

Discussant comments on “Managing Price Volatility: Approaches at the global, national, and household levels”

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When I was a graduate student in the mid 1980s, I remember reading a number of Peter Timmer’s works, which were on the syllabi of almost all of the development oriented courses that I took at Michigan State University. Professor Timmer was, and still remains, one of the luminaries of our field, and because of that, I feel a bit reticent to say that I find myself in disagreement with him on a number of his points. I believe that several of Timmer’s key conclusions derive from his many years of working primarily on rice-based food systems in Asia, whereas my conclusions derive more from my work on maize-based systems in Africa. I think it is not a case of one of us being right and the other being wrong, but rather a reflection largely of the structural differences between Asia and Africa with respect to cropping systems, governance, country size, infrastructure, and human capital. Our collective challenge, therefore, is to highlight these differences and to see what policy lessons each region can learn from the other.

I will illustrate these differences by first summarizing the major points of Timmer’s presentation, and then explain my problem with each of them, especially as they apply to Africa. I will then conclude with my list of policy *do’s* and *don’ts* for helping governments manage the problems associated with food price volatility.

Timmer makes three basic points:

1. Price volatility is a major *economic* problem – price stability contributes to economic growth.
2. Food price volatility is a major *political* problem. Policy analysts need to address these real problems to be taken seriously by policy makers. He stresses that “greater attention needs to be devoted to ‘2nd -best’ approaches at the national level mainly because policy makers tend to ignore standard economic arguments discouraging major interventions in food markets.
3. Timmer offers four guidelines for policy makers:
 - a. Help households cope with price risks;
 - b. Help countries stabilize domestic food prices, with minimal spillover to global markets;
 - c. Help regional organizations provide productive forums for coordinated food reserve policies;
 - d. Stop thinking of price stabilization as something to be avoided but rather something to be done, and done better.

These points are all articulately and compelling argued in Timmer’s paper, yet I have some fundamental misgivings. Why?

Price stability contributes to economic growth, but price stabilization efforts too often do not contribute to price stability. The empirical evidence of governments’ track record in stabilizing

food prices has been mixed at best (Kherallah et al. 2002; Dehn et al. 2005; Byerlee et al. 2006; Tschirley et al. 2006; Rashid et al. 2007; Chapoto and Jayne 2009; Sarris and Morrison 2010). In Africa, two of the countries that have taken the most aggressive steps to stabilize food prices in the region, Zambia and Malawi, have experienced the most volatile food prices of all the countries examined in a comparative analysis by Chapoto and Jayne (2009). Clearly, the weight of the research evidence in Africa shows that price stabilization has only rarely contributed to price stability, and in many cases it has exacerbated it, at massive costs and foregone investment in other areas where positive impacts might otherwise have been achieved. While the stabilization objective may be noble, most measures to implement it have been counterproductive in Sub-Saharan Africa.

In other developing areas, such as Latin America and Asia, governments have had more success in stabilizing prices, but even here many researchers question whether the payoffs to price stabilization are really worth the costs (Rashid et al. 2007). Moreover, the political economy literature underscores many cases in which government actions taken ostensibly to stabilize markets for the benefit of farmers and consumers are often the smokescreen for patronage activities that may undermine the interests of the majority (Bates 1981; Bates and Kruger 1993; Sahley et al. 2005; van de Walle 2001). I personally saw, as a Peace Corps Volunteer in Ghana in the early 1980s, how the hard efforts of smallholder farmers could be undermined by the stroke of a pen by unfortunate and often self-serving actions taken by politicians.

My conclusion regarding Timmer's first main point is that, despite agreeing that there are indeed benefits to price stability, government attempts in many developing countries to stabilize prices often create instability in the food markets. I am aware of little evidence to support the view that countries that attempt to stabilize have greater productivity growth or food security than those that do not.

