

The Safety Demand in a Monetary Union

Oscar Soons (University of Amsterdam)

December 21, 2020

AFA 2021

Contact: o.soons@uva.nl

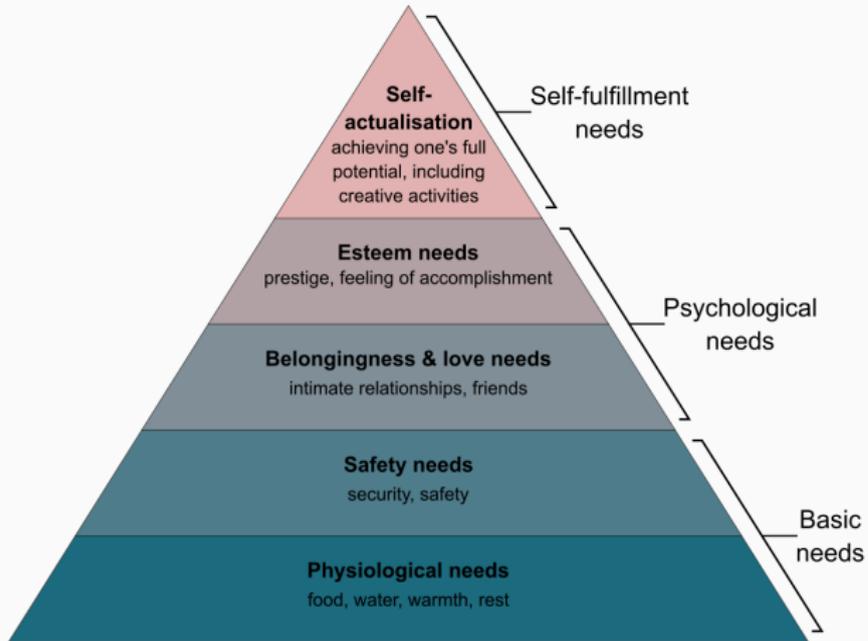
What is my paper about?

- Why should a monetary union have a common safe asset?
- This paper: 2-country model of a monetary union
 1. study investment decisions under safety demand
 2. leads to a rationale for a common safe asset
 - to fund common safety spending
 - justification for EU Covid-19 response

- “Eurobond” literature focuses on risk sharing and financial stability benefits (De Grauwe and Moesen, 2009; Brunnermeier et al., 2017)
- Safety demand is also of first order importance
 1. large safety demand (Gorton et al., 2012; Gourinchas and Jeanne, 2012)
 2. safe assets scarcity (Caballero et al., 2016; Caballero and Farhi, 2018)
 3. thus public safety is important, not only in Covid-crisis times
- This paper: safety demand requires common safety spending

What is safety demand?

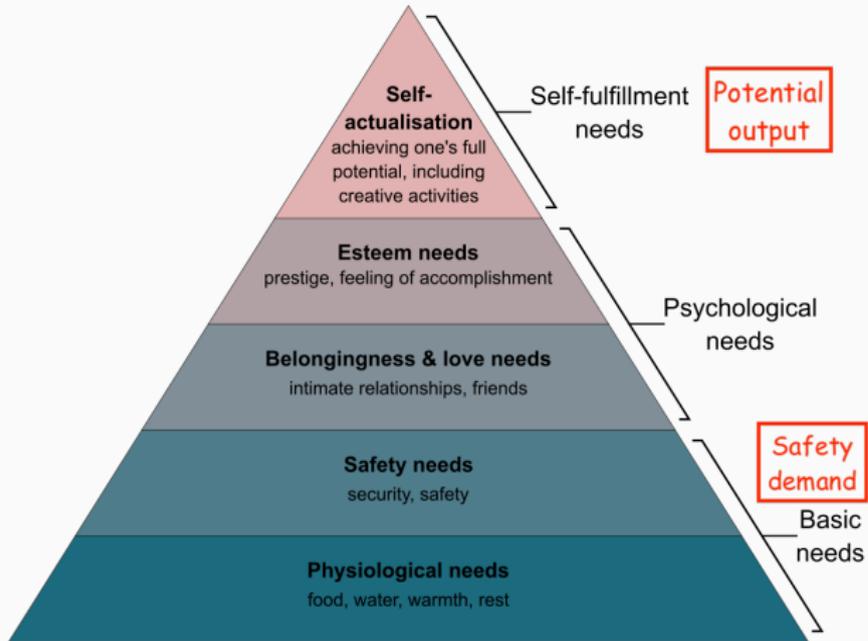
Figure 1: Maslow (1943) hierarchy of needs



Source: Wikipedia

What is safety demand?

