

United Nations Conference on Trade and Development

**14th Multi-Year Expert Meeting on Commodities and Development**

**09-11 October 2023, Geneva**

**(Food security) PS as response to excessive price volatility and the related WTO debate**

By

Franck Galtier, Cirad, UMR Moisa, France

The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.





(Food security) PS as response to excessive price  
volatility

and the related WTO debate

Franck Galtier, Cirad, UMR Moisa  
[galtier@cirad.fr](mailto:galtier@cirad.fr)


# 1. Food security PS as response to excessive price volatility





**Food Reserves**  
Using food reserves  
to enhance food and nutrition security  
in developing countries

**Synthesis Report**  
October 2018

 Study carried out on behalf  
of the European Commission

# 2. WTO debate on PS

Food Policy 116 (2023) 102400

Contents lists available at ScienceDirect

**Food Policy**

Journal homepage: [www.elsevier.com/locate/foodpol](http://www.elsevier.com/locate/foodpol)

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Take an inch for a mile. About an error of metrics in WTO rules and its impact on the ability of countries to build public stocks for food security<sup>\*</sup>

Franck Galtier<sup>1</sup>

CIRAD, UMR MOISA, F-34398 Montpellier, France  
MOISA, Univ Montpellier, CIRAD, CIRHEAM-IAMM, INRAE, Institut Agro, Montpellier, France

**ARTICLE INFO**

**Keywords:**  
Food reserve  
Public stock  
WTO  
Agreement on Agriculture  
Food security  
Domestic support

**ABSTRACT**

Many developing countries use public stocks to provide free or subsidised grain to food-insecure households or to mitigate sharp increases in grain prices. However, the building of public stocks is regulated by the WTO, as public procurement may be used to provide farmers with a price support. This support is bounded jointly with the other forms of non-exempt domestic support for agriculture. Since 2012, WTO rules on public stockholding programmes have been questioned by a group of 33 member countries, and are at the top of the WTO negotiation agenda. The topics debated are i) the way this support should be calculated, and ii) the maximum level of support allowed. This article addresses the first topic. It identifies three biases in WTO rules and estimates the magnitude of the gap between the support actually provided and the support calculated according to WTO rules. It appears that, for grains, the support calculated is generally several times higher than the real support, compromising countries' compliance with their domestic support commitments and thereby significantly reducing their ability to build public stocks. Moreover, the gap is not the same for all countries and is generally much higher for poor countries: the countries that most need public stocks for food security are those with the least freedom to build them. This article thus proposes a simple way to correct the rules that specify how the support provided by public stockholding programmes should be calculated.

**1. Introduction**

As part of their public stockholding programmes for food security purposes, the governments of many developing countries purchase food products (mainly grains), store them and either distribute them for free to food-insecure households or sell them on the market when prices reach unacceptable levels. The expected effect on food security is that this will maintain food-insecure households' access to food, either by transferring food to them or by mitigating food price increases. These programmes may provide support to farmers either directly (by paying a high price to their suppliers), or indirectly if public procurements generate an increase in the domestic market price. This is why the building of public stocks (henceforth PS) is regulated by the World Trade Organization (WTO). WTO rules on public stockholding programmes are set out in the Agreement on Agriculture (AoA), which entered into force with the establishment of the WTO on 1 January 1995. The support provided by public stockholding programmes is bounded jointly with the other forms of non-exempt domestic support.

However, WTO rules on public stockholding programmes have been questioned by some member countries (Kash, 2020). They claim that these rules prevent them from implementing the policies they need in order to guarantee food security for their population. In 2012 and 2013, a group of 33 member countries led by India (the G33) proposed modifications to these rules (Bellmann et al., 2013), which were consequently debated during the Bali Ministerial Conference in December 2013. However, the Bali Conference failed to produce an agreement on this issue: members simply agreed on a "peace clause" exempting the public stockholding programmes already existing from legal challenges until a "permanent solution" is found (WTO, 2013; Diaz-Bonilla, 2014). The need to find a permanent solution to the issue of public stockholding for food security purposes was reaffirmed during the 2015 and 2017 WTO Ministerial Conferences (WTO, 2015; Glauber, 2016). This need

<sup>\*</sup> This article is partly built on a working paper published by ICTSD as an E-15 initiative output: Galtier, F. (2017). Looking for a Permanent Solution on Public Stockholding Programmes at the WTO: Getting the Right Metrics on the Support Provided. E15 Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum. <https://www.e15initiative.org/>.  
E-mail address: [franck.galtier@cirad.fr](mailto:franck.galtier@cirad.fr).  
<sup>1</sup> Postal address: CIRAD-UMR MOISA, 73 rue Jean-François Breton, TA C-99/15, 34398 Montpellier Cedex 5, France.

