

WIDER Working Paper No. 2013/037

The political economy of food price policy

Country case study of Mozambique

Virgulino Nhate, Claudio Massingarella and Vincenzo Salvucci*

April 2013

Abstract

The 2007-09 price shocks affected in particular the prices of food commodities and fuel. As a consequence, Mozambique experienced reduced exports, more expensive imports and increased food and oil prices, contributing to the stagnant poverty rates registered in 2008/9. Our analysis finds, first, that domestic prices for imported food crops followed the international trends only partially and remained high even after international prices declined. And second, the policy responses adopted by the Mozambican government to stabilize the impact of price shocks in the domestic market seem to have been effective, even though they turned out to be costly in terms of lost revenue and increased debt.

Keywords: food price, agriculture, price shocks, political economy, Mozambique
JEL classification: E31, F42, E64

Copyright © UNU-WIDER 2013

* Development Economics Research Group (DERG), University of Copenhagen, email: Vincenzo.salvucci@gmail.com

This study has been prepared within the UNU-WIDER project 'Political Economy of Food Price Policy', directed by Per Pinstrup-Andersen.

UNU-WIDER gratefully acknowledges the financial contributions to the research programme from the governments of Denmark, Finland, Sweden, and the United Kingdom.



The World Institute for Development Economics Research (WIDER) was established by the United Nations University (UNU) as its first research and training centre and started work in Helsinki, Finland in 1985. The Institute undertakes applied research and policy analysis on structural changes affecting the developing and transitional economies, provides a forum for the advocacy of policies leading to robust, equitable and environmentally sustainable growth, and promotes capacity strengthening and training in the field of economic and social policy making. Work is carried out by staff researchers and visiting scholars in Helsinki and through networks of collaborating scholars and institutions around the world.

www.wider.unu.edu

publications@wider.unu.edu

UNU World Institute for Development Economics Research (UNU-WIDER)
Katajanokanlaituri 6 B, 00160 Helsinki, Finland

Typescript prepared by Lisa Winkler and Liisa Roponen at UNU-WIDER.

The views expressed in this publication are those of the author(s). Publication does not imply endorsement by the Institute or the United Nations University, nor by the programme/project sponsors, of any of the views expressed.

1 Introduction

The 2007-09 price shocks affected the prices of food commodities and fuel in particular. Mozambique heavily relies on imported food and fuel, which makes it vulnerable to international price shocks. As a consequence, Mozambique experienced reduced exports, more expensive imports and increased food and oil prices.¹ This may have contributed to the stagnant poverty rates registered by the 2008/9 Mozambican Household Budget Survey (GoM 2010b).

This paper attempts to analyse the relation between international and domestic food prices, and the policy responses adopted by the Mozambican government to stabilize the impact of price shocks in the domestic market. The study proceeds as follows. Section 2 presents the motivation, while Section 3 introduces some main facts of the Mozambican economy, with a focus on agriculture and staple crop production. Section 4 examines the degree of transmission of food price shocks throughout the country, while Section 5 presents the political economy side of the food price crisis; in particular, some of the policies adopted to face price shocks and their outcomes are discussed, together with the rationale for such policy interventions. Section 6 concludes.

2 Motivation

Despite the high GDP growth experienced by Mozambique in the past, poverty has not declined. According to official statistics, the Mozambican economy continued to grow at a 6 per cent rate even after the crisis had reached its peak in 2008 (GoM 2008a). GDP per capita increased from US\$235.8 to US\$453 from 1997 to 2009 (GoM 2008a, 2008b; 2010a, 2010b, 2010c). But poverty rates, after a steep decline from about 69 per cent in 1996/7 (GoM 2010b), have remained steady at about 55 per cent between 2002/3 and 2008/9. A possible explanation for the stagnation of poverty is that food price shocks have severely affected the poorer socioeconomic groups.

