

Market Reform, Marketing Margins and Food Prices in Eastern and Southern Africa: Emerging Issues and Challenges



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What is the problem?

- ❑ Stagnant agricultural productivity growth
- ❑ More frequent food crises – and soaring world food prices
- ❑ Realization that these problems are partially due to poorly functioning markets
- ❑ ***What can African policy makers do to develop food markets to encourage uptake of GR inputs, catalyze farm productivity growth, and protect poor consumers?***

Current thinking on “strategy”

- Growing advocacy for a “big push” strategy
 - e.g., Sachs, AGRA
 - World Bank “liberalization” policies on trial
- Major debate about the right “enabling environment”
 - Search for new market institutions
 - What is the role for marketing boards, price controls, trade controls?

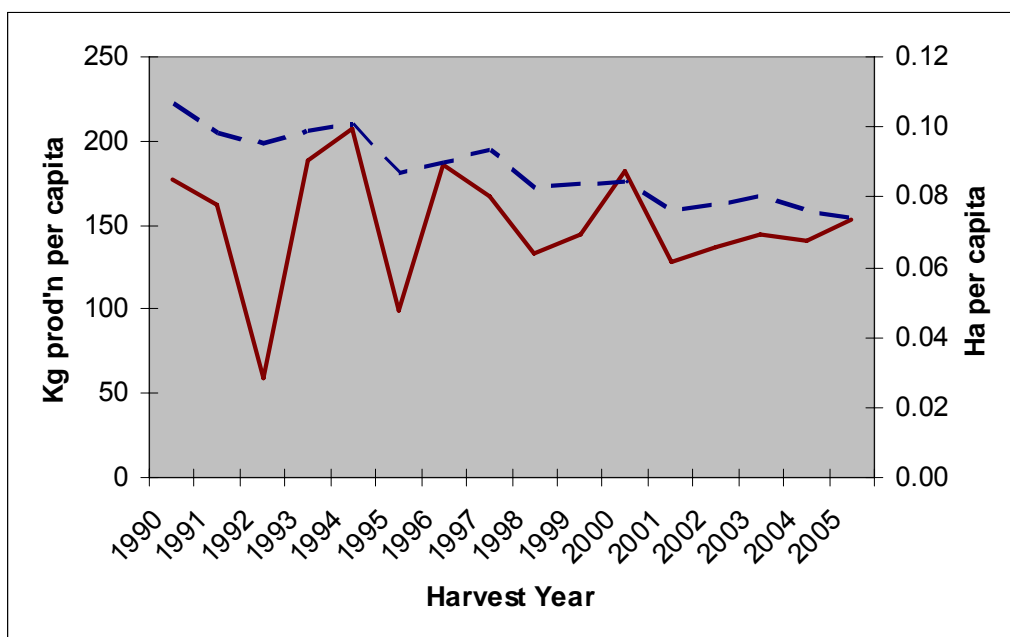
Current thinking on “strategy”

-can be guided by evidence on impacts of food market liberalization

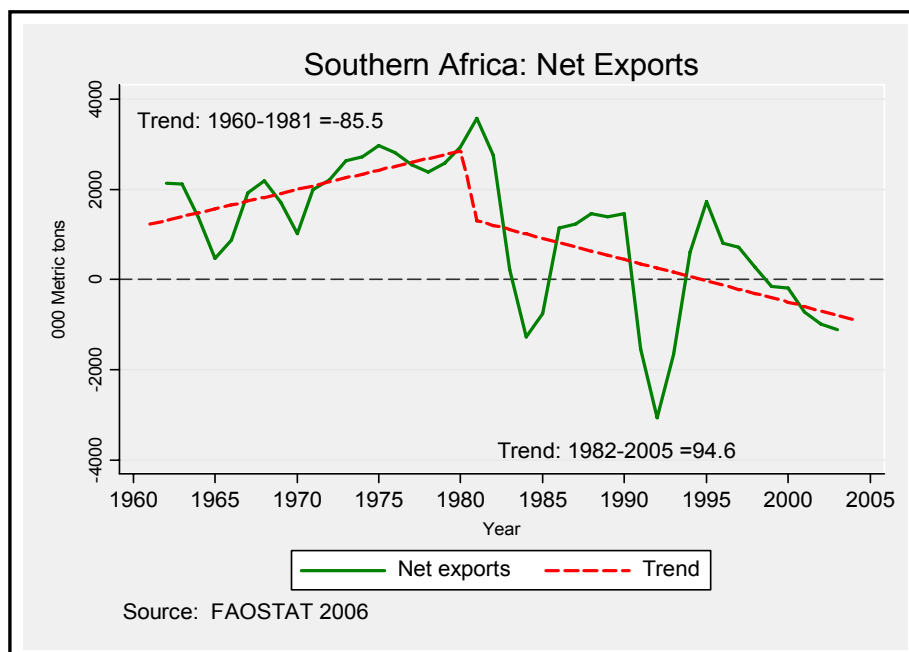
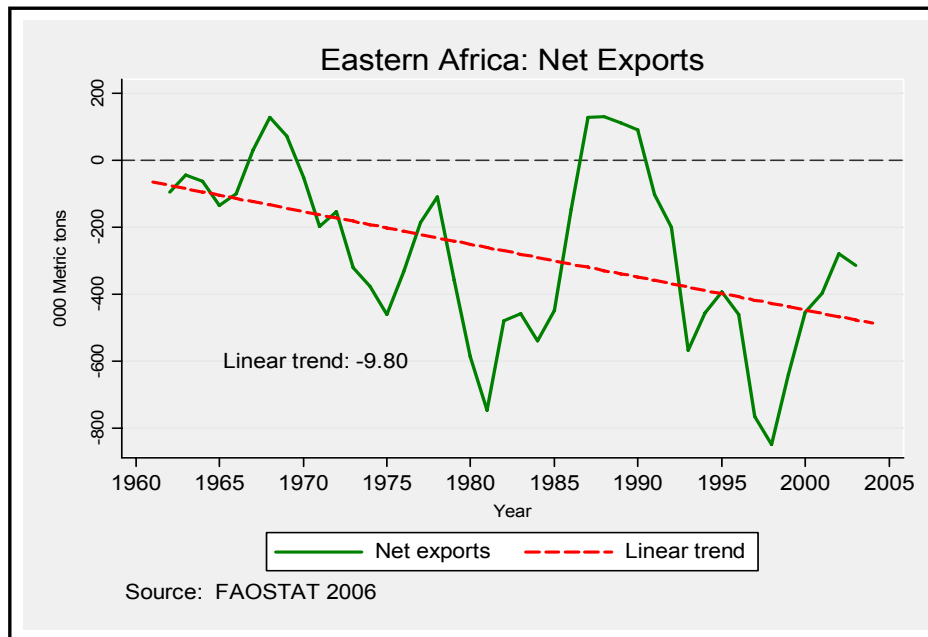
Objectives

