

The Causal Relationship between Democracy and Prosperity

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Motivation

- Question: Does democracy hurt development?
 - Examples:
 - India, Russia
 - Counter examples:
 - South Africa, Estonia, Albania
- What is China's political future?
 - Transiting to democracy like Taiwan, S. Korea?
 - Or maintain its current repressive rule?

Searching for a Social Law

- The link between democracy and prosperity
- The causal link between democracy and prosperity
 - Does democracy lead to prosperity?
 - Or it is the other way around?

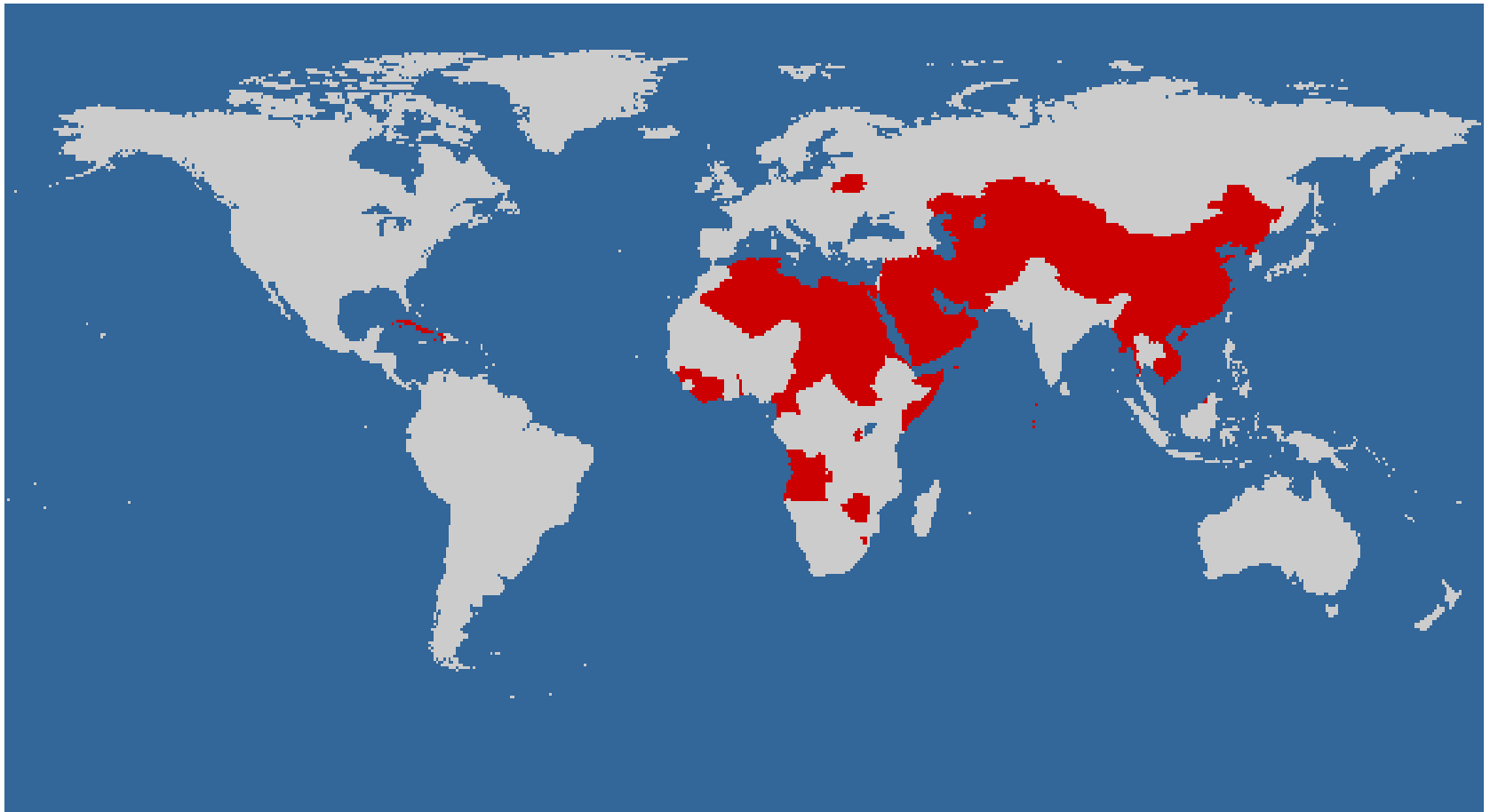
Political reality in the world in 2003

- Total number of countries: 192
- 121 electoral countries
- 48 non-free

Countries that are not free in 2003

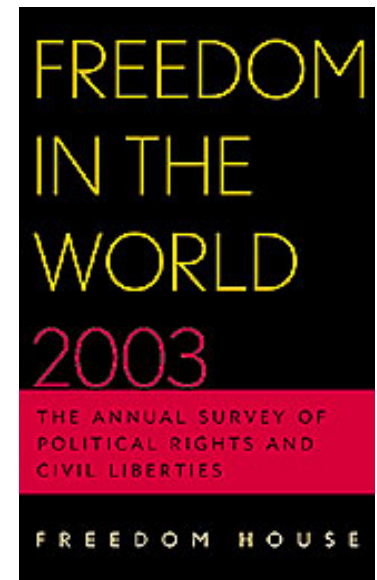
Region	Countries
Asia (9)	China, North Korea, Vietnam, Cambodia, Laos, Burma, Bhutan, Brunei, Maldives
Middle East (12)	Afghanistan, Egypt, Iran, Iraq, Lebanon, Pakistan, Oman, Qatar, Saudi Arabia, United Arab Emirates, Yemen, Syria
Africa (19)	Algeria, Libya, Tunisia, Sudan, Somalia, Eritrea, Cameroon , Cote d'Ivoire, Togo, Equatorial Guinea, Guinea, Chad, Congo , Liberia, Burundi, Rwanda, Zimbabwe, Angola, Swaziland
Former Soviet Union (6)	Belarus, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan
Central America (2)	Cuba, Haiti

Freedom Map



Quantitative measure of freedom: Freedom House Index

- Freedom House
 - Founded over 60 years ago
 - Published annual Survey since 1972.
- Freedom index from 1 to 7,
1=most free, 7=most repressive
- Based on 2 separate indexes:
 - Political Rights
 - Civil liberties



Freedom Index: Examples

34	USA, Australia, Canada	1.0	7	Kuwait	4.5
28	Japan, Greece	1.5	9	Malaysia	5.0
11	South Korea	2.0	22	Cambodia	5.5
16	Thailand, India	2.5	12	Egypt	6.0
11	Argentina	3.0	7	China	6.5
10	Indonesia	3.5	8	North Korea	7.0
16	Nepal	4.0	192	(total)	

Worst of the WORST: 15 most repressive countries

Equatorial Guinea	6.5	Burma	7
Eritrea	6.5	Cuba	7
Somalia	6.5	North Korea	7
Laos	6.5	Libya	7
China	6.5	Saudi Arabia	7
Vietnam	6.5	Sudan	7
Uzbekistan	6.5	Syria	7
		Turkmenistan	7

Political Freedom

■ Political Rights

- Electoral Process
- Political Pluralism and Participation
