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Phones Before Accounts: Mobile Money and the Gender Gap in Financial Inclusion in South Asia

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ABSTRACT

Financial inclusion is monitored by counting adults who own an account, and mobile money is often presented as the technology that will close the gender gap in that count. Mobile money, however, works only through a chain of prerequisites: a phone, a SIM registered in one's own name, the skill to operate a PIN, and cash agents. This study uses the public country-level Global Findex Database 2025 (survey rounds 2011 to 2024) to examine whether mobile money narrows or reproduces the gender gap in Bangladesh, India, Nepal, Pakistan and Sri Lanka, compared with Sub-Saharan Africa and 70 economies with mobile money data. In 2024, India showed no gender gap in account ownership (−0.4 percentage points). Yet men led women by 17.6 points in mobile money use, 24.1 points in phone ownership and 35.3 points in SIM registration, and women's accounts were more often inactive (19.6% versus 12.6% of owners). Pakistan had the largest phone gap of 141 economies (64.8 points) and an account gap of 30.4 points, of which 13.1 points came from accounts held only through mobile money. Across economies, each point of phone ownership gap was associated with a 0.38-point mobile money gap (95% CI 0.23 to 0.54). Women more often reported that a family member already had an account, and Pakistani women often lacked a phone because of family disapproval or difficulty reading. The headline count and the experienced chain tell different stories. Mobile money inherits the gender gap in the phone rather than bypassing it.

Keywords: mobile money, financial inclusion, gender gap, mobile phones, South Asia, Global Findex

1. Introduction

Governments and development agencies judge financial inclusion mainly by one number: the share of adults who have an account. The Sustainable Development Goals track it as indicator 8.10.2, the proportion of adults with an account at a bank or other financial institution or with a mobile money provider (United Nations Statistics Division, 2026). The World Bank's Global Findex survey supplies this number for more than 140 economies and reports it separately for women and men (Klapper et al., 2025). By this count, the gender gap in developing economies fell from 9.6 percentage points (pp) in 2011 to 4.9 pp in 2024 in the data analyzed here.

Mobile money is a large part of the story told about that progress. A mobile money account stores value on a SIM card and lets the user send, receive and pay by phone, with cash moved in and out through local agents (Donovan, 2012; Suri, 2017). In Kenya, access to M-PESA helped households share risk and was linked to lower poverty, with larger gains for female-headed households (Jack & Suri, 2014; Suri & Jack, 2016). In Bangladesh, an experiment that helped migrant families use the bKash service raised remittances and lowered poverty in rural sending households (Lee et al., 2021). These results have made mobile money a standard answer to the question of how to reach women who lack bank accounts.

Mobile money is also a technical system with entry requirements. It assumes that the user owns or controls a phone, that a SIM is registered to that user against an identity document, that the user can read a menu and keep a PIN, and that an agent is close enough to convert cash. Each requirement is a point at which gender inequality in phones, documents, literacy and mobility can enter. South Asia has some of the widest gender gaps in phone ownership in the world (Fatehkia et al., 2018; Rotondi et al., 2020). If mobile money depends on the phone, it may carry that gap into finance rather than remove it.

This article asks how mobile money relates to the gender gap in account ownership in five South Asian countries: Bangladesh, India, Nepal, Pakistan and Sri Lanka. It contrasts them with Sub-Saharan Africa, where mobile money spread first and furthest. The study is built around a gap that the journal's theme makes central. Inclusion is evaluated by account counts, but women experience it through use: whether their account is active, whether they hold the phone and SIM in their own name, and whether they can operate the device without help. Three research questions guide the analysis.

RQ1. How did gender gaps in account ownership, mobile money use and inactive accounts change in the five countries between 2011 and 2024, compared with Sub-Saharan Africa? RQ2. Across economies, how closely do gender gaps in mobile money and in account ownership track the gender gap in owning a phone and holding a SIM in one's own name? RQ3. What do use-side measures and the barriers that women and men report show that the account count does not?

The study uses the public, country-level Global Findex Database 2025, which covers survey rounds from 2011 to 2024 and, for the first time, a module on phones and connectivity (World Bank, 2025). The analysis finds that mobile money tracks the phone. Where women lag in phone ownership, they lag in mobile

money by about four-tenths of that gap. India reached parity in account ownership through bank accounts, while gaps in the phone-based chain remained large and women's accounts were more often idle. Pakistan shows the opposite path: a fast rise in mobile money that mostly reached men and widened the account gap. The contribution is to show, with public data, how a single inclusion count hides the technical chain that decides who can use an account.

2. Related work and framing

2.1 Mobile money as a route to inclusion

Research on mobile money began with the observation that phones cut the cost of moving information and money in places with few bank branches (Aker & Mbiti, 2010). Mobile money turned the phone into a payment instrument. In Kenya, M-PESA users absorbed income shocks without cutting consumption, because remittances arrived faster and from more senders (Jack & Suri, 2014). Similar insurance effects against village-level shocks appear in Tanzania (Riley, 2018). Reviews of this work report clear benefits for payments and risk sharing, with less certain effects outside East Africa (Aron, 2018; Suri, 2017).

