



# **Food Price Volatility, Food Security and Trade Policy: The Future Ain't What It Used To Be...**

---

**Eugenio Díaz-Bonilla (IFPRI)**

**September 18-19, 2014**

**World Bank, Washington, D.C.**

# Questions

---

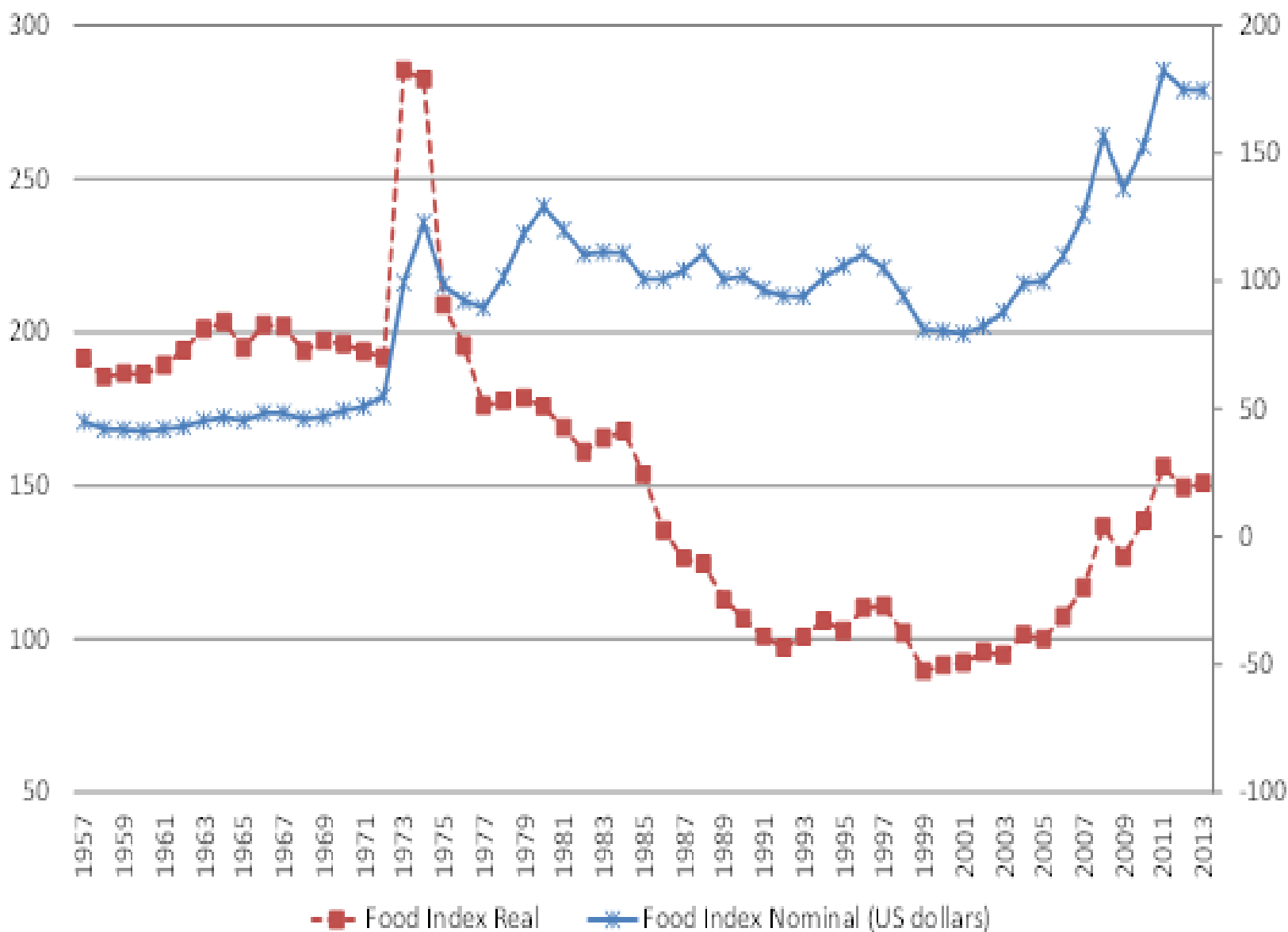
- **What is the policy problem to be addressed?**
- **What are the possible policy approaches to deal with the specific policy problem identified?**