<https://doi.org/10.1016/j.foodpol.2022.102400>  
Received 12 November 2021; Received in revised form 10 December 2022; Accepted 14 December 2022  
Available online 13 April 2023  
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# Methodology of the study

- *commissioned by the European Commission (DEV-CO, now INTPA)*
- *aims to clarify the potential role of PS in enhancing food security in developing countries*
  - look at the **pathways** through which PS can contribute to improving food security;
  - analyze the **efficiency of PS compared to alternative tools**;
  - investigate the **complementarity and synergies** between PS and other tools;
  - examine the implications of its recommendations on country compliance with current **WTO rules**
- *based on:*
  - an extensive **review of the existing literature** (both theoretical and empirical)
  - **10 case studies** analyzing national or regional experiences in Africa, Asia and South America
  - an **evidence-based, relativist** (emphasis on the context) and **pragmatic** (emphasis implementation and governance issues) approach

# What are FS PS?

## **FS PS are:**

- stocks of food products important for FS (usually grains)
- held by a public entity

## **FS PS can exist at different scales**

- Local (ex: Mali)
- National
- Regional (ex: ECOWAS, ASEAN+3)
- International (theoretically)

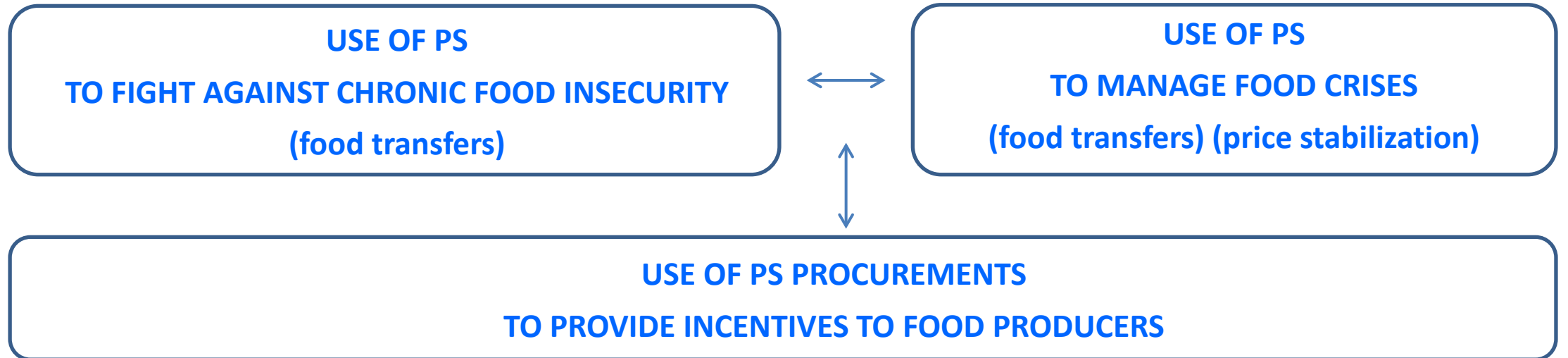
## **FS PS are widely used**

Example: PS releases during the 2008 crisis (*Demeke et al., 2008*)

- 15 Asian countries (out of 26)
- 13 African countries (out of 33)
- 7 Latin-American countries (out of 22)

# How can PS contribute to improving FS?

- Uses of PS by governments to improve national FS



- Effect of national PS on international markets (and global FS)?

# How can PS contribute to manage « excessive price volatility »?

## **Types of “excessive $\Delta P$ ”**

- (1) Seasonal
- (2) Food crisis (national level)
- (3) Food crisis (international level)

# (1) PS and excessive seasonal volatility

**The seasonal pattern of price is normal** (it reflects storage costs, incl. credit and risk)

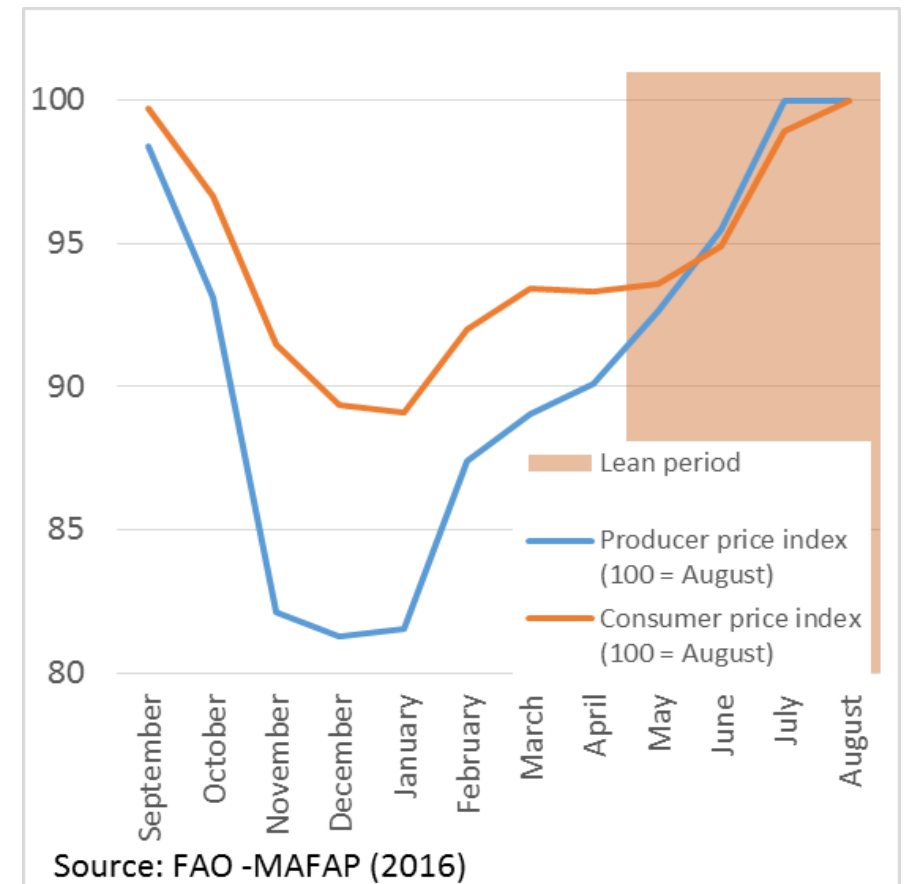
**But the seasonal  $\Delta P$  can be excessive:**

