Unbundling Property Rights
in
India

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Objective

To examine the effects of threats to property rights on performance of manufacturing sector in Indian states.

Property Rights

All the rights that have property values.

1) Property right to private property:

   The right to utilize and dispose of private property at one's disposal.

2) Property right to contracts = claim

   The right to claim an act from another person, as specified in a contract.

Acemoglu and Johnson (2005): "Unbundling Institutions" (JPE)

They separate institutions into property right institution and contracting institution. Then they show that only the former has significant effects on economic performance, but not the latter.

Previous studies

- Studies by economic historians

  North and Thomas (1973)

  Landes (1998)

  Engerman and Sokoloff (1997, 2002)

Previous studies

- Econometric studies

Knack and Keefer (1995)

Hall and Jones (1998)

Acemoglu, Johnson and Robinson (2001, 2002)

Rodrik, Subramanian and Trebbi (2002)

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Glaeser, La Porta, Lopez-de-Silanes, and Shleifer (2004)

Previous study for India

Veeramani and Goldar (2005)

States with good business climates have higher TFP.

Chemin (2004)

Ineffective judiciary processes cause more breach of trust, fewer relation-specific investments, and lower firms' growth.

Improvement on previous studies

Many previous studies have used the indices based on questionnaire responses from business people, or assessments by experts.

=>1) Subjective, 2) Sample Bias.

Interpretations of variables in Acemoglu and Johnson (2005) are arbitrary.

Improvement on previous studies

- By using objective data on crimes against property rights in one country, we could at least make improvements in these problems.

Data from "Crime in India"

- **Threats to private property** is captured by value of property stolen divided by gross value of output.
- **Threats to contracts** is captured by the incidence of cheating divided by population.

The average value of the former for the last three years, including the present year, is denoted by *vpstolen*, and those of the latter by *cheat*.

We will estimate the effects of *vpstolen* and *cheat* on economic performance variables.

Economic Performance Variables

1) Gross value added per worker

2) Capital labor ratio

3) Total factor productivity

4) Investment rate

5) Loan to output ratio

Control Variables

- Infrastructure: electricity sales to ultimate consumers per person, total road length per person

- Human resources: primary school enrolment rates, labor disputes per worker

- Financial resources: the number of bank branches per person

Instrumental Variable Estimation

← To address the endogeneity problem.

Instrument variable = total number of policemen per person

Estimation equation

$$Z_{it} = \alpha + \theta_t + \theta_i + \beta X_{it} + Y_{it}' \gamma + \varepsilon_{it}$$

i indicates state i, and t indicates year t.

Z_{it}: economic performance variables of the manufacturing sector of state i in year t,

X_{it}: the variable indicating the extent of threats to property rights,

Y_{it}: the vector of control variables which may influence the economic performance of the manufacturing sector of each state.

　　All these variables are in natural log terms.

θ_i : state dummy

θ_t : year dummy

Estimation results

Table 7

vpstolen has significant negative coefficients for gross value added per worker, capital labor ratio, and total factor productivity.

Table 8

cheat also has significant negative coefficients for gross value added per worker, capital labor ratio, and total factor productivity.

Discussion

- Acemoglu and Johnson (2005) argue that "individuals can avoid most of the adverse effects of bad legal rules by changing the terms of their contracts or by developing informal arrangements" (p. 984) .

- However, those individuals making a contract must incur additional transaction costs. Thus, threats to contracts may plausibly deteriorate economic performance.

Discussion

The adverse effects of threats to property rights are large.

One per cent increase in *vpstolen* would reduce GVA per worker by 0.79%, KL ratio by 0.55%, and TFP by 0.44%.

One per cent increase in *cheat* would reduce GVA per worker by 1.39%, KL ratio by 0.97%, and TFP by 0.77%.

Conclusion

- Not only threats to private property but also threats to contracts adversely affect performance of manufacturing sector of Indian states.

- The protection of property rights is very important for further economic growth.