

# FINDEX NOTES

Asli Demirguc-Kunt

Leora Klapper

Douglas Randall

## The Global Findex Database

### *Islamic Finance and Financial Inclusion*

*Compared with non-Muslims, self-identified Muslims are significantly less likely to own a formal account or save at a formal financial institution, after controlling for other individual and country characteristics, according to recent research using Global Findex data. But the authors find no evidence that Muslims are less likely to borrow formally or informally. Data from an additional survey of adults in five North African and Middle Eastern countries with relatively nascent Islamic finance industries shows very little use of Sharia-compliant banking products, though there is evidence of a hypothetical preference for Sharia-compliant products among a plurality of respondents despite higher costs. The Global Findex database and related research can help Islamic finance industry leaders expand their outreach to Muslim clients, and help policymakers more clearly define their role in expanding financial inclusion—Islamic or otherwise—to Muslim adults.*

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Recently, much attention has been given to the tremendous growth of the Islamic finance industry and the potential of Sharia-compliant financial services to expand financial inclusion among Muslim adults. Yet there has been a scarcity of empirical research that measures the degree to which Muslims are not accessing conventional financial systems, and how much they demand and use Sharia-compliant financial products, particularly within the realm of household finance. Even less is known about how these usage gaps and preferences vary between various financial products and across regions and countries.

This note summarizes recent research by Demirguc-Kunt, Klapper, and Randall (2013) that explores whether Muslims are less likely than non-Muslims to use formal financial services and, in a smaller sample of countries, the usage and awareness of Sharia-compliant banking products. The case for expanding Sharia-compliant products is often based on the relatively low levels of financial inclusion in Muslim-majority economies, yet these claims confound religious identification with other individual- and country-level attributes. Individual-level, demand-side data are required to isolate the relationship between Muslim identity and preferences for, and usage of, formal financial services. The Global Findex database provides such data, measuring how people in 148 economies around the world save, borrow, make payments, and manage risk. These new indicators are constructed with survey data from interviews with more than 150,000 nationally-representative and randomly-selected adults age 15 and above. The survey was carried out over the 2011 calendar year by Gallup, Inc. as part of its Gallup World Poll. This note features Global Findex data based on nearly 65,000 interviews across 64 economies, as well as data from an additional survey in five North African and Middle Eastern countries (map 1).

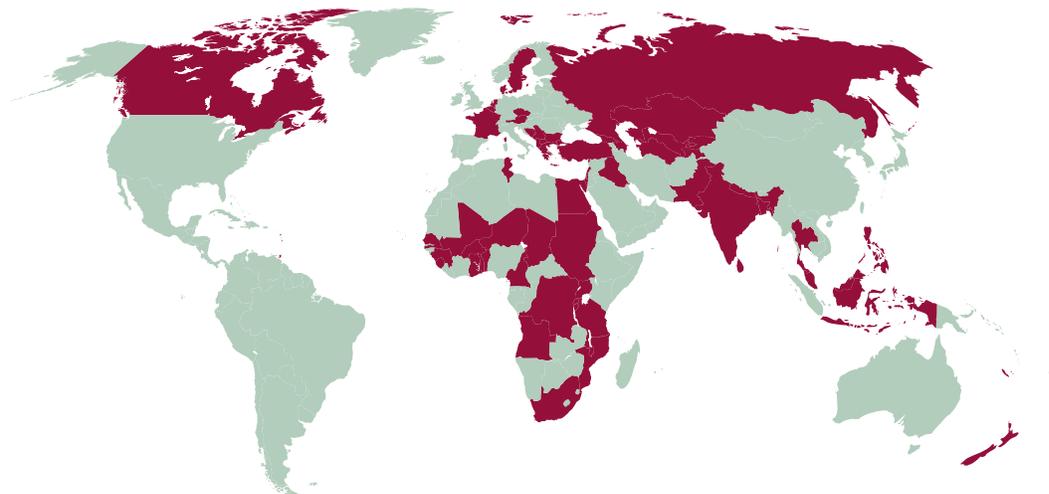
### Differences in Account Ownership between Muslims and Non-Muslims

The gap in account penetration between Muslims and non-Muslims is large and statistically significant, even when controlling for other individual- and country-level characteristics. In order to examine variation between Muslims and non-Muslims within economies, the analysis excludes countries where less than 1 percent or more than 99 percent of the adult



## Economies included in the analysis

Economies included in Demirguc-Kunt, Klapper, and Randall (2013)



Source: Demirguc-Kunt, Klapper, and Randall 2013.

population identify themselves as Muslim.<sup>1</sup> According to data covering 64 countries—and approximately 75 percent of the world’s adult Muslim population—24 percent of Muslim adults report having an account at a bank or formal financial institution, compared with 44 percent of non-Muslims.<sup>2</sup> Multivariate regression analysis suggests that although much of this difference is related to other individual- and country-level characteristics, self-identification as a Muslim is associated with a 6 percent decrease in the probability of having a formal account.<sup>3</sup> The gap in account penetration between Muslims and non-Muslims persists across most regions, except for East Asia and Pacific economies, where there is no significant difference in account penetration between the two populations.