- Functioning of Government
- Discretionary Political Rights

■ Civil Liberties

- Freedom of Expression and Belief
- Associational and Organizational Rights
- Rule of Law
- Personal Autonomy and Individual Rights

Electoral Process

- Free elections of state head
- Free elections of legislative representatives
- Fair polling and ballots

Political Pluralism and Participation

- The right to organize different political parties
- Significant opposition power
- Free from domination by the military, foreign powers, or religious hierarchies
- Participation of cultural, ethnic, religious, and minority groups



Functioning of Government

- Freely elected representatives determine the policies of the government
- Free from pervasive corruption
- Government accountability and transparency

Discretionary Political Rights

- Right to petition the ruler
- No government favor of one ethnic or culture group



Civil Liberties

- Freedom of Expression and Belief
- Associational and Organizational Rights
- Rule of Law
- Personal Autonomy and Individual Rights

Freedom of Expression and Belief

- Free press –新闻自由
- Free religious expression –宗教自由
- Academic freedom, free of extensive political indoctrination –
学术自由， 不受政治灌输的自由
- Free private discussion

Associational and Organizational Rights

- Freedom of assembly and demonstration
- Freedom of political organization
(including political parties and civic organizations)
- Free trade unions – 工会

Rule of Law

- Independent judiciary—司法独立
- Rule of law prevail in civil and criminal matters --民法与刑法
- Protection from police terror, unjustified imprisonment, or torture.
- Equality under the law—司法公正

Personal Autonomy and Individual Rights

- Freedom of travel, residence and employment.
- The right to own property and establish private businesses.
- Personal social freedoms, including gender equality, choice of marriage partners, and size of family
- Equality of opportunity

Income level and Freedom Rating (1)

Income Level	Country	Freedom Rating
[40,000, 50,000]	Luxembourg	1.0
	Switzerland	1.0
	Japan	1.5
[30,000, 40,000]	Denmark	1.0
	Norway	1.0
	Austria	1.0
	Germany	1.0
	Finland	1.0
	Sweden	1.0
	USA	1.0
	Iceland	1.0
	Belgium	1.0
	Netherlands	1.0
	France	1.0
Ireland	1.0	

