



**Moral Values and financial Markets:
Assessing the resilience of Islamic Finance
Against Financial Crisis
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**Capital Structure, Efficiency and Governance:
a Comparison Between Islamic and Western Banks**

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Stability and Resilience of the Islamic banking system to the 2007-2008 crisis

After the crisis of 1929: Chicago Reform Plan



Banking system divided into two components:

- 1) depository component with 100 per cent reserve requirement;
- 2) investment component where deposits were considered as equity shares and were remunerated with dividends

Fisher (1933): debt/equity responsible of booms and recessions (over-indebtedness → over-investment → over-speculation)

Minsky (1992): over-leverage due to financial innovation would bring to a collapse of the system

IDEA: debt in relation to equity plays an important role as a cause of financial crises. **Recapitalization** can also be a cure. It has been generally recommended by banking regulators after the 2007-2008 crisis.

Same effects in all types of banks?

Capital structure and firm's performance (in general)

Agency costs approach:

- \uparrow equity/debt \Rightarrow firm performance \uparrow
lower expected costs of financial distress, the cost of debt decreases, monitoring (Jensen and Meckling, 1976, and others).
- \uparrow equity/debt \Rightarrow firm performance \downarrow
managers are less pressured to generate cash flows to pay fixed returns on debt (Jensen, 1986, and others).

... and banks' performance (in particular)

Firms \rightarrow Banks \Rightarrow Debt \rightarrow Deposits;

... and Islamic banks' performance

As in conventional banking, it is not clear whether recapitalizing Islamic banks has positive or negative effects.

However, since in Islamic banks several depositors are closer to shareholders we should observe that, whatever its sign, the impact of higher equity/deposits on performance should be smoothed as compared to conventional banking.

- equity ↑: the risk premium on deposits may not decrease since equity does not insure depositors as much as in conventional banks
- equity ↑: managers may not feel a lower pressure to pay - fixed- returns to depositors

Average Value of the Variables (2000-2008)

	European	Islamic
Total assets (mil. Euro)	42,100	3,548
Loans/tot. assets	0.53	0.54
Oth. earning activ./tot. assets	0.41	0.32
Fixed assets/tot. assets	0.02	0.02
(Off-bal. sheet items/tot. assets)	0.15	0.22
Deposits/tot. assets	0.69	0.73
Equity/tot. assets	0.09	0.16
(Staff members/tot. assets)	0.0025	0.0017

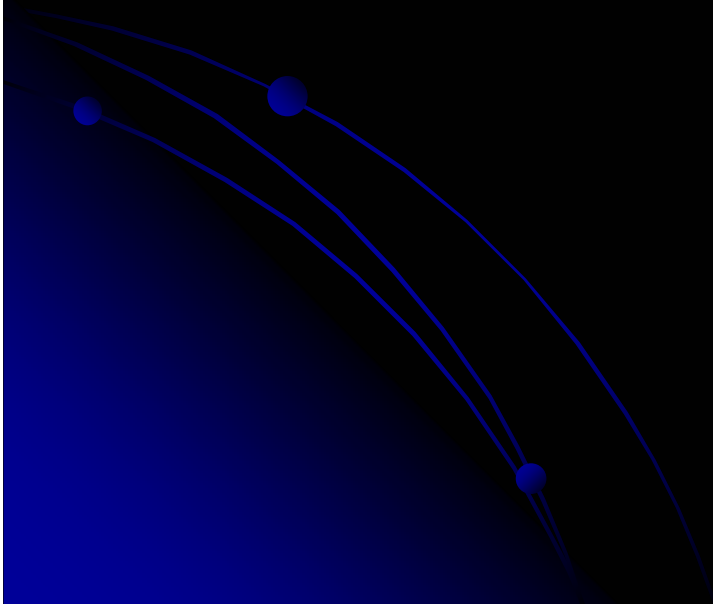
Data: Bankscope (2001-2008); commercial banks

Islamic banks: 367 observations, 158 banks, 30 countries

European banks 9,712 observations, 5,430 banks, 27 countries

Average Costs (2000-2008)

	European	Islamic
Depreciation	0.19	0.18
Interest rate	0.07	0.05
Staff wages (Euro/year)	187,960	51,780



Performance  Efficiency

Efficiency measurement: Stochastic Cost Frontier Analysis

$$c(y_{ijt}, w_{ijt}, \theta) \leq E_{ijt}$$

where:

i = bank, j =country, t = year

E_{ijt} = total expenditure

c = deterministic component (cost frontier)

y_{ijt} = vector of outputs: net loans,
other earning assets,
off-balance sheet transactions

w_{ijt} = unitary cost of inputs: interest rate (on deposits),
depreciation rate (on fixed-assets),
average wage (staff)