# Policy Issues 1

---

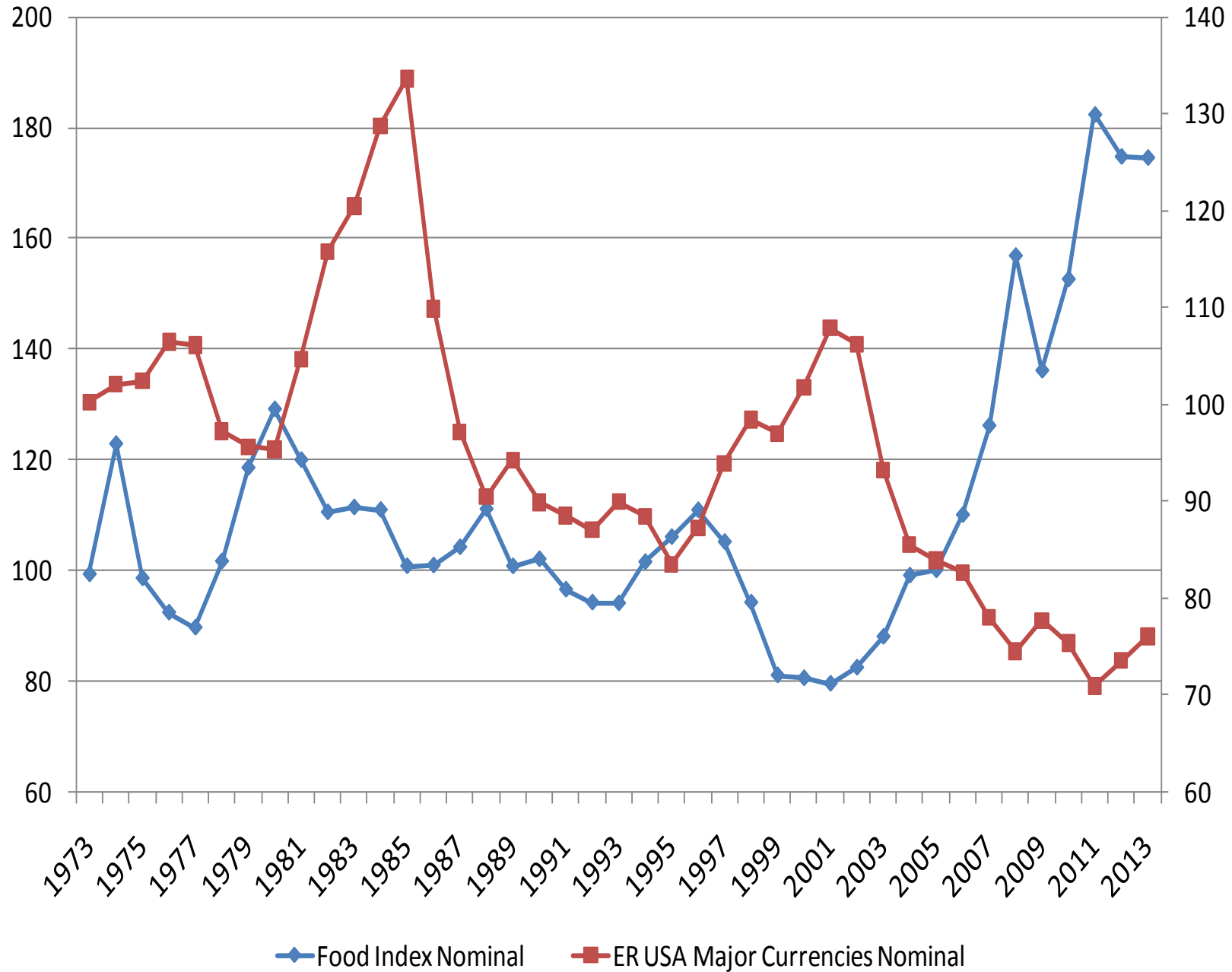
- **Volatility? In levels (trends, changes in trends, cycles, extreme price events, high or low), or in differences (inflation and variability of inflation)?**
  - **What to measure? Time frame and currency**
  - **How to measure? De-trending methods? (Canova, F. 1999)**

### Food Price Indices (in US dollars): Nominal (right axis) and Real (left axis) (2005=100)

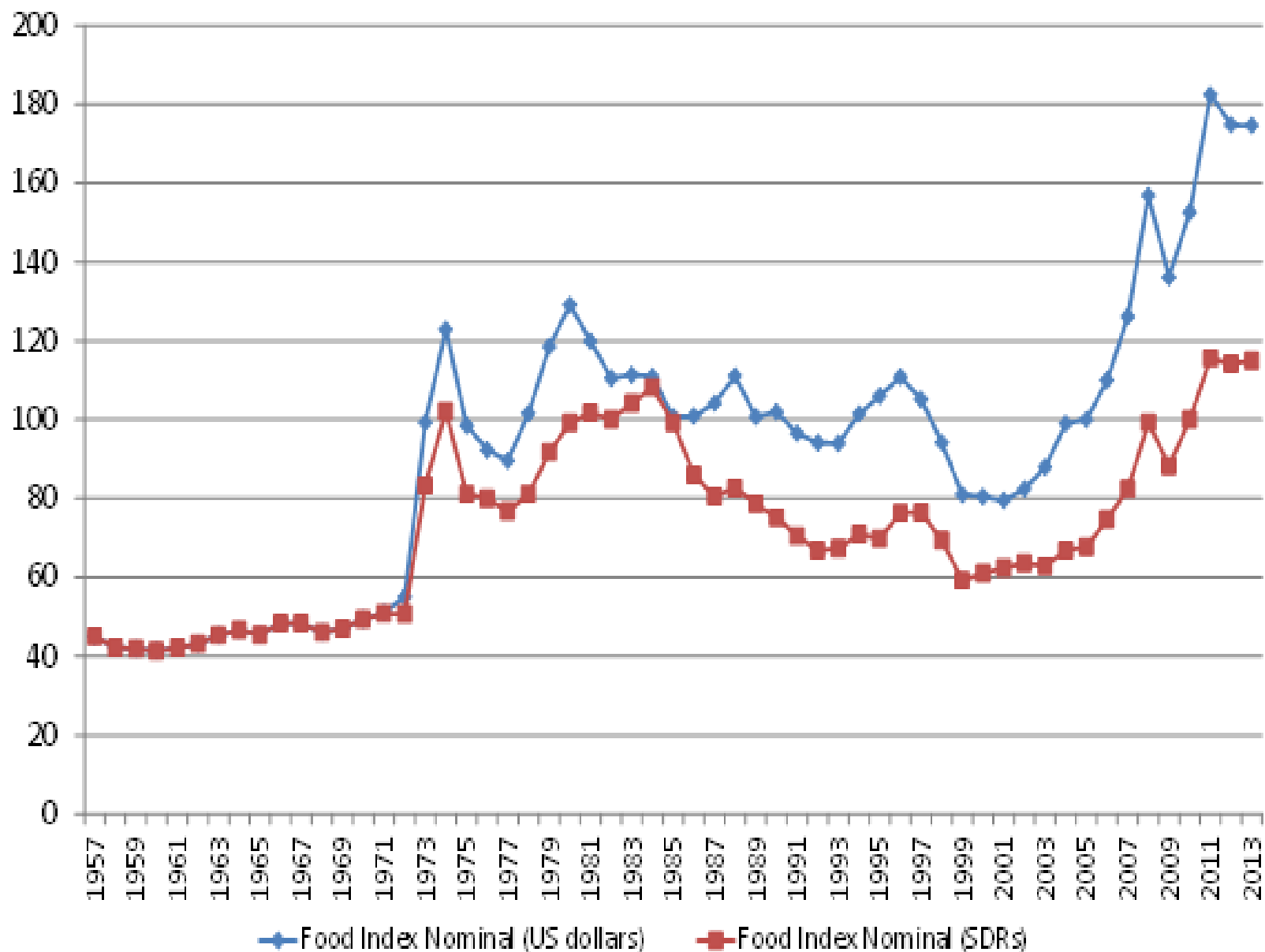




# Nominal Food Index and Nominal US Exchange Rate



## Nominal Food Price Indices in US and SDR (2005=100 for the US index)



# Policy Issues 2

---

- **Global level:**
  - **Uncoordinated policy responses that lower welfare and create unfair distributive effects**
- **National level:**
  - **Trade balance, fiscal accounts, inflationary pressures, political unrest, overall macroeconomic uncertainty, agricultural/food production**
- **Household level**
  - **Poor and vulnerable producers and consumers**

