Digital Remittances: A Scoping Review of Emerging Trends and Gaps

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Abstract

Remittance-driven economic development is gaining increased prominence in recipient countries, facilitated by advancements in digital technology. Digital financial technologies are reshaping remittance practices, yet their effectiveness and broader development impacts remain underexamined. This scoping review synthesizes existing literature on digital remittances, delineating central themes, empirical insights, and gaps in trends and development impacts. A comprehensive search of Scopus, Web of Science, and Dimensions databases was conducted for peer-reviewed articles published from 1998 to 2024. Out of the 190 articles reviewed, 69% of the articles were published after 2019, evidencing an intensified interest in digital remittances research after the COVID-19 pandemic. The studies showed significant household-centered leveraging of digital remittances for poverty alleviation and financial inclusion in developing countries, particularly in Sub-Saharan Africa. Despite progress in digital remittances research, there are deficiencies in primary data, systems-level analysis, and perspectives on harnessing remittances for broader sustainable development, including climate action. Future research must address these gaps, especially in developing regions where climate impacts reverse poverty reduction gains. Improved research underpins the design of appropriate policies and interventions to address digital remittance challenges and maximize the development potential.

Keywords

Digital remittances, mobile money, fintech, financial inclusion, socioeconomic development

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Cover Image

Youth-operated mobile money booths in Lusaka, Zambia. Photo credit: Imago/Alamy

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Introduction

In 2022, USD 647 billion was sent to low- and middle-income countries (LMICs) out of USD 831 billion in officially recorded international remittance flows (IOM, 2024). The World Bank forecasts that about USD 656 billion will be sent to developing countries in 2025 (Figure 1) (Ratha et al., 2024). These figures highlight the massive financial contribution of remittances to developing countries, which currently exceed official development assistance (ODA) and foreign direct investment (FDI) (Figure 1). Economic remittances sent by migrants significantly contribute to the financial and socioeconomic development of those left behind in their countries of origin (Metzger & Wu, 2020). The flow of financial remittances moves from a source or sender to a destination or receiver, spanning both internal and international contexts (Niankara & Traoret, 2023). At the microeconomic level, about three-quarters of received finances go towards household consumption of basic needs like food and shelter, and on average, remittances represent about 60% of the annual income of recipient households (IFAD, 2017). Beyond household spending and investing, which boost local economies, remittances also support macroeconomic development by contributing to the development of formal financial institutions, foreign exchange reserves, and Gross Domestic Product (GDP) (Dridi et al., 2019).

Remittance transactions typically follow a three-step value chain of sending, processing, and receiving. During the first step, the sender pays the principal amount to a service provider through an in-person visit, phone call, or internet-based financial platform using cash, cheque, debit or credit card instructions, or money order (IFAD, 2024; Rodima-Taylor, 2023). Service providers include banks, money transfer operators (MTOs), non-bank financial institutions, relations, and telecom companies, who process sent amounts via physical cash transport, SWIFT, messaging systems, bank transfers, digital platforms, or in-kind transfers (Metzger et al., 2019; Metzger & Wu, 2020). Finally, the beneficiary receives the remittance in the third step via cash, bank transfers, electronic wallets, or goods (IFAD, 2024).

Depending on the remittance-sending service providers, transfers are considered formal or informal, with variations in payment modes, network coverage, technology, service providers, and regulations (Coffie, 2022; IFAD, 2017). Informal remittances are transferred through trusted intermediaries or networks rather than through officially documented or regulated financial platforms. On the other hand, formal remittances flow through bank and non-bank financial institutions, supported by reliable, secure remittance networks that mitigate against transaction failures and fraud, particularly for international remittances (Metzger et al., 2019). Apart from banks, other key formal-sector players include money transfer operators (MTOs) and pure remittance companies such as Western Union and MoneyGram (IFAD, 2017).

Historically, remittances were cash-intensive and undocumented, routed through hand-carrying, courier services, unregistered microfinance businesses, and forex bureaus (Fernandes et al., 2023; Freund & Spatafora, 2005). Hawala, an old informal remittance channel used by migrants in South-East Asia and Africa for remitting destinations, usually lacks verifiable evidence of money transferred between the sender and the receiver (Maimbo & Ratha, 2005). Consequently, untraceable remittance flows are prone to theft and fraud and serve as an attractive platform for financially sponsoring acts of terrorism (Crush et al., 2015; Flore, 2018; Kosse & Vermeulen, 2014). Therefore, remittance flows that support micro and macroeconomic development require verifiable and regulated financial channels.

Digitalization has reduced the importance of informal remittance channels by significantly enhancing the efficiency of formal remittance transactions, allowing transferred foreign currencies to be received as local currencies through digital platforms (Flore, 2018; Metzger et al., 2019). Digital remittances are sent via a payment instrument, using an online platform or self-assisted, and received into a transaction account at a bank or non-bank deposit-taking institution (e.g., post office), a mobile money account, or an electronic money account (World Bank, 2020). Digital remittances uptake has been catalysed by advancements in internet systems, mobile phone usage, electronic payment systems, digital identities, and online and mobile applications (GPFI, 2023; Rodima-Taylor, 2023; Rodima-Taylor & Grimes, 2019). Multilateral and international agreements govern interoperability among financial infrastructure systems, such as digital-only MTOs, banks, and non-bank remittance service providers, to facilitate remittance transfers (IFAD, 2024; Metzger et al., 2019; Rodima-Taylor & Grimes, 2019).

Web-based mobile remittance platforms have lower transaction costs than banks and other remittance service providers (Rodima-Taylor, 2023; World Bank, 2020). However, mobile operators account for less than 1% of remittance service providers (World Bank, 2020). While still emerging, some remittance service providers are adopting blockchain technologies and cryptocurrencies (digital currencies), which enable cheaper, more transparent remittance transactions by eliminating intermediaries and their associated costs (Flore, 2018; Peters & Panayi, 2016; Ratha et al., 2018; Robins, 2024). Nigeria has one of the largest cryptocurrency markets globally, with blockchain-based remittance apps such as SwyChr or Afriex facilitating remittance sending and receiving (Sohst, 2024). Cryptocurrency users use crypto wallets (e.g., mobile wallets) that interface with blockchain networks to enable digital currency transactions (Sohst, 2024).

This paper seeks to contribute knowledge to the growing field of digital remittances via a comprehensive synthesis of existing literature. A scoping literature review approach was adopted enabling a systematic and transparent search of peer-reviewed literature to examine digital remittance dynamics and research gaps. The first section of the paper provides an overview of digital remittance pricing contexts and policy frameworks that underlie digital remitting. This is followed by the methodology detailing the research questions, literature search, article selection, review and analysis. The results are then presented quantitatively, highlighting

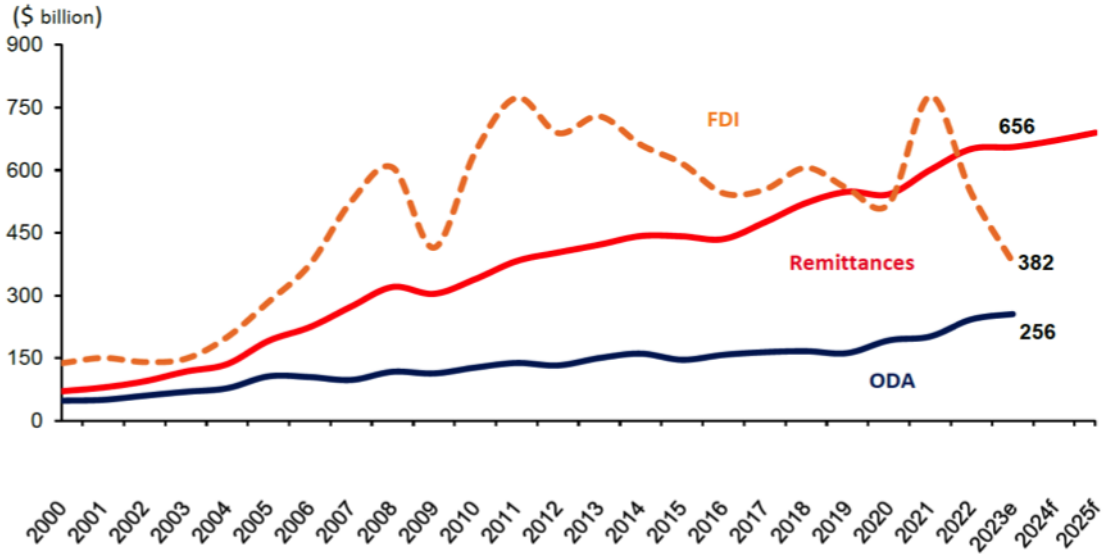
the most cited articles, and qualitatively according to relevant themes from the findings. The penultimate section discusses the research gaps and policy challenges identified within the selected articles. The paper concludes with recommendations for future research and policy implications.

