THE LEVEL OF DEVELOPMENT IN THE MUSLIM WORLD: A FINANCIAL INQUIRY

Ihsan Isik, Ph.D.

Professor of International Banking and Finance, Department of Accounting and Finance, Rowan University, Glassboro, New Jersey, USA,
E-Mail: isik@rowan.edu

ABSTRACT

Utilizing the most recent macro and micro-economic data available and calculating the modern measures of financial sector development, this extensive inquiry purports to determine the current state of finance, both in terms of depth (size) and breadth (diffusion) dimensions, at the 57 OIC countries vis-à-vis their income and regional counterparts in the world. After controlling for country size and density factors, it also tries to investigate the association between financial development and other country traits. It is astonishing to see that three out of four adults in the Islamic world are excluded from the financial system. Furthermore, the size of the financial industry in a typical Muslim country is almost fifty percent smaller than the typical country in the world. Such level of financial exclusion and financial underdevelopment is an incredible waste of valuable development resources.

Keyword *Index Terms*— OIC, Islamic finance, financial development, financial access

INTRODUCTION

FINANCE has been shown to *matter* for countries' economic development. The empirical and theoretical evidence that finance causes growth is so robust that it is available at all levels (country, sector, firms, and households) and supported by various econometric techniques. Furthermore, based on extensive cross-country databases, researchers have found a strong and causal relationship between indicators of financial sector development and GDP per capita growth, productivity growth, poverty, firm growth, and entry rates (Beck and Levine, 2005). Finance is important for several reasons. It promotes growth through raising and pooling funds, thereby allowing more and more risky investments to be undertaken, by allocating resources to their best uses, by monitoring usage of funds, and by providing instruments for risk management. More importantly, finance helps with improving income distribution and poverty reduction (Beck et al., 2004). Clearly, financial development is not only *pro-growth* but also *pro-poor*. More abundant private credit creates a rising tide that lifts all boats but gives a bigger lift to the poorest ones, according to Asli Demirguc-Kunt, a research manager in the World Bank. Hitherto, the empirical literature behind the evidence that finance causes economic growth has used financial sector *depth*, typically measured as the ratio of financial assets (e.g., private credit or liquid liabilities or total deposits) to GDP as the "independent variable". The underlying assumption was that financial depth is a good surrogate for financial development. However, de la Torre et al. (2006) rightly argue that the intricate web of institutional and market interactions at the heart of financial development can hardly be reduced to a single dimension. Financial development, with all of its dimensions, not just financial depth, lubricates and boosts the process of growth. These dimensions include *stability*, *depth*, and *breadth* (access to finance). Of these dimensions, access to finance is a new discovery that has attracted wide attention from the World Bank to the United Nations and from politicians to academicians in a very short time.

Political democracy and market economy are separable concepts, but they tend to converge over the long run.

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S. B. Author, Jr., was with Rice University, Houston, TX 77005 USA. He is now with the Department of Physics, Colorado State University, Fort Collins, CO 80523 USA (e-mail: author@lamar.colostate.edu).

T. C. Author is with the Electrical Engineering Department, University of Colorado, Boulder, CO 80309 USA, on leave from the National Research Institute for Metals, Tsukuba, Japan (e-mail: author@nrim.go.jp).

McKinnon and Shaw postulate that private intermediaries operating in a liberalized financial environment (as distinct from government planners) make better use of funds at their disposal. There is much empirical support for their view that financial liberalization leads to financial deepening and fosters a more efficient allocation of investment (Williamson and Mahar, 1998). However, the well known study, "Good-bye financial repression, hello financial crash" (Diaz-Alejandro, 1985), reminds us that the economic stage should be prepared for change before liberalization is put in motion; otherwise the system could become prone to crashes, as demonstrated lately in Chile, Mexico, Russia, and several Eastern and Central European countries. Banks and securities markets cannot function properly unless their institutional foundations are strong. At the very least, we have learned out of experience that sudden financial liberalization can create instabilities when the underlying institutional structure contains serious weaknesses. Thus, the way financial liberalization occurs also matters, particularly for ensuring that financial development rests on sound institutional footings. It seems that what matters the most for growth is not the *form* in which financial services come, but the fact that they are provided in an efficient manner and supported by a proper institutional and competitive environment (Claessens, 2005).