1. To determine the effects of food market reform on food price levels and marketing margins
2. To consider:
 - how higher world food prices will affect food prices under liberalized food markets
 - *supply response*: who will be able to respond?
 - why only a small % of farmers will benefit, at least in short run

I. Gradual transition to structural grain deficit



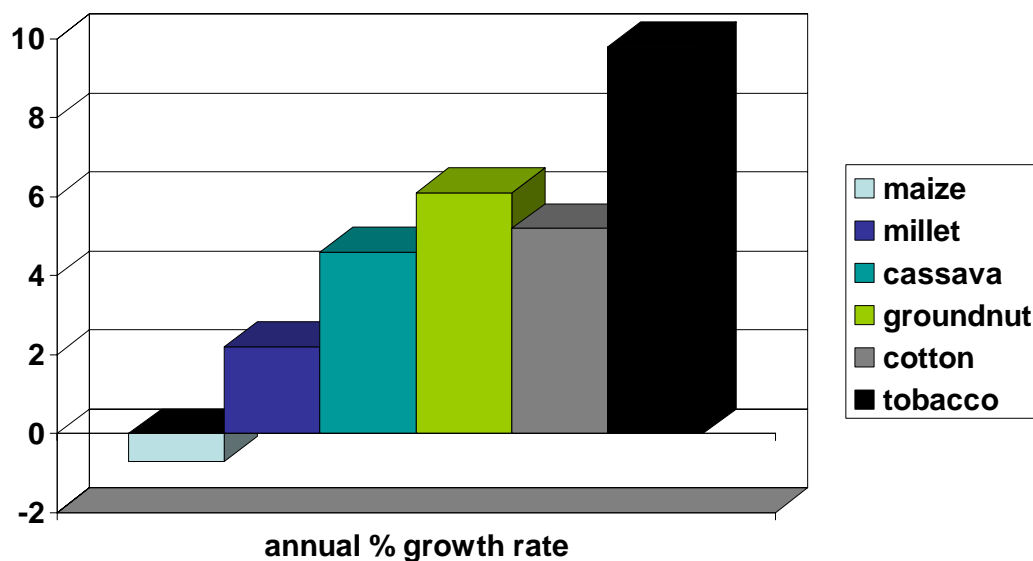
I. Gradual transition to structural grain deficit



Why is maize production stagnating in the region?

1. Withdrawal of marketing board maize support prices and fertilizer subsidies
2. Cultivated area shifted from maize to other crops: cassava, cotton, groundnut, horticulture

Zambia annual growth rates, 1992/3-2003/04



Role of maize in small farm incomes is declining (share of gross sales revenue)

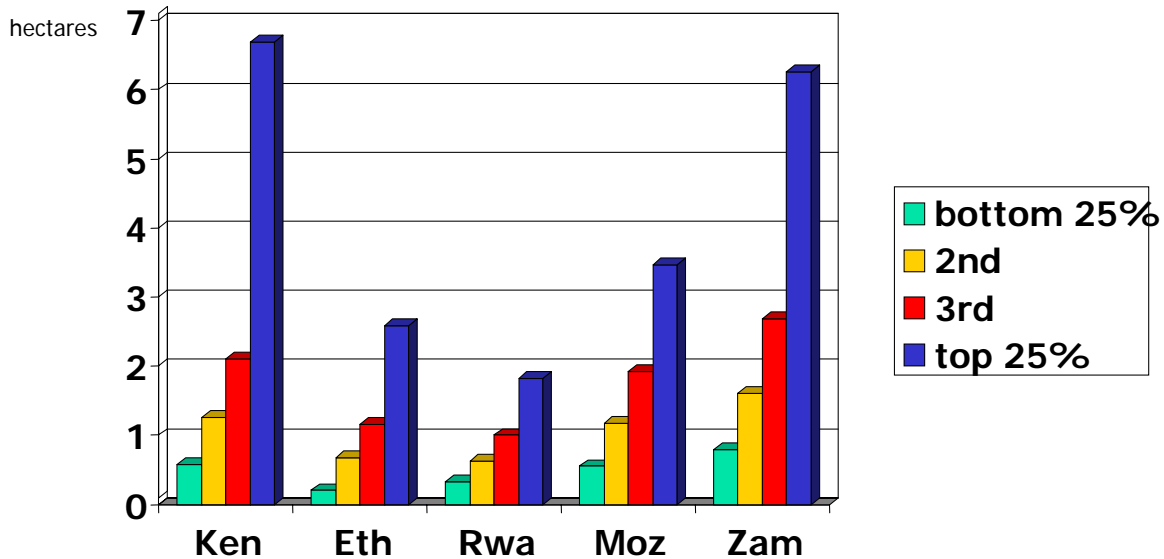
	Maize	Other grains/ beans/ oilseeds	Non-food cash crops	Fruits - veges	Animal products
Kenya	13.3	7.9	34.0	17.7	26.7
Malawi	21.0	9.8	36.9	26.3	na
Mozam	13.8	9.3	16.9	30.4	23.4
Zambia	28.2	7.7	16.7	27.5	14.7

Source: Jayne, Mather, Mghenyi, 2006

Why is maize production in the region stagnating?