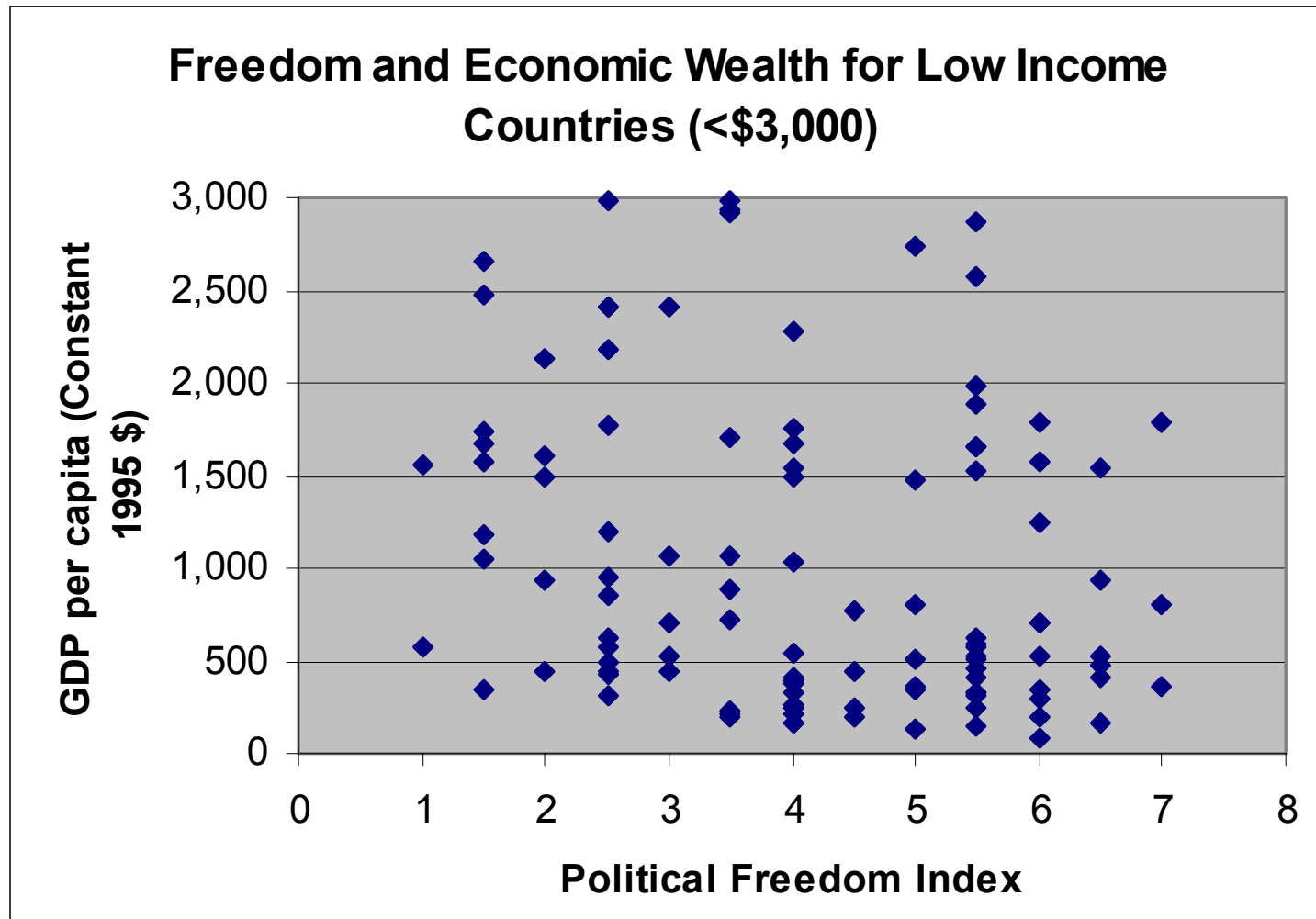
Income level and Freedom Rating (2)

Income Level	Country	Freedom Rating
[20,000, 30,000]	Singapore	4.5
	Australia	1.0
	Canada	1.0
	UK	1.0
	Italy	1.0
[10,000, 20,000]	New Zealand	1.0
	Spain	1.0
	Brunei	5.5
	Israel	2.0
	Ecuador	3.0
	Korea, South	2.0
	Greece	1.5

