# UNCTAD

## GLOBAL COMMODITIES FORUM 2013

**Recommitting to commodity sector development as an engine of economic growth and poverty reduction**

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# Managing commodity price instability: Why grains are different

By

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# Managing commodity price instability

*Why grains are different*

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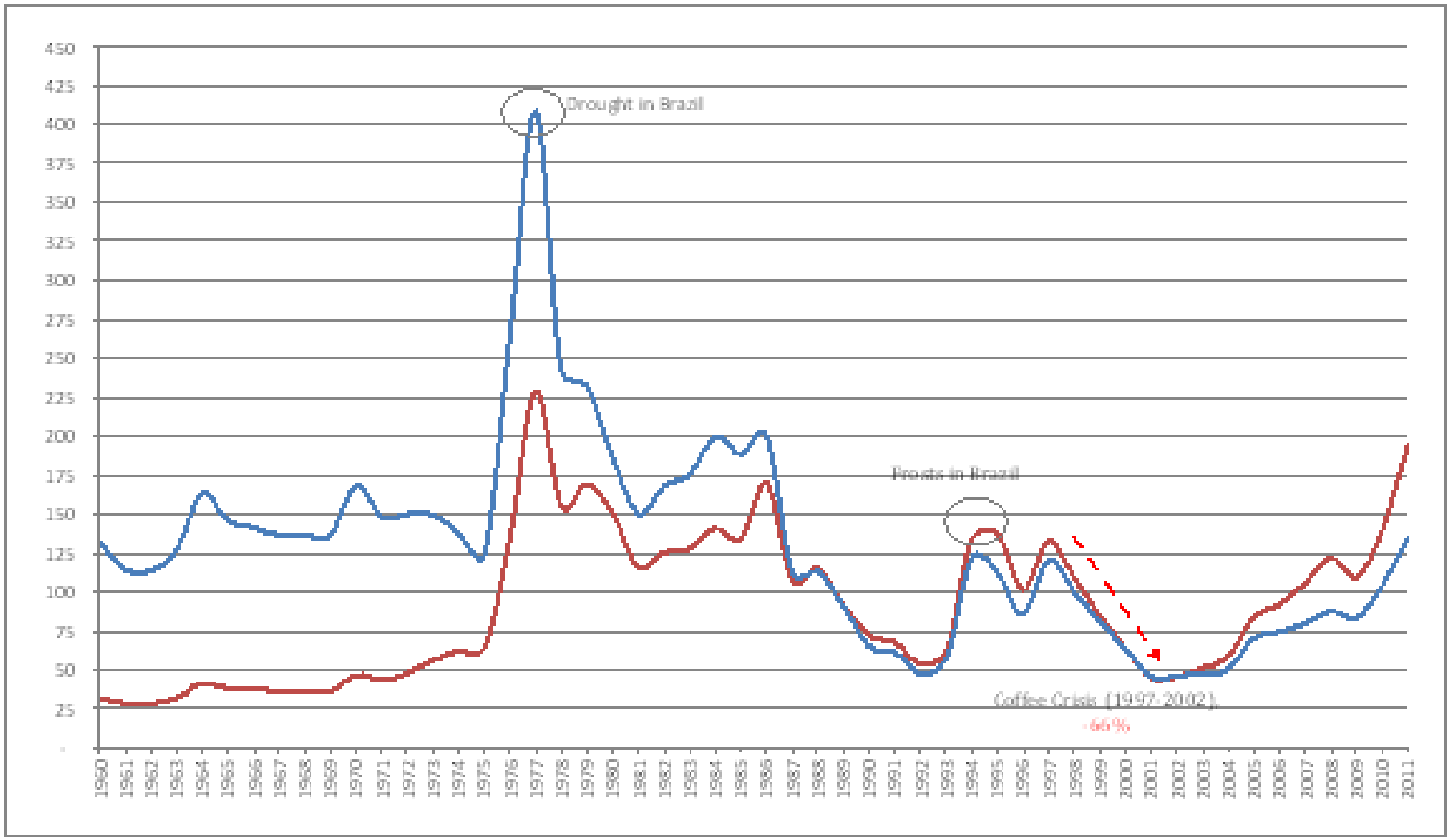
# Plan of the presentation

1. Magnitude of grain price instability
2. Consequences for developing countries
3. Panorama of the available solutions
4. The former doctrine
5. The current doctrine.
6. The specificity of grains.
7. Implications for the relevance of applying the doctrine to grain
8. Which alternative?

Conclusion: which model to manage grain price instability?

