Greenwheel Insights In Investment Practice

Investing in Financial Inclusion

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> **"Most of the world's unbanked population is in regions that the Emerging and Frontier Markets team has been investing in for over thirty years. In that time, financial inclusion has been a consistent investment theme for its attractive risk reward profile across a breadth of investment opportunities and the key role it plays in accelerating economic growth."**
>
> \- John Malloy, Co-Head of Redwheel Emerging and Frontier Markets team

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Executive Summary

Financial inclusion means individuals and businesses have access to appropriate and affordable financial products and services. It is a fundamental tool for tackling poverty and inequality and is a core tenet of economic development.

We have developed an innovative sustainable investing approach to financial inclusion in our Sustainable Emerging Markets Strategy in collaboration with Greenwheel, Redwheel's Thematic Sustainability Insights team.

In this context, our Sustainable Emerging Markets Strategy team requested Greenwheel develop a new predatory lending risk framework, which is now used to understand and manage the challenges that can occur in vulnerable populations accessing financial services in the context of sustainable investments.

This framework is core to our three-pronged approach to financial inclusion in sustainable investments:

1. Positive Effect: First, we use our in-house methodology to measure and report the proportion of a financial company that is providing financial inclusion solutions using the corporate loan book as a measure of sustainable activities.

2. Downside Risk Mitigation: Second, we use Greenwheel's predatory lending risk in the context of our analysis of possible harm to consumers.

3. Real World Analysis: Lastly, we match these on-desk tools and processes with real world in-country on the ground site visits.

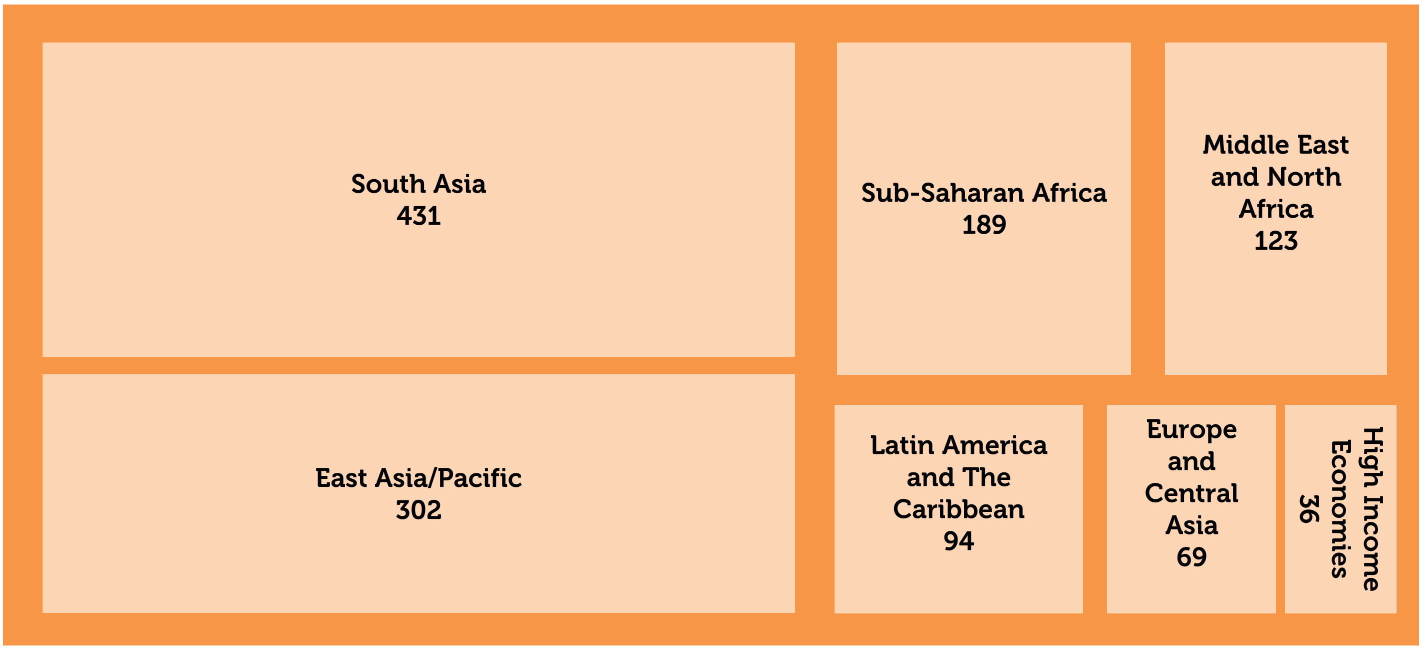
This paper provides an overview of the investment opportunity we believe financial inclusion presents alongside real portfolio examples of these tools and insights in practice.

Financial Inclusion as an investment opportunity

Access to formal financial services allows people to store money, receive payments, carry out transactions and save for the future safely and efficiently. These processes are the nuts and bolts of participating in and building up the economy for both consumers and micro, small and medium sized enterprises (MSMEs).

While substantial progress has been made over the past decade to boost access (in no small part thanks to digitization), an estimated 1.4bn adults remain unbanked, with access particularly challenged in Asia (see Figure 1).

