

# Famine's Drivers: Old and New

Cormac Ó Gráda

University College Dublin

*‘Famine refers to shortage of food or purchasing power that leads directly to excess mortality from starvation or hunger-induced diseases’*

- Killing event
- Scope for agency
- Encompasses entitlements
- Crisis, not steady state

## Primo Levi's 'grey zone', Mayo 1847:

*'Hunger and idleness have left them a prey to every immorality; and if they soon do not practice every vice attendant upon such a state of things, it will be because they have not the power ... and should I stay in Ireland six month longer, I shall not be astonished at seeing any deeds of wickedness performed, even by those who one year ago might apparently have been as free from guilt as any among us.'*

1972-75:

2 million

1980s:

Cambodia (0.3 million)

Ethiopia+Sudan (1 million)

1990s:

Bahr El Ghazal 1998 (70,000)

Ogaden 1999-2000 ('between 10,000 and 100,000')

Malawi 2002:

Disaster anticipated

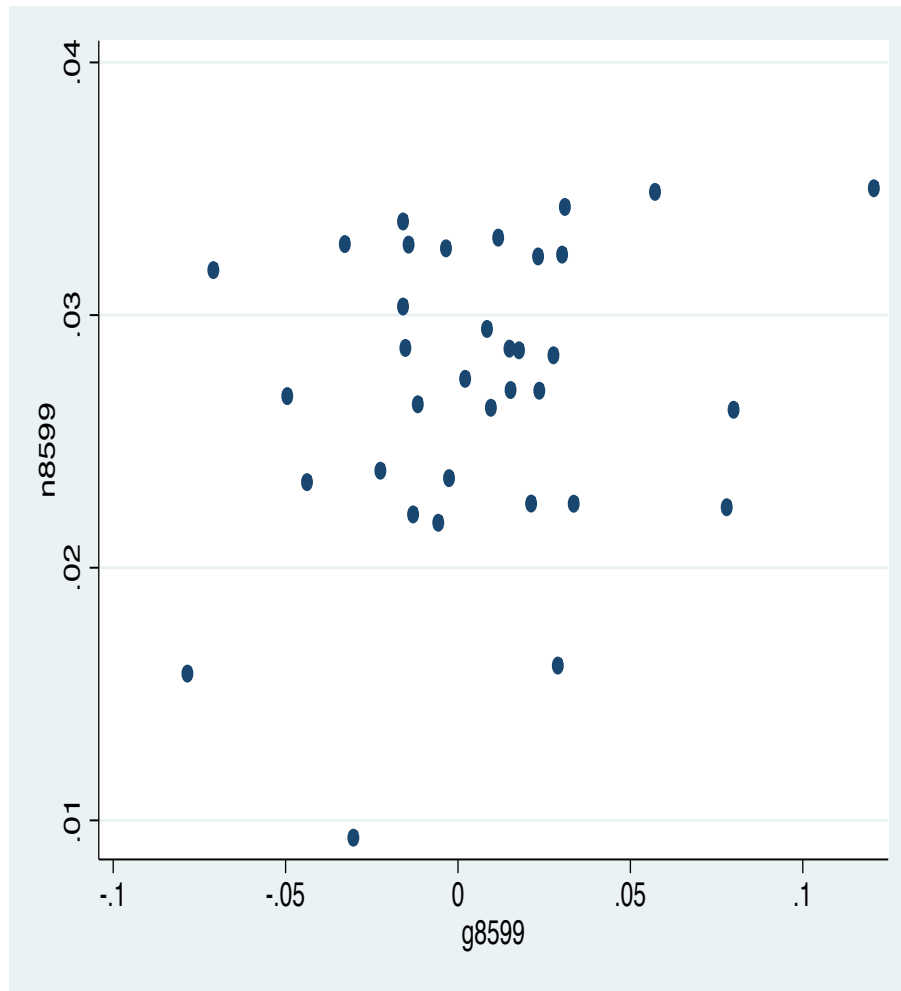
Minimal excess mortality

Niger 2005:

