# Can the WTO rules prevent or lessen global agricultural commodity market volatility?

#### **Alexandros Sarris**

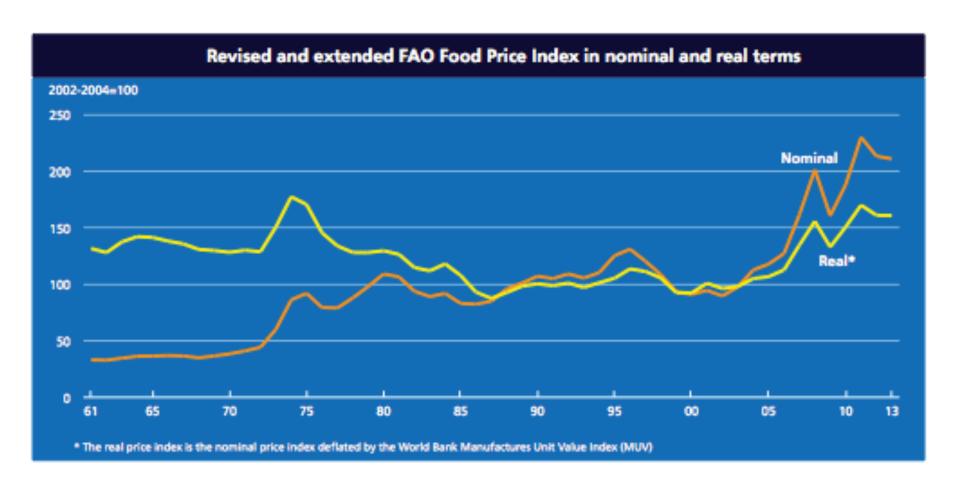
Professor of economics, University of Athens, Greece

Presentation at the Conference on 'Evolution of International Trading System: Prospects and Challenges', St Petersburg Russia, October 29-30, 2015

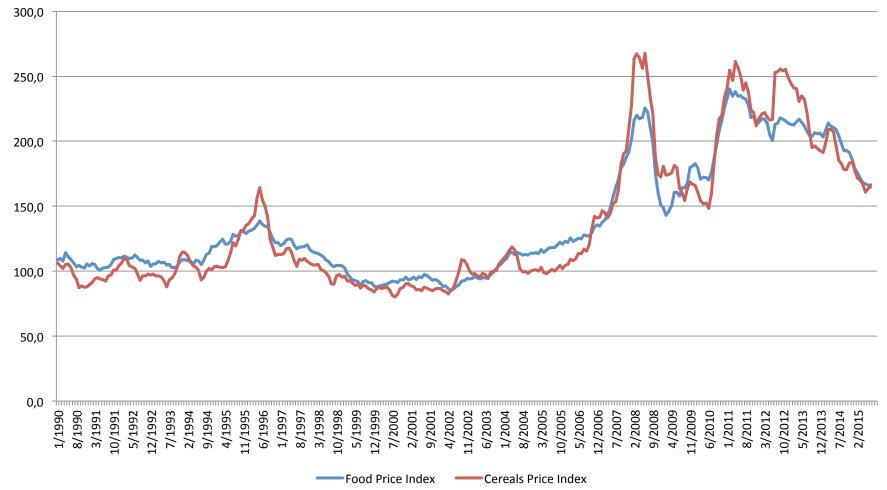
#### Plan of presentation

- Food commodity market instability and why it matters
- Instability risks faced by developing country food importers
- How have developing countries reacted to recent volatility
- Provisions in the WTO AoA relevant to high food prices and price volatility
- Issues for WTO action by the international community to assist developing countries to deal with continuing food market volatility

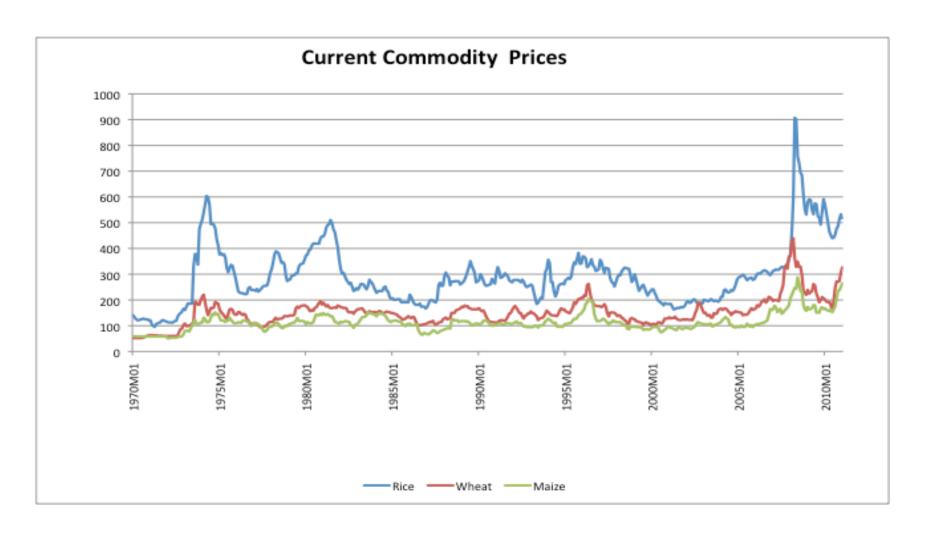
Global food commodity price volatility has been unusually high in the 1970s and also since 2007. World food commodity price index 1961-2013 (FAO)