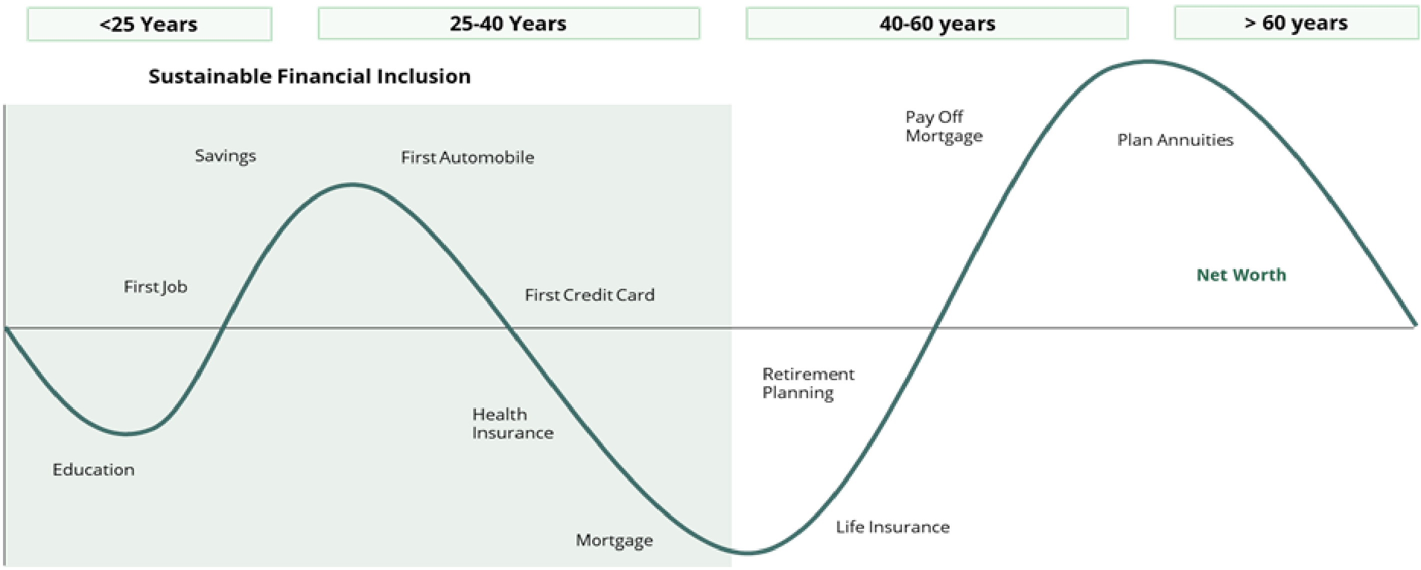
Figure 1: The Unbanked - More than half the world's unbanked adults live in Asia (millions)



Source: Global Findex database at end December 2021. Data shows millions of unbanked adults per region. The information shown above is for illustrative purposes only and is not intended to be, and should not be interpreted as, recommendations or advice.

We are particularly focused on financial inclusion investment opportunities at the early part of the financial lifecycle: the first account, the first loan, the first savings product (see Figure 2). Financial inclusion is a cross cutting theme that advances a range of SDGs both directly and indirectly, enabling people and communities to meet basic needs, such as nutritious food, clean water, housing, education, and healthcare, thereby advancing the sustainable development goals.

