National banking in a monetary union: the case of Spain

Tano Santos
Columbia Business School
Columbia University
Introduction

• An overview of the Spanish banking sector in the context of the real estate bubble:

  ① Private credit in Spain: The time series and the cross section
    • Growth of private credit: Luis’s presentation

  ② Spain: A “banking” economy
    • Banks and Cajas: What were the cajas?
    • The evolution of the aggregate balance sheets:

  ③ Policy responses to the crisis: Before and after the crisis

  ④ Going forward
THE CREDIT CYCLE
Credit to other resident sectors by credit institutions (BE041301) as a fraction of GDP. Quarterly, 1974Q4 to 2010Q2. The trend is estimated with a backward MA-20. Source: Bank of Spain and INE.
Loans to other residents granted by monetary financial institutions as a fraction of GDP for Spain, Germany, France and Italy. Quarterly. Smoothed with an MA-4. 1998Q4-2010Q4. Data source: Eurostat
THE SPANISH BANKING SECTOR
The Spanish banking sector: A quick look

- The Spanish banking sector has changed enormously over the last 25 years as a consequence of the rise of the “cajas”
  - Deposit institutions with all banking activities but owned by non-for-profit foundations
  - Supervised by the bank of Spain
  - Strong political connections: To a large extent some of them, not all, dominated by local political elites.
  - Fundamental difference with banks:
    - Corporate governance issues
    - No mechanism for recapitalizations
- The cajas no longer exist!
The Spanish banking sector: The rise and fall of the cajas

Banks vs. Cajas: Assets of each of these institutions as a fraction of total assets of both. Banks (BE045101) & Cajas (BE046101) divided by total assets, respectively. Monthly, January 1962 to September 2010. Source: Bank of Spain

Banks vs. Cajas: Loans to the private sector by banks (BE041203) and cajas (BE041204) as a fraction of loans to the private sector by credit institutions (BE041202). Monthly, January 1962 to November 2010. Source: Bank of Spain
The Spanish banking sector: Cajas: The liability side

Cajas: Balance sheet – Liabilities as a percentage of total assets
Deposits (BE046202; left axis), debt issued (BE046207; right axis), and capital, reserves and “obra benefica y social” (OBS, BE046208 plus BE046209; right axis) as a percentage of total assets (BE046201).
The Spanish banking sector: Credit institutions: Wholesale funding

Credit institutions: Debt as a percentage of total assets. Debt (BE04.2.7) as a percentage of total assets (BE04.2.1). Monthly: January 1962 to January 2012.

Data source: Bank of Spain
The Spanish banking sector: The asset side

Credit institutions: Loans to construction and real estate developers as a percentage of loans granted to firms 
(BE4.18.4 plus BE4.18.10 divided by BE4.18.1) 
Quarterly: 1998Q4-2011Q4. Data source: Bank of Spain

Credit institutions: Real estate exposure
Loans to construction companies, real estate developers and mortgages as percentage of loans to the private sector 
(BE4.18.4 plus BE4.18.10 plus BE4.13.4 divided by BE4.13.1) 
Quarterly: 1998Q4-2011Q4. Data source: Bank of Spain
THE POLICY RESPONSE
The policy response: Did Spaniards know about the bubble?

The real estate bubble had been the focus of policy debates since the early 2000s:

1. Fall 2003: Report from the European Commission alerting of the dangers of house appreciation in Spain

2. Fall 2003, Rodrigo Rato, Spanish VPM, acknowledges that the housing market is overheated but that this did not mean a brusque adjustment

3. 2002-2003, several studies from the Bank of Spain pointing out that the housing market was overpriced between 8% and 20%

4. 2004: General election campaign rotates around the “bricks and mortars” growth model of the conservative party, in power until then.