- Prices often collapse during the post-harvest season (because of farmers' limited access to formal credit)
- Prices may spike during the lean season (because of stock hoarding behaviours)

**PS may contribute to smooth the excessive seasonal  $\Delta P$**

- by procuring grain during the post-harvest season
- by releasing grain (sales, distribution) during the lean season

Seasonality of sorghum producer price and consumer price in Mali





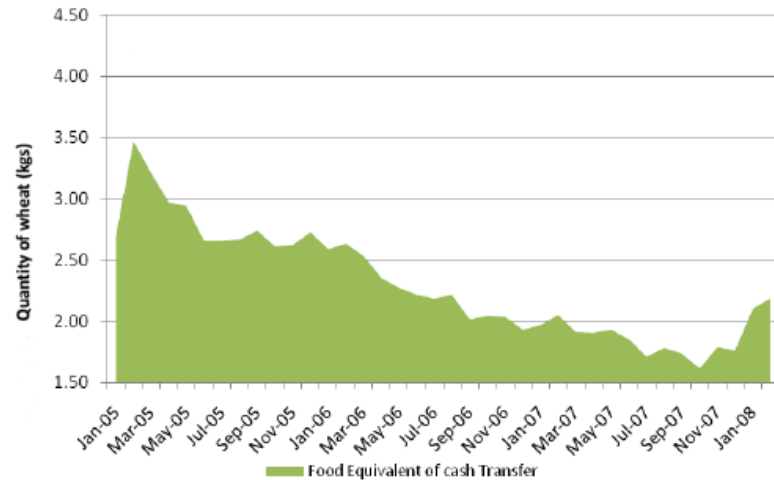
## (2) PS and food price crisis (country level)

### ***Provide (emergency) food transfers to f.i. hh***

→ Why not cash?

- because food price increases reduce the purchasing power of cash transfers

Figure 7 Evolution of the wheat purchasing power of the cash transfers provided by Ethiopia's PSNP



Source: Rashid and Taffesse (2009).

- because cash transfers may exacerbate the increase in food prices ( $\Rightarrow$  ethical issue)

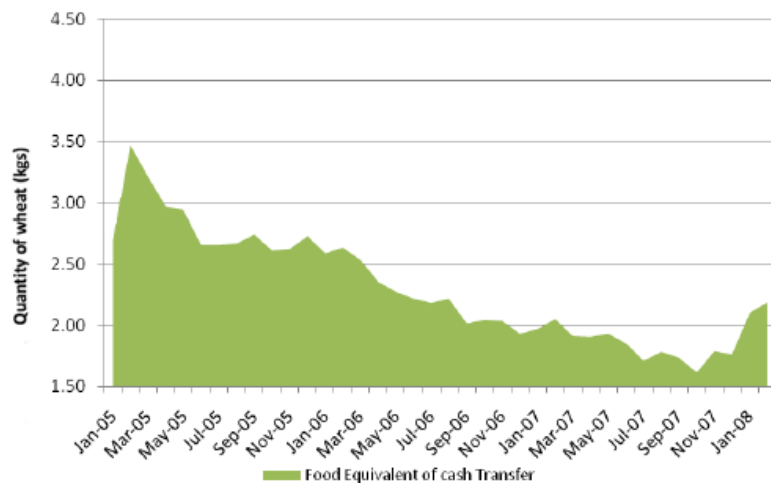
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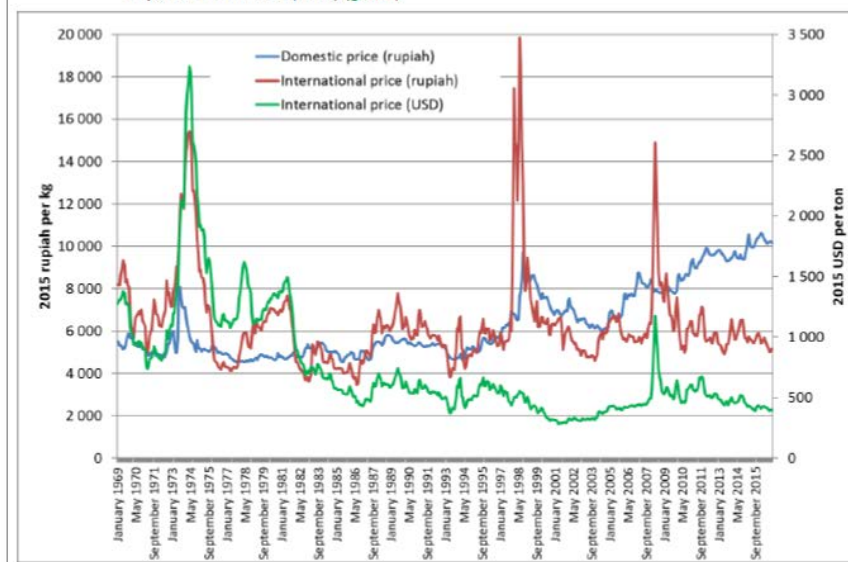
Source: Rashid and Taffesse (2009).