Digital Remittance Pricing

International remittances sent to LMICs have increased steadily in recent decades (Figure 1). Digital remitting has grown rapidly and transaction costs have been declining across all regions. The speed of remittance sending has also increased, especially through mobile operators (World Bank, 2024). However, formal remittance channels remain costly, especially for migrants and their families, driving continued reliance on cheap informal channels (FSB, 2021; Ratha et al., 2011). Sub-Saharan Africa receives the highest volumes of informal remittances, with average remittance transfer costs exceeding 8%, compared to under 6% in South-East Asia and the global average of 6.65% (Figure 2) (World Bank, 2024).

Formal remittance channels remain susceptible to local and global economic market fluctuations, inflation, trade and exchange rate restrictions, which hike transaction costs and reduce recipient amounts (Coffie, 2022; Sohst, 2024; UNCTAD, 2013). Also, vulnerable groups in developing countries face difficulties accessing digital remittances due to limited access to electricity, internet connectivity, and telecommunication services, as well as high internet costs (Sohst, 2024). As such, informal remittance channels thrive in Sub-Saharan Africa and other Global South regions amid exchange rate fluctuations, high remittance taxes, limited formal financial infrastructure, political instability, cash prioritization, and poverty (IFAD, 2017; Ratha et al., 2018; World Bank, 2020). The value of remittances sent via informal

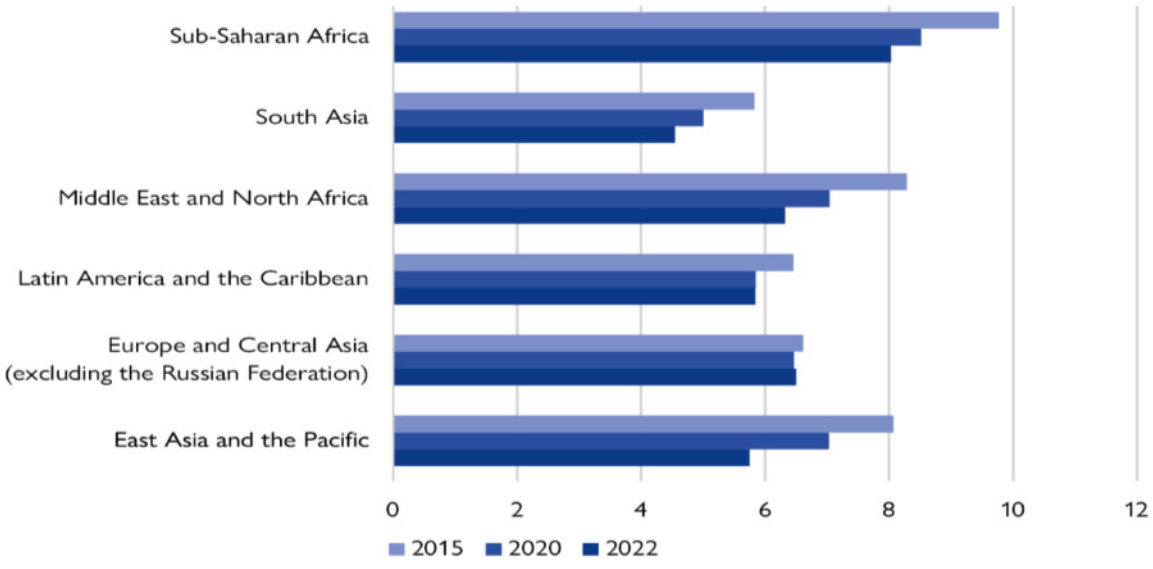
Figure 1: Remittances, FDI, and ODA Flows to LMICs, 2000-2025



Source: Ratha et al. (2024)

Note: f(forecast); e (estimates)

Figure 2: Average Cost of Sending USD200 by World Region, 2015-2022 (%)



Source: IOM (2024)

channels may constitute between 35% and 75% of formal remittance volumes in Global South migration corridors, and official figures may be underreported (Fernandes et al., 2023; Freund & Spatafora, 2005).

Financial inclusion refers to poverty reduction driven by digitalization through improved access to affordable financial products and services, including remittances (Ozili & Mhlanga, 2024). Sending and receiving digital remittances establishes a relationship with formal financial institutions, thereby facilitating access to other financial services, such as savings and loans (GPFI, 2023). Remittance-receiving families that are excluded from formal financial services are gradually gaining financial inclusion through digitalization (IFAD, 2017). The percentage of people accessing formal banking services increased from 51% to 77% globally, while the percentage of mobile money account owners in Sub-Saharan Africa increased from 37% to 55% between 2011 and 2021 (GPFI, 2023). Digital remittances, therefore, benefit senders, recipients, and remittance service providers, creating opportunities for broader economic impacts in the short- and long-term (IFAD, 2024). Yet, an estimated two billion adults, mostly women, remain excluded from formal financial services, highlighting a critical digital inclusion gap, particularly in developing countries (GPFI, 2017).

A key international agreement underscoring increased financial inclusion is the 2015 Sustainable Development Goals (SDGs), adopted by all 193 member states of the United Nations (UN SDGs, 2016). A key target for achieving financial inclusion by 2030 includes reducing remittance costs to less than 3% relative to the principal amount and eroding remittance corridors with costs above 5% (SDG 10.c.1). Reducing remittance costs by 5% points could result in USD 16 billion worth of savings annually, for recipients (World Bank, 2025). The United Nations General Assembly in 2018 further proclaimed 16th June the 'International Day of Family Remittances', recognizing that more than one billion people are impacted by remittances annually (GPFI, 2023). Thus, the theme for the 2023-2024 Family Remittances Campaign was "digital remittances towards financial inclusion and cost reduction," highlighting digitalization to enhance remittance access and financial inclusion (IDFR, 2024).

International agreements among G20 countries, non-G20 countries, and affiliated partners can contribute to increased financial inclusion among underserved populations. This includes the Global Partnership for Financial Inclusion (GPFI)'s 2010 financial inclusion action plan (FIAP), which promotes effective financial policies and enhanced multilateral engagement for cross-border payments of migrant remittances (FSB, 2021; GPFI, 2023). The GPFI further supports innovative investment mechanisms to amplify the development impact of remittances, particularly in financing SDG implementation in developing countries (UNGA, 2018). Likewise, the Global Compact on Migration (2018) underscores the need for faster, cheaper, and safer remittance transfers and the creation of conducive conditions for migrants to contribute to sustainable development (United Nations, 2018).

Conducive environments for digital remitting vary by country, depending on governance systems, financial regulations, infrastructure frameworks, economic market drivers, and digital financial literacy (IFAD, 2024). The United Nations General Assembly invites member states, non-governmental organizations, civil society, the private sector, academia, and individuals to collectively facilitate enhanced SDGs implementation (UNGA, 2018). Examining the dynamics of digital remittances can reveal structural and non-structural enablers and barriers, informing how to leverage remittances for sustainable development.

