



# **Food, Agriculture & the World Bank**

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The University of Chicago CIS

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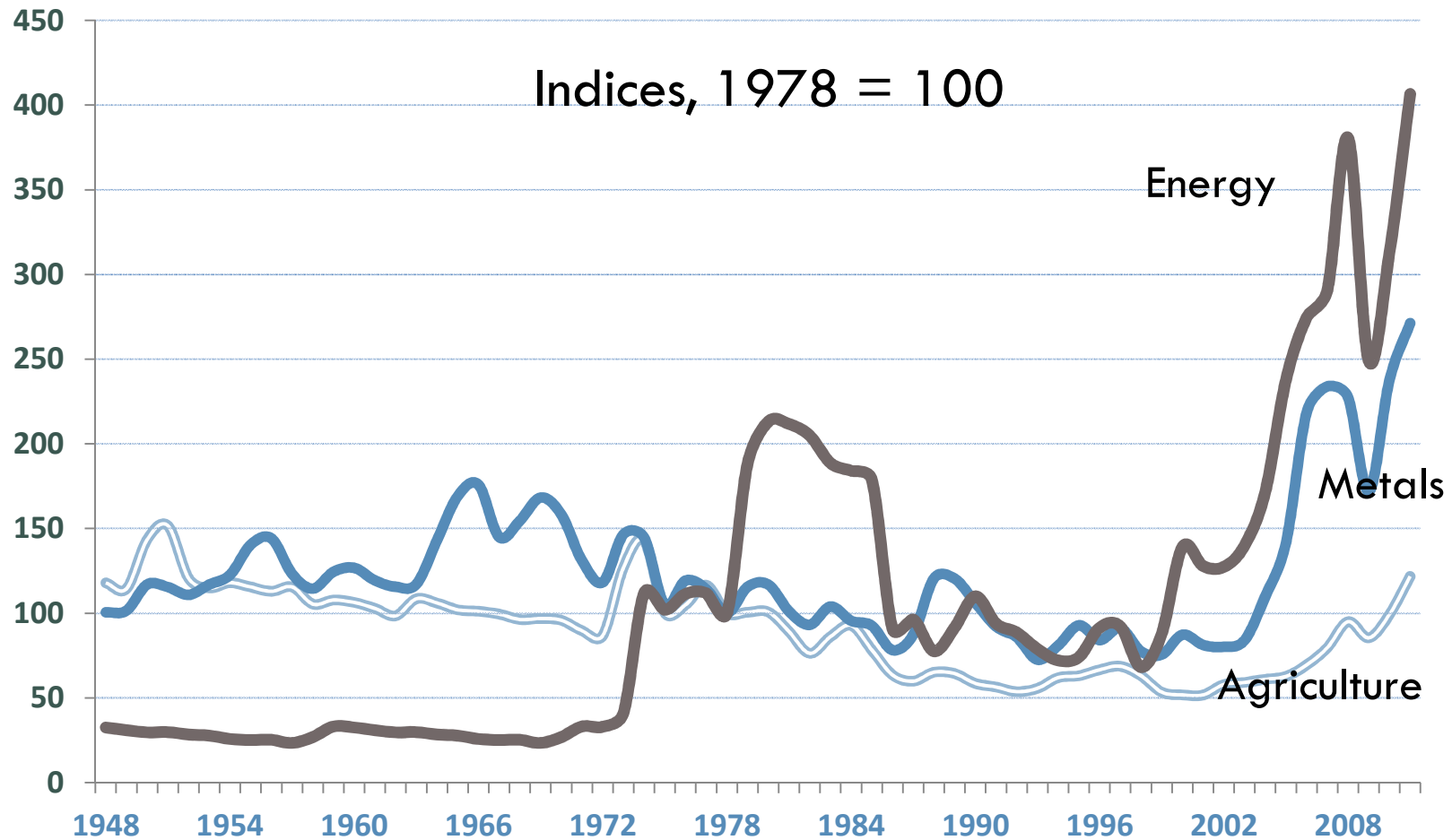
## **Current Global Food Security Challenges from the Agricultural Standpoint**

- **Still many 100s millions hungry people, mostly rural**
- **High food prices leading to social tension**
- **Continuing food and other commodity price volatility contributing to uncertainty**
- **Greater links between oil, fertilizer, and food markets**
- **High distrust of int'l grain markets (again) since 2008**
- **Steadily rising overall grain demand (2.5% p.a.)**
- **Slowdown in grain crop yield growth (1.7% p.a.)**
- **Increased water scarcity and reached land frontier**
- **Increasingly variable climate**
- **Insufficient investment in agricultural public goods**

# Commodity Relative Price Moves 1948-2011

(energy+metals more volatile but  $R_2$  with food is growing)

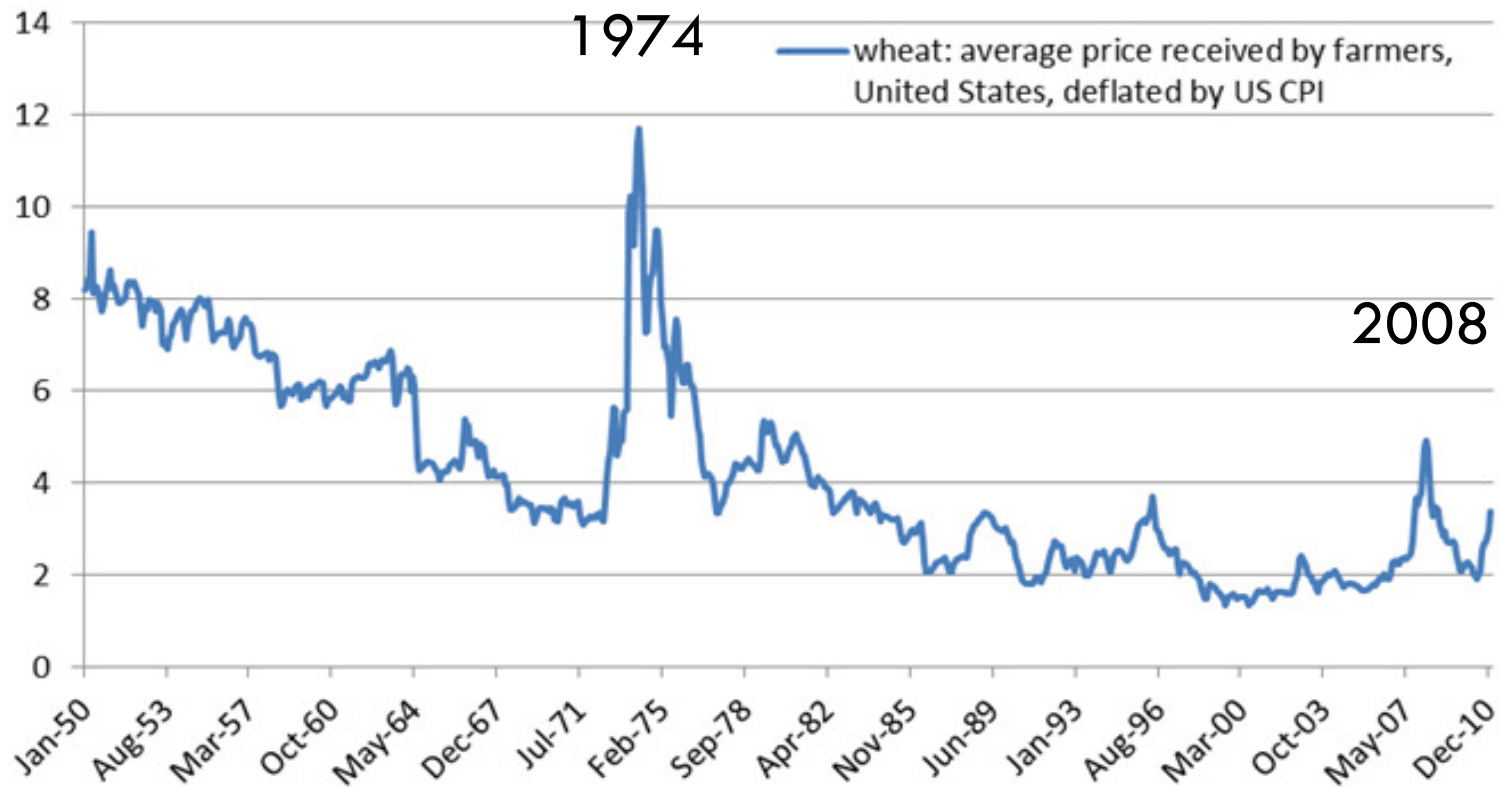
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Source: World Bank, DECPG

