Contents lists available at SciVerse ScienceDirect



Global Food Security



journal homepage: www.elsevier.com/locate/gfs

Government trade restrictions and international price volatility

Kym Anderson^{a,b,*,1}

^a School of Economics, University of Adelaide, 10 Pulteney Street, Adelaide, SA 5005, Australia ^b Crawford School of Public Policy, Australian National University, Canberra, ACT 2601, Australia

ARTICLE INFO

Article history: Received 30 May 2012 Accepted 6 November 2012

Keywords: Food price stabilization Domestic market insulation Trade-distorting measure

ABSTRACT

National governments dislike food price volatility to varying extents. When some of them use trade measures to insulate their domestic market from international food price fluctuations, that volatility is amplified. This in turn prompts more countries to follow suit. However, when both food-exporting and food-importing countries so respond, each group becomes less capable of preventing domestic price volatility. This paper examines empirically the extent of insulation in both groups of countries, and also in high-income versus developing countries. It also provides an estimate of the contribution of such government actions to international food price spikes. A multilateral agreement to limit such government responses would reduce the need for all countries to so intervene, and allow more-efficient generic social protection policies to deal with the most vulnerable cases.

© 2012 Elsevier B.V. All rights reserved.

1. Introduction

The upward spike in international food prices in 2008 caused panic in numerous developing countries. It may have even contributed to the recent political revolutions in several Arab countries. Two further price spikes have since occurred, in late 2010/early 2011 and in the second-half of 2012 (see Fig. 1). Having three international food price spikes in less than 5 years is unprecedented in modern history, and justifies the attention policymakers have been giving to its national and global food security consequences. That in turn warrants further analysis of the contributors to the spikes.

Apart from the immediate political and poverty crises it can cause, food price volatility is also undesirable from a long-run economic viewpoint. This is because unexpected commodity price fluctuations reduce consumer and investor confidence in all countries, thereby potentially lowering global economic growth. They also cause swings in the economic welfare of net sellers of food versus net buying households, and hence also between net food-exporting and food-importing countries.

Understanding the causes of international food price volatility is an important first step toward reducing this global problem. Much has been written and spoken about possible causes of the mostrecent fluctuations in those prices, including in the mass media and in international fora such as the G20 (FAO et al., 2011). Weather is obviously one possible supply-side contender, and climate change may be adding to the frequency and severity of extreme weather events. However, since growing seasons vary across the globe and the various crops grow in different months of the year, international trade and consumer substitutability normally can even out their net effect on the international price of food. Speculators are sometimes blamed, although their contribution as a group is usually the opposite because – if they are to be profitable and remain in business – they tend to buy when prices are low and sell when they are high. A problem can arise though if global stocks are depleted while prices are still rising—which Wright (2011) argues convincingly was one of the main contributors to the 2008 food price spike.

The purpose of this paper is to highlight another contributor to the volatility of international food markets, namely national governments' agricultural trade policies. Those policies contribute in two ways: through 'thinning' the international market for food in normal years; and through 'insulating' domestic markets from, and thereby adding to, international price swings in abnormal years. Over the past half-century the former has been a consequence of rich industrial countries protecting farmers relative to manufacturers and poor agrarian countries doing the opposite (for reasons explained in Anderson (1995, 2010)). The latter is the result of fluctuations in food trade restrictions, stemming from the fact that national governments dislike domestic food price volatility. When some governments alter the restrictiveness of their food trade measures to insulate their domestic markets from international price fluctuations, the volatility faced by other countries is amplified. That reaction therefore prompts more countries to follow suit, which not only further amplifies but also lengthens the duration of each price spike. The irony is, however,

^{*} Tel.: +61 8 8313 4712; fax: +61 8 8223 1460.

E-mail address: kym.anderson@adelaide.edu.au

¹ The author is grateful for referee comments, for discussions with Will Martin and Signe Nelgen, and for financial support from the Australian Research Council, the World Bank, and Australia's Rural Industries Research and Development Corporation. Views expressed are the author's alone.

^{2211-9124/\$ -} see front matter @ 2012 Elsevier B.V. All rights reserved. http://dx.doi.org/10.1016/j.gfs.2012.11.005



Fig. 1. Real international food and cereal price indexes, from January 1990 to September 2012 (monthly data, 2002–2004=100). *Source*: FAOSTAT at www.fao.org.

that when both food-exporting and food-importing countries so respond, each country group undermines the other's attempts to stabilize its domestic markets. That is, what seems like a solution to each country's concern if it were acting alone turns out to be less effective, the more other countries respond in a similar way.