1. Withdrawal of marketing board maize support prices and fertilizer subsidies
2. Shifted area from maize to cassava, cotton, groundnut, horticulture
3. Declining farm size
 - A strategy of growing maize commercially is generally not viable for farms < 2 hectares

Farm size distribution: Small farm sector

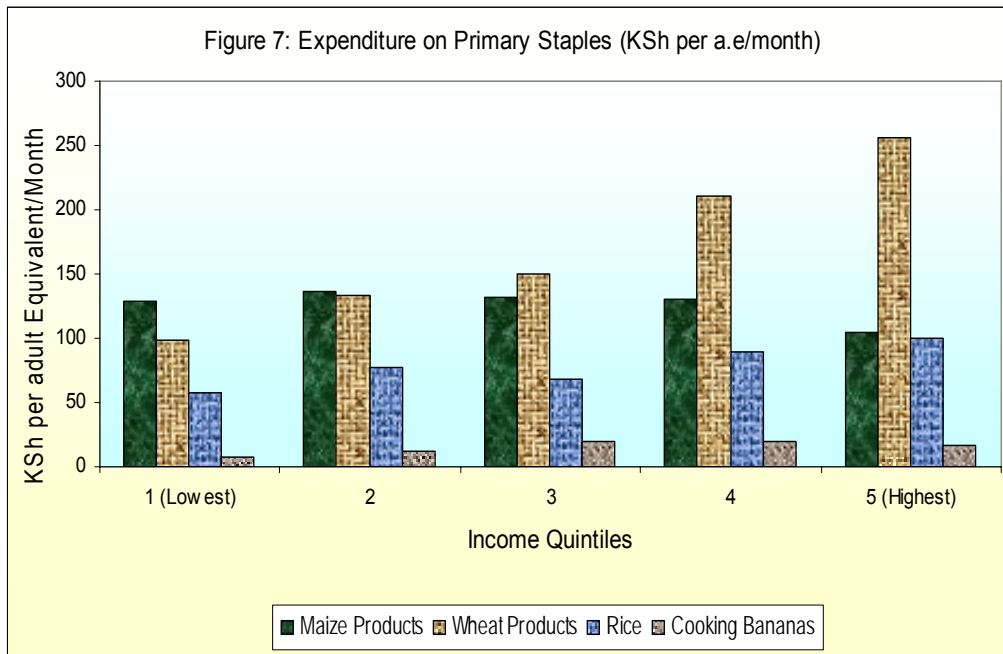


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4. Urbanization → preferences shifting to convenience foods (bread, rice)

Nairobi Staple Food Expenditure Patterns



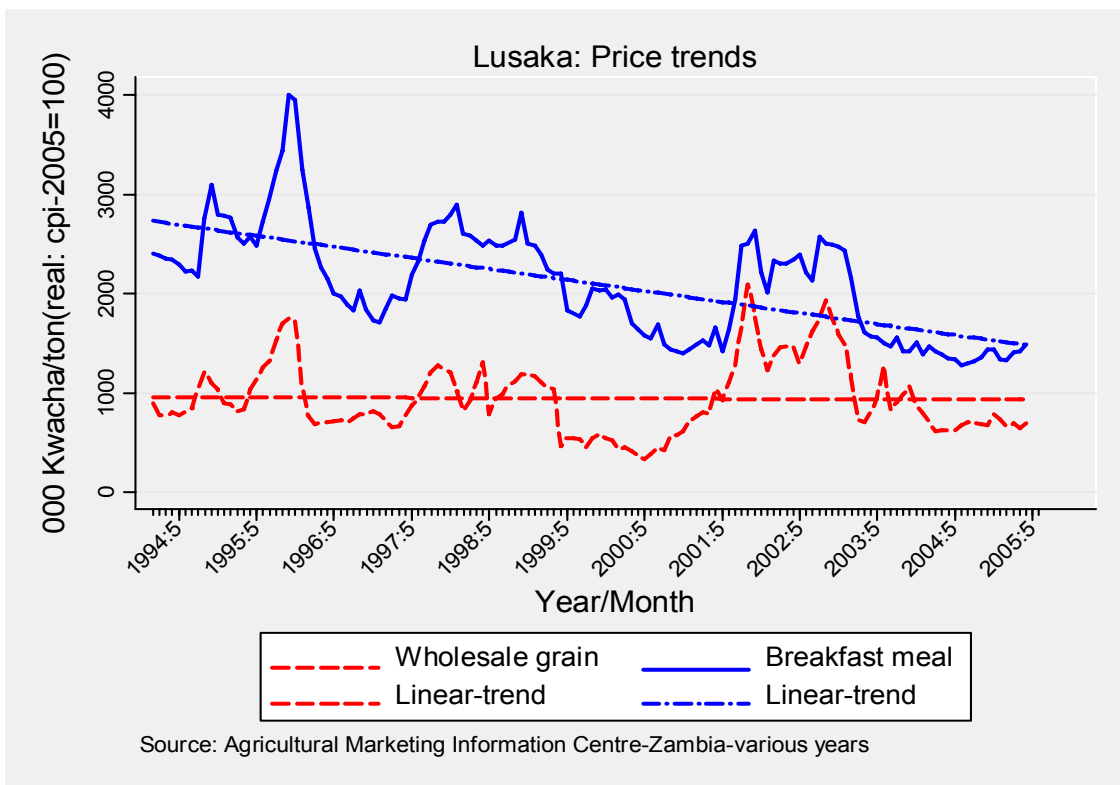
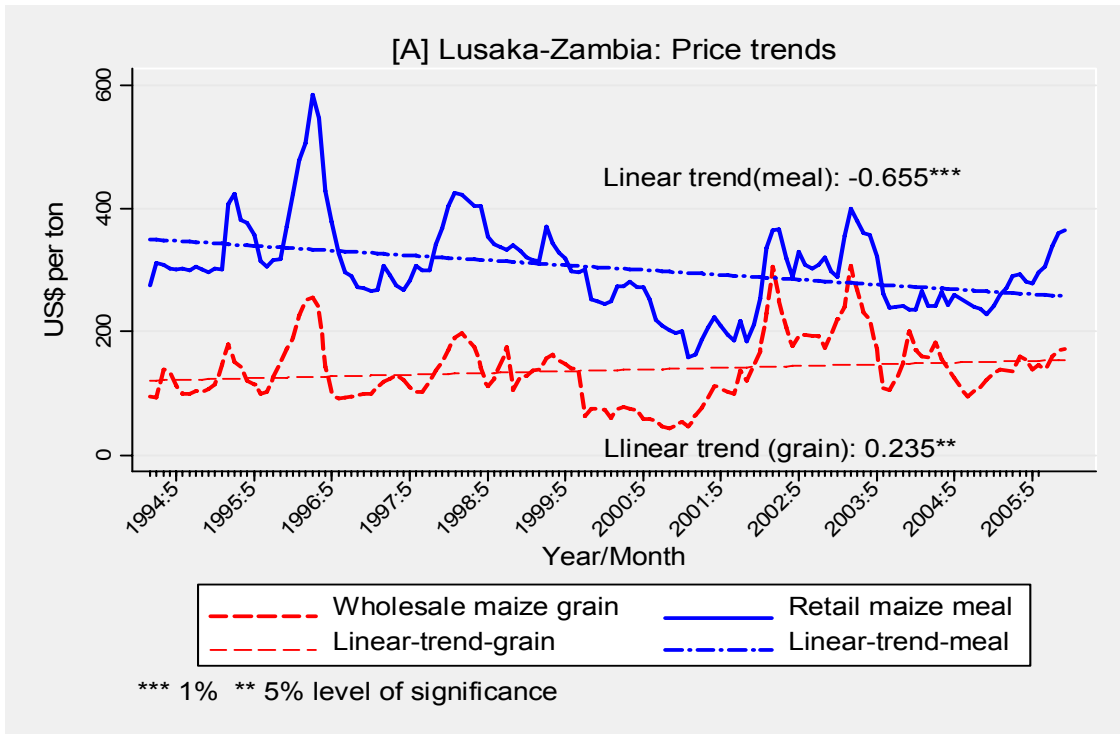
Source: Muyanga et al., 2005

