



Food and Agriculture  
Organization of the  
United Nations

Agricultural Development Economics Division (ESA)

# Impacts of the 2006-2008 Food Price Shock

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PECC Agricultural and Food Policy Forum:  
Moving Beyond Market Volatility to Foster Food Security  
Taipei, 1 December 2011





# High and volatile prices are likely to continue

- Rapid growth in emerging economies.
- Population continues to increase.
- Possible biofuels expansion.
- Increasingly scarce natural resources in some regions.
- Declining rates of yield growth for some commodities.
- Stronger linkages between agricultural and energy markets
- Increased frequency of weather shocks.



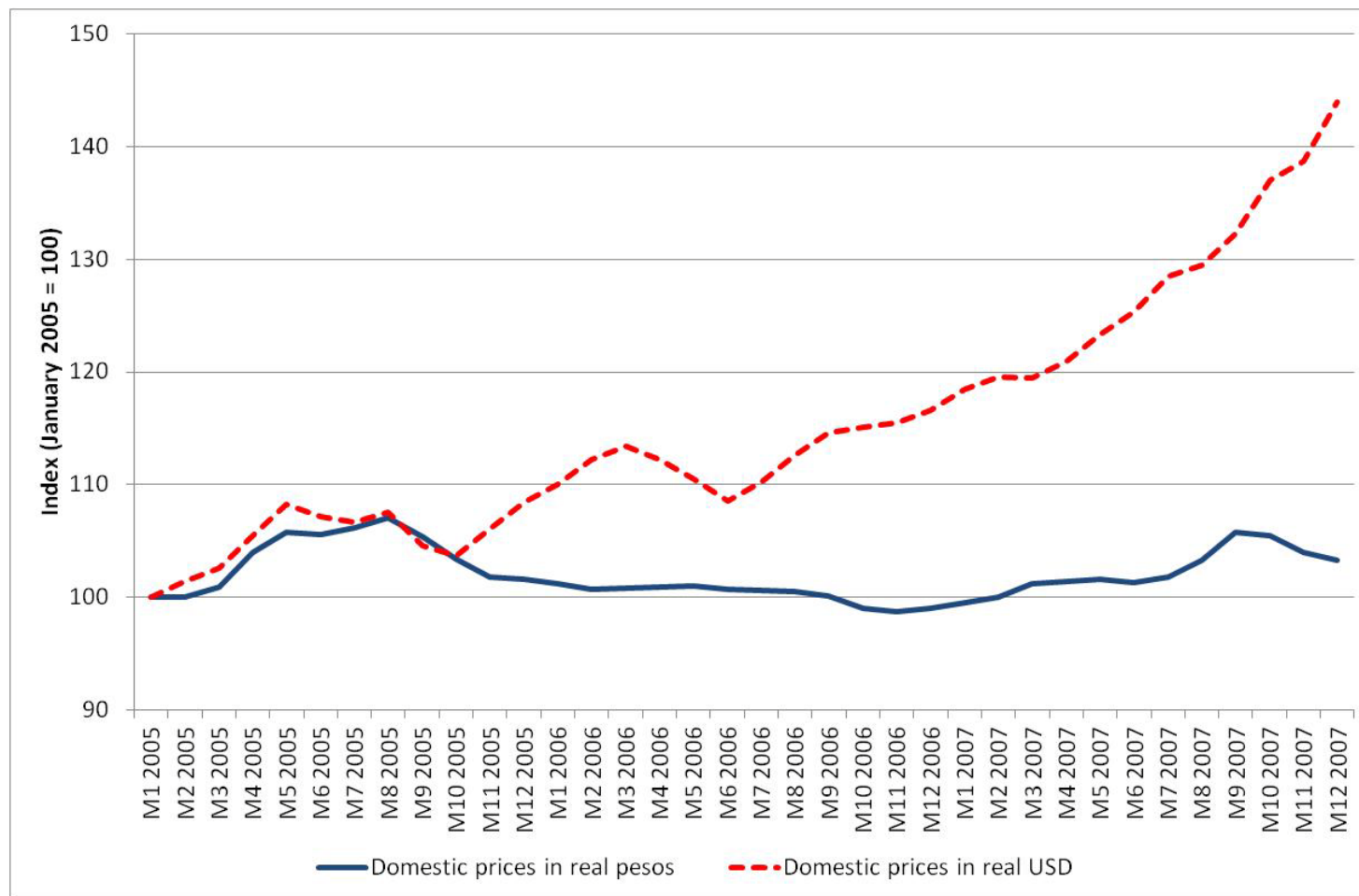
## Methods used

- Staple food prices are analyzed because the basket used to calculate food price inflation is not representative of the expenditure patterns of the poor.
- All prices are adjusted for inflation.
- All analysis is done in local currency terms so as to understand trends from the domestic point of view



