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The Digital Leap: Assessing the Impact of Payment Technologies on Currency Choices in Cambodia

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Abstract

Dollarization poses significant challenges to monetary policy effectiveness and heightens economic vulnerability to external shocks, prompting calls for de-dollarization and greater promotion of local currency use. This paper investigates the role of digital payment in fostering the use of Cambodia's local currency, the Khmer riel (KHR), in an economy that has remained heavily dollarized since the 1990s.

First, we develop a simple theoretical model to explain how digital payment has the potential to promote the use of KHR. Second, using unique survey data collected in 2023 from workers in Cambodia's garment, footwear, and textile sectors, we apply two advanced econometric approaches to address endogeneity in digital payment adoption: i/-A linear regression model with endogenous treatment effects estimated via maximum likelihood, and ii/-An endogenous treatment-effects model allowing for heterogenous impacts of digital payment based on households' characteristics. These models enable comparison between observed outcomes and counterfactual scenarios—that is, what individuals' KHR usage would have been had they use or do not use digital payment.

Empirical results indicate that digital payment significantly increases KHR usage, raising total expenditure in KHR by 4.52 percent to 10.41 percent relative to the case without digital payment. However, the analysis also reveals important demographic disparities: younger, urban, and more educated individuals show stronger preferences for the US dollar. Hence, while digital payment supports broader use of the local currency, their long-term effectiveness relies on complementary measures such as promoting KHR-denominated pricing, salary payments, and expanding KHR-linked digital services. Therefore, the study emphasizes the necessity of coordinated efforts among relevant stakeholders to ensure sustained progress in the promotion of local currency.

Keywords – Digital payment, Dollarization, Local Currency, Endogenous treatment effects

JEL codes – D12, E42, G41, O33

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1. Introduction

Dollarization, defined as the widespread use of a foreign currency in domestic economic transactions, poses significant challenges for many developing economies. It typically arises from historical episodes of high inflation and economic instability, resulting in a lack of confidence in local currency. While dollarization can provide short-term stability by anchoring fiscal discipline, inflation expectations and fostering investor confidence, notably at the early stage of economic restoration from years of political turmoil and economic uncertainty, it inherently limits the monetary policy effectiveness, thereby reducing economic sovereignty. Countries experiencing high levels of dollarization are also vulnerable to external economic shocks transmitted through currency fluctuations, interest rates set by foreign central banks, and global financial crises. Additionally, dollarization restricts seigniorage revenues, the profits gained by governments through currency issuance, and complicates liquidity management within domestic financial system.

Given these critical drawbacks, de-dollarization, the process of reducing reliance on foreign currencies, has become a key policy priority for many economies. Effective de-dollarization not only restores monetary policy autonomy but also stabilizes economic conditions, enhances financial stability, and strengthens economic sovereignty. However, several experiences have shown that forceful de-dollarization has been ineffective and, in some cases, such as Peru and Bolivia in the 1980s, even triggered capital outflows (Sosa & Garcia-Escribano). As a result, de-dollarization is pursued as a long-term policy goal, while promoting the use of the local currency remains the focus in the short to medium term.

In Cambodia, extensive dollarization has persisted since the early 1990s, with foreign currency deposits consistently exceeding 80 percent of the broad money supply (M2) as of 2024. The Cambodian economy's entrenched reliance on the US dollar (USD) significantly constrains monetary policy effectiveness and increases the vulnerability of the economy to external shocks. The COVID-19 pandemic and subsequent external shocks have exposed this vulnerability, as the National Bank of Cambodia (NBC) lacks an effective policy rate to steer economic activity, unlike central banks in non-dollarized countries. Being aware of this shortfall, the promotion of Khmer Riel (KHR) has become an important policy that the NBC and the Royal Government of Cambodia (RGC) have pursued over the last two decades after achieving political stability and robust economic growth. However, the deep-rooted use of USD in both daily transactions and financial activities continues to impede the broader adoption of KHR, notably in urban areas and high-income people.

In response to the persistent challenge of dollarization, the RGC and the NBC have adopted a range of measures to promote the use of KHR. On the monetary front, efforts have focused on maintaining exchange rate stability, introducing regulatory incentives to encourage KHR usage, and raising public awareness about the importance of the national currency usage. Despite these efforts, the use of the USD remains widespread, keeping the level of dollarization relatively stable. To support evidence-based policymaking, the NBC has also collaborated with development partners such as Japan International Cooperation Agency (JICA) and the International Monetary Funds (IMF) to conduct surveys and analytical studies aimed at identifying effective strategies for promoting KHR. A core component of these strategies has been the modernization of Cambodia's payment infrastructure to ensure that domestic currency transactions are as convenient, secure, and cost-effective as those conducted in USD.

In this context, digital technology has been leveraged to enhance both payment efficiency and financial inclusion, particularly in rural areas where KHR is more commonly used. Key innovations include the launch of Bakong in 2020, a blockchain-based digital

payment platform, as well as the introduction of KHQR in 2022, which support standardized QR code and retail transactions. These platforms not only streamline payments and reduce dependency on physical cash, but also help to expand the reach and everyday usability of KHR. Importantly, such systems enable rural households, many of whom previously lacked access to formal banking, to participate more fully in the financial system. As a result, modernized payment systems are expected to play a pivotal role in broadening KHR adoption.

However, despite significant investments and advancements in digital payment infrastructure, the impact on promoting KHR usage remains uncertain. Cambodian payment systems are designed to be currency-neutral, allowing seamless transactions in both USD and KHR without discrimination. Given the pervasive usage of USD, especially in urban areas and among certain socioeconomic groups, it remains unclear whether the availability of digital payment is able to shift consumer and merchant preferences toward KHR. Many businesses in urban centers continue to price goods and services primarily in USD, and individuals whose incomes are denominated in USD might find little incentive to switch to KHR, even when digital payment options are readily available.

Our study aims to address this critical uncertainty using both a theoretical model and empirical data collected from a comprehensive survey jointly conducted by the NBC and UNDP in March 2023. The survey targeted workers in Cambodia's garment, footwear, and textile (GFT) sectors and their households, gathering detailed information on household income and expenditure categorized by currency, alongside data on digital payment adoption and frequency. This unique dataset allows for a robust empirical analysis of whether digital payment system influences household currency choice.

To accurately identify the causal impact of digital payment adoption on KHR usage, our analysis employs two advanced econometric methods: 1/- A linear regression model with endogenous treatment effects using maximum likelihood estimation, and 2/- An endogenous treatment-effects model, allowing for heterogenous impacts of digital payment based on households' characteristics. In these two models, we use awareness of the Bakong payment system as a key instrument to address potential biases arising from the endogeneity of digital payment adoption.

