Macroprudential policy

From the past to future challenges

Bank of Albania

Geneva Meeting, Sept 2017

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Content

Context

The Albanian Economy and Financial System before and after crises

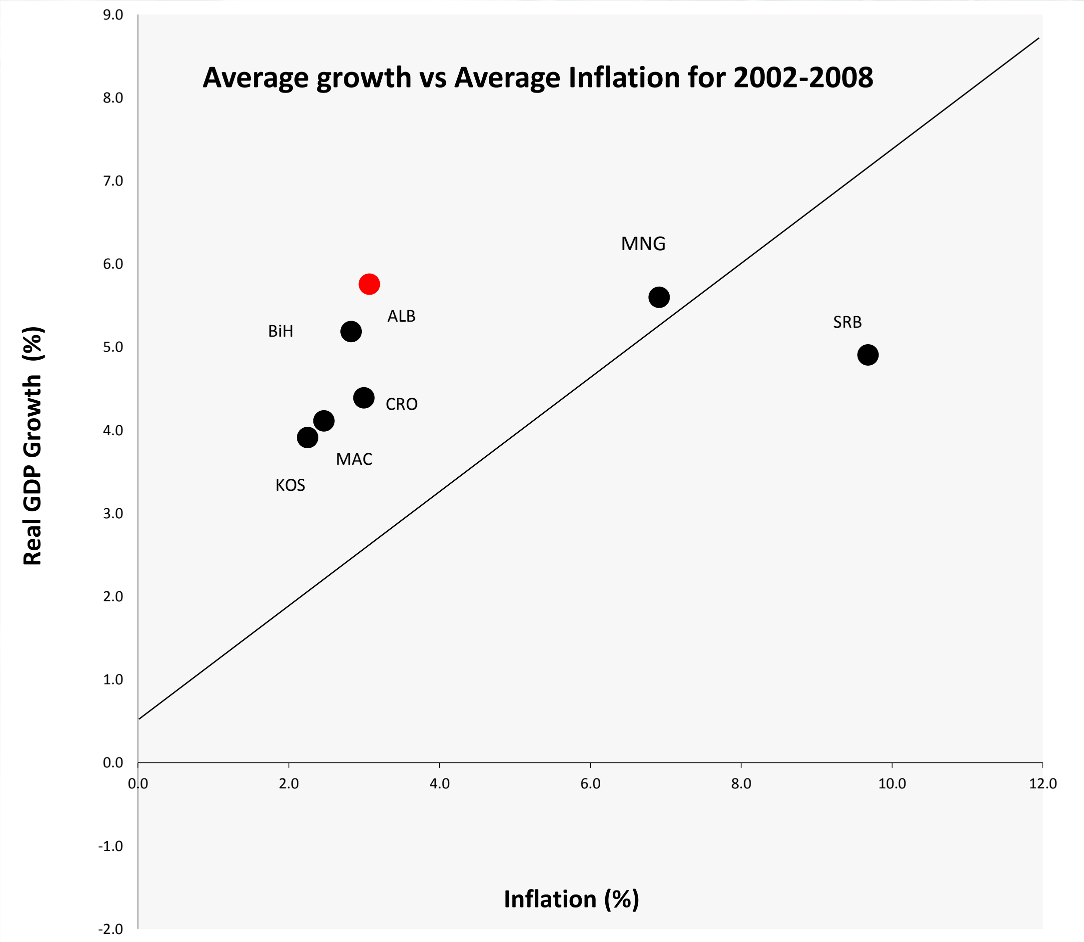
Quick Factsheet

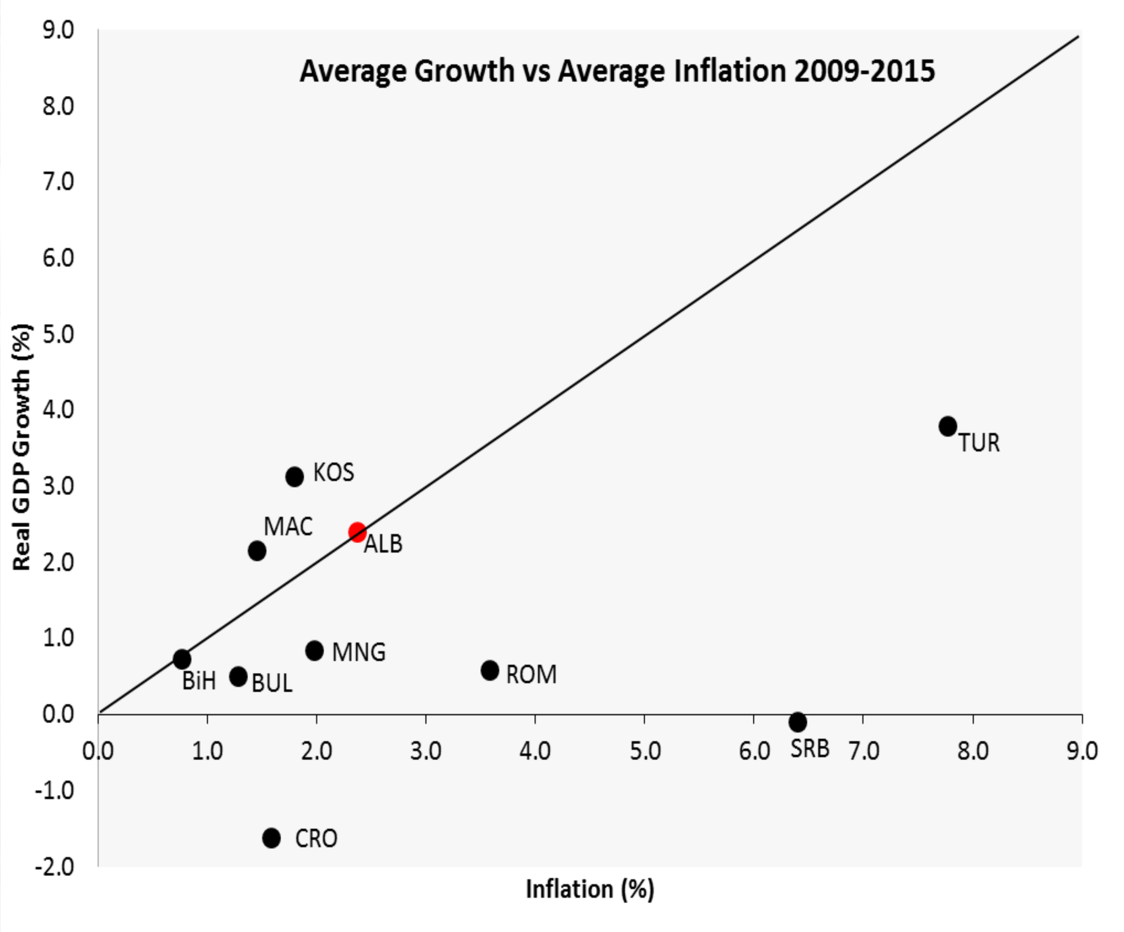
- Population 2.89million
- Upper middle income country
- GDP value: 10.3 bio Euro
- GDP/Capita: 3,575 Euro
- GDP/Capita in PPS: 30% of EU-28 average
- EU candidate country as of June 2014
- Country Rating: B+ (S&P)

