# Developing Institutions versus Implementations: Evidence from US Corporate Boards during the Financial Crisis

Iftekhar Hasan

Rensselaer Polytechnic Institute and Bank of Finland

### What are institutions?

 "a set of rules, compliance procedures and moral and ethical behavioral norms designed to constrain the behavior of individuals in the interests of maximizing the wealth or utility of principals." -North (1981)

### Classification of institutions

- The degree of formality
  - Formal, such as constitutions, laws and regulations
  - Informal, such as customs and traditions
- Different levels of hierarchy
  - Regional level
  - Country level
  - Firm level
- The area of analysis
  - Economic
  - Political
  - Legal
  - Social

# Empirical evidence on the impact of institutions on development outcomes

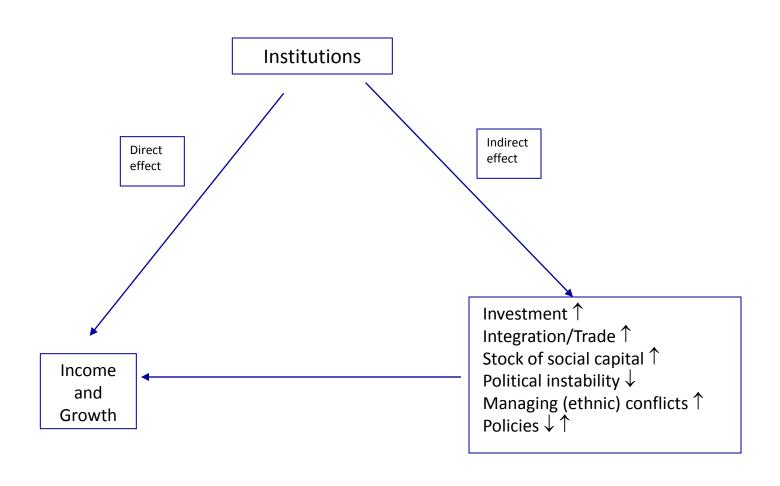
#### Macro level

- How country level institutions affect economic development and growth
- Frequently use Africa's disappointing economic performance, the East Asian financial crisis, former Soviet Union countries, and more recent financial crisis as testing samples
- Most of empirical studies show that institutions are important factor that determine economic development and growth

### Micro level

- How firm level institutions, especially corporate governance, affect firm performance and efficiency
- The results are mixed

### **How Institutions Affect Growth**



### Problems with empirical studies

- Measuring errors in country level "institutions"
  - Aggregate
  - Most are based on subjective ratings
- Data and estimation problems
  - Simultaneity and endogeneity
- Interpretation and policy implications
  - Relative importance of institutions compare to other factors

### What I am going to talk about

- The gap between developing institutions and implementing them
- Developing institutions is necessary but not sufficient
- Without appropriate and effective implementations, institutions are just "check the box"

## Why I emphasize the implementation of institutions?

- Do US institutional models fit all countries?
   Especially developing countries?
- Even within the US, We also witnessed the failures of many institutions
- I will use one of my recent research works to support my opinion

### Background of my research

- Corporate boards are the most important internal corporate governance mechanism that monitor management in fulfilling the mandate to protect shareholder interests (e.g., Fama and Jensen, 1983 and Hermalin and Weisbach, 2003).
- However, in reality, most corporate boards fail to fulfill their watchdog role
- A lot of criticisms from both academia and regulators point out that boards lack of independence from the CEOs
- The increased attention on the weakness of corporate boards has further been motivated by the accounting scandals, such as Enron and WorldCom, from 2001 to 2002

