

# Cross-country risk-sharing in the EMU: Current mechanism and new proposals

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**Fiscal Rules, Stabilization and Risk-Sharing in the EMU**

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# Outline:

1. Shock absorption in the euro area
2. The role of national fiscal policy in smoothing shocks in the EA (and the US federal budget as benchmark);
3. The role of financial markets in smoothing shocks: cross-country private risk-sharing
4. Cross-country fiscal risk-sharing: The case for a European unemployment insurance mechanism

# 1. The background

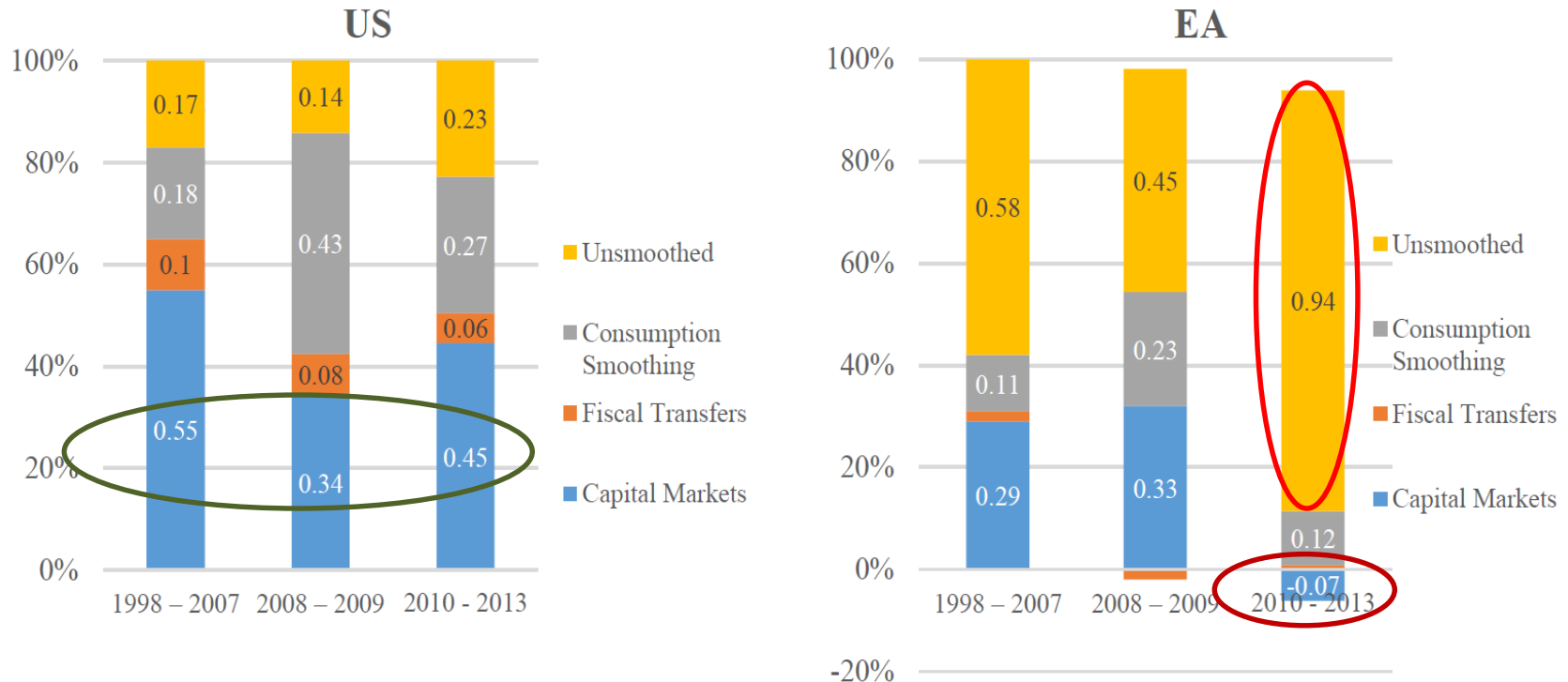
- Maastricht design: shocks are mainly fiscal and should become rarer given the fiscal rules
- Reality different:
  - In the EA (ex-ante) coordination limited by low enforcement
  - Also non-fiscal shocks
- Lessons from the crisis and experience of federations
  - Asdrubali et al. (1996): In the US international risk-sharing (IRS) is high
- IRS reduces correlation between domestic consumption and domestic output
- Risk-sharing vs. consumption smoothing
  - Capital Markets and fiscal transfers: cross-boarder transfers (no borrowing/lending) of private or fiscal money=>IRS
  - smoothing through savings (households, governments, firms): intertemporal dimension