Several studies point to gender-specific gains. Long-run access to M-PESA moved Kenyan women from farming into business (Suri & Jack, 2016). In Niger, cash transfers paid by mobile phone gave women more say over spending than transfers paid in cash (Aker et al., 2016). In Uganda, loans disbursed into a private mobile money account let women protect money from family claims and raised their business profits (Riley, 2024). These gains depend on the account being the woman's own. Field et al. (2021) show the same logic for bank accounts in India: paying women's public works wages into accounts in their own name, rather than a husband's account, raised their work outside the home.

2.2 Ownership, use and the limits of the count

Account ownership has long been known to be a weak guide to use. Demirgüç-Kunt and Klapper (2013) found that, across 148 economies, cost, distance and documentation explained part of the gap in formal account ownership, and that women were less likely than men to have an account. Field experiments that opened free bank accounts in Uganda, Malawi and Chile found that most accounts were rarely or never used (Dupas et al., 2018). In Nepal, by contrast, women household heads offered a free savings account used it often (Prina, 2015). The difference between owning and using is therefore an empirical question for each setting.

Critical work treats the account count as a policy object. Mader (2018) argues that financial inclusion became a goal measured by access rather than by outcomes. Gabor and Brooks (2017) link the push for digital accounts to the data and revenue interests of financial technology firms. Studies of quantification describe how indicators turn varied social conditions into comparable numbers that come to govern the problems they measure (Merry, 2016). Bowker and Star (1999) show that classification systems make some cases visible and others invisible. The account indicator is such a classification: it decides that a woman who transacts through her husband's phone is unbanked, and that a woman with an unused bank account is included.

2.3 The phone and the identity system

The gender gap in phone access is well documented. Hilbert (2011) showed that women's lower use of digital tools in developing countries largely followed their lower employment, education and income. Cross-national estimates find the widest gaps in South Asia and parts of Africa (Fatehkia et al., 2018; Rotondi et al., 2020). In India, cost and household economic dependence limit women's phone ownership (Potnis, 2016). Field studies show that women often use phones that belong to, or are monitored by, other family members (Sibona, 2021; Tacchi et al., 2012).

Mobile money adds identity requirements to the phone. Mandatory SIM registration ties each SIM to an identity document and can exclude people without one (Jentzsch, 2012). Cash agents are the last link: adoption in Kenya rose with agent proximity (Johnen et al., 2023).

2.4 Framing: an access chain

This study treats mobile money as an access chain: a sequence of technical conditions that a person must meet before an account appears in the count. The links are owning a phone, holding a SIM in one's own name, being able to read and enter text, operating a PIN without help, and transacting in the past year. A gender gap at any link can pass down the chain. The distinction that Kabeer (1999) draws between resources and agency fits this design: a phone is a resource, but control over it decides whether a woman can act on it. The empirical question is whether mobile money skips links that block women in banking, or whether it adds new links that block them earlier.

3. Data and methods

3.1 Data

All data come from the Global Findex Database 2025, downloaded as a CSV file from the World Bank in October 2026 (World Bank, 2025). The file holds country, regional and income-group estimates for survey rounds in 2011, 2014, 2017, 2021 and 2024, broken down by gender and other groups. A small 2022 round covering 16 economies was excluded. The 2024 round interviewed about 1,000 adults aged 15 and over in most of 141 economies, with 3,086 in India; Gallup collected the data mostly face to face in low- and middle-income economies (Klapper et al., 2025). The survey methodology appendix lists the number of interviews and the design effect for each economy. These were extracted with a script to estimate sampling error. Findex microdata were not used, because they require registration.

3.2 Measures

Account ownership is the share of adults who report an account at a bank or similar financial institution, or who report personally using a mobile money service in the past year. Mobile money account follows the second part of this definition. The two parts differ in kind: a bank account counts if it is owned, while a mobile money account counts only if it was used. This asymmetry is part of the system under study. The mobile-money-only share is the difference between any account and a

financial institution account, and measures adults who are counted as included only through mobile money.

The phone module of the 2024 round adds a measure for each link in the access chain. These are owning a mobile phone, having the SIM registered in one's own name, having sent a text message, and being able to change the phone's PIN or password without help. Two further measures record having used someone else's phone in the past three months and having used the internet. An inactive account is one with no deposit, withdrawal or digital payment in the past year. Findex publishes it as a share of all adults; this study divides it by account ownership to express it as a share of account owners.

Reasons for not having a financial institution account (too far, too expensive, lack of documents, not enough money, a family member already has one, lack of trust) are published as shares of the adults who were asked, that is, adults without such an account. Some published values exceed the share of all adults without an account, which rules out all adults as the base. Reasons for not owning a phone (cannot afford a phone, airtime too expensive, poor coverage, difficulty reading or typing, family disapproval, safety, using someone else's phone) never exceed the share of adults without a phone in any economy. They behave as shares of all adults and are analyzed that way. Findex suppresses gender estimates where cells are too small, so some country values are missing.

