Financial Stability Report

December 2010

Financial Stability Report

- The publication of the Financial Stability Report is an international standard among central banks. The NBP has published its FSR since 2001
- The FSR is a part of the NBP's information policy which facilitates the fulfillment of the Bank's statutory objectives
- The aim of the Financial Stability Reports is to present to market participants the conclusions from analytical and research work on financial system stability, including an assessment of financial system resilience to potential disturbances
- The FSR presents the NBP's assessment of the current situation of the financial system and risk factors for its stability

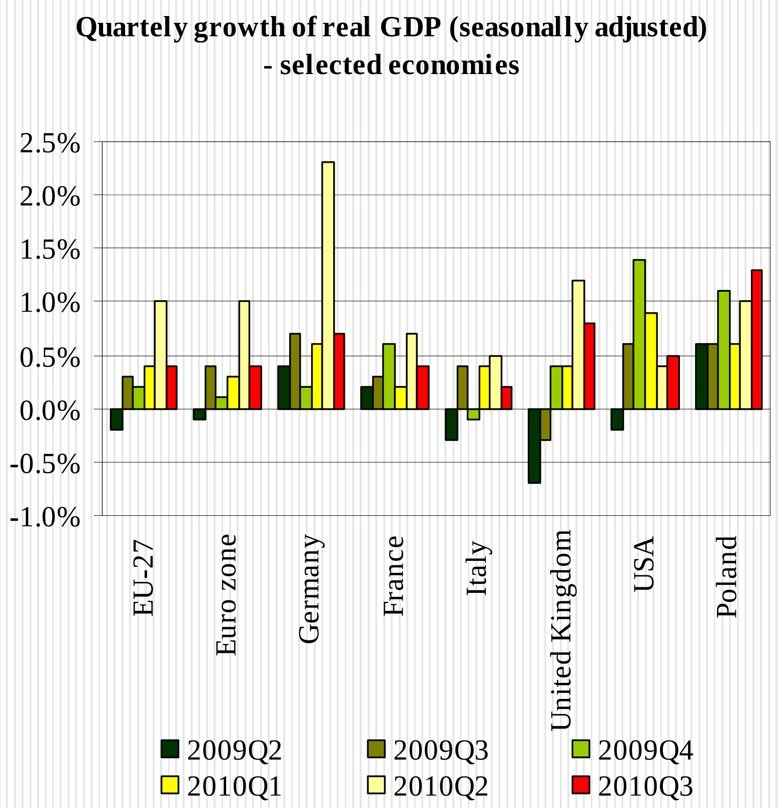
- The current edition of the FSR covers the period from March 2010 and is based on data available up to 20 November 2010

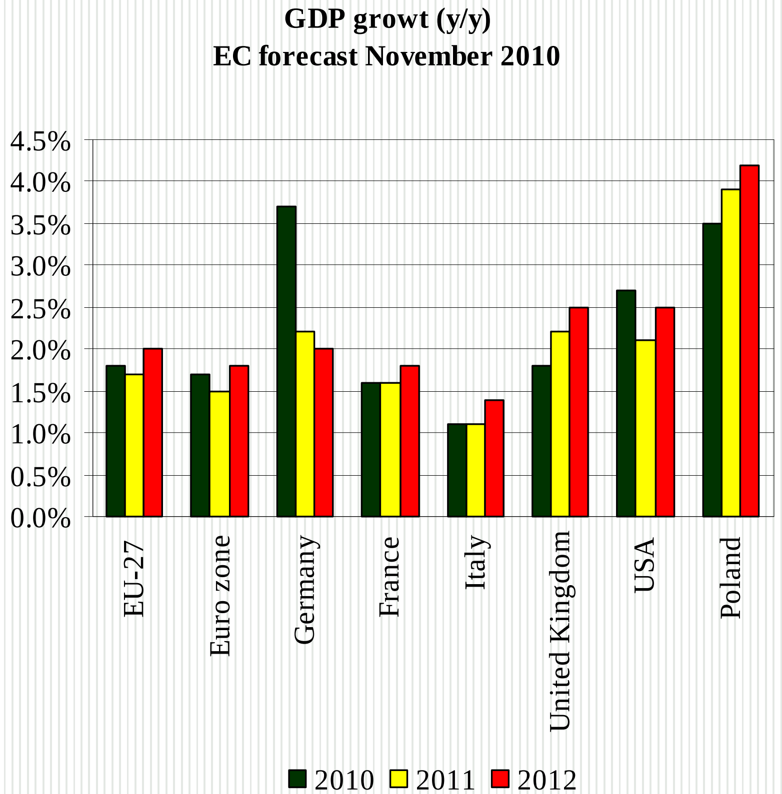
Agenda

1. Current situation assessment
2. Risk generating processes for financial system stability and policy recommendations
3. Conclusions

External environment of the Polish economy

- Economic growth in foreign countries, stable and moderate growth forecasted in next two years

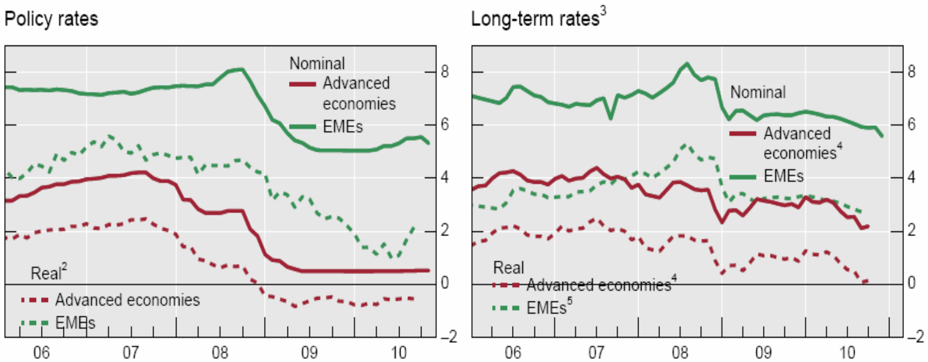




Source: Eurostat, EC

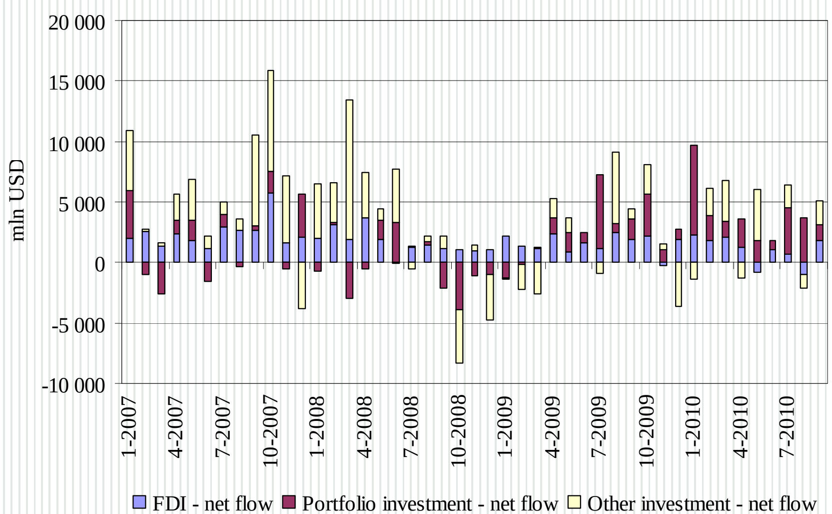
Capital inflows return to EM

Global monetary indicators[1]



[1] Aggregates of major advanced and emerging market economies (EMEs); weighted averages based on 2005 GDP and PPP exchange rates. [2] Deflated by core inflation. [3] Typically 10-year government bonds. [4] United States, euro area and Japan; deflated by 10-year Consensus forecast inflation. [5] Deflated by a five-year moving average of core inflation.

Poland

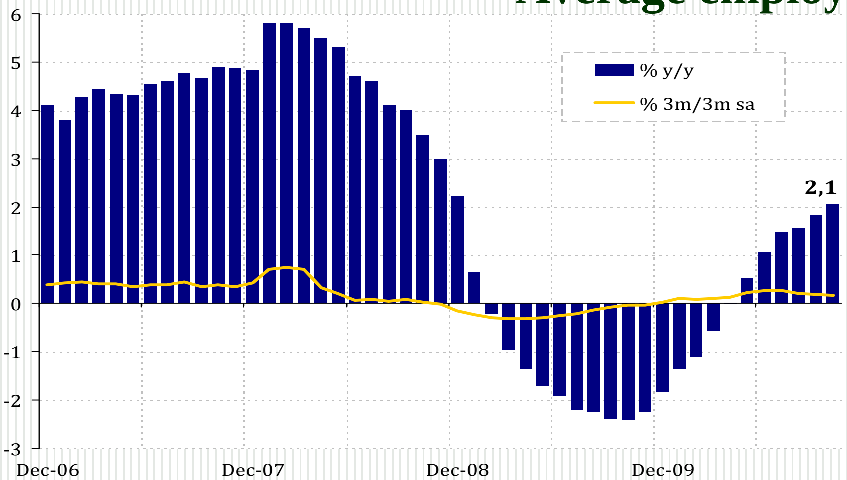


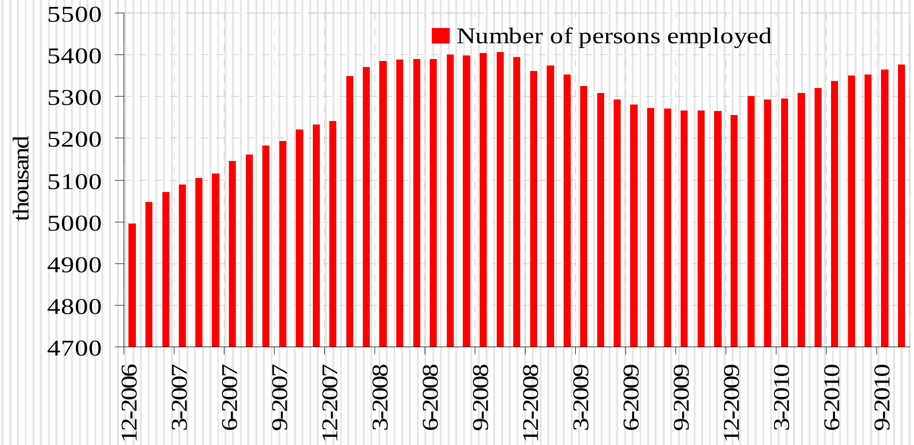
USD bln	2009			2010		
	I-II Q	III Q	I-II Q	I-II Q	III Q	I-III Q
Total EM	110	99	**209**	189	166	**355**
Latin America	37	37	**74**	64	63	**127**
Bonds	15	18	33	36	31	67
Asia	44	33	**77**	58	59	**117**
Bonds	6	3	9	14	8	22
Central and Eastern Europe	22	21	**43**	53	33	**86**
Bonds	13	11	24	31	17	48
Other EM countries	7	9	**16**	14	10	**24**

