Agricultural and Food Price Volatility

African views and perspectives

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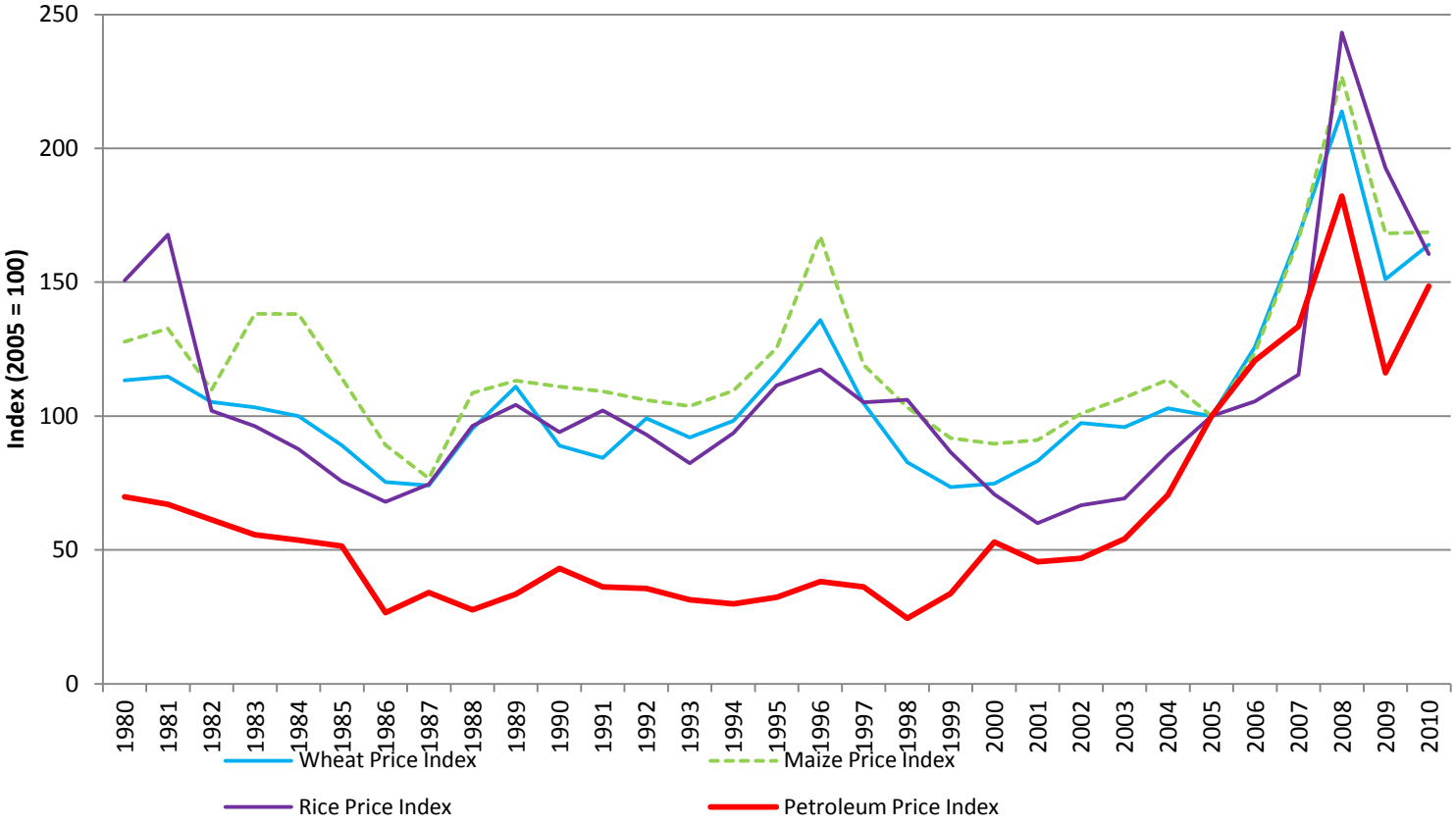
Food Price Volatility and Food Security