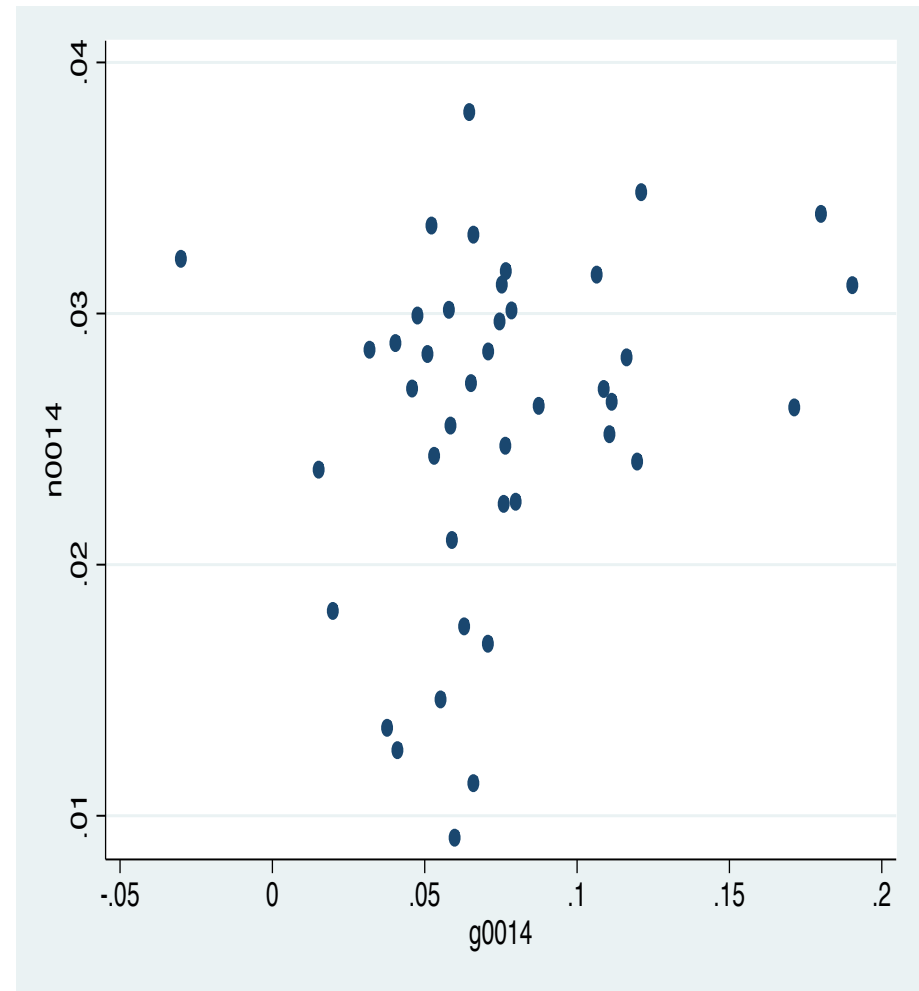
*'disette'* / *'dearth'* / famine

Minimal excess mortality

Malnutrition versus famine

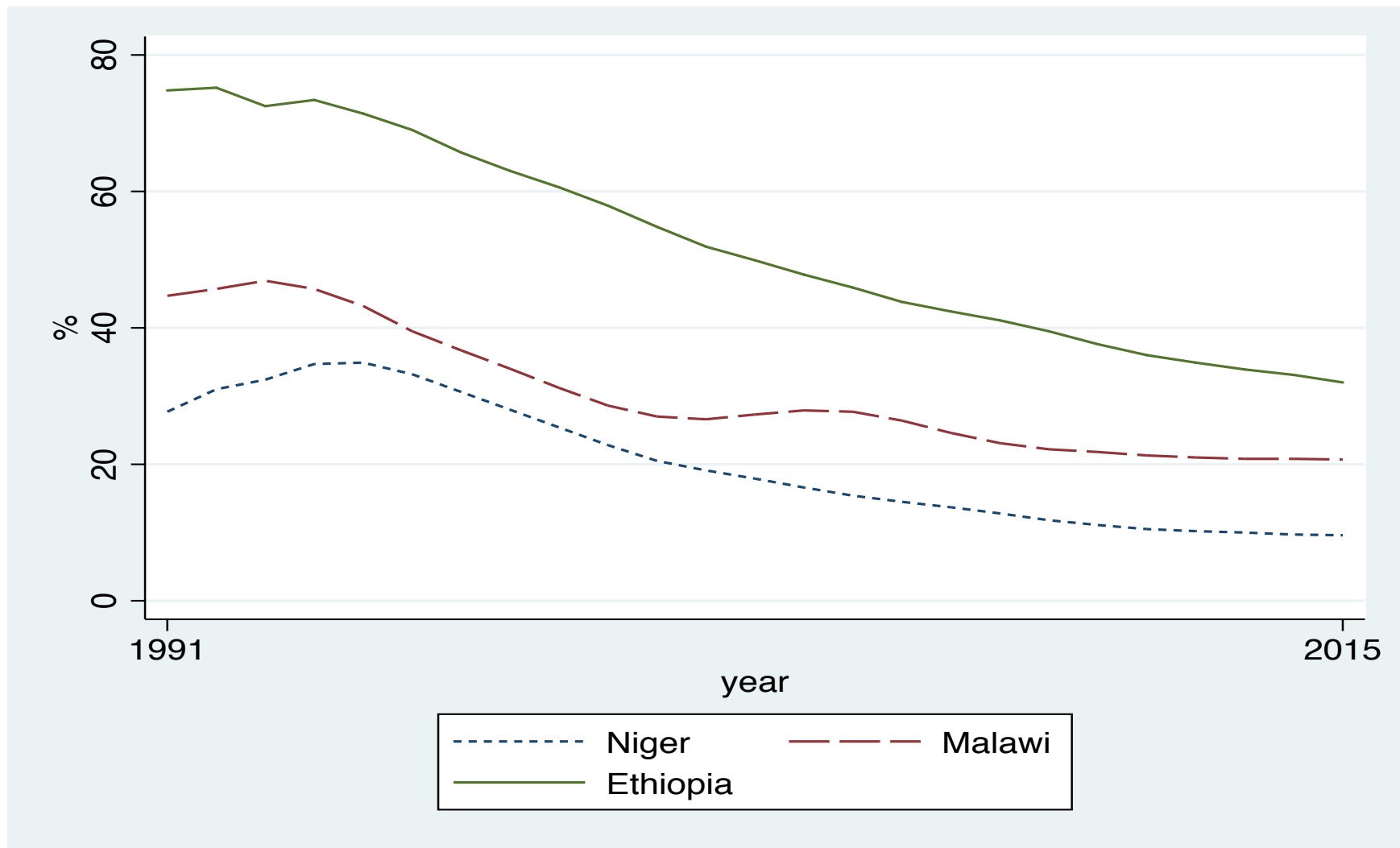


[a] 1985-99

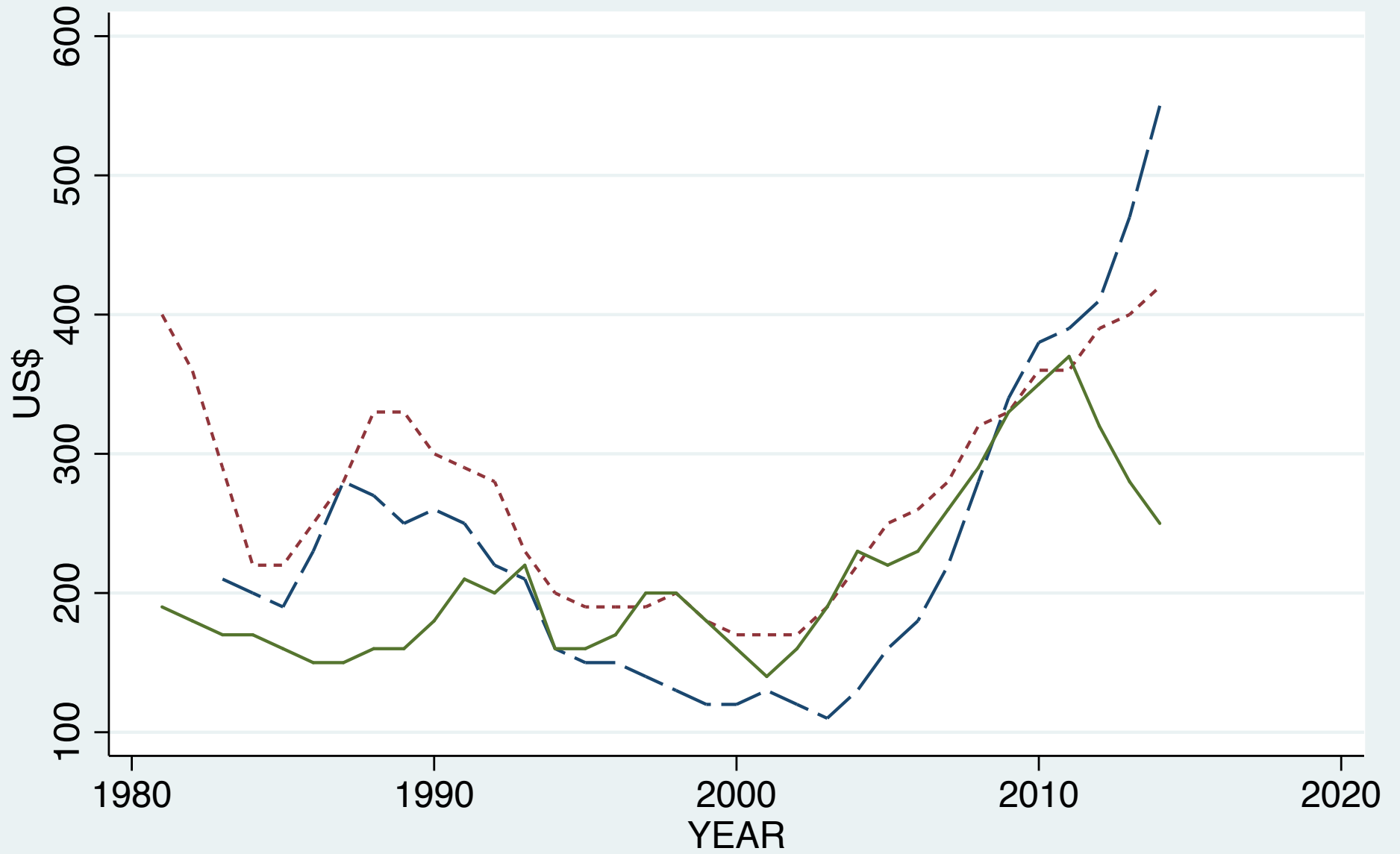


[b] 2000-14

Population growth and GDP per capita growth across sub-Saharan Africa



Malnutrition rates, 1991-2015(3-yr moving averages)





- Don't conflate famine and hunger
- Distinguish between war famines and other famines
- Information crucial
- 'Bad' food aid and food security

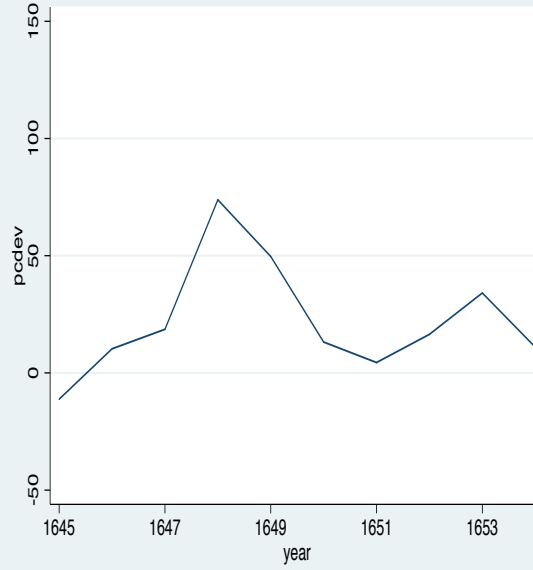
# How high do prices rise during famines?

