan, for example, government departments, UNHCR, the Central Bank of Jordan, payment service providers, and MNOs developed a coordinated response to identify refugees, help them open e-wallets, and, by mid-May 2020, over 470,000 e-wallets were created, of which 70 percent were active.\textsuperscript{27} Others, like Zimbabwe, Bangladesh, Nigeria, and the Democratic Republic of Congo, lacked a robust ID infrastructure but had high mobile phone penetration rates and consequently partnered with MNOs to track transfers and payments in real time.\textsuperscript{28} Along similar lines, the Myanmar government utilized local digital platforms, such as Wave Money and OnePay, to extend credit, emergency funds, and social transfers to farmers, garment works, street vendors, and other vulnerable populations.\textsuperscript{29} These examples hold valuable learnings for the United States, whose financial sector is scattered with multiple agencies and regulators having separate missions and mandates.\textsuperscript{30}


\textsuperscript{25} FIGI is a three-year initiative funded by the Gates Foundation and led by ITU, the World Bank Group, and the Committee on Payments and Market Infrastructures that aims to promote collective action to advance research in digital finance and accelerate digital financial inclusion in developing countries. (https://www.itu.int/en/mediacentre/backgrounders/Pages/digital-financial-inclusion.aspx)


\textsuperscript{27} Ibid.

\textsuperscript{28} Ibid.

\textsuperscript{29} Ibid.

Rocio:
What are some of the risks in adopting DFS?

Mayada:
Emerging evidence suggests that DFS are not a magic bullet and could exacerbate problems of low-income, marginalized communities. While DFS have been powered by the use of data to improve product customization and efficiency of delivery, concerns on the access to, use, storage, sharing, and protection of data, lack of clarity about effective informed consent, and the design of algorithms based on alternative data have also been raised.

Although algorithms and automation are rarely designed to be discriminatory, they are often biased and founded upon unproven assumptions. These risks are far higher in developing markets where norms and regulations do not yet exist to prohibit the inclusion of specific data on gender, religion, and ethnicity in algorithms. In addition to the risk of discriminatory algorithms, low-income individuals and persons with limited digital capabilities are also disproportionately impacted by a complex combination of choice architecture, awareness, capability, and need when it comes to data protection, privacy, and re-identification risks.31 For example, In 2016, the Omidyar Network surveyed 300+ digital credit users in Kenya and Colombia and found that although an overwhelming majority of respondents considered emails, calls, texts, personal financial and medical data private, more than 60 percent of them were willing to share data on mobile phone usage, bank accounts, and social media activity to get a loan.32

A recent World Bank report identified several limitations on practices to obtain customer consent. Some of the issues outlined in the paper included lengthy and complex consent forms, incomplete and ambiguous information, and standardized, inflexible terms offered on a “take it or leave it” basis, perhaps due to the challenges in adapting to frequently changing rules in fast-paced, low-capacity environments.33 The General Data Protection Regulation (GDPR), the standard now in Europe, is an apt example of a rigorous standard with clear definitions of consent and opt-out rules. Other emerging consent models limit data usage to legitimate purposes, fiduciary duty, and use of learned intermediaries and are designed to shift the onus of consent and its implications from the borrower to the provider.34 However, evidence from India, Peru, and other emerging markets shows that MFIs, fintechs, and other financial institutions catering to the low-income segments with limited

literacy and digital capability need flexible rules and substantial support when defining holistic and unambiguous consent guidelines. 35 Given the differences in contexts and shades of privacy between the developed and developing countries, 36 and low-capacity environments under which financial institutions in the developing world operate, developing countries will need to adapt and create their own version of GDPR to fit their context and resource constraints.