Context

The Albanian Economy before and after crises

Growth dynamics were affected by the global financial crisis

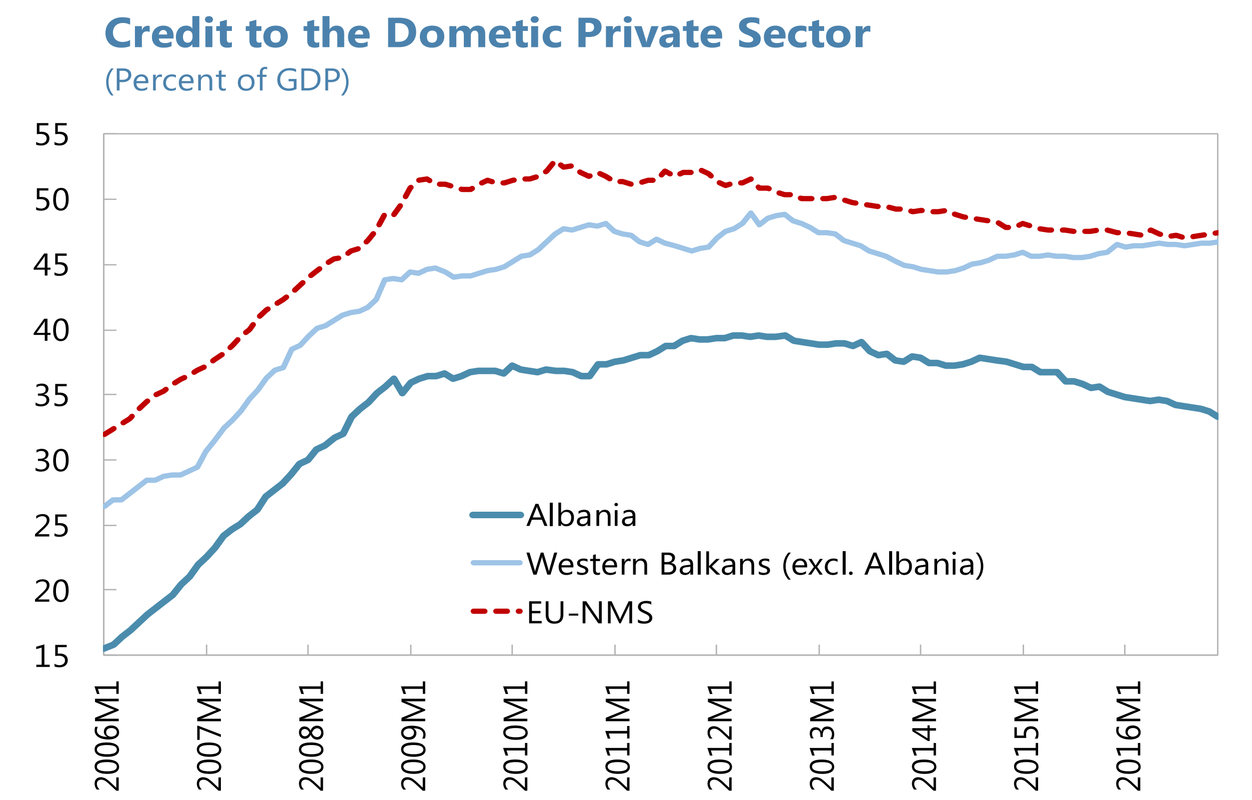




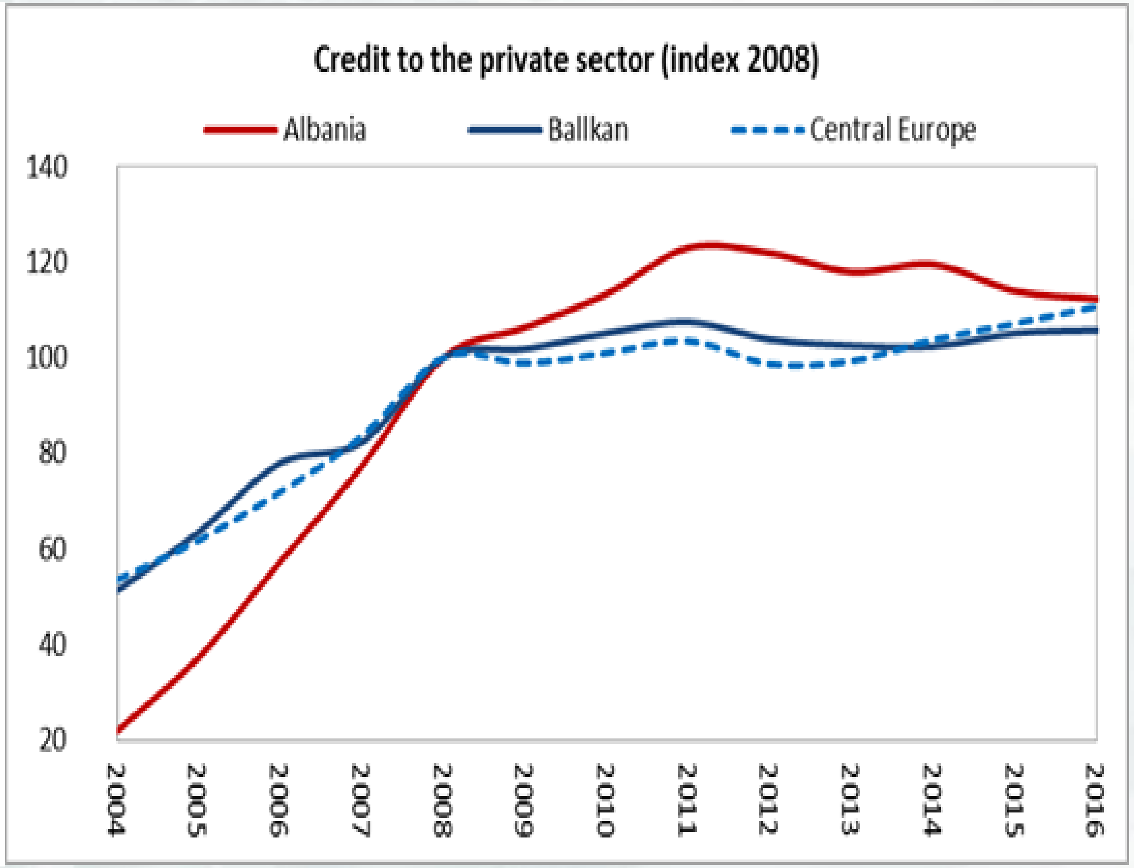
