Recent Food Price Trends

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Recent threats to global food security

- Resource and environmental constraints
- Climate change → weather → harvests
- Food prices increasing, more volatile
- Bio-fuel mandates
- Food commodities as financial asset class
- More financial speculation
- Economic slowdown after 2008
- Growing unemployment, underemployment
- Fiscal austerity vs social protection

Recent Hunger Trends

- SOFI15: ~795 million undernourished, down from >1 bn in 1991, ~900m in 2000
- MDG 1c hunger target to halve share of hungry
- WFS global goal to halve number of hungry
- Uneven Progress:

  E, SE Asia, LAC: significant progress

  Sub-Saharan Africa highest prevalence of under-nourishment, modest progress

  West Asia: no progress

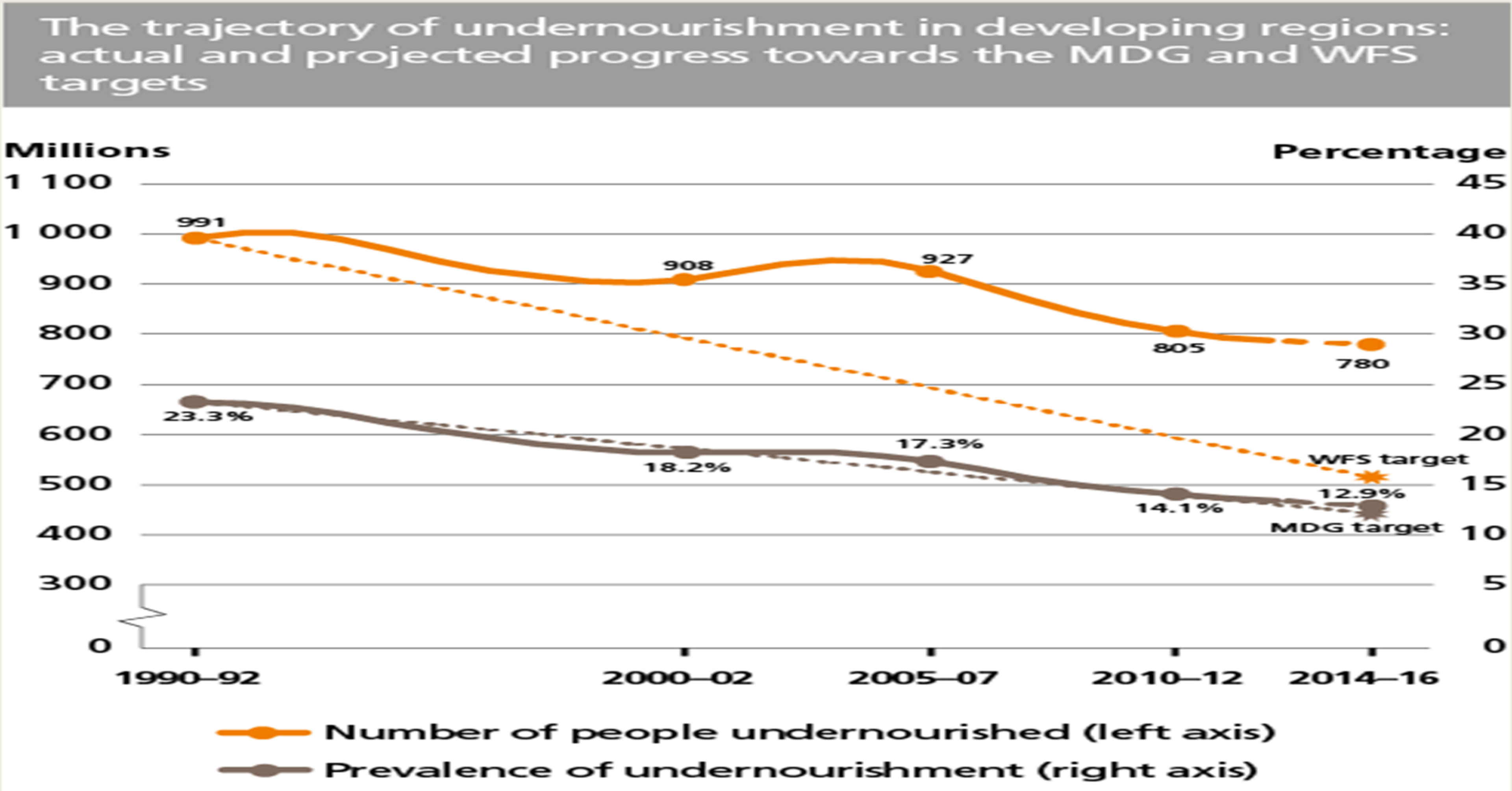
  South Asia, North Africa: slow progress

Poverty and Hunger

- Poverty line supposed to be mainly defined by income level to avoid being hungry
- But official poverty rate has declined much faster than hunger rate since 1990
- WB: MDG1 for poverty achieved by 2010
- Hunger decline slower since 2006
- In ST, hunger can only be reduced with much better social protection (non-market entitlements), international cooperation

Hunger decline slower

- About 795 million people suffer chronic hunger, down >100 million from 2000, >200 million since 1991
- Vast majority live in developing countries