Figure 2: Maslow (1943) hierarchy of needs



Source: Wikipedia

- Here: preferences include a minimum consumption need

$$E[U] = \begin{cases} c_1 + \delta E[c_2], & \text{if } c_2 \geq c^{min} \\ -U, & \text{if } c_2 < c^{min} \end{cases}$$

- If safety benefit (U) small there is a risk-return trade-off
 - safe asset demand driven by liquidity or transaction need
- Safety demand dominates if safety benefit (U) large
 - **prioritize obtaining subsistence consumption**

- Safe financial assets: public debt
 - domestic or foreign
 - if public spending is high, only a fraction is safe
- “Real” safety
 1. public spending contributes to safety
 - public good benefit, but also public safety: $c_2 + \theta G \geq c^{min}$
 - e.g. public employment, public health care, unemployment insurance, basic income, law and order, border protection, Deltaprogramma, etc
 2. safety from private sector
 - low-return safety technology with decreasing return to scale
- Productive investment provides no safety, but has highest expected return

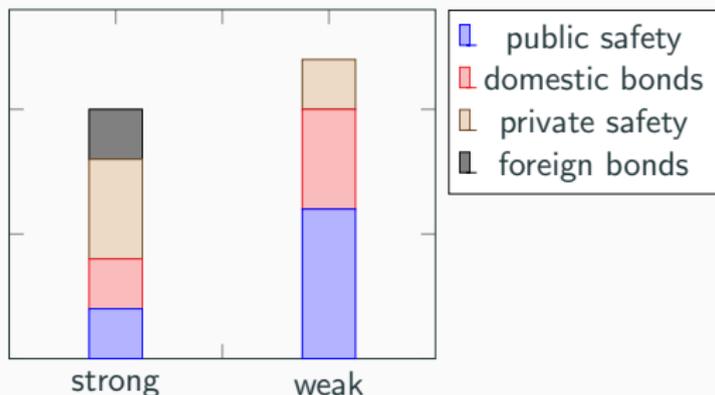
When a country is on its own: public sector

- Governments choose public spending
 - trade-off public safety and fiscal cost
- Countries have different fiscal fixed cost (institutional quality)
 - fixed cost unproductive
 - contributes to safe income at cost of higher taxation
- **Result:** 'High cost' (weak) governments spend more, so its citizens rely less on private safety
 - higher cost of producing same public good
 - more public spending so higher taxation, but also more direct public safety provision
- Public debt safety decreases with scale

When a country is on its own: safety demand

- Citizens may acquire foreign safe asset to satisfy safety demand
 - foreign bonds with exchange rate risk provide less safety
- **Result:** countries with low public debt acquire foreign safe asset
 - foreign public debt reduces need for inefficient private safety

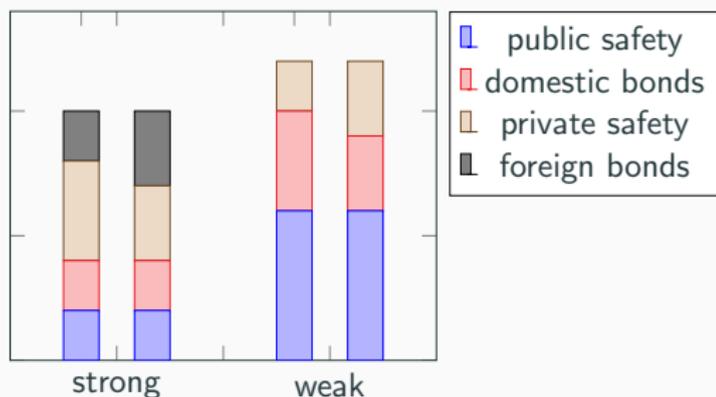
Figure 3: Safety demand before MU



Monetary union equilibrium

- No more exchange rate risk on foreign bonds
- **Result:** low public debt countries acquire more foreign safe assets
 - capital flows from core to periphery [Show](#)

Figure 4: Safety demand before and after MU



First best solution

- First best spending maximizes joint household welfare
 - involves a boost to total public safety
- **Result:** first best total public safety $>$ sum of national public safety
 - joint household welfare independent of capital flows
 - capital flows reallocate safe assets, but fiscal costs are not shared
- Joint household welfare higher under first best choice
 1. weak country always better off
 2. strong country may be worse off

How to implement first best? A common solution

- Common public safety spending boost
 - a central institution issues common debt
 - common safety spending, not substitute national spending
 - beneficial if total safety supply increases
- Providing more safe assets to strong country is beneficial
- How should it be funded?
 - common resources dominate transferring the loan in the bad state
 - ideally some new tax revenues
- Resembles SURE instrument and NextGenerationEU proposal

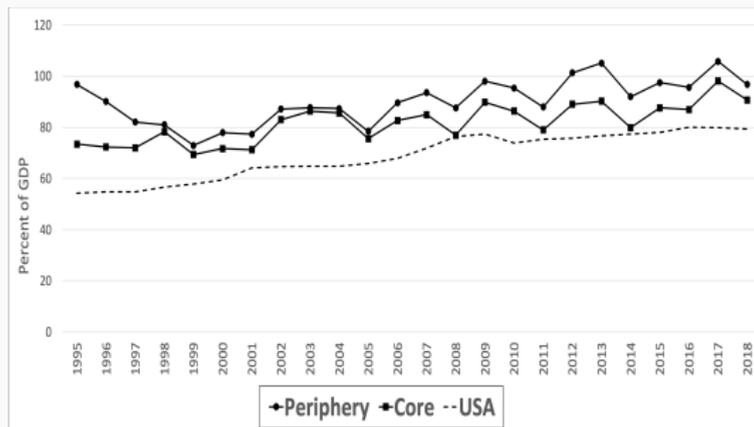
- This paper aims to contribute to the debate on a common euro safe asset by focusing on the safety demand in a MU
- A novel rationale for a common safe asset
 - national solution lead to an underproduction of public safety
 - a common safe asset can fund targeted common safety spending
- A framework to study safe asset design choices
 - relates to EU Covid-19 response
- All member states can benefit from a common safe asset, also outside of crisis times

Questions/comments/suggestions?