# Real Wheat Prices 1950-2010

(it was a lot worse in 1974)

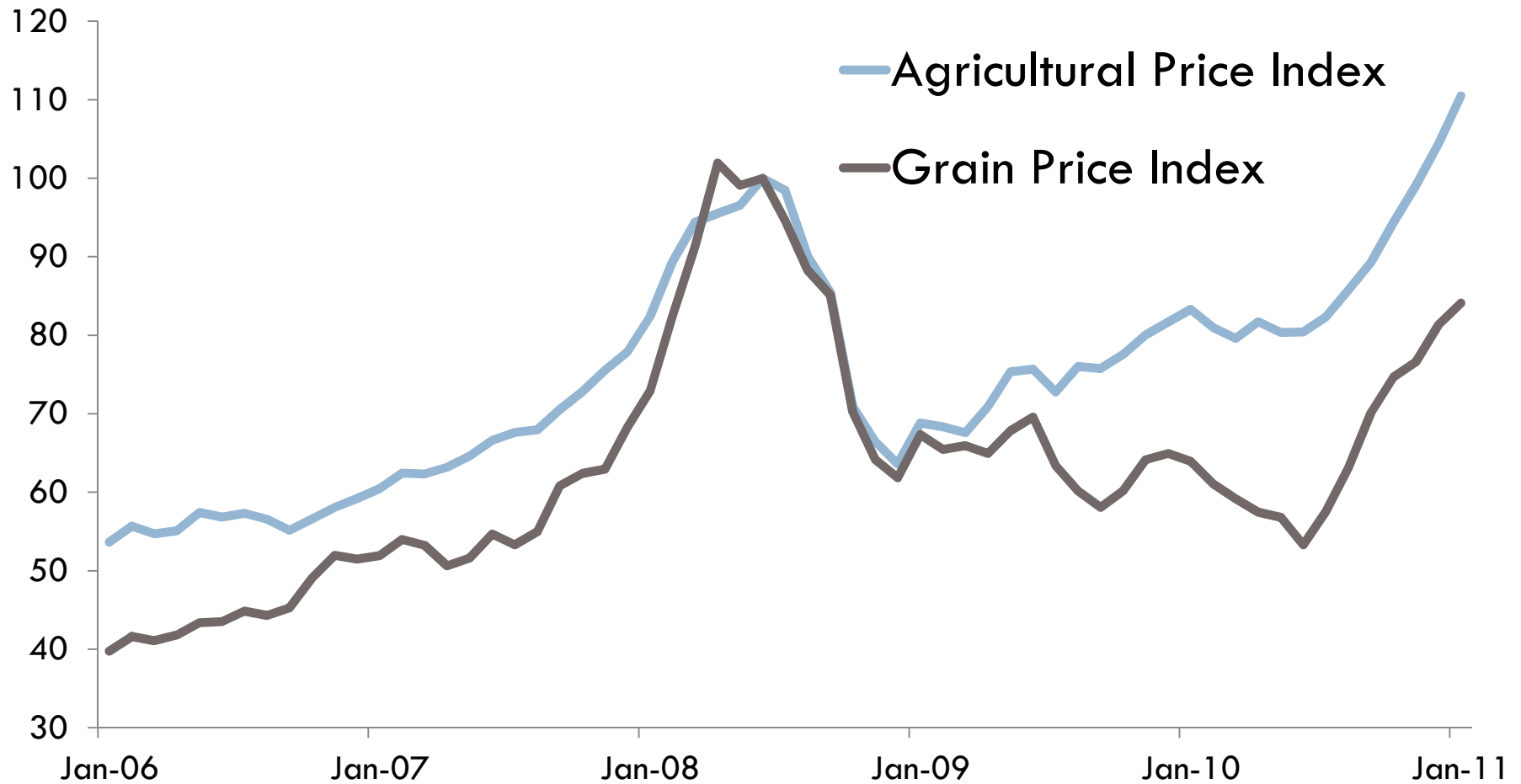


Source: USDA. Deflated using U.S. CPI

# It is Most of Agricultural Prices that Are Increasing in the Recent Era, Not Just Cereals (hmmm...)

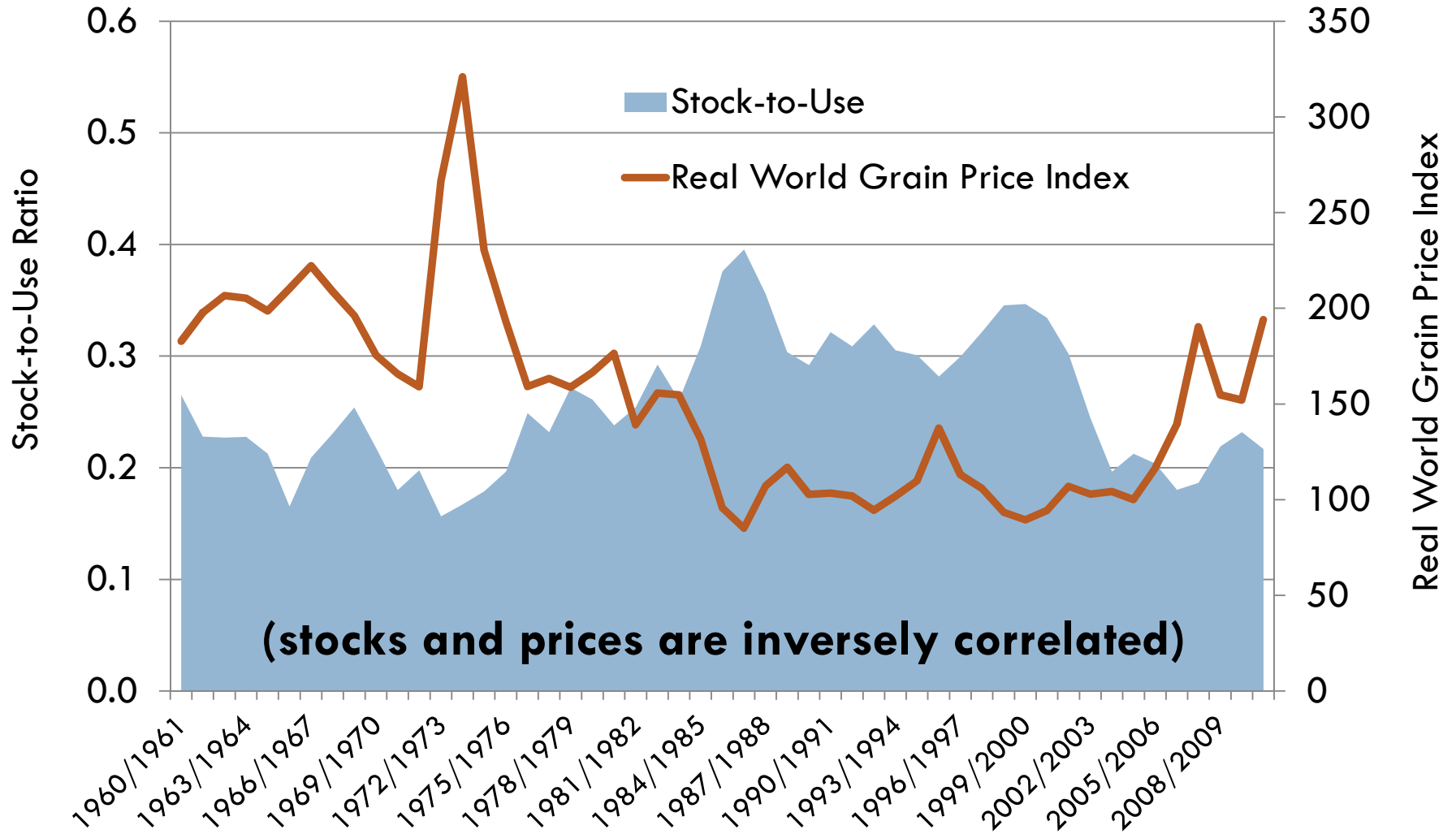
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Price Index, July 2008 = 100 (Prices through to end January 2011)