# 1. (Asymmetric) Shock absorption in US & EA

Based on Asdrubali et al. (1996) – GDP variance decomposition: 3 channels for absorbing the impact of a GDP shock before it affects consumption

We build a dataset with fully comparable data– corporate savings and K-depreciation are part of the capital markets channel

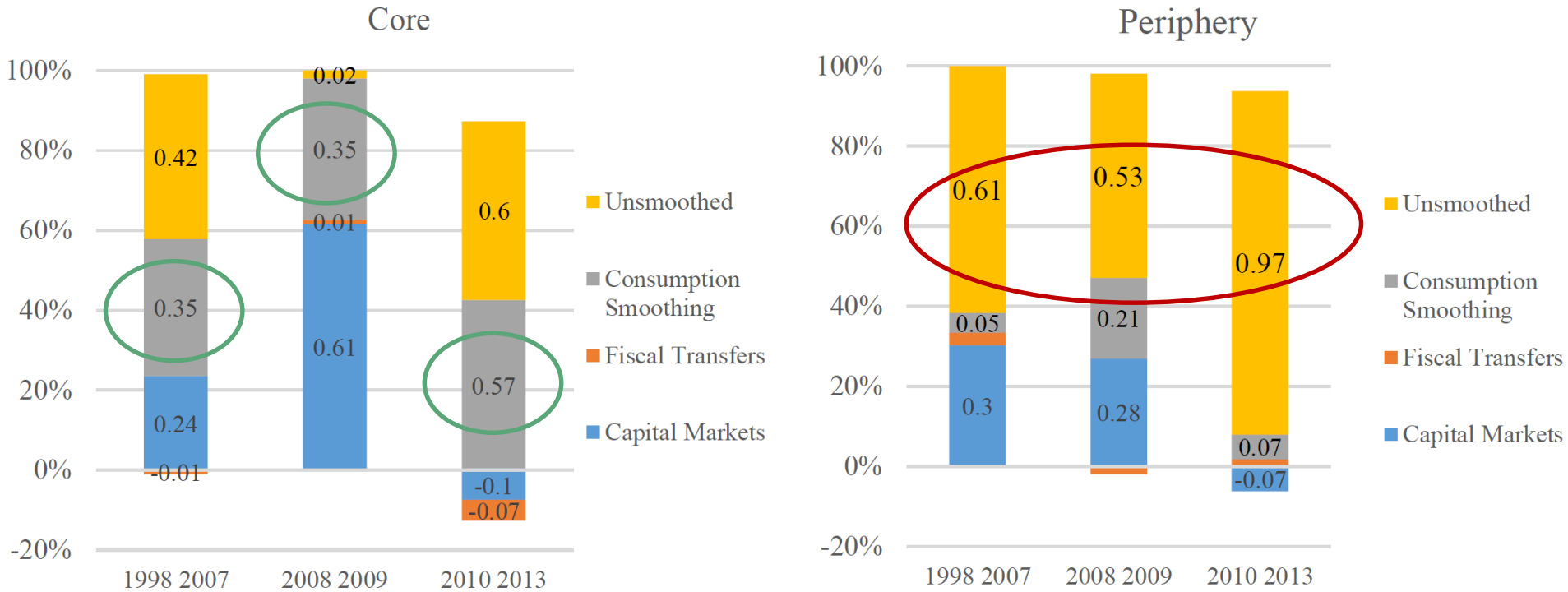
US-EA-11 comparison by sub-periods, 1998-2013



