ADEMU WP3
Macroeconomic and Financial Imbalances and Spillovers

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WP3 Objectives

New understanding of the fiscal policy implications of cross-border economic interdependence within the EU — spillovers and imbalances

- New evidence on the cross-border **spillover effects** of fiscal and financial shocks in the euro area — implications for fiscal policies in EU countries
- Assess the role of **macroeconomic and financial imbalances** in the recent crisis and recession
- Analyse the existing institutional **mechanisms for controlling imbalances** and consider strategies for their effective improvement

Deliverables

Working papers

Workshops

- Macroeconomic and Financial Imbalances and Spillovers
  CERGE-EI (April 2016) and Barcelona GSE Summer Forum (June 2017)
- Risk Sharing, Macroeconomic Interdependencies and Imbalances
  CERGE-EI (March 2018)

Lectures

- Fabrizio Zilibotti (Yale)
- Victor Rios-Rull (UPenn)
- Hal Cole (UPenn)
- Stanley Zin (NYU)

Open Access Data

- European Commission MIP Scoreboard
- Board of Governors of the FED
- IMF: Global Financial Stability Map
- Office of Financial Research
- European Systematic Risk Board
- Bank of England
- Reserve Bank of New Zealand

Macroprudential Policies

- Goal: financial stability, resilience to shocks, containment of systemic risk
- Instruments: supervision, regulation, stress tests, communication
- Institutions: central banks, regulatory bodies, finance ministries
- Interplay between the financial sector and the rest of the economy

Macroprudential Policies

- Ex ante macroprudential restrictions
- Taxes or quantity restrictions (LTV or DTI)
- Alleviate the severity of future crises
- Trade-off: costs and benefits
- Example: leverage regulation

Leverage Bounds with Default and Asymmetric Information (WP 2017/060)

- Leverage bounds from info frictions and default in financial markets
- Heterogeneous agents
- Occupational choice: assets and skills
- Firms: Risky projects from DRS technology
- Borrowers and lenders
- Incomplete markets
- Financing constraint
- Risk sharing

Optimal allocations

Social planner with full information

- Allocations independent of assets
- Skill-based efficiency
- Perfect risk sharing

Decentralization: financial and labor markets

General equilibrium

Financial markets in general equilibrium

- Occupational choice $$v(a,z) = \max\left\{v^W(a,z), v^E(a,z)\right\}$$
- Entrepreneur

$$v^E(a,z) = \max_{k,n} \sum_{z'} \max_{c,a'} \left\{u(c) + \beta v(a',z')\right\} Q^E(z,z')$$

$$c + a' \leq (1-\delta)k + z' f(k,\tilde{z}n) - w\tilde{z}n - (1+r)(k-a)$$

- DRS technology $$f(k,\tilde{z}n) = \left(k^\alpha (\tilde{z}n)^{1-\alpha}\right)^\theta$$
- Financing constraint $$(1-\delta)a - w\tilde{z}n - (r+\delta)(k-a) > 0$$
- Risk sharing

Frictions

Imperfect Monitoring (IM)

- Skills unobservable
- Ex-ante (adverse selection) and ex-post (moral hazard)
- Incentive constraint and threat-keeping constraint

Default (D)

