# Developing Country Aspects To Trade Policy Analysis: Does One Size Fit All?

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#### Introduction

- Geography, Integration, and institutions major explanation for differences among rich – poor nations
- Theme:
- Interdependence between institutions and international trade in goods, services, factors of production, "ideas"
- Openness induces trickle down reform that may exceed gains from trade alone
- Many sub-Saharan countries are exporters of primary agricultural commodities; protection in advanced nations become barrier to gains from trade and institutional reform

# II. Organization of paper

Following a brief background/context remarks, organization is:

- Overview of the geographic, institution trade linkages
- Linking trade and institutional reform
- Do sub-Saharan agricultural trade patterns suggest gains from trade
- The effect of ag. trade reform on world agriculture
  - Static analysis
  - Dynamic
  - Sub-Saharan Africa
- Conclusions

# III. Background

- Performance of world economy in last ½ of 20<sup>th</sup> century has lifted more people from poverty than any previous time in history
  - \$1/day (1987 PPP) has fallen from 20% to 5% in last 20 yrs.
  - \$2/day has fallen from 44% to 18%
  - Attribute to forces causing globalization
- 2. Still, many not participating: 19% live on 1.3% of world's income
  - In sub –Saharan Africa, 52 % live on \$2 ppp/day and 12% of the regions income
- 3. Features of growth relatively easy to recognized
  - Macroeconomic policy
  - Micro: firm level environment (need links to rest of world)
  - Macro policies may be necessary, but not sufficient;
    Institutions provide micro-environment
  - Which comes first, opportunities then institutions or reverse?

# IV. Overview of geography-institutions-trade

Why are we so rich, they so poor?

- Geography (Boom and Sachs..)
  - Climate
  - Resource endowments
  - Distance to markets/transport costs
  - Disease burden
  - Extractive form of governance
- International trade (Integration)
  - Efficiency, specialization division of labor
  - Inputs/FDI/practices
  - Ideas/organization / financial diversification

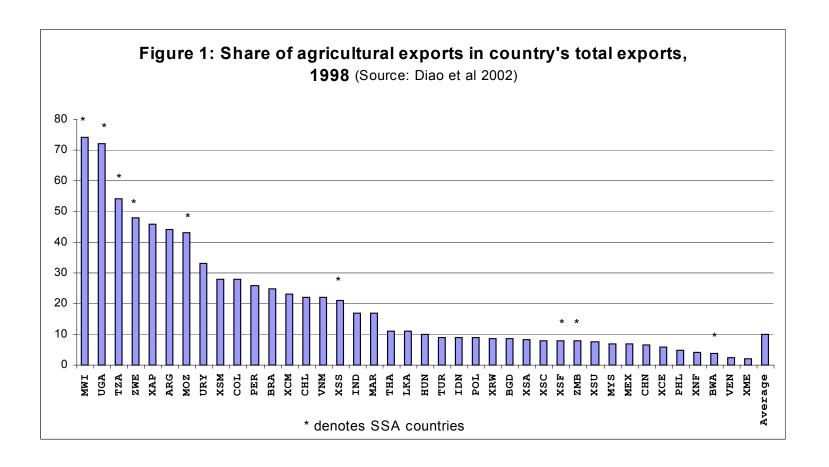
- 3. Institutions (Rodrik (2002), MacFarlan (2003)
  - Property rights, rule of law (market creating institutions)
    - Institutions matter almost exclusively, geog. somewhat
    - Integration has positive effect on institutional quality
  - MacFarlan; broader measure;
    - Sub-Saharan move to \$800 to \$1400
    - Rate of growth increase by 1.7 percentage points (2.5 to 4.2 -> < 16 yrs)</li>
- Sachs (2003) critic
  - Institutions matter, but not exclusively
  - Identify direction of causation
- 5. Forces of globalization create opportunity/potential; some grasp some do not (create institutions that mkts use intensively)

