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G2Px
PAYMENTS THAT EMPOWER

G2Px Evidence Brief
Digital G2P Payments and Benefits to Recipients

Research to date shows that digital G2P payments have meaningfully improved the convenience, safety, and transparency of receiving transfers. Recipients frequently report reductions in travel and waiting times, greater predictability of payments, and higher satisfaction—particularly when offered choice in how and where to receive funds. These gains are especially important for vulnerable groups such as women and rural populations. However, these benefits are not systematically measured, and evidence remains limited on how design choices—such as delivery models, customer service quality, and platform features—shape user experience or influence trust and satisfaction.

Digital G2P payments show promising inroads to financial inclusion. Countries' transition to making G2P payments into accounts has significantly expanded account ownership, with some indications of active account usage and on-ramping to other financial products and services. Nevertheless, evidence remains limited regarding which interventions most effectively support this behavior, especially for low-income and rural populations. The extent to which psychosocial factors (trust, privacy concerns, etc.) and cultural norms influence recipients' financial behaviors is understudied. While onboarding support and training appear promising, further research is needed to determine which designs are most effective across different contexts.

INTRODUCTION

The digitalization of government-to-person (G2P) payments, such as wages, pensions, and social assistance transfers, has the potential to positively impact recipients. This includes improving their experience through a more transparent, safe and convenient approach. Most notably, digitalizing G2P payments also shows promising inroads to advancing financial inclusion by providing a gateway to access and use appropriate financial products and services that can help improve their financial lives – though further research is needed.

The digitalization of G2P payments, has played a significant role in the progress towards increasing account ownership. Digitalizing G2P payments offers an entry point into the formal financial system for many individuals, especially in low and lower-middle income countries. Notably, data from the Global Findex 2021 database reveals that 865 million account owners in developing economies opened their first account specifically to receive government payments.

Yet, evidence highlights that while payments into an account are a crucial first step, complementary measures are necessary to ensure recipients are fully financially included-- equipped to use their accounts effectively and able to engage with a broader range of financial services. The adoption of other financial services is underpinned by the need for people to understand, trust and feel confident using financial products and services, the availability of complementary interventions like financial education and consumer protection, and an infrastructure conducive to a robust digital infrastructure (Bailey 2017, Gronbach 2020, Abass Bangura 2016, Demirgüç-Kunt et al 2022). Simply providing access to an account does not guarantee increased use of financial services.

Even when financial inclusion is not achieved, the evidence shows digital G2P payments offer recipients increased convenience, satisfaction, security, and transparency. Recipients widely report high levels of satisfaction with digital payments due to their greater convenience compared to traditional methods, increasingly when choice is also offered. Digital payments cannot only significantly reduce the costs associated with receiving and managing fund, including reduced travel and waiting times, but can potentially eliminate additional expenses of time and money, like transportation expenses to distant payment centers (Bailey 2017, Prina 2016, Masino and Niño-Zarana 2020).

This brief synthesizes evidence from 32 case studies and 51 academic papers to highlight how digital G2P payments can impact recipients. This review encompasses literature on G2P payments specifically but also some evidence from the broader digital payments literature that help shed light on potential through which digital G2P payments could impact financial inclusion even if the specific evidence on G2P payments is still lacking

Box 1: Key terminology

Financial inclusion: The uptake and usage of a range of appropriate financial products and services by individuals and micro, small, and medium enterprises, provided in a manner that is accessible and safe to the consumer and sustainable to the provider (World Bank 2018).

Transaction accounts: A transaction account is broadly defined as an account held with a bank or other authorized and/or regulated service provider (including a non-bank) which can be used to make and receive payments. Transaction accounts can be further differentiated into deposit transaction accounts and e-money [or mobile money] accounts (World Bank 2020).

Financial capability: Financial capability is the capacity to act in one's best financial interest, given socioeconomic environmental conditions. It encompasses the knowledge (literacy), attitudes, skills, and behaviors of consumers regarding managing their resources and understanding, selecting, and making use of financial services that fit their needs (World Bank 2018).