# Policy Issues 2a: Global Problems

---

- **Food security blocked agricultural and overall WTO negotiations: SSM (low prices) and Public Food Security Stocks (high prices).**
  - Possible language in Diaz-Bonilla 2014
  - PE of negotiations more complex
- **Improve global coordination on trade and other policies because of welfare and distributive impacts**
  - **Asymmetry: booms (shorter) and busts (longer)**
  - **Economic incentives to insulate both in high and low (however, if convincingly show negative overall effects... also for exporters, incentive to avoid rush to self-sufficiency...)**
  - **“Unpleasant stockpiling arithmetic” (Josling, 1981). Trade policies redistribute food consumption, only larger stocks add to supply... but see simulations in Thompson and Tallard, 2010**
  - **55% of increase in rice and 63% of increase in wheat in 2008 NOT explained by trade policies (Anderson and Martin, 2011)**

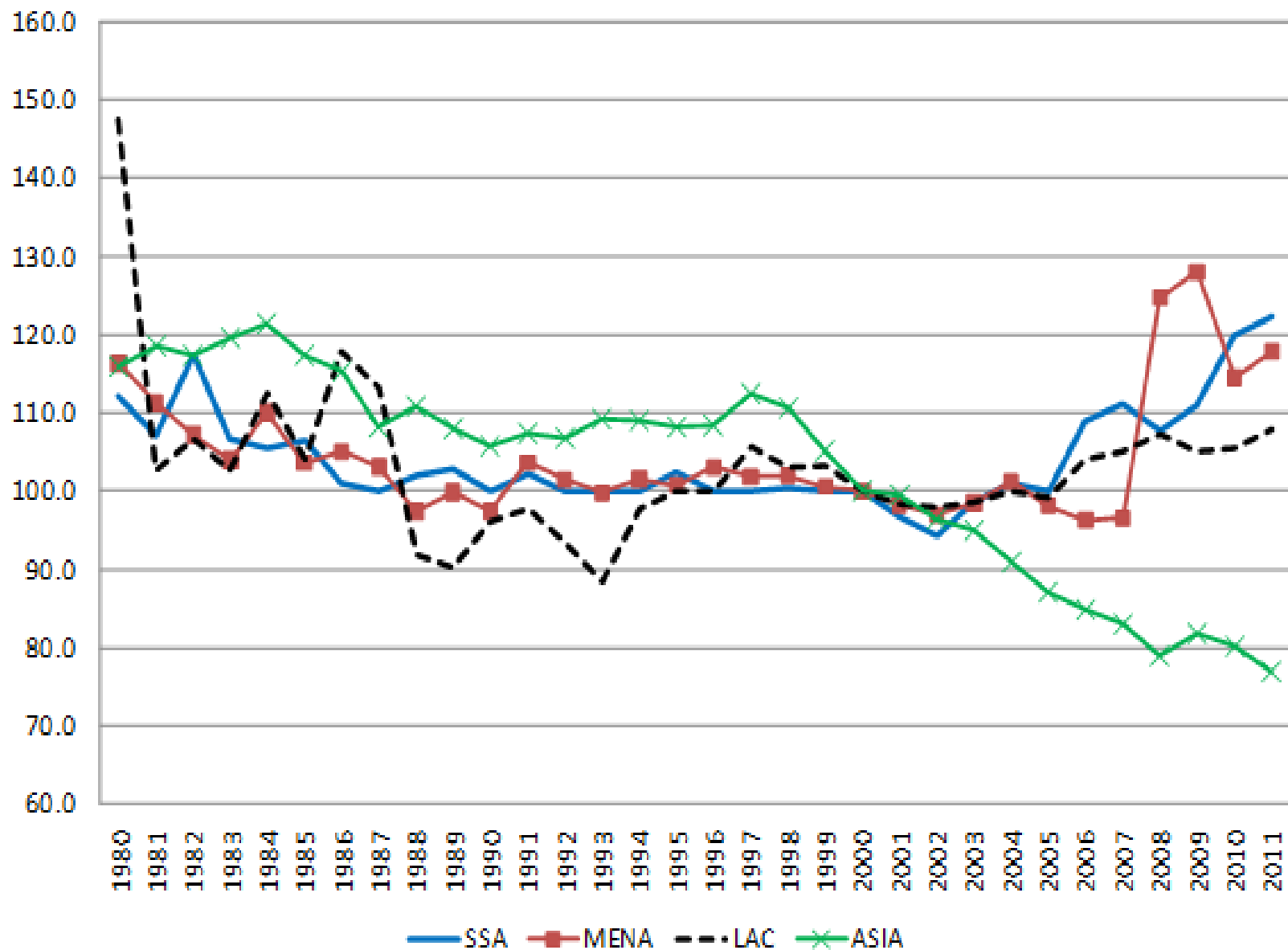


# Policy Issues 2a: National Level

- Food prices and other commodities move together. Implications for trade balance, fiscal accounts...

