

EC3355: International Trade

Developing countries

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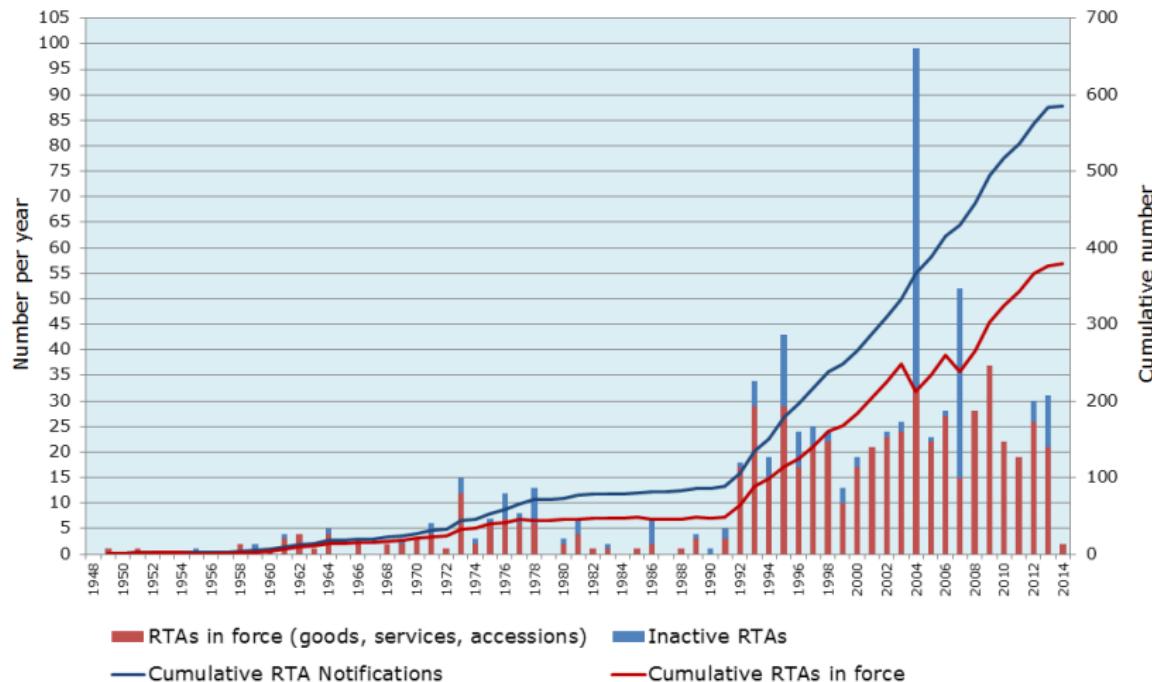
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Last week

- ▶ Political economy of trade
 - ▶ Most trade policies neglect economic advice
 - ▶ Can explain policies by looking at economic self interests and social concerns
- ▶ Trade negotiations
 - ▶ Multilateral negotiations can offer more benefits opposed to bilateral negotiations
 - ▶ WTO plays an important role in reducing trade barriers and dispute settlement
 - ▶ Proliferation of regional trade agreements
- ▶ Trade policy as foreign policy
 - ▶ Trade can be used to influence domestic politics or as a coercive tool

Trade regionalism

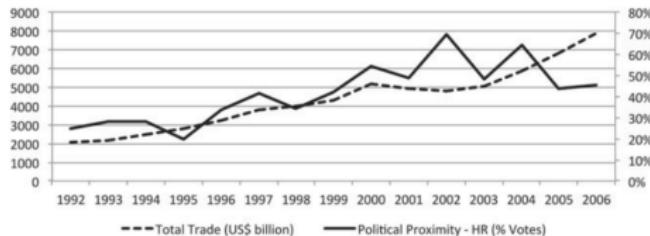
Regional Trade Agreement (*Source: WTO*)



Trade policy as foreign policy

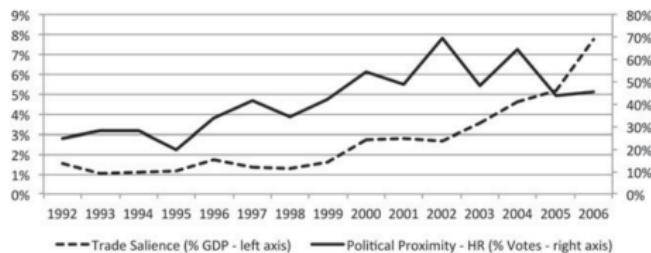
"The Foreign Policy Consequences of Trade: China's Commercial Relations with Africa and Latin America, 1992–2006", Flores-Macías & Kreps (2013)

Africa and Latin America's Average Trade Flows and Convergence on Country-Specific Human Rights Votes with China, 1992–2006



Source: Based on United Nations General Assembly Voting Data from Voeten and Merdzanovic 2009.
Trade Data from COW Dyadic Trade Data and World Bank World Development Indicators.

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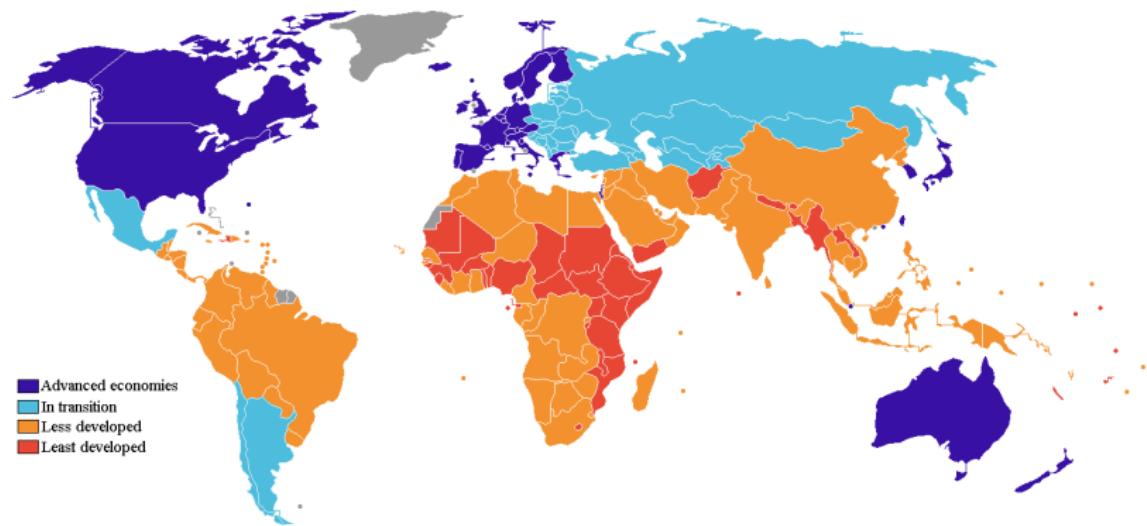
Today

International trade and developing countries

- ▶ Characteristics of developing countries
- ▶ Natural resource dependency
- ▶ Import-substituting industrialisation
- ▶ Trade liberalisation
- ▶ Export-oriented industrialisation
- ▶ Trade, growth, and development

