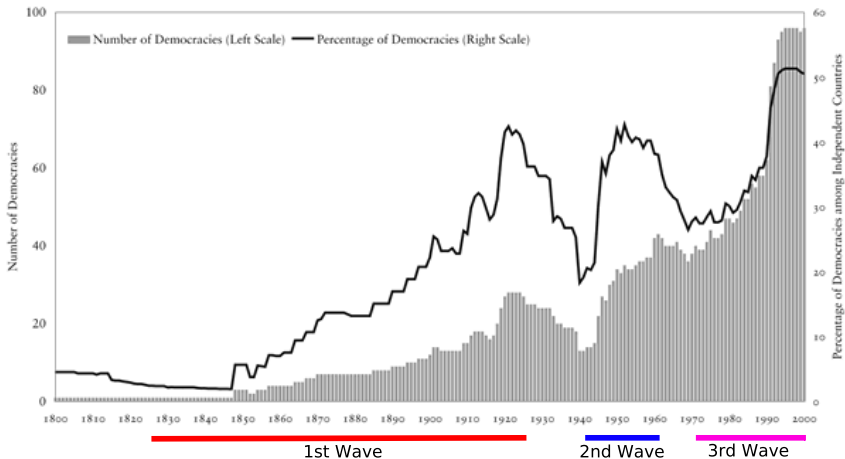


Democracy and Economic Development

Political Science 225
North Dakota State University

Democratic Waves

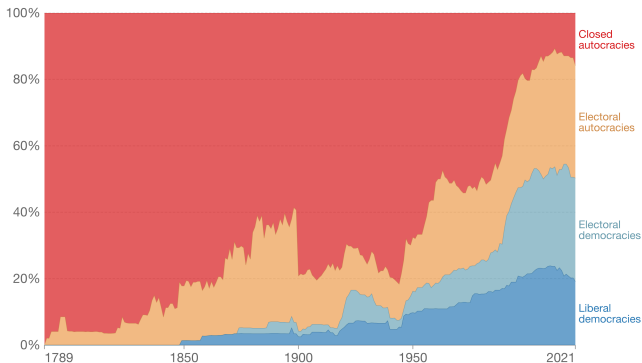


Democratic Waves

Share of countries that are democracies and autocracies, World

Political regimes based on the criteria of the classification by Lüthmann et al. (2018) and the assessment by V-Dem's experts.

Our World
in Data



Source: OWID based on Lüthmann et al. (2018) and V-Dem (v12)

OurWorldInData.org/democracy • CC BY

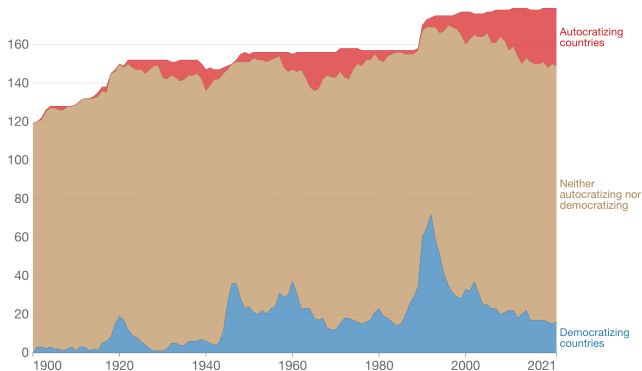
Note: The share of closed autocracies increases a lot in 1900 because V-Dem covers many more countries since then, often colonies.

Democratic Waves

Number of democratizing and autocratizing countries, World

Political regimes based on the criteria of the classification by Episodes of Regime Transformation (v4) and the assessment by V-Dem's experts.

Our World
in Data



Source: OWID based on Episodes of Regime Transformation (v4)

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Why Are Some States Democracies?