3.3 Analysis

The gender gap is defined as men's percentage minus women's percentage, in pp. A positive gap means men lead. For inactive accounts, a negative gap means that women's accounts are more often inactive. For RQ1, gaps were traced across rounds for the five countries, the South Asia aggregate and the Sub-Saharan Africa aggregate. For RQ2, the unit of analysis is the economy in 2024. The mobile money gap and the account gap were regressed on the phone ownership gap by ordinary least squares with heteroskedasticity-consistent (HC3) standard errors. Extended models add the overall level of mobile money or account ownership and dummies for seven World Bank regions, including high income. The sample is the 70 economies with published gender estimates for both phone ownership and mobile money. A second predictor, the gap in SIM registration in one's own name, is available for 62 of them. For RQ3, use-side measures and reasons were compared for women and men.

Findex does not publish standard errors in the country file. Approximate 95% confidence intervals for each 2024 gap were computed from the published design effect and number of interviews, assuming that half of each sample was female. For indicators defined on a subgroup, such as account owners or adults without an account, the subsample was scaled by that group's share. The formula reproduces the published margins of error for all 141 economies to within 0.05 pp. Regional aggregates are shown without intervals. Country gaps also carry sampling error into the regressions. The mean standard error of the phone gap was 2.6 pp against a cross-country standard deviation of 9.6 pp, which implies a reliability ratio of 0.92 and only slight attenuation of the slopes. All analysis was done in R, and every number in the text comes from the analysis code.

4. Findings

4.1 Trends: parity in the count, gaps in the channel (RQ1)

Figure 1 traces the gaps from 2011 to 2024. In the South Asia aggregate, which India dominates, the account gap fell from 15.9 pp in 2011 to 5.0 pp in 2024. India drove that change. Its gap rose to 19.6 pp in 2014, fell to 6.4 pp in 2017 and was −0.4 pp in 2024 (95% CI −3.1 to 2.2). Almost all of this movement came through financial institution accounts. India's national inclusion mission set the goal of at least one basic bank account for every household (Department of Financial Services, n.d.). Women's account ownership in India rose from 26.5% in 2011 to 89.2% in 2024, while mobile money remained a minor channel.

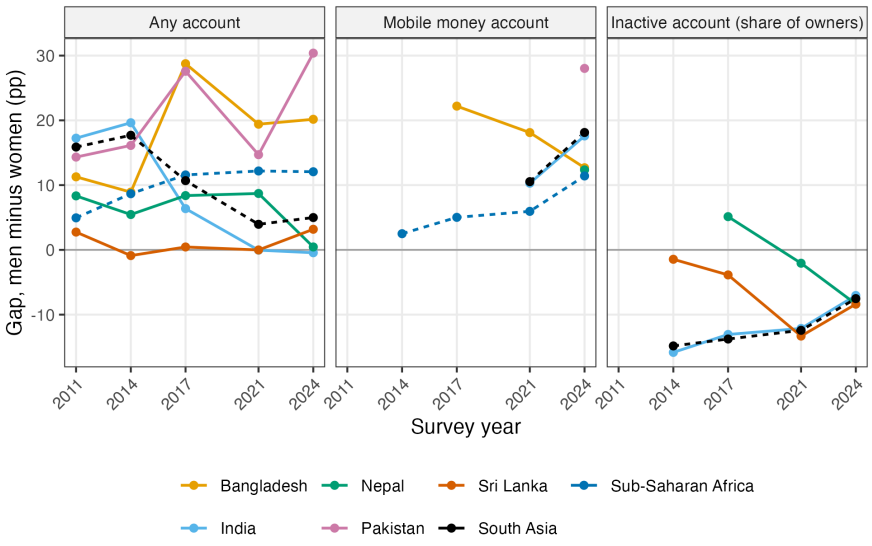

Figure 1. Gender gaps in any account, mobile money account and inactive accounts, 2011–2024. The gap is men's share minus women's share in percentage points (pp). Inactive accounts are expressed as a share of account owners, so a negative gap means that women's accounts are more often inactive. Dashed lines are regional aggregates. Points appear only where the Global Findex publishes the value by gender; Sri Lanka has no published mobile money estimate.

The mobile money gap moved the other way. In South Asia it rose from 10.5 pp in 2021 to 18.1 pp in 2024, and in India from 10.3 to 17.6 pp, as men's use grew faster than women's (from 15.4% to 31.8% for men and from 5.1% to 14.2% for women). Bangladesh is the one South Asian case where the mobile money gap narrowed, from 22.2 pp in 2017 to 12.7 pp in 2024. Even there, the account gap stayed at about 20 pp, and overall ownership fell from 52.8% in 2021 to 43.3% in 2024. The 2021 round was run by phone in many economies because of COVID-19 restrictions, and face-to-face interviews resumed in 22 economies in 2024 (Klapper et al., 2025). Changes between these two rounds should therefore be read with care.