# V. Linking trade and institutions

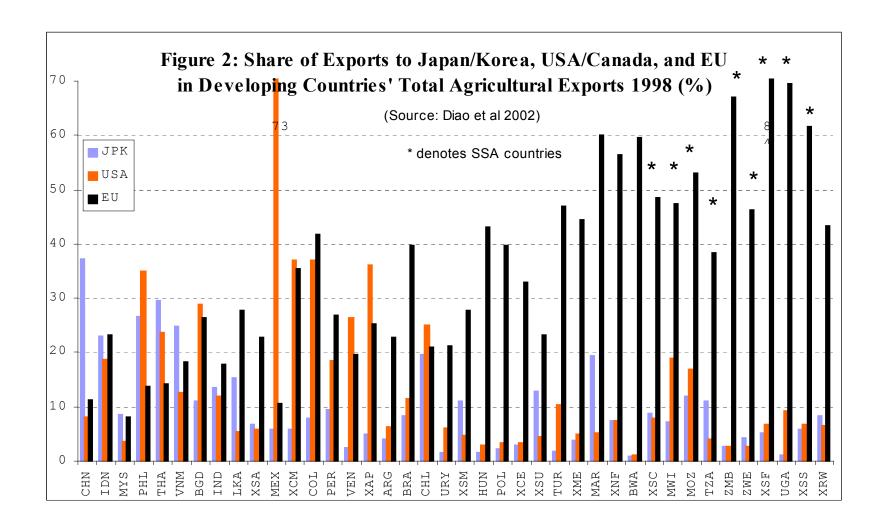
- 1. Effects of globalization on world economy
  - Similarities of the two waves (1860-1914; 1960 --)
  - Differences (first massive divergence, second convergence)
  - Implications
- 2. Country studies, e.g., the case of Mexico
  - Inward oriented policies
  - Events outside its boarders
  - Prospects of stagnation and the PRI party (Salinas)
  - Implies: institutional change is ex-post; joint process, identification

- Trade reform
  - No country has developed successfully by turning is back on international trade and capital flows
  - No country has developed simply by opening itself to trade and capital flows
  - Trade reform entails
    - Importation of institutions from abroad
    - Membership in WTO
    - Adoption of a set of institutional norms that rent seekers find hard to change
    - Financial integration places pressures for macro stability
    - Flow of information encourages civil liberties & political freedom
    - Gov. enforcement of foreign investor rights then inclined to do same for own citizens
- 4. Trade important, what is trade opportunities for sub-Saharan Af.?

# VI. Do sub-Saharan trade patterns show potential?1. Agricultural exports are important as share in total trade



- 2. Most agricultural export markets are in the North
  - -North imports 65% of developing country total ag exports
  - -Non cereal crops; veg., fruits, cotton, sugar, veg. (LDC-60-80%)



3. Traditional (cash crop) export to world; see evidence for intraregional trade as well; Thus data suggest substantial potential to expand ag trade (traditional: cocoa, tobacco, sugar..; non-trad.: fish, veg

Table 1. Sub-Saharan African (SSA) agricultural trade -- 1996-2000 annual average

		1 1	Exports	Imports	Export share by	Import share by	
			Exports	imports	commodity	commodity	
		Rank*	Value	Value	commodity	commodity	
		IXank	(Million \$US)	(Million \$US)	(%)	(%)	
Saples	Meat	16	335	2,572	1.8	25.4	
	Livestock	18	123	1,104	0.7	10.9	
	Other cereals	19	207	272	1.1	2.7	
	Maize	22	287	105	1.6	1.0	
	Beans	24	54	35	0.3	0.3	
	Cassava	28	2	0	0.0	0.0	
	Sub-Total		1,007	4,089	5.5	40.4	
Non-traditional	Fish	2	2,403	1,239	13.1	12.2	
	Vegetable&fruits	6	2,449	787	13.3	7.8	
	Miscellaneous	7	777	554	4.2	5.5	
1	Oilseeds	12	317	456	1.7	4.5	
Ę	Oils and fat	13	359	435	2.0	4.3	
. 🕏	Processed food	20	159	333	0.9	3.3	
Ž	Beverages	27	334	56	1.8	0.6	
	Sub-Total		6,798	3,859	36.9	38.1	
	Cocoa bean	1	2,387	797	13.0	7.9	
	Coffee green	3	1,844	148	10.0	1.5	
l _	Cotton	4	1,459	130	7.9	1.3	
Tractional	Tobacco	5	1,125	119	6.1	1.2	
ij	Sugar	8	1,063	73	5.8	0.7	
<u> </u>	Tea	9	646	44	3.5	0.4	
Ξ	Cashew nuts	14	221	22	1.2	0.2	
	Other nuts	25	44	12	0.2	0.1	
	Other fibers	26	233	4	1.3	0.0	
	Sub-Total		9,022	1,349	49.0	13.3	
Offices	Processed cocoa	10	492	305	2.7	3.0	
	Animal skin	11	564	224	3.1	2.2	
	Spices	15	157	124	0.9	1.2	
	Feed stuffs	17	147	76	0.8	0.7	
	Coffee roasted	21	105	60	0.6	0.6	
	Cigarettes	23	108	41	0.6	0.4	
-	Sub-Total	+	1,572	829	8.5	8.2	
TOTAL			18,400	10,125			

<sup>\*</sup> By share in sub-Saharan Africa total agricultural exports.