Consumption smoothing: HH savings and domestic fiscal policy

Fiscal transfers means federal/central transfers

# 1. (Asymmetric) Shock absorption the EA: core vs. periphery



**Euro area core:** Austria, Belgium, France, Finland, Germany, Netherlands

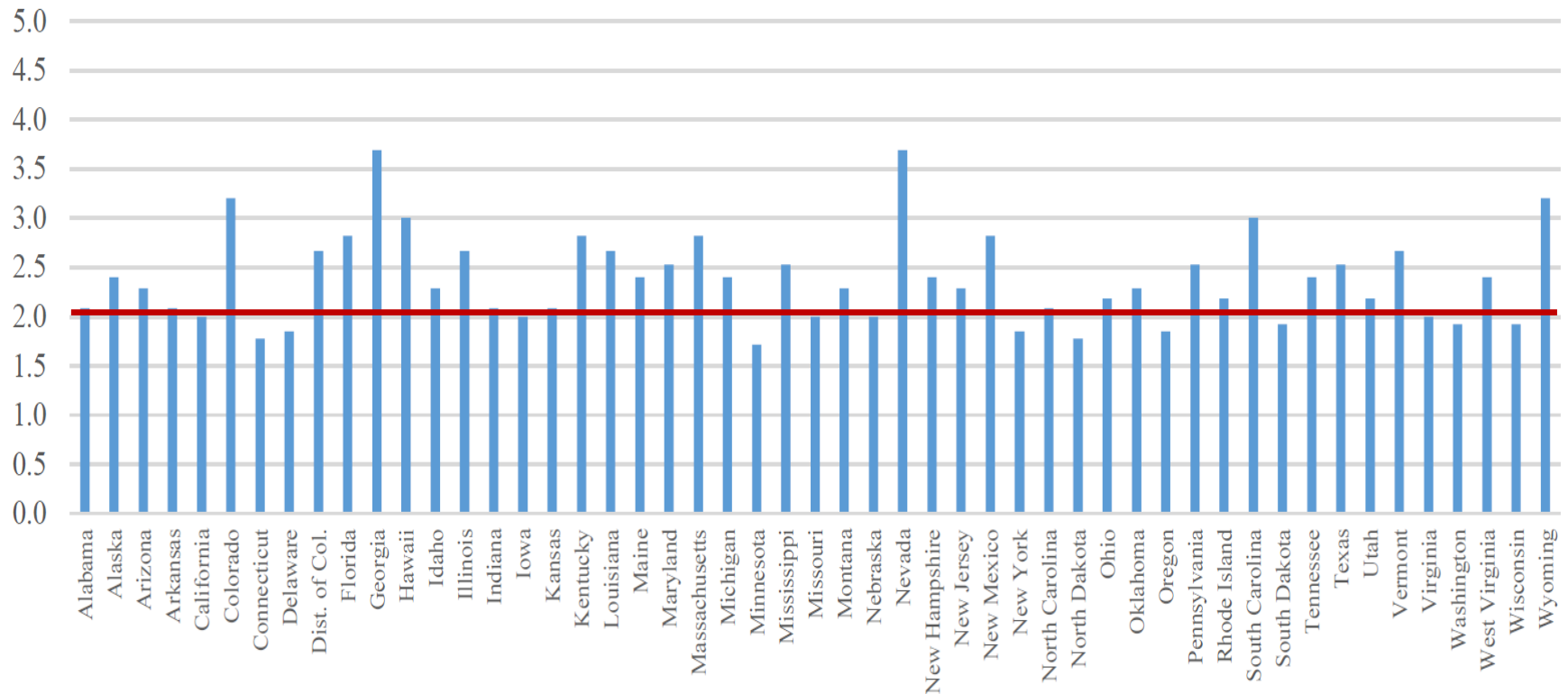
**Euro area periphery:** Greece, Italy, Ireland, Portugal, Spain

Consumption smoothing: [HH savings and domestic fiscal policy](#)

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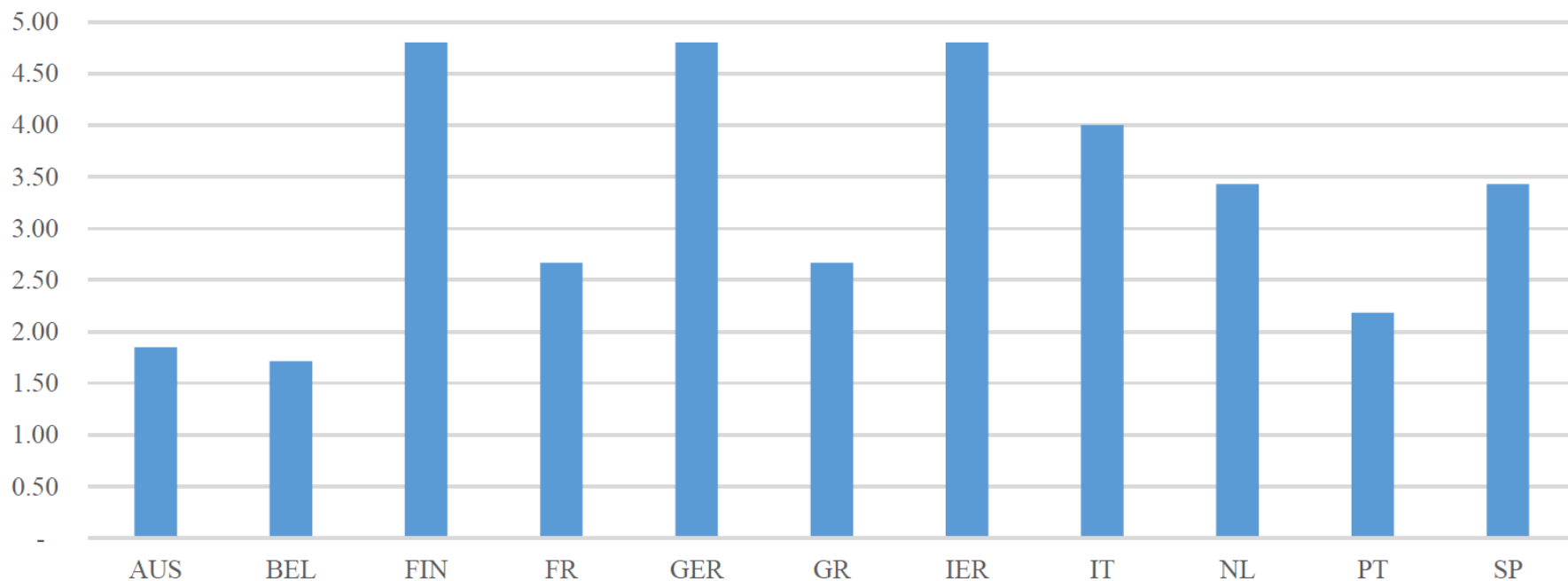
# 1. Average shock persistence in the US

