

# Comments on "Assessing Policies to Revive Credit Markets"

Chapter 2 of Global Financial Stability Report, IMF, October, 2013

### Rafael Doménech

Madrid, October 18, 2013



## Main results

- Chapter 2 of the GFSR offers a timely and comprehensive empirical analysis
  of the factors that underlie the weakness in credit
- Three different approaches to identify the constraints to credit:
  - Lending surveys
  - Structural determinants of the supply and demand of bank lending to firms
  - Firm-level regressions of changes in debt-to-asset ratio for manufacturing firms

#### Results:

- Constraints in credit markets differ by country and evolve over time
- Importance of careful country-by-country assessments and
- Need for better data on new lending (production sectors, firms, etc.)



## Main results

- Two main economic policy implications
  - Policymakers should also recognize that there are limits to credit policies and not attempt to do too much
  - Policymakers need to continually weigh the near-term benefits against the longer-run costs of policies aimed to boost credit
- This chapter
  - finds very interesting results,
  - makes original empirical contributions to the literature, and
  - offers sound economic policy recommendations on a very relevant issue in the economic recovery of countries with high levels of credit to GDP ratios



## Main comments

- The analysis focuses on the stock of credit and not on flows (new loans), due to the lack of data
- Alternative approaches to identify supply and demand factors: estimation of a DSGE model with a banking sector
- Policy implications
- Some additional comments



## 1. Flows vs the stock of credit

## Assume a very simple model in which:

- the economy was in steady state (real growth 2% yoy, credit stock/GDP=100%),
- a (positive) financial shock occurred (credit growth from 2% to 10%), and
- the economy returns to its steady state

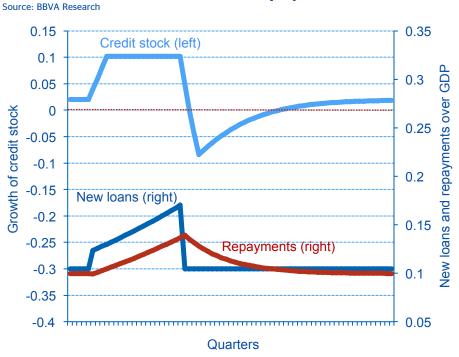
#### Also assume that:

- in steady state, new loans represent a fraction of GDP (10%)
- repayments represent a constant fraction of the credit stock (10%)
- **Main result**: for an extended period of time the stock of credit is falling (deleveraging) but the economy is in steady state
- Weak growth of the stock of credit is not the appropriate measure