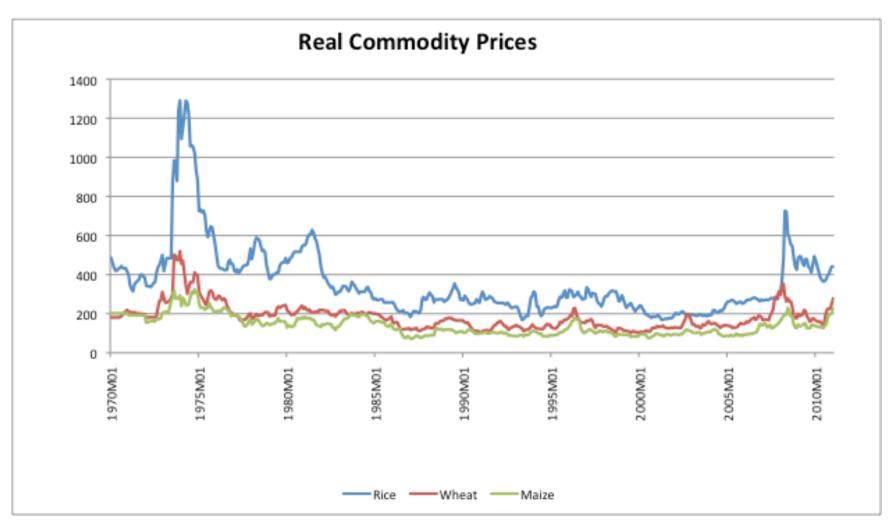
Food and cereal monthly world price index. Considerable instability since 2008. The indices have been computed by using nominal prices. The data cover the period from January 1990 to July 2015.



# Cereal commodity prices in long term perspective (current prices). Rice has been more volatile than other cereals



### Cereal commodity prices in long term perspective (real prices)



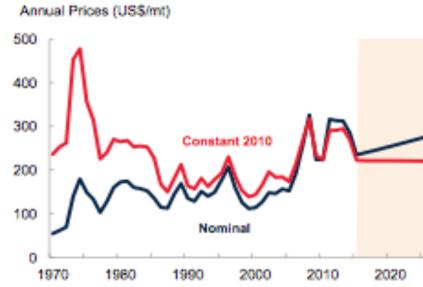
# After considerable instability in 2007-8 agricultural price instability for main cereals has continued but overall price trend is downward

#### Wheat



Source: World Bank.

Note: Last observation is June 2015.



Source: World Bank.

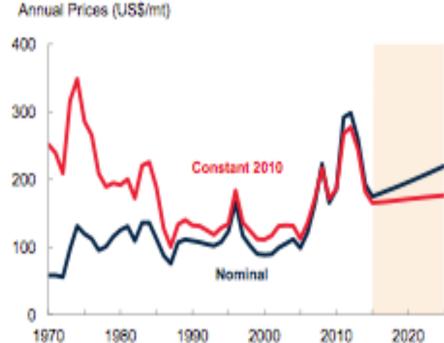
Note: 2015-25 are forecasts.

#### Maize



Source: World Bank.

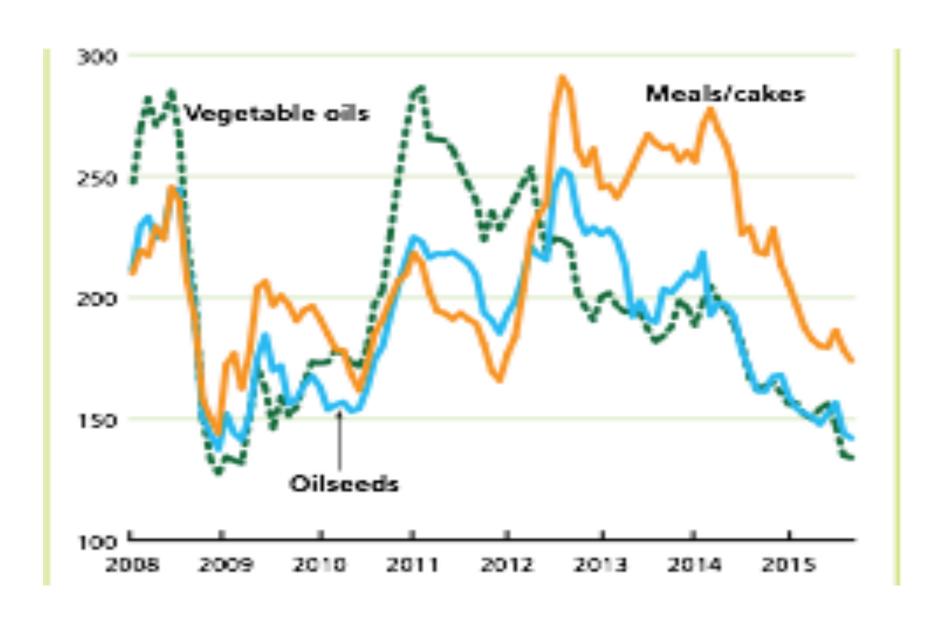
Note: Last observation is June 2015.



Source: World Bank.

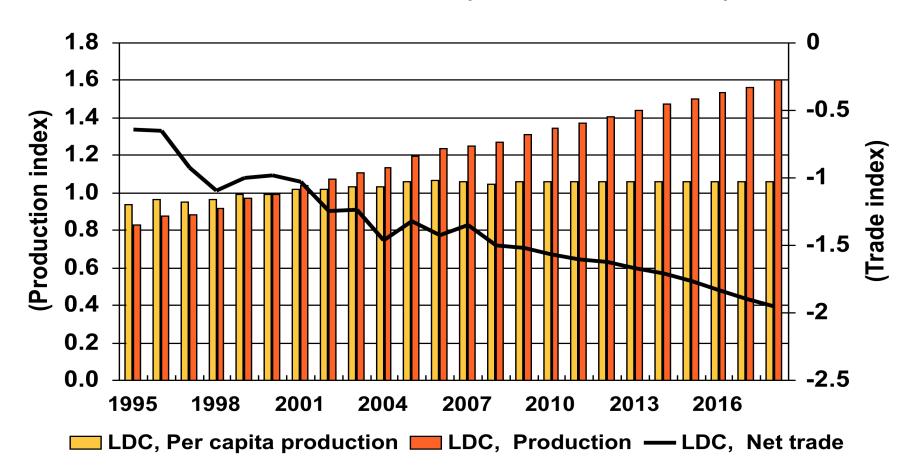
Note: 2015-25 are forecasts.

