Macroeconomics (2)

MEK 781

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Easterly and Levine (1997)

- cross-country differences in economic growth, public policies and choice of public policies (why some countries consistently implement bad policies?)
- in sub-Saharan Africa growth is associated with low schooling, political instability, underdeveloped financial systems, distorted exchange markets, high government deficits and insufficient infrastructure
- ethnic fractionalisation (ethnolinguistic diversity) explains part of the above characteristics (ethnic diversity is associated with low schooling, underdeveloped financial systems, distorted exchange markets and insufficient infrastructure)

Easterly and Levine (1997)

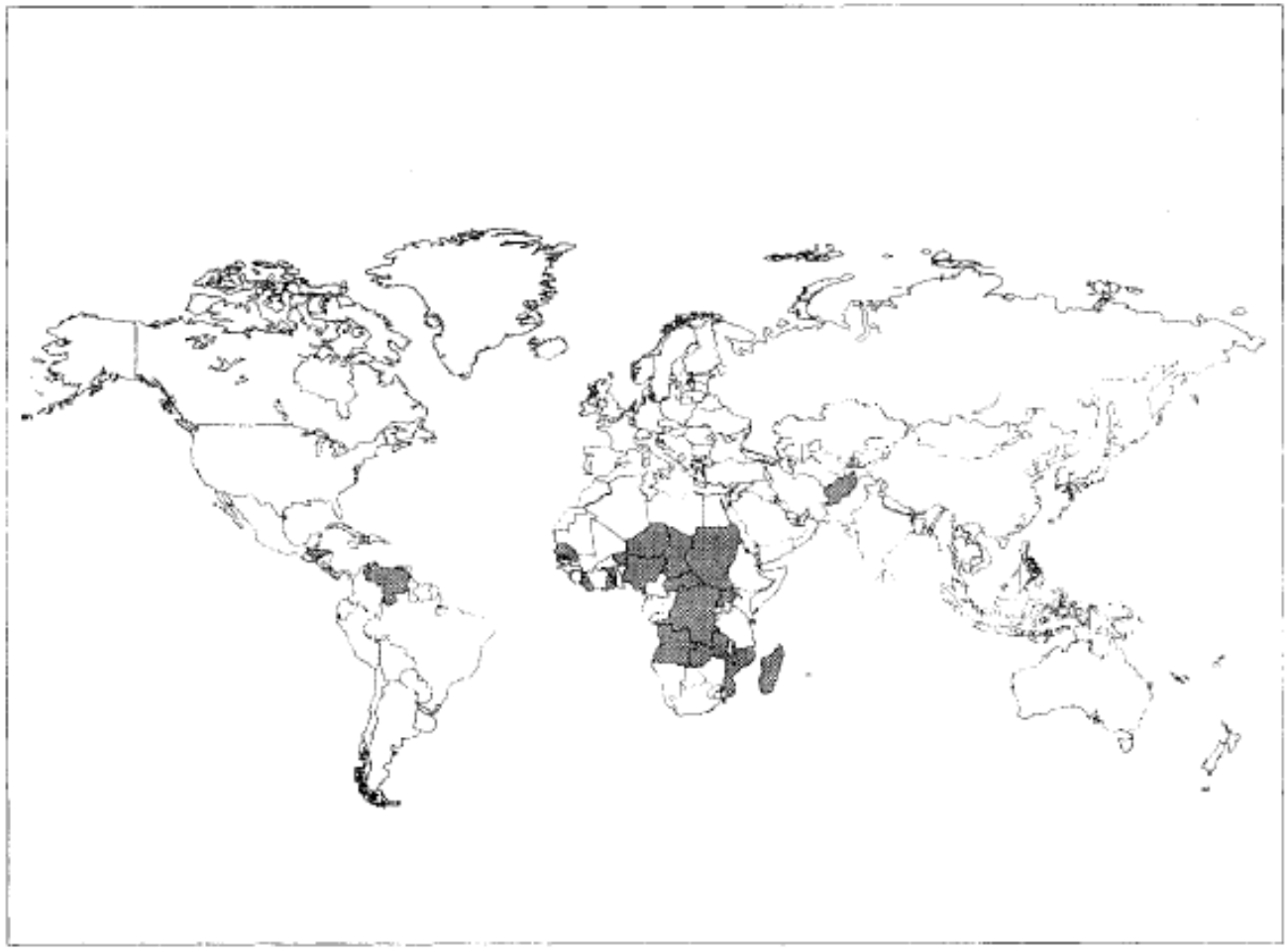

FIGURE I
Regional Distribution of Negative Growth
Countries that had negative per capita growth 1960–1988 are shaded gray.

