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# Development Dimensions of Food Security

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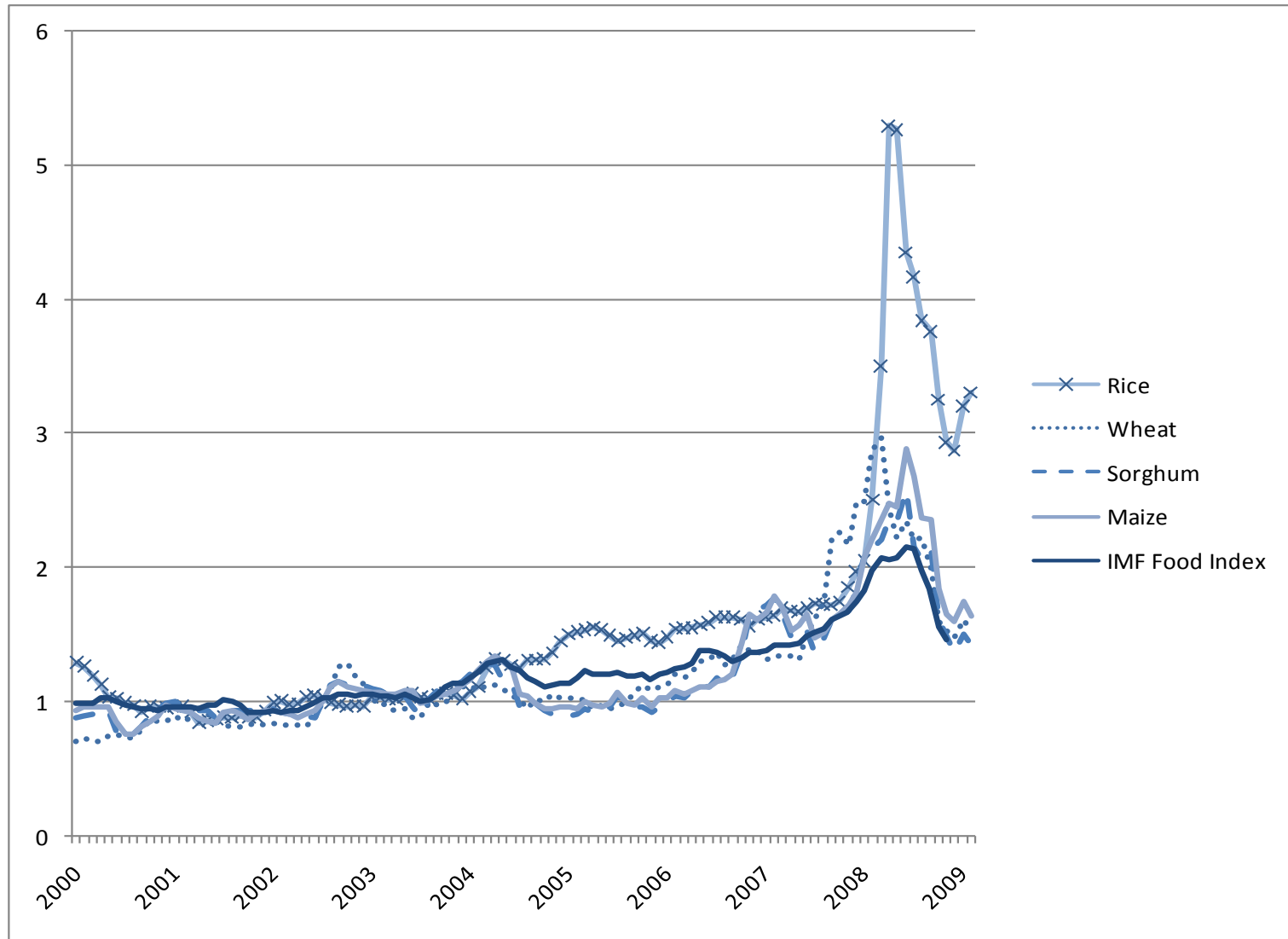
Presented to the OECD Global Forum on Agriculture  
Paris, June 29 – 30, 2009

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# Recent Global Food Price Shocks