Another concern relates to the arrival of digital multinationals, such as Facebook, Google, Apple, Alibaba, Amazon, Tencent, and others, in the fintech space to advance inclusive finance by crunching vast datasets and leveraging user networks and strong analytics to offer payments, insurance, credit, and money management at scale. 37 In China, Alipay launched a money market fund (MMF) called Yu’ebao, which became the biggest MMF in the world with over CNY 1 trillion in assets (about USD 150 billion) and more than 350 million customers, 38 while Tencent—through its two integrated payment platforms, Tenpay and WeChat Pay—controls 40 percent of the country’s payments market. 39 Similarly, with 67 million active users as of September 2019 and $110 billion in annualized payments volume, Google Pay has recorded phenomenal uptake in India. While the scale at which these platforms work has the potential to transform the inclusive finance landscape, in the absence of strong supervisory architecture, these tech giants can be a threat to both consumers and smaller, innovative providers. Unfortunately, the existing regulatory and supervisory bodies in most countries are ill-equipped to oversee these enormously profitable players, leading to a glaring “big data divide” between digital multinationals and financial authorities. 40 With the rapid acceleration of digitization, in response to lockdown restrictions and social-distancing measures, there is an urgent need for policymakers to strengthen supervision and provide adequate oversight of these big techs in finance. These risks exist in developed and developing countries, but stronger regulatory and supervisory capacity in developed markets means that they are better equipped to address the risks, provided there is political will. Recent actions in China to rein in Alipay and other technology giants are a case in point. 41

**Rocio:**

What about consumer protection risks in digital credit?

**Mayada:**

In addition to payments, digital credit has received significant attention, given the exponential

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35 CFI, “35 CFI, "Data Consent."
38 Ibid.
40 Ibid.
41 https://www.pymnts.com/antitrust/2021/china-clarifies-big-tech-monopoly-rules/
growth of digital credit offerings for consumption smoothening and associated risks for vulnerable clients. Kenya’s digital credit market has been well documented and shows worrying signs of rapid growth. Recent studies show that one in four Kenyans has taken out a digital loan, with close to 50 digital credit providers crowding the market. From 2014 to 2018, the percentage of digital loans as a proportion of total loans from formal borrowers has more than doubled, increasing from slightly over 40 percent to over 90 percent. Digital credit in Kenya is offered by a plethora of players who are not regulated uniformly and, therefore, adopt aggressive lending practices, strong-arm tactics, and deceptive marketing as a part of their customer acquisition and collection strategies. Challenges are further compounded by the high interest rates, nontransparent prices, terms and conditions listed in complex, ambiguous language, and the absence of fraud prevention policies.

The convenience afforded by digital credit has led to multiple borrowings and customers’ deftly gaming the system to get more loans for sports betting, loan-stacking, and identity fraud. On the other hand, regulatory gaps and the lack of a well-established infrastructure for digital credit have led to crippling defaults and high delinquency rates, often camouflaged by clever rescheduling and refinancing policies. Customers defaulting on these loans often have outstanding balances of less than US$10 and end up being blacklisted by the credit bureau. They need to expend considerable time and money to clear their names, not to mention the accompanying emotional stress and shame.

Unfortunately, Kenya is not the only East African country facing serious consumer protection risks in DFS. A recent CFI study of more than 1,000 mobile money customers in Rwanda found that almost 40 percent of respondents felt fraud was a serious issue, and 10 percent had been victims of fraud themselves. Another review of transactional and demographic data of over 20 million digital loans in Tanzania revealed that irresponsible lending and poor transparency have resulted in high default rates and late payments on digital loans, especially those made to low-income consumers.

Developed markets, such as the United States, also had their share of predatory practices, especially in the payday lending segment. The Consumer Finance Protection Bureau (CFPB), established in 2011 as an important element of post-crisis U.S. financial regulation, is an excellent example of an institute created solely with a consumer protection mandate and having broad oversight over banks and non-banks. In addition to settling with payday lenders and returning over US$12 billion in relief to customers, the CFPB has examined and generated evidence on a wide range of topics related to consumer financial markets, consumer behavior and regulations, informed public discourse and has undertaken over 200 public enforcement actions.

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48 Ibid.
Rocio:
How has the COVID-19 pandemic changed the conversation around financial inclusion?

Mayada:
More recently, the COVID-19 pandemic and the need for social distancing have spurred governments and the inclusive finance community to switch from cash to digital money and transactions. In addition to facilitating safe and easy access to financial services, DFS also make it easier for low-income households to accumulate and access savings and, in turn, improve resilience. It also enables them to make and receive payments at far lower transaction costs, avoid theft, and keep their financial transactions a secret.