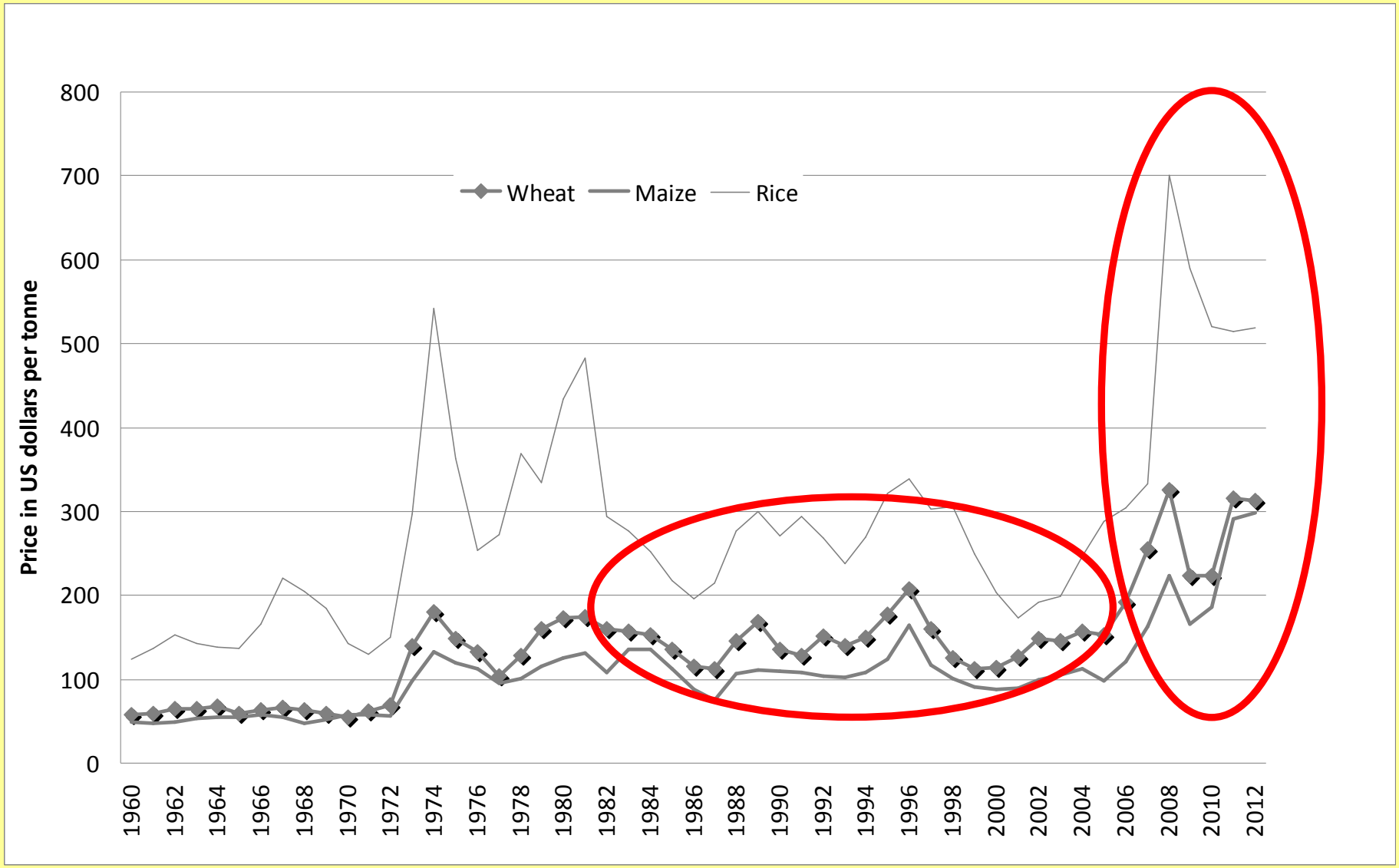
# *1. Magnitude of commodity price instability*

# Coffee




Source: UNCTAD PCS

# Grain




Source: IMF

# *2. Consequences for developing countries*

# Consequences

The instability of international prices may affect:

- Countries (balance of payment problems: fall in currency earnings; rise of import bills)
- Farmers (risk that discourages agricultural investment)
- Consumers (for some commodities)

# *3. Available solutions*

# Available solutions

| Goal / Means | Stabilize prices | Reduce the effects of price instability |
|---|---|---|
| Market-based | **Strategy A** ***Free trade*** | **Strategy B** ***Hedging of price-risk and credit*** |
| Based on public interventions | **Strategy C** ***International buffer stock*** ***Export control*** | **Strategy D** ***Compensatory transfers*** |