	Agriculture	Energy	Fertilizers	Metals and Minerals
Agriculture	1			
Energy	0.91	1		
Fertilizers	0.89	0.92	1	
Metals and Minera	0.90	0.94	0.87	1

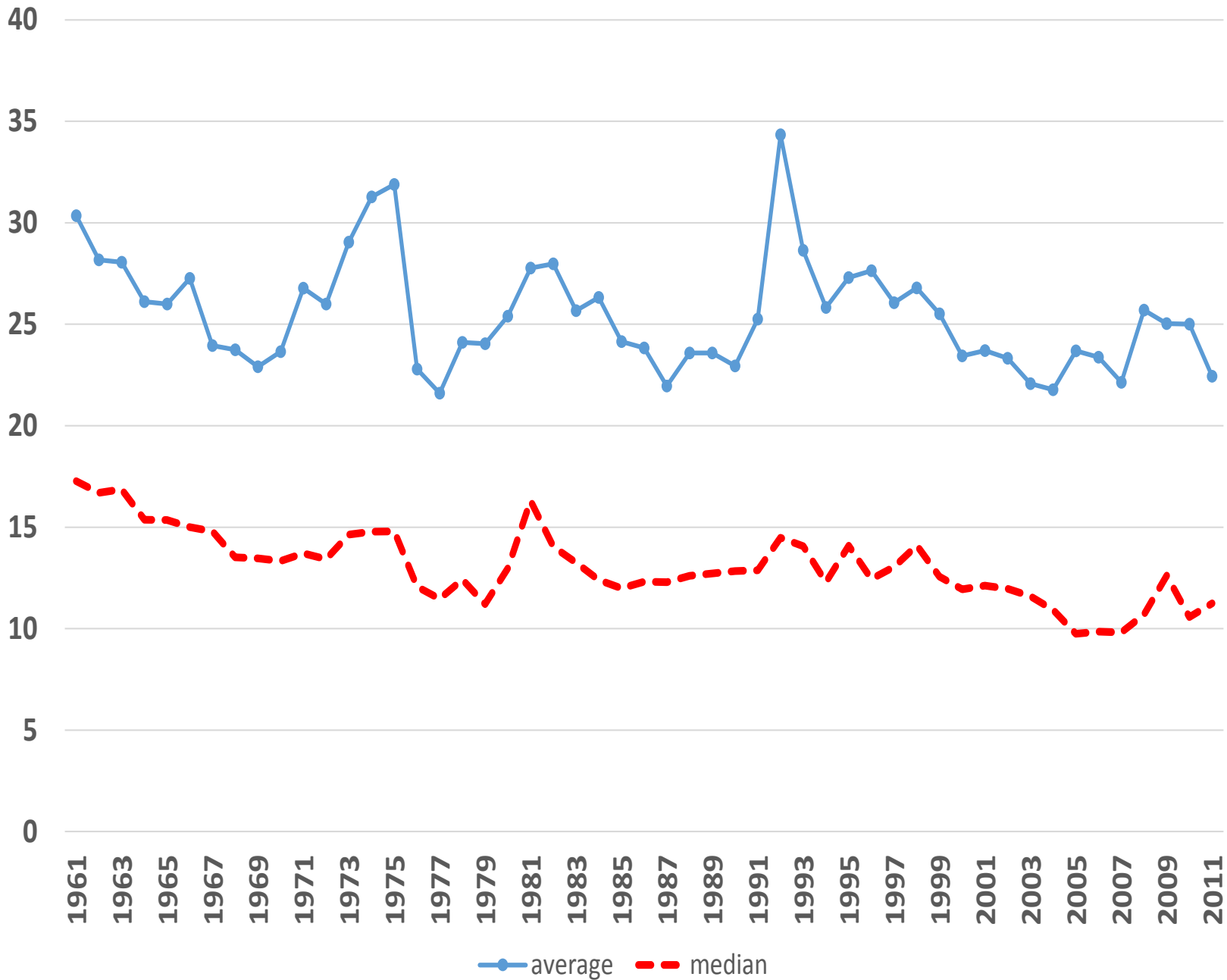
Index of Terms of Trade (median value; 2000=100)



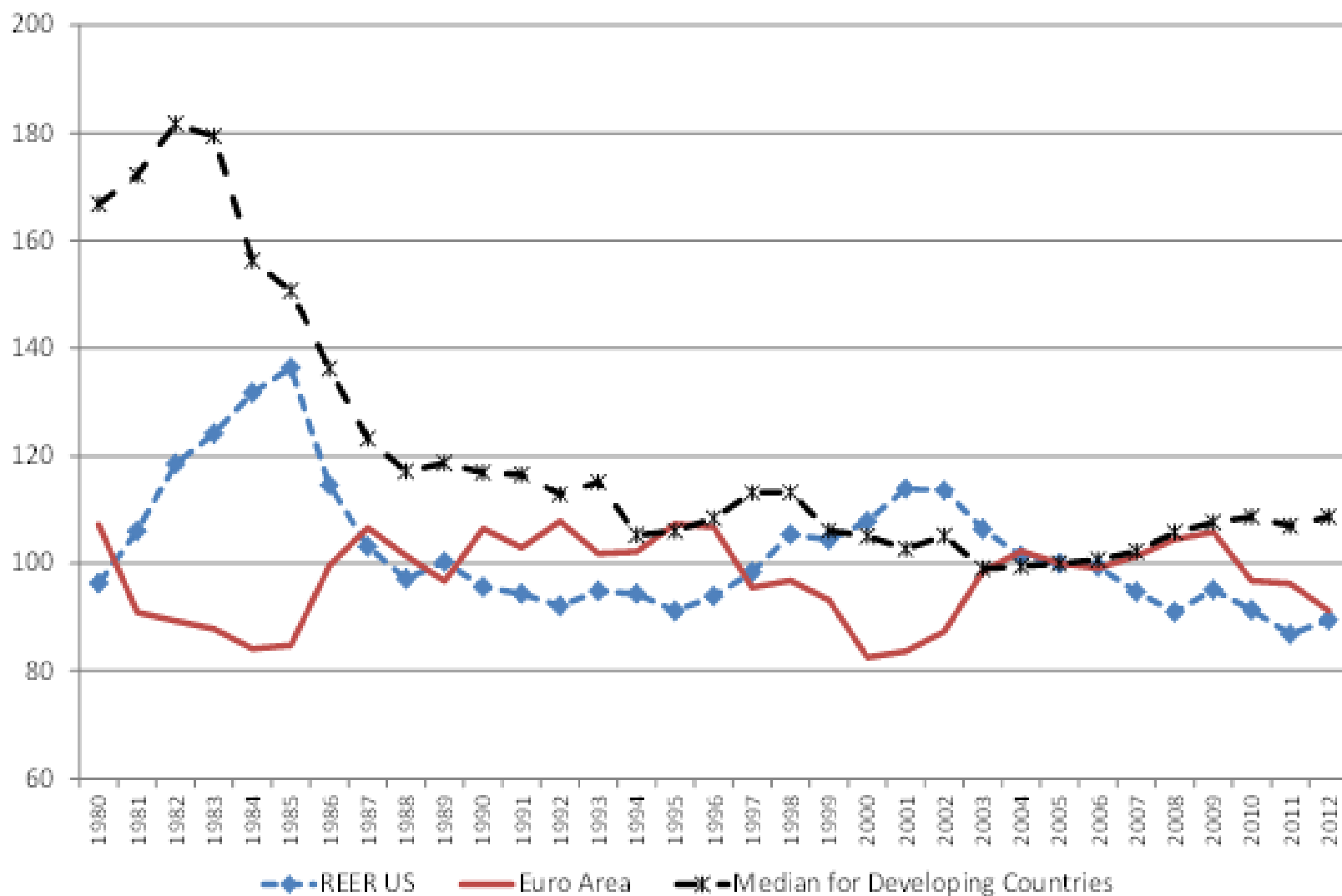
Note: This corresponds to the median values for 36 countries for SSA, 17 for LAC, 6 for MENA, and 12 for Asia. Source: World Bank/WDI, 2013



