

# **Policies and Trade - Part III: Export Policies**

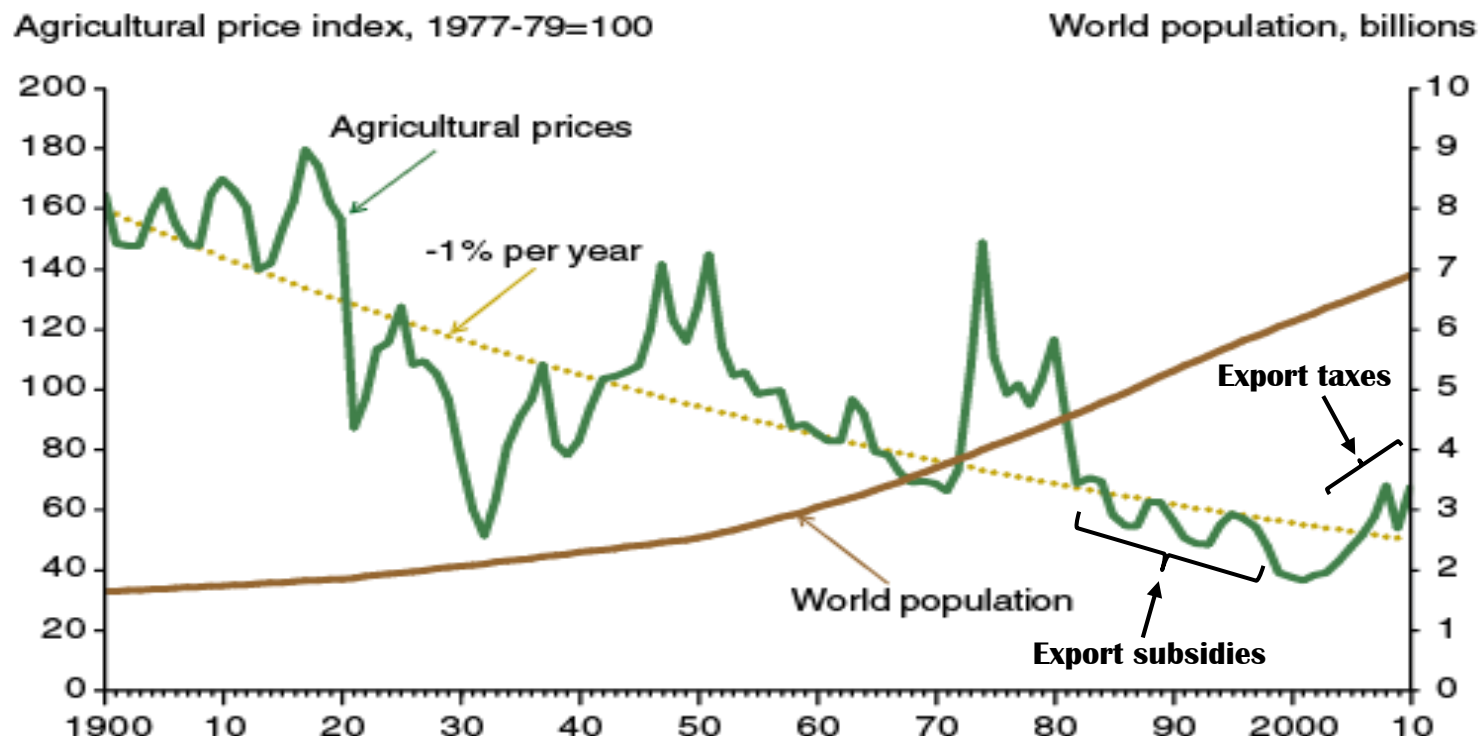


**AED/IS 4540  
International Commerce  
and the World Economy**

**Professor Sheldon  
sheldon.1@osu.edu**

# Real Food Price Trend

**Real agricultural prices have fallen since 1900, even as world population growth accelerated**



Source: USDA, Economic Research Service using Fuglie, Wang, and Ball (2012). Depicted in the chart is the Grilli-Yang agricultural price index adjusted for inflation by the U.S. Gross Domestic Product implicit price index. The Grilli-Yang price index is a composite of 18 crop and livestock prices, each weighted by its share of global agricultural trade (Pfaffenzeller et al., 2007). World population estimates are from the United Nations.