IMPACT ON FINANCIAL INCLUSION

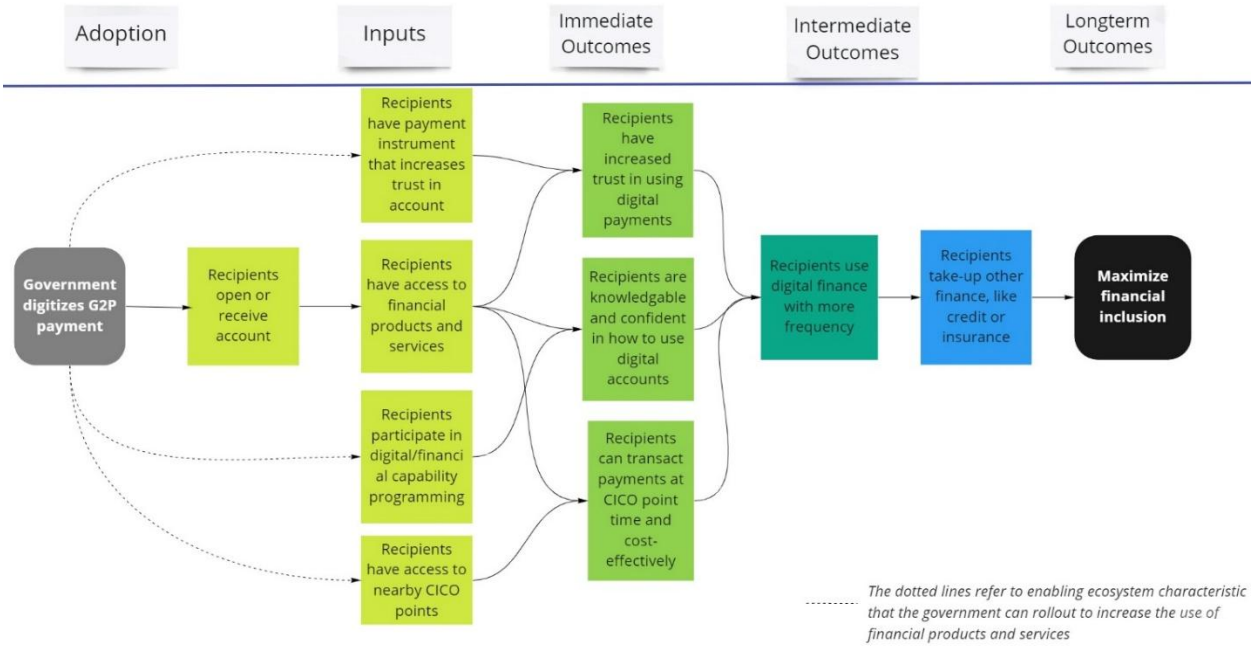
Advancing financial inclusion has demonstrable benefits for improving individual livelihoods, particularly among vulnerable populations. Evidence from the broader digital financial services literature provides useful insights into the positive impact of access to formal financial services. The ability to save in an account, securely and conveniently, allows individuals to accumulate capital, smooth consumption during unexpected shocks, and potentially escape poverty traps (Bastian et al 2018, Suri and Jack 2016). In Nepal, providing free, zero-fee bank accounts at local branches enhanced households' capacity to manage financial shocks and led to increased spending on essential areas like education and health (Prina 2015). In Kenya, promoting mobile banking savings among vulnerable women improved their risk management capabilities without diminishing overall risk-sharing arrangements (Dizon et al 2020). More broadly, in rural China, the expansion of digital financial services has been linked to reductions in poverty, primarily by alleviating credit and information constraints, strengthening social networks, and fostering entrepreneurial activities (Chen and Zhou 2021). Notably, in Kenya, access to the mobile money service M-Pesa facilitated a significant number of women transitioning from subsistence farming to small-scale enterprises, contributing to higher incomes and long-term poverty reduction .

Digitalizing G2P payments can provide a pathway to advancing financial inclusion. In 2021, over a quarter of adults worldwide (28 percent) received at least one payment from the government via a public sector wage, pension, or social protection payment (Global Findex 2021). Given the scale of these payments and the characteristics of the targeted population of many of these payments—namely social assistance and sectoral subsidies, G2P payments can serve as a catalyst for bringing previously excluded individuals into the formal financial system. Notably, by 2021, 865 million account owners in developing economies had opened their first account specifically to receive government payments (Global Findex 2021).

For G2P recipients specifically, the evidence on whether access to an account translates to use of financial services—and therefore contributes to financial inclusion—is still nascent but rapidly growing; there are insights into the complex interaction of factors that influence the extent of financial inclusion gains. These factors can be at the ecosystem level, like the availability of digital infrastructure, the type of financial instruments available to recipients, the design and implementation of a program, the availability of complementary measures like financial education, consumer protection, and two-way communication with recipients, as well as recipient-specific factors, like the digital and financial capability of recipients, weak trust in financial institutions, among others. The theory of change below summarizes likely pathways of impact based on the available literature both specific to G2P payments and also broader digital financial services. This brief then summarizes the available evidence for digital G2P payments contributing to access and usage of financial services.

Theory of change

Figure 1. Potential impact pathways of digital G2P payments to recipients' financial inclusion



Source: Authors. These interventions repeatedly emerged from the literature as effective avenues to increase financial usage among digital G2P payment recipients.