# Food Imports as % of Total Merchandise Exports



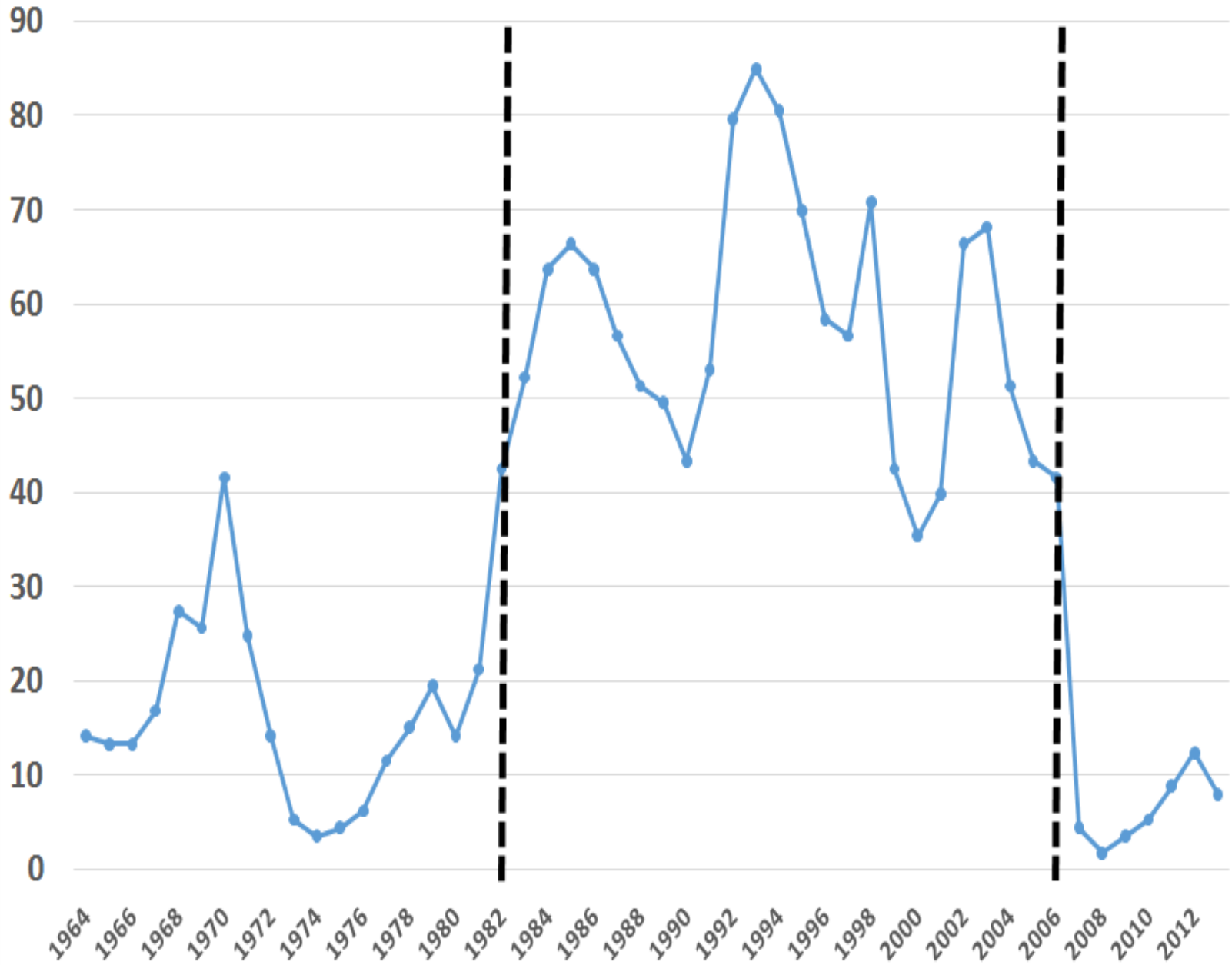
## REER for the US, Euro Area, and Developing Countries 2005=100



~~Median for 50 developing countries using data since the 1980s~~

Source: IMF IFS, 2013.