Characteristics of developing countries

Developed and developing countries



Characteristics of developing countries

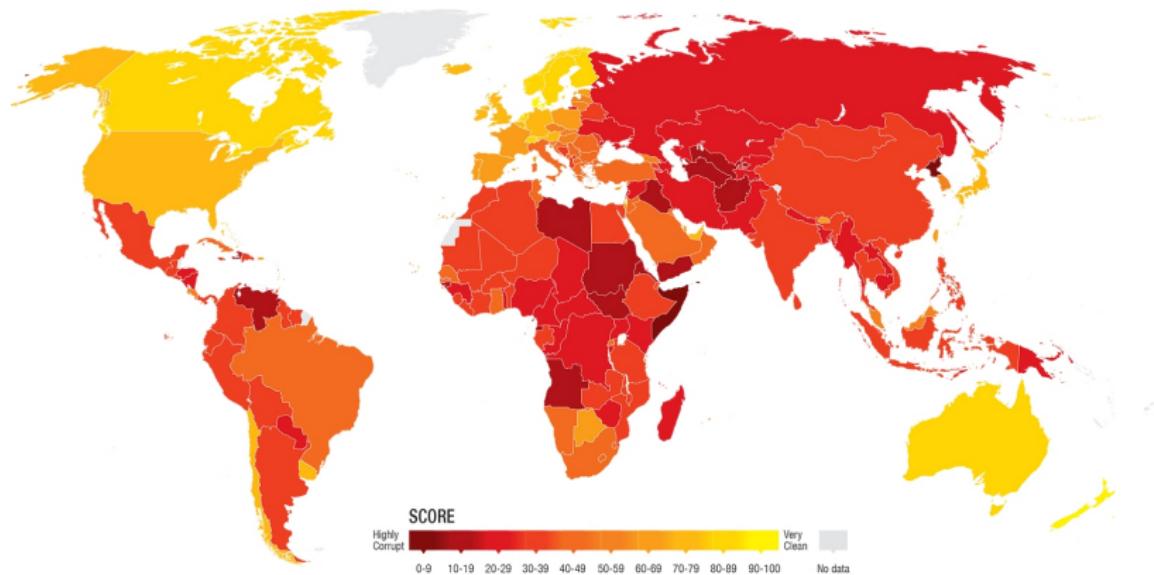
Some common features

- ▶ History of direct government control on economy
- ▶ History of high inflation
- ▶ Pegged exchange rates or capital controls
- ▶ Weak credit institutions and undeveloped capital markets
- ▶ High corruption levels
- ▶ Heavy reliance on primary commodity exports

Characteristics of developing countries

Corruption perception index 2014

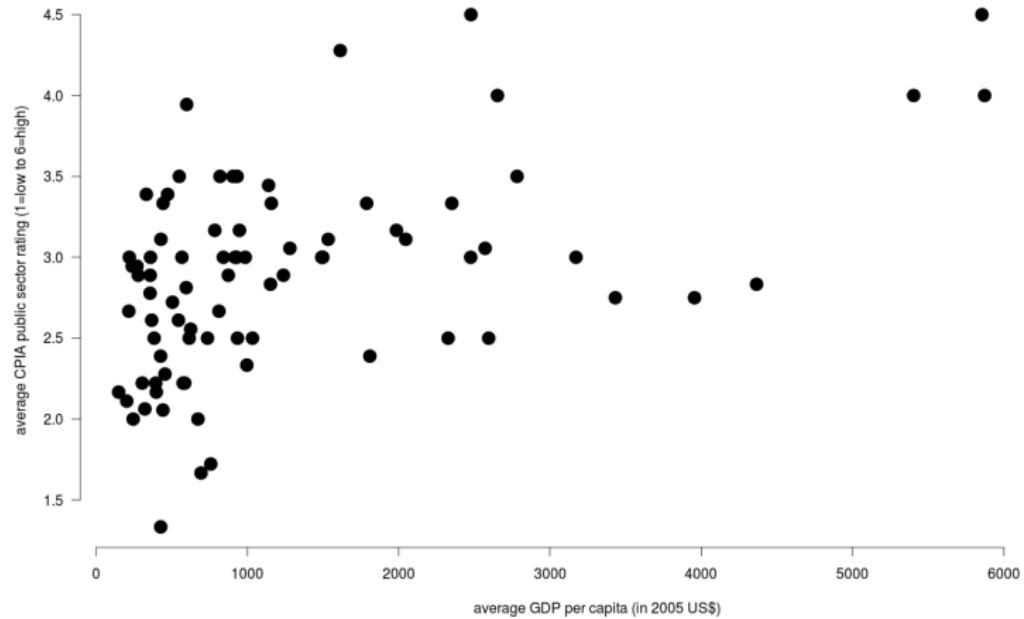
Source: *Transparency International*



Characteristics of developing countries

Corruption versus income (average for 2004-2013)

Source: *World Bank*



Characteristics of developing countries

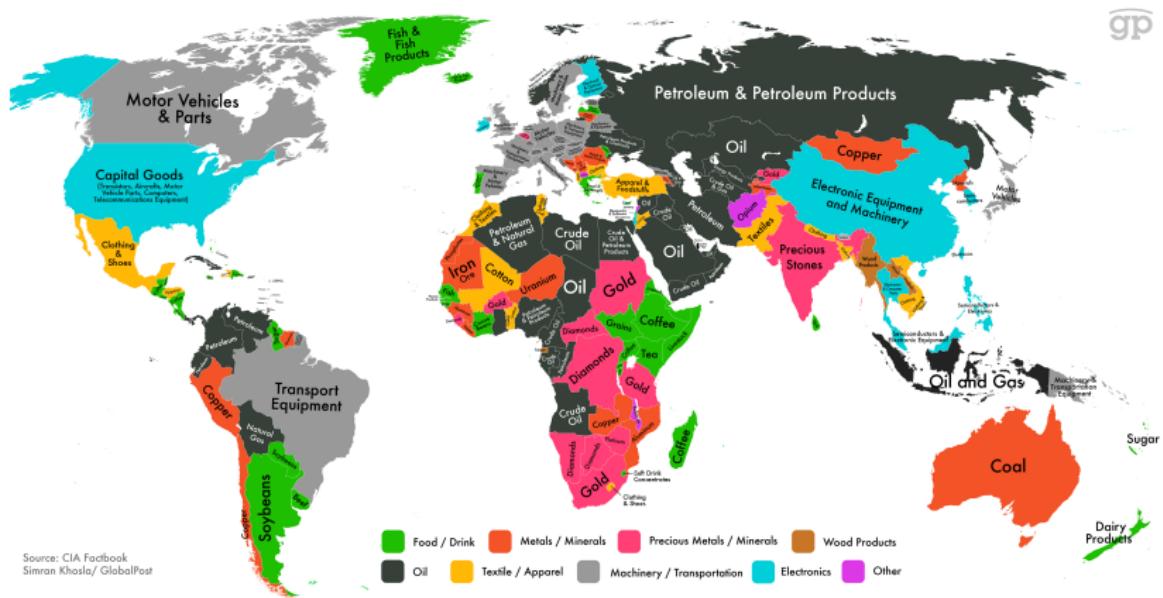
Link between corruption and international trade

- ▶ Mystery of missing trade
 - ▶ International trade volume is less than what is predicted by economic models
- ▶ Trade flows are particularly small in low-income countries
- ▶ Corruption can result in unreported trade
- ▶ Effect of corruption is ambiguous
 - ▶ Bribing acts as an additional tax similar to transportation costs
 - ▶ Corruption can also help overcome bureaucratic barriers to trade

Characteristics of developing countries

Main commodity export for each country

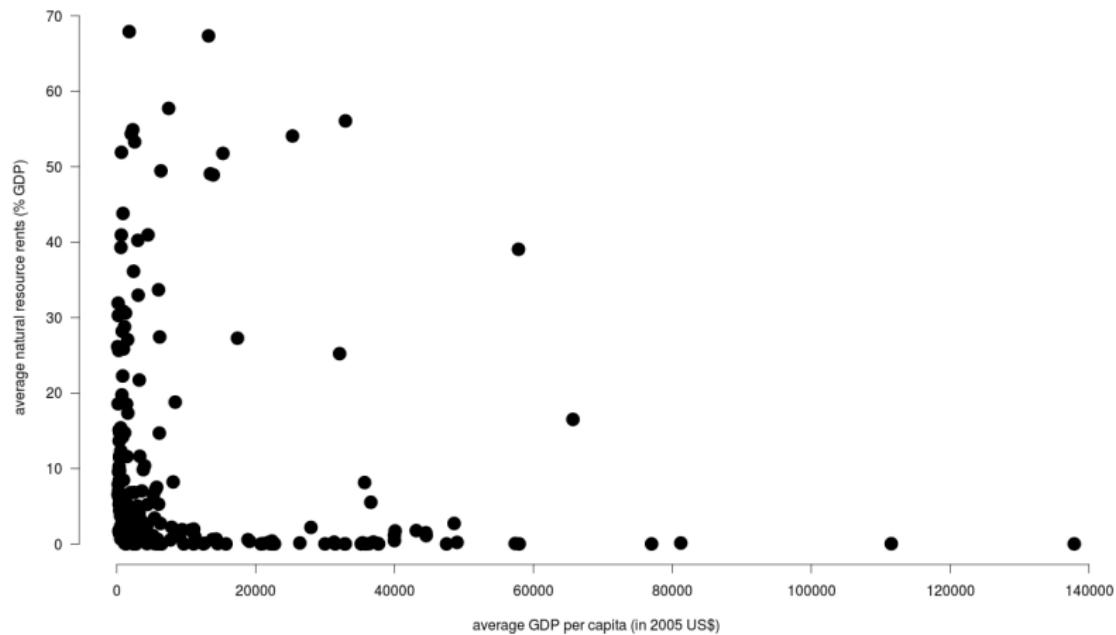
Source: *Global Post*



Characteristics of developing countries

Resource rents versus income (average for 2004-2013)