Awudu Abdulai

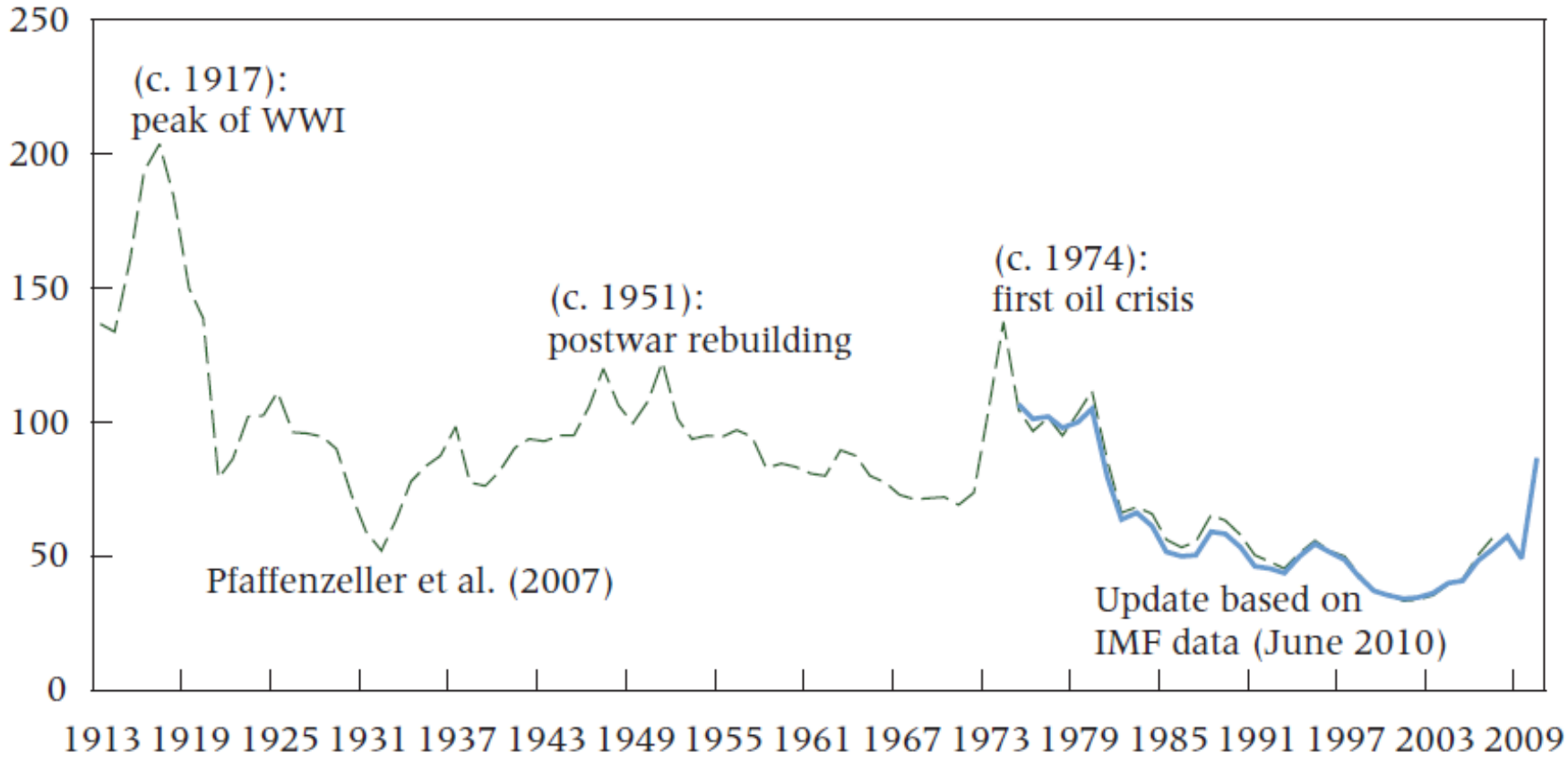
University of Kiel, Germany

Deflated Food and Petroleum Price indices, 1980-2010



Source: IMF International Financial Statistics «http://www.imfstatistics.org».

FIGURE 2 Real non-fuel commodity price index, 1913–2010 (Index, 1977–79 = 100)



NOTE: Deflated using the US BLS consumer price index (CPI).
SOURCE: Prior to 1995, Pfaffenzeller et al. (2007); spliced and updated through June 2010 using IMF International Financial Statistics «http://www.imfstatistics.org».