# The choice of currency matters

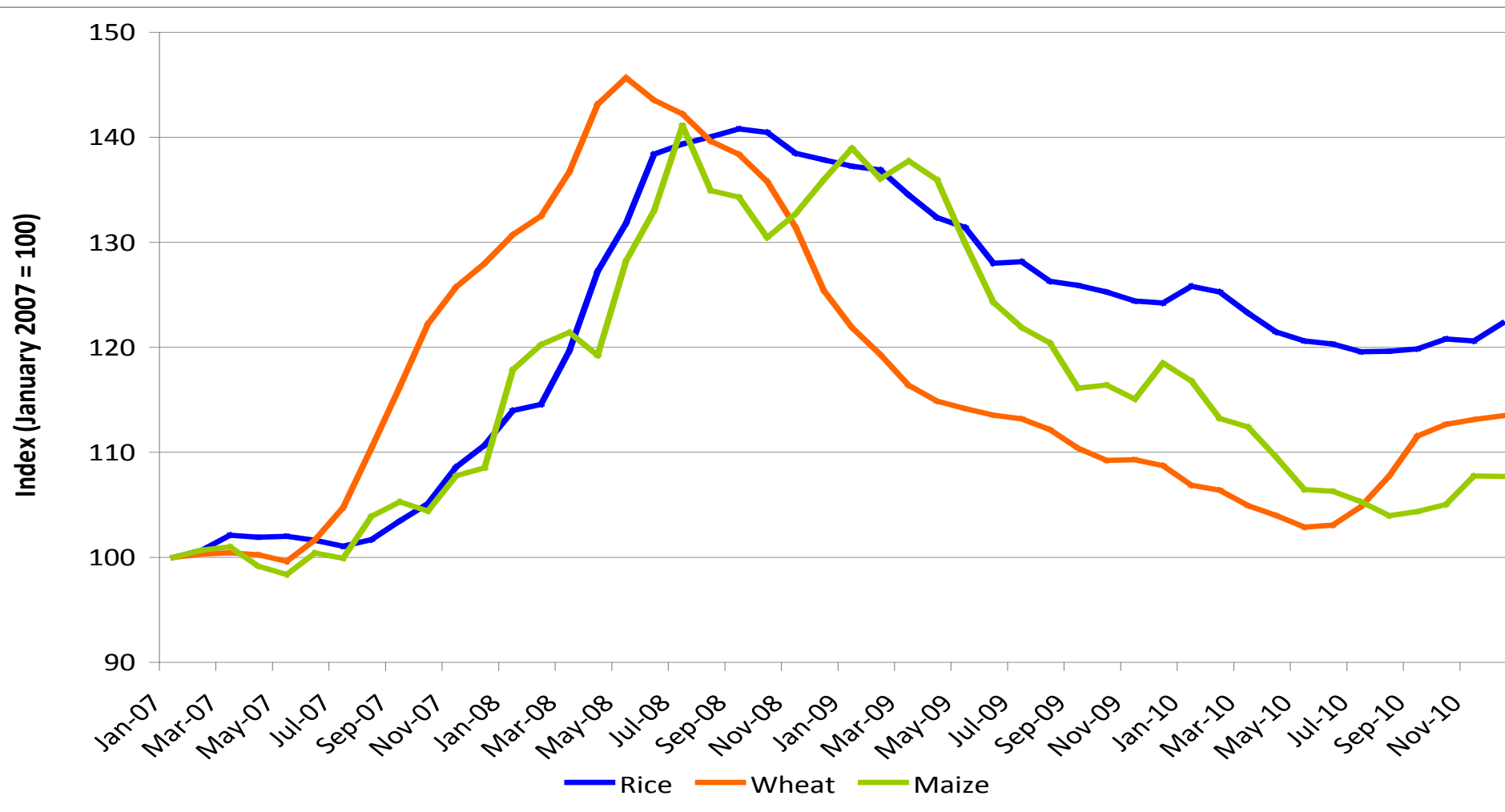
## Rice prices in the Philippines, Jan 2005 to Dec 2007