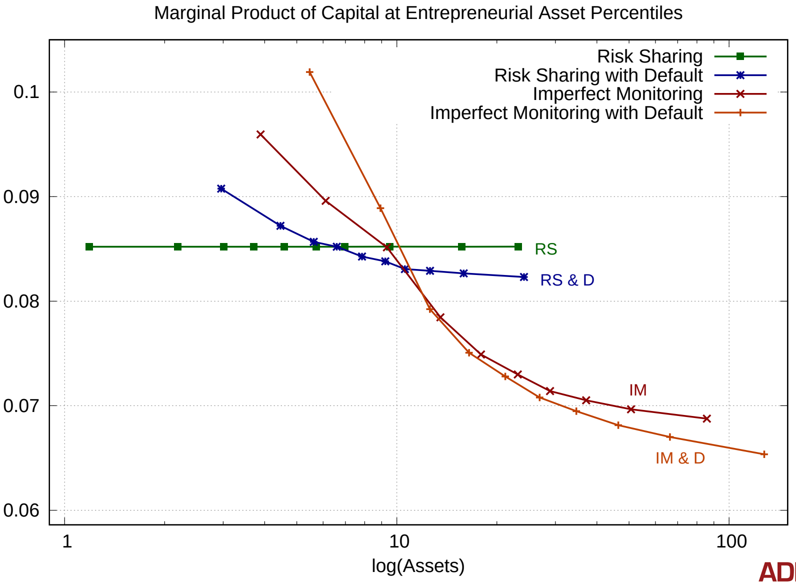
- Default repudiation constraint

IM & D jointly

Imperfect Monitoring of Skills and/or Default

- Partial risk-sharing
- Misallocation: Extensive and intensive margins
- Assets: Precautionary savings and collateral
- Efficiency and welfare losses
- Mapping to collateral constraint

Misallocation



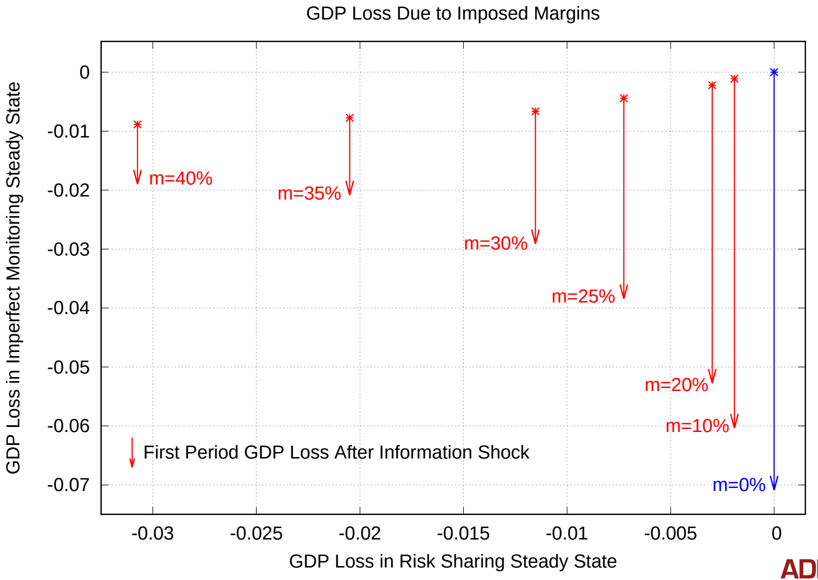
Macroprudential leverage regulation

- Minimum downpayment margin $m \equiv a/k \in [0,1]$

- Trade-off
- Ex-ante cost
- Ex-post gain during a crisis

- Steady states: frictions acknowledged or ignored (policy)
- Information crisis: transition to a new steady state
- Role of m

Macroprudential policy trade-off



Macroprudential policy trade-off

At $m = 0$

- Steady state efficiency
- Too much leverage in a crisis

For $m \approx 0.25$

- Steady state efficiency loss around 0.5% of GDP
- Crisis gains 3-4% of GDP

As $m \to 1$

- Autarky
- Large steady state costs, no financial market crisis

General equilibrium adjustments important

Macroprudential Policies: Conclusions

- Trade-off between stability and efficiency, distribution effects
- Short-term, certain costs vs. long-term, uncertain benefits
- Definition of goals ("sufficient" resilience) and instruments
- Whom to regulate?
- Target market failures and systemic externalities
- Rules vs. discretion, time inconsistency
- Micro- or macro-prudential policies
- Uncertainty on the nature and severity of systemic risk
- Highly interconnected, complex linkages, dynamic