The policy response: Before the crisis

- The Bank of Spain took some decisions prior to the crisis that were instrumental in the ability of the banking sector to withstand the first hit:

1. Dynamic provisioning

   - Banks had “generic provisions” of about 3% of GDP (€28bn) at the start
   - Spain was unique amongst developed countries in this aspect
   - Buffer: In the private sector and in the public sector (low debt/GDP)

2. Off-balance sheet transactions

   - The Bank of Spain successfully prevented banks from going “Citi” withstanding pressure from the large banks.
The policy response: Before the crisis

Provisions (in millions of euros) in Spain, 2000-2010: Total, Specific and General
The policy response: The crisis comes

- Some (contradictory) ideas have dominated the policy response:

  1. The taxpayer should not bear the burden of rescuing the banking sector

  2. Debt holders should not suffer losses

     - Given the wholesale funding needs there was a fear that imposing losses to debt holders and the doubts about the extent of real estate losses liquidity would drain for the entire system

     - Debt holders have yet to have a loss (except preferred)

  3. The system, in the aggregate, was solvent:

     - Once you include the ability to recap through retained earnings

     - And the reserves that the system had accumulated
The policy response: The crisis comes

- Given the assumptions, what was the strategy?
  - Strong provisioning against P&L
  - Mergers amongst good and bad financial institutions:
    - Funded with loans from the public sector
    - Asset protection schemes with some, minimal, “bad banks” created
  - Limited recap efforts
  - Losses borne by the FGD (Spanish FDIC): Socialization of losses amongst banks
- But, first, Fall of 2008 market dries up:
  - Debt guarantee program
The policy response: The crisis comes

- Throughout one has the feeling that the authorities felt that they did not have a “net:”
  - All promises were fiscal in nature
  - Were depositors going to get nervous in case of substantial losses by the FGD?
  - If losses were to be imposed on debt holders, would wholesale liquidity disappear?
  - If the FROB were to issue massively (up to maximum €100bn), would the market infer something about the extent of losses? Would the sovereign be affected?

- Still, there was a slow drift linking public and private balance sheets, which eventually limited the set of options available to policy makers.

- At some point thus the strategy started rotating around what could be funded, rather than funding the actual capital needs
  - Stress testing without funds available compromises credibility
The policy response: The crisis comes

- There are two responses to the banking crisis:

  ① Government:

    a) Debt guarantee program: Approved in the fall of 2008 (RDL 7/2008)
    
    b) Overhaul of the banking system to, effectively, do away with the cajas (RDL 11/2010)
    
    c) Creation of SPV (the FROB) to lend and recap banks
    
    d) Force credit institutions to recognize and provision for losses (RDL 2/2012)

  ② Bank of Spain

    • Intervention and merger strategy: Incentivize mergers to avoid losses to the taxpayers (and debt holders)
The policy response: The timeline

**2008**
- **October 2008**: RDL 7/2008: Debt guarantee program; Maximum size €100bn; Final date: 12/31/09; Renewed several times

**2009**
- **March 2009**: CCM intervened by the FGD: Capital injection plus asset protection scheme; “good bank” sold to Cajastur
- **July 2009**: RDL 9/2009 FROB1 created: An SPV created to channel public funds to aid the restructuring of the banking sector via debt

**2010**
- **July 2010**: RDL 11/2010: Reform of the cajas; legal framework for recap and governance; cajas to disappear
- **May 2010**: Cajasur intervened; Asset protection scheme granted by the FROB1; sole loss so far

**2011**
- **Summer 2010**: Amendment of accounting rules on loan write downs
  - Recognition of value of real estate collateral applying significant haircuts and acceleration of provisioning
  - Increased minimum provision for foreclosed assets
- **February 2011**: RDL 2/2011
  - 8% capital on RWA for banks (10% for those that remained cajas)
  - FROB2: The FROB can recap credit institutions in distress
- **July 2011**: Compliance with RDL 2/2011
  - Bankia, Caixabank and Banca Civica IPOs to comply with RDL 2/2001 capital requirements
  - CatalunyaCaixa, Unnim, Novacaixagalicia, CAM request FROB2 assistance
- **July 2011**: CAM intervened
- **November 2011**: B.Valencia intervened; FROB2 recap €1bn plus €2bn liquidity

**2012**
- **March 2012**: Unnim sold to BBVA for €1; Asset protection scheme
- **January 2012**: RDL 2/2012: New provision and loan loss recognition
- **December 2011**: RDL 20/2011: New debt guarantee program; Max. €100bn
- **November 2011**: B.Valencia intervened; FROB2 recap €1bn plus €2bn liquidity
- **September 2011**: Unnim intervened; FROB2 recap €953m
The policy response: The merger strategy