Source: UNCOMTRAD rev3, 2002

## The E. U. is a major importer of SSA Ag. products

Table 2. Share of exports to the EU in selected countries for total agricultural exports by commodity group, 1996-2000 average

	Fish	Shrimp	Vegetables &fruits	Oilseeds	Beverages	Sugar	Coffee green	Tea	Tobacco	Cotton	Other fiber
Kenya	38.6	97.6	88.9	29.9	3.9	7.3	82.7	33.2	63.6	17.5	50.9
Uganda	50.5	0.0	81.8	44.5	3.7	8.1	64.5	9.3	79.1	52.8	54.0
Tanzania	61.1	0.0	81.0	16.4	1.4	94.0	60.2	33.0	69.9	14.0	49.0
Ethiopia	27.0	0.0	13.6	19.6	13.9	12.9	54.8	11.2	100.0	18.5	100.0
Madagascar	78.6	0.0	93.6	19.7	63.5	77.7	61.8	88.2	48.2	73.4	81.2
Cote d'Ivoire	98.0	97.5	93.4	61.8	5.7	63.9	57.3	4.8	30.0	14.4	86.6
Cameroon	38.9	0.0	86.7	6.1	1.2	1.7	75.0	36.1	15.2	18.2	1.4
Nigeria	87.1	98.0	64.2	73.3	81.0	10.7	68.0	27.6	66.0	17.6	98.8
Senegal	79.1	96.3	95.0	80.8	0.9	60.0	68.9	1.3	12.8	49.7	90.7
Ghana	81.1	87.1	92.2	80.3	47.0	0.9	57.6	21.7	52.6	32.0	42.3
Zimbabwe	44.5	N/A	81.7	13.1	3.3	35.2	77.1	32.7	42.2	40.7	18.1
South Africa	57.2	N/A	67.2	35.2	62.3	25.6	75.8	84.5	25.2	8.2	59.7

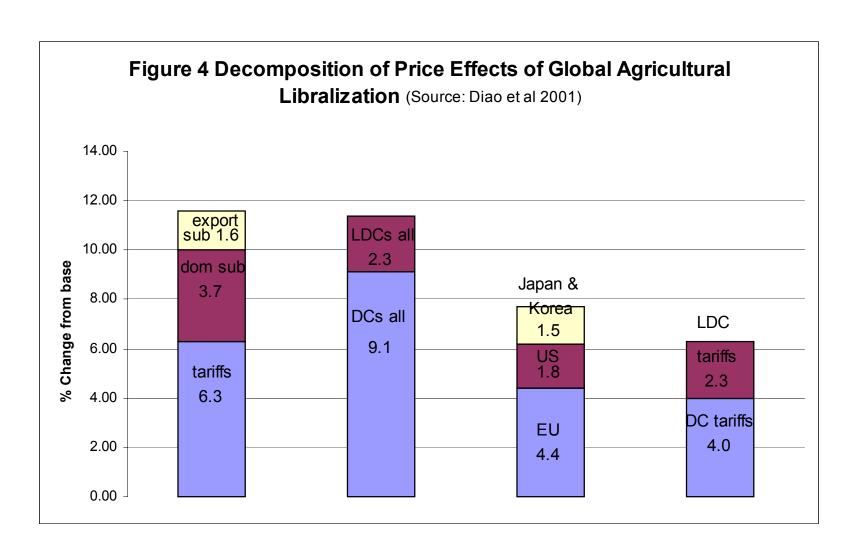
## EU & U.S. maintain barriers to these products

