

Trade and Inequality: A Suggestion and Research Gaps

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Suggestion: Add “Poverty” into the “Trade-Inequality” discussion

- Poverty is an important issue in its own right. Much disquiet about globalization/trade originates from concerns about poverty and less about inequality.
- To some, inequality per se is not so important in the absence of absolute poverty.
- When the concept of relative poverty is used, inequality becomes synonymous with poverty.
- After all, why shall we worry about the trade impact on the non-poor/rich?

Trade-inequality Nexus: Empirical Issues

- Relatively little empirical evidence exists regarding the quantitative impacts of trade on inequality
- As far as the impact is concerned, no single theory can explain the diverse stylized facts
- It is subject to more empirical studies. Yet, empirical findings are mixed.
- Can we generalize?

Common Approach

- Inequality = $f(\text{trade}, Xs)$.
- Choice of inequality index seems not important.
- Choice of trade variable (openness, tariff rate...) and model specification are important.
- Choice of study period and country/region are also important
- Most important and yet an **neglected issue**: what aspect of the trade variable:
 - Mean of trade \Rightarrow inequality?
 - Dispersion of trade \Rightarrow inequality?

The Research Gaps

- Assume: $\text{Income} = a_0 + a_1 \text{ trade} + a_2 X$
- It is strictly true that: $\text{Ine}(\text{Income}) = \text{Ine}(a_0 + a_1 \text{ trade} + a_2 X)$
- But the common approach uses: $\text{Ine}(\text{Income}) = b_0 + b_1 \text{ trade} + b_2 X$
- Trade as a variable can be characterized by its mean and dispersion. It is the dispersion which is relevant in inequality analytics but is usually ignored except Wan (JCE, 2004; RDE 2006, and ROIW 2007).
- The dispersion determines the sign and size of the contribution while the mean affects the size of the contribution

The Research Gaps

- When trade is good for growth, it is inequality-increasing if the rich/poor trade more/less. Otherwise, it is inequality-decreasing
- Gap 1: how to model **both** the mean (growing trade) and dispersion (trade convergence or divergence) impacts of trade on inequality and **poverty**?
- Gap 2: More empirical work needed before generalizing
- Gap 3: Dynamic decomposition to examine changing role of trade in affecting inequality
- Gap 4: It is important to distinguish “within vs between country inequality”, “spatial vs horizontal inequality”, “impact on developed vs developing economies”.

