

Globalization and its Discontents

Roundtable Discussion

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On Globalization and its Discontents

- **Globalization** is the process of international integration arising from the interchange of world views, products, ideas, and other aspects of culture (Wikipedia)
- Human history has known forceful globalization as a result of wars and violent dominance: from the displacement of neandertals by homo sapiens (100.000 years ago) to Russia's invasion of Ukraine (now)
- Peaceful and rule-based globalization is a modern invention, enshrined in national laws and international agreements.
- *The Winter of Our **Discontent*** is John Steinbeck's last novel, published in 1961
- This title is a reference to the first two lines of William Shakespeare's Richard III: "*Now is the winter of our discontent / Made glorious summer by this sun [or son] of York*"
- ***Globalization and Its Discontents*** is the title of Joseph Stiglitz's book, published in 2002.

Outline

- 1. Globalization and its Measures**
- 2. Globalization and its “Contents”:
Globalization and Growth**
- 3. Globalization and its “Contents and
Discontents”: Globalization and
Distribution**
- 4. Implications for Globalization Research and
Policy**

1. Globalization and its Measures

What is Globalization? (1)

Very generally:

Globalization or international integration implies (free) cross-border mobility of:

- Things
- Finance
- Ideas
- People

What is Globalization? (2)

More specifically, globalization comprises:

A. Economic globalization:

- Free trade in goods and services
- Free mobility of finance (capital)
- Free mobility of labor and migrants
- Free mobility of technology

B. Int'l adoption of economic institutions:

- Market economy; macro and micro institutions
- Environmental and labor standards, ...

C. Int'l adoption of political institutions and regimes

- Rule of law, human rights, democracy, ...

D. Social and cultural globalization

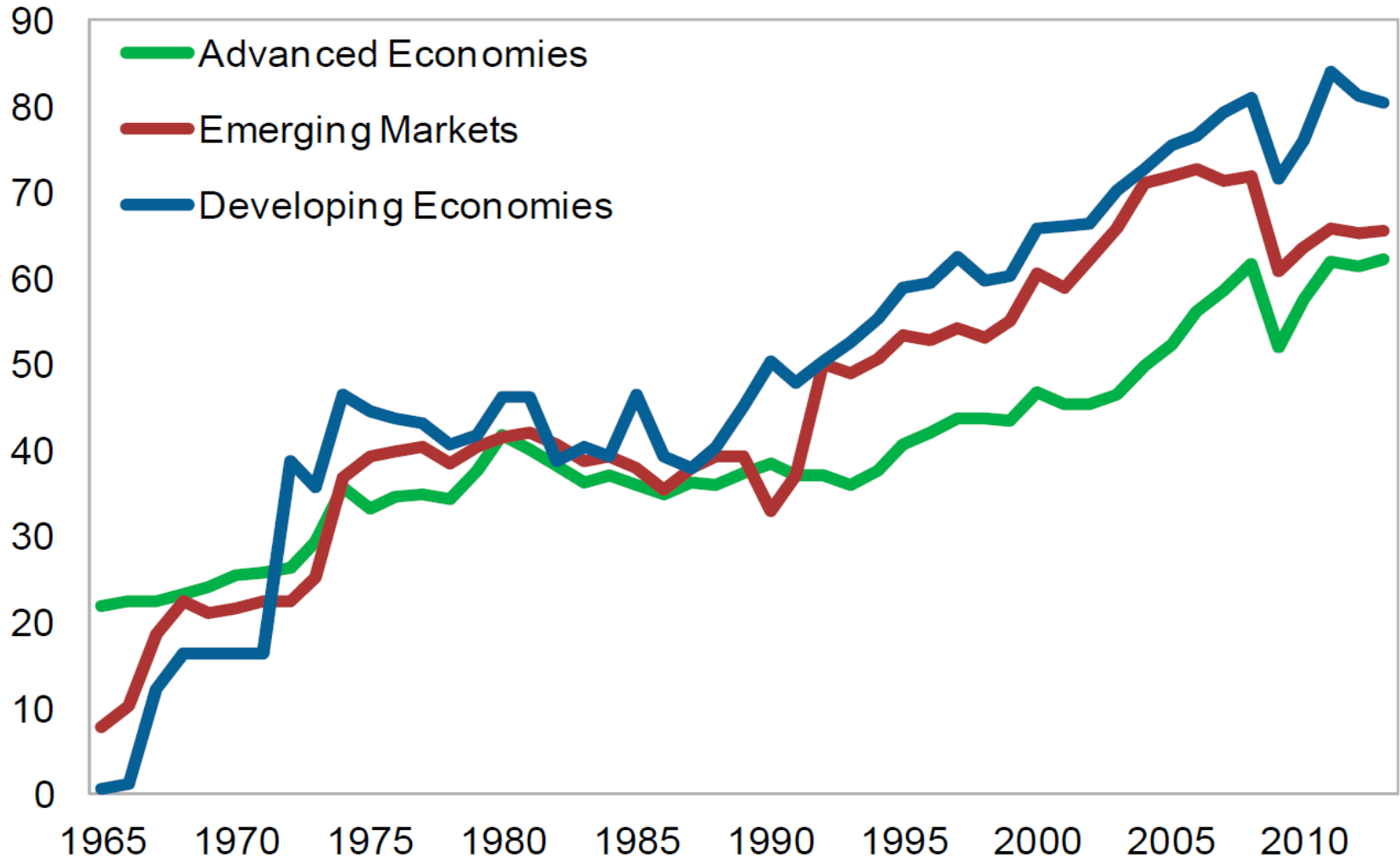
- Spreading of norms, English usage, internet,