Cajas: Loan-to-Deposit ratio for the top fifteen cajas by assets as of December 2009.
Source: Citi “Spanish Savings Banks: Survival of the Fittest,” June 4th, 2010
The policy response: The merger strategy

Cajas: Loan-to-Deposit ratio for the top fifteen cajas by assets as of December 2009.
Source: Citi “Spanish Savings Banks: Survival of the Fittest,” June 4th, 2010
The policy response: The merger strategy

Merger to create Bankia/BFA: Balance sheet >€300bn

Merger with Caja 3: Balance sheet  €65bn

Merger with Banca Cívica; absorption by La Caixa

Merger Unicaja-Caja España:  €80bn

Merger to create Novacaixagalicia

Merger to create Mare Nostrum

Cajas: Loan-to-Deposit ratio for the top fifteen cajas by assets as of December 2009.
Source: Citi “Spanish Savings Banks: Survival of the Fittest,” June 4th, 2010
The policy response: Credibility

- The Spanish authorities faced credibility issues from the beginning of the crisis:
  - Difficult inference for investors: Were the lack of loss recognition real, gambling for survival or simply that recognizing the losses would affect the sovereign?
- In addition authorities did not handle early interventions well sending mixed signals:
  - Example: Caja Castilla-La Mancha (CCM)
    - Intervened by the BoS on March 2009 after merger with Unicaja fell apart
    - PwC did due diligence on behalf of Unicaja on the 2008 numbers and uncovered an equity gap of €3bn.
    - NPL ratios jumped from 9.32% to 14.15% after intervention casting doubts on the numbers in the entire sector
    - Intervention wiped out 90% of the funds at the FGD. Obscure sale to Cajastur.
The policy response: Credibility

- The CAM (€70.8bn balance sheet as of December 31st 2011) as an example:
  - Caja del Mediterráneo (CAM) was in the middle of the real estate boom
    - Operations in eastern Spain
    - Heavy political control by the conservative party in power in the region of Valencia for the last 20 years. Now also in power in Madrid.
      - CCM: Castilla-La Mancha, socialist party, in power for 20 years too.
  - 2010 stress tests: Evaluated as part of Banco Base, a merger encouraged by the Bank of Spain of good and bad cajas (Cajastur, C. Cantabría and C. Extremadura.)
    - Capital needs: 0
  - Banco Base falls apart in March 30th 2011: CAM is left “hanging”
The policy response: Credibility

- April 28th 2011: CAM requests FROB2 recap. of €2.8bn to meet the RDL 2/2011
  - With that recap, CAM below the 5% but not with the generic provisions
- July 21st 2010: Bank of Spain grants 10 days to CAM’s board to present a viable plan
- July 22nd 2011: CAM’s board requests the Bank of Spain intervention
  - Recap of €2.8bn and €3.0 credit line
- NPL of CAM in 2011: 20.8%
- December 7th 2011: Sale to Banco Sabadell
  1. FGD acquires 100% of CAM for €5,249bn for a posterior sale to Sabadell for €1
  2. FGD grants a 10-year asset protection scheme to Sabadell to absorb 80% of the losses of a set of assets valued at €24.6bn, after provisions of €3.9bn.
  3. FROB extends liquidity line of €12.5bn
## The policy response: Credibility

<table>
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<tr>
<th>ISIN</th>
<th>Amount guaranteed (€mill)</th>
<th>Interest (%)</th>
<th>Issue date</th>
<th>Maturity date</th>
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<td>ES0314400096</td>
<td>1.500</td>
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<td>ES0314400112</td>
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<td>12/11/2009</td>
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<tr>
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<td>500</td>
<td>Biannual: Euribor (6m) + 33pb</td>
<td>01/12/2009</td>
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<td>3.000</td>
<td>23/06/2010</td>
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<td><strong>Total</strong></td>
<td><strong>5.811</strong></td>
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</table>

Caja del Mediterráneo: Debt issuance under the debt guarantee program

Source: Tesoro Público
The policy response: Credibility

- Loans to real estate developers kept growing and peaked in 2009Q2 at €324.6bn
  - Real estate developer cycle difficult to stop
  - At that time delinquent loans were “only” €26bn

- These type of plots created some form of “cognitive dissonance”
  - How come the level was not dropping faster?
  - What percentage of these loans were being refinanced?