US: average duration of asymmetric shocks by State (1965-2013)



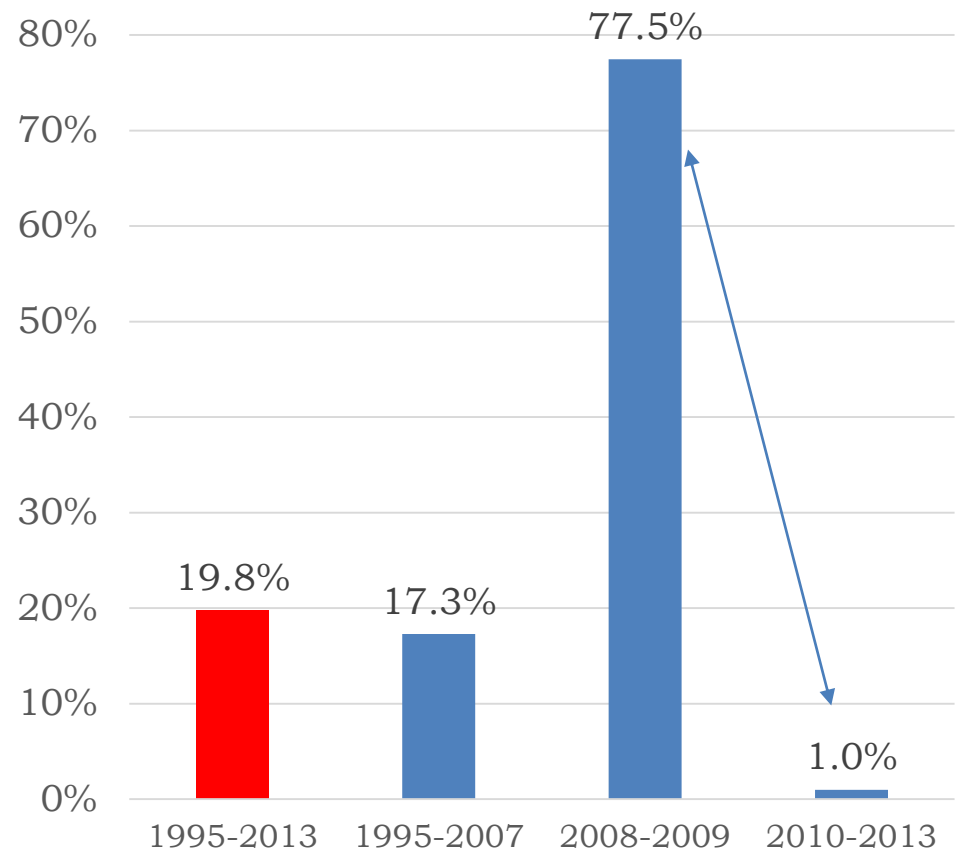
# 1. Average shock persistence in the EA

EA: average duration of (asymmetric) shocks by state (1990-2014)

