Democracy and Globalization

Barry Eichengreen

and

David Leblang

Many economists (and many politicians) presume that globalization and democracy go together

- So say those impressed by the opening to the world economy of the countries of Central and Eastern Europe following the demise of Soviet-led authoritarianism.
- And so say those impressed by the outward orientation of Latin America since the wave of democratization that began in 1978.
  - Since free international transactions benefit society as a whole, democracy that renders leaders more accountable to the citizenry should be conducive to the removal of restrictions on such transactions.
  - The exchange of goods and services is a conduit for the exchange of ideas, and a more diverse stock of ideas encourages political competition.
- So say those impressed by how the difficulties of managing financial globalization spurred the transition to a more open and competitive democratic system in Indonesia.

Aggregate data also point in this direction

- Between 1975 and 2002, there was a quadrupling in the number of democratic countries.
- Over the same period, global trade as a share of GDP, a standard measure of trade openness, rose from 7.7 to 19.5 per cent.
- The share of countries open to international capital flows, as measured by the International Monetary Fund, rose from 25 to 38 per cent.
  - Evidently there is a powerful dynamic at work.

Of course, every causal statement just made could be wrong

- Some studies not only reject the hypothesis that democratization leads to openness but in fact conclude in favor of the opposite.
  - Their authors rationalize their finding by observing that concentrated interests may be better able to secure the imposition of protectionist policies in democratic political systems where they are better represented.
  - Others base similar arguments on the Stolper-Samuelson theorem: in countries where labor is the scarce factor of production, democratic reforms that raise labor’s leverage over policy will encourage protectionism rather than opening to the rest of the world.
  - They suggest that democratization will not result in working class support for globalization where domestic distortions prevent the benefits of opening from trickling down to the poor (e.g., consider Bolivia and Peru).

One can similarly question the effect of openness on democracy

- One can point to cases – here China is a case in point – where economic and financial opening have not undermined autocratic political control.
- Again there are a number of empirical studies that find no impact of trade openness on democracy or even a negative relationship.
- True also of studies of the impact of financial openness on democracy.
  - Thus, some authors argue that capital account liberalization may impose limits on the ability of governments to deploy redistributive taxation, regulation, and risk-sharing policies, thereby weakening support for democratic forms of governance.
  - Others do not agree.

- To be sure, there have been parallel trends in the direction of political democratization and economic globalization in the last quarter century.
- But this does not mean that the relationship is stable or general.
- And correlation does not mean causation, as we know.

In fact, there has been a great deal of work on these connections

- The idea that globalization promotes the diffusion of democratic ideas goes back to Immanual Kant in his *Essays on Politics, History and Morals* (1795).
- Authors such as Joseph Schumpeter, Seymour Martin Lipset and Fredrich Hayek, writing in the 1950s, an era of decolonization when these issues were very much in the air, argued that free trade and capital flows, by enhancing the efficiency of resource allocation, raise incomes and lead to the economic development that fosters a demand for democracy.
- Within the modern discipline of political science, the connections between economic and political liberalization is one of the foundational topics of the subfield of international political economy.

But modern work remains inconclusive

- Most studies look only at one of the two causal connections, from democracy to globalization or vice versa.
  - Since they are not concerned with two-way causality, sometimes they do not even acknowledge the existence of an endogeneity problem, much less develop an appropriate instrumental variables strategy for dealing with it.
- They rarely acknowledge that democratization has different dimensions and that economic globalization includes both the globalization of trade and the globalization of finance.
- Few studies take advantage of the fact that there have been prior waves of globalization and democratization.
  - These are the things we try to do in our paper.

Identification

- Identification is a problem in any setting where two variables plausibly influence one another.
- In the present context, research on the connections between democracy and openness is, of course, only as convincing as its identification strategy.
- We develop our instrumental variables strategy by reviewing the empirical literatures on the determinants of trade openness, financial openness, and democratization.
- We then ask which factors highlighted in these literatures plausibly satisfy the exogeneity and exclusion restrictions for valid instruments.