In the sample of economies worldwide, just 7 percent of unbanked Muslims and unbanked non-Muslims cite religion as a barrier to account ownership. Similar to non-Muslims, Muslims are most likely to cite cost, distance and documentation as barriers to account ownership. In regression analysis, however, there is some evidence that unbanked Muslims are more likely than unbanked non-Muslims to report not having an account at a formal financial institution because of religious reasons. But this finding does not hold consistently across different regression specifications, and it appears to be driven largely by a handful of economies, particularly those in Sub-Saharan Africa. The significant and economically meaningful gap in account penetration between Muslims and non-Muslims, combined with the generally insignificant gap in reporting religion to be a barrier to account ownership, suggests that constraints may be supply-driven—possibly by discrimination or the relative scarcity of financial services in predominantly Muslim areas. Unfortunately, the currently available data do not allow formal empirical tests of these hypotheses.

## Differences in Borrowing between Muslims and Non-Muslims

Nine percent of non-Muslims and 7 percent of Muslims report having borrowed money from a bank or another formal financial institution in the past 12 months. The differences in formal borrowing behavior between Muslims and non-Muslims are considerably smaller than those related to account ownership, and are not statistically significant in the complete sample, after controlling for other individual- and country-level characteristics. Differences in borrowing from a range of other sources—family, friends, retail outlets using store or installment credit, an employer, or an informal private lender—are also not found to be

statistically significant in regression analysis. When examined on a regional level, however, some differences do emerge. According to multivariate regression analysis, Muslims are significantly more likely than non-Muslims to have borrowed money from formal financial institutions in high income economies. In contrast, Muslims are significantly less likely to do so in the four East Asian and Pacific countries in the sample.<sup>4</sup>

An important caveat to the above findings is that Global Findex data does not distinguish between conventional and Sharia-compliant financial products. It is possible that the absence of a gap in borrowing behavior is the result of widespread availability and use of Sharia-compliant products. However, given that less than 1 percent of total global financial assets (and less than 1 percent of microfinance products) are from Islamic financial institutions, that is unlikely to be the case. Rather, it seems more plausible that a vast majority of financially included Muslims use conventional banking products and services.

## Usage of, and Preferences for, Sharia-Compliant Financial Services

The analysis supplements Global Findex data with an additional questionnaire on the awareness, use, and preference for Islamic financial products, which was included in the 2012 Gallup World Poll. This module was included in Algeria, Egypt, Morocco, Tunisia, and Yemen with approximately 1,000 respondents per country. In each of those countries, with the exception of Egypt, 100 percent of respondents self-identified as Muslim.<sup>5</sup> In Egypt, 95 percent of respondents did so. An important caveat is that these results are not representative of Islamic banking globally; in many countries, use of and attitudes towards Islamic finance are likely markedly different.

Across the five countries, 48 percent of respondents report having heard of Sharia-compliant products in their country that offered services to people like them (table 1). This ranges from 35 percent in Algeria to 57 percent in Tunisia. However, just 2 percent of respondents report currently using a Sharia-compliant banking service. In no country does this value exceed 3 percent. Among those who separately report having an account at a formal financial institution or having borrowed from a formal financial institution in the past year, just 8 percent report currently using an Islamic banking service. This is consistent with the low concentration of Islamic banking services in these countries as reported by Beck et al. (2013), which shows that in Egypt and Tunisia, Islamic banks' share of total bank assets is 4.2 and 1.5 percent, respectively. Islamic banks' share of total bank assets in Yemen is 51.5 percent, though this is mostly concentrated in non-commercial assets. Regression analysis suggests that income and access to information are strongly and positively associated with awareness and use of Sharia-compliant banking products.