Uneven trends

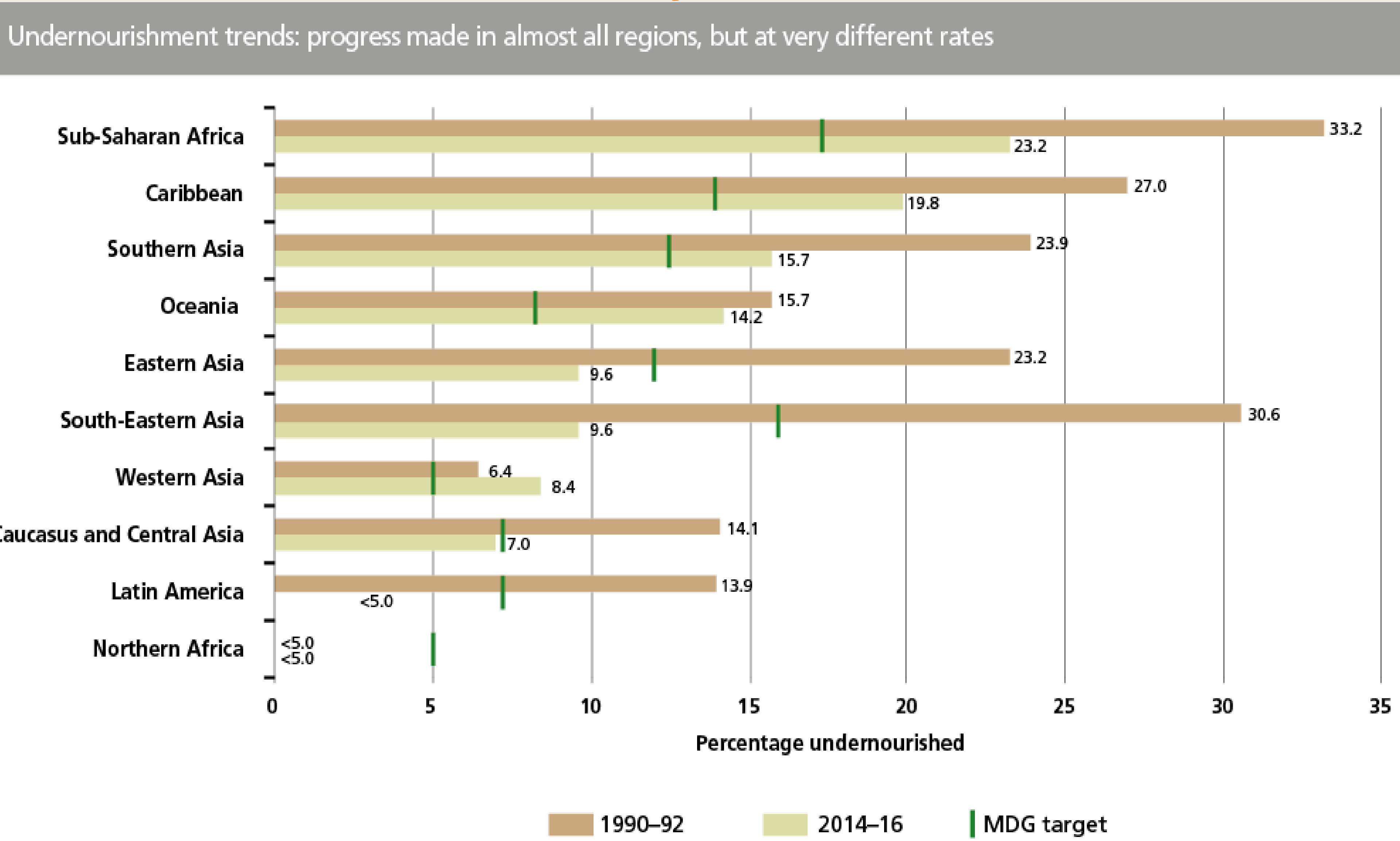
Over time

- Progress in 20C2H with lower food prices
- Progress since due to economic growth
- Slower growth, progress since 2007

By region

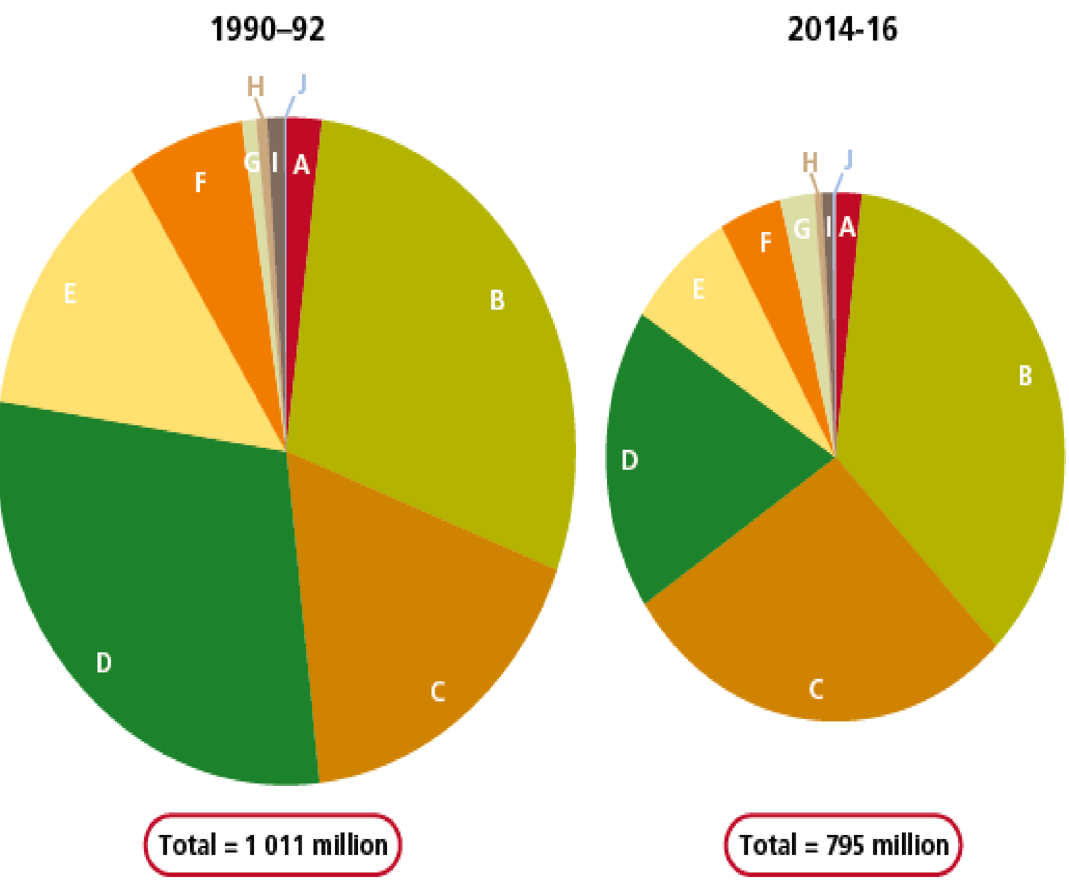
- Progress mainly in LAC, East and SE Asia
- Number of hungry increased in SS Africa
- Poor progress in Arab region, South Asia

Progress in most regions, but very uneven



Changing regional distribution of world hunger, 1991-2014

The changing distribution of hunger in the world: numbers and shares of undernourished people by region, 1990–92 and 2014–16



	Number (millions)		Regional share (%)	
	1990–92	2014–16	1990–92	2014–16
A Developed regions	20	15	2.0	1.8
B Southern Asia	291	281	28.8	35.4
C Sub-Saharan Africa	176	220	17.4	27.7
D Eastern Asia	295	145	29.2	18.3
E South-Eastern Asia	138	61	13.6	7.6
F Latin America and the Caribbean	66	34	6.5	4.3
G Western Asia	8	19	0.8	2.4
H Northern Africa	6	4	0.6	0.5
I Caucasus and Central Asia	10	6	0.9	0.7
J Oceania	1	1	0.1	0.2
Total	1 011	795	100	100