θ = parameters to be estimated

Translog specification of the cost function

$$\begin{aligned}\ln E_{ijt} = & \beta_{0t} + \sum_m \alpha_m \ln y_{mijt} + \sum_n \beta_n \ln w_{nijt} + \\ & + \frac{1}{2} \sum_m \sum_h \alpha_{mh} \ln y_{mijt} \ln y_{hijt} + \frac{1}{2} \sum_n \sum_k \beta_{nk} \ln w_{nijt} \ln w_{kijt} + \\ & + \sum_n \sum_m \gamma_{nm} \ln w_{nijt} \ln y_{mijt} + u_{ij} + \varepsilon_{ijt}\end{aligned}$$

u_{ij} is the bank-specific inefficiency component (time-invariant)

$$u_{ij} = \alpha_0 + \alpha_1 x_{ij} + \alpha_j + v_{ij}$$

Regress inefficiency on a set of variables (x_{ij}):

- Equity/Deposits, Equity/Total Assets, Equity/Loans
- Other controls related to the capital structure

Dependent: cost inefficiency

European

Islamic

Loans/total assets

-0.059***

-0.050**

(0.004)

(0.022)

Other earning activ./total assets

-0.099***

-0.103***

(0.006)

(0.024)

Fixed assets/total assets

0.098***

0.071***

(0.004)

(0.026)

Off-balance sh. items/total assets

-0.020***

-0.015

(0.003)

(0.015)

Equity/total assets

-0.125***

0.000

(0.007)

(0.021)

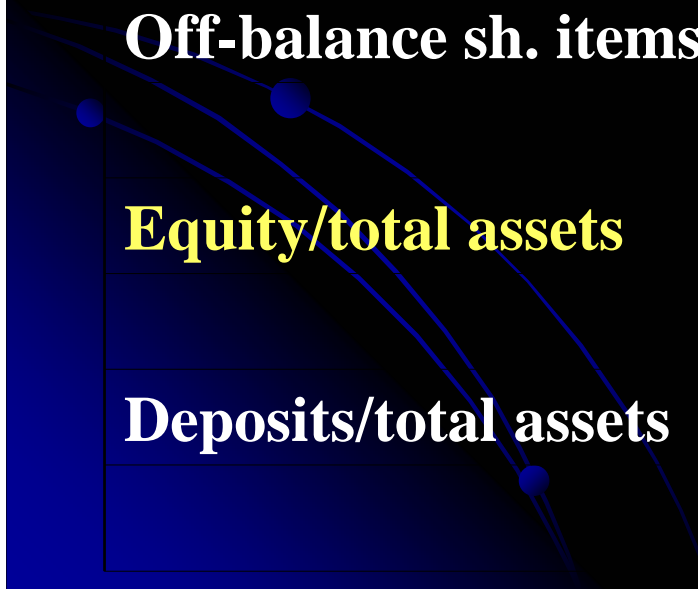
Deposits/total assets

0.254***

0.235***

(0.006)

(0.035)



Dependent: cost inefficiency

European

Islamic

Loans/other earning activities

0.050***

0.075***

(0.004)

(0.019)

Loans/fixed assets

-0.114***

-0.096***

(0.004)

(0.020)

Fixed ass./off-balance sh. items

0.124***

0.102***

(0.004)

(0.020)

Equity/deposits

-0.203***

-0.080***

(0.004)

(0.017)



Equity/deposits

Dependent: cost inefficiency

European

Islamic

Equity/loans

0.030***
(0.004)

0.022
(0.016)

Equity/other earning activities

0.033***
(0.005)

0.043**
(0.017)

Equity/off-balance sh. items

-0.000
(0.003)

-0.002
(0.013)

(Controlling for input ratios)

Dependent: cost inefficiency

European

Islamic

Equity/deposits

-0.130***
(0.004)

-0.034
(0.025)

Equity/fixed assets

-0.016***
(0.004)

0.032
(0.024)

Equity/staff members

-0.155***
(0.004)

-0.083***
(0.023)

(Controlling for output ratios)



Conclusions

- Relationship between capitalization and cost efficiency is much stronger in European (conventional) banks while it weakly affects efficiency in Islamic banks
- Motivation: different structure of deposits, i.e. depositors are not insured by shareholders
- Islamic banks have recapitalized recently. It seems that, as opposite to their Western counterparts, they do not need to further recapitalize
- Islamic banks: interbank market, relationship banking, standardized products as for activities other than lending