- C17-c18 mercuriales
- Lee, Weir, etc.
- => Not *that* much
  
- Compare 2008-09
  
- Somalia in 1992 and 2011

Siena 1552-1561



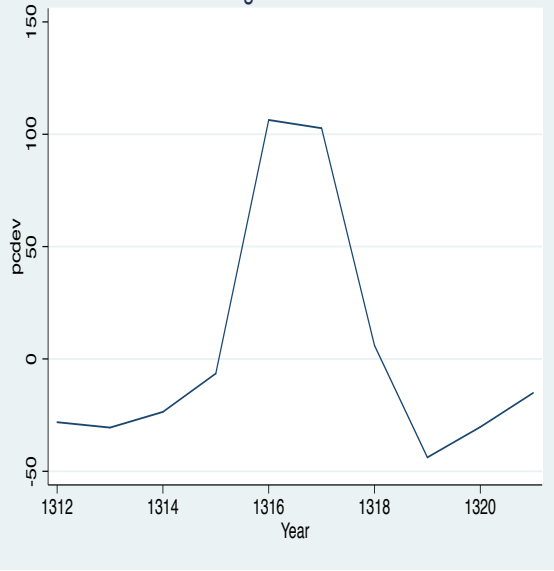
Siena 1645-54



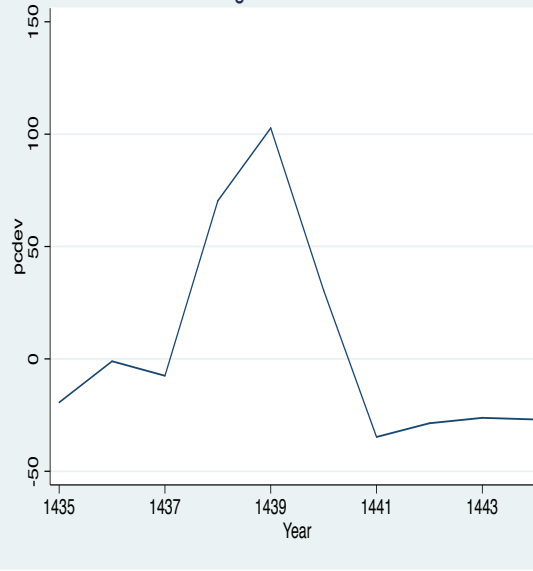
Siena 1674-83



England 1312-21



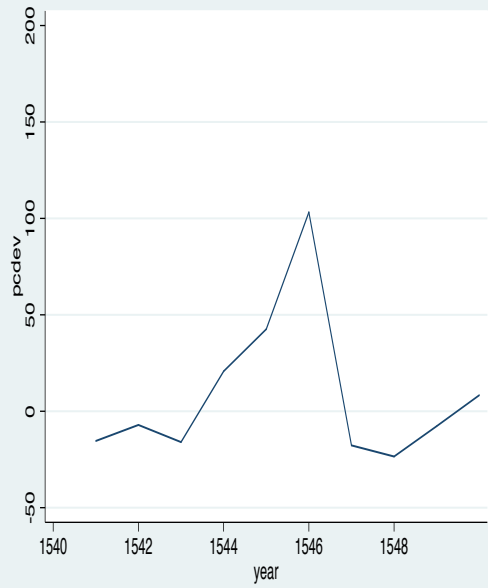
England 1435-1444