## Percentage of Countries where 5 year volatility of ER is larger than volatility of the world nominal index of food (WB data)



## **Policy Issues 2c: Household Level**

---

- **For poor/vulnerable, price shocks one of several damaging fluctuations (Sinha, Lipton, and Yaqub 2002):**
    - **1) violence (wars, civil strife, community violence); 2) natural disasters; 3) harvest failure; 4) disease or injury; 5) unemployment or under employment; and 6) shocks that increase relative price of food compared to incomes.**
  
  - **Macroeconomic crises: growth and employment collapses, inflationary shocks**
    - **Hazell, Shields, and Shields (2005) in World Bank, 2005: larger component of domestic price variability is related to macroeconomic problems**
-

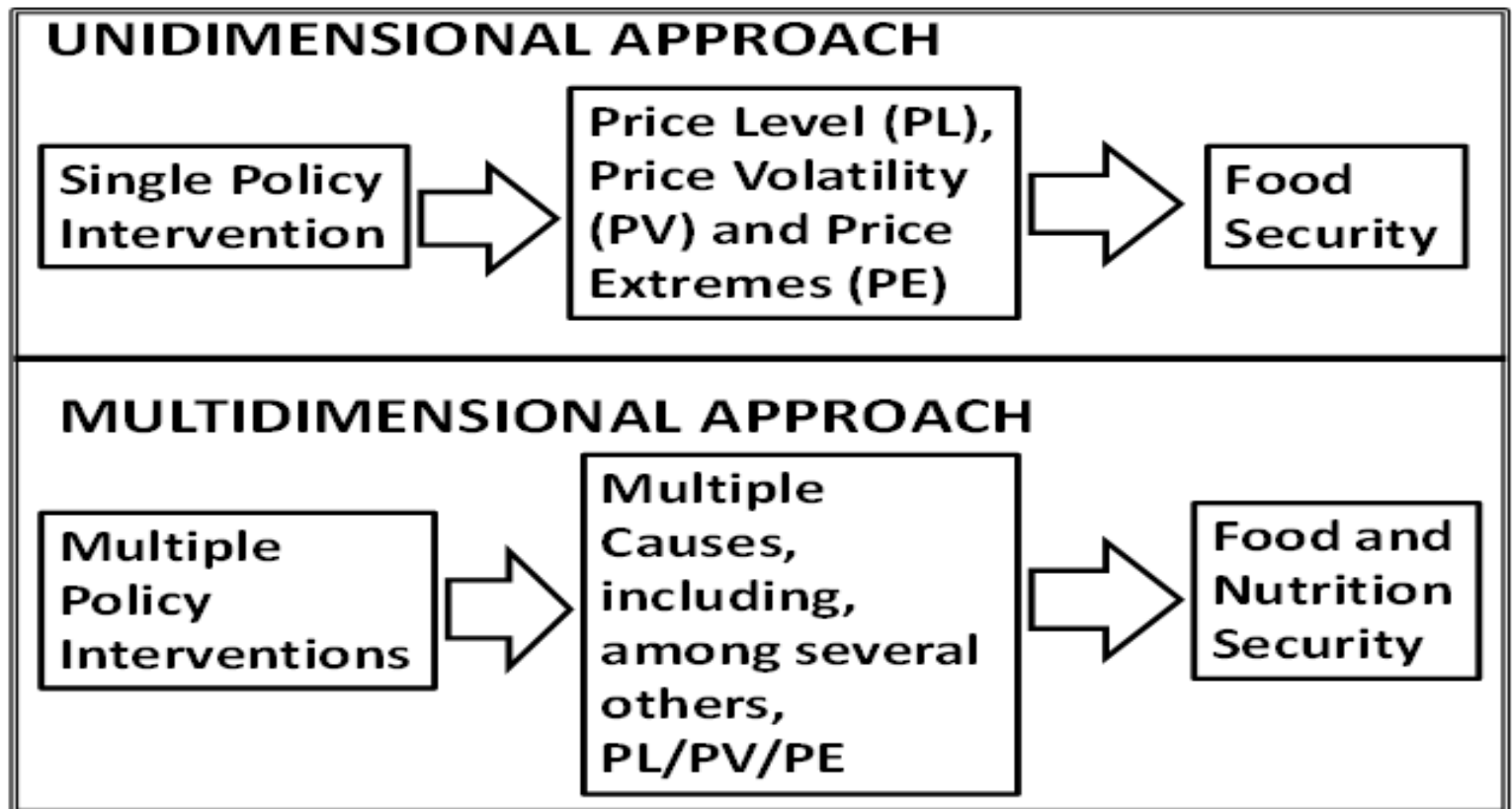
# Policy Issues 2c (cont): Household Level

---

- **Diversification of sources of calories**
  - **Indonesia: rice (a storable product) represents 48% of calories (2009; 56% in 1980). India: 21% of total average calories in 2009 from wheat and wheat products and about 29% from rice. In Western Africa, average calories consumption: 5.4% wheat and products, 12.6% rice, 9.1% maize and products, 10% millet and products, 9.1% percent sorghum and products, 8.7% cassava and products, and 7.9% yams.**
- **Lack of dietary diversity more correlated with child stunting/wasting and underweight mothers (Arimond and Ruel 2006).**
- **Changes in retail channels (supermarket and food systems “revolution” Reardon and Timmer, 2012)**

# Final Comments 1

- Trade policy (WTO sense, including three pillars) → Food Price Volatility → Food Security (calories, limited staple crops)... Too limited?





# Final Comments 1

---

## ■ **Recession in the next 2-3 years?**

- **Final quantitative easing Increasing interest rates (market-driven: government financing requirements , increased risk perception ). Impact on construction and debt. Another round of bank / financial problems.**
- **No room for fiscal (monetary ?) stimulus**

## ■ **Spikes in energy prices and food?**

- **Low growth and new technologies (déjà vu 1980s, all over again?)**
  - **Biofuel demand stabilized**
  - **But recurrence of extreme weather events and geopolitical shocks complicate projections...**
-