#### Oils oilseeds and oil seed meals prices 2005-2015

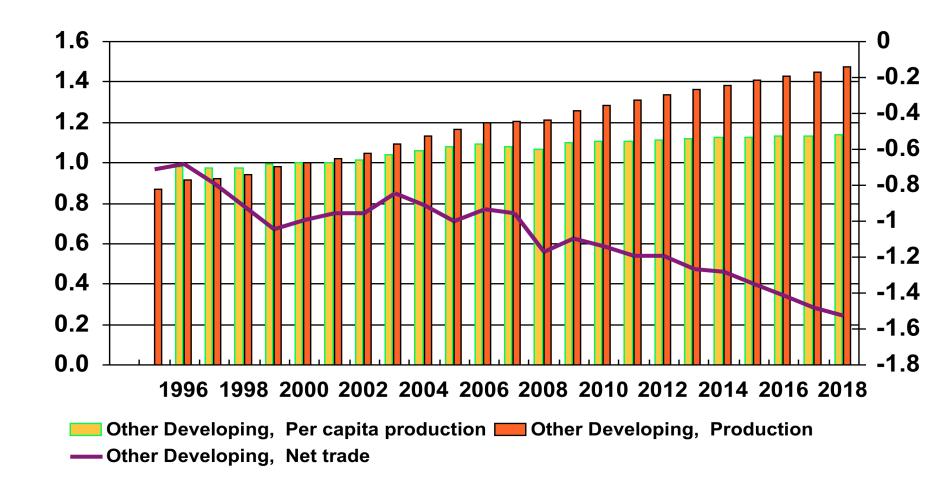


Volatility matters for developing countries because of increasing trade exposure.

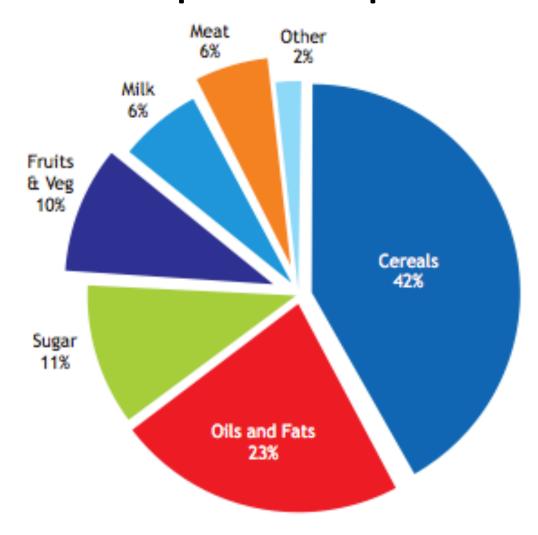
Medium term OECD-FAO projections of agricultural production and trade LDC Countries (Base 1999-2001 =1)



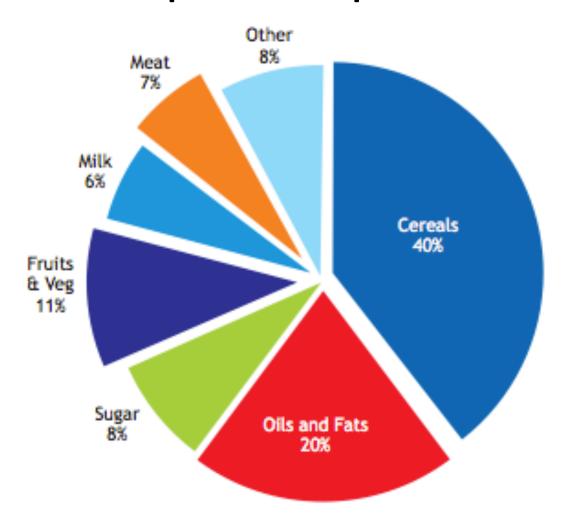
# Medium term OECD-FAO projections of agricultural production and trade for other developing countries (non-LDC, non-BRIC) (Base 1999-2001 =1)



