Why Food Security is Determined by Elites: Price Spikes and Vietnam's Rice Policy

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World Rice Prices, 2000-2015

Legend
INTERNATIONAL PRICES, Thailand (Bangkok), Rice (Thai 100% B), Export - USD
Source
2007-08 Price Spike

Price of Thai 100% Grade B rice rose from $US 335 per ton to over $US 1000 per ton

- Estimated to have driven 130 million people into poverty worldwide, with 75 million more becoming malnourished

- Causes for the spike
  - Panic buying by large importers
  - Weak U.S. dollar
  - Rising oil prices
  - Increased biofuel requirements
  - Changing diets and growing incomes of Asian consumers
  - Export restrictions by countries such as India and Vietnam

Export Bans

- Rice
  - Vietnam — 2007-08
  - India — 2007-08
  - Myanmar — 2011
  - Thailand — 2011
  - India — 2011

- Wheat
  - Argentina — 2006
  - India — 2007
  - Russia (Duty) — 2008
  - India — 2011
  - Russia — 2012
  - Ukraine — 2012
  - Russia — 2014
“India will not think of a ban until it fears that local prices are going to increase. The rice crop is good in India and other countries and the global prices may remain stable.” Ajay Jain, assistant vice president at Almondz Commodities Ltd. (Bloomberg, January 9, 2012)

Industry and Trade Deputy Minister Nguyen Thanh Bien said the export ban would help to “reduce the quantity but increase the value and export revenues, while ensuring food security and serving the state’s interest.”

Bien said recent shipments to the Philippines, a rice deficit country, had earned a record 1,200 dollars per tonne. (Economic Times, April 26, 2008)
The Take-Home Message

- The structure of the Vietnamese rice export system is a rational response in political economy terms to the inherent volatility present in the international rice market.
- Vietnam's political institutions provide the elite in that country with the political power to design the policy mechanisms so that the anticipated volatility in the economic environment can be exploited in a manner that is advantageous to the elite.
- These actions, of course, exacerbate the price volatility, further strengthening the demand for export restrictions.

Applied Theory

- Model
  - Motivation of agents (assumptions)
  - Institutional constraints
- Lots of fun math
- Predicted Outcomes
  - Behaviour of the agents
- Observed Outcomes
  - Behaviour of the agents
Models as Hypotheses

Predicted Outcomes ✈ Observed Outcomes

Observed Outcomes
Border rice prices and nominal rates of assistance, 1986-2009
Motivational Assumptions and Institutional Constraints

- The volatility of the grain market
- The psychology of gains versus losses
- The structure of Vietnam's rice policy
- Vietnam's political economy

The Volatility of the Grain Market
U.S. Corn, Wheat and Soybean Prices, 1913-2003
“Grain price volatility exhibits a special pattern with two key features. First, price fluctuations occur against a longer-term backdrop of a downward price trend during the period 1950 to 2001 and a flattening out of prices during the early 2000s. Second, against this backdrop, ...episodes of sharp price spikes, followed by precipitous falls, are prominent features of the data, interspersed by longer intervals of less extreme variation. The price series are asymmetric; there are no steep troughs to match the spikes” (Wright 2011, p. 35)

- Demand is elastic when prices are stable; demand is inelastic when prices spike

The Psychology of Losses versus Gains

Value function steeper for losses than for gains

Value of gain

Losses

Value of loss

Gains
The Structure of Vietnam’s Rice Policy

Ministry of Agriculture and Rural Development
Ministry of Industry and Trade
Vietnam Food Association

Reserved Sales
National Food Authority
Perum BULOG
BERNAS

Cuba
Iraq

Export Targets

The Political Economy Model
Source: Acemoglu and Robinson

Elite
- de jure power
- de facto power
- Economic benefits

Economic Institutions and Policy
Political Institutions
Governance Indicators for Vietnam, 1996-2010
Extractive Political and Economic Institutions

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Ongoing State Control of the Business Environment

“...the programme of so-called ‘equitisation’ [privatization] is de facto a means of preserving and formalizing informal ownership rights, in which party-state actors are still implicated. Hence, it proceeds at a pace suited to the interests of the owner-managers and their state and party clients and protectors. The case of SOE reform illustrates a pattern common across the economic reform process in Vietnam: because the party-state remains enmeshed with the business interests that marketisation has given rise to, it is vital that the process of ‘transition’ is one which the party-state centre controls, or at least contains. In various ways, the centre has had to fight hard not to lose control over its own people and to maintain the integrity and effectiveness of its own systems of power and rule.” (Painter 2005, p. 279).
The Balance of Power

De Facto Power

Everyone Else

Stable Prices

Elites

Sharply Rising Prices
Impact of Price Spikes on Export Tariffs
Low Loss Aversion

Rent Extraction by the Elites

Expected Rents for Elites

Consumer Losses Do Not Affect Power
Prices Spike

Consumer Losses Affect Power

Prices Stable

Tariff Low

Tariff High

Export Tariff
Impact of Price Spikes on Export Tariffs

High Loss Aversion

Fit With Observed Outcomes
Domestic and export rice prices, and export margins, 2008-2009
Other Hypotheses
Why A Political Economy Framework is Required

- Predicted results are very different than if government is assumed to set rice policy so as to maximize economic welfare for the country
- If this were the goal, governments would not allow state-owned enterprises to benefit from the trade restrictions
- Instead, government should capture the rents
- Since this outcome is not observed, it is possible to conclude that welfare maximization is not a motivational assumption that should be used to understand trade restrictions

What Can We Expect in the Future?

- In attempts to stabilize their own domestic prices, exporting countries such as Vietnam exacerbate international volatility by restricting exports at precisely those times when the world market is tight and prices are already rising
- While the restrictions alleviate food security issues in the exporting country, they make them worse in importing countries
- We can expect this behaviour to continue
Direct Subsidies Unlikely

- Direct subsidies to consumers, while more efficient and less distorting to world prices, are unlikely to be implemented.
- The reason: The elites, who have the power, have no incentive to introduce such policies.
- Export restrictions, implemented during times of price spikes, both create rents for the elites and ensure the maintenance of their power.
- These extractive economic policies are a legacy of Vietnam’s colonial past and are likely to remain in place.

Impact on Food Security

- Positive feedback effects at work mean that the political and economic institutions in Vietnam are likely to remain extractive in nature.
- This entrenchment has serious repercussions for the Vietnamese economy, market stability and global food security.
- International price volatility can be expected to persist.
- Since food security depends critically on price volatility, concerns over adequate caloric intake for those with the lowest incomes will persist and be difficult to address.
Thank You