

# 14.75 : Corruption Lecture 4

Ben Olken

- Do we care?
  - Magnitude and efficiency costs
- The corrupt official's decision problem
  - Balancing risks, rents, and incentives
- Embedding corruption into larger structures
  - The IO of corruption: embedding the decision problem into a market structure
  - **Corruption and politicians**
    - **How politicians are corrupt: political influence on state firms**

# Value of political connections

Fisman 2001: "Estimating the value of political connections"

- Setting: Indonesia under Soeharto
- Empirical idea:
  - Use stock market event study to gauge the "market value" of political connections to Soeharto
  - Idea: when Soeharto gets sick, what is the effect on stock price of Soeharto-connected firms relative to unconnected firms
    - *"Whenever Mr. Soeharto catches a cold, shares in Bimantara Citra catch pneumonia" – Financial Times*
  - So when Soeharto gets sick, we compare the change in stock market value for connected vs. unconnected firms.
- What does this tell us? Why is this still perceptions? Does this buy us anything over just asking people?

- Data on connections to Soeharto
  - Indonesian political consultancy rates each firm on scale of 0-4 of how close they are to Soeharto
  - Examples of "4" firms are those owned by Soeharto's children, Soeharto's cronies from childhood, and his relatives
- Data on dates of 6 Soeharto health shocks from Lexis-Nexis
- Then run a stock market event study for each event

$$R_{ie} = \alpha + \rho POL_i + \varepsilon_{ie}$$

- Since events are heterogeneous, measures total effect of event with net return of Jakarta stock exchange ( $NR(JCI)$ ), then estimates

$$R_{ie} = \alpha + \rho_1 POL_i + \rho_2 NR_e(JCI) + \rho_3 POL_i \times NR_e(JCI) + \varepsilon_{ie}$$