- because cash transfers may exacerbate the increase in food prices ( $\Rightarrow$  ethical issue)

### ***Contribute to mitigate $\Delta P$***

- Difficult for non-tradable good (huge quantities are required)
- Not very efficient for exporting countries
- Can be very effective for importing countries (jointly with import regulation, to manage import timelines)

Figure 9 Real Rice Prices in Indonesia, Domestic (Rp) (blue), Imported from World (Rp) (red), and Imported from World (USD) (green)



Source: Data and graphics provided by David Dawe, FAO Bangkok.

Source: Indonesia case study report.

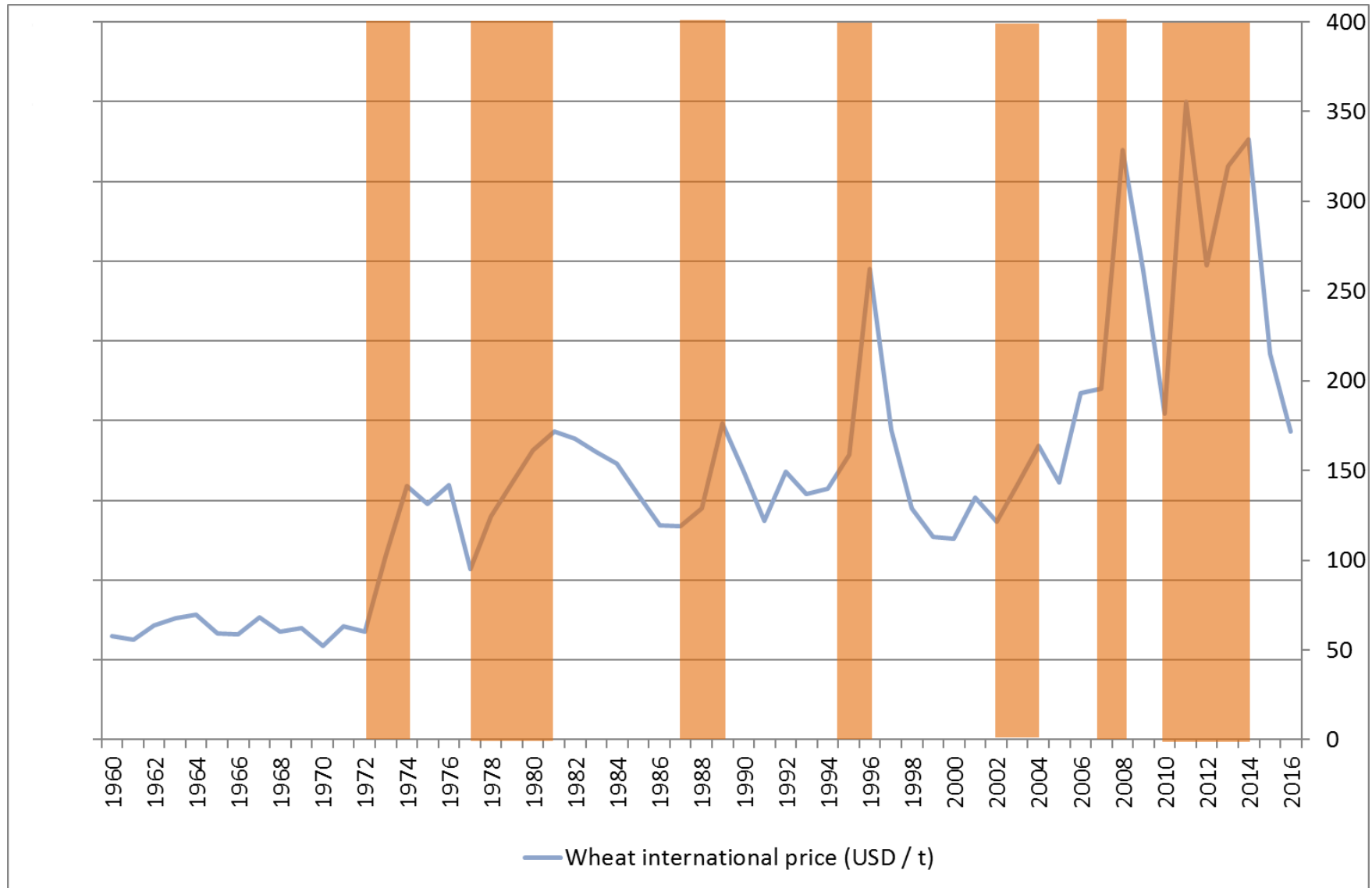
*Stabilization of the price of rice in Indonesia*

