Institutions and Poverty Problems

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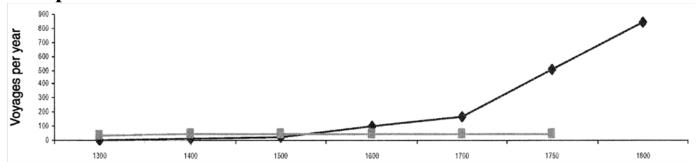
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A. Introduction

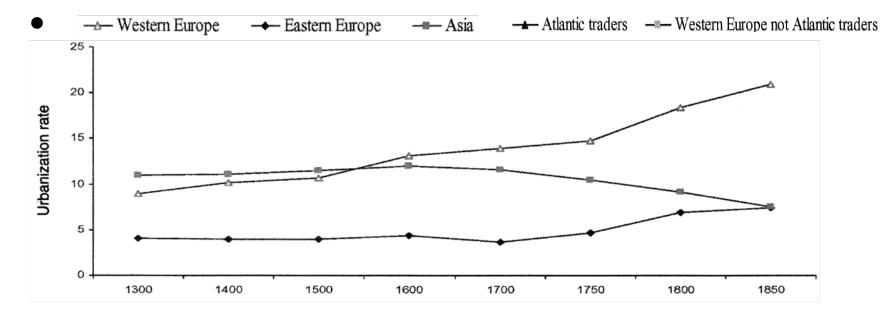
It is not until recent that economists have devoted effort toward understanding the role of institutions as well as economic infrastructures played in the process of economic development. This relatively thin but important literature includes:

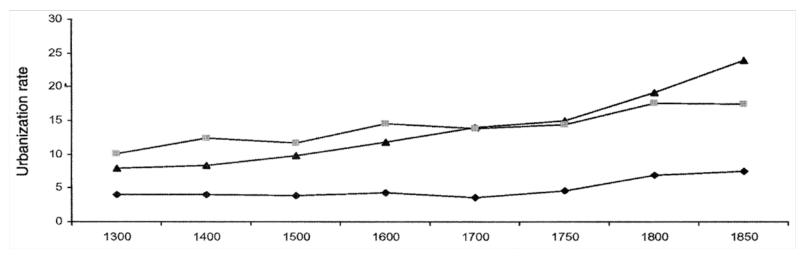
- Institutional and infrastructural development:
 - classic: North (1981, 1990), Baumol (1990), Mokyr (1990)
 - conventional: Shleifer-Vishny (1993), Knack-Keefer (1995), Hall-Jones (1997)
 - new literature: Acemoglu-Robinson (2000, 2008), Acemoglu-Robinson (2000, 2001, 2008), Acemoglu-Johnson-Robinson (2001, 2002, 2005), Galor-Moav-Vollrath (2009), Palivos-Wang-Yip (2010)
- The Importance of Institutions: institutional factors can
 - affect laws and regulations under which households and firms function
 - shape the incentives individuals have for various decision-making
 - then, individuals' decisions can, in turn, affect the establishment of political and economic institutions

- B. Trade, Institutions and the Rise of Europe: Acemoglu, Johnson and Robinson (2005)
- The rise of Europe after 1500 is believed due largely to strong growth in countries involving cross-Atlantic trade with the "New World," particularly over the period of 1500-1850



- Such substantial trade and associated colonialism changed institutions (in England and the Duchy of Burgundy), strengthening merchant groups by constraining the power of the monarchy and by protecting property rights
- Improved institutions led to faster and more sustained economic growth
- A notable phenomenon accompanying such development is rapid urbanization: Atlantic traders (UK, Netherlands, Portugal, Spain) were not as urbanized as non-Atlantic traders in Western Europe during 1300-1700, but become urbanized rapidly afterwards



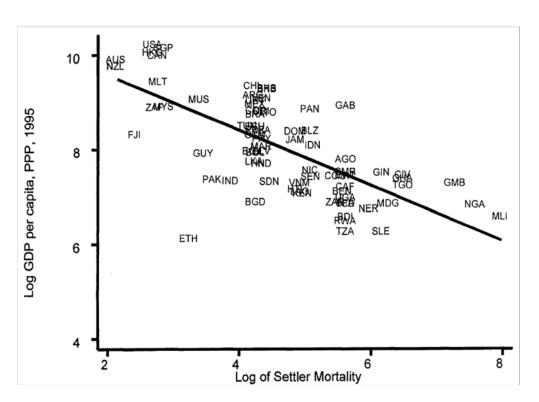


- 1. The Hypothesis
- Four subhypotheses:
 - political institutions constraining state power are essential for the merchant's incentives to undertake investment
 - such institutions were not welcome by the monarchy earlier in Europe
 - institutions favored by economically and politically powerful groups (royal family, landlord, bishops) are more likely to prevail
 - in countries with nonabsolutist initial political institutions, Atlantic trade and colonization strengthened commerce, including new groups without ties to the monarchy, leading to a *rise of the middle group*
- These subhypotheses imply that, in countries with easy access to the New World via Atlantic and without an absolutist monarchy,
 - Atlantic trade provided substantial profits and hence political power for commerce outside the monarchy circle
 - the rise of this merchant group demanded and obtained favorable political institutions protecting their property rights
 - with such newly gained power and favorable institutions, these Atlantic trading merchants had higher incentives to invest and continued growing, fueling the first *Great Divergence* of cross-country per capital real income