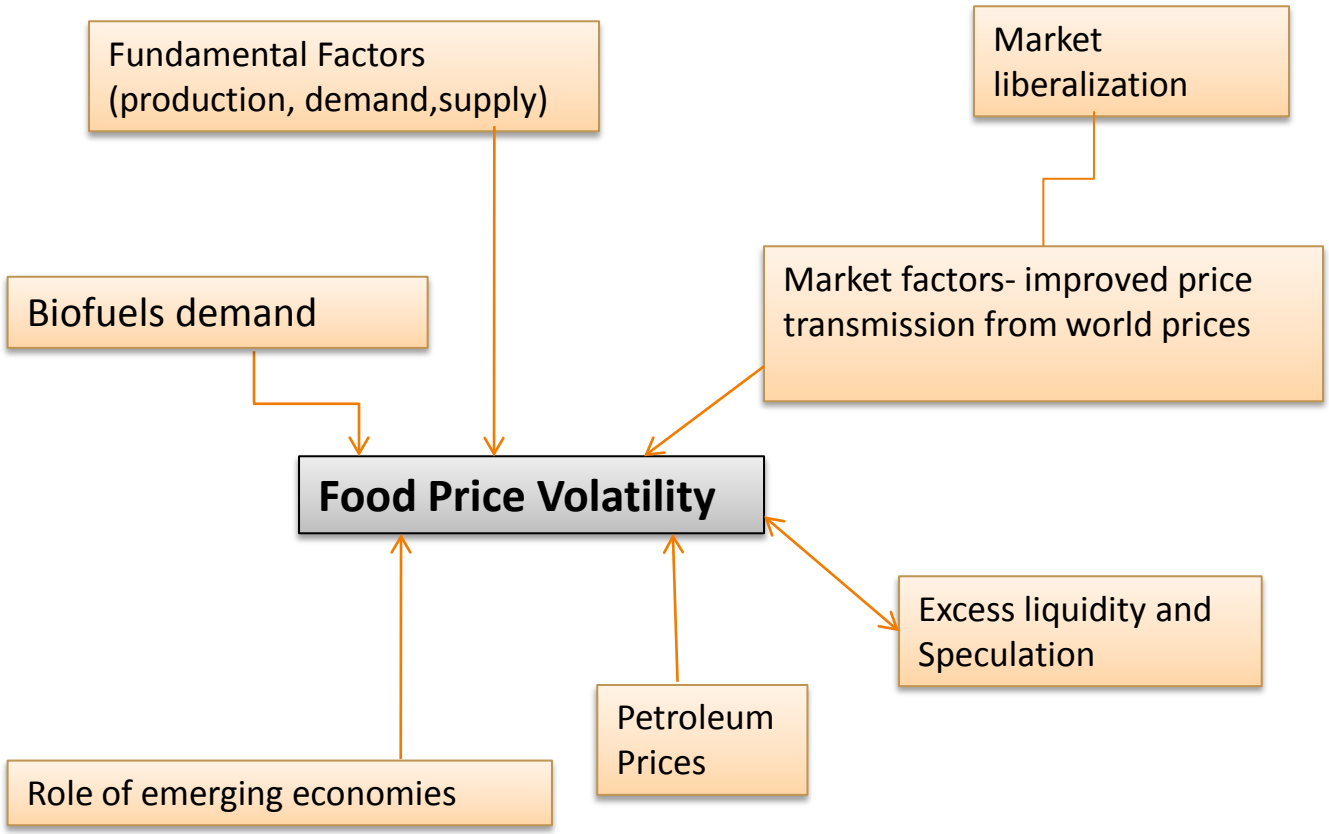
Naylor and Falcon, 2010

Monthly variations by decade, for selected real commodity prices, coefficient of variation (in %)

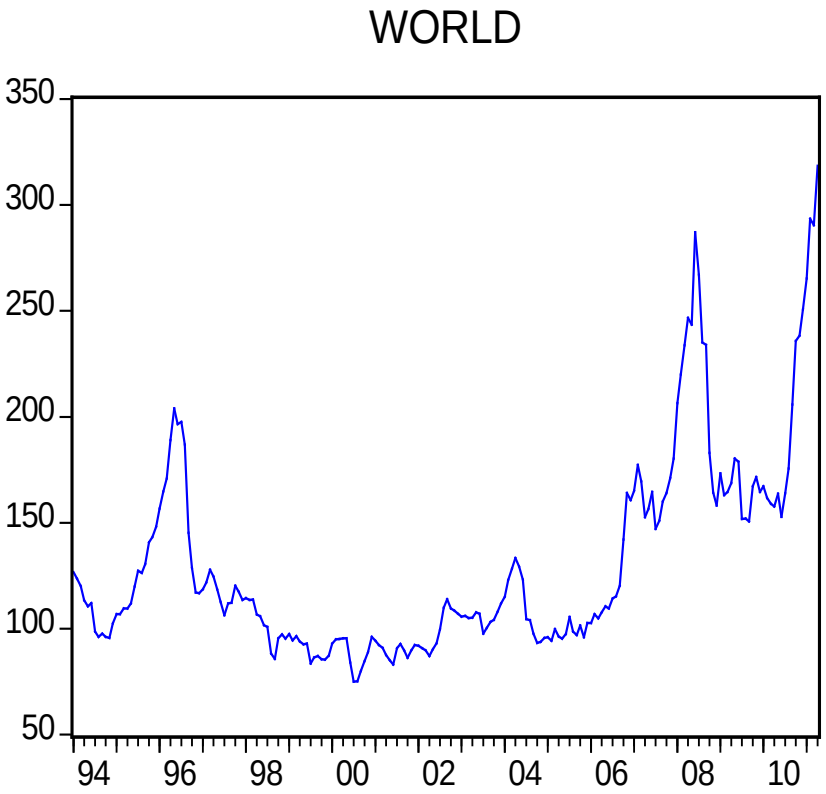
	1980-1990	1990-2000	2000-2010
Wheat	0,143	0,176	0,331
Rice	0,303	0,142	0,489
Maize	0,168	0,170	0,317
Petroleum	0,322	0,140	0,457