Two broad theoretical traditions:

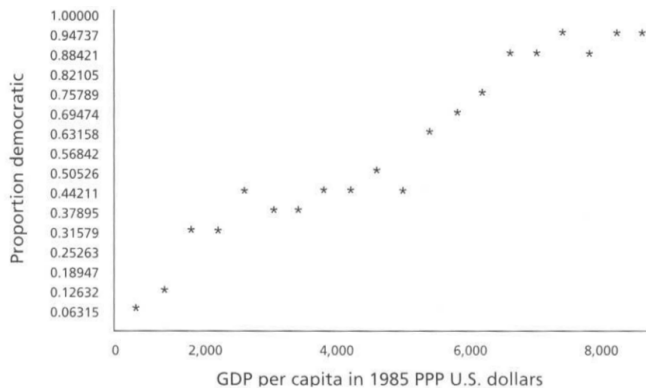
- Economic theories
- Cultural theories

Democratic Transition and Survival

Two core dependent variables:

- Democratic emergence
- Democratic survival

Income and Democracy



GDP, GNP, and PPP

- Gross domestic product
- Gross national product
- GDP per capita
- Purchasing power parity

Modernization Theory

- I.V. Economic development → D.V. Transition/Survival Democracy

Modernization Theory

- I.V. D.V.
Economic development → Transition/Survival Democracy
- Causal mechanism
 - Emergence of new groups (e.g. middle class, educated)
 - Agricultural to industrial
 - Rural to urban
 - Psychological change (e.g. increased expectations)

Modernization Theory

- I.V. D.V.
Economic development → Transition/Survival Democracy
- Causal mechanism
 - Emergence of new groups (e.g. middle class, educated)
 - Agricultural to industrial
 - Rural to urban
 - Psychological change (e.g. increased expectations)
- Evidence
 - High correlation between economic strength and democracy

Modernization Theory

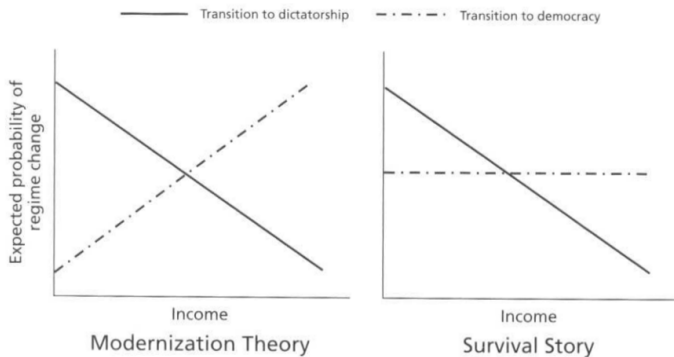
- I.V. D.V.
Economic development → Transition/Survival Democracy
- Causal mechanism
 - Emergence of new groups (e.g. middle class, educated)
 - Agricultural to industrial
 - Rural to urban
 - Psychological change (e.g. increased expectations)
- Evidence
 - High correlation between economic strength and democracy
- Policy prescription
 - Liberalize economy and regime will follow
 - IMF, World Bank, Russian reformers

Survival Theory

- I.V. Economic development → D.V. Survival of Democracy

Modernization vs Survival: Predictions

Modernization vs Survival: Predictions



Modernization vs Survival: Predictions

- Shared implications
- Modernization theory only
- Survival story only

Modernization vs Survival: Predictions

- Shared implications
 - Democracy and income are correlated
 - Income $\uparrow \rightarrow$ authoritarian transition \downarrow
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 - Income $\uparrow \rightarrow$ democratic transition \uparrow
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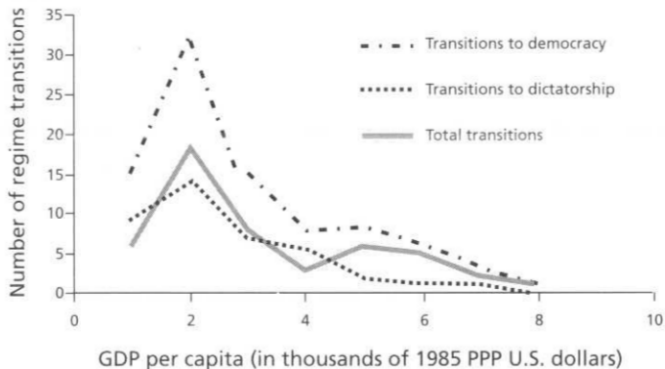
Modernization vs Survival: Predictions

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- What are the critical test(s)?

