The Safety Demand in a Monetary Union

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Why would the euro area benefit from a common safe asset?

- The literature argues that a European common safe asset benefits member states by
  1. increasing financial stability
  2. increasing risk sharing
  3. improving monetary policy transmission
- This paper studies investment decision in a monetary union in the context of a structural safety demand
  - motivation: figure 3
  - I find that a European common safe asset may also benefit member states when it increases the total supply of public safety

Key Results

1. **National governments optimally provide too little public safety compared to the globally efficient allocation**
2. **The underproduction of public safety is more severe under a common currency**
3. **In a monetary union a common public spending boost funded by a common safe asset can increase the public safety supply, leading to a Pareto improvement**

2-country model of a monetary union

- Households prioritize ensuring their subsistence consumption c^{min}, leading to a well-defined safety demand

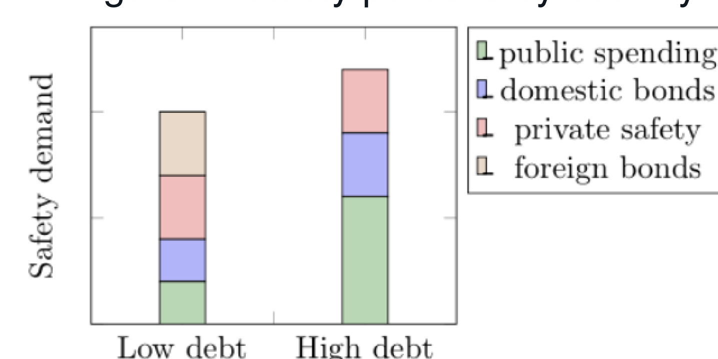
$$E[U] = \begin{cases} c_0 + \delta E[c_1] + V(G), & \text{if } c_1^s \geq c^{min} \\ -U, & \text{if } c_1^s < c^{min} \end{cases}$$

- Households obtain safety from the private sector, or from the public sector
- Public sector safety supply:
  1. public debt that may have default risk if spending is high
  2. foreign bonds also satisfy safety demand
  3. public spending contributes directly to safety
- Private sector safety supply:
  1. conservative investment: provides a safe return, but low expected return and decreasing safe-return to scale
  2. productive investment: no safety, but high expected return
- Governments decide on public spending
  - trade-off: public safety & public goods versus fiscal cost & crowding-out productive investment
  - subject to high or low fiscal fixed cost (only difference between countries)
  - optimal policy maximizes productive investment and public good value subject to a safety constraint
- In a monetary union countries share a currency
  - no more exchange rate risk on foreign bonds

Household portfolio allocation

- Productive investment = endowment - resources required to obtain safety demand
- Safety demand = subsistence consumption + taxation in the low state
- How do households satisfy safety demand across countries?

Figure 1: Safety portfolio by country

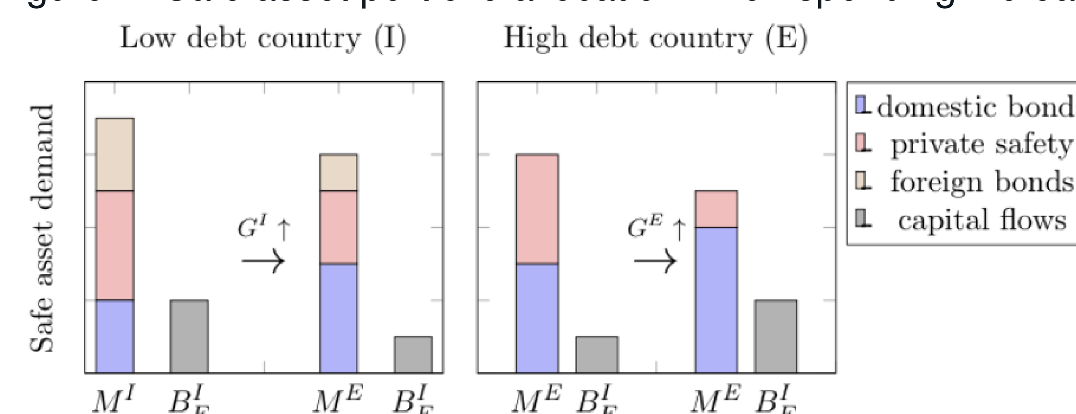


- High debt governments set higher taxation, so households have a larger safety demand. They also provide more direct safety, so households rely less on alternative safety options
- Households in low debt countries acquire foreign bonds for safety
- If public spending is equal there are no capital flows