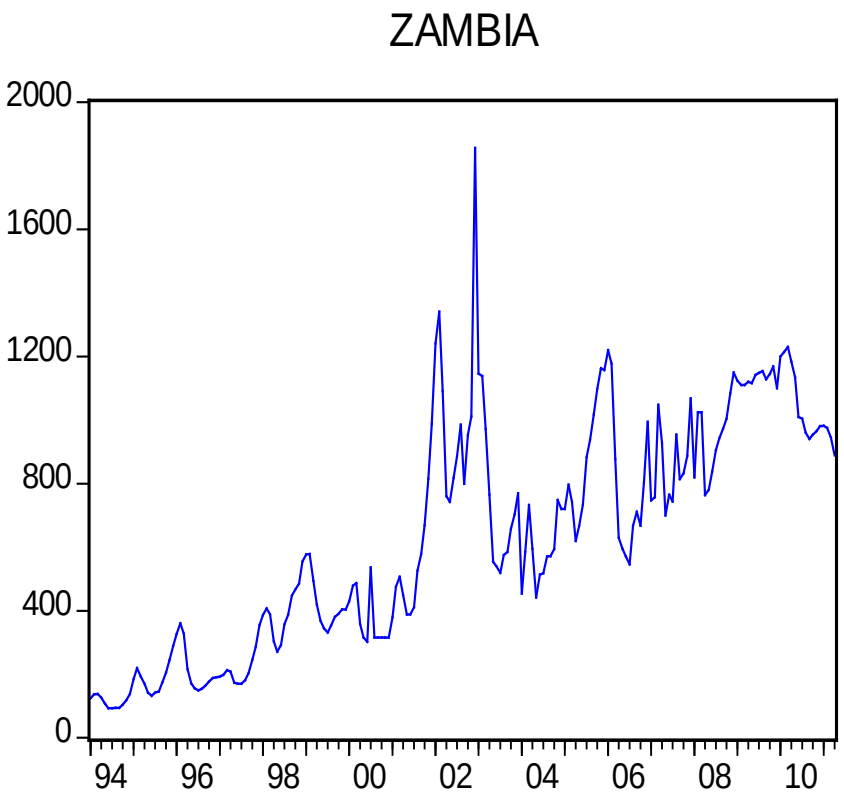
Source: IMF International Financial Statistics «http://www.imfstatistics.org».