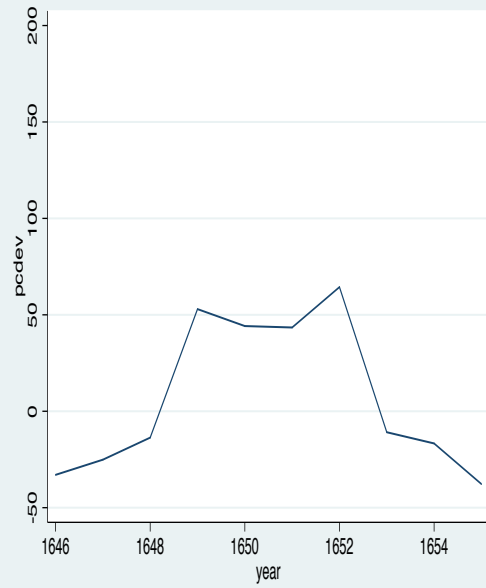
England 1592-1601



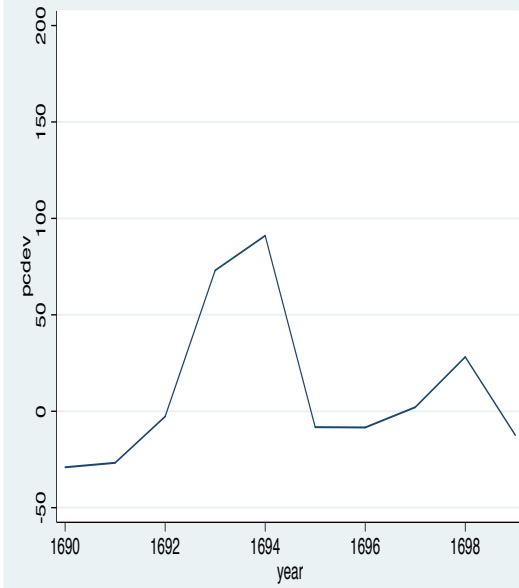
Paris 1541-1550



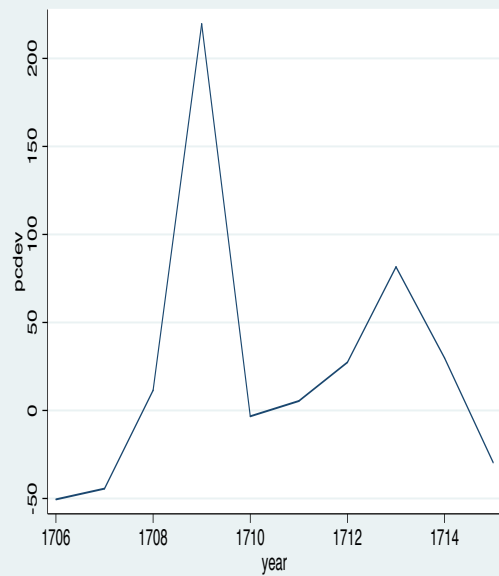
Paris 1646-1655



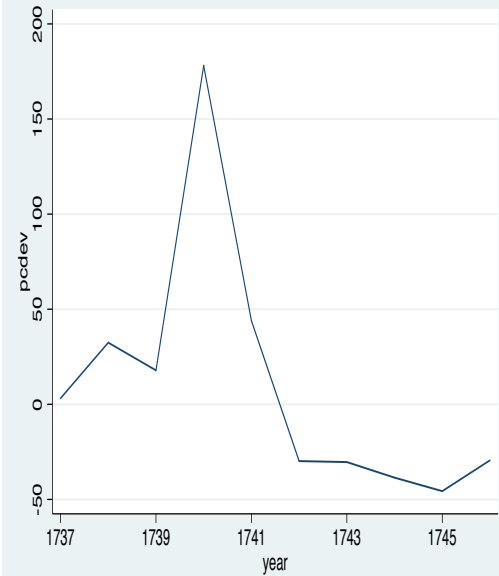
Paris 1690-1699



Paris 1706-1715



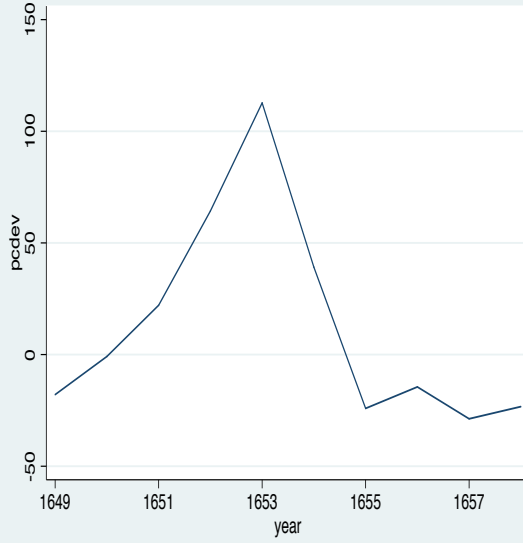
Paris 1737-1746



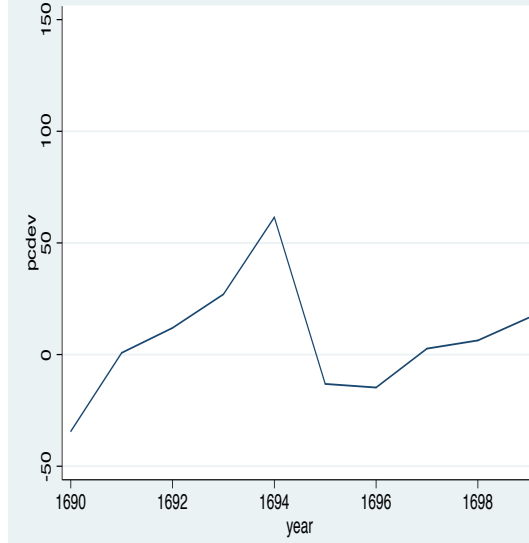