Source: *World Bank*



Natural resource dependency

Prebisch-Singer hypothesis

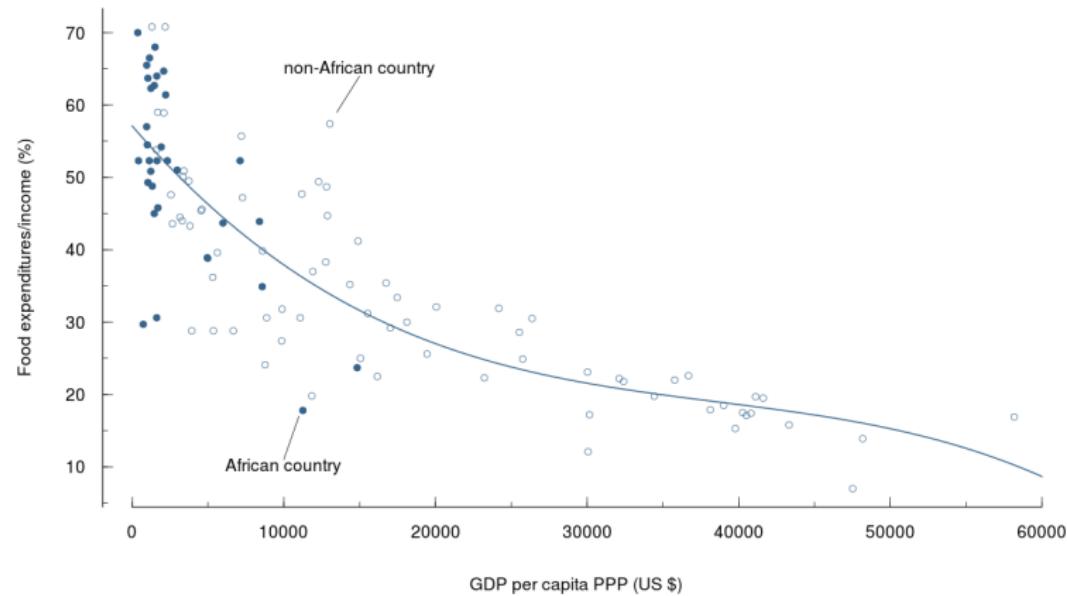
Price of primary commodities declines over time relative to the price of manufactured goods.

- ▶ Manufactured goods have greater income elasticity of demand compared to primary products such as food

Natural resource dependency

Food expenditures as share of disposable income

Data: Global Food Security Index (105 countries for 2013)



Natural resource dependency

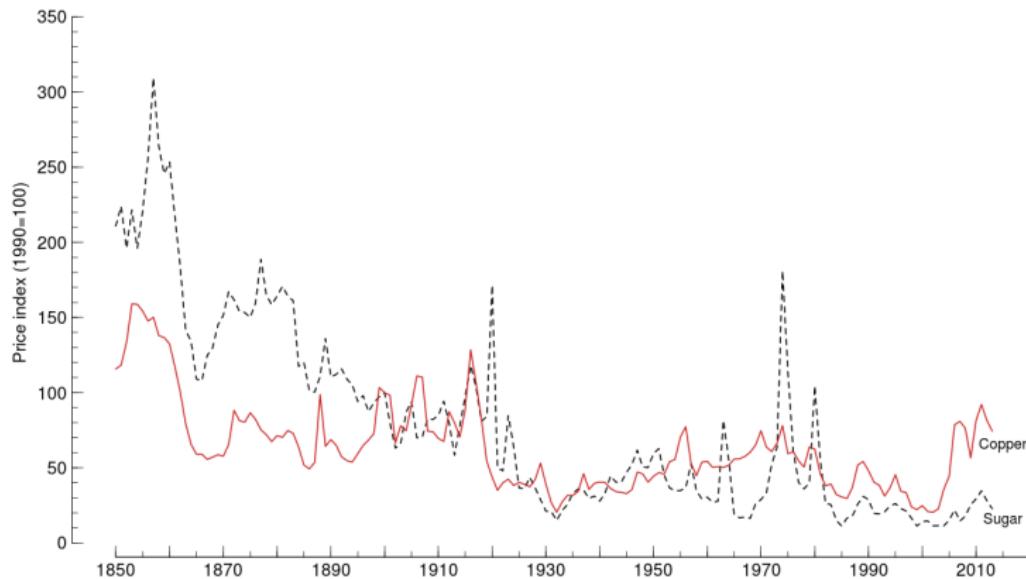
Prebisch-Singer hypothesis

- ▶ Hypothesis predicts that commodity prices follow a downward trend
- ▶ Evidence for this stylised fact is very mixed
 - ▶ Negative downward trend in price time series of main commodities (*Arezki et al. 2013*)
 - ▶ Increase in commodity prices since the 1950s (*Jacks, 2013*)
- ▶ Seems that hypothesis holds only for some commodities but that there is no general effect

Natural resource dependency

Price index for sugar and copper

Source: David Jacks "From Boom to Bust"



Natural resource dependency

Implications of Prebisch-Singer hypothesis for international trade and developing countries

- ▶ Primary commodity prices fall as efficiency rises
- ▶ As countries begin exporting the price of primary commodities declines relative to the price of manufactured goods
- ▶ Deterioration in terms of trade of countries with economy based on primary products
- ▶ These type of countries should diversify their economy, to become less dependent on primary commodity exports

Natural resource dependency

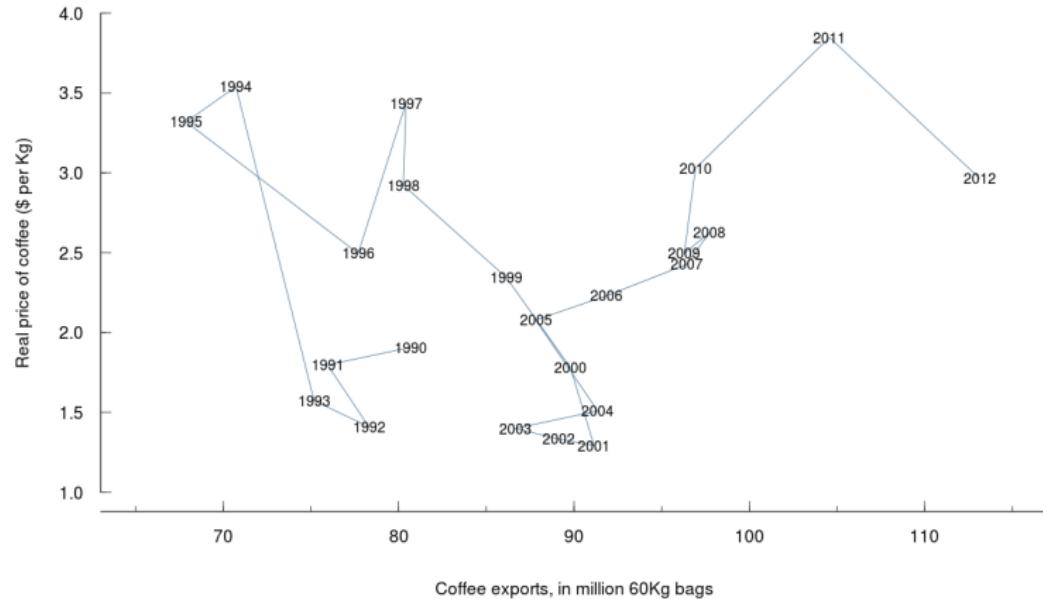
Example: Coffee prices

- ▶ Coffee is primarily grown in developing countries
- ▶ Over past two decades large price fluctuations of coffee
- ▶ Large price fluctuations also mean large price fluctuations in real income of coffee farmers
- ▶ Governments often protect agricultural sector from negative effects of trade
- ▶ Protections raise income of farmers but also domestic price of protected good