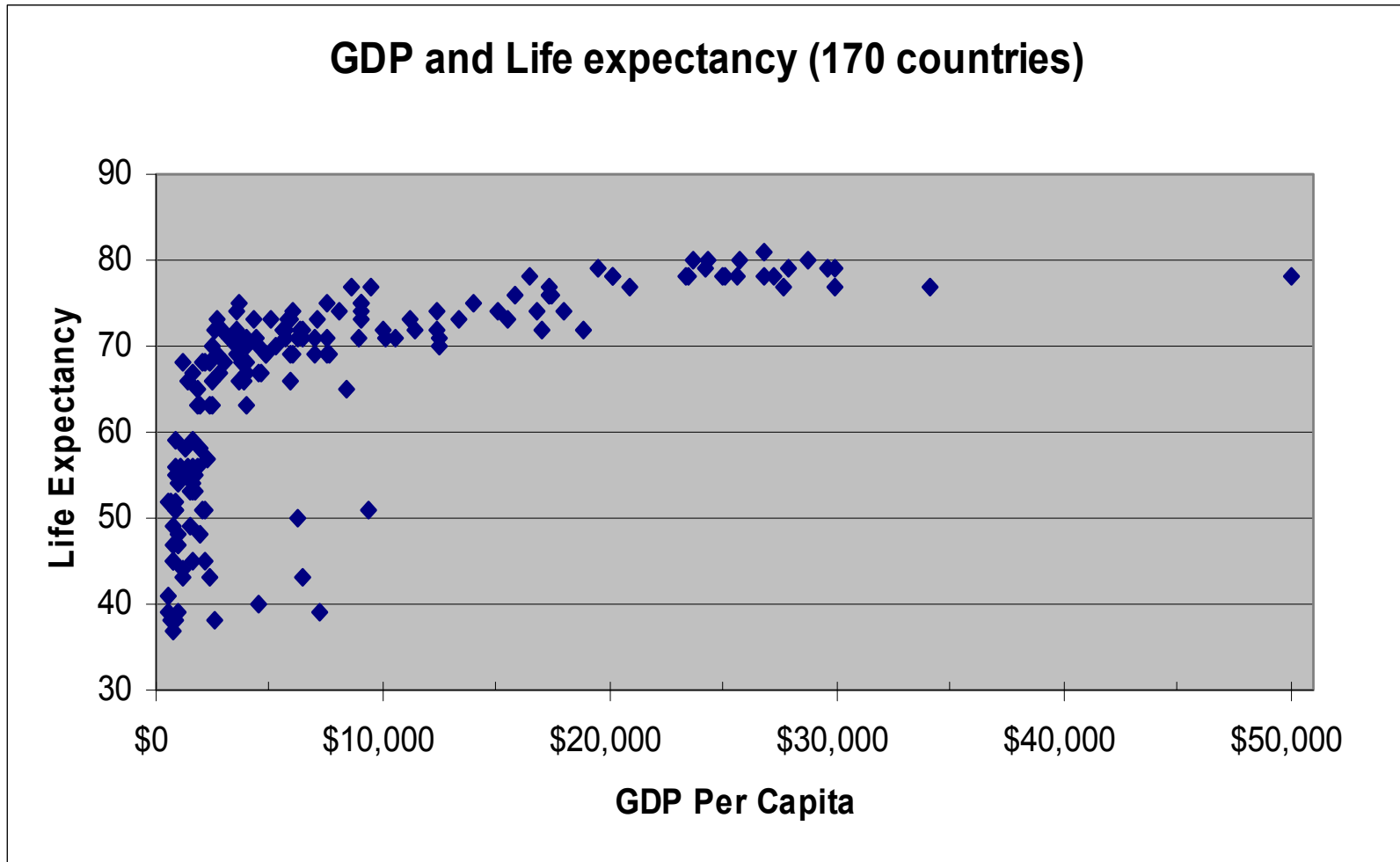
Outliers: Oil export nations

GDP per capita in 2002	Country	Political rating
[10,000, 20,000]	United Arab Emirates	5.5
	Brunei	5.5
	Bahrain	5.0
	Kuwait	4.5
[5,000, 10,000]	Saudi Arabia	7.0
	Oman	5.5

