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Overindebtedness: An escalating risk for consumers

Foreword

In 2024, GSMA published a comprehensive study on overindebtedness that provides insights into the diverse ways digital credit is being utilized across various countries, including Côte d'Ivoire, Ghana, India, Kenya, and Tanzania. Our findings underscore the potential of digital credit in fostering financial inclusion and economic empowerment, including for women.

In Ghana, digital credit is often utilized to cover emergency expenses and manage daily financial needs. The accessibility of digital credit through mobile money platforms has made it easier for Ghanaians to address unexpected financial challenges, such as medical bills and school fees. This financial resilience is particularly important for women, who often bear the brunt of household financial responsibilities.

India presents a unique case where digital credit is widely used by both urban and rural populations. Urban borrowers frequently use digital credit for consumer purchases, while rural borrowers leverage it for agricultural investments. The impact of digital credit on rural financial inclusion cannot be overstated, as it has enabled farmers to invest in seeds, fertilizers, and equipment, thereby improving agricultural productivity and livelihoods.

In Kenya, digital credit is predominantly used by micro-entrepreneurs and small business owners. The ability to manage working capital, purchase inventory, and invest in business growth has been a game-changer for many. Additionally, digital credit is used to cover personal expenses, such as school fees and medical bills, further highlighting its role in enhancing financial stability.

Executive Summary

Digital credit is expanding access to finance, especially for women, but also increases the risk of overindebtedness due to easy access, limited consumer protections, and gendered barriers. Women are particularly vulnerable because of lower financial literacy, disproportionate instant credit targeting, and less access to favorable credit. Families burdened by overindebtedness may struggle to cover necessities, like food, due to the debt load.

The brief recommends integrating digital credit into traditional credit scoring, improving consumer protections, and investing in financial literacy—especially for women—to ensure digital credit drives inclusion without deepening debt risks.

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Our GSMA research also highlights the importance of responsible digital credit practices in mitigating risks such as overindebtedness. By leveraging digital credit responsibly, mobile money providers can drive financial inclusion and business growth while ensuring positive consumer experiences. This is particularly significant for women, who often face unique financial challenges and barriers to accessing traditional financial services.

Our study also reveals the challenges posed by overindebtedness. Loan repayments can consume large portions of a household's monthly income, leading to financial stress and mental health issues. Abusive lending practices, such as excessive pricing and debt stress, further exacerbate the problem, particularly in vulnerable communities.
To address these challenges, the industry has put in place several mitigations. Implementing positive friction in credit disbursement, leveraging AI-driven credit-scoring algorithms, and promoting consumer education are crucial steps in ensuring responsible borrowing practices. Transparent pricing and terms also play a vital role in helping consumers make informed decisions and avoid unexpected financial burdens.

Regulatory measures have also proven effective in tackling overindebtedness. By enforcing responsible lending practices, enhancing financial literacy programs, and introducing mechanisms for debt restructuring and relief, regulators have empowered consumers to manage their finances more effectively. These measures are particularly beneficial for women, who often face additional financial pressures and responsibilities.

In conclusion, our research and work at the GSMA underscores the potential of responsible digital credit in promoting financial inclusion and economic empowerment. By addressing the challenges of overindebtedness and fostering a supportive regulatory environment, we can ensure that digital credit serves as a powerful tool for positive change. I am confident that our findings will inspire further innovation and collaboration in the financial inclusion space.

We are delighted to collaborate with Women's World Banking on this brief - the insights and recommendations are intended as a resource for those committed to advancing responsible, inclusive, and sustainable finance for every consumer, making the most of the potential that mobile connectivity offers to financially include the more than 700 million women that are still under- or unserved by financial services today.

