

# What can the international community do to help developing countries manage food price instability?

Franck Galtier, CIRAD – UMR MOISA (galtier@cirad.fr)

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Food price instability poses an extremely serious problem for developing countries (DCs). Firstly, it hits DC consumers hard as they often devote a large proportion of their income to the purchase of food<sup>1</sup>. This generates serious **food security problems** (under-nutrition, malnutrition) and sometimes **political instability** (price surges in 2008 sparked riots in cities across some forty DCs). *Producers* are also affected. By making investment in agriculture a very risky undertaking, price instability **obstructs green revolutions**. As these green revolutions are now widely considered to be a necessary step in economic development, this is also brought to a halt by price instability. Finally, for certain importing countries rendered vulnerable by their low foreign exchange reserves, price instability may also generate **macroeconomic problems** (import rationing, reduced exchange rate).

The international community therefore must assume the major responsibility of helping DCs manage food price instability. Fortunately, the discussions taking place this year in the G20 and in the FAO's Committee on World Food Security (CFS) are creating favorable conditions for international mobilization in this field.

But if we are to meet the threat that price instability poses for global food security and agricultural modernization in DCs, we must find new solutions. The aim of this note is therefore precisely to develop such proposals and six in all will be put forward<sup>2</sup>. The first two are devoted to mechanisms designed to protect DC population from the effects of food price instability. The second two are designed to reduce grain price instability in DCs and on international markets. The last two concern the necessary re-balancing of WTO rules, allowing countries the possibility to protect themselves from international price instability while at the same time preventing them from excessively increasing this instability.

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<sup>1</sup> For instance in Mali, on average 64% of household expenditure is devoted to food products. Cereals alone account on average for 18,4% of urban household expenditure and 34,9% of rural household expenditure. For the 20% poorest rural households, this even reaches 44% ! Cf. Bocoum (2011). *Sécurité Alimentaire et Pauvreté. Analyse Économique des Déterminants de la Consommation des Ménages. Application au Mali*. Thèse de Doctorat. Université Montpellier 1, 242 p. + annexes.

<sup>2</sup> These proposals emerged from a study conducted in 2008-2009 on the instruments that can be brought into play to manage price instability in DCs. This study, financed by the *Agence Française de Développement* and the French Ministry of Foreign and European Affairs, was entrusted to a European consortium, ECART, and was coordinated by Franck Galtier. It involved four research institutions: CIRAD, IRAM, NRI and the University of Wageningen (WUR). The content of this note was drawn from the manuscript of a book to be published by AFD. The views expressed herein do not necessarily reflect those of any person or body other than the author.

## **A. DEVELOPING PROTECTIVE MECHANISMS AGAINST PRICE INSTABILITY**

### **A1. For vulnerable households in developing countries**

By reducing the food consumption of poor households, price surges may lead to major food security problems.

For many years, food aid was thought to be the solution. Food crises were supposed to be managed by providing emergency aid distributed free of charge or sold at a low cost, with efforts made to target precisely those areas or households suffering from food insecurity.

Two factors have contributed to a gradual change in thinking: increased awareness that aid may have perverse effects (if aid forces down prices, this will harm producers) and increasing recourse to a definition of food security that goes beyond the question of physical availability to encompass problems of access to food. This has led to *a diversification of aid mechanisms with aid no longer necessarily being made up of food but also sometimes of money or food stamps*.

The 2005 crisis in the Sahel countries (and more particularly in Niger) highlighted a new dimension to the problem: *the decapitalization of households* (weakened by successive crises) *that reduces their capacity to respond to shocks*: reduced savings, decreased productive capital and reduced human capital through under-nutrition which is detrimental to the health of household members.

Emergency aid (activated only in times of crisis) is therefore insufficient. Structural aid that aims to recapitalize vulnerable households is necessary. And this leads to the idea of setting up multi-annual safety nets.

#### **Proposal 1: Support the setting up of multi-annual safety nets in DCs**

In addition to activating emergency aid in times of crisis, *medium-term* action should be taken to recapitalize vulnerable households and thus increase their resilience. This could be done by using *safety nets whereby every year assets are transferred over a determined period to a number of households*.

This kind of program is already used in some countries (see for example the *Social Cash Transfers* program in Malawi and the *Productive Safety Net Programme* in Ethiopia). But few programs of this type are in operation and those that do exist could advantageously be extended in terms of the number of households covered and the assets transferred. These programs have proved to be effective but their cost has prevented DCs from setting them up or giving them sufficient breadth. Help from the international community in setting up these programs is therefore vital.