Methodology

The scoping literature review approach adopted by this paper involved conducting a wide literature search guided by research questions, identifying and selecting relevant studies, charting the data, and synthesizing the findings (Arksey & O'Malley, 2005). This was further strengthened with the PRISMA Framework (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), which provides a rigorous structure for review processes of identifying, screening, assessing articles for eligibility, and inclusion and exclusion criteria (Tricco et al., 2016). The literature review explores peer-reviewed literature on digital remittances, highlighting findings, central themes, and identifying gaps and areas of attention for future research. The key research questions are:

- What does the existing literature reveal about digital remittances, including key findings and central themes?
- What evidence exists on digital remittance impacts on financial inclusion, poverty reduction, socioeconomic wellbeing, and climate action in Sub-Saharan Africa?

A systematic search of the Scopus, Web of Science, and Dimensions databases was conducted for peer-reviewed articles published in English from 1998 to 2024. The literature search was shaped by the definition of digital remittances as remittances sent via a digital platform and received into a bank or non-bank deposit-taking institution (e.g., a mobile money or electronic money account) (Niankara & Traoret, 2023; World Bank, 2020). Different iterations of the term 'digital remittance' and Boolean search functions were adopted to support the capture of multiple forms of key terms (Table 1). The search was restricted to article abstracts, titles, and author keywords. This search resulted in 595 articles in English, for which bibliometric data were retrieved in 'csv' format, stored, and analysed in Excel.

Of the 595 articles retrieved, all duplicates were removed, leaving 418 documents (Figure 3). The remaining articles were screened using their titles and/or abstracts, and sometimes a preliminary reading of the article to determine their eligibility for inclusion in the full review. Excluded papers mostly focused on digital technologies without remittance linkages or migrant remittances without digital technology linkages (Figure 3). The papers included in the full review provided insights into digital and financial technology for remittances, digital remittances, and socio-economic devel-

opment, as well as digital remittance regulations, policies, and development. A total of 190 peer-reviewed articles were eligible for inclusion in the scoping review.

The study adopted both quantitative (bibliometric) and qualitative approaches to the literature review. The quantitative analysis involved descriptive statistics in Excel, including charts of the number of publications and citations, the most publications per journal, the top-cited articles, and the methods. This was followed by a qualitative analysis of articles, identifying findings, key themes, and gaps in the literature.

Key Sources and Themes

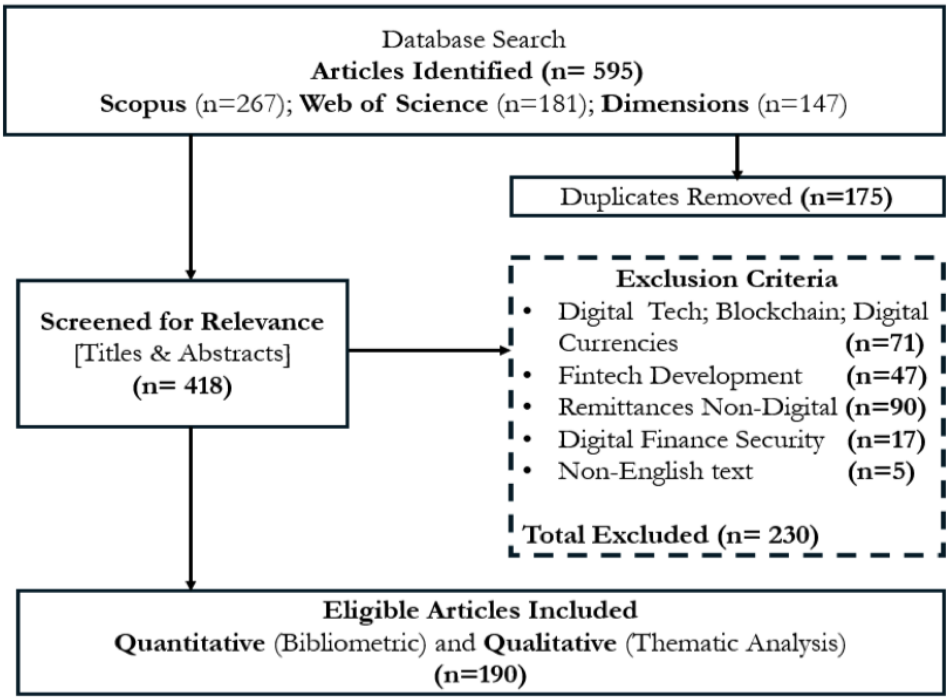
The 190 articles reviewed were published across 150 journals, with seven journals: *Journal of Payments Strategy and Systems, World Development, Telecommunications Policy, Review of Development Economics, Journal of International Development, Journal of the Knowledge Economy, and European Journal of Development Research*, publishing 12% of all articles. More than 65% of published articles were quantitative studies, with most relying on secondary data (Appendix A). Of the 190 articles, 62 (32%) spanned the geographical regions of emerging economies, remittance-recipient countries, and developing countries; 67 (35%) focused broadly on Sub-Saharan African countries, including Kenya, Uganda, Tanzania, Nigeria, and Ghana. There were also 30 articles (16%) that focused on Asia, especially Bangladesh, India, and the Philippines, while 9 articles (5%) provided insights from Europe, including Romania, the Netherlands, Armenia, and Ukraine. The 13 remaining articles (7%) explored digital remittance insights from countries in Latin and Central America, Small Island Developing States, the Caribbean, and Gulf Cooperation Council countries (Appendix A).

The first article linked to digital remittances was published in 1998, highlighting findings from a survey of executives in treasury and financial management positions on their perceptions of the uptake of electronic platforms for payments (including migrant remittances) (Phillips, 1998). Publication slowed down after 1998 but gradually increased from 2009 and sharply increased after 2019 (Figure 4). Sixty-nine percent of the articles were published after 2019, indicating heightened interest in digital remittances and their impacts

Table 1: Search Strings Used in Article Extraction

Database	Search string	Articles (No.)
Scopus	(TITLE-ABS-KEY (digit*) OR TITLE-ABS-KEY (online) OR TITLE-ABS-KEY (electronic) OR TITLE-ABS-KEY ("mobile money") OR TITLE-ABS-KEY (internet) OR TITLE-ABS-KEY (fintech) OR TITLE-ABS-KEY (virtual) OR TITLE-ABS-KEY (e-remittance) AND TITLE-ABS-KEY (remittan*) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English"))	267
Web of Science	"digit*" and "remittan*" (Topic) or "online" and "remittan*" (Topic) or "electronic" and "remittan*" (Topic) or "mobile money" and "remittan*" (Topic) or "virtual" and "remittan*" (Topic) or "fintech" and "remittan*" (Topic) and "internet" and "remittan" (Topic) and Article (Document Types) and English (Languages)	181
Dimensions	Digital remittance	147
Total		595

Figure 3: Flow Chart for Article Screening



after the COVID-19 pandemic (Figure 4). The papers with the highest number of total citations were published in 2014 (Jack & Suri, 2014) and 2016 (Peters & Panayi, 2016). The reviewed articles were classified under five broad thematic areas (Figure 5).

The ten most cited articles highlighted key themes within the digital remittances research landscape (Table 2). Seven articles focused on the digitalization of remittances via mobile platforms, especially the use of mobile money in developing countries and its poverty-reduction potential (Jack & Suri, 2014; Lee et al., 2021; Munyegera & Matsumoto, 2016, 2018). The benefits of mobile money included improved access to financial services, enhanced welfare, poverty reduction, and consumption-smoothing amid economic shocks at the household level (Kikulwe et al., 2014; Riley, 2018; Sekabira & Qaim, 2017). Two papers examined business and infrastructure development policies to leverage digital remittances for human development in Sub-Saharan Africa (Asongu, 2018; Lueth & Ruiz-Arranz, 2008). The last paper focused on digital innovations, particularly blockchain technologies, to enable less costly, more transparent, and faster remittance transfers than conventional formal remittance services (Peters & Panayi, 2016).