Countries differ vastly in terms of economic and financial development around the globe. The average GDP per capita in the Islamic world is $8,600, whereas, it is $16,800 in non-Muslim countries. The global average income is $14,450 (see Table 1). Apparently, the income per capita, widely acclaimed measure of development in a country, is significantly lower for the Islamic world than the rest of the world (almost half). Given the extant literature on the positive association between finance and growth (see Levine, 2005 for the survey of the literature), it is worthwhile to study the role of finance in the relative underdevelopment of the Muslim countries. To that end, this study presents the state of finance in the Islamic world by measuring the modern indicators of financial sector development (the breadth and depth statistics) at the 57 OIC countries. We also test the differences between OIC and non-OIC countries in terms of financial development, after controlling for economic development and regional endowments variations across countries. In the final stage, we relate these financial depth (vertical) and breadth (horizontal) indicators to the measures of institutional, regulatory, legal and physical and social infrastructure in the Islamic world (this stage is still under development).

I. THE LEVEL OF FINANCIAL DEVELOPMENT IN MUSLIM WORLD

The World Bank periodically publishes overall financial development indicators for many countries, as initially developed by Hanohan (2007), and indicators of financial access and use, as developed by Beck et al. (2006). In this analysis we utilize the most recent data sets collected by the World Bank, IMF, Heritage Foundation and Pew Research Group to examine the state of finance in the Islamic world as well as study the determinants of financial development, as measured by financial access and depth variables.

As Figure 1.1 reveals, the average income at the OIC countries is $8,600, whereas it is $17,000 at the non-OIC countries and $14,000 at a typical country in the world. It is clear that the state of economic development in Islamic countries is significantly lagging behind that of the rest of the world. The OIC countries can only catch up by achieving faster economic growth than their peers. However, although its direction is debated, a strong economic growth requires a strong financial system (Levine, 2005; Isik, 2008). As Figure 1.2 demonstrates, about 75% of the adult population in Islamic countries is outside the financial system, with no formal account at a formal financial institution. This is a clear manifestation of underdevelopment of financial system in the OIC countries. Whether money or talent or nature or knowledge, most developing economies, including Muslim ones, tend to underutilize their scarce resources. So to speak, the challenge of economic development in Islamic countries is on the shoulder of only 25% of the population. The financial resources of the rest of the population are absent in the economic scene.

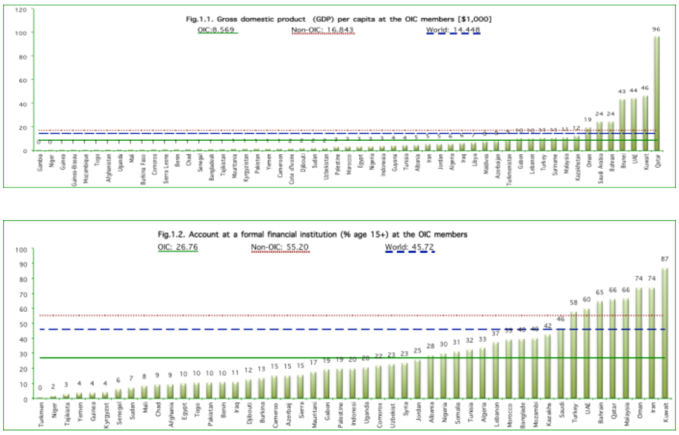

Fig. 1. Economic And Financial Development In The Islamic World – The GDP Per Capita & Diffusion Of Financial Services At The OIC Members

Not surprisingly, given the low participation by the populace, the financial systems of Islamic countries are rather shallow. The average size of the banking industry at the OIC countries is 43% of the national income, whereas it is 76% in the non-OIC countries. The average size of securities markets in the Islamic world, represented by stock market capitalization to GDP is also lagging behind that of the rest of the world by about 10%. Furthermore, the levels of private credit, liquid monetary resources and bank deposits, which are the raw material for finance and necessary to finance entrepreneurship, innovation and productive investment opportunities in an economy are also rather low in the Muslim countries. Certainly, the lower "inside money" in the Islamic world means insufficient funds to support the intended faster growth. This could be a product of the Muslim world's prosperity level or the Muslims' attitude to financial institutions.