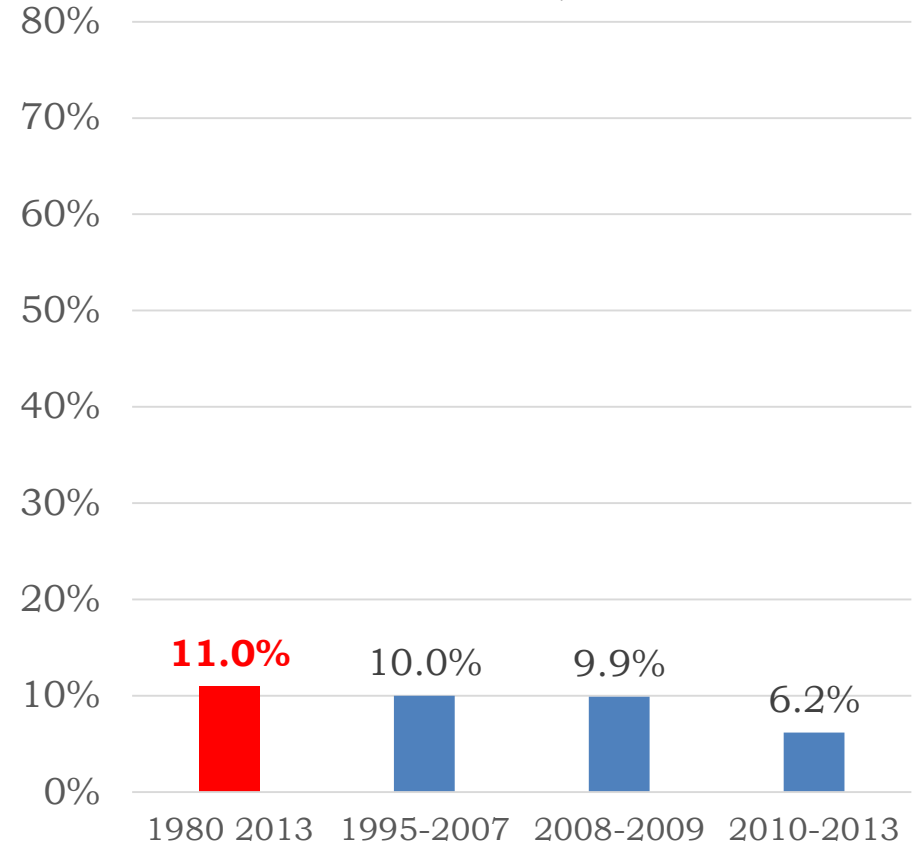


# 2. Governments smoothing: US vs. EA11 (asymmetric shocks)

National Fiscal policy smoothing EA 11  
1995-2013



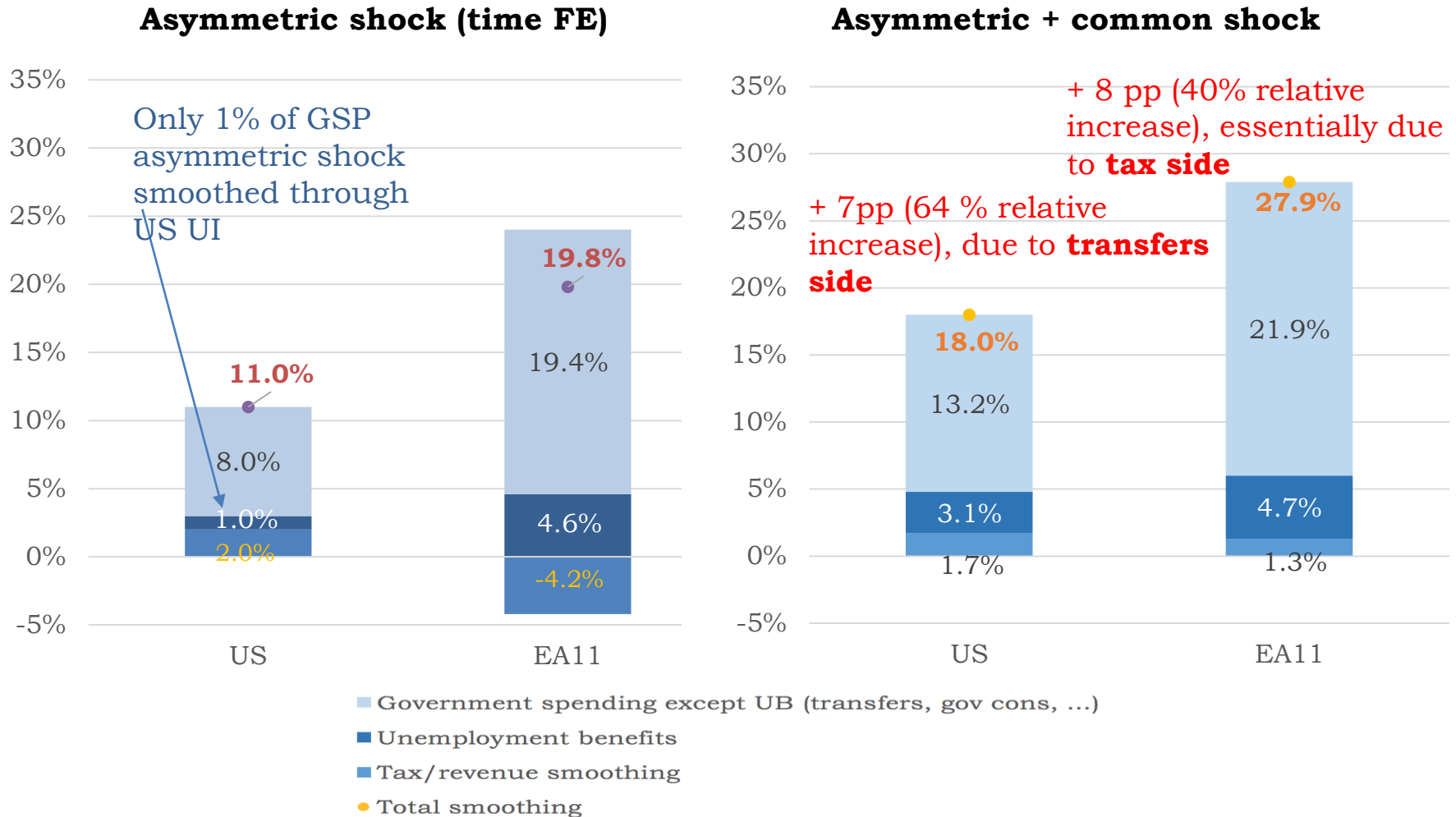
U.S **Federal** system of transfers  
1980-2013