# The level of domestic prices increased substantially

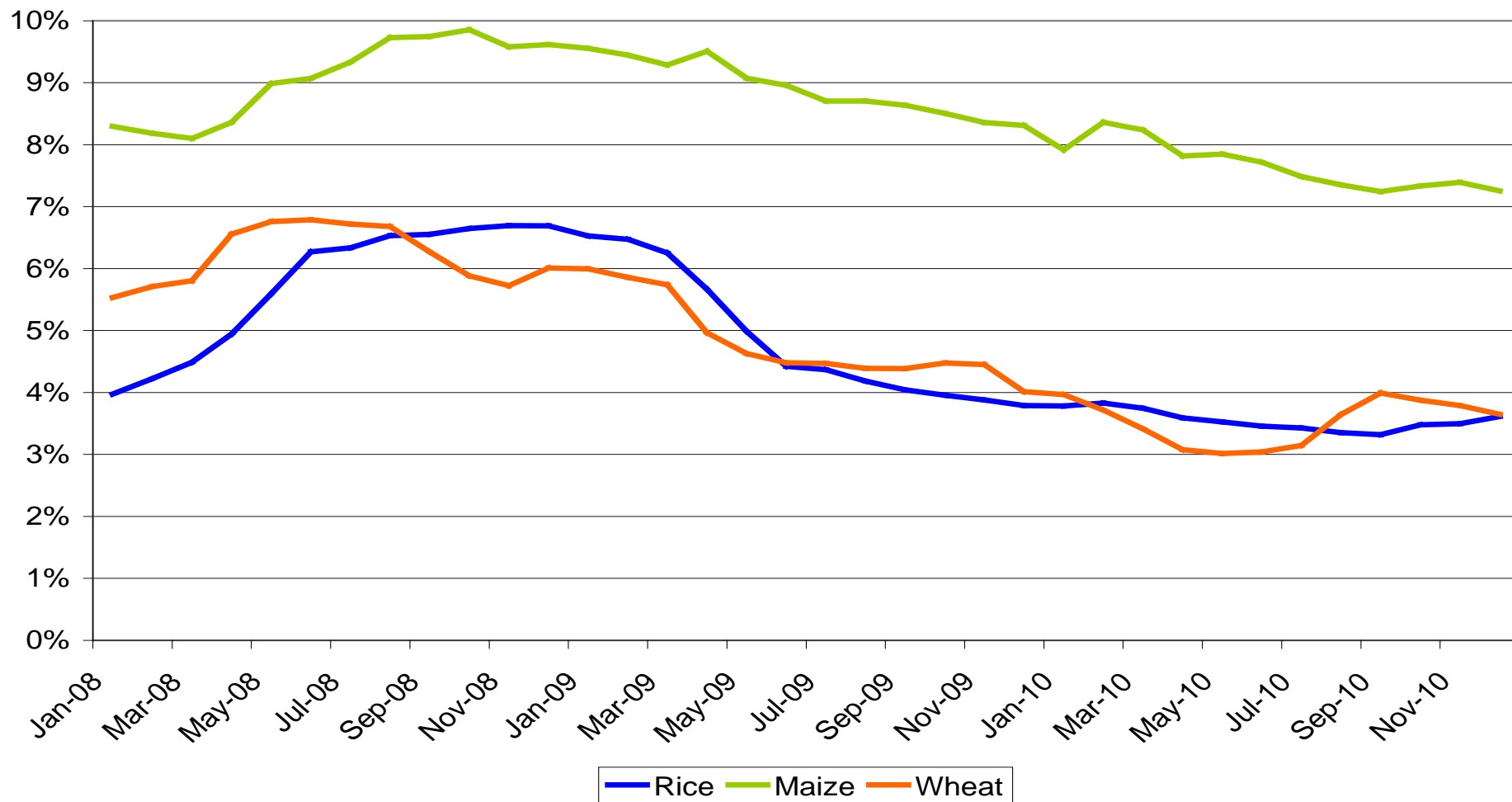
## Domestic staple food prices, Jan 2007 to Dec 2010