Source: IE NBP, Worl Bank, DEC Prospect Group, BIS

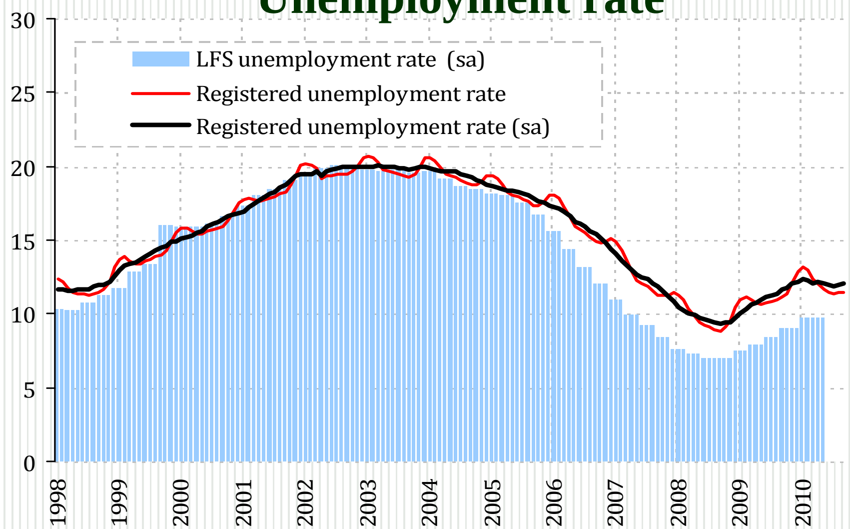
Poland: stabilization in the labour market

Average employment in enterprise sector

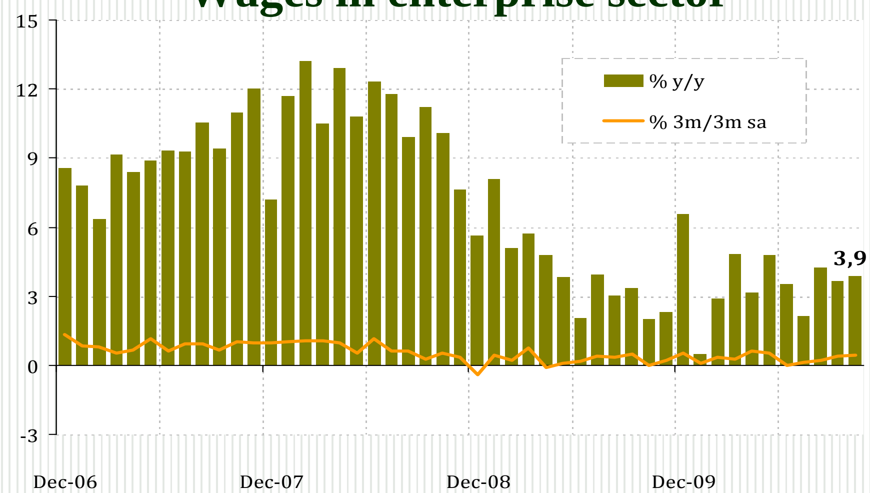




Unemployment rate



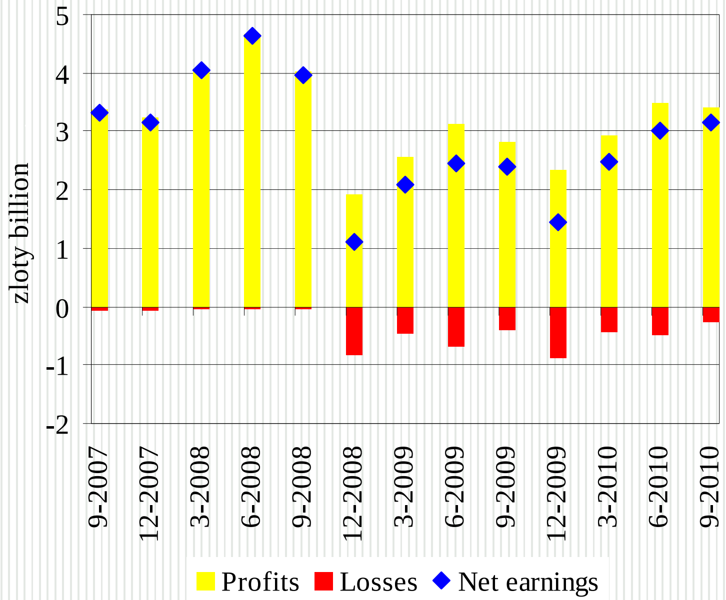
Wages in enterprise sector



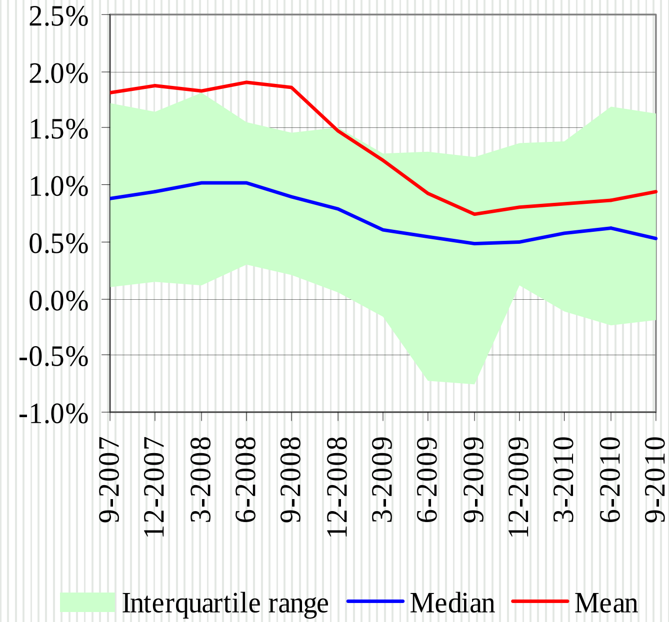
Source: GUS, NBP

Earnings of the banking sector

Quarterly net earnings of the banking sector



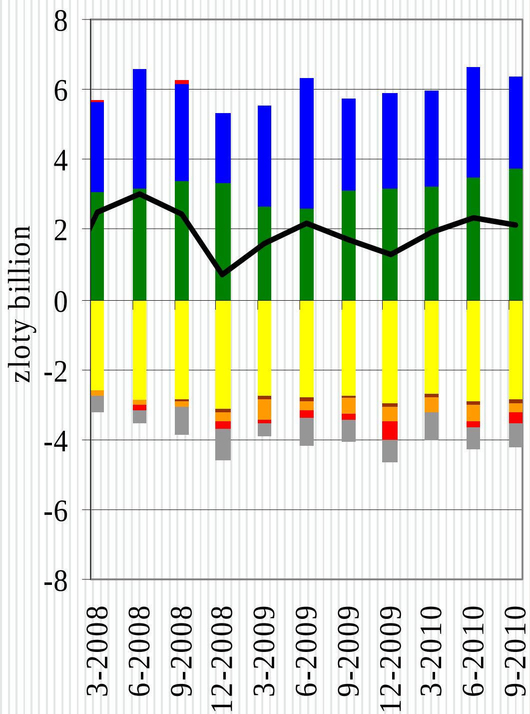
Distribution of ROA in commercial banks



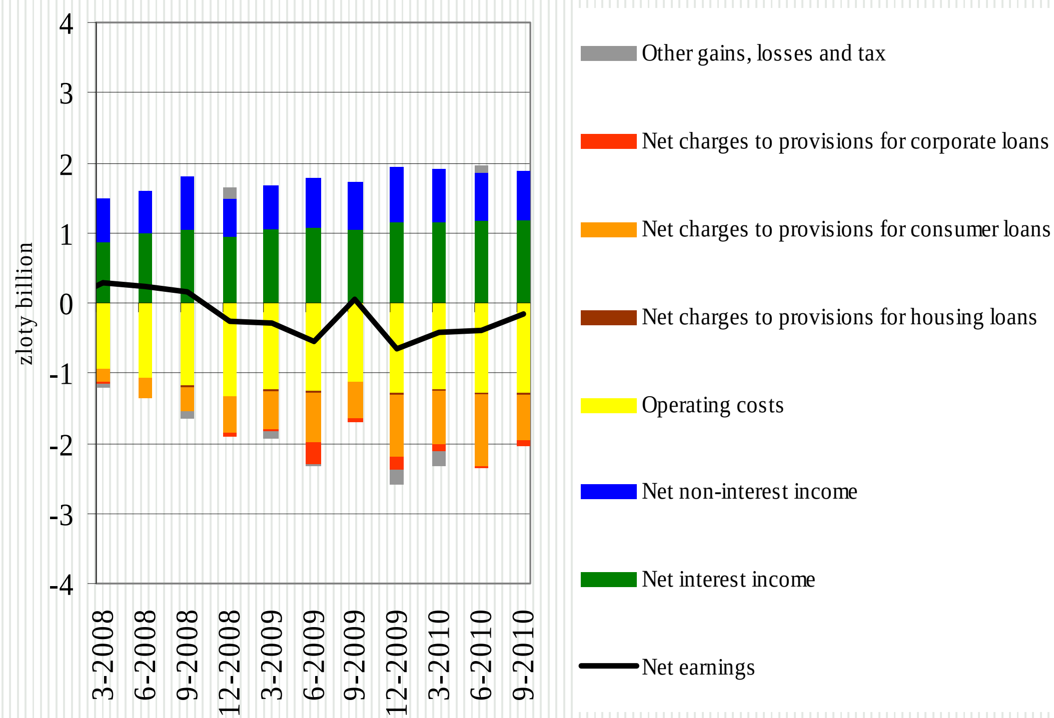
Source: NBP.