# 2. Asymmetric+ common part of shocks

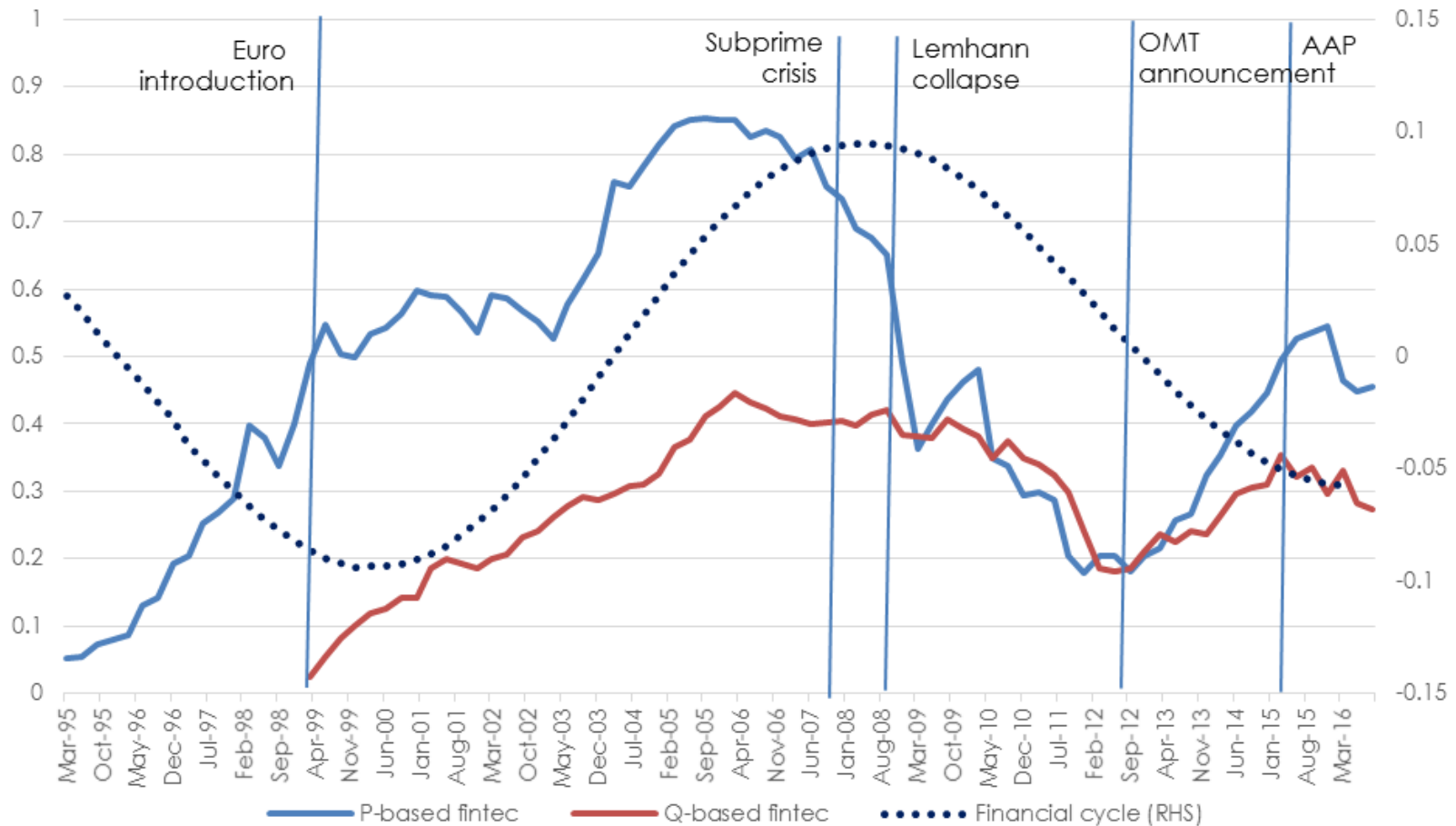
Following Areazza et al. (1999) and Poghosyan et. al. (2014)