As a response to these shocks, the government implemented a mixture of policies aimed at containing the influence of international food prices and avoiding chaos on the domestic markets (discussed in Section 5). The main government goals included increasing local food production and reducing dependence on imports, while enhancing productivity to improve competitiveness with imported foods. Measures for fuel subsidies and the construction of granaries for the storage of agricultural surplus were also implemented. It is likely that the government's desire to be re-elected in the upcoming 2010 elections was one of the motivations for implementing these policies. Nevertheless, the subsidies and other measures helped to maintain the retail price of commodities such as rice and bread stable, thus avoiding greater social struggle.² However, the

¹ The export value of cashew nuts declined from MZN 20.5 million to MZN 10.8 million; sugar from MZN 71.4 million to MZN 49.4 million (GoM 2007); tobacco from MZN 109 million to MZN 45.2 million (GoM 2008a). MZN=Mozambican Metical (exchange rate, 7 March 2013: 1 USD=29.5 MZN).

² The increased price of food and fuel did lead, however, to violent riots and demonstrations in 2008 in Maputo, the capital city.

effect of these (costly) policies on the macroeconomic framework is less clear. In what follows, we try to understand, first, whether international price shocks were transmitted to the Mozambican economy; and second, whether governmental policies succeeded in reducing the negative consequences of the price shocks on the economy.

3 Main facts of the Mozambican economy and agricultural sector

Mozambique has slightly more than 20 million inhabitants. Agriculture is the most important sector, with about 80 per cent of the population dependent on agriculture for their livelihoods (Cunguara and Hanlon 2010). However, its contribution to GDP is stagnant, approximately 25 per cent (Magaua, Hong and Massingarella 2011). Subsistence agriculture is predominant despite the availability of fertile and irrigable land, and smallholders account for 99 per cent of total farms (Cunguara and Hanlon 2010). The agriculture budget share has always ranged between 3-4 per cent of total GDP, even though there is an ongoing pressure to increase it. Donovan and Tostão (2010) find that the average cultivated land for smallholders, who constitute 99 per cent of total rural households, is less than one hectare (0.9 ha), and most rural households are net buyers of food staples. This is also due to a paucity of granaries for the storage of staple crops, which prevents the build-up of domestic production surpluses, reduces food security, and increases vulnerability to international food price crises.

Furthermore, almost 70 per cent of total household expenditures in Mozambique is devoted to food. Thus, a major upsurge in food prices such as the one experienced in 2008/9 can potentially affect large sectors of the population, especially lower-income and urban households (GoM 2010b). Arndt et al. (2008) estimate that as a consequence of price increases in 2008, poverty increased by 0.5 per cent. At the same time, the 2008/9 agricultural season was not successful due to poor weather conditions that caused droughts in some parts of the country and heavy storms and floods in others (GoM 2010b). This resulted in either reduced or null food surpluses for most farmers, who thus were unable to benefit from higher domestic prices. Food access and food security are recognized as the country's major unsolved issues.

3.1 Staple food crop production

Cassava, maize, wheat, and rice are the most common staple food crops in Mozambique (Table 1). Cassava is consumed mostly in the northern populous provinces of Nampula and Zambezia, while maize represents the most important staple in other regions. As shown in Table 2, cassava and maize are also the most commonly produced staple food crops. Wheat and rice are mainly imported, but are increasingly preferred by both urban and rural households (Donovan and Tostão 2010). Figure 1 presents wheat imports and consumption for the years 1996-2006.

Thus, in order to study the transmission mechanism between international food prices and domestic prices, we focus in the following on wheat and rice. The analysis is based on three markets (Maputo in the south; Beira in the centre; Nampula in the north). Most imported food products are delivered to regional markets from these three main marketing centres. The prices