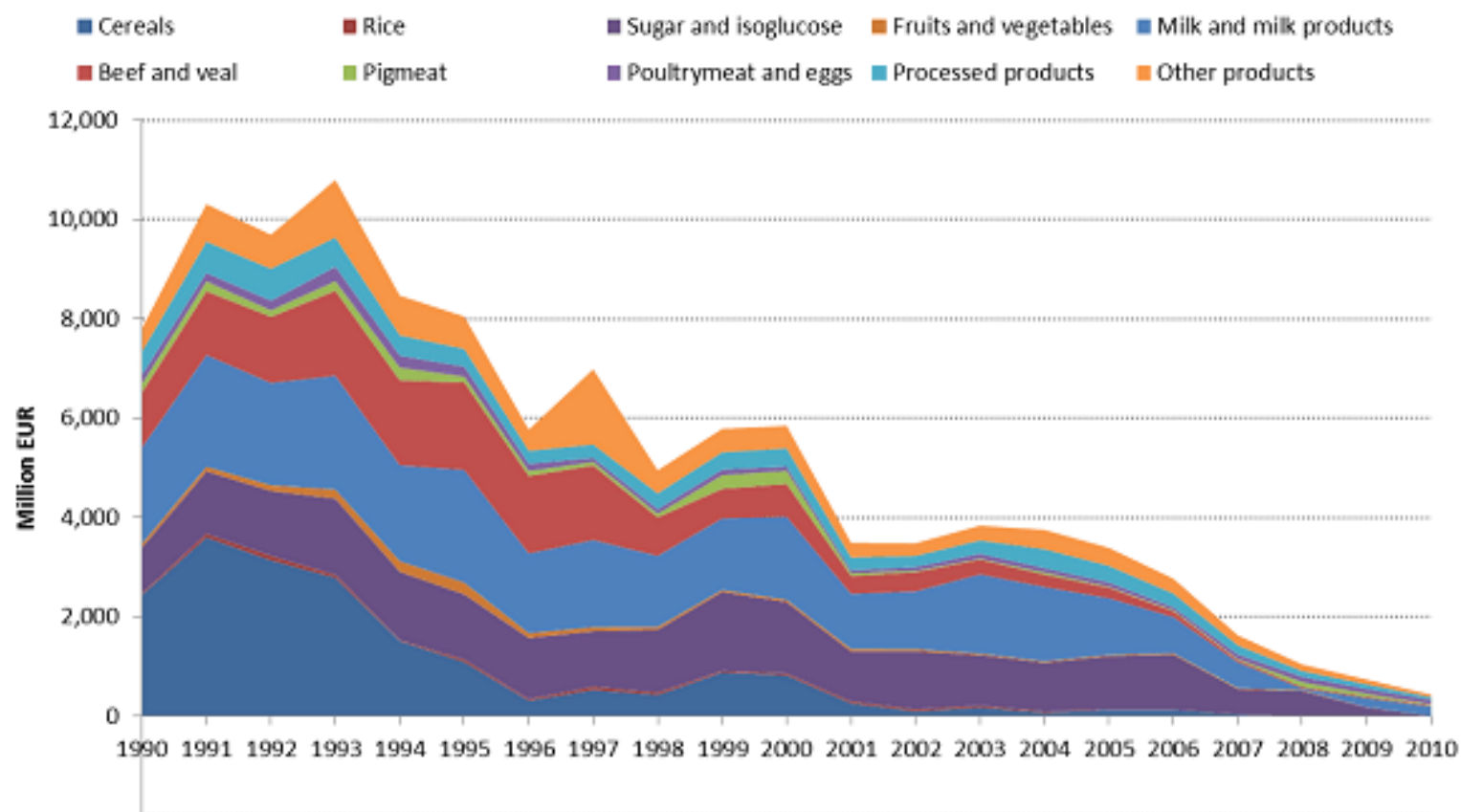
# Export Subsidies

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- ❖ **Governments promote or subsidize exports more often than they restrict or tax them**
- ❖ **Export subsidies often highly transparent, e.g., those given to agricultural commodities by EU (Figure 1)**
- ❖ **Since inception of WTO, focus on any policy that acts as an export subsidy in agriculture, e.g., Brazil won case in 2009 against US in WTO relating to cotton**
- ❖ **WTO members agreed in 2015 to abolish their use**
- ❖ **Export subsidies often good for those who complain about them, bad for those who use them**