### **A2. For developing countries**

International price instability and/or production instability in DCs may cause sudden increases in the food bill paid by importing countries. In countries with low foreign exchange reserves this may cause the exchange rate to fall, or worse may lead to import rationing. In such situations external aid must be provided.

Different instruments are already available: food aid and certain forms of emergency credit (particularly as provided to countries by the IMF). But these instruments have come in for a great deal of criticism, particularly regarding the time required for their implementation.

Some have suggested that DC governments could use insurance instruments (weather insurance, call option), but very few attempts have been made in this direction. It is also fairly unrealistic to imagine vulnerable importing countries allowing themselves the luxury of paying insurance premiums, unless assisted by the international community<sup>3</sup>. Others have suggested setting up a public mechanism to stabilize the spending of vulnerable countries on imported food products (a mirror image of the STABEX mechanism developed by the EU to stabilize the export income of ACP countries). But the STABEX system would appear to suffer from the same defect as food aid and emergency credit: excessively long timelines.

A critical evaluation of these different instruments therefore appears to be necessary.

**Proposal 2: A study should be conducted to determine the potentials and weaknesses of the various mechanisms designed to protect vulnerable importing countries**

This study would cover all the possible instruments that could be used to assist "vulnerable" importing countries facing difficulties in paying their food bill: food aid, emergency credits, insurance instruments and public mechanisms to stabilize spending on food imports. The study would be based primarily on empirical evidence: analysis of past experience such as with food aid in Niger during the 2005 crisis, facilitated access to IMF credit during the 2008 crisis, the experience gained by Malawi, Ethiopia and Mexico in government use of insurance instruments, and experience gained through STABEX.

The study would therefore assess the different instruments and put forward proposals to improve their performance.

**The limits of protection-based approaches.**

Although multi-annual safety nets and emergency aid are crucial to prevent or halt food crises, they are of limited effectiveness if used alone: targeting may prove costly and flawed (some households requiring aid may not be covered). The problem grows if a large number of people need aid, as is the case with major price surges. *Action must therefore be taken on prices to reduce the frequency and amplitude of surges and thus render the safety nets more effective.*

Also, although safety nets aim only to protect urban and rural consumers against price surges, *producers should also be protected against falling prices* for this is essential to *stimulate investment and thus promote the modernization of DC agriculture.*

The price of food staples must therefore be stabilized on DC internal markets.

Likewise, protective mechanisms must be used to manage the macroeconomic effects of international price instability on vulnerable importing countries. These mechanisms, however, have difficulty managing the effects of major price surges. Firstly, funds are not transferred fast enough to meet the urgent nature of the need. Secondly, international price surges affect all vulnerable importing countries at the same time, meaning that the funds needed may well be very large. *International action must therefore be envisaged to reduce the frequency and amplitude of price surges.*

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<sup>3</sup> If we look at the principal success story in this field – the Malawi government's acquisition of a call option for maize in 2005 - the 9% premium was paid by the UK Department for International Development.

## **B. REDUCING PRICE INSTABILITY**

### **B1. In DCs**

This is where most action should be taken for it is *in DCs* that food price instability causes most harm both short term (food insecurity, political instability) and long term (obstructing green revolutions, and therefore economic development).

Price stabilization policies must therefore be set up in DCs, particularly for food staples such as cereals as these account for most of the caloric intake of the populations in these countries. These policies could be based on the regulation of imports and exports and/or on recourse to public stocks. Historically, for England in the 18th century, North America, the European Union (CAP), and Asian countries, green revolutions have almost always taken place thanks to such mechanisms used to stabilize grain prices on the domestic market (these policies - depending on the case - concerned maize, wheat or rice).

Sub-Saharan Africa has seen few success stories in this field<sup>4</sup>. And this for two major reasons: firstly, these policies lack funding (except in a few countries that possess mining resources, for example Zambia that was able to finance its maize price stabilization mechanism thanks to money from copper), and secondly, the weakness of public policy governance structures which, on occasion, leads to unpredictable public interventions after the State has caved in to pressure from the street or from lobbies. These untimely interventions upset markets, with private operators deciding not to stock or import for fear that public interventions will drive prices down. To be effective, these public interventions must supplement rather than play against market mechanisms. They must therefore be governed by rules; for instance the State must only intervene when prices move outside a previously defined band.

