



Microfinance Index of Market Outreach and Saturation

Senegal

Sep 2016

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The MIMOSA saturation score for Senegal is 3 – a market that is neither saturated nor underserved. However, Senegal stands out among countries covered by MIMOSA for two reasons. First, of the seven MIMOSA reports to-date it is the first to have no mitigating scores in the Regulation and Financial infrastructure category. Second, lending is uniquely concentrated in one city – Dakar. We explore both issues in more detail in the Special Discussion below, but this context should be kept in mind throughout the report.

Senegal's penetration level is modest, with 7.4% of adults estimated to be borrowers. In light of the sector's infrastructure and oversight, even this modest level may be approaching the ceiling of sustainable lending. Senegal's quality of regulation is still evolving. The 2016 Microscope report cites stakeholder interviews noting that the DRS (the regulator in charge of microfinance institutions) actively monitors portfolio growth and loan size for the largest 5 institutions that comprise over 70% of the market by number of borrowers, but is less stringent on data collection from the smaller MFIs. Moreover, there is no similar focus on collections practices. Indeed, 11% of respondents in the field survey cited collection practices that include asset seizure and even one case of public shaming (posting photos of delinquent clients).

Since at least 2013, there has been extensive discussion of establishing a credit bureau in Senegal, including technical assistance projects funded by AfDB, LuxDev and others. Since the start of 2016, a credit bureau (CreditInfo Volo) has been in place, but its efficacy is unclear. One possible impediment is regulation that requires lenders to obtain clients' permission before to report their data to the credit bureau. For the time being, we are not aware of any significant utilization of the credit bureau and thus the risk of multiple borrowing remains significant, especially in Dakar.

Category	Rating	Indicator	Value
Saturation	3	Loan penetration over capacity	+ 1.6%
	Low	Credit card penetration ¹	0.9%
Regulation / Financial infrastructure ²	●	Overall quality of regulation	38/100
	●	Prevention of overindebtedness	1/2
	●	Appropriate collections	0/2
	●	Quality of credit bureau & credit reporting	42/100
Competition / Overheating	●	Level of competition (HHI) ³	~1600/10,000
	?	% Borrowers with 3+ loans	n/a
	●	MF Loan portfolio 3yr CAGR in value (FCFA) ³	6.7%
	●	MF Loan portfolio growth in value expected next 12 months (FCFA) ⁴	12.2%
Maturity of microfinance institutions	●	% clients at MFIs >20y old ⁴	57.8%
	●	Experienced crisis in past 15 years	No
Transparency	●	Composite transparency score	2.4/8
	●	Market share of MFIs with ratings in past 3 years	70%
Other risks	?	% of loan portfolio in foreign currency	n/a
	?	Interest rate level	n/a

1) Findex 2014; 2) Microscope 2015; 3) DMF; 4) MIX

One important mitigant is the very modest growth rate in the sector. Both in banks and MFIs, growth has been roughly at the level of GDP growth for the past several years. Likewise, the MFIs' expected growth target of 12.5% (in number) and 12.2% (in volume) seems optimistic compared to recent trends, and it's likely that actual growth will come in below that figure. The market is thus likely to remain at the normal saturation level of 3 for the coming few years.

