Seminar 5

ECON4921- Institutions and Economic Systems

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1. Besley and Persson (2009) consider two facets of state capacity, legal capacity and fiscal capacity. Explain:

a) What each of these really mean

b) What it means to invest in each of these and how it can be done

Assignment I-1a

Legal capacity

- What it means:

Assignment I-1a

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- What it means:
  - The state's capability to protect private property rights ("market supporting measures") against expropriation by other private actors
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- Meaning and means of investment
  - Investment means building of the infrastructure that can support property rights
  - In the paper: "court system, employing judges, and registering property"
  - Further aspects: Education of judges, police force, ...

Assignment I-1b

Fiscal capacity

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Assignment I-1b

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- Meaning and means of investment
  - Investment means building up a tax collection administration, and a monitoring system that makes hiding income more difficult

Assignment I-2

2. In their model, there are two groups, A and B. What would change in the model if there was only one group? How would you interpret this change to the model?

Assignment I-2

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  Contrast to the two-group model: no redistribution and no taxation in the low α case (redistribution in the model happens along group and not income lines)
- There is always investment in both state capacities

  Contrast to the two-group model: neither underinvestment nor overinvestment in fiscal capacity (and legal capacity)

Assignment I-3

3. Explain why high political stability may enhance a state's ability to expand its capacity.

Assignment I-3

Higher political stability means:

- A group is more likely to remain in power
- That group is more likely to enjoy the returns of its investment in state capacity
- and less likely to experience redistributes away from itself by the other group

Assignment I-4

4. What empirically testable predictions does the model give?

Assignment I-4

Many predictions:

- Proposition 4: Countries with higher wealth (pledgeable wealth held by agents with high return) have larger state capacity
- Proposition 5: Higher expected demand for public goods increases investment in state capacity
- Proposition 6: Greater political stability increases state capacity
  - Effect should be stronger in less representative political systems
- Proposition 7: A more representative political (democracy, parliamentary, proportional) system raises investment in state capacity

Assignment I-4

Many predictions continued:

- Proposition 8 (valid under additional assumptions $\sigma^A = \sigma^B$): In a more unequal society in terms of wealth distribution
  - If the rich are in power: investment in fiscal capacity is lower and investment in legal capacity higher
  - If the poor are in power: investment in fiscal capacity is higher and investment in legal capacity lower
- Economic growth:
  - Legal capacity, via financial deepening can cause growth (but there is also reverse causality: proposition 4)
  - Possibly negative (inequality driven), zero (no investment equilibrium) or positive *correlation* (driven by prop 4-7) between fiscal capacity and growth

Assignment I-5

5. Sánchez de la Sierra (2017) argues that the settling of stationary bandits, a primitive form of state creation, is more likely where efficient taxation is possible. Explain briefly how he tests this hypothesis and what he finds [Exam question 2015]

Assignment I-5

Case study of two minable resources which differ across the dimension of taxability: gold and coltan

- Coltan: bulky mineral with a low price to weight ratio
  $\rightarrow$ difficult to conceal output at production and sell for private profit
  $\rightarrow$ easy to tax at the production side
- Gold: high value to weight ratio
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  - $\rightarrow$ difficult to tax at production
  - $\rightarrow$ taxation should occur at consumption

$\Rightarrow$ Hypothesis: coltan should be taxed at the mines (production sides) but gold at the villages where miners consume their income

Assignment I-5

Identification:

- shocks to the prices of the two resources: one to coltan, one to gold
- affected the incentives for local armed groups to set up a tax system
- different timing of shocks allows identification of location decision

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Findings:

- positive price shock for coltan increases fiscal capacity at the mines
- positive price shock to gold increases taxation in the villages

Assignment I-6

6. To what extent can Sánchez de la Sierra's (2017) paper be seen as a test of Besley and Persson's (BP) model?

Assignment I-6

- de la Sierra's studies two mayor topics:

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  - State formation (extensive margin): lies outside the framework of BP
  - Degree of bureaucratic organization of the tax system and the state (intensive margin)
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- Three outcomes: complexity of the tax system, monitoring and protection of property rights
- Potential explanatory factors:
  - Wealth - occurs in BP
  - Difficult to tax income source - not in BP
    $\rightarrow$ extension for natural resources

Assignment II-1

1. Table 3 in Fisman (2001, AER) is reproduced below. How can Fisman, on the basis of the findings in this table, conclude that a substantial fraction of the market value of the politically connected firms is due to their connections? Recall that NR(JCI) is the return on the Jakarta Stock Exchange Composite Index net of broader Southeast Asian effects, and that POL is an index of the firm's political connections. Discuss briefly potential weaknesses in Fisman's identification strategy.