### (3) PS and food price crisis (international level)

#### **Do national PS have a stabilizing or distabilizing effect on international markets ?**

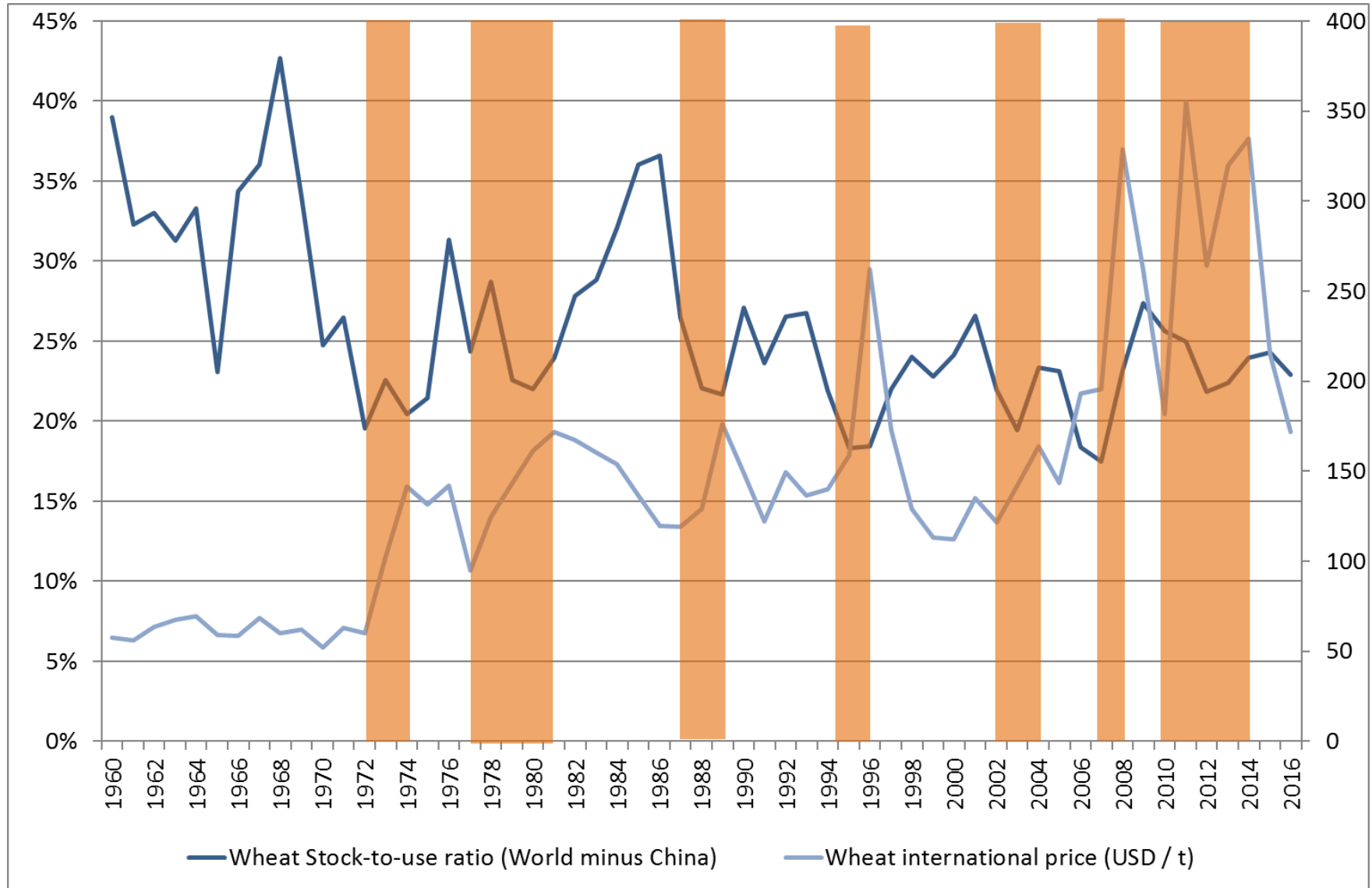
- Controversional issue
- Several evidences suggest that PS are stabilizing, most of the time
  - The price-stock relationship
  - The role of panic imports (case of rice in 2008)
    - 50% export bans
    - 50% panic imports
  - The role of Japan WTO rice stock in ending the 2008 crisis