### LDCs. Main commodity groups (in %) of the value of food and animal products imported 2000-2009

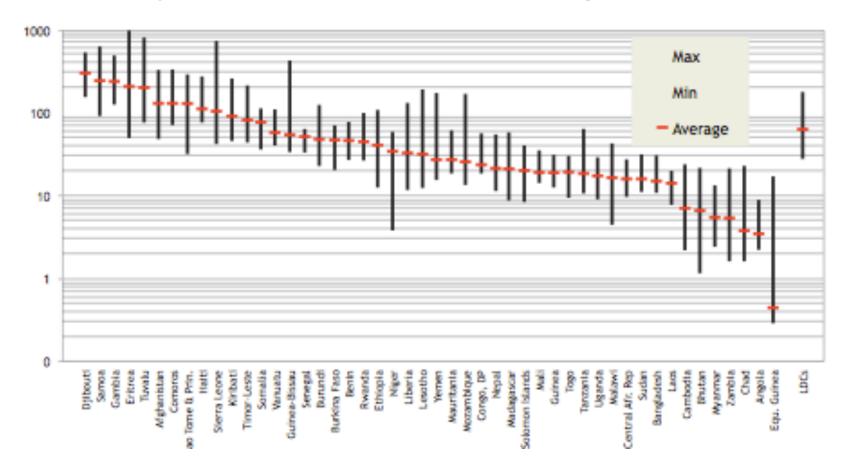


### NFIDCs. Main commodity groups (in %) of the value of food and animal products imported 2000-2009

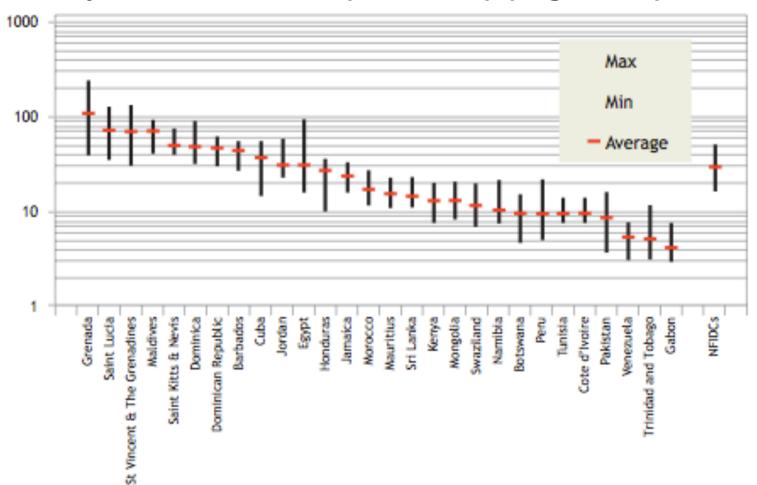


Developing countries spend a large share of the export earnings on agricultural imports.

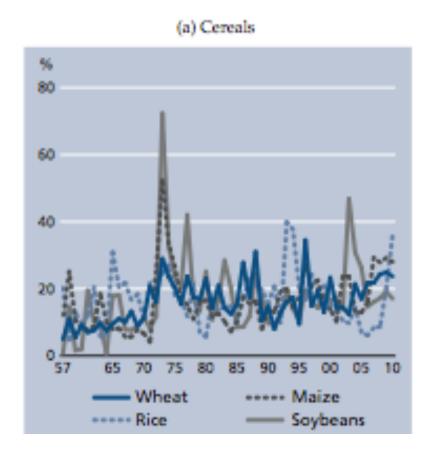
Shares of food imports (%) in total merchandise exports of LDCs (1990-09) (log scale)

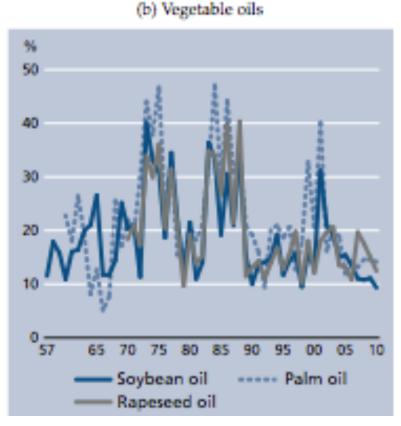


### Shares of food imports (%) in total merchandise exports of NFIDCs (1990-09) (log scale)

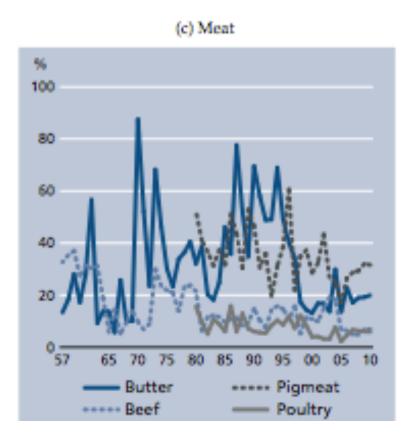


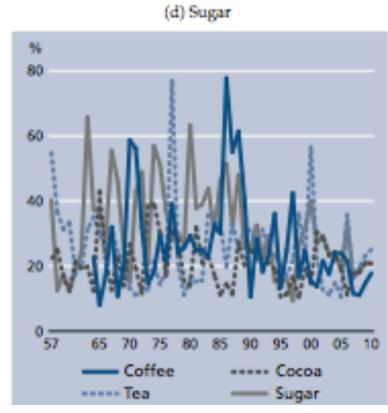
Has volatility increased? Annualized real historic volatility of selected food commodities 1957-2010 (Source. Prakash 2011)