Empirical results show that digital payment has a significant and positive impact on the use of local currency, by increasing the total expenditures in KHR by 4.52 percent to 10.41 percent. Nonetheless, the analysis underscores that the long-term impact of digital payment on de-dollarization could be nuanced and conditional. Educated, urban, and higher-income households tend to maintain or even increase USD usage through digital channels, due to exposure to foreign-priced platforms, dollarized labor markets, and income-expenditure currency matching. Hence, while digital tools lower transaction barriers, they may digitize existing dollarized behaviors unless supported by broader policy interventions.

This research makes several contributions to the existing literature. First, it develops a simple yet policy-relevant theoretical model to illustrate how digital payment can influence household currency choice through transaction cost differentials. Second, it provides one of the first empirical assessments of how digital payment adoption influences local currency usage in a highly dollarized developing economy. Third, it highlights the heterogeneous effects across demographic groups, offering new insights into how household characteristics interact with payment behavior and currency choices. Fourth, by addressing these dynamics, the study fills a critical gap in the literature and offers policy implications for central banks seeking to promote de-dollarization through digital financial tools.

The paper is structured as follows: Section 2 reviews the relevant literature; Section 3 provides an overview of the payment system in Cambodia; Section 4 develops the theoretical model; Section 5 presents the data and descriptive statistics; Section 6 discusses the method and results; Section 7 checks robustness of the main result, Section 8 draws policy implications; and Section 9 concludes.

2. Literature Review

Dollarization is widely recognized as the phenomenon whereby foreign currencies, predominantly the USD, are extensively used alongside or instead of the domestic currency in economic transactions. The literature identifies three primary forms: payment dollarization (currency substitution), financial dollarization (asset substitution), and real dollarization (Nicolo et al., 2005; Kokenyne et al., 2010). Payment dollarization involves the use of foreign currency for transactions, financial dollarization pertains to holding financial assets or liabilities denominated in foreign currencies, while real dollarization is characterized by indexing domestic prices and wages to a foreign currency (Nicolo et al., 2005). In the case of Cambodia, all three forms are present to varying degrees, with the USD serving not only as a transactional medium but also as a store of value and unit of account.

Historically, dollarization emerges predominantly due to prolonged periods of macroeconomic instability, high inflation rates, and volatility in local currencies, leading to diminished public confidence in domestic monetary systems (Calvo & Reinhart, 2002; Duma, 2011). While the adoption of foreign currencies may temporarily stabilize inflation expectations and attract investor confidence (Calvo & Vegh, 1996), extensive dollarization severely limits monetary policy effectiveness, reduces seigniorage revenue, constrains liquidity management, and restricts economic sovereignty, thereby exposing countries to external economic shocks (Alesina & Barro, 2001; Lange & Sauer, 2005; Minda, 2005).

The literature documents varying outcomes in attempts to reduce dollarization. Forceful de-dollarization measures, such as mandatory currency conversions implemented in Bolivia and Peru in the 1980s, resulted in capital flight and economic disruption, highlighting the risks of aggressive administrative strategies (Sosa & Garcia-Escribano, 2011). Conversely, gradual and market-based de-dollarization approaches, evidenced in countries such as Israel, Poland, and Uruguay, have demonstrated greater efficacy. These successful approaches typically involve consistent macroeconomic stabilization, financial liberalization, robust liquidity management, and the development of domestic financial markets and instruments denominated in local currencies (Mecagni et al., 2015). Meanwhile, Vidal et al. (2022) experimentally demonstrate that interventions such as taxing foreign-currency transactions and subsidizing local-currency storage significantly reduce domestic acceptance of foreign currency and boost local currency use.

In line with these findings, the increasing ease and accessibility of local currency transactions through digital payment system can reinforce the shifts toward domestic currency use, and has become central to de-dollarization strategies. According to Kokenyne et al. (2010), digital payment plays a pivotal role in enhancing financial inclusion, interoperability, transaction speed, and security, thus the reliance on foreign currencies for transactions can be significantly reduced. In this sense, the authors argue that central banks must ensure domestic payment services are efficient, convenient, and at least as attractive as foreign currency options. This involves eliminating preferential treatment for foreign currency payments and actively promoting digital and electronic payments in local currency. This emphasis aligns with the broader policy goal of making domestic currency transactions sufficiently attractive to naturally diminish demand for foreign currencies.

Armas et al. (2022) further illustrate this point through the case of Peru, where the planned introduction of a central bank digital currency (CBDC) aims to reinforce de-dollarization by improving access to and usability of the local currency, the sol (PEN). In a bi-monetary environment, a digital sol is expected to reach cash-reliant and financially excluded populations, particularly in rural and informal sectors, by offering a secure, interoperable, and

low-cost digital alternative. By mimicking the convenience of cash while encouraging formal financial participation, the CBDC could shift payment flows toward the local currency and reduce incentives for dollar-based transactions. Over time, such developments may contribute to a more inclusive and sovereign monetary system.

Meanwhile, de-dollarization is increasingly gaining prominence at both global and regional levels as well. Within ASEAN+3 cooperation framework, for example, countries are aiming to strengthen monetary autonomy and reduce exposure to external shocks by promoting the use of local currencies in bilateral trade and investments (AMRO, 2023). Encouraging the use of local currencies in cross-border transactions helps lower conversion and hedging costs, particularly for small and medium-sized enterprises, while also enabling firms to align revenues and liabilities in the same currency, thereby mitigating exchange rate risks and supporting macro-financial stability. A stronger demand for local currency further contributes to the development of local bond markets by enhancing liquidity and improving pricing mechanisms. Moreover, enabling local currency transactions facilitates regional trade and investment by simplifying and reducing the cost of payments, thus reinforcing regional value chains. In this context, initiatives to connect QR payment systems and upgrade regional payment infrastructure reflect a broader movement toward greater local currency usage.

Therefore, to support de-dollarization objectives, central banks have increasingly recognized the importance of developing robust payment infrastructures. This recognition has translated into substantial investments in payment technologies, including fast payment systems, real-time gross settlement systems, interoperable mobile payment platforms, and standardized QR codes, all of which enhance the attractiveness and convenience of domestic currency usage (BIS, 2021).

Although the literature provides strong theoretical support for the role of digital payment in promoting the use of local currency, there is a lack of empirical research that quantitatively examines this relationship. A related study to our research by Odajima et al. (2019) finds that having a bank account helps mitigate the negative effect of large transaction sizes on the likelihood of using the local currency. This suggests that enhancing the usability of the local currency, particularly by reducing its transaction costs relative to foreign currency for higher-value payments, could support greater use of the local currency. Nonetheless, the paper does not directly examine the role of digital payment adoption in promoting local currency use, particularly in the context of Cambodia, where the use of USD is not restricted in digital transactions. This still raises the question of whether digital payment actually encourages the use of KHR or, conversely, contribute to further dollarization.