Pakistan shows how a mobile money expansion can widen the count gap. Account ownership rose from 21.0% to 27.3% between 2021 and 2024, and mobile money use more than doubled, from 8.5% to 18.4%. The gender gap in account ownership doubled too, from 14.7 pp to 30.4 pp. Women's ownership was 13.5% in 2021 and 11.9% in 2024. In 2024, 32.2% of Pakistani men but only 4.2% of women had used mobile money. Sub-Saharan Africa followed a slower version of the same pattern. As mobile money spread, the regional mobile money gap rose from 2.5 pp in 2014 to 11.4 pp in 2024, and the account gap rose from 4.9 to 12.1 pp. The regional aggregates cover somewhat different sets of economies in each round, so these are broad trends.

The third panel of Figure 1 shows the use side. In every South Asian case with published data, women's accounts were more often inactive than men's. In India in 2014, 42.3% of women's accounts and 26.4% of men's had no transaction in the past year. By 2024 these shares had fallen to 19.6% and 12.6%, but the gap of 7.0 pp (95% CI 3.8 to 10.3) remained. Nepal and Sri Lanka had similar gaps in 2024 (8.4 pp in each). Findex publishes the inactive measure by gender for only six economies in 2024; women's accounts were more often inactive in all six. Because mobile money accounts count only when used, almost all measured inactivity sits in bank accounts. This means that India's parity in the count includes many women's accounts that the survey itself records as idle.

4.2 The access chain in 2024

Figure 2 shows each link of the chain for women and men in 2024, and Table 1 gives the gaps with approximate confidence intervals. The gaps grow as the chain moves from basic ownership to control. In India, 78.4% of men and 54.3% of women owned a phone, a gap of 24.1 pp. The gap in having the SIM registered in one's own name was larger, at 35.3 pp (67.6% of men, 32.2% of women). Among phone owners, 86.1% of men but 59.4% of women had a SIM in their own name. Indian women were also 18.2 pp less likely than men to be able to change their phone's PIN without help. The account count showed no gap, but every link of the phone-based chain did.

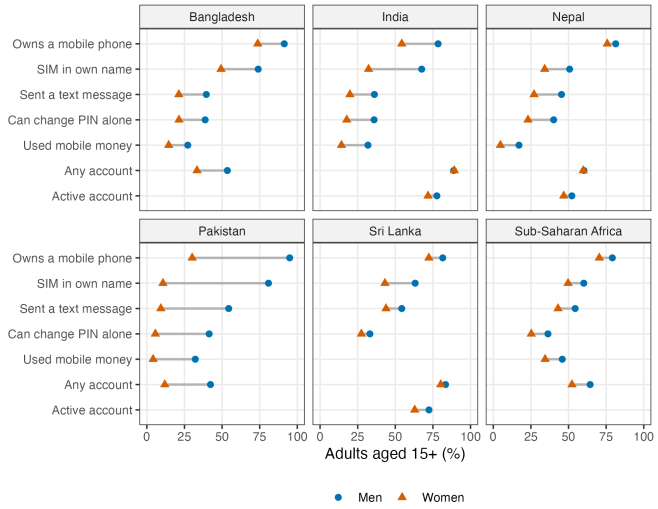

Figure 2. Links in the mobile money access chain for women and men aged 15 and over, 2024. Each row is the share of all adults. "Active account" is any account minus inactive accounts. Missing points are values that the Global Findex does not publish by gender.

Table 1. Gender gaps in accounts and in the phone access chain, 2024 (percentage points, men minus women)

Economy	Any account	Financial institution account	Mobile money account	Owns a mobile phone	SIM in own name	Can change PIN without help
Bangladesh	20.2 (13.4, 26.9)	12.9 (6.4, 19.5)	12.7 (7.1, 18.3)	17.6 (12.5, 22.8)	24.7 (18.1, 31.3)	17.4 (11.1, 23.7)
India	−0.4 (−3.1, 2.2)	−0.9 (−3.5, 1.8)	17.6 (14.1, 21.0)	24.1 (20.3, 28.0)	35.3 (31.4, 39.3)	18.2 (14.5, 21.8)
Nepal	0.4 (−6.6, 7.5)	−2.5 (−9.6, 4.6)	12.3 (8.0, 16.7)	5.6 (−0.3, 11.5)	16.6 (9.6, 23.6)	17.1 (10.5, 23.6)
Pakistan	30.4 (23.5, 37.3)	17.3 (11.1, 23.5)	28.0 (22.1, 34.0)	64.8 (58.8, 70.7)	70.1 (64.3, 76.0)	35.8 (29.4, 42.1)
Sri Lanka	3.2 (−2.8, 9.2)	2.2 (−3.9, 8.3)	n/a	9.2 (2.7, 15.7)	20.1 (12.4, 27.7)	5.7 (−1.5, 12.8)
South Asia	5.0	2.5	18.1	27.5	37.8	19.9
Sub-Saharan Africa	12.1	11.0	11.4	8.7	10.4	11.1
Developing economies	4.9	4.3	7.5	9.2	21.1	12.7