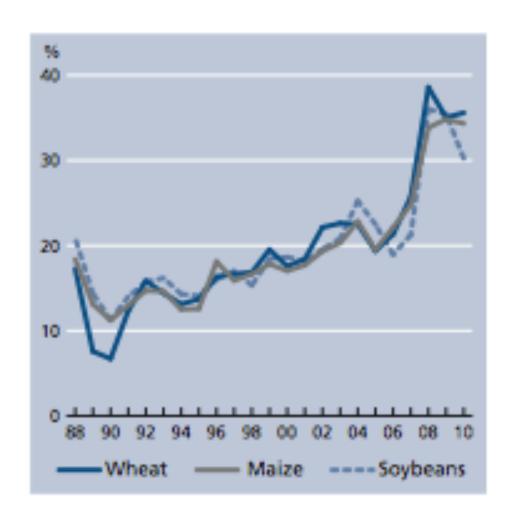


### Annualized real historic volatility of selected food commodities 1957-2010 (Source: Prakash, 2011)



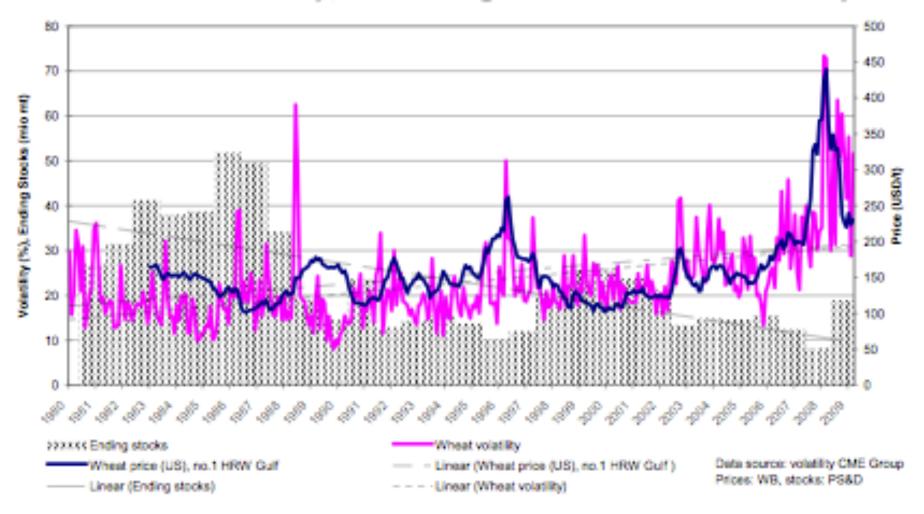


### Has volatility increased? Implied price volatilities 1987-2010. Proxies for unpredictability (Source: Prakash, 2011)



#### Volatility increases with high prices and low stocks

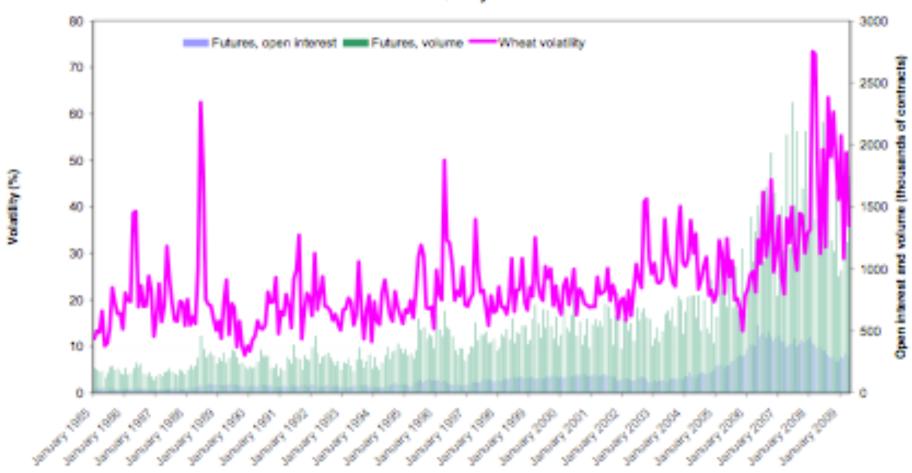
#### US Wheat Volatility, US Ending Stocks and Price Monthly



Source: European Commission

### Volatility is positively correlated with open interest and volume of trading in futures markets

US Wheat Historical Volatility, Futures Open Interest and Volume monthly



Data source: CME Group

Source: European Commission

### Main factors that have affected and will affect future grain market volatility

- Developments in total incomes and consumption (more price inelastic?)
- Developments in productivity (especially in DCs)
- Shocks to production (especially in exporting countries and major importing ones)
- Developments in global stocks (especially in exporters)
- Agricultural trade policies (both importing and exporting). Have been destabilizing in past
- Petroleum prices
- Biofuel policies and technology prospects
- Developments in USD exchange rates (most commodity prices are quoted in USD)
- Developments in financial markets and speculative fund positions
- New investments in agricultural production
- Overall: considerable uncertainty and likely volatility
- WTO only relevant to trade policies, but these in turn are not the most important

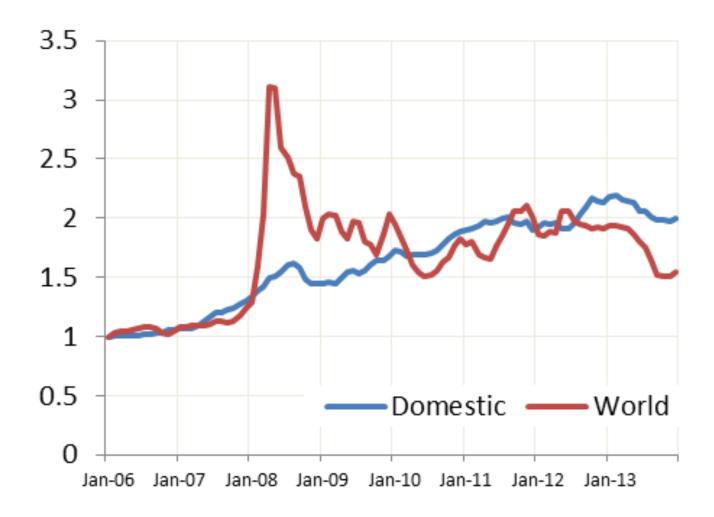
### Can agricultural market volatility be prevented or lessened?

