



Microfinance Index of Market Outreach and Saturation

Morocco

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The MIMOSA score for Morocco is 2 – a normal market, at the lower end of its capacity range.

In purely penetration terms, with 4.4% of Morocco’s adults being active borrowers, the country is in fact well below that of its peers. The reason for meeting the “normal market” threshold is that Morocco’s borrowing capacity is also much lower, due to the widespread view in the country that borrowing is forbidden by Islam. In our field survey of 215 market vendors in Morocco, 32% of those who had been recently offered loans cited the Islamic prohibition against borrowing (*riba*) as the reason for not borrowing.

Since the MIMOSA model cannot capture this key factor, we manually reduced the modeled capacity by 30%, from 9.0% to 6.3% nationally. While the survey also showed significant regional variation (ranging from 24% to 43%), the samples are too small and too limited to extrapolate regional trends, and we thus applied the 30% capacity reduction in all regions equally. Even after this change, penetration in Morocco remains significantly below capacity. This is unusual, given the country’s relatively high market development scores.

In terms of regulation, Morocco features moderate- to strong scores. Overindebtedness regularly takes first place (at 35-40% of responses) as the major risk cited by MFI managers in the quarterly MIX Barometer survey. An unofficial credit exchange has been operating since 2008 among the largest three MFIs, and the government credit bureau was rolled out to all MFIs in 2014, with mandatory reporting.

However, collections methods are likely too harsh. When asked how lenders collect from loan defaulters, 46% of active borrowers cited the courts/the law, and 7% cited prison. Of the eight MIMOSA pilots, Morocco was the only market where such strong collection tactics were so widely reported.

Category	Rating	Indicator	Value
Saturation	2	Loan penetration over capacity	-1.9%
	n.a.	Credit card penetration	n.a.
Regulation	●	Overall quality of regulation	52/100
	●	Prevention of overindebtedness	3/3
	●	Appropriate collections	0/2
	●	Quality of credit bureau & credit reporting	67/100
Competition / overheating	●	Level of competition (HHI)	2,423
	●	% Borrowers with 3+ loans	1.1%
	●	Loan portfolio CAGR in value past 3 years	8%
	●	Loan portfolio growth in value expected next 12 months	11%
Maturity of microfinance institutions	●	% clients at MFIs <10y or >20y old	1% <10y old
	●	Experienced crisis in past 15 years	yes
Transparency / Data availability	●	Composite transparency score	2.7/4
	●	% MFIs with ratings in past 2 years	100%
Other risks	?	FX exposure	n.a.
	●	Interest rate level	38.2%

The market is only modestly competitive among the MFIs, and banks don't significantly compete for the same clients – out of 54 individuals who were asked from which institution they had borrowed, only 3 mentioned banks, of whom 2 said Banque Populaire – the parent company of the MFI Attawfiq. Consumer lenders were slightly more prevalent, cited by 5 individuals, all in or around Casablanca. A recent entrant, Bab Rizq Jameel founded in 2011, is seeking to add 100,000 clients by 2018, though it remains to be seen whether it will reach the target. A 2014 report cited Bab Rizq Jameel having 8,000 active clients.¹

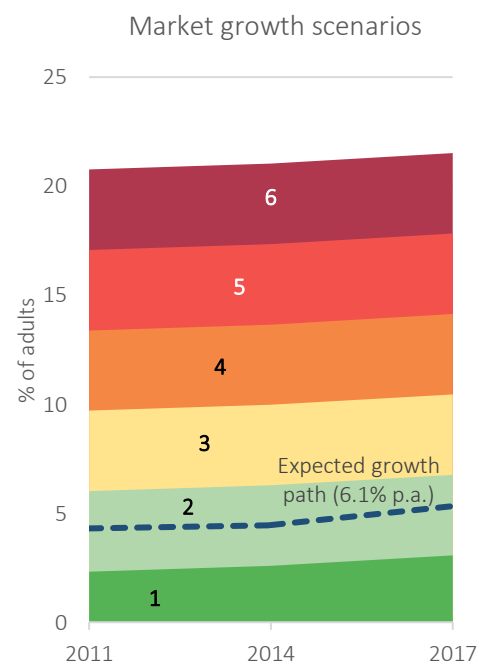
After several years of essentially flat growth, the market appears to be rebounding, with MFIs forecasting 6.1% annual growth in the immediate future. However, this level growth almost exactly tracks our forecasted growth in capacity, and assuming the same growth rate holds through 2017, Morocco will still remain below capacity. Growth in the banking sector has been equally flat, with bank loan portfolios registering 3.7% CAGR during 2011-14.

