

The Relevance of Judicial Procedure for Economic Growth

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I. Introduction

- A number of recent papers show that structural characteristics of judiciary have important economic consequences.
 - E.g. Feld and Voigt (2003, 2006): judicial independence conducive to economic growth
- Yet: Growth Effects of Judicial Procedure largely neglected
- First attempt to close that gap.

I. Introduction (2)

- Structure of the Talk:
 - Theory: Two competing views on the effects of judicial procedure
 - Data Description
 - Estimation Approach, Interpretation
 - Conclusions and Outlook

II. Theory: Two Competing Views on the Effects of Judicial Procedure

- Judicial Procedure \approx those formal steps that actors involved in the judicial system need to follow in order to produce binding decisions (\approx due process)
- The First View:
 - Judicial procedure increases likelihood that judges will apply relevant norms in their decisions
 - Judicial procedure reduces arbitrariness of judicial decision-making
 - Judicial procedure increases predictability

II. Two Competing Views (2)

- 2 examples:
 - Right to legal counsel: reduces asymmetry in judicial expertise between judge and defendant; increases likelihood of proper application of relevant norms.
 - Right to appeal: creates probability that judicial decision will be reviewed by higher ranked colleagues; creates incentives to apply norms properly.
- Potential transmission channels:
 - number of contracts $\uparrow\uparrow$; willingness to specialize $\uparrow\uparrow$
 - (Foreign direct) investment $\uparrow\uparrow$
 - Level of interest rate lower \Rightarrow lower tax burden
- The Second View:
 - Djankov et al. (2003; „Lex Mundi“ study)
 - Neighborhood model as benchmark
 - Deviations interpreted as undue regulatory intervention serving the interests of the rulers

II. Two Competing Views (3)

- Index of Procedural Formalism

- (1) Professionals vs. Laymen;

- (2) Written vs. Oral elements;

- (3) Legal justification;

- (4) Statutory regulation of evidence;

- (5) Control of superior review;

- (6) Engagement formalities;

- (7) Independent procedural actions.

- Indicators created with answers from law firms based on two paradigmatic cases (eviction of tenant, cashing in of bounced check)

- Higher values indicate higher degrees of formalism

III. Data Description

- Index of „Fair Trial“ created by Hathaway (2002)
- Made up of 10 components:
 - (1) independent and impartial judiciary,
 - (2) the right to counsel,
 - (3) the right to present a defense,
 - (4) the presumption of innocence,
 - (5) the right to appeal,
 - (6) the right to an interpreter,
 - (7) the absence of *ex post facto* laws,
 - (8) the right to a public trial,
 - (9) the right that the charges are presented with prior notice and
 - (10) the timeliness of court action.
- Based on Human Rights Reports of U.S. State Dept. (1985, 88, 91, 94, 97, 2000)
- Coding:
 - 0 – always enforced; 0,5 – sometimes enforced; 1 – never enforced.
- Refers to all kinds of trials (including civil as well as administrative cases) although some components only applicable to criminal law

Table A2: Correlation coefficients of judicial variables

<i>Collection of a check:</i>	Judiciary	Right to council	Right to defense	Presumption of innocence	Right to appeal	Timeliness	Public	Charges presented
Professional vs. laymen	0.16	0.14	0.12	0.06	0.14	0.26*	-0.06	-0.01
Written vs. oral elements	0.29*	0.22(*)	0.22(*)	-0.04	0.04	0.27*	-0.06	-0.09
Legal justification	0.10	0.00	-0.11	-0.17	0.07	0.25*	-0.14	-0.14
Statutory regulation of evidence	0.40**	0.36**	0.15	0.19	0.02	0.31**	0.16	0.26**
Control over superior review	0.13	-0.04	0.01	0.16	-0.01	0.14	-0.16	-0.10
Engagement formalities	0.37**	0.18	0.04	-0.03	0.08	0.36**	-0.04	-0.05
Independent procedural actions	0.45**	0.38**	0.34**	0.32**	0.20	0.47**	0.23(*)	0.12
<i>Legal origin:</i>								
English	-0.19	0.16	0.05	0.27*	0.08	-0.07	-0.04	0.32**
French	0.37**	0.10	0.04	-0.12	0.07	0.43**	0.09	-0.04
German	-0.08	-0.13	0.11	0.08	-0.06	-0.26*	0.11	-0.11
Scandinavian	-0.31*	-0.30*	-0.27*	-0.24(*)	-0.15	-0.36**	-0.16	-0.27**
Socialist	0.03	-0.05	-0.01	-0.15	-0.09	-0.10	-0.10	-0.17

Notes: **, *, and (*) indicate significance at the 1%, 5%, and 10% level, respectively.

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↪ Higher degrees of formalism are correlated with less timely decisions.

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Notes: **, *, and (*) indicate significance at the 1%, 5%, and 10% level, respectively.

↳ More independent proc. Actions imply less adherence to legal procedures.

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↳ Countries with Scandinavian Legal Origin follow procedural norms strictly.