Figure 2: Sustainable Financial Inclusion Focus

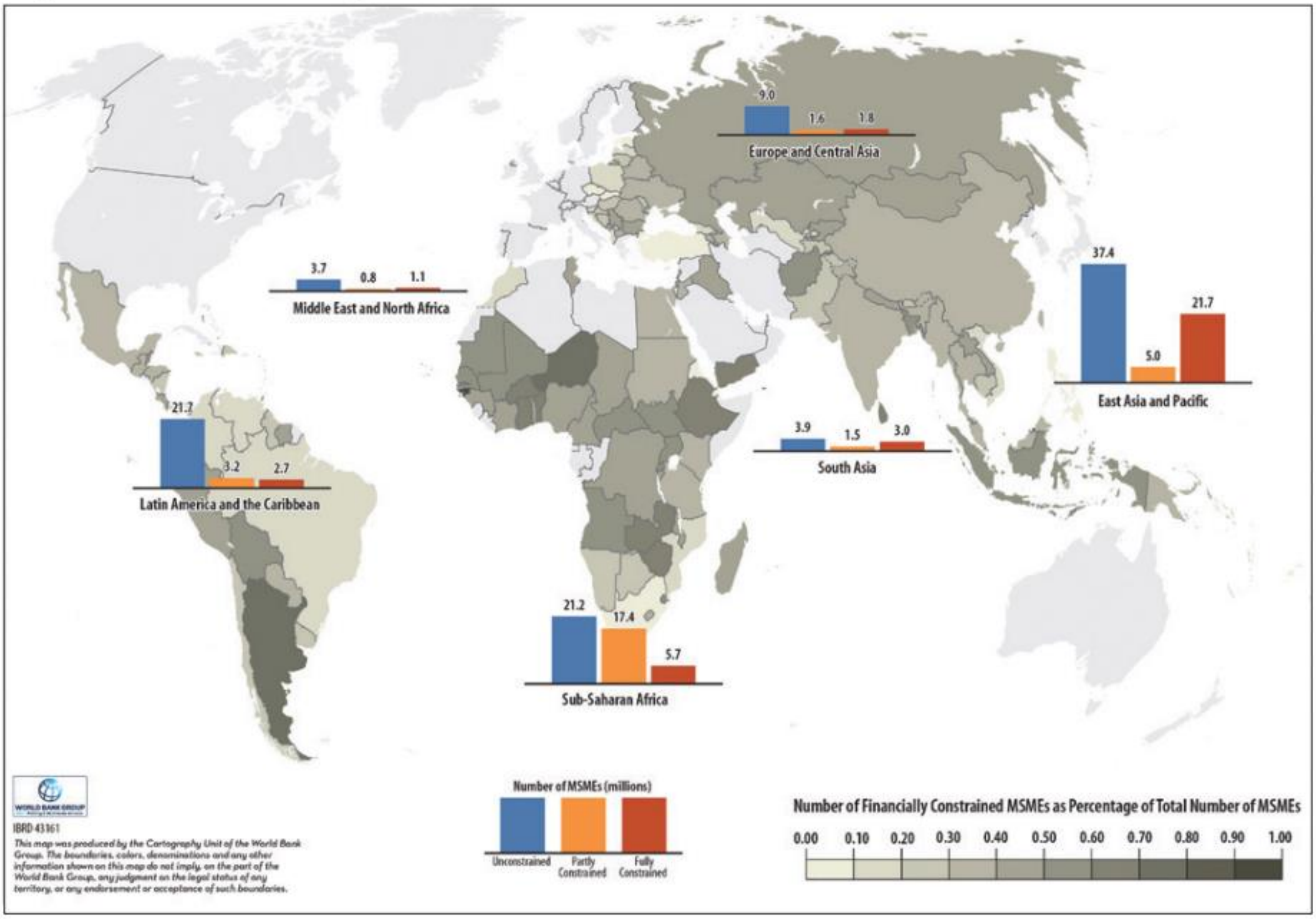


Source: Redwheel Sustainable Emerging Markets at end February 2024. The information shown above is for illustrative purposes only and is not intended to be, and should not be interpreted as, recommendations or advice.

Formal micro, small and medium enterprises (MSMEs) contribute 40% of national income in emerging markets, not to mention the contribution of the many informal MSMEs that proliferate in these economies. Combined, they are thought to generate between 70-95% of new employment opportunities.[1]

However, these companies struggle to get funding. The International Finance Corporation estimated at the end of 2017 that 65million MSMEs in emerging markets face unmet financing need to the tune of $5.2trn, with $1.5trn attributable to women-owned companies. For us, this further underscores the opportunity and importance of investing in financial inclusion to boost sustainable growth.

Figure 3: Financial Constrained MSMEs are concentrated in EMs



Source: IFC (as at end December 2017). The information shown above is for illustrative purposes only and is not intended to be, and should not be interpreted as, recommendations or advice.

"Some of the simplest advantages of access to capital for MSMEs include the ability to grow a business, build economies of scale, improve productivity and efficiency of delivery, and incentivise entrepreneurship and innovation. Over the medium term, this can then generate a virtuous cycle of employment opportunities, production and consumption in an economy. By investing in financial inclusion, banks can thus create opportunities for growth for themselves as well as the economy by finding new customers to initially lend to and over time increase ticket sizes and so growing the loan book. This premium for growth is reflected in EM banks trading at significant premiums vs developed market peers vis a vis book values. Additionally, higher yields for loans associated with financial inclusion, both absolute and risk-adjusted, are generally higher return on equity business. As scale begets scale in this context, incumbents end up having robust profitability."

- Jaimin Shah, Financial Sector Lead Analyst

1 https://www.worldbank.org/en/topic/smefinance, https://www.ifc.org/en/what-we-do/sector-expertise/financial-institutions/msme-finance

Investing in financial inclusion in our portfolios

One of the companies that exemplifies the real investment opportunity that financial inclusion presents is Bank Rakyat Indonesia, which has been covered by The Redwheel Emerging Markets Team for almost 20 years and is held across several of our emerging and frontier markets portfolios.

MSMEs have long served as the backbone of Indonesia's national economy. The Ministry of Cooperatives and MSMEs has reported there are a staggering 64.2 million MSMEs in Indonesia, constituting 62% of the economy. 64% of these entrepreneurs are women - a valuable, growing segment facing numerous challenges (Source: The Ministry of Cooperatives and Small and Medium-sized Enterprises, end December 2021)

Despite their pivotal role in driving economic growth, MSMEs and women in particular face many growth obstacles in Indonesia, including limited access to capital—particularly in geographically challenging locations, or because of negative experiences with financial services and product schemes that don't align with their needs.

Bank Rakyat, the third largest bank in Indonesia, is a key provider of microloans for these audiences with 55% market share in financial inclusion-related services (source: Bank Rakyat, end December 2023).