Political Freedom and Economic Wealth for Low-Income Countries



Life Expectancy and GDP



Causality Study and Regression

- Regression only test correlation

$$Y_t = a + bX_t$$

- Granger causality test

$$Y_{t+10} = a + bX_t$$

- Events study method

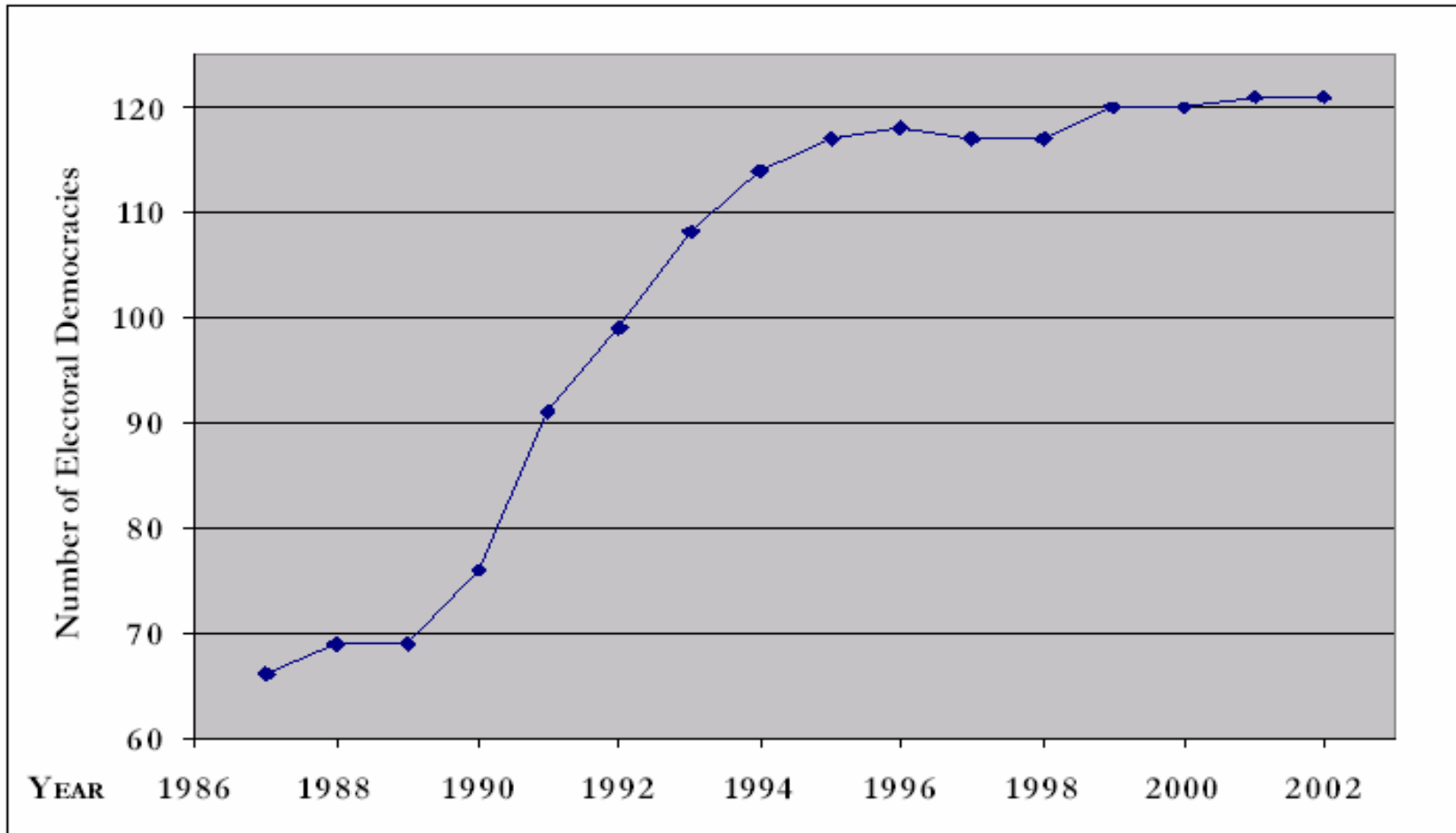
$$Y_{t+10} \text{ compared to } Y_t$$

Definition and Data set

- Democracy:
 - A country with freedom index ≤ 3
- Stable democracy
 - A country with freedom index ≤ 3 continuously for at least 10 years, and until 2002
- Income level
 - GDP per capita (constant 1995 US \$)
- Data: 169 countries (without 6 oil nations)
- Year: 1972 -2002