- Major determinants of volatility are
- 1. Shocks to production and consumption
- 2. Passive and active border and domestic policies
- 3. Stock holding behavior
- Difficult to prevent food price spikes. Better to instill more confidence in markets so as to prevent hoarding behavior and overreactions by public and private agents
- To reduce volatility need to influence national food policies and stocks
- Policy changes through WTO, OECD, UN fora
- Border and domestic food policies must be WTO compatible.
- Main issue is to assure food import supplies at all times and at reasonable prices for low income countries

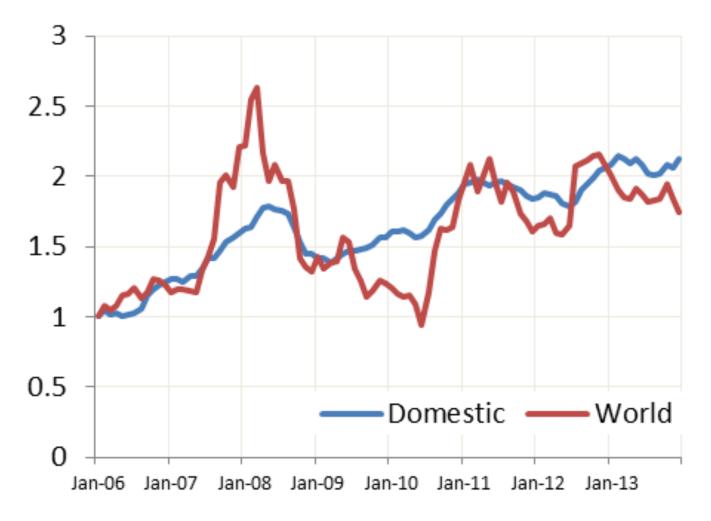
### What drives agricultural trade policy relevant to market volatility

- We have a great deal of theory to explain how policy makers set the level of protection
  - Depends on levels of political support
  - And the cost of protecting particular sectors
  - This theory guides our policy advice for trade reform
- But the past few years of price volatility have highlighted something very different
  - Policy makers set domestic prices to insulate against sudden price shocks
    - Particularly for staples like rice & wheat
  - But pass through longer run changes in prices

### Very strong insulation for rice



### Also strong insulation for wheat



#### Was the 2006-8 insulation a success?

- Policy makers insulated their domestic prices against the surge in world prices
- But their actions contributed substantially to these increases in world prices
  - A beggar thy neighbor problem
  - Even countries that don't want to insulate are forced to
- Each individual country sees its actions as a success
  - But is this the case for countries as a whole?

### Conceptual issues on volatility

- What matters for market participants is uncertainty, namely ex-ante unpredictability and not ex-post variability
- Risk is determined by exposure to uncertainty or unpredictability
- Unpredictability not easily measured, while expost variability readily measured
- Impacts of volatility on DCs large at both micro and macro levels because of large dependence on primary food commodities and credit constraints at both micro and macro levels

### Policy options for food importing developing countries to deal with external unpredictable food prices

- Trade policies (tariff changes, export taxes, restrictions) not very effective for preventing volatility, because generally are not state dependent. Need to be WTO compatible
- Domestic taxation policies: not very effective
- Stock policies. Not effective unless there is control of domestic market, and expensive. Need to be WTO compatible
- Short term input and other production subsidies (may work in some cases)
- Combine small scale market operations with effectively targeted safety nets
- Import hedging to cover price risks
- Regional free trade may help diffuse impacts of external and internal food shocks
- Coordination and information between private and public sectors

### WTO rules on agriculture relevant to agricultural instability: Situation prior to UR

- Special treatment of agriculture
  - GATT permitted QRs, exp/dom sub., var.levies
- NTBs dominated
  - only 20% of tariffs were bound in dev'd and less than 10% in dev'g
- huge <u>transfers</u> to farmers in OECD producers
  - in some cases 60-80% of farmer revenues
- surplus production
  - world prices <u>depressed</u> and <u>insulation</u> of domestic markets contributed to world market instability
- non-subsidizing countries <u>adversely</u> affected
- frequent trade <u>disputes</u>
  - 60% of all GATT disputes in the 1980s concerned agriculture

#### Achievements of the UR

- Agriculture into <u>rules-based</u> system
  - 3 pillars: limiting arbitrary actions at border and domestically
  - NTBs tariffied/reduced plus minimum access
    - nearly 100% of ag tariffs bound (better than NA!)
  - reduction in distortive domestic support and export subsidies
- new <u>disciplines on SPS</u>
  - facilitate trade and minimize their discriminatory effects
- <u>Disputes Settlement</u> strengthened
  - more accessible and its decisions more binding

### ... but also built-in asymmetries

- AoA meant to address mainly dev'd country problems
  - <u>structural surpluses</u> and associated trade distorting policies
- LDCs + NFIDCs had opposite problem
  - underproduction: due to own disincentive policies + OECD distortions
- but, all agreed to same production restraining provisions
  - potentially limiting their food policy options
- by design, but not intentionally
  - AoA (and its built-in agenda) is asymmetric
    - geared towards addressing problems of periods of cheap food, namely with interests of exporters in mind
- question:
  - is the basic premise of the AoA valid under high food prices, ie periods of interest to importing countries?