Warm regards,

Ashley Olson Onyango
Head of Financial Inclusion & AgriTech
GSMA

The rise of overindebtedness around the world

Global overindebtedness trends

Overindebtedness has emerged as a growing global concern, particularly in low- and middle-income countries, where access to credit is expanding rapidly. In East Africa, for example, 86 percent of borrowers in Kenya, and 70 percent in Tanzania reported having made late payments, partial repayments, or having defaulted on loans in the past year; far higher than the 38 percent reported in India and just over 50 percent in Côte d'Ivoire and Ghana.[i] [ii] In Southern Africa, an estimated 12 million adults are now overindebted, and three-quarters of borrowers in 2024 used credit to meet essential needs such as food.[iii]

While the topic of overindebtedness is well-discussed, there is no universal definition of the issue. One commonly used definition is from the OECD, which poses that "households become over-indebted [...] when their debt-to-income ratio becomes larger than three, and more exposed to significant risks in the event of sudden falls of their income".[iv] This can have stark negative consequences for the economy: estimates from the International Monetary Fund suggest that a 5 percent increase in the household debt to Gross Domestic Product (GDP) ratio over a three-year period is expected to lead to a 1.25 percent drop in real GDP growth three years ahead.[v]

The drivers of this trend are multifaceted. Key predictors of consumers' overindebtedness include low financial literacy, limited income and widespread multiple borrowing.[vi] A growing number of households rely on credit to absorb income shocks or fund life events like weddings or childbirth.[vii] Behavioral factors such as overconfidence and overly optimistic income expectations can also lead individuals to accumulate unsustainable levels of debt.[viii]

Benefits and risks

The proliferation of digital credit and mobile money has introduced a host of benefits in terms of financial inclusion, especially for women. The potential to reach new users is huge, as mobile money platforms serve over half a billion monthly active users, with 2 billion registered accounts and USD 4.6 billion transaction value every day. Mobile money even has the potential to increase the growth of full economies: the total GDP of countries with a mobile money service was more than USD 720 billion higher than it would have been without them.[ix] For women especially, digital credit may circumvent barriers such as lack of collateral, limited mobility, absence of formal credit history, and gender-biased lending practices by leveraging mobile technology, alternative data and simplified onboarding processes that do not require physical bank visits or extensive documentation.

However, with new opportunities also come new risks. Evidence suggests that increased credit supply is linked to higher incidence of overdue loans, particularly among financially illiterate consumers.[x] Predatory lending practices and inadequate transparency around loan terms compound the problem,[xi] while regulatory frameworks have not kept pace with the rapidly evolving credit landscape. Furthermore, higher availability of credit has been shown to fuel online shopping and addictive consumption patterns, reinforcing a cycle of debt dependency and vulnerability. In India, for instance, the absence of personal bankruptcy protection leaves individuals trapped in cycles of unmanageable debt, with no formal avenues for relief.[xii] In Brazil, according to the government's Consumer Indebtedness and Default Survey 2025, more than 76 percent of families were in some form of debt. 21 percent of Brazilians allocated more than half their income to debt payments, and on average, households spent 30 percent of their earnings on repayments.[xiii] In the same survey, women claimed that one of the main financial challenges they face is indebtedness, with 31 percent stating that they are facing this as a major hurdle.[xiv] The consequence of such overindebtedness extends beyond financial health, threatening individuals' long-term resilience and overall quality of life. In the aforementioned Kenya and Tanzania, one in five borrowers reported reducing spending on basic utilities and transport, while many others cut back on food or sold personal belongings to repay debts. In India, borrowers are increasingly taking on new loans to service existing ones,[xvi] while studies link household overindebtedness to poorer health outcomes, increased poverty and broader financial instability.[xvii]

To create a sustainable system, it is in the industry's interest to issue responsible credit, as it fosters long-term customer trust, reduces default rates, enhances portfolio quality and supports sustainable financial inclusion, especially for women. Responsible digital credit design featuring transparent terms, consumer protection, and financial capability support, encourages continued responsible use of products, and cross-selling of other financial products like savings and insurance.