This paper first explains the basic national and global economics behind both types of trade policy contributions to the volatility of international food prices. It then reviews empirical evidence on trends and fluctuations in the extent of those policy interventions, and the evolution through time of their market, welfare, inequality and poverty effects. It highlights the substantial role that trade restrictions continue to play in 'thinning' international food markets, and the roles that fluctuations in those trade restrictions have played in amplifying substantially international price volatility and yet reducing very little domestic food price volatility. The final section examines national and multilateral policy options for reducing the contribution of trade policies to global food price volatility, and for improving the effectiveness of social protection policies to deal with the most vulnerable households whose food security would otherwise be adversely affected by food price spikes.

2. Global economic effects of national trade policies

Consider first the 'thinning' argument, which grew in importance up to the 1980s but has since diminished somewhat with trade policy reform, and then the 'insulating' argument which has not diminished despite the trade reforms of the past three decades.

2.1. The 'thinning' argument

If rich industrial countries protect their farmers from import competition more than they assist their manufacturers and producers of other tradables, that policy choice encourages domestic food production and discourages domestic food consumption in those countries. It thus reduces demand and so lowers the relative price of food and reduces the volume traded in the international food marketplace.² If poor agrarian countries do the opposite, for example through taxing farm exports or protecting manufacturers from import competition, that discourages domestic food production and encourages domestic food consumption in those developing countries. That in turn lowers the relative price of food in those countries and so also reduces the volume traded in the international food marketplace. These two country groups' trade policies thus reinforce each other's impacts on that international market. They also reinforce each other in discriminating against net sellers of farm products in developing countries—including in those countries whose governments choose not to adopt antiagricultural trade policies.

The important point in terms of price volatility is that such policy regimes, in addition to reducing the volume of food trade across national borders, also tend to lower the price elasticities of aggregate excess demand and excess supply in the international food marketplace. This 'thinning' of the international food market thus makes its price more volatile in the face of any given-sized global supply or demand shock. It also means that there are fewer logistics in place for shipping food than would be the case under less-restrictive international trade regimes, so the world is less able to cope when more shipments are suddenly needed in crisis times.

2.2. The 'insulating' argument

As for the 'insulating' aspect of farm trade policies, it is again helpful to think of the world as having just two country groups, namely food importers and food exporters. Suppose a severe weather shock at a time of low global stocks causes the international food price to suddenly rise. Those national governments wishing to avert losses for domestic food consumers may alter their food trade restriction so that only a fraction of that price rise is transmitted to their domestic market. For example, imposing or raising an export tax or an equivalent quantitative restriction on food exports would mean the domestic price in a food-surplus country would rise less than the border price. Similarly, lowering any import tax on food would mean the domestic price in a fooddeficit country would rise less than the border price. Hence it is not surprising that governments, in seeking to protect domestic consumers from an upward spike in international food prices, consider a change in trade measures as an appropriate lossaverting response. That response raises the consumer subsidy equivalent/lowers the consumer tax equivalent of any such trade measure, and does the opposite to producer incentives.³

However, if such domestic market insulation using trade measures is practiced by large countries, or by a sufficiently large number of small countries, it turns out to be not very effective in keeping domestic price volatility below what it would be in the international marketplace if no government so responded. To see why this can lead to ineffective outcomes, it is helpful to refer to Fig. 2, which depicts the international market of food. In a normal year, the excess supply curve for the world's food-exporting countries is ES_0 and the excess demand curve for the world's

² True, production and export subsidies in food-surplus countries expanded international trade, but in practice that was always dwarfed by the trade-restricting effects of food-deficit countries' protectionist policies.

³ Conversely, a global shock that expanded supply on the international food market and caused its price to slump may trigger the opposite reaction by governments concerned for the welfare of their farmers. That is, food export taxes may be lowered in food-surplus countries and tariffs may be raised in food-importing countries, again to ensure only a fraction of the change in the international price is transmitted to those countries' domestic markets. In that scenario the response by governments lowers the producer tax equivalent/raises the producer subsidy equivalent of any such trade measure, and does the opposite to consumer incentives.

Download English Version:

https://daneshyari.com/en/article/1047599

Download Persian Version:

https://daneshyari.com/article/1047599

Daneshyari.com