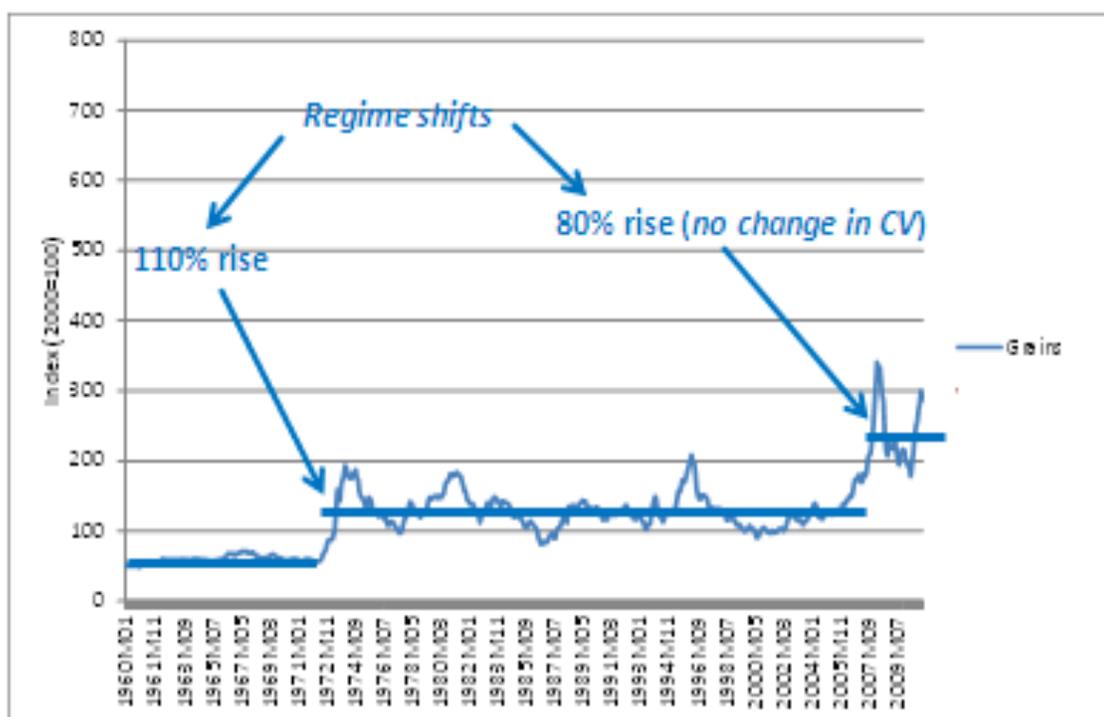
Timmer's second point is that food price volatility is a major *political* problem, and that policy analysts need to devote greater attention to "2nd-best" solutions that take into account politicians' concerns in order to be taken seriously by them. I believe that there is a lack of clarity about what the fundamental problem really is. As Barrett and Bellemare (2011) recently pointed out, there is sometimes confusion between price instability and rising food prices. Food price instability can cause confusion in price signals, but most analyses show that high food prices are the much more important and dangerous problem. Barrett and Bellemare argue that they "find no rigorous evidence" to indicate that political unrest is associated with food price instability.

It is also instructive to ask whether there is evidence to suggest that food prices are becoming more unstable or less affordable to the world's poor. Figure 1 shows the world food price index from 1960 to 2010 in nominal terms. There appear to be three distinct structural periods over this time frame: one in the 1960s and up to 1972; one starting in 1972 when food prices jumped amid panic of a world food crisis but then stayed relatively constant over the next three decades up to early 2008; and, one that seems to have started in 2008 with the increasing integration of food and fuel markets, the expansion of the biofuels industry, and the rising growth in the demand for food associated with income growth in middle-income countries. A major conclusion evident from Figure 1 is that while the nominal price of grains has increased over time, there has been no

major change in the instability of food prices (as measured by the coefficient of variation) between these three periods.¹

Figure 1. Are food and fertilizer prices becoming more unstable?