Women are disproportionately at risk

While overindebtedness is becoming a more widespread phenomenon, data shows that women are often more strongly affected than men due to a number of structural reasons. The prevalence of women in informal employment, their burden of paid and unpaid work, such as their role in caring for children and for ailing and elderly family members, their limited access to land, property and social security, their primary role in providing food and water for their families and their prevalence in subsistence agriculture leave women vulnerable to the economic hardship associated with debt and austerity.[xviii]

In Canada, women's share of total insolvencies rose from 42 percent in 2012 to 49 percent in 2018. Women are more likely to be in a high-risk group than male debtors, leading to a cycle of more borrowing, often with expensive debt options like payday loans, high-interest installment loans and credit card debt. Intermittent income leads to default, and more accounts are put into collection.[xix]

Similar results are found in the UK, where data from 2021 showed that 60 percent of those seeking debt advice were women, which increased to 64 percent in 2023.[xx] In France, women among the age groups most affected by overindebtedness (25 to 54 year olds) accounted for 55 percent of debtors, even though women are less than 51 percent of the overall population in that age group.[xxi]

With credit innovation comes new risk of overindebtedness

Product spotlight: Instant mobile credit

Instant mobile credit generally refers to small, short-term consumption-oriented loans that are remotely and rapidly disbursed, offering borrowers access to funds even without a formal credit history. Together with airtime loans, they are among the most popular products from the first generation of digital credit, which helped spur growth in financial inclusion, but also offers new risks for customers, especially women.[xxii]

These digital lending platforms, accessible via smartphones and often requiring little more than an ID and minimal documentation, have flooded markets with an unprecedented supply of instant, short-term credit. Unlike traditional bank loans, mobile credit applications are typically approved within minutes, bypassing traditional vetting processes that assess a borrower's ability to repay.

However, the very features that make mobile credit appealing, such as instant approval, low barriers to entry, and seamless integration into everyday transactions, also encourage impulsive borrowing and repeated cycles of debt, especially in the absence of robust transparency of repayment terms and interest rates.

Biases

Behavioral factors, such as cognitive and emotional biases, make consumers more vulnerable to risks in digital credit. Lenders may exploit the following biases through marketing tactics or default settings that encourage excessive or unnecessary borrowing.

- **Present bias:** People overweight immediate rewards over future ones, which can lead to impulsive buying decisions.
- **Loss aversion:** Losses feel more painful than equivalent gains feel pleasurable, shaping risk attitudes. In case of Buy Now Pay Later (BNPL), loss aversion can lead to using installments to minimize the current loss.
- **Salience bias:** Individuals focus on vivid or prominent information, neglecting less noticeable but relevant factors. This leads to salient short-term benefits of BNPL dominating consumers' attention.

As a result, consumers may underestimate costs, misunderstand loan terms, or accumulate unsustainable debt due to overconfidence and habitual reborrowing.[xxiii]

For example, in Kenya, the first country to broadly introduce mobile instant credit, one report found that 3.2 million Kenyans had been negatively listed by credit reference bureaus by 2020, with the majority of defaults linked to mobile digital loans.[xxiv] Despite the implementation of the Central Bank-backed credit repair framework intervention, which resulted in over 4.2 million Kenyans having their bad credit scores repaired in the 2023,this number rose to 7.74 million in 2024.[xxv]

Still, the products are in high demand. A study by GSMA found that among African borrowers, those with digital loans are more likely to report loans in arrears. However, this correlation does not imply causation. Borrowers may seek digital credit as a response to existing financial distress, and digital credit users also report higher savings and financial health indicators in several markets.[xxvi] In a study across Kenya, Malawi, Nigeria, Ghana, Haiti, and Mexico, digital credit take-up- rates ranged from ~34 percent to 70 percent among eligible borrowers, which was far higher than traditional microcredit uptake (often below 33 percent). In the same sample, however, it was noted that borrowers in Malawi averaged around 5 loans per person, suggesting repeat borrowing habits that raise risks of dependency or stacking. Across these cases, late fees could exceed 12–22.5 percent, and borrowers frequently misunderstood or were unaware of basic terms, like late fees, with terms sometimes even being changed without notice.[xxvii]

Women might also be at a disadvantage as AI-driven credit scoring systems may replicate and amplify existing gender biases. For example, if women's lower phone usage is interpreted as lower creditworthiness, they may be unfairly excluded or charged higher rates.

