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Urban-rural polarization: Financial implications, challenges, and opportunities

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Abstract

This study endeavors to establish a conceptual framework for examining the cross-cultural issues arising from the enduring financial factors contributing to the urban-rural divide. Central to this framework is the notable disparity in available financial services between urban and rural areas. This discrepancy draws attention to the ongoing necessity to combat financial exclusion within agricultural communities. Broadly speaking, it underscores the significance of rural finance, a subset within the financial realm, as a potential means to mitigate the observed polarization. Key factors to be underscored include ongoing technological advancements driving progress in the financial sector and instilling hope in digitization as a catalyst for fostering inclusive finance.

Keywords: Digital finance; financial inclusion; urban-rural divide

Introduction

The urban-rural divide has been a consistent feature in both industrialized and developing nations, and recent reports indicate its widening, although such disparities are evident globally (Chetty et al., 2018; Henry, 2019). This polarization is recognized as a systemic phenomenon, persisting even within the European Union (EU), despite its concerted efforts to enhance the economic well-being of citizens across all Member States and mitigate regional imbalances. The continual depopulation of rural areas in favor of urban centers is indeed remarkable, showcasing its potential to drive economic growth, sustainable development, and social convergence. Examining the trends and catalysts behind this shift between urban and rural communities sheds light on diverse financial implications, opportunities, and challenges (Aliyu & Amadu, 2017; de Bruin et al., 2021; Sun & Tu, 2023).

Urban and rural areas often exhibit stark differences in inherent characteristics, including economic conditions, financial stability, and standards of education and living. These disparities elucidate the reasons behind migration from lower-income regions, where agriculture traditionally serves as the primary activity and a crucial source of sustenance. Rural areas frequently grapple with depopulation due to unfavorable conditions such as limited access to public services, economic competitiveness, innovation, and weak governance structures (Sun & Tu, 2023; Yu et al., 2022). While the influx of foreign immigrant workers might alleviate this issue, their impact remains insufficient, as these individuals and their families typically gravitate toward larger cities that offer more abundant opportunities and brighter prospects (Frenkel, 2017; OECD, 2014).

Building upon these outlined perspectives, this article seeks to contribute to existing literature on the challenges and opportunities associated with the urban-rural divide. It delves into its significant financial implications, notably highlighting a substantial disparity in available financial services. The exploration of enhancing financial inclusion in rural communities, particularly emphasizing the role of finance (specifically rural finance), is appealing. This focus anticipates support in alleviating the examined polarization. The discussion will spotlight technological advancements driving ongoing progress in the

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financial industry, especially in the domain of delivering financial services. It will also underline the optimism surrounding digitization as a catalyst for promoting inclusive finance. The overarching aim is to provide a conceptual framework for analyzing interdisciplinary issues arising from persistent financial drivers fueling the urban-rural divide. This framework holds relevance not only for academia but also from the perspective of policymakers.

Bridging the gap in urban-rural polarization

As we reshape our narrative in response to the evolving landscape and reassess our work-life equilibrium, it becomes pertinent to consider substantial transformations in both urban and rural domains. Envisioning sustainable "rurban" systems that blend the distinctive features of these areas offers a promising pathway to transcend the longstanding dichotomy under examination. To propel desirable structural shifts, leveraging advancements in the financial sphere, particularly emphasizing the pivotal role of finance, becomes imperative. Rural finance emerges as a pertinent subset, encompassing the "provision of financial services to a diverse rural population engaged in both farm and non-farm activities across various income levels" (CGAP, 2023). This domain involves a spectrum of formal, informal, and semi-formal institutional arrangements, offering an array of products and services such as loans, deposits, insurance policies, and remittances. Rural finance encompasses segments like rural microfinance and agricultural finance, aiming to fund agriculture-related activities spanning from production to market.