Easterly and Levine (1997)

TABLE I

GROWTH REGRESSIONS: POOLED DECADES (1960s, 1970s, 1980s)

(DEPENDENT VARIABLE: REAL PER CAPITA GDP GROWTH)

Variable	(1)	(2)	(3)	(4)
Dummy for the 1960s	−0.142	−0.169	−0.246	−0.267
	(−1.66)	(−1.96)	(−2.60)	(−2.82)
Dummy for the 1970s	−0.145	−0.171	−0.243	−0.261
	(−1.70)	(−1.99)	(−2.56)	(−2.76)
Dummy for the 1980s	−0.165	−0.191	−0.259	−0.277
	(−1.93)	(−2.22)	(−2.74)	(−2.93)
Dummy variable for Sub-Saharan Africa	−0.014	−0.015	−0.016	−0.018
	(−3.24)	(−3.45)	(−3.39)	(−3.58)
Dummy variable for Latin America and the Caribbean	−0.021	−0.019	−0.015	−0.016
	(−5.58)	(−5.21)	(−4.22)	(−4.56)
Log of initial income	0.047	0.055	0.079	0.090
	(2.11)	(2.43)	(3.22)	(3.74)
(Log of initial income) squared	−0.003	−0.004	−0.006	−0.007
	(−2.26)	(−2.60)	(−3.59)	(−4.58)
Log of schooling	0.012	0.013	0.011	0.009
	(2.93)	(3.04)	(2.53)	(1.89)
Assassinations		−23.783	−17.868	−22.923
		(−2.26)	(−1.82)	(−2.52)
Financial depth			0.018	0.013
			(3.08)	(2.19)
Black market premium			−0.020	−0.018
			(−4.48)	(−4.09)
Fiscal surplus/ GDP			0.093	0.177
			(3.00)	(4.93)
Log of telephones per worker				0.007
				(2.71)
No. of observations	83; 89; 96	78; 88; 95	45; 72; 76	41; 70; 67
R^2	0.21, 0.18, 0.32	0.20, 0.18, 0.34	0.42, 0.43, 0.49	0.42, 0.49, 0.59

t-statistics are in parentheses.
Estimated using Seemingly Unrelated Regressions: a separate regression for each period.
See Data Appendix for definitions and sources.

Easterly and Levine (1997)

TABLE II
ECONOMIC INDICATORS: AFRICA VERSUS EAST ASIA

Variable	Africa mean	East Asia mean
Log of schooling	1.031	1.574
Assassinations	1.13E-05	3.73E-06
Financial depth	0.240	0.474
Black market premium	0.450	0.054
Log of telephones per worker	2.436	3.538
Fiscal Surplus/GDP	−0.051	−0.025

See the Data Appendix for definitions and sources.

Easterly and Levine (1997)

TABLE III

ETHNOLINGUISTIC FRACTIONALIZATION INDEX (ETHNIC)

(66 COUNTRIES, 1960)

Country	ETHNIC	Country	ETHNIC
15 Most fractionalized:		15 Least fractionalized:	
Tanzania	93	Haiti	1
Uganda	90	Japan	1
Zaire	90	Portugal	1
Cameroon	89	Hong Kong	2
India	89	Yemen	2
South Africa	88	Germany	3
Nigeria	87	Burundi	4
Ivory Coast	86	Dominican Republic	4
CAR	83	Egypt	4
Kenya	83	Ireland	4
Liberia	83	Italy	4
Zambia	82	Norway	4
Angola	78	Iceland	5
Mali	78	Jamaica	5
Sierra Leone	77	Jordan	5

ETHNIC measures the probability that two randomly selected persons from a given country will not belong to the same ethnolinguistic group. The more groups there are, the higher ETHNIC. The more equally distributed the groups, the higher the ETHNIC.