Alternative data used by instant mobile credit providers

Instant mobile credit providers increasingly rely on alternative data to assess creditworthiness, especially for "thin-file" customers without formal financial histories. These data points are harvested from mobile phones and other connected devices, and fed into machine learning models to predict repayment behavior.

Common data types include:

- Device metadata: handset model, operating system, storage capacity, and connection history.
- Behavioral patterns: time spent at business location, app download history, and whether contacts are capitalized.
- Communication logs: SMS and call records, including frequency and duration.
- Location data: GPS and network-based location tracking.
- Social and personal data: contact lists, calendar entries, photos, and microphone access.
- Usage permissions: access to camera, identity, and system settings.

These data points are often collected automatically when users download credit apps and agree to share their data. In Women's World Banking's 2021 report, Algorithmic Bias, Financial Inclusion, and Gender, a sample analysis of 16 major digital credit apps revealed extensive permissions ranging from reading call logs and SMS to modifying system settings and accessing media files.

While these data sources offer rich behavioral insights, they also carry gendered risks, such as overlooking women in training datasets or using variables like residential address or time spent at work as proxies for repayment risk. These proxies can inadvertently penalize women, who may have different mobility or caregiving responsibilities. Furthermore, women are 8 percent less likely than men to own a mobile phone and 14 percent less likely to use mobile internet in low- and middle-income countries, limiting their ability to access, understand, and manage digital credit products effectively.[xxviii]

These biases can result in **creditworthy women being misclassified as high-risk**, reducing their access to financial services.

How consumer use of instant mobile credit can lead to overindebtedness

Despite widespread adoption, instant mobile credit products often operate in regulatory blind spots. Many providers are not subject to the same consumer protection standards as traditional banks, and with increasing innovation speed, might not even be on the regulator's radar as new products. The most relevant areas of concern for policymakers are lack of transparency, inadequate affordability assessments, data privacy risks, and lack of recourse mechanisms.

For some instant mobile credit products, terms and conditions, including interest rates, fees or repayment schedules, are phrased in difficult-to-understand or opaque ways. Furthermore, lenders rarely conduct thorough affordability checks, or may employ aggressive collection tactics, including frequent phone calls, public shaming, or misuse of borrower data. Finally, when borrowers fall into default, there are often limited avenues for complaint or redress, and few protections against exploitative practices. Women, who may have less recourse or power to contest unfair practices, are especially at risk.

Because of its rapidly changing landscape, the regulatory frameworks governing mobile credit have not kept pace with the speed and scale of innovation. As a result, many products fall outside the jurisdiction of consumer protection agencies or are governed by outdated laws that might be ill-suited to digital financial services. This gap leaves borrowers, especially those who are already marginalized, without sufficient protection from predatory lending, unfair fees, or coercive recovery practices.

The role of Buy-Now-Pay-Later (BNPL) products

BNPL is a credit product that allows people to instantly spread or delay the cost of their purchase, and with increasing digitalization, has emerged as a fast-growing consumer credit globally.

In the United States, BNPL usage surged from 16.8 million loans in 2019 to 180 million in 2021, with the total value increasing from USD 2 billion to USD 24.2 billion and concentrated in the purchase of apparel and beauty.[xxix] Similar trends are unfolding in emerging markets. In India, BNPL adoption has grown rapidly between 2021 and 2024, driven by the robust growth of the e-commerce sector and a digital ecosystem increasingly accessible through widespread smartphone and internet use. The limited penetration of credit cards, with only about 5 percent of Indians owning a credit card, has made BNPL an attractive alternative, especially for younger consumers.[xxx] The market penetration of BNPL has accompanied a shift in how consumers engage with credit. Unlike traditional loans, BNPL is designed to feel convenient, low-risk, and virtually invisible through its simplified sign-up process, instant approvals, seamless integration with purchase, and zero-interest repayment over short periods.[xxxi]