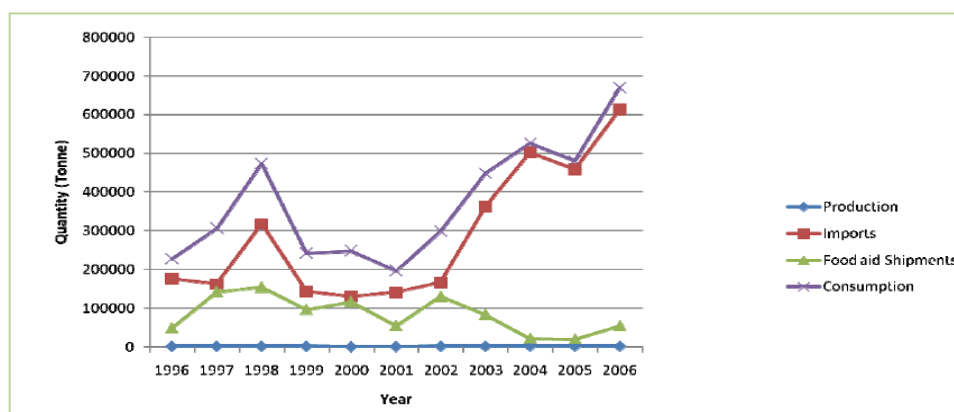
recorded in Maputo, Beira and Nampula are also used by the National Institute of Statistics to compute the official Mozambican consumer price index.

Table 1: Staple food consumption in Mozambique, 2009

Commodity	Quantity consumed (kg/person/day)	Calorie intake (kcal/person/day)	% of total calorie intake
Maize	58	462	22
Cassava	247	740	36
Wheat	20	147	7
Rice	15	145	7
Others	87	587	28
Total	427	2082	100

Source: Based on Donovan and Tostão (2010).

Figure 1: Wheat imports and consumption, 1996–2006



Source: Based on Cachomba (2010).

Table 2: Production and trade of staple food in Mozambique, 2009/10 balance sheet

Commodity	Production (tons)	Imports (tons)	Exports (tons)	Exports as % of production	Imports as % of production
Maize	1932	220	233	12	11
Cassava	7437	0	5	<1	0
Wheat	10	429	2	<1	43
Rice	165	258	0	0	2

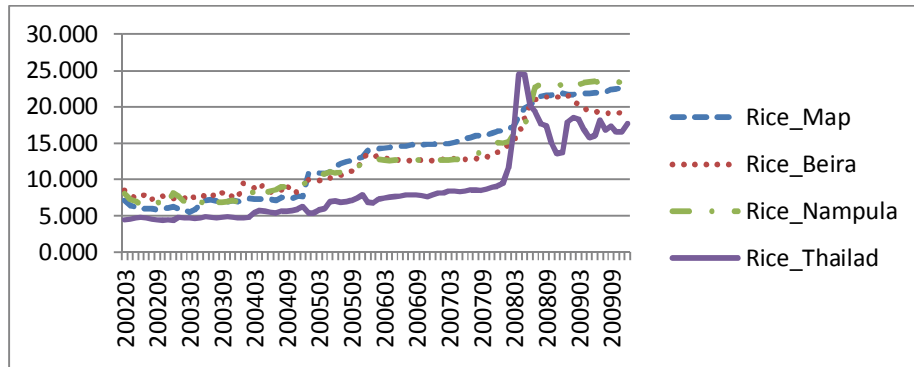
Source: Based on Donovan and Tostão (2010).

Rice

Figure 2 shows rice price trends both domestically and at its origin (the price of rice in Thailand is taken as a reference) for the years 2000-09. The price of rice has been following a slightly increasing trend both domestically and at the origin from 2002 until mid-2007. Then, in October

2007, it started to increase, reaching its peak in mid-2008. Thereafter, it went down again in Thailand but remained high in Mozambique until the end of 2009. In January 2009 the price declined slightly only in Beira, but in general it never returned to its pre-crisis levels. Despite the international price exhibiting a few extraordinary peaks, these were not reflected in the domestic price. This may be the result of different forms of subsidies introduced by the government, and of a substitution effect in consumption shifting towards locally produced staple crops.