3. Payment System Development in Cambodia

The NBC plays a pivotal role in developing and overseeing the country's payment infrastructure. Through regulatory oversight and strategic partnerships with domestic and international stakeholders, the NBC ensures the safety, efficiency, and stability of payment transactions. Over the past decade, major efforts have been undertaken to modernize the payment system, promote financial inclusion, improve transaction efficiency, and support broader economic growth.

Cambodia's payment system has transitioned dramatically from a predominantly cash-based system to a more digitized financial environment. Historically reliant on cash transactions, the introduction of electronic payment methods, including credit and debit cards, ATMs, mobile and internet banking, and various electronic fund transfers, has progressively diversified the payment landscape. Digital payment adoption, although still developing, has rapidly expanded in recent years, partly accelerated by the COVID-19 pandemic.

The NBC's payment infrastructure consists of two main components: the Large Value Payment System (LVPS) and the Retail Payment System. The LVPS includes the Online Banking System (OBS), established in 2016 as Cambodia's real-time gross settlement (RTGS) system, enabling high-value interbank settlements in both KHR and USD. To strengthen this infrastructure, NBC is developing the Bakong-based LVPS, which will support settlement of interbank transactions, net balances from retail systems, and financial market payments.

On the retail side, the National Clearing System (NCS), launched in 1994 and automated in 2012, continues to process checks and electronic payment orders in both KHR and USD, though newer platforms are gradually reducing its role. To modernize retail transfers, the Fast Payment System (FPS) was introduced in 2016 and upgraded to version 2.0 in 2021, supporting real-time domestic transfers in KHR (up to 40 million). Complementing this, Retail Pay, launched in 2021, facilitates interoperability for everyday transactions such as bill payments, peer-to-peer transfers, and merchant purchases.

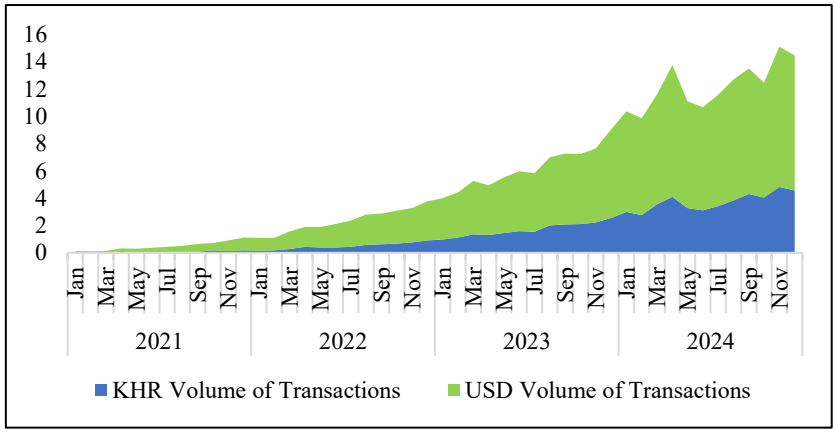
One of the most important innovations is Bakong, launched in 2020, which connects most banks and payment service providers through a single interoperable platform. Built on Distributed Ledger Technology (DLT), Bakong provides faster, cheaper, and more secure payments, allowing users to send money or make payments in both KHR and USD directly from their mobile phones. To further simplify digital payment, the KHQR system was introduced in 2022. This standardized QR code allows merchants and individuals to accept payments from any app with just one code, making it especially convenient for small shops and street vendors, and helping to expand digital payment nationwide. The most recent development is the Cambodian Shared Switch (CSS), launched in 2023, which links banks and microfinance institutions to enable ATM interoperability, card payments, and money transfers seamlessly across different networks.

Alongside domestic progress, Cambodia has also advanced in strengthening cross-border payment connectivity. Through the Bakong system, the NBC has established links with regional partners and international payment networks, including Thailand, Laos, Vietnam, Malaysia, South Korea, Japan, UnionPay International (including China), as well as global providers like Alipay, Visa, and Mastercard.[1] These developments highlight Bakong's growing role in facilitating cross-border transactions and integrating Cambodia into the regional payments landscape.

[1] As of August 2025.

Taken together, these initiatives underscore Cambodia's sustained efforts to build a secure, inclusive, and interconnected payment ecosystem. They have also provided a solid foundation for strengthening the role of the local currency in both domestic and regional transactions (Chea & Ouk, 2023). Reflecting these achievements, digital payment usage has expanded rapidly: the total value of transactions through the Bakong system rose from USD 5.7 billion in 2021—of which KHR accounted for 18.2 percent—to USD 147.1 billion in 2024, with the KHR share climbing to 30.5 percent (Figure 1).

Figure 1: Volume of Transactions in KHR and USD through the Bakong System (in USD billion)

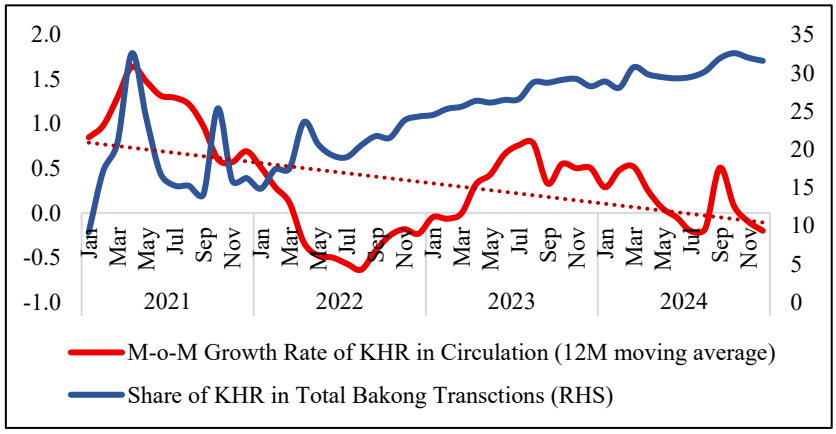


Source: NBC's data, authors' calculation

Based on Figure 1, while USD continues to dominate digital transactions through the Bakong system, the share of KHR has steadily increased over time. This trend suggests that Bakong may be playing a role in promoting the use of the local currency. However, some may argue that the rising KHR share reflects a shift from cash-based to digital transactions among existing KHR users, rather than an actual increase in overall KHR usage.

For instance, Figure 2 below illustrates a declining trend of growth rate of KHR in circulation over the last few years, suggesting a possible shift from cash to digital forms of the KHR. This highlights the importance of conducting research to examine whether digital payment truly promotes the use of KHR.