Pakistan shows the chain at its most extreme. Women's phone ownership was 30.1% against 94.9% for men. The gap of 64.8 pp was the largest of the 141 economies; the next largest was Ethiopia's 29.0 pp. Only 10.7% of Pakistani women had a SIM in their own name, against 80.8% of men, and only 5.6% could change a PIN without help. With most women outside the first

link, the mobile money gap of 28.0 pp and the account gap of 30.4 pp follow. Accounts held only through mobile money made up 15.5% of Pakistani men and 2.4% of women. This mobile-money-only gap of 13.1 pp (95% CI 8.5 to 17.7) accounts for 43% of the account gap. In Bangladesh the mobile-money-only gap was 7.2 pp (95% CI 3.0 to 11.5) of a 20.2 pp account gap.

Nepal and Sri Lanka show smaller phone gaps (5.6 and 9.2 pp) but still larger SIM gaps (16.6 and 20.1 pp). In Nepal, the mobile money gap of 12.3 pp was more than twice the phone gap, which suggests that links beyond ownership, such as SIM registration and skills, also matter. Sub-Saharan Africa shows the contrast. Its phone gap was 8.7 pp and its SIM gap 10.4 pp, close to its mobile money gap of 11.4 pp. Among phone owners, 70.5% of women in the region had a SIM in their own name, against 58.5% in South Asia.

Bangladesh, home of the bKash service studied by Lee et al. (2021), sits between these cases. Most women owned a phone (73.7%, against 91.3% of men), but only 49.3% of women had a SIM in their own name, against 74.0% of men. Among phone owners, the shares were 66.9% and 81.0%. Women were about half as likely as men to have sent a text message (21.2% against 39.5%) or to change a PIN without help (21.4% against 38.7%). The mobile money shares followed the same ratio: 14.5% of women and 27.2% of men had used the service. Accounts held only through mobile money covered 6.8% of women and 14.0% of men. In Bangladesh, then, the handset is no longer the main barrier for most women. The later links of registration and skill are where the gap persists.

4.3 Across economies, mobile money follows the phone (RQ2)

Figure 3 plots the mobile money gap and the account gap against the phone ownership gap for the 70 economies with both measures. Men led women in mobile money use in 67 of the 70 economies (96%), with a mean gap of 8.2 pp. The mobile money gap rose with the phone gap ($r = 0.61$). Table 2 reports the regressions. In the simple model, each 1 pp of phone gap was associated with a 0.38 pp mobile money gap (95% CI 0.23 to 0.54; $R^2 = 0.38$). With controls for the overall level of mobile money use and region, the slope was 0.30 (95% CI 0.17 to 0.44). The SIM-in-own-name gap was a slightly stronger predictor of the mobile money gap ($R^2 = 0.46$, $n = 62$).

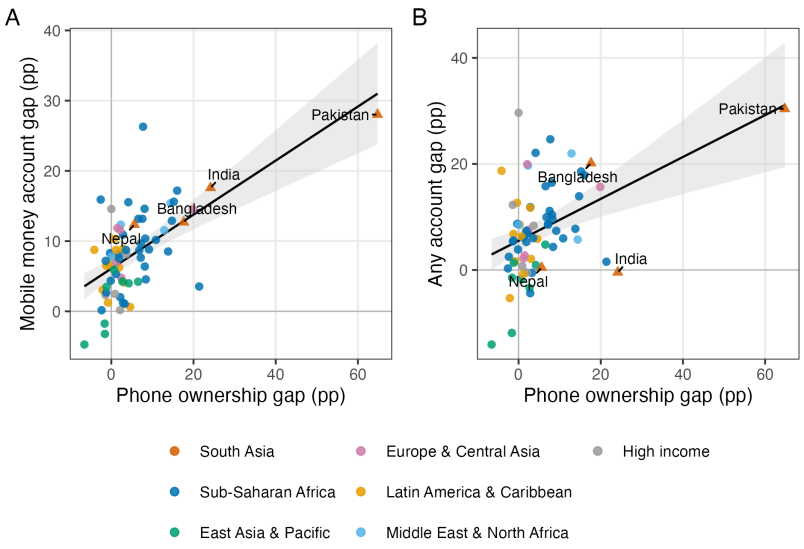

Figure 3. Gender gap in phone ownership against the gender gap in (A) mobile money account and (B) any account, 2024, for 70 economies with published gender estimates of both measures. Lines are ordinary least squares fits with 95% confidence bands. South Asian economies are labelled and shown as triangles.