Assignment II-1

Fisman AER (2001), Table 3

	(1)	(2)
POL	−0.60** (0.11)	−0.19 (0.15)
NR(JCI)	0.25 (0.14)	−0.32 (0.28)
NR(JCI) · *POL*		0.28* (0.11)
Constant	0.88 (0.27)	0.06 (0.35)
R^2	0.066	0.078
Number of observations	455	455

Note: Robust standard errors are in parentheses.
* Significantly different from 0 at the 5-percent level.
** Significantly different from 0 at the 1-percent level.

Assignment II-1

Discuss briefly potential weaknesses in Fisman's identification strategy:

- Is $NR(JCI)$ endogenous?
- Different information content in events?
  - Severity and timing

Assignment II-1

Fisman AER (2001), Table 2

TABLE 2—EFFECT OF POLITICAL CONNECTIONS ON CHANGES IN SHARE PRICE, SEPARATE ESTIMATION FOR EACH EVENT

	Jan. 30–Feb. 1, 1995	April 27, 1995	April 29, 1996	July 4–9, 1996	July 26, 1996	April 1–3, 1997
POL	−0.58* (0.34)	−0.31 (0.18)	−0.24* (0.15)	−0.95*** (0.27)	−0.57*** (0.22)	−0.90** (0.35)
Constant	1.29 (0.79)	0.21 (0.32)	0.12 (0.46)	0.83 (0.64)	−0.07 (0.41)	0.77 (0.97)
R^2	0.037	0.043	0.025	0.147	0.078	0.075
Observations	70	70	78	79	79	79

Note: Robust standard errors are in parentheses.
* Significantly different from 0 at the 10-percent level.
** Significantly different from 0 at the 5-percent level.
*** Significantly different from 0 at the 1-percent level.

Assignment II-1

Measure of connectedness (not strictly identification strategy but data issue):

- Subjective evaluation: measurement error
- Range 1-5: binary could reduce problems of measurement errors or not-normal distribution

Assignment II-2a

Explain how Hodler and Raschky (2014) study the extent of favoritism, and discuss critically to what extent they can really identify favoritism.

- Basic ideas: country leaders give preferential treatment to their birth region (transfers and investment of public money)
- Study of (essentially) nightlight activity and dummies for leader birth region
- 126 countries for the period 1992-2009:

$$Light_{ict} = \alpha_i + \beta_{ct} + \gamma Leader_{ict-1} + \varepsilon_{ict} \tag{1}$$

Assignment II-2b

Are there types of favoritism that would escape their strategy?

Definition of favoritism used by Hodler and Raschky (2014):
Regional favoritism: "leaders choose policies that mainly benefit their preferred region"

Assignment II-2b

Are there types of favoritism that would escape their strategy?

Definition of favoritism used by Hodler and Raschky (2014):
Regional favoritism: "leaders choose policies that mainly benefit their preferred region" Not included:

- Non-regional favoritism: class, race, ethnic/linguistic identity that is not regionally concentrated,
- Regional favoritism not connected to birth region: ethnolinguistic group in other regions (overlaps with above),
- Favoritism that does not increase nightlight intensity: cash, consumption of non-light goods - although probably correlated

Assignment II-2c

Consider the case where a country discovers deposits of a natural resource (e.g. oil), making one city important (e.g. Stavanger). As the resource is important for the country, a president from this region is elected. Moreover, as the resource is valuable, the extraction city grows. Discuss to what extent Hodler and Raschky would measure this as favoritism

Assignment II-2c

- They would in the basic setup
- Additional evidence suggests otherwise:
  - Dynamics of favoritism
  - No effect of oil x leader

Assignment II-2c

Hodler and Raschky (2014), Figure III 3