# Results

Event by event

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=a U[ Yg fYa cj YX Xi Y'fc 'Vtdnf][ \hfYghf]W]cbg" GYY. ': ]ga Ubz F Uma cbX""9ghja Uhjb[ 'hY J U'i Y:cZDc']h]W'  
7cbbYVW]cbg""5a Yf]Wlb'9Wtbc a jWF Yj jYk' - %bc"( 'fB,$$%L' %$- )!%$&"  
HUV'Y '&'! '9ZZYVh'cZDc']h]W' 7cbbYVW]cbg'cb'7\Ub[ Yg ]b'G\UFY Df]Wz GYdUfUH'9ghja Uh]cb'zcf'9UW'9j Ybh  
HUV'Y' '! '9ZZYVh'cZDc']h]W' 7cbbYVW]cbg'cb'7\Ub[ Yg ]b'G\UFY Df]W'
```

# The value of connections

- Need to examine the counterfactual event where Soeharto died and firm connections went to 0.
  - Fisman uses JCI return to benchmark this, since JCI also declines whenever Soeharto gets sick
  - Specifically, he asked investment bankers what would happen to JCI if Soeharto died and value of connections went to 0 – their estimate was a decline of 20%
  - This implies that coefficient on *POL* would be  $.28 * -20 - .19 = -5.8$  in such a scenario.
  - So for a firm with maximum connections ( $POL = 4$ ), Soeharto's death would reduce firm value by about 23 percent.
- What do we infer from this?

# An international comparison

Fisman, Fisman, Galef and Khurana (2006)

- One can repeat the same exercise in different countries to gauge the value of political connections in that country
- Fisman et al. (2006) do the exact same exercise in the US– they look at the value of connections to Dick Cheney
- Definitions of connections:
  - Halliburton (Cheney was CEO)
  - Board ties (Cheney was on board, or overlap with Halliburton's board)
- Events:
  - Heart attacks
  - Self-appointment as VP-nominee
  - Changes in probability of Bush-Cheney victory
  - Changes in probability of war in Iraq

# Results: No detectable impact

=a U[ Yg'fYa cj YX'Xi Y'hc V&dmf][ \h'fYghf]Wjcbg" GYY. : ]ga Ubž'8Uj ]Xž'FUma cbX'>": ]ga Ubž'YhU""9gh]a Uh]b[ 'h'Y'J U'i Y  
cZ7cbbYVW]cbg'hc'J ]W!DfYg]XYbh7\YbYm""H'Y'6"9">ci fbU'cZ9Vt'ba ]W5bU'ng]g/ 'Dc ]W'h% 'bc"" 'fB\$%&Ł"  
HUV'Y '&"5j YfU[ Y'Yi W'gg'fYh fbg Zcf'7\YbYm V&bbYVWYX Z]fa g'cj Yf'h'Y'hk c!XUmdYf]cX'Zc"ck ]b[ 'Ub'Yj Ybh'h Uh  
UZZYVWg'7\YbYm]fj'UV]]mhc'dfcj ]XY'dc' ]h]W"ZUj c'fg"  
HUV'Y ""'F'Y'Uh]cbg\]d'VY'hk YYb'dfcVUV]]mhcZU'6i g\ 'j ]W'cfmUbX'Yi W'gg'fYh fbgž'UW'cgg'U""V&bbYVWYX'Z]fa gž  
cj Yf'Vch'U'cbY!XUmUbX'Z]j Y!XUmdYf]cX"  
HUV'Y (''F'Y'Uh]cbg\]d'VY'hk YYb'dfcVUV]]mhcZGUXUa f]g'W'dhi fY'UbX'Yi W'gg'fYh fbgž'UW'cgg'U""V&bbYVWYX'Z]fa g ]b  
k Uf!fY'U'hYX ]bXi gh]Ygž'cj Yf'Vch'U'cbY!XUmUbX'Z]j Y!XUmdYf]cX""""

# An empirical example

Khwaja and Mian (2005): "Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market"

- Setting: Banking in Pakistan
- Empirical questions:
  - Do state-owned banks channels rents to politically connected firms through preferential loans?
  - How socially costly is this?
- Data:
  - Every single loan in Pakistan from 1996 to 2002.
  - Includes information on identity of borrower, amount, and repayment status
  - Also includes all members of the board of directors of borrowing firm
- Political connections:
  - Match board of directors to list of all candidates for national or provincial office

- Estimation:

$$Y_{ij} = \alpha_j + \beta_1 \text{Political}_i + \gamma_1 X_i + \gamma_2 X_{ij} + \varepsilon_{ij}$$

including bank FE ( $\alpha_j$ ), firm size dummies, number of creditor dummies, city dummies, industry dummies. Convincing? Are these firms different?

- Estimation 2: compare differences between state banks and private banks:

$$Y_{ij} = \alpha_i + \alpha_j + \beta_1 \text{Political}_i + \beta_2 \text{Political}_i \times \text{Gov}_j + \gamma_1 X_i + \gamma_2 X_{ij} + \varepsilon_{ij}$$

Does this solve the problem?

- Estimation 3: use time-differences in political connections based on whether your connected politician is in office:

$$Y_{ijt} = \alpha_{ij} + \alpha_t + \beta_1 \text{WIN}_{it} \times \text{Gov}_j + \beta_2 \text{WIN}_{it} + \varepsilon_{ijt}$$

- Convincing?

- Connected firms default more with government banks, but not once fixed effects included. Does this mean there is no corruption?

⇒ U[ Yg'fYa cj YX'Xi Y'hc'Wdnf][ \h'fYgh]Wjcbg" GYY. '?\k U'Uz'5gja '=Unz'UbX'5h]ZA ]Ub" fBc'@YbXYfg': Uj cf' Dc']h]W"m7cbbYVWYX  
:]fa g3 FYbhDfcj ]g]cb' ]b'Ub'9a Yf[ ]b[ : ]bUbV]U" A Uf\_YH" H Y E i UfhYf m>ci fbU" cZ9Vt bca ]Vg %&\$ 'bc" ( 'f&\$) E. '% +%d (%%"  
HUV'Y'J. '5fY' Dc']h]W"m7cbbYVWYX:]fa g': Uj cfYX'Vm; cj Yfba Ybh'6Ub\_g'Cb'm8'8YZJi 'h'FUH  
HUV'Y'J'5fY' Dc']h]W" :]fa g': Uj cfYX'Vm; cj Yfba Ybh'6Ub\_g'Cb'm8'5VW]gg'hc'7fYX]h  
HUV'Y'J =H]a Y'GYf]Yg'HYgh'cZDc']h]W"GHfYb[ H' "

# Efficiency costs

- Calculate two types of efficiency cost
  - Deadweight loss of taxation
    - 24.8 percentage point excess default rate compared to private banks.  
 $\$3.2 \text{ billion in total lending} * 38 \text{ percent connected firms} * 24.8 \text{ percent additional default} = \$300 \text{ million}$
    - 0.40 deadweight loss implies  $\$120 \text{ million in deadweight loss} = .16 \text{ percent of GDP}$
  - Investment distortions
    - Assume private lending has standard 'market to book' returns of 2.96, and defaulted government lending has return of 1 (no productive return)
    - So  $(2.96 - 1) * \$300 \text{ million excess default} = \$588 \text{ million} = .78 \text{ percent of GDP}$ . Higher if all government lending has lower return.
- Total cost: 0.94 percent of GDP.Huge!!!

# Future directions

- Very useful – but by no means the last word on politician corruption
- In particular, a key open question is the interaction between controlling corruption and the inefficiency of corruption
  - e.g., tighter controls of politician corruption may reduce total corruption, but may increase social efficiency (Shleifer-Vishny model)
- Related questions:
  - How else do politicians steal? Bureaucratic influence, legislative influence, etc
  - More direct measures of efficiency costs
  - Relationship between legalizing some forms of corruption (e.g., campaign contributions, employment upon leaving office) and the efficiency or inefficiency of corruption

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