Source: World Bank, DECPG

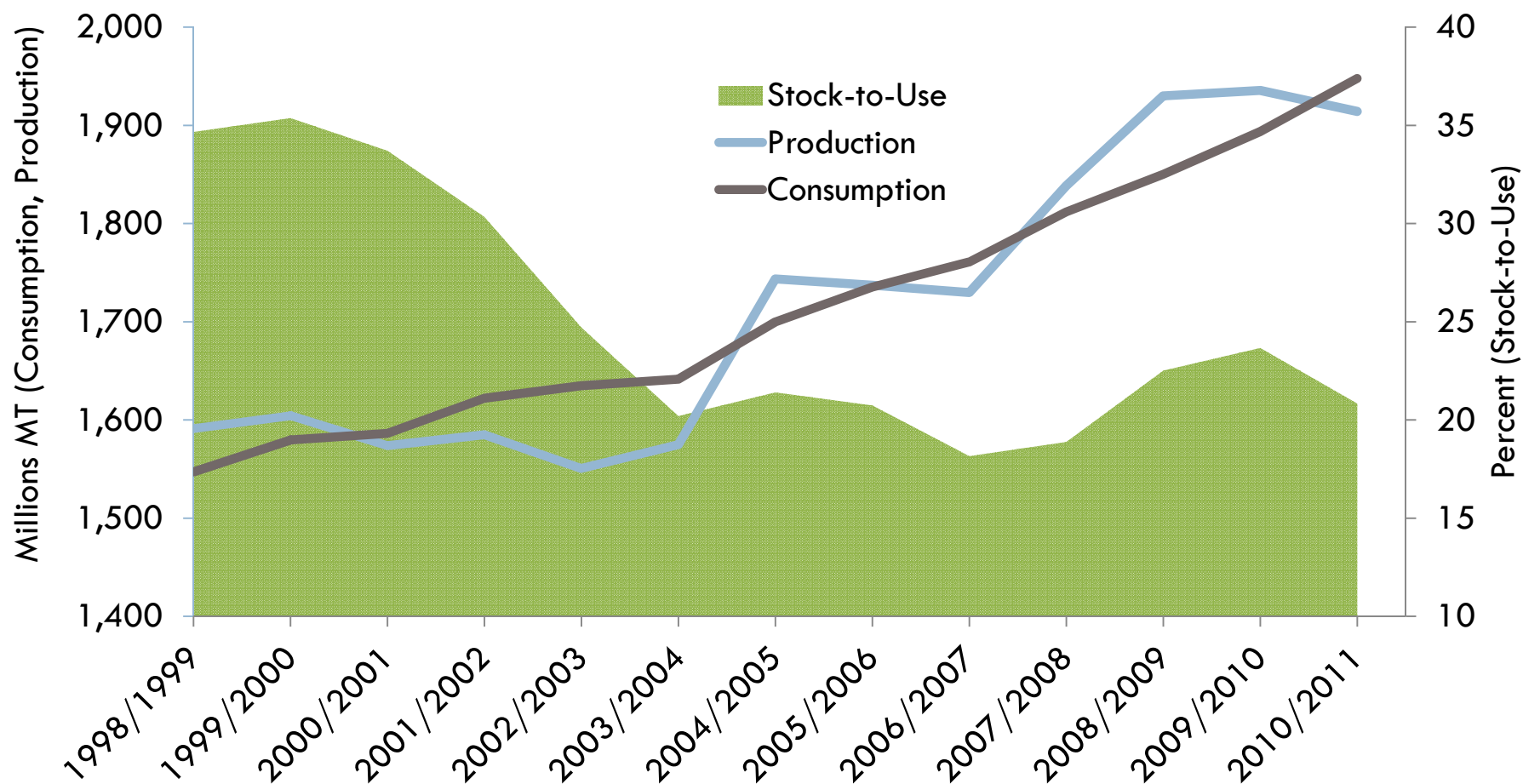
# High Grain Demand + Production Shocks + Low Stocks = Food Price Volatility



# Grain Stocks, Shocks, and Consumption Since 1998

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World Maize, Wheat, Rice



# Global Growth Rates 1970-2011

(average annual growth rates for cereals %)

	Consumption	Production
Rice/Wheat/Maize		
<b>1971-1980</b>	3.4	3.4
<b>1981-1990</b>	2.0	2.1
<b>1991-2000</b>	1.7	1.8
<b>2001-2011</b>	1.9	1.6
2001-2005	1.5	1.5
2006-2011	2.3	Demand > Supply 1.8