Table 2. Cross-country regressions of gender gaps on the phone ownership gap, 2024

Model	Outcome	Predictor	Controls or sample	Slope (HC3 SE)	95% CI	n	R^2
M1	Mobile money gap	Phone gap	None	0.38 (0.08)	0.23 to 0.54	70	0.38
M2	Mobile money gap	Phone gap	Mobile money level, region	0.30 (0.07)	0.17 to 0.44	70	0.49
M3	Mobile money gap	SIM-in-own-name gap	None	0.33 (0.05)	0.24 to 0.42	62	0.46
M4	Any account gap	Phone gap	None	0.39 (0.09)	0.22 to 0.57	70	0.19
M5	Any account gap	Phone gap	Account level, region	0.34 (0.14)	0.06 to 0.63	70	0.41
M6	Mobile-money-only account gap	Phone gap	None	0.24 (0.05)	0.13 to 0.34	69	0.25
M7	Any account gap (all economies)	Phone gap	None	0.43 (0.08)	0.28 to 0.58	141	0.16

S1	Mobile money gap	Phone gap	M1 without high-income economies	0.38 (0.08)	0.22 to 0.54	65	0.39
S2	Mobile money gap	Phone gap	M1 without South Asia	0.45 (0.14)	0.16 to 0.73	66	0.22
S3	Any account gap	Phone gap	M4 without South Asia	0.52 (0.21)	0.10 to 0.94	66	0.13
S4	Mobile money gap	Phone gap	M1 without Pakistan	0.45 (0.11)	0.23 to 0.67	69	0.27

The phone gap was also associated with the overall account gap, with a slope of 0.39 (95% CI 0.22 to 0.57), but it explained less of the variation ($R^2 = 0.19$). Bank accounts offer routes that do not need a phone, as India shows: it sits well below the line in panel B. Model M6 isolates the mobile money channel. The gap in mobile-money-only accounts rose by 0.24 pp for each point of phone gap (95% CI 0.13 to 0.34). Where women lack phones, the part of inclusion that runs through mobile money adds to the gender gap.

The gaps along the chain are wider and more consistent than the gap in the headline count. Across all 141 economies in 2024, men's account ownership exceeded women's in 80% of cases, with a mean gap of 6.2 pp. Sampling error is large relative to such gaps, however, and the approximate 95% interval excluded zero in only 38% of economies. For the PIN measure, available for 75 economies, the mean gap was 10.0 pp, men led in 95% of economies, and the interval excluded zero in 63%. The SIM gap had a mean of 10.1 pp across the same 75 economies. Mobile money gaps were largest in South Asia, with a regional mean of 17.7 pp across four economies, against 9.1 pp across 32 Sub-Saharan African economies and 1.5 pp across eight in East Asia and the Pacific. After Pakistan (28.0 pp), the largest mobile money gaps were in Togo (26.3 pp) and India (17.6 pp).

The SIM measure deserves attention because it is where the phone meets the identity system. Across the 62 economies with both measures, the SIM gap correlated at 0.85 with the phone gap and at 0.68 with the mobile money gap. The two links are therefore closely tied, and the data cannot fully separate them. The mobile-money-only gap, by contrast, was small in most economies. Its mean across 140 economies was 0.5 pp, and its interval excluded zero in only 9% of them. Mobile money adds measurably to the gender gap in a minority of economies, mostly those where women's phone ownership lags far behind men's.

Pakistan is an extreme point that pulls on these models. Without it, the slope of the mobile money gap on the phone gap rose to 0.45 (95% CI 0.23 to 0.67), but R^2 fell from 0.38 to 0.27. Without all four South Asian economies, the slope was 0.45 (95% CI 0.16 to 0.73). The association is therefore not an artefact of South Asia alone. The design is cross-sectional and ecological. It shows that mobile money gaps and phone gaps go together across economies, not that closing one would close the other in any single country.

4.4 What women report (RQ3)

Use-side measures for women and men in 2024 show that borrowed access was common among women. In India, 23.0% of women but 9.6% of men had used someone else's phone in the past three months; in Pakistan the shares were 25.4% and 2.8%. Text use, a proxy for the literacy that mobile money menus require, showed gaps of 16.3 pp in India and 45.1 pp in Pakistan. Internet use, which newer payment apps need, showed gaps of 18.6 pp in India and 43.6 pp in Pakistan. These are the forms of use that the account indicator does not see: a woman who sends money through a relative's phone is counted as unbanked.

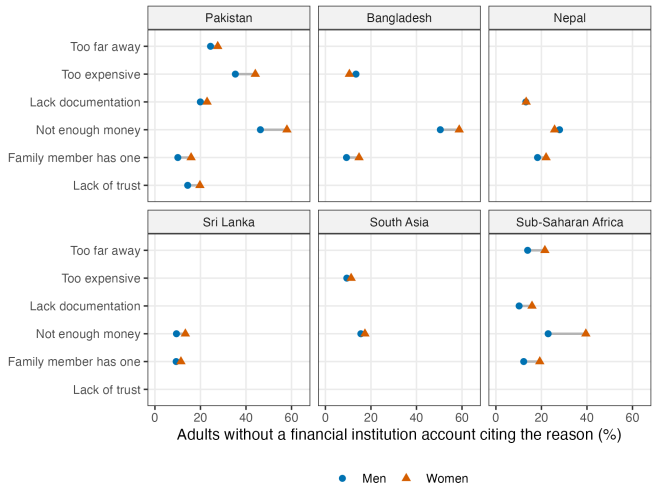

Figure 4. Reasons for not having a financial institution account, by gender, 2024. Values are shares of adults without such an account who cite each reason; respondents could give more than one. Only reasons published for both women and men are shown.