---

■ **Thanks.....**

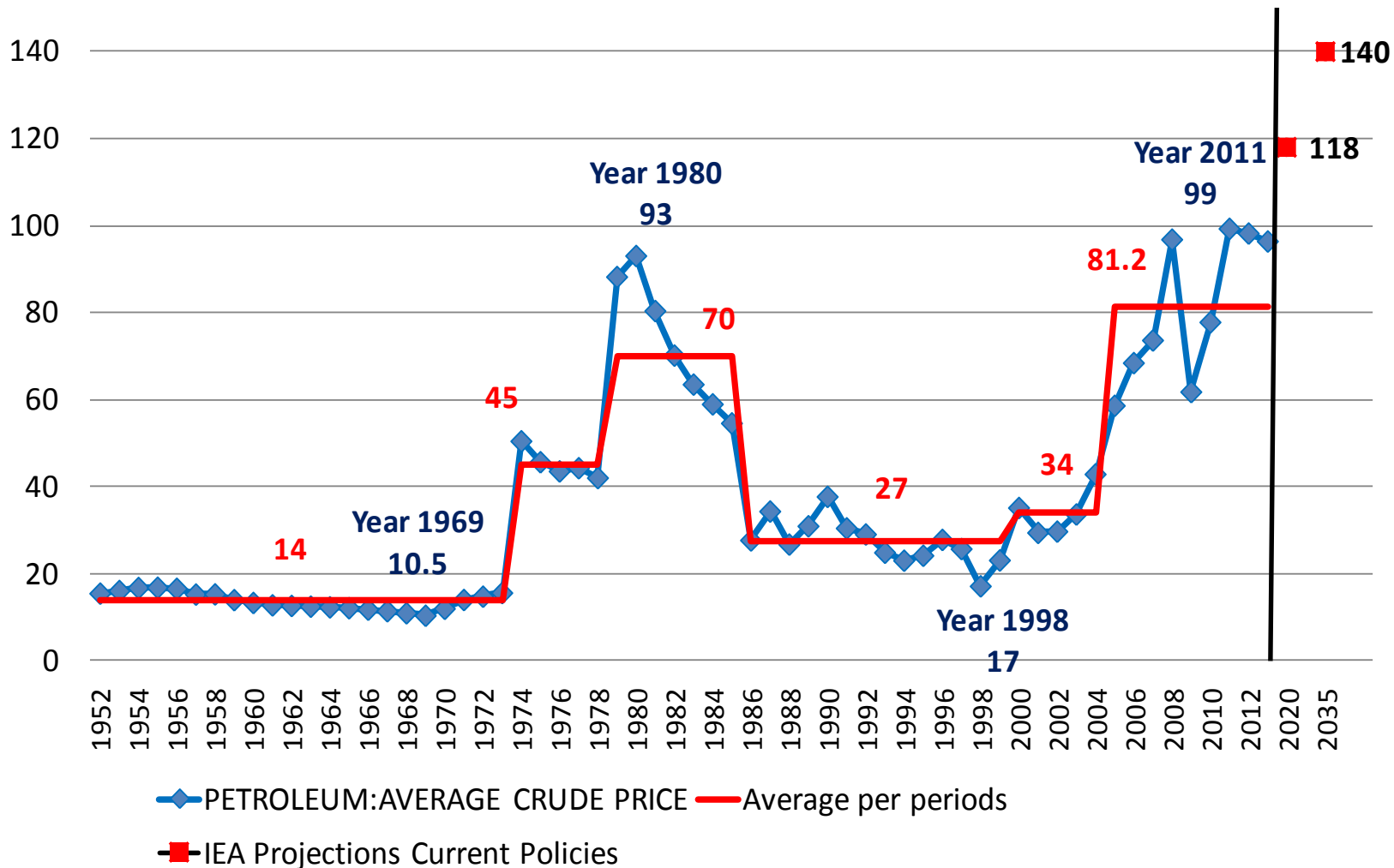
# Legal Trade Issues

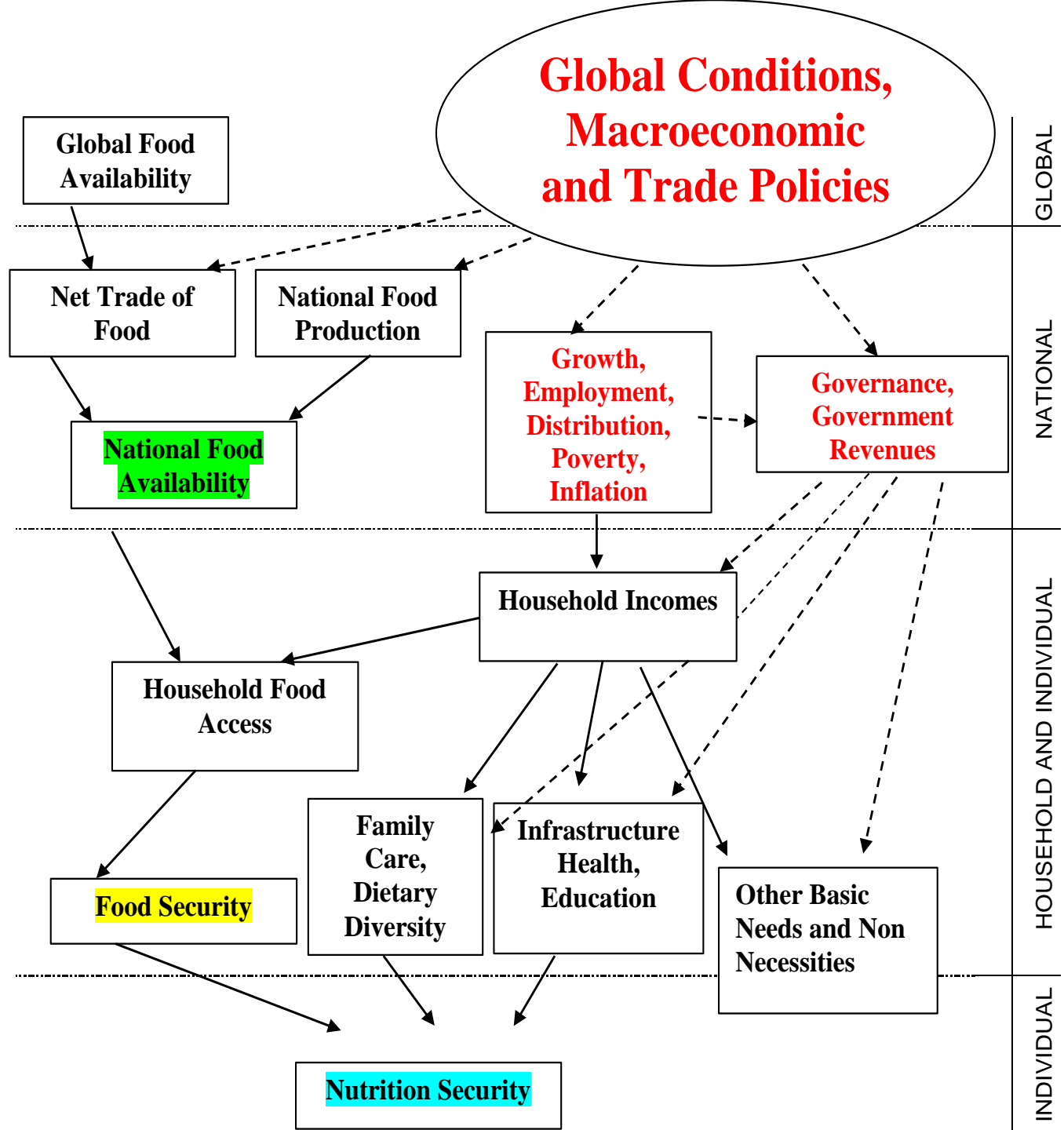
---

- **Extreme event, low price, poor producers**
    - **Income support to (LIRP) farmers (Section 5, Annex 2 AoA)**
    - **Normal Safeguard, Anti-Dumping (companies), Subsidies and Countervailing Measures (governments)**
    - **Increase tariffs within bound levels**
    - **Public Food Stocks (Section 3, Annex 2) (possible language in Diaz-Bonilla 2014)**
    - **Institutional public procurement (government procurement exempted from GATT, Article III: 8a).**
    - **(Special Safeguard Mechanism; does not exist yet)**
  
  - **Extreme event, high price, poor consumers**