Source: Robert Townsend, World Bank, using USDA data

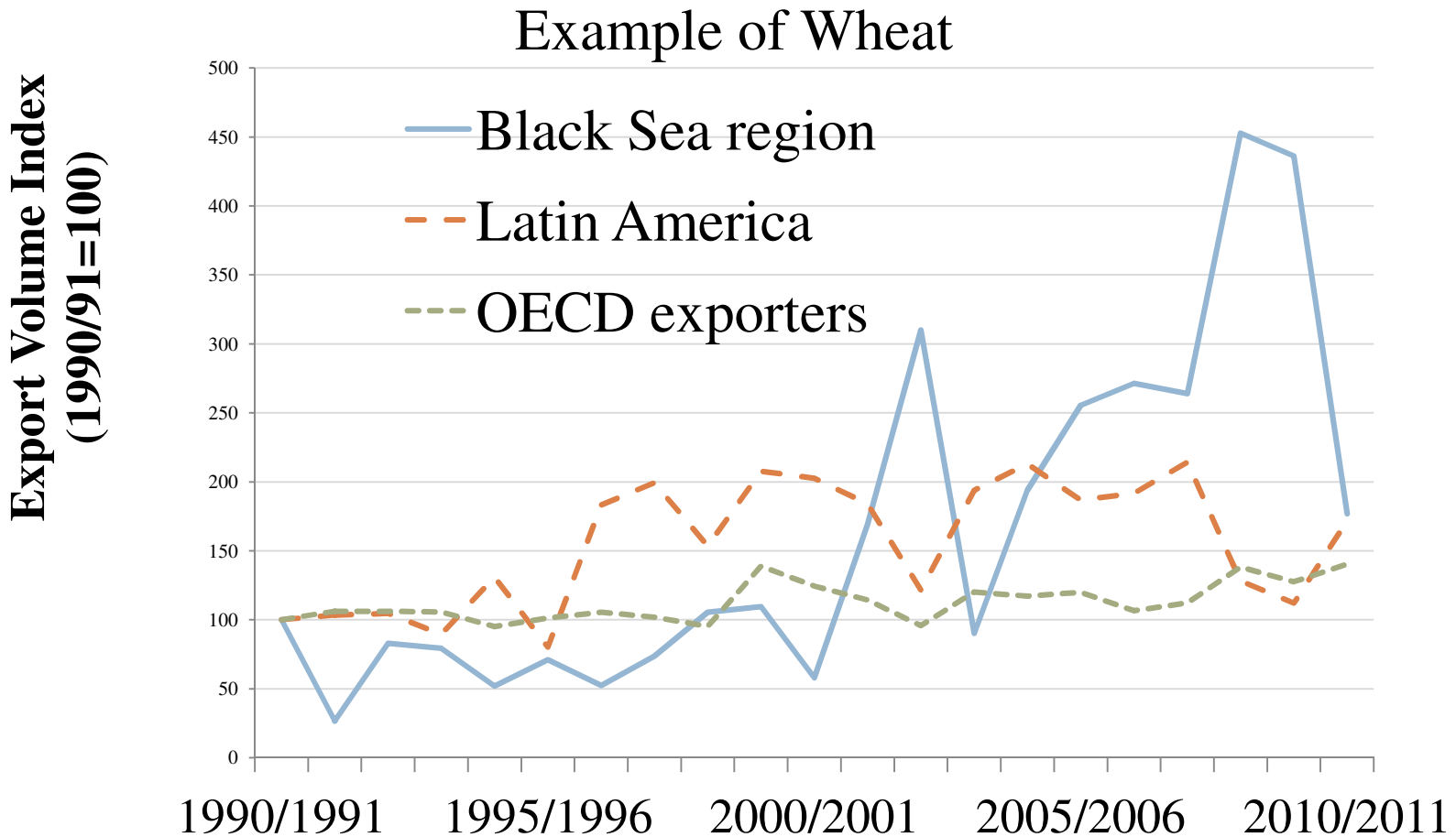


# Globalization, Grain Stocks Levels, Food Isolationism, and Food Price Volatility

- **Globalization** normally helps reduce price volatility by diversifying sources of supply
- But export supply is shifting to areas of **more variable climate**
- Yet if **grain stocks are normal**, adverse shocks can be mostly absorbed by stock reduction
- But nervousness sets in when **stocks are low**
  - ▣ Reducing demand in line with supply shortfalls then requires large increases in price
  - ▣ Countries, companies and farmers become more isolationist as risk aversion is manifested

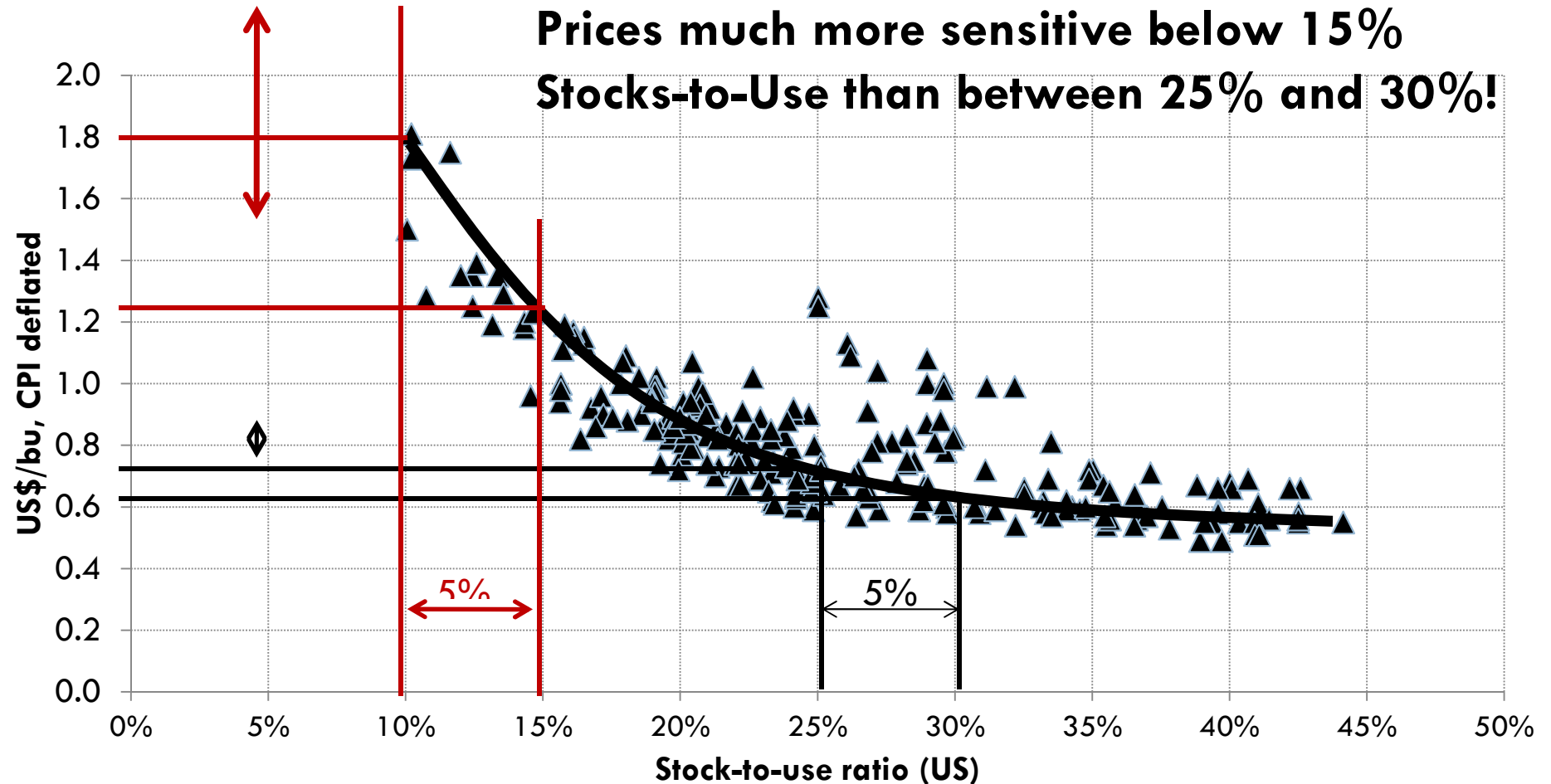
# Grain Exports from New Major Exporters Are More Variable Than from Traditional Exporters