We know that "above ground money" should be flowing to either into banks or in securities markets in a typical economy. However, bond markets in the developing Islamic countries, are literally inexistent and the stock markets occupy non-trivial place in their financial system. The average size of the banking system, as mentioned, is less than half of the national income in the Islamic world, while most developed economies, have a banking market at least as big as their national economy. Obviously, the "Muslim money" does not travel to formal financial markets or institutions and are apparently wary of the current financial system. The miniscule size of the financial system in the Islamic countries obviously suggests that there are substantial drains from the system. Lack of trust in the financial system might have induced people to keep their money under mattress or in alternative forms of value storage, foreign currencies, gold, or other jewelleries.

Any nation with important economic and financial goals needs every 'dirham', every talent, and every positive NPV project, however small, which will help it attain these goals. Thus, financial inclusion and financial diffusion are important and critical policy variables among the OIC countries to close the widening historical gap with the rest of the world. Then, towards this end, the first task is to determine the current state of finance in the Islamic world. What is the level of financial exclusion in this world? Why are many individuals and firms operating underground? What obstacles are they facing in accessing financial services? What could be done to broaden access and 'domesticate' idle resources, including the reluctant "Muslim money"?

II. What Explains Financial Development?

The limited breadth and depth of the financial sector at the OIC countries imply that there must be some barriers to financial access and use. World Bank researchers have developed a number of indicators of barriers to financial access and categorized them into three different dimensions: 1) Physical access refers to the points of service delivery. 2) Affordability means the costs in terms of minimum balances and fees that bank customers need to pay to obtain financial services. 3) Eligibility refers to the criteria (in terms of documents or other requirements) that determine who can access financial services and who cannot. Explanations of the lack of access fall into two dimensions: financial institutions' specific factors and barriers from the overall institutional environment.

Beck et al (2005) in their empirical analysis explored such factors and barriers to explain cross-country variations in access to finance. Their correlation and regression results show that financial access indicators are significantly and positively associated with conventional indicators of economic development (GDP per capita) and financial development (private credit, liquid liabilities, and bank deposits to GDP). They also find that geographic access to banking services is positively correlated with population density. Expectedly, access to financial services is greater in larger economies. These results somewhat reflect economies of scale in the provision of financial services. Another noteworthy finding is that where access is wider, firms report lower financing obstacles. Moreover, even after controlling for country size and density, the authors detected important associations between financial access and other country traits and policy variables. In particular, they find that a better communication and transportation infrastructure is closely associated with greater access.

Countries with better-developed institutions enjoy greater levels of financial access. Quality of credit information sharing systems is positively associated with measures of access to bank outlets, whereas, restrictions on banks' activities and entry requirements are negatively correlated with access. They also reported that government ownership of financial intermediaries does not necessarily mean greater access and more concentrated banking systems are unexpectedly associated with more usage of financial services. Foreign banks do not directly increase access, nonetheless, their very existence pushes local firms to look downward and reach more customers. Interestingly, the effect of outreach does not systematically vary across firms of different size.In a follow up paper, Beck et al. (2006) examined the variations in barriers to bank access and use around the world. Specifically, they investigate indicators of 'physical access', 'affordability' and 'eligibility' barriers to deposit, loan and payment services. They found that banks in more economically and financially developed economies impose lower barriers. Barriers are negatively correlated with financial outreach and with lower financing obstacles. They concluded that bank size and the existence of physical infrastructure in a country are the most important determinants of barriers. In particular, they reported that larger banks demand lower minimum balances to open a checking account, charge lower checking and savings fees, require fewer documents to open accounts, impose lower minimum loan amounts for SMEs and consumer loans, need fewer days to process loans, and are more likely to accept loan applications through non-traditional delivery channels such as phone or the Internet. This is also another indication of scale economies in delivering financial services. Hitherto, empirical and theoretical literature has not attached much weight to the relationship between infrastructure, input costs, and financial depth and breadth.

III. Income, Geography & Finance In The Muslim World

Because there is a close association between GDP per capita and access and use of financial services, we constructed Table 1, to control for wealth, when comparing the OIC members with the rest of the world. The results indicate that in the great majority of financial depth and breadth statistics, the OIC countries lag behind those in the non-OIC countries even after controlling for differences in income. In the low, middle income and high-income country groups, the Muslim countries tend to follow from behind the rest of the world. However, the Muslim countries demonstrate relative superiority in the lowest income group as compared to their peers. The cultures, traditions and life styles are determined by geography. In addition, the endowments also significantly differ across localities.