Toulouse 1627-1636



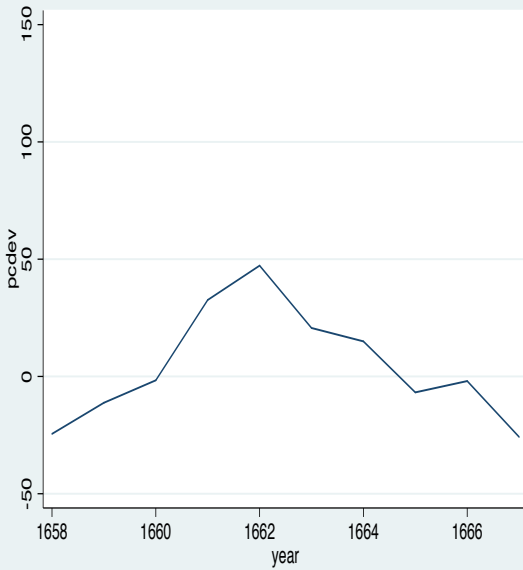
Toulouse 1649-1656



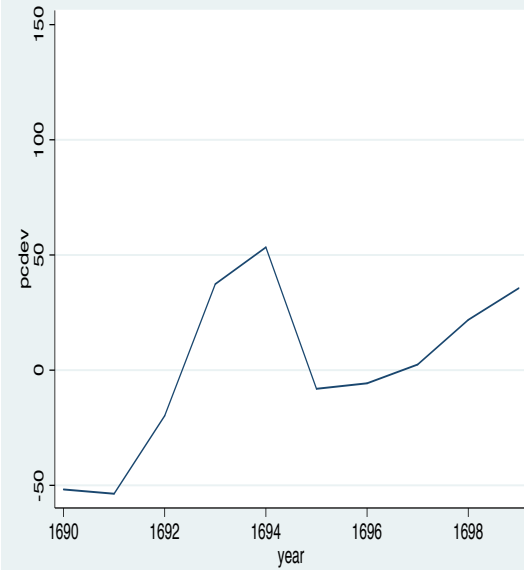
Toulouse 1690-1699



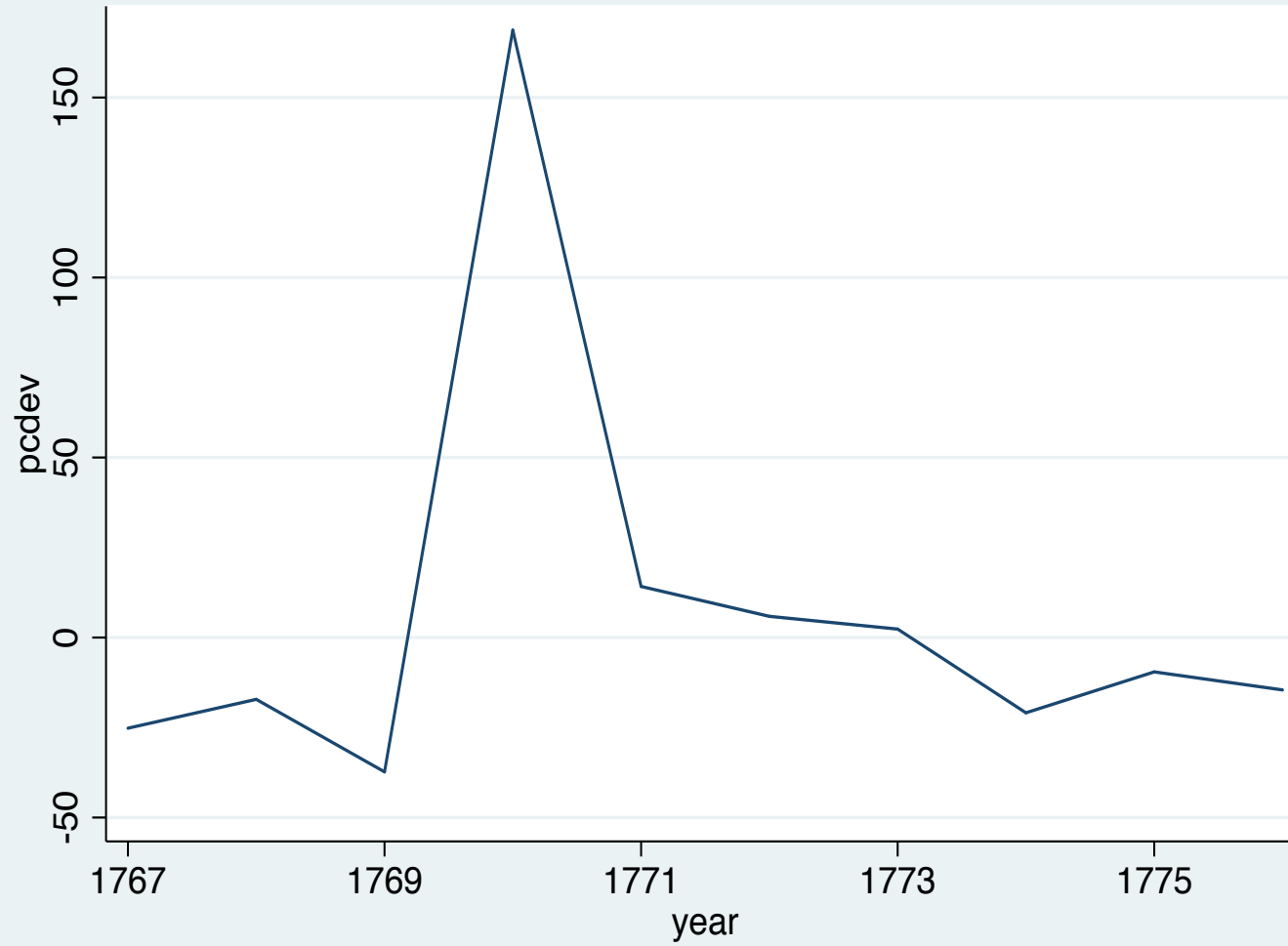
Tours 1658-1667

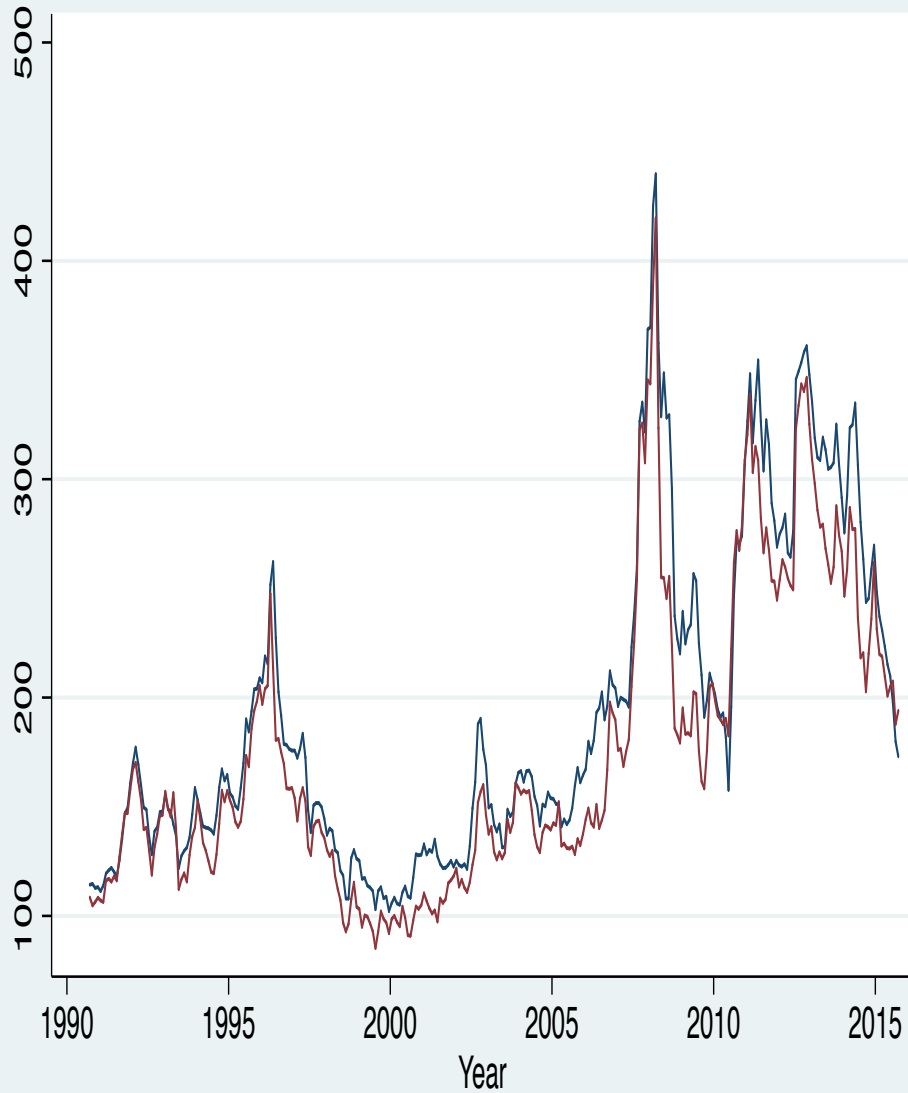


Tours 1690-1699

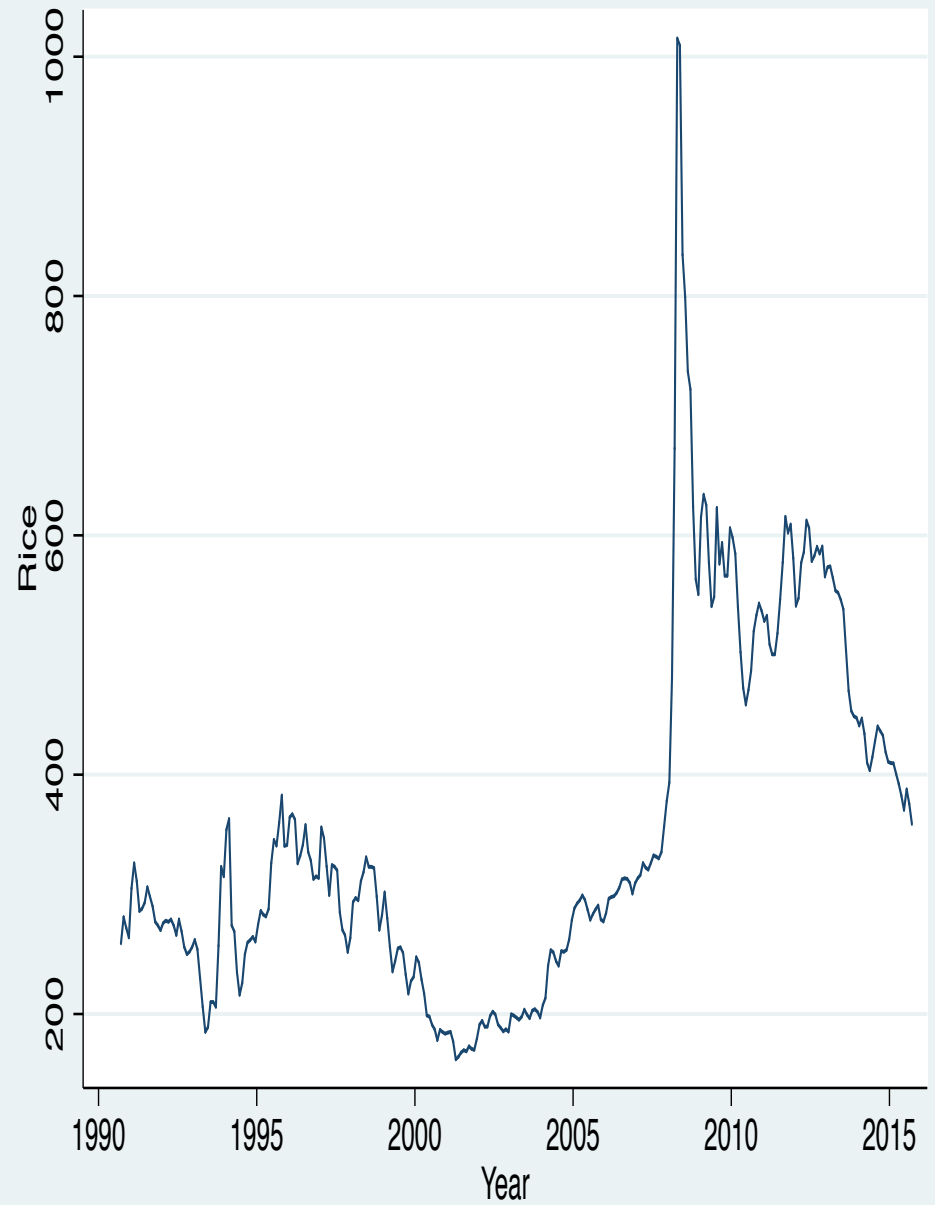


Calcutta 1767-1776 [Rice]