Narrow and broad Measures of Globalization

- Traditional measures of globalization are narrow measures of *de jure* and *de facto* trade and financial openness. They dominate in the economics literature
- Broader measures of globalization encompass economic, political, and social measures of globalization – they are used more exceptionally
- Most measures are applied to a large annual dataset of countries, starting in the late 1960s
- Main finding: large increase in globalization and cross-country convergence in globalization during the last half century

World Trade Openness, 1965-2012

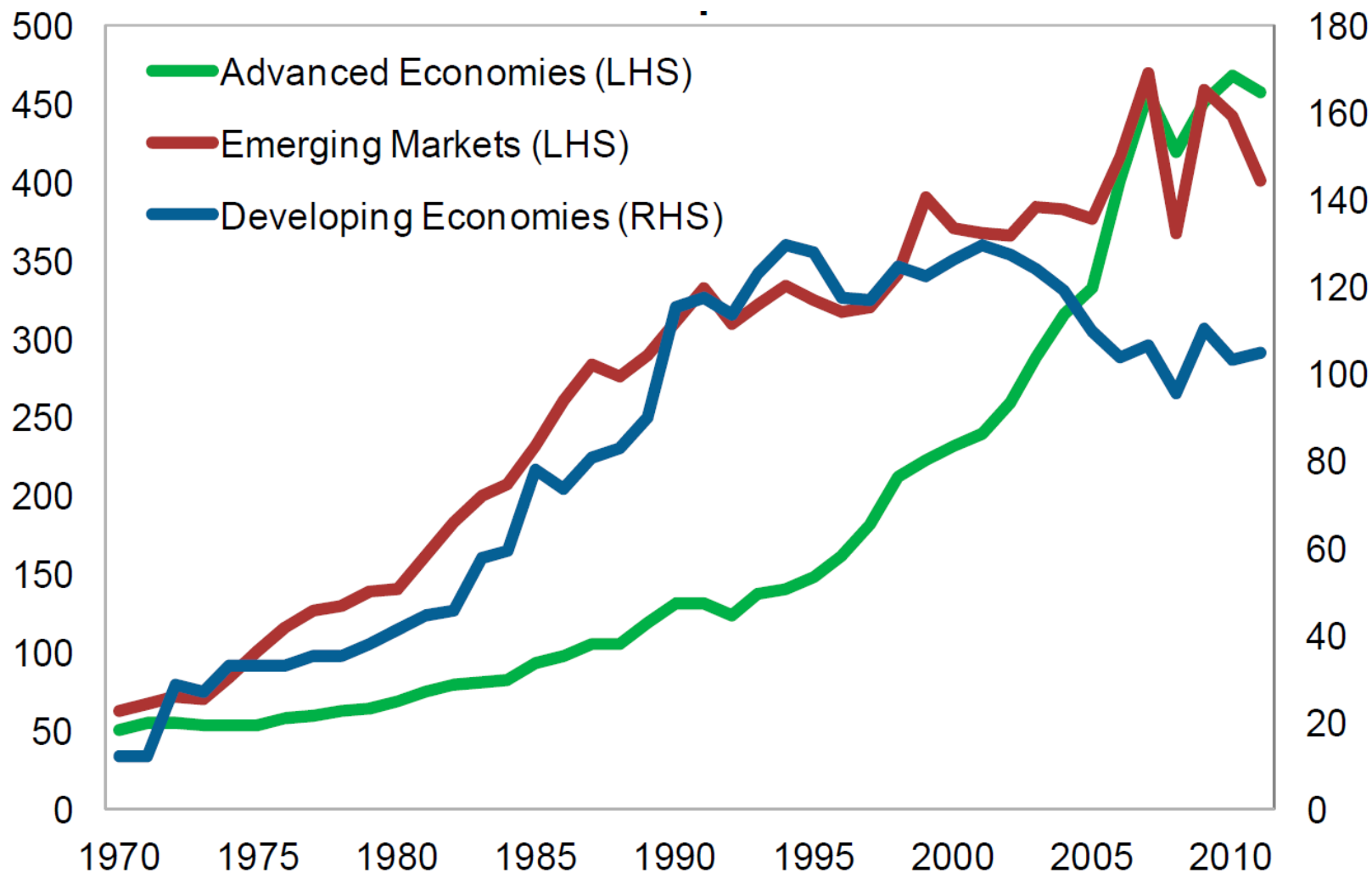
(total imports and exports as percentage of GDP)