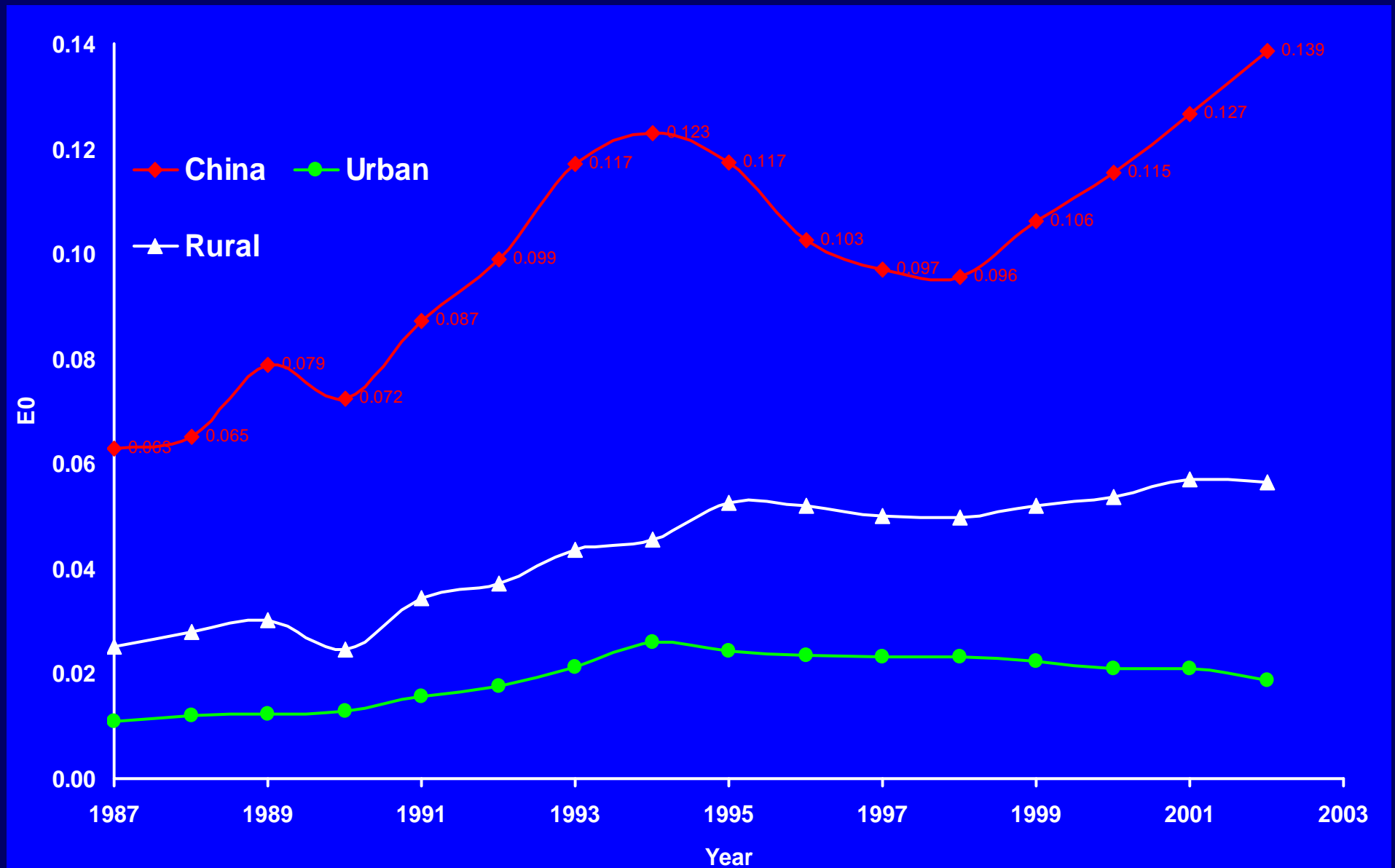
Global Inequality and Trade

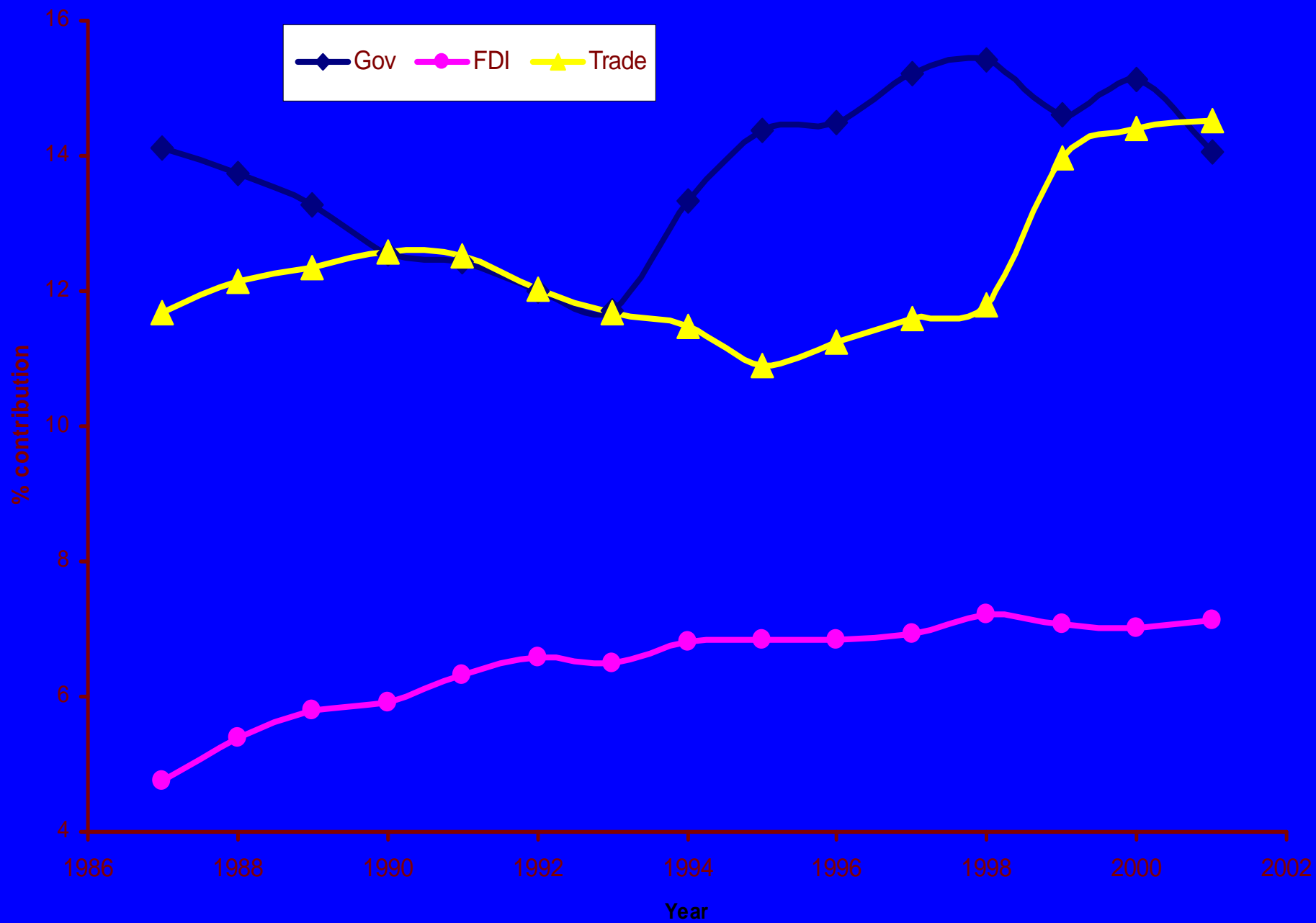
Variable	Upper-middle & high income countries		Low & lower-middle income countries	
	Coefficient	p-value	Coefficient	p-value
Trade openness	0.0027	0.000	0.0021	0.033
FDI	0.0097	0.072	0.0109	0.095
Capital	0.0002	0.000	0.0008	0.002
(Capital) ²	0.0000	0.000	0.0000	0.131
Age dependency	-1.1499	0.000	-0.6687	0.000
Inflation	-0.0001	0.090	0.0000	0.775
Literacy	-0.0030	0.152	-0.0005	0.801
Life expectancy	0.0018	0.677	0.0020	0.507
Real GDP	0.3440	0.010	0.7450	0.000
Freedom index	0.0243	0.483	-0.0136	0.421
Observations	485		340	
F-statistic	477.820***		373.430***	
Adjusted R ²	0.984		0.988	
DWH-statistic	36.904***		5.230*	
WH-statistic	17.625***		3.127*	

