Market Volatility and the Food System

Pacific Food System Outlook 2009-2010

Pacific Economic Cooperation Council

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Most Price Volatility since 1970s

- Agricultural prices rose 2006-2008
- Sharp downturn starting in mid-2008
- Causes and impacts of market volatility
- Policy implications

Figure 1--Food Commodity Prices in 2005-09 Most Volatile in Three Decades

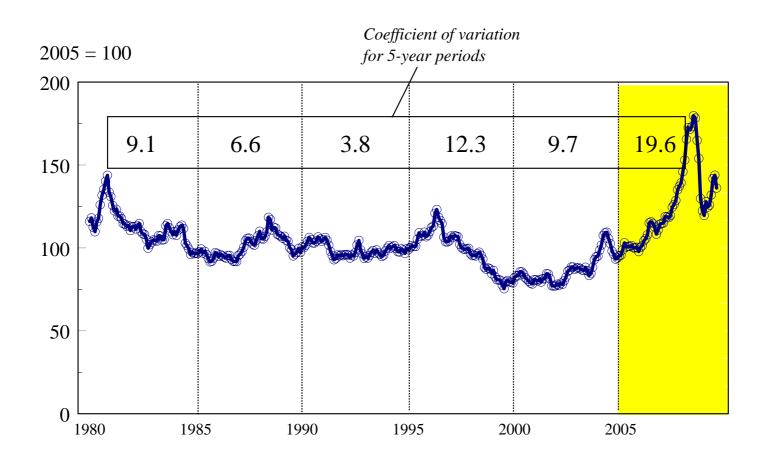
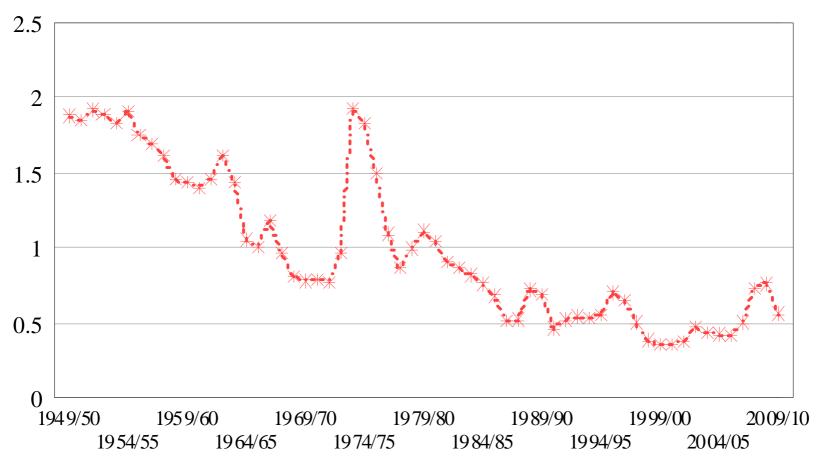


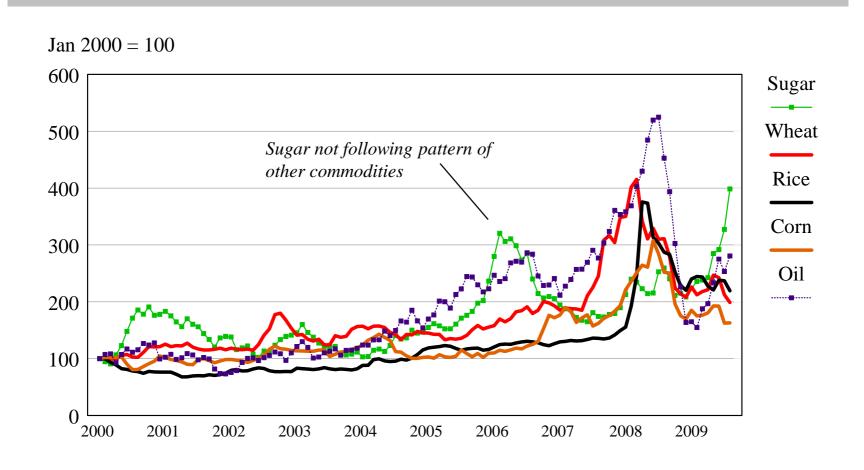
Figure 2--Inflation Adjusted Wheat Prices Still Lower Than in Earlier Periods

Wheat price deflated by CPI for 1950 (\$/bushel)



Source: Wheat prices are average farm wheat prices (all grades) as reported by USDA