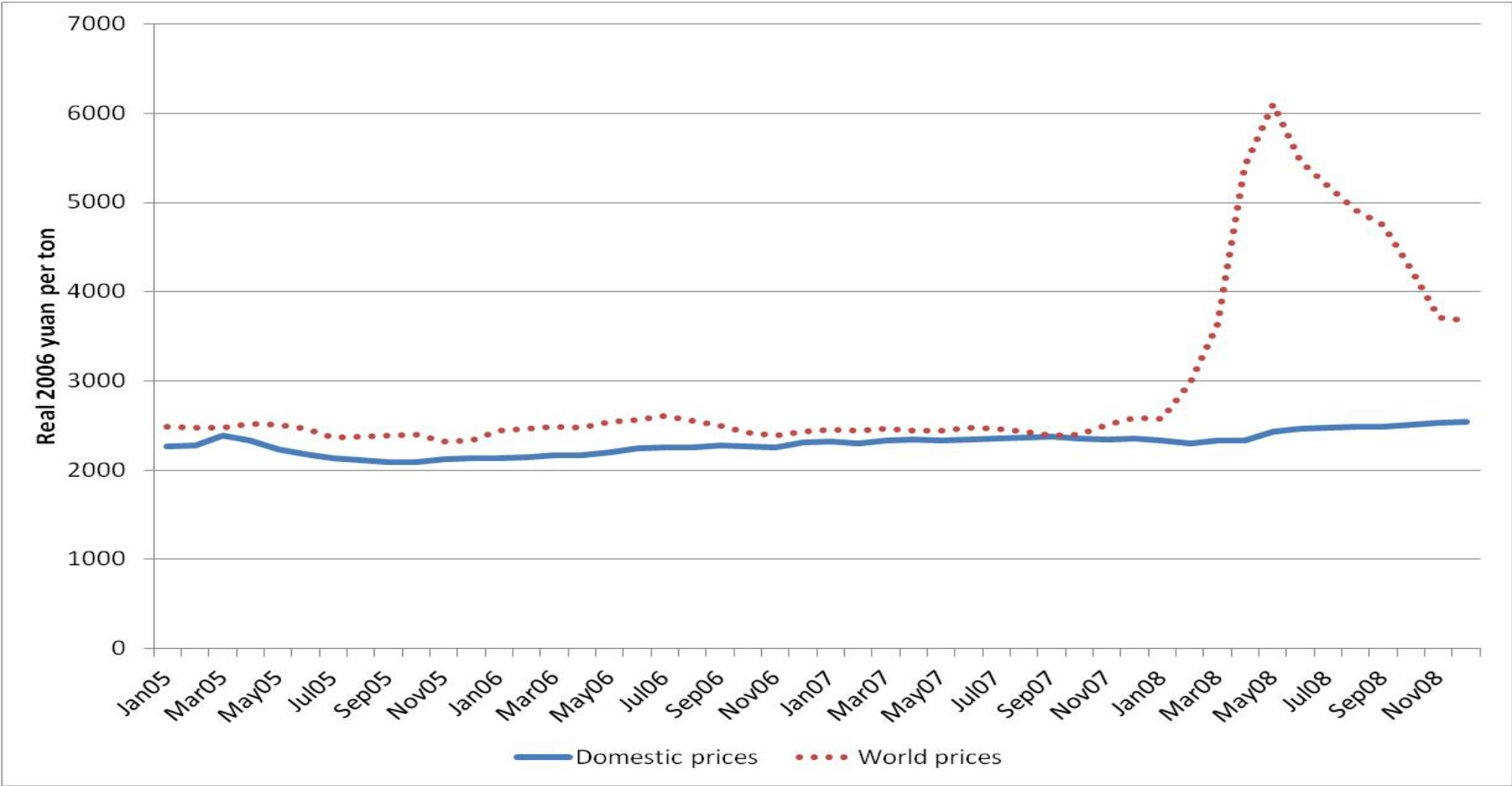
# Domestic price volatility increased as well

## Domestic staple food price volatility



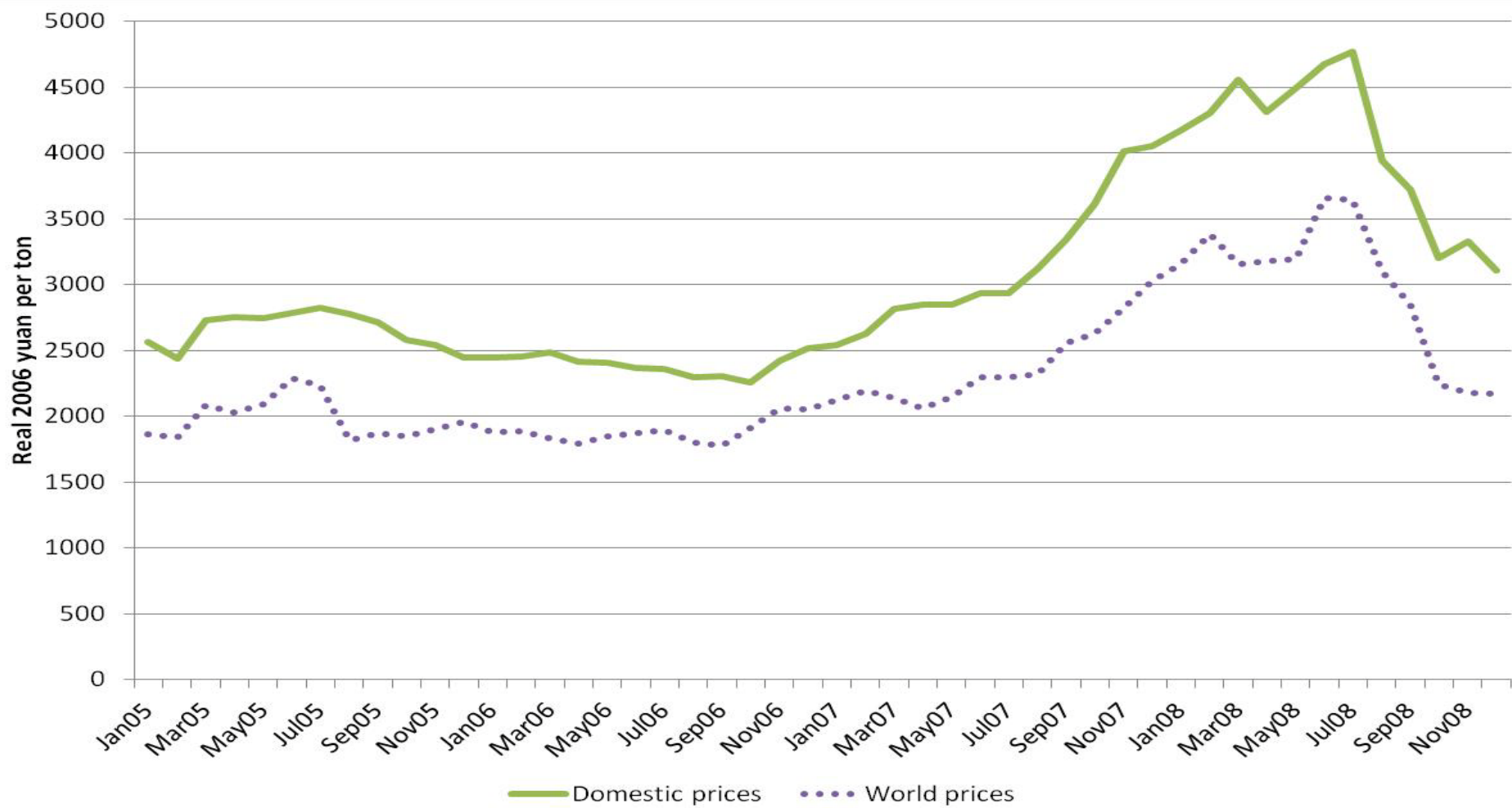
# Policies matter (1)