The microfinance sector is reasonably transparent, chiefly via reporting and publications of Centre Mohammed VI. The same couldn't be said about the banking sector, where despite intercession of a multilateral institution, we were unable to access meaningful client outreach figures for the banking system. Extrapolating from Index and MFI data in 2011, we estimate that banks and consumer lenders account for roughly a quarter of the total number of individual borrowers in Morocco. The absence of Morocco data in the 2014 Index means we have no recent full borrowing data for Morocco, but the nearly flat growth registered by both MFIs and banks during this period suggests that deviations from our estimates are likely to be minor. We relied on a combination of portfolio volumes and branch growth metrics to estimate bank outreach for 2014.

Though the market in Morocco seems quiescent, the situation deserves one important caveat: the combination of Islamic prohibition against credit and aversion to risk-taking, perhaps in response to severe collections methods, likely reduces total demand (and hence capacity) for credit. We discuss this in the special section below.

	2011	2014	2017*
HDI	0.612	0.617	0.641
Population density per km ²	61.9	65.0	79.0
Credit Bureau Score	24.3	35.1	40.7
Loan capacity	6.0	6.3	6.8
Borrowers per adult	4.3	4.5	5.3
Microfinance loans per adult	3.4	3.5	4.2
MIMOSA Score	2	2	2
Credit card users per adult	-	-	-
MIMOSA CC penetration score	-	-	-
GDP per capita (current \$)	3,082	3,291	3,427
GDP 3yr CAGR (constant LCU)	4.5%	3.3%	4.9%

* forecasts: IMF for GDP, UNDP for population; MIMOSA for others



¹ La Vie éco, [4 Jun 2014](#)