Figure 4: Total Number of Papers Published and Paper Citations, 1998-2024

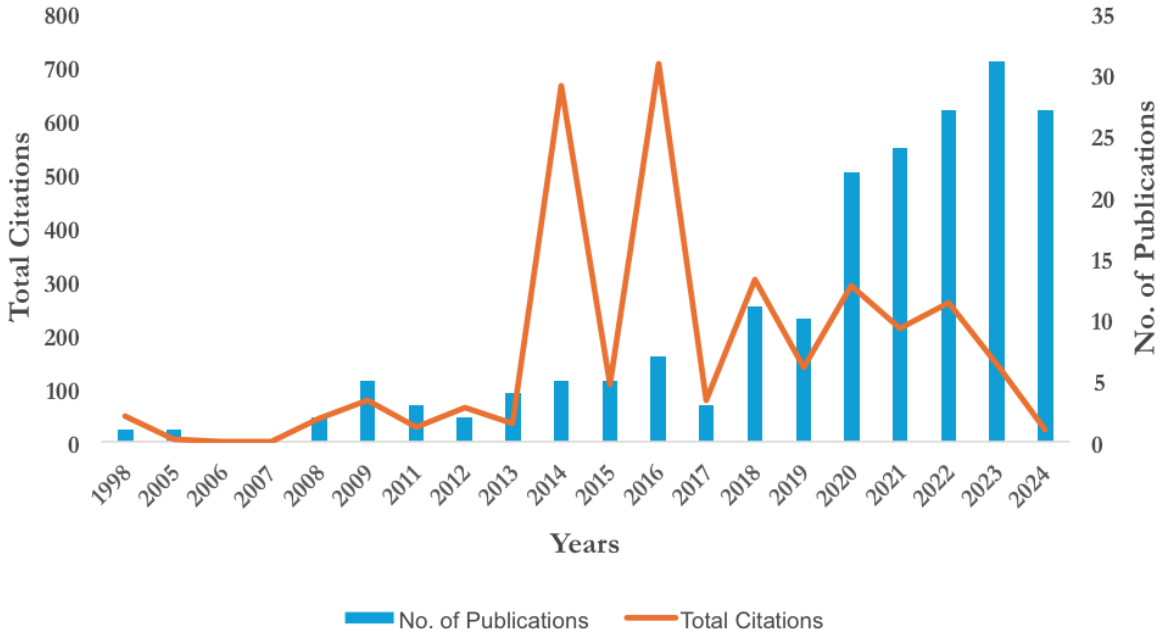
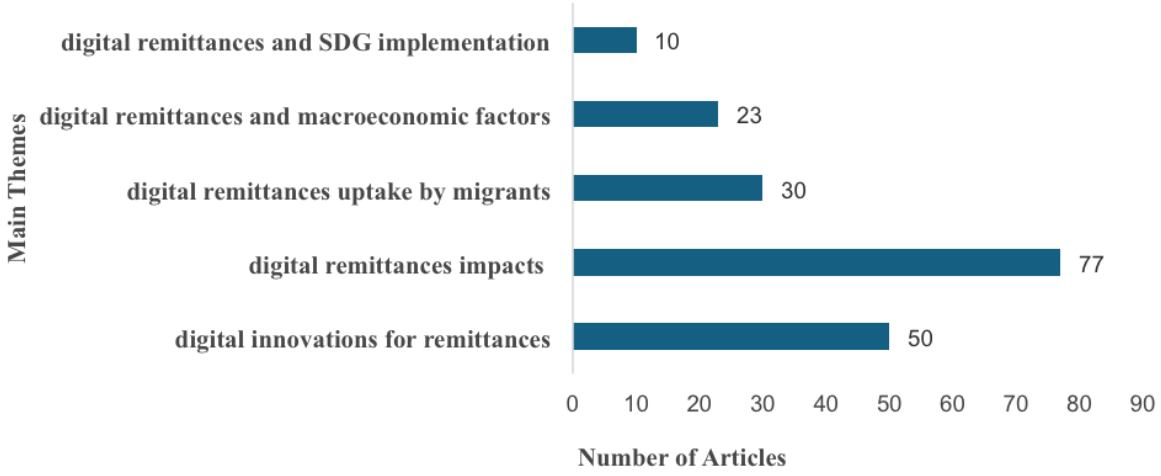


Table 2: Ten Most Cited Articles

Rank	Title	Journal	Citations	References
1	Risk sharing and transaction costs: Evidence from Kenya's mobile money revolution	American Economic Review	509	Jack & Suri (2014)
2	Understanding modern banking ledgers through blockchain technologies: Future of transaction processing and smart contracts on the internet of money	New Economic Windows	415	Peters and Panayi (2016)
3	Mobile money, remittances, and household welfare: Panel evidence from rural Uganda	World Development	230	Munyegera & Matsumoto (2016)
4	Mobile money, smallholder farmers, and household welfare in Kenya	PLoS ONE	135	Kikulwe et al. (2014)
5	Mobile money and risk sharing against village shocks	Journal of Development Economics	105	Riley (2018)
6	Mobile money, agricultural marketing, and off-farm income in Uganda	Agricultural Economics	77	Sekabira & Qaim (2017)
7	ICT for financial access: Mobile money and the financial behavior of rural households in Uganda	Review of Development Economics	67	Munyegera & Matsumoto (2018)
8	Determinants of bilateral remittance flows	B.E. Journal of Macroeconomics	65	Lueth & Ruiz-Arranz (2008)
9	Poverty and migration in the digital age: Experimental evidence on mobile banking in Bangladesh	American Economic Journal – Applied Economics	54	Lee et al. (2021)
10	Conditional determinants of mobile phones penetration and mobile banking in Sub-Saharan Africa	Journal of the Knowledge Economy	53	Asongu (2018

Figure 5: Main Themes and Number of Publications per Theme



Digital Innovations for Remittances

Fifty articles (or a quarter of the total) were classified under the first theme (Figure 5). These articles examined how digital technologies have transformed the remittances landscape, improved access to financial services, reduced costs, and accelerated financial transactions in developing regions across Southeast Asia, Sub-Saharan Africa, and the Pacific Islands. Various subthemes provide further insights.

Mobile Money, Mobile Banking, and Digital Payment Technologies: The introduction of the internet, and digital, electronic, and mobile innovations such as smartphones is transforming conventional banking operations (Ozili, 2020; Phillips, 1998; Wang & Wang, 2022). Mobile banking is enabled by internet access and the use of smartphones, tablets, and computers, allowing users to manage their bank accounts and access financial services online. The adoption of such systems enables users to save in electronic wallets, send and receive remittances, and access online payments and digital banking apps, fostering inclusive economic growth, even in regions with limited traditional banking infrastructure (Agarwal & Taneja, 2021; Jadhav & Bhagwat, 2023; Jeong et al., 2018). Electronic wallets and digital finance payment apps are gaining attention as payment methods for online transactions and remittances (Koike, 2015; Mampaey, 2011; Rachmad & Raharjo, 2023; Tang et al., 2021).

The primary digital platform driving financial inclusion in developing countries, is mobile money. Mobile money operates via mobile phones and mobile network operators, facilitating access to basic banking services, including savings, withdrawals, deposits, payments, and money transfers, with or without a traditional bank account or internet access. Increased mobile phone penetration has been linked to increased remittance transactions and industrialization trends in 49 African countries between 1980 and 2014 (Asongu & Odhiambo, 2020). With mobile money, sending and receiving money over long distances is cheaper and more convenient, especially for migrants sending money back home, even in regions with inconsistent internet access. Mobile financial services like mobile money have become a pivotal platform driving digital remittance behaviour in developing countries like Kenya, Uganda, Bangladesh, and Indonesia (Ciptarianto, 2022; Emara & Zhang, 2021; Fernandes et al., 2021; Hossain & Samad, 2021; Johora & May, 2015; Masino & Niño-Zarazúa, 2020; Muwanguzi & Musambira, 2009; Niankara & Traoret, 2023; Srinivas, 2017).