A G2P-specific theory of change suggests that when governments deliver payments into fully functional—also called transaction–accounts, combined with appropriate accompanying measures, positive outcomes can be achieved in the short, medium, and long run. As a starting point, digitalizing G2P payments often leads to recipients opening or receiving an account, potentially their first one, which introduces them to a fuller suite of financial services and products, which can include savings, digital payments, remittances, among others. When G2P payments are coupled with accompanying measures, such as digital and financial capability programming, and the recipient is in an ecosystem conducive to

using financial services, then consistent, positive experiences with the financial system can foster trust and can crystalize the convenience benefits of digital payments for recipients.

The combined effect of increased trust, financial knowledge, and expanded access options then can lead to the outcome of increased usage of digital accounts. This, in turn, opens pathways for exploring other financial services. Increased usage is facilitated by the expansion of CICO points, which enhances convenience and decreases the time and costs associated with financial transactions. The intermediate and long-term outcomes of this process are rooted in recipients' increased trust, familiarity, convenience, and satisfaction with digital financial services. These factors encourage the adoption of a broader range of financial products and services, ultimately leading to greater financial inclusion, capacity for better risk management and resilience, and economic empowerment and resilience.

Access to an account

G2P payments hold significant potential for advancing account ownership. Receiving G2P payments into an account can often be the first contact with the formal financial sector for previously unbanked individuals. Data from the Global Findex 2021 database reveals that 865 million account owners in developing countries (18 percent of all adults), including 423 million women, opened their first financial institution account for the purpose of receiving money from the government. This is especially true for social assistance beneficiaries. An overview of 33 conditional cash transfer programs across Latin America, found that direct deposit of cash transfers encouraged account opening especially among people in the poorest income quintile of the population (Chiapa and Prina 2016).

The digitalization of social assistance payments during the COVID-19 crisis showed the potential of digital G2P payments to expand account ownership for previously unbanked populations. In Colombia, the government launched *Ingreso Solidario*, an unconditional cash transfer program that distributed payments directly into beneficiaries' accounts in response to COVID-19. As of May 2020, *Ingreso Solidario* reached over 1.7 million previously unbanked beneficiaries and 1.2 million beneficiaries who already held accounts received the payments (World Bank 2020). In Brazil, *Auxilio Emergencial*, a digital social protection program, reached over 55 percent of the national population in response to COVID-19. *Auxilio Emergencial* opened digital savings accounts for over 70 million people of which 40 percent opened a formal financial account for the first time (Arruda et al. 2021). In Indonesia, the government cash transfer program, Program *Keluarga Harapan* (PKH), responded rapidly to COVID-19 by opening an additional 800,000 bank accounts: 93 percent of respondents opened an account for the first time in order to receive their digital government cash transfer (Theis et al 2020).

G2P payments into mobile money accounts has played an especially crucial role in boosting account ownership. In 2020, the number of registered mobile money accounts recorded a growth of 12.7 percent to 1.21 billion accounts in 2020 (GSMA 2021). Many countries in Sub-Saharan Africa, such as Benin, Cameroon, Zambia, and Ghana, among other nations, experienced double-digit growth in mobile money accounts (Demirgüç-Kunt et al 2022). Mobile money's growing adoption in many developing countries, often exceeding that of traditional bank accounts in regions like Sub-Saharan Africa, makes it a readily accessible platform for digital G2P payments. G2P payments have played a big role in this trend; at the

peak of the initial COVID-19 outbreak in early 2020, the number of individual customer accounts receiving G2P payments quadrupled (GSMA 2021).

Having a transaction account is just the first step for financial inclusion, and it does not guarantee individuals use these accounts to access other financial products and services that can improve their financial lives. Anecdotal evidence, especially for social assistance recipients, continues to point to the predominance of cashing out as the sole use these G2P recipients make of their accounts. For example, in the context of social assistance programs, a study of programs in the Philippines, Colombia, and Bangladesh found that the majority of beneficiaries who received their benefits through bank accounts immediately withdrew the entire amount upon payment (Koechlein and Tanvi, 2022). Yet, aggregate global evidence implies there might be more potential for G2P payments driving financial inclusion.