## Domestic and world rice prices, China, 2005-2008



## Policies matter (2)

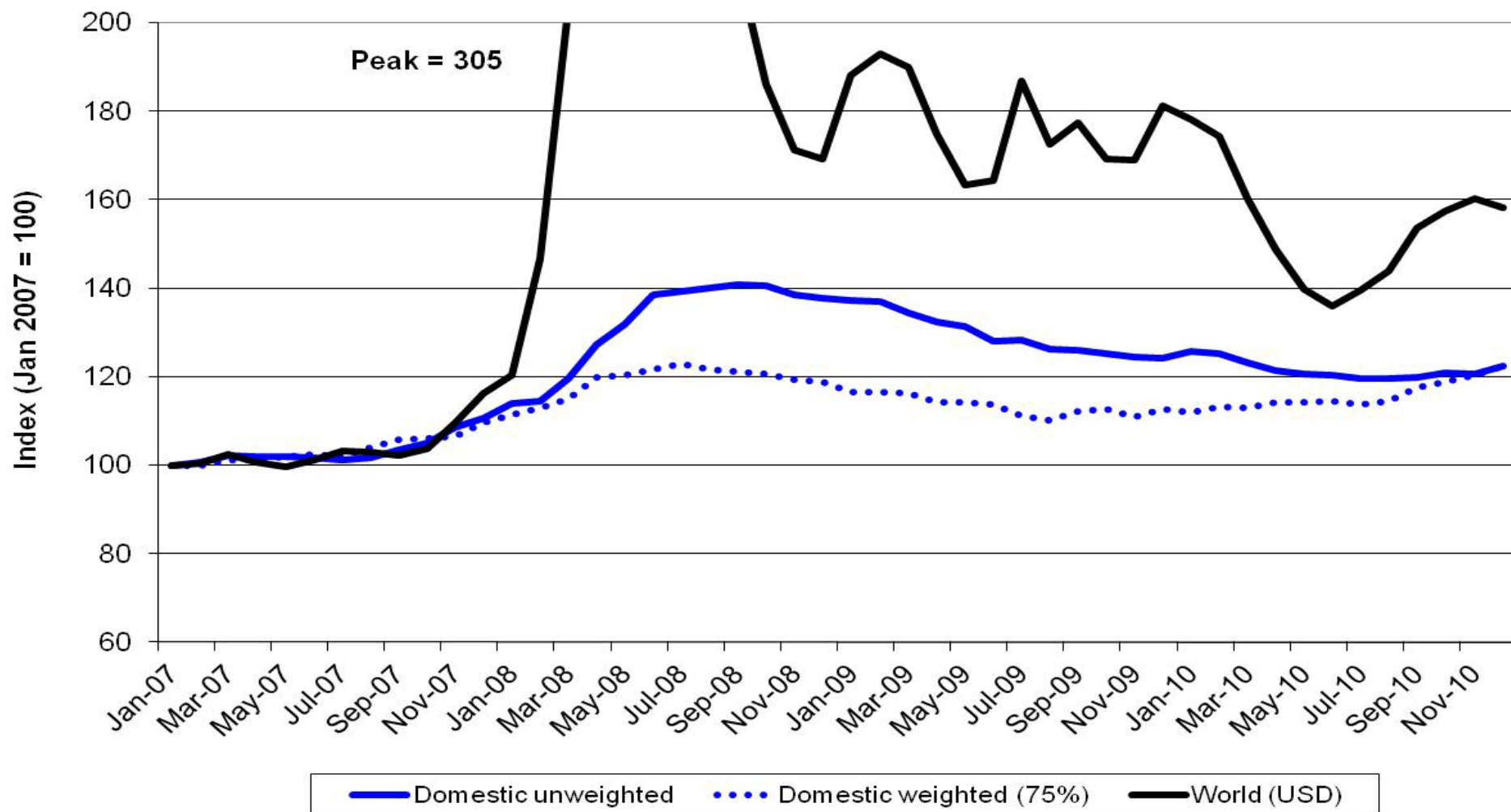
### Domestic and world soybean prices, China, 2005-2008