Instruments for trade openness

- Following previous work, we use the gravity model to identify the exogenous component of trade.
- The gravity model looks to country size on the grounds that smaller countries produce a narrow range of inputs and outputs and hence benefit from exchanging these with the rest of the world, and to distance to a country's trading partners as a measure of transport costs.
- Both variables are plausibly exogenous over the annual horizon that is the focus of our analysis.
- Do they also satisfy the exclusion restriction for valid instruments in an equation explaining democratization?
  - We are not aware of arguments linking country size to democratization.
  - Casual empiricism does not point in one direction or the other.
  - Similarly, it is not obvious why a country's distance from the world's major markets should affect its political regime.
- All this is consistent with the idea that the basic arguments of the gravity model are plausible instruments for identifying the exogenous component of trade.

Instruments for financial openness

- No single literature, analogous to that for trade.
- One strand of work argues by way of analogy with merchandise trade: small countries have the greatest difficulty in producing a diversified portfolio of financial assets and hence the greatest incentive to engage in financial trade.
- Another appeals to theories of optimal taxation, arguing that where the inflation tax is higher and fiscal imbalances are more severe the authorities will have a greater tendency to tax capital imports.
  - We are not aware of convincing evidence that democracies have lower (or higher) inflation rates or smaller (or larger) budget deficits; we take this as suggesting that inflation and budget deficits plausibly satisfy the exogeneity condition.
  - Similarly, we have not identified a literature in which these variables independently affect the political regime and hence violate the exclusion criterion.
- A final strand of literature considers global determinants of countries' choice of international financial regime.
  - Capital account openness is more likely when many other countries have opened in previous periods; capital account openness is less likely when there have been a large number of currency crises in previous periods).
- Both timing and the small country assumption, which is appropriate for most of our observations, support the maintained hypothesis of the exogeneity of these instruments.
- And it is not clear why these variables should affect the political regime other than via policies toward the capital account (in other words they plausibly satisfy the exclusion restriction).

- We make use of all of these literatures to identify instruments for capital account policies. Our consolidated instrument list thus includes country size, inflation, the budget deficit, the number of other countries with capital controls, and the number of other countries experiencing currency crises.

Instruments for democratization

- Political scientists argue that transitions to democracy are more likely in colonial systems where citizens or their forbearers had positive experience with democratic practice
- They are less likely in countries with a history of frequent transitions between democracy and dictatorship, where experience with democracy has been less satisfactory.
- These variables are likely to satisfy the exclusion restriction for a valid instrument in an equation explaining economic and financial openness.
  - We know of no study that has demonstrated a link running from colonial origin or instability of the political regime to economic and financial openness.
- These variables are also plausibly exogenous with respect to economic and financial openness.
- Other authors have focused on countries' natural resource endowments, arguing that greater reliance on mineral exports leads to concentrated power, reducing the probability that dictatorships will become democratic.
  - Here, though, there may be reasons to worry about the exclusion restriction; countries specializing in the production of natural resources may be more inclined to trade, insofar as they depend and/or can afford to import a range of other goods.

- Again, we draw on all these studies in what follows. Our instrument list for democracy is colonial heritage, number of prior transitions to dictatorship, the country's constitutional age,, natural resource endowment, and various geographical indicators. To check for robustness we also estimate the same regressions without resource endowments and geography in the instrument list.

Sample

- Our goal is to examine the relationship between democracy and globalization over the longest and broadest possible sample.
  - Data limitations for imports and exports are the largest constraint
- Sample:

  14 countries in 1870

  28 countries in 1919

  56 countries in 1945

  156 countries in 1999

Data

- Imports & Exports: Mitchell, Banks
- GDP: Maddison, Mitchell, Banks
- Capital Controls:
  - Bordo and Eichengreen: 1870-1950
  - IMF, AREAER: 1950-1999
- Democracy: Dichotomous variable =1 if
  1) Free elections (with at least 50% of the population is enfranchised)
  2) Party competition (more than one party stands for election)
  3) Rotation of power (same party does not always win)
- Age of Democracy: measured since 1800.

Statistical Methods

- Two-stage instrumental variables least squares and probit.
- Cross-sectional and time-series problems
  - Cross-sectional heterogeneity: random effects and/or robust standard errors (clustered by country).
  - Serial correlation: period dummies, time trend, and/or lagged dependent variable.