Natural resource dependency

Fluctuations in coffee exports between 1990-2012

Source: *Global Economic Monitors, International Coffee Organization*



Natural resource dependency

The resource curse

- ▶ Paradox that suggests that resource rich countries tend to grow slower, and are less developed, than resource poor countries
 - ▶ E.g. Denmark vs. Congo DR
- ▶ Different explanations for how resource abundance leads to underdevelopment
 - ▶ Rent-seeking behaviour
 - ▶ Resource sector crowds out the non-resource sector which is more important for long-run growth due to increasing returns at the sector level
- ▶ Some research shows that it is not abundance per se but dependence that leads to underdevelopment (e.g. Brunschweiler & Bulte, 2008)

Import-substituting industrialisation

- ▶ Development strategy adopted by many low- and middle-income countries before the 1980's
 - ▶ Predominantly in what is called the Global South
 - ▶ Especially popular in Latin America in the 1950-60
- ▶ Aims to reduce foreign dependency
 - ▶ Replace imports with domestic production
 - ▶ Encourages domestic production
- ▶ Justified by the Prebisch-Singer hypothesis
- ▶ End of colonialism
 - ▶ Belief that rich countries exploit poor countries through international financial markets and trade

Import-substituting industrialisation

Infant industry argument

- ▶ Principle justification of ISI policy
- ▶ Potential comparative advantage in certain industries
- ▶ No economies of scale to compete with foreign competitors
- ▶ Governments should support these industries until they are strong enough

Import-substituting industrialisation

Problems with infant industry argument

- ▶ May be wasteful to support industries that will have future comparative advantage
- ▶ With protection industries might never become competitive
- ▶ In absence of market failure, there is no justification for government intervention
- ▶ In practice this policy often lead to corruption and monopolies

Import-substituting industrialisation

Support for the argument

- ▶ Market failure can prevent infant industries from becoming competitive
1. Imperfect capital markets
 - ▶ Poorly working financial laws and markets restrict borrowing of new industries and hamper economic growth
 - ▶ Creating tariffs would be a second-best policy to increase profits of new industry
 2. Appropriability problem
 - ▶ Firms might not be able to appropriate benefits from investment in new industries as they are public goods
 - ▶ Knowledge created by industry might not be appropriable due to lack of property rights
 - ▶ If establishing system of property rights is not feasible, tariffs are a second best policy to encourage growth

Import-substituting industrialisation

Some effects of import-substituting industrialisation

- ▶ Lead to disconnect with the developed world
- ▶ Decrease in exports
- ▶ Extreme protection
 - ▶ In the early 1970's India imported 3% of its GDP (excluding oil)
 - ▶ Effective tariff rates: Mexico 26%, Philippines 61%, Brazil 113%, Chile 182 %, Pakistan 271 %

Import-substituting industrialisation

The end of import substitution

- ▶ Lost popularity in the 1980's
 - ▶ Export-led growth in Asian countries showed more promising policy
 - ▶ Poor performance in import-substitution industries
- ▶ Explanations for failure
 - ▶ Production on too small scale
 - ▶ Protection distorted through rent-seeking behaviour
 - ▶ Increased costs associated with starting a business due to bureaucracy

Import-substituting industrialisation

The end of import substitution: Latin American experience

- ▶ During the 1950s and 1960s ISI helped manufacturing sectors
- ▶ During the 1970s further ISI possibilities disappeared
- ▶ Industrial growth slowed
- ▶ Urban jobs became scarce
- ▶ Income distribution did not improve
- ▶ Export possibilities were limited due to high prices
- ▶ ISI abandoned during the 1980s

Trade liberalisation

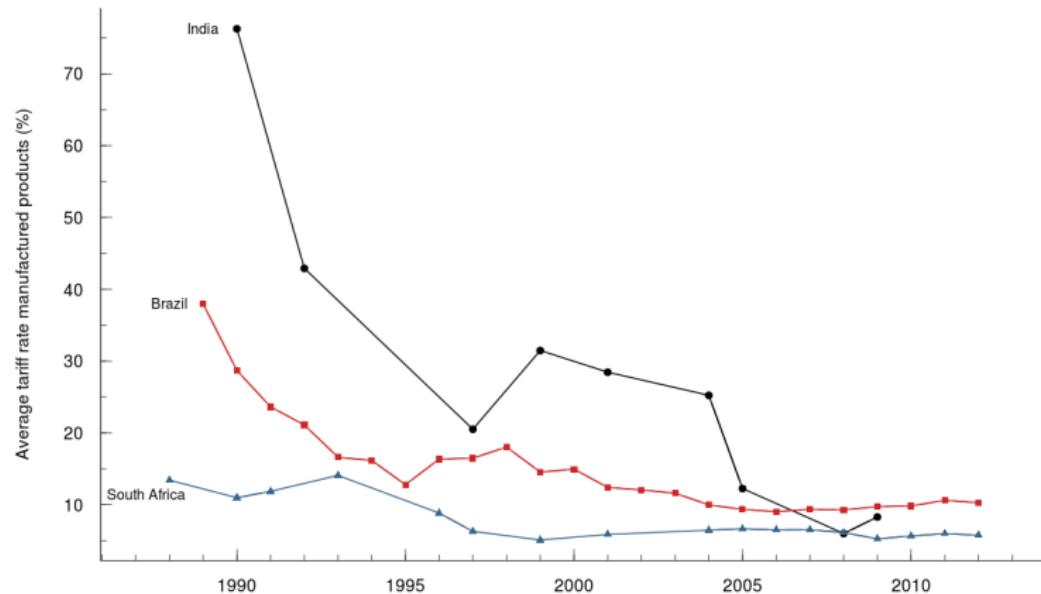
Background

- ▶ There is some empirical evidence that low- and middle income countries with free trade had higher average economic growth than those who followed ISI (heavily debated though)
- ▶ By the 1980s faith in ISI was lost and many countries began process of trade liberalisation