- 2. Empirical Findings
- The difference in success between UK/Netherlands and Portugal/Spain: the former had political institutions placing sufficient checks on the monarchy
 - UK's key institutional development:
 - the Civil War of 1642-1649 with Parliamentarians defeating Charles I
 - the Glorious Revolution of 1688-1680 with James II deposed by Parliament since then a parliamentary regime was formed
 - The Netherlands' key institutional development:
 - the establishment of the independent Dutch Republic replacing the Habsburg monarchy, starting 1570 and ending 1648
- Significance of Atlantic trade in the UK and the Netherlands:
 - UK: mostly known the East India Company founded in 1600, since then Atlantic trade created large profits, about:
 - £0.2m per year, 1601-1650
 - £0.5m per year, 1651-1675
 - £0.9m per year, 1676-1700
 - £1.7m per year, 1701-1750, growing to about £5.0m per year by 1800
 - Netherlands: mostly known the Dutch West India Company created by Philip III in 1609

C. Mortality and Colonial Institutions: Acemoglu, Johnson and Robinson (2001)

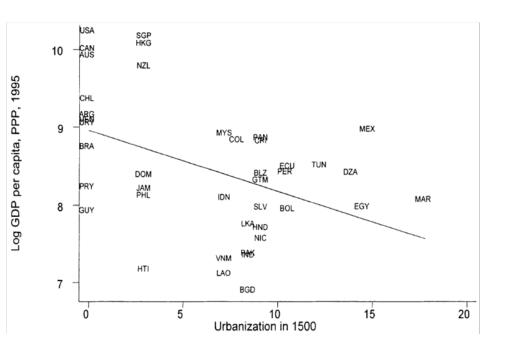
- European settlements:
 - in places with high mortality rates, European settled by setting up short-term extractive institutions: colonization of Congo under Belgian
 - in places with low mortality rates, "Neo-Europes" were created (Western European Offshoots) in which institutions such as



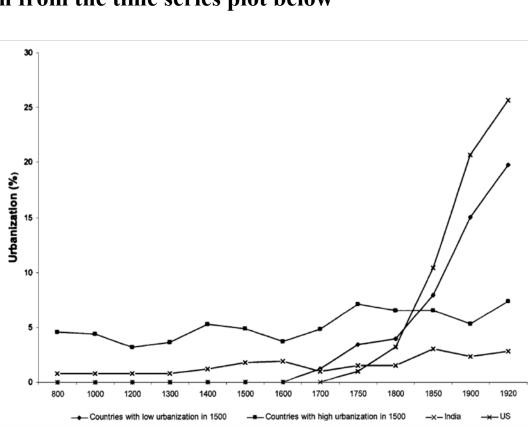
private property protection were established: colonization of Australia/New Zealand/US under English

- The institutions established in colonial eras persisted even after independence
- So neo-Europes' post-independence per capita income turned out to be higher

- D. Institutional Reversal: Acemoglu, Johnson and Robinson (2002)
- Many countries which were initially rich in 1500AD became relatively poor now: Australia, New Zealand & US
- In initially poor places, there were more opportunities, which induced Europeans to establish institutions to encourage investments
- Measure of prosperities: urbanization
 - those with lowest levels of urbanization in 1500, such as Australia, Canada, Hong Kong, New Zealand, Singapore & US, achieved highest (PPP adjusted) per capita income in 1995
 - those with highest levels of urbanization in 1500, such as Algeria (DZA), Egypt, India, Morocco (MAR) and Tunisia, stagnated



- why: early urbanization => incumbent powers (landlords, merchants trading necessities, city rulers) wanted to maintain their powers => block new entrants => cause inefficiency and slow down growth
- the reversal can be best seen from the time series plot below
 - countries with low urbanization outperformed those with high
 - urbanization also see US vs. India
 - reversal occurred between 1750 and 1850
 - it coincided with
 - widespread of industrial technologies
 - intensity of trade



- establishment of private property protection

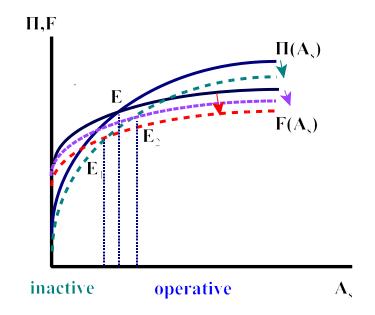
- E. Political Transition: Acemoglu and Robinson (2001)
- In Western Europe and Latin America, nondemocratic societies were controlled by a rich elite
- The initially non-elite poor could challenge the elite by threatening revolution
- Would such a political transition toward democracy occur?
 - When the opportunity cost of revolution facing the poor was low (e.g., during recessions), such a threat could force the elite to permit democratization (mass murder, famine, plague, high tax/corruption)
 - Yet the redistribution from elite to the poor lowered the elite's incentive for democratization
 - The latter could dominate when the elite's loss turned out to be big
 - Yet if the elite could benefit from having a better motivated group of poor, the associated loss would become more bearable
- Examples:
 - Chin Dynasty in 200BC
 - **Robin Hood in the 14th century**
 - Louis XVI in the 18th century