    - **Domestic food aid (Section 4, Annex 2). Safety nets**
    - **Reduce import tariffs**
- 
- **Export taxes, restrictions (Disciplines?)**

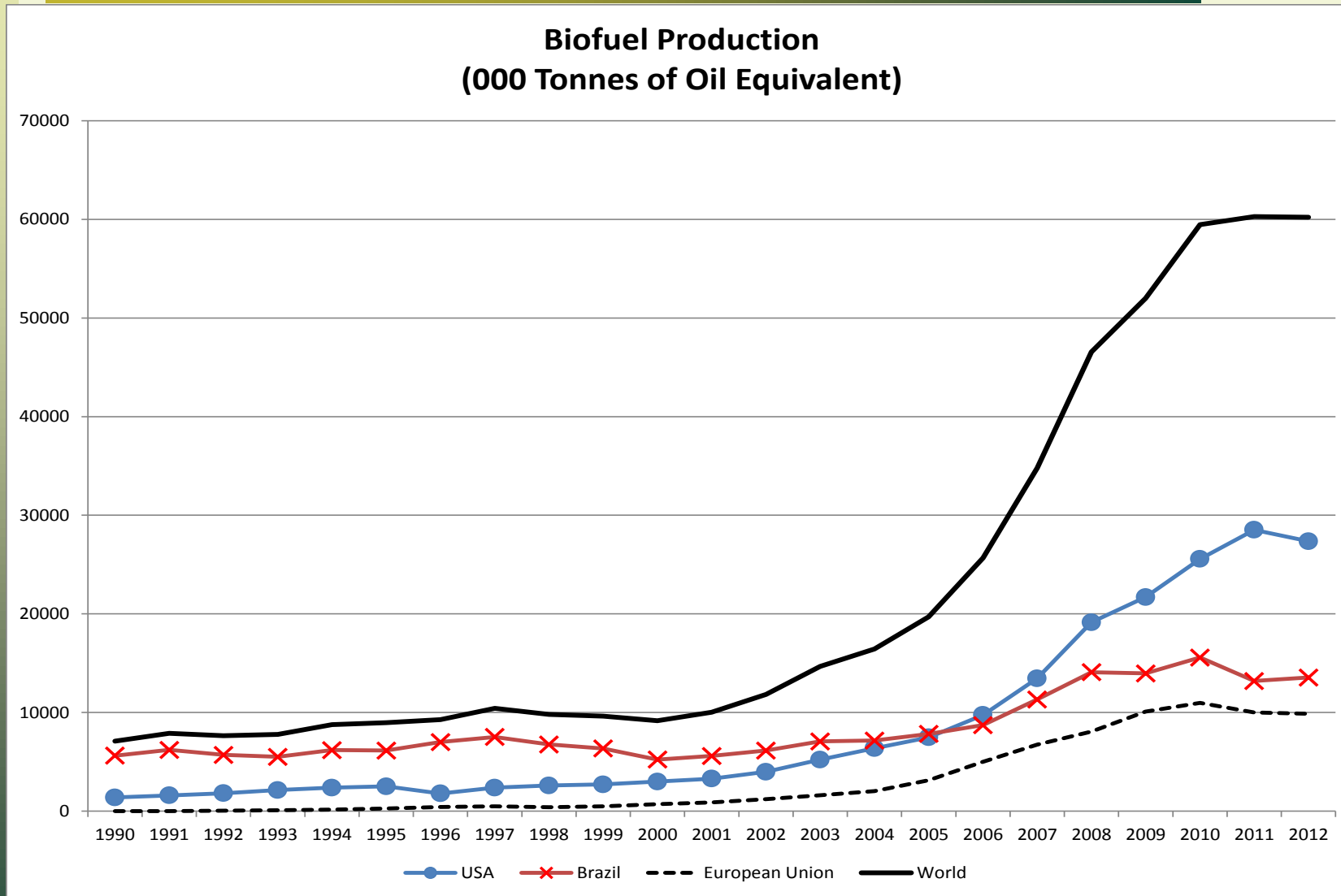
# Precios del Petróleo

## Average World Oil Price (2009 US constant dollars per barrel)





# Producción de Biocombustibles



# Conclusiones

---

- **Asegurar balances entre metas de crecimiento, metas de inflación, tipo de cambio, y tasa de interés. Evitar sobrevaluación**
  - **Reforzar políticas de apoyo al sector agropecuario, espacio rural y cadenas de valor**
  - **Incrementar/mejorar gasto para políticas de protección social. Programa integrado para la seguridad alimentaria y nutricional**
-