Source: IMF, World Economic Outlook October 2016

Context

Financial System and Financial Markets



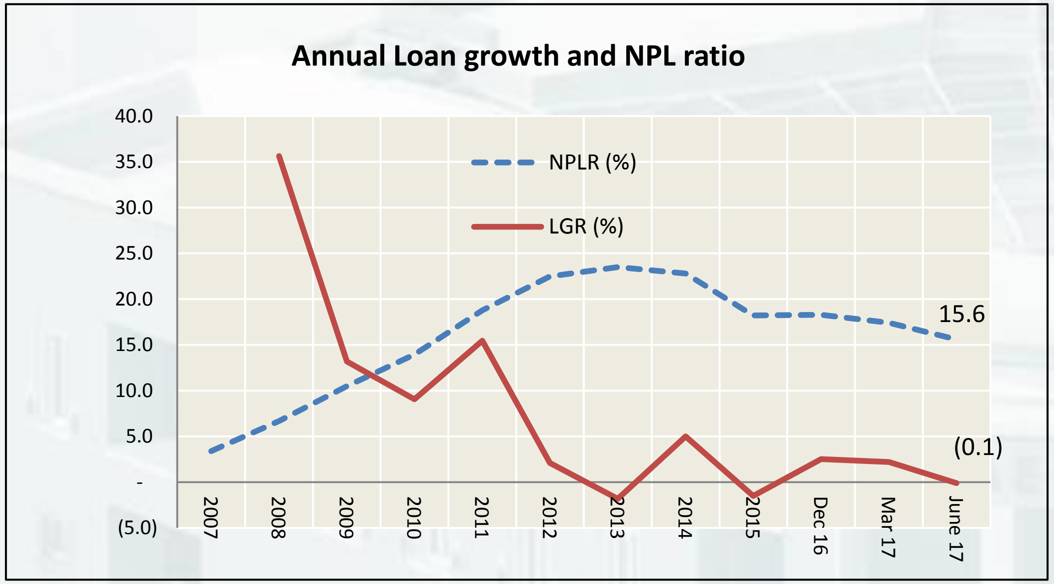
Sources: HAVER; IMF, IFS; and IMF staff estimates.