These two problems could be solved simultaneously by creating an international competitive fund.

#### **Proposal 3: Create a competitive international fund to finance grain price stabilization policies in DCs.**

Such a fund would ensure that grain price stabilization policies are no longer the preserve of a few countries with income from mining or other sources. Conditionality would guarantee the good governance of these policies. These conditionalities must primarily concern the fact that the triggering of interventions is governed by simple rules known to all. This condition guarantees the predictability of public interventions and thus avoids discouraging private storage.

The fund would be competitive and finance only the best stabilization policy projects. The procedures for country eligibility and project selection are still to be specified. Countries would require support both to develop and implement these policies (technical assistance, training). The fund could start with a relatively small sum and initially finance a few pilot schemes in order to render the mechanism credible and attractive both for donors and DCs. As an indication, were the fund to be initially provided with €50 million per year, this would be sufficient to finance a grain price stabilization policy in a small West African country such as Mali, Burkina Faso or Benin.

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<sup>4</sup> With the possible exception of Malawi and Zambia which are too recent for us to determine whether these policies are really successful and reproducible.

## **B2. On international markets**

DCs have few means at their disposal to protect themselves from grain price surges on international markets. In 2008, importing countries saw prices rise on their domestic markets. This caused food security problems and in some cases political unrest. Exporting countries, for their part, have often protected themselves in the past by restricting their exports, but this has the effect of accentuating the surge in international prices.

The frequency and amplitude of price rises must therefore be reduced. To do this we can tackle the different root causes of these surges (e.g. biofuels or excessive speculation on futures markets). However, such a strategy can only have a limited impact given that prices surge for many reasons and these are often interrelated and some are difficult to control (e.g. climate shocks).

Another complementary and more effective option would be to increase global grain stocks. These buffer and absorb shocks that are likely to cause price rises (biofuels, speculative bubbles, drought, etc.). This "universal" instrument could be used to combat price rises stemming from any cause. This theoretical role played by stocks has been confirmed empirically: price surges on wheat, rice and corn markets have always occurred when stocks are abnormally low (see figures 1 to 3).

And, as it happens, global grain stocks have fallen sharply over the last few years following changes to agricultural policies in the USA, the European Union and China. For many authors, the increased instability of international prices since 2005 can be explained primarily by low stocks. Public incentives are therefore required to increase stock levels for it is widely recognized that private grain stocks are insufficient. But public incentives are difficult to implement given that each country, taken individually, has every interest in letting other countries shoulder the burden of global grain stocks. Only an international agreement that shares the grain stocks burden could increase global stock levels and guarantee that these do not fall below the minimum required to avoid overly frequent and substantial price surges.

### **Proposal 4: An international agreement to maintain global grain stocks above a minimum level**

This would involve establishing a minimum stock target and leaving countries to choose the policy they consider most appropriate to reach it<sup>5</sup> (subsidies for private storage or for the use of hedging instruments by storers, expansion of public stocks, etc.).

Global minimum stocks (in terms of months of consumption) would need to be established for each grain (wheat, corn and rice) by an expert committee on the basis of past movements in the markets for these products. Country stock goals would then be set by sharing the effort between countries in a redistributive manner: the effort requested would increase with the country's income (it could be imagined that DCs would not be asked to make an effort whereas emerging countries would be asked to make a moderate effort and developed countries a greater effort). This system would also have the advantage of obliging countries to be more transparent about their stocks. The governance of this mechanism (control system and sanctions) remains to be specified.

Such a device would be far less complex than the international public stocks set up in the past to stabilize the price of certain commodities (such as cacao)<sup>6</sup>. Yet this device would be sufficient to reduce considerably the frequency and amplitude of price surges.

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<sup>5</sup> Similar to the type of agreement used for greenhouse gas emissions.

### C. REVISING WTO RULES FOR A BETTER BALANCE BETWEEN STABILISATION AND PROTECTION

Trade policies are *the only effective means available to DCs to protect themselves from international price instability*. For instance, importing countries may levy an import tariff that is indexed on international prices, and this fully compensates for the effects of turbulence on international markets (when the international price falls the tariff is increased by the same amount, and vice versa when the international price rises<sup>7</sup>). Likewise, exporting countries may restrict exports as the only means to prevent a international price surge from causing a price surge on their domestic market.