Source. Taylor and Hudson [1972].

Easterly and Levine (1997)

TABLE IV

ETHNIC DIVERSITY AND LONG-RUN GROWTH

(DEPENDENT VARIABLE IS GROWTH OF PER CAPITA REAL GDP)

Variable	(1)	(2)	(3)	(4)	(5)
Dummy for the 1960s	−0.072	−0.096	−0.186	−0.254	−0.224
	(−0.88)	(−1.15)	(−1.94)	(−2.66)	(−2.37)
Dummy for the 1970s	−0.074	−0.098	−0.182	−0.248	−0.217
	(−0.90)	(−1.17)	(−1.90)	(−2.59)	(−2.30)
Dummy for the 1980s	−0.094	−0.117	−0.198	−0.263	−0.232
	(−1.14)	(−1.40)	(−2.07)	(−2.76)	(−2.46)
Dummy variable for Sub-Saharan Africa	−0.013	−0.014	−0.012	−0.013	−0.013
	(−2.82)	(−2.98)	(−2.46)	(−2.53)	(−2.49)
Dummy variable for Latin America and the Caribbean	−0.022	−0.021	−0.017	−0.018	−0.019
	(−6.52)	(−5.88)	(−4.74)	(−4.90)	(−5.22)
Log of initial income	0.033	0.039	0.066	0.086	0.081
	(1.56)	(1.82)	(2.69)	(3.58)	(3.41)
(Log of initial income) squared	−0.003	−0.003	−0.005	−0.007	−0.006
	(−1.83)	(−2.09)	(−3.10)	(−4.25)	(−4.23)

Easterly and Levine (1997)

TABLE IV
CONTINUED

Variable	(1)	(2)	(3)	(4)	(5)
Log of schooling	0.011	0.011	0.009	0.009	0.010
	(2.85)	(2.83)	(2.28)	(1.98)	(2.22)
Assassinations		−20.730	−14.874	−21.480	−21.862
		(−2.04)	(−1.56)	(−2.45)	(−2.45)
Financial depth			0.015	0.012	0.011
			(2.54)	(2.10)	(1.90)
Black market premium			−0.020	−0.019	−0.019
			(−4.63)	(−4.46)	(−4.52)
Fiscal surplus/GDP			0.088	0.171	0.158
			(2.88)	(4.82)	(4.40)
Log of telephones per worker				0.005	0.005
				(1.74)	(1.86)
ETHNIC	−0.020	−0.017	−0.016	−0.011	
	(−3.19)	(−2.74)	(−2.54)	(−1.53)	
AVG-ETHNIC					−0.020
					(−2.73)
No. of observations	78; 84; 90	75; 83; 89	44; 69; 72	40; 68; 64	41; 70; 67
R^2	0.31, 0.24, 0.35	0.27, 0.23, 0.36	0.43, 0.44, 0.51	0.43, 0.49, 0.61	0.45, 0.52, 0.60

t-statistics are in parentheses.
Estimated using Seemingly Unrelated Regressions: a separate regression for each period.
AVG-ETHNIC is the average value of ETHNIC and the Muller [1964], Roberts [1962], and two Gunnemark [1991] measures of ethnolinguistic diversity.
See the Data Appendix for definitions and sources.