- Extraordinary agricultural commodity price increases from 2002 until mid 2008
    - Then rapid fall in those prices to December, 2008
    - Brought market volatility, food inflation, poverty and hunger
  - OECD Report – Development Dimensions of High Food Prices
  - Two critical disconnects:
    - **Imperfect transmission of world prices across borders** – isolationist policy responses and weak market integration
    - **National government versus international donor community responses**
      - Market interventions (isolationist trade policy, subsidies)
      - Emergency relief (food aid) and Agricultural Development
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# International Agricultural Commodity Prices, 2000-2009



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# Causes of Food Price Shocks:

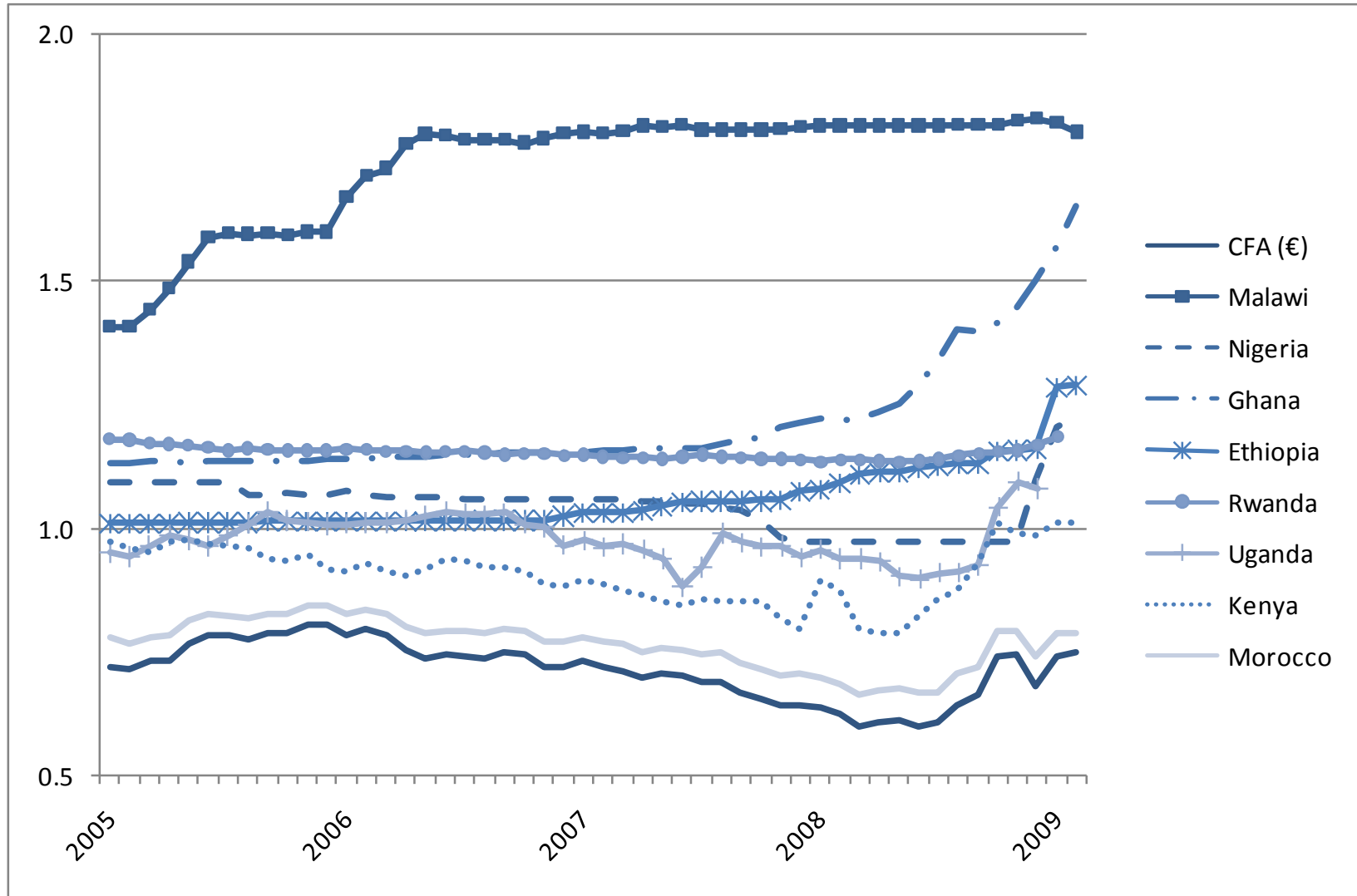
## Consensus

- Low expected carry out stocks due to long run trends
- Stronger Links to Crude Oil
- **Isolationist Policy Responses in Thin Markets**