# Prices increased less in large countries (1)

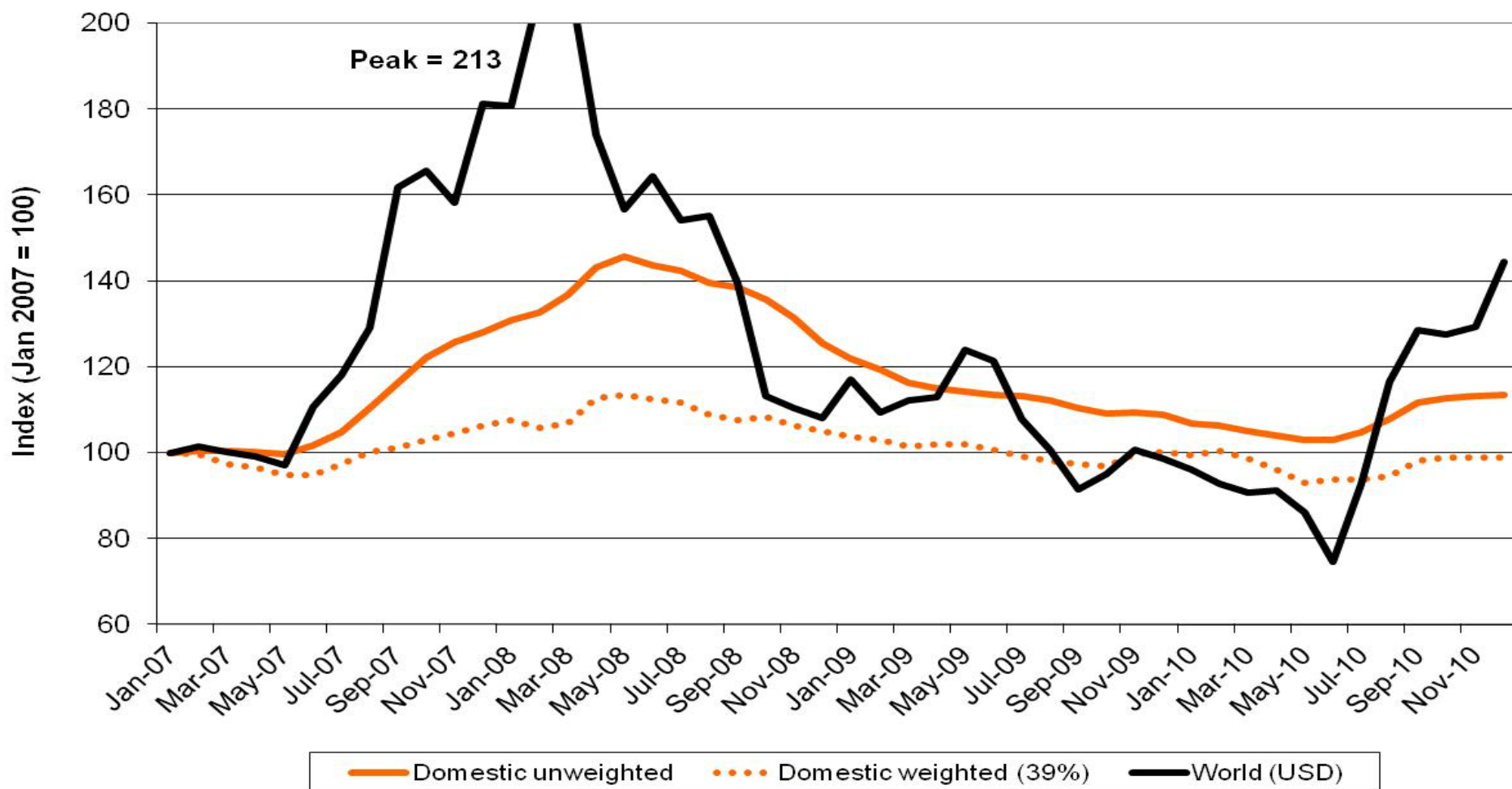
## Domestic & world rice prices, Jan 2007 to Dec 2010