Easterly and Levine (1997)

TABLE VI
DETERMINANTS OF ECONOMIC INDICATORS

Dependent variable	C	ETHNIC	R^2	Number of observations
Log of schooling	1.508	−0.991	0.08,0.09,0.10	83; 85; 91
	(17.12)	(−6.21)		
Assassinations	1.24E-05	1.03E-06	−0.01,−0.06,−0.02	98; 105; 105
	(1.52)	(0.07)		
Financial depth	0.417	−0.266	0.09,0.06,−0.02	94; 100; 103
	(11.44)	(−3.67)		
Black market premium	0.070	0.252	0.05,0.08;−0.04	97; 107; 106
	(1.82)	(3.39)		
Fiscal surplus/ GDP	−0.026	−0.013	−0.14,−0.02,−0.13	55; 87; 82
	(−5.48)	(−1.37)		
Log of telephones per worker	4.331	−3.067	0.21,0.23,0.04	95; 103; 92
	(18.95)	(−7.17)		

t-statistics are in parentheses.
Equations estimated using Seemingly Unrelated Regression procedures.

Hall and Jones (1999)

- "Why do some countries produce so much more output per worker than others?"
- output per worker is driven by differences in institutions and government policies, which is called social infrastructure (an index of government antidiversion policies, which includes law and order, bureaucratic quality, corruption, risk of expropriation and government repudiation of contracts, and openness to international trade)
- social infrastructure is endogenous and it is determined by location and language (IVs)

Hall and Jones (1999)

Output per Worker

↑

(Inputs, Productivity)

↑

Social Infrastructure.

Hall and Jones (1999)

