Variable	Definition and data source	Expected sign <sup>a</sup>
	Dependent variables	
<b>Z-score</b>	Z-score is a measure of bank's soundness. Higher value indicates higher stability and	
	higher distance from probability of default. We use natural logarithm of Z-score in order	
	to normalize the data. Data source: Bankscope database Bureau Van Dijk (BVD)	
NPL ratio	A ratio of Non-performing loan to gross loan, high value indicates higher credit risk and	
	more risky loan portfolio. Data source: Bankscope database of BVD	
<b>Equity ratio</b>	A ratio of equity to total assets, high value indicates lower loan portfolio risk and better	
	capitalization. Data source: Bankscope database of BVD	
TT 4 4 4 4 4	Variables Measuring competition and concentration	
H-statistic	Non-structural measure of competition which is the sum of elasticity of revenue with	
	respect to input prices. Higher value of H-statistics indicates higher competition and	
	lower market power. Data source: Bankscope database of BVD	
Lerner Index	Non-structural measure of competition which is a mark-up of price over marginal cost.	-
	Higher value indicates less competition and higher market power to set loan price over	
	marginal cost. Data source: Bankscope database of BVD	
HHI	Structural measure of competition which is the sum of square of market share of loan	-
	of commercial banks. Higher value indicates high concentration and market power, and	
	low competition. Data source: Bankscope database of BVD	
	Bank Level Variables	
Bank size	Log of total assets in million US\$. Data source: Bankscope database of BVD	+
Assets	Ratio of net loan to total assets indicating size of intermediation or asset composition.	-
composition	Data source: Bankscope database of BVD	
Operational	The ratio of cost to income is used to proxy bank efficiency. Data source: Bankscope	-
Efficiency	database of BVD	
Foreign	A dummy variable having value 1 if foreign ownership exceeds 50 % of total	+
Ownership	ownership. Data source: Bankscope database of BVD and bank's website	
	Regulation variables	
Deposit	A dummy variable which takes 1 for the country having explicit deposit insurance	+
Insurance	scheme otherwise 0. Data source: Barth et al.(2000,2003,2008)	
Activity	An index that takes a value from 0 to 12. Higher value shows greater regulatory	-
•	restriction on bank activities. Data source: Barth et al.(2000,2003,2008)	
index		
	Macro-economic Variables	
Inflation rate	Annual Inflation rate based on consumer price index. Data source: World bank	-
	development indicator. Data source: World Bank development indicator	
Real GDP	Annual real GDP growth rate. Data source: World bank development indicator	+
growth rate		
	A dummy variable that takes 1 if the year is 1997 to 1998, otherwise 0.	-
dummy	Data source: Authors' compilation	
	A dummy variable that takes 1 if the year is 2008 to 2009, otherwise 0.	_
dummy	Data source: Authors' compilation.	
	Instrumental variables	
	An index that takes value from 0-100 indicating the level of regulatory restrictions on	
Freedom	financial freedom of the firms. Higher value indicates more freedom and less	
Dranasts	restrictions. Data source: Heritage Foundation  An index that takes a value from 0, 100 indicating the level to which private property.	
Property	An index that takes a value from 0 -100 indicating the level to which private property	
Right	right is protected by the law. A higher score indicates more economic freedom and	
	strong protection of property right of the individuals. Data source: Heritage	
	Foundation	