Source: Dabla-Norris et al. (2015)

World Financial Openness, 1965-2012

(total external assets and liabilities as percentage of GDP)



Source: Dabla-Norris et al. (2015)

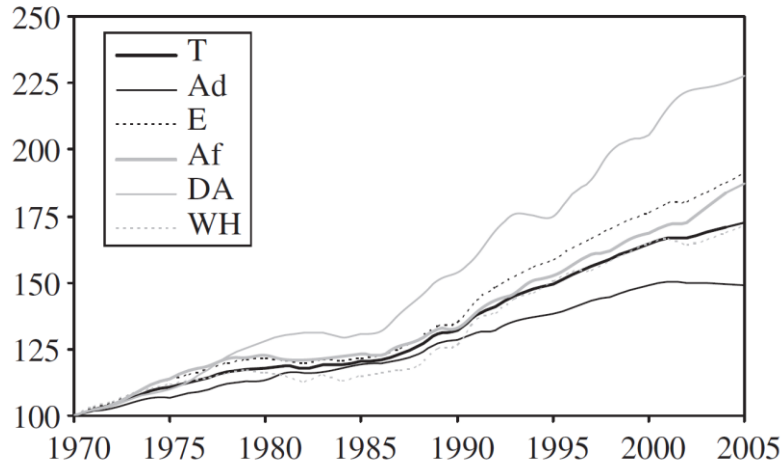
KOF Globalization Index: Components and Weights (Potrafke 2015)

TABLE 1
Components of the 2013 KOF Index of Globalisation

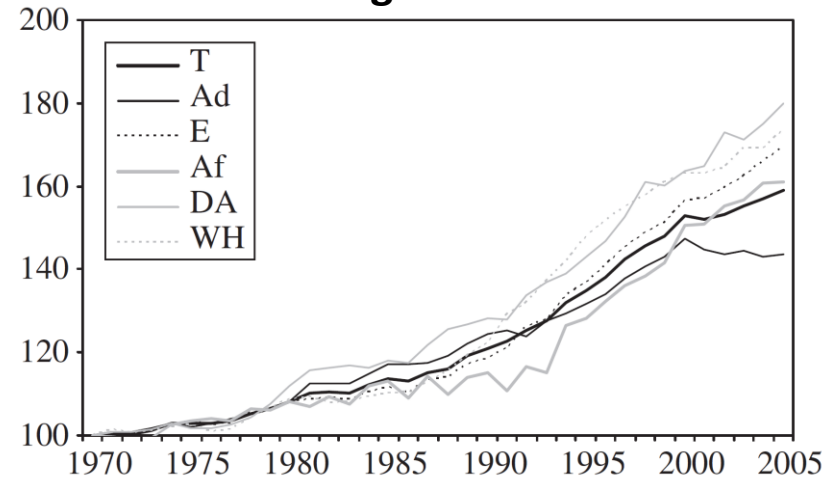
<i>Indices and Variables</i>	<i>Weights (%)</i>
A. Economic globalisation	36
(i) Actual flows	50
Trade (% of GDP)	21
Foreign direct investment, stocks (% of GDP)	28
Portfolio investment (% of GDP)	24
Income payments to foreign nationals (% of GDP)	27
(ii) Restrictions	50
Hidden import barriers	24
Mean tariff rate	27
Taxes on international trade (% of current revenue)	26
Capital account restrictions	23
B. Social globalisation	37
(i) Data on personal contact	34
Telephone traffic	25
Transfers (% of GDP)	3
International tourism	26
Foreign population (% of total population)	21
International letters (<i>per capita</i>)	24
(ii) Data on information flows	35
Internet users (per 1,000 people)	33
Television (per 1,000 people)	36
Trade in newspapers (% of GDP)	31
(iii) Data on cultural proximity	31
Number of McDonald's restaurants (<i>per capita</i>)	45
Number of IKEA stores (<i>per capita</i>)	45
Trade in books (% of GDP)	10
C. Political globalisation	26
Embassies in country	25
Membership in international organisations	28
Participation in U.N. Security Council Missions	22
International treaties	26