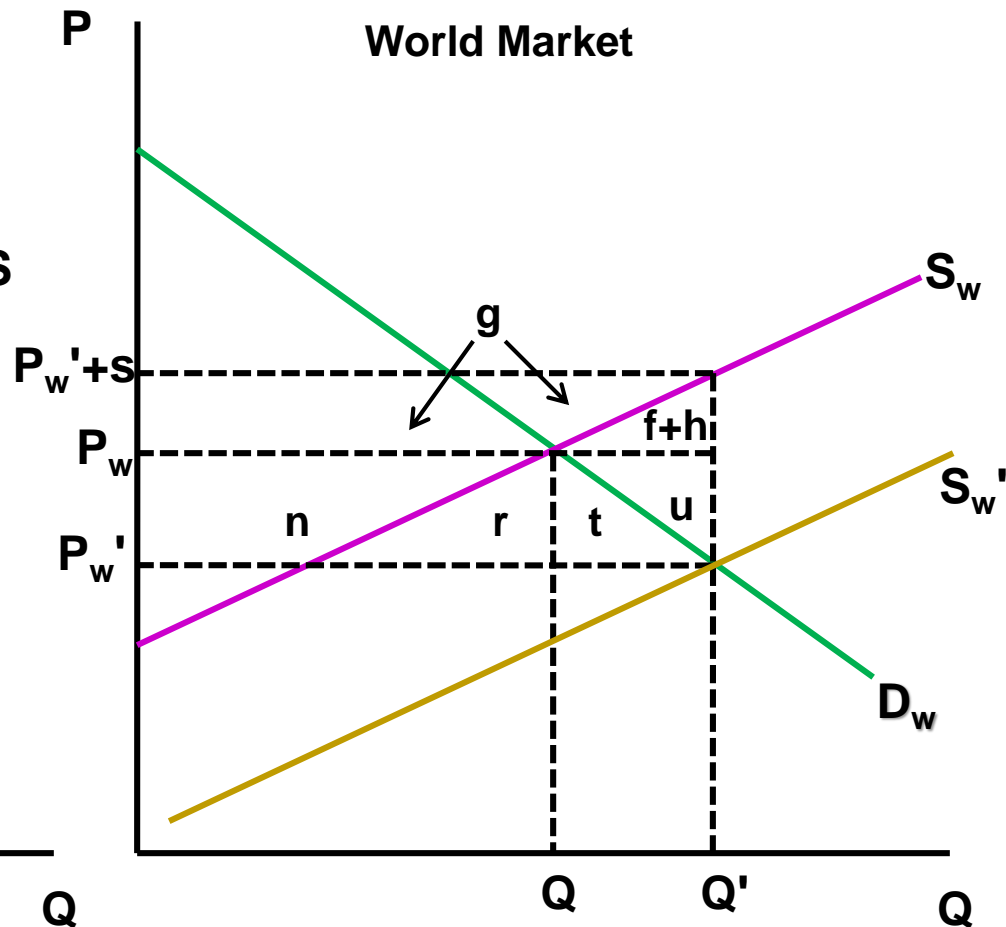
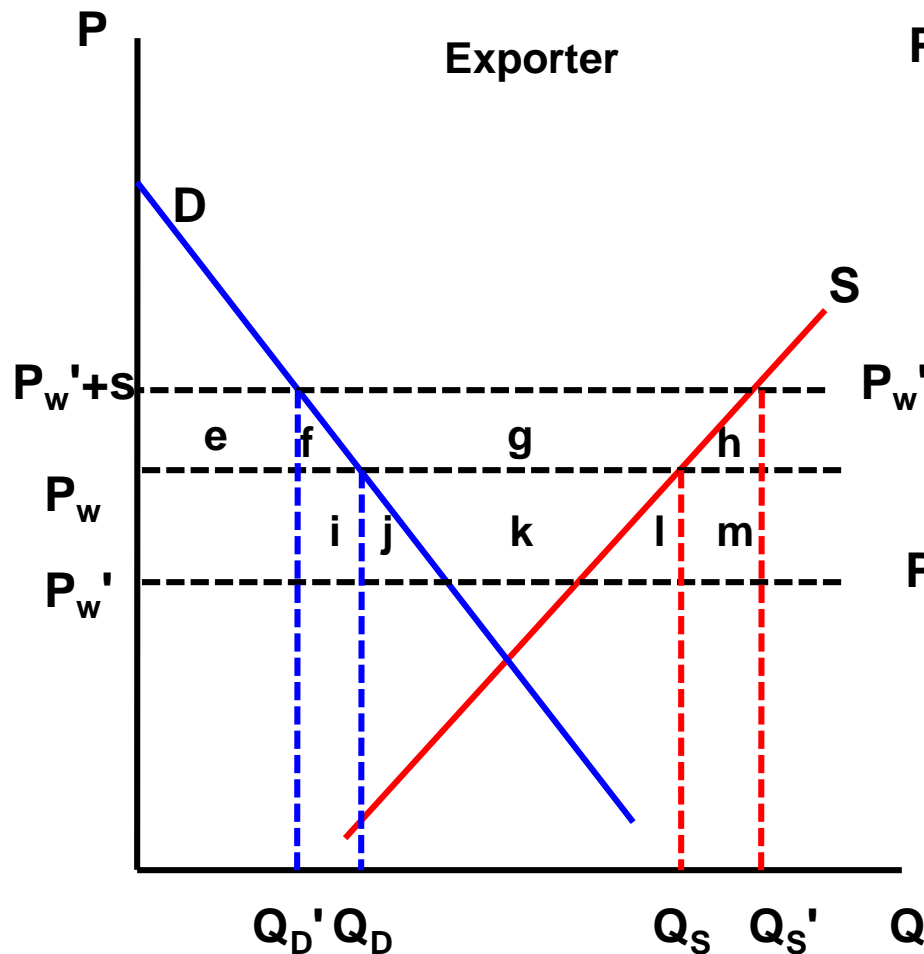
# EU Export Subsidies