Digital Non-Financial Technologies: The implications of digital non-financial technologies, such as Information and Communication Technology (ICT) and social media platforms for international migration and remittance processes are significant. Increased diffusion of digital infrastructure, such as fixed broadband, internet access, and mobile cellular networks, has enabled greater use of formal remittances for socioeconomic development in recipient countries (Adeabah et al., 2021; Ghislain, 2022; Jemiluyi & Jeke, 2023, 2024; Laguerre, 2013). Social media platforms like Facebook facilitate connections between migrants and their relations, fostering both financial and non-financial remittances (Wu, 2021). Social media platforms further impact how migrants communicate and send remittances (e.g., crowdfunding) for development projects (Akanle et al., 2021; Ali et al., 2024; Li, 2024; Ongo Nkoa et al., 2023; Wahyono et al., 2019). Higher remittance-sending behaviour has been linked with more frequent use of social media and communication technologies, as observed among Somali migrant communities in Canada who send remittances to their families back home (Elmi & Ngwenyama, 2020).

Fourth Industrial Revolution Technologies: Apart from the proliferation of digital remittances through online and mobile wallets, some studies have highlighted the transformative potential of Fourth Industrial Revolution technologies, such as distributed ledgers, blockchain, and cryptocurrencies, particularly for cross-border remittances (Peters & Panayi, 2016; Wang et al., 2020). Blockchain technology facilitates online financial transactions by eliminating intermediaries, reducing transaction costs, and increasing transparency in cross-border remittances (Sajter, 2022). Other papers explored the potential of adopting digital versions of national currencies referred to as Central Bank Digital Currencies (CBDC) to address key challenges, such as high transaction costs that currently plague the banking and fintech-related remittances industry (Choi et al., 2017; Didenko & Buckley, 2022; Dong et al., 2024; Edwards, 2021; Wood & Brathwaite, 2016).

Institutional and Policy Perspectives: Apart from formal financial institutions, the fintech industry is key to promoting digital remitting. Fintech industries function as a bridge between the financial, information, and communications technologies industries, providing innovative financial products for harnessing remittances towards socioeconomic development (Aleksanyan, 2022; Apostu et al., 2023; Ashimbayev et al., 2018; Kantoroeva & Toktomamatova, 2020; Kim et al., 2019; Lyons et al., 2022; Sawng et al., 2022). Leveraging digital remittance flows requires policies that improve digital literacy, internet expansion, digital and communication infrastructure, and innovations that boost mobile financial services adoption and financial inclusion (Alhassan, 2023; Emara & Zhang, 2021; Kasiisii et al., 2023; Mahmood-ur-Rahman, 2022; Sekantsi & Lechesa, 2018)

Digital Remittances Impacts

Under this second theme, 77 articles (41% of total articles) explored how digital remittances, particularly through mobile money platforms, contribute to increased financial inclusion, mostly in developing regions such as Sub-Saharan Africa and Southeast Asia. The articles present a range of evidence on improved household welfare, poverty reduction, and financial inclusion, elaborated under the following sub -themes.

Financial Inclusion: The papers in this theme identify mobile money platforms as the most transformative digital tools fostering financial inclusion in developing regions. The uptake of mobile money in these regions is driven by high populations being unbanked, limited physical banking infrastructure, rising education levels, supportive monetary policies and widespread mobile phone penetration (Alhassan et al., 2021; Apeti & Edoh, 2023; Asongu, 2018; Bair & Tritah, 2019; Chatterjee, 2024; Mahmoud El Baz, 2020; Mtengwa et al., 2021; Munyegera & Matsumoto, 2018; Tian & Xiang, 2024; Wu et al., 2023). The M-Pesa mobile money service is one of the most successful mobile financial services in Africa, with lightning-fast record uptake in Kenya, surpassing the adoption speed of most technological innovations in advanced industrial countries (Batchelor, 2012; Jack & Suri, 2014; Kusimba et al., 2016; Suri et al., 2012; Velazquez et al., 2022). Despite challenges like high cash preference, digital illiteracy, limited internet connectivity, and data privacy concerns in developing countries, mobile remittance platforms have advanced financial inclusion (Bettman & Harris, 2014; Chatterjee, 2024; Kumar & Dutta, 2015; Kumar & Charles, 2024; Mahmoud El Baz, 2020; Mpofu, 2024; Mtengwa et al., 2021; Myeni et al., 2020; Ozili & Mhlanga, 2024; Patel, 2023; Saravanbhavan & Rajeev, 2023; Singhania & Tanty, 2023).

Mobile money service providers leverage the widespread use of mobile phones to expand access to financial services, thereby supporting economic development at micro- and macro-scales. Mobile money is bridging the significant digital and financial gap that limits vulnerable groups, such as rural populations, women, and low-income earners, from accessing formal banking services (Della Peruta, 2018; Kim, 2022; Kusimba et al., 2016; Mpofu, 2024; Sakyi-Nyarko et al., 2022). Households that were formally financially excluded are empowered to participate in economic interactions through access to financial services including bill payments, savings, borrowing, access to credit, sending and receiving remittances (Ajefu & Massacky, 2023; Ajefu & Ogebe, 2019; Apeti, 2023; Atta-Aidoo et al., 2023; Bukari et al., 2024; Dube & Chummun, 2019; Geng et al., 2018; Kikulwe et al., 2014; Kilombele et al., 2023; Munyegera & Matsumoto, 2016; Mustafa et al., 2023; Myeni et al., 2020; Ngaba, 2021; Ozili, 2021; Seng, 2021; Senou & Houensou, 2024; Thulani et al., 2014; Wang & Wang, 2022).

Mobile money platforms provide households with access to financial services at lower cost, greater accessibility, and greater convenience than traditional banking services (Biggs, 2016; Huang et al., 2020; Mersland et al., 2013; Naito & Yamamoto, 2022; Obadha et al., 2020). At the macro-level, mobile money drives financial inclusion, boosting economic development across various scales, especially through personal income and corporate tax revenues and job creation (Alhassan et al., 2021; Apeti & Edoh, 2023; Mersland et al., 2013; Naito & Yamamoto, 2022).

Household Poverty Reduction and Consumption Smoothing: Receiving remittances via mobile financial platforms is vital for consumption smoothing, especially for households in developing countries who regularly experience income and economic shocks. Data from 76 developing countries (1990–2019) showed that mobile money platforms increased access to migrant remittances, thereby reducing consumption volatility during shocks (Apeti, 2023). For example, in Tanzania and Kenya, households using mobile money did not experience any drop in consumption during economic shocks, whereas non-user households did (Jack & Suri, 2014; Naito et al., 2021; Riley, 2018). Households using mobile financial platforms were likely to receive remittances more frequently, mobilize resources for investment in income-generating activities, engage more in financial transactions, and have more consumption, compared to non-users (Apiors & Suzuki, 2018, 2023; Gascón et al., 2023; Lee et al., 2021; Stark, 2021).

Receiving remittances has thus supported poverty reduction in low- and middle-income developing contexts. Mobile technology–driven financial inclusion has been linked to reduced inequality and poverty levels in Latin American countries (e.g., Ecuador and El Salvador), some Eastern European countries (e.g., Poland and Slovenia), and Sub-Saharan African countries (Giannetti et al., 2009; Polloni-Silva et al., 2021; Senou & Houensou, 2024). Therefore, digital financial platforms can more effectively alleviate poverty by improving household access to remittances and addressing their financial, digital, and technical exclusion (Inoue, 2024; Subramaniam & Masron, 2024).