KOF Globalization Index, World and Regions (1970-2005; 1970 =100)

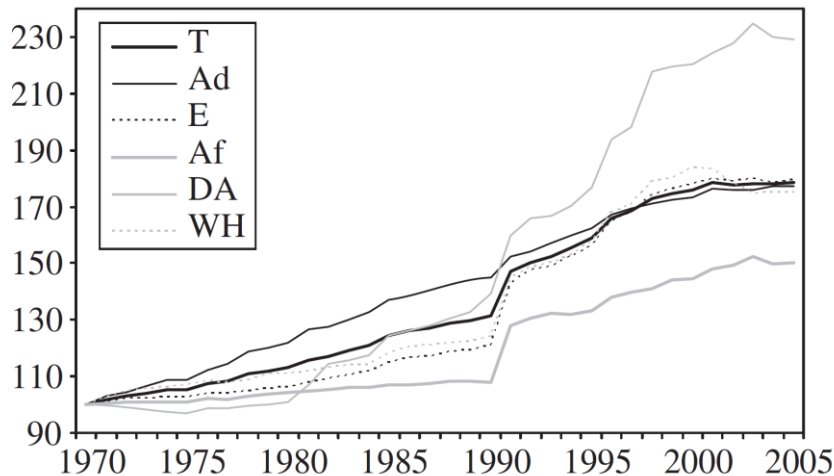
Total globalization



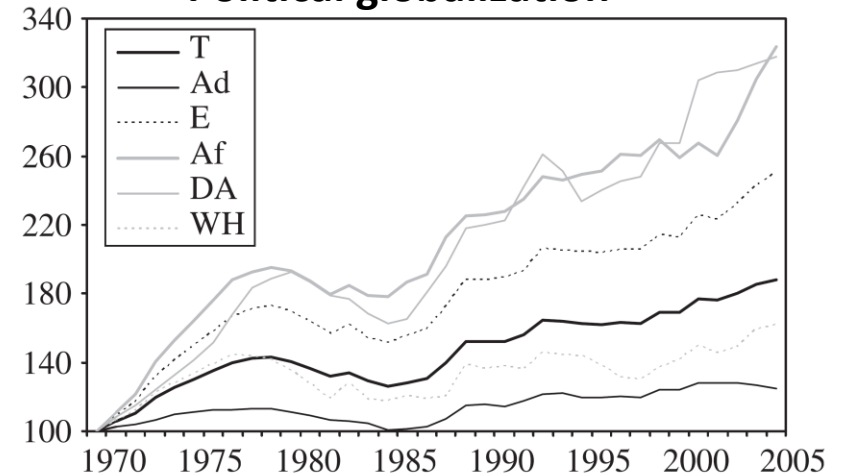
Economic globalization



Social globalization



Political globalization

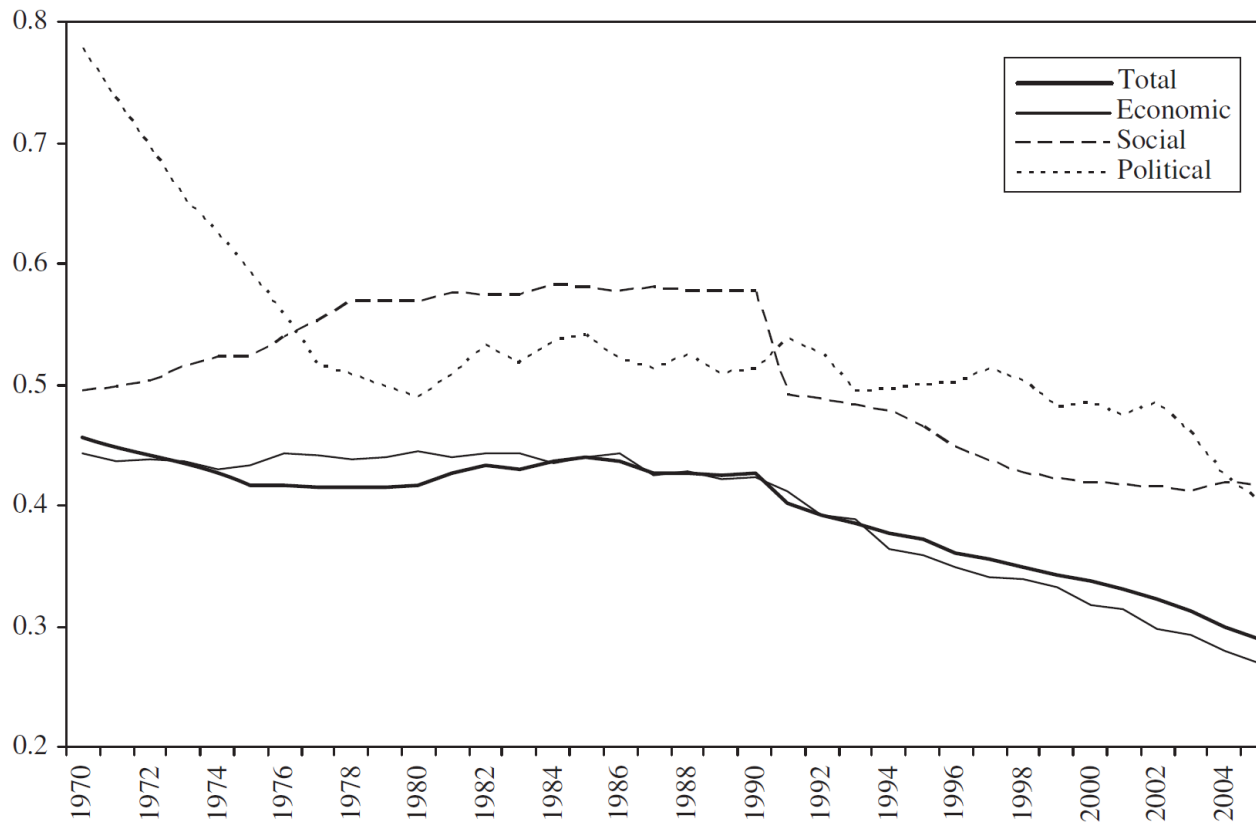


Source: Villaverde and Maza (2011). Total sample (T); advanced economies (Ad); emerging and developing economies (E); Africa (Af); developing Asia (DA); Western Hemisphere (WH).

Convergence in Globalization (1)

Globalization indexes: σ -convergence

FIGURE 2
Sigma (σ) Convergence (Coefficient of Variation)



Source: Villaverde and Maza (2011).

Convergence in Globalization (2)

Globalization indexes: β -convergence, based on estimating dynamic panel-data equation for 5-year data:

$$\Delta G_{i,t} = \alpha_i + \chi_t + \beta G_{i,t-k} + \varepsilon_{i,t},$$

Implying half-life of convergence to steady state of 41 years for total globalization index ($\beta = -0.081$)

TABLE 1
Beta (β) Convergence

<i>Total</i>		<i>Economic</i>		<i>Social</i>		<i>Political</i>	
<i>Value</i>	<i>t-statistic</i>	<i>Value</i>	<i>t-statistic</i>	<i>Value</i>	<i>t-statistic</i>	<i>Value</i>	<i>t-statistic</i>
-0.081*	-11.90	-0.068*	-9.91	-0.064*	-10.71	-0.113*	-23.03

Source: Villaverde and Maza (2011).

2. Globalization and its “Contents”: Globalization and Growth

Globalization and Growth

- A large body of evidence (based on partial models – see below) tends to show that particular measures of globalization – such as trade and financial globalization – contribute positively and significantly to:
 - Higher (average) per capita growth
 - Higher (average) per capita income levels
 - Faster (average) income convergence

Non-linear Effects of Globalization on Growth and Growth Volatility

Calderón, Loayza, and Schmidt-Hebbel (2006, 2008), using annual 1970-2000 panel data for 76 countries, and applying GMM estimation methods to non-linear empirical models for growth levels (G) and growth volatility (GV), find that:

1. Trade openness and financial openness affect both G and GV significantly
2. Growth effects of openness depend non-linearly and/or non-monotonically on level of development (per cap. GDP)
3. G and GV effects of foreign real and financial shocks depend on levels of openness