- F. Infrastructure and Economic Incentives: Baumol (1990) and Hall-Jones (1999)
- If you build, they will come (Governor Nathan; Field of Dream)
- An entrepreneur's investment decision can be simply captured by a discrete choice problem:
 - invest if Π (profit) \geq F (fixed cost)
 - do not invest if $\Pi < F$
- Determinants of F
 - fundamental economic cost factors
 - infrastructure costs
 - utility infrastructure
 - transportation infrastructure
 - laws, regulations and tra (red tapes matter)
 - in post-communist Russia and post-1979 China, a foreign business needed to bribe every officer involved, including those in foreign investment office, industrial ministry, finance ministry and the executive branch of the local government
 - in 1983 Peru, it required 2 bribes and 289 days to obtain official licensing for starting a small garment factory in Lima

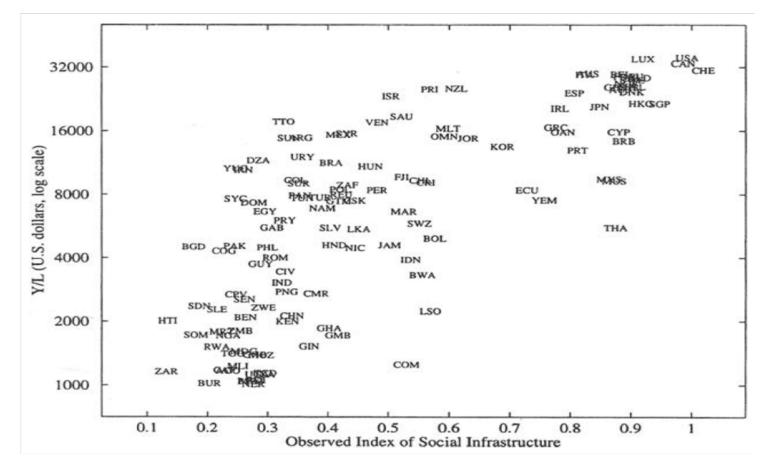
- Determinants of Π
 - fundamental economic firm-specific profit factors
 - market structure
 - inter-firm spillovers
 - international spillovers
 - in Ming & Ching dynasty of China, the reactionary rulers suppressed foreign ideas to ensure tight controls, leading to the fall of China
 - stability of economic environment (probability of success/failure)
 - laws, regulations and tax distortions
 - corporate income/profit taxes
 - investment tax credit (ITC)
 - import tax rebates (ITR)
 - in post-WWII Japan and Korea, corporate income tax rates averaged 10% (as opposed to over 30% in the U.S.), with both ITC and ITR being offered to performing firms
 - labor union and wage setting
 - financial markets and capital costs
 - in post-WWII Taiwan, high-interest postal saving accounts were offered, attracting funds to lower firms' capital costs

- Operative profit $\Pi(A_s)$ is increasing but concave in firm-specific technology A_s
- Fixed cost $F(A_s)$ is also increasing and concave, flatter than $\Pi(A_s)$
- Determining the level of firm investment, productivity and growth:



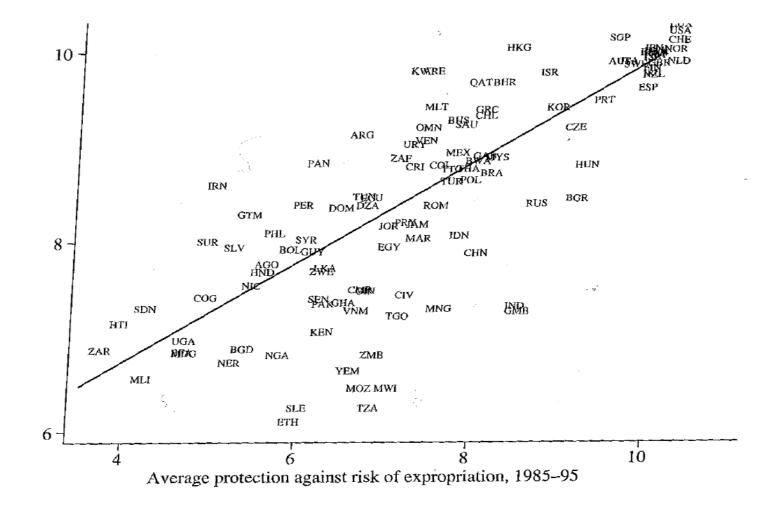
- let infrastructure be financed by corporate income (profit) tax
- better infrastructure lowers fixed cost (larger drop if government more efficient/less corruptive), but also reduces operative profit (higher tax)
- possibly more operative firms/higher growth (E_1) or the opposite (E_2)
- even in the former case, productivity need not be higher (selection effect)