Figure 2: Growth Rate of KHR in Circulation and Its Share in Total Bakong Transactions (in percent)



Source: NBC's data, authors' calculation

4. Theoretical Model

To examine how digital payment influences household currency choice, we model a representative household that allocates consumption between goods priced in KHR and USD. Building on Uribe (1997), yet in a simpler way, our framework also employs a Constant Elasticity of Substitution (CES) utility function with transaction cost frictions, and extends it by incorporating the role of digital payment in reducing these frictions unevenly across currencies. The model captures how differences in transaction costs shape consumption decisions and ultimately determines the share of expenditure made in KHR.

A/- Utility Function

The household derives utility from consumption of goods/services paid in KHR and USD. We assume a CES utility function with:

$$U(C_{KHR,}C_{USD}) = [\alpha.C_{KHR}^{\delta} + (1-\alpha).C_{USD}^{\delta}]^{\frac{1}{\delta}} \qquad (1)$$

Where:

- C_{KHR} and C_{USD} represent consumption in KHR and USD, respectively.
- $\alpha \in [0,1]$ denotes the household's baseline preference for KHR
- δ is the substitution parameter with the elasticity of substitution is given by $\sigma = \frac{1}{1-\delta}$; δ is assumed to be positive and lower than 1 ($0 < \delta < 1$), reflecting the imperfect substitution between the consumptions in KHR and USD.

B/- Budget Constraint

Household consumption is constrained by income I, and faces transaction costs that depend on the currency and the payment method $P \in \{cash, digital\}$. These frictions are modeled multiplicatively, reflecting per-unit cost increases due to convenience, fees, or acceptability constraints:

$$(1+\tau_{KHR}^{P}).C_{KHR} + (1+\tau_{USD}^{P}).C_{USD} \leq I \qquad (2)$$

Where:

- τ_{KHR}^{P} and τ_{USD}^{P} denote the transaction costs of consuming in KHR and USD under payment method P.

C/- Household Optimization

The household chooses C_{KHR} and C_{USD} to maximize utility subject to the budget constraint. The Lagrangian is:

$$L = [\alpha.C_{KHR}^{\delta} + (1-\alpha).C_{USD}^{\delta}]^{\frac{1}{\delta}} - \lambda[(1+\tau_{KHR}^{P}).C_{KHR} + (1+\tau_{USD}^{P}).C_{USD} - I] \qquad (3)$$

First-order conditions yield the optimal consumption ratio:

$$(\frac{C_{KHR}}{C_{USD}})^{\delta-1} = \frac{(1+\tau_{KHR}^{P})}{(1+\tau_{USD}^{P})}.\frac{1-\alpha}{\alpha} \qquad (4)$$

This equation (4) shows how the relative use of KHR and USD responds to changes in transaction costs and household preferences. For example, starting from an equilibrium, if digital payment reduces the transaction cost of using KHR more than that of USD—let us say, by addressing the inconvenience of handling high-denomination KHR banknotes ($\tau_{KHR}^{cash} > \tau_{KHR}^{digital}$, while $\tau_{USD}^{cash} \approx \tau_{USD}^{digital}$)—then, the effective cost of transacting in KHR declines more than that of USD when consumers switch from cash to digital payment.

As a result, the right-hand side of the equation decreases, and since $\delta < 1$, the ratio $\frac{C_{KHR}}{C_{USD}}$ on the left-hand side of the equation would increase. Given that the share of expenditure in KHR is nothing else but $\frac{C_{KHR}}{C_{KHR}+C_{USD}}$, our model implies a higher share of household consumption will shift toward KHR once they adopted digital payment.

However, this simple model has a key limitation: it does not account for the currency in which goods are priced or the currency in which households receive their income—both of which can influence the actual outcome. If goods are still predominantly priced in USD—for example, rental payments set at USD 80—and households earn mostly in USD, they might simply switch from using USD cash to USD digital. This could happen even if digital payment helps lower frictions associated with using KHR, such as reducing the need for large-denomination KHR notes (currently available only up to KHR 200,000, or about USD 50) or dealing with multiple zeros. Therefore, these structural factors, price tags and income in USD, can significantly influence how much reduced transaction costs of KHR from digital payment translate into actual changes in currency usage.

5. Data and Descriptive Statistics

5.1 Data

Based on the theoretical framework, digital payment has the potential to promote the use of KHR, although their effectiveness might be limited if currency in price tags and income are in USD. To empirically test the overall effect of digital payment on the promotion of KHR usage, we employ a survey-based data, collected under joint research between the NBC and UNDP in Cambodia between March 15 and 31, 2023, among workers in the garment, footwear, and textile (GFT) sector. The survey targeted factory workers and their households from Phnom Penh and four economically active provinces: Banteay Meanchey, Svay Rieng, Preah Sihanouk, and Kandal. These provinces were selected due to their high levels of economic activity and greater likelihood of foreign currency circulation. Data collection was conducted in person through random sampling, selecting between 10 and 20 workers per factory. In total, responses were obtained from 1,068 workers, of whom 888 were women.[2]

The questionnaire collects detailed information on workers' household income and expenditure, disaggregated by both currency (local and foreign) and by income sources or expenditure categories. This allows us to compute the share of income and expenditure in local and foreign currencies using weighted averages. At the same time, although the questionnaire does not provide information on digital payment usage at household level, there is a question asking the respondent of how often he/she makes digital payment that we use as a proxy. We recode this variable as 0 if he/she never makes digital payment at all and 1 otherwise. Besides these variables of interest, the questionnaire also includes household attributes such as age, gender,[3] educational level, and household location that we can use as control variables in our regression.

5.2 Descriptive Statistics

Table 1 below present descriptive statistics of variables used in this analysis.

Table 1: Descriptive statistics of variables used in this analysis

				Usage of digital payment		
Variables	Mean	Std. dev.	Share of KHR[4]	Yes	No	T-test[5]
Dependent variable:						
Share of KHR in household (hh) expenditure	89.1	14.0		87.7	89.5	
Individual attributes:						
Average age of hh members	28.9	7.8	89.6	27.9	29.2	**
Female	0.83	0.37	89.4	0.79	0.84	**
Location of hh: Phnom Penh	0.47	0.5	84.4	0.47	0.47	

[2] For more details on the survey, please read "Dollarization and its Effects in the Garment, Footwear, and Travel Goods and Bag Sector in Cambodia: Toward the Promotion of Khmer Riel in Wage Payment".

[3] We do not have information of gender of all household head and all household members. Therefore, we use the gender of the respondents instead.

[4] For continuous variables, the share of KHR in household expenditure is calculated for values higher than the mean levels.

[5] T-test tests whether there is a significant difference between the means of each individual attribute between digital and non-digital users. *** represents a significant level at 1 percent, ** 5 percent, and *10 percent.