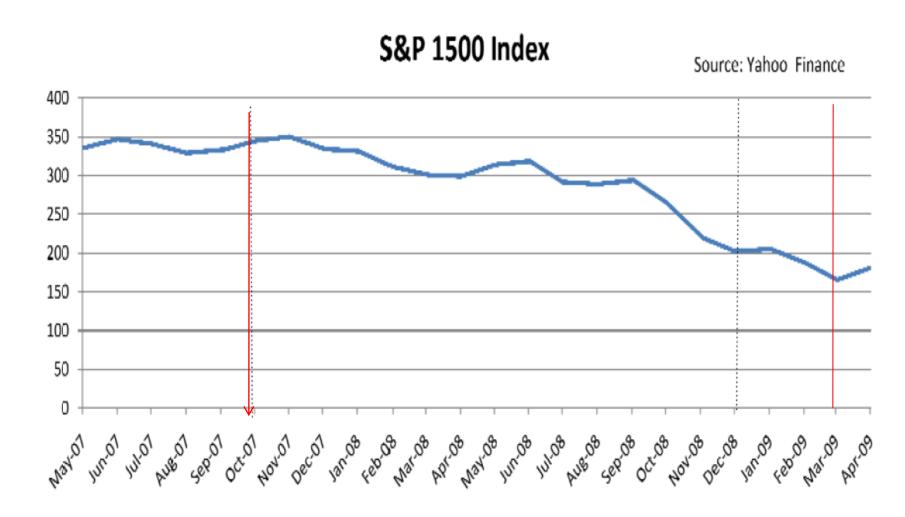
### SOX after financial scandals

- July 2002, the US congress passed the Sarbanes— Oxley Act (SOX), which set new and enhanced standards for boards of directors
  - increasing the independence of corporate boards
  - requiring financial experts on boards
- Corporate boards have become more independent and more financial experts have joined the boards (Linck et al. (2008))
- Have the governance problems been solved?
  - We empirically test it using the current financial crisis as an natural experiment

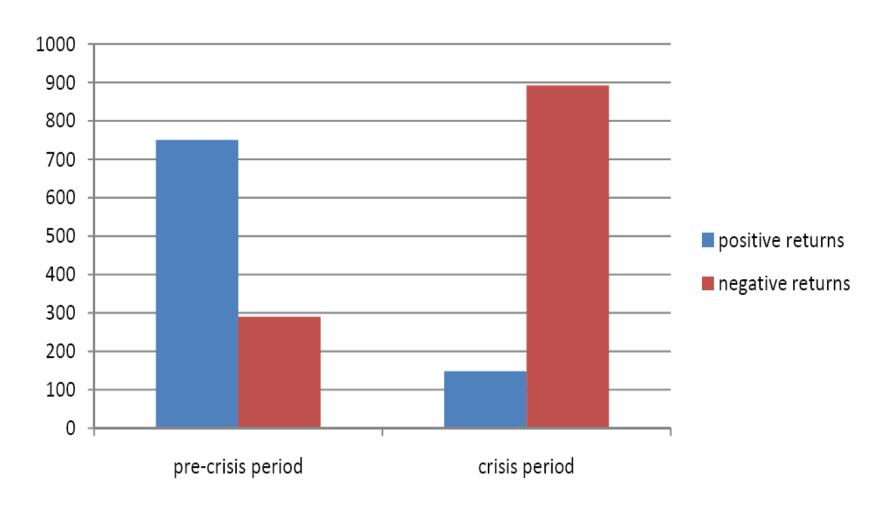
# An example: Where was Lehman's board? (WSJ: SEP 15, 2008)

- "Nine (of ten) are retired. One is a theater producer, another a former Navy admiral. Only two have experience in the financial-services industry"
- "One wonder how and why this board let its long-time chairman and patron, Richard Fuld Jr., cling to both hope and power"
- "How much was Lehman's board monitoring the company's on-going risk? In both 2006 and 2007, the risk committee of Lehman's board met twice each year"