In Table 2, we compare the financial development statistics of the OIC members with those of the neighbour countries in the same region. We come across with a similar finding that the OIC countries do not fare as well as their neighbours in terms of financial breadth and depth. Table 3 provides the correlations between financial depth and breadth measures. It is clear that financial development is very critical for economic growth as all the financial development measures are significantly correlated with GDP per capita.

Also the Muslim population percentage variable correlations demonstrate, as the fraction of Muslims increase in a country, the financial development variables tend to diminish. It is evident that average Muslims do not approve or find the current financial system and products appealing to his or her expectations or beliefs. This is both a challenge and also opportunity in the Islamic world to develop inventive products to increase financial inclusion among the populace.

Table 1

Financial Development (Depth and Breadth) Statistics of the OIC Countries by GDP QUINTILES [Q1=LOWEST, Q5=HIGHEST]

Indicators	LOW INCOME: Q1			MIDDLE INCOME: Q2			MIDDLE INCOME: Q3			MIDDLE INCOME: Q4			HIGH INCOME: Q5		
	OIC	Non-OIC	World	OIC	Non-OIC	World	OIC	Non-OIC	World	OIC	Non-OIC	World	OIC	Non-OIC	World
Number of countries	*20*	18	38	*11*	27	38	*10*	28	38	*8*	30	38	*6*	32	38
GDP per capita [$US]	*823*	744	786	*2367*	2487	2452	*5741*	5752	5749	*11640*	14443	13853	*46380*	49966	49400
Panel A: Financial Depth															
% Private credit	*17.8*	18.6	18.1	*26.3*	37.0	34.4	*44.7*	48.2	47.5	*49.9*	62.5	60.0	*43.6*	129.8	114.9
% Liquid liabilities	*32.6*	35.6	33.7	*48.9*	46.0	46.7	*68.0*	53.9	56.8	*79.1*	68.6	70.5	*52.2*	132.0	118.7
% Bank deposits	*24.5*	29.6	26.5	*39.4*	38.2	38.5	*56.9*	47.1	49.2	*73.6*	60.0	62.3	*48.5*	120.8	108.7
% Bank assets	*24.1*	22.1	23.3	*38.7*	44.2	42.9	*63.9*	54.4	56.4	*68.8*	78.2	76.3	*56.5*	148.9	133.0
% Stock mrkt cap	*15.6*	17.7	16.5	*37.0*	31.5	33.2	*61.1*	39.0	41.3	*51.5*	35.1	38.0	*54.1*	85.9	81.8
Panel B: Financial Breadth															
% Acct at a financial inst.	*13.5*	16.5	14.7	*17.8*	28.0	24.3	*31.2*	47.9	43.4	*42.3*	61.9	57.3	*64.7*	94.3	89.4
Bank brnch - 1,000 km^2	*8.3*	5.4	6.9	*14.5*	19.1	17.8	*29.5*	22.4	24.3	*23.2*	39.8	36.6	*17.8*	148.3	128.6
Bank brnch-100,000 people	*4.4*	3.5	4.0	*10.3*	13.2	12.3	*14.5*	31.4	26.9	*15.4*	26.0	23.9	*14.6*	32.9	30.2
ATM - 1,000 km^2	*8.4*	4.8	6.7	*25.0*	27.8	27.0	*49.2*	43.9	45.3	*52.5*	79.5	75.0	*75.9*	506.1	438.9
ATM – 100,000 people	*5.2*	3.8	4.5	*13.2*	25.3	21.8	*23.1*	45.4	39.4	*50.4*	65.7	63.2	*67.0*	108.8	102.5
Loan acct – 1000 people	*28.8*	18.0	23.4	*95.1*	104.7	101.4	*150.3*	201.7	188.8	*419.8*	362.1	374.9	*307.0*	612.5	490.3
Loan income ratio	*41.6*	39.7	40.9	*22.0*	12.6	15.5	*10.3*	7.3	7.9	*7.3*	4.9	5.4	*3.8*	4.3	4.1
Deposit acct - 1,000 people	*202.9*	167.0	187.4	*383.4*	730.8	591.9	*784.0*	688.5	716.6	*692.0*	1112.8	1022.6	*1018.0*	1410.0	1242.0
Deposit income ratio	*3.1*	3.5	3.2	*2.5*	1.1	1.6	*1.2*	4.9	3.9	*2.1*	0.8	1.1	*0.7*	1.6	1.2
% Check usage +15	*3.1*	2.5	2.9	*3.8*	3.0	3.3	*7.3*	3.7	4.7	*5.1*	5.5	5.4	*12.6*	25.9	23.7
% Credit card +15	*1.6*	1.9	1.7	*2.1*	5.2	4.1	*6.8*	10.3	9.4	*15.2*	19.4	18.4	*31.3*	51.9	48.5
% Electronic pay +15	*1.7*	1.7	1.7	*2.4*	2.5	2.5	*6.5*	7.9	7.5	*7.3*	21.1	17.8	*17.5*	61.5	54.1
% Mobile phone pay +15	*2.7*	1.7	2.3	*2.1*	2.3	2.2	*5.7*	3.4	3.9	*2.7*	2.4	2.5	*12.8*	11.2	12.3
Panel C: Other Traits															
GNI per capita [$US]	*812.0*	831.7	821.3	*2361.0*	2600.7	2535.9	*5931.0*	5701.5	5763.5	*10860.0*	14314.3	13587.1	*45853.3*	49678.4	49074.5
Population density	*151.9*	137.2	145.1	*137.6*	124.8	128.5	*170.9*	101.5	119.7	*84.4*	129.8	120.2	*394.8*	1281.3	1141.3
% Muslims	*0.72*	0.09	0.42	*0.79*	0.03	0.25	*0.87*	0.08	0.29	*0.62*	0.02	0.15	*0.76*	0.03	0.15