Earnings of the banking sector

Six largest banks

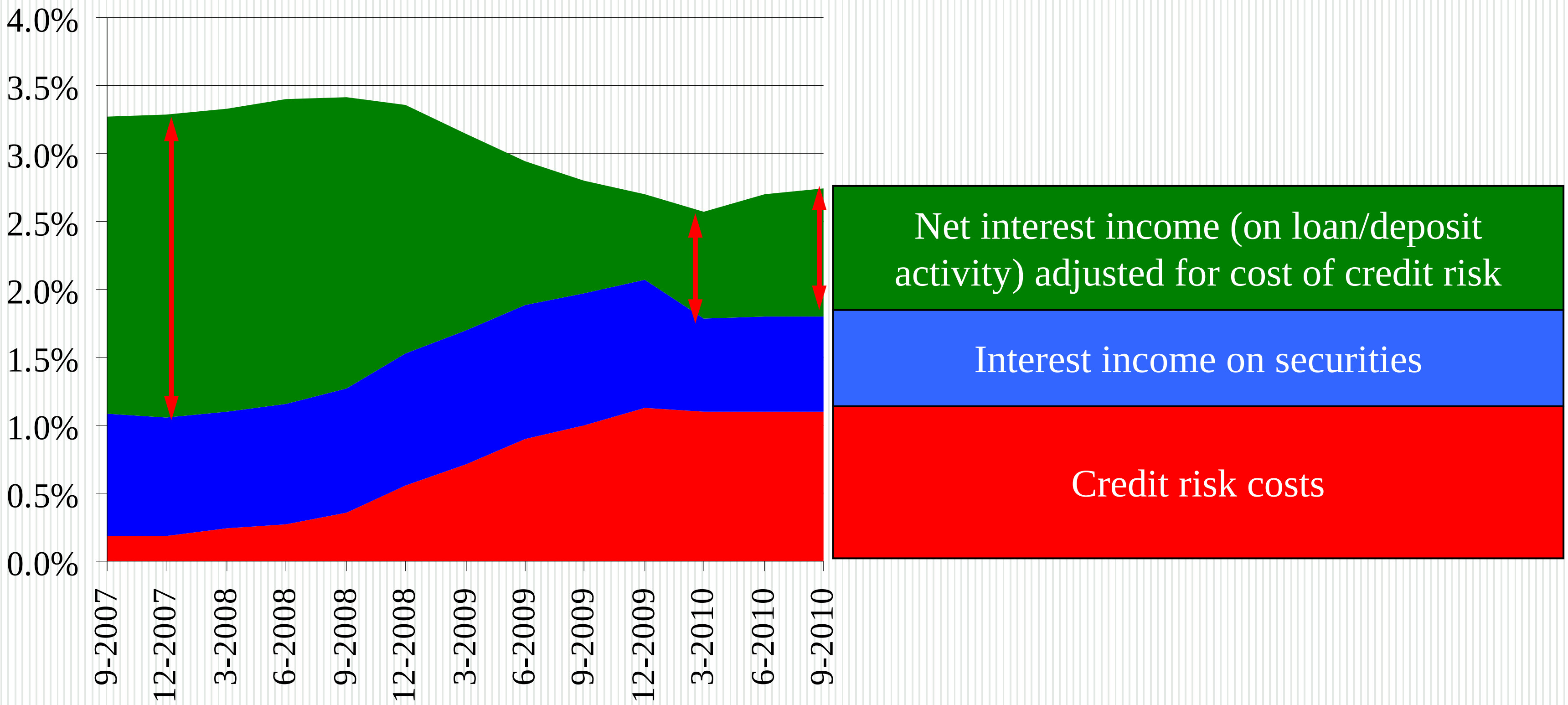


Banks posting negative profitability ratios in 3 quarters of 2010



Source: NBP.

Interest margin and cost of credit risk



Adjusted net interest margin

Interest income on securities

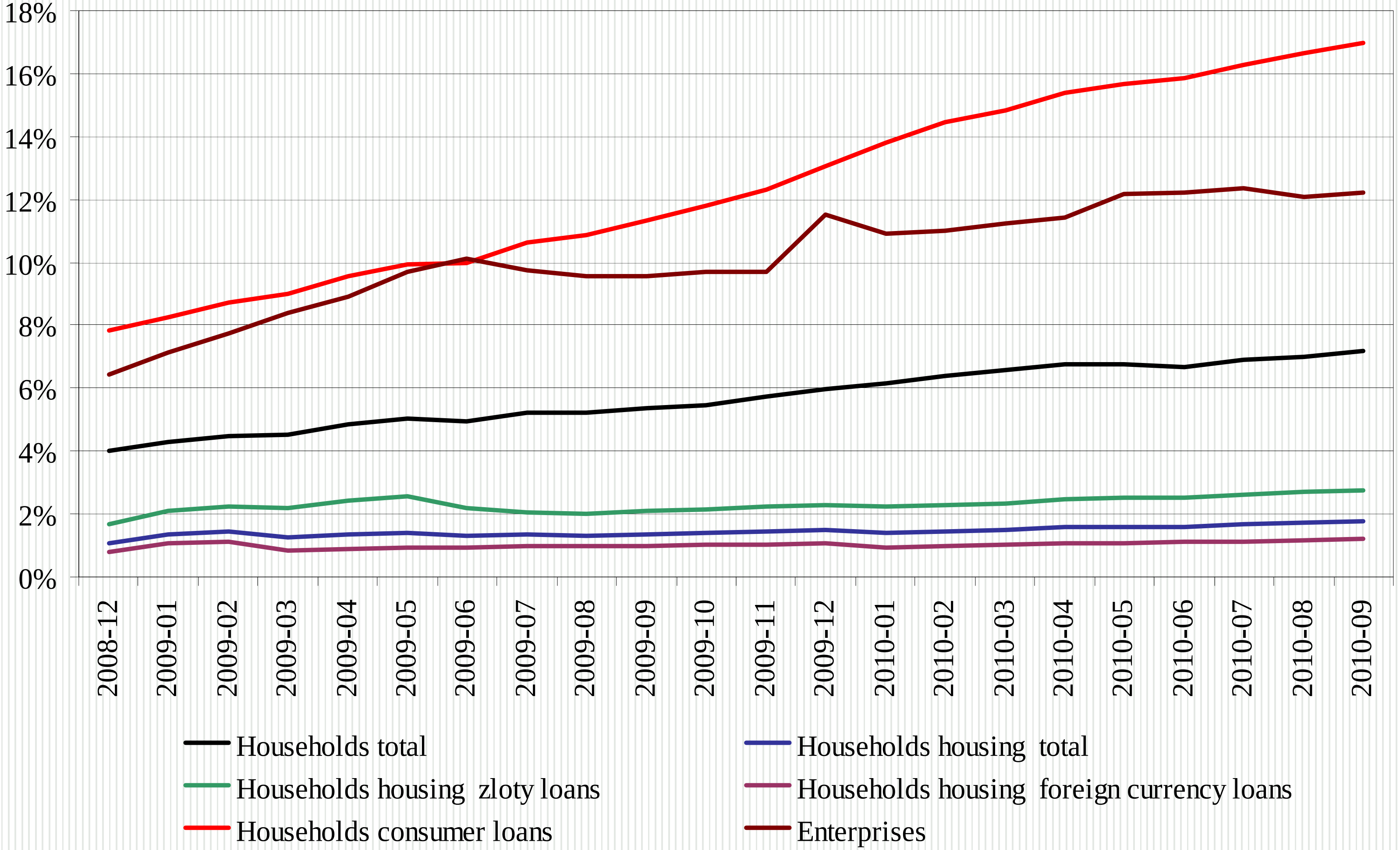
Net charges to provisions for impaired loans

Note: Data for the whole banking sector

All categories expressed as % of assets

Source: NBP.

Imapired loan ratio by loan type



Source: NBP.