## Misunderstandings and Controversies

- Short run supply-demand factors
  - Financial factors
    - Speculation
    - **Exchange Rates**
    - **Global recession and financial crisis**
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# African Exchange Rates per Dollar (Indices, 2002 = 1)



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# Outlook

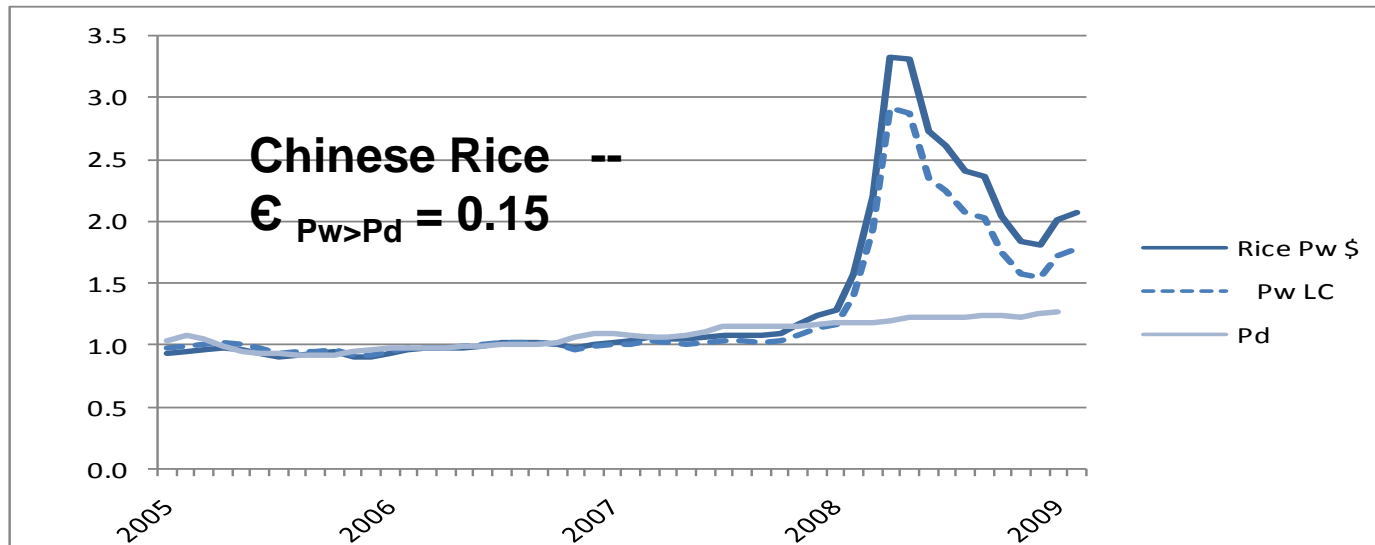
- OECD-FAO and USDA expected high prices to persist – and they are still high by historical norms
    - Expectations are that stocks are back closer to normal levels following global supply response, but
    - Biofuels demand remains – how soon until supply catches up to this new demand?
    - Continuing population and income growth worldwide
  - Global recession has slowed growth and contributed to declining prices
    - Depreciating exchange rates in developing countries keep prices high there
    - Both factors determining prior forecasts affected – income growth especially, since July 2008
  - Higher energy prices would mean higher food costs
    - Transportation, fertilizer, biofuels
  - Uncertainty (not just volatility) due to links with crude oil, global macroeconomic performance and exchange rates
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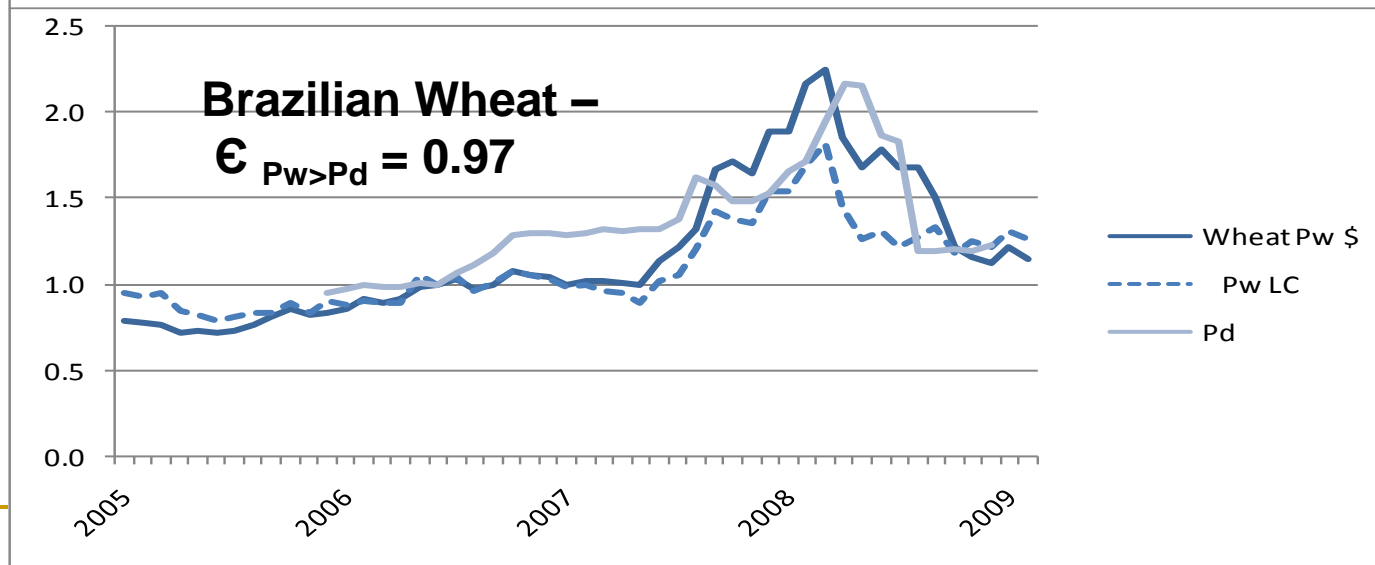
# Impacts on Developing Countries: Price Transmission