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Source: USDA

# Wheat Stock-to-Use % and Real International Prices Jan. 1990-Aug 2009

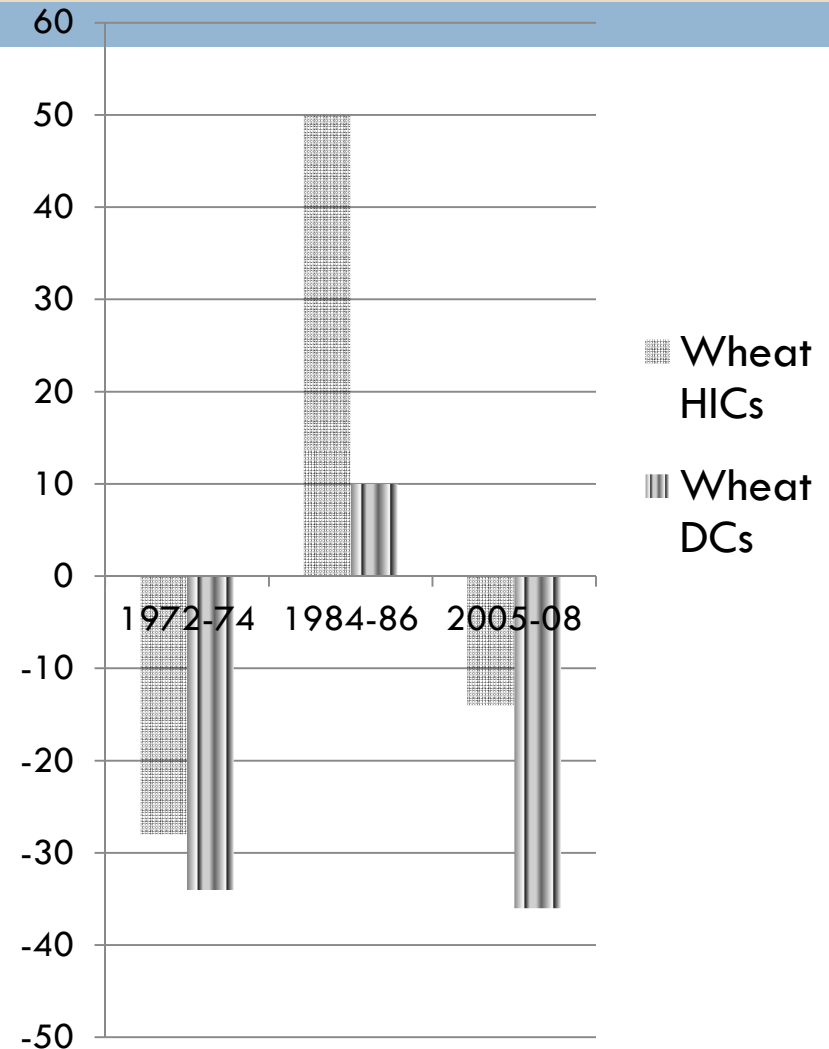


Source: FAO, Schmidhuber and Califero 2010

# Price Insulation in Rich & Poor Countries

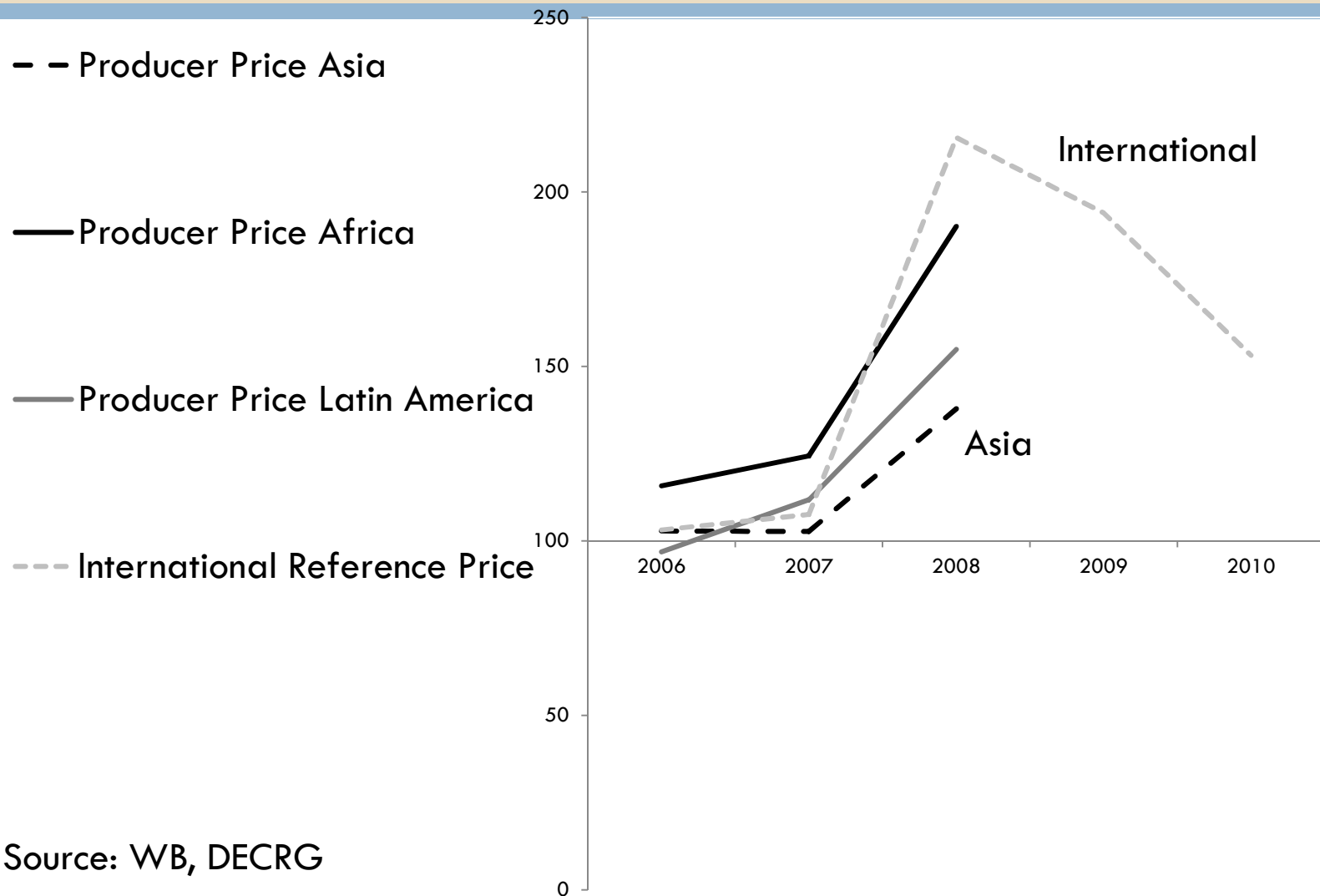
## Example of Wheat

- **Developing countries** used insulating policies more strongly in 1972-4 & 2005-08 to keep domestic prices below high world prices
- **High Income countries** used insulating policies more strongly in 1984-86 to keep domestic prices above low world prices



