

Impact of World Prices of Many Countries Using Trade Policy to Stabilize Domestic Food Prices: Discussion of K. Anderson & S. Nelgen

Terry Roe

University of Minnesota

Dec. 10, 2011

Introduction

- ① How and to what extent have border restrictions on trade in farm products
 - "Adjusted" to spikes in food prices, and
 - Further contributed to magnitude of spikes
- ② Shows that response by exporters and importers
 - Reduce the effectiveness of the others' domestic market stabilization intervention effort while
 - Exacerbating the international price spikes.
- ③ History: discussed by the D. Gale Johnson in the 1980s (ref.? Chapter he authored in a book he co-edited with Schuh)
- ④ Policy implications: stronger WTO disciplines

Political economy

- 1 Governments use trade measures to protect consumers from spikes; or to limit/dampen deviations from world prices from entering the economy. (Gov. risk aversion?)
- 2 Couple of points
 - Strategic interdependence between exporting - importing countries and even a simple one-shot Nash game (with Negishi weights) could be interesting to pursue: provide insights into possible treaty actions
- 3 More efficient instruments exist: however
 - Institutional constraints & collective choice of instruments (new) vs levels involves different costs and benefits in the collective action process. (Rodrik, Agemoglu, Easterly)

Economic effects

- 1 Motivated by clear and easily read partial equilibrium diagrams.
 - Effects of price distortions on factor payments can be viewed through Stolper-Samuelson logic of relative factor intensities (not necessarily the case that wages fall)
 - Nevertheless, resource allocation departs from true opportunity costs, causing decline in total real factor income...which is a **second order neg.** effect on consumers
 - Growth? Econometric studies find it a challenge to link trade interventions to growth
- 2 Inequitable; Collective action->terms of trade tends to favor exporting country farmers
- 3 Magnitudes: GE effects, less than those predicted by partial equilibrium; dynamic effects greater than static GE

How to estimate policy response link to price deviations

Elegance: From partial equilibrium excess demand:

$\sum_i (S_i(p_i) + v_i) - \sum_i D_i(p_i) = 0$, obtains the proportional change in the international equilibrium price \hat{p}^* as $\hat{p}^* = \hat{T} + R + (\hat{T} * R)$ from which one can isolate the proportional effect of \hat{T} according to $\hat{T} / (\hat{T} - R)$.

Evidence (data)

- 1 Nominal Rate of Assistance (NRC), Nominal Assistance Coefficient (NAC) and consumer tax equivalent (CTE) for 22 high income and 55 developing countries. NRC capture direct border measures (not limited to tariffs) \Rightarrow rich(poor) countries $NRA >(<)0$, **Negatively** correlated with dev. from trend in world price \Rightarrow dampen effect of world price deviations on economy.
 - **Excludes** farm input subsidies, and effects of **indirect** interventions
 - Krueger-Schiff-Valdes; but for this paper, direct are right point of focus
- 2 Price transmission (distributive lag); further evidence supporting a "target" price (policy) and dampening effects of world to domestic prices
 - Perfect substitutes a la Armington?
 - Exchange rate?

Evidence (NAC changes when prices spike)

- 1 Spike year plus two years on either side; this gives three episodes and capturing trough-peak-trough for spikes for 1974 and 2008 spikes, and reverse for the 86 negative spike;
- 2 Find NAC lower on upward spike relative to mean, and conversely on downward side.
 - Some measures of dispersion would be useful.

How much do NRA changes contribute to upward price spikes?

- 1 Use formula obtained from $\hat{p}^* = \hat{T} + R + (\hat{T} * R)$ to estimate "externality" effect
- 2 The change in trade restrictions \hat{T} for 2005-08) are -40 rice, -14 wheat and -12 maize (different numbers in paper table 6). Given observed % changes in world prices (127%, 100%, 126%) calculate the proportional contribution of \hat{T} to these price spikes, and obtain .31, .13 and .18 respectively
 - These are consequences of direct interventions
 - Would GE calculations reveal similar results?
 - In the longer run, what is the effect of rate on growth and sectoral composition?
 - **Insulation** from price spikes: possible..maybe not likely..that collective action (without DUP activities) is willing to pay the "insurance" price
 - Key point is a prisoner's dilemma type problem

Concluding remarks

Good paper, next step