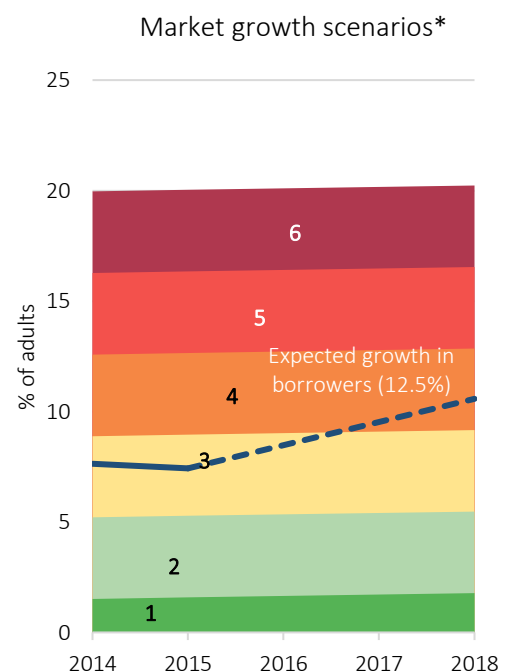
As far as competition is concerned, Senegal has relatively modest levels compared to other markets. The top two MFIs – CMS and Pamecas – serve 47% of microfinance borrowers, while the next two (ACEP and Caurie) account for another 25%. One aggravating factor is that all of these institutions have a strong presence in Dakar, where banks and other downscaling lenders are likewise heavily concentrated. In this environment, one can expect competition and overlaps between MFIs and banks. Feedback from market experts pointed to these overlaps as a concern, especially in the case of more aggressive downscaling institutions. However, we were unable to assess the degree of such competition, and our field survey in Dakar did not yield clear signals on this.

The leading MFIs in Senegal are well-established institutions, having been around for over 20 years and some even approaching 30. However, their mid-sized competitors, Microcred and Caurie in particular, are 10 years or younger and have been growing at nearly twice the rate of the incumbents. Depending on how the market evolves, competition could become a greater factor in Senegal over the medium term, as the less mature institutions gain greater market share.

Finally, on the question of transparency Senegal falls well-short of where it could be. While the institution in charge of collecting and reporting MFI data – DRS-SFD – gets good marks from Microscope for the data it puts out, we find that its figures are not always reliable. Meanwhile, transparency for the banking sector is mixed. BCEAO's reports on lending at the provincial level leaves out a key data point for MIMOSA – number of loans outstanding. However, using its reported branch locations we were able to make reasonable estimates of bank lending penetration. And then of course there is the issue of the credit bureau, which simply has not gotten off the ground in a meaningful way. Indeed, we find the issue of transparency and credit market infrastructure so salient in Senegal that we have made it the focus of our Special Discussion, below.

	2014	2015*	2018
HDI	0.463	0.466	0.474
Population density per km ²	70.8	73.0	79.9
Credit Bureau Score	0.0	0.0	0.0
Borrowing capacity	5.2	5.3	5.5
Borrowers per adult	7.6	7.4	10.6
Microfinance loans per adult	5.6	5.4	7.6
MIMOSA Score	3	3	4
Credit card users per adult	0.9	n/a	n/a
MIMOSA CC penetration score	●	n/a	
GDP per capita (current \$)	1,057	913	1,063
GDP per capita (current PPP \$)	2,346	2,451	2,861
GDP, 3yr CAGR (current LCU)	3.8%	3.6%	8.7%

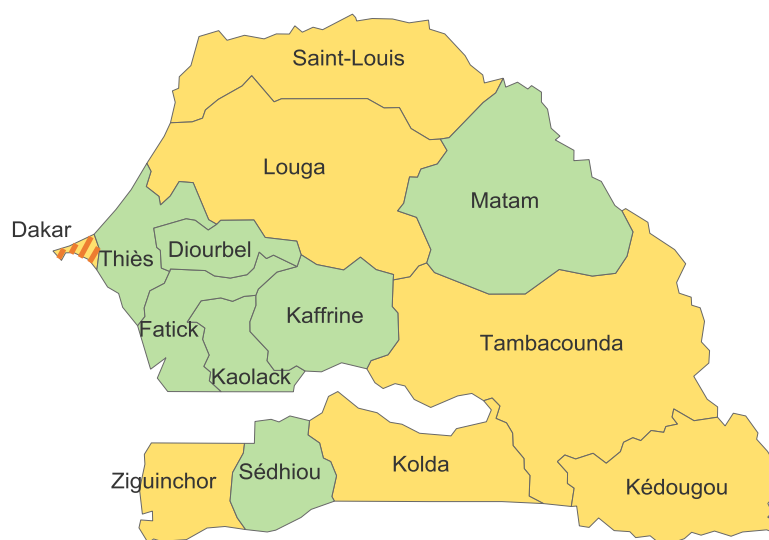
* penetration data from June 2015 (DMF) and estimates for banks; forecasts: IMF for GDP, UNDP for population; MIMOSA for others