- Above the cutoff technology at E, firms operate
 - better technology requires more fixed costs but yields higher profit
 - to adopt better technology, it must be that the profit channel dominates the fixed cost channel
- Results:
 - Red tapes
 - \Rightarrow $F(A_s)$ shifts up
 - => cutoff moves to the right
 - => fewer operative firms
 - low corporate income tax
 - $\Rightarrow \Pi(A_s)$ rises
 - => cutoff moves to the left
 - => more operative firms
- more operative firms =>
 - more aggregate output + better competition
 - less productive firms become operative => lower average productivity (i.e., a negative selectivity effect in equilibrium)



• Infrastructure and economic performance:

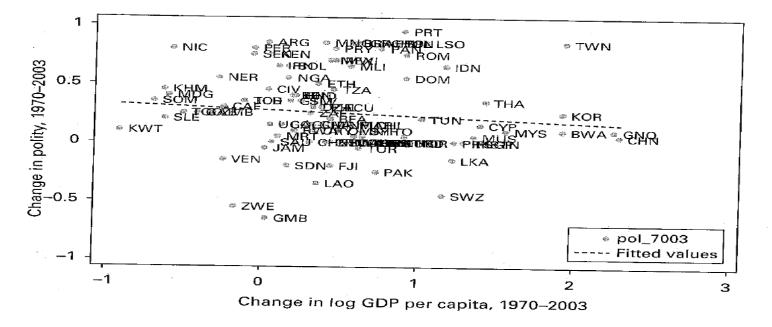
• this positive relationship => positive profit channel dominates negative fixed cost channel and selectivity effect



• IPR protect and economic performance:

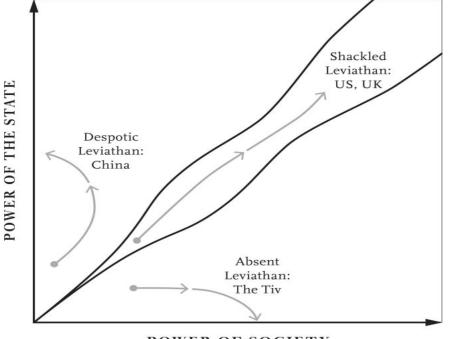
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- G. Democracy and Development
- Cross-country relationship between democracy and growth is not robust



- Within the sub-Saharan countries, the most democratic countries (Botswana and Ghana) do perform better
- In Asia, China and Taiwan both perform well despite very different democracy

- The Narrow Corridor: Acemoglu-Robinson (2019)
 - the power of society vs. the power of the state
 - a middle way, shackled Leviathan, provides stability which is less socially and economically repressive
 - too much state power: despotic-few rights & fear of tyrannical government (Afghanistan & North Korea; to some degree Cambodia, China, Laos, Myanmar, Nicaragua & Vietnam)
 - too much society power: stateless that can degenerate into total disorder (Tivoid ethnic group in Nigeria & Cameroon about 14 million population; Lebanon)



POWER OF SOCIETY

- H. Market Reforms and Development (Wang-Wong-Yip 2016)
- In the development process, many countries undertook market reforms
- While some succeeded, others failed
- Production: Cobb-Douglas with capital income share = α
- Technology assimilation of US technology by a firm in country j:

 $A_{j,t} = \tau_{j,t} A_{US,t} \min \left[1, (k_{j,t}/k_{US,t})^{\zeta_j} \right]$ (Basu-Weil-Acemoglu)

 τ_i = relative TFP gap from the US, ζ_i = barriers to assimilation ($0 \le \zeta_i \le 1-\alpha$)

• When $\zeta_i < \zeta_{US}$, relative income becomes:

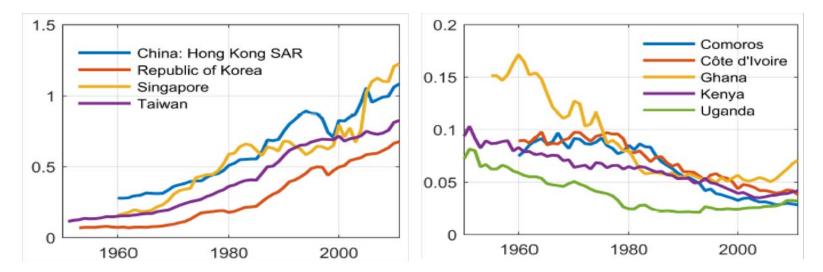
$$\frac{y_{j,t}}{y_{US,t}} = \tau_{j,t} \left(\frac{k_{j,t}}{k_{US,t}}\right)^{\alpha+\zeta_j}$$

- increasing in relative capital accumulation
- decreasing in relative TFP gap
- decreasing in technology barriers

Year	Average per capita income bottom 10%	Average per capita income top 10%	Ratio
1960	606.2	12015.0	19.8
1970	758.1	16072.5	21.2
1980	716.9	24545.9	34.2
1990	637.0	26390.7	41.4
2000	657.9	35522.1	54.0
2010	852.0	45277.3	53.1
lote:	Data from the Penn World Table 8.0, in US	dollars.	