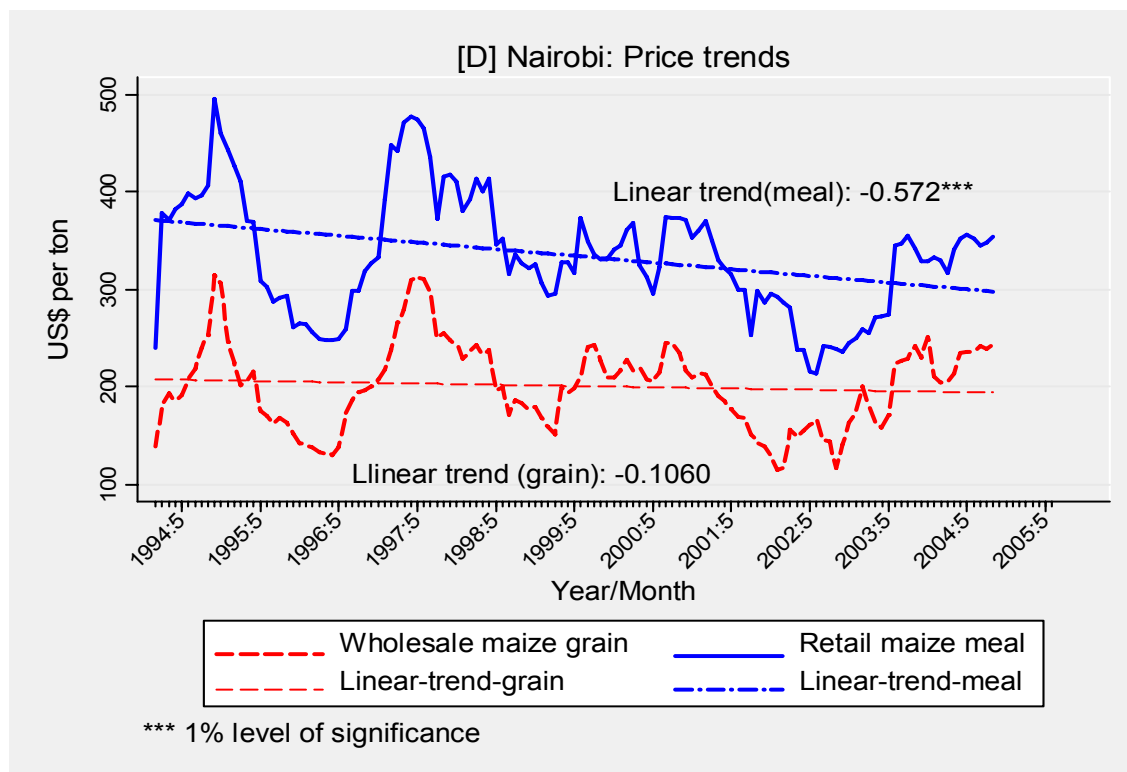
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- More than 50% of Africa's population will be urban by 2015.
 - 2000: 10 farm households feed 7 non-farm households
 - 2020: 10 farm households feed 16 non-farm households

Declining per capita maize production ≠ region is losing its ability to feed itself

- May be moving toward comparative advantage
 - Grain self-sufficiency → grain self-reliance
- Shifts to other domestic food crops that provide much greater calories/unit of land
- What really matters are trends in farm income growth → market performance plays a crucial role

Evidence on effects of reform on marketing margins and food prices:



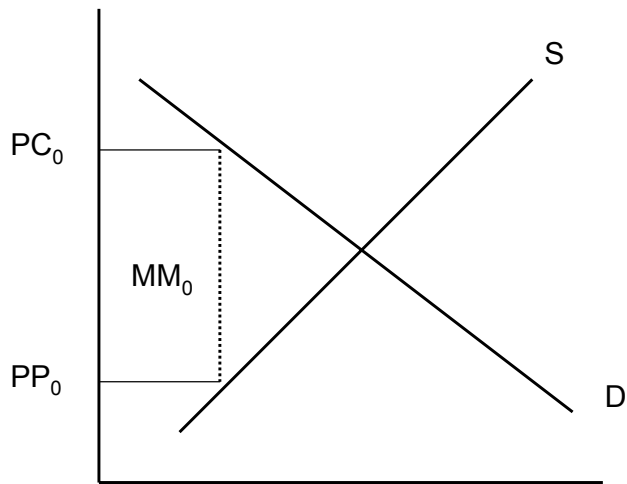
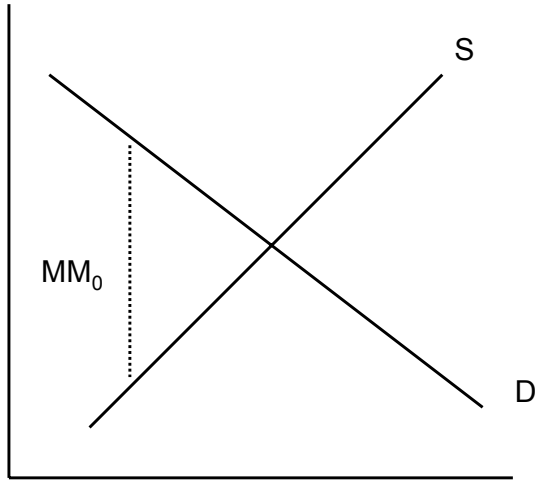