Figure 4 shows the reasons given by adults without a financial institution account. Women more often said that a family member already had an account, in all four countries with published values and in Sub-Saharan Africa. In Pakistan the shares were 15.9% for women and 10.1% for men, and in Sub-Saharan Africa 19.3% and 12.2%. These differences are modest and the country intervals are wide; in Pakistan the 95% interval for the gap ran from −11.9 to 0.3 pp. The direction is consistent, though. The household, not the woman, is treated as the unit that needs an account, which matches the household target of India's mission. Women also cited lack of money more often in Pakistan (58.0% against 46.3%; gap 11.6 pp, 95% CI 2.5 to 20.8) and in Sub-Saharan Africa (39.5% against 22.9%). Distance and documents were cited by similar shares of women and men in South Asia.

Reasons for not owning a phone show where the first link breaks. In Pakistan, 52.3% of all women lacked a phone because they could not afford one, 35.8% cited difficulty reading or typing, 30.8% said they used someone else's phone and 27.6% cited family disapproval. The matching shares for men were 1.3% to 3.3%. In India, 37.7% of women but 16.3% of men lacked a phone partly because airtime was too expensive, and 27.5% of women cited reading or typing difficulty. These shares combine how many lack a phone with why. In India, where the sample of adults without a phone is large enough, the reasons among phoneless women and men were similar: 69.0% of phoneless women and 70.0% of phoneless men could not afford a phone. The gender difference lies mainly in how many women stand

outside the first link, not in a different set of reasons. Sri Lanka was the exception among countries with enough data: 80.2% of phoneless women but 58.6% of phoneless men cited cost (gap 21.7 pp, 95% CI 6.5 to 36.9). In Bangladesh, 15.3% of all women and 5.2% of all men lacked a phone because they could not afford one.

The account reasons in Sub-Saharan Africa differ from South Asia in one respect that bears on the technology. Women there more often cited distance (21.5% against 13.9%) and lack of documents (15.9% against 10.2%). Distance to a bank branch is the barrier that mobile money agents are meant to remove, and documents are the barrier that SIM registration brings back. In South Asia, distance and documents were cited by similar shares of women and men, while family and phone barriers differed sharply. The binding links of the chain therefore appear to differ between the two regions.

5. Discussion

The evidence answers the three questions in one direction. Over 2011–2024, the account gap in South Asia narrowed mostly through bank accounts, while the mobile money gap widened in India and Pakistan (RQ1). Across 70 economies, the mobile money gap tracked the phone gap and, more closely, the gap in SIM registration (RQ2). Use-side measures showed gaps that the account count hides, and women's reported barriers pointed to the household and the phone (RQ3). Mobile money, as these data record it, does not bypass the gender gap in phones. It inherits it.

5.1 Two definitions inside one count

The first finding concerns the indicator itself. The account count joins two different technical events. A bank account enters the count when it exists, whether or not it moves money. A mobile money account enters only when it was used in the past year. India's parity rests on the first definition, and the survey records a fifth of women's accounts as idle. Pakistan's growth rests on the second, and it reached men far more than women. The same indicator therefore rewards one country for opening accounts and the other for transactions. Bowker and Star (1999) note that classifications carry such choices quietly. Here the choice decides whether the gender gap looks closed or open.

This is the gap between evaluation and experience that the study set out to examine. On the evaluated measure, Indian women reached parity with men in 2024. On the experienced measures, they were less likely to own a phone, to hold a SIM in their own name, to manage a PIN alone, to use mobile money or to have an active account. Field experiments elsewhere also found that opened accounts often stay unused (Dupas et al., 2018). The present data add that, in India, idleness falls more on women than on men. A count-based target can be met while the experience it stands for is not.

5.2 The chain as a gender filter

The second finding concerns the technology. Mobile money is often described as a way around the bank branch, and in Kenya it was (Jack & Suri, 2014). Its own entry points, however, are personal: a phone, a SIM tied to an identity document, literacy and a PIN. Each point screens out more women than men where women's access to phones and documents is limited. In Pakistan, women lost ground at the very first link, and the gap carried through to mobile money and then to the account count. The cross-country slope of about 0.38 says that, on average, two-fifths of a phone gap reappears as a mobile money gap. The stronger fit for SIM registration than for phone ownership suggests that the identity layer, as well as the handset, matters. That fits concerns that registration rules exclude people without documents (Jentzsch, 2012).