"Bank Rakyat has been involved in the microlending business since the 1960s, which has proved over decades to be a profitable source of growth. Currently, nearly 65% of Bank Rakyats loans are to MSMEs, by far the largest ratio among Indonesia's big banks. Managed properly, small loans can be lucrative."

– James Johnstone, Co-Head of Emerging and Frontier Markets Team

Building on a strong foundation: the Redwheel Sustainable Emerging Markets strategy

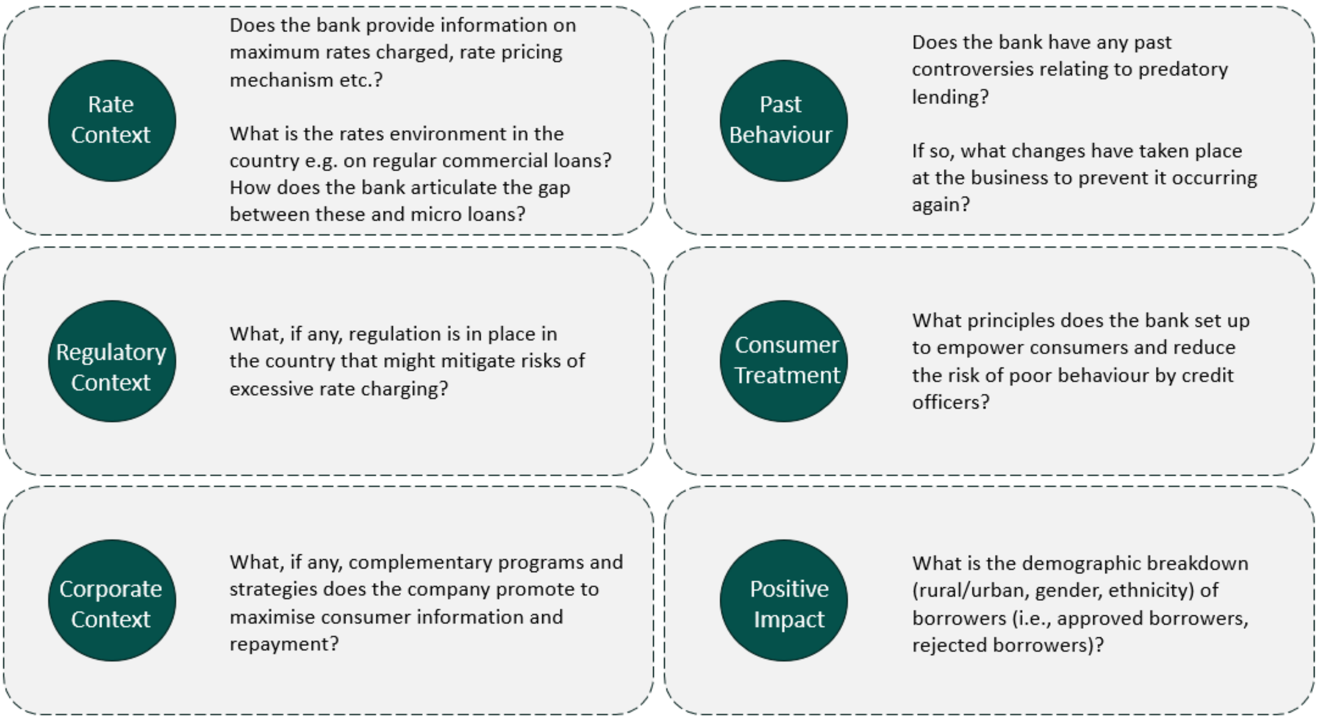
To maximise this opportunity in the context of our sustainable investment mandate, Greenwheel and the Sustainable Emerging Markets Strategy team, supported by the deep market expertise of the Emerging and Frontier Markets team, have developed a three-pronged financial inclusion investment approach.

1. **Positive Effect:** First, we use our in-house methodology to measure and report the proportion of a financial company that is providing financial inclusion solutions using the corporate loan book as a measure of sustainable activities.

2. **Downside Risk Mitigation:** Second, we use Greenwheel's predatory lending framework to assess risk in the context of our analysis of possible harm to consumers.

3. **Real World Analysis:** Lastly, we match these on-desk tools and processes with real world in-country on the ground site visits.

Figure 4: Greenwheel Predatory Lending Risk Framework



Source: Redwheel at end of February 2024. The information shown above is for illustrative purposes only and is not intended to be, and should not be interpreted as, recommendations or advice.

Assessing Financial Inclusion: Gentera in Mexico & Peru

Gentera, the microfinance provider operating in Mexico, Peru and Guatemala provides a useful illustration of how we implemented this three-pronged assessment of positive impact, potential risks, and real-world effects on the ground.