IV. Estimation Approach and Interpretation

- The following model estimated on the basis of 67 countries for period 1985 – 2003
- $Y = B\alpha + J\beta + C\gamma + D\delta + L\lambda + \varepsilon$

where:

- Y = Vector of growth rates in %,
- B = Matrix of basic explanatory variables (initial income, investment, population growth, schooling),
- C = Matrix of control variables (regional dummies, economic as well as institutional controls),
- J = Matrix of procedural justice indicators,
- D = Matrix of the degree of judicial formalism variables,
- L = Matrix of the legal origin variables,
- ε = Vector of errors.

IV. Estimation Approach and Interpretation (2)

- **General-to-specific approach (Hendry 1993)**
 - Low potential estimation biases;
 - Allows for consistent testing down procedures;
 - Fully considers interaction of explanatory variables
- **Due to limited degrees of freedom, 4 models were estimated:**
 - (1) $Y = B\alpha + C\gamma + L\lambda + \varepsilon$
 - (2) $Y = B\alpha + J\beta + C\gamma + \varepsilon$
 - (3) $Y = B\alpha + J\beta + C\gamma + D(\text{tenant})\delta + \varepsilon$
 - (4) $Y = B\alpha + J\beta + C\gamma + D(\text{check})\delta + \varepsilon$
- **Model reduction algorithm (Hendry and Krolzig 1999) used to generate parsimonious models.**

Table 2: Specific model for the per capita GDP growth rate in % (equation (2))**Included judicial variables: Legal origins**

Remaining variables	<u>Coeff</u>	SE	Partial-R ²	<u>Elasticities</u>
Initial GDP in 1985 in US \$	-0.0016**	0.0003	0.33	-1.07
Investment to GDP ratio in %	0.930**	0.221	0.23	1.29
Population growth in %	-1.072**	0.211	0.26	-1.18
Average inflation rate	-0.239*	0.095	0.10	-0.05
Economic freedom index	5.470*	2.057	0.11	2.87
<u>South America</u>	-8.559**	2.794	0.14	
Constant	-6.226	10.98	0.01	



Upshot:
Legal Origins
uncorrelated
with economic
growth.

(1) No of observations	67
(2) SE equation	9.14
(3) R ²	0.57
(4) Model selection criterion: Adj. R ²	0.526
(5) Model selection criterion: Hannan-Quinn	7.452
(6) Joint test remaining variables	F(6,60) = 13.2**
(7) Testing-down from general model	F(16,44) = 0.82
(8) <u>Heteroscedasticity test</u>	F(11,48) = 0.96

Table 4: Specific model for the per capita GDP growth rate in % (equation (4))**Included judicial variables: Procedural indicators and formalism indicators (tenant)**

Remaining variables	<u>Coeff.</u>	SE	Partial-R ²	<u>Elasticities</u>
Initial GDP in 1985 in US \$	-0.0018**	0.0003	0.43	-1.17
Investment to GDP ratio in %	0.664**	0.190	0.18	0.92
Population growth in %	-0.993**	0.195	0.32	-1.09
Presumption of innocence	37.70**	6.682	0.36	0.46
Timeliness	-18.00**	4.162	0.25	-0.52
Right to council	-19.80*	8.304	0.09	-0.51
Written vs. oral	13.51*	6.174	0.08	0.88
Military control	-8.241**	2.945	0.12	
<u>South America</u>	-8.687**	2.834	0.14	
Transition countries	-14.20*	5.891	0.09	
Constant	32.58**	6.186	0.23	

(1) No of observations	67
(2) SE equation	7.26
(3) R ²	0.75
(4) Model selection criterion: Adj. R ²	0.701

Upshot:

Presumption of Innocence with unexpected effect;

Only one formalism variable survives; it has „wrong“ sign.

Table 5: Specific model for the per capita GDP growth rate in % (equation (5))**Included judicial variables: Procedural indicators and formalism indicators (check)**

Remaining variables	<u>Coeff.</u>	SE	Partial-R ²	<u>Elasticities</u>
Initial GDP in 1985 in US \$	-0.0015***	0.0003	0.36	-0.98
Investment to GDP ratio in %	0.689***	0.190	0.19	0.95
Population growth in %	-1.072***	0.120	0.33	-1.18
Presumption of innocence	35.63***	6.831	0.32	0.44
Timeliness	-19.15***	4.107	0.27	-0.55
Independent procedural actions	-12.07*	5.654	0.07	-0.25
Military control	-6.776*	3.043	0.08	
Transition countries	-13.17*	6.165	0.07	
Constant	36.19***	5.484	0.43	

(1) No of observations	67
(2) SE equation	7.64
(3) R ²	0.71
(4) Model selection criterion: Adj. R ²	0.668
(5) Model selection criterion: Hannan-Quinn	7.146
(6) Joint test remaining variables	F(8,58) = 17.6***

Upshot:

Presumption of Innocence with unexpected effect;

Formalism variable with low absolute and relative effect.

V. Conclusion and Outlook

- Formalism not always detrimental to growth.
 - Written procedures conducive to growth;
 - Right to council conducive to growth;
 - Timeliness conducive to growth;
 - Presumption of innocence detrimental to growth.
- Legal Origins without effect on growth.
- More fine grained data desirable; precondition for more detailed analysis.

- Thank you for your attention!