Main Factors driving food price volatility



Maize Prices for Zambia and World Prices





Impacts of Food Price Volatility on African Households

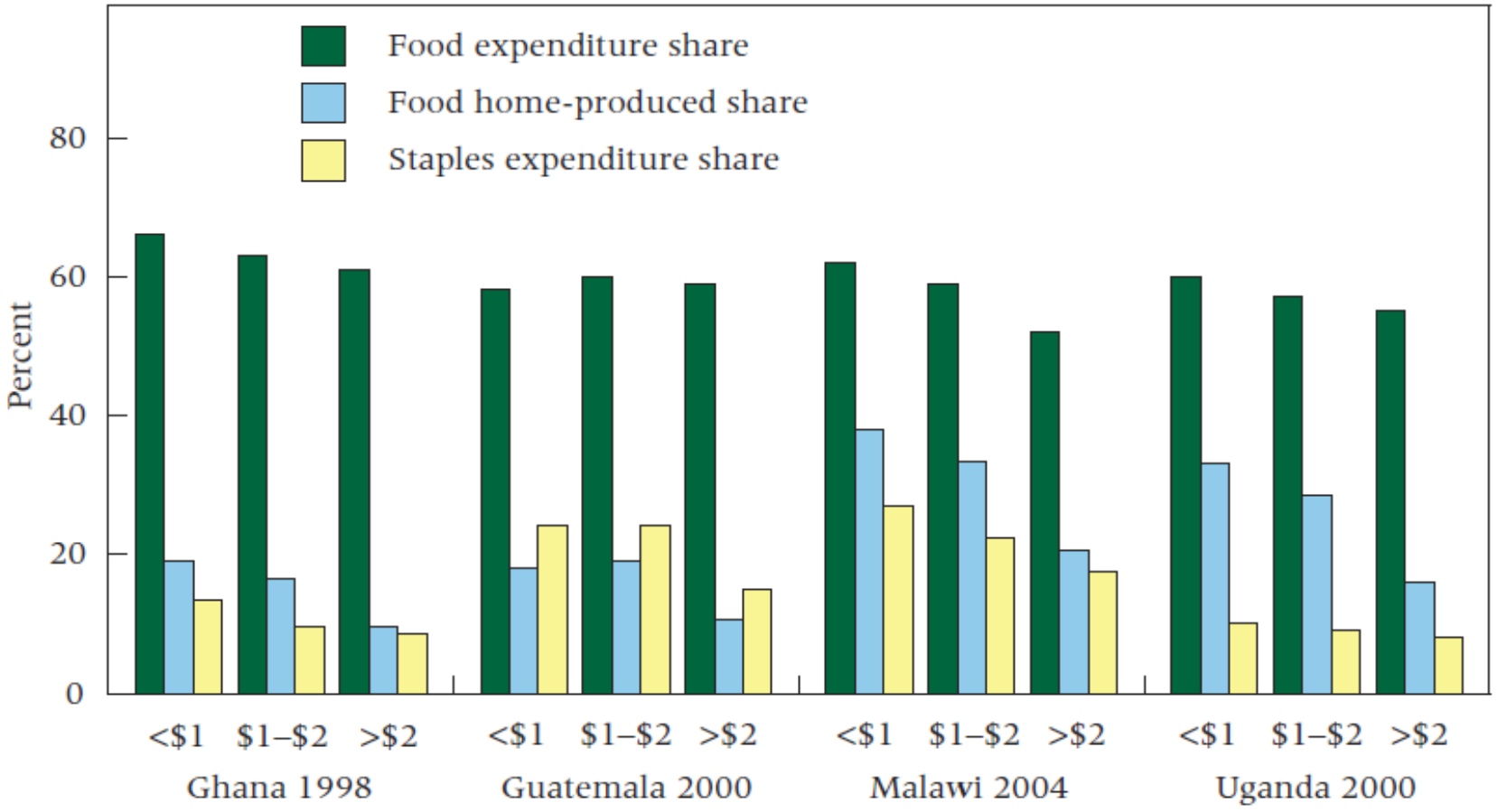
- To the extent that international food price volatility transmits to domestic markets, the main question is how these price shocks affect food security of households

- Higher food prices tend to hurt the poor, since they spend a much larger fraction of their incomes on food than do rich households.

- The high share of food and fuel in consumer baskets in these countries means their economies are particularly sensitive to food and fuel price shocks.

- Domestic price changes have implications for political stability of governments in some countries, e.g., demonstrations in some West African countries in 2008.
  - Burkina Faso, Cameroon, Guinea, Ivory Coast, Senegal witnessed large-scale riots in response to higher food prices.

FIGURE 6 Household expenditure patterns by poverty category from selected LSMS surveys



SOURCE: World Bank Living Standards Measurement Studies (LSMS) as reported in Wang (2009).

Source: Naylor and Falcon, 2011

Percent of households that are net producers of selected crops and livestock, selected LSMS surveys

Ghana, 1998	Maize (24), rice (4), cassava (5), vegetables (4)
Malawi, 2004	Maize (13), sweet potatoes (5), groundnuts (12), soybeans (5), vegetables (9), chickens (17)
Uganda, 2000	Maize (25), cassava (11), sweet potatoes (5), beans (23)

Source: Wang (2009), Stanford University

Conclusions and Implications

- Policies at the macro level and petroleum prices appear to be the primary determinants of the recent food price volatility and will probably remain so in the future.

- Food price volatility, in particular price spikes, has profound effects on poor consumers, and remains a major obstacle to improved food and trade policy in developing countries

- Low income countries are more vulnerable because they have less capacity to protect themselves from global price volatility

- Food price volatility deserves much more attention in the policy arena in order to improve food security globally