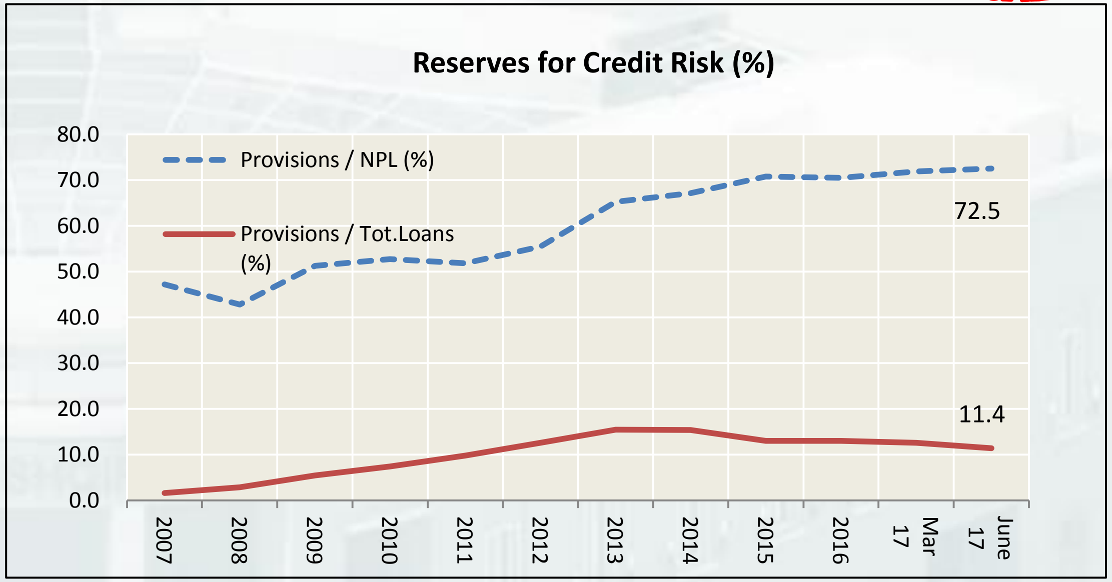


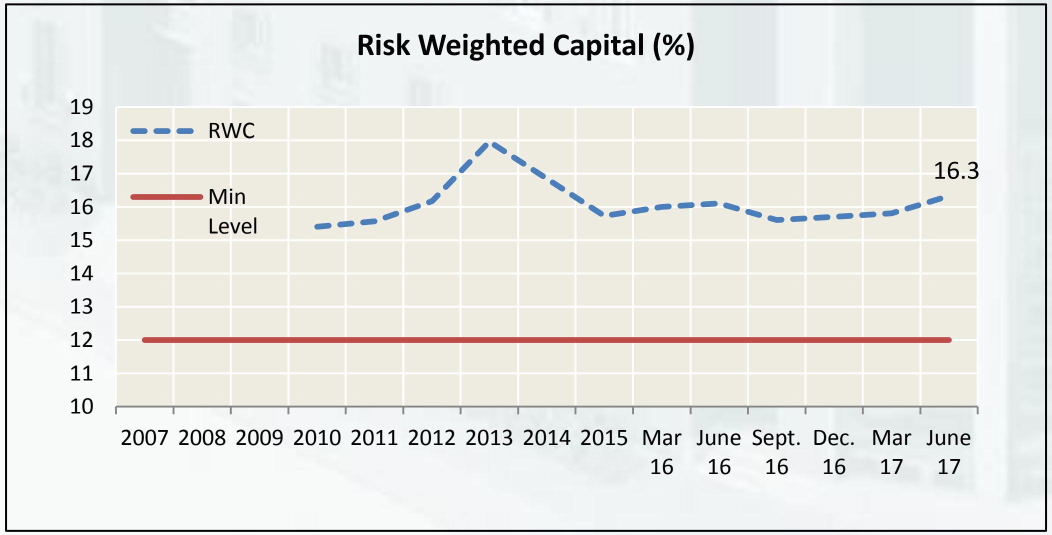
Credit growth dynamics were affected by the global financial crisis