Source: Galtier (2013a)

# *4. The former doctrine (1950s – 1980s)*

## *Building a "new international economic order"*

# Building a "new international economic order"

| Goal / Means | Stabilize prices | Reduce the effects of price instability |
|---|---|---|
| Market-based | **Strategy A** *Free trade* | **Strategy B** *Hedging of price-risk and credit* |
| Based on public interventions | **Strategy C** *International buffer stock* *export control* ***ICAs*** *[countries and farmers]* | **Strategy D** *Compensatory transfers* ***STABEX*** *[countries]* |

- **ICAs → Integrated Program for Commodities proposed by the UNCTAD**
- **STABEX (EU-ACP countries)**

# Abandonment

- The end of ICAs' stabilization schemes (1980s)

Table 1. *General features of ICAs*

| | Cocoa | Coffee | Rubber | Sugar | Tin |
|---|---|---|---|---|---|
| First agreement | 1972 | 1962 | 1980 | 1954 | 1954 |
| Current/final agreement | 4th* | 4th* | 3rd | 4th | 6th |
| Date | 1986 | 1983 | 1996 | 1978 | 1982 |
| US membership | no | yes* | uncertain* | yes | no |
| Breakdown/lapse of economic clauses | suspended | suspended | continues | lapsed | collapsed |
| Date | 1988 | 1989 | | 1983 | 1985 |
| Buffer stock | yes | no | yes | no | yes |
| Ceiling | + 17.3% | n.a. | + 28.6% | n.a. | + 15% |
| Floor | – 17.3% | n.a. | – 25.2% | n.a. | – 15% |
| Must sell/buy | ± 17.3% | n.a. | ± 20% | n.a. | ± 15% |
| May sell/buy | ± 14.5% | n.a. | ± 15% | n.a. | ± 5% |
| Export controls | no | yes | no | yes | yes |
| Withholding provisions | yes | no | no | no | no |
| Implemented | no | n.a. | n.a. | n.a. | n.a. |

*The fifth ICCA, which came into force in 1993, and the fifth ICoA, which came into force in 1994, lack buffer stock and export control provisions. The fifth ICCA has withholding provisions. The United States was a member of the fourth ICoA and the second INRA but did not join the fifth ICoA. Its attitude to the third INRA is to be determined by the end of 1995. Buffer stock trigger prices are defined relative to the (actual or implicit) central reference price.

Gilbert (1996)

- The end of STABEX (1975-2000). *Accords de Cotonou*

# *5. The current doctrine :*

*Relying on trade and hedging*

# The current doctrine : relying on commodity and financial markets

| Means \ Goal | Stabilize prices | Reduce the effects of price instability |
|---|---|---|
| Market-based | **Strategy A**<br>***Free trade***<br>***WTO rules***<br>*[Countries – Farmers – Consumers]* | **Strategy B**<br>***Hedging of price-risk and credit***<br>***futures markets***<br>*[Countries – Farmers]*<br>***IMF credit facilities***<br>*[Countries]* |
| Based on public interventions | **Strategy C**<br>***International buffer stock***<br>***export control*** | **Strategy D**<br>***Compensatory transfers*** |

# Questions

Q1: Is this doctrine better than the previous one?

Q2: Is this doctrine enough to manage commodity price instability?
(*cf.* the coffee crisis of early 2000s)

Q3: Is this doctrine relevant for the case of grain?

# *6. The specificities of grains*

# The specificities of grain

1. The weight of country self-consumption (only 10% of grain production is traded on international markets)

2. The crucial role of grain for the food security of DC consumers
   i) % of caloric intake
   ii) % in expenditures

Proportion of grain in the diet and household expenditures in Mali

| | Proportion of grain in dietary calories | Proportion of grain in food expenditures | Proportion of grain in total expenditures |
|---|---|---|---|
| Average for rural households | 86.0% | 51.1% | 34.9% |
| Average for the poorest 20% of rural households | 88.6% | 57.6% | 44.3% |
| Average for the richest 20% of rural households | 82.0% | 44.1% | 26.5% |
| Average for urban households | 73.1% | 31.9% | 18.4% |
| Average for the poorest 20% of urban households | 78.6% | 38.5% | 27.3% |
| Average for the richest 20% of urban households | 68.0% | 27.4% | 13.6% |