Recent threats to global food security

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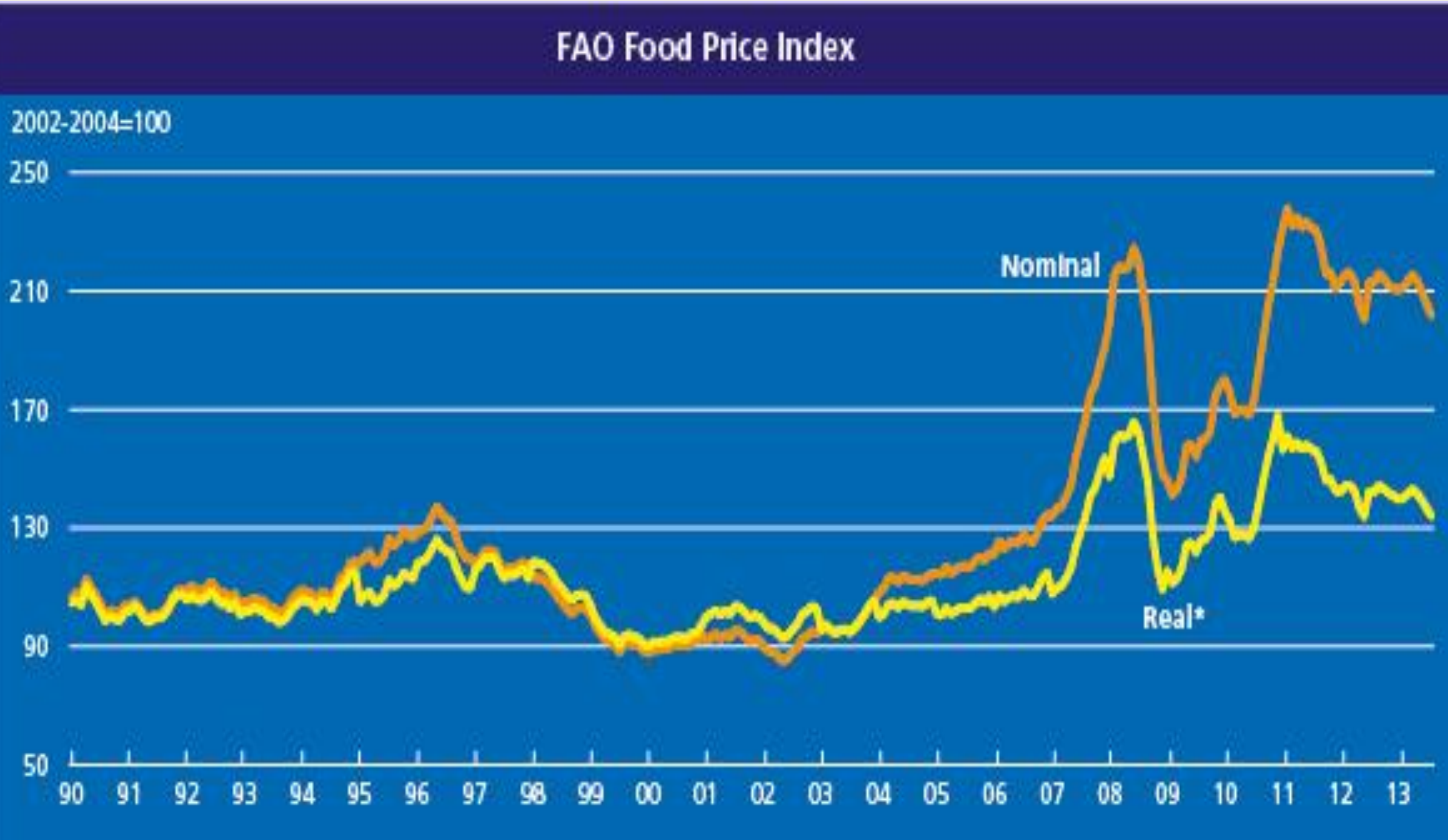
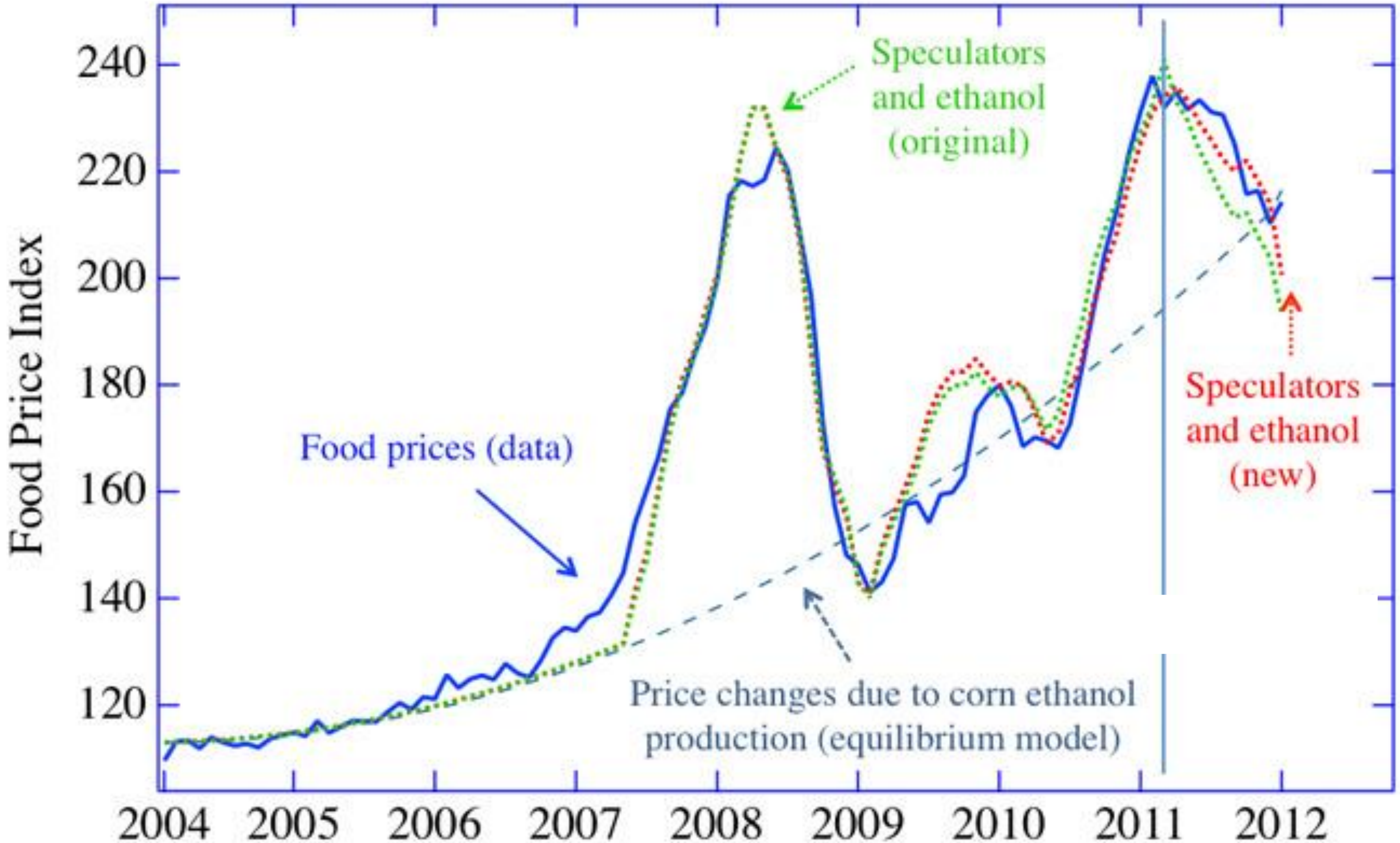
Food prices rise, more volatile after 2006