Credit risk

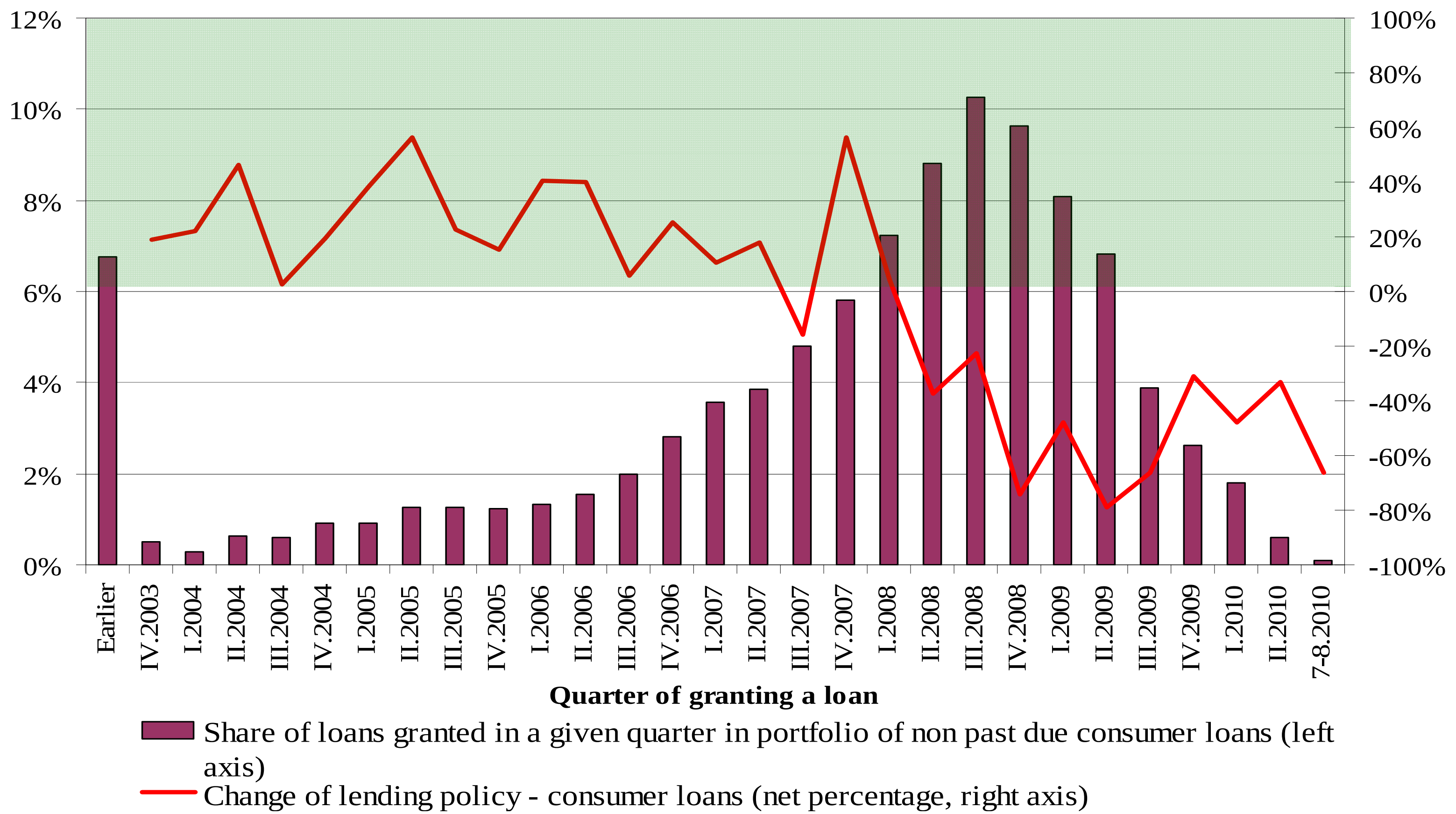
	Impaired loan ratio (%)				Increase of volume of irregular loans since 2010 (zlotys billion)*
	2007	2008	2009	9-2010	
Loans to enterprises	**6.9**	**6.4**	**11.5**	**12.2**	**1.5**
- Zloty loans	7.5	7.1	13.6	14.1	1.1
- FX loans	4.4	4.4	5.7	6.5	0.4
Household loans	**4.1**	**4.0**	**6.0**	**7.2**	**6.7**
Housing loans, of which	**1.2**	**1.1**	**1.5**	**1.8**	**1.1**
- Zloty loans	1.7	1.7	2.3	2.8	0.8
- FX loans	0.7	0.8	1.1	1.2	0.3
Consumer loans, of which	**6.6**	**7.8**	**13.0**	**17.0**	**5.6**
- Zloty loans	6.8	8.3	13.6	17.7	5.5
- FX loans	2.8	2.4	4.3	5.6	0.1

* Excluding the impact of foreign exchange rate changes

Credit risk

Consumer loans

Structure of non past due consumer loans by quarter of granting the loan (portfolio at the end of August 2010)

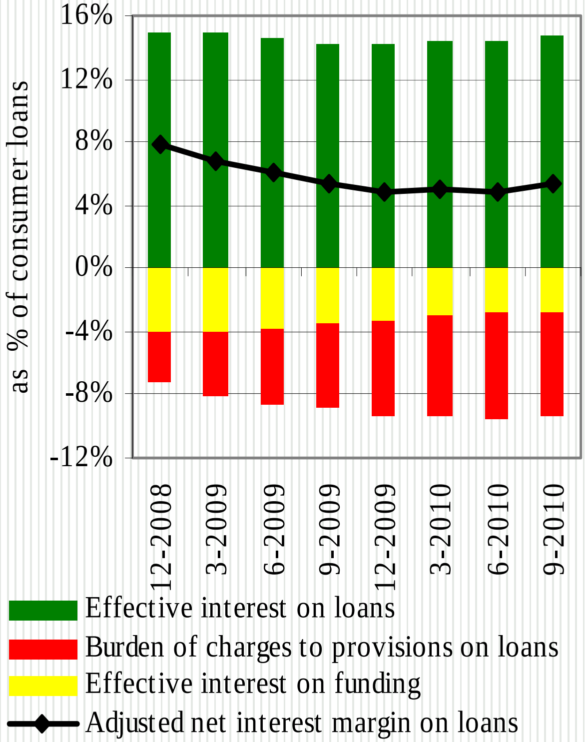


Loans granted in period 2006Q1-2008Q4: 30% portfolio
Loans granted in period 2006Q1-2009Q2: 43% portfolio

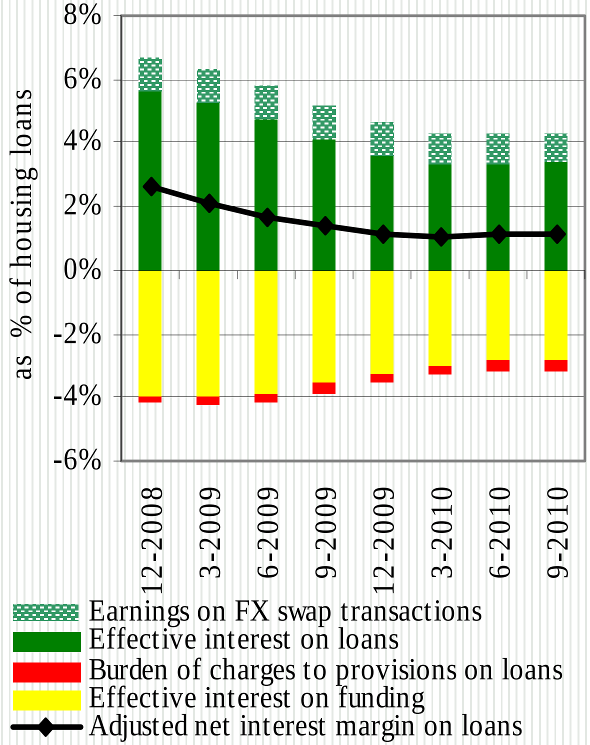
Source: NBP calculations based on BIK data

Estimated profitability of loans

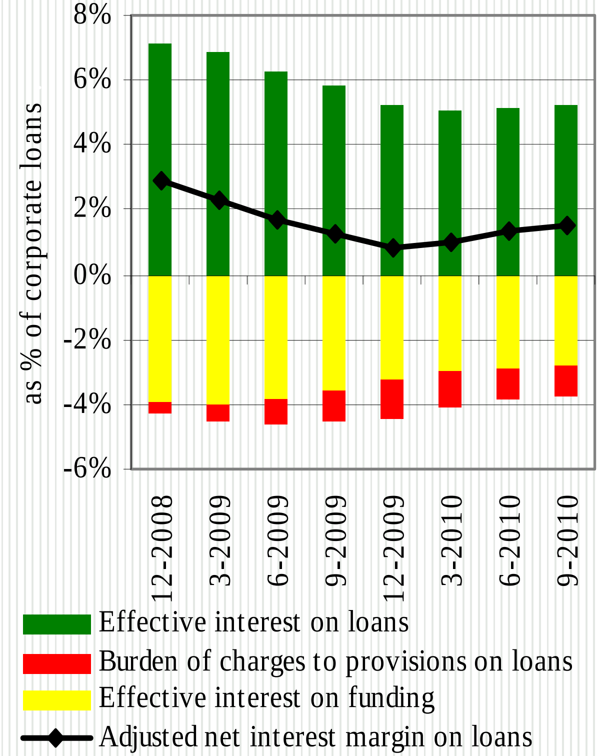
Consumer loans



Housing loans



Loans to enterprises

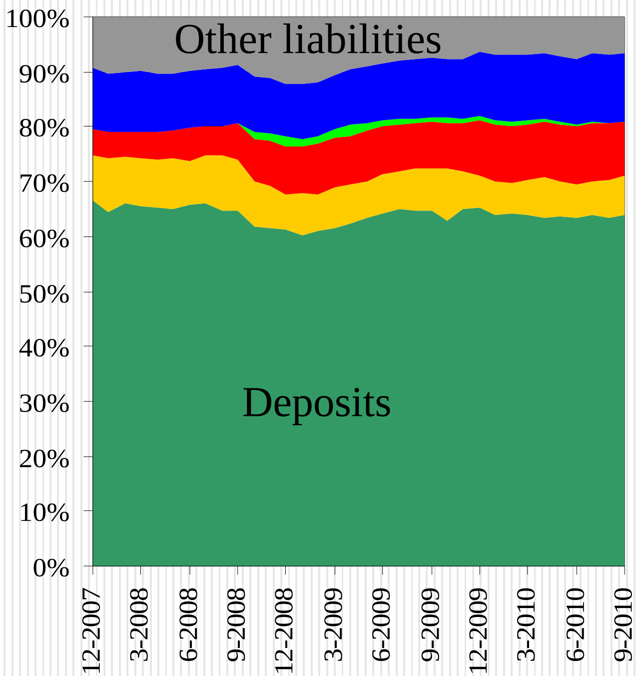


Banks' funding strategies

- Stabilization of funding structure in banks with different funding strategies
- Banks applying foreign funding strategy increased their share in the total assets of the commercial bank sector