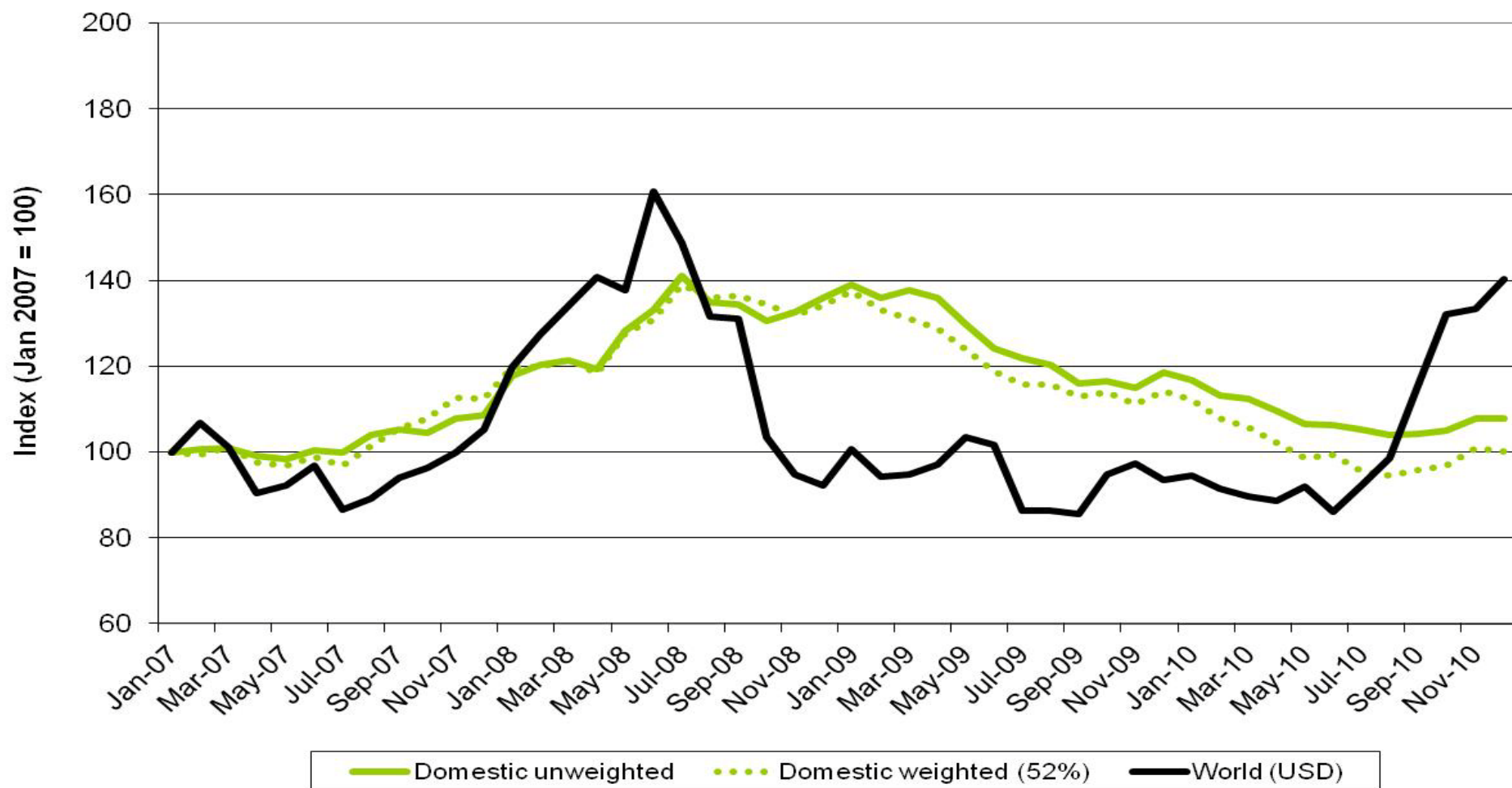
# Prices increased less in large countries (2)