### The 75/25% problem

- five episodes of high and unstable food prices since 1970
  - 1974-76, 1980-82, 1988-90, 1995-97 and 2008-now
  - spikes in world food prices and high food import bills
- each episode lasting for about 2 years but recent period much longer
  - total 10 years over a period of about 40 years to 2008
  - about 25% of the time volatile/high prices
  - 75% of the time, world food prices and food import bills could be said to be on trend or depressed

#### questions:

- whether this 75/25% pattern is likely to hold in future
- is 50/50% more likely? Recent period suggests that frequency and duration of price spikes have increased
- in any case, are production/trade rules designed to deal with periods of cheap food adequate for periods of dear food?
- Can DCs use trade policy during a price spike? Not much

#### WTO instruments related to instability

- Three categories of instruments/related WTO provisions
  - regarding impact on affected countries and possible unintentional effects on third <u>food importing countries</u>
- first, measures that are trade enhancing
  - predicted/limited effect on word market and third countries
  - examples: reduction of import tariffs, FIFF (Food Import Financing Facility), export credits
- second, measures that are trade restrictive
  - aggravate situation and affect adversely third countries
  - examples: export prohibitions/restrictions, possibly STEs
- third, measures which are relatively neutral
  - lessen short-term pressure on world market and thus indirectly beneficial to third food importing countries
  - examples: domestic stockholding, targeted food aid
- Overall, WTO measures
  - can be helpful at the margin but not the answer to the problem!
  - strengthening the rules could help
    - more flexibility on relatively neutral policies
    - more restraint on those that aggravate the situation

#### Export prohibitions, restrictions and export taxation

- technically legal under Article XI of GATT
  - "to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party"
- Art 12 of AoA adds very little
  - "give due consideration to the effects of such prohibition or restriction on importing Members' food security"
  - not applicable to developing countries, unless a "net-food exporter"
- very little attention paid to these provisions during recent crisis
  - not even consultations or notifications to CoA as stipulated
  - reinforced doubts about the world market being a reliable source of food supplies; detrimental to negotiations
- weak provisions remain in draft text
  - despite concrete proposals for more symmetrical rules on exports and imports
- WTO lost a unique opportunity to reassert itself
  - show its relevance in periods of high prices as well
  - a heavy price may have to be paid for this!

### Food aid

- current provisions more guidelines than rules
  - no real restraining effect on food aid
  - food aid levels largely supply driven, perverse relationship
  - also, allocation not always to needy
- envisaged disciplines tighter
  - emergencies and non-emergency situations
    - Safe Box for fist, tighter rules for second
  - move in the right direction
    - better allocation/targeting
    - avoiding displacement and disincentives
  - but emergency situations not fully defined
    - cases of soaring world food prices included?
    - even if, how to use food aid in the absence of established targeting mechanisms?
- perhaps new rules, if volumes decline
  - due to market conditions (high food prices continue), or
  - unwillingess of major donor (US) to move away from in-kind

### Export credits, credit guarantees or insurance programmes

- no specific rules prescribed in the AoA
  - development of such rules was part of built-in agenda
- envisaged disciplines in draft texts
  - maximum repayment term no more than 180 days
  - <u>self-financing</u> schemes by the interest rate charged
  - tighter set of rules than what presently practiced
- SDT provisions
  - 360-540 days for LDCs and NFIDCs facing "very exceptional difficulties" (not defined)
  - should result in better targeting to countries in greater need
- further improvements could be made
- Less divergence than in other segments of the negotiations but still no consensus on the elements of any broad agreement
  - clarify "very exceptional difficulties" (link to the similar concept in food aid?)
  - SDT for LIFDCs

#### **STEs**

- main concern is on exporting STEs
  - avoid undermining the other disciplines on the export competition pillar
  - hence main discipline under discussion is the elimination of all forms of subsidization of STEs
- S&D provisions for STEs in developing countries
  - with social objectives in their state trading activities such as domestic price stability, food security and rural development, and/or
  - are small to have an effect on world markets and are not otherwise inconsistent with other WTO rules
- most STEs in developing countries meet these criteria
  - generally importing STEs for basic foodstuffs
  - would not be constrained, although
  - their positive contribution not automatic
    - would depend on how effectively they pursue their stated social objectives.

#### **Marrakesh Decision and FIFF**

- Existing facilities (notably IMF's CFF) of little use
  - due to major difficulties/conditionalities in accessing them
- not much has been achieved in implementing Decision
  - despite efforts made by countries concerned with support of FAO/ UNCTAD
- Food Import Financing Facility (FIFF)
  - dedicated instrument with clear rules for access
  - market-based and self-financed aside from a start-up capital and callable obligations by donors
  - similar in functionality to export credit guarantees but with multilateral and more transparent rules for accessing funds
- Recent soaring prices validated need for such instrument
  - reassurance to LDCs/NFIDCs that world market is an affordable source of food supplies
  - again, this would have done wonders for the Doha Round and at a very modest cost!

#### **Compensatory financing arrangements**

- Only facility that currently exists is the IMF's Exogenous Shocks Facility (ESF), established in 2008
- It includes a High Access Component (HAC) that provides concessional financing for countries eligible under the Poverty Reduction and Growth Trust (PRGT), facing balance of payments difficulties caused by sudden and exogenous shocks.
- Has been superseded as of 2013 by the Standby Credit Facility (SCF), which provides financial assistance to Low Income Countries (LICs) with short term balance of payments problems in times of shocks or crises.
- Funds available under this facility are loans that carry low interest rates (0.25 percent), have a grace period of 4 years, and are subject to the IMF's conditionalities that aim to correct the causes, if any, of the situation that brought about the shock or crisis.
- The IMF also has other relevant short term financing instruments such as the Rapid Credit Facility.
- While several countries received support under the ESF since 2008, and it remains the IMF's main compensatory financing mechanism, complaints remain that it is too cumbersome and subject to conditionalities.
- EU's FLEX facility. Reviews of its performance have shown that this facility has suffered from inadequate finance and delays in the financing procedures. The EU's V (for vulnerability)-FLEX mechanism that was approved in 2010 is a short term instrument designed to support vulnerable ACP countries subject to external shocks, and has received support of 500 million Euro but for only two years. The funds available from these programs are grants, compared to the IMF funds that are loans.
- Idea that dates to the Uruguay Round is a Food Import Financing Facility (FIFF). Idea is to facilitate food import finance in times of high prices, and when the financing for food imports for poor food dependent economies reaches limits imposed by international private banks that finance food trade. While the idea received some discussion in the WTO, it did not advance, and while it resurfaced in the recent food crisis nothing was done to advance it.

