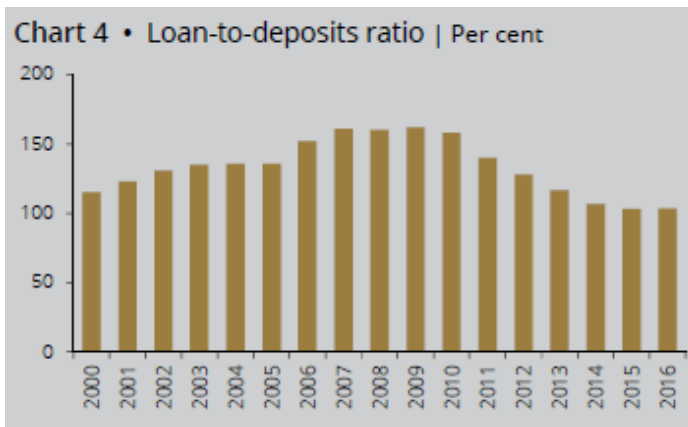
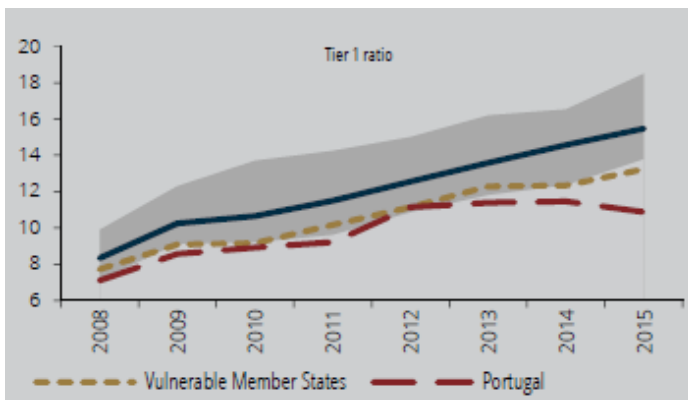


Master in Monetary and Financial Economics

Banking and Insurance

Exam – 15 January 2018

1. Please consider the following charts:



Source: Bank of Portugal (2017), "Financial Stability Review", June.
Notes: Figures in %

1.1. In which extent did the Macroeconomic and Financial Adjustment program of the Portuguese economy in the period between 2011 and 2014 contribute to the behaviour illustrated in the charts above? (3,0/20)

- EFAP targets
- impact of impairments' inspections

1.2. Identify the main consequences of the behaviour illustrated. (3,0/20)

- lower profitability (e.g. ROE), counteracted by higher exposure to Govt debt
- funding shift (+ deposits, -bonds)
- less credit

2. How do you characterize the evolution of the relevance of the financial system in the economy worldwide in the last decades and how did this evolution contribute to the subprime crisis. (3,0/20)

- Higher weight on GDP and profits
- Higher profitability, due to increased leverage, higher share of assets at fair value and selling deep OTM options

3. What were the main regulatory and supervision responses to the subprime crisis? (3,5/20)

(i) Banks – capital, liquidity and governance

- **New Basel III requirements:**

(1) Leverage Ratio

(2) Provisions and Cyclical

(3) Systemically Important Financial Institutions (SIFIs)

(4) Liquidity

-CRD IV - Increased quality and quantity of the minimum capital, conservation, countercyclical and systemic risk buffers

- BRRD – MREL/TLAC

- European Supervision Model and Banking Union

(ii) Supervisors - Improve microprudential supervision + create a macroprudential framework

- increasing role of stress tests and strengthening of pillar 2 regulation (e.g. SREP)

(iii) Rating agencies – new regulation

4. “Median return on assets (ROA) levels of the Portuguese banking system were relatively high (around 0.9 per cent) and close to the EU-15 third quartile between 2000 and 2007 (...). Profitability initiated a decreasing trend from 2008 onwards and a steep deterioration was observed until 2013, when the median ROA of Portuguese banks reached a minimum of close to -0.5 per cent. This deterioration in the Portuguese banking system’s profitability, also observed in other vulnerable euro area countries, was sharper than in the EU-15 as a whole and the median ROA remained negative for most of the 2010-2014 period. This is in stark contrast to the situation before 2010, when banks in countries most affected by the sovereign debt crisis enjoyed greater returns compared to the median European bank”.

in Bank of Portugal (2017), “Financial Stability Review”, June.

Please comment the previous paragraph, namely by identifying the main reasons for the behaviour of profitability in the banking system before the subprime crisis, during the macroeconomic and financial adjustment program (2011-2014) and more recently. (3,0/20)

(i) Before the subprime crisis

- Credit growth
- Favourable NII, due to reliance on bond issuance with low spreads
- Lower capital requirements

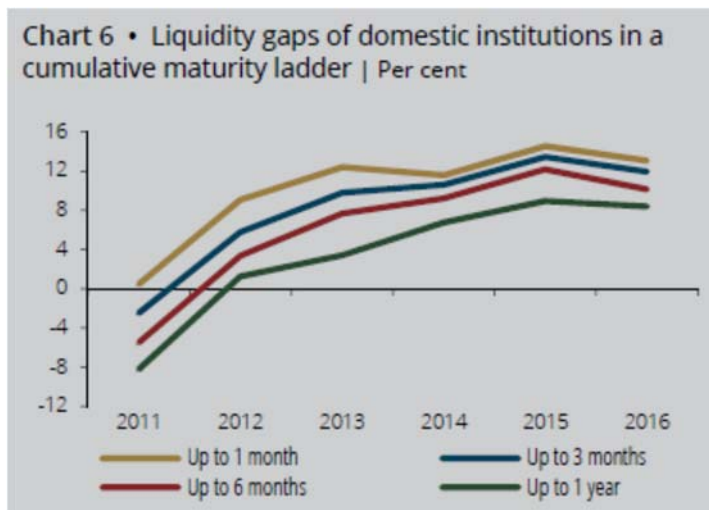
(ii) During EFAP

- increase in impairments (loans and real estate assets)
- lower NII, due to deleveraging and lower interest rates (counteracted by larger exposure to Govt debt)
- increase in fees and RFO, due to larger exposure to Govt debt
- lower administrative costs

(iii) After EFAP

- recovery in NI, due to lower impairments, recovery in NII (due to lower cost of funding and credit growth) and reduction of administrative costs

5. Please consider the following chart:



Source: Bank of Portugal (2017), “Financial Stability Review”, June.

5.1. What were the most relevant contributions to the illustrated behaviour? (2,0/20)

- difficulties in bond markets hampered liquidity until 2011
- ECB funding policy
- deleveraging, with higher deposits and lower credit

5.2. Describe the main assumptions and methodologies to calculate the gaps mentioned, as well as alternative indicators to assess the liquidity risk of banking institutions. (2,5/20)

- Liquidity gaps based on behavioural assumptions on credit and funding
- Dynamic gaps require assumptions on BSheet growth
- Alternative indicators: liquidity ratios (Basel III) and eligible collaterals