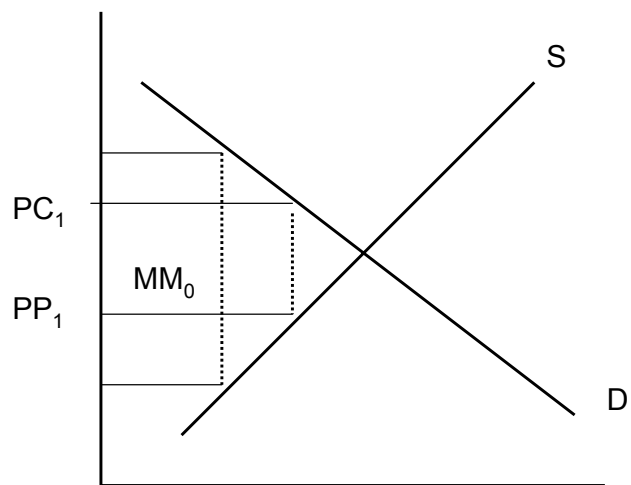
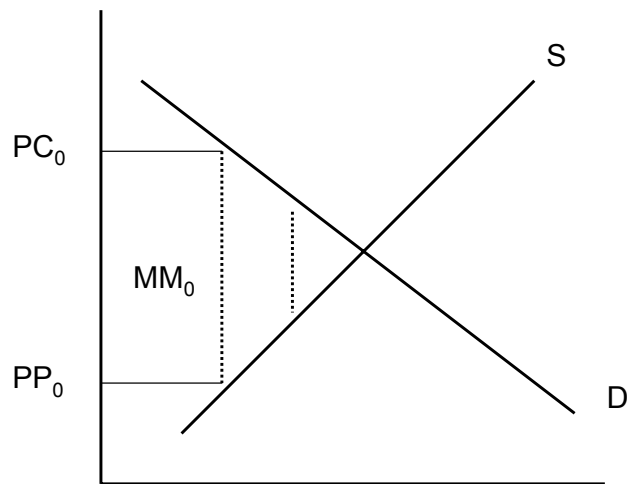
Summary of impacts of food market reform:

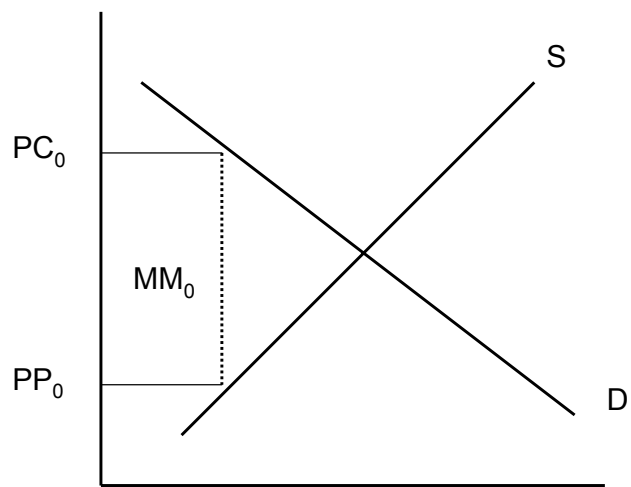
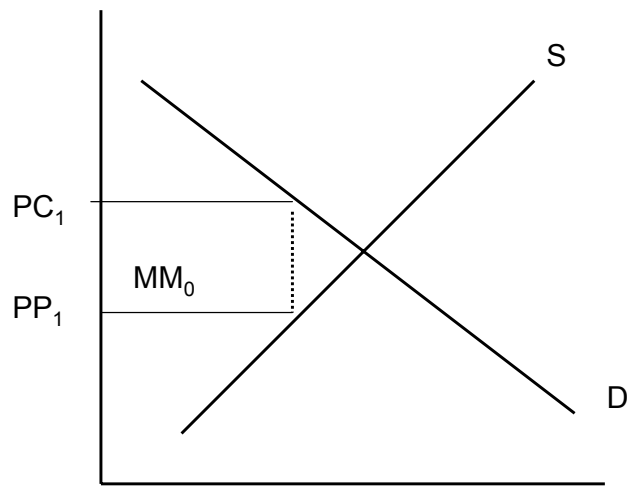
1. Retail food prices have fallen
2. Wholesale food prices have risen or stayed constant
3. Food marketing costs have declined

Reasons:

- Reform broke up oligopolistic grain milling and retailing sector
- Massive investment in small-scale milling





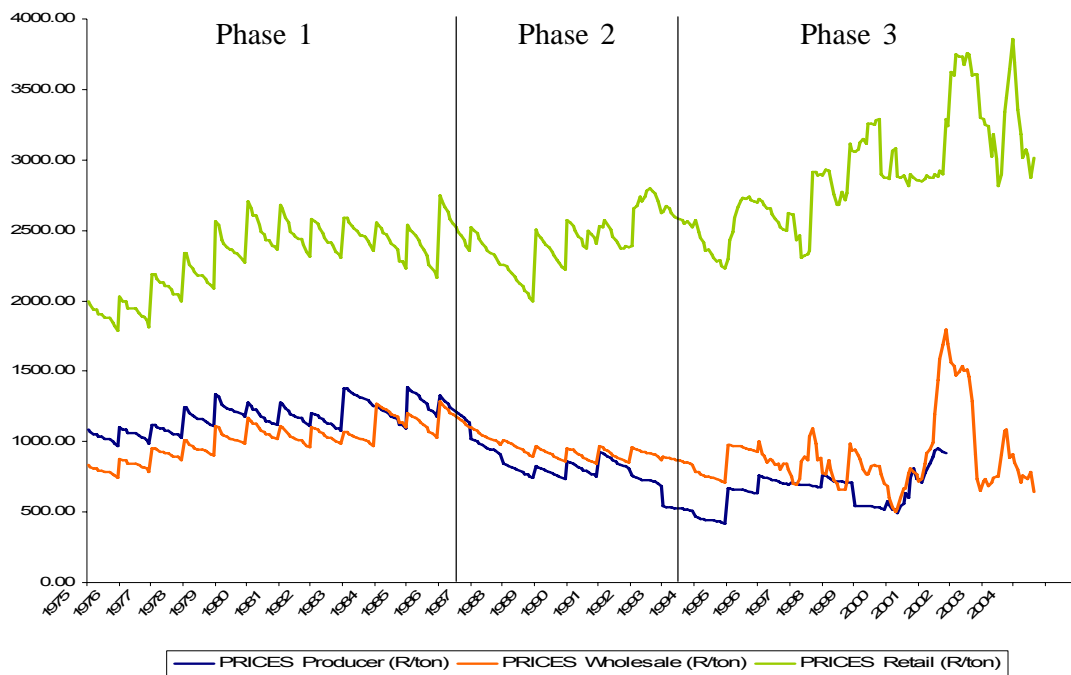


Summary of impacts of food market reform (cont.)