**World Bank World Price Indices for Grains and Fertilizer (Pink Sheet)
1960-2011**

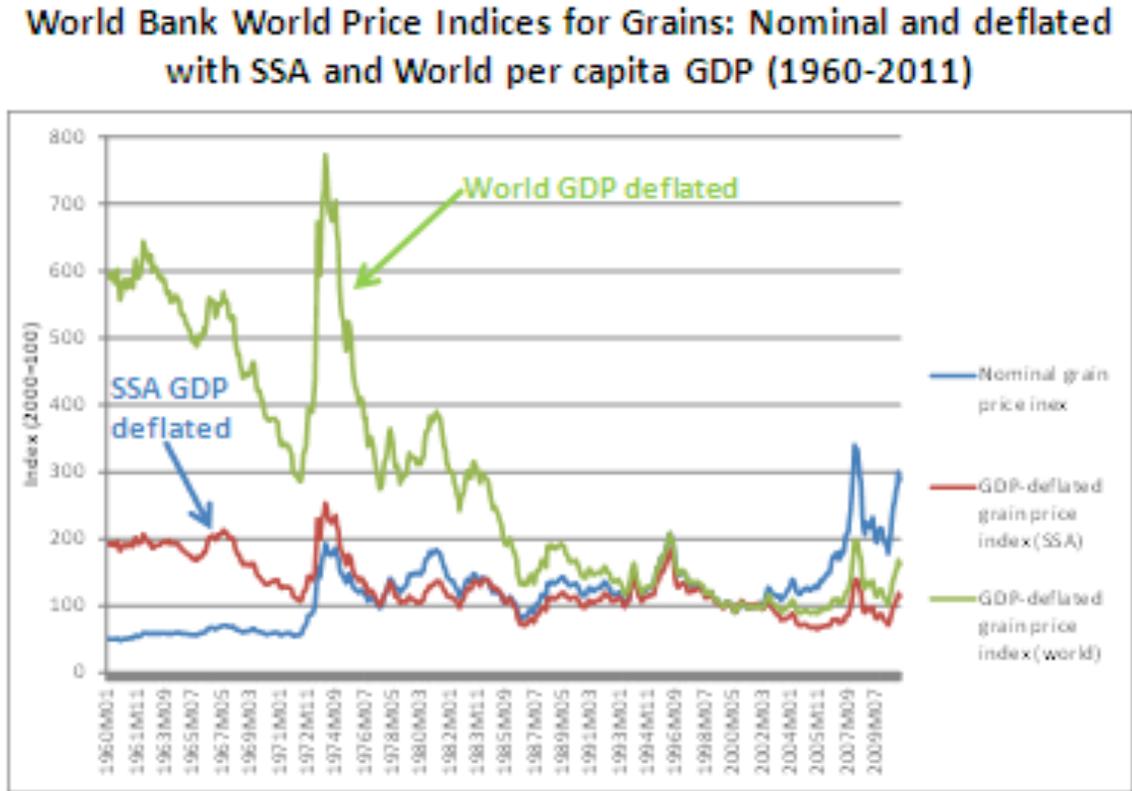


Source: World Bank 2011.

Furthermore, when food prices are deflated by the world GDP deflator to provide a rough measure of the cost of food relative to incomes (Figure 2), it becomes clear that food has become considerably less costly over time, and the episodes of price run-ups, as in 2008-09, look considerably less severe. Even deflating prices using the Sub-Saharan Africa GDP deflator, shows that food prices have fallen in real terms and become less unstable. In short, incomes are growing faster than food prices -- a testimony to long run economic growth and agricultural productivity growth. Other studies from Africa examining food prices relative to wage rates and urban worker incomes reach very similar conclusions (Mason et al. 2011; Headey 2010). Obviously, many consumers' wages did not rise as fast as the GDP deflator, but even if they rose half as fast, the real cost of food has surely declined over the past 40 years for the vast majority of the world's consumers.

¹ I thank Dave Tschirley for Figures 1 and 2, which he prepared using World Bank data at: <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21574907~menuPK:7859231~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>