Figure 2: Rice price trends, 2002-09

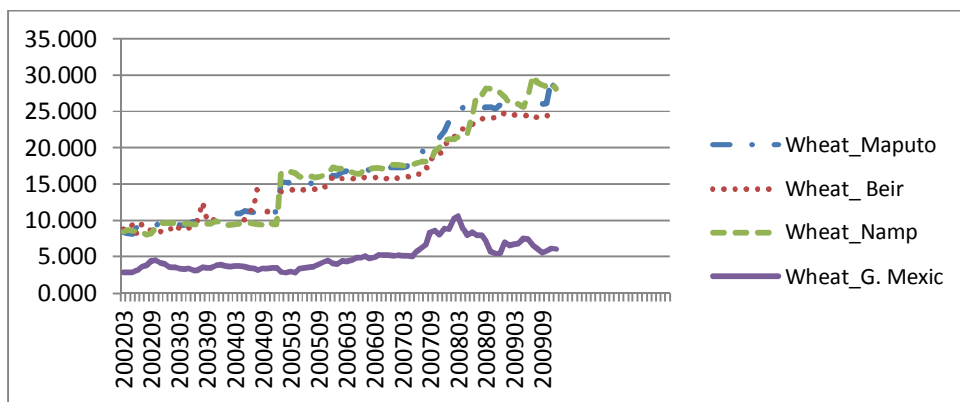


Source: Authors' calculation.

Wheat

With regard to wheat, the reference international price (Gulf of Mexico) started to rise in the second half of 2007, reaching its peak in the first quarter of 2008 (Figure 3). As observed for rice, the international price upsurge directly affected the domestic price for wheat. However, domestic price did not revert to the pre-crisis levels even though the international price did. On the contrary, it slightly increased, especially in Maputo and Nampula. This un-arrested increase in the domestic price of wheat—and hence of bread—was among the main causes that led to massive demonstrations in Maputo at the end of 2010. To contain these occurrences, the government decided to implement additional price control measures.

Figure 3: Wheat price trends, 2002–09



Source: Authors' calculation.

4 The degree of price transmission

In this section we perform a co-integration analysis to assess the degree of transmission between international and domestic prices for wheat and rice. The degree of transmission between prices in Maputo and prices in Beira and Nampula is subsequently also studied. As is standard in this kind of analysis, we (i) test for the presence of a unit root; (ii) check for the existence of a long-run relation; and (iii) assess the speed of adjustment, and the long- and short-run adjustment (Minot 2010; Traub et al. 2010).

The results are presented in Table 3. The Augmented Dickey-Fuller (ADF) and Phillips-Perron unit root tests almost always agree on the non-stationarity of the series analysed. A co-integrating relation exists only between the international rice price and its price in Nampula. This might be due to the fact that the northern region of Nampula is where most cassava is produced and consumed. This would imply that a cheaper alternative to rice exists locally and high mark-ups on the import price of rice do not last long. The test performed finds no co-integration between international and domestic prices of wheat. As displayed in Figure 3, the gap between international and domestic prices of wheat is wide. In particular, domestic prices followed the rise of international prices but did not follow its subsequent decline. This may be due to the lack of competitiveness in the local markets, but also to the population's increasing preference and demand for wheat derivatives, especially bread. Thus, it would seem that wheat and rice prices in Mozambique are only weakly linked to international prices, especially when these decline. This would confirm that Mozambique is still a fairly small economy weakly integrated with international markets (Simeone 2010).

Table 3: Transmission of international rice and wheat prices to domestic markets in Mozambique

Location	Commodity	Unit root in domestic price?		Long-run relationship	Error correction model (if long-run relationship confirmed)		
		ADF test	Phillips-Perron test	Engle Granger test	Speed of adjustment	Short-run adjustment	Long-run adjustment
Maputo	Rice	Yes	Yes	No	-	-	-
Beira	Rice	Yes	Yes	No	-	-	-
Nampula	Rice	Yes	No	Yes	0.112*	0.18*	0.13
Maputo	Wheat	Yes	Yes	No	-	-	-
Beira	Wheat	Yes	No	No	-	-	-
Nampula	Wheat	Yes	Yes	No	-	-	-

Note: * $p < 0.05$.