- Exchange rate changes and border price transmission determine domestic prices
    - Depreciation since July, 2008 helps keep prices high
  - Highly variable domestic price impacts
    - Import dependence (rice), home good status (millet) determine
      - which countries most severely impacted,
      - which commodities within countries see biggest price changes
  - Two causes of imperfect transmission
    - Isolationist policy responses (export bans, tariff cuts, domestic market policies)
      - Domestic policies and trade policies both matter
    - Weak market integration (transactions costs, imperfect markets)
  - Food inflation follows home goods, much less impacted than grain prices
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# Price and Exchange Rate Transmission of World \$ prices to Domestic Prices, Chinese Rice and Brazilian Wheat

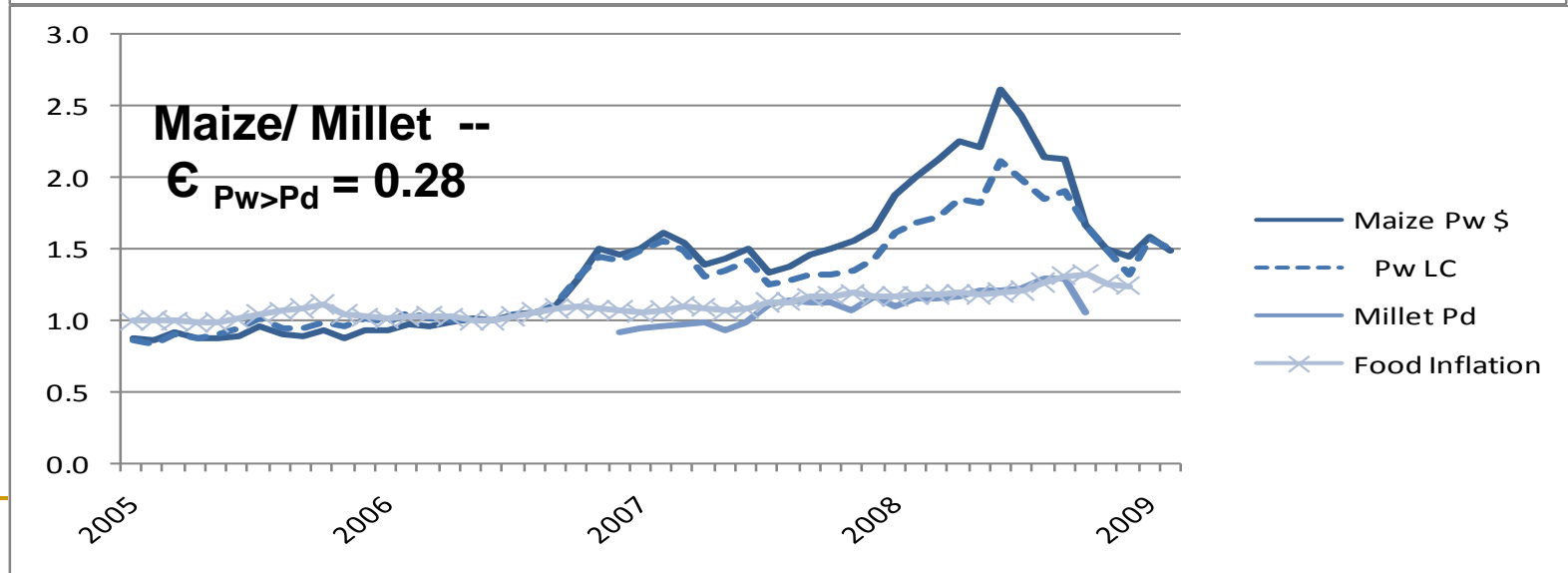
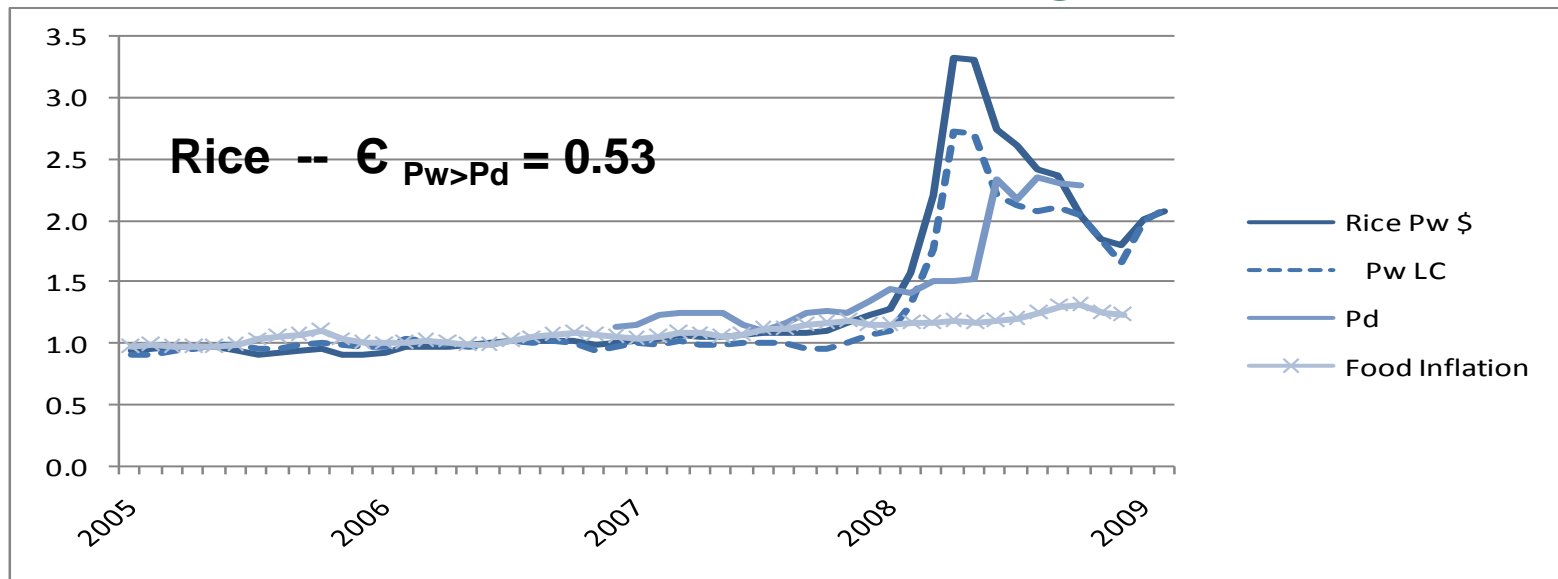