Results 1: Effect of Democracy on Trade Openness

	Democracy = Age of Democracy		Democracy = Dichotomous Measure	
	With geographic instruments	Without geographic instruments	With geographic instruments	Without geographic instruments
Democracy (t-1)	0.138**	0.145**	0.194**	0.195**
	(0.032)	(0.033)	(0.056)	(0.056)
Log(Distance (t-1))	-1.290**	-1.288**	-1.354**	-1.355**
	(0.167)	(0.167)	(0.166)	(0.166)
Log(Area (t-1))	0.117**	0.117**	0.126**	0.126**
	(0.060)	(0.060)	(0.060)	(0.060)
Log(Population (t-1))	0.215**	0.218**	0.155**	0.155**
	(0.044)	(0.044)	(0.041)	(0.041)
Log(GDP (t-1))	-0.144**	-0.147**	-0.113**	-0.113**
	(0.034)	(0.034)	(0.032)	(0.032)
Constant	8.301**	8.298**	8.850**	8.855**
	(1.432)	(1.433)	(1.421)	(1.421)
N	7250	7250	7250	7250

Dependent variable: Log[(Imports+Exports)/GDP]
Models estimated via random effects instrumental variables regression. Exogenous variables in the first stage model include: constitutional age, number of prior transitions to dictatorship and dummy variables for oil exporter, socialist legal origin, British colonial heritage, Spanish colonial heritage, and French colonial heritage. Geographic instruments are dummy variables for Latin American and the Caribbean, Asia, Africa and the Middle East. All models are estimated with a set of year fixed effects.

Results II: Effect of Democracy on Capital Accounti Policies (y=1 if capital controls in place)

	Democracy = Age of Democracy		Democracy = Dichotomous Measure	
	With geographic instruments	Without geographic instruments	With geographic instruments	Without geographic instruments
Democracy (t-1)	-0.078 *	-0.120	-0.324*	-0.467 *
	(0.047)	(0.081)	(0.174)	(0.282)
Capital Controls (t-1)	3.744**	3.729**	3.747**	3.773**
	(0.099)	(0.100)	(0.094)	(0.103)
Interwar Period	1.285**	1.284**	1.296**	1.293 **
	(0.151)	(0.150)	(0.150)	(0.151)
Bretton Woods Period	1.630 **	1.621 **	1.623 **	1.606 **
	(0.155)	(0.156)	(0.155)	(0.163)
Post Bretton Woods Period	1.194 **	1.139 **	1.200 **	1.147 **
	(0.162)	(0.193)	(0.164)	(0.198)
Log (GDP (t-1))	-0.011	-0.001	-0.011	-0.002
	(0.026)	(0.031)	(0.025)	(0.028)
Log (GDP Per Capita (t-1))	-0.094**	-0.078**	-0.097**	-0.083**
	(0.023)	(0.035)	(0.021)	(.031)
# Systemic Curr. Crises (t-1)	0.015*	0.015*	0.016*	0.015*
	(0.009)	(0.009)	(0.009)	(0.009)
Inflation (t-1)	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Government Balance (t-1)	-0.005*	-0.005*	-0.005**	-0.005**
	(0.003)	(0.003)	(0.003)	(0.002)
Constant	-2.169 **	-2.279 **	-2.121 **	-2.189 **
	(0.279)	(0.320)	(0.259)	(0.269)
N	4909	4909	4909	4909

Models estimated via instrumental variables probit. Cell entries are maximum likelihood estimates with robust standard errors in parentheses. Exogenous variables in the first stage model include: constitutional age, number of prior transitions to dictatorship and dummy variables for oil exporter, socialist legal origin, British colonial heritage, Spanish colonial heritage, and French colonial heritage. Geographic instruments are dummy variables for Latin American and the Caribbean, Asia, Africa and the Middle East.