The key role of the financial system

In an era where unexpected events like escalating evidence of global inflation and recession continue to emerge as "black swans," the financial landscape faces unprecedented challenges. Crucial concerns linger in both rural and urban areas regarding the revival of long-term growth while advancing sustainable development. A pivotal aspect lies in rejuvenating and reorienting the economic environment, inherently reliant on the financial system comprising products, markets, and institutions. Surprisingly, limited attention had been devoted to the "finance-growth nexus" and the role of financial intermediaries in ensuring an optimal allocation of capital until the end of the last century. Subsequently, a shift occurred where academics and practitioners began recognizing the significance of this aspect. However, intensifying thoughts now caution that countries with broader, deeper, and more active financial systems might face heightened vulnerability to financial crises, especially in the absence of robust regulatory frameworks (Abbassi et al., 2017).

The disruptions caused by Covid-19 to social needs, work dynamics, and production paradigms have underscored the unparalleled significance of investing in local infrastructure on a global scale. This investment serves both short-term goals of sustaining recovery and addressing longstanding challenges like those posed by climate change, without undermining the implications of social exclusion. It's imperative to acknowledge that while financial inclusion remains a crucial factor for social inclusion, it alone may not suffice. Research indicates a negative correlation between the risk of social exclusion and the utilization of banking services (Fernández-Olit, Paredes-Gázquez & de la Cuesta-González, 2018), amplifying the growing recognition of promoting financial inclusion as a priority. This raises questions about whether financial exclusion, defined as the inability to access or utilize appropriate financial services necessary for leading a normal social life, serves as an independent cause of social exclusion or merely reflects its symptoms.

Among the marginalized groups are underserved market segments comprising unbanked and underbanked households, along with micro- to medium-sized enterprises, seeking suitable financial services from institutions. The underbanked may encompass individuals blacklisted by major banks, young consumers, those seeking to avoid debt collectors, dissatisfied with fees, unemployed, or those with negative customer experiences. In such cases, traditional financial services become inaccessible, potentially leading to reliance on informal channels. On the other hand, the unbanked, lacking any bank account, face exclusion from formal banking opportunities, fostering reliance on alternative, less reputable financial models within the system (Mori, 2019).

Financial exclusion in rural areas

Financial inclusion, as defined by the World Bank (World Bank, 2022), ensures that individuals and businesses have access to affordable and beneficial financial products and services—covering transactions, payments, savings, credit, and insurance—in a responsible and sustainable manner. This concept's importance is highlighted within the 2030 Agenda, where Goal 8 emphasizes inclusive and sustainable economic growth, mirroring the objectives of industrialization (Goal 9), cities and communities (Goal 11). Goal 1 underscores financial inclusion as a means to "end poverty in all its forms everywhere,"

particularly emphasizing equal access for everyone, especially the poor and vulnerable, to suitable financial services, including microfinance.

The impact of financial exclusion is not limited to developing nations. For instance, in 2021, approximately 5.9 million U.S. households—about 4.5 percent—were deemed unbanked, lacking any checking or savings account at a bank or credit union. Unbanked rates were notably higher among lower-income, less-educated, Black, Hispanic, working-age households with disabilities, and single-mother households (Federal Deposit Insurance Corporation [FDIC], 2022). Globally, it's widely acknowledged that financial exclusion is more prevalent in rural areas compared to urban centers. This discrepancy is rooted in lower income levels within rural communities and limited access to bank credit for farmers and non-farming businesses, particularly micro- to medium-sized enterprises in agribusiness, influenced by both demand and supply factors.

Users of banking and financial services in these sectors may tend towards self-isolation and exclusion due to competitive disadvantages inherent in their businesses. Challenges like low and unstable income, risk aversion, and distrust in traditional financial institutions, notably banks, contribute to this trend (Liang et al., 2017; Xu et al., 2021). Simultaneously, deficiencies in local financial systems also contribute to the threat of financial exclusion. Banks may deny potential loans, request excessive collateral, or terminate credit agreements for subjective reasons, making it difficult for these customers to access financial services (Ananzeh, 2016; Hung & Cothren, 2002). Challenges in assessing their creditworthiness and reacting to any changes in their financial stability may lead to harshened terms or the withdrawal of financial support when temporary difficulties arise. This hampers their ability to shape optimal financial structures, reducing economic efficiency, hindering growth, and impeding comprehensive, balanced, and sustainable development within the broader economy.