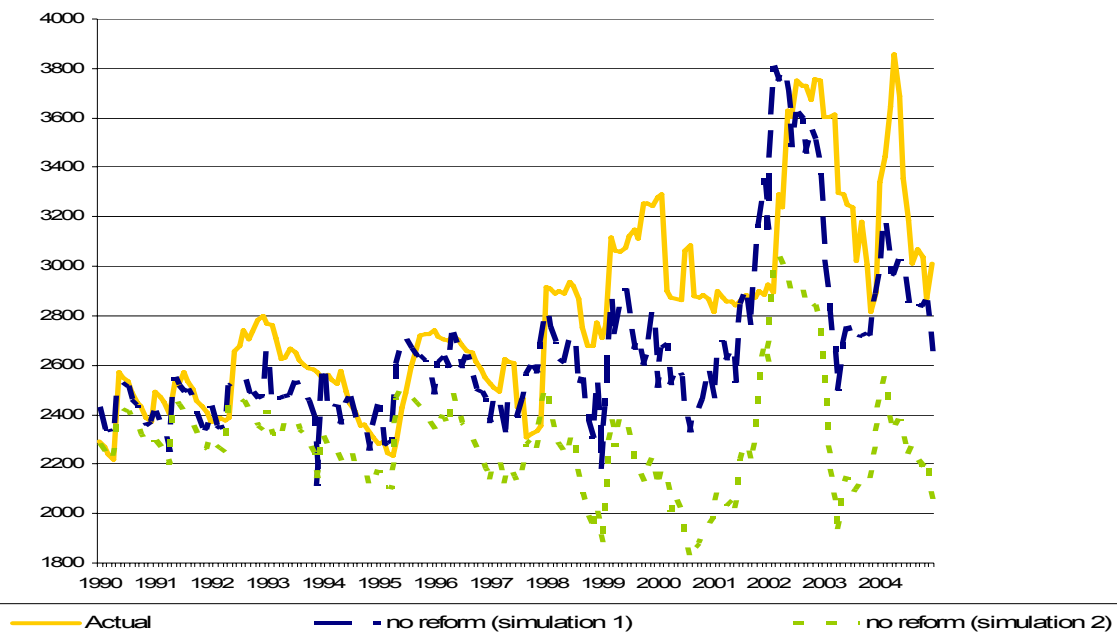
4. Reduced incentives to produce grain for sale in remote areas as marketing board price supports were scaled back
5. Shifted cultivated area from grain to other crops
6. Grain production growth trends stagnant, but overall agricultural growth generally rising

	period	Ag. Growth rate (FAO)	AgGDP (WB)
Malawi	1990-2006	+3.26	+5.70
Mozambique	1990-2006	+4.76	+5.21
Kenya	1990-2006	+2.15	+2.69
Zambia	1990-2006	+1.41	+2.82
Sub-Saharan Africa	1990-2006	+2.98	+3.43

Figure 1. Inflation-adjusted maize and maize meal prices, South Africa, May 1975 to December 2004



Maize Meal Retail Prices: Actual vs. No Reform Simulation



Result Summary: Welfare Effects

1. Rising Milling/Retailing Margins

- Conditional mean increased by between 16% - 40% depending on model specification

2. Transfer of Consumer Surplus

- Market reform has raised maize meal prices at least 13% higher than under simulated control price regime → \$179 million/year from consumers to marketing agents

Findings are robust to alternative model specification and estimation method

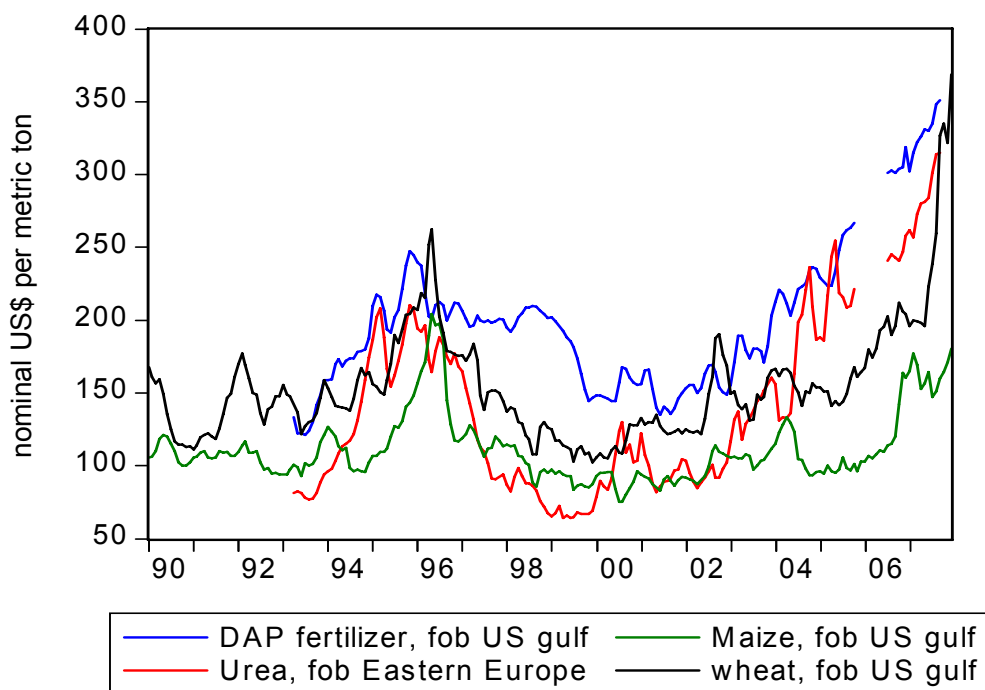
Conclusion

- Need to address the “why”?
 - In other countries in the region, liberalization removed the barriers to investment in alternative milling channels, but not in South Africa – why?
- Ndibongo Traub brown bag - Thursday