Use of financial services

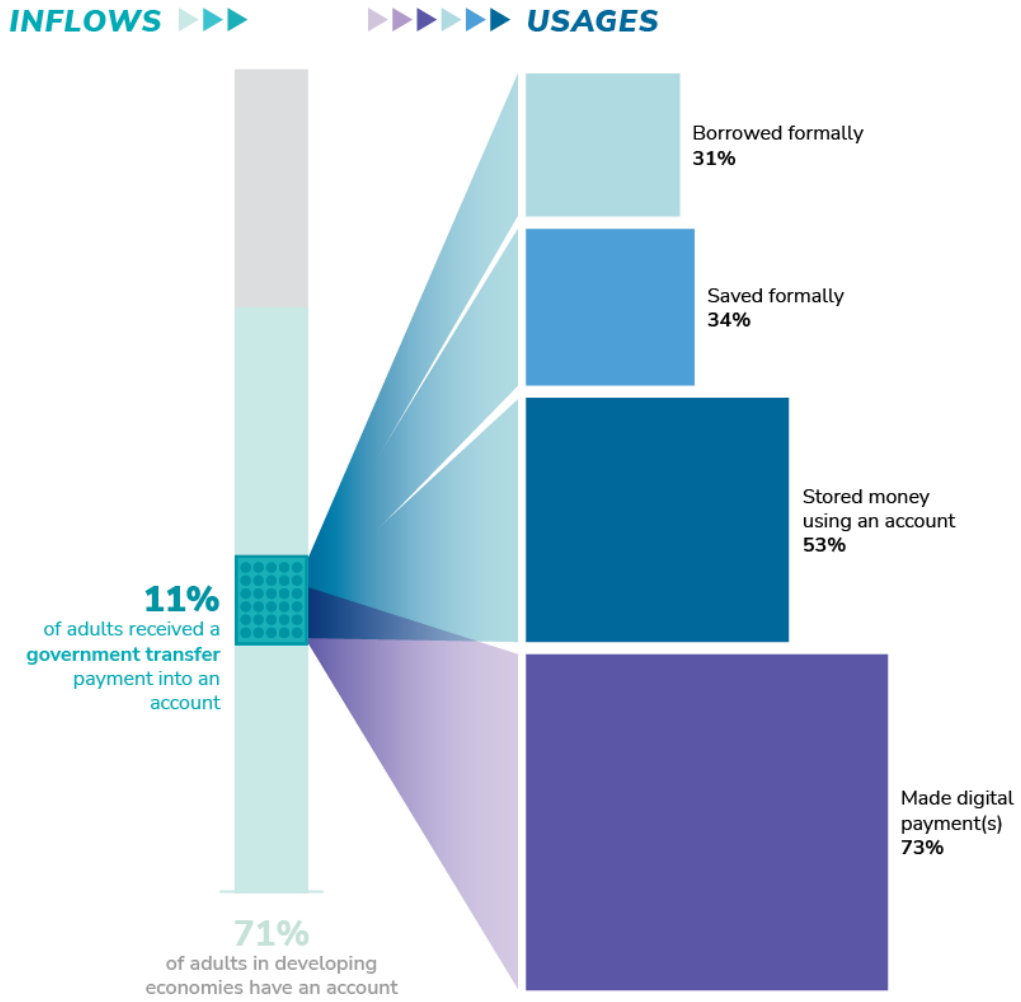
There is nascent evidence of G2P recipients using their accounts to access financial services. The 2021 Global Findex Database indicates an upward trend of account usage among G2P payment recipients with 7 out of 10 recipients making digital payments themselves, including online and in-store purchases, up from approximate just half five years prior. Beyond payments, 34 percent also saved at a formal financial institution or mobile money account (see Figure 2). Here, account usage is defined as the use of an account beyond receiving a payment or a wage and cashing out, it includes the use of financial services such as deposits and savings, transfers (including commercial transactions and remittances), and products like credit and insurance products.

Evidence suggests that G2P payments, particularly when delivered through direct deposits, can encourage positive savings behavior and increase overall savings levels. In Fiji, a direct social welfare payment resulted in 18.4 percent of recipients using their bank accounts for saving purposes (Torrente and Chang 2019). In India, there was a remarkable 110% increase in savings levels in households receiving three months of weekly payments through bank accounts compared to those receiving cash (Somville and Vandewalle 2018). In Mexico, 12.4% of *Prospera* beneficiaries saved money in their accounts (Chiapa and Prina 2016). Further illustrating this trend, the transition from cash to electronic G2P payments via savings accounts for *Prospera* resulted in a substitution effect, with beneficiaries choosing bank accounts over informal savings methods like *tandas* (rotating savings and credit associations) (Masino and Niño-Zarazua 2017).

Eliminating or reducing fees, can encourage savings by making transactions more affordable and accessible. The literature suggests that policies and products that minimize or eliminate transaction fees, particularly those associated with withdrawals, can play a critical role in promoting savings and fostering financial inclusion. A study in Nepal found that when women were provided with savings accounts that had no fees and were conveniently located near their homes, they exhibited high savings rates. Specifically, 80% of the households in the study frequently used the accounts, depositing approximately 8% of their weekly income around once a week (Prina 2015). Another study in Sri Lanka found that mobile-linked bank accounts, which often feature free deposits but charge for withdrawals, can also serve as an effective way to promote savings. In this scenario the "asymmetric fee structure" worked as a commitment device, encouraging users to deposit funds and limit withdrawals, ultimately leading to

higher savings levels (De Mel et al 2022). This is consistent with a study in Burkina Faso that found that even small withdrawal fees of 1% can act as a "soft commitment" mechanism, helping individuals avoid unnecessary expenditures and save more (Ky et al 2017).