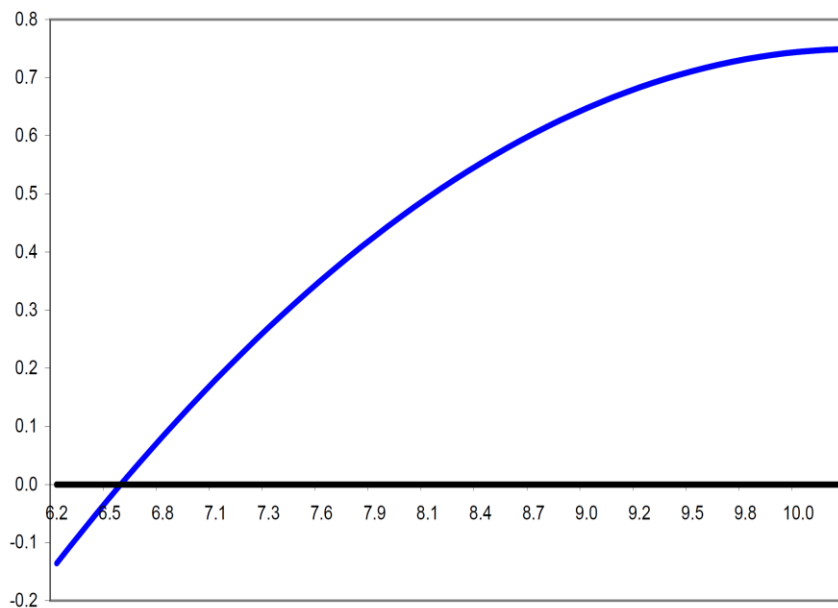
Trade and Financial Openness, as well as Foreign Real and Financial shocks, affect growth and growth volatility independently and significantly

			Growth	Volatility
Openness	Trade		+	+
	Financial		+	-
Shocks	Real	ToT	+	+
		TP growth	+	+
	Financial	Cap inflows	+	+

Source: Calderón, Loayza, and Schmidt-Hebbel (2008)

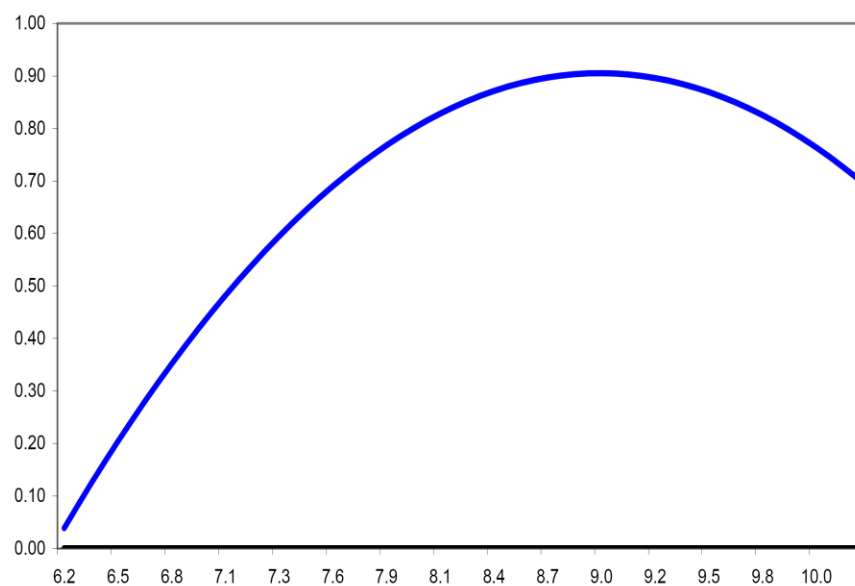
Non-linear Growth Effects of Trade and Financial Openness

Growth Effect of Trade Openness depends on per capita GDP



Real GDP per capita (in logs)

Growth Effect of Financial Openness depends on per capita GDP



Real GDP per capita (in logs)

Source: Calderón, Loayza and Schmidt-Hebbel (2008)

Growth and Growth Volatility Effects of Shocks depend on Levels of Trade Openness and Financial Openness

Shocks	Growth		Growth volatility	
	Trade Openness	Financial Openness	Trade Openness	Financial Openness
Terms of trade	↓	↑	↓	↓
Trade part. growth	↓	↑	↑	↓
Capital inflows	↑	↓	...	↓
World interest rate	↑	↑	...	↓

Source: Calderón, Loayza, and Schmidt-Hebbel (2008)