The Economist Intelligence Unit’s Global Microscope 2020 report examined the role of inclusive finance in policymakers’ response to the COVID-19 crisis across 55 countries. Overall, the report finds that countries that had invested in digital financial infrastructure and had enabling policy environments were better positioned to cope with the crisis. These countries could leverage digital distribution channels for social payments and simple due diligence procedures for remote account opening. For example, 44 of the 55 participating countries implemented cash transfer programs to aid vulnerable citizens, while 50 countries had at least partially digitized national ID systems. Among them, 28 countries were distributing payments via financial or mobile money accounts. Additionally, 19 countries with well-established digital infrastructure (such as Kenya) had implemented emergency cash transfer programs. Given that these programs usually target low-income households and informal sector workers, digital tools also paved the way for these individuals to self-register for benefits. Needless to say, the benefits of a robust digital infrastructure and identification system will continue to be reaped well beyond the aftermath of the pandemic.

The rapid digitization of cash payments linked to COVID, while laudable, also presents a set of emerging potential risks. While the number of new digital accounts being opened is unprecedented, it is unclear if governments have informed beneficiaries of their rights and obligations linked to these new accounts and educated them on what is required to maintain these accounts, how to cash out, or close accounts, or what data privacy measures have been implemented.

Rocio:
Where do we go from here?

Mayada:
The past decade has witnessed considerable progress in improving access to financial services for

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many of the world’s underserved, and the number of excluded people declined from 2.5 billion in 2010 to 1.7 billion in 2018.\textsuperscript{50} New business models have emerged that harness the power of data and digital technology to reach low-income customers. The coronavirus pandemic has reinforced the need for financial tools to help those affected remain resilient and, where necessary, recover and prosper. Countries with well-established digital infrastructure and ID systems have found it easier to form effective responses and support crisis-affected populations. To its credit, the pandemic has demonstrated the power of dialogue, innovation, flexibility, and clear, consistent communication and policy responses between government departments, financial- and telecom-sector regulators, and providers.

As the world emerges from this unprecedented crisis and the focus shifts towards “building back better,” it is equally important to pause and reflect closely on the frailties of the financial services sector that were exposed by the pandemic. Digital payments and cash transfers can benefit those who have IDs and accounts. On the other hand, millions of low-income communities in dire need of financial assistance are not digitally connected and may never be. In order to be truly inclusive and not leave anyone behind, governments and policymakers will need out-of-the-box solutions. Moreover, financial services are a means to enabling low-income, vulnerable households to access essential services, have the financial freedom and capability to make sound choices, and live a life of dignity. Accordingly, recovery strategies should adopt a longer-term vision and think beyond access to providing suitable products that catalyze use and ultimately improve consumers’ financial health. Developed countries, such as the United States, are an apt case in point.

The rapid digitization of financial services and increasingly sophisticated means of data use, fraud, and discrimination have introduced significant consumer protection and data risks. The emergence of social platforms, e-commerce giants, fintechs, and pay-as-you-go providers who embed financial services in their offerings present risks that cannot be handled by the financial sector alone. These issues call for greater coordination among different regulatory bodies, corporations, and customers to better understand these challenges, safeguard data privacy, portability, and other consumer rights, and improve overall customer experience.

To date, the path to market development has differed considerably between developed and developing markets. However, the current challenges that technology introduces to the financial system are potentially a unifying force globally. Collaboration is needed both within and between countries as governments, regulators, and providers try to balance product suitability and innovation with inclusion and responsible practices with the ultimate objective of improved financial access and financial health of consumers everywhere.

\textsuperscript{50} Findex 2010 and 2018 data sets.
Mayada El-Zoghbi is the Managing Director of the Center for Financial Inclusion, a role she began in September 2019. She leads the vision and strategy for CFI, building on its strong foundation of innovative, industry-shaping work. Mayada’s experience includes serving as lead for strategy, research and development for CGAP. In that role, she led CGAP’s strategy development and its research on women’s financial inclusion, financial services in crisis environments, and other emerging topics. Prior to this, she managed CGAP’s work with the donor and investor community based in Paris, France. From 2002 to 2009, Mayada founded and managed a development consulting firm. She has also led numerous technical assistance, evaluation, and research assignments, served as a research director for a USAID initiative, and lectured at Columbia’s School of International and Public Affairs. Mayada started her career working with several non-profit organizations establishing inclusive financial institutions in the Palestinian Territories, Bosnia and Herzegovina, Croatia, and Kosovo.