* Growth expectations reported by MFIs to the 2015 MIX Barometer; we believe these are optimistic

MIMOSA Scores by Region

Nationally, Senegal shows a mix of underpenetrated (score of 2) and normal markets (score of 3). Only Dakar is in the range of normal to moderately saturated (score of 3 to 4). Note that several regions scored as 3 (Kolda, Kedougou and Tambacounda) feature penetration levels below 5% of the adult population, but it is the low credit capacity of these regions – due to both very low level of development (HDI) and low population density – that results in a score of 3. Meanwhile, regions with higher penetration (Kaolack and Thies) are scored as below capacity, due to their higher density and HDI levels.



Column no:	1	2	3	4	5	6	7
Region	Population (000s)	HDI	Population density (per km2)	MIMOSA Score	Borrowing capacity (%)	Borrowers per adult (%)	Penetration over capacity
National	14,357	0.466	73	3	5.3	7.4	2.2
Dakar	3,331	0.556	>600	3 4	10.3	13.5	3.2
Thiès	1,889	0.476	283	2	6.8	6.5	-0.3
Diourbel	1,592	0.378	330	2	5.2	3.9	-1.3
Kaolack	1,022	0.464	191	2	6.0	5.3	-0.7
Saint-Louis	958	0.482	50	3	5.4	6.5	1.0
Louga	924	0.419	37	3	4.1	5.6	1.4
Fatick	762	0.465	111	2	5.5	2.8	-2.7
Tambacounda	730	0.340	17	3	2.5	4.9	2.3
Kolda	704	0.354	51	3	3.0	4.0	1.0
Kaffrine	610	0.389	54	2	3.7	2.4	-1.2
Matam	607	0.368	21	2	3.1	1.7	-1.4
Ziguinchor	584	0.492	79	3	5.8	8.1	2.3
Sédhiou	484	0.388	66	2	3.8	3.0	-0.8
Kédougou	162	0.372	10	3	3.1	3.8	0.7

Sources: ANSD (1, 3); UNDP, ANSD (2); DRS-SFD, DMF, BCEAO, MIMOSA (6); MIMOSA (4, 5, 7)

Special discussion: Financial infrastructure

Senegal's financial sector – both microfinance and banking – pays a hefty penalty by not investing in better infrastructure. The foundations are already in place: MFIs already report regularly to DRS-SFD and provide an extensive amount of data. And a credit bureau has been operating since the start of 2016. The central bank overseeing the banking and microfinance sectors provides reasonably complete and transparent reporting. Yet each of these infrastructure building blocks has issues that together combine to undermine the sector's potential for sustainable credit growth.

The problem at DRS-SFD is that while data coverage is regular and detailed, its reliability can be problematic. When the figures reported show a 115% increase in number of loans outstanding during just a single quarter (Q3 2015) with no similar change to portfolio volume, the reporting agency should double- and triple- check the data, rather than report the increase as a simple observation.¹ Otherwise, practices like this throw the validity of its reporting into doubt, and institutions that would normally rely on its reporting numbers when making strategic decisions must go back to guesswork.

But the crucial missing building block in Senegal's credit infrastructure is a fully-functional credit bureau, which could provide solid data on MFI and bank lending outreach (including overlaps between the two), as well as deeper data on multiple borrowing and other high-risk practices. This should be within reach, and the payoffs are real. Putting in place a credit bureau with the capacity of Credit Bureau of Cambodia, for example, would raise Senegal's borrowing capacity from 5.3% of adults to 6.8%. The increased data transparency would create valuable opportunities for data analysis that could help make the market more efficient and improve ability to assess borrower quality. And because well-designed credit bureaus become more valuable over time (due to growing datasets), Senegal's sustainable credit capacity would grow faster as well, reaching 8% or higher – well above the level of its peer group.