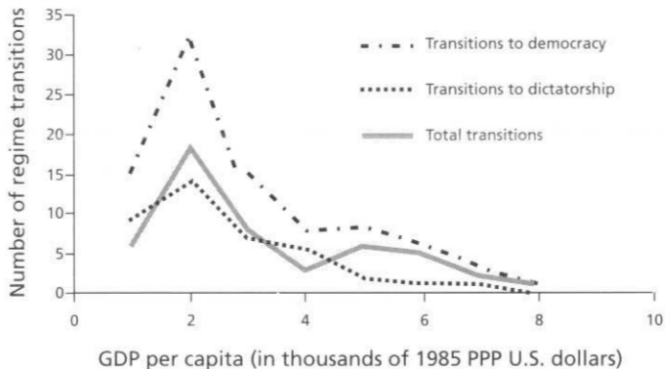
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- What are the critical test(s)?
 - Transition frequency
 - **Relationship between income and transitions to democracy**

Modernization vs Survival: Evidence

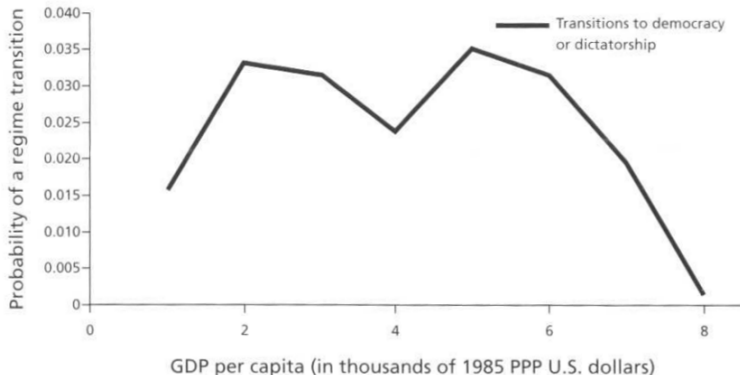


Modernization vs Survival: Evidence



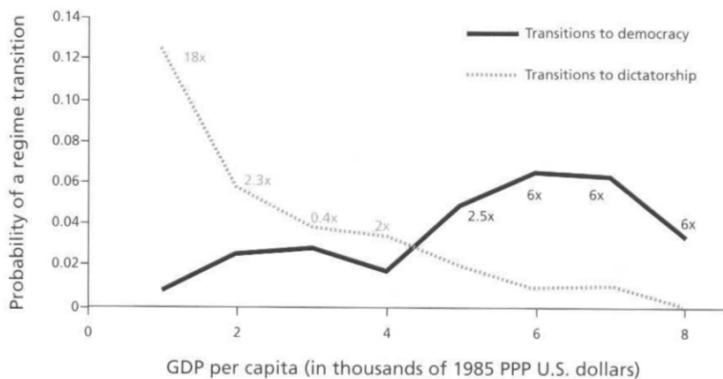
Are raw counts informative?

Modernization vs Survival: Evidence



$$P(\text{Regime Transition} | \text{Income Level}) = \frac{\# \text{ Transitions}}{\# \text{ Country Years}} | \text{Income Level}$$