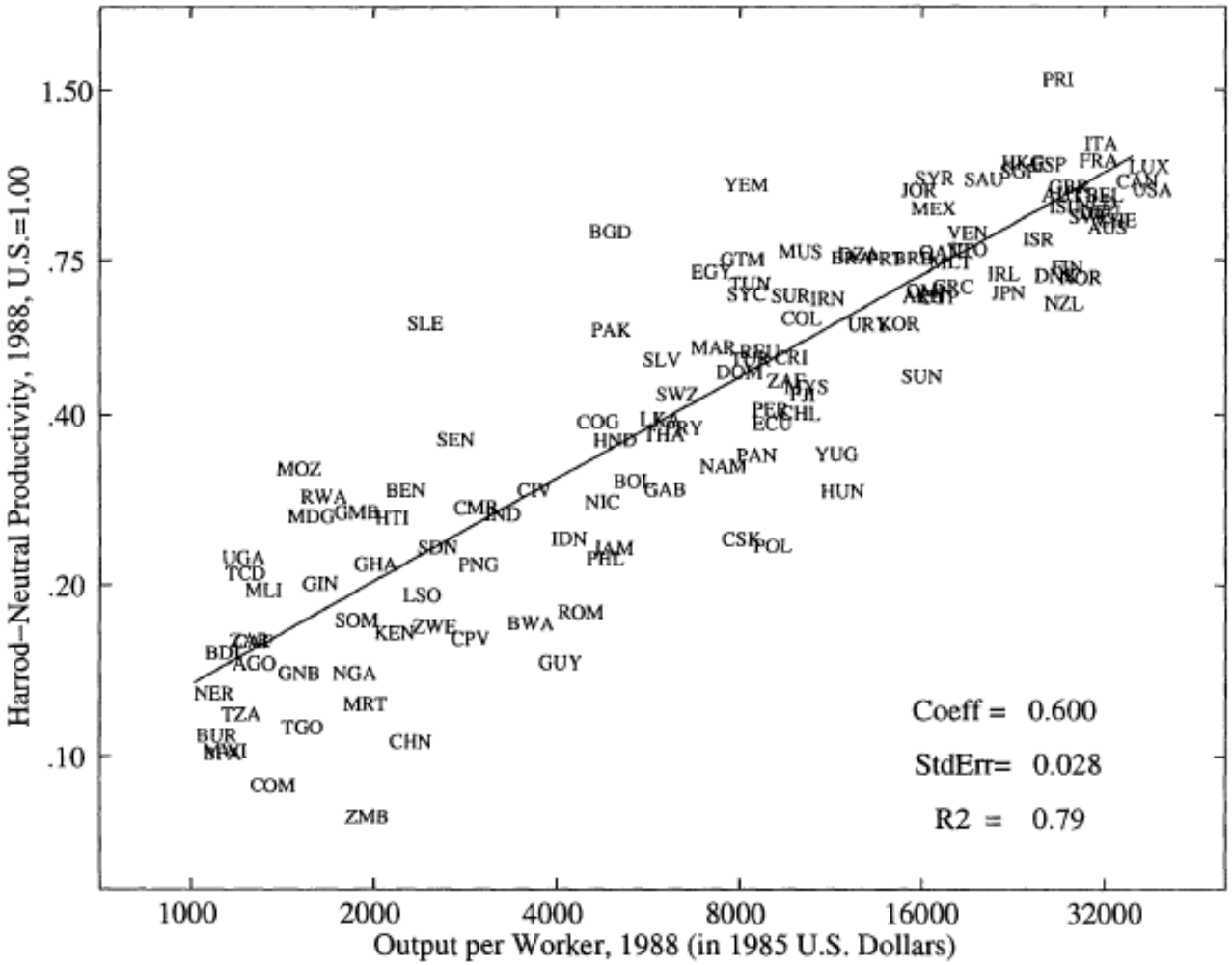

FIGURE I
Productivity and Output per Worker

Hall and Jones (1999)

TABLE I

PRODUCTIVITY CALCULATIONS: RATIOS TO U. S. VALUES

Country	Y/L	Contribution from $(K/Y)^{\alpha/(1-\alpha)}$	Contribution from H/L	Contribution from A
United States	1.000	1.000	1.000	1.000
Canada	0.941	1.002	0.908	1.034
Italy	0.834	1.063	0.650	1.207
West Germany	0.818	1.118	0.802	0.912
France	0.818	1.091	0.666	1.126
United Kingdom	0.727	0.891	0.808	1.011
Hong Kong	0.608	0.741	0.735	1.115
Singapore	0.606	1.031	0.545	1.078
Japan	0.587	1.119	0.797	0.658
Mexico	0.433	0.868	0.538	0.926
Argentina	0.418	0.953	0.676	0.648
U.S.S.R.	0.417	1.231	0.724	0.468
India	0.086	0.709	0.454	0.267
China	0.060	0.891	0.632	0.106
Kenya	0.056	0.747	0.457	0.165
Zaire	0.033	0.499	0.408	0.160
Average, 127 countries:	0.296	0.853	0.565	0.516
Standard deviation:	0.268	0.234	0.168	0.325
Correlation with Y/L (logs)	1.000	0.624	0.798	0.889
Correlation with A (logs)	0.889	0.248	0.522	1.000

The elements of this table are the empirical counterparts to the components of equation (3), all measured as ratios to the U. S. values. That is, the first column of data is the product of the other three columns.

Hall and Jones (1999)