# 3. The role of markets: Risk-sharing and financial integration

- Literature focussing until 2008 : EA financial integration improved IRS
- During the crisis financial integration showed no risk-sharing properties
- What went wrong?
  1. No capital mkt integration but cross-border debt, i.e. no risk-sharing
  2. Common underlying factor which prevented cross-country diversification
- Estimates (Alcidi, 2017) of the degree of market risk-sharing (and fiscal policy smoothing) suggest pro-cyclicality relative to the **financial cycle**, which behaves similarly to financial integration indicators
- RS is high when credit and house prices are booming, low in the downturn phase of the financial cycle
  - Amplification effect in peripheral MS which were borrowing
- Financial integration – at least the broad measure – does not necessarily lead to risk-sharing

# 3. Financial integration and the financial cycle in the EA

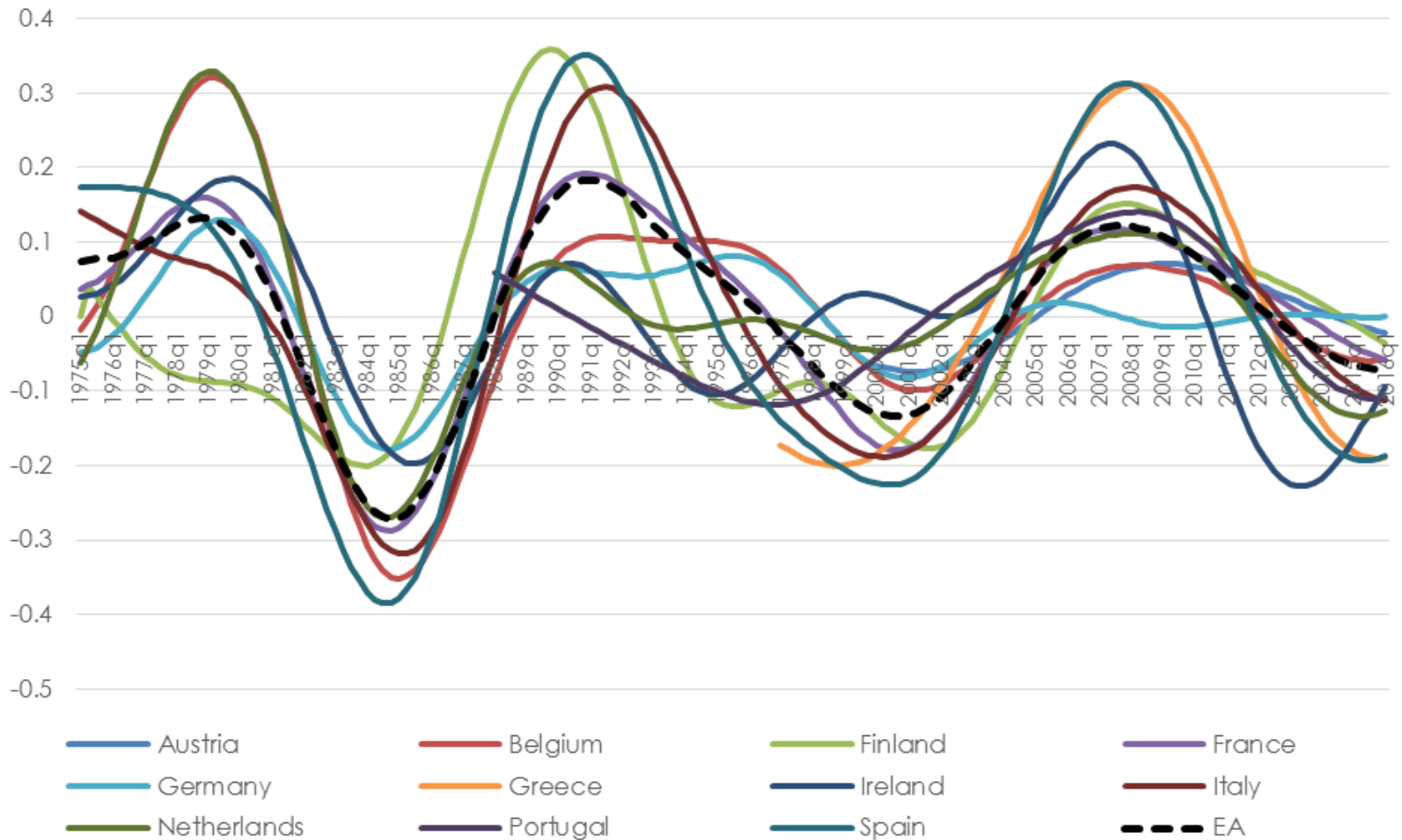


Source: Alcidi (2017)

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# 3. Financial cycle in EA MS



Source: Alcidi (2017)

# Summary on shock absorption capacity

- Capital markets in the US are the main channel for shock absorption
- In the EA, domestic fiscal policy the main tool to smoothing the effect of shocks
  - but this has been limited in size and showed pro-cyclicality.
    - Most likely to be induced by markets dynamics than fiscal rules
  - US Federal budget seems particular relevant in the case of symmetric rather than asymmetric shocks
- Higher persistence of shocks in the EA, relative to the US, combined with the weak role of capital markets, can explain low shock absorption.
- In the EA poor performance of the market channel is due to financial integration not contributing to risk-sharing as expected
  - It overlapped with the financial cycle plus “bad” integration
- Policy options to improve shock absorption
  - It will take time e.g. CMU
  - Prevention of large swings (in business and financial cycles) is crucial: Banking Union and macroprudential policies
  - Improve mitigation: Rationale for common insurance mechanism?

# Stabilization function for EA

- Why a stabilization ‘function’ for euro the area?
  - US example or US mirage? – very limited role