Table 2

Financial Development (Depth and Breadth) Statistics of the OIC Countries by GEOGRAPHICAL REGIONS

Indicators	Middle East-North Africa			Sub Saharan Africa			Europe-Central Asia			South Asia			East Asia - Pacific			Latin America-Caribbean			North America
	OIC	NOIC	World	OIC	NOIC	World	OIC	NOIC	World	OIC	NOIC	World	OIC	NOIC	World	OIC	NOIC	World	World
Number of countries	*18*	2	20	*20*	27	47	*8*	42	50	*4*	4	8	*3*	25	28	*2*	32	34	3
GDP per capita $US	*17250*	30549	18580	*1458*	3335	2537	*6100*	29599	25839	*2646*	2044	2345	*19225*	16421	16722	*7300*	9369	9247	53651
PA: Financial depth																			
% Private credit	*46*	110	55	*16*	28	22	*33*	103	95	*37*	42	40	*55*	71	69	*29*	43	43	53
% Liquid liabilities	*74*	155	81	*31*	39	35	*40*	89	83	*53*	61	57	*74*	92	90	*51*	55	55	70
% Bank deposits	*64*	117	72	*23*	36	30	*37*	78	74	*43*	53	48	*71*	79	78	*53*	49	49	81
% Bank assets	*67*	129	76	*22*	35	28	*46*	116	108	*54*	52	53	*62*	83	80	*45*	54	53	62
% Stock mrkt cap	*49*	55	50	*24*	38	34	*21*	42	41	*17*	42	32	*95*	96	96		41	41	115
PB: Financial Breadth																			
% Acct at a financial inst.	*40*	93	45	*15*	26	21	*22*	74	65	*20*	43	31	*43*	67	64		34	34	92
Bank brnch - 1,000 km^2	*20*	296	47	*3*	16	10	*12*	37	33	*82*	32	57	*13*	116	105	*0*	38	36	6
Bank brnch-100000 people	*13*	29	15	*4*	9	7	*16*	35	32	*9*	14	12	*15*	17	17	*10*	29	28	29
ATM - 1,000 km^2	*45*	631	107	*5*	25	17	*23*	90	80	*110*	31	70	*54*	413	374	*1*	89	84	8
ATM – 100000 people	*29*	92	36	*5*	17	12	*36*	77	71	*10*	15	12	*60*	58	58	*31*	53	52	223
Loan acct – 1000 people	*135*	909	195	*32*	63	53	*228*	346	317	*63*		63	*469*	241	294		259	259	
Loan income ratio	*16*		16	*32*	27	29	*4*	4	4	*37*		37	*4*	9	7		4	4	
Deposit acct - 1,000 people	*529*	1070	612	*162*	429	310	*689*	1406	1150	*591*		591	*1536*	706	775		737	737	
Deposit income ratio	*2*	2	2	*3*	2	3	*1*	1	1	*1*		1	*1*	8	7		1	1	
% Check usage +15	*9*	46	13	*3*	4	4	*2*	11	9	*5*	4	5	*4*	12	11		3	3	60
% Credit card +15	*14*	66	19	*2*	5	4	*9*	28	25	*1*	2	1	*6*	28	25		12	12	67
% Electronic pay +15	*9*	44	13	*3*	4	4	*3*	37	31	*0*	1	1	*8*	31	28		6	6	67
% Mobile phone pay +15	*5*	13	5	*3*	3	3	*8*	3	4	*1*	2	1	*1*	3	2		1	1	
PC: Other Traits																			
GNI per capita $US	*18281*	27995	19304	*1385*	3112	2377	*5875*	28923	25235	*2583*	2023	2303	*17237*	15391	15575	*6820*	9155	9013	71010
Population density	*217*	858	278	*86*	117	103	*62*	520	456	*675*	246	460	*103*	1153	1066	*4*	205	195	448
% Muslims	*0.89*	0.09	0.82	*0.61*	0.08	0.31	*0.90*	0.07	0.19	*0.96*	0.07	0.52	*0.75*	0.02	0.08	*0.11*	0.00	0.01	0.01