*Source: Bocoum (2011).*

# How the doctrine takes into account these specificities

| Goal / Means | Stabilize prices | Reduce the effects of price instability |
|---|---|---|
| Market-based | **Strategy A**<br>***Free trade***<br>***WTO rules***<br>*[Countries – Farmers – Consumers]* | **Strategy B**<br>***Hedging of price-risk and credit***<br>***futures markets***<br>*[Countries – Farmers]*<br>***IMF credit facilities***<br>*[Countries]* |
| Based on public interventions | **Strategy C**<br>***International buffer stock***<br>***export control*** | **Strategy D**<br>***Compensatory transfers***<br>***Emergency food aid***<br>*[Countries – Consumers]* |

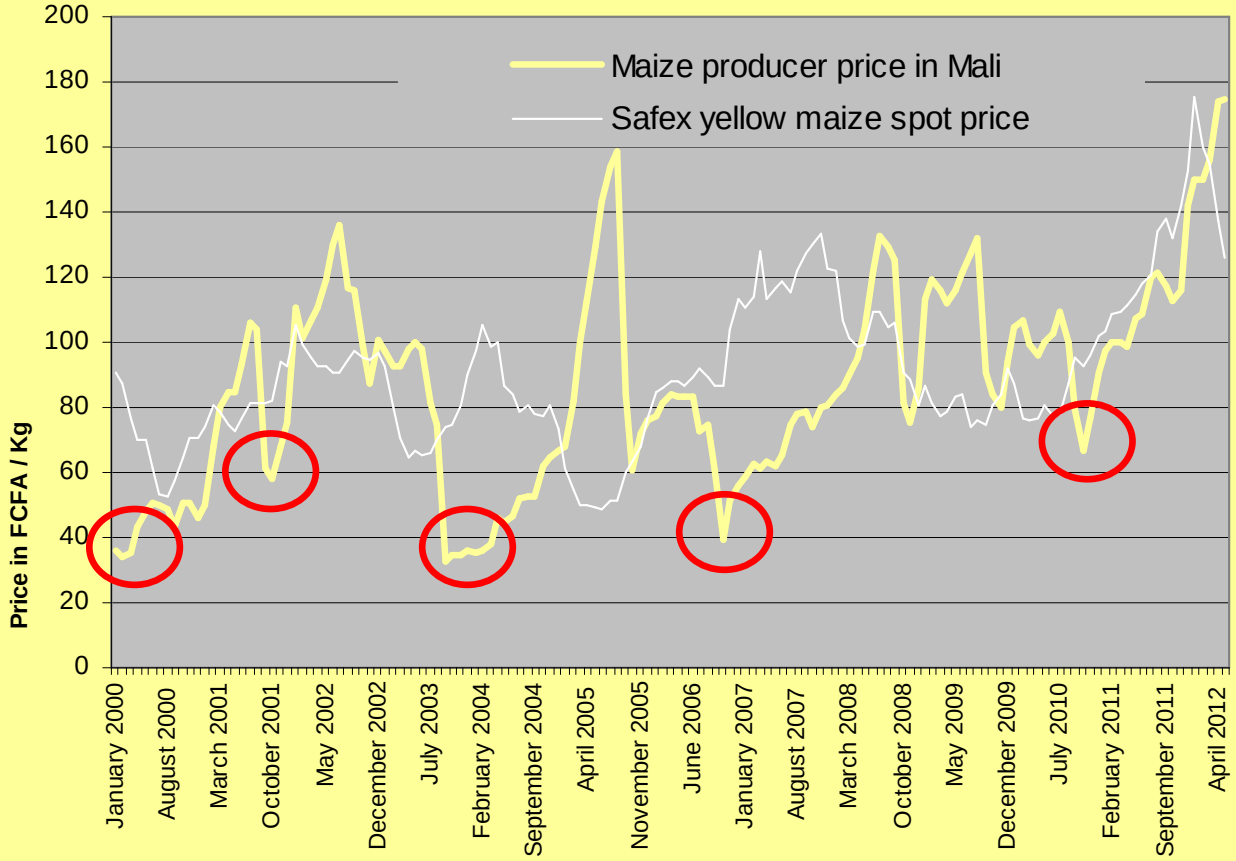
Is it enough?

# *7. Implications of grain specificities for the effectiveness of the doctrine*

# (1) Implications of the weight of country self-consumption

•International grain markets are thin → free trade stabilizing effect is limited
→ low effectiveness of Strategy A

•Futures markets are missing for some grains (millet, sorghum, rice) and basis risk are high (see the example below).