• Widening world income disparities

• Miracles vs. Traps:



		development accounting					growth accounting		
	average growth of relative income 1960-2011	relative income in 1960	relative TFP	institutional barrier parameter	institutional barriers	relative TFP advancement	capital deepening		
Hong Kong	2.45%	29.85%	1.087	0.667	78.31%	-17.47%	39.16%		
Singapore	2.92%	20.95%	0.697	0.103	13.92%	40.83%	45.25%		
South Korea	4.06%	10.64%	0.901	0.391	57.61%	-6.70%	49.09%		
Taiwan	3.59%	13.62%	1.551	0.533	82.40%	-33.96%	51.56%		
Malaysia	2.21%	10.73%	1.067	0.667	102.46%	-53.68%	51.23%		
Thailand	2.70%	5.10%	0.405	0.296	36.33%	22.71%	40.95%		
China	4.95%	2.67%	0.406	0.389	38.81%	27.91%	33.28%		
India	1.11%	4.85%	1.544	0.667	92.94%	-39.41%	46.47%		
Botswana	4.03%	3.09%	0.244	0.000	0.00%	68.16%	31.84%		
Mauritius	0.97%	14.31%	0.867	0.667	23.44%	64.84%	11.72%		
Average	2.90%	11.58%	0.877	0.438	52.62%	7.32%	40.05%		

• 10 development miracles:

- institutional barriers most important, accounting for over 50% of growth
- capital deepening crucial as well, accounting for about 40%
- residual (relative) TFP not essential at all (< 10%)

			developm	nent accounting	growth accounting			
	average growth of relative	relative income in		institutional barrier	institutional	relative TFP	capital	
	income 1960-2011	1960	relative TFP	parameter	barriers	advancement	deepening	
A. Trapped Ec	conomies							
Comoros	-2.01%	4.34%	0.596	0.667	61.65%	7.53%	30.82%	
Cote d'Ivoire	-2.76%	8.26%	1.420	0.667	74.95%	-12.42%	37.47%	
Ghana	-0.83%	10.28%	0.508	0.509	187.76%	-210.81%	123.05%	
Kenya	-1.32%	6.46%	0.132	0.000	0.00%	52.03%	47.97%	
Uganda	-0.85%	4.73%	0.428	0.285	7.18%	84.42%	8.40%	
Average	-1.56%	6.82%	0.617	0.425	66.31%	-15.85%	49.54%	
B. Other Lagg	ards							
Argentina	-0.58%	43.51%	0.734	0.667	73.66%	-10.48%	36.83%	
Brazil	0.42%	15.56%	0.328	0.000	0.00%	36.79%	63.21%	
Chile	0.45%	25.87%	1.382	0.667	284.46%	-326.69%	142.23%	
Greece	0.61%	34.71%	1.113	0.667	185.22%	-177.84%	92.61%	
Philippines	-0.65%	11.68%	0.722	0.483	-34.85%	158.93%	-24.07%	
Average	0.05%	26.27%	0.856	0.497	101.70%	-63.86%	62.16%	

• 10 development laggards

• institutional barriers and capital deepening matter most in traps

• institutional barriers are the sole driver in laggards, with relative TFP and capital deepening essentially offsetting

- Case study: The world factory China
 - China pursued on export-oriented growth strategy toward the end of 1970s, following the steps of the East Asian miracles
 - More comprehensive export-led growth strategy was adopted after 1992 (the "Southern Trip" by Deng Xiao-ping)
 - It provided the correct incentives from all government policies, including industry and trade policies, regulations (new laws and rules in all aspects of Chinese economic and trade reforms), administrative guidance and support (establishment of economic and technological development zones (ETDZs) and directive measures to lead finance and investment to the key sectors), and foreign direct investment (FDI) policy with capital market liberalization
 - This led to double digit growth
 - China's policies concurrently affect all sectors of exports, including primary goods, intermediate goods, and finished products

- Starting mid-1990s, 7 years before its accession to the WTO, China has lowered its effective tariff sharply, from over 30% to below 10%
- China took only two decades to become the number-one exporter of the world and the largest world factory
- Its FDI share in exports rose from 1.94% in 1986 to 54.8% in 2003
- The open door reform is accompanied by several other key reforms that helped advancing the economy, including:
 - agricultural reform (from *dual* economy to market economy)
 - privatization of state-owned enterprises (SOEs): Xiagang since 1993
 - migration relaxation: hukou reforms in 1994-95 and 2014
 - college expansion: in 1999

- Case study: The next giant India
 - India's growth came much later than China
 - From 1950 to 1990, India's per capita income grew at an average annual rate of only about 2%, a result due to restrictive trade, financial, and industrial policies
 - The state took control of major heavy industries, including licensing requirements, capacity restrictions, and limits on regulatory framework
 - Following the foreign exchange crisis 1957-58, trade policies orientated towards self-sufficiency and the government gradually tightened control by increasing statutory liquidity and cash reserve requirements
 - On the positive end, however, the government invested heavily in R&D and many organizations were established to commercialize research outcomes, leading to the birth and rise of the software industry: its average R&D expenditure was 0.4% of GDP from 1950 to 1990, but surged to 0.8% form 1991 to 2005, twice as much