Table 3

Correlation Among Financial Development Indicators with Economic Development and Percentage Muslim Population

	GDPpc	Privcrd	Liqlia	Bnkdep	BnkTA	Stockmc	Acct	Brnkm	Brnpc	ATMkm	ATMpc	LoanAcct	LoanInc	DepAcct	DepInc	%Check	$CrdCrd	%ElctrPay	%MobPay
Privcrd	.68***																		
Liqlia	.59***	.88***																	
Bnkdep	.62***	.86***	.93***																
BnkTA	.69***	.97***	.91***	.89***															
Stockm	.38***	.43***	.48***	.50***	.47***														
Acct	.83***	.81***	.71***	.75***	.81***														
Brnkm	.42***	.58***	.56***	.59***	.61***	.30***	.53***												
Brnpc	.68***	.65***	.58***	.63***	.64***	0.15	.66***	.64***											
ATMkm	.59***	.69***	.62***	.63***	.72***	.38***	.67***	.89***	.60***										
ATMpc	.86***	.75***	.61***	.64***	.75***	.28***	.82***	.48***	.74***	.68***									
LoanAcct	.80***	.63***	.51***	.56***	.62***	0.16	.69***	.44***	.72***	.61***	.87***								
LoanInc	-.70***	-.42***	-.23**	-0.29**	-.38***	0.13	-.55***	-.39***	-.58***	-.52***	-.74***	-.88***							
DepAcct	.74***	.68***	.52***	.65***	.70***	0.09	.78***	.51***	.79***	.64***	.83***	.77***	-.64***						
DepInc	-.53***	-.29**	-0.08	-0.17	-.29**	0.32**	-.54***	-.40***	-.57***	-.47***	-.58***	-.43***	.65***	-.78***					
%Check	.49***	.48***	.44***	.50***	.50***	.37***	.58***	.32***	.35***	.40***	.42***	0.17	0.03	.34***	-0.19				
$CrdCrd	.88***	.70***	.58***	.64***	.69***	.40***	.87***	.46***	.69***	.62***	.83***	.73***	-.62***	.71***	-.54***	.56***			
%ElctrPay	.84***	.71***	.60***	.63***	.70***	.38***	.91***	.40***	.63***	.56***	.81***	.65***	-.55***	.71***	-.56***	.57***	.88***		
%MobPay	.32***	.23**	0.15	.26***	.26**	0.21*	.45***	0.10	0.16*	0.16*	.25***	0.03	0.06	.37***	-.30*	.46***	.43***	.56***	
MusPer	-.39***	-.19***	-0.12	-0.13*	-0.15*	0.13	-.29***	-0.13*	-.31***	-.16**	-.31***	-.24***	.28***	-.31***	.36***	0.06	-.36***	-.33***	0.02

CONCLUSIONS

Nearly 75% of the Muslim adult population is unbanked. In other words, the fraction of adults with an account in any financial institution in the OIC member countries is about 26%. This implies that access to financial services is still a privilege in the Islamic world, confined to only wealthier and more connected segments of society. However, in advanced countries, the issue of financial exclusion has been eradicated from the public sphere, like malaria and tuberculosis of the past. The level of financial access is 100% in Netherland, 99% in Sweden, 97% in Germany and 96% in France and Canada. The average inclusion in the OECD countries is over 90%. However, the OIC members are lagging behind the world in almost all financial development statistics, in terms of both depth and breadth.