Access to mobile financial platforms also reduces poverty risks among smallholder agricultural households by improving access to agricultural inputs, fostering increased productivity, income generation, and commercialization (Kilombele et al., 2023; Yao et al., 2023). Digital finance platforms have improved access to fertilizer and increased agricultural participation in Pakistan (Mumtaz, 2024). Also,

in Uganda and Kenya, smallholder farmers using mobile money experienced reduced cash constraints and benefited from money transfer transactions and agricultural marketing opportunities (Kikulwe et al., 2014; Sekabira & Qaim, 2017). The adoption of mobile banking services enables the receipt of remittances, facilitating agricultural intensification and increased per capita farm income (Tabetando et al., 2022).

Access to remittances, especially via mobile platforms, has contributed to continuous improvements in living standards and household welfare in areas of health and food security (Braimah et al., 2024; Munyegera & Matsumoto, 2016). Receiving remittances is one of the primary ways in which mobile money enhances households' food security and nutrition, facilitating food purchases (Ajefu et al., 2024). On the other hand, the influx of remittance income and the convenience of spending through digital platforms may fuel consumption-oriented behaviour, especially for non-essential goods and services (Mas'udah, 2020; Naito et al., 2021; Twumasi Baffour et al., 2021).

Increased Investments in Human Capital: Access to remittances is embedded within strong social networks, and in the absence of social safety nets, access to digital remittances facilitates payments for human capital development services, including education and healthcare (Guermond, 2022; Housen et al., 2013; Ojong, 2016). Access to digital remittances has improved access to health insurance and healthcare services, including pregnancy-related and newborn care, in developing countries in Africa and Asia (Egami & Matsumoto, 2020; Geng et al., 2018; Nathaniel, 2019). School fees are key barriers to education in developing countries. Access to mobile money has been positively correlated with higher investment in children's education in Kenya, Nigeria, Tanzania, Ghana, and Uganda, increasing school enrolment and reducing child labour, especially among female-headed households (Abdul-Mumuni et al., 2019; Abiona & Koppensteiner, 2022; Ajefu & Massacky, 2023; Rotondi & Billari, 2022; Tabetando & Matsumoto, 2020). A study in Benin found that the costs, time, and risks associated with school fee payments were reduced for households that used mobile money platforms to remit school fees directly to schools (Adida et al., 2018). Household financial and digital literacy has also been linked with increased access to remittances via mobile financial platforms (Mas'udah, 2020; Seng, 2021).

Digital Remittances and Macroeconomic Factors

The influence of macroeconomic, regulatory, and financial environments, as well as global crises, on digital remittances was examined in 23 articles (12%).

Financial Environment and Digital Infrastructure: Remittances are now the main source of capital inflows to developing countries, contributing significantly to their economic development while being less volatile and less burdensome on government budgets than foreign direct investment (FDI) (Bouoiyour et al., 2016; Zakaria et al., 2023). Yet, the volumes and inflows of digital remittances will only thrive in the context of well-developed, interoperable digital and financial environments that facilitate access to banks, non-bank financial services, and mobile financial platforms (Gurira, 2024; Lueth & Ruiz-Arranz, 2008; Shaibani & Wye, 2024). Countries like Kenya and the Philippines provide key examples of government partnerships with private financial and telecommunications institutions that have fostered innovations in digital remittance platforms, thereby increasing national financial inclusion levels (Vlcek, 2011). In a country like Lesotho, by contrast, informal cross-border remittances are substantial, due to the limited presence of international money transfer operators, inefficient interoperability between banks and mobile network operators, and a limited number of mobile money transfer agents in non-urban areas (Sekantsi & Peter, 2018).

Some countries, including many Small Island Developing States (SIDS), due to their geographical remoteness and spatially dispersed populations, face significant barriers in installing physical infrastructure for digitalization, further heightening remittance costs (Hahm et al., 2021). The cost of remitting constitutes a major impediment to the uptake of digital remittance platforms, particularly in Sub-Saharan Africa and SIDS (Hahm et al., 2021; Rodima-Taylor & Grimes, 2019). However, there has been a noticeable reduction in remittance costs across some regions as digitalization levels increased (Carare et al., 2022). Establishing a competitive economic environment for fintech companies, combined with improved interoperability between local and international remittance service providers, is crucial to reducing remittance transaction costs (Carare et al., 2022; Hahm et al., 2021; Rodima-Taylor & Grimes, 2019).

Regulatory Infrastructure: Digitalization facilitates faster, cheaper remittance transfers but may pose regulatory and cybersecurity challenges, thereby inhibiting remittance flows (Akanfe et al., 2020c, 2020a, 2020b). In remittance-recipient countries, corruption, high inflation, and distrust in institutions have been linked to devalued remittance inflows (Gurira, 2024; Padhan et al., 2023; Salman, 2009). In some jurisdictions, a hybrid regulatory system has emerged to mitigate the effects of weak financial institutions and political insecurity. For example, in Somaliland, stakeholders such as private fintech companies, the police, Sharia courts, and community leaders jointly address mobile money-related disputes (Stremlau & Osman, 2015).

For these reasons, simultaneously improving the quality of financial institutions and addressing government-related investment inefficiencies can positively impact remittance inflows for financial development (Mamman, 2023; Pal & Mahalik, 2024). This highlights the need for robust national, international, government, fintech company, and international remittance policies that address issues like corruption, consumer protection, cybersecurity, money laundering, terrorism finance, data privacy concerns, migrant protection, and safe remitting (Akanfe et al., 2020c, 2020a, 2020b; Bunduchi et al., 2019; Srouji, 2020; Vlcek, 2011). At the international level, the introduction of remittance cost-transparency tools and monitoring indicators is deemed crucial for

addressing regulatory concerns and boosting remittance flows in emerging economies (Gurira, 2024; Shaibani & Wye, 2024).

Economic Downturns and Digital Remittance Patterns: The impact of economic downturns and natural disasters on local economies may be moderated by access to remittances. While remittances support the restoration of pre-disaster livelihoods, post-disaster remittance inflows may not be sufficient to reduce disaster-related vulnerability (Lueth & Ruiz-Arranz, 2008). The adverse impacts of the COVID-19 pandemic on global and local economies included significant, though uneven, decreases in remittances flows. Yet migrant resilience, coupled with the rapid uptake of digital remittance platforms, stabilized remittance flows to some countries and regions during the pandemic (Abel & Gietel-Basten, 2020; Tsingou, 2021). Among Zimbabwean migrants in South Africa, for example, remittance flows during and after the COVID-19 pandemic were sustained by a major shift from informal to digital remittance channels (Crush & Tawodzera, 2023; Sithole et al., 2023). Digital remittance platforms could reduce vulnerability in disaster-prone areas, especially compared to informal remittance channels, though this may vary with the impact of the disaster, the digital remittance infrastructure, and uptake.

Digital Remitting Uptake by Migrants

Thirty articles (16%) highlighted complexities such as transnational family dynamics, migrant challenges, dynamics of remittance markets, and the potential of digital solutions. The dynamics of sending and receiving remittances reflect complex, multidimensional, and nuanced interactions rather than linear techno-fix interpretations (Cirolia et al., 2021; Mirabaud, 2009). The uptake of digital remitting by migrants is influenced by digital literacy and formal financial infrastructure in their country of origin (Ilinitchi, 2020; Kosse & Vermeulen, 2014; Kumar & Dutta, 2015; Shah & Sachin, 2024). One study focused on low-income migration from Pakistan, India, and Sri Lanka found that less than 25% of households had knowledge of and were likely to use mobile money remittance platforms (Sivapragasam et al., 2011). In Bangladesh, a digital remittance training program among illiterate migrant households significantly increased the uptake of mobile banking remittances among men and women, although men used the platforms more extensively (Lee et al., 2022). Another study found that amid prolonged civil unrest, Myanmar migrants in Thailand preferred informal cross-border remittance channels called 'phoy-kyuwn', which had gained the trust of migrants and their families for transferring money, goods, and services (Wantanasombut, 2022). Despite the end of the war and the widespread adoption of telecommunication and digital remittance channels, the preference for informal remittance channels persists, addressing the needs of both documented and undocumented migrants and their families (Wantanasombut, 2022).