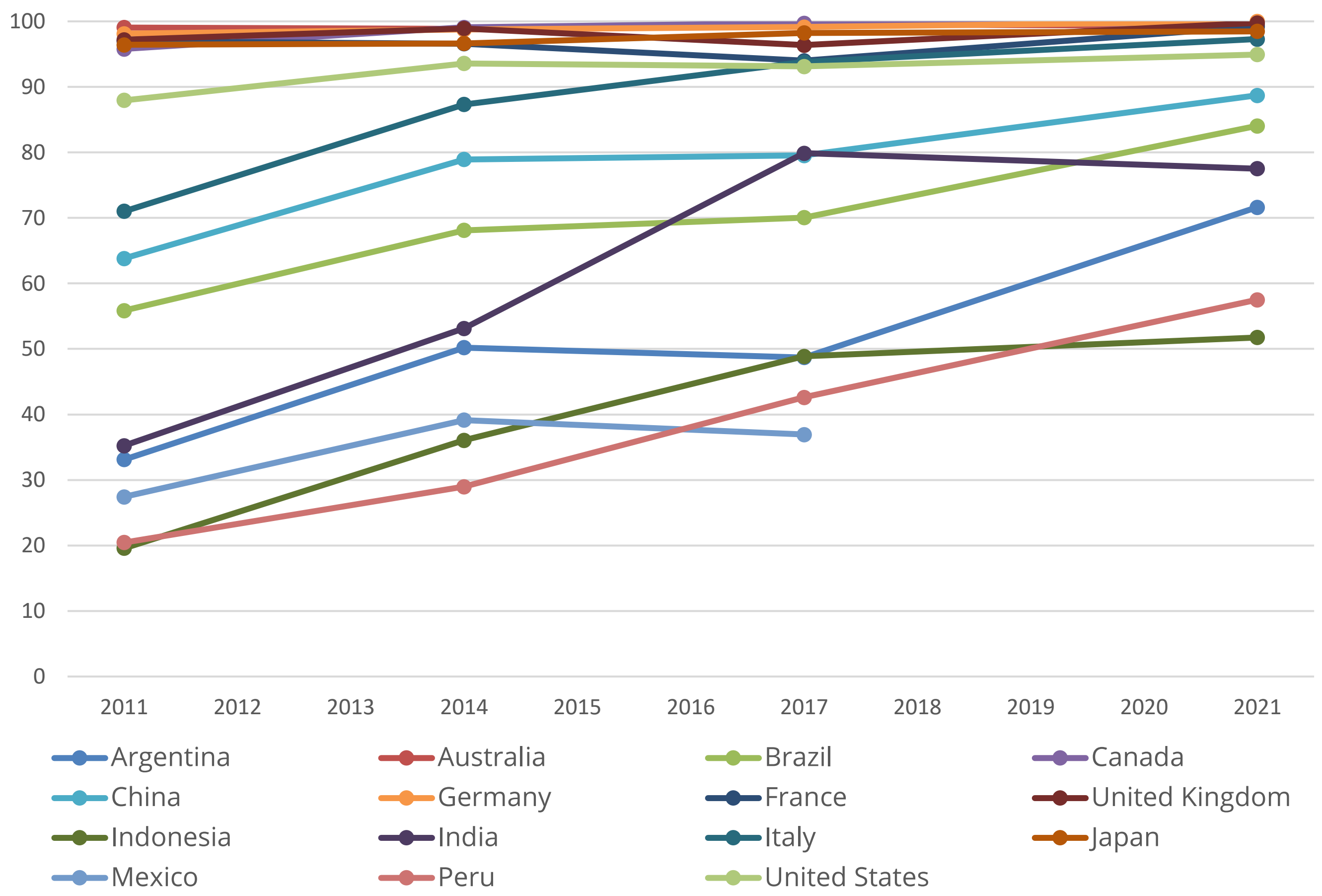
This context and need are important contributors to our assessment of investee companies' contribution to financial inclusion. In the case of Gentera, our research found that Mexico faces financial access gaps by gender, region, and urban-rural setting that are significantly larger in Mexico than in the Latin America & Caribbean Region and OECD countries.

Only 37% of adults have accounts – largely due to the informal nature of the economy – and just 32% have made or received digital payments, both significantly below countries with similar levels of development. Moreover, there is an 8ppt gender gap in access.

Private sector credit to GDP in Mexico remains low at c.30-35%, compared to around 50% in Colombia and over 60% in Brazil. MSMEs provide 70% of the employment, but only around 11% use bank credit due to affordability and access issues.

Similarly, 52% of Peruvians do not have any financial savings products at all, while 72% perceive at least one barrier to having deposit or savings products despite Peru being considered one of the best enabling environments for microfinance and financial inclusion.[2] Private sector credit to GDP in Peru is at ~40%.

Figure 5: Major challenges in access to bank accounts in Mexico, Peru, and Indonesia



Source: Sustainable Development Report (as at end of 2021). The chart shows the percentage of adults with bank accounts across major developed and emerging markets. The information shown above is for illustrative purposes only and is not intended to be, and should not be interpreted as, recommendations or advice.