The benefits found in the experimental literature were tied to women's own control of the account (Field et al., 2021; Riley, 2024). The chain measured here is the precondition for that control. Where women use a relative's phone or depend on others to change a PIN, the private account that produced gains in Uganda is not available to them. The results do not show that mobile money harms women. They show that, as deployed in South Asia, it adds to inclusion mostly where women already have phones in their own name.

5.3 The household as the unit

The third finding concerns whom the system counts as the user. Women without accounts more often said that a family member already had one, and India's mission targeted one account per household. Phone use followed the same pattern: women more often used someone else's phone, and in Pakistan more than a quarter of women lacked a phone because of family disapproval. Findex records accounts and phones for individuals, which is why these gaps are visible at all. Policies that aim at the household, however, can be satisfied by an account or a phone held by a man. This finding supports work that treats women's phone use as shared and supervised rather than private (Sibona, 2021; Tacchi et al., 2012).

5.4 South Asia and Sub-Saharan Africa compared

The comparison with Sub-Saharan Africa clarifies what the technology can and cannot do. In Sub-Saharan Africa, 45.8% of men and 34.4% of women used mobile money in 2024, and 20.9% of men and 19.8% of women were counted as included only through it. There, mobile money reaches women at scale, because most women already own a phone (70.5%) and most female phone owners hold the SIM in their own name. In South Asia, only 53.9% of women owned a phone and 12.8% used mobile money. The same technology meets a different first link. Mobile money in South Asia is therefore not a weaker copy of the African model; it runs on a phone base from which many women are absent.

This comparison also tempers the success story. Even in Sub-Saharan Africa, the mobile money gap grew as the service spread, and the region's account gap of 12.1 pp in 2024 was larger than South Asia's 5.0 pp. A wide mobile money network brought many women into the count, but men gained more. Kenyan evidence of benefits for women (Suri & Jack, 2016) is consistent with this pattern: gains for those who use the service do not imply that the gap in use closes.

5.5 Implications

Three implications follow for those who design and monitor inclusion. First, account ownership should be reported next to a use measure by gender, such as the share of account owners with an active account. The data exist in Findex; the headline indicator omits them. Second, mobile money programmes aimed at women should be judged by the earlier links in the chain: women's phone ownership, SIMs in their own name and the ability to use a PIN alone. Without those links, a program will reach mostly men. Third, the Sub-Saharan African trend is a warning for South Asia. Mobile money spread there much further, yet the gender gap in mobile money rose rather than fell. Diffusion of the technology did not by itself close the gap.

6. Limitations

The study uses country-level estimates, so all cross-country results are ecological. They describe economies, not individuals, and cannot separate the effect of phones from other features of each country, such as income, female employment or the reach of the identity system. The regressions show association, not causation; phone gaps and mobile money gaps may share causes such as gender norms. The sample of 70 economies excludes those where Findex did not publish gender estimates, mainly because few people used mobile money. One economy, Pakistan, is an extreme point, although the association holds without it.

The confidence intervals are approximations. They assume half of each sample was female and use one design effect for all indicators. True intervals for subgroups, such as adults without an account, may be wider. Findex suppresses small cells, so inactive accounts are available by gender for only six economies in 2024, and several reasons are missing for some countries. The base of the reason indicators was inferred from the published values, because the glossary does not state it. Survey mode changed between 2021 and 2024 in some economies, which limits comparisons between those rounds. The services counted as mobile money also differ across countries. Finally, all measures are self-reported, and a respondent who uses a relative's account may report it in different ways. Individual microdata would allow tests of the chain within countries, with controls for education and income. They would also show whether women who borrow a phone or rely on an agent transact in ways the account indicator misses, which the country file can only suggest.

7. Conclusion

Financial inclusion is counted by accounts, and by that count the gender gap in South Asia is small. This study read the same Global Findex data along the technical chain that mobile money requires. In India, parity in accounts sat beside a 24.1 pp gap in phone ownership, a 35.3 pp gap in SIM registration, a 17.6 pp gap in mobile money use and more idle accounts among women. In Pakistan, the growth of mobile money reached men first and doubled the account gap to 30.4 pp. In Bangladesh, where most women now own a phone, the gap persisted in SIM registration and in the skills needed to use the service. Across 70 economies, the mobile money gap rose by about 0.38 pp for each point of phone gap. Mobile money can be a route to inclusion, but only for those who already hold the phone, the SIM and the skills in their own name. Monitoring that reports these links by gender, next to the account count, would show where the route is closed.

Declaration of conflicting interests

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Ethics statement

This study is a secondary analysis of publicly available, de-identified country-level data. No human participants were contacted, and no ethics approval was required.

Data availability statement

The study uses the Global Findex Database 2025 (country-level CSV file, glossary and survey methodology appendix), published by the World Bank at https://www.worldbank.org/en/publication/globalfindex/download-data (accessed October 2026). SDG indicator 8.10.2 metadata were read at https://unstats.un.org/sdgs/metadata/files/Metadata-08-10-02.pdf (accessed October 2026). The analysis code will be deposited in a public repository on acceptance; it is withheld during review only to keep the review anonymous.

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