Overall, migrant remittances support the economic development and social well-being of recipient households and countries, optimized by digitalization (Chernobay & Malibroda, 2024; Dey et al., 2024; Dilanchiev et al., 2020; Gniniguè & Ali, 2022; Gupta & Hegde, 2009; Kairuki & Cousins, 2022; Shah & Sachin, 2024; Varlamova et al., 2023). Access to the internet and digital platforms enables the maintenance of economic, social, and emotional connections across long distances, especially for migrants who have left their children behind (Ballaret & Lanada, 2022; Bryceson, 2022; Cabalquinto, 2020; Mirabaud, 2009). Beyond households, digitalization fosters transnational social connections at the community and ethnic group levels, supporting collective investments in community development projects (Chua & Wellman, 2015; Cohen & Zotova, 2021; Mills, 2005).

Legal migration for economic purposes is often more feasible for middle-income and higher-income households, with remittances reinforcing the prosperity of recipient households (Agyei, 2021). Furthermore, digital platforms encourage remitting for self-insurance purposes, with migrants managing their mobile accounts in their home countries, especially for potential return migrants (Bounie et al., 2013). Also, for those with financial means, access to digital remittance platforms supports international migration, especially for trade and education purposes, addressing key challenges in the payment of fees (e.g., international student fees) quickly, safely, and at less cost (Barnett & Nam, 2024; Prakash & Venkataramani, 2021). The benefits of digital remittances notwithstanding, factors like migrant income, duration of stay, financial behaviours, financial literacy, and social interactions shape the frequency and volumes of remittances sent and received via mobile platforms (Cohen & Zotova, 2021; Johnson & Stoll, 2008; Lee et al., 2024; Morvant-Roux & Peixoto-Charles, 2020; Sivapragasam et al., 2011).

Digital Remittances and the SDGs

The ten articles (5%) addressing this theme explore how digital remittances may finance broader sustainable development, especially goals related to environmental sustainability and climate change impact mitigation. Digital remittances aimed at mitigating climate change and advancing environmental sustainability are referred to as 'green remittances' (Mills, 2023). Access to digital remittances influences the adoption of clean energy technologies, which are required to reduce fossil fuel emissions and mitigate climate change impacts (Farzana et al., 2024). A Somali study found that mobile money access among low-income households facilitated a switch from environmentally polluting traditional fuels to environmentally sustainable solar-powered fuels (Mohamed & Mohamud, 2024). Similarly, remittance-receiving households in Nigeria and Uganda were more likely to adopt cleaner energy systems such as electricity and solar photovoltaic panels, rather than traditional fuels (Aarakit et al., 2022; Aminu et al., 2024).

While digital remittances enable the adoption of cleaner energy systems (SDG 7) and foster climate mitigation (SDG 13), the expansion of digital financial platforms may increase energy consumption and electronic waste production, hampering environmental sustainability (Kai et al., 2024; Siddiqui et al., 2022). A study from India found that

higher remittance inflows increased oil consumption, while technological innovation also increased short-term oil demand (Siddiqui et al., 2022).

Digital remittances contribute towards finances for SDG implementation in LMICs (Mhlanga, 2023). To amplify sustainable development's impact, digital remittance policies must address cross-SDG synergies, so that progress in one SDG complements rather than nullifies progress in others. There must be engagements among home countries, diaspora groups, remittance beneficiaries, and remittance service providers to leverage digital remittances to broadly support sustainable development, including building resilience to climate-related impacts in the short- and long-term and across multiple scales (Mills, 2023; Nurse, 2018).

Research Gaps & Policy Challenges

Of the 190 articles included in this review, most focused on digital remittance dynamics in developing regions, particularly Sub-Saharan Africa (Appendix A). This reflects global research interest in the potential of migrant remittances to support socioeconomic development in developing countries, making up for FDI and ODA deficits. Regardless, the review highlights critical gaps in the research on digital remittances.

First, there is limited evidence on the redistributive impacts of digital remittances beyond the household level. While digitalization has accelerated remittance flows to developing countries, there is limited evidence on whether and how they might fund public and social infrastructure. While ODA and FDI finance economic and social infrastructural projects for public or national benefit, digital remittances foster financial inclusion and increased well-being of beneficiary households (Agyei, 2021; Jack & Suri, 2014; Jemiluyi & Jeke, 2024; Munyegera & Matsumoto, 2016; Riley, 2018). Hence, a key policy challenge for governments and other development stakeholders is harnessing remittances to amplify economic and development impacts at the household, community, and national levels (GPFI, 2023; IFAD, 2017; UNCTAD, 2013).

Second, there are obvious limitations in the types of data and research methods used in studies of digital remitting. With the research area of digital remittances in its infancy, more than 70% of the articles reviewed used secondary data and qualitative literature reviews. More primary country-level data is required to yield nuanced, deeper insights into the dynamics of digital remittances. This necessitates integrating quantitative, qualitative, mixed-methods, cross-sectional, and longitudinal research approaches, using primary data, to examine the short- and long-term impacts of digital remittances in developing countries. As innovations like Artificial Intelligence, Blockchain, and Ledger technologies evolve, they should be informed by participatory research methods to inform evidence-based decision–making for inclusive digital remittance uptake.

Third, the factors influencing the dynamics of digital remittance sending and receiving are complex, multidimensional, nuanced, and under-researched. While factors such as human behaviour, user experience, remittance mobilization capacities, and social-cultural dynamics influence the uptake of digital remittances, research on these dimensions remains markedly deficient. Other factors shaping digital remittance dynamics are specific migration-corridor development, social mediation processes, gender, socioeconomic trade-offs, cross-border regulations, migrant socioeconomic conditions, and financial technology uptake (Cirolia et al., 2021; Morvant-Roux & Peixoto-Charles, 2020; Sekantsi & Peter, 2018; Shah & Sachin, 2024). Marginalized groups, including women, seniors, less-educated people, and people in rural and remote areas, also face telecommunication and internet access barriers, limiting their digital remittance uptake (Sohst, 2024).

Fourth, another gap is the lack of comprehensive data on the volumes and modes of informal remittance channels. Beyond reduced costs, informal remittance channels are shaped by historical, social, and cultural contexts, offering personalized rates and delivery packages to migrant families, thereby addressing the limitations of formal remittance channels (Guermond, 2022; Ojong, 2016; Wantanasombut, 2022). In addition, cross-border unlicensed remittance services are increasingly using digital platforms, blurring the distinction between formal and informal remittances and raising cybersecurity concerns (Cirolia et al., 2021; Ngaba, 2021; Wantanasombut, 2022). Data on networks, actors, costs, modes of transaction, and volumes is relevant for reducing the cost of remittances and informal remittance use, thereby facilitating progress toward digital remittances.

Finally, digital remittances can support a range of SDGs on poverty reduction, economic growth, food security, enhanced education and healthcare, clean energy, and gender equality (Ajefu et al., 2024; Ajefu & Massacky, 2023; Aminu et al., 2024; Chatterjee, 2024; Egami & Matsumoto, 2020; Tabetando et al., 2022; Tabetando & Matsumoto, 2020). However, impacts on climate action (SDG 13) are underexplored. Given the linkages among climate-related impacts, poverty, migration, agricultural livelihoods, and remittances, enhancing digital remittances to support climate adaptation is crucial amid intensifying climate-related disasters (IPCC, 2022; UNCTAD, 2013). Regardless, increased digital remittances may foster remittance dependency, consumption-oriented lifestyles, and increased energy consumption, with long-term adverse economic and environmental sustainability impacts (Acosta et al., 2009; Farzana et al., 2024; Mas'udah, 2020). Research is required to examine the interactions between digital remittances and overall economic, social, and environmental sustainability, especially in climate adaptation, disaster risk management, and resilience building.