Figure 2. Use of accounts by adults in developing countries who receive a government transfer payment into an account



Source: Global Findex Database 2021.
Note: Usages are shown as percentages of the 11 percent of adults receiving a government transfer payment into an account.

Source: Desai et al. 2022

Evidence especially from the broader literature also points to the potential of transaction accounts translating to the adoption of other financial services and products. In Mexico, G2P beneficiaries receiving payments into accounts increased the frequency of remittances in rural areas (Masino and Nino-Zarazua 2020). Another study found that a bank reform requiring payroll accounts with no fees increased the probability by 8% of a household member holding a credit card (Kaiser et al 2013 in Chiapa and Prina 2016). Experimental evidence from a study in Tanzania found that improved access to a mobile savings account increased the use of microloans amongst participating women. The intervention was paired with

a business training intervention with also improved the business practices of women (Bastian et al. 2018). *Orange Money* clients in Madagascar demonstrated a higher prevalence of sending and receiving domestic remittances compared to non-users, who primarily relied on in-person methods (Arestoff and Venet 2017). Similarly, in Bangladesh, a significant portion (26%) of active mobile money users utilized the service for urban-to-rural remittances (Lee et al 2021). The impact of digital payments on international remittances is also noteworthy. The GSMA reports that the number of international remittances processed through mobile money reached record levels in 2020, highlighting the role of digital platforms in supporting cross-border financial flows during times of crisis.

While there is no evidence on which type of account is most effective at translating to usage, the broader digital financial services literature points to access to mobile money as having a strong potential. In Peru, a fully interoperable national mobile money platform, *Billetera Móvil*, was introduced as mobile banking services for the unbanked and underbanked. As of December 2019, the platform successfully registered 1.3 million transactions per month (Rutkowski et al 2020 in Davidovic et al 2020). In Bangladesh, the introduction of mobile money services, coupled with training on using them, resulted in 70 percent of rural participants becoming active users, compared to 22 percent in the control group (Lee et al 2021). Similarly, a study in Malawi found increased access to mobile money accounts resulted in usage and savings in the short term after the introduction of mobile money accounts, although the impact was modest in the longer term (Moore et al 2019).

Mobile money platforms have also demonstrated a positive impact on savings behavior. A randomized field experiment in Mozambique found that introducing mobile money led to an increase of at least 23% in account savings and 26% in mobile money remittances, suggesting a shift away from informal mechanisms (Batista and Vicente 2014). Similarly, in Burkina Faso, mobile money usage was correlated with individuals saving for health emergencies (Ky et al. 2018). Another study focusing on female micro-entrepreneurship in Tanzania revealed that providing access to mobile bank accounts, along with business training, had a positive impact on savings. This suggests that mobile money's convenience and lower transaction costs can facilitate increased savings, particularly when combined with financial literacy initiatives (Bastian et al. 2018).

Outside of G2P digital payments, M-PESA provides an example of how leveraging mobile money can increase the frequency and amount with which recipients send and receive remittances. In Kenya, nearly all users (96 percent) of M-PESA used mobile money to send and receive payments (Jack and Suri 2014). To recipients, the use of mobile money meant lower transaction costs, greater security and safety, and more opportunity to send person-to-person (P2P) payments. Roughly 25 percent of sampled users in Kenya noted that receiving money through remittances was the most important use of M-PESA while 29 percent noted it was sending money (Jack and Suri 2014). The expansive agent network made M-PESA convenient to send and receive -- nearly 70 percent of adults in Kenya gained access to M-PESA in the first four years (Jack and Suri 2014). Additional experimental research found that in Kenya, 35 percent of M-PESA users reported that mobile money increased their frequency of sending transfers and 31 percent of users reported an increase in the frequency of transfers received (Mbiti and Weil 2016). M-PESA users sent smaller but more frequent remittances, which increased the money flow in rural areas where cash is difficult to access (Morawcyznski and Pickens 2009).

Digital and financial ecosystem factors

The extent to which an individual adopts and uses transaction accounts and other financial services is closely linked to the development of their local financial ecosystem. External factors such as availability of agents or branches nearby, fee structures, interoperability of systems, connectivity, and user-friendly interfaces, among others, can have a significant impact on the widespread use of digital payments. These factors determine the overall familiarity with digital financial services, the availability of use opportunities and the associated costs, among other factors.