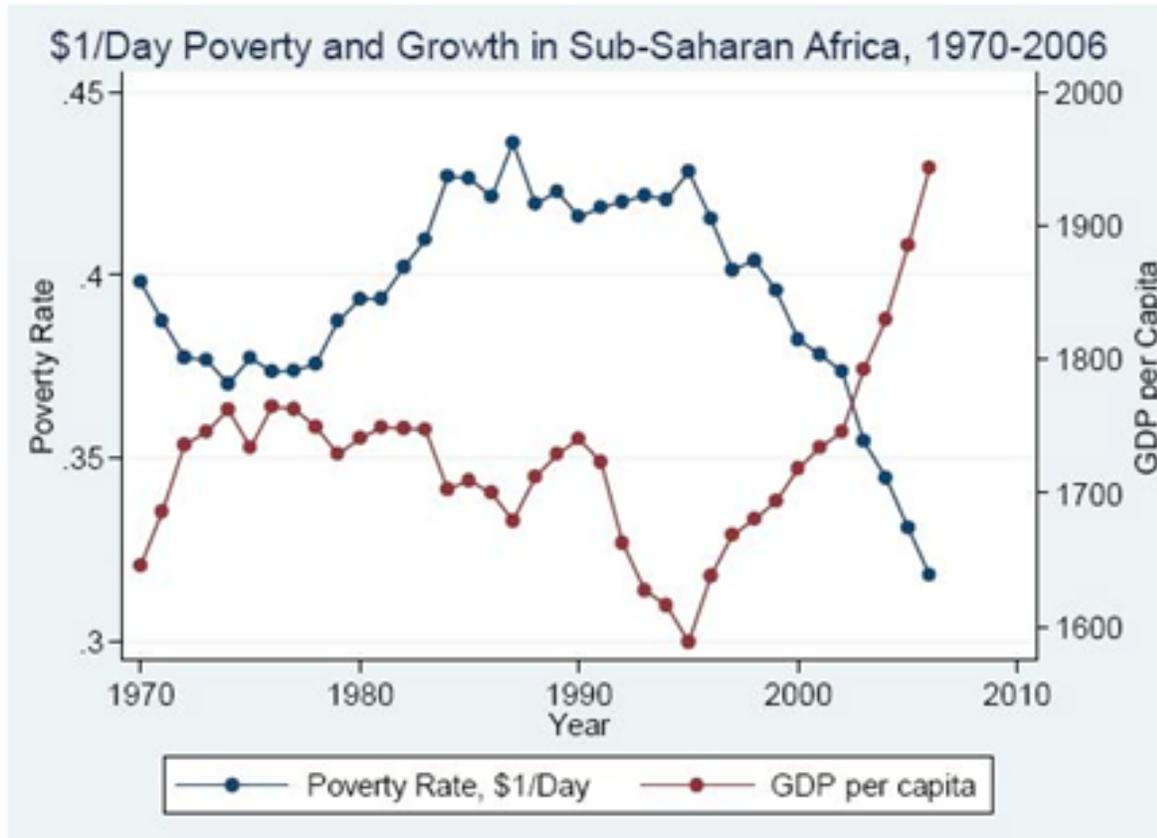
Figure 2. Higher food price levels?



Source: World Bank 2011.

Africa is also apparently in the midst of a 15-year trend in rapid income growth and poverty reduction (Figure 3). Earlier this year, the World Bank documented the rise of the African middle class. In the past 10 years, the middle class has risen from 50 million to 200 million. About 1 in 5 persons in Africa are now regarded as middle class. There is obviously still very far to go, but the macroeconomic and sectoral reforms that most of Africa underwent in the early and mid-1990s – as politically painful as they were – appear to be reaping major benefits.

Figure 3. Trends in poverty rates and income per capita, Sub-Saharan Africa



Source: Sala-i-Martin and Pinkovskiy 2010.

Based on the foregoing evidence, I conclude that there is little evidence to suggest that food prices are becoming more volatile: GDP and wages are rising faster than food prices in most developing areas, including most of Africa, hence the problem of food affordability is generally declining over time, and should continue to do so if governments continue to make the right investments to promote long-run and sustainable agricultural productivity growth; farmers producing a surplus are hurt by low prices, but these surplus-producing farmers are usually considerably better off than the rural poor, who tend to be net buyers of food and are hence made worse-off from efforts to raise food prices (Naylor and Falcon 2010). Efforts to raise farm prices often hurt the poor and tend to have a regressive effect on income distribution; and *high* food prices (not volatility *per se*) constitute the major problem. The strategies for addressing structurally high food prices differ from the strategies to address price volatility. The best defense against unaffordably high food prices is income growth, so a focus on the public investments and policies that can best achieve that seems the preferred option.