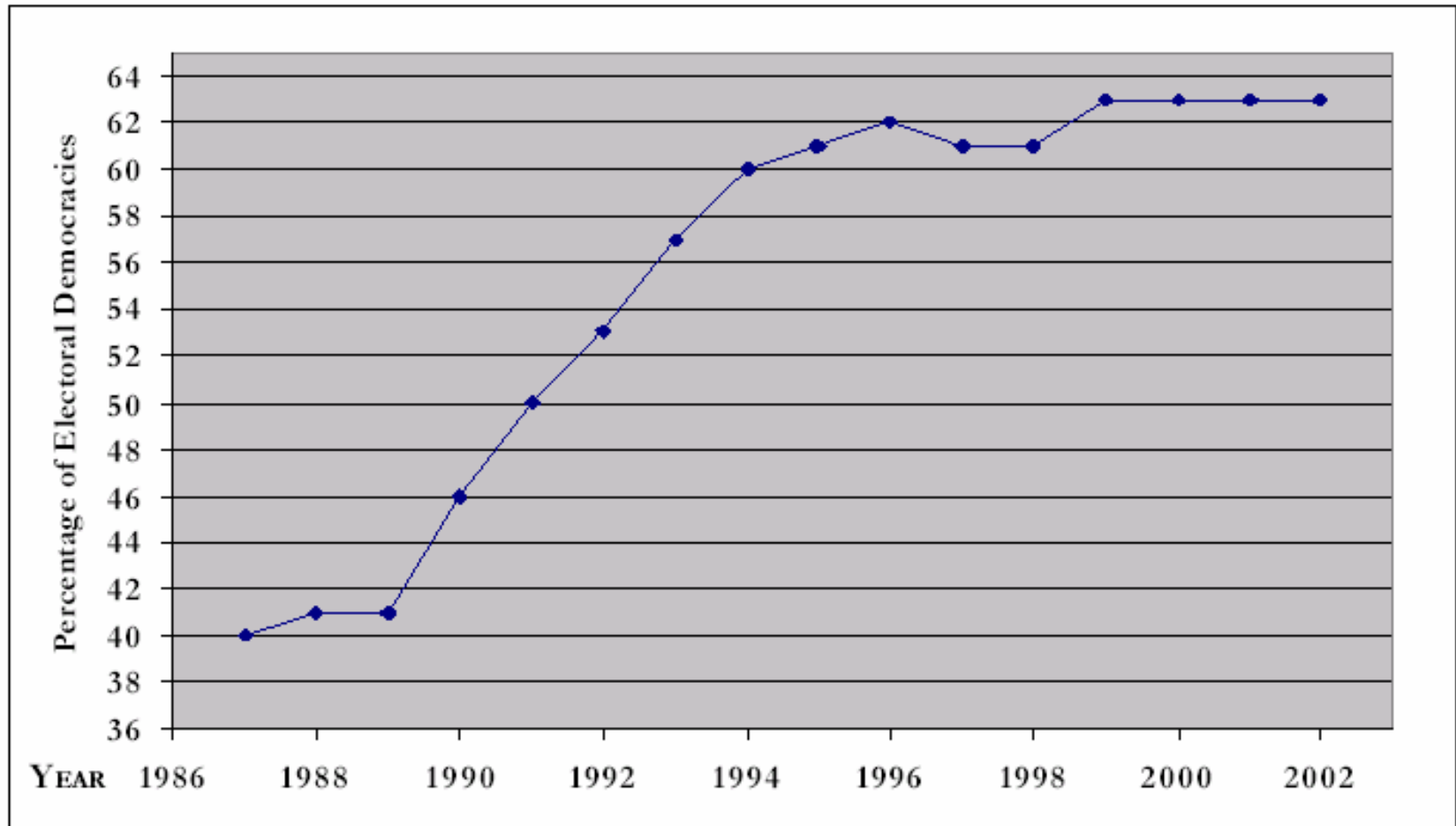
Movement toward freedom in the last part of 20th century