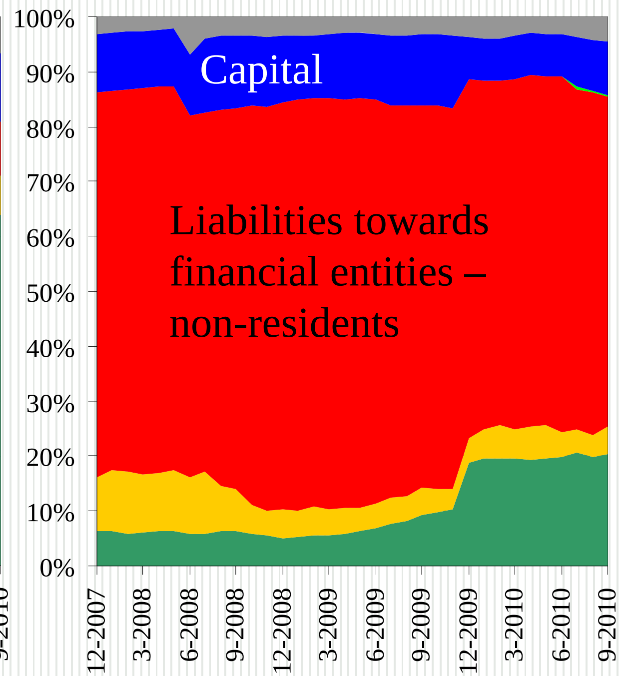
Deposit funding strategy:

59% banking sector assets



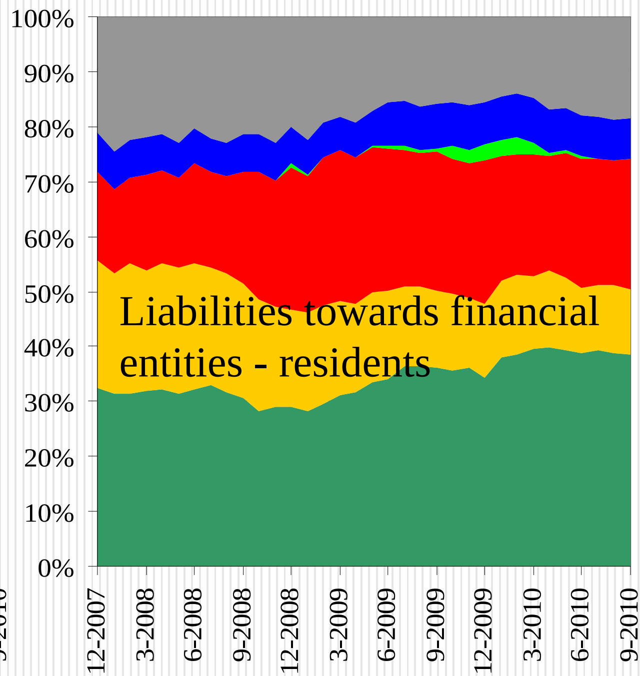
Foreign funding strategy

14% banking sector assets



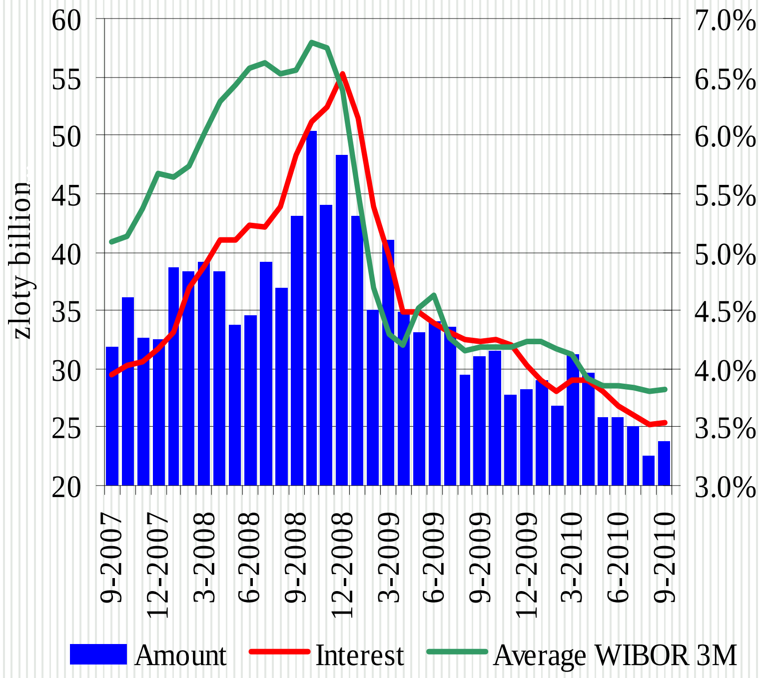
Mixed funding strategy :

27% banking sector assets

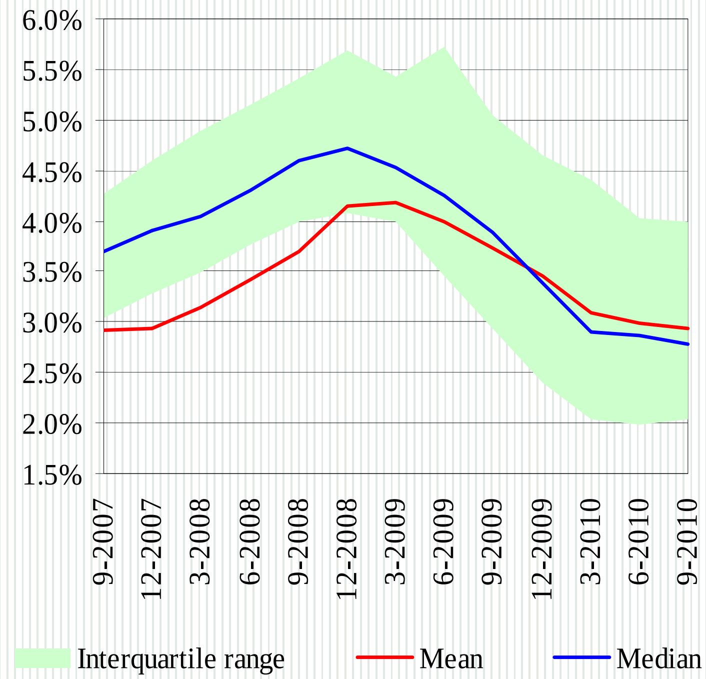


Cost of funding

Household new zloty deposits amount and interest

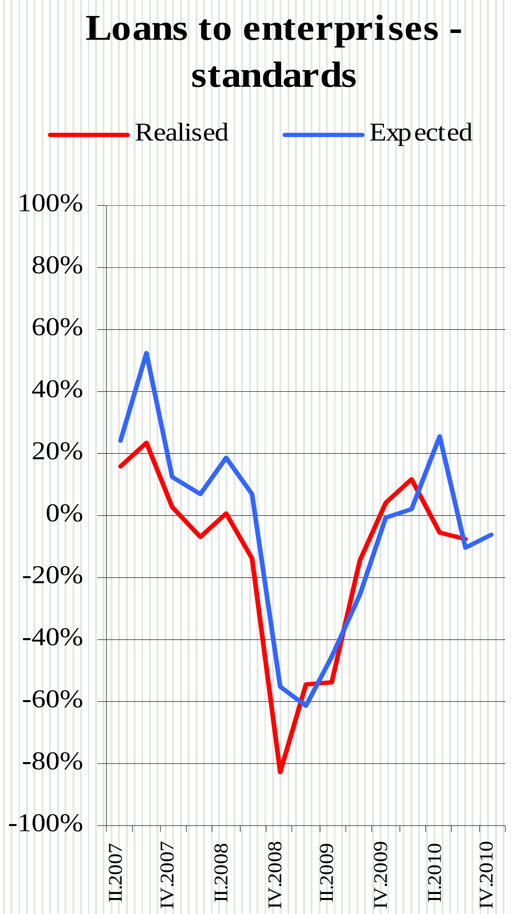


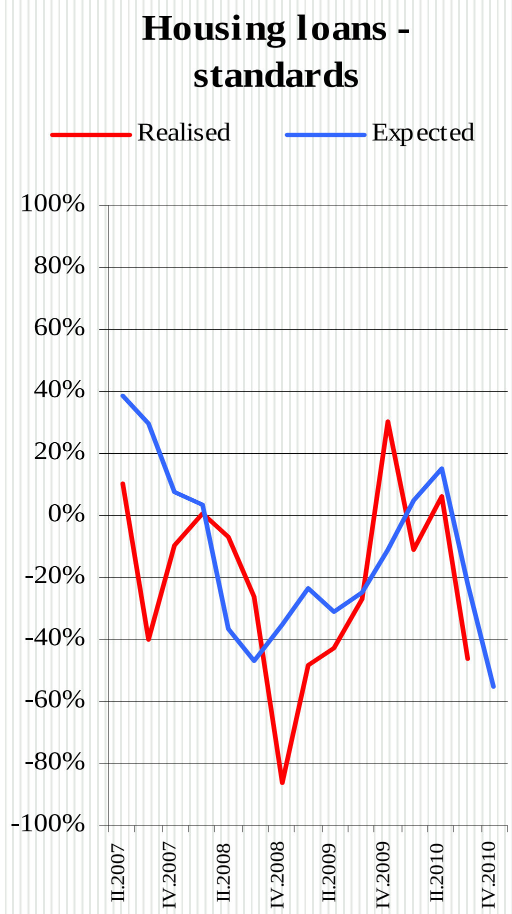
Distribution of effective interest on liabilities

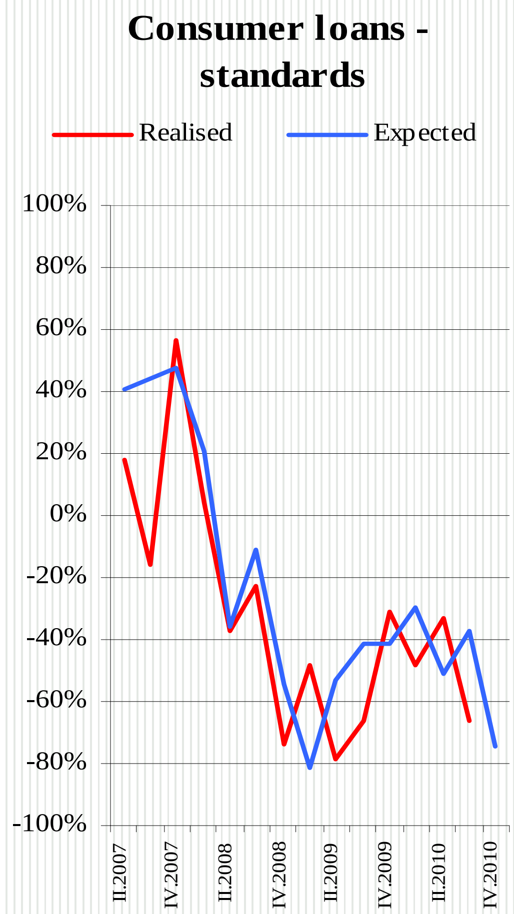


Source: NBP.