Source: Galtier (2013b)

→ low effectiveness of Strategy B

# (2) Implications of the importance of grain for consumer food security

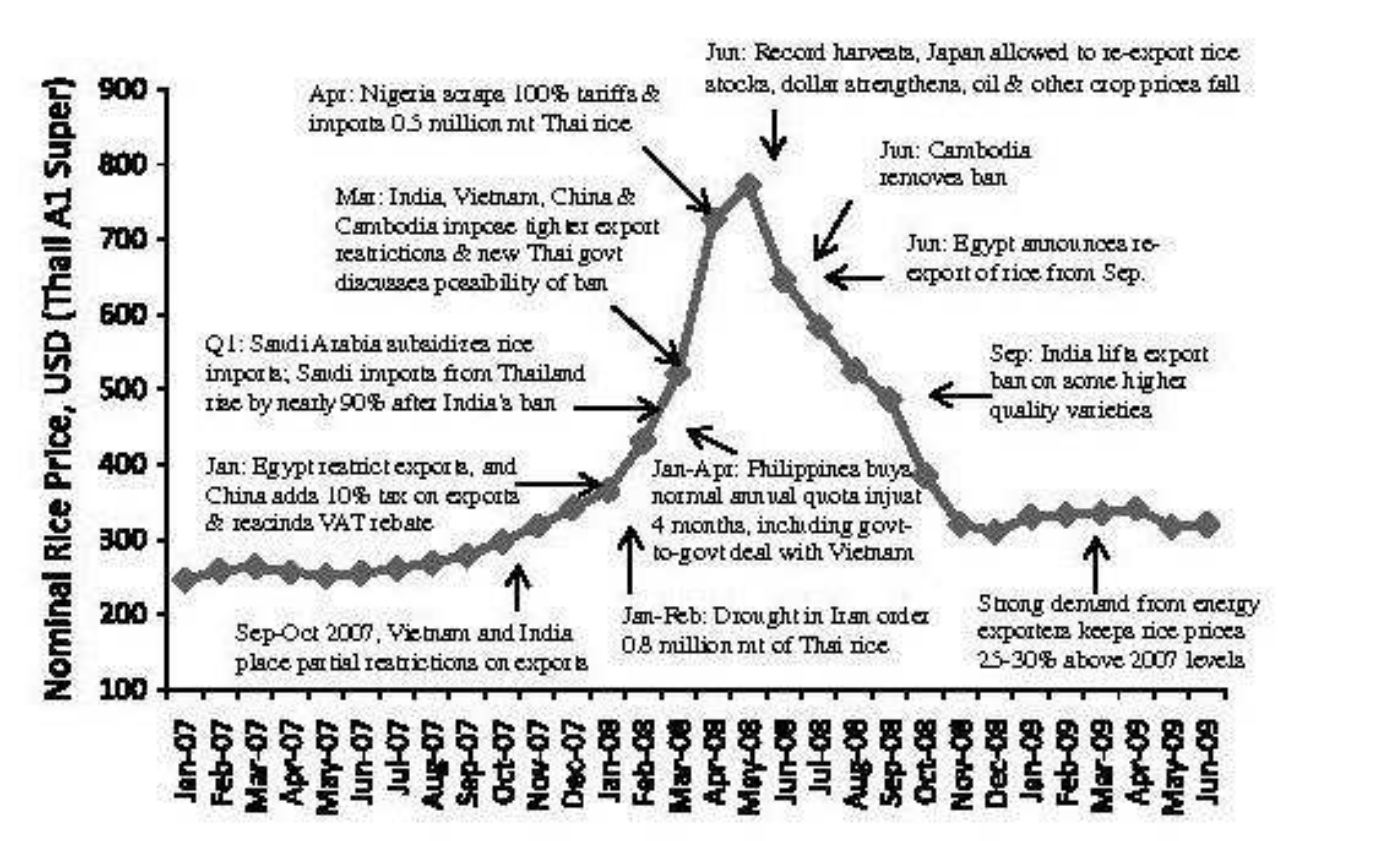
•Markets are less effective to prevent spikes than collapses (because of the non negativity of stocks, *cf.* Williams and Wright, 1991)
→low effectiveness of Strategy A to protect consumers

•Consumers are not able to use futures markets (the quantity they buy are too low to make it profitable). The use of futures markest by importers does not protect consumers.