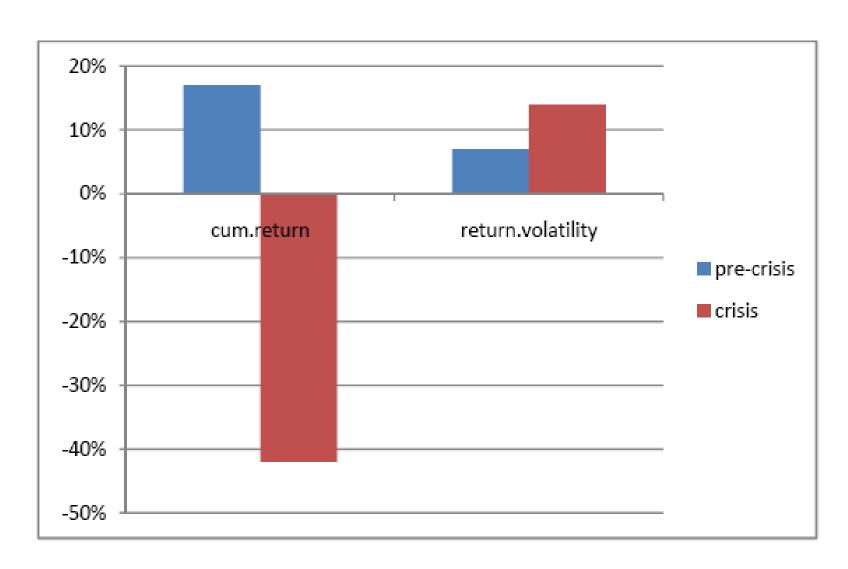
### S&P 1500 index during the financial crisis



### Positive or negative stock returns during the pre-crisis period and the crisis period (S&P 1500)



### Cumulative stocks returns and return volatility in the crisis period and before crisis period



### **Key Variables**

### Firm stock performance

 Cumulative stock returns (buy and hold return) over the crisis period (October 2007 to March 2009)

#### Board of directors

- Board independence
  - An independent director as a board member who is not a past or present employee of the firm and who is not affiliated with the firm through business ties or family ties.
- Board true independence
  - A true independent director is an outside director who is not selected by the current CEO
- Financial experts
  - Insider financial experts include the companies' CFOs, accountants, treasurers, and VPs
    of finance
  - Outside financial experts refer to outside directors with backgrounds in commercial banking, investment banking, hedge funds, mutual funds, insurance, corporate law, accounting, auditing, etc

#### Control variables

- Firm size; leverage; M/B; Prior profitability; Governance index
- Industry effect

### Data sources

- Monthly stock data: the Center for Research in Security Prices (CRSP)
- Corporate boards data: the Investor Responsibility Research Center (IRRC)
- Accounting and firm-specific data: Compustat database
- CEO information: ExecuComp

### **Summary statistics**

Variables	Obs	Mean	Std. Dev.	Min	Max
Stock Performance					
Cum. Returns (Crisis)	876	-0.417	0.437	-3.156	0.825
Cum. Returns (Pre-Crisis)	876	0.174	0.302	-1.191	1.828
Return Volatility (Crisis)	876	0.138	0.052	0.036	0.370
Return Volatility(Pre-Crisis)	876	0.073	0.029	0.021	0.211
Board Structure					
Independence	876	0.777	0.113	0.333	1.000
True Independence	876	0.601	0.271	0.000	0.941
Board Size	876	9.142	2.166	4.000	18.000
Duality	876	0.533	0.499	0.000	1.000
Other Board Characteristics					
Financial Expert (Dummy)	876	0.473	0.495	0.000	1.000
Financial Expert	876	0.674	0.893	0.000	5.000
Percentage of Financial Experts	876	0.075	0.101	0.000	0.667
Academic (Dummy)	876	0.242	0.428	0.000	1.000
Woman (Dummy)	876	0.689	0.463	0.000	1.000
Meeting	214	8.060	3.920	3.000	25.000
Less Attendance (Dummy)	876	0.083	0.276	0.000	1.000
Interlock (Dummy)	876	0.006	0.076	0.000	1.000
Shareholding	876	0.077	0.161	0.000	1.000
Age	876	61.157	3.729	46.000	73.833
Tenure	876	10.955	3.663	1.000	29.143
Directorship	876	0.932	0.525	0.000	2.636