Biofuels, speculation



Recent trends

Cereal prices declined during 20CH2

Food prices rose from 2006, especially 2007-2008

Food prices rose again during 2010-11, then in 2012

Greater price volatility not well captured by trend data, but affects farm investment decision-making

Major immediate causes

Of higher cereal prices:

- Bio-fuels
- Higher oil prices

Of greater cereal price volatility:

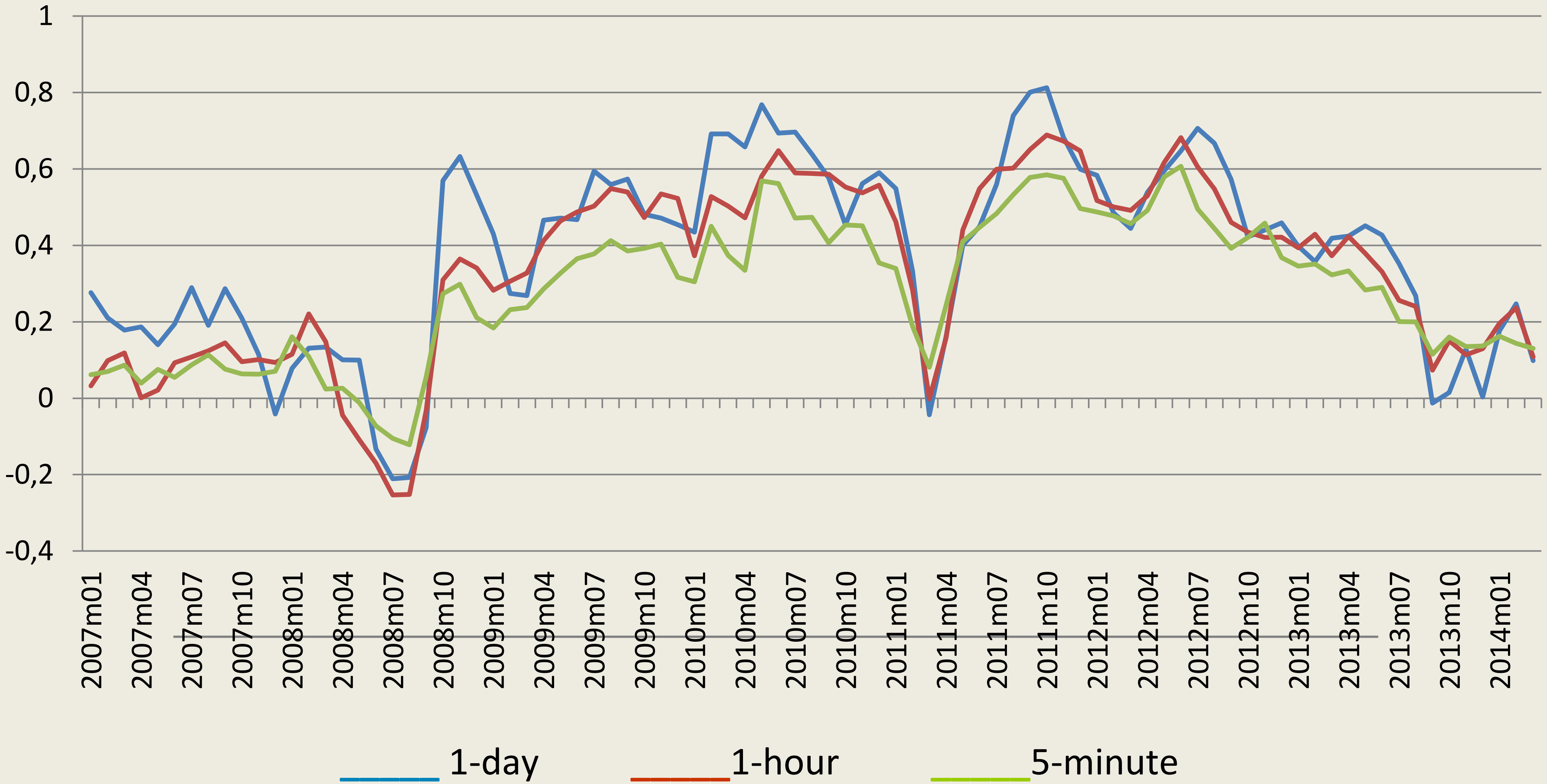
- Oil price volatility
- Financialization → New financial assets