Median level of hh education[6]	2.48	0.68	87.8	2.64	2.43	***
Share of hh income in KHR	15.3	19.7	91.1	15.2	15.3	
Expenditure per capita (in log)	7.8	3.8	84.2	8	7.8	
Usage of digital payment	0.24	0.43	87.7	NA	NA	NA
Total observation:				1068		

Source: UNDP-NBC survey (2023), authors' calculation

The decision to use digital payment is not exogenous and may be influenced by individual characteristics such as age, gender, and education—factors that may also affect currency preferences. For example, Table 1 shows that younger households are more likely to adopt digital payment, thanks to their tech-savviness, but they may prefer using USD over KHR, reflecting long-standing habits and familiarity with USD (Duma, 2011). Conversely, female may be less likely to use digital payment but more inclined to use KHR, as they are often responsible for food purchases where KHR is commonly used. Similarly, households with higher levels of education are more likely to use digital payment thanks to their digital literacy, yet they may exhibit a stronger preference for foreign currency, consistent with findings from Stix (2011), who shows that education is positively associated with euro holdings, possibly due to greater integration into remittance networks or exposure to foreign currency usage.

Beyond selection bias, other sources of endogeneity may also be present. For instance, omitted variable bias could arise if unobserved factors, such as authorities' policies aimed at promoting digital payment and the use of KHR, influence both the likelihood of adopting digital payment and household currency preferences. Additionally, reverse causality may occur if households that already prefer to spend in KHR are more likely to adopt digital payment, as doing so helps them manage the inconvenience of large denominations with too many zeros.

As such, failing to account for the endogeneity of digital payment use could lead to biased estimates of its impact on the share of KHR in household expenditure. To address this, we employ a linear regression model with endogenous treatment effects using the maximum likelihood approach, which allows us to jointly estimate the outcome and treatment equations while correcting for endogeneity and recovering the counterfactual outcomes regarding what KHR usage would have been in the absence (or presence) of digital payment adoption.

[6] The level of household education is coding as follows: 1 (no schooling), 2 (some/complete primary school), 3 (some/complete lower secondary school), 4 (some/complete upper secondary school), 5 (some/complete bachelor degree), and 6 (some/complete PhD).

6. Empirical Method and Results

6.1 Empirical Method

Our empirical specification has two equations that we must estimate simultaneously:

The outcome equation, which explains the impact of digital payment and household covariates on the share of household expenditure in KHR, is written as follows:

$$y_i = \beta_0 + \beta_1 D_i + \beta_2 X_i + \varepsilon_i$$

where y_i: share of household expenditure in local currency;

D_i: a binary variable indicating whether the respondent has ever used digital payment or not;

X_i: household covariates including average age of household members, level of household education, location of household, gender of the respondent, share of household income in KHR, and size of household total expenditure per capita (in log); and

ε_i : the error term.

The treatment Equation using a probit model for digital payment use is described with the following equation:

$$D_i^* = \gamma_0 + \gamma_1 Z_i + \gamma_2 X_i + v_i \text{ with } D_i = 1 \; if \; D_i^* > 0, 0 \text{ otherwise.}$$

Where Z_i: an instrumental variable, which must be correlated with the treatment variable (relevance condition) and uncorrelated with the error term in the outcome equation (exogeneity condition). That is Z_i should affect the outcome only through its impact on the treatment variable;

X_i: household covariates in the outcome equation that might also have effects on the respondent's choice of using digital payment or not; and

v_i : the error term.

In this model, we assume that the error terms from the treatment and outcome equations follow a bivariate normal distribution with mean zero and a non-zero correlation. This specification accounts for potential endogeneity, allowing unobserved factors that influence digital payment adoption to also affect the share of expenditure in local currency:

$$\begin{pmatrix} \varepsilon_i \\ \nu_i \end{pmatrix} \sim \mathcal{N}\left(\begin{pmatrix} 0 \\ 0 \end{pmatrix}, \begin{pmatrix} \sigma^2 & \rho\sigma \\ \rho\sigma & 1 \end{pmatrix} \right)$$

Table 2 below has shown that usage of digital payment is not exogenous as the chi-squared statistic and F-statistic scores are statistically significant, rejecting the null hypothesis that digital payment usage is exogenous. Therefore, the choice of endogenous model is appropriate.

Table 2: Tests of endogeneity

Hypothesis	Robust score chi2(1)	Robust regression F(1,1059)
H_0: Usage of digital payment is exogenous	33.812***	36.791***

Source: Authors' calculation, *** *p-value < 0.01,* ** *p-value < 0.05,* * *p-value < 0.1*

As an instrumental variable, we use the awareness of Bakong.[7] This instrument satisfies the relevance condition, as awareness of Bakong strongly predicts the likelihood of using digital payment. Table 3 confirms that the instrument is not weak, with a Cragg-Donald Wald F-statistic well above the conventional threshold of 10 proposed by Stock et al. (2002), and statistically significant at the 1 percent level. The instrument is also assumed to satisfy the exclusion restriction, based on the rationale that mere awareness of Bakong is unlikely to directly influence a household's choice of currency for daily transactions, except through its effect on digital payment adoption. Moreover, since we estimate a linear regression model with endogenous treatment effects via maximum likelihood, it allows for correlation between unobserved factors that influence both digital payment adoption and local currency use. This means the model can still yield consistent estimates even if the instrument does not fully satisfy the exclusion restriction, as some of the endogeneity is accounted for through this correlation. In other words, the exclusion requirement is less stringent than in standard Instrumental Variable (IV) models like Two-Stage-Least-Squares (2SLS) regressions.

Table 3: Tests for the quality of instrument

Hypothesis	Cragg-Donald Wald F-statistic
H_0: Instrument is weak	165.149***

Source: Authors' calculation, *** *p-value < 0.01,* ** *p-value < 0.05,* * *p-value < 0.1*

6.2 Empirical Results and Discussion

Table 4 below presents the regression results of the linear regression model with endogenous treatment effects:

Table 4: Regression results

Dependent variable: Share of KHR in total expenditure	Coefficient	Robust standard error
Average age of household members	0.147***	0.049
Female	2.077*	1..144
Location of household: Phnom Penh	-8.060***	0.869
Household education[8]	-1.900**	0.815
Share of total income in KHR	0.037**	0.018
Expenditure per capita (in log)	-0.592***	0.122
Usage of digital payment	4.523***	1.255

[7] In the survey, respondents were asked whether they knew Bakong application or not.
[8] We split the sample into two equal groups: households whose median education level is above primary school, and those whose median education level is at or below primary school completion.