Source: Authors' calculations.

4.1 The degree of price transmission among domestic markets

Maputo, the capital, is the most important economic centre of the country and the most populous city. Thus, most of the imports pass through its port, for delivery to the rest of the country. Therefore, here we investigate whether a co-integration relation exists between Maputo and the other two main markets (Beira and Nampula), concerning food price transmission. The results presented in Table 4 show that the price of rice and the price of wheat in Maputo and Nampula

are co-integrated. This might seem puzzling, given that Nampula is about 2000 km away from Maputo. However, it needs to be noted that Nampula is still a developing market, and that it serves the country's most populated province of about four million inhabitants. Hence, part of the food sold in Nampula is imported from Maputo and then transported to this local market.

Also in this case, the Augmented Dickey-Fuller (ADF) and Phillips-Perron unit root tests agree on the non-stationarity of the series analysed. Moreover, the Johansen procedure found that the prices in Maputo and Nampula exhibit long-run relations for both rice and wheat despite the existence of imbalances in the short run. The degree of rice price transmission between Maputo and Nampula was estimated at 0.03, i.e., only 3 per cent of the change in price in Maputo is transmitted to Nampula. The disequilibrium in the prices that is observed in the short run is corrected in about one month and the series revert back to the long-run relationship in about nine months. For wheat, the elasticity of transmission is about 7 per cent. The short-run disequilibrium is corrected in 11 months, while the long-run relationship is re-established in about two years (24 months).

Table 4: Transmission of food prices in Maputo to other markets in Mozambique

Location	Commodity	Unit root in domestic price?		Long-run relationship	Error correction model (if long-run relationship confirmed)		
		ADF test	Phillips-Perron test	Johansen test	Speed of adjustment	Short-run adjustment	Long-run adjustment
Beira	Rice	Yes	Yes	No	-	-	-
Nampula	Rice	Yes	Yes	Yes	0.03	0.01	0.09*
Beira	Wheat	Yes	Yes	No	-	-	-
Nampula	Wheat	Yes	Yes	Yes	0.07	0.11	0.24*

Note: * $p < 0.05$.

Source: Authors' calculations.

5 The political economy of food prices

5.1 Policy responses against food and fuel price increase

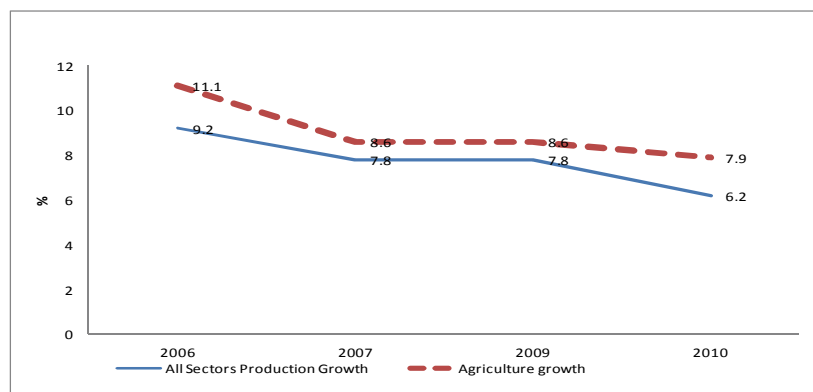
The direct and indirect policy responses to the food price crisis in Mozambique are analysed and discussed in this section. The direct responses included various measures to smooth the impact of food price increases on domestic prices, while the indirect ones were aimed at reducing the impact of higher fuel prices on other sectors, including food production and distribution. Mozambique has a long history of price control and direct public participation in the markets as buyer and seller of key agricultural commodities. Alfieri, Arndt and Cirera (2007) describe how during the 1980s and early 1990s the government frequently bought and sold key staples in the markets—especially maize—through AGRICOM and later through the Institute of Cereals of Mozambique (ICM). In this manner, the government sought to maintain food prices low for the consumers. However, the ICM was restructured in 1996 and is no longer active in any staple crop sales or purchases; currently it owns just granaries which are rented out to the private sector. Thus, the private sector has been largely free to set prices since 1997, although the

government continues to issue indicative (non-binding) prices. In 2008/9, government policies were adopted mainly in the agricultural and trade sectors:

Promotion of increased agricultural production and productivity

In the aftermath of the 2008 price shocks, the government introduced the Food Production Action Plan (PAPA 2008-11), which was meant to secure food to the entire population. The PAPA operational plan was mainly targeted to the production of rice, wheat, and poultry, but also aimed to reduce the dependence on the imports of similar products. In addition, it proposed the application of different mechanisms to enhance food storage and distribution, and setting up basic conditions in rural areas to develop food processing using local inputs. Furthermore, in July 2008 the Ministry of Trade and Industry promoted the construction of granaries for the storage of cereals. As mentioned earlier, the storage of agricultural surpluses is one of the main problems for the Mozambican agricultural value chain. Given the high transportation costs, producers frequently sell their surplus locally and immediately after the harvest, missing the opportunity of higher profits. The granary initiative was intended to create a domestic production surplus that would improve food security and reduce the impact of international food price crises. Notwithstanding these policies, agricultural productivity did not exhibit any considerable improvement. Cunguara and Hanlon (2010) show that maize productivity was lower in 2008 than it was in 2002 and 2003, while Mosca (2011) compares agricultural productivity in the 1950s with recent figures and concludes that the production structure and agricultural productivity show no significant improvement over time. Figure 4 displays the growth rate for agricultural production and all sector production from 2006 to 2010, both series showing a slightly decreasing trend.

Figure 4: Trend of production in Mozambique



Source: Authors' calculations based on Banco de Mocambique (2012).

Trade policy measures

To mitigate the short-term effects of increasing global food prices, the government reduced import tariffs in early 2008, cutting the tariffs of maize, wheat and rice from 25 to 2.5 per cent. Moreover, after the 2008 increase in food and fuel prices, a specific committee was activated to search for possible strategic responses. The committee interacted with different stakeholders, such as companies that had intended to increase certain domestic prices. The increase of

domestic fuel prices in response to the increase of international prices was also discussed first within a specific inter-ministerial committee. The government also adopted policies to maintain an overvalued exchange rate, while subsidizing fuel prices and freezing any increase in tariffs for public utilities. Whereas the policies adopted for the agricultural sector did not have the expected results, it seems that such trade policy measures were generally effective in reducing the international price shock impact.

5.2 The rationale for policy interventions

As introduced in previous sections, there are several reasons why the Mozambican government decided to step in during the 2008/9 fuel and food price crisis, and implement a series of measures to mitigate the most negative effects of the crisis.

Protecting the poor

First of all, the need to protect the poor was at the centre of the governmental agenda, as it appears from the main strategic documents in the country (GoM 2005; 2010b). Since most of the poor depend on agriculture for their livelihood, then part of the implemented policies obviously concerned the agricultural sector. However, the 2008/9 poverty assessment shows that the headcount ratio did not decrease from its 2002/3 levels (55 per cent). Cunguara and Hanlon (2010) also find that the median income was 10 per cent lower in 2008 than it was in 2002, and was lower for most income groups, concluding that poverty has been increasing rather than decreasing. Nonetheless, increased food prices and declining terms of trade cannot entirely explain the stagnation of consumption levels over time. The 2008/9 poverty assessment stresses that at least two other factors contributed to that outcome: (i) very slow growth rates in agricultural productivity, especially with respect to food crops; (ii) weather shocks that impacted the harvest of 2008, particularly in the central provinces (GoM 2010b). As previously discussed, notwithstanding the agricultural strategies to increase the levels of agricultural production and productivity, there is not enough evidence that these instruments have been successful in helping the country's poor. The country is still a net importer of agricultural commodities and the vulnerability of the agricultural sector to shocks does not seem to have been reduced (GoM 2011).