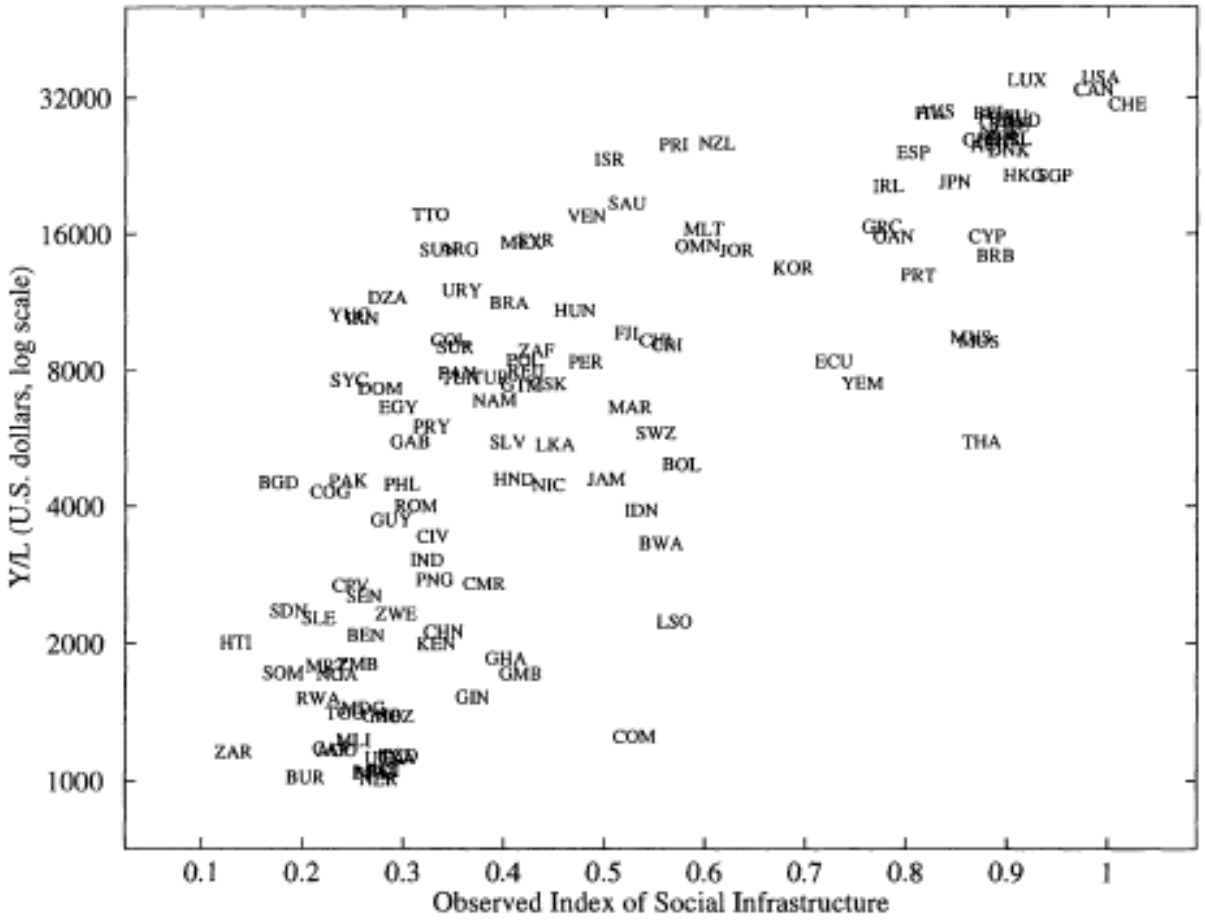

FIGURE II
Social Infrastructure and Output per Worker

Hall and Jones (1999)

TABLE II

BASIC RESULTS FOR OUTPUT PER WORKER

$\log Y/L = \alpha + \beta\tilde{S} + \tilde{\epsilon}$

Specification	Social infrastructure	OverID test p-value test result	Coeff test p-value test result	$\hat{\sigma}_{\tilde{\epsilon}}$
1. Main specification	5.1432	.256	.812	.840
	(.508)	Accept	Accept	
Alternative specifications to check robustness				
2. Instruments:	4.998	.208	.155	.821
Distance, Frankel-Romer	(.567)	Accept	Accept	
3. No imputed data	5.323	.243	.905	.889
79 countries	(.607)	Accept	Accept	
4. OLS	3.289	—	.002	.700
	(.212)		Reject	

The coefficient on Social infrastructure reflects the change in log output per worker associated with a one-unit increase in measured social infrastructure. For example, the coefficient of 5.14 means than a difference of .01 in our measure of social infrastructure is associated with a 5.14 percent difference in output per worker. Standard errors are computed using a bootstrap method, as described in the text. The main specification uses distance from the equator, the Frankel-Romer instrument, the fraction of the population speaking English at birth, and the fraction of the population speaking a Western European language at birth as instruments. The OverID test column reports the result of testing the overidentifying restrictions, and the Coeff test reports the result of testing for the equality of the coefficients on the *GADP* policy index variable and the openness variable. The standard deviation of log Y/L is 1.078.

Hall and Jones (1999)

TABLE III
REDUCED-FORM REGRESSIONS

Regressors	Dependent variables: Social infrastructure	Dependent variables: Log (output per worker)
Distance from the equator, (0,1) scale	0.708	3.668
	(.110)	(.337)
Log of Frankel-Romer predicted trade share	0.058	0.185
	(.031)	(.081)
Fraction of population speaking English	0.118	0.190
	(.076)	(.298)
Fraction of population speaking a European language	0.130	0.995
	(.050)	(.181)
R^2	.41	.60

N = 127. Standard errors are computed using a bootstrap method, as described in the text. A constant term is included but not reported.

