

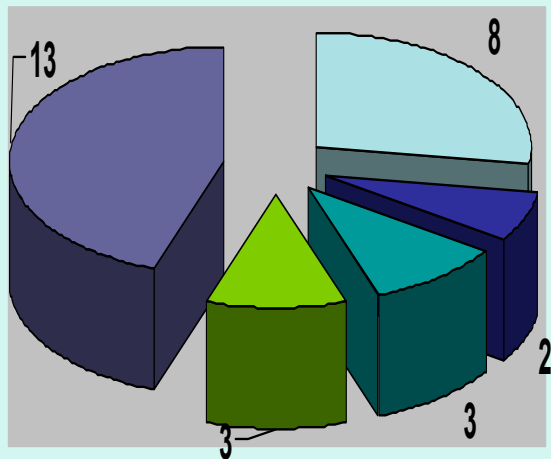


Bulgarian Banking Sector Stress-testing

Margarita Angelova
Banking Supervision Department

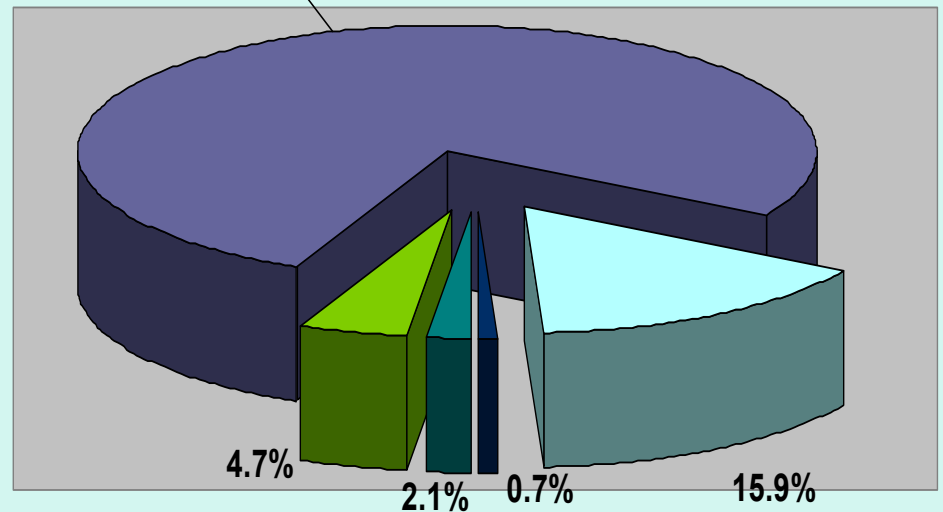
Structure of Bulgarian Banking System – June 2008

Number of Banks



- Bulgarian Banks
- Branches of Non-European Banks
- Non-European Foreign Banks
- Branches of European Banks
- European Banks

Share of Banks' assets as % of total assets



- Bulgarian Banks
- Branches of Non-European Banks
- Non-European Foreign Banks
- Branches of European Banks
- European Banks



BULGARIAN
NATIONAL BANK

Basic Indicators as of June of 2008

- **NPL ratio – 2.02%**
- **Solvency ratio – 14.55%**
- **Liquidity ratio – 24.01%**
- **ROA – 2.40%**
- **ROE – 24.25%**
- **Assets growth (6.2007 – 6.2008) – 39.2%**
- **Banking Assets to GDP – 105% as of end 2007**



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BNB approach on stress-testing

Basic assumption

**3 scenarios for the whole loan portfolio :
1%, 3% and 5% migration of standard loans,
which reflect respectively in**

124%, 233% and 342% growth of NPL

**As a result the solvency ratio decreased by
0.4 p. p, 2.2 p. p. and 4 p. p.**



In addition to the Basic assumption BNB applies Credit Risk+ (CR+) model

Basic information needed to implement CR+

- PD, LGD, EAD for each sub-portfolio (e.g. corporate, mortgage, consumer,...)
- Number of borrowers in each sub-portfolio

Scenarios based on change of Macroeconomic indicators (GDP growth, inflation, interest rates, credit growth, real estate price growth)

- Macro scenario 1 (light shock)
- Macro scenario 2 (strong shock)



CR+ for households

- **Participants in the stress-test are the top 10 market players, whose market share is about 80% of each sub-portfolio in the banking system (consumer loans, credit cards, mortgages)**
- **The banks are required to calculate and report to the BNB information for PD, SD and Recovery Rate for each sub-portfolio**



Results for the households based on 1-st Q 2008 data

➤ Consumer loans

PD varies from 1.0% to 10.5%

SD (0.04% - 22.30%)

RR (25% - 97.5%)

➤ Mortgages

PD (0.01% - 6.2%)

SD (0.3% - 20%)

RR (10.1% - 95.6%)



Thank you