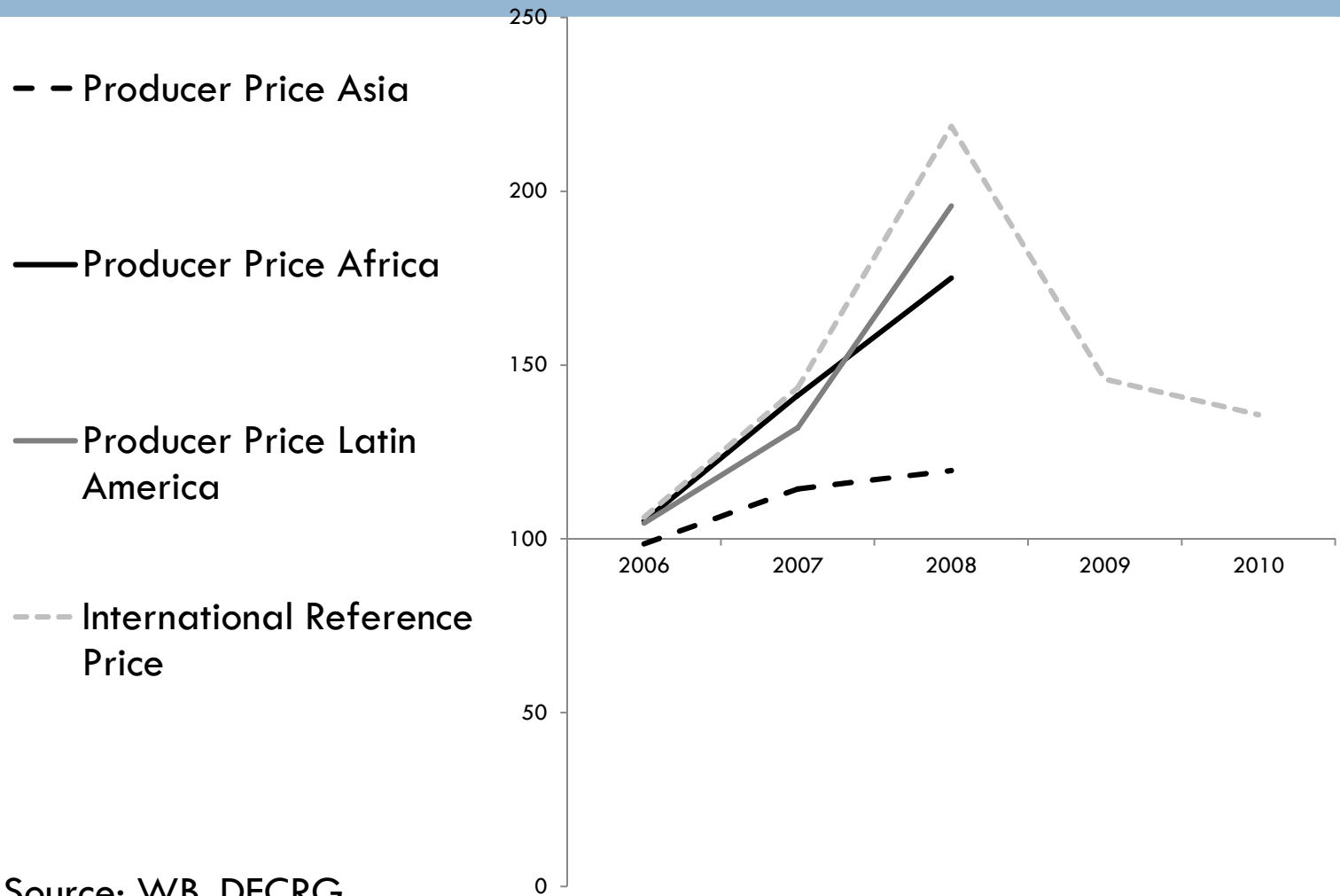
Source: WB, DECRG

# 2008 Surge in Rice Prices Compared



Source: WB, DECRG

# 2008 Surge in Wheat Prices Compared



# In Sum...

## OUTLOOK

World food prices are expected to remain higher and more volatile than their pre-2007 levels

Short term price volatility is increasingly becoming a long term phenomenon

Dangers of growing isolationism in handling global price events

## RESPONSEs

### ***Create opportunities***

- Productivity growth
- Link farmers to markets

### ***Manage and share risks***

- Coping strategies for most vulnerable
- Climate smart
- Promote trade and cooperation
- Improve transparency of markets and trust

# Much Discussion of Short-term Food Crisis Management Needs Since 2008

- **Fund emergency humanitarian response adequately**
- **Recognize the absolute imperative governments face to provide food security** in the face of crisis, including through solidarity from better off neighbors
- **Help countries avoid short-term policy responses to short-term food insecurity that have adverse longer-term implications for both food security and market development (partners need to help with alternatives)**
- **Improve the consistency of market signals**
- **Build resilient safety nets as volatility will continue**



# **Example: WB's \$1.5 Billion Global Food Price Crisis Response Program (GFRP) Partnership for Emergency Response**

**47** countries world-wide, almost all eligible for IDA

**40 million** beneficiaries

**Very rapid** for recipient-executed projects

## **Focus:**

- Food price policies
- Safety nets and nutrition (contributing to the broader Bank Strategy on Social Protection)
- Short-term food production

## **Project Examples:**

- Fiscal support (Sierra Leone, Burundi)
- Targeted cash transfers (Liberia, West Bank and Gaza)
- Food production (Niger, Ethiopia Tajikistan)

# Recognition of Longer-Term Needs

- **Need to halt the precipitous decline in investment in agricultural public goods** in developing countries since 1980 (fall by half in real terms and more more in relative terms)
- **Need to work much harder on resilience to climate change** as well as growth in production; the low hanging fruit has already been picked
- **Enhance national buy-in, social inclusion, and capacity** for strategic, inclusive and evidence-based responses
- **Decrease the asymmetries of information that create transactions costs** in international grain markets
- **Failure to make major changes** will lead to increased suffering, violence and insecurity in the world in addition to lasting damage to people and resources

# The World Bank Group's Regular Ag Program 2006-12

## Five Thematic Areas

1. **Raise agricultural productivity:** 75% of IDA/IBRD program in 10-12
2. **Link farmers to markets and strengthen value chains**
3. **Reduce risk and vulnerability**
4. **Promote rural non-farm income**
5. **Enhance environmental services and sustainability**