Early draft posted on <https://www.oscarsoons.com>

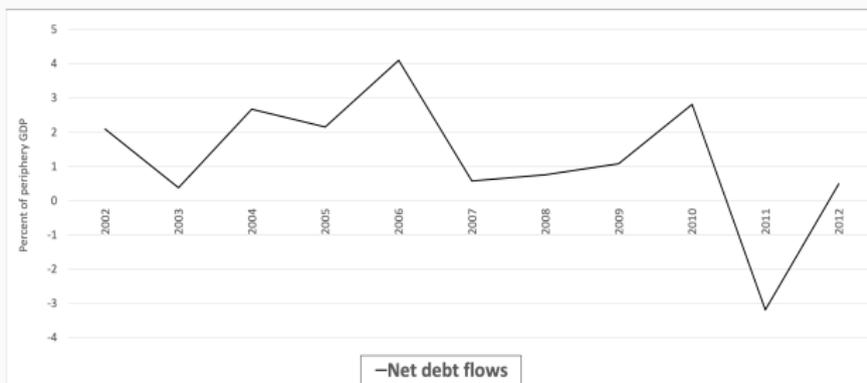
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Figure 5: Revealed demand for safe assets



Holdings of safe assets is constructed as the sum of currency and deposits, short term debt and money market fund securities of households and non financial business. Core is the average of Germany, Netherlands, Austria, Finland and France. Periphery is the average of Italy, Spain, Portugal and Greece. *Source:* OECD

Figure 6: Net financial debt flows from core to periphery

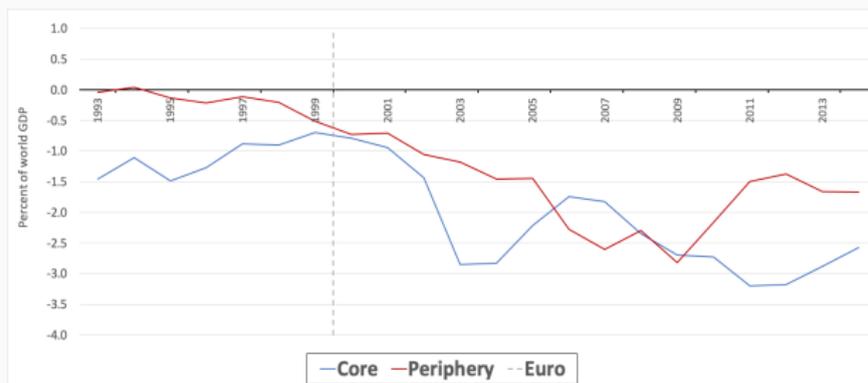


The net sum of bilateral financial flows from core EMU countries to debt instruments in periphery countries, and vice versa, as a percent of periphery GDP. *Source:* Hobza and Zeugner (2014)

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Take away: periphery absorbed safety seeking capital from the core (in normal times)

Figure 7: Net safe asset position

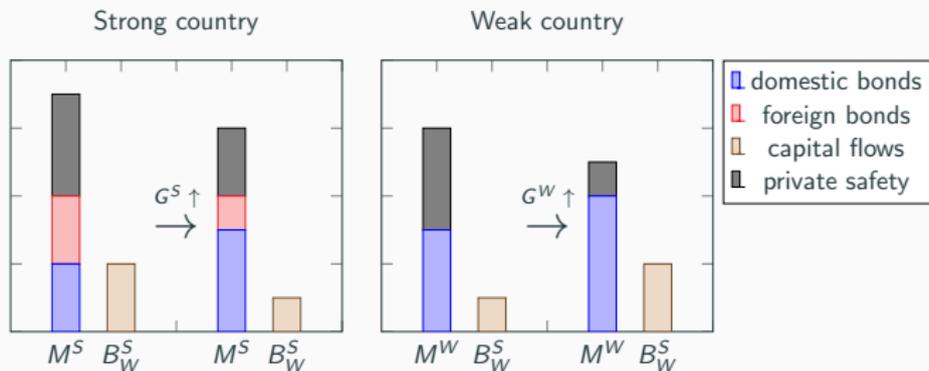


The net safe asset position with the rest of the world as a fraction of world GDP calculated as the sum of official FX reserves minus gold, and portfolio debt assets minus portfolio debt liabilities (similar to Caballero et al. (2020)). *Source:* Lane and Milesi-Ferretti (2018)

Take away:

1. After the euro introduction the periphery became a net supplier of safe assets

Figure 8: Portfolio allocation under an increase in spending



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