## The price-stock relationship (case of wheat)

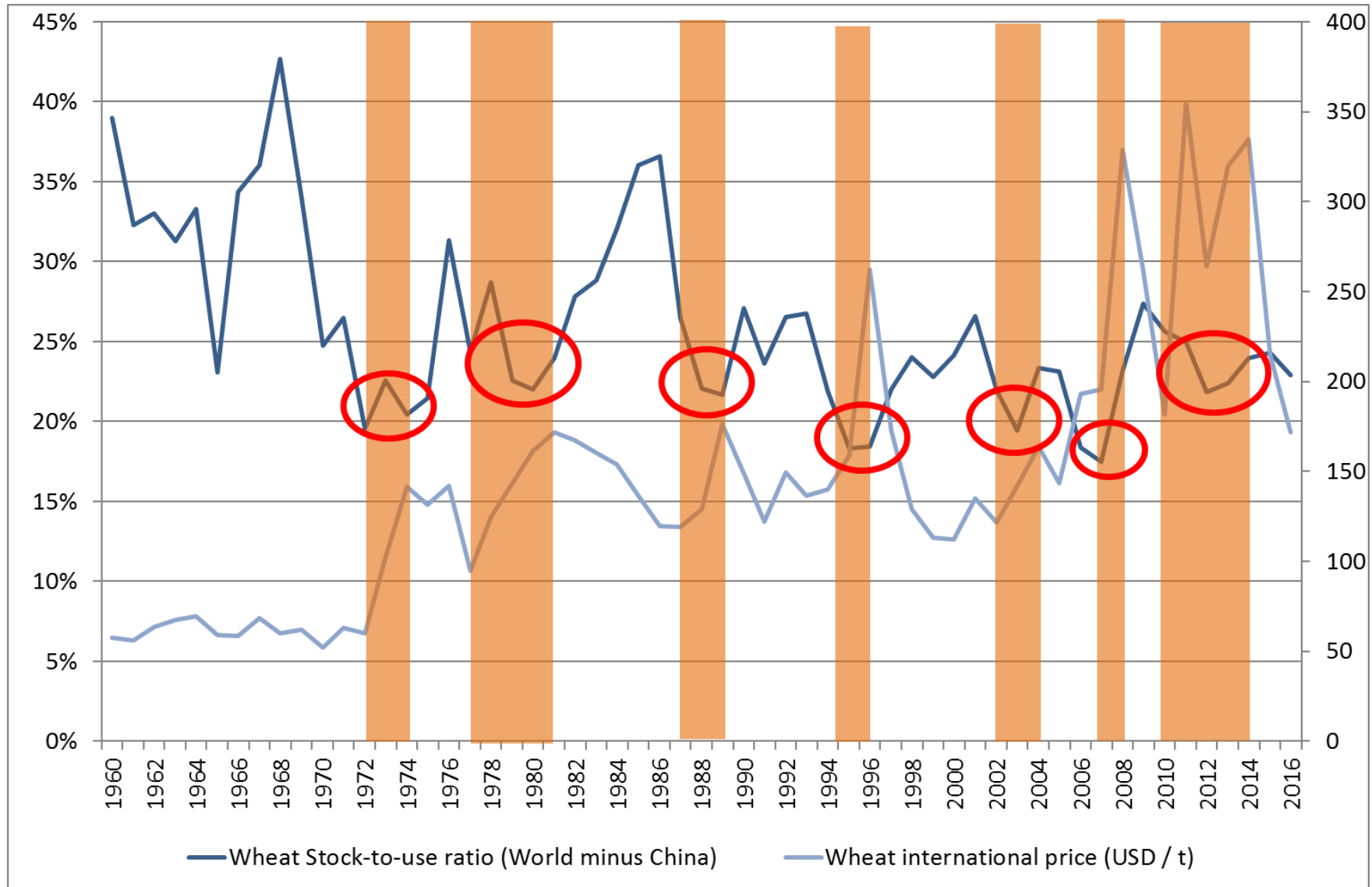


Source: FMI

## The price-stock relationship (case of wheat)

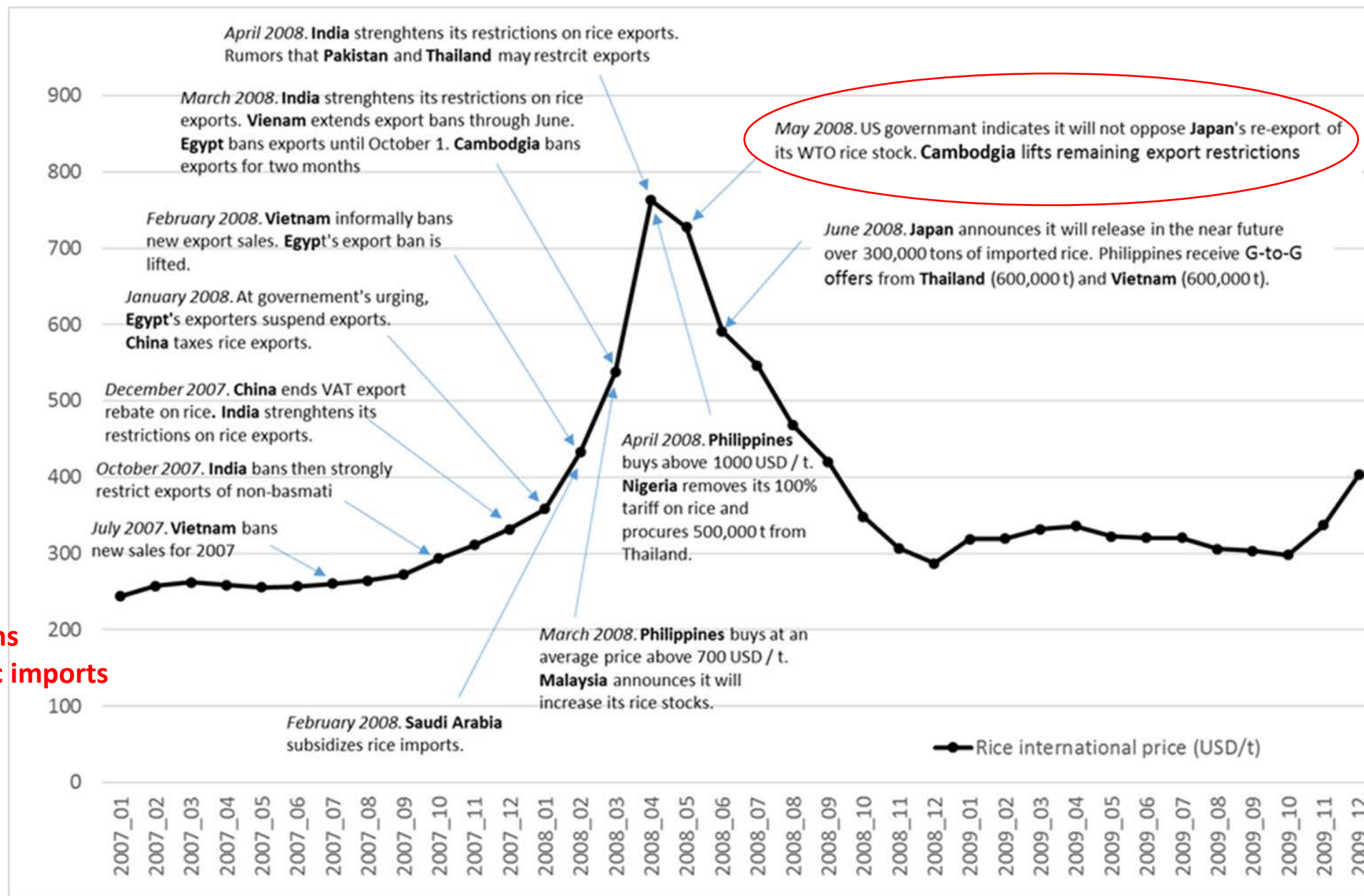


## The price-stock relationship (case of wheat)



Source: FMI, USDA PSD

# Chronology of the 2008 crisis on the rice market



50% : X bans  
50% : panic imports

Source:  
Galtier (2020)

# Conclusion

(take-away messages)

**PS are very useful in some situations to manage excessive price volatility and improve national FS**

**Most of the time PS have a stabilizing effect on international