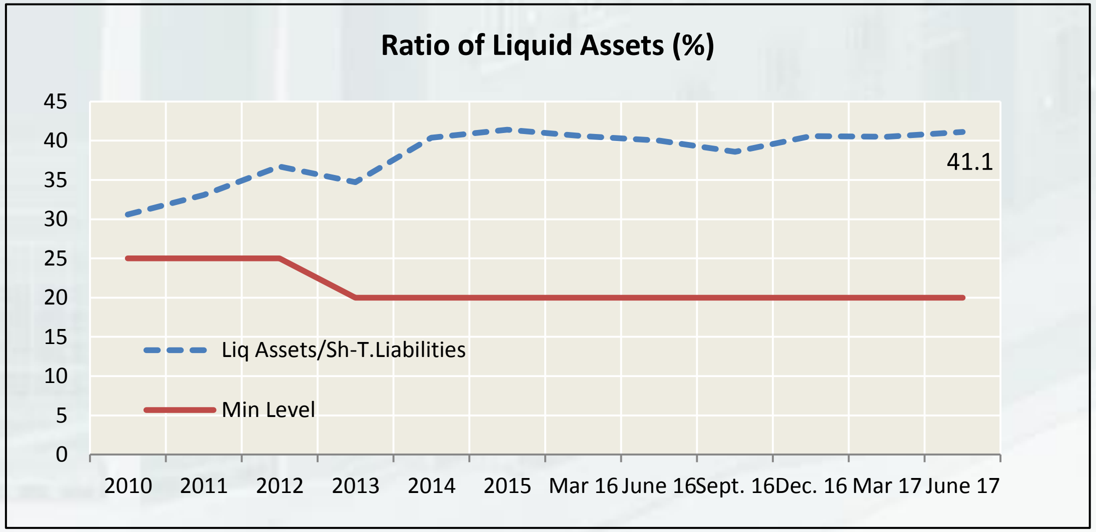
Context

Financial System and Financial Markets



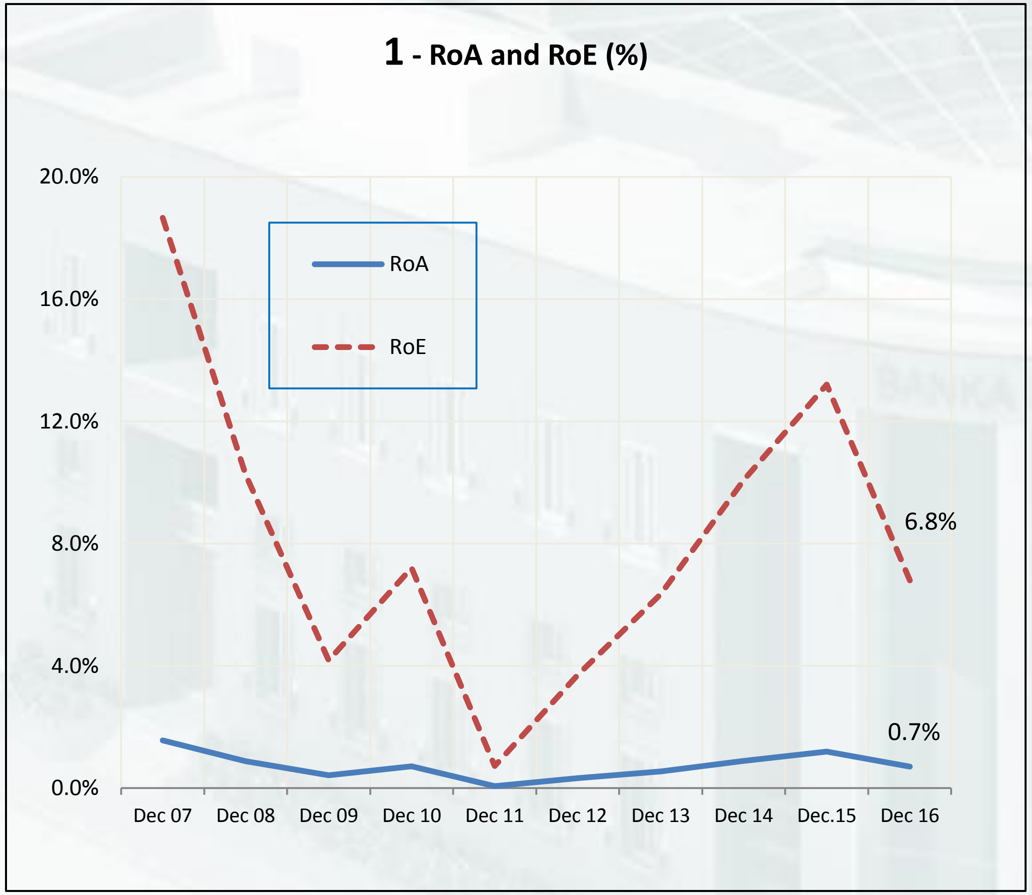


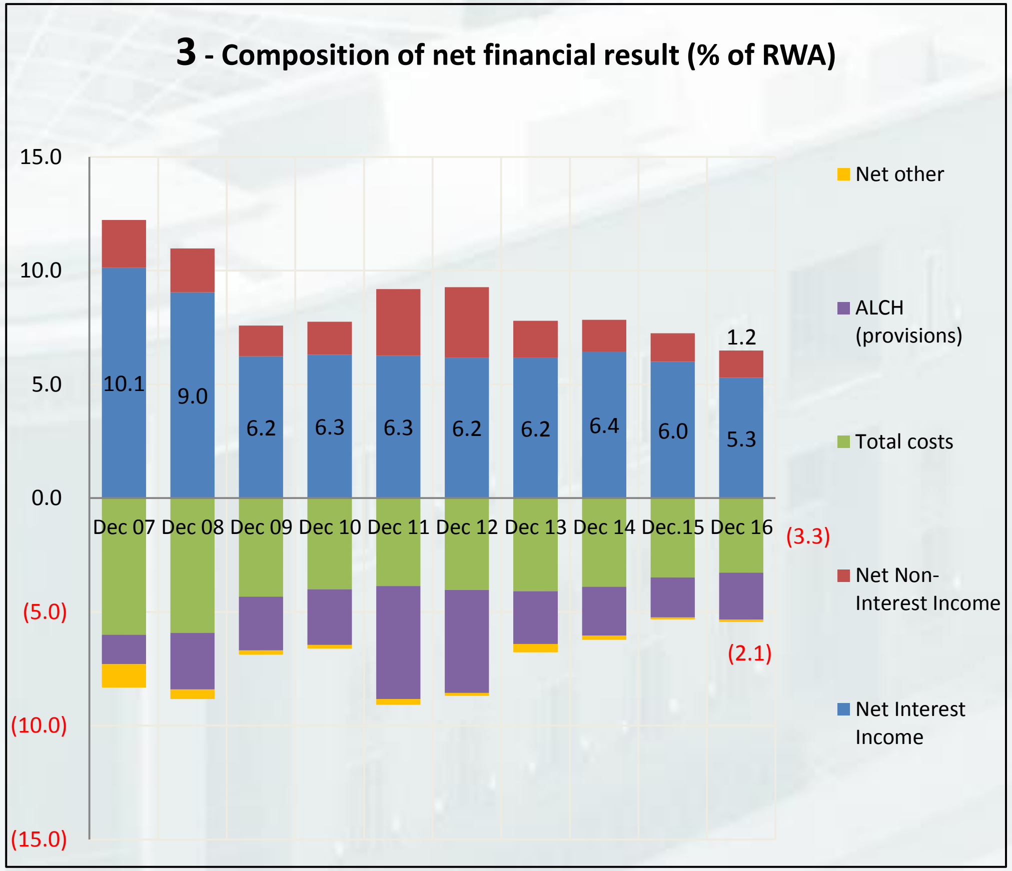