NUMBER OF ELECTORAL DEMOCRACIES



Percentage of Electoral Democracy

PERCENTAGE OF ELECTORAL DEMOCRACIES



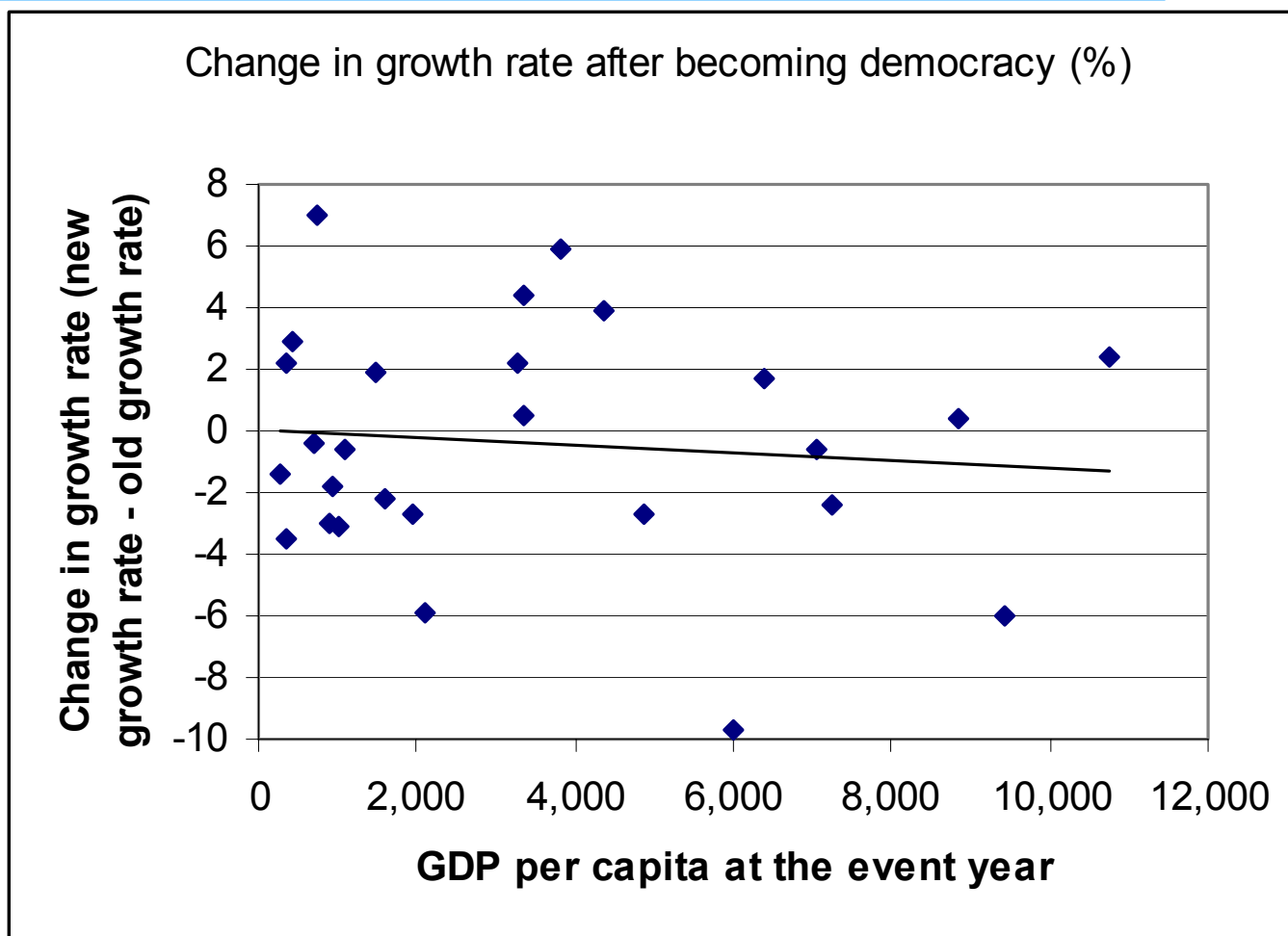
Actual events and Freedom rating

	Year of Democratic Event	Year of reaching 3
Chile	1990 (Free election)	1990
Uruguay	1985 (Civilian rule restored)	1985
Namibia	1990 (Independence)	1990
Portugal	1976 (election of constitutional assembly)	1976
Benin	1991 (free election)	1991
El Salvador	1992 (military and political reform)	1992
Estonia	1991 (independence from Soviet Union)	1991
Greece	1974 (free election)	1974
Spain	1977 (free elected government)	1977
Hungary	1990 (first multiparty election)	1990

Democracy event and its effect on growth

Country	Average growth rate 10 years before the event (%)	Event Year	Average growth rate 10 years after the event (%)
Botswana	9.2	1973	7
Chile	3	1990	5
South Korea	6	1988	5
Slovakia	-2	1994	4
Uruguay	0	1985	3
Namibia	-2	1990	2.1
Portugal	6	1976	2.0
Estonia	1.1	1991	1.6
Greece	7	1974	1.5
Spain	4	1977	1

Democracy event and its effect on growth (graph of all 28 countries)



Countries that reached \$5,000 and their freedom rating change

Country	Event year	Freedom rating at the event year	Average rating in the next 10 years
Czech Republic	1995	1.5	1.5
Estonia	2002	1.5	1.5
Hungary	1999	1.5	1.5
Malta	1984	3.0	1.6
Chile	1997	2.0	1.9
Croatia	2000	2.5	2.0
Cyprus	1977	3.5	2.0
South Korea	1984	5.0	3.0
Uruguay	1979	6.0	3.3
Seychelles	1987	6.0	4.5

Examples of transiting to democracy

- Thailand: reaching \$2,000 in 1991 and \$3,000 in 2003, democracy in 1996
- Chile: reaching \$3,000 in 1989, first election in 1990
- South Korea: reaching \$5,000 in 1984 first free election in 1987
- Uruguay: reaching \$5,000 in 1979, Restore civilian elected government in 1985
- Spain: reaching \$10,000 in 1974, first election in 1977