  → More investments, speculation

  → Asset diversification

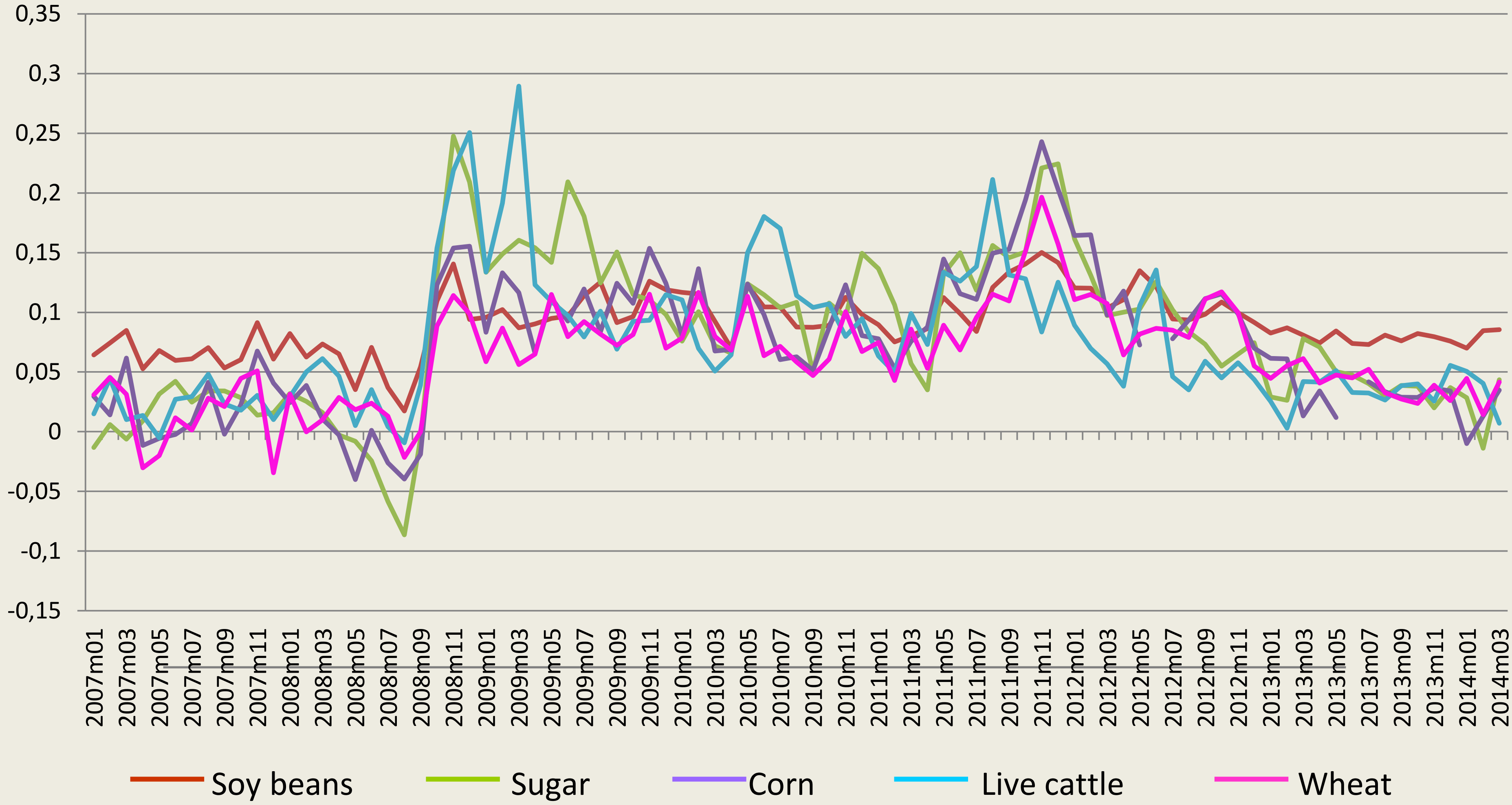
High frequency trading distorts food prices

Monthly average of dynamic conditional correlations between the returns on the WTI and the E-mini S&P 500 futures by frequency, 2007m1-2014m3



But investments declining

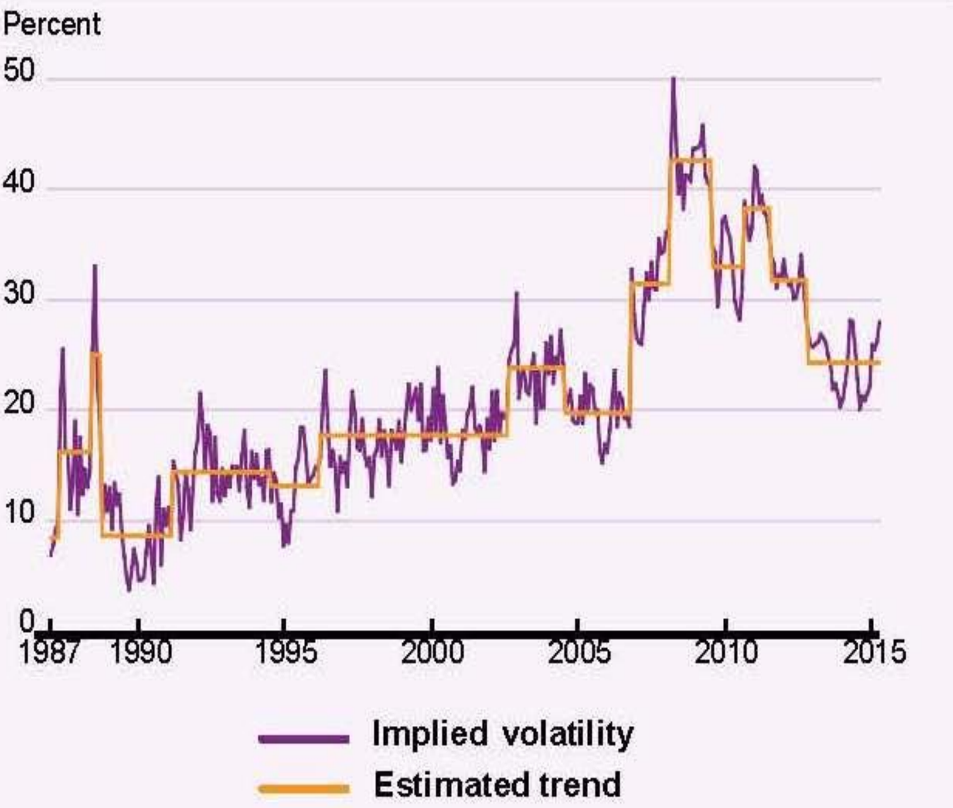
Monthly average of dynamic conditional correlations between the returns on the selected soft commodities and the E-mini S&P 500 futures over 5-minute intervals, 2007m1–2014m3



Volatility receding?