#### Stockholding and domestic food aid

- often policies of choice for dev'g countries in past
  - respond to domestic and world market instability
  - provide a minimum support to farmers
  - help consumers through food distribution schemes
- existing AoA rules allow these instruments
  - although possible limitations depending on their bound AMS levels
- Under proposed agreement, these restrictions are relaxed considerably
  - exemption from AMS when subsidized purchases from lowincome or resource-poor producers +
  - objective of fighting hunger and rural poverty
  - but considerable opposition by developed countries
- may be of some value in the future
  - if, in response to uncertainties about soaring food prices,
     more countries opt for putting in place such schemes

#### Agricultural product stockholding issue in the WTO

- Earliest proposal in 2002 by African group, aimed at removing reference to AMS (trade distorting support) and putting these programs under the Green box
- 2006 draft modalities excluded it from AMS calculations if aimed at poor producers
- 2013 Bali. "Peace clause" shields existing programs of developing countries against legal challenge if support leads them to exceed agreed limits. Issue discussed under food security
- 2014 Bali interim "peace clause" confirmed. Members agreed to strive for permanent solution by the end of 2015;
- Supposed to happen in Nairobi in December 2015

# A system to ensure food imports in low income countries net grain importing countries through a dedicated Food Import Financing Facility

- •The major problem faced by LDCs and NFIDCs during periods of food import needs in excess of normal commercial imports, is import financing for both private as well as parastatal entities
- Major reason for this is exposure limits of exporting country private trade financing banks to various developing countries
- •Need system that can provide guarantees to trade financing banks to increase temporarily their exposure limits to grain importing countries

#### Basic rationale and concept of a FIFF

- <u>Purpose</u>: To allow LDCs and NFIDCs to finance commercial food imports in periods of excess import bills
- Problem to be dealt with: Credit and financing exposure ceilings from developed country financing institutions to LDCs and NFIDCs
- <u>Concept</u>: Provide additional finance for commercial food imports in <u>excess</u> of normal commercial food imports. In other words increase risk bearing capacity of financial institutions financing food imports
- <u>How</u>: By inducing increases in credit ceilings and country exposures under specific conditions, via a credible mechanism of intermediation. This can be effected by sovereign loan guarantees for the additional financing (only) by developed countries. Amounts of guarantees would not surpass 10-15 percent of food import bills of LIFDCs and would constitute a very small fraction of total debt levels of major donors (less than 0.05 percent).
- A system of this nature was discussed in WTO during the UR negotiations under the so-called Marrakesh decision, but never agreed upon. This could be a major instrument to deal with agricultural market spikes

## Global safety net. Proposal for a Global Financial Food Reserve (GFFR)

- Aim not to prevent spikes but to have some resources to assist quickly countries most affected by price spike
- Idea to establish a fund that would maintain a long position in basic commodities in organized exchanges (much like existing financial commodity funds). This would constitute a "virtual commodity reserve" to act as a dormant physical commodity reserve.
- When markets would go into a spike, as signaled by high probabilities of crossing appropriate price bands, the GFFR could either take delivery or take monetary profits. Such physical or financial resources could be utilized to assist, according to pre-specified rules, highly affected countries to lessen the extra cost of food commodity imports
- Would act as part of a global safety net for low income net food importing countries
- Cost modest. Between 2006 and 2008 the total cereal import bill of LDCs increased by roughly 20 percent or about 4 billion US\$. If 10 percent of that could have been considered as extraordinary cost of vulnerable poor countries that would be compensated by developed countries as extraordinary aid under some global safety net, then this would amount to 400 million US\$.
- If the fund before the crisis was of a size of 100 million US\$, and it was all invested in cereal stocks via long future positions, then at 5 percent margin it would have commanded physical amounts, worth about 2 billion US\$. The profits from a 20 percent increase in prices during the spike (and the actual increase during a spike would have been much larger than this) would then have been around 400 million US\$

### Conclusions (1)

- Policy makers appear to adjust protection in response to changes in world prices
  - This makes sense for individual countries
    - Both for political-economy considerations and in light of poverty reduction goals
- In the short run, food price increases appear to increase poverty
  - But to lower it in the longer term
    - When supplies adjust and unskilled wage rates rise
- Collectively, insulation appears to be ineffective
  - Need to develop policies that work
  - Lots more research and policy development needed

### Conclusions (2)

- WTO rules for agriculture designed mostly for low prices not high prices
- WTO does not prevent many of the policies that lead to price spikes (export prohibitions)
- WTO rules could lessen agricultural market volatility
- WTO has not expanded into food import financing issues, albeit important for low income food deficit countries
- Not much on stockholding policies albeit they can prove stabilizing
- Trade policies are slow to change in response to external conditions, hence cannot adapt fast to external market upheavals. WTO has moved to prevent state dependent trade policies (variable levies).

#### **Epilogue**

- Issue of supporting food dependent low income developing countries to deal with unexpected food shocks, has been y high on the agendas of high level meetings, since 2006.
- However, not much has been accomplished in terms of additional resources to support new institutions designed to deal with such unusual events.
- Reason maybe that the most vulnerable of these countries do not have a voice in setting the agendas of the G8 or G20 meetings
- With declining world food prices, the risk is that the item may disappear from the priorities of major donors, as it did after the past world food crises.
- WTO can become more relevant to developing countries by adopting measures and rules that will help them to deal with future food price spikes

# Thank you