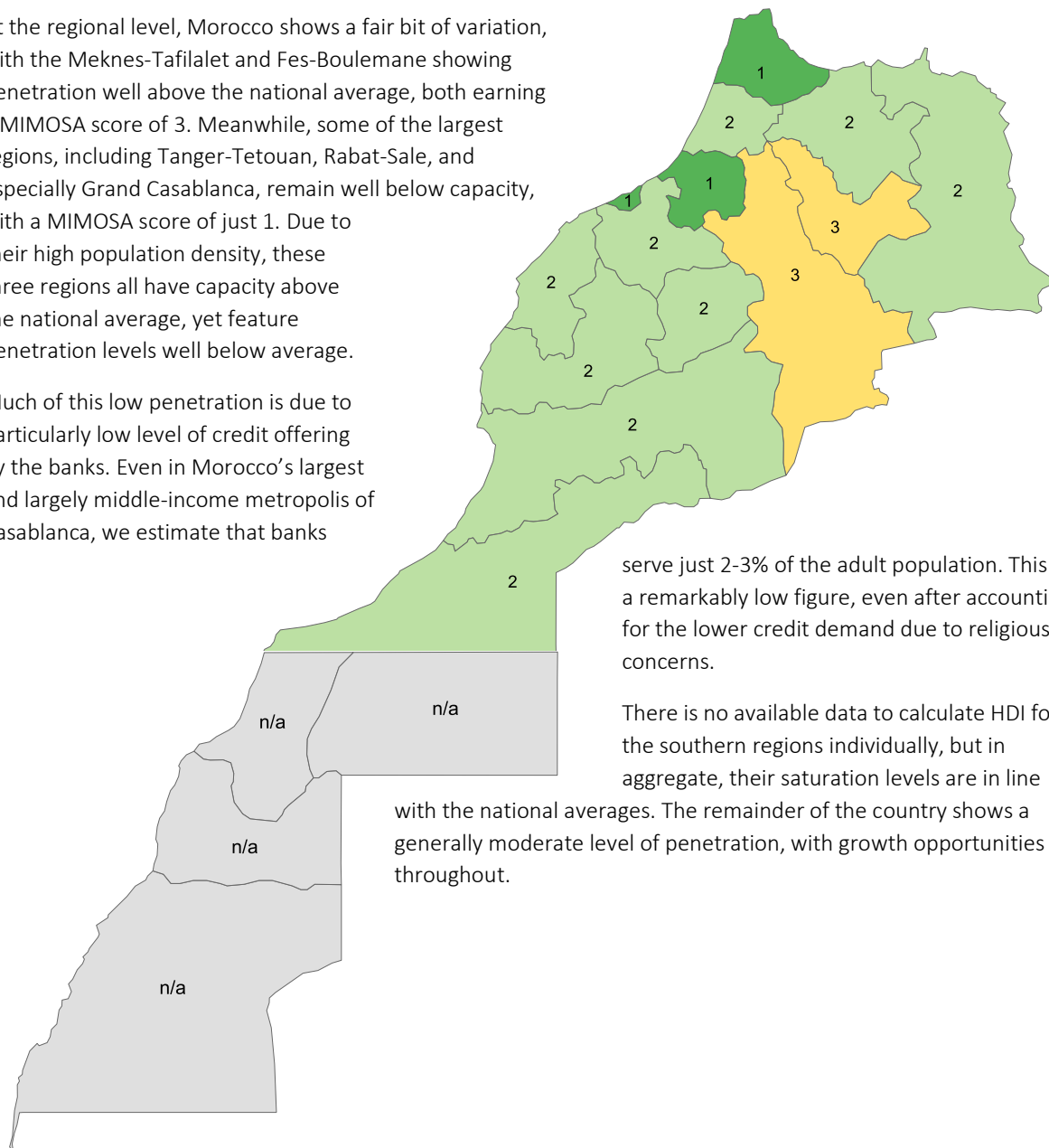
MIMOSA Scores by Region

At the regional level, Morocco shows a fair bit of variation, with the Meknes-Tafilalet and Fes-Boulemane showing penetration well above the national average, both earning a MIMOSA score of 3. Meanwhile, some of the largest regions, including Tanger-Tetouan, Rabat-Sale, and especially Grand Casablanca, remain well below capacity, with a MIMOSA score of just 1. Due to their high population density, these three regions all have capacity above the national average, yet feature penetration levels well below average.

Much of this low penetration is due to particularly low level of credit offering by the banks. Even in Morocco's largest and largely middle-income metropolis of Casablanca, we estimate that banks

serve just 2-3% of the adult population. This is a remarkably low figure, even after accounting for the lower credit demand due to religious concerns.

There is no available data to calculate HDI for the southern regions individually, but in aggregate, their saturation levels are in line with the national averages. The remainder of the country shows a generally moderate level of penetration, with growth opportunities throughout.



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	33,848	0.617	65	2	6.3	4.5	-1.8
Grand Casablanca	4,271	0.733	1,200	1	12.9	3.5	-9.3
Sous-Massa-Daräa	3,602	0.586	51	2	5.8	3.7	-2.1
Marrakech-Tensift-Al Haouz	3,577	0.577	115	2	6.0	5.0	-0.9
Tanger-Tetouan	3,157	0.593	273	1	6.9	2.5	-4.4
Rabat-Salé-Zemmour-Zaer	2,677	0.684	279	1	8.1	4.0	-4.1
Meknès-Tafilalet	2,317	0.599	29	3	5.9	7.4	1.5
Doukala-Abda	2,183	0.570	164	2	6.1	4.4	-1.6
Oriental	2,098	0.605	25	2	5.9	5.5	-0.4
Gharb - Chrarda - Beni -H	1,904	0.580	216	2	6.5	3.6	-2.9
Chaouia-Ourdigha	1,894	0.620	113	2	6.5	4.0	-2.5
Fés-Boulemane	1,808	0.619	89	3	6.4	6.6	0.2
Taza-Al Hoceima-Taounate	1,807	0.512	75	2	4.9	3.9	-1.0
Tadla-Azilal	1,608	0.550	94	2	5.5	5.2	-0.3
Régions du Sud	947	0.650	2	2	6.4	5.1	-1.3
Guelmim Essmara	502		4			5.7	
Laayoune-Boujdour-Sakia	302		2			4.5	
Oued Ed Dahab-Lagouira	143		1			4.3	

Sources: 1) Haut Commissariat au Plan (HCP); 2) HCP, UNDP, MIMOSA; 3) HCP; 4-5) MIMOSA; 6) Findex, Centre Mohammed VI, MIMOSA; 7) MIMOSA

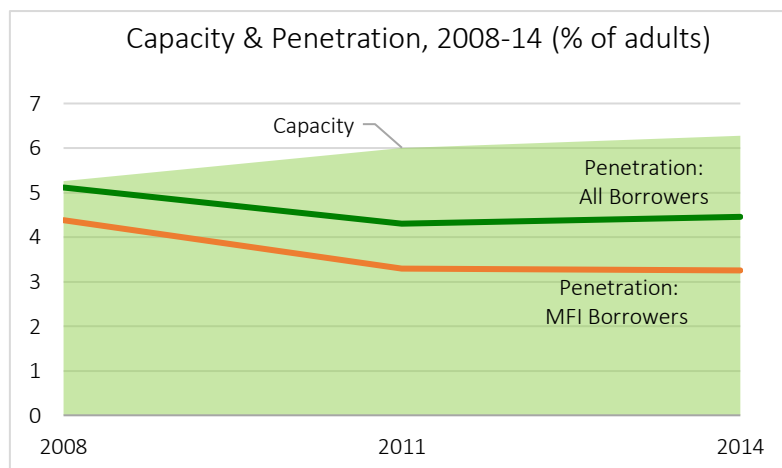
Special discussion: What is the true credit capacity in Morocco?