II. Current World Food Price Dilemma

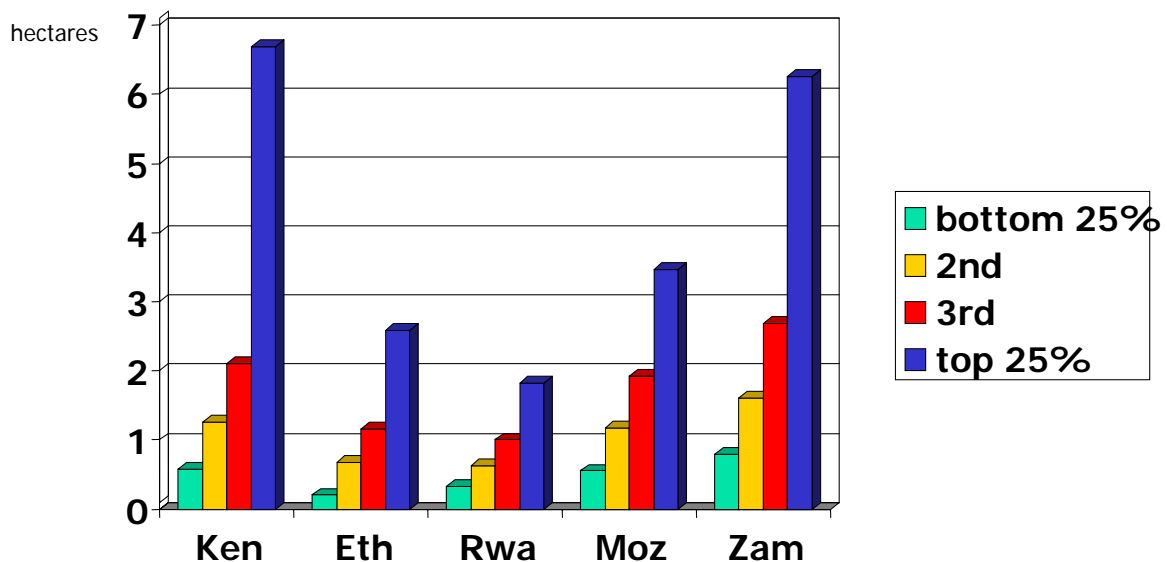
- Structural food deficits in Africa → raising price surface toward import parity
- Higher world food prices appear likely
- Major concerns over impact on consumers
- Will small farmers be able to respond to these price incentives?

World food and fertilizer price trends



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- Emerging land pressures are generating fundamental challenges for broad-based income growth from staple grain sales

Farm size distribution: Small farm sector



Source: Jayne, Mather, Mghenyi, 2006

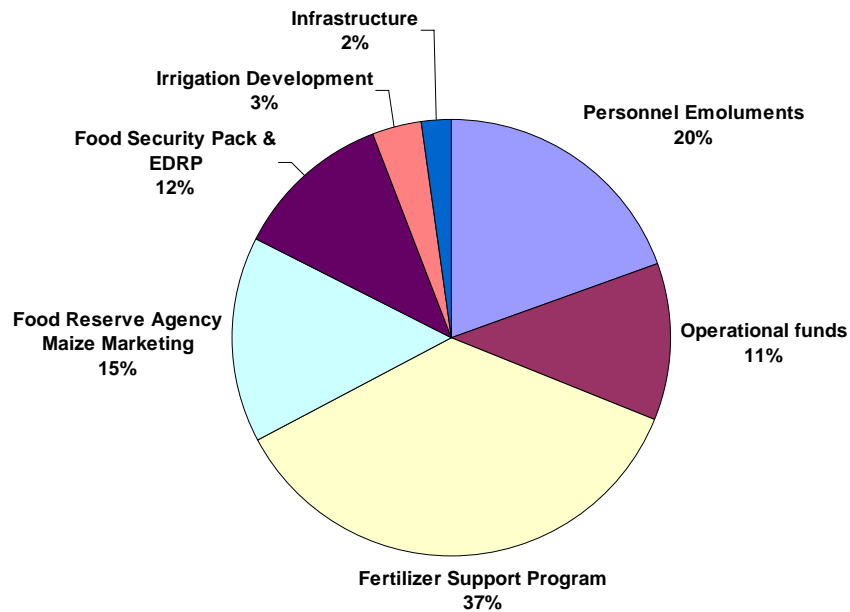
Predictions (hypotheses):

- Large farm sector is likely to respond by raising grain area and input use on maize
- Limited production response by small-scale farms (most of whom < 2 hectares)
- Cassava production will grow rapidly:
 - high calorie/hectare ratio
 - drought tolerance
- Up till recently, policy in US, India and other countries has sought to limit grain output → great potential for ramped up world production in 2-3 years