**Table 4 Agricultural Protection in the European Union and United States** 

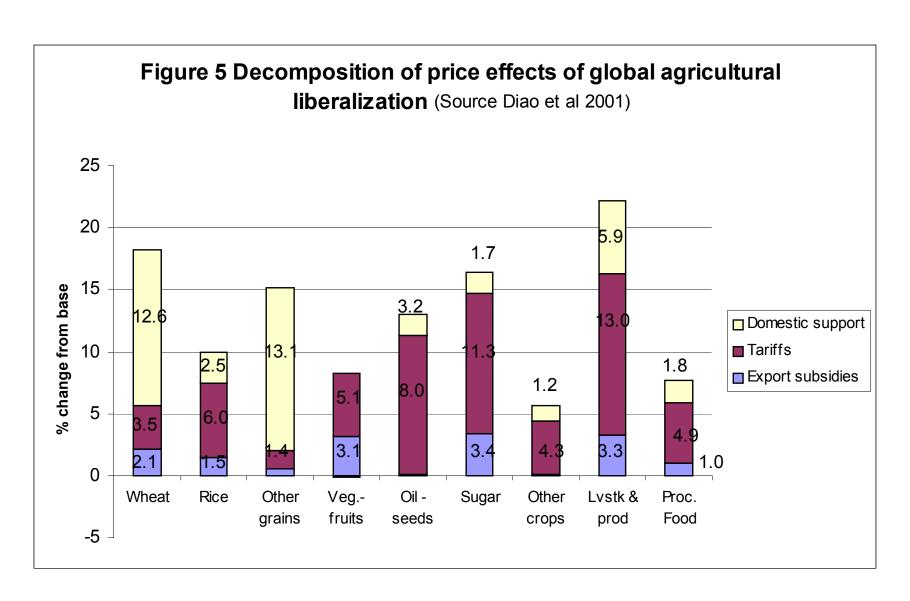
l able 4 Agricultural Protection in the	Import			Subsidies	Domestic	Protection
	EU	US		US	EU	US
Paddy rice	64.6	4.9	12.6		43.2	13.4
Wheat	68.3	2.6	9.1		75.2	47.3
Other cereal grains	43.1	0.6	34.1	0.0	78.8	24.5
Vegetables, fruits, nuts	17.5	4.7	1.0			
Oil seeds	2.6	17.7	0.0		117.6	24.2
Sugar cane, sugar beet	247.3	0.7	0.0		3.5	4.1
Plant-based fibers	0.0	9.7	0.0			45.0
Other crops	4.6	21.5	0.4			
Cattle and sheep	38.0	1.1	0.1		31.9	0.6
Other animal products	6.1	0.6	0.0		1.6	0.6
Raw milk	0.0		3.8		3.2	1.5
Forestry	0.8	0.4				
Fishing	8.0	0.3				
Beef and mutton	95.2	5.3	27.0			
Other meat products	52.0	3.6	4.5	0.0		
Vegetable oils and fats	11.8	4.3	0.1			
Dairy products	89.8	42.5	26.0	18.6	3.2	1.5
Processed rice	86.3	5.3	13.7		43.2	13.4
Processed sugar	76.5	53.4	53.5		3.5	4.1
Other processed food	32.3	11.4	4.2			
Beverages and tobacco products	12.4	3.0				
Average tariff (weighted)	21.7	10.7	7.1	0.0	14.4	10.2
Average tariff (non-weighted)	45.6	9.2				

#### VI.1. Results of static analysis:

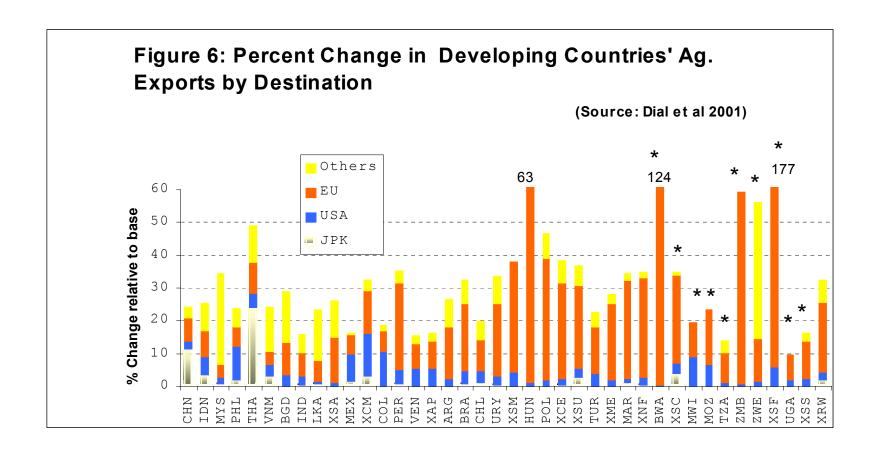
- Market access; export subsidies, domestic support