In 2008, Morocco experienced a repayment crisis, becoming among the first of the microfinance “crisis countries.” Relying on historical data, we generated a MIMOSA score for the peak year of crisis (2008), yielding a score of 2 – a normal market, with penetration of 5.1% versus estimated capacity of 5.3%, including the reduction due to religious objections. By comparison, penetration today is 2/3rds or a point lower than it was in 2008, while capacity is more than a point higher. Most of this change is due to a significantly reduced microfinance sector, where penetration in 2008 was more than a full point higher than today’s levels – even after accounting for greater levels of multiple borrowing. Even so, neither the microfinance nor the total lending markets in 2008 showed saturation levels that would normally raise concerns. Why would such a market fall into crisis?

One reason can be found in the other factors evaluated by MIMOSA. A Morocco report for 2008 would have featured many warning flags – regulation was weak, with the Central Bank having just begun to supervise MFIs a year earlier. There was no credit bureau, nor any attempts to avoid overindebtedness. Competition was greater, with 4 large MFIs jockeying for supremacy, instead of the current 3. More importantly, between 2006-08, growth at all leading MFIs stood at or near 100% per annum. These MFIs were young, and managers had not experienced anything other than a boom market. Nor was there any data transparency at the regional level. In short, despite a moderate saturation score of two, a 2008 MIMOSA report for Morocco would’ve been festooned with red warning flags.

The second reason questions the crisis itself. A study of Morocco during 2008-13 by one of the MIMOSA authors,² argues that the market crisis there was more modest than is commonly perceived, far below the levels of Bosnia or Nicaragua. The widely cited market figures were weighed down by the failure of the 2nd largest MFI, Zakoura, which imploded from internal mismanagement and fraud, and likely would’ve struggled to survive under any circumstances.

The strong religious resistance to borrowing is also important in understanding capacity. As mentioned earlier, while we have reduced the estimated capacity by 30%, it’s likely that this alone does not capture its full impact. While many markets are able to operate sustainably with penetration five or even ten points above capacity (when other mitigating factors are present), such a proposition for Morocco seems less realistic.



² D. Rozas et al, “Ending the Microfinance Crisis in Morocco: Acting early, acting right,” IFC 2014

For one thing, the low demand for credit itself retards growth. A major RCT study with the country's largest MFI (Al Amana) in 2006-07 had to significantly change its methodology due to an unexpectedly low loan take-up rate. Considering that this took place during the pre-crisis period of rapid growth, the result is all the more surprising.³ In this context, it is not difficult to imagine that the threshold of saturation that is likely to trigger a repayment crisis is likewise lower, with religious or political forces generating a backlash sooner than might be likely in other countries.

Normally, relying on culture and social context to explain why a certain market has a higher or lower capacity reflects a weak argument. Experience is replete with cultures that have seen rapid shifts in attitudes to debt. In 1999, previously debt-averse residents of South Korea did not resist a sudden influx of credit card offers. It took just 3 years for the bubble to form and then burst.

Aversion to debt could similarly change in Morocco. But it is unlikely to happen as quickly, and thus rapid expansion of credit is inadvisable. While the low levels of saturation imply plenty of scope for growth, extra care is sensible. Growth should be best pursued through more diverse products that answer needs not currently being met. And this diversification of credit products should be pursued both by MFIs, and also by banks that are currently grossly underserving the middle-class market.

For MFIs specifically, focusing on less coercive collection methodologies could also help decrease the reluctance to borrow. By emphasizing alternative collection methodologies that limit the use of legal processes to all but the rarest of cases, the MFIs may also see an increase in demand without a significant impact on loan repayments.

By combining a broader set of credit products with collections methodologies that de-emphasize borrowers' personal risk, the financial and microfinance sectors may be able to improve consumer perceptions of credit and thus raise the country's effective credit capacity.

³ S. Morvant-Roux et al, "Adding Value to Randomization with Qualitative Analysis: The Case of Microcredit in Rural Morocco," World Development 2013

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	$HHI > 3,000$	$1,500 < HHI < 3,000$	$HHI < 1,500$
	Multiple borrowing	% borrowers with 3+ loans	$< 5\%$	5-15%	$> 15\%$
	Prior growth	Loan portfolio 3-year CAGR	$< 2x$ GDP growth	2-3x GDP growth	$\geq 3x$ GDP growth
	Future growth	Loan portfolio 12-mth growth expectations	$< 2x$ GDP growth forecast	2-3x GDP growth forecast	$\geq 3x$ GDP growth forecast
Maturity of microfinance institutions	Age of FIs	% clients of MFIs $> 20y$ or $< 10y$ 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%	$> 60\%$