Low transmission in an isolated market



High transmission in an open, import dependent case

# Price and Exchange Rate Transmission of World \$ Prices to Domestic Prices and Food Inflation, Senegal



# Impacts on Developing Countries: Macroeconomics or Poverty and Hunger?

- Price increases drive **food inflation**, so also general **inflation**
  - Lower real incomes
- Mitigating measures (tariff and tax cuts) costly, **government revenue** falls – “fiscal space reduced”
  - Countries that isolate via policy see high costs
  - Where world prices cross borders, food inflation, poverty and hunger result
  - Country strategies fall between extremes
- **Balance of payments**
  - Food imports costly, also oil imports
  - Commodity boom, oil imports – mix of consequences depending on trade status
  - **Exchange rates depreciate** when BOP worsens
- IMF – High Food prices impact poverty, whereas energy prices affect macro performance
- Better estimates of poverty and hunger need households surveys, actual price changes faced, and net seller status of rural households

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# Impacts on Developing Countries: Supply Response

- High food prices should mean better incentives to farmers
    - Price transmission may be less to rural areas if markets are not well integrated
    - If policy blocks high world prices, effects are not fully seen by farmers
  - Imported input prices (oil and fertilizer) may be more fully transmitted, raising production costs
    - Input subsidies adopted (Malawi, FAO initiative, AGRA)
    - Common prior policy regime – subsidize consumption, compensate farmers with subsidized inputs
  - Large exporters responded strongly to incentives of high world prices
    - Worldwide supply grew 5.8% in 2007, 5.1% in 2008
  - Africa had seen slowing agricultural production growth from 1970
    - 2005-08 growth of 4.9% per year is respectable!
    - Accelerated agricultural growth would reduce poverty
    - Recent performance was quite strong (3.9% from 2000-05)
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# Policy responses:

## National government versus International donor community

- National governments
    - Market interventions (isolationist trade policy, subsidies)
    - Targets consumers broadly, stabilize
  
  - International Donor Community
    - Two prongs of CFA
      - Safety nets (food aid)
      - Agricultural Development
    - Targets rural poverty – smallholder farmers
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# Trade based policy measures commonly adopted worldwide (as of 1 December 2008)

	Africa	Asia	Latin America	Overall
<b>Countries surveyed</b>	33	26	22	<b>81</b>
<b>Market Interventions</b>				
Trade policy				
<i>Reduction of tariffs and customs fees on imports</i>	18	13	12	<b>43</b>
<i>Restricted or banned export</i>	8	13	4	<b>25</b>
Domestic market measures				
<i>Suspension/reduction of VAT or other taxes</i>	14	5	4	<b>23</b>
<i>Released stocks at subsidized prices</i>	13	15	7	<b>35</b>
<i>Administered prices</i>	10	6	5	<b>21</b>
<b>Production Support</b>				
Production Support	12	11	12	<b>35</b>
Production Safety Nets	6	4	5	<b>15</b>
Fertilizer and Seed Programs	4	2	3	<b>9</b>
Market Interventions	4	9	2	<b>15</b>
<b>Consumer Safety Nets</b>				
Cash transfers	6	8	9	<b>23</b>
Increase Disposable Income	4	8	4	<b>16</b>

Source: Demeke, Pangrazio and Maetz, 2008.