The state of finance in Islamic world should certainly be recorded and further studied to determine its causes and draw some lessons for the future. Recent theoretical and empirical literature shows that financial development (depth) and financial access (breadth) are not only pro-growth but also pro-poor in both absolute and relative terms. The countries with more developed financial systems both in terms of depth and breadth tend to have higher growth rates, alleviate poverty, and mitigate income inequality faster.

If examined from a fine angle, the excluded represent forgone opportunities to expand the economic pie and individual slices for everyone, including the included. So, what can be done to broaden access to financial services and raise opportunities for all in the Islamic world? Before answering this vital question and outlining policy prescriptions, one first should ask another vital question. What are the reasons for the financial exclusion?

We need to remember that *use* of financial services is distinct from *access* to financial services. Non-users of formal financial services are either voluntarily or involuntarily excluded. Some people may opt out using such services voluntarily although they have no access issues. Voluntarily excluded people may choose not to use financial services for cultural or religious reasons or simply they may refuse to use them due to lack of need or demand. On the other hand, some people are involuntarily excluded; i.e., they wish to use financial services but they cannot access them for various reasons.

Some people are screened out by banks because they do not qualify due to high risk or insufficient income. In some extreme cases, people are refused by lenders for no other reason than their ethnic background, gender, religion or age. Sometimes, financial institutions may lack adequate transaction technology or infrastructure to accommodate the people at the fringes, as serving them now may be prohibitively costly and risky. Lastly, some people simply cannot afford financial services due to high minimum balances/fees, or current services may not be tailored to their needs. Thus, policymakers who wish to expand financial access probably may not be able to do much if certain people are rightly excluded due to their high chance of default. However, they can certainly take some actions against discrimination, insufficient informational and contractual infrastructure, and high provisional costs of financial services.

In this study, we examine the state and determinants of financial development in the OIC countries. Specifically, what excludes three out of four Muslims from accessing financial services? For involuntary exclusion, four possibilities may exist: affordability, insufficient income and high-risk profile of potential clients, discrimination, or weak contractual and informational frameworks. To answer the question, we must trace the flow of money. Total assets of banks in the Islamic world are only half of their GDP. The OIC members lag most countries in financial depth. Either financial institutions or financial markets channel monies of modern societies. The financial markets in the Islamic world do not seem to be the secondary address for the money. One cannot help but ask then, if money is not kept in banks or markets in these countries, where is it? The subsequent critical question is why money is escaping from the system?

Part of the flight from banks may spring from socio-economic reasons. Religious or cultural concerns may still keep away some groups from the 'mundane' financial institutions; despite the fact that the spread of zero-interest financial institutions in the world in recent years has notably shrunk this unbanked segment of the society. More can be done on this front by introducing more financial services and products compatible with religious concerns.

Islamic jurists could be called into service to mitigate the theological concerns of the pious and help invent new products to domesticate still untapped funds. As for discrimination, there are some concerns in certain circles that rural money is collected and loaned in urban areas. Moreover, holding banking structure is still a prevalent organizational form in the OIC members. Various major banks are under the control and ownership of business holdings and conglomerates or state.

Many Muslim entrepreneurs are complaining that some banks turn them down, if they have projects to enter a business line or industry where the parent company of the bank is doing business as well. As for injustices on the basis of religion, gender, age, or ethnicity, it is hard to judge without concrete evidence. We need more investigation. However, the bureaucracy of opening an account or obtaining a loan at the OIC members is much more problematic as compared to other countries (Isik, 2009).

The red tape observed in many Muslim countries could be some, albeit weak, sign of discriminatory tendencies. Legislations in the U.S., like the Community Reinvestment Act, which bars *red-lining* certain regions, and the Equal Credit Opportunities Act, which prohibits discrimination, could be enacted in the Muslim world to protect the innocent. Also, employing bank clerks speaking local dialects, or representing some ethnicities could help. Alternatively, the real problem could be a matter of poverty or financial illiteracy, not access, for certain groups. Then, financial or general education policies gain importance.