- In the late 1970s, open door policies were adopted, including:
 - liberalizing international trade (about the same time as China)
 - liberalizing the capital market (earlier than China)
- It was accompanied by the pro-business policy emphasized by Indira Gandhi, who returned to power in 1980
- The rate of growth was still moderate, due to:
 - incomplete implementation of the open door policy
 - more rigid industrial and financial policies
- Another major reform was undertaken by Manmohan Singh after the 1991 balance-of-payment crisis, which essentially ended protectionism
- This led to an average annual growth rate that exceeded 6% from 1992 to 2005 not as rapid as China due partly to much faster population growth

- Case study: The African Miracle Botswana
 - From 1966 to 1988, Botswana's real GDP grew at an annual rate of 14.5%
 - A key open-door reform was institutionalized in 1979
 - Rapid export growth followed the discovery of diamonds, with mining contributing 13% to the GDP in 1975 to more than 50% by the end of the 1980s
 - Since then Botswana sought to diversify the economy by encouraging investment from aboard
 - The transition slowed down its growth over 1997-2002, its real GDP growth rate decreased to 5.9%
 - AIDS has also been a serious problem in 2009, UN reports its HIV prevalence rate at 24.8%, one of the highest in the world, similar to Swaziland (25.9%) and Lesotho (23.4%)

- Case Study: The rise of Ghana
 - Attaining its political independence in 1957, Ghana adopted a fast track strategy by launching state-owned import substitution industries in the 1960s
 - In 1970, Ghana had one of the most diverse and dynamic manufacturing sectors in sub-Saharan Africa. However, as Ghana pursued non-selective industrialization policies behind high barriers of protection, its industry failed to develop adequate industrial capabilities and infrastructure
 - Growth slowed down and, with declining revenues from the primary exports that had financed manufacturing industries, even turned negative
 - This led to market reform the 1980s and growth resumed by the end of the 1990s.
 - Yet, the R&D effort was well below the critical mass needed to make a significant contribution to the adoption or adaptation of modern technologies

- I. Fiscal, Monetary and Foreign Exchange Institutions and Development
- Fiscal expansion, inflation and negative real returns
 - Four high-inflation episodes: Rogers-Wang (1993)

Country		tion rate ercent)		owth Around on (Percent)
Argentina	434 688	(1983) (1984)	67 -5.39	(1985:2) (1985:3)
Peak inflation rates (per episode):	387	(1985)	13.5	(1985:4)
31 percent (June 1985), 190 percent (1989:3)	82 175	(1986) (1987)	4.1	(1987) (1988)
	388	(1988)	-4.1	(1989:3)
Success in stabilizing: very temporary (before April 1991)	4,145	(1989) (1990)	-4.5	(1989) (1990)
very temperary (before riph root)	923	(1991)		(1000)
	22	(1991:2-1992:2)		
Bolivia	276	(1983)	33.3	(1985:2)
Peak inflation rate:	1,281 8,175	(1984) (1985)	-25.7 15.2	(1985:3) (1985:4)
66 percent (June 1985)	14.6	(1986)	-2.9	(1986)
	16.0 15.2	(1987)	2.1	(1987)
Success in stabilizing:	16.5	(1988) (1989)	3.0 3.2	(1988) (average 1989–1991)
yes, immediate	17.4	(1990)		
	16.2	(1991)		
Brazil	178 197	(1983) (1984)	-2.5	(1983) (1984)
Peak inflation rates (per episode):	227	(1985)	8.3	(1985)
20 percent (February 1986),	145	(1986)	7.6	(1986)
24 percent (June 1987) 33 percent (January 1989),	225 1,038	(1987) (1988)	3.6	(1987) (1988)
59 percent (March 1990)	1,759	(1989)	3.3	(1989)
Success in stabilizing: only temporarily	1,658	(1990)	-4.1	(1990)
only temporarily	494	(1991) (1992)		
Mexico	29	(1981)		
	99	(1982)	6	(1982)
Peak inflation rates (per episode): 11 percent (August 1982),	81	(1983)	-4.2	(1983)
15 percent (August 1982), 15 percent (December 1987)	59 64	(1984) (1985)	3.6 2.6	(1984) (1985)
	106	(1986)	-3.7	(1986)
Success in stabilizing: very temporary (before December 1989)	159 45	(1987) (1988)	1.6 1.4	(1987) (1988)
very temporary (before December 1989)	20	(1989)	2.9	(1989)
	24	(1990)	4.9	(1990)
	19 12	(1991) (1992)	3.9	(1991)
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Countries	Episodes	Real Interest Rates %
Boliva	1979-85	-49.4
Guinea-Bissau	1989-92	-15.9
Nicaragua	1989-91	-86.7
Sierra Leone	1983-91	-34.4
Sudan	1979-84	-15.6
Somalia	1979-88	-24.9
Uganda	1981-88	-41.8
Zambia	1985-91	-33.6

• Episodes with severe negative real interest rates: Easterly (2001)