## Regional Focus: Africa and South Asia

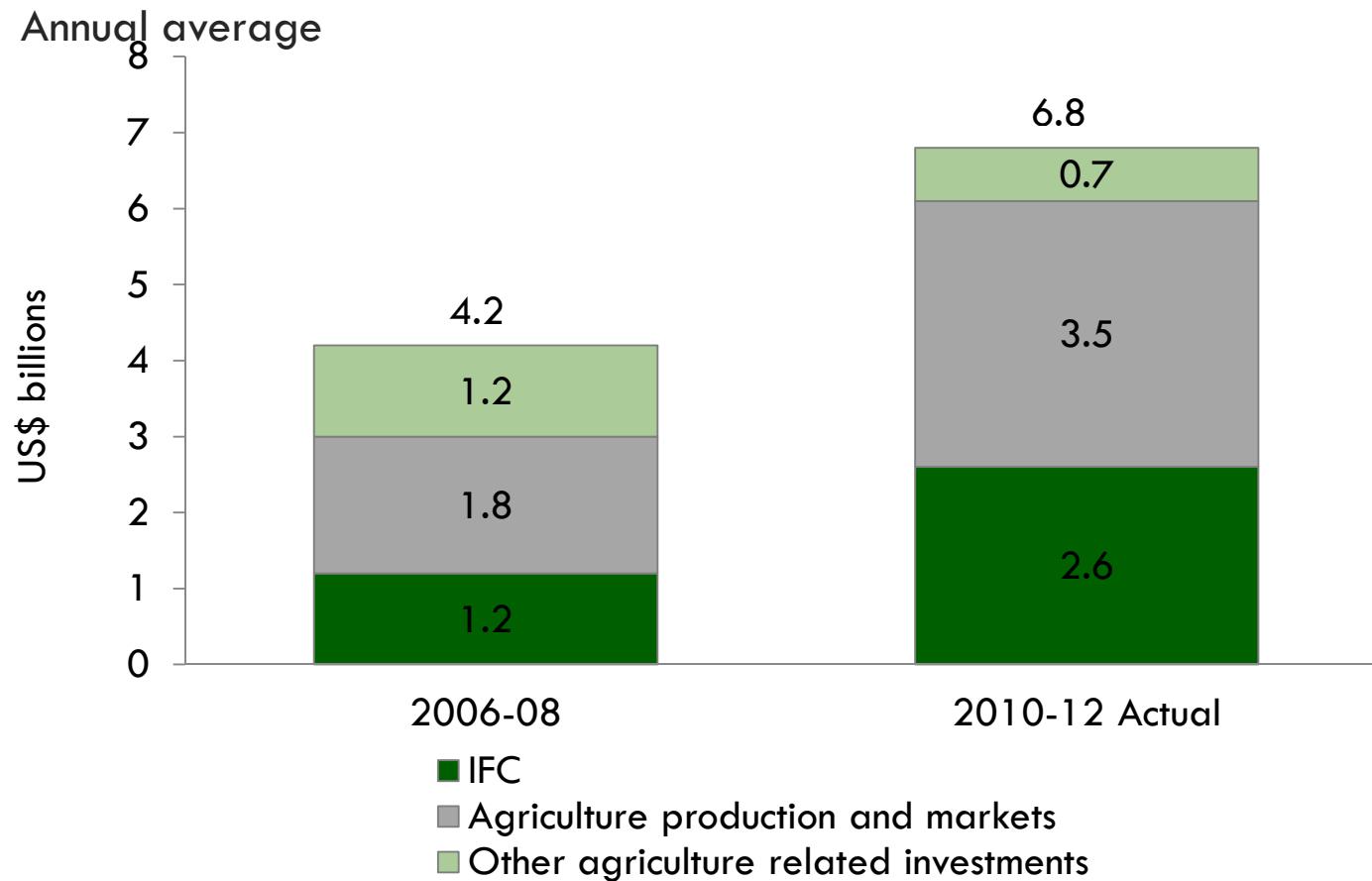
- **IDA/IBRD:** 63% of the program in FY12, up from 53% in FY09
- **IFC Agribusiness Africa:** From \$186m in FY06-08 to \$631m in FY09-11

## Gender Responsive Design: Baseline to FY11

- **Explicit gender informed design:** From 59% to 81% of projects
- **Gender Disaggregated M&E:** From 28% to 57% of projects

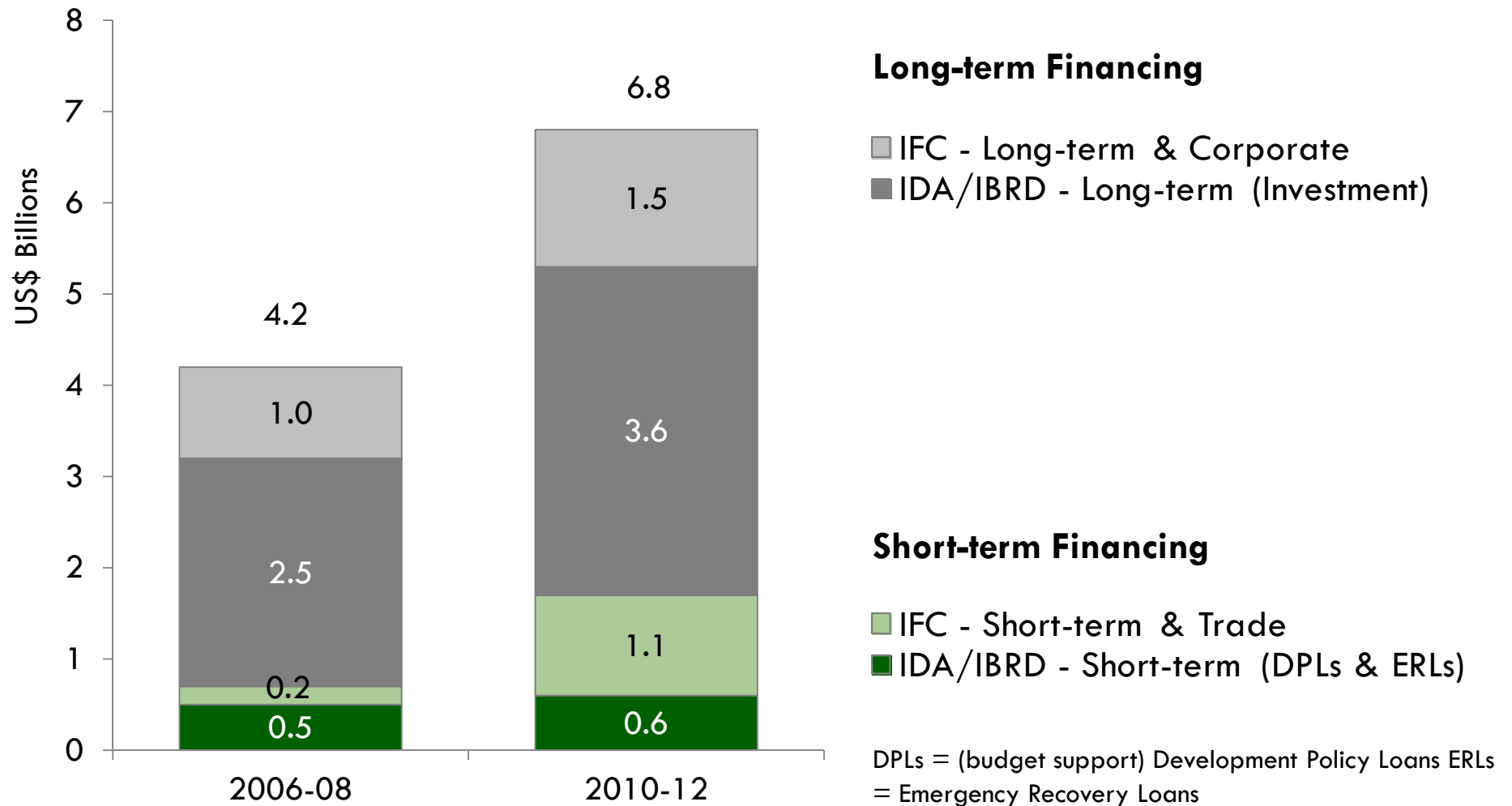
# The World Bank Group's Regular Ag Program 2006-12