→ Strategy B is not effective to protect consumers

# (3) Joint implications of (i) the weight of country self-consumption and (ii) the importance of grain for consumer food security

•Exporting DCs are likely to implement export bans in case of price surge, potentially leading to an « export bans bubble » (as happened in 2008):

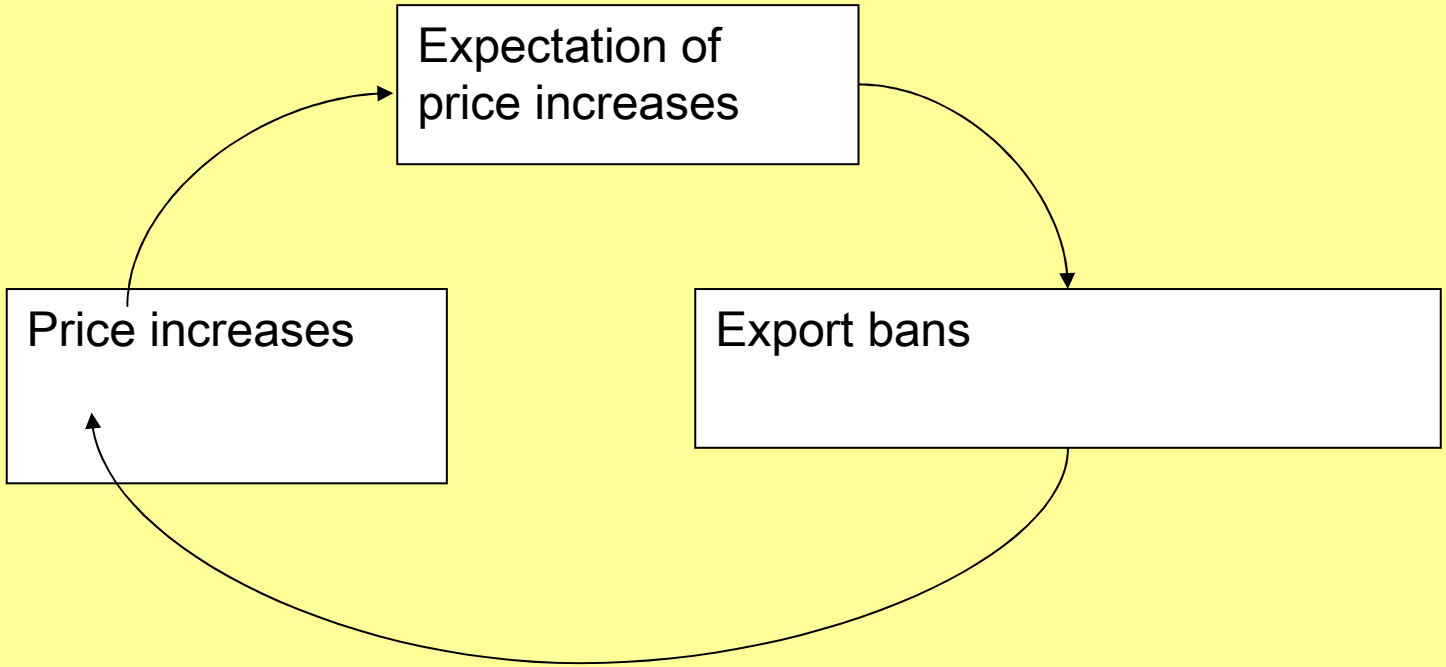



Source: Headey (2011)