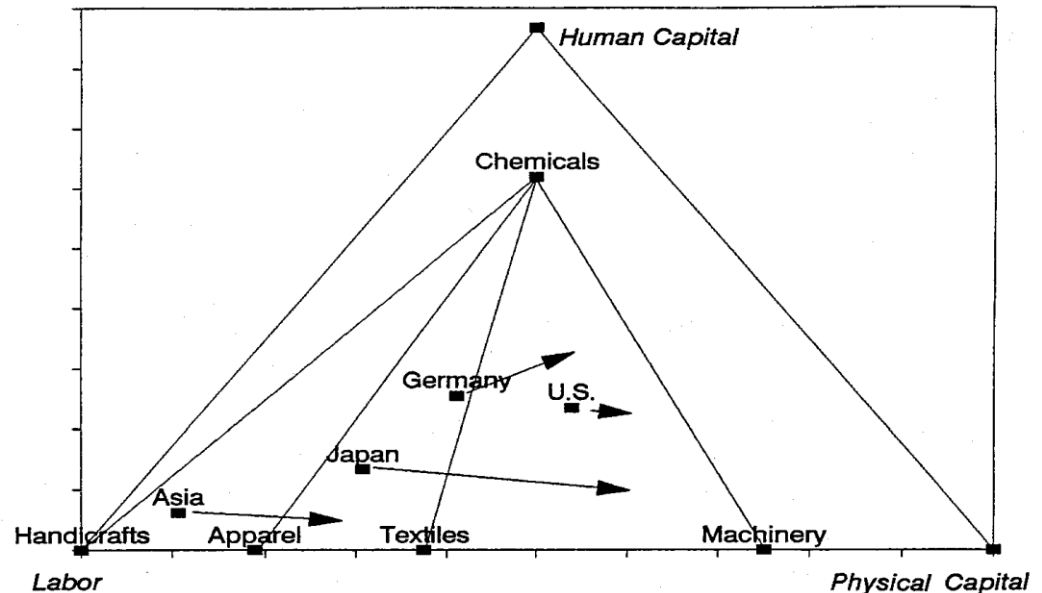
**3. Globalization and its “Contents and Discontents”:
Globalization and Distribution**

Globalization and Distribution

- There is a growing literaturra (still tiny compared to the growth-globalization nexus) of evidence that tends to show that:
 - Globalization \neq technology
 - Globalization reduces poverty worldwide, in particular in EMEs / DCs
 - (Probably) Globalization improves the world's income distribution (\neq cross-country average income distribution)
 - Globalization affects factor returns and personal income distribution very differently in rich and por countries
 - Globalization raises income concentration in advanced economies but not in EMEs / DCs

Trade and Factor Returns: Leamer's Triangle generalizes Stolper-Samuelson

Developing a three-factor, multi-goods model, Leamer (1995) predicts the effects of trade-induced changes of goods prices on factor returns



EFFECTS OF PRICE CHANGES ON U.S. FACTOR EARNINGS

Reduction in Price of	Effect on U.S. Earnings			
	Raw labor	Human Capital	Physical Capital	Skill Premium
Machinery	+	+	-	?
Chemicals	0	-	0	-
Textiles	-	+	+	+

Inequality Drivers (IMF 2015)

- (1) Trade globalization or Perot's - Trump's "giant sucking sound":
 - Raises (lowers) demand for high-skilled (low-skilled) labor in AEs (EMEs), raising (lowering) inequality in AEs (EMEs)
- (2) Financial globalization:
 - Capital flows generally (FDI in particular) toward EMEs raise demand for complementary high-skilled labor, raising inequality in EMEs
- (3) Technology:
 - Raises demand for skilled labor relativev to unskilled labor, raising inequality
- (4) Other factors:
 - education, financial deepening, labor market institutions, redistributive policies,

Int'l Panel-Data Evidence I (Jaumotte et al. 2013)

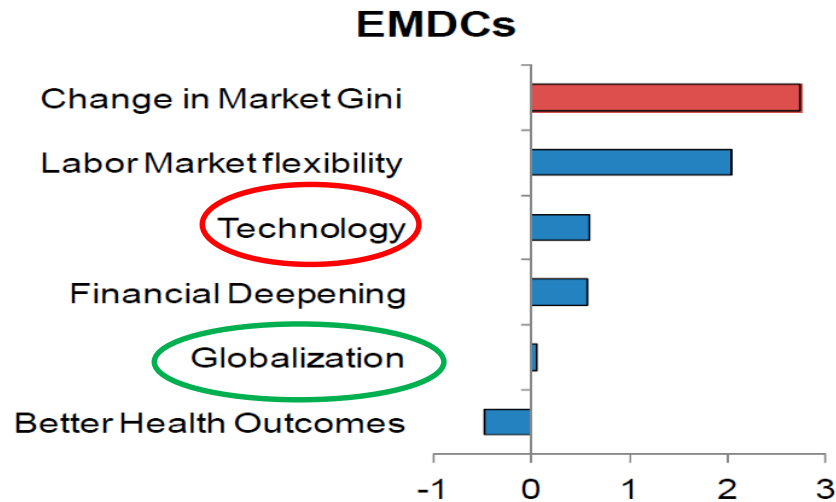
Table 1. Income Inequality Panel Regressions
(Dependent Variable: Natural Logarithm of Gini)