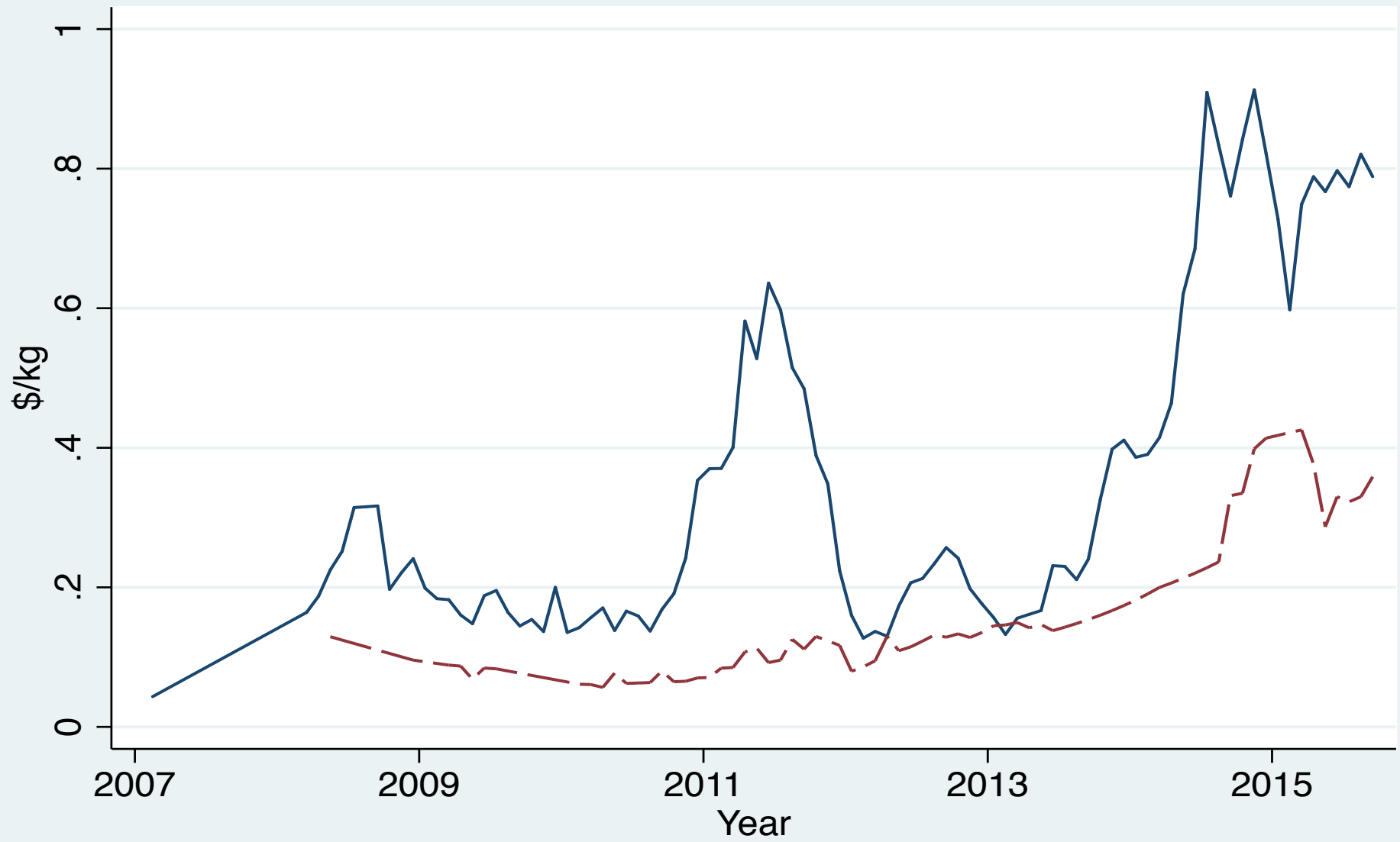




— HardWh — SoftWh



Monthly Wheat and Rice Prices 1990-2015 (US\$ per metric ton)



— Baidoa    - - - Borama



1990-1992:

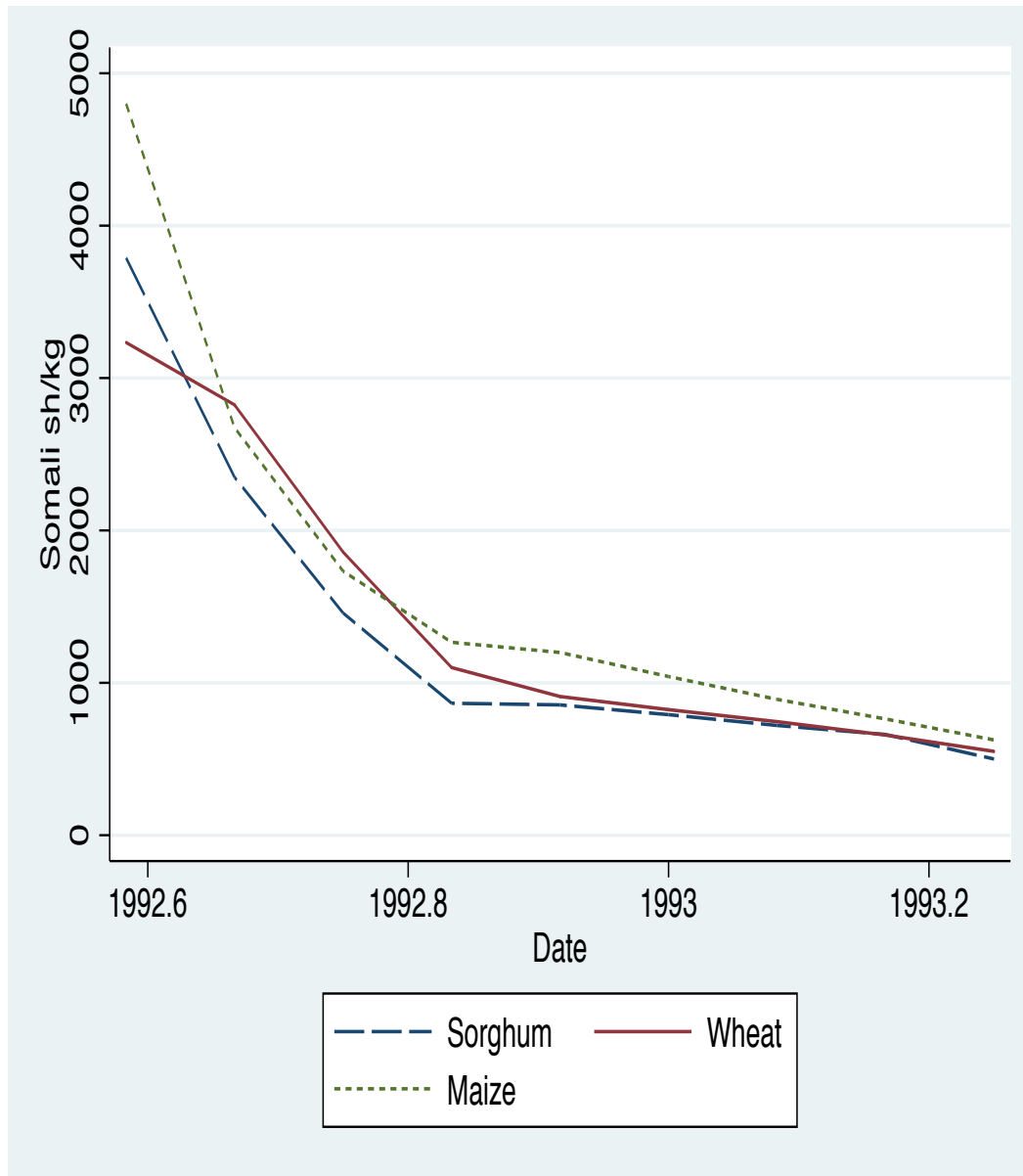
- 600% increase in price of sorghum from 1990 to 1992
- Exchange rate (Shillings per \$)

1990 1,982

1991 4,675

1992 6,095

1993 7,465



Cereal Prices in South Mogadishu  
July 1992-mid-March 1993

# Somalia 2011-12

Checchi and Robinson [2013]:

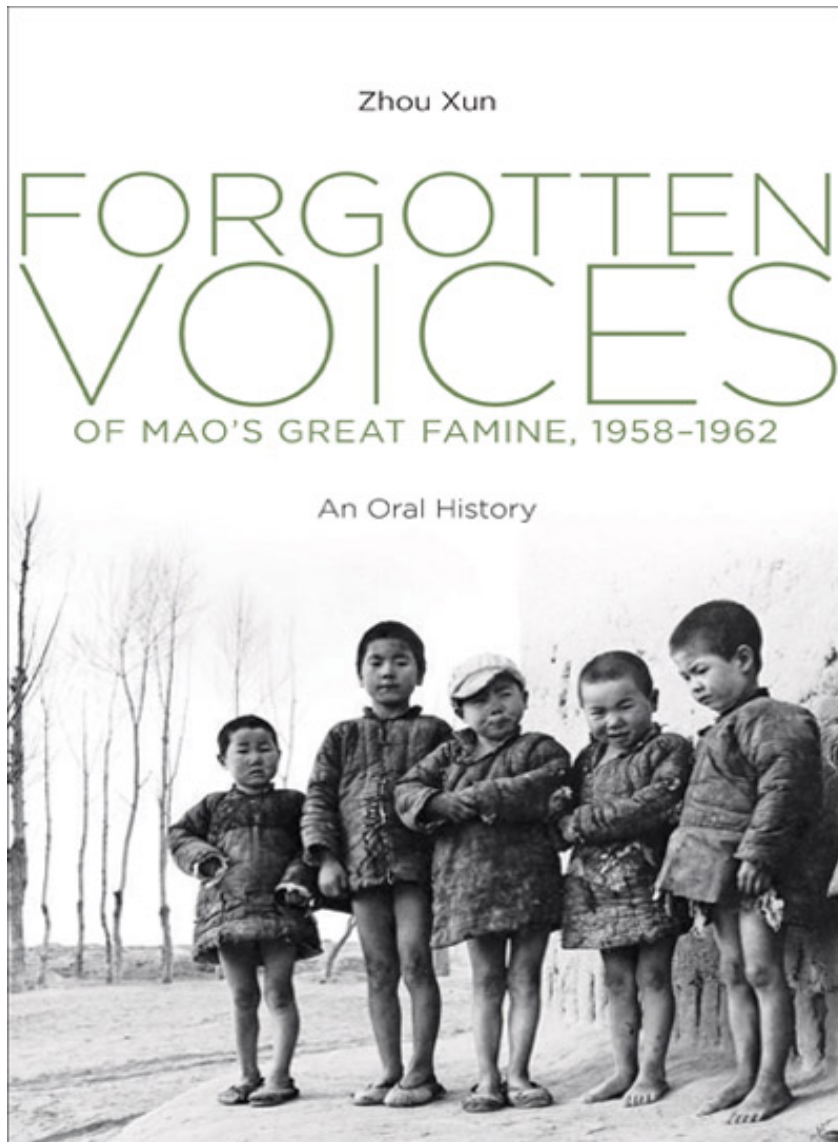
- 260,000 excess deaths
- Half <5 years
- No fall in BR

*Famine Narratives* [Tufts, 2015] =>

- Excess mortality dates from Spring 2010
- Mostly children

# 1992-93 versus 2011-12

- Striking similarities
- *Famine Narratives* versus MSF, other eyewitness accounts
- Global Acute Malnutrition [GAM]
- Food prices



CHINA 1959-61:  
Zhou Xun



SOMALIA, 2011:  
Nisar Majid *et al.*

**1992:** *There was a huge number... in the process of dying... We also saw other horrific scenes of the famine: people scratching at the trees to eat the bark, people gathered around putrefying camel carcasses to eat. There was really nothing left to eat. Malnourished adults, with Kwashiorkor or oedema, no longer moving... Dead people, many fresh graves...*

MSF medical co-ordinator

*Baidoa is one of the 3 or 4 experiences I've had that have made me say, "famine reveals itself." It was crazy! ... It was really hell!*

Rony Brauman, MSF, on 1992

*A lot of MSF people were traumatized – Working conditions were extremely bad ... People would call me after 3 days and say, "well thank you but I'm going home".*

Jules Pieters, MSF Holland, on 1992

**2012:** An agro-pastoralist man from Baidoa district, *From late April to May 2011, cattle started dying. We left with some of the cattle still alive but not able to move. One of my children died on the way to Baidoa. We arrived in Baidoa in a congested camp called Bargiyamo... We received some food and other items from Baidoa people. We got some help from a local organization. ... We were affected very much in our village but the number of people who died were not many..*

**2012:** Displaced woman from Bay region:  
*We moved by foot from Ufurow to Dollo. We lost three children on the way between the eleven families moving together... We spent 15 days on the way. We used donkey carts to carry the weak children, water, and food.*

Displaced man from Bakool: *We spent 6 days on the way... No, we didn't lose anybody on the way but we lost a child at Yubow, the screening and transit point...*



1991-1993	2011-2012
NUTRITION	
<ul style="list-style-type: none"> <li>• <b>GAM 40-70%</b> Bardera/Baidoa/Hudder: GAM 70%</li> <li>• Burhakaba: GAM 55% (WHM &lt;80%, NCHS 1977)</li> <li>• Beletwene 1992: GAM 43.8% (WHM &lt;80%, NCHS 1977)</li> <li>• CDR 7.3-23.4/10,000/day</li> <li>• Human and livestock disease (Measles/Rinderpest)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>GAM 20-45%</b></li> <li>• Bay: GAM 44.7%</li> <li>• Lr Shabelle Riverine: GAM 20.2%</li> <li>• Lr Shabelle Agropastoral: GAM 28.7%</li> <li>• CDR: in Bay (2.15/10,000/day)</li> <li>• Lr Shabelle riverine 5.93/10,000/day</li> <li>• Lr Shabelle Agropastoral 4.29/10.000/day</li> <li>• Cholera, measles</li> </ul>
Source: <i>Somalia: Country Programming Paper (IDDRSI)</i> , 20 June 2013	

1991-1993	2011-2012
<b>LIVESTOCK</b>	
<ul style="list-style-type: none"> <li>• 50-70% livestock death in C/S</li> <li>• Average 78% decrease in livestock exports</li> </ul>	<ul style="list-style-type: none"> <li>• Below baseline level livestock herds for all species</li> <li>• Cattle price decline: 60% in Bay, 30% in Shabelle</li> </ul>
<b>AGRICULTURE</b>	
<ul style="list-style-type: none"> <li>• Total cereal crop failure (sorghum belt); 63% decrease in sorghum production from 1990-92</li> <li>• No cereal stocks available</li> </ul>	<ul style="list-style-type: none"> <li>• Significant decline in cereal production—Bay (19% of PWA); Lr Shabelle (37% in Gu 2011</li> <li>• Minimal cereal stock availability</li> </ul>

Short Term: Famine as 'History'

Medium Term: Global Warming  
=>Drought=>Famine?

- Elkin, Jones, Dell [2008]; Burke, Hsiang, Miguel [2015]
- Olmstead and Rhode [2013]

# Olmstead and Rhode on wheat :

Innovation shifted  
frontier to where  
climate would have  
Previously  
Precluded cultivation



- Paradigm or exception?

# Sutch on Corn Belt Drought and Hybrid Corn:

- Sudden and dramatic climate change induced prompt and prudent response.
- Process driven by private enterprise, but government involved via research and publicity (Secretary of Agriculture Henry Agard Wallace).

*A body of historical research suggests ... that in the long run farmers... are able to exploit conditions that originally appeared hostile (Olmstead and Rhode, 2011)... Using data from a more recent period... we find limited evidence that agricultural productivity has adapted to these environmental changes...*

Burke and Emerick [2015]

*Adaptations such as **unprecedented** innovation (Olmstead and Rhode 2011) ... might reduce these effects.*

Burke, Hsiang, and Miguel [2015]

*A **notable exception** is Olmstead and Rhode (2011)...*

Dell, Jones, and Olken [2015]