### Main Model

$$\begin{aligned} \textit{Crisis\_Period\_Return} &= \alpha + \beta_1(\textit{Board\_Variable}) + \beta_2(\textit{Firm\_Size}) + \beta_3(\textit{Leverage}) \\ &+ \beta_4(\textit{M/B}) + \beta_5(\textit{ROA}) + \beta_6(\textit{CEO\_Tenure}) + \beta_7(\textit{Segment}) \\ &+ \beta_8(\textit{Beta}) + \beta_9(\textit{G\_Index}) + \beta_{10}(\textit{Industry\_Dummies}) + \varepsilon \end{aligned}$$

# Board Independence and firm stock performance during the crisis

	(1)	(2)	(3)
Board Structure			
Independence	0.030		
	[0.39]		
True Independence Board (Dummy)		0.052**	
		[2.53]	
True Independence			0.092***
			[2.65]
Firm Characteristics			
Log (Assets)	0.006	0.001	0.001
	[0.96]	[0.07]	[0.04]
Leverage	-0.267***	-0.272***	-0.267***
	[4.59]	[4.74]	[4.64]
M/B	0.032***	0.033***	0.033***
	[3.51]	[3.59]	[3.65]
ROA	-0.266**	-0.253**	-0.252**
	[2.07]	[1.99]	[1.98]
CEO Tenure	0.001	0.001	0.001
	[0.80]	[1.36]	[1.38]
Segment	-0.003	-0.004	-0.003
	[0.66]	[0.78]	[0.73]
Beta	-0.181***	-0.180***	-0.180***
	[9.62]	[9.64]	[9.58]
G-index	-0.004	-0.006*	-0.006*
	[1.18]	[1.67]	[1.66]
Control For			
Industry Effect	Y	Y	Y
Observations	876	876	876
Adjusted R-squared	0.20	0.21	0.21

# Financial experts on boards and firm stock performance during the crisis

	(1)	(2)	(3)	(4)	(5)
Financial experts on boards					
Financial Expert (Dummy)	0.034**				
	[2.08]				
Inside Financial Expert (Dummy)		-0.005			
		[0.25]			
Outside Financial Expert (Dummy)			0.052***		
			[3.14]		
Number of Outside Financial Expert				0.037***	
				[3.87]	
Ratio of Outside Financial Expert					0.309***
					[3.63]
Firm Characteristics					
Log (Assets)	0.005	0.005	0.005	0.005	0.007
	[0.92]	[0.91]	[0.84]	[0.85]	[1.21]
Leverage	-0.269***	-0.270***	-0.270***	-0.282***	-0.280***
	[4.69]	[4.64]	[4.75]	[4.93]	[4.89]
M/B	0.032***	0.032***	0.032***	0.032***	0.032***
	[3.59]	[3.52]	[3.63]	[3.61]	[3.58]
ROA	-0.253***	-0.266**	-0.247**	-0.243**	-0.245*
	[1.98]	[2.07]	[1.96]	[1.90]	[1.91]
CEO Tenure	0.001	0.001	0.001	0.001	0.001
	[0.98]	[0.94]	[1.01]	[1.04]	[1.04]
Segment	-0.003	-0.003	-0.003	-0.003	-0.002
	[0.73]	[0.66]	[0.66]	[0.59]	[0.53]
Beta	-0.181***	-0.181***	-O.181****	-0.180****	-0.181***
	[9.69]	[9.63]	[9.72]	[9.69]	[9.70]
G-index	-0.004	-0.004	-0.004	-0.004	-0.004
	[1.19]	[1.26]	[1.16]	[1.24]	[1.14]
Control For					
Industry Effect	Y	$\mathbf{Y}$	Y	Y	Y
Observations	876	876	876	876	876
Adjusted R-squared	0.21	0.20	0.21	0.21	0.21

### Take away

- Building a governance system is necessary for good firm performance
- However, building institutions is not sufficient for good outcomes
- Our study show that the efficacy of corporate boards could be reduced by
  - Incentive problem: Whether boards are truly independent from the CEOs
  - Ability problem: whether directors have necessary financial knowledge to monitor and advise the CEOs

### Summary

- Building institutions are necessary, but not sufficient
- To make them work well, we need to effectively implement them
- Future research should pay attention on how the implementations of institutions, not only the developments of institutions affect economic development, growth and performance