#### - Decomposition by commodity

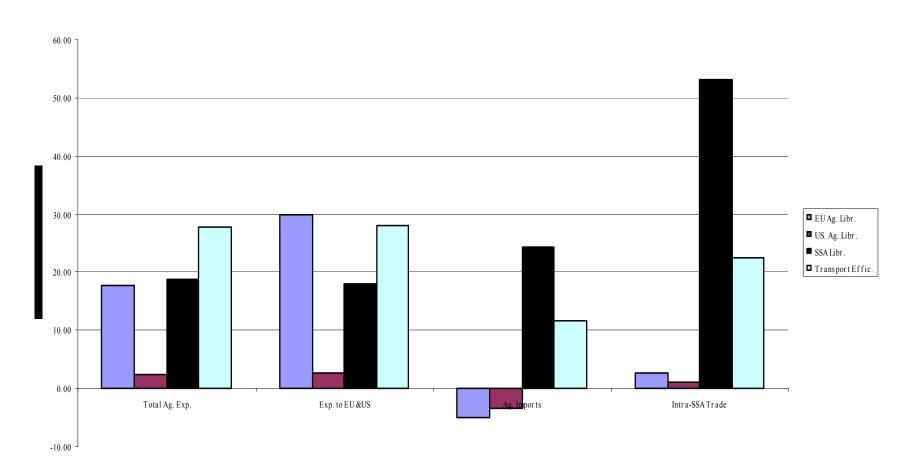


- Find substantial increase in trade volume; Exports from Africa to EU rise most; Are institutions in place to make this possible?

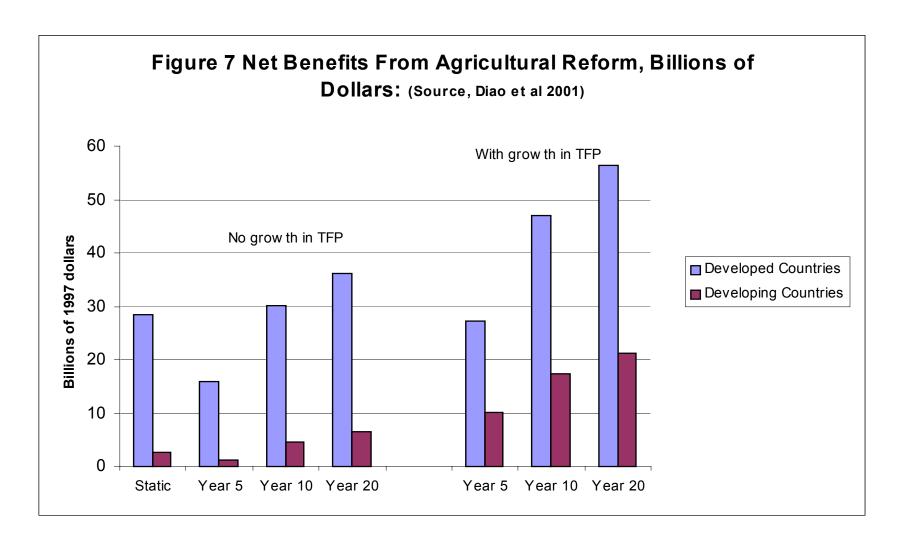


# Trade barriers matter, and so does geography (transport costs)

Figure 5 Effect of trade liberalization and transport efficiencies on sub-Saharan Africa agricultural trade: Percent change from base