But at the same time, *these trade policies may accentuate price instability on international markets*. For example, levying variable tariffs on imports means that demands made of the international market are insensitive to variations in international prices (and this tends to amplify the variations). But above all, if exports are restricted in response to price surges on the international market, this reduces supplies on the market, further increasing prices (as happened in 2008).

*The role of the international community (through WTO rules) is therefore to balance these partially contradictory goals*: allow countries to protect themselves from international price instability, without permitting them to overly accentuate this instability. Just the right dose must therefore be found: if too strict, WTO rules will prevent countries from protecting themselves from international turbulence; if too lax, they will increase the volatility of international prices.

Unfortunately, *current WTO rules are a long way from striking this balance*. Sometimes they are too strict. For instance, variable tariffs on imports are prohibited (except in very special cases) even though these are essential if importing countries are to stabilize domestic prices and these tariffs often have a fairly minor destabilizing effect on international prices (particularly when levied by "small" countries<sup>8</sup>). On the other hand, WTO rules may sometimes be too lax. They allow countries to restrict food exports to any extent they wish, and this can cause international price surges or greatly accentuate surges (as occurred in 2008).

*WTO rules therefore need to be re-balanced*. In particular, importing DCs must be given more freedom to use variable tariffs, and this especially concerns "small" importing countries. At the same time, the right of exporting countries to restrict their grain exports should be limited while leaving them the possibility to protect themselves from international price surges. Two proposals are put forward herein to bring balance to this situation.

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<sup>6</sup> The very widespread idea that it is impossible to stabilize international prices is based on the supposed failure of International Commodity Agreements. These agreements - the declared intention of which was to stabilize the international price of various commodities (coffee, cacao, natural rubber, tin, etc.) - were nearly all abandoned in the 1980s. But the real reason for their failure was that their true objective was to support, not stabilize, prices. This led to the build up of overabundant stocks (as with cacao) or to tensions between exporting and importing countries (as with coffee). It cannot therefore be concluded from the failure of these agreements that it is impossible to stabilize international prices (around their trend value). It should also be noted that the mechanism we propose is far less complex than a price stabilization mechanism: it does not aim to hold prices within a predefined band but only to guarantee minimum stocks.

<sup>7</sup> In this case it may be necessary to subsidize imports.

<sup>8</sup> Here we use the term "small country" in its meaning given by the theory of international trade: a country whose import or export volumes are too small to affect the international price of the commodity considered

### **Proposal 5: Allow small, grain-importing DCs recourse to indexed variable tariffs**

The WTO currently prohibits indexed variable tariffs. Only fixed tariffs are tolerated on condition either that they remain below ceilings determined in 1994 ("consolidated levels"), or the country finds itself in the situation described by the "special safeguard clause". The tariff may be modified on an *ad hoc* basis (so long as it remains below the consolidated level). By contrast, indexed tariffs are prohibited even if the highest tariff band is below the consolidated level (see WTO's decision concerning the dispute between Argentina and Chili).

The justification given for this is that indexed tariffs render the demand of importing countries insensitive to international prices (and this, at least in theory, is a factor that increases international price instability).

However, for small, grain-importing countries (like most countries in Sub-Saharan Africa), this destabilizing effect on international markets is negligible whereas the stabilizing effect on consumer prices and prices paid to producers in these countries has very beneficial consequences on food security and investments in agriculture.

Here it should be underlined that to be effective the tariffs must be indexed. *Ad hoc* variations in tariff levels cause unpredictability and this discourages private operators from importing and storing grain and ultimately results in increased price instability (as illustrated by the experience of various eastern and southern African countries). Indexed tariffs are also more readily accepted by populations as they guarantee a certain reciprocity (producers will be less opposed to a decrease in import tariffs –when international prices rise- if they know that these tariffs will be raised should international prices fall).

The ban that weighs on indexed variable tariffs should therefore be lifted for the import of certain products (grain) by certain countries ("small" importing developing countries).

### **Proposal 6: Limit the right of countries to restrict grain exports**

Countries at present have the right to restrict their grain exports to any extent they wish.

*The desire of exporting DCs to restrict their grain exports during periods of international price surges is perfectly legitimate* for they cannot accept to see their market emptied of grain and domestic prices rise in consequence. Export restrictions have been far more substantial for rice than for wheat or corn, simply because rice is primarily exported by DCs and emerging countries where it is key to food security.