The broader literature shows that increasing the capillarity of financial access points, such as bank branches and mobile money agents, can significantly improve account usage among the general population. In Sri Lanka, a bank offered a weekly door-to-door deposit collection services to a set of unbanked individuals that lived at least 5km from the nearest bank branch. The result of this experiment saw a 15 percent increase in overall savings and a fourfold increase in the number formal financial transactions each month, highlighting the potential impact of convenient access on transaction frequency (Callen et al. 2019). Similarly, in Kenya, M-Pesa users, particularly those in female-headed households, experienced a 22% increase in savings when they resided in areas with a higher density of mobile money agents (6 agents within a 1-kilometer radius) (Suri and Jack 2016). In Nepal, the physical proximity of a local bank branch was a key driver of account usage, with 99% of transactions in the first year of the study occurring at these branches. In a survey in the same study, 70% of account holders reported that they valued the "ability to easily deposit and withdraw any amount of money anytime" as the most desirable feature, indicating a strong preference for convenient and flexible banking services. Their findings support that households are less likely to be banked, the more expensive it is going to a bank**.** (Prina 2015). Policies aimed at expanding the reach of financial access points and reducing the distance individuals need to travel to transact can play a vital role in promoting account usage and fostering financial inclusion.

Complementarities in digital public infrastructure play a crucial role in encouraging uptake and usage of digital payments. Reliable physical infrastructure, such as electricity, connectivity, stable mobile networks, among others, as well as the financial infrastructure equipped with interoperable payment systems and robust consumer protection regulations are key to create an environment where digital products and services are more appealing and accessible than cash. For example, in India, the country took between 6 to 7 years after creating financial entry points across G2P recipients to popularize digital payments (Gelb et al 2022a). Specifically, the authors merit the combination of (i) increasing accessible, low-cost telecommunications, (ii) cost-effective interoperability through Unified Payments Interface, and (iii) diverse, convenient, low-cost payments services provided by new market players, for the acceleration of digital payments in India.

Recipient-specific factors

The impact of G2P payments on usage and formal savings can be influenced by factors affecting recipients such as the level of financial and digital capabilities, access to clear information and good customer service, trust in financial services, access to a personal mobile phone and reliable network coverage, among others. Low levels of financial and digital capabilities can hinder the uptake of digital

payments and limit the potential for driving financial inclusion. Findings from the literature emphasize the importance of training to empower beneficiaries, as well as providing accessible and continuous support, potentially through well-trained agents. Interventions that enhance trust in financial institutions and digital payment systems are critical, especially when targeting populations with limited financial inclusion. This could involve clear communication about program features and safeguards, accessible grievance redressal mechanisms. Additionally, there are gender-specific barriers that should be taken into account when designing digital G2P payments, like women's access to mobile phones and agents.

When digital payments are accompanied by financial capability training interventions, there is evidence of positive impacts on financial knowledge, attitudes, practices, and performance. While traditional classroom-based financial education has shown mixed results, there is evidence that practical training structured as learning-by-doing during the onboarding process can be more effective. Evidence on longer-term impact on formal financial inclusion is limited. One study in Colombia evaluated LISTA, a tablet-based financial education program for female recipients of the *Mas Familias en Accion* conditional cash transfer program. The education program was found to increase financial health for poorer, less educated, and more rural populations for more than two years after the intervention. 12 percent of recipients had a savings balance, and the average savings balance grew from $4 to US$11. That said, the effect was only significant in the short term. (Attanasio et al 2019; Berfond et al. 2019; Marulanda Consultores 2015; Stuart 2018). Similarly, in Peru, only 3.9 percent of G2P recipients of the Juntos program were aware they had a savings account. To address this, the government implemented a training program to increase their knowledge and use of their saving accounts. As a result, pro-saving attitudes remains latent for one year and saving account balances grew by 30 percent with the training intervention, as compared to the control group (Berfond et al. 2019; Chong and Valdvia 2017).

Digital literacy may also be a challenge for new users and impede them from fully benefiting from the potential advantages of digital financial services, such as convenience, security, and access to other financial products. One-third of mobile money account holders in Sub-Saharan Africa cannot use their accounts without help from a family member or an agent (Demirgüç-Kunt et al 2022). In some economies or specific population groups the share of adults needing help using an account can be higher. For example, in Liberia, Malawi, and South Africa, more than 50 percent of mobile money users need help using their accounts. Lack of digital literacy can make recipients more vulnerable and have implications for the design of G2P payments and limit the effectiveness of technology solutions aimed at financial inclusion.