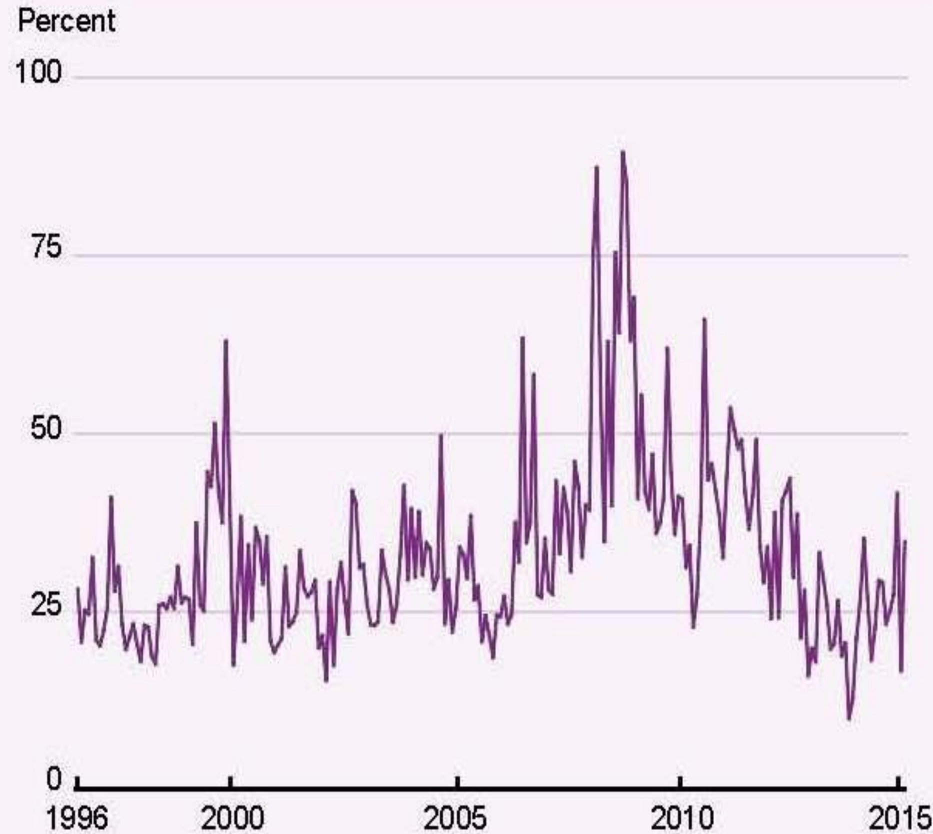
Changes in volatility are visually apparent

Figure 1.1: Implied wheat price volatility*



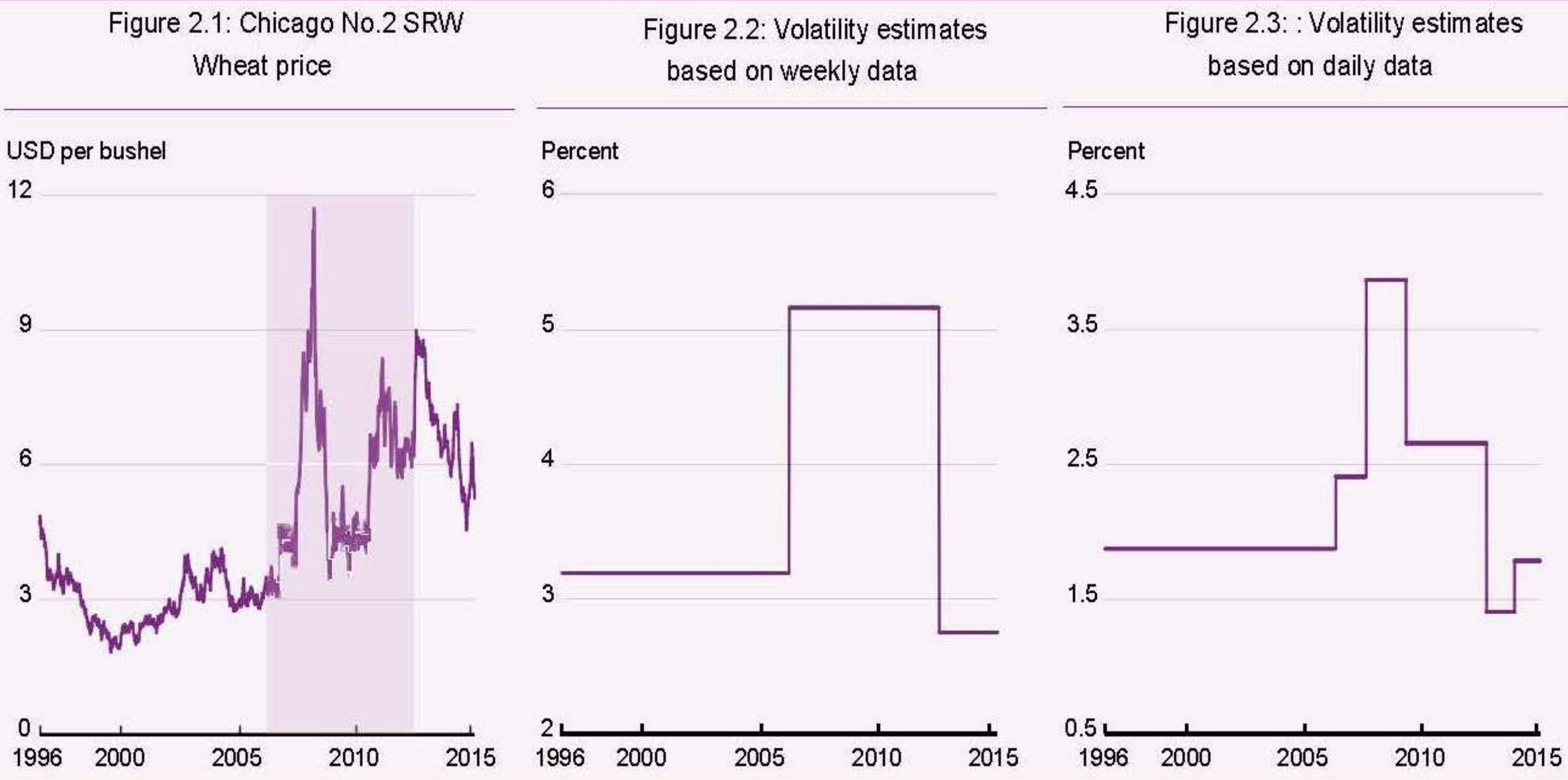
ased on Black-Scholes formula for at-the-money options with six months maturity

Figure 1.2: Realized wheat price volatility (Chicago No. 2 SRW Wheat)



Chicago: Higher wheat price volatility, 2006.03-2012.07

Estimation results indicate a phase of higher wheat price volatility from March 2006 to July 2012 for Chicago No. 2 SRW wheat



IGC: Higher wheat price volatility, 2006.03-2012.07

Estimation results indicate a phase of higher wheat price volatility from April 2007 to September 2011 for wheat sub index of IGC's Grains and oilseeds index

