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Undermining Shared Prosperity? Risk Shifting and Islamic Banking

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Contents

Managing Risk

1.Risk Transfer

2.Risk Shifting

- Concentrates economic benefits in a minority class and excludes a majority from sharing in the prosperity.

3.Risk Sharing

- increases access of lower-income groups to finance and promotes shared prosperity.

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Risk Shifting

- Tagged as a major cause of worsening economic conditions.
- Adverse distributional impact through wealth transfer.
- Associated with system-wide crises[1].
- Mitigating factors

[1] See Kroszner and Strahan (1996) and Hovakimian and Kane (2000)

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Risk Shifting and Islamic Banking

Motivation

- Axiomatically, risk shifting is absent in an ideal Islamic financial system (The Kuala Lumpur Declaration, 2012).
- Creating an opportunity for shared prosperity is a litmus test of the authenticity of Islamic banking.
- The present formation of Islamic finance has grown out of conventional finance and it uses its instruments.
- Is there evidence of risk shifting in Islamic banking?

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Research Objective

- To empirically assess risk-shifting incentives in Islamic banks and derive implications for the future of shared prosperity..

Research Questions	Methodology
1. Do Islamic banks engage in risk shifting in a systematic and significant way? 2. Do the Turkish and Malaysian Islamic bankiing iindustrıes behave differently??	- Merton (1977) and Duan et al. (1992) models. - Two-step dynamic difference GMM.

Data and Sample Size

- 347 Islamic and conventional banks in 19 OIC countries.
- The sample period spans 2002-2013.
- Bank financial statement data is taken from the Bankscope database.
- Country-level variables are derived from key World Bank global databases.

	Variable	N*T	Mean	S.D.	Min	Q25	Mdn	Q75	Max
Conventional Banks	IPP	2779	0.01	0.06	0	0	0	0	0.86
	DV	2779	65.28	15.03	1.43	58.21	68.25	74.93	156.53
	σ_v	2779	18.26	23.23	0.27	6.95	12.66	20.59	362.4
	EQ	2779	11.7	7.68	-95.94	7.69	10.44	14.27	78.97
	TA	2779	8,500	16,000	37	750	2,300	8,200	120,000
	RoA	2734	1.39	2.43	-72.44	0.81	1.44	2.15	13.2
	RoE	2731	13.62	34.06	-534.93	7.57	13.74	20.4	850.24
	Law	2779	1.78	0.59	0.08	1.23	1.89	2.37	3.04
	GDPPCG	2712	22.67	3.85	2.94	21.18	23.54	24.82	70.03
	Lerner	2045	2.28	0.15	1.81	2.19	2.24	2.4	2.62
Islamic Banks	IPP	571	0.02	0.08	0	0	0	0	0.97
	DV	571	60.29	20.41	1.3	51.63	65.23	74.47	111.08
	σ_v	571	21.6	33.34	0.36	7.19	13.09	23.73	453.57
	EQ	571	14.06	12.6	-77.21	7.52	11.19	17.53	82.61
	TA	571	5,300	9,100	20	620	2,200	5,500	75,000
	RoA	563	1.36	2.35	-12.72	0.55	1.13	1.91	21.39
	RoE	563	10.09	31.63	-573.3	5.26	11.19	17.02	101.22
	Law	571	1.96	0.68	0.16	1.23	2.26	2.51	3.04
	GDPPCG	553	21.66	4.44	2.94	19.83	22.74	24.37	37.49
	Lerner	372	2.33	0.15	1.81	2.22	2.35	2.46	2.62

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Model Specification

- $IPP^{*}_{ijt} = \beta_0 IPP^{*}_{ijt-1} + \beta_1 \sigma_v^{*}_{ijt} + \beta_2 \sigma_v^{*}_{ijt} * IB + \beta_3 \sigma_v^{*}_{jit} * X_{ijt} + \beta_4 \sigma_v^{*}_{jit} * K^{*}_{jt} + \varepsilon^{*}_{ijt}$

where,

IPP_{ijt}	*is the actuarial value of insurance premium per dollar of insured deposits for bank i at time t in country j,*
σv_{ijt}	*is asset risk,*
IB	*is a binary variable that takes the value of 1 if the bank is Islamic and 0 otherwise, and*
X_{ijt}	*is a vector of bank-specific variables*
K_{jt}	*is a vector of country-specific variables*
ε_{ijt}	*is an error term.*

- Conceptually $\beta 1$ captures the net effect of the tension between banks' incentives to increase risk and outside disciplining forces.

The superscripted * denotes forward orthogonal deviations transformation of the respective variable.

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Estimation Results

	(1)	(2)	(3)	(4)	(5)
IPP_{it-1}	0.262***	0.314***	0.234***	0.233***	0.240***
σ_v	0.137***	0.127**	0.124***	0.125***	0.121***
$IB_{xMT}*\sigma_v$	-0.0184***	-0.0304***	-0.0199***	-0.0205***	-0.0185***
$MY*IB*\sigma_v$	0.0383***	0.0243**	0.0356***	0.0415***	0.0463***
$TRK*IB*\sigma_v$	0.0482***	0.0254**	0.0501***	0.0391*	0.0110
Size* σ_v	-0.00405***	-0.00341**	-0.00374***	-0.00380***	-0.00425***
$Capital_{it-1}*\sigma_v$	-0.00137***	-0.00158***	-0.00133***	-0.00134***	-0.00112***
ROA* σ_v	-0.0134**	-0.00979	-0.0159***	-0.0159***	-0.0148***
GDP Growth* σ_v		-0.000170	-0.000220	-0.000263	-0.000746
Rule of Law* σ_v		-0.0130***	-0.000417	-0.000612	-0.000106
Stock Market* σ_v			0.0291***	0.0293***	0.0297***
Lerner Index* σ_v			-0.00813	-0.00871	-0.00150
$IB_{xMT}*Crisis*\sigma_v$				-0.000356	
$MY_{IB}*$ Crisis* σ_v				-0.00481**	-0.00479**
$TRK_{IB}*$Crisis* σ_v				-0.000564	-0.00165
CB*Crisis* σ_v					0.00357**
F	45.40	26.65	35.40	37.49	115.8

A positive coefficient on $\boldsymbol{\sigma_v}$ is consistent with observed risk-shifting.

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Post Estimation Tests

	(1)	(2)	(3)	(4)	(5)
No of observations	1769	2536	1769	1769	1769
No. of banks	286	330	286	286	286
No. of instruments	149	325	227	230	230
AR(2) test	-1.69*	-1.46	-1.38	-1.38	-1.29
Hansen test	116.52	285.48	192.91	194.68	196.59

- From an empirical point of view, estimates may, in part, justify the relative resilience of Islamic banks during the recent financial crisis (Hasan and Dridi, 2010) and hint, at the same time, at the weaknesses of the current configuration of Islamic banking, which fail to fully discipline banks' risk shifting incentives.

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Policy Implications

- Empirical evidence of risk shifting in Islamic banks.
- The present industry is undermining the contribution of Islamic finance to shared prosperity.
- Immediate remedial actions.
- Strengthening the regulatory and supervisory framework (IFSA 2013, Malaysia)
- Market-oriented approach to incentivise risk sharing.
- The true opportunity cost of forestalling Malaysia's mega Islamic bank proposal.

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Thank you