Offering recipients the ability to monitor their funds can impact their trust and confidence on digital financial services and may have an impact on their use. Providing recipients with tools to track their balances and transaction history empowers them with greater transparency and control over their finances. This can boost their confidence in using digital financial services and encourage more active engagement with their accounts (Demirgüç-Kunt et al 2022). In Mexico's conditional cash transfer program *Oportunidades*, recipients with the card were found accumulating savings equivalent to 2 percent of their annual income after two years, primarily driven by the reduced transaction costs of accessing money, and increased trust in the bank by allowing beneficiaries to check their balances frequently and freely (Bachas et al. 2021). An experimental study in Sri Lanka found a significant increase in formal savings among unbanked individuals living at least 5 km from a bank branch. The experiment

offered a door-to-door service for deposit, where agents would use a POS handset and print account balance receipts after each transaction. This feature enabled participating users to stay informed about their financial situation and make more informed financial decisions (Callen 2019).

When recipients lack the necessary training to transact or cash out their digital G2P payments, they may be exposed to greater risk of inconvenience, or even, fraud. In Cameroon, some recipients of the COVID-19 emergency response had difficulty accessing their payment because users unintentionally erased or forgot the PIN code that was shared via SMS by the payment service provider (Botea and Ndiaye 2024). In Haiti and Kenya, digital G2P payment recipients waited in long lines to withdraw cash, because they required assistance from bank agents to understanding of how to use PINs (Zimmerman et al. 2014). In Pakistan, 18 percent of beneficiaries reported being asked to pay a bribe to either guards or staff members at the Pakistan Post to collect their payments over the counter; had they been trained on how to use an ATM, this type of situation could have been avoided (Cheema et al. 2016).

Access to personal mobile phones is a crucial factor in increasing account usage, particularly for women. Across Sub-Saharan Africa, women are 7 percentage points more likely than men to cite lack of a mobile phone as a reason for not having a mobile money account. In Pakistan, women's limited access to mobile phones presented a significant barrier to applying for a COVID-19 emergency grant, particularly for those not already benefiting from the Benazir Income Support Program (BISP). The program required applicants to use mobile phones for registration, and because men were more likely to have registered phones, a gender gap emerged in receiving government support. Studies indicated that only 25 percent of women received aid, compared to 63 percent of men (Bourgault and O'Donnell 2020; Gelb and Mukherjee 2020).

IMPACT ON CONVENIENCE

Even in contexts where the ecosystem is not conducive to financial inclusion, digitalizing G2P payments can have a significant positive impact for recipients; the most salient benefit is increased convenience for. Ecosystem and recipient-specific factors will impact the time and money recipients spent trying to access financial services, their accessibility, and the variety of services adopted; overall, it affects the widespread use of digital payments. In this way, convenience not only enables the adoption of digital payments but also serves as a valuable outcome in itself. Evidence supports that when recipients use digital instead of non-digital payment methods, they can save both time and money, as well as experience greater flexibility in terms of when and where they can access and use their funds. Higher satisfaction also comes hand-in-hand as a result of increased convenience. A process evaluation of Cameroon's Social Safety Nets Project found that 78% of urban beneficiaries preferred mobile money payments over cash (Botea 2024). In this context, there was already a widespread adoption of mobile money accounts, where 95 percent of beneficiaries already had accounts prior to participating in the program, this cements their preference for a tool that is both convenient and trustworthy.

Digital G2P payments can be timesaving for recipients by offering convenience and eliminating the need to travel long distances to limited payment points. Evidence from various countries consistently demonstrates this outcome. India's NREGS beneficiaries in the treatment group that adopted Smartcards saved an estimated US$4.5 million of time savings (Muralidharan et al 2016). In Zambia, a choice-based digital G2P payment system reduced time spent on travel and queuing to receive payment from 6 to 2 hours on average (Baur-Yazbeck et al. 2021). Similarly in Fiji, recipients who used the electronic G2P

payment saved 3 hours and 40 minutes compared to recipients who received payment in vouchers (Torrente and Chang 2019). A study in Niger revealed that recipients of cash transfers had to travel an average of 2 km (about half an hour) each way to receive their payments. In contrast, those receiving payments through mobile money traveled less than 0.5 km (less than 10 minutes) experiencing a reduction in travel and waiting time from an average of 4 hours to at most 1 hour (Aker et al 2016). Similar time-saving advantages are evident with mobile-linked deposit services. A study in Colombia documented a dramatic reduction in waiting times for receiving transfers, 259 minutes for cash transactions versus 68 minutes using ATMs and 41 minutes for withdrawals at POS terminals. While in Argentina waiting times decreased from 251 minutes to 43 minutes when the transfer was delivered through cards (Chiapa and Prina 2016).

In terms of expenses, digital G2P payments can be cost saving for recipients, primarily due to reduced transportation costs and low or zero fees. In Zambia, 82 percent GEWEL recipients reported that they incurred zero fees in receiving digital payments, while those who did spent about ZMW26 (USD 1.74) on average (Baur-Yazbeck et al. 2021). In Fiji, recipients using electronic G2P payments saved FJD4.00 (US$2) bi-annually compared to those receiving voucher payments at district Department of Social Welfare offices (Torrente and Chang 2019). The broader literature also shows reduced costs for recipients. In Liberia, teachers who received their salaries through digital deposits saved around 23$ per paycheck. Recipients saw a 92% decrease in the cost of collecting their wages (Demirgüç-Kunt et al 2022).