The government desire to be re-elected and avoid social unrest

As was pointed out in Section 2, in examining the factors that motivated the implementation of the above-mentioned policies, it should also be remembered that in 2008/9 the government was preparing for the upcoming 2010 general elections. The 2008/9 food and fuel price shocks occurred immediately before the Mozambican presidential elections, and this certainly influenced the government decision to stabilize the impact of price shocks in the domestic market, especially in order to avoid a generalized social unrest. The revenue losses and huge increase in public debt that the government incurred in 2008/9 can also be explained in the light of its desire to be re-elected. However, such costly measures left no room for adopting additional policies after 2009. By then the government had used almost all available resources to avoid a general price upsurge, and had the international fuel prices continued to increase, there would have been very limited capacity to keep smoothing the impact on the domestic market. The government desire to be re-elected in the upcoming 2010 elections was then among the main

motivations for implementing subsidies and other greatly incisive but costly trade policy measures.³ Indeed, such interventions were gradually abandoned in 2010.

Macroeconomic stability

Another goal of the government for intervening during the crisis was to maintain a low inflation rate and the stability in the exchange market. This was accompanied by a reduction in tariffs, which resulted in an increased import capacity and helped to avoid the increase of domestic food prices. However, the annual growth rate of tax revenue as a share of GDP from 2007 to 2008 was below the 1.4 per cent target, and the decrease was mainly driven by the reduction of taxes on goods and services. Moreover, public debt increased 42 per cent after the crisis, and external debt increased 17 per cent (Table 5). According to GoM (2010c), subsidies increased so that the primary fiscal deficit passed from 2 per cent of GDP in 2008 to 5 per cent of GDP in 2009. This huge increase was largely due to the payments to fuel retailers and to millers and bakers.

Table 5: Evolution of accumulated debt

Accumulated debt	2006	2007	2008	2009	2010
External	83,306	78,778	106,152	129,446	122,754
Internal	6,932	8,042	7,446	11,914	18,747
Total real change, %	-	-6.9	11.1	11.6	-17.4

Source: GoM, Conta Geral do Estado, 2006-10.

Given the quantity and complexity of the different responses implemented by the government during and after the food and fuel price crisis, it is difficult to accurately assess the impact of the adopted policies. While the adopted policy responses broadly fulfilled the goal of ultimately preserving the consumers from a massive price increase, their effect on macroeconomic stability is less clear. Some of these policy adjustments came at a very high cost, especially those that deprived the government of important sources of revenue, thereby preventing future investments.

Some sectors were more adversely affected by the price shocks: namely, transport and communications, tourism, and manufacturing. Other sectors, like agriculture, financial services, water and electricity, and construction seemed to be more immune to the crisis shocks (Castel-Branco and Ossemane 2010). The limited impact of the price shocks on consumers can then be explained largely by both the country's weak integration with international markets (Simeone 2010) and by the interventions of the central government in the economy.

6 Conclusions

The food and fuel price shocks occurred in 2008/9, immediately before the general elections which led the central government of Mozambique to intervene in order to stabilize the impact of

³ See also: <http://blogs.worldbank.org/african/on-the-riots-in-mozambique-are-subsidies-the-solution>

price shocks in the domestic market. A mixture of subsidies and other measures helped to keep the retail price of food commodities stable, and thus to avoid greater social struggle. Nonetheless, such policies turned out to be extremely costly in terms of lost revenue and increased debt, so that their effect on the macroeconomic framework and on poverty reduction is less clear.

Using a standard co-integration procedure, we find that domestic prices for rice and wheat followed the international trends only partially, and that they remained high even after international prices had declined. This paper concludes that a significant price transmission mechanism existed only between the international price of rice and the price of rice in Nampula, and between wheat and rice prices in Maputo and Nampula. Such a transmission mechanism did not seem to be in place for the market of Beira in the central region.