However, even with its rise in popularity, findings from the UK show that BNPL as a product is still not universally understood, even among customers. Of people surveyed who have used BNPL in the last year, 39 percent used it without realizing, 40 percent think BNPL isn't "proper" borrowing, and 42 percent didn't fully understand what they were signing up for.[xxxii] This lack of awareness often stems from the fact that BNPL is seamlessly integrated into the customer journey and offered as just another payment option when checking out.

How consumer use of BNPL can lead to overindebtedness

Table 1: Own design of consumer risks at different BNPL stages based on Citizen's Advice UK[xxxiii]

Advertising and offers	At the checkout	Deciding on whether to use BNPL	Approval from the BNPL provider	Making payments	Missed payments
Adverts are unclear about BNPL being a credit product	BNPL is often the default payment option on retailers' websites	Design of checkout can encourage people to spend more than they can afford	Lack of affordability checks by some BNPL providers	Missing information about payment setups from checkout	Inconsistent support for people in financial difficulty
Adverts may promote unaffordable spending as inspirational	Easy to sign up for BNPL	BNPL often isn't presented as a serious credit product	Inconsistent spending limits by providers	Methods for setting up payments are inconsistent	Many providers charge late fees and some refer customers to debt collectors
Some retailers offer discounts for using BNPL	Not enough information on BNPL and the consequences of non-payment		Using BNPL with multiple providers simultaneously can become unaffordable		

The rapid expansion of BNPL products has outpaced existing regulatory frameworks, creating critical loopholes that expose consumers (see some risks in Table 1). BNPL activity is often invisible to traditional credit scoring systems due to its atypical repayment structures. This lack of transparency undermines lenders' ability to assess risk and allows consumers to accumulate debt across platforms without a clear record, pushing credit bureaus to develop alternative scoring models that are only beginning to be integrated.[xxiv]

In the absence of comprehensive oversight, BNPL continues to exploit behavioral biases and regulatory blind spots.[xxxv]
For example, unlike traditional credit cards, BNPL arrangements often lack basic consumer protection mechanisms. Users who cancel an order may still be liable for payment if the seller fails to issue a refund, an issue compounded by BNPL providers operating as third-party intermediaries without robust dispute resolution systems.[xxxvi] These structural gaps place the burden of resolution on the consumer, and particularly harm those with low financial literacy who may not fully understand the implications of BNPL agreements.[xxxvii]

BNPL's design also contributes to distorted spending behavior. By breaking down total prices into small quantity installments, BNPL reduces the perceived cost of a purchase and increases the likelihood of impulse spending. This psychological framing has been shown to drive up overall consumer expenditures.[xxxviii] As a result, even financially stable individuals may engage in excessive borrowing, while financially fragile users are more likely to roll over debt by using other credit instruments such as credit cards.[xxxix]

Why women are more vulnerable to instant mobile credit

Lower financial capability

Evidence points to the fact that risk of over-indebtedness is not associated with income and education level, but primarily driven by lack of financial literacy.[xl] As women's level of financial literacy on average are lower than men's, they become especially vulnerable to products such as instant mobile credit, which offer a seemingly quick solution to outstanding payments.
For example, BNPL products are shown to be particularly attractive to groups already vulnerable to financial exploitation, such as women and younger, lower-income consumers, and they are more likely to use such products for their purchases.[xli]

Personal technology access

As the latest Findex data shows, while women are catching up, there is still a gap in access and use of financial tools, especially digital ones. According to the data, women are less likely to own smartphones, which are used by 90 percent of internet users to get online.[xlii]

More discretionary spending

Women are often targeted more directly with instant credit offers, as they are the majority decision makers for household consumption and they are estimated to control 75 percent of discretionary spending by 2028.[xliii]. Such products also have encouraged consumers to spend more overall and make larger purchases. For example, using a BNPL product, Afterpay, users spend 54 percent more in total; their average order value is 28 percent higher than non-users; and nearly half (48 percent) reported they would not have made the purchase from the same retailer if BNPL hadn't been available.[xliv] These trends show how BNPL doesn't just meet the consumers' demand but shapes it and may contribute to the pattern of debt accumulation.