→ **Strategy A is highly ineffective for grain**

*8. Can this problem be solved inside the framework of the doctrine?*

# The mechanism of export bans bubbles



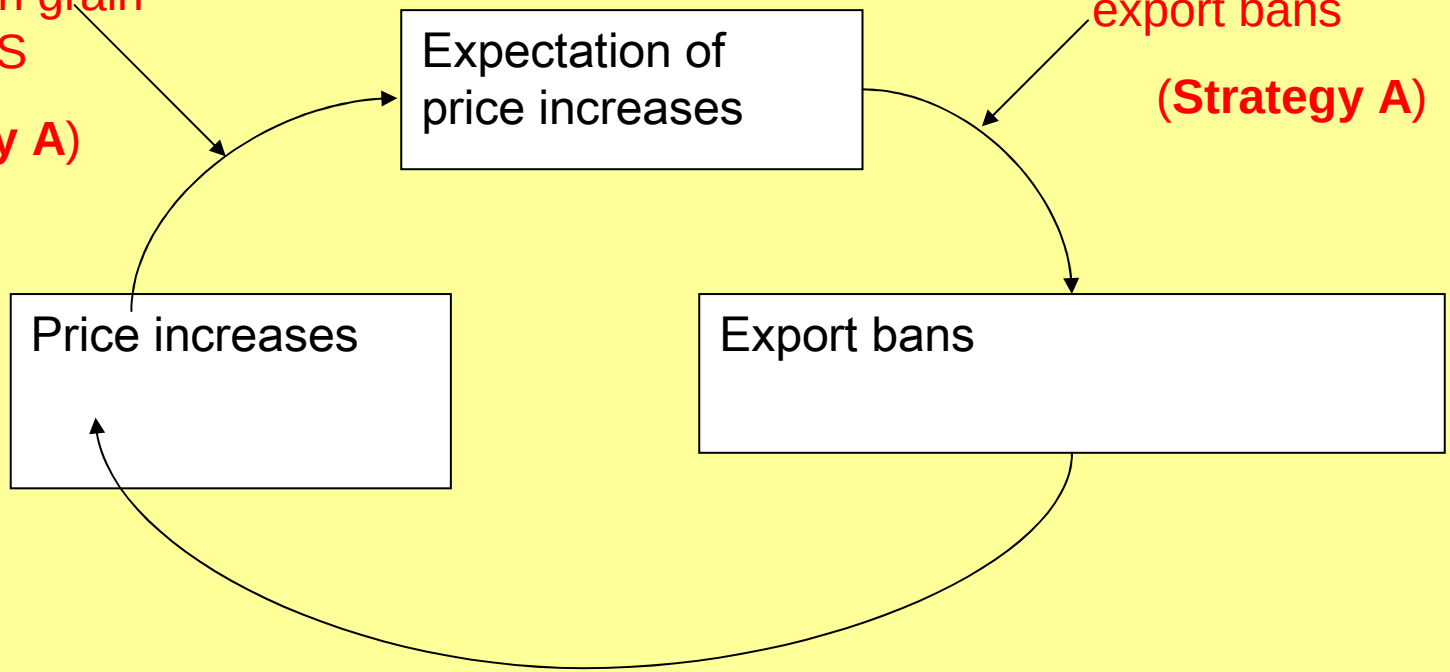
# The solutions proposed by the doctrine

Improve market information (especially on grain stocks): AMIS

(**Strategy A**)

Strenghten WTO rules to forbid export bans

(**Strategy A**)



# Is it possible to prevent export bans bubbles through dissemenation of data on grain stocks?

1. **Is it possible to collect reliable data on grain stocks?**
   a. **Many governments do not know the level of private stocks in their country.**
   b. **Some governments are reluctant to communicate data on the level of their grain public stocks.**

2. **If such data were collected and disseminated would it be enough to prevent governments for implementing export bans?**

   a. **It is rather uncertain**
   b. **In fact, if stocks are low, transparency on stocks can even generate speculation and panics**