Exploiting the economic potential outside urban areas

Certainly, regional disparities persist, particularly regarding the presence of financial institutions in rural areas, necessitating close monitoring on a case-by-case basis and through comparative analysis. The density of financial institution branches concerning population and GDP per capita emerges as a crucial variable for modeling the Index of Rural Financial Exclusion. For instance, this Index has been employed to analyze factors mitigating rural financial exclusion in various regions of Gansu Province and Jiangsu Province, China. Findings indicated a higher degree of financial exclusion in Gansu Province. Consequently, an increase in the number of financial institution branches in this region has been recommended to potentially elevate the credit per capita and effectively alleviate financial exclusion (Zhao, 2016).

In a broader context, rural communities require access to financial services for productive (asset building, working capital) and protective (risk mitigation, including health concerns) purposes. These services encompass purchasing stock, agricultural inputs, infrastructure maintenance, hiring workers, transportation of goods, payment processing, managing seasonal incomes, and investing in education, housing, health, and emergencies. Despite these needs, rural populations globally constitute the largest underserved market segment in the financial domain. Ensuring their financial inclusion holds significant potential to unlock economic growth in rural areas and bolster household incomes and decent work, as articulated by the International Labour Organization (ILO, 2019), which stands ready to offer technical assistance toward achieving this objective.

Turning attention to Europe, specifically Spain, a concerning trend surfaces with the escalating count of individuals residing in municipalities devoid of a bank branch. This situation, reported as a form of financial exclusion, impacted 1.13 million people in rural areas in 2017. Contributing factors include substantial job losses in the financial sector and the widespread closure of bank branches, particularly in areas where cost-benefit analyses fail to yield satisfactory results. The shift of savings banks to commercial entities and the series of mergers among financial institutions, potentially extending to credit unions, have led to a contraction in branch networks within rural locales. Moreover, the European Parliament highlighted concerns about the widening digital divide between urban and rural regions, emphasizing the exacerbating impact of digitalization in the banking sector on banking exclusion (López Bermejo, 2017).

Promoting inclusive digital economies

In this landscape, the increasing provision of digital financial services, including mobile-based options, represents an encouraging step towards including individuals who would otherwise face financial exclusion or limited access to services. Notably, due to substantial advancements in accessibility and affordability, millions of financially marginalized individuals are transitioning from cash-based transactions to formal financial services. This shift is fostering economic growth and stability for both

customers and the economies they are part of (Lauer & Lyman, 2015).

There's an optimistic perspective that financial inclusion, ensuring universal access to financial services, is within reach, largely due to new technologies, transformative business models, and extensive reforms (OECD, 2020; Stalmachova et al., 2022). Instruments like e-money accounts, debit cards, and low-cost bank accounts have the potential to significantly enhance financial access for the underserved and unbanked populations, particularly impacting rural communities experiencing severe financial exclusion. The UN Capital Development Fund's (UNCDF) strategy, "leaving no one behind in the digital era," built on extensive experience in digital financial inclusion across continents, highlights the transformative impact of global digital access and usage of formal financial services for low-income households and small enterprises. This transition aims to mitigate and eventually eradicate competitive disadvantages faced by excluded populations in rural areas. Importantly, these services must cater to customer needs, be responsibly delivered, and be cost-effective for consumers and sustainable for providers. This approach seeks to catalyze digital financial inclusion, ultimately fostering inclusive digital economies in line with the 2030 Agenda.

The concept of financial inclusion, encapsulated in Goal 17 of partnering to achieve the other 16 Sustainable Development Goals (SDGs), emphasizes using digital finance to empower individuals to align their financial resources with their requirements, thereby advancing sustainable development. This evolving perspective reframes financial inclusion not solely as an end goal but rather as a means to various ends (UNCDF, 2022). This viewpoint celebrates significant strides made in digitalizing the financial system, even in developing countries, catering to their unique digital needs compared to industrialized regions. Digital financial inclusion provides avenues for low-income account holders to participate in the economy, addressing daily needs, enhancing skills, productivity, and marketability in the digital age.