Figure 3.1: Wheat sub index of IGC's Grains and Oilseeds Index

Figure 3.2: Volatility estimates based on weekly data

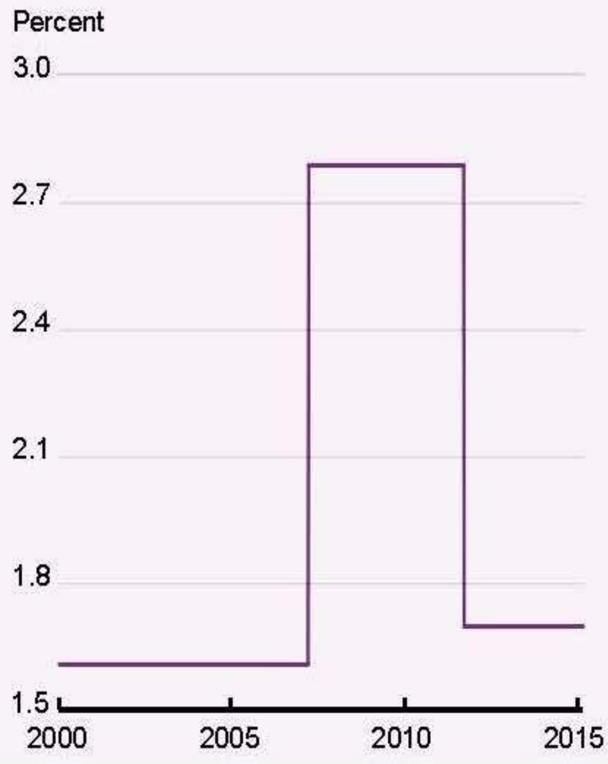
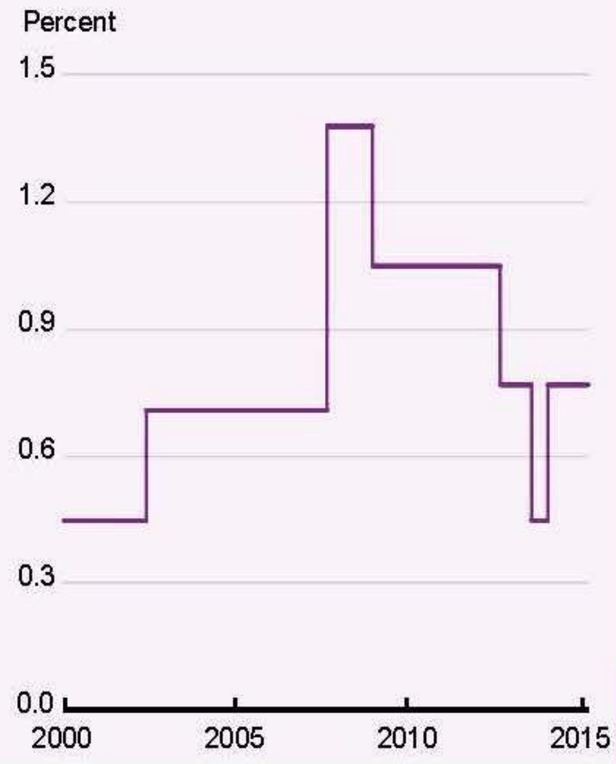
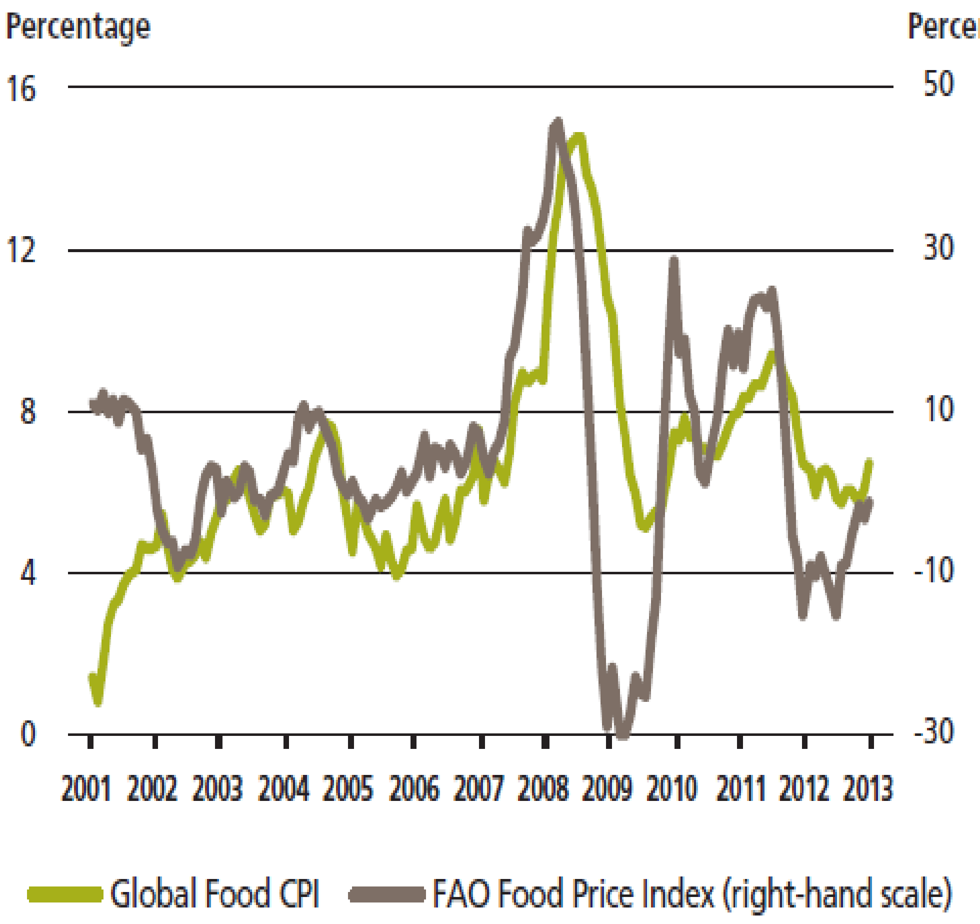