# Is it possible to set up and to enforce rules to forbid export bans?

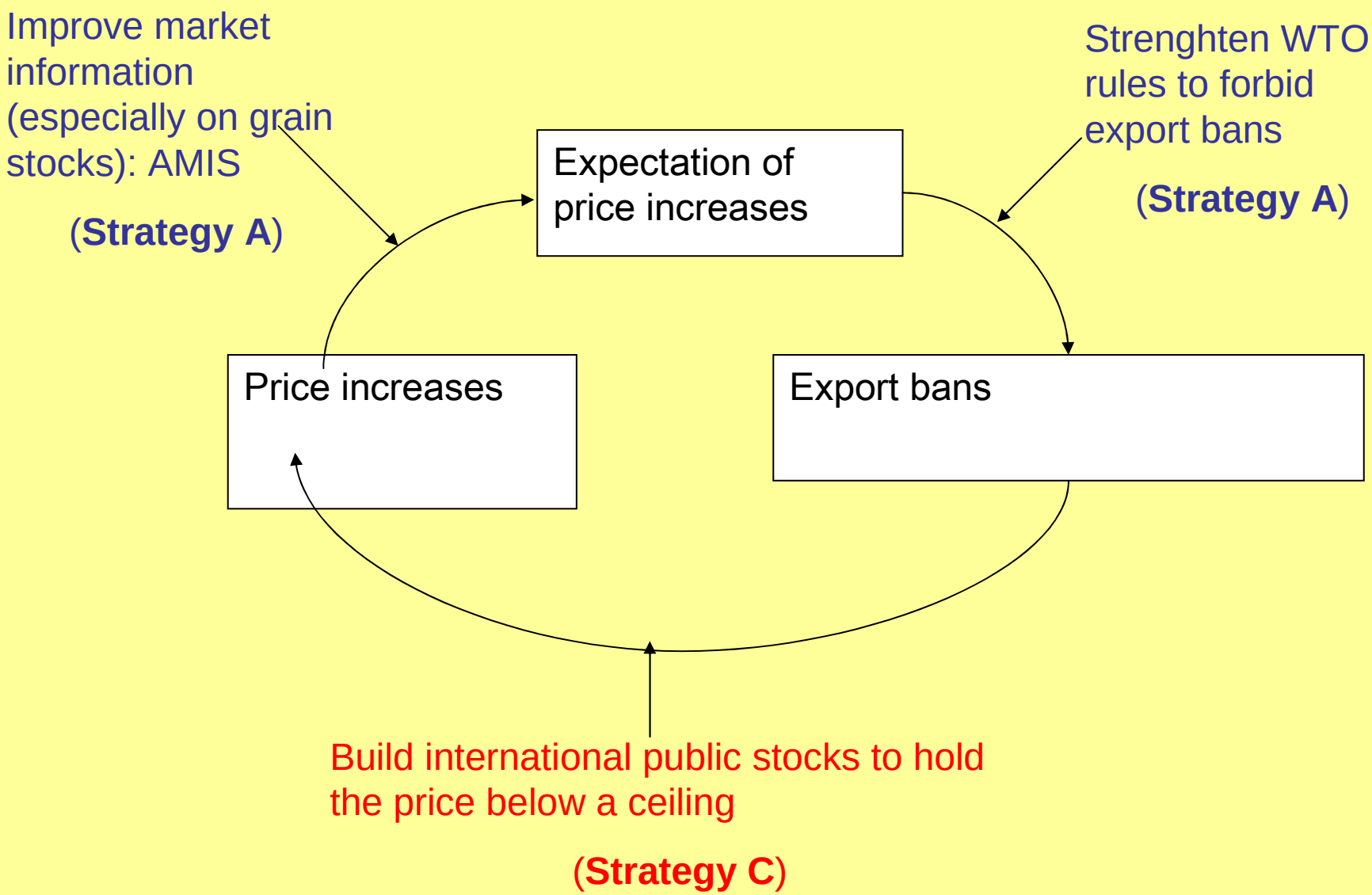
1. **Is it possible to change the rules of the WTO regarding export bans?**
   a. **Lessons of the G20 negotiation: many countries are against.**
   b. **G20 agreement: not to impose anymore export bans on WFP food aid.**
   c. **Enforcement of this decision: no endorsement by the WTO Ministerial Conference in December 2011.**

2. **If new rules were adopted, would it be possible to enforce them?**
   **a. For many exporting countries, the dilemma would be between:**
   - **complying with the rules of the WTO**
   - **maintaining prices at a reasonable level to avoid food insecurity and social instability**

   **b. No doubt they would choose the second option**

# *8. Which alternative?*

# Which alternative?



# Objections

## Main objections:

- It is difficult to set up and update the price band
- The buffer stock may be exhausted (Townsend)
- The buffer stock may be suject to speculative attacks (Salant)
- The failure of ICAs (namely the cocoa agreement)

# These objections are not decisive

Main objections:

- It is difficult to set up and update the price band

  → MA(P)

- The buffer stock may be exhausted (Townsend)
- The buffer stock may be suject to speculative attacks (Salant)

  → The stock should be lar ge enough

  → The use of grain for other purposes than human consumption (namely biofuels) may be restricted in case of grain price spike (Wright, 2010)

- The failure of ICAs (namely the cocoa agreement).

  → This failure was mainly due to the fact that the real objective of ICAs was to *support* prices , not to *stabilize* them (Gilbert 1996; OCDE 2011; Gilbert 2012)

## *8. Conclusion. How to manage grain price instability?*

# The doctrine is not enough to manage grain price instability

•In the short run, DCs are likely to implement export bans in case of price surge, potentially leading to « export bans bubbles » (as happened in 2008)

•In the long run, DCs are likely to develop self-sufficiency policies, leading to:

- A vicious cycle between price instability and market narrowness
- A poor allocation of resource at the global level leading to an increase in the average cost of food

→ Empirical evidences of such policies since 2008

• The solutions proposed by the doctrine to restore the confidence in international grain market (AMIS, WTO rules on export bans) are very unlikely to solve the problem

# An alternative policy is possible

The components of this policy are the following:

1. Define a price band (Pmin ; Pmax) for wheat, maize and rice and rules to update the band (MA of past prices)
2. Build international reserves of wheat, maize and rice and rules to trigger their use (depending on Pmin and Pmax).
3. Set up rules to restrict the use of grain for purposes other than human consumption (namely biofuels) when grain prices reach Pmax.

This policy would allow to restore confidence in international grain market (as already stated by Keynes, 1942)

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# *To go further*

## A book

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*Thank you for your attention*

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