The broader literature confirms these findings, offering compelling evidence that mobile money and digital transactions can significantly reduce the time and effort required for financial transactions. For example, in Kenya, M-PESA increased time-savings for sending remittances by replacing the need to travel an average of 200 km to in cash (Jack and Suri 2014). Findings from a microfinance experimental study in the Philippines, found that the introduction of mobile banking led to time savings of 30 percent for deposits and 70 percent for withdrawal transactions. Participating members could make mobile loan payments, deposits, and withdrawals at corner stores, increasing the convenience of making transactions (Harigaya 2020). In Uganda, experimental evidence found that the rollout of mobile money agents lowered transportation costs by 76 percent to household receiving remittances. With closer agent availability, mobile money users were able to walk or bike to an agent instead of having to pay for motorized transport options. Although the authors found overall weak effects, these were concentrated in areas were the mobile money service provider deemed as a higher commercial priority. This highlights the importance that commercial interests may play a role in the impact of mobile money on recipient households (Wieser 2022).

Digital payments also offer increased flexibility and control. Digital payments can be more convenient than cash payments because they can be made and received anytime and anywhere. This can be especially beneficial for people who live in rural areas or who have limited access to traditional financial services. For instance, in Bangladesh, 80% of mothers preferred receiving education subsidies through digital payments because they could access the funds securely at their convenience, eliminating travel and wait times associated with cash disbursements (Gelb et al 2019). Lack of flexibility can also have the adverse effect on the usage of financial services. In a study in Nepal from the broader literature, found that people often saved up larger sums of money and made infrequent deposits because the bank's business hours

were inconvenient (Prina 2015). Digital payments allow recipients to access their funds at any time, giving them greater control over their finances.

Digital G2P payments significantly reduce processing time, leading to improved predictability in payments for recipients. Predictability of payments not only ensures the impacts of social assistance programs but also allows for recipients to budget. An impact evaluation of the *National Rural Employment Guarantee Scheme* program and the social security pension in India reported that the switch to Smartcards (closed-loop biometric authentication capable cards), brought payments faster and more reliably, in less time, and ensured the transfer was the correct amount. Recipients faced shorter delays by 5.8 to 10 days in comparison to the control group. Recipients also expressed overwhelming preference for smartcard over the previous system. The switch also brought efficiency gains for program administration (Muralidharan et al 2016).

CONCLUSION

Digital G2P payments offer a promising avenue for advancing financial inclusion and enhancing the convenience of underserved populations. By providing secure, accessible, and efficient financial services, digital payments enable recipients to open and use accounts, save money, and manage finances more effectively. The increased convenience of digital payments has also led to higher satisfaction among recipients, as they save time and money and gain greater flexibility in accessing their funds. As digital payment ecosystems continue to grow, they will play a crucial role in poverty alleviation and the broader financial inclusion agenda.

Moving forward, it is essential to address recipient-specific factors to ensure that the benefits of digital G2P payments are fully realized and inclusive for all. Program effectiveness hinges on a nuanced understanding of recipient characteristics and contextual factors, which are crucial in promoting financial inclusion and the effectiveness of G2P programs.

- **Investing in digital and financial infrastructure, especially in rural areas**. Limited network coverage, a lack of mobile money agents, and inadequate access to digital devices can hinder adoption and use of digital financial services. Adequate access to mobile phones and reliable network connectivity is fundamental for ensuring seamless program implementation and equitable access to funds. Addressing gender-specific barriers, such as limited phone ownership or mobility constraints among women, may require complementary interventions to promote inclusivity.
- **Financial and digital capability training to equip beneficiaries with the knowledge and skills to confidently and effectively use digital financial services.** This can include understanding basic financial concepts, account functionalities, and how to navigate digital platforms. Accessibility, clear communication, and ongoing support, potentially through well-trained agents, can address user questions, build trust, and encourage continued usage digital financial products.
- **Ensuring user-friendly platforms and processes.** Complicated account opening procedures, confusing interfaces, or lack of readily available information can discourage account use. Well-trained customer service, whereas at branches or an agent network, is essential for providing reliable service delivery and bridging the gap in areas with limited information and access.

- **Promoting trust and consumer protection**. Concerns about data privacy, security breaches, and fraud can deter individuals from adopting digital financial services. Clear communication about program features, robust grievance redressal mechanisms, and demonstrable government commitment to program sustainability can enhance confidence and encourage uptake.

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