Lending policy

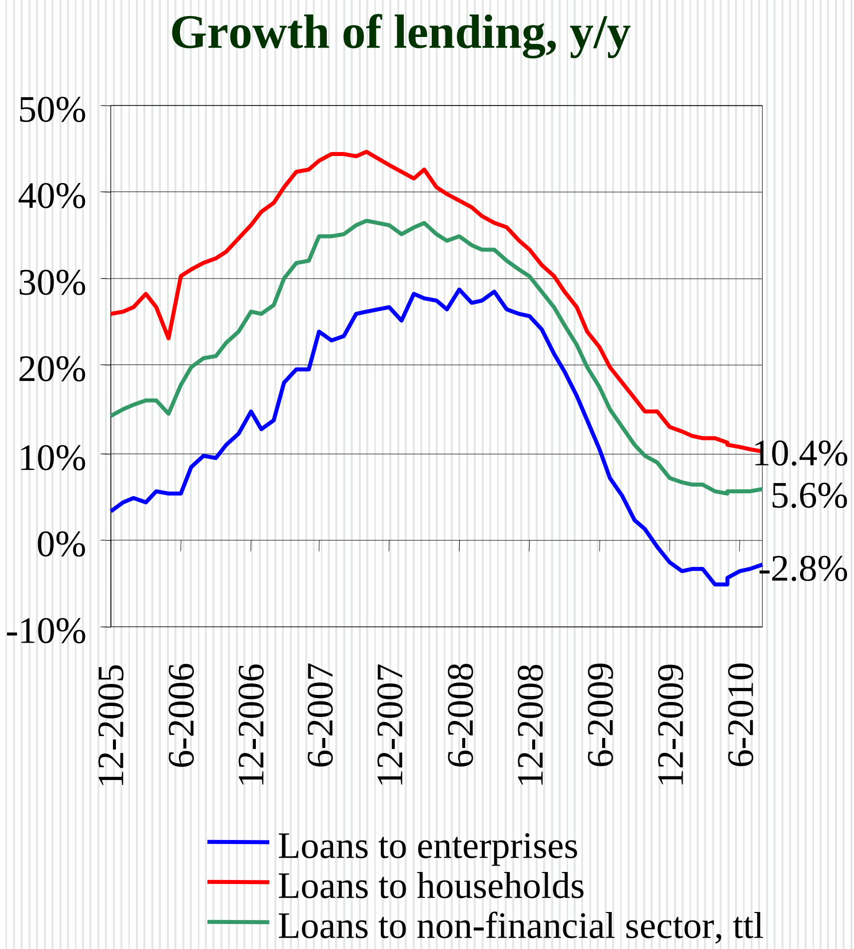


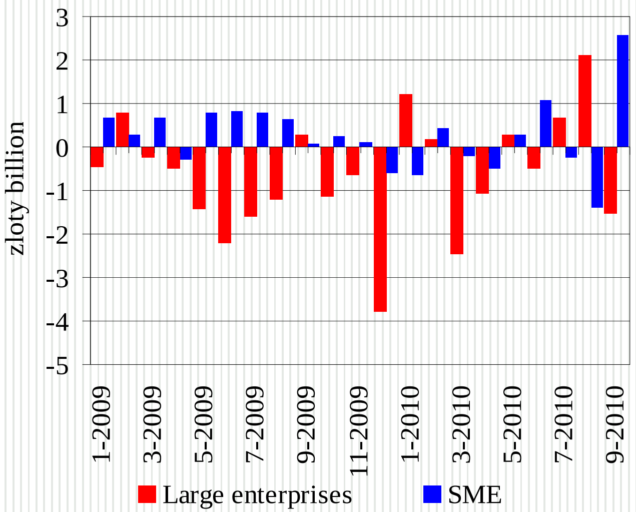


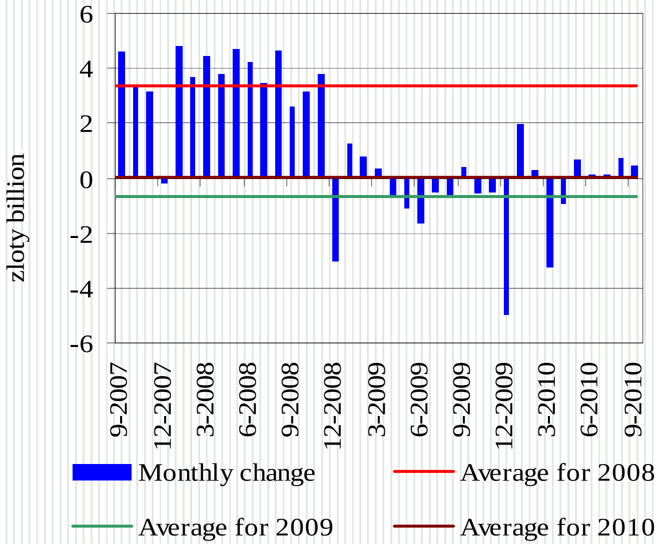


Source: NBP survey.

Growth of lending
Changes in the value of loans to corporates



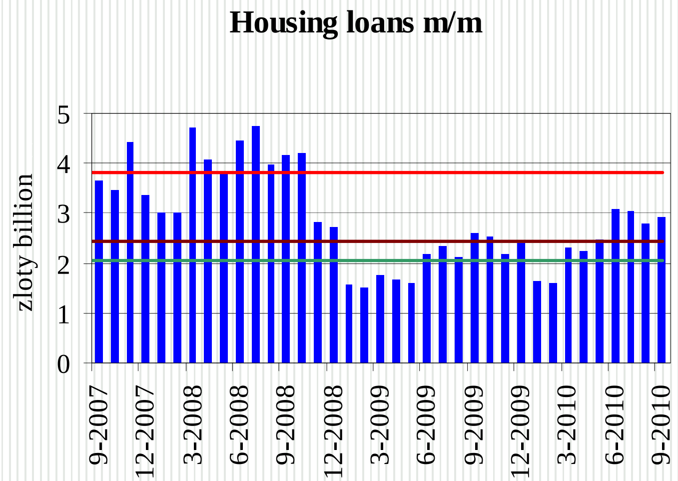


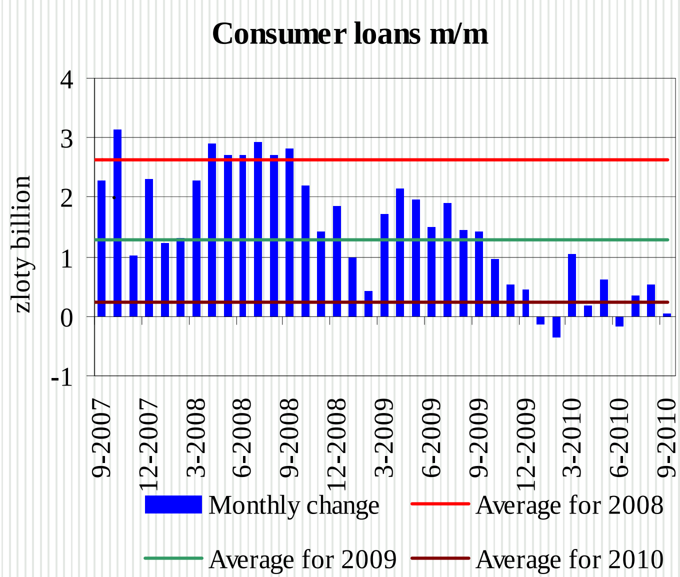


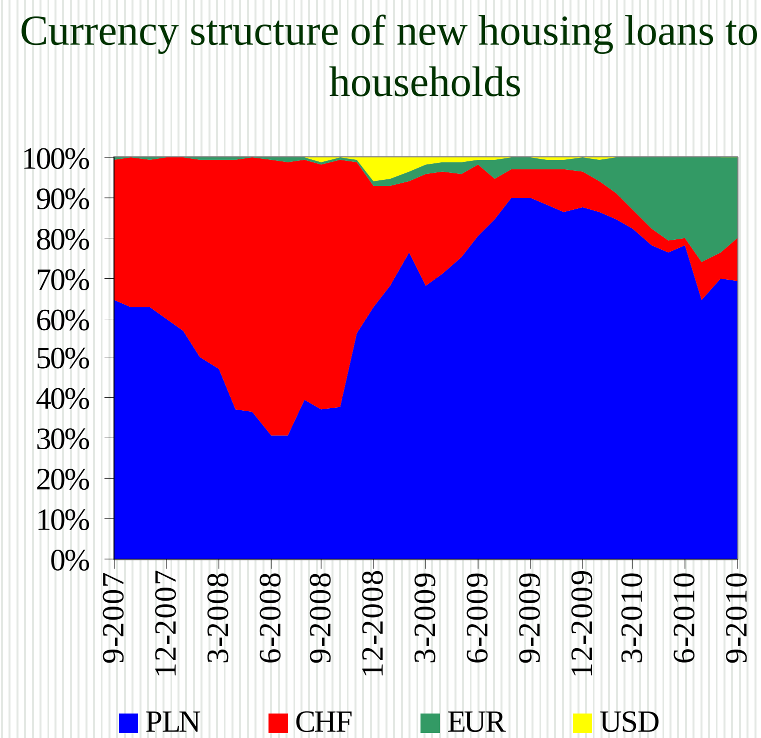
Source: NBP.
Data after excluding the impact of foreign exchange rate changes.