Countries	Episodes	Black Market Premium %
Bangladesh	1985-92	198.9
Costa Rica	1981-84	179.2
Ethiopia	1984-93	176.8
Guyana	1980-90	344.4
Mauritania	1982-89	156.8
Nicaragua	1981-88	2116.1
Sierra Leone	1987-90	545.7
Sudan	1984-90	269.0
Syria	1984-91	403.6
Uganda	1980-88	301.0
Zambia	1987-91	308.0

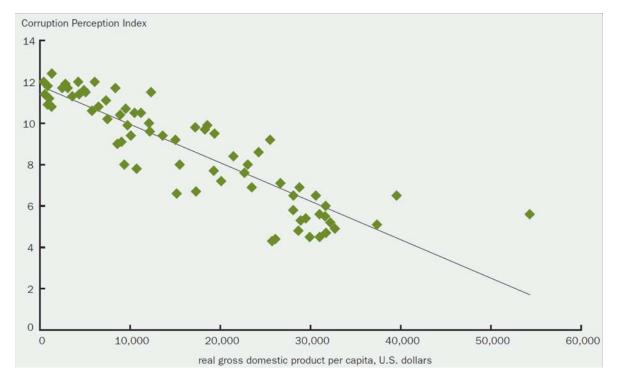
• Large foreign exchange black market premium: Easterly (2001)

- A Nobel winning institution: Microfinance
 - Credit targeted toward small and poor entrepreneurs
 - The origin: Grameen Bank, Bangladesh, founded in 1983 by Muhammad Yunus (receiving Nobel Peace Prize in 2006)
 - Key features other than targeted borrowers:
 - Solidarity lending: group lending, collateral free with collective act on repayment
 - Socially responsible lending: targeted projects helping poor people with better earnings and better living environment
 - Buera-Kaboski-Shin (2012): microfinance and the macroeconomy
 - use data from Microfinance Information Exchange (US\$ in 2009)

Country	Fraction of Borrowers	MF Loans to GDP	Average Loan Size	Per-capita Income	Total Credit to GDP
Bangladesh	0.13	0.028	112	547	0.37
Mongolia	0.13	0.129	1,393	$1,\!410$	0.62
Peru	0.11	0.041	$1,\!590$	$4,\!658$	0.21
Bolivia	0.09	0.107	1,926	1,776	0.31
Vietnam	0.09	0.044	510	1,024	1.06
Kenya	0.04	0.036	744	803	0.20
India	0.02	0.003	146	$1,\!154$	0.53

- Findings: microfinance raised # of entrepreneurs by 26%, TFP by 4% and output by 2%

- J. Corruption and Development
- Corruption at various levels has been common in developing economies with less well-defined institutions weaker enforcement mechanisms
- Cross-country study suggests that more advanced economies are less corrupted (lower corruption perception index, CPI)

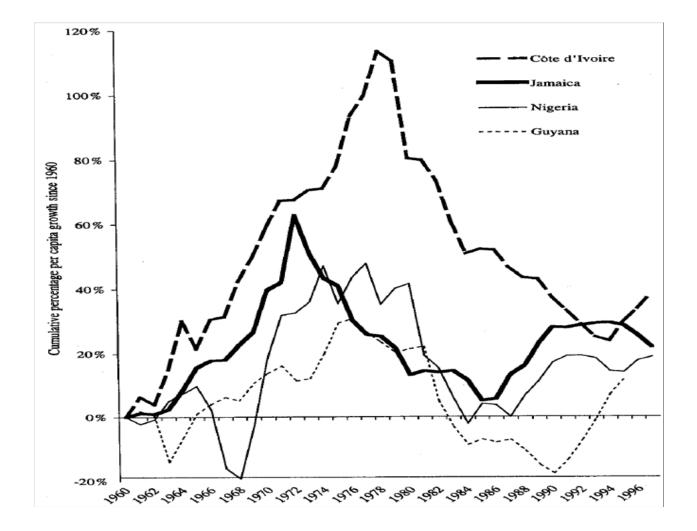


- Cross-country study fails to establish robust negative relationship between corruption and economic growth
- A tale of two corrupted states:
 - Zaire: high corruption, low growth (Mobutu's corruptive earnings 4-15 bil. US\$)
 - Indonesia: high corruption, high growth (Suharto's corruptive earnings 15-35 bil. US\$, but court only identify 1.6 mil. US\$ bribes)
- Two side of the mirror:
 - corruption creates distributive rents to the rulers, that can reduce investment incentives
 - corruption corrects failed price system, that can encourage stronger effort toward efficiency
- The miracle of Ghana: over the period from 1982 to 1990, Ghana
 - raised the quality of bureaucracy from 1 to 4, the rule of law from 1 to 3 and the freedom from corruption from 1 to 4 (all on 0-6 scale)
 - helped the economy to better most of other sub-Saharan countries