Trade liberalisation

Average tariff rates

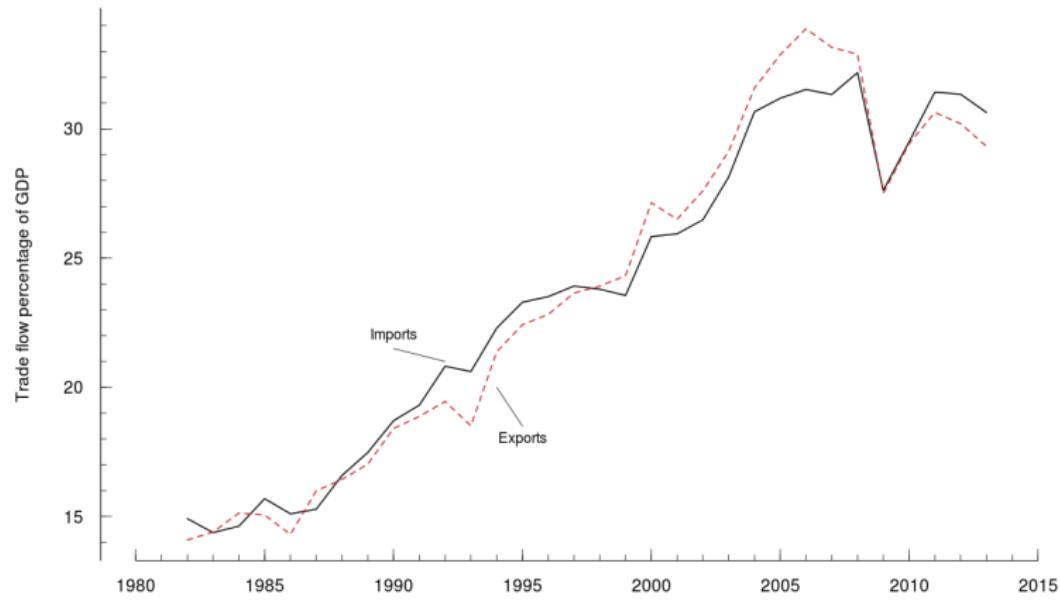
Source: *World Development Indicators*



Trade liberalisation

Imports and exports developing countries

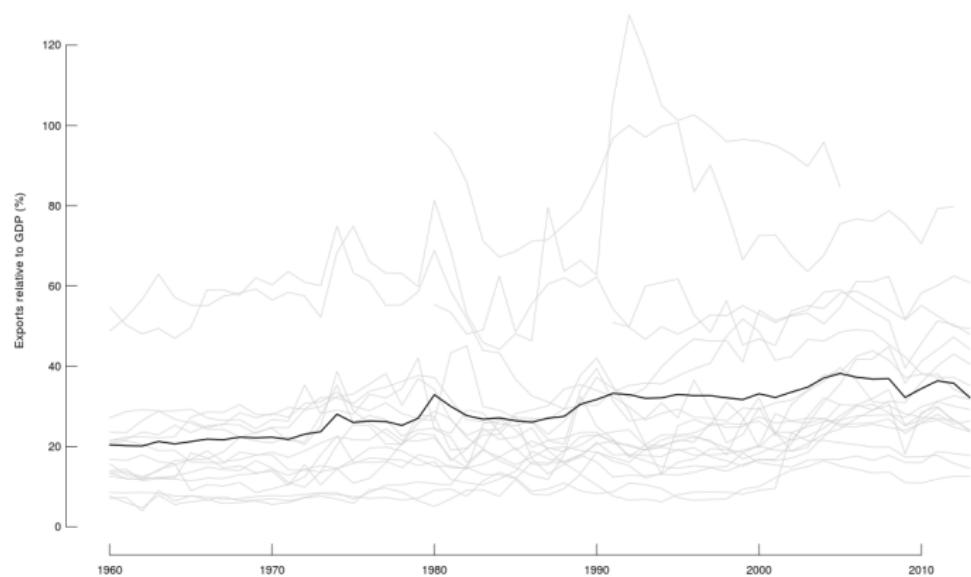
Source: *World Bank Development Indicators*



Trade liberalisation

Exports Central and South America

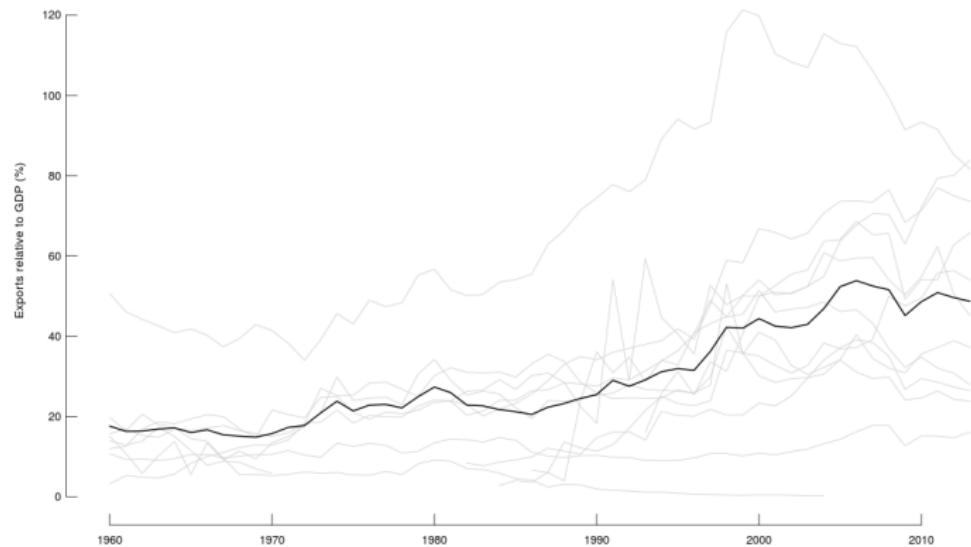
Source: *World Bank Development Indicators*



Trade liberalisation

Exports Eastern Asia

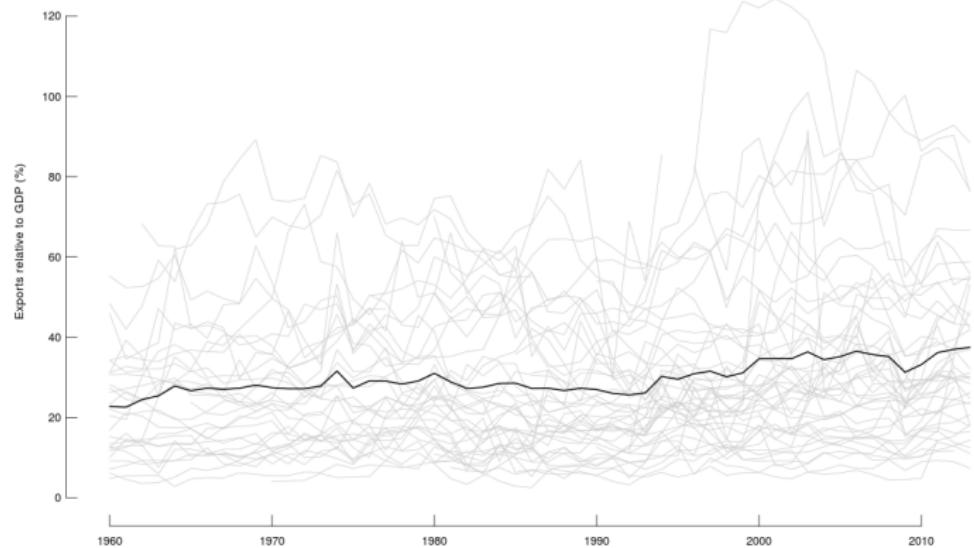
Source: *World Bank Development Indicators*



Trade liberalisation

Exports Sub-Saharan Africa

Source: *World Bank Development Indicators*



Trade liberalisation

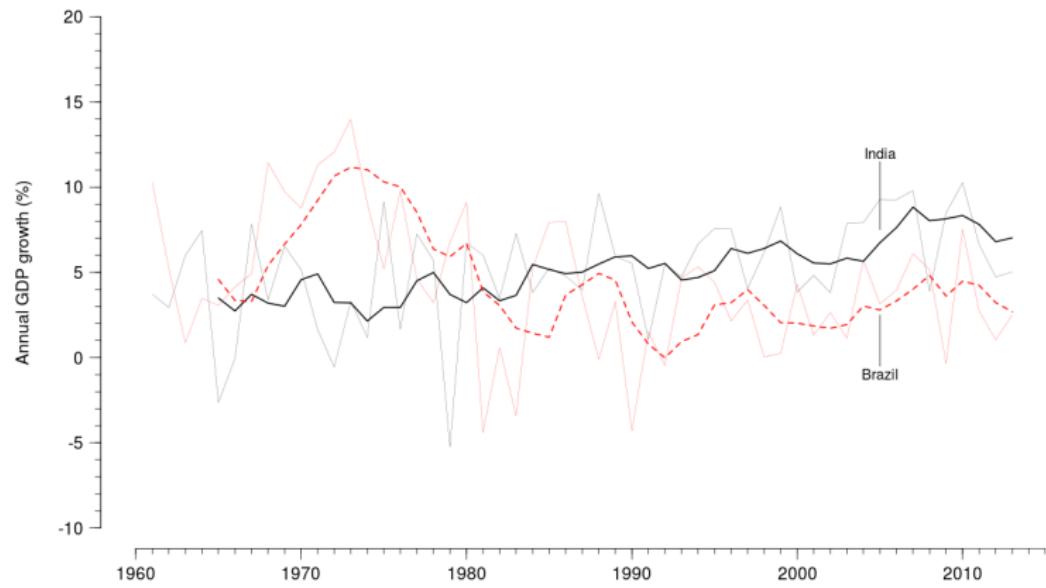
Aims and results

- ▶ Similar to ISI, economic development is ultimate goal
- ▶ Evidence for promotion of development is mixed
- ▶ Growth rates in Brazil and other L-America countries has been slower than during ISI
 - ▶ Other factors have influenced growth rates since the 1980s such as unstable macroeconomic policies (e.g. in Argentina) and financial crises
- ▶ Some countries (e.g. India) have grown faster, but it is unsure what the contribution of trade liberalisation is
- ▶ Some argue that liberalisation has contributed to income inequality
 - ▶ As predicted by HO-model