Growth of lending

Changes in the value of loans to households



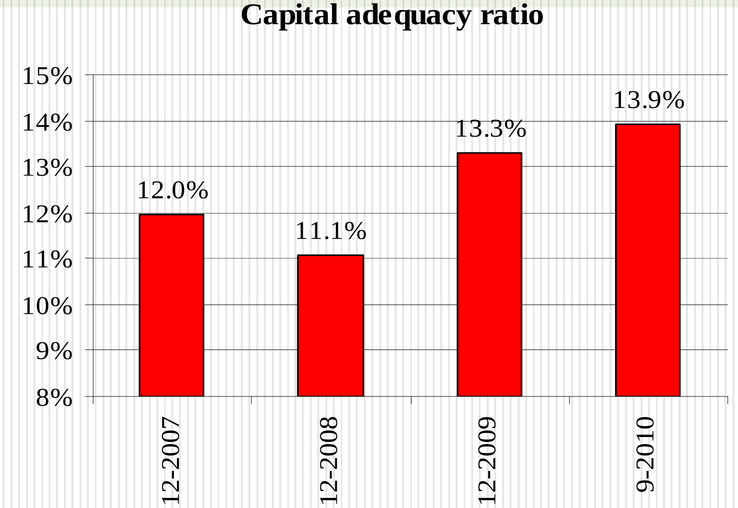


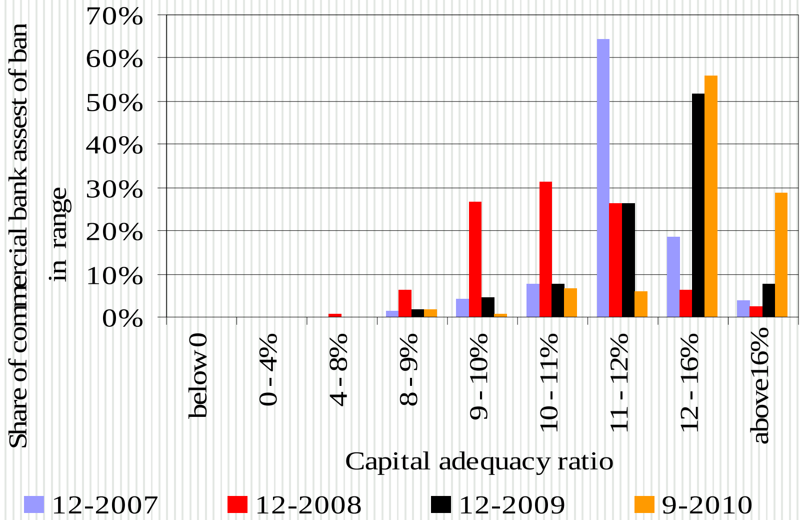


Source: NBP.
Data after excluding the impact of foreign exchange rate changes. Data based on a sample of 20 banks reporting information on interest rates and value of new loan agreements to the NBP.

Bank's capital position

- Stabilization of capital adequacy ratios
- Moderate increase in regulatory capital
  - New shares issue (3.1 bln PLN since March 2010)
  - Stable value of subordinated debt
- Most banking sector assets in banks with capital adequacy ratio above 12%
- No bank needed support from public sources





Non-bank financial institutions

Assessment of current situation

- Scale of relationship with banks is smaller then in developed economies
- Non-bank financial institutions did not increase the impact of the crisis on the banking system
- Concentration of the insurance portfolio of housing loans among a small number of non-life insurance companies may pose a potential threat to the financial standing of these companies in the event of a deterioration of the portfolio quality of housing loans

Non-bank financial institutions
Assessment of current situation

- Decrease in financial results of pension fund management companies (PTE) in the first half of 2010
  - Reduction of maximum level of commission fees that may be charged by PTE
  - The continuing increase of acquisition related costs
- The decrease in financial results of investment fund management companies (TFI) in 2009 resulted from a lower average value of assets of the managed funds. Preliminary data on the financial situation of TFI as of 1H 2010 suggest a rebound in revenue caused by an increase in the average value of net assets

Non-bank financial institutions
Assessment of current situation

- The decrese in revenues of the life insurance sector
  - Lower income on investments
- Low financial income of non-life insurance sector in the first half of 2010
  - The result of unfavourable weather conditions (severe winter) and increase in the value of claims arising in automobile insurance
- The claims paid arising from floods do not threaten the solvency of the insurance sector, however it decreased its net profit and technical results

Agenda

1. Current situation assessment
2. Risk generating processes for financial system stability and policy recommendations
3. Conclusions

Risk factors identified in the last edition of the FSR

Risk factors	Change in the significance since the last edition of FSR
Slowdown in developed economies potentially leading to financial market disturbances and slowing down the economic recovery in Poland and world economy	↘
Risk of excessive lending in case of stronger than expected economic growth	→
Planned regulatory changes in the European financial system, especially in the field of liquidity risk	↓

↑ **Significant increase**

↗ **Slight increase**

→ **No changes**

↘ **Slight decrease**

↓ **Significant reduction**

Risk factors identified in the current edition of the FSR

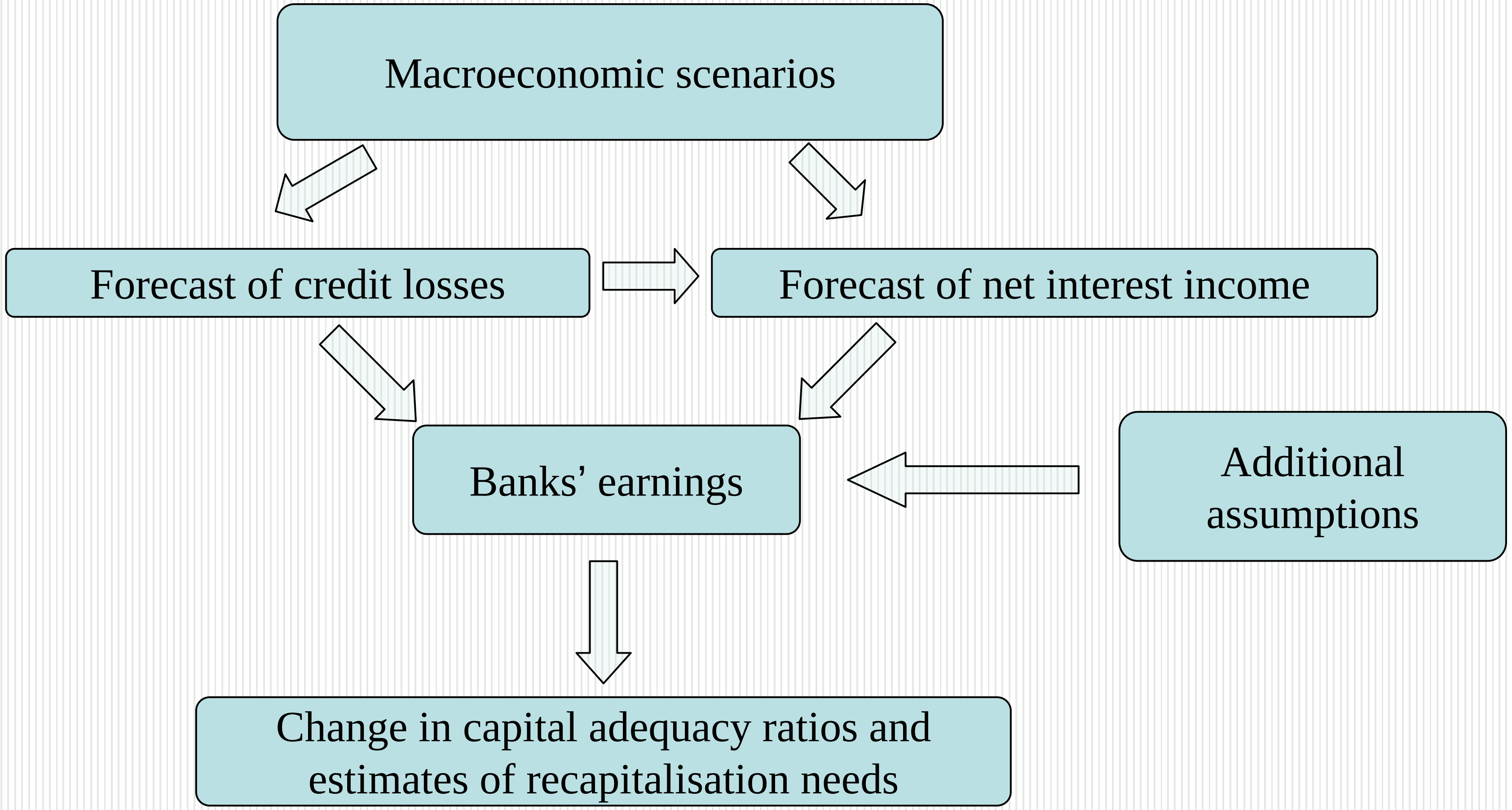
- Macroeconomic slowdown in developed economies leading to lower economic growth in Poland
- The risk of excessive lending growth in case of stronger than expected economic growth in Poland

Risk of economic growth slowdown

- Uncertainty about future economic growth in developed countries
  - The increase of public debt of developed economies and fears regarding their long-term solvency
  - The increase of interdependence between the financial situation in individual countries, the financial standing of banks which received public support and the macroeconomic situation
  - Deleveraging of private sector in countries which experienced asset bubbles
  - Limited capacity to contend the economic slowdown by means of conventional monetary policy
- Risk of recurrence of global recession decreased since the last edition of FSR; the risk of economic recession is concentrated in countries which lost the confidence of financial markets
- Market disturbances in case of increased risk aversion is still posible.