Our conclusion is that Mozambique is a fairly small economy, with weak linkages to international markets and prices, but that it increasingly depends on imported food commodities and fuel. This makes Mozambique vulnerable to international price shocks, also because the economy in the past had been unable to create the conditions needed for increasing agricultural productivity and food production, and for storing post-harvest agricultural surplus efficiently. Price shocks affected some sectors as well as some socioeconomic groups more than others, but the overall effects of these seemed to have been limited. This can be explained largely by both Mozambique's weak integration with international markets and by central government's deep interventions in the economy, which could have been more severe had the government not intervened.

References

- Alfieri, A., C. Arndt, and X. Cirera (2007). 'Distortions to Agricultural Incentives in Mozambique'. DNEAP Working Paper 54. Maputo: National Directorate of Studies and Policy Analysis, Ministry of Planning and Development, Mozambique.
- Arndt, C., R. Benfica, N. Maximiano, A. Nucifora, and J. T. Thurlow (2008). 'Higher Fuel and Food Prices. Economic Impacts and Responses for Mozambique'. IFPRI Discussion Paper 00836. Washington: IFPRI.
- Banco de Mocambique (2012). Base de dados da Balança de Pagamentos. Maputo: Mozambique
- Cachomba, I (2010). 'Impacto económico da redução da importação do trigo em Moçambique'. II Simpósio de Investigação Agrária em Moçambique. 15-17 de setembro de 2010. Maputo: Mozambique.
- Castel-Branco, N., and R. Ossemane (2010). 'Mozambique Phase 2'. Global Financial Crisis Discussion Series Paper 18. London: Overseas Development Institute.
- Cunguara, B., and J. Hanlon (2010). 'Poverty is not being reduced in Mozambique'. London: Crisis State Research Centre, London School of Economics and Political Science.

- Donovan, C., and E. Tostão (2010). 'Staple Food Prices in Mozambique'. Paper prepared for the COMESA policy seminar on 'Variation in Staple Food Prices: Causes, Consequence, and Policy Options'. Maputo.
- GoM (2005). Programa Quinquenal do Governo 2005-2009. Maputo: Mozambique.
- GoM (2007). Balanço do Plano Economico e Social. Maputo: Mozambique.
- GoM (2008a). Balanço do Plano Economico e Social. Maputo: Mozambique.
- GoM (2008c). Cenário Fiscal de Médio Prazo 2009-2011. Maputo: Mozambique.
- GoM (2010a). Programa Quinquenal do Governo 2010-2014. Maputo: Mozambique.
- GoM (2010b). Terceira Avaliação Nacional da Pobreza em Moçambique. Maputo: Mozambique.
- GoM (2010c). Relatório de Execução Orçamental. Maputo: Mozambique.
- GoM (2011). Balanço do Plano Economico e Social. Maputo: Mozambique.
- Magaua, M., V. Hong, and C. Massingarella (2011). Natural resource endowment of Vietnam and Mozambique.
- Minot, N. (2010). 'Transmission of World Food Price Changes to African Markets and its Effect on Household Welfare'. Paper prepared for the COMESA policy seminar on "Variation in staple food prices: Causes, consequence, and policy options". Maputo: Mozambique.
- Mosca, J. (2011). *Políticas agrarias y cambios en la agricultura de Mocambique (1975-2009)*. Maputo: Mozambique.
- Simeone, F. (2010). 'A crise económica mundial: implicações e impacto em Moçambique no primeiro Semestre de 2009'. Discussion papers No. 65P. Maputo: National Directorate of Studies and Policy Analysis, Ministry of Planning and Development.
- Traub, L. N., R. J. Myers, T. S. Jayne, and F. H. Meyer (2010). 'Measuring Integration and Efficiency in Maize Grain Markets: The Case of South Africa and Mozambique'. Paper presented at the Joint 3rd African Association of Agricultural Economists (AAAE) and 48th Agricultural Economists Association of South Africa (AEASA) Conference, 19–23 September. Cape Town.