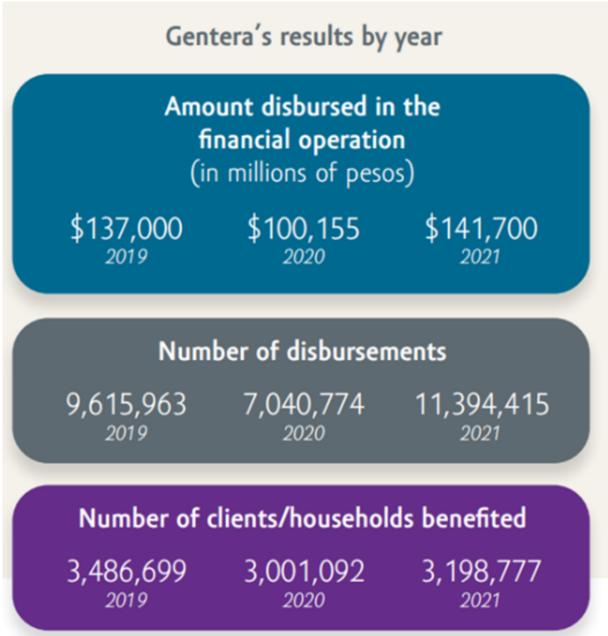
2 according to Credicorp's Financial Inclusion Index for 2021,

Solutions in action: Gentera's products and services

Gentera serves 4.4 million people across different geographies, 80% of whom are women. The company operates in Mexico under the name Compartamos Banco, and in Peru under Compartamos Financiera, with other subsidiaries including ConCrédito (microcredit), Yastas (payment solutions) and Aterna (insurance). Through these various brands, Gentera provides access to a wide range of convenient financial products and services through both physical and digital distribution channels particularly for consumers in low-income areas.

Finally, a key piece of Gentera's product suite we consider important to delivering on this theme, is financial literacy and education in the communities it operates. We consider financial education a core enabler to people maximising the value of these services.

Figure 6: Gentera's self-reported impact



Source: Source: Gentera (as at end December 2021). The information shown above is for illustrative purposes only and is not intended to be, and should not be interpreted as, recommendations or advice.

Investing in Financial Inclusion for Sustainable Investments: Three Steps in Practice

Listed financial sector companies that provide low-income consumers and MSMEs with access to credit are a compelling proposition for a range of reasons when it comes to maximising sustainable development. A formalised institution can provide an important source of more stable, transparent and governed rules of engagement when it comes to credit access, reducing reliance on informal providers like loan sharks and small, unlisted names subject to less external scrutiny.

By virtue of being listed, these names can have economies of scale that can benefit customers, such as a network of branches, education programmes for creditors and digital solutions to maximise efficiencies. By providing support to consumers through education, financial technology and supporting products (like savings accounts, insurance), we believe they can reduce the risk of non-repayment for a mutually beneficial outcome.

Being listed also means that where shareholders are live to risks of predatory lending behaviours, these companies can establish clear governance and reporting to mitigate risks of bad behaviour that has sometimes been associated particularly with microfinance.

Given this opportunity, we have built a three-pronged approach to measure and maximise the opportunity to invest in financial inclusion in the listed space by measuring the positive, managing the risk and matching on-desk research with on the ground insights.

1. Measuring the positive: Measuring contribution to the SDGs using loan book

Financial inclusion is a cross cutting theme that advances a range SDGs both directly and indirectly.

Our methodology for estimating lender contribution to SDGs is through loan book exposure. Loan book exposure is a clear statistic to demonstrate disbursements funding targeted segments like small/micro-entrepreneurs and minority individuals.

Lenders generally report loan disbursement statistics in more granular detail, while there is often less granularity in interest income reported, and more volatility due to interest rate cycles, cost of capital and NPL cycles. As a result, as agreed upon with our financials sector head and reinforced by discussion with our third party data provider SDI-AOP, we use loan book exposure as a measure of contribution to SDGs.

Applying loan book analysis in practice

The investment team estimates that 100% of Gentera's loan book exposure is supporting financial inclusion through various micro-credit products geared towards the low-income consumer, predominantly women. As such, we believe all product categories serve target populations and qualify as sustainable activities. These sustainable activities primarily align with SDG 9 in our calculations, but also towards solving for SDGs 1, 5, 8 and 10 in the markets they operate in.

Figure 7: Breaking down loan book exposure to financial inclusion

	Mexico	Peru	Concredito
Average loan size (P$)	11,948	26,146	52,506
% Total Loan Portfolio	57.8%	35.4%	6.9%
Clients (number)	2,595,128	725,957	71,239
Clients (%)	76.5%	21.4%	2.1%

	SDG	SDI AOP	Revenue %	Redwheel	Revenue %
1	No Poverty			x	
2	Zero Hunger				
3	Good Health and Well-Being				
4	Quality Education				
5	Gender Equality			x	
6	Clean Water and Sanitation				
7	Affordable and Clean Energy				
8	Decent Work and Economic Growth			x	
9	Industry, Innovation and Infrastructure			x	100.0%
10	Reduced Inequalities			x	
11	Sustainable Cities and Communities				
12	Responsible Consumption and Production				
13	Climate Action				
14	Life Below Water				
15	Life on Land				
	Total		0.0%		100.0%

Source: Redwheel (as of 2023). The information shown above is for illustrative purposes only and is not intended to be, and should not be interpreted as, recommendations or advice.