But *export restrictions may also be speculative in nature*: if countries foresee that international prices are about to climb, they may have an interest in differing their exports to obtain a better price. In this case export restrictions run the risk of inflating a veritable speculative bubble: the more certain countries restrict their exports, the more other exporting countries have every interest in doing the same. According to some experts this is what happened on the rice market in 2008.

The best rule would therefore be to allow countries to restrict their exports *within the limits necessary to ensure sufficient supplies for their domestic market*. In practical terms, export bans would be prohibited but export quotas would be authorized, with volumes based on estimates of a country's needs. Experience gained with food aid (where volumes are often based on such estimates) has shown that such an approach is possible though difficult ("grain balance sheets" give rise to heated discussions and controversy but at the end of the day the different parties always manage to come to an agreement).

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These six proposals are not exclusive, they are complementary.

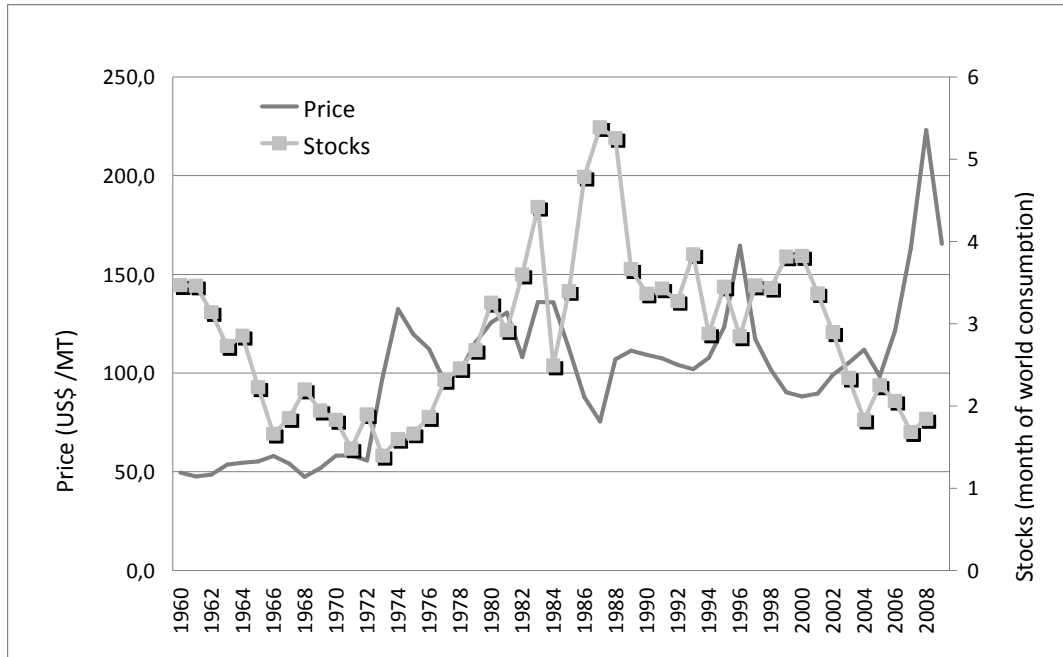
Proposals 1 to 3 are the most important as they concern food price instability *in DCs* precisely where the consequences are most serious for consumers (food insecurity) and producers (green revolutions obstructed).

But national and regional price stabilization policies can prove difficult to implement if international prices are too unstable or if WTO rules are too strict. That is why specific proposals are necessary to avoid international price surges (proposals 4 and 6) and to allow countries to protect themselves from international price instability impacting on their domestic prices (proposals 5 and 6).

Finally, specific instruments are necessary to help importing countries that find it difficult to pay their food bill. Here, current instruments should be assessed and improvements suggested (proposal 2).