With respect to Timmer’s conclusion that good economics must take account of political realities, my conclusion is, “let’s not be so quick to give in to 2nd best approaches.” Dismissing 1st best strategies as not worthy of consideration because politicians will not accept them strikes

me as settling for less than what could be achieved. How many seemingly unattainable policy reforms may have seemed politically impossible to achieve for so long but indeed occurred with surprising quickness? The break-down of the Berlin Wall, economic liberalization in eastern Europe, and more recently, major political change in the longstanding autocratic regimes of the Middle East were all once viewed as politically infeasible not long before they actually happened.

Africa's agricultural policy environment is fundamentally less shackled by state control now in 2011 compared to the late 1980s when many African governments controlled food markets, prices, external trade, and exchange rates as a matter of state sovereignty. In short, it is important not to underestimate what kind of 1st best policy reform is possible. I entered the agricultural field in order to identify and make the case for the policies and investments that would most effectively promote the welfare of poor people in the developing world. I would like to keep the pressure on to ensure that public funds are allocated in the way that makes the greatest contribution to long-term poverty and hunger reduction.

I would thus have liked to have seen Timmer put more focus on the policy and investment strategies that represent the best prospects for sustainable poverty reduction and livelihood improvement, rather than focus on 2nd - best options involving very expensive price stabilization. To be fair, however, I recognize that his lecture today was but one in a series, that volatility was his topic, and that the merits and demerits of alternative investments are the topics of other presentations.

So, concretely now, what should be done? Timmer's paper highlights the importance of helping households cope with price risks, helping countries stabilize domestic food prices (with minimal spillover to global markets), helping regional organizations provide productive forums for coordinated food reserve policies, and encouraging governments to think of stable food prices as a "good" rather than a "bad." Timmer also highlights the importance of long-run investments too, such as crop science, infrastructure, and basic education, but does not underscore the major trade-offs involved. Last year, the Zambian government's efforts to stabilize maize prices cost 2 percent of its GDP, more than the treasury's entire annual outlay to the Ministry of Health. Think of the added gains in child and maternal health and the long-term productivity impacts that could have been achieved if 2 percent of Zambia's GDP could have been invested in addressing its severe health problems!

My list of concrete actions for Sub-Saharan Africa would encourage a shift in public budgets from price stabilization (some of which is often destabilizing) to investments with a proven track record in reducing poverty and promoting income growth: sound macroeconomic management, crop science / R&D, improving farmer knowledge and management through viable agricultural extension systems, basic education and health, marketing infrastructure, and more rules-based as opposed to unpredictable government actions in markets (trade bans, sudden changes in marketing board operations, etc). The weight of research evidence from the development economics literature over the past 40 years highlights these investments as having the greatest positive impact on agricultural development, income growth, and the livelihoods of the poor.

In a world of constrained resources, every dollar spent on price stabilization is a dollar potentially not spent on crop science, R&D, farmer extension systems, health and education, sustainable use of the world's available water, and other investments necessary to enable more of the world's farmers to respond to high food prices and to raise the world's food production. And, therefore, cope with the huge growth in world demand.

In the long run, I believe that Timmer and I agree on the way forward – using public resources to promote productivity growth. In part, I learned this from Timmer himself a long time ago! Where we differ is in the short-run.

What should be done in the short run? First, distinguish between emergency reserves and buffer stocks. The former are smaller, meant to cover an immediate shortfall until imports can arrive. The latter are explicitly meant to stabilize prices and so need to be large. In spite of a compelling theoretical rationale, buffer stocks have a very poor record in many developing countries, Africa in particular. Second, there is a need to combine relatively small emergency reserves (two to three months maximum) with robust and layered safety nets, involving school feeding programs, conditional cash transfers, and temporary food aid.

What should not be done—at least in Sub-Saharan Africa? I believe that advising governments to undertake large-scale food procurement and buffer stock policies would be disastrous for many developing countries and their citizens. It is true that stabilizing well could be good economics. But stabilizing badly is neither good economics nor good politics.

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