The risk of economic growth slowdown

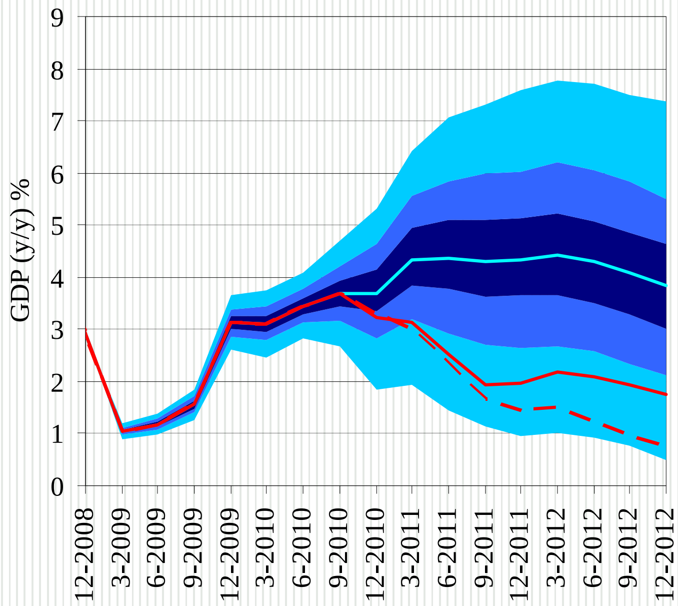
The macro stress testing framework



Macro stress tests

- Scenarios
  - **Baseline:** October NBP projection
  - **Shock I:** slowdown in world economic growth in 2010 and 2011 as a result of weakening effects of fiscal stimulus, procyclical fiscal tightening in developed economies due to uncertainty over their solvency
  - **Shock II:** shock scenario I combined with fall in foreign investor confidence and additional shock for the Polish economy resulting in outflows of capital from the Polish government bond market of and further fiscal consolidation
  - Horizon – end of 2012, as in NBP macroeconomic projection

Shock scenarios (red lines) on the back of October projections of GDP



GDP y/y	*2010*	*2011*	*2012*
Baseline	3,5%	4,3%	4,2%
Shock I	3,4%	2,4%	2,0%
Shock II	3,4%	2,1%	1,1%

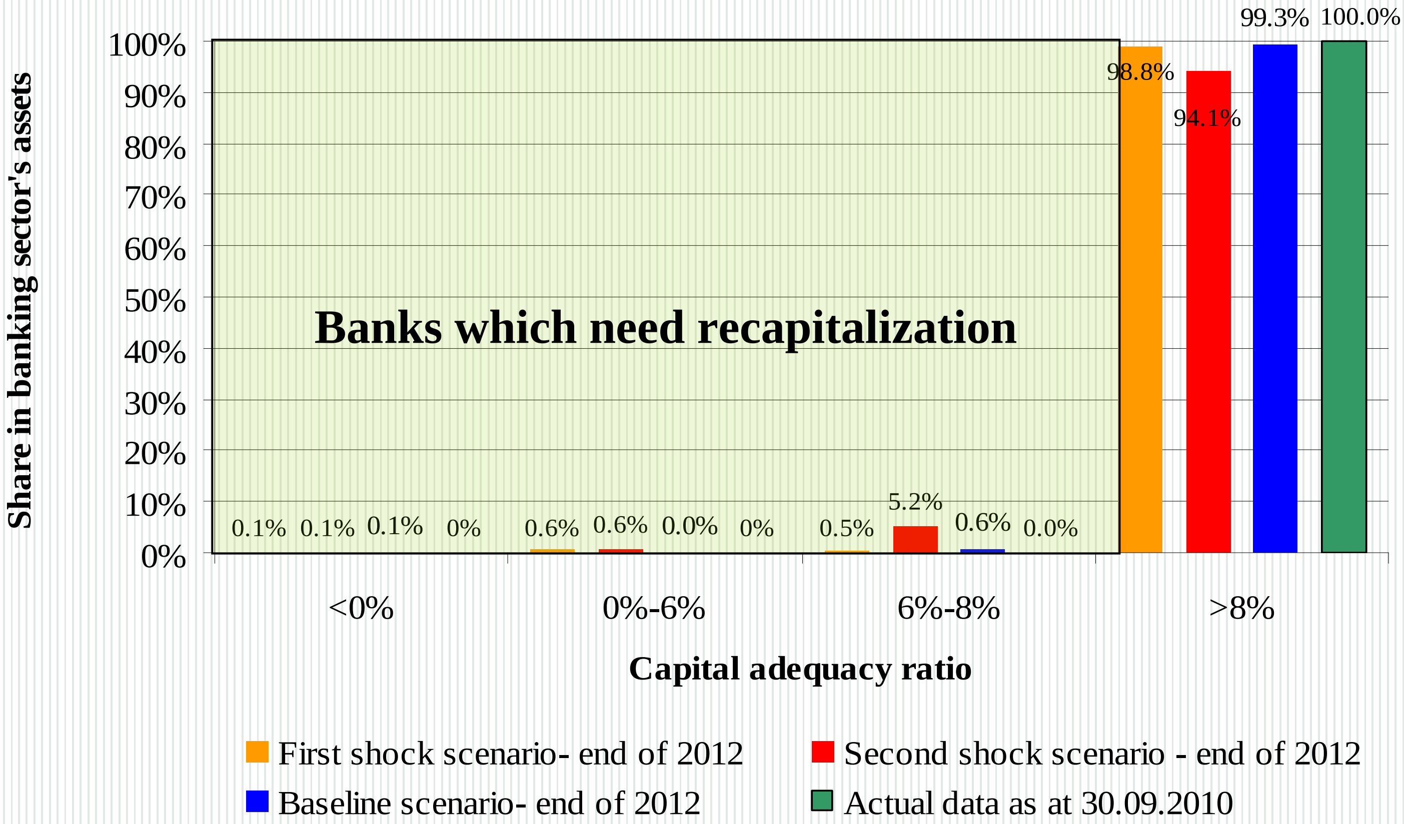
Macro stress tests

- Credit risk forecast
  - Three panel data models, estimated on data for individual commercial banks
    - Provisions on loans to enterprises
    - Provisions on housing loans
    - Provisions on other loans to households
- Net interest income forecast
  - Two panel data models, estimated on data for individual commercial banks
    - Interest income (excluding income from debt securities), including fees andd commisions, taking into account quality of loans portfolio
    - Interest cost
- Other assumptions
  - Earnings for the first three quarters of 2010, retained
  - Banks' operating expenses remain unchanged
  - Stable value and structure of assets
  - Net income from FX and trading activities are reduced by 20%
- The shock of losing confidence of the financial markets assumed in the second shock scenario
  - An increase in bond yields by 300 basis points
  - The impact on banks: 4.5 billion PLN (3.6 billion PLN through capital, 0.9 billion PLN through profits)
  - Low duration of banks' portfolio

Macro stress tests

Results

Distribution of commercial banks assets according to capital adequacy ratio



Data for 45 commercial banks was analyzed

The risk of economic growth slowdown

Assessment and recommendations

- Most banks are able to absorb an economic downturn thanks to regulatory capital and retained earnings
- Banks should conduct careful dividend policy due to uncertainty about the future economic outlook

Risk factors identified in the current edtition of the FSR

- Macroeconomic slowdown in developed economies leading to lower economic growth in Poland
- The risk of excessive lending growth in case of stronger then expected economic growth in Poland

Risk of excessive lending growth

- The most likely scenario is an acceleration of economic growth
- Most probably it will be followed by an increase in the demand for loans
- The risk of excessive credit growth has been assessed as low, but as the economic recovery continues - especially in the area of housing loans - risk may start to increase because of:
  - Long-term trends in increase of financial intermediation
  - cyclical increase in demand and credit supply
  - increase in the number of households
  - optimistic perception of rates of return offered by the credit market in Poland, which would lead international banking groups to expand their business in Poland
- As factors limiting this risk, banking regulations designed to prevent excessive risk-taking by banks (including rapid growth in lending) might be proposed

Risk of excessive lending growth

- Rapid lending growth in the housing loans segment would be particularly undesirable if the main source of funding was an inflow of capital
- Loose monetary policy in major economies - a factor contributing to the inflows of capital to the EM
- Alarming signals
  - increase of foreign currency loans in new housing loans
  - increase in the banking sector share by banks with foreign funding strategy

Risk of excessive lending growth

Recommendations for economic policy

- Support for FSA action focused on strengthening credit risk management in banks, including Recommendation T
- Foreign currency loans should be a niche product targeted at borrowers receiving income in the currency of the loan; the NBP supports measures aimed at reducing the availability of such loans

Other recommendations included in the Report

- In the NBP's opinion it would be appropriate to enable all banks to issue covered bonds
- Development of the fully fledged market would require the introduction of regulations in order to ensure safe trading of issued securities

Other recommendations included in the Report

- PTE regulatory capital should be dependent upon their asset valuation. The mechanism requiring 100% shortage cover should be maintained
- The introduction of diversified funds, in terms of investment policy and tailored to the participant's age. Changes in the funds' investment policy should be preceded by a detailed analysis of the impact arising from new regulations

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1. Current situation assessment
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Conclusions

Scope of analysis	Assessment of changes compared to previous edition
Current situation of the banking sector	↗
Ability to absorb shocks in the banking sector	↗
Current situation of non-bank financial institutions	↘
Outlook for the operating environment of the domestic financial system	↗

- ↓ **Significant deterioration or significant increase of risk**
- ↘ **Slight deterioration or a slight increased of risk**
- → **No changes**
- ↗ **Slight improvement or a slight decrease of risk**
- ↑ **Significant improvement or a significant reduction of risk**

Conclusions

- Economic developments, in line with the October projection of the central macroeconomic path conducted by the NBP, will not pose a threat to the stability of the domestic financial system
- The global economic outlook is still affected by considerable uncertainty - dividend policy should be cautious
- In the analyzed period, risk for the stability of the domestic financial system has slightly declined