## FIGURES

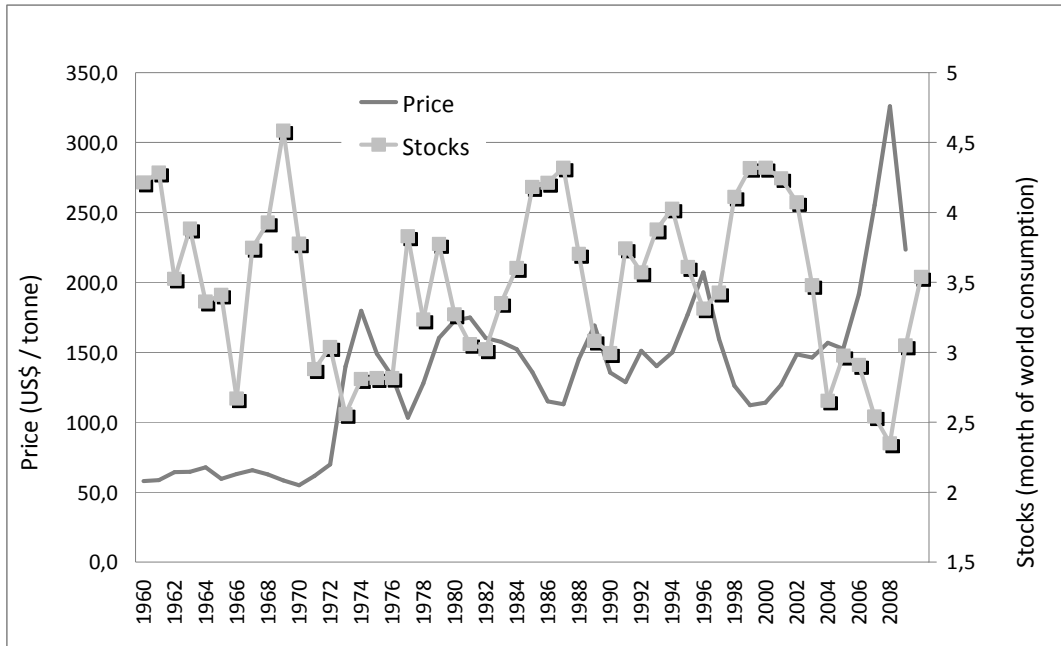
Figure 1: International maize stocks and prices (1960-2008)



Sources: IMF for prices and USDA for stocks

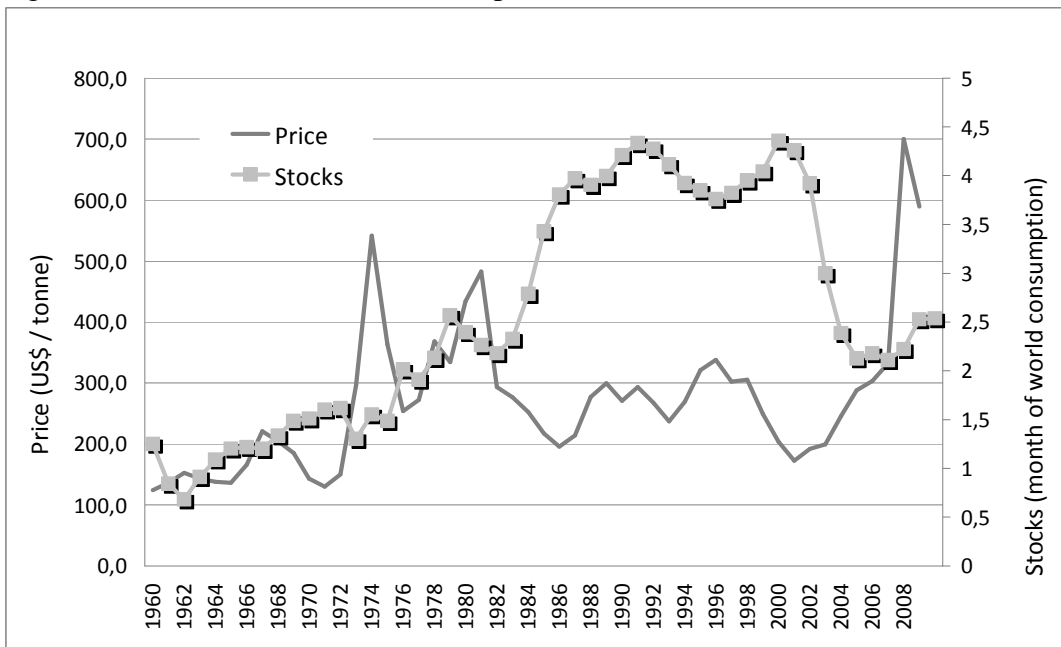


Figure 2: International wheat stocks and prices (1960-2008)



Sources: IMF for prices and USDA for stocks

Figure 3: International rice stocks and prices (1960-2008)



Sources: IMF for prices and USDA for stocks