Finally, an effective credit bureau can significantly shift borrower behavior. In our field survey, we ask potential clients the following question: If a borrower doesn't repay a loan to one lender, will other lenders find out and how? In the six countries covered by MIMOSA thus far, the answer has been nearly unanimous – yes, they will, usually "from the computer." They may not know of the credit bureau directly, but these borrowers are well aware that failing to repay a loan to one lender will directly impact their ability to borrow from another. What these countries all have in common is an effective credit bureau.

By contrast, the response in Senegal has been quite the opposite – most interviewees answered that they didn't know if other lenders would find out if they became delinquent on a loan. And some said that lenders would not find out at all. How much does the absence of a credit bureau in Senegal affect borrower repayment rates? It's difficult to say, but this is one factor that the financial sector in Senegal can and should eliminate.

Senegal has much to gain by taking its financial sector infrastructure up one level. This is eminently achievable and worth pursuing.

¹ Due to this shift, we used DRS-SFD reports up only up to Q2 2015.

Special Discussion: Dakar vs. Senegal

The geography of credit in Senegal is unique among the countries thus far covered by MIMOSA. While Dakar accounts for 23% of the country's population, it counts 55% of the country's total borrowers, and an even more striking 75% of bank borrowers. And this doesn't account for the fact that loans in Dakar are larger, so that the share of the total credit portfolio in Dakar is greater still.

There are many reasons why Dakar has more lending activity than the outlying regions. Senegal is a country of contrasts. The Dakar metropolis is a hive of economic activity and its level of development is on par with countries like Kenya and Cambodia. Meanwhile, 34% of the population lives in regions whose level of development (as measured by HDI) is equivalent to some of the world's poorest countries, like Chad and Niger.

That such drastic differences should result in highly unequal distribution of lending is unsurprising. Although the penetration of its lending ranges from 1.7% in Matam (one of the country's least developed regions) to 8.1% in Ziguinchor and 13.5% in Dakar, the MIMOSA scores vary only between 2 and 3 (and between 3 and 4 in Dakar). The differences in lending penetration in Senegal seem to largely follow the differences in credit absorption capacity.

For those focused on financial inclusion and outreach, this presents a puzzle. The 2014 Findex survey found loan penetration of 3.5% (unchanged from 2011), whereas our penetration level for 2014 is 7.6% – more than double the Findex level. We don't know the reasons for the disparity, but it is notable that the 2011 Findex (when data was disaggregated by urban/rural) found minimal differences in borrowing between the rural and urban areas – a finding that doesn't square with the much higher level of lending concentration in Dakar. Indeed, a much larger World Bank survey of 3,200 adults² in Senegal found less than 3% adults in Dakar using formal credit, including microfinance. Such low figures are highly inconsistent with the depth of both bank and MFI branch concentration in Dakar or any other supply-side data gathered by MIMOSA.

One possibility for this discrepancy in survey data is under-reporting of borrowing, especially in Dakar – a pattern we have seen in other markets. For example, in Peru the Findex survey reported borrowing penetration 2.5 times lower than the level captured by the credit bureau. This shouldn't be surprising – talking about debt is highly personal and can be socially awkward. So when borrowers are asked by a survey taker – a complete stranger – if they have an outstanding loan, a significant percentage simply say no.

Whatever the source of the disparity in Findex and other demand-level surveys, we believe our penetration estimates, drawn from DRS-SFD and BCEAO data, present a more accurate picture of lending in Senegal. And that has implications for the financial sector development and supervision. Senegal needs a two-tiered approach – one oriented towards its very poor rural countryside, and another designed for the urban landscape of Dakar. The former needs strong emphasis on outreach and institutional development. The latter requires much more focus the types of risk faced by saturated markets and the financial and regulatory infrastructure needed to sustain them. Designing effective policies will require a thoughtful and flexible approach. Making sure that the country's nascent credit bureau is able to at least effectively cover Dakar would go a long way.