markets**

**WTO rules send the wrong incentives :**

→ very restrictive for the building of PS (generally stabilizing for international markets)

→ permissive for X bans or M subsidies (generally destabilizing for international markets)

**WTO rules on PS are biased (they strongly overestimate the support provided by PS) but they can be easily corrected [2 additional slides]**



# References

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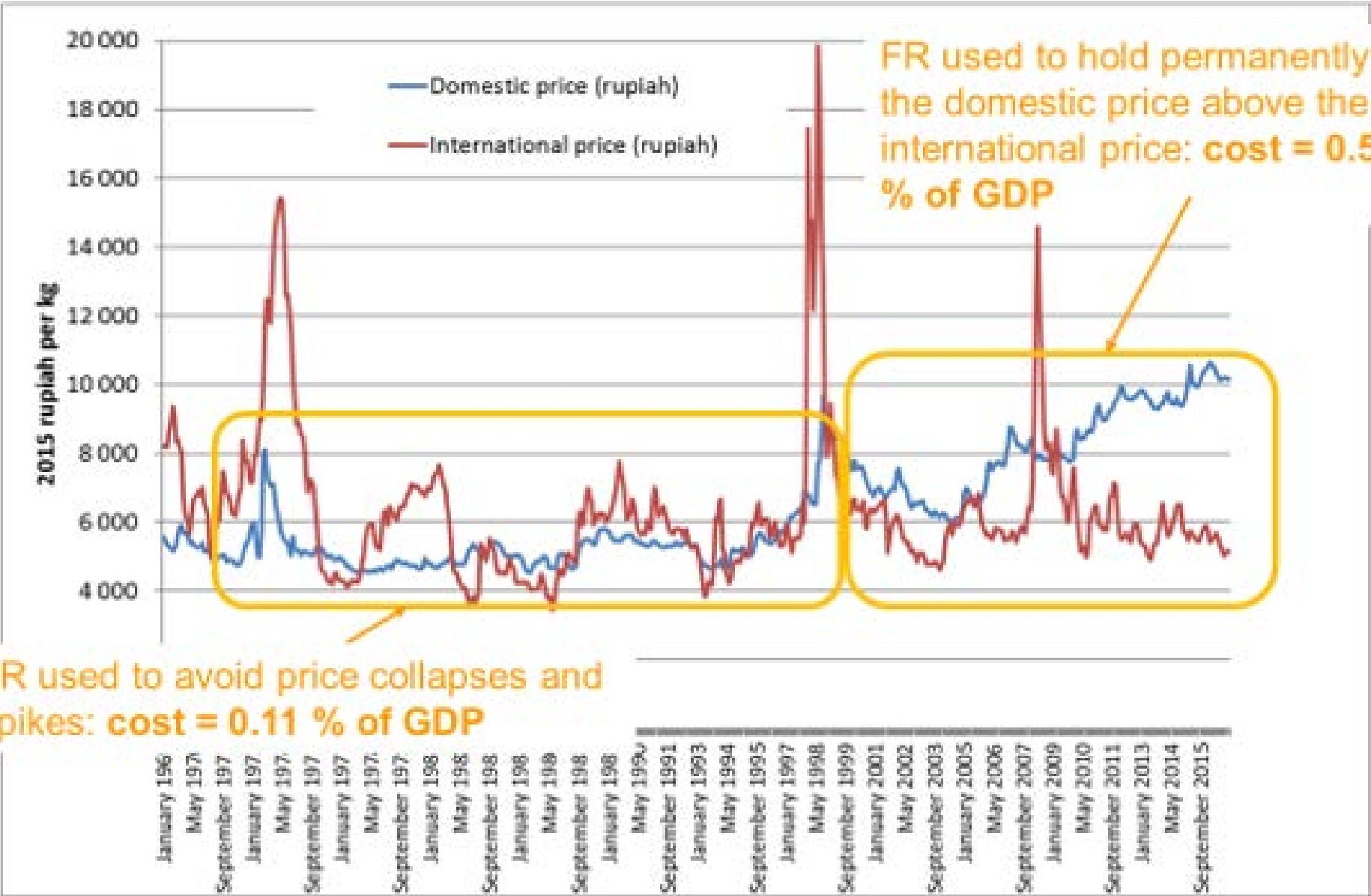
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<https://doi.org/10.1016/j.foodpol.2022.102400>