**Figure 1: EU Agricultural Export Subsidies, 1990-2010**



Source: OECD

# Export Subsidy: Large Country



# Terms of Trade Effects

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- ❖ Large exporter faces supply curve,  $S_w$
- ❖ With  $s$ , exports rise to  $Q_s'$ , or equivalently  $Q'$ , and world price falls to  $P_w'$
- ❖ Exporter deadweight net loss is  $-(f+h+i+j+k+l+m)$ , made up of consumption effect  $-(f)$ , production effect  $-(h)$ , and terms of trade effect  $-(i+j+k+l+m)$
- ❖ In world market, importer benefits due to fall in world price by extra consumer surplus of  $+(n+r+t)$
- ❖ Overall, world worse off by  $-(f+h+u)$ , i.e., too much of good is exported

# Spikes in World Food Prices

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- ❖ **Post-2007 – world prices of key staple foods volatile around relatively high levels**
- ❖ **Different to pattern over past century where real food prices have trended downwards**
- ❖ **Historically, while price spikes are often intense, they have typically been infrequent**
- ❖ **Since 2008, three price spikes: early 2008, early 2011, and third quarter of 2012**
- ❖ **2008 – price of Thai rice saw 198% increase from \$335/ton to \$1000/ton (Dawe and Slayton)**

# **Political Impact of Higher Prices**

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- ❖ **Higher food prices found to increase poverty sharply in short-run (World Bank, 2012)**
- ❖ **Research suggests food riots are correlated with high food prices (Bellemare, 2015)**
- ❖ **Intervention a matter of political survival in countries with large poor populations**
- ❖ **Indian Prime Minister and Indonesian President both re-elected in 2009 after campaigns emphasizing ability to limit impact of food crisis in respective countries**