² Enhancing Financial Capability and Inclusion in Senegal: A Demand-side Survey, World Bank Group, Jun 2016

User Guide

This is an abbreviated guide. For explanation of the methodology behind the penetration and capacity values, please consult the MIMOSA whitepaper.

The MIMOSA index consists of several measures. The primary score evaluates the degree to which the level of penetration exceeds estimated market capacity. The score levels and their interpretation is shown in the below table.

MIMOSA Score	Penetration over/ under capacity		
	Percentage points	Standard Deviations	Market status
6	>11.1%	3+	Saturated
5	7.4-11.1%	2 to 3	
4	3.7-7.4%	1 to 2	
3	0-3.7%	0 to 1	Normal
2	-3.7 - 0%	-1 to 0	
1	< -3.7%	< -1	Underserved

In addition to the score, we include the component metrics underlying the capacity and penetration calculations:

Human Development Index (HDI): developed by UNDP to assess the level of development, comprising GNI per capita, life expectancy, and education metrics. The scale ranges from 0-1.

Population density per km²: standard measure retrieved from country statistical bureaus.

Credit Bureau Score: derived from the Getting Credit measures in the World Bank Doing Business report. We include the level of coverage, and amount of information (both repayment history and debt outstanding) provided. The scale ranges from 0-400.

Borrowing Capacity: % of adults expected to be active borrowers, based on the MIMOSA model.

Borrowers per adult: derived from multiple sources, including the World Bank Findex survey, central bank reports, credit bureaus, and MIMOSA field surveys.

Microfinance borrowers (% of loans): number of active loans of microfinance institutions. Usually defined either by institutional registration with the regulator or membership in the microfinance association. Multiple loans held with the same institution are counted once.

Credit card borrowers (% of adults): number of adults with an outstanding credit card balance. Figure from Global Findex.

Credit card score: level of penetration vs. capacity. Graded on a three-point scale, indicating a market whose credit card demand is under-served, appropriately served, or over-saturated.

GDP 3-year CAGR (current \$): three year cumulative growth rate of GDP. Figure from IMF WEO.

GDP per capita (constant LCU): figure from IMF WEO.

In addition, we include a list of indicators that serve as additional risks or mitigants that in aggregate may increase or reduce the country's ability to manage increased levels of penetration:

Category	Indicator	Indicator	Mitigant 	Neutral 	Risk 
Regulation	Overall quality of regulation	Overall microscope score (0-100)	≥ 75	50-75	< 50
	Consumer protection (OID)	Microscope score 4.2.1	3	2	0 or 1
	Consumer protection (Collections)	Microscope score 11.3.2	2	1	0
	Credit bureau, credit reporting	Microscope score 10	≥ 75	50-75	< 50
Competition / overheating	Level of competition	Herfindahl-Hirschman Index	$\text{HHI} > 3,000$	$1,500 < \text{HHI} < 3,000$	$\text{HHI} < 1,500$
	Multiple borrowing	% borrowers with 3+ loans	$< 5\%$	5-15%	$> 15\%$
	Prior growth	Loan portfolio 3-year CAGR	$< 2\times$ GDP growth	2-3x GDP growth	$\geq 3\times$ GDP growth
	Future growth	Loan portfolio 12-mth growth expectations	$< 2\times$ GDP growth forecast	2-3x GDP growth forecast	$\geq 3\times$ GDP growth forecast
Maturity of microfinance institutions	Age of FIs	% clients of MFIs $> 20\text{y}$ or $< 10\text{y}$ old	$> 65\%$ of the borrowers are clients of MFIs > 20 years old	Other	$> 65\%$ of the borrowers clients of MFIs < 10 years old
	Prior crisis experience	Date of previous crisis	Market experienced crisis in past 15 years	no crisis experience	
Transparency	Composite score	See Transparency worksheet	≥ 3		< 1.5
	Ratings	% leading MFIs rated in past 2 years	≥ 75	50-75	< 50
Other risks	FX exposure	% of loans in foreign currency	< 10	10-25	≥ 25
	Interest rate level	Average Full APR, weighed by number of borrowers	$< 30\%$	30-60%	$> 60\%$