	(1)	(2)	(3)	(4)	(5)	(6)
Model specification	Summary model	Full model	Benchmark model	Sectoral exports	Sectoral productivity	IV estimation
Trade globalization						
Ratio of exports and imports to GDP	-0.058 (1.83)*					
Export-to-GDP ratio		-0.061 (1.49)	-0.056 (2.02)**		-0.050 (1.77)*	-0.054 (1.67)*
Financial globalization						
Ratio of cross-border assets and liabilities to GDP	0.035 (1.79)*					
Ratio of inward FDI stock to GDP		0.042 (2.38)**	0.042 (2.48)**	0.040 (2.37)**	0.037 (2.06)**	0.032 (1.81)*
Technology						
Share of ICT in total capital stock	0.075 (2.57)**	0.057 (1.90)*	0.054 (1.95)*	0.053 (2.05)**	0.050 (2.17)**	0.068 (2.70)***
Control variables						
Credit to private sector (% of GDP)	0.063 (4.66)***	0.052 (3.68)***	0.054 (4.08)***	0.054 (5.13)***	0.053 (4.55)***	0.044 (3.58)***

Int'l Panel-Data Evidence II (IMF 2015)

Variables	Market Gini (1)	Net Gini (2)	Top 10% (3)	5th Income Decile (4)	Bottom 10% (5)
Trade openness	-0.025 (0.017)	-0.008 (0.014)	-0.011 (0.014)	0.002 (0.003)	0.005 (0.005)
Financial openness	0.098*** (0.016)	0.047** (0.019)	0.026** (0.011)	-0.002 (0.002)	-0.008* (0.004)
Technology	56.85* (31.01)	15.03 (30.01)	31.11* (15.81)	-3.775 (3.572)	-11.51*** (3.587)
Financial deepening	0.050** (0.021)	0.026** (0.011)	0.022*** (0.007)	-0.004 (0.001)	-0.002 (0.002)
AEs * Financial deepening	-0.049**	-0.033**	-0.03***	0.007***	0.004*

Decomposition of Market Gini Change in AEs and EMEs, IMF 2015 (1985-2012 Gini point change)



4. Implications for Globalization Research and Policy

Globalization Research Challenges

- Better analytical models:
 - (Separate, joint) contribution of globalization and technology to growth
 - (Separate, joint) contribution of globalization and technology to poverty and to income distribution
 - Understanding the links (bi-causality) between globalization and technology
- Better empirical work:
 - Closer links between empirical and analytical models
 - Based on broader measures of globalization (beyond trade and financial openness)
 - Considering well-founded interactions between technology and globalization
 - Addressing classical econometric problems

Who are the Globalization Discontents?

- Average agent and voter wins with globalization
- But there are losers: very few in absolute terms (poverty declines), more in relative terms (especially in AEs)
- Risk-averse agents are hurt by larger uncertainty (not higher income volatility) due to globalization (and other changes)
- Voters scared by large amounts of immigrants
- Political economy: few losers (especially those who have much to lose) and many risk-averse agents form effective coalitions that block or revert globalization reforms that benefit majority of winners and less-risk averse agents
- Politicians exploit coalitions against globalization to gain power:
 - 2016: Brexit plebiscite (June), Trump election (November)
 - 2017: Prospects of anti-EU and anti-globalization populists from the left and the right that may win European elections

Globalization: Welfare and Policy Implications

- Let me submit my reading of the literature's implications for a first-best globalization :
 - Free trade in goods, services, capital, technology, ideas, and institutions (except some extreme forms of predatory dumping, i.e., Chinese steel)
 - Not: free mobility of people. Interior solution may be optimal: quota systems à la AUS, NZD, CAN
- Economists:
 - disseminate better our research results
 - discuss positive and welfare implications
 - take seriously and evaluate positive and welfare implications of anti-globalization (protectionist) policy proposals
- Policy implications for governments
 - Promote full globalization, except free mobility of people
 - Compensate losers selectively and temporarily. Example: training programs for displaced workers

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