Level of spending on agriculture has increased to \$6.8 billion/year avg

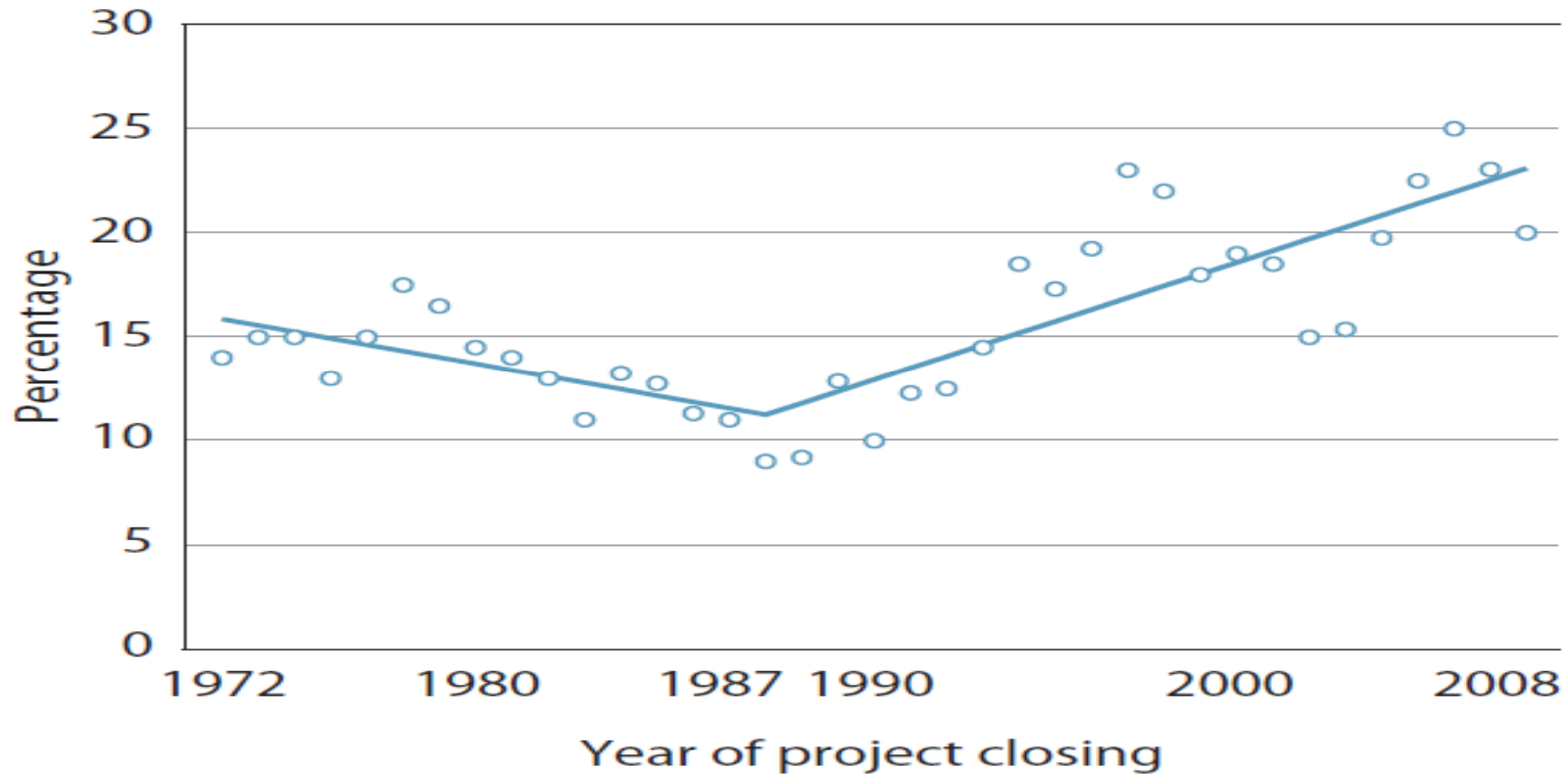


# Using Both Short-term and Long-term Financing

Annual Average



# The Economic Returns of IBRD/IDA Ag Projects Per Dollar Invested Have Doubled Since the Late 1980s



○ Median rate of return

— Estimated regression line

**Source:** World Bank data.

**Note:** ERR = economic rate of return.

Source: IEG (2010): Cost-benefit analysis of World Bank Projects

## Key Areas of Emphasis Going Forward for Helping Clients

- **Manage and mitigate increased levels of agricultural risks** (price, weather, etc.)
- **Climate-proof agriculture**, increasing resilience of systems and rural livelihoods
- **Leverage private sector response** in the provision of agricultural public goods
- **Better integrate nutritional objectives** into agricultural projects
- **Build and support global partnerships** to harmonize and align efforts around food security objectives

## **Example: A Multilateral Approach to Aid Effectiveness In Agriculture: the Global Agriculture and Food Security Program (GAFSP)**

- **Requested by Pittsburgh G20 Summit for L'Aquila follow-up**
- **Under governance of donors and recipients**, with full representation of CSOs, MDBs and UN food agencies, for projects of IFAD, MDBs including WB
- **\$1.1 bil pledged, \$780 m received** or on way so far, \$517 m committed
- Provides finance for **quality country-led plans with long-run targets** resulting from existing aid effectiveness processes such as CAADP or SWAPs
- **Strong and independent assessment** of whether countries are ready, proposals good, show real need, and have high chance of success
- **In depth monitoring and impact assessment**



## **GAFSP Provides the Missing Incentive for Competition Among Countries to Do Better (in the widely agreed CAADP sense) Strategic Ag Plans**

- **Normally all aid given by country with little fungibility among countries but fungible across sectors; not GAFSP**
- **Twelve GAFSP country allocations to date by public sector window**
  - Bangladesh (WB), Haiti (IDB + WB), Rwanda (WB), Sierra Leone (IFAD), Togo (IFAD+WB), Ethiopia (WB + FAO), Mongolia (WB + FAO), Niger (AfDB), Cambodia (AsDB), Liberia (AfDB), Nepal (WB), and Tajikistan (WB)
- **Eighteen eligible proposals country received in current call have been reviewed, and \$180 million will be allocated May 23 to the 5 or 6 highest ranked**

# New Partnerships to Better Work With the Private Sector

- **B20** focus on investment and infrastructure
- Growing the **private sector window of GAFSP**
  - IFC has the window running
  - \$200 mil+ in pledges so far, mechanism being refined to handle concessional funding necessary to leverage
- Growing an **agricultural pull mechanism to encourage innovation (AGPM)**
  - Up and running, about \$100 million
  - Four pilots chosen out of 40 submissions in first round: on-farm storage, PPR livestock vaccine, biofortified crops, reducing aflatoxins with AlfSAFE
- **The 2012 G8 approach with 6 African pilot countries**



# The “New” Consultative Group on International Agriculture Research

- **CGIAR Value Proposition** - for every US\$ 1 invested in CGIAR research, US\$ 9 worth of additional food is produced in developing countries
- New **Strategy and Results Framework** identifies 15 priority global programs.
- **CGIAR overall funding** in 2010 was **US\$ 673 mil** and the newly created **CGIAR Fund** received **US\$ 363 mil** in 2011
- **CGIAR’s funding goal is US\$ 1 bil. by 2013**, together with predictable, multi-year funding indications from donors
- **Independent Science and Partnership Council** provides advice on quality of science and **Independent Evaluation Arrangement** ensures appropriate evaluation of results