2. Mitigating Risk to Maximise Positive Impact: Lending Practice Risk Framework

As we have flagged, predatory lending is a challenge for investors both because it can call into question the positive effects of loans in the context of financial inclusion but also because it creates substantial reputational and thus price risk for investee companies.

We believe that to maximise the positive impact of this access to credit, investors must be clear eyed about these risks, understand the regional and cultural context, and engage with investee companies to minimize them. The principal concerns when it comes to credit provision in this context tend to be particularly related to the interest rates charged, customer treatment, types of acceptable collateral and repayment enforcement practices.

Regulators who are empowered and focused on consumer rights can provide a lower risk backdrop than unregulated environments while the broader rule of law and justice system in a country are also relevant considerations from the perspective of consumer empowerment.

Of course, many countries that are early in their financial inclusion journey may not have strong governance and regulation, so we certainly do not to exclude those places in great need. Rather, we recognise the importance of understanding the risk context a potential investee company is operating in.

Importantly, great companies can operate in this space regardless of regulatory context. Understanding the company's exposure to predatory lending risk through past behaviours, consumer protection principles and broader corporate programs all provide useful evidence in any macro context.

Our deeply integrated team ensures that the sustainable views are supported by the depth of our team's knowledge. In conferring with our financial sector head Jaimin Shah, who has been covering financial services for over 15 years, he shared his experience on rates and risk in microfinance:

*"**Access to finance is more important to consumers** than the cost for their purposes. For example - $100 borrowed allows a borrower buy goods that they sell on at $110, yielding $10 in earnings. The $1 paid in interest per day for the $100, is worth it given the borrower would otherwise not have been able to net $9. While the annualized interest rate is high from our perspective vs what we can access in the market, **this is not an option for many informal borrowers**. In my experience of visiting these borrowers, they are financially literate and think in absolute terms rather than the annualised rate. This is not to advocate price gouging, but a perspective on how value is perceived.*

***What is the next best alternative?** In many markets, the next best alternative is even more expensive, not necessarily just loan sharks or payday lenders, but unlisted, small lenders. As such, if Gentera's rates are at 40% - it still much cheaper (and safer) than the [available] alternatives. So, while absolute rates may look high [to us], other lenders [in the market] charge even higher rates and typically have worse [lending] practices. A listed companies has better source of funds which tends to bring lending rates lower and have better governance than alternatives out there."*

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The Greenwheel predatory lending framework pulls this together to allow us to systematically investigate and engage with potential and existing investee companies around lending risks to maximise confidence in the positive impact and return case that access to credit provides for consumers and MSMEs in Emerging and Frontier Markets.

Figure 6: Greenwheel Lending Practice Risk Framework

Rate Context
Does the bank provide information on maximum rates charged, rate pricing mechanism etc.?
What is the rates environment in the country e.g. on regular commercial loans? How does the bank articulate the gap between these and micro loans?

Past Behaviour
Does the bank have any past controversies relating to predatory lending?
If so, what changes have taken place at the business to prevent it occurring again?

Regulatory Context
What, if any, regulation is in place in the country that might mitigate risks of excessive rate charging?

Consumer Treatment
What principles does the bank set up to empower consumers and reduce the risk of poor behaviour by credit officers?

Corporate Context
What, if any, complementary programs and strategies does the company promote to maximise consumer information and repayment?

Positive Impact
What is the demographic breakdown (rural/urban, gender, ethnicity) of borrowers (i.e., approved borrowers, rejected borrowers)?

Source: Redwheel (as at end December 2023). The information shown above is for illustrative purposes only and is not intended to be, and should not be interpreted as, recommendations or advice.

The team incorporated the Greenwheel lending practice risk framework, as well as a quantitative data metrics, to understand Gentera's lending framework and risk exposure.

Table 1: Predatory Lending Risk Framework Analysis for Gentera

<table>
<tr><td>Rate Context</td><td>Gentera’s products vary by size, duration, geography, and interest rate:
<table>
<tr><th></th><th>Mexico</th><th>Peru</th></tr>
<tr><td>Format</td><td>Group lending to 10-50 women</td><td>Individual loans</td></tr>
<tr><td>Purpose of loan</td><td>Working capital loans</td><td>Working capital loans</td></tr>
<tr><td>Average loan size</td><td>$350-$4000</td><td>P$25,000</td></tr>
<tr><td>Average duration</td><td>4-6 months</td><td>12 months</td></tr>
<tr><td>Average interest rate</td><td>68%</td><td>20%-88%</td></tr>
</table></td></tr>
<tr><td>Consumer Treatment</td><td>• Loan officer initiates loan and stays with the client for the duration of the loan
• Typical compensation 1.5x minimum wage, typically from the community, no university education requirement
• Each loan officer has ~ 320 customers and visits them weekly</td></tr>
<tr><td>Complimentary Services</td><td>• Financial education required for loan disbursement
• Broader financial education through digital mediums published on social media and web pages.</td></tr>
<tr><td>Demographic served</td><td>• In FY 2022, over 2.5m customers, of whom over 80% were female
• Rural areas throughout Mexico and some parts of Peru</td></tr>
<tr><td>Past Behaviour</td><td>• In response to articles on high interest rates charged by the company, Gentera shared transparently the reasons for high rates: higher credit costs, higher operational complexity and costs given physical group meetings and outreach, and higher credit costs for unsecured lenders.
• Based on our market understanding, Gentera is priced competitively and has gained share among peers because it offers fair rates and tends to be the first- or second-best option in Mexico.</td></tr>
<tr><td>Regulatory Context</td><td>• Mexican regulators have not instituted interest rate caps while Peru and Columbia have
• Interest rate caps can have mixed outcomes
• Rate caps alone do not affect the cost of lending and that the effectiveness is often undercut by the addition of non-interest fees and commissions
• Rate caps have also resulted in a reduction in overall credit supply, and the distribution of credit away from riskier sectors, in effect reducing credit access to populations in need.</td></tr>
</table>