#### The benefits of trade reform take time

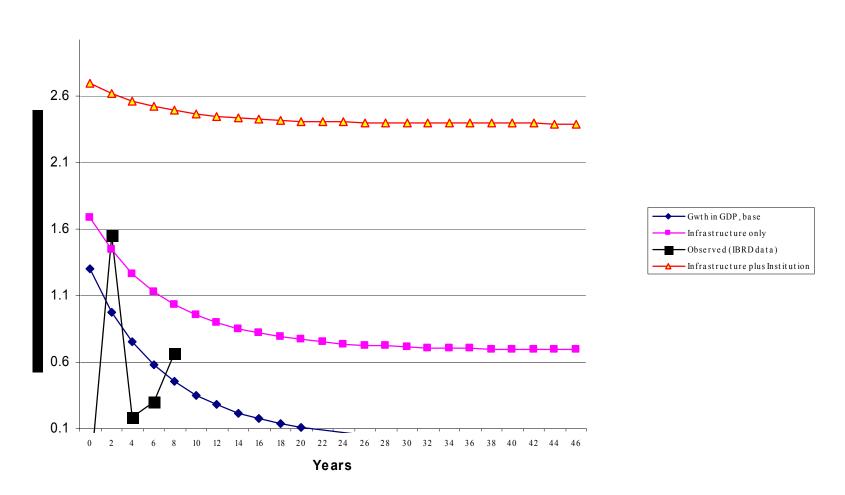


## VI.3 A closer look at sub-Saharan Africa (SSA)

- Approach; three sector, SAM aggregated from IFPRI archives (1993)
- About 1/3 of the 2.8% in U.S. ag. productivity growth from infrastructure during 1959-1968 period
- Growth in SSA econ. wide prod. About 0.02 % (U.S. over period 1981-1995 about 1.0%; increased fast after 1995)
- If same applies to SSA, then increase SSA prod. Growth shock of about 0.65%
- Second shock is to assume MacFarlan's (2003) estimate of 1.7% points to growth from raising quality of institutions to mean of sample

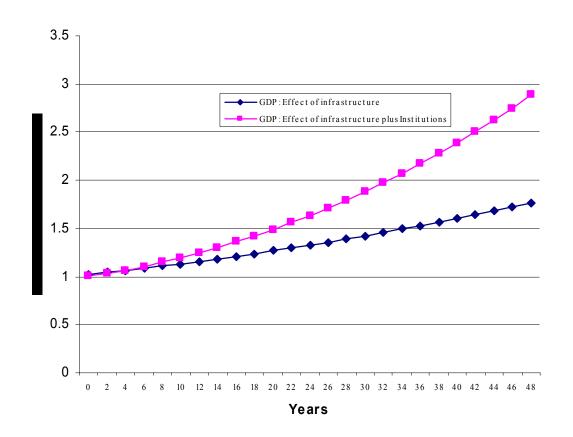
#### 1. Base solution, transition growth

Figure 7 Sub-Saharan Africa: growth in GDP per capita, base plus two simulations



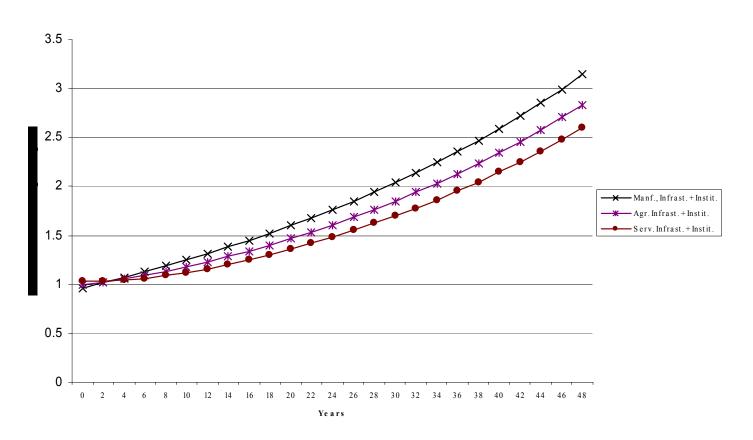
- -Effect of infrastructure: \$567 vs \$627.6 in 2001; \$819 in 2020 and 1128 in 2040
- -Effect of institutions: \$650 2001, \$1057 in 2020, \$1844 in 2040

Figure 8. Sub Sharan Africa: Illustration of the effect of infrastructure and institutions on GDP per capita



#### Evolution of sectoral composition

Figure 9. Sub-Saharan Africa: effect of infrastructure and institutions on sector output; Simulation relative to base path



#### 7. Conclusions

- Institutions matter; country situation specific; trickle down better than no change at all.
- Analysis suggests ag policies of advanced countries wastes resources, and is a barrier to *helping* induce institutional reform in SSA; implies SSA has major interest in Doha round.
- Institutional reform
  - Initial conditions matter, but becoming easier to overcome
  - Institutional change is induced by potential for economic gain (not reverse?), and logic thus follows prescription of econ. Opportunities
  - Unfortunately, no compelling reasons to think that societies will naturally gravitate toward good institutions, all else constant (bad institutions can persist indefinitely, this is why trickle down is better than none at all.)
- Form of governance (democracy or other) may not matter much (Mohtadi & Roe, 2003)
- Reform need not be complete, but targeted and evolutionary