Hyperinflation in a Monetary Union: Lessons from 1619-1623

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Motivation

• The European Monetary Union (EMU) faces institutional gaps (Sims, 1999; Uhlig, 2003)
• How do these gaps affect price stability in such an union - especially in presence of big shocks?
• EMU is unique, hard to find comparable structure anywhere else
• Therefore, we investigate a historical episode with surprising similarities
The Holy Roman Empire

Map of the Imperial Circles of the Holy Roman Empire (c. 1512)
The structure of the Holy Roman Empire

- Emperor
- Army of Empire
- Imperial Courts
- Imperial Diet "Reichstag"
  - Legislative body of empire
- 10 imperial circles
  - Executive body: defence, imperial taxation, supervision of coining, peace-keeping functions and public security
- Up to 300 imperial estates
  - Individual entities governed by bishops, kings, dukes, abbots
The Holy Roman Empire and the EU

Niall Ferguson (2005): “Like the Holy Roman Empire, it (the EU) has a relatively weak legislature ... like the Holy Roman Empire it (the EU) is always in the process of reforming itself, without ever quite getting there.”

Jan Zielonka (2006): “In Essence, the Holy Roman Empire like the contemporary EU was always a highly ‘plurilateral’ and decentralized unit unable or unwilling to forge a fully fledged political union”
Timeline
From 1559 to Hyperinflation

• Augsburg imperial mint ordinance ("Reichsmünzordnung")
• selected group of princes maintaining a limited number of mints
• intrinsic content of coins was fixed
• system of supervision and punishment
From 1559 to Hyperinflation

- silver content for small coins was set too high
- incentive to reduce intrinsic value
- rules to prevent this behavior were not enforceable

-> right from beginning incentives to deviate from “Reichsmünzordnung”
From 1559 to Hyperinflation

- debasement becomes more severe
- imperial estates (principalities) still attempt to fight debasement
e.g. tried to punish mints not minting according to “Reichsmünzordnung”
From 1559 to Hyperinflation

- start of the Thirty Years’ War
- Hyperinflation starts in 1618/19
  -> called “Kipper- and Wipperzeit”
    (to tilt) (to seesaw)
- similar characteristics as before but at different pace (e.g. more mints)
From 1559 to Hyperinflation

- People became unwilling to accept bad coins
- Government received more and more bad coins
- Between 1623-1624, the authorities started to revert to the old coinage system
- Bad coins were withdrawn from circulation
- Losses were borne by the principalities

-> Commitment device to stop hyperinflation
Historical data
Debasement of Kreutzer vs Reichsthaler

Source:
Price indices (CPI) in local currencies
(Kreuzer or Pfennig)

Source:
Seignorage („Schlagschatz“) in Gulden

Munich

Kulmbach

Kursachsen

Quedlinburg

Year

1604 1605 1606 1607 1608 1609 1610 1611 1612 1613 1614 1615 1616 1617 1618 1619 1620 1621 1622

Gulden

0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 6500 7000
Outlook and Questions
Historical Data

- we have started to collect data for prices, on debasement, and seignorage
- so far just from few areas of the HRE
- most of data sources are anecdotal descriptions of the most severe episode for a single region (state)
- various issues: missing observations, etc

- Goal: comprehensive picture (e.g. fiscal financing) of the union at this time; most existing paper focus on one state
Guidance for modeling

• interpretation of data through structural model
• Kipper- and Wipperinflation often told as version of Gresham’s Law (Kindleberger, 1991; Schnabel and Shin, 2006)
• for us, this sounds questionable (see also Rolnick and Weber, 1986; Sargent and Smith, 1997)
• quite stable episode until war; until more and more governments join the game of debasement
• rather fiscal inflation (unpleasent arithmetic)

Further interesting features:
• fiscal free riding, asymmetric information
Distribution across Holy Roman Empire

Number of flysheets per region regarding hyperinflation between 1620-1623