Constant	90.895***	1.835
Treatment variable:		
Usage of digital payment		
Awareness of Bakong	1.324***	0.093
Average age of household members	-0.0129**	0.005
Female	-0.168	0.112
Location of household: Phnom Penh	0.106	0.097
Household education	0.357***	0.094
Share of total income in KHR	-0.0004	0.002
Expenditure per capita (in log)	0.003	0.012
athrho	-0.321***	0.041
lnsigma	2.571***	0.040
rho	-0.310	0.037
sigma	13.083	0.525
lambda	-4.062	0.557
Total observation: 1,068		

Source: Authors' calculation, *** *p-value < 0.01,* ** *p-value < 0.05,* * *p-value < 0.1*

Results confirm that digital payment usage is endogenous, as evidenced by a statistically significant correlation between unobserved factors in the outcome and treatment equations ($\rho = -0.31$***). This negative correlation means that unobserved factors that increase the likelihood of adopting digital payment are associated with a lower-than-expected share of KHR usage. Hence, without correcting for endogeneity, we would underestimate the positive effect of digital payment on the KHR usage.

Indeed, the treatment equation reveals that some of the same factors affecting KHR usage also drive the adoption of digital payment. For instance, younger households adopt the technology more readily, and more educated households are also more inclined to use it. Meanwhile, awareness of Bakong is a powerful predictor: households that have heard of Bakong are more likely to use digital payment. Other covariates, however, do not significantly affect digital-payment take-up in this specification.

From the outcome equation, we find that household characteristics play an important role. For each additional year in the average age of household members, KHR spending increases by 0.15 percent, suggesting that younger households are more familiar and comfortable with using USD, having grown up in an economy where USD is widely used. This contradicts to the findings of Stix (2011) who find that older people in Eastern European countries prefer more foreign currencies due to their experiences in past political and economic crises. Households in Phnom Penh spend 8 percent less in KHR than those outside the capital, reflecting a stronger preference for USD, possibly due to long-established dollar usage and stronger network effects in urban areas as Hay (2021) also finds that USD dominates KHR in performing the three functions of money in Phnom Penh. Education also appears to influence currency choice, with more educated households spending 1.9 percent less in KHR, potentially because they have greater access to formal financial services and are more inclined to save or transact in USD.

Next, we also find that female tend to spend 2.07 percent more in KHR than male, likely because women are more involved in day-to-day purchases, where KHR is commonly used.

Moreover, a one percent increase in the share of household income earned in KHR leads to a 0.037 percent rise in KHR spending, highlighting the natural link between the currency in which people earn and the currency they spend (Odajima et al., 2019). Wealthier households use less KHR, with a one percent increase in logged expenditure associated with a 0.59 percent decline in KHR usage, perhaps due to a preference for USD in high-value transactions (Odajima et al., 2019).

Most notably, after controlling for unobserved differences, digital payment usage is associated with a greater use of the local currency: by using digital payment, households spend on average 4.52 percent more of their total expenditures in KHR than they would have if they had not adopted digital payment.

6.3 Extended Analysis: Heterogeneity Impacts

To complement the structural estimation from the linear regression with endogenous treatment effects, which addresses endogeneity by allowing for correlated unobservable in a joint distribution framework, we also employ the endogenous treatment-effects model using the control function approach. This alternative method provides a robustness check, relying on a different set of assumptions. Although it does not exploit the joint distribution of error terms between the treatment and outcome equations, as the previous model does, potentially resulting in less efficient estimates, it has the advantage of allowing the impact of household characteristics on KHR usage to differ between digital payment users and non-users. This flexibility offers a richer and more policy-relevant interpretation by capturing how adoption decisions interact with user profiles to influence local currency use. Table 5 below shows the results:

Table 5: Regression results

Dependent variable: Share of KHR in total expenditure	Coefficient	Robust standard error
Average treatment effect:		
Usage of digital payment	10.410***	2.819
Treatment equation: Usage of digital Payment		
Awareness of Bakong	1.279***	0.098
Average age of household members	-0.0133**	0.005
Female	-0.162	0.113
Location of household: Phnom Penh	0.104	0.097
Household education	0.378***	0.094
Share of total income in KHR	-0.0006	0.002
Expenditure per capita (in log)	0.005	0.012
Constant	-0.877***	0.215

Outcome equation (non-digital users):		
Share of KHR in total expenditure		
Average age of household members	0.164***	0.055
Female	3.225**	0.020
Location of household: Phnom Penh	-8.077***	1.000
Household education	-0.8203	0.946
Share of total income in KHR	0.017	0.021
Expenditure per capita (in log)	-0.688***	0.147
Constant	89.496***	2.112
Outcome equation (digital users)		
Share of KHR in total expenditure		
Average age of household members	0.168	0.116
Female	-0.061	2.119
Location of household: Phnom Penh	-7.587***	1.801
Household education	-7.277***	1.816
Share of total income in KHR	0.085**	0.040
Expenditure per capita (in log)	-0.441**	0.224
Constant	102.563***	4.412
Total observation: 1,068		

Source: Authors' calculation, *** *p-value < 0.01,* ** *p-value < 0.05,* * *p-value < 0.1*

In the treatment equation, awareness of Bakong significantly increases the likelihood of using digital payment. The increase in the average age of household members decreases the probability of adopting digital payment, while each additional level of education increases the likelihood of usage, which are the same to the previous model.

However, results from the outcome equation reveal that the effects of household characteristics on KHR usage differ notably between digital and non-digital payment users, suggesting that the drivers of currency choice are mediated by payment behavior.

Education has no significant effect among non-digital users, yet among digital users, higher education significantly reduces the use of KHR: households with education levels above primary school spend 7.28 percent less in KHR. This may reflect their greater exposure to international norms, including digital purchases from foreign platforms priced in USD, or employment in sectors where salaries and transactions are commonly denominated in USD among higher educated people.

The share of income earned in KHR also shows divergent effects. Among non-digital users, income composition does not significantly influence spending currency, but for digital users, a one percent increase in income received in KHR leads to a 0.085 percent increase in KHR spending. This result suggests that the structure of digital platforms likely encourages spending in the currency in which income is received.

As household per capita spending increases, KHR usage declines across both groups, reflecting a shift toward USD for higher-value transactions. However, the effect is more pronounced among non-digital users (–0.69) compared to digital users (–0.44), likely because digital payment helps reduce the practical inconveniences of using KHR, such as handling large volumes of banknotes due to the high number of zeros, similar to findings by Odajima et al. (2019).

Urban residence also influences currency choice. Living in Phnom Penh reduces KHR usage in both groups, but slightly more so for non-digital users (8.08 percent) than for digital users (7.59 percent). This urban dollar reliance likely stems from the higher prevalence of USD-denominated goods and services in the capital, as well as the dominant role of USD in urban labor markets (Hay, 2021).