Conclusion

Designing effective policies, programs, and interventions for amplifying the development impacts of remittances must be backed by evidence-based research. The discussion above demonstrates a growing research interest in the uptake of digital remittances and their socioeconomic impacts, especially in developing regions like Sub-Saharan

Africa. Research interests spiked after 2019, following the COVID-19 pandemic, highlighting remittances' relevance for household well-being and consumption smoothing amid economic shocks. The review further highlights critical research gaps, including the significant reliance on secondary data, the use of quantitative methods, and a heavy focus on short-term poverty reduction among recipients rather than broader economic, social, and environmental sustainability goals.

The lack of an adequate knowledge base may limit policy development and the leveraging of remittances for sustainable development. Future research should address these pressing gaps and engage stakeholders in assessing the systemic linkages between digital remittances and short- and long-term sustainable development goals, thereby strengthening policy development and coherence. Stakeholders include governments and international institutions, fintech companies, banks and non-bank financial institutions, telecommunication institutions, internet service providers, remittance service providers, diaspora networks, and marginalized groups. The complexity of the digital remittances research landscape necessitates holistic, context-specific insights informed by systems-focused theoretical frameworks, including intersectionality, socio-techno-ecological systems (STES), vulnerability, resilience, and feminist participatory research approaches.

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Appendix A: Included Studies Based on Themes

Africa	Asia	Europe/Russia/GCC	Americas	Developing Regions	Total
Theme: Digital Innovations for Remittances					
Sekantsi & Lechesa (2018)	Kim et al. (2019)	Russia	SIDS	Wang et al. (2022)	50
Niankara & Traoret (2023)	Tang et al. (2021)	Ashimbayev et al. (2018)	Didenko & Buckley (2022)	Peters & Panayi (2016)	
Fernandes et al. (2021)	Hossain & Samad (2021)			Koike (2015)	
Ongo Nkoa et al. (2023)	Jeong et al. (2018)	Europe	Central, Latin & Caribbean	Phillips (1998)	
Elmi & Ngwenyama (2020)	Sawng et al. (2020)	Sajter (2022)	Masino & Niño-Zarazúa (2020)	Choi et al. (2017)	
Asongu & Odhiambo (2020)	Johora & May (2015)	Aleksanyan (2022)	Laguerre (2013)	Agarwal & Taneja (2021)	
Jemiluyi & Jeke (2023)	Ozili (2020)	Apostu et al. (2023)	Wood & Brathwaite (2016)	Kasiisii et al. (2023)	
Jemiluyi & Jeke (2024)	Rachmad & Raharjo (2023)	Kantoroeva & Toktomamatova (2020)		Dong et al. (2024)	
Muwanguzi & Musambira (2009)	Raksha & Dhaval (2023)			Edwards (2021)	
Akanle et al. (2021)	Ciptarianto (2023)			Alhassan (2023)	
	Srinivas (2017)			Lyons et al. (2022)	
	Wahyono et al. (2019)			Emara & Zhang (2021)	
	Ali et al. (2024)			Mahmood-ur-Rahman (2022)	
				Wu (2021)	
				Li (2024)	
				Adeabah et al. (2021)	
				Ghislain (2022)	
Theme: Digital Remittance Impacts					
Munyegera & Matsumoto (2018)	Lee et al. (2021)	Giannetti et al. (2009)	Polloni-Silva et al. (2021)	Della Peruta (2018)	77
Asongu (2018)	Huang et al. (2020)		Gascón et al. (2023)	Apeti & Edoh (2023)	
Suri et al. (2012)	Saravanabhavan & Rajeev (2023)			Biggs (2016)	
Ajefu & Ogebe (2019)	Wu et al. (2023)			Mersland et al. (2013)	
Apiors & Suzuki (2018)	Kumar & Charles (2024)			Naito & Yamamoto, (2022)	
Batchelor (2012)	Patel (2023)			Velazquez et al. (2022)	
Thulani et al. (2014)	Singhania & Tanty (2023)			Mustafa et al. (2023)	
Guermond (2022)	Seng (2021)			Chatterjee (2024)	
Obadha et al. (2020)	Wang & Wang (2022)			Tian & Xiang (2024)	

Ojong (2016)	Mas'udah (2020)			Subramaniam & Masron (2024)	
Myeni et al. (2020)				Bettman & Harris (2014)	
Alhassan et al. (2021)				Ozili (2022)	
Stark (2021)				Inoue (2024)	
Bair & Tritah (2019)				Bukari et al. (2024)	
Apiors & Suzuki (2023)				Mpofu (2024)	
Atta-Aidoo et al. (2023)				Ozili & Mhlanga (2024)	
Mtengwa et al. (2021)	Mumtaz (2024)			Apeti (2023)	
Senou & Houensou (2024)				Nathaniel (2019)	
Ngaba (2021)				Housen et al. (2013)	
Kim (2022)					
Sakyi-Nyarko et al. (2022)					
Kusimba et al. (2016)					
Mahmoud (2020)					
Riley (2018)					
Jack & Suri (2014)					
Munyegera & Matsumoto (2016)					
Kikulwe et al. (2014)					
Geng et al. (2018)					
Tabetando & Matsumoto (2020)					
Abiona & Koppen-steiner (2022)					
Egami & Matsumoto (2020)					
Baffour et al. (2021)					
Naito et al. (2021)					
Abdul-Mumuni et al. (2019)					
Rotondi & Billari (2022)					
Ajefu & Massacky (2023)					
Ajefu et al. (2024)					
Dube & Chummun (2019)					
Adida et al. (2018)					
Braimah et al. (2024)					
Sekabira & Qaim (2017)					
Kilombele et al. (2023)					
Yao et al. (2023)					
Tabetando et al. (2022)					

Theme: Digital Remittances and Macroeconomic Factors					
Stremlau & Osman (2015)	Padhan et al. (2023)	Gulf CC Countries	CAPDR & non-CAPDR	Gurira (2024)	23
Crush & Tawodzera (2023)	Zakaria et al. (2023)	Shaibani & Wye (2024)	Carare et al. (2022)	Rodima-Taylor & Grimes (2019)	
Sithole et al. (2023)	Bouoiyour et al. (2016)	Srouji (2020)		Akanfe et al. (2020a)	
Mamman (2023)	Salman (2009)	Europe		Akanfe et al. (2020b)	
Sekantsi (2018)		Bunduchi et al. (2019)		Akanfe et al. (2020c)	
				Vlcek (2011)	
				Lueth & Ruiz-Arranz (2008)	
				Abel & Gietel-Basten (2020)	
				Tsingou (2021)	
				Pal & Mahalik (2024)	
Theme: Digital Remittances and Uptake by Migrants					
Morvant-Roux & Peixoto-Charles (2020)	Sivapragasam et al. (2011)	Russia	Mills (2005)	Barnett & Nam (2024)	30
Agyei (2021)	Lee et al. (2022)	Varlamova et al. (2023)		Bryceson (2022)	
Cirolia et al. (2021)	Lee et al. (2024)			Johnson & Stoll (2008)	
Mannan et al. (2023)	Ballaret & Lanada (2022)	Europe		Cohen & Zotova (2021)	
Kairuki & Cousins (2022)	Gupta & Hegde (2009)	Dilanchiev et al. (2022)		Shah (2024)	
	Kumar & Dutta (2015)	Kosse & Vermeulen (2014)		Mirabaud (2009)	
	Wantanasombut (2022)	Chernobay & Malibroda (2023)		Bounie et al. (2013)	
	Cabalquinto (2020)			Gniniguè & Ali (2022)	
	Dey et al. (2024)			Prakash (2021)	
	Chua & Wellman (2015)			Ilinitchi (2020)	
Theme: Digital Remittances for SDG Implementation					
Aarakit et al. (2022)	Siddiqui et al. (2022)		SIDS	Nurse (2019)	10
Aminu et al. (2024)			Hahm et al. (2021)	Mills (2023)	
Mohamed & Mohamud (2023)				Kai et al. (2024)	
				Farzana et al. (2024)	
				Mhlanga (2023)	
Totals					
67	39	13	9	62	190