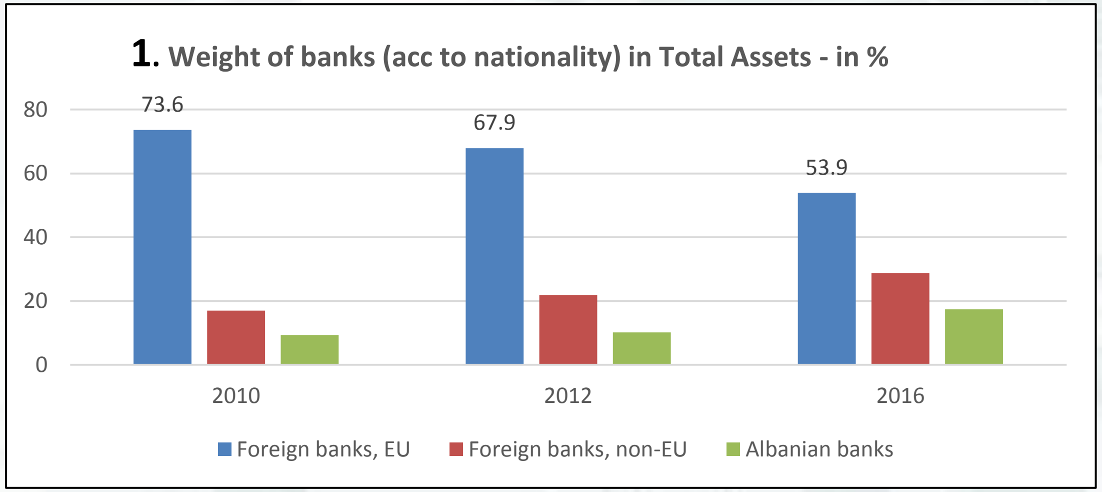
Context

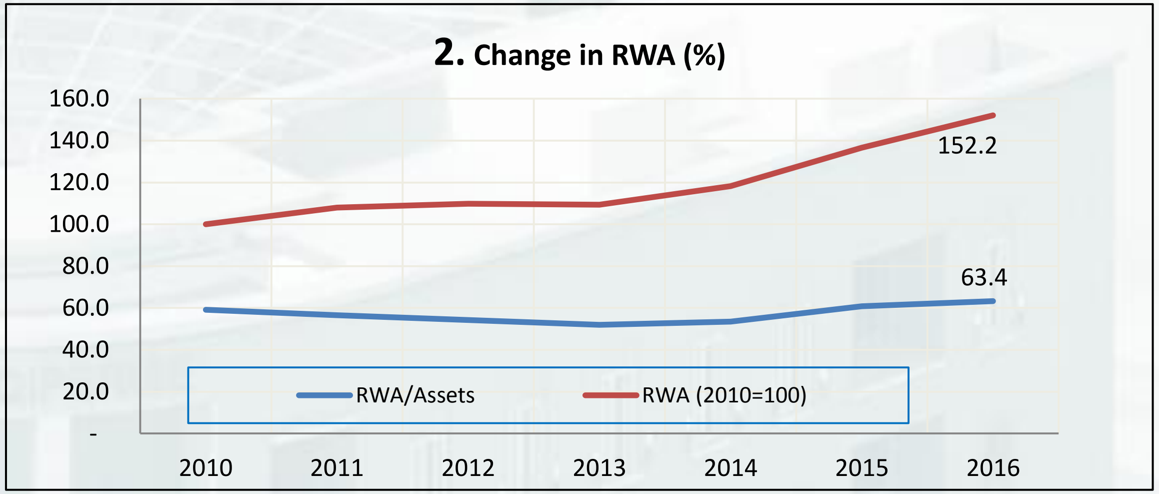
Impact from Low interest rate environment - *Profitability*