Loans to real estate developers and delinquent loans (BE4.18.10) and (BE4.18.21) Quarterly: 1999Q1-2011Q4. Data source: Bank of Spain.
Write-offs: January 2008 - June 2011
Source: AFI

- There has been substantial write-offs in the system
  - Against reserves and P&L
  - Total: €105bn
- There has been some injection of public capital via equity & preferreds
  - About €20bn
  - Some private capital in the IPO of Bankia, SEO of Sabadell, ...
- But all in all little in terms of fresh capital to absorb losses
The policy response: Credibility

<table>
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<th></th>
<th>€mn</th>
<th>%RWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>BFA-Bankia</td>
<td>4,465</td>
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<td>NovaCaixaGalicia</td>
<td>3,627</td>
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<tr>
<td>CatalunyaCaixa</td>
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<tr>
<td>CAM</td>
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<tr>
<td>Banca Civica</td>
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<tr>
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<td>Grupo BMN</td>
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</tr>
<tr>
<td>BBK-cajasur</td>
<td>392</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>17,617</td>
<td></td>
</tr>
</tbody>
</table>

- The FROB has distributed relatively little to institutions in distress
- The only loss so far are the €392mn on an asset protection scheme granted to BBK when it took over Cajasur
- Of the list there are two pending resolution CatalunyaCaixa and NovaCaixaGalicia
- Banco de Valencia was intervened late in 2011 and the FROB injected €1bn

FROB injections up to November 2011
The policy response: An evaluation

● Good things:
  – Resolution of secular problems in the Spanish banking sector
  – The cajas no longer exist
  – Removal of political influence in the Spanish credit sector

● Spanish authorities have not succeeded in removing the doubts over the losses:
  – Merger strategy made the problem of adverse selection worse making it difficult for private capital to come in.
  – Wholesale funding is closed for most Spanish banks
  – They are wholly dependent on LTRO liquidity
  – Credit crunch: New credit down by 30% in 2011
GOING FORWARD
Going forward: NPL ratios: The aggregate picture

NPL ratio: Private sector credit (BE4.53.12 divided by 4.53.1)
Monthly: January 1970- February 2012
Data source: Bank of Spain

February 2012: 8.24%

NPL ratio (%): Construction and real estate developers (BE4.18.15 Divided by 4.18.4 & BE4.18.21 divided by 4.18.10))
Quarterly: 1999Q1-2011Q4. Data source: Bank of Spain
Going forward: NPL ratios: The aggregate picture

NPL ratio: Mortgages (BE4.13.17 divided by BE4.13.4)
Quarterly: 1998Q4-2011Q4
Data source: Bank of Spain

Mortgages NPL, 1 year Euribor and unemployment rate
Going forward: Private estimates

- The private estimates of capital needs vary widely.
- This creates enormous problems for the Spanish authorities who are left with little options: Either the satisfy the most pessimistic of the estimates or doubts will persist.
- There are challenges in estimating the extent of losses:
  - A unique situation in Spain’s banking history.

Private estimates of recapitalization needs for the Spanish banking system.
Going forward: LTRO and the diabolic loop

Net lending to Spanish credit institutions (in €bn)
Data Source: Table 8.1.b Balance sheet Bank of Spain

Credit Institutions: Assets (in €bn) other than shares issued by the public sector (BE4.4.4)
Data Source: Table 8.1.b Balance sheet Bank of Spain
Going Forward: Options

- There are two options:

  1. Bad bank à la NAMA

    - Example: Buy *all* real estate developer loans, mark them down by 60% (as in NAMA)
    - This would provide capital relief from RWAs of €26bn
    - Assuming Tier-1 targets of 9-10% leaves an estimated capital deficit of €60bn
    - Other losses? Political problems (what about me)?

  2. Intervention of other institutions and creation of “several” bad banks

    - Take on problematic systemic institutions, chop them off creating a very good bank that can attract private capital and a bad bank