## Domestic & world wheat prices, Jan 2007 to Dec 2010



# Prices increased less in large countries (3)

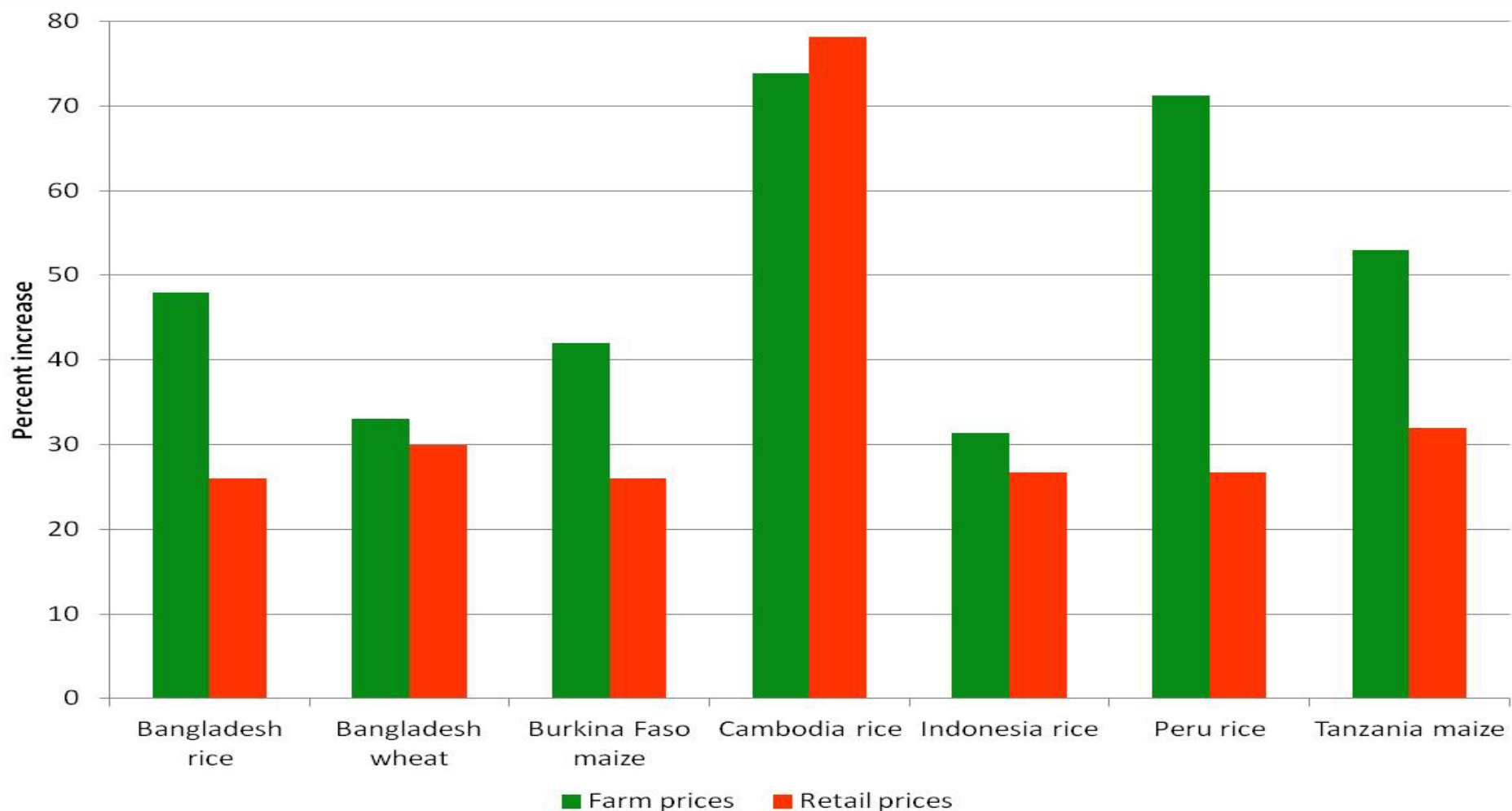
## Domestic & world maize prices, Jan 2007 to Dec 2010





# Farm prices generally increased as retail prices increased

## Percentage increase in real prices, 2003-2008





## Higher output prices generally more than compensated for higher input costs

### Input costs & profits for winter-spring paddy, An Giang, Viet Nam

Item	2007	2008	Percent increase
Seed	484	936	93
Fertilizer	3269	6691	105
Labor	3116	4765	53
Other costs	2928	2941	0
Yield (kg/hectare)	6100	5792	-5
Price (VND/kg)	2350	3700	57
Profit	4538	6097	34

VND is Vietnamese dong. Costs and profits are in thousand VND per hectare.



# Supply response was strong

## Increase in cereal production by country groups

Country group	Percent increase, 2007- 2008
OECD	6.2
BRICS	8.2
All others	7.2

Source of raw data: FAOStat (2011)



# High food prices generally hurt the poor

- Household surveys seem to indicate that the poorest quintile are net food buyers in most countries, although there are exceptions.
- Benefits of high prices tend to accrue to farmers with ample land and water.
- More research should be done in estimating the magnitude of labor market effects.
- Higher food prices represent an opportunity to reduce poverty, but only if they induce investment that shifts out the supply curve.



# Summary

- Price transmission was far from complete, but it was rapid and substantial...
- ... except in some countries that were not too dependent on imports and used trade policy to block transmission.
- Generally speaking, farm prices seemed to increase whenever retail prices increased, and supply response was strong as a result (even though input costs rose).
- The price increases were bad for food security and poverty in the short-term – FAO estimates undernourishment increased from 2007 to 2008 by about 2%, Ivanic and Martin (2008) estimate an increase in extreme poverty of about 100 million.
- If the price increases provide the spark to increased long-term investment in agriculture, they may turn out to be positive.





# Thank you for your kind attention