Source: Redwheel (as at end December 2023). The information shown above is for illustrative purposes only and is not intended to be, and should not be interpreted as, recommendations or advice.

> **“The risk assessment did not flag any major issues and, in combination with our site visits below, provided valuable insights on the company’s impacts on its consumers. As a core holding in our strategy, our engagement with and understanding of the company will be ongoing.”**
>
> – Archana Shah, Hui Ting Ang, Victor Erch – Portfolio Managers, Sustainable Emerging Markets Team

3. Matching on-desk research with real world, on-the-ground insights

While on-desk research is core to the approach we take with financial inclusion, real on-the-ground investor trips to see companies in action are a crucial source of information and provide the opportunity to see the real-world impact of these companies. This part of the work is extremely rewarding and brings to life the figures we see on spreadsheets.

Real world company impact: Gentera site visit – Account by Hui Ting Ang, PM on Sustainable Emerging Markets Strategy

In January 2024, we visited a Compartamos bank branch, followed by an informal retail store that offered digital payment opportunities for the community, and the inauguration of a new credit cycle for a group of ten women at the group leader's home in the community.

The women brought their children along to gather in the group leader's house, reinforcing that these loans are not just figures on our spreadsheet but real women with families and responsibilities. Each woman took their turn to sign the loan agreement with their national ID and signature/ fingerprint if they are unable to write and received a paper cheque, which they can redeem for cash at a Compartamentos bank branch.

Each woman's loan amount and interest rate is different, based on her credit history, payment history, and loan balances. A creditor can get lower interest rate for punctual payments and a rebate for taking higher loans. On this list, I saw APRs between 63-105%. Some have lower rates from prior cycles and others have stayed the same. The APRs may seem high, but these are small, short duration loans so the actual absolute dollar amount of interest is low. The level of interest rates incorporate the riskiness of unsecured credit, the cost of weekly physical outreach to the communities and financial education programs, as well as the higher cost of credit in Mexico, and are often lower than that offered by any other lenders.

In addition to small gifts such as a pen and a reusable bag, each woman received a booklet to track their payments and balance – as well as their dreams. As each paper cheque was handed out, they discussed what they planned to do with the money, and their dreams for the future. This group of women had a diverse range of plans and businesses: one planned to expand their taqueria; another to study as a manicurist to work in a beauty salon and a third to purchase more inventory for their small roadside stall.

The loan cycle is sixteen weeks long, and the women will gather like this every week to hand their weekly payment to the group leader. Group leaders tend to be a respected figure in the community and do not receive any compensation for this role. Our group's leader is a woman who owns a taqueria, and is on her 59th credit cycle. To our questions, she responds she has never banked with any other financial institution, as she only trusts Gentera.

Loan officers may attend these meetings, but will not handle any cash (in fact, the phrase "we do not receive cash" is embroidered on their shirt to reinforce the point). The responsibility for payment lies with the group leader, who will collect the payment and bring this to locations such as bank branch (Compartamos or other), a convenience store (like an Oxxo), or anywhere with a Yasta Point (a digital payment point owned by Gentera).

Some insurance coverage is included as part of the loan, but Gentera also sells additional personal insurance at these meetings.

Payment points in action

Gentera has also invested in making payments quick and convenient for the community, which we got to see in practice. The images below are an example of a Yastas Point, or an informal retail "mom & pop" shop that has installed a Yastas payment system. This allows the women to accept credit card transactions as well as accept loan payments. Gentera does not charge the merchant for this and will share revenues with them.

Figure 7: Yastas payment system in a mom &pop shop in Mexico

Source: Redwheel (as at end December 2023)

3 Interest rate caps: The theory and the practice (worldbank.org)

Key Information
No investment strategy or risk management technique can guarantee returns or eliminate risks in any market environment. Past performance is not a guide to future results. The prices of investments and income from them may fall as well as rise and an investor's investment is subject to potential loss, in whole or in part. Forecasts and estimates are based upon subjective assumptions about circumstances and events that may not yet have taken place and may never do so. The statements and opinions expressed in this article are those of the author as of the date of publication, and do not necessarily represent the view of Redwheel. This article does not constitute investment advice and the information shown is for illustrative purposes only. Whilst updated figures are not available for all sources, we have performed further analysis and believe that this data has not significantly changed and is reflective for 2024.

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