Lower income

Another contributing factor to the added vulnerability of women customers specifically is that women, on average, have lower income compared to men. For example, on average, women earn just 77 cents for every USD 1 paid to men.[xlv] This is based in a number of structural biases such as inflexible or unsafe working environments,[xlvi] restrictive social norms, and limited access to education, training, and financial resources that constrain women's economic opportunities. On average, women worldwide also have less time for paid work, as they perform more than three-quarters of unpaid care and domestic work.[xlvii]

Less access to favorable credit

Women's access to formal credit remains constrained by structural barriers in both labor markets and financial systems. Nearly 60 percent of women's employment globally is in the informal economy, and in low-income countries, it is more than 90 percent.[xlviii] According to the Global Findex Database 2025, 77 percent of women worldwide hold a financial account compared to 81 percent of men, which are often needed to establish transaction histories to establish customers as creditworthy.[xlix]

Consumer protection in light of new innovations

Proportionate regulation can unlock the potential of mobile credit, especially for women, while also allowing financial service providers (FSPs) to access new markets and deepen financial inclusion among their customers. In order to create a thriving environment for women customers, FSPs, and policymakers alike, we recommend the following approaches:

For policymakers:

Include instant mobile credit into traditional credit scoring systems

Policymakers and credit bureaus should prioritize the integration of instant mobile credit into traditional credit scoring systems. By incorporating alternative data on mobile credit usage, credit bureaus can improve the accuracy of credit assessments for 'thin-file' customers and help reduce gender biases inherent in conventional datasets.

Monitor cross-platform debt accumulation

Encourage data-sharing protocols and standardized reporting among instant mobile credit providers and financial institutions to track consumer debt holistically to help identify at-risk borrowers and prevent debt rollover through multiple credit instruments.

Mandate consumer protection standards

Regulators could require standardized disclosures that highlight the full financial implications of installment purchases, such as periodic billing statements like the ones received for classic credit card accounts.

For financial service providers:

Use women-centered design to design for all
In our work, we have seen that designing for women means designing for all. Using women-centered design approaches, and including product design choices such as positive friction to account for behavioral biases, can increase responsible use of instant mobile credit. Instant mobile credit providers should also implement basic protections akin to traditional credit products, including clear refund policies, liability safeguards, and accessible customer support for dispute resolution.

Promote financial capability and consumer protection measures
FSPs should invest in financial education campaigns that explain instant mobile credit terms, risks, and alternatives. These efforts should prioritize vulnerable groups, including women and youth, who may be disproportionately affected by opaque credit structures. BNPL providers should also implement basic protections akin to traditional credit products, including clear refund policies, liability safeguards, and accessible customer support for dispute resolution.[lii]

Conclusion

With the advancement of digital and instant mobile credit also comes a significant opportunity to deepen financial access and empower women and men within the financial ecosystem. However, these opportunities come with a responsibility to ensure that innovative products are both inclusive and safe. By fostering collaboration between policymakers, financial service providers, and other stakeholders, we can address existing barriers, such as gender bias, limited data, and inadequate consumer protection, and build a more resilient, equitable financial landscape. Through targeted regulation, responsible product design, and robust financial literacy initiatives, we can ensure that the expansion of instant mobile credit not only leaves no one behind, but actively bridges gaps, helping women and underserved populations to thrive in a rapidly evolving digital economy.

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@womensworldbanking

230 Park Avenue, Second Floor West | New York, NY 10169 | USA
Phone +1.212.768.8513 • www.womensworldbanking.org