Hall and Jones (1999)

TABLE IV
RESULTS FOR $\log K/Y$, $\log H/L$, and $\log A$
$Component = \alpha + \beta \hat{S} + \tilde{\epsilon}$

	Dependent variable		
	$\frac{\alpha}{1-\alpha} \log K/Y$	$\log H/L$	$\log A$
Social infrastructure	1.052	1.343	2.746
	(.164)	(.171)	(.336)
OverID test (p)	.784	.034	.151
Test result	Accept	Reject	Accept
$\hat{\sigma}_{\tilde{\epsilon}}$	.310	.243	.596
$\hat{\sigma}_{\text{Depvar}}$	.320	.290	.727

Estimation is carried out as in the main specification in Table II. Standard errors are computed using a bootstrap method, as described in the text.

The paper report

- The purpose of writing a report on a paper is firstly to summarise the paper and then, with your comments, improve the paper. A report should be three-pages long
- also important: you must be concise and precise
- in addition, you have to use economic/econometric terminology/jargon and be familiar with the related literature (otherwise you are not qualified to write a report)
- you have to state how the paper compares to related papers in the literature, for instance, does it move a step forward w.r.t. previous papers, is the hypothesis slightly different, what about methodology and dataset, is it a new dataset just released?

The paper report

- **Summary**: you have to summarise the main contribution of the paper. The Editor does not want to know your opinion at this stage
- you have to tell the reader (in this case the Editor of the journal) the following:
- the research question/or goals of the paper
- the theoretical model, in this case, even if there is no theoretical model (written in mathematical terms), you have to explain the hypothesis that the paper is attempting to (empirically) test

The paper report

- the empirical methodology, for instance, panel data, cross-section, instrumental variables, *etc*.
- the data being used, for instance, how this dataset was compiled, what countries or time period it covers, sources, *etc*.
- the main results obtained

The paper report

- **Comments, criticisms and suggestions**: you have to provide at least five suggestions/criticisms/suggestions to the authors
- be precise, for every problem (or criticism) you raise, you have to offer an alternative, for instance, if you think that something is endogenous, then you have to provide an idea for a plausible instrument
- you have to think critically about a paper, but also be constructive
- specifically:

The paper report

- is the research question precise enough? and the empirical methodology, is it the right methodology given the dataset available?
- what about the model, is it reasonable?
- and the results, do they answer the research question originally proposed? What about the interpretation of the results, is it correct?
- would you like to see some extra results, for robustness sake?

The paper report

- **Alternatives:** two questions (or alternatives) are in order:
- but before the alternative questions: remember, you have to be precise
- what else can be done with the dataset? Is there any other research question that can be addressed?
- or, provide alternative ways of addressing the same research question, that is, perhaps there is a different dataset available, or a slightly modified sample (or subsample), or perhaps a different instrument

The paper report

- **Recommendation:** you have to write a final paragraph where you provide the Editor with your recommendation: **REJECT, REVISE AND RESUBMIT, OR ACCEPT**
- for top journals in the profession, the most common recommendation is a reject (but bear in mind that this decision does not mean that the paper is a bad effort, there are just much more papers than journals in the academic market)
- the second most popular decision is a revise and resubmit (but without being too enthusiastic about the paper, usually the Editor ends up rejecting those papers)

The paper report

- then there is the revise and resubmit with a more enthusiastic tone (very rare in top journals)
- finally, there is the accept
- again, you have to argue why you are recommending what you are recommending, be precise

The paper report

- all in all, it is important that you do not waste time on frivolities, that is, all papers have flaws, the job of the referee is not to correct grammar, vocabulary, *etc*., but to be precise and provide constructive comments so that the paper can be improved
- you should highlight what is important, that is, corrections that are important to be implemented, and what is not so important, that is, suggestions that do not affect publication or rejection of the paper
- lastly, you must always be courteous in your report, the important thing is substance