Trade liberalisation

Growth in India and Brazil

Source: *World Development Indicators*



Trade liberalisation

Mexican experience

- ▶ Throughout 1950s-1960s high tariff barriers
- ▶ Produced very little for exports
- ▶ Trade liberalisation in the 1980s
 - ▶ 1980: Exports (mainly oil) were 10.7% of GDP
 - ▶ 1985-1988: Reduction in tariffs en removal of quotas
 - ▶ 1994: Joined NAFTA
 - ▶ 2010-2013: Exports were (on average) 30% of GDP, mainly manufactures

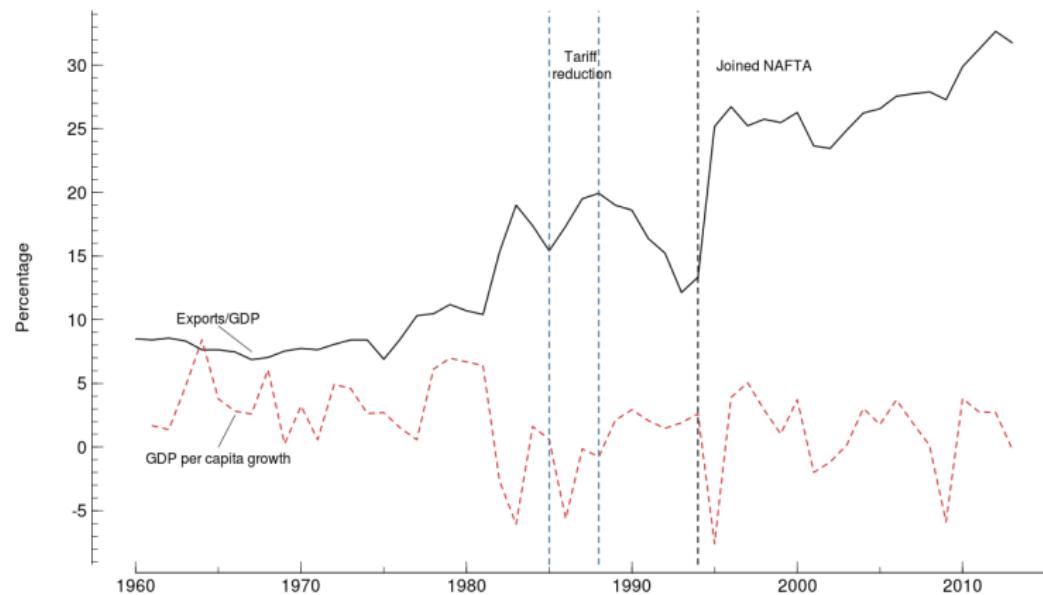
Trade liberalisation

Mexico and Brazil: trade as percentage of GDP



Trade liberalisation

Mexico: Exports and GDP growth



Export-oriented industrialisation

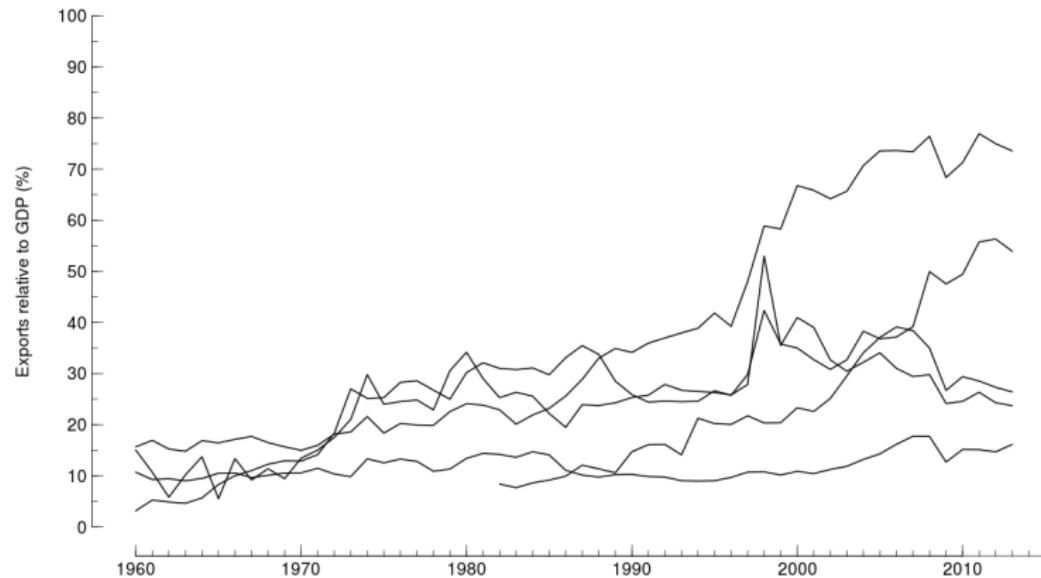
Using comparative advantage

- ▶ Rather than ISI, some countries adopted policies that promoted exports in targeted industries
 - ▶ Several East Asian countries such as China, Japan, Korea, Indonesia, etc.
 - ▶ Experienced rapid economic growth in export sectors and in general
- ▶ Generated high volumes of exports and imports relative to total production
 - ▶ By these standard these economies are "open economies" but the contribution to free trade is debatable
 - ▶ Although they have less trade restrictions, some restrictions were still in effect

Export-oriented industrialisation

Exports relative to GDP for selected East-Asian countries

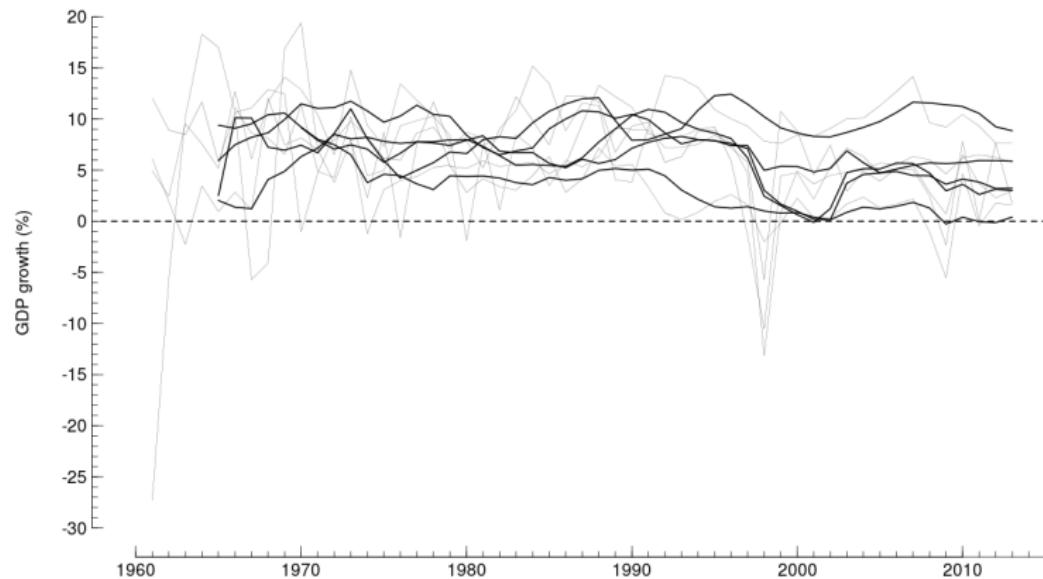
Source: *World Development Indicators*



Export-oriented industrialisation

GDP growth for selected East-Asian countries

Source: *World Development Indicators*



Export-oriented industrialisation

Industrial policies in East Asia

- ▶ Some East Asian countries adopted policies to promote certain industries
- ▶ Besides usual policies these also included subsidized loans for industries, and subsidized research and development
- ▶ Economies that did implement these policies had a variety of policies
 - ▶ Hard to establish the effect of these policies
- ▶ Little evidence that these countries experienced more rapid growth in targeted industries
- ▶ Some evidence that these policies failed
 - ▶ Automobile industry in South Korea in the 1970s
 - ▶ Abandoned as they were too expensive and did not produce desired growth