Modernization vs Survival: Evidence

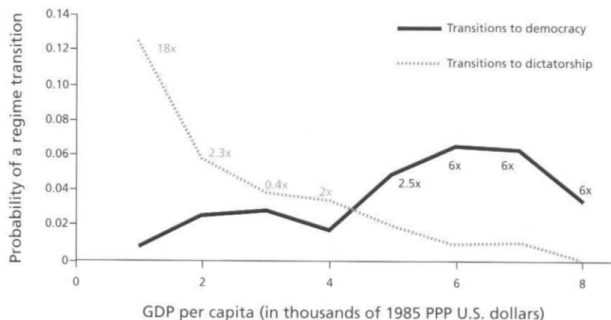


$$P(\text{Democratic Transition} | \text{Income Level}) = \frac{\# \text{ Democratic Transitions}}{\# \text{ Authoritarian Country Years}} | \text{Income Level}$$

$$P(\text{Authoritarian Transition} | \text{Income Level}) = \frac{\# \text{ Authoritarian Transitions}}{\# \text{ Democratic Country Years}} | \text{Income Level}$$

Exercise

Use the provided data to create a graph like the one below. Break GDP up into 5 categories (1000-2000, 2000-3000, ..., 5000-6000).

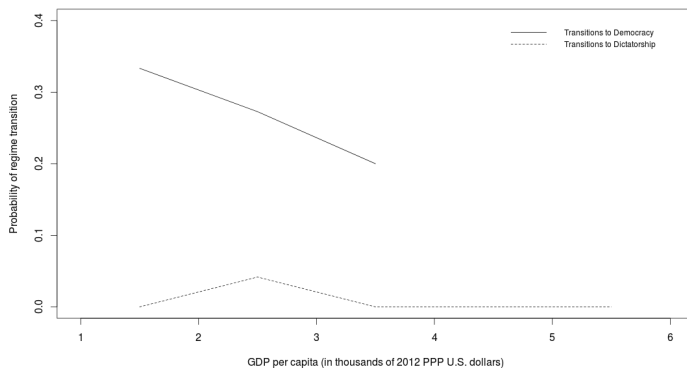


$$P(\text{Democratic Transition} | \text{Income Level}) = \frac{\# \text{ Democratic Transitions}}{\# \text{ Authoritarian Country Years}} | \text{Income Level}$$

$$P(\text{Authoritarian Transition} | \text{Income Level}) = \frac{\# \text{ Authoritarian Transitions}}{\# \text{ Democratic Country Years}} | \text{Income Level}$$

Exercise: Results

	1-2K	2-3K	3-4K	4-5K	5-6K
Dem Trans	1	3	1	0	0
Auth Years	3	11	5	0	0
Auth Trans	0	1	0	0	0
Dem Years	8	24	8	7	4



Development, Predation, and Institutional Development

- Crown autonomy and gentry exit options
- Fixed vs liquid assets
- Quasi-rents and extraction
- Rentier states and the resource curse

Statistical Evidence

Dependent variable: Probability that a country will be a democracy this year if it was a dictatorship last year.

Independent variables	1946–1990	1946–1990	
GDP per capita	0.00010*** (0.00003)	0.00010*** (0.00003)	← Coefficient ← Standard error
Growth in GDP per capita		–0.02*** (0.01)	
Oil production		–0.48** (0.24)	
Constant	–2.30*** (0.09)	–2.27*** (0.09)	
Number of observations	2,407	2,383	
Log-likelihood	–233.01	–227.27	

Source: Data are from Przeworski et al. (2000).

Note: Robust standard errors are in parentheses.

* = greater than 90% significant.

** = greater than 95% significant.

*** = greater than 99% significant.

Statistical Evidence

Dependent variable: Probability that a country will be a democracy this year if it was a democracy last year.

Independent variables	1946–1990	1946–1990
GDP per capita	0.00020*** (0.00004)	0.00020*** (0.00004)
Growth in GDP per capita		0.04*** (0.01)
Oil production		–0.21 (0.269)
Constant	1.13*** (0.13)	1.12*** (0.13)
Number of observations	1,584	1,576
Log-likelihood	–149.71	–144.11

Source: Data are from Przeworski et al. (2000).

Note: Robust standard errors are in parentheses.

* = greater than 90% significant.

** = greater than 95% significant.

*** = greater than 99% significant.