- The case of China: Bai-Hsieh-Song (2014)
 - with the open-door policy institutionalized in 1978 and further enhanced since the Southern Trip of Deng Xiao-Ping in 1992, China is committed to improving its living standard
 - yet, its laws and economic institutions were not up to the western standard: its World Bank Ease of Starting a Business Indicator ranked 151 similar to Congo
 - for example, to build a business office in Nanjing requires 95 taxes and 192 approval stamps
 - while entry barriers and red tapes abound, many of its local party leaders work collectively to use bribes as an incentive mechanism for enhancing business efficiency
 - significant portion of the bribes are even redistributed to the local society
 - this is done in an organized manner with party secretary and mayor aligned and with each of the 9 deputy mayors assigned with 20 key projects to promote
 - rapid growth observed in many major cities with such organization

- K. A Tale of Two Failed Development Policies: Easterly (2006)
- World loans (by IMF & World Banks) need not help (1980-1999): despite repeated loans, most experienced low growth and high inflation

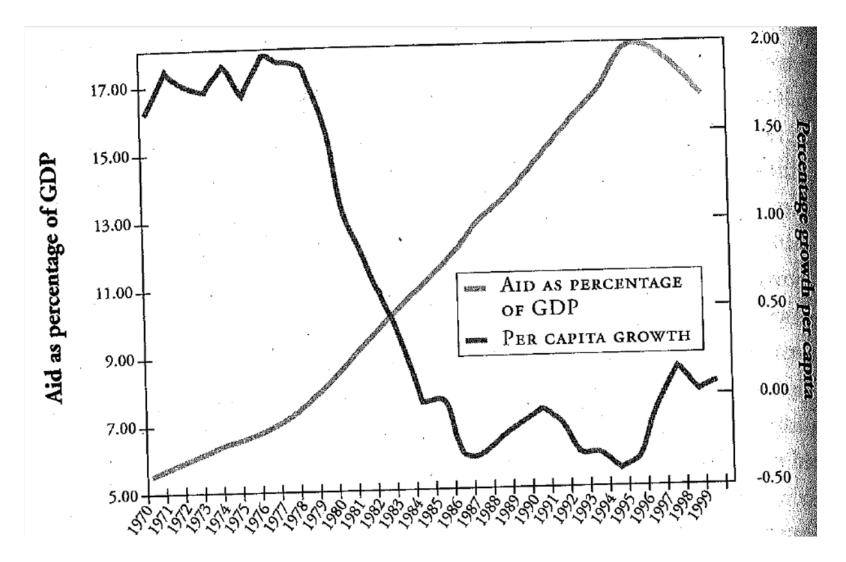
Sub-Saharan Countries	# World Loans	Growth Rate %	Inflation Rate %	Ex-communist Countries	# World Loans	Growth Rate %	Inflation Rate %
Niger	14	-2.3	2	Ukraine	10	-8.4	215
Zambia	18	-2.1	58	Russia	13	-5.7	141
Madagascar	17	-1.8	17	Kyrgyz	10	-4.4	25
Togo	15	-1.6	5	Kazakhstan	9	-3.1	117
Ivory Coast	26	-1.4	6	Bulgaria	13	-2.2	124
Malawi	18	-0.2	23	Romania	11	-1.2	114
Mali	15	-0.1	4	Hungary	14	1.0	16
Kenya	19	0.1	14	Poland	9	3.4	52
Ghana	26	1.2	32	Albania	8	4.4	40
Uganda	30	2.3	50	Georgia	7	6.4	37



• short lived rise in cumulative growth

Sub-Saharan Countries	Aid to GDP Ratio %	Time under IMF %	Growth Rate %	Fast-Growing Countries	Aid to GDP Ratio %	Time under IMF %	Growth Rate %
Nigeria	0.59	20	-1.6	Korea	0.03	36	5.9
Niger	13.15	63	-1.7	China	0.38	8	5.6
Togo	11.18	72	-1.8	Taiwan	0.00	0	4.5
Zambia	19.98	53	-1.8	Singapore	0.07	0	4.5
Madagascar	10.78	71	-1.9	Thailand	0.81	30	3.9
Ivory Coast	5.60	74	-1.9	India	0.66	19	3.7
Haiti	9.41	55	-2.6	Japan	0.00	0	3.6
Liberia	11.94	22	-3.9	Hong Kong	0.02	0	3.5
Congo	4.69	39	-5.0	Mauritius	2.17	23	3.2
Sierra Leone	15.37	50	-5.8	Malaysia	0.40	0	3.1
overall	high	many	low	overall	low	few	high

• Foreign aid need not help (1980-2002):



- Final remarks on the hopefulness of development programs:
 - Korea and Mauritius each had 7 adjustment loans provided by the World Bank and the IMF over 1980-94, resulting in, respectively, 6.7% and 4.3% annual growth rate in per capita real GDP
 - Thailand had 5 adjustment loans provided by the World Bank and the IMF over 1980-94 resulted in a 5.3% annual growth rate in per capita real GDP
 - Among 17 countries receiving aids, 6 countries induced at least one-for-one increases in investments, including Hong Kong, China, Tunisia, Morocco, Malta and Sri Lanka
 - Not just loans/aids fail to work, but only does the implementation matter to ensure quality implementation, loans and aids must be:
 - properly destined
 - closely monitored
 - *staged*, contingent upon prior successful implementation