Equilibrium fiscal policy

- Public spending choice affects portfolio allocation

Figure 2: Safe asset portfolio allocation when spending increases



- A global planner sets the fiscal policy that maximizes joint welfare
  - does not consider the effect of spending on capital flows that redistribute safety without joint productive effects
- National governments set the fiscal policy that maximizes domestic welfare
  - does consider the effect of spending on capital flows
  - lower spending induces domestic households to acquire more foreign bonds
- **Nash equilibrium: governments set lower public spending than global planner**
  - at the globally efficient fiscal policy, unilaterally lowering spending means
    1. lower taxation $\rightarrow$ lower safety demand
    2. less public safety $\rightarrow$ rely more on private safety and foreign bonds
  - net effect positive as foreign bonds do not carry fiscal costs
  - benefit of lowering spending is larger without exchange rate risk, so under a common currency

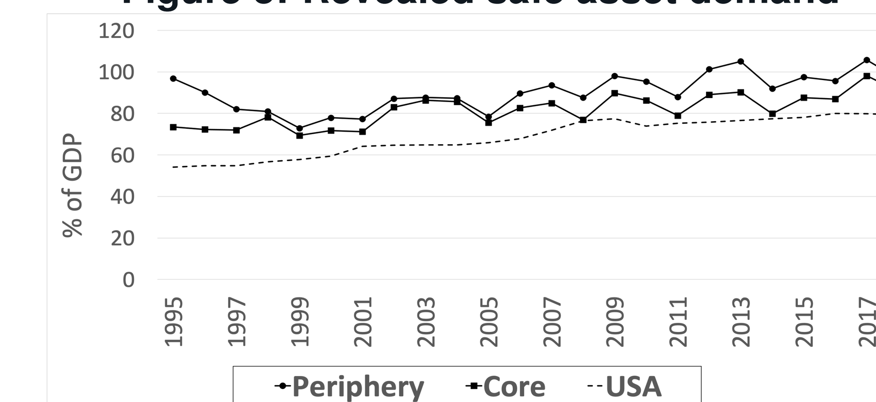
Common policy

- **A common public spending boost funded by a common debt can implement the globally efficient allocation**
- Institutional setup:
  - a common institution that issues safe common debt
  - common spending that does not substitute national spending
- How should it be funded?
  - a seniority claim on national tax base may not be credible
  - common resources dominate transferring the loan in the bad state
- High fixed cost countries certainly better off & low fixed cost countries also with common resources

Remarks

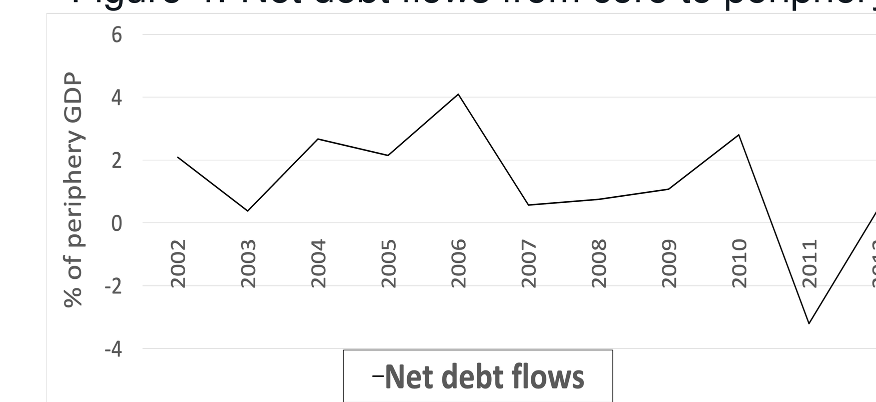
- I provide a justification for the EU Covid-19 response:
  1. common debt to fund common public spending
  2. targeted safety spending complimentary to national spending, for instance unemployment insurance
  3. proposals to introduce new common taxation, for instance plastic tax or tax on large multinationals
- The underproduction of safety is not unique to a monetary union
  - a reason for the global safe asset scarcity studied in Caballero and Farhi (2018)
  - a monetary union has the opportunity to benefit from common policy
- The model matches some euro area data patterns:
  1. Safe asset demand large and constant over time (calculated as in Gourinchas and Jeanne, 2014)

Figure 3: Revealed safe asset demand



  2. safety seeking capital flows go from core to periphery, outside of crisis (data from Hobza and Zeugner, 2014)

Figure 4: Net debt flows from core to periphery



  3. prediction: lower domestic public spending induces households to obtain more safety from 1) the private sector and 2) foreign bonds