Unlocking access to rural finance

Numerous case studies demonstrate the positive impact of rural finance, emphasizing the shared commitment to expanding this sector within the financial industry. These instances illustrate how rural finance can contribute to fostering a just rural transition by bolstering resilient and equitable livelihoods while aligning with climate goals, preserving nature, and ensuring ample nutritious food for the world's burgeoning population. Arguments in favor of this approach stem from the 2030 Agenda, highlighting that catering to rural communities' financial needs can incentivize and reward embedded producers, fostering vibrant rural economies. This, in turn, supports reliable supply chains, provides opportunities for decent work and sustainable incomes, thus retaining the younger generation – essentially, the future workforce – within the realms of food and agriculture (Braverman & Huppi, 1991; Hsu et al., 2014; Liu et al., 2021).

Successful instances include projects aimed at expanding lending to smaller-sized enterprises situated in rural areas, often underserved by traditional financial channels. For instance, agricultural small- and medium-sized enterprises (agri-SMEs) in East Africa face difficulties accessing the necessary loans for business expansion, despite their critical role in supply chain resilience. A significant financing gap persists for agri-SMEs, creating a "missing middle" in capital markets where loans are too substantial for microcredit providers yet too risky and costly for commercial banks. To address this, initiatives such as Aceli Africa's Agri-SME lending incentive scheme offer first-loss cover at a portfolio level to credit providers, mitigating potential defaults on loans to these borrowers (Just Rural Transition [JRT], 2021).

The sustainable growth of agricultural markets hinges upon access to a suitable array of loans and financial services, raising questions about the relationship between governments and private sector involvement. On one hand, as private capital markets and financial service providers increasingly participate in agricultural finance, the challenge for states and state-owned institutions lies in creating, incentivizing, and regulating space for private sector involvement. On the other hand, as countries progress toward higher agricultural productivity, more mature agricultural markets, advanced banking systems, and larger farm sizes, the commercial viability of financial service provision gains importance (Initiative for Smallholder Finance [ISF] Advisors, 2020). However, these transformative trends may take decades to materialize and often remain incomplete, necessitating continued subsidies for certain market segments to ensure the availability of required financial services.

Technology-enhanced financial innovation in rural areas

Technological advancements have significantly propelled financial innovation, both in product and process realms, highlighting digitization as a crucial element in rural finance and across various financial sectors and industries. The rise of fintech, an amalgamation of finance and technology, demonstrates the increasing utilization of digital SME loans, not limited to rural areas. Digital finance, particularly in the domain of digital payments, has notably transformed the landscape of financial service

provision, showcasing remarkable effects (Mills, 2023; Pawłowska et al., 2022; Rowan, 2023).

In the context of prior unsuccessful efforts by traditional brick-and-mortar financial institutions to expand financial coverage in rural areas, rural fintechs have emerged, showcasing their potential to revolutionize digital financial services. This is evident in new models of digital finance pioneered by Internet giants like JD and Alibaba in rural China, marking significant attempts to include the Chinese countryside in the digital finance ecosystem (Kong & Loubere, 2021). However, the fintech landscape is diverse and rapidly evolving, making it challenging to make broad generalizations or provide static descriptions. The ongoing advancements in financial technology adoption, including video interfaces and voice assistance, are poised to transform the delivery of financial solutions to the last mile, particularly in rural India, setting the stage for rural economic growth.

Examining India's landscape, the implementation of Aadhaar Enabled Payment Services (AePS) has been pivotal in revolutionizing financial services in rural areas. AePS is a bank-led payment model enabling Aadhaar card holders to conduct financial transactions at micro-ATMs or points of sale using a unique identification number and biometric authentication. This model aims to promote cashless transactions, aligning with India's aspiration to become a digitally empowered society and knowledge economy (Government of India, n.d.). AePS has significantly upgraded financial services in rural areas, facilitating convenient and secure money withdrawals and transfers through biometric authentication, particularly crucial during the post-coronavirus outbreak period for timely delivery of financial services to remote parts of the country (Kumar, 2022).