Transiting to democracy from a non-democracy after certain income level

- Countries originally non-democratic

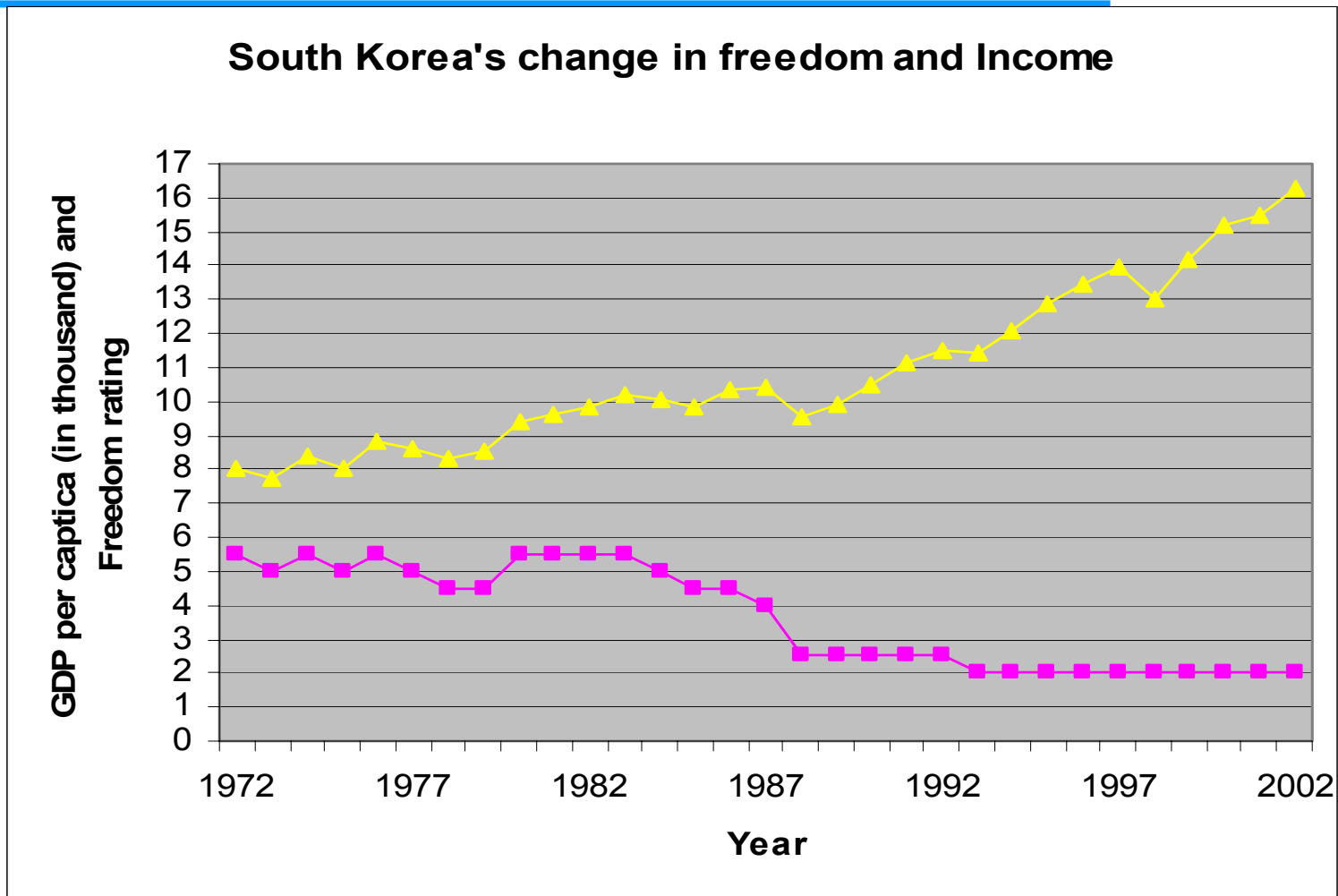
Income	Ratio of transiting to democracy
\$1,000	8%
\$2,000	0
\$3,000	14%
\$5,000	50%
\$10,000	50%
\$20,000	0

Income level event and its impact on freedom (non-democratic)

- Countries originally non-democratic

Income	Countries becoming freer
\$1,000	83%
\$2,000	75%
\$3,000	57%
\$5,000	100%
\$10,000	100%
\$20,000	100%

The Path of South Korea



Examples of reversing to non-democracy

■ Suriname

--reaching At \$1,000 in 1977 (the only case of reverse)

Countries reaching \$1,000 that do not reverse:

Botswana, Dominica Republic, Samoa

■ Colombia

□ : reaching \$2,000 in 1987

■ Turkey:

□ reaching \$2,000 in 1976

Countries reaching \$2,000 that do not reverse:

Namibia, Grenada, Fiji, Belize, Dominica. ...

Reversing to Non-democracy after reaching certain income

- Countries originally democratic

Income	Ratio of changing to non-democracy
\$1,000	25%
\$2,000	25%
\$3,000	0
\$5,000	0
\$10,000	0
\$20,000	0

Summary

- Democracy is not a cause of economic growth
- Economic prosperity will definitely lead to democracy

Remaining questions

- If Democracy does not affect growth, what causes growth?
- Why does prosperity leads to democracy?