Inequality Decomposition Results

Variables	Gini	Gini (%)	GE ₀	GE ₀ (%)	GE ₁	GE ₁ (%)
1990						
Trade intensity	0.013	2.586	0.008	1.951	0.009	1.814
FDI	0.003	0.612	0.001	0.287	0.001	0.238
Capital	0.104	21.07	0.106	25.09	0.142	27.34
Age dependency	0.024	4.920	0.016	3.778	0.019	3.595
Inflation	0.000	0.000	0.000	-0.043	0.000	0.006
Literacy	0.002	0.349	0.001	0.322	0.001	0.284
Life expectancy	0.001	0.282	0.001	0.275	0.001	0.251
Real GDP	0.006	1.315	0.006	1.428	0.008	1.518
Freedom index	0.000	0.000	0.000	-0.189	-0.001	-0.196
Location	0.339	68.86	0.283	67.094	0.338	65.14
Total	0.492	100	0.422	100.	0.518	100
2004						
Trade intensity	0.013	2.731	0.008	2.085	0.009	1.957
FDI	0.005	1.054	0.002	0.587	0.002	0.493
Capital	0.104	21.95	0.101	25.65	0.134	28.23
Age dependency	0.019	3.902	0.010	2.469	0.008	1.647
Inflation	0.000	0.000	0.000	0.000	0.000	0.001
Literacy	0.001	0.301	0.001	0.264	0.001	0.222
Life expectancy	0.001	0.280	0.001	0.293	0.001	0.261
Real GDP	0.010	2.095	0.003	0.772	0.003	0.619
Freedom index	0.000	0.016	-0.001	-0.173	-0.001	-0.196
Location	0.322	67.67	0.267	68.04	0.316	66.76
Total	0.476	100	0.392	100.	0.473	100

Regional Inequality in China: 1987-2002





Independent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Globalization indicator: trade/GDP ratio										
Globalization g	0.029 0.001	0.011 0.301	0.030 0.021	0.032 0.052	0.028 0.035	0.029 0.028	0.030 0.028	0.025 0.057	0.040 0.007	0.045 0.003
Per capita income y	-0.145 0.000	-0.300 0.000	-0.319 0.000	-0.319 0.000	-0.338 0.000	-0.354 0.000	-0.338 0.000	-0.309 0.000	-0.372 0.000	-0.381 0.000
Coast × g				-0.004 0.843						
Time × g					-0.008 0.054	-0.010 0.026	-0.006 0.155	-0.008 0.058	-0.011 0.009	-0.012 0.008
Liberalization						0.046 0.113				0.063 0.038
Economic structure							0.056 0.122			0.096 0.015
Education								-0.012 0.460		-0.011 0.510
Inflation									-0.100 0.016	-0.134 0.002

Independent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Globalization indicator: FDI stock /GDP ratio										
Globalization g	0.003	0.006	0.009	0.009	0.001	0.005	0.001	0.001	0.000	0.005
	0.647	0.319	0.187	0.164	0.925	0.567	0.946	0.905	0.973	0.571
Per capita income y	-0.115	-0.309	-0.329	-0.320	-0.325	-0.351	-0.325	-0.295	-0.346	-0.355
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coast × g				-0.008 0.249						
Time × g					-0.009 0.004	-0.010 0.003	-0.009 0.008	-0.009 0.006	-0.012 0.000	-0.012 0.000
Liberalization						0.051 0.106				0.060 0.081
Economic structure							0.034 0.332			0.060 0.099
Education								-0.013 0.443		-0.012 0.497
Inflation									-0.081 0.039	-0.104 0.009