Export-oriented industrialisation

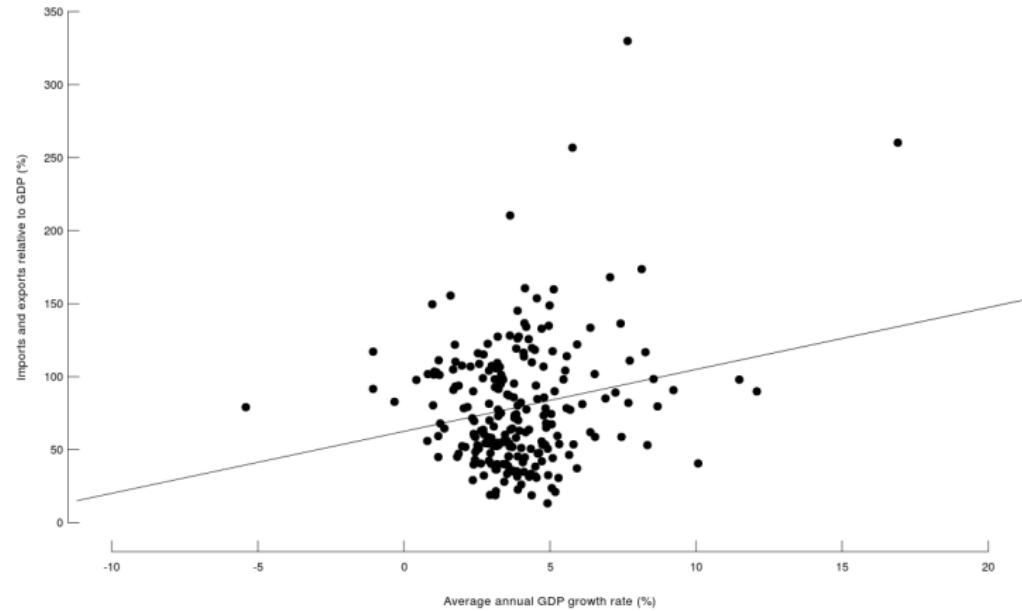
Exports and growth

- ▶ Unclear if exports caused growth or were just correlated with it
 - ▶ High savings and investment rates lead to high general growth rates and growth in export sectors
 - ▶ Asian economies also experienced rapid growth in education, which is important for productive labour force
- ▶ Latin American countries such as Brazil and Mexico did not experience same growth spur as the East Asian countries did

Trade, growth, and development

Openness to trade and GDP growth

Source: *World Bank Development Indicators*



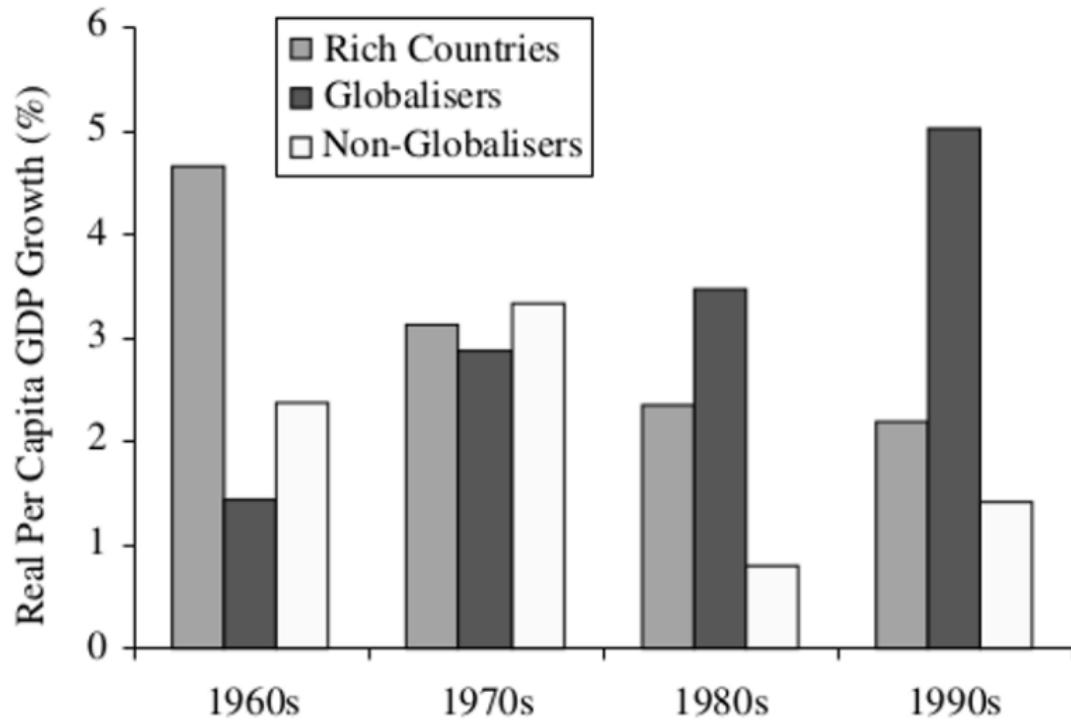
Trade, growth, and development

- ▶ Trade policies like import substitution and export-oriented industrialisation were aimed at promoting economic development
- ▶ Experiences with these policies have been mixed
- ▶ Since the 1980's some developing countries have undergone a process of trade liberalisation
 - ▶ Large increases in trade: 16% to 32%
 - ▶ Significant declines in tariffs: 22 point reduction
- ▶ Convergence between post-1980 globalisers and industrialised countries
- ▶ Non-globalisers are falling farther behind