**TABLE 1**  
**Sharia-compliant Financial Services**

|                  | Sample size | Has heard about Islamic banks (%) | Currently uses an Islamic banking service (%) | Hypothetical loan choice                            |   |                                |                        |
|------------------|-------------|-----------------------------------|---|---|---|--------------------------------|------------------------|
|                  |             |                                   |   | Prefers (more expensive) loan from Islamic bank (%) | Prefers (cheaper) loan from conventional bank (%) | Does not have a preference (%) | Don't know/ Refuse (%) |
| All              | 5,071       | 48                                | 2   | 45  | 27  | 10                             | 17                     |
| Algeria          | 1,022       | 35                                | 3   | 49  | 27  | 22                             | 3                      |
| Egypt, Arab Rep. | 1,020       | 49                                | 3   | 0   | 0   | 0                              | 0                      |
| Morocco          | 1,000       | 41                                | 1   | 54  | 16  | 13                             | 17                     |
| Tunisia          | 1,029       | 57                                | 2   | 31  | 40  | 12                             | 17                     |
| Yemen, Rep.      | 1,000       | 53                                | 1   | 37  | 18  | 22                             | 22                     |

*Note:* "All" averages are weighted by economy-level adult population. Due to survey execution errors, data from Egypt, Arab Rep. are not included in the hypothetical loan choice summary statistics.

The third and final question in the module examines the robustness of demand for Islamic banking services.<sup>6</sup> The question puts forth a hypothetical scenario, in which the respondent has been approved for a one-year loan from a conventional bank and an Islamic bank. The value of the hypothetical loan is equivalent to 15 percent of the GDP per capita of the respondent's home country. However, the loan from the Islamic bank comes with an effective 20 percent interest rate, while the loan from the conventional bank comes with an effective 15 percent interest rate. The price difference is meant to test the price sensitivity of respondent's potential preference for Islamic products. In reality, the price difference between conventional and Islamic loans is often less than 5 percentage points. The interest rate is presented in terms of the value of the monthly payment, since explicit rates are not Sharia-compliant. The respondent is asked to choose which loan he/she preferred.

In the sample, 45 percent of respondents reported a preference for the more expensive Islamic bank loan, while 27 percent of respondents reported a preference for the cheaper, conventional bank loan. Respondents in Morocco were most likely to opt for the Islamic bank loan (54 percent), while respondents in Tunisia were most likely to choose the conventional loan (40 percent). There was relatively little variation in choice by within-country income levels. Men were significantly more likely than women to choose the Islamic option (48 percent vs. 43 percent), with the largest gender gap in Egypt.

Taken together, the results from the Islamic finance module suggest that individual-level use of Islamic banking services is extremely low in these countries. This is consistent with supply-side data. And while a plurality of respondents do report a preference for Islamic banking services despite

significantly higher costs, an almost equally large share of adults prefer the cheaper, conventional loan or do not have a preference between the two. This suggests that there is likely to be demand for both conventional and Islamic banking services, and that preferences for Sharia-compliant products are influenced by price.

## Conclusion

There is wide scope for future research on this topic. Additional research is needed to investigate whether the differences that exist between Muslims and non-Muslims in the use of financial products are demand- or supply-driven. The results from Demirguc-Kunt, Klapper, and Randall (2013) also raise the question of whether a gap exists between Muslims and non-Muslims in the ownership of formal accounts but not in formal credit products due to divergent "urgencies of need," with respect to savings and payments versus borrowing. Additional cross-country, demand-side data (particularly in countries where the Islamic finance industry is more developed) on the use of, and preferences for, Sharia-compliant finance products would also be valuable in better understanding the variation in the demand for Sharia-compliant finance products among Muslim adults. Survey instruments that can vary price and other hypothetical product features would allow researchers to determine elasticities of demand for certain financial products, Sharia-compliant and otherwise. Finally, time-series data that can track the development of Islamic finance industries across countries and the accompanying shifts in demand-side usage of, and attitudes toward, Sharia-compliant financial products would provide insight into the relationship between Islamic finance and the broader patterns of financial inclusion.

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1. See Demirguc-Kunt, Klapper, and Randall (2013) for more details.
2. Thirty-six percent of respondents in the sample self-identify as a Muslim. 17 percent of respondents in the complete worldwide Global Findex dataset report the same.
3. Even after controlling for other individual-level and country-level differences, the authors do not interpret the observed correlations as causal effects. Of particular concern is the omitted variable critique in which an omitted variable causes individuals both to identify as a Muslim and to behave in a certain way. The omitted variable can be transmitted from parents to children (either genetically or through education).
4. Indonesia, Malaysia, Philippines, and Thailand.
5. For this reason, Algeria, Morocco, and Yemen are not included in the main analysis. Tunisia was not surveyed by Gallup in 2011.
6. Due to the omission of the "No preference" option in the Egypt survey, we do not include data from Egypt in the analysis of this question. The omission was the result of a clerical error.

## References

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