Figure 3—Each Commodity Has a Different Story



Source: World Bank, Commodity Price Data; updated Sept. 15, 2009

Causes of Price Increases

- Declining grain stocks
- Expanding biofuel production
- Policy intervention
- Other factors

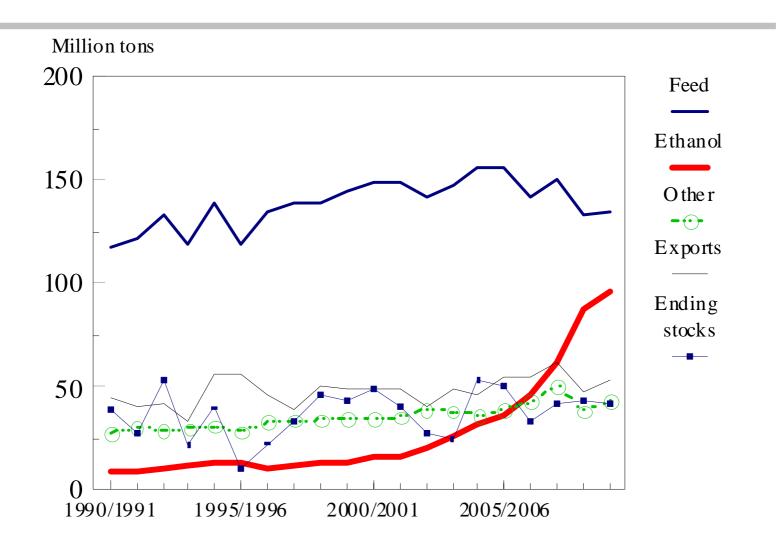
Declining Grain Stocks

- Set stage for volatility and price increases
- Dietary transition
- Production shortfalls
- Policy choice in some countries

Expansion of Biofuel Production

- New demand for agricultural products
- Biofuel production concentrated
- Driven by policy and rising oil prices
- Profitability in biofuel declined since 2006

Figure 5--Use of Corn for Fuel Ethanol: The Most Significant Change in U.S. Agriculture in Last 10 Years

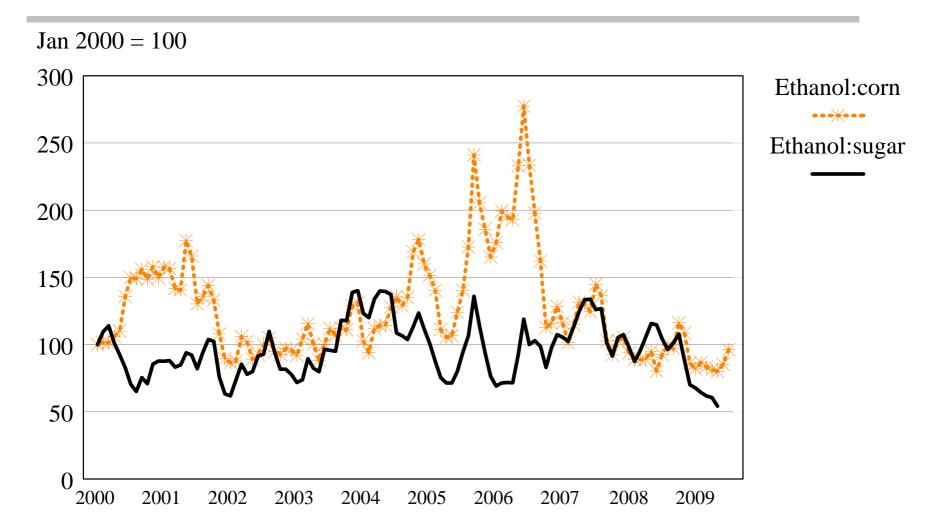


Source: USDA

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Figure 7—Ethanol Profits Trending Downward