Trade, growth, and development

Real GDP per capita growth

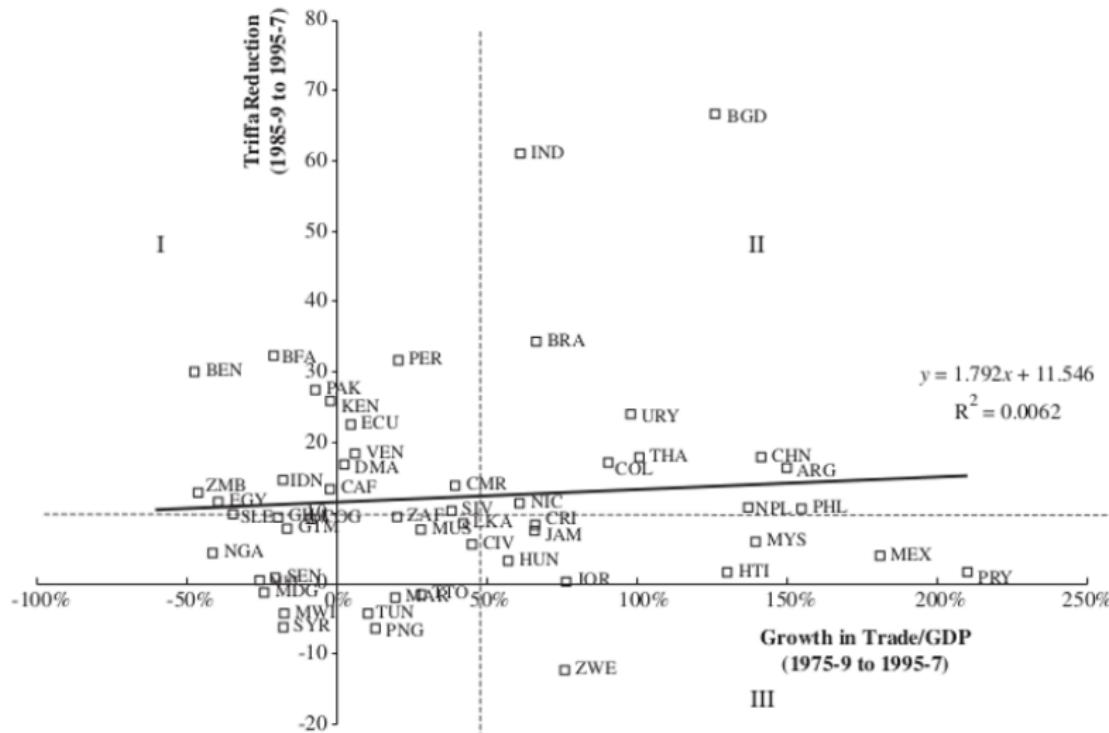
Source: *Dollar & Kraay, 2004*



Trade, growth, and development

Identifying globalisers

Source: Dollar & Kraay, 2004



Trade, growth, and development

Some interesting pairwise comparisons

1. Vietnam vs. Burma
2. Bangladesh vs. Pakistan
3. Costa Rica vs. Honduras

Trade, growth, and development

Impact of trade liberalisation

Source: Santos-Paulino & Thirlwall, 2004

Table 1
Export Duties and Export Growth Before and After Trade Liberalisation

Country	Year of liberalisation	Before liberalisation (from 1972)		After liberalisation (up to 1997)	
		Export duty	Export growth	Export duty	Export growth
$0 \leq d < 1\%$					
Chile	1976	0.0	8.8	0.0	10.2
Indonesia	1986	0.6	4.6	0.5	9.4
Korea	1990	0.0	16.0	0.0	15.3
Malawi	1991	0.4	4.4	0.0	5.2
Paraguay	1989	0.7	11.6	0.0	9.5
Venezuela	1991	0.0	-0.7	0.0	6.4
$1 \leq d < 3\%$					
Ecuador	1991	1.6	12.0	0.3	8.6
India	1991	1.4	6.5	0.2	12.2
Mexico	1986	2.0	9.5	0.02	12.8
Morocco	1984	2.1	4.3	0.5	7.3
Philippines	1986	1.4	6.4	0.1	10.9
Thailand	1986	2.7	8.8	0.3	14.6
Uruguay	1985	1.1	6.9	0.4	7.6
Tunisia	1989	1.2	7.4	0.3	4.9
Zambia	1990	2.4	-1.1	0.0	4.9
$3 \leq d < 5\%$					
Cameroon	1991	4.2	9.1	1.8	-0.9
Colombia	1991	4.5	5.7	0.3	8.6
Pakistan	1991	4.0	6.0	0.0	6.3
$5 \leq d < 10\%$					
Costa Rica	1990	7.9	6.2	2.6	8.7
Dom. Rep.	1992	5.3	6.6	0.01	29.3
Malaysia	1988	6.9	8.9	1.7	14.1
10% or more					
Sri Lanka	1990	13.5	4.3	0.7	9.3

Trade, growth, and development

Impact of trade liberalisation

Source: Santos-Paulino & Thirlwall, 2004

Table 2
Import Duties and Import Growth Before and After Trade Liberalisation

Country	Year of liberalisation	Before liberalisation (from 1976)		After liberalisation (up to 1998)	
		Import duty	Import growth	Import duty	Import growth
$0 \leq d < 5\%$					
Indonesia	1986	4.82	7.55	5.11	8.59
$5 \leq d < 10\%$					
Costa Rica	1990	9.72	3.95	7.97	9.05
Korea	1990	8.68	12.53	5.55	9.35
Malaysia	1988	8.41	10.06	5.09	15.48
Mexico	1986	8.27	7.94	4.69	13.44
Paraguay	1989	8.59	11.02	4.88	22.88
$10 \leq d < 15\%$					
Chile	1976	13.93 ^a	2.49	12.42	9.88
Philippines	1986	13.48	2.84	13.97	13.12
Sri Lanka	1990	13.38	7.93	13.41	8.77
Thailand	1986	12.81	6.12	9.66	11.66
Venezuela	1991	10.05	6.40	10.11	12.71
Zambia	1990	10.07	-4.23	16.67	2.34
$15 \leq d < 20\%$					
Colombia	1991	15.04	4.99	9.17	14.52
Dom. Rep.	1992	18.98	5.38	15.03	8.05
Ecuador	1991	15.81	1.78	8.89	6.69
Morocco	1984	19.11	3.31	16.65	6.49
Uruguay	1985	16.27	-1.53	10.65	11.39
$20\% \text{ or more}$					
Cameroon	1991	21.65	6.77	20.98	3.40
India	1991	38.59	6.79	27.77	10.93
Malawi	1991	21.47	2.28	21.36	1.83
Pakistan	1991	26.82	3.63	21.33	4.84
Tunisia	1989	23.83	6.01	21.29	4.63

Trade, growth, and development

Impact of trade liberalisation

Source: Santos-Paulino & Thirlwall, 2004

- ▶ Estimate effect of trade liberalisation for sample of 22 developing countries
- ▶ Trade liberalisation has lead to a sharp reduction in export duties and relatively little decline in import tariffs
- ▶ Increase in export growth from 6.9% to 9.8%
- ▶ Larger increase in import growth from 5.2% to 9.5%
- ▶ This development has worsened trade balance and balance of payments
- ▶ Constrains economic growth of output and living standards

Trade, growth, and development

Growth in South-South trade

Table 1

Exports and Imports Relative to GDP by Regional Trading Partner

Region	Trade partner	Exports to partner relative to regional GDP			Imports from partner relative to regional GDP		
		1994	2008	Percentage point change	1994	2008	Percentage point change
Low-income countries	Low-income countries	0.8%	3.2%	2.4	0.8%	3.2%	2.4
	Middle-income countries	4.5%	11.6%	7.1	6.0%	17.1%	11.1
	China, India	1.1%	8.3%	7.2	1.8%	10.7%	8.9
	High-income countries	20.0%	31.8%	11.8	15.1%	23.0%	7.9
	World	26.3%	55.0%	28.6	23.7%	54.0%	30.4
Mid-income countries	Low-income countries	0.7%	2.1%	1.4	0.5%	1.4%	0.9
	Middle-income countries	5.3%	15.6%	10.3	5.3%	15.6%	10.3
	China, India	2.2%	7.5%	5.3	2.4%	7.4%	5.0
	High-income countries	16.9%	29.6%	12.7	18.6%	26.0%	7.4
	World	25.1%	54.8%	29.8	26.8%	50.4%	23.6
China and India	Low-income countries	0.8%	2.7%	1.9	0.5%	2.1%	1.6
	Middle-income countries	9.5%	15.2%	5.7	8.6%	15.4%	6.8
	China, India	0.1%	1.2%	1.1	0.1%	1.2%	1.1
	High-income countries	14.3%	25.3%	11.0	9.8%	14.1%	4.3
	World	24.8%	44.4%	19.6	19.0%	32.7%	13.7
High-income countries	Low-income countries	0.3%	0.7%	0.4	0.5%	1.0%	0.5
	Middle-income countries	3.7%	6.6%	2.9	3.4%	7.5%	4.1
	China, India	0.5%	1.7%	1.2	0.7%	3.1%	2.4
	High-income countries	12.8%	16.9%	4.1	12.8%	16.9%	4.1
	World	17.4%	26.0%	8.6	17.4%	28.6%	11.2

Source: UN Comtrade, (<http://comtrade.un.org/>).

Trade, growth, and development

Growth in South-South trade

- ▶ In general growth can be explained by falling trade barriers and expanding global production networks
- ▶ Robust growth in China and India seems to be fuelling global recovery from financial crisis
- ▶ Average annual export growth between 1992-2008
 - ▶ 18% in China
 - ▶ 14% in India
 - ▶ 8% in top 15 of next middle-income countries
- ▶ South-South trade largely driven by industrialisation and urbanisation in China and India
 - ▶ Strong demand for raw materials to build infrastructure
 - ▶ Many developing countries are abundant in these materials
- ▶ This changing pattern has interesting consequences for our theoretical trade models