# Response to Food Price Spikes

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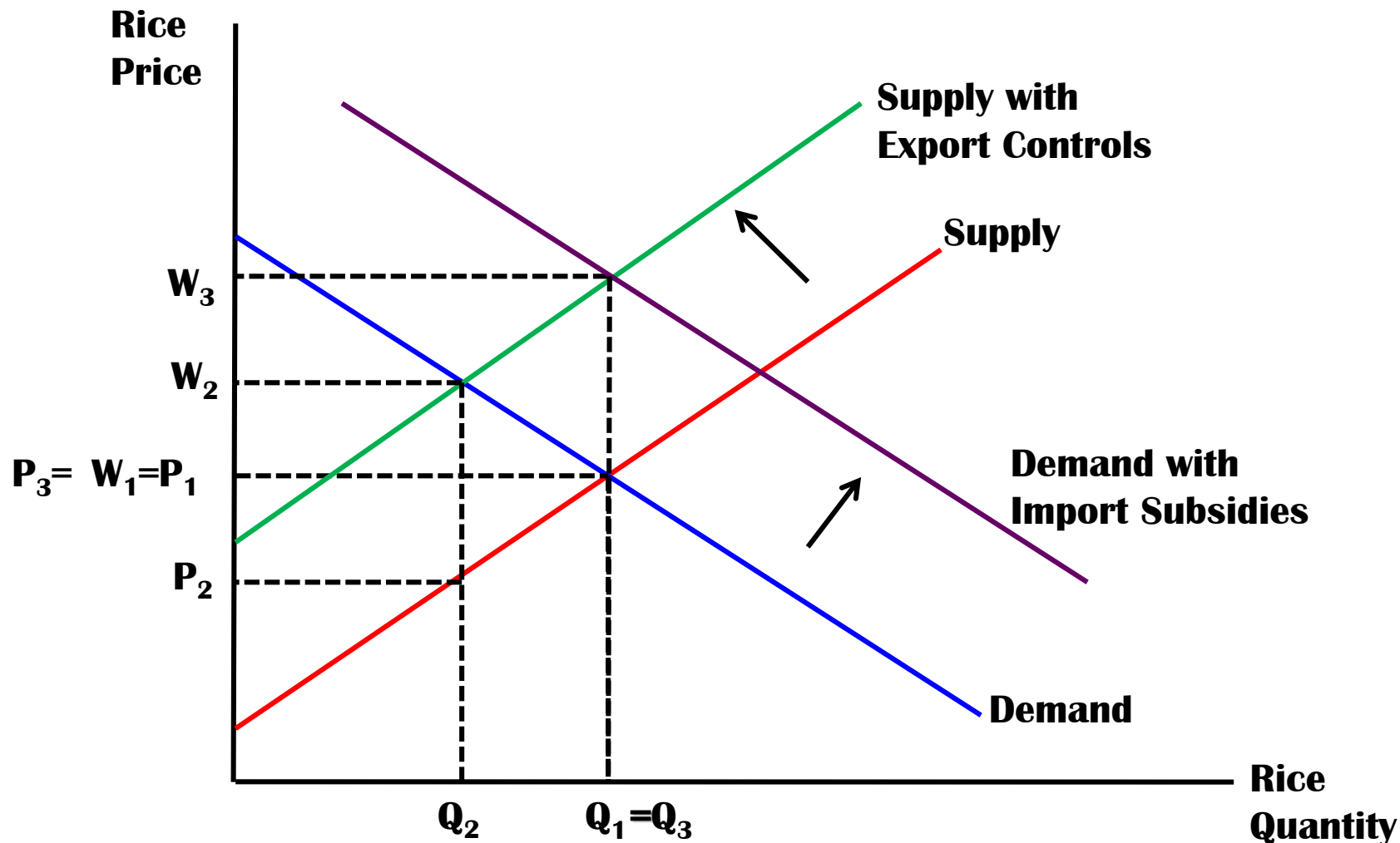
- ❖ **Many developing countries responded to food price spikes by directly intervening to stabilize domestic markets**
- ❖ **2008: 68 countries used trade policies (e.g., China, India)**
- ❖ **Trade policies typically consisted of: (i) export controls for net exporters, and (ii) import subsidies for net importers**
- ❖ **In contrast, developed countries typically did not implement such policies**