Fintech applications for agriculture businesses

Undoubtedly, while digital financial services are pivotal for farmers, many encounter impediments that hinder their full access to formal financial channels, even at a local level (Rufaidah et al., 2023). Overcoming these challenges can be achieved by leveraging technology in finance, an approach observable in the agribusiness sector, rural small enterprises, and related segments within the food industry (Heng & Tok, 2022; Huang et al., 2021).

The burgeoning interest in fintech coincides with an increased focus on technology-driven innovation in agriculture, giving rise to the concept of agritech or agtech. These advancements have been crucial in enhancing farm productivity to meet the demands of a growing population over the last century, despite associated controversies related to agricultural industrialization, such as concerns regarding the environment, human health, and farm fertility. Consequently, the agtech industry is at the forefront of developing products and solutions to help farmers adapt to evolving ecosystems and address sustainability challenges. These include advancements in indoor and vertical farming, biotech innovations targeting safer fertilizers, and more resilient crops.

Significant strides have been made in recent years, largely attributed to fintech applications for agricultural businesses. Remarkable success stories emerge from pioneering innovators like FarmDrive and MyAgro. FarmDrive, based in Kenya, harnesses data analytics and mobile technology to build risk assessment models for financial institutions to evaluate farmers. Operating at the intersection of technology, agriculture, and finance, FarmDrive creates comprehensive credit profiles for young farmers who can then apply for and receive credit from lending partners via their mobile phones (Tinsley & Agapitova, 2018).

On the other hand, MyAgro's unique mobile layaway platform allows farmers to use their mobile phones to purchase seeds and fertilizer. Established in 2011, MyAgro aims to increase market access for smallholder farmers and provides comprehensive support, ranging from delivering high-quality input packages to offering both in-person and remote training (MyAgro, 2020). Their model involves farmers paying little-by-little over 6-8 months, enabling MyAgro to deliver the inputs directly to farmers in time for planting seasons, fostering a self-financing approach. This initiative has significantly impacted poverty reduction and food security, operating across multiple countries such as Mali, Senegal, and Tanzania, addressing the unmet needs of smallholder farmers, 60 percent of whom are women (Skoll Foundation, 2023).

Conclusions, Suggestions and Limitations

In summary, fintech companies, particularly those aimed at agribusinesses, are pivotal in driving inclusion within rural areas. Tech-driven solutions are rapidly emerging as crucial tools in eradicating poverty and enhancing the attractiveness of these regions. Rural depopulation, analogous to urban concentration, presents challenges to sustainability in these communities, especially as young people migrate to urban areas seeking better educational and job prospects. However, this trend should be viewed as a dilemma rather than an assumed outcome, prompting broader discussions among academics and practitioners, particularly in youth policy. The resulting exodus exacerbates economic hardship in

impoverished communities and strains already overcrowded urban spaces, revealing the limitations of current conditions.

Globally, ensuring equitable opportunities, services, and rights for people regardless of their location, particularly for younger generations, is critical for our planet's future. To meet the objectives of the 2030 Agenda, concerted efforts should be directed at finding solutions to challenges magnified by the prolonged impact of the Covid-19 pandemic. The pandemic accelerated the shift towards digitalization not only in banking and financial services but also in environmental considerations. Money transmitters actively promoted digital payment methods, while fintechs expanded into areas such as remittances and wealth management.

Advancements in rural finance inspire optimism for improving living standards in communities reliant on agriculture. Conversely, the allure of large cities has been challenged by the rise of remote work practices and reduced tourism due to travel restrictions and lockdowns. This shift prompts consideration for substantial changes and the creation of sustainable "rurban" systems, stemming from the increasing interconnectedness of urban and rural areas. Drawing from best practices and success stories summarized in this study, these initiatives aim to shape a post-pandemic "new normal" and pave the way for a "new future."

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Competing Interests

The author(s) declare that there are no competing interests relevant to the content of this article.

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