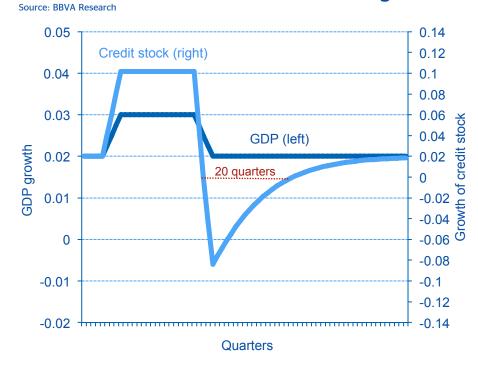


## 1. Flows vs the stock of credit

#### Simulation of new loans and repayments (% GDP)



### Simulation of the stock of credit and GDP growth

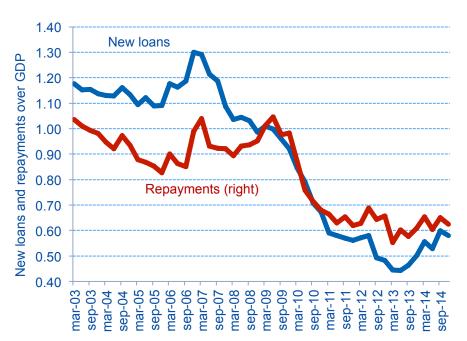




## 1. Flows vs the stock of credit

#### Spain: new loans and repayments (sa, % GDP)

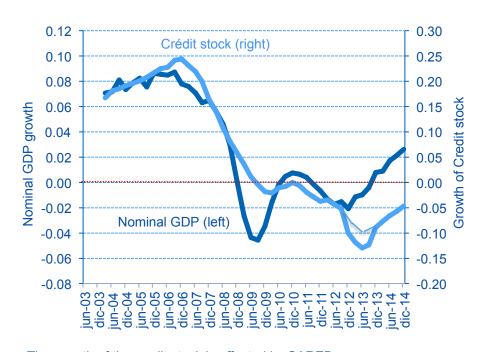
Source: BBVA Research



New loans include refinancing operations

#### Spain: stock of credit and nominal GDP growth

Source: BBVA Research



The growth of the credit stock is affected by SAREB

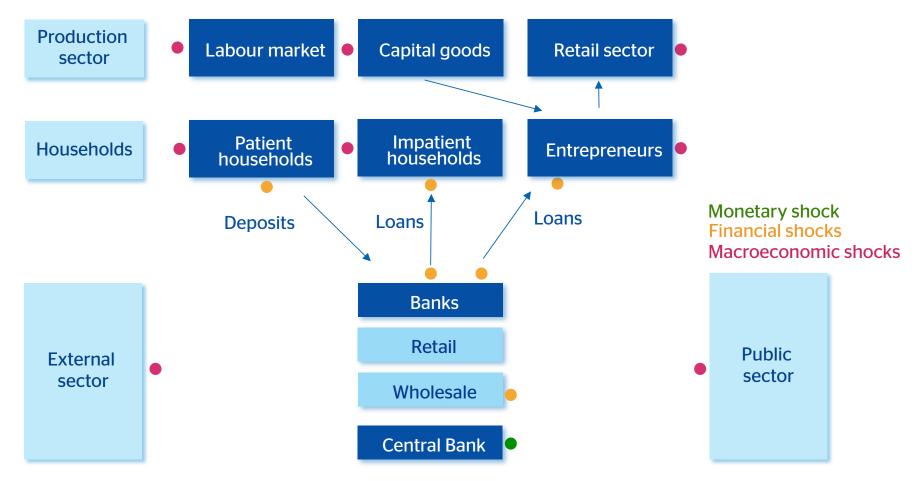


# 2. DSGE model for EMU with a banking sector

- Alternative decompositions of supply and demand shocks can be obtained with other approaches, for example, with estimated DSGE models
- Loans to firms and households could have been affected by supply and demand shocks in different ways
- **Results for EMU** using an estimated DSGE model with a banking sector indicate that differences across sectors are relevant



# 2. DSGE model for EMU with a banking sector

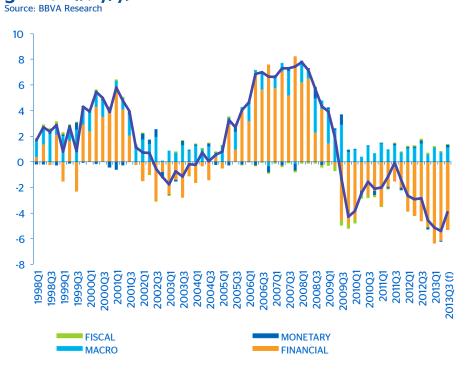


Extended version of Gerali, Neri, Sessa and Signoretti (2010), with public and external sector.

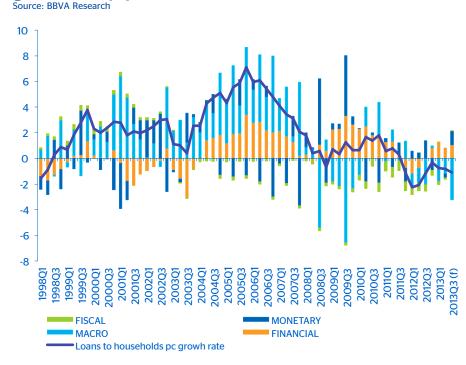


# 2. DSGE model for EMU with a banking sector

# Historical decomposition of EMU corporate loans growth (% y/y)



# Historical decomposition of EMU households loans growth (% y/y) Source: BBVA Research

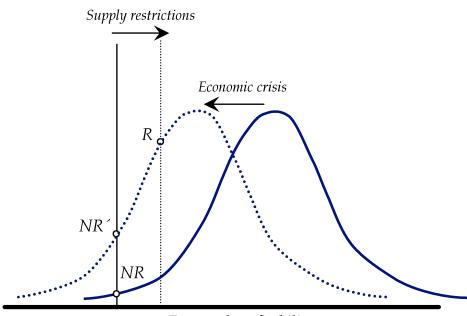




# 3. Policy implications

#### Changes in rejection rates of new loans

Source: BBVA Research



Expected profitability

It is difficult to know without uncertainty when policy interventions are justified (R) or not (NR')

In NR' there is no change in risk evaluation rules but the rejection rate increases because more applications are non-profitable

In R there is an additional increase in rejection rates (higher risk aversion, less liquidity, regulatory uncertainty, etc.)



## 4. Additional comments

• **Lending survey analysis:** consider the inclusion of credit over GDP (in *t*-1) as an additional regressor

$$\begin{aligned} \textit{Credit growth}_t &= \alpha + \beta \textit{Credit growth}_t + \\ & \gamma_i \textit{Demand factors}_{t-i} + \delta_i \textit{Supply factors}_{t-i} + \\ & \phi \frac{\textit{Credit}_{t-1}}{\textit{GDP}_{t-1}} + \varepsilon_t \end{aligned}$$



## 4. Additional comments

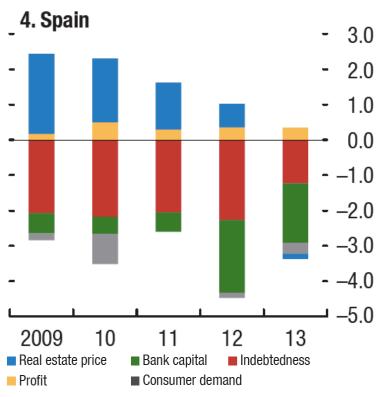
- Firm-Level regressions of changes in debt-to-asset ratio for manufacturing firms:
  - Include the real interest rate from 1991 to 2012
  - The **estimated effects for bank capital** are not clear, given the increase in capital ratios from 2007 to 2012



## 4. Additional comments

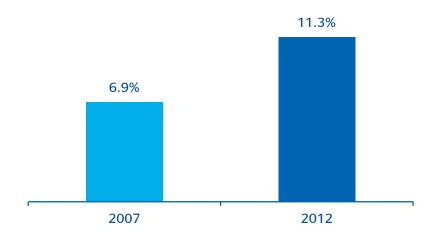
# **Decomposition of change in Debt-to-Asset** ratios for firms

Source: IMF (2013)



#### Capital and reserves over banks' assets

Source: BBVA Research





# Concluding remarks

- A timely and comprehensive empirical analysis of the factors behind the weakness in credit
- A relevant issue in the **economic recovery** of countries with high levels of credit to GDP ratios (e.g., Spain)
- Very interesting results
- Original empirical contributions
- Sound economic policy recommendations



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