Results III: Effect of Globalization on Democracy

	Trade Openness	Capital Controls	Trade Openness and Capital Controls
Endogenous Variable: Trade	0.120*		0.161**
	(0.064)		(0.07)
Endogenous Variable: Capital Controls		-0.772**	-0.565*
		(0.274)	(0.306)
Democracy (t-1)	3.719**	3.776**	3.762**
	(0.148)	(0.176)	(0.115)
Log(GDP Per Capita (t-1))	0.209**	0.154**	0.237**
	(0.049)	(0.049)	(0.062)
Growth Rate (t-1)	0.525	0.432	0.522
	(0.451)	(0.613)	(0.629)
Urban Population (t-1)	0.237	0.173	0.067
	(0.394)	(0.380)	(0.378)
Population Density (t -1)	0.001**	0.002**	0.002**
	(0.001)	(0.001)	(0.001)
Constant	-2.311**	-1.773**	-1.823**
	(0.204)	(0.292)	(0.030)
N	6901	4819	

Dependent variable: Dichotomous measure of democracy
Models estimated via instrumental variables probit. Cell entries are maximum likelihood estimates with robust standard errors in parentheses. In column 1, exogenous variables in the first stage model include: the lagged values of geographic area, average distance from the rest of the world, population, and GDP. In column 2, exogenous variables in the first stage model include the lagged values of the number of systemic currency crises, the proportion of other countries with capital controls, inflation, and the government balance.
Second stage model also includes dummy variables for the interwar, Bretton Woods and post Bretton Woods periods as well as variables measuring constitutional age, number of prior transitions to dictatorship, socialist legal origin, colonial origin, and geographic controls. These are not shown for the ease of presentation.
* 0.10 ** 0.05

Robustness

1) Alternative measures of democracy
   - Age of democracy rather than dichotomous measure
   - POLITY data set
2) Alternative measures of globalization
   - Sach-Warner (updated) measure of trade liberalization.
   - Initial year of capital account liberalization after the end of Bretton Woods

3) Alternative econometric specifications

- Include country dummies in trade and age of democracy models
- Use generalized methods of moments estimator to obtain heteroscedastic and autocorrelation consistent estimates
  - This results in efficiency gain if errors are autocorrelated and/or heteroscedastic; is inconsequential if they are not.
- Use Markov Transition model to examine iimpact of globalization on democratization.

$$P(D_{it}) = \Phi\{\alpha_0 + \alpha_1 G_{it-1} + \beta_0 D_{it-1} + \beta_1 D_{it-1} G_{it-1}\}$$

- Markov Transition Model Results
  - Trade
    - openness does not have a statistically significant effect on the probability that an dictatorship will become a democracy.
    - openness increases the probability that a democracy will remain a democracy.
  - Capital Controls
    - openness increases the probability that a dictatorship will be come a democracy.
    - openness does not have a statistically significant effect on the probability that a democracy will remain a democracy
  - Both Trade Openness and Capital Controls
    - openness does not have a statistically significant impact on the probability of a transition to democracy
    - openness increases the probability that a democracy will remain a democracy

Robustness (continued)

4. Alternative instrument lists
    - One based on geography: continent dummy variables and natural resource exporter
    - One based on history: number of prior transitions to autocracy, constitutional age, colonial origin, and socialist legal origin
    - We also dropped the size of the economy and per capita GDP as instruments for globalization
    - Result: substantive results are unchanged

Extension: Trade Theory

- Trade theory suggests that the impact of democratization on openness is contingent upon a country's factor endowment
  - Workers/voters prefer trade in labor abundant countries.
  - We interact democracy with the land/labor ratio.
  - We obtain a positive effect of democracy and a negative effect from the interaction.
  - We find this pattern using the entire sample, a sample from 1870-1913, and a sample from 1960-2000, but not for the interwar years.
- We find similar results when capital controls is the dependent variable.

Conclusion

- What do the dynamics of a democratization-globalization system look like?
  - Unstable Case: shocks to trade and democracy could send both in a positive or negative direction--without limit (e.g., experience of the 1930s)
  - Stable Case: shocks to trade and democracy could send both in a positive or negative direction--within limits (e.g., ‘third wave’ of democracy since the 70s)
- Our results show support for the stable case: increases in democracy lead to increases in globalization and vice versa…but each successive increase is smaller than the one prior.