Age has a positive impact only among non-digital users: each additional year in average age increases KHR usage by 0.164 percent, potentially reflecting generational preferences for the national currency or historical trust in cash-based systems. Among digital users, age has no significant effect, suggesting that once households adopt digital platforms, age plays a lesser role in determining currency choice.

Similarly, gender matters only among non-digital users. Being female is associated with a 3.23 percent increase in KHR spending, possibly due to their higher engagement in household budgeting and daily market transactions where KHR remains more accepted. Among digital users, the gender effect is insignificant, indicating that the digital payment environment may neutralize gender-based spending patterns.

Finally, digital payment has a statistically significant and positive impact on the use of KHR in household expenditure. The average treatment effect implies that by using digital payment, households spend on average 10.41 percent more of their total expenditure in KHR than they would have if they did not adopt digital payment.

The estimated effect in this model is notably higher than the 4.52 percent effect found in the first model. There are two main reasons for this difference. First, unlike the structural model, this control function approach does not rely on the joint distribution of error terms between the treatment and outcome equations. While this makes the model more flexible in some respects, it also means that the estimates may be more sensitive to violations of the exclusion restriction. In particular, if the instrument—awareness of Bakong—has a direct positive influence on KHR usage beyond its effect through digital payment adoption, the estimated treatment effect may be overstated.

Second, however, this model allows for heterogeneous treatment effects across different household characteristics, unlike the first model which assumes a constant effect. This implies that if non-users were to adopt digital payment, some could experience even larger shifts toward KHR usage. For example, less-educated households are less likely to adopt digital payment and, when using cash, tend to show no clear currency preference. However, once they adopt digital payment, they often shift toward KHR. Although these households are typically embedded in KHR-based local markets, frictions such as handling large amounts of cash may lead them to transact in USD for convenience. Digital tools help reduce these frictions, making KHR usage easier and more appealing.

Taken together, the results from both models suggest that the impact of digital payment adoption on KHR usage likely lies between 4.52 percent and 10.41 percent, highlighting a substantial and positive overall effect.

7. Robustness Check

7.1 Addressing Instrument Validity Concerns

A potential concern when using the endogenous treatment model lies in the validity of the instrument, particularly the exclusion restriction criterion. For instance, the NBC's promotional campaigns often emphasize both the Bakong payment system and the importance of using KHR. As a result, individuals who attend such campaigns may become more aware of Bakong and simultaneously increase their trust and usage of KHR, even if they do not actually adopt digital payment. This implies that Bakong awareness could influence the outcome variable directly, outside of the digital payment adoption channel.

Another concern arises from a potentially high correlation between Bakong awareness and financial literacy. People with higher financial literacy are generally more exposed to financial information, more likely to interact with formal financial institutions, and more responsive to financial education campaigns. These characteristics increase the likelihood that they are aware of Bakong. At the same time, higher financial literacy itself is associated with greater trust in KHR given a stable exchange rate and inflation in Cambodia over more than two decades, encouraging them to use more KHR. Thus, again, Bakong awareness may partly reflect underlying differences in financial literacy rather than serving as an exogenous source of variation in digital payment use.

Nevertheless, as we mentioned earlier, by estimating a linear regression model with endogenous treatment effects via maximum likelihood, we allow for correlation between unobserved factors affecting both digital payment adoption and local currency use, enabling consistent estimates even if the instrument partially violates the exclusion restriction. Furthermore, as indicated by the significant and negative rho (ρ) value in Table 4, unobserved factors that increase the likelihood of adopting digital payment are actually associated with a lower-than-expected share of KHR usage, suggesting that the NBC's promotional campaigns, which often emphasize both the Bakong payment system and the importance of using KHR, may be less concerning in this regard.

To further address the concern, we include two variables—financial literacy and trust in KHR—in the first regression model to control for these effects. In the questionnaire, respondents were asked whether they trust the KHR and to what degree. Only about 3 percent reported that they either do not trust, or neither trust nor distrust the KHR. The vast majority (97 percent) expressed trust, of which 25.6 percentage points indicated strong trust. Accordingly, we construct a categorical variable coded as 0 (no trust), 1 (trust), and 2 (strongly trust). For financial literacy, we use three questions covering: i/-The compound interest calculation, ii/-The concept of the real interest rate, and iii/-The effect of KHR depreciation on USD loan repayments. Each correct answer is awarded one point, and the financial literacy score is calculated as the sum of these points.

The results reported in Table 6 show that the effect of digital payment adoption on KHR usage remains positive and robust after controlling for financial literacy and trust in KHR. Specifically, digital payment usage increases the share of KHR in total expenditure by 3.68 percent on average, and still significant at the 1 percent level. Trust in KHR, although widely reported among respondents, does not have a significant impact on KHR usage. By contrast, financial literacy matters only at the highest level: respondents who answered all three questions correctly demonstrate a significantly higher share of KHR expenditure by 3 percent

and at the 10 percent level only. Other covariates remain largely unchanged, supporting the robustness of the baseline findings.[9]

Table 6: Regression Results with Additional Controls of Financial Literacy and Trust in KHR

Share of KHR in total expenditure:	Coefficient	Robust standard error
Digital Payment	3.68***	1.315
Total Observation	1068	

Source: Authors' calculation

7.2 Disaggregating the Impact by Expenditure Category

Based on the previous analysis, digital payment has a positive impact on the share of total expenditure in KHR. However, the analysis does not account for the type of transaction, which may influence how digital payment affects currency choice. For instance, food and beverage purchases are typically conducted in KHR, so digital payment could further encourage the use of KHR in these cases. In contrast, rental fees are often priced in USD, and the network effect may lead digital payment to reinforce USD usage for such transactions. Table 7 below presents descriptive statistics on the share of expenditure in KHR, disaggregated by transaction type and digital payment usage.

Table 7: Share of Expenditure in KHR by type of transactions

			Digital Payment			
Variables	Mean	Std. dev.	Yes	No	T-Test	Observation
Share of Expenditure in KHR:						
Food and Beverage	99.9	1.6	100	99.9		1068
Housing (Rental)	33.0	46.2	28.0	34.6	**	801
Utilities	98.6	11.4	98.6	98.6		1059
Communication	84.5	35.0	74.9	87.5	***	1067
Transportation	99.9	0.16	99.9	100	**	910
Personal Care	99.4	7.2	99.1	99.5		1068
Remittances	81.6	37.8	79.4	82.5		613
Clothing and Footwear	95.2	17.9	92.8	96.1	***	902
Medical Care	98.7	9.8	98.7	98.7		936
Other Expenses	93.6	22.2	90.6	94.6	***	710

Source: UNDP-NBC's survey (2023), author's calculation

Next, we use the linear regression model with an endogenous treatment effect to examine the impact of digital payment on the share of expenditure in KHR across different transaction types, while controlling for the same set of variables.