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# Policy response: Developing country governments' focus on stabilization

- Exporting instability onto world markets – by both exporters and importers
    - Export bans widely criticized
    - Tariff adjustments also destabilizing
  - WTO implemented commitments failed to resolve problems of 1970s – countries mistrust international markets
    - Policy responses within weak prior commitments
    - Stabilization (Safeguards), stumbling block, key developing country concern in Doha negotiations
    - Analytical methods, negotiations have taken a static perspective
    - Self-sufficiency now in developing country language
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# Policy response: International Institutions and Bilateral Donors

- Safety nets (Food Aid - WFP)
  - WFP - \$1 billion appeal response
  - US PL480 increased \$1.2 billion
- Agricultural Development
  - UN initiatives – FAO, Comprehensive Framework for Action (CFA), IFAD
  - World Bank – GSRP
  - Asian, African, Inter-American Development Banks – reallocate portfolios
  - Bilateral Donors
  - International dialogue

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# Policy response: International Institutions and Bilateral Donors – **Prior to crisis**

## **Renewed Commitment to Agricultural Development**

- Millennium Development Goals
    - UN Millennium Project – Sachs, Columbia
  - Green Revolution for Africa (AGRA)
  - World Bank, IFIs
    - *World Development Report, 2007* – refocus on agriculture
    - PSRPs – poverty reduction
  - Bilateral donors and regional organizations
    - Paris declaration – recipient ownership, donor harmonization
    - Maputo declaration
    - Accra initiative
    - African Union - CAADP
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# Lessons and policy implications for national governments and the donor community

## Scientific or political failure?

- **Food aid** -- improved understanding of safety nets, and some countries plus WFP have implemented best practices
    - Targeting, Cash transfers
    - Local procurement
  - **Agricultural research** has been successful in the past, key component of any new strategy
  - **Economic understanding of agricultural development** has advanced
    - Agriculture responds to incentives
    - Missing output markets and price collapse
    - Missing credit and input markets
  - **Political roadblocks** limit agricultural development success
    - **Revealed national government priorities** – broad consumer protection
    - Donor priority – rural poverty
    - **Missing institutions** – post structural adjustment reforms
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# Policy recommendations

## Market intervention

- Ideal is free markets coupled with safety nets
    - Thin markets may be inherently unstable
    - Policy response – mistrust of international markets
  
  - Domestic stabilization – exports instability
    - Old IFPRI literature – variable levies best mechanism!
  - International stabilization
    - Insurance is costly, stocks management difficult
    - Virtual reserves?? Must impact Q
  - Research is needed on this!
    - Extent of world stabilization from free trade
      - Theory is clear, but magnitudes of effects are not
      - Simplistic 1992 study our last effort (Tyers and Anderson)
    - How well would good safety nets protect consumers?
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# Policy recommendations

## Agricultural development

- Fund public goods – research, extension, information, infrastructure
  - Build institutions- missing markets for outputs and inputs, marketing
  - Key to success is overcoming political failures
    - Effective national governments critical to success
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# Policy recommendations/ Controversies

## Agricultural development

- Seed and fertilizer subsidies
    - Missing markets not high costs
  - Targeting smallholders (How small)
    - Welfare (poverty) or production program?
    - Inconsistencies in priorities
  - Stabilization
    - Is it necessary? What is the objective?
    - Will it limit incentives to future production?
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# Economics Research Agenda

- **Hunger and poverty**
    - Household surveys during crisis
    - Actual price impacts (realistic assumptions)
    - Comparisons of policy regimes adopted on households
  - **Stabilizing market interventions**
    - Price transmission – separating weak market integration, domestic measures and trade policy
    - Domestic stabilization strategies with safety nets
    - International stabilization under freer trade
  - **Agricultural development**
    - Input subsidies or missing markets
    - Targeting smallholders
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# Conclusions –

## Price Transmission and Impacts

- Price transmission and isolation
    - Country outcomes varied
      - Import dependence, home goods, policy responses
    - Weak integration, domestic policy as important as trade policy
  - Countries linked to world markets saw higher grain prices and food inflation
    - World food prices impacted poverty more, whereas crude oil prices impacted BOP and Macro
  - Imperfect transmission costly when policy achieves isolation
  - Revealed national government preference for stabilization, broadly protecting consumers
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# Conclusions - Policy

- High food prices are likely to persist in Poor Countries
    - Better environment for agricultural development
  - In their longer term policy responses, a better balance needs to be achieved between short and long run outcomes, reflecting shared priorities of donors and national governments
  - Needs for more rapid agricultural development include sustainable new market institutions, time consistent national policies, functioning and predictable international markets, and committed national governments.
    - Key to this is resolving the role of the state, and recognizing there is a role it must play.
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