# **Beggaring Thy Neighbor...**

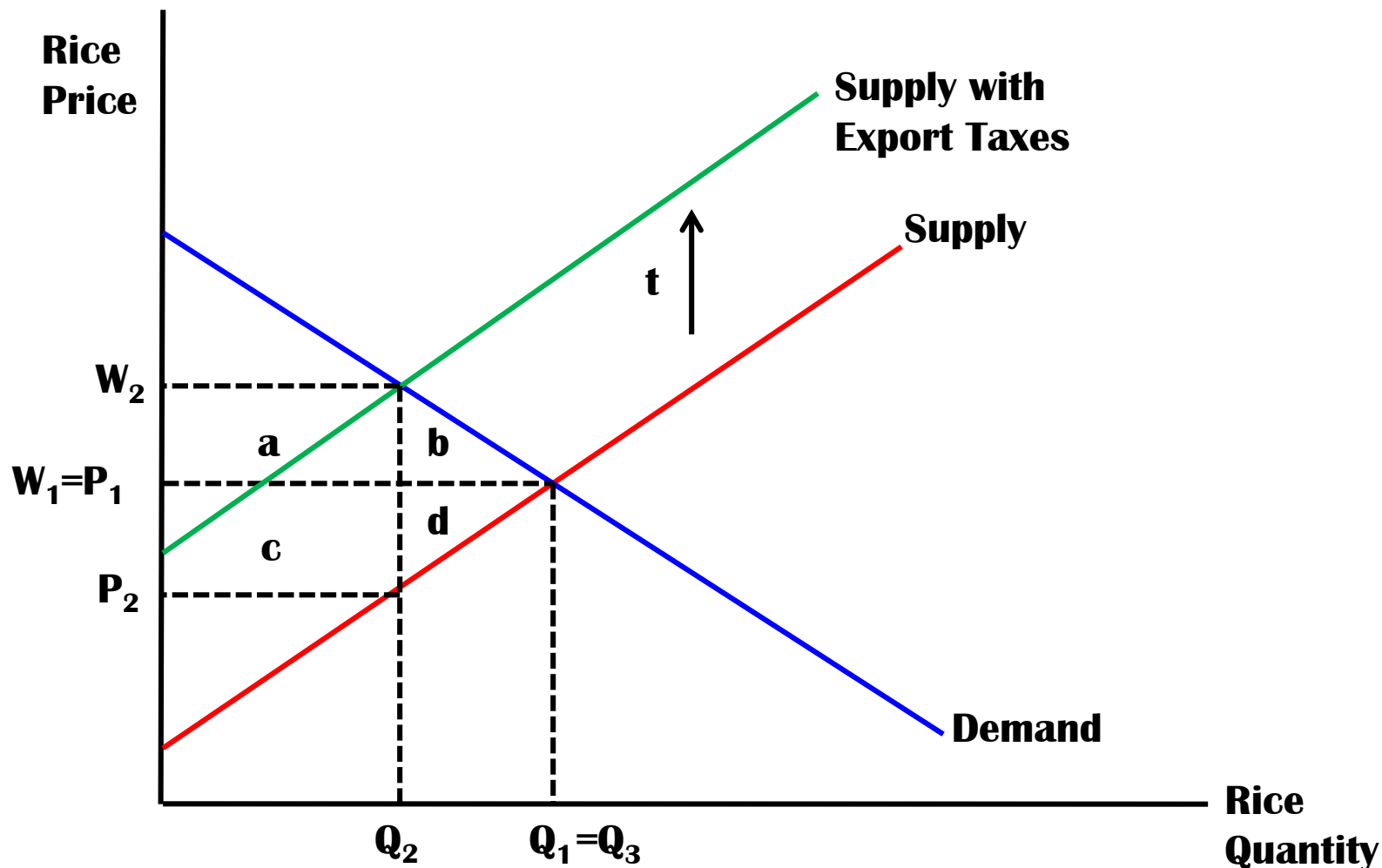
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- ❖ **If enough countries adopt trade policies, end result is increased world food price instability**
- ❖ **“...export restrictions play a direct role in aggravating food crises...” (Pascal Lamy, Director General of WTO, 2011)**
- ❖ **40%, 19% and 10% of 2007-08 spike in rice, wheat and maize prices respectively due to trade policies (Anderson and Nelgen, 2012)**
- ❖ **Unless countries cooperate over not using trade policies, each has unilateral incentive to intervene, but collectively no better off**

# World Rice Market



# Welfare Effect of Export Taxes



# Welfare Effect of Export Taxes

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- ◇ If several countries use export tax, shifts up world supply curve, world price increasing to  $W_2$ , domestic price in exporting countries falling to  $P_2$
- ◇ Global effects of export tax:
  - importers loss of consumer surplus =  $-(a+b)$
  - exporters loss of producer surplus =  $-(c+d)$
  - exporting government tax revenue =  $+(a+c)$
  - deadweight loss =  $-(b+d)$
- ◇ Exporters gain only if  $a > d$ , but importers clearly lose as they transfer income to exporter

# **Disciplines on Trade Policy**

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- ❖ **Trade policies appeared successful in stabilizing domestic prices, but ended up exacerbating world price spikes**
- ❖ **Solution to prisoner's dilemma is cooperation via a self-enforcing agreement, i.e., the WTO**
- ❖ **Doha Round of WTO pushing for reductions in agricultural tariffs and disciplines on export subsidies**
- ❖ **Developed countries have also pushed for tighter WTO disciplines on export restrictions – rejected by many exporting developing countries**