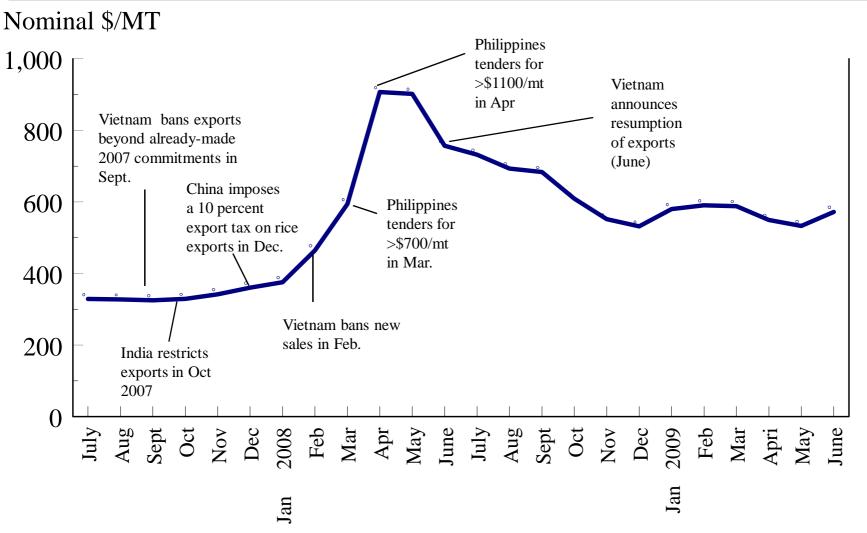


Source: ERS; World Bank Commodity Price Data; Nebraska energy web site: www.neo.ne.gov; updated Sept. 15, 2009

Policy Intervention

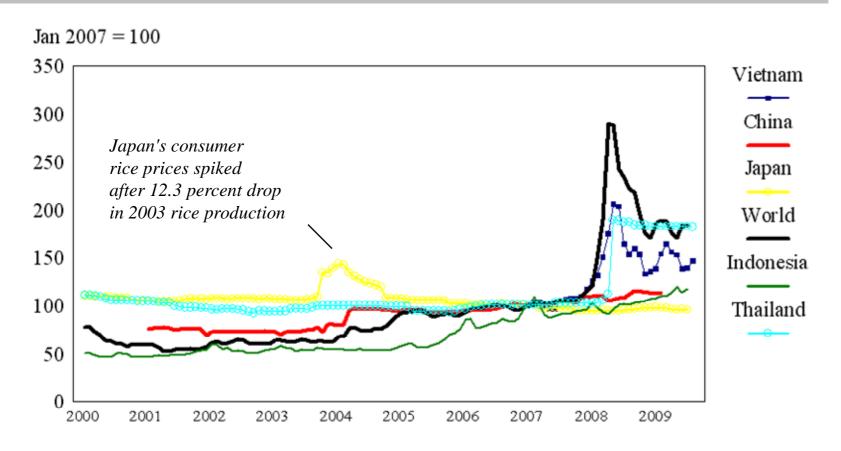
- World rice prices among most volatile
- Rice prices had most significant effect
- Rice is most thinly traded major grain
- Food price inflation key consumer issue
- Consumer effects differ around region

Figure 8–Timeline for World Rice Prices



Source: Indica rice, 5 % brokens; World Bank; Slayton (2009).

Figure 10--International Rice Price vs. Selected Consumer Rice Prices



Source: World price is Thai rice, 5% brokens based on weekly surveys of export transactions, fob Bangkok (World Bank); Japan retail price is for Akitakomachi, Akita, yen per 10kg (Koyama); China retail price is for late indica rice, Remimbi per 500gms (Gale); Vietnam retail price is for ordinary paddy at Can Tho, Vietnamese Dong per kg (Dieu); Indonesian consumer price, Rupiah per 10 kg. (Natawidjaja); Thai retail price 5% white rice (Tokrisna)..

Causes of Price Declines

- Record world grain production in 2008
- Significant demand weakness
- Food prices still higher than before 2007
- Weaker value of U.S. dollar

Food System Impacts

- Impacts greatest on the poor
- Depends on nature of the commodity
- Policies keep food prices low, stable
- Higher food prices raised global poverty
- Biggest impact on the urban poor
- Reverse rural-urban migration

Policy Implications

- Must protect the most vulnerable
- Avoid harming other countries
- Role of biofuels overstated
- Possible new era of volatility, higher prices

Policies Adopted Now Influential

- Affect future food price volatility
- Regional and international cooperation needed
- PECC can play important role in collaboration
- Policies to benefit everyone
- Reinvigorate APEC Food System

Policy Implications

- Protect most vulnerable, don't harm others
- Open food trade beats policy intervention
- Help the poor with short-run safety nets
- Don't overstate biofuel's role in volatility
- Possible new era of volatility, higher prices

PFSO Reports Available

- This report and earlier ones are available on the PECC website
- <u>www.pecc.org/research/food-and-agriculture</u>
 <u>www.pecc.org/resources</u>