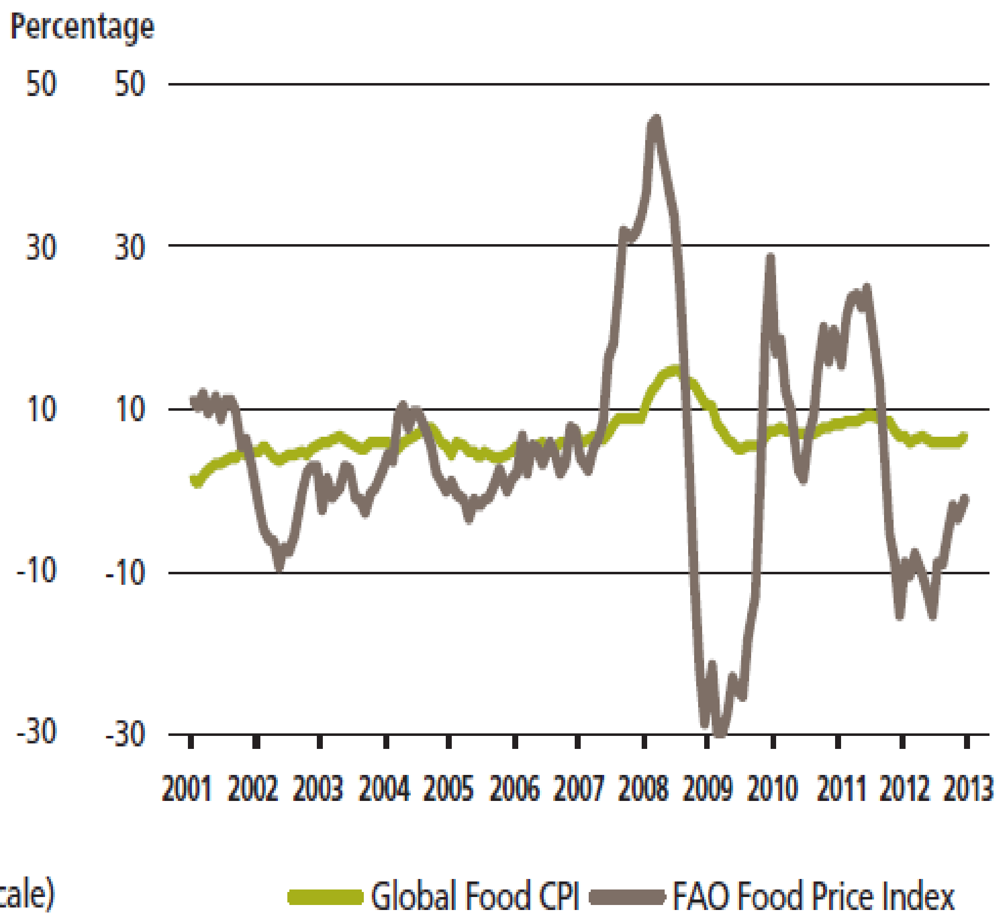
Figure 3.3: Volatility estimates based on daily data



International price volatility not fully transmitted

Changes in consumer prices of food much smaller than changes in international and producer prices, and significantly delayed

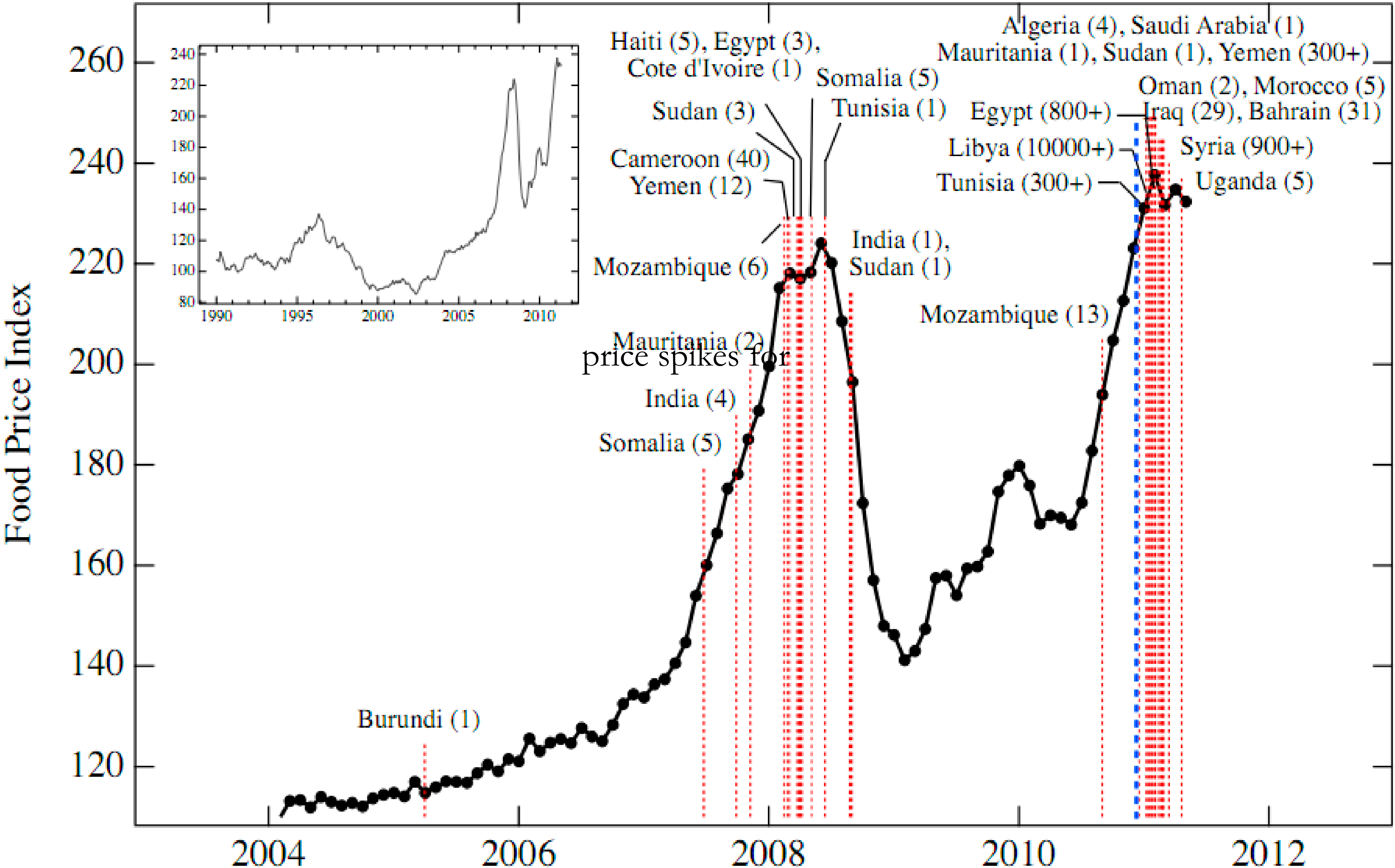




Higher prices → more hunger?

- Food shortages rarely reason people go hungry
- Price levels declined from 1980s to mid-2000s, higher since then
- More food price spikes (not sustained) recently: 2007-8, 2010-1, 2012
- Greater price volatility not well captured by annual trend data

Higher prices → unrest



Slower progress since 2006

Long-term cereal price decline ends

- Bio-fuel mandates, subsidies
- Economic growth in South → greater demand
- Easier credit → more financial speculation
- Food commodities → financial asset class
- Economic slowdown after 2008
- Climate change affects food production
- Resource and environmental constraints

Thank you

For more information …

The State of Food Insecurity in the World (SOFI)
The leading international reference on global hunger issues

Food Outlook, *May 2015*

www.fao.org/publications/