The large capital drain from the financial system at the OIC countries also signifies the trust issues inflicting their societies. Cash is still the most prominent payment instrument. Check payments are not common. Thus, people carry big stacks of cash around to settle daily transactions. Furthermore, bank failures; economic crises, social unrest and security issues do not help. Hence, the severe anorexia of Muslim citizens to deal with banks may be engraved in their psyche after a number of very costly and frequent mass bank failures, resulting mainly from outright fraud of bank owners and managers.

The lack of an effective legal and contractual system that will timely resolve conflicts between economic agents may be keeping many Muslims at bay. Market frictions like information asymmetries and agency problems can only be overcome by constructing a credible legal system, effective oversight, prudent regulations, transparent government and corporations, reliable accounting and auditing practices, and market discipline.

Moreover, inflationary fears of the past could still be in the public subconscious, which might be encouraging the holding of outside money like gold. Then, prudent macroeconomic policies become instrumental. There are also some signs that many banking services are not affordable for an average Muslim citizen. Fees charged on savings accounts, mortgage, business, and SME loans are considerably above world medians. This can be the result of weak competition among the banks at the OIC members.

According to many pundits of financial development and access, public efforts in the long run should be geared towards improving the *enabling institutional environment*, where all agents would feel safe to play and deal with strangers. However, for those who are impatient and suffering from reform fatigue, the best medicine in the short run is a *stiff competitive environment*, which encourages self-discipline in everyone.

REFERENCES

[1] J. K. Banerjee, A. and Newman, A., (1993). Occupational Choice and the Process of Development. *Journal of Political Economy* 101, 274-98.

[2] Beck, T. and Levine, R., (2005). Legal Institutions and Financial Development, in: Claude Menard and Mary Shirley, eds., *Handbook of New Institutional Economics*, Kluwer Dordrecht (The Netherlands).

[3] Beck, T., Demirguc-Kunt, A. and Levine, R., (2004). Finance, Inequality and Poverty: Cross-Country Evidence. World Bank Policy Research Working Paper 3338.

[4] Beck, T., Demirguc-Kunt, A. and Martinez Peria, M.S., (2005). Reaching Out: Access to and Use of Banking Services Across Countries, World Bank Policy Research Working Paper 3754.

[5] Beck, T., Demirguc-Kunt, A. and Martinez Peria, M.S., (2006). Banking Services for Everyone? Barriers to Bank Access and Use Around The World, World Bank Policy Research Working Paper 4079.

[6] Beim, D. O. and Calomiris, C. W. (2001). Emerging Financial Markets. New York: McGraw-Hill Companies.

[7] Claessens, S., (2006). Access to Financial Services: A Review of the Issues and Public Policy Issues. *World Bank Research Observer*, forthcoming.

[8] De la Torre, A., Gozzi, J.C. and Schmukler, S.L. (2006). Innovative Experiences in Access to Finance: Market Friendly Roles for the Visible Hand? Latin Amrica Regional Studies Series, World Bank.

[9] Diaz-Alejandro, C.F. (1985). Goodbye Financial Repression, Hello Financial Crash. Journal of Development Economics 19: 1-24.

[10] Fukuyama, F. (1995). Trust: The Social Virtue and the Creations of Prosperity, New York: Free Press.

[11] Galor, O. and Zeira., J., (1993). Income Distribution and Macroeconomics. *Review of Economic Studies* 60, 35-52.

[12] Hanohan, Patrick (2007). Cross-Country Variationin Household Access to Financial Services, Proceeding of Access to Finance Conference, Washington DC.

[13] Isik, I. (2009). What Explains the Variations in Financial Access Across Turkey? Working Paper, William G. Rohrer College of Business, Rowan University, NJ, USA.

[14] McKinnon, R.I. (1973) Money and Capital in Economic Development. Washington D.C.: Brookings Institutions.

[15] Peachey, S., and Roe, A. (2004). Access to Finance, A Study for the World Savings Banks Institute. Oxford Policy Management.

[16] Rajan, R. and Zingales, L., (2003). *Saving Capitalism from the Capitalists*. Crown Business Division of Random House.

[17] Shaw, E. (1973). Financial Deepening in Economic Development. New York: Oxford University Press.

[18] World Bank (1998). Finance for All? Policies and Pitfalls in Expanding Access, World Bank Policy Research Report, Washington DC, USA.

[19] Williamson, J. and Mahar, M. (1998). A Survey of Financial liberalization. Princeton, NJ: Princeton University Press Essays in International Finance, No: 211, November.