Under-investment in public goods

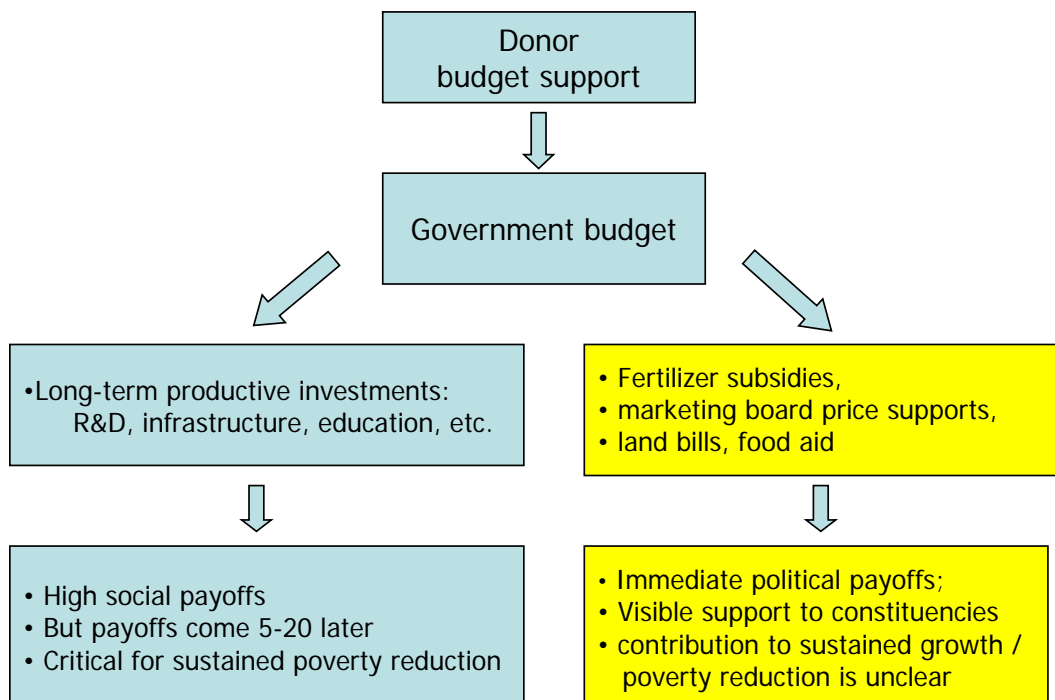
1. Stock of physical infrastructure progressively being run-down
2. Market development requires adequate public goods investments:
 - Road, rail, port infrastructure
 - R&D, extension
 - Market institutions, grades & standards, etc.
3.Tired old messages – but critically important

Budget allocation to Agricultural Sector in Zambia: ZMK465 million in 2005



Source: Govereh et al, 2006

Political economy of public resource allocation



Implications for Food Marketing Policy:

- Well-functioning markets can encourage smallholder agricultural growth and food security
- Evidence that market reform has brought tangible benefits for welfare of both producers and – primarily – consumers
- Still much more can be done (public goods investments, market institutions) that can support further market development

Implications for Food Marketing Policy:

- But should we be expect that there is some staple food marketing/trade strategy that can catalyze agricultural growth.....without also making progress on:
 - Public investment in physical infrastructure?
 - Technology – crop science?
 - Governance?
 - Basic education
 - Addressing acute land constraints?
 - Improved farmer management practices?
 - HIV/AIDS?

Implications for Food Marketing Policy:

- Food market development is critical, but alone it can never be a silver bullet
- It would be a grave mistake to dismiss the benefits that food market reform have brought over the past 15 years, even though reform alone has not been able to appreciably raise farm productivity or living standards.



thank you

Zambia	Total Income	Assets	Landholding size
	'000 kwacha per capita		ha per capita
Fertilizer source:			
<i>Households not acquiring fertilizer:</i>	266	173	.15
<i>Cash purchases from private retailers:</i>	774	342	.20
<i>Government Fertilizer Support Program (50% subsidy)</i>	804	425	.23

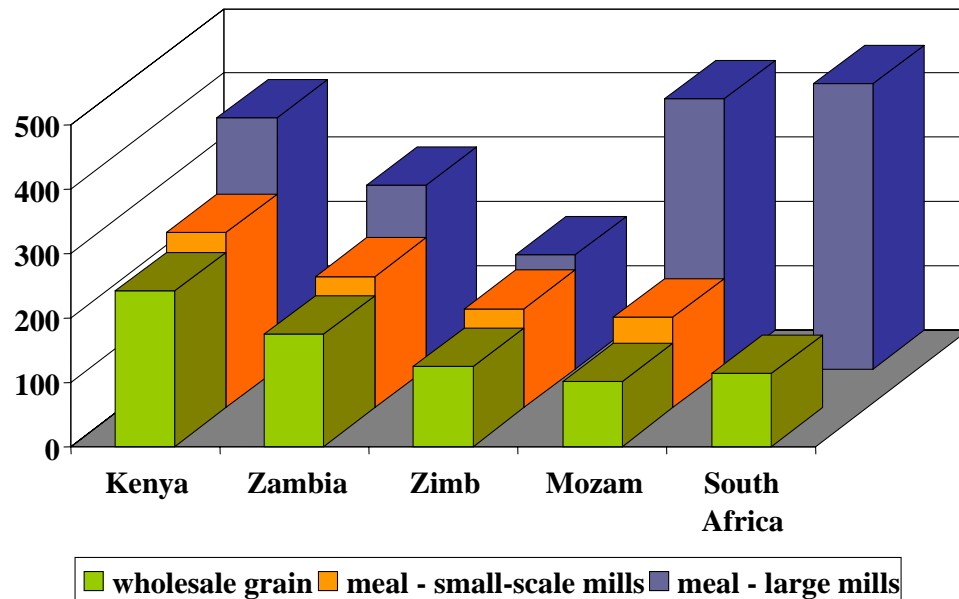
Source: Govereh et al, 2006

Characteristics of smallholder farmers, Zambia 2002/03

	N=	Farm size (ha)	Asset values (US\$)	Gr. Rev., maize sales (US\$)	Gr. Rev., crop sales (US\$)	Total hh income (US\$)
Top 50% of maize sales	23,680	6.0	1,558	690	823	2,282
Rest of maize sellers	234,988	3.9	541	74	135	514
Households not selling maize	762,566	2.8	373	0	36	291

Source: Jayne, Mather, Mghenyi, 2006

Maize grain and maize meal prices, 1996-1999, informal vs. formal channels



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1. In much of E/S Africa, “market liberalization” is an inaccurate characterization of the environment
 - marketing boards continue to play major role in food and input markets
 - 25-70% of marketed maize in Zambia, Kenya, Malawi, Zimbabwe

IV. Tendencies for Overgeneralization about Policy Impacts

1. An important role of research is to identify what works, what doesn't, and why
2. This requires distinguishing between policy pronouncements and implementation
 - Market reform not “monolithic” in either design or implementation (e.g., Moz, South Africa, Kenya)
3. Implementation of reforms – highly heterogeneous
4. Need to resist overgeneralizations
5. Failure to adequately account for differences in implementation results in mis-identification of policy impacts

Sources of Policy Unpredictability

- Export bans, import quotas (year to year & within year)
- Uncertainty over changes in import tariff rates
- When and where will marketing boards enter the market
 - current example: Zambia 2006
- Prices at which the MBs buy and sell unpredictable
- All of these sources of unpredictability impede private traders' servicing small farmers' needs