[9] Full regression results are not reported here but are available upon request. Financial literacy and trust in KHR were excluded from the baseline to avoid over-controlling as their inclusion does not alter either the main results, since trust is insignificant and only the highest level of financial literacy shows an effect. Thus, we prefer to keep them as a robustness check instead.

Table 8: Regression results by types of transactions

Share of KHR expenditure in:	Coefficient of digital payment	Robust standard error	Observation
Food and Beverage	0.218**	0.111	1068
Housing (Rental)	25.651	21.749	801
Utilities	1.036	1.444	1059
Communication	3.765	3.488	1067
Transportation	2.02E-07***	9.06e-09	910
Personal Care	0.038	0.695	1068
Remittances	16.892***	5.034	613
Clothing and Footwear	-1.768	2.097	902
Medical Care	-0.421	3.121	936
Other Expenses	0.051	2.685	710

Source: Authors' calculation

Results from Table 8 show that the impact of digital payment on KHR usage varies notably by transaction type. Digital payment adoption is associated with a statistically significant increase in the share of expenditure in KHR for food and beverage purchases—categories typically priced in the local currency—and for remittances, which are often made in KHR by low-income households. In contrast, no significant effect is observed in categories such as housing rental, medical care, and clothing, where prices are often anchored in USD. These findings highlight the importance of transaction characteristics and emphasize that the effectiveness of digital payment in promoting local currency use also depends on whether prices are displayed in KHR.

Given these findings, and the fact that food and beverage and remittance expenditures account for 33.7 percent and 12.2 percent of total household spending, respectively, we include these variables in our regression analysis to check if the positive impact of digital payment was driven by expenditure composition. Table 9 presents the results:[10]

Table 9: Regression results adding share of food and beverages and share of remittance

Share of KHR in total expenditure:	Coefficient	Robust standard error
Digital Payment	4.08***	1.446
Total Observation	1068	

Source: Authors' calculation

Digital payment usage still increases the share of KHR in total expenditure by approximately 4.1 percent, even after controlling for the shares of spending on food and beverage, and remittances.[11] This is slightly lower than the baseline estimation of 4.52 percent, suggesting that the baseline effect result is not because of higher spending in categories typically transacted in KHR. Instead, the findings imply that digital payment actively supports the use of KHR by making local currency transactions more convenient and accessible.

[10] Full regression results are not reported here but are available upon request.
[11] When financial literacy and trust in KHR are added to the model, the coefficient is 3.18 and remains statistically significant, though at the 5 percent level.

8. Policy Implications

The findings of this study confirm that digital payment system has a positive impact on local currency (KHR) usage. However, without targeted interventions, structural and behavioral factors could limit or even nullify this benefit in the long run. Following key policies are proposed:

First, strengthening digital and financial literacy as well as targeted outreach. Demographic groups with lower adoption rates, particularly older households and those with lower educational attainment, should be prioritized in digital and financial literacy campaigns. Education programs should not only explain how to use digital payment but also emphasize the benefits of using KHR, countering the tendency among more educated, digitally active users to default to USD for online and cross-border transactions.

Second, counteracting urban dollarization through pricing and platform defaults. In Phnom Penh and other urban centers, where USD is the dominant pricing currency, regulators and payment providers should encourage or mandate local currency defaults in digital platforms. This could include requiring or further encouraging price displays in KHR and promoting KHR-based payroll systems in urban businesses.

Third, targeting high-income and internationally exposed users. Affluent consumers remain inclined toward USD, probably for imported goods. To shift behavior, policymakers should work with merchants and payment providers to create KHR-based loyalty programs, discounts, or exclusive offers, making local currency transactions the more attractive option even for large purchases.

Fourth, aligning income currency with spending currency in digital payment system**.** Since users tend to spend in the currency in which they are paid, increasing KHR-denominated salaries can directly boost KHR usage in digital payment. Public–private partnerships can promote KHR payroll adoption and facilitate salary payment through interoperable KHR platforms like Bakong.

Fifth, the introduction of direct incentives for KHR digital transactions. Bakong and other mobile payment apps could offer free transfers for KHR while applying a small fee for USD transfers. Merchants could also be supported to provide exclusive discounts for payments made in KHR. Over time, such incentives can help form lasting KHR spending habits.

In short, digital payment currently supports KHR usage, but their long-term effect depends on policy design. By reinforcing KHR defaults, incentivizing local currency pricing, and expanding KHR-denominated income flows, this would ensure that growing digital adoption, especially among urban, affluent, and educated users, drives sustained progress in promoting the local currency rather than entrenching USD usage. This implies the necessity of coordinated efforts among all relevant stakeholders.

9. Conclusion

This paper evaluates the influence of digital payment system on the adoption of Cambodia's KHR within a highly dollarized economy. Our theoretical model has illustrated that digital payment has the potential to promote the use of KHR by reducing the transactions cost of KHR relatively to cash more than the USD, though their actual impact may depend on the market environment, including currency in income and price tags. Findings from empirical models clearly demonstrate that digital payment significantly encourages households to spend more in KHR, suggesting the potential of digital technologies as effective tools in de-dollarization strategies. However, the persistence of demographic differences, notably stronger USD preferences among younger, educated, and urban populations, underscores that digital payment alone is insufficient to overcome entrenched dollarization. Effective promotion of the local currency will thus require a comprehensive approach, integrating digital infrastructure enhancements with policy interventions such as financial education programs, regulatory incentives for KHR transactions, and widespread adoption of KHR in salary payments and price-setting.

Nevertheless, our study has certain limitations. The theoretical model does not account for the currency in which income is received, even though households often align their spending with income currency to avoid conversion costs—a pattern also reflected in our empirical findings. It further assumes fixed price tagging in either KHR or USD, overlooking real-world practices such as dual pricing, rounding, or merchant-specific currency preference that can influence consumer currency choice. Meanwhile, on the empirical side, the cross-sectional nature of our data limits our capacity for observing temporal shifts or establishing causality definitively, particularly regarding unobserved heterogeneity across households. Additionally, the sector-specific scope (GTF) of the data may limit broader applicability across the Cambodian economy. The study also lacks detailed information on the pricing environment, whether goods and services are price-tagged in KHR or USD, which likely influences household currency choices. Indeed, the observed variation in KHR usage across transaction types suggests that price tagging also plays an important role. Therefore, future research could extend the theoretical model and expand upon the empirical findings by incorporating longitudinal analyses, broader economic sectors, and more detailed transaction-level datasets to better understand and guide Cambodia's ongoing local currency promotion efforts.

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