- **Semantics:** Stabilization not equal to insurance.
  - Stabilization generally a continuous process of mitigating impact of shocks – usually domestic fiscal policy
  - Insurance is discontinuous.
    - Pay premium for most periods, receive payout rarely
    - Ex-ante mechanism – different from discretionary measures require political decisions and power. In US: congress’ decision
    - Insurance may affect behaviour of markets
- Focus on the recent experience of EA: large (catastrophic) shocks.

# General considerations

- Insurance is useful when cost of certain unpredictable events is convex, i.e. when a shock of twice the magnitude of another one causes damage which is more than twice as high.
- General theorem of insurance economics says that best contract is (full) insurance with a deductible (Arrow 1974).



# General considerations cont.

- Shocks come in all sizes.
- Usual social loss function larger than the shock hitting the economy.
- With a shock absorber which neutralizes a certain percentage to the shock, the welfare impact of all shocks is proportionally lower

# Reasons for convexity

- Financial market instability.
- As long as financial market access not impaired, national government can smooth temporary shocks.
- Large shocks can lead to loss of market access (bankruptcy costs very high for sovereign).  
⇒ National government can insure individuals against small (national) shocks, but not against large shocks.  
⇒ Need re-insurance.
- Experience shows financial market instability lead to safe haven effects (euro savings can flee any one country, but not the area).

# Re-insurance applied to unemployment schemes

- National unemployment ‘insurance’ funds might be overwhelmed by large shocks (extreme form of convexity).
- Deep recessions come with high expenditure, rising debt levels and rising risk premia, only at that point does country need funding.
- Implementation is difficult but still feasible

# Concluding remarks

- Economic case for ‘stabilization’ (i.e. shock absorbers for small shocks) not so clear if national government can use fiscal policy
- Economic case of protection against large shocks (which impair access to financial markets) strong.

**Thank you for your  
attention!**

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