*Thank you for your attention*

[galtier@cirad.fr](mailto:galtier@cirad.fr)

# 1. Food security PS as response to excessive price volatility

# Cost of FS PS (depending on their objective): the case of Indonesia



## 2. Current WTO debate on food security PS

# Stakes of the WTO debate

## **WTO disciplines on PS procurement**

- PS procurement may provide support to farmers
- This support is bounded jointly with other non exempted DS
- Most of the time the maximum allowed level of DS is 10% of the VoP of the commodity considered

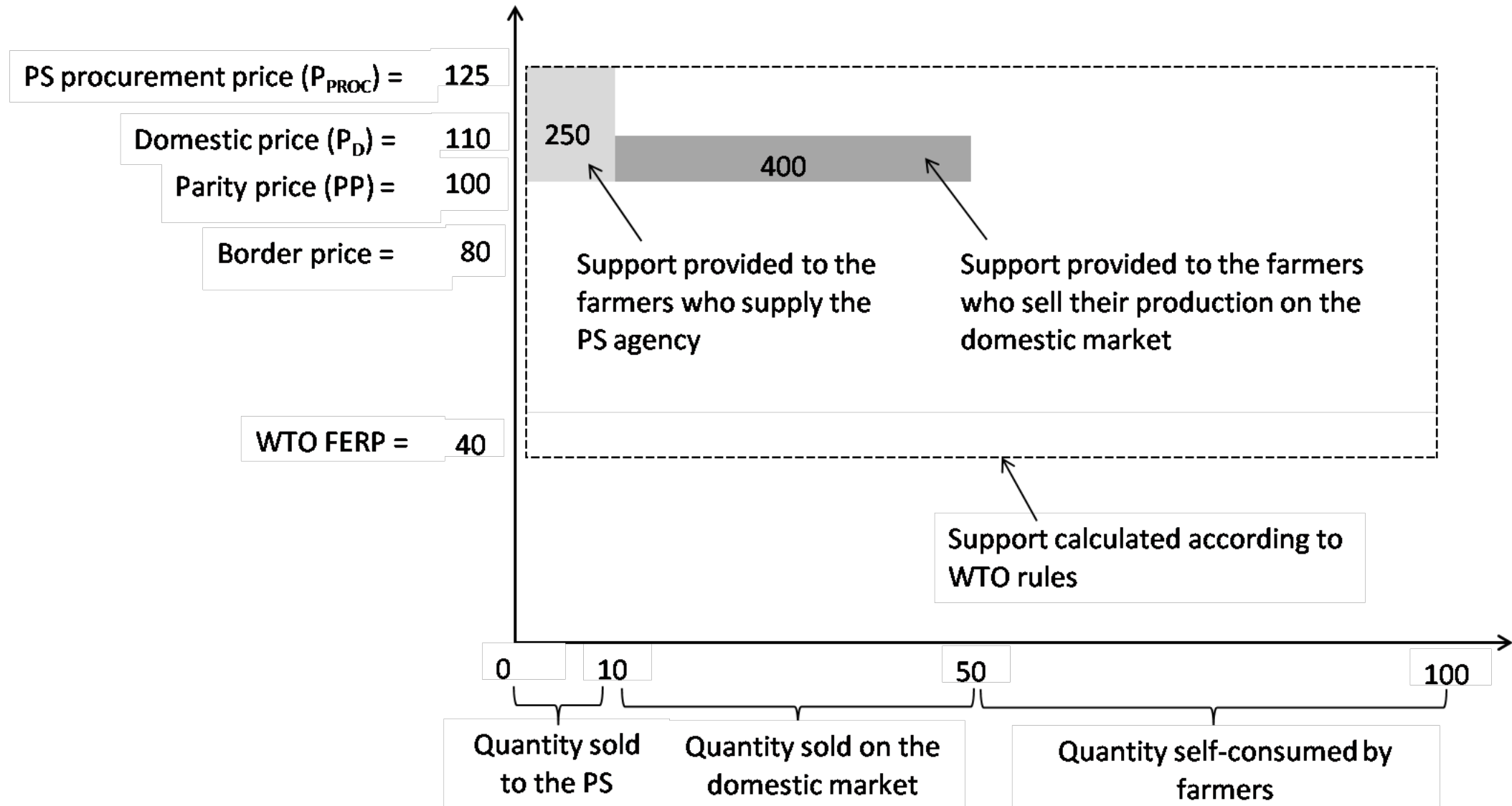
## **WTO rules on how to estimate the support provided by PS usually lead to strongly overestimate it**

⇒ Compliance issue

⇒ Countries lack the policy space they need to build PS and fight against food insecurity

⇒ On-going initiative by more than 80 emerging and developing countries to change these rules

# Illustration



# Empirical example: the US-China grain dispute

**Table 2** Support generated by China wheat public stockholding programme as notified (a), calculated according to WTO rules (b) and recalculated after removing the main biases in WTO rules (c)

Year	$S_{\text{NOTIFIED}}$ (a)	$S_{\text{WTO}}$ (b)	S (c)
2012	3.0%	12.1%	0.3%
2013	1.5%	18.2%	2.2%
2014	5.5%	21.7%	6.4%
2015	4.5%	22.4%	10.6%

Source: Galtier (2023)

The support is expressed in percentage of the production value of wheat (for China, it should remain below 8.5%)