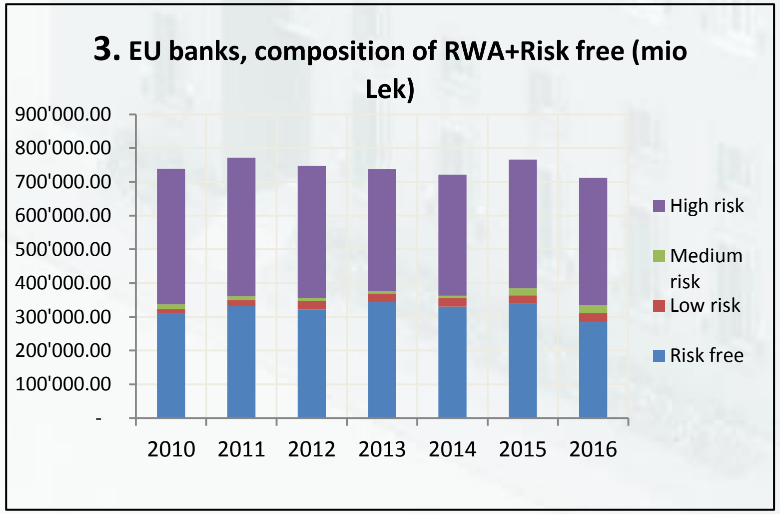


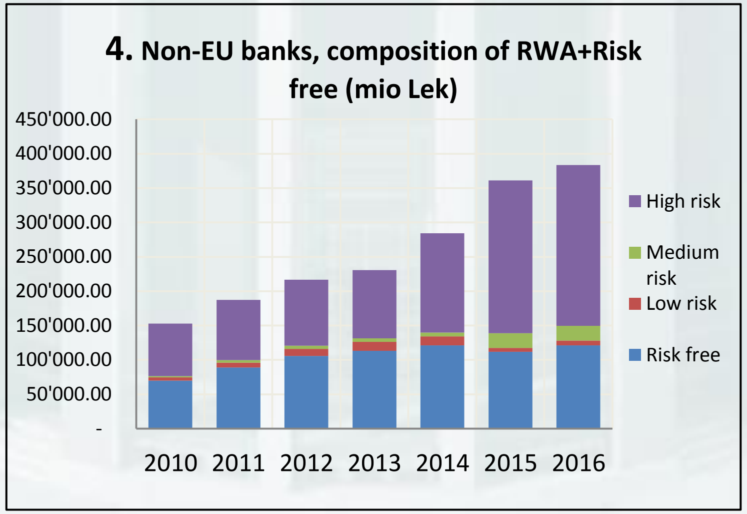


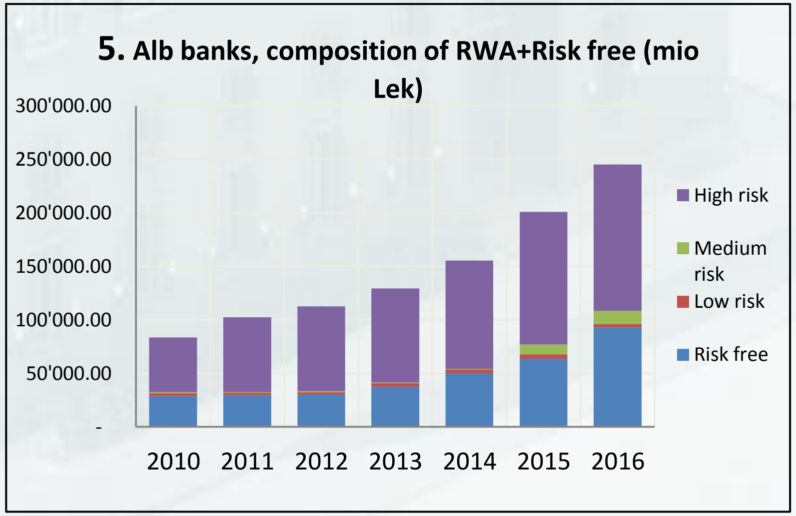
Behavior of EU-originated banks, following 2008 – a passive one











Zooming in Past use of macro-prudential tools

- The BoA's historical interpretation of financial stability

For **Credit risk:**

changes in risk weights, for:

2006 - to decelerate credit growth,

2008 – to increase capital requirements for credit in Fx;

2013 – following significant reduction in credit, measures were necessary to induce banks to shift their excess liquidity, especially the one invested abroad, to lend to the domestic economy.

For **Liquidity risk**:

2009 – to improve the definition and composition of liquid assets;

2013 – to introduce min requirements for the amount of liquid assets (both in FX and in domestic currency), in relation to short term liabilities

For **Systemic risk:**

2012 – branches of foreign banks were transformed in subsidiaries, following legal changes of 2011.

2012 - higher capital requirements and higher liquidity requirements were introduced for banks with a higher risk profile (including for banks with Greek capital, following financial crisis in Greece);

2017 – The de-euroization package

- change in the reserve requirement rate (RRR) for Fx deposits
- increase minimum requirement rate for Liquidi assets in Fx in relation to short term liabilities in Fx, to 20% (from current 15%) –;
- BoA has signed an MoU with theMinistry of Finance and AFSA

Content

I. Macro prudencial Policies framework

- Definition, Objectives, Scope

Macro prudential policy –analyze, measure and address (through macro prudential tools) the Systemic Risk to preserve financial stability through:

- preventing the build-up of risks;
- strengthening the resilience of the financial system.

Financial stability–preserve the capacity of the financial system (incl. institutions, markets and supporting infrastructure) to perform its functions efficiently, under normal or less favorable economic situations

Systemic risk –the risk of disruptions in the financial system, leading to serious negative consequences for the financial system and the real economy.

- *Cyclical (time) dimension* –where the financial system activity amplifies the economic cycle, as it changes through time;

- *Structural dimension* –means the distribution of risk at different parts of the financial system, at a given time. It shows through interlinkages, common exposures, systemic institutions;

I. Macro prudencial Policies framework

- Definition, Objectives, Scope

Ultimate goal of Macroprudential policy:
to contribute in maintaining financial stability, through prevention/mitigation of **systemic risk** and increasing resilience of financial system;

Intermediate objectives *(based on BERRS 2014, CRD IV)*, aim at preventing and mitigating systemic risks arising from:

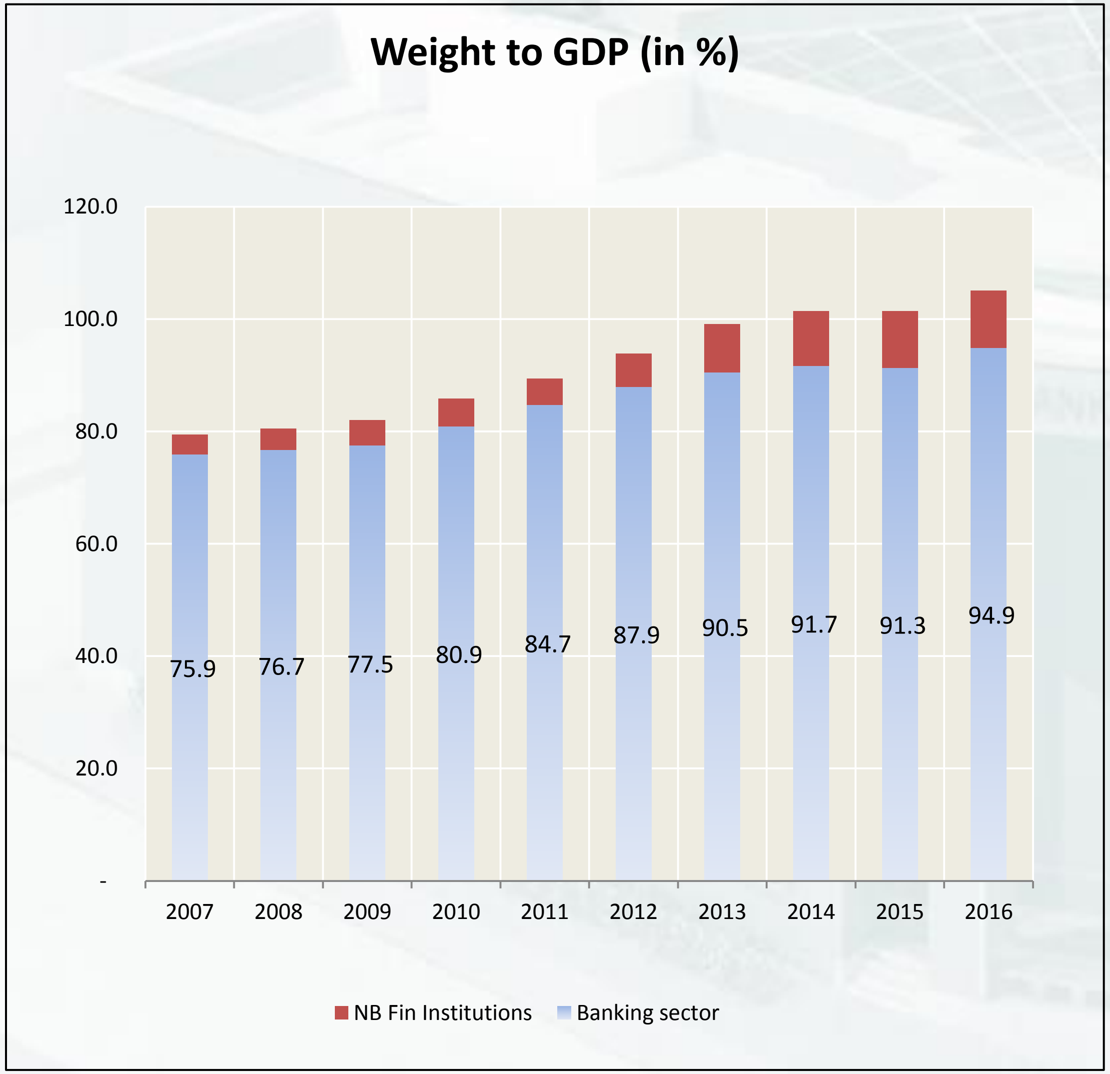
- excessive credit growth and leverage
- excessive maturity mismatches, and market illiquidity–
- direct and indirect exposure concentrations –
- excessive risk-taking from SIFIs –.

Ultimate goal and intermediate objectives :

- rapid credit growth, lower credit underwriting and monitoring standards, rising asset prices, high NPLs; potential for future high credit growth;
- maturity mismatches that exist, that could increase and become a source of pronounced risk with an expanding economic cycle;
- concentrations on bank balance sheets, in terms of products (Gov't debt securities), sectors (lending to construction), entities (large corporates); currency (Fx); jurisdictions…
- banks continuously increasing in systemic importance, as also, their connections with non-bank financial institutions are expanding;

Content

Composition of Financial Sector in Albania



Supervisory Authority	Financial System (% of GDP)	2011	2012	2013	2014	2015	2016
Bank of Albania	***Banking Sector***	84.7	89.6	90.5	91.7	91.3	94.9
	Non bank financial instituitons	2.5	2.7	2.5	2.7	2.7	2.9
	SCA and their Unions	0.7	0.8	0.8	0.8	0.7	0.6
Financial Supervision Authority	Insurance companies	1.5	1.6	1.6	1.7	1.9	2.1
	Pension Funds	0.01	0.02	0.03	0.04	0.1	0.1
	Investment Funds		1.21	3.7	4.5	4.7	4.4
Financial Intermediation (% of GDP)		89.41	95.93	99.13	101.44	101.3	105.1

Banking dominates the Fin System:

Table 2: Financial System Assets

(Percent of GDP)

	ALB 2016	Western Balkans[1] 2015-16	NMS: Inflation Targeters[2] 2015-16
Total	**105.1**	**91.1**	**121.9**
Banking	**95.0**	**81.7**	**90.2**
Of which lending to gov. (incl. securities)	24.1	10.6	16.3
Nonbanking	**10.1**	**9.4**	**31.7**
NBFIs, Saving Assoc., others	3.5	2.4	6.6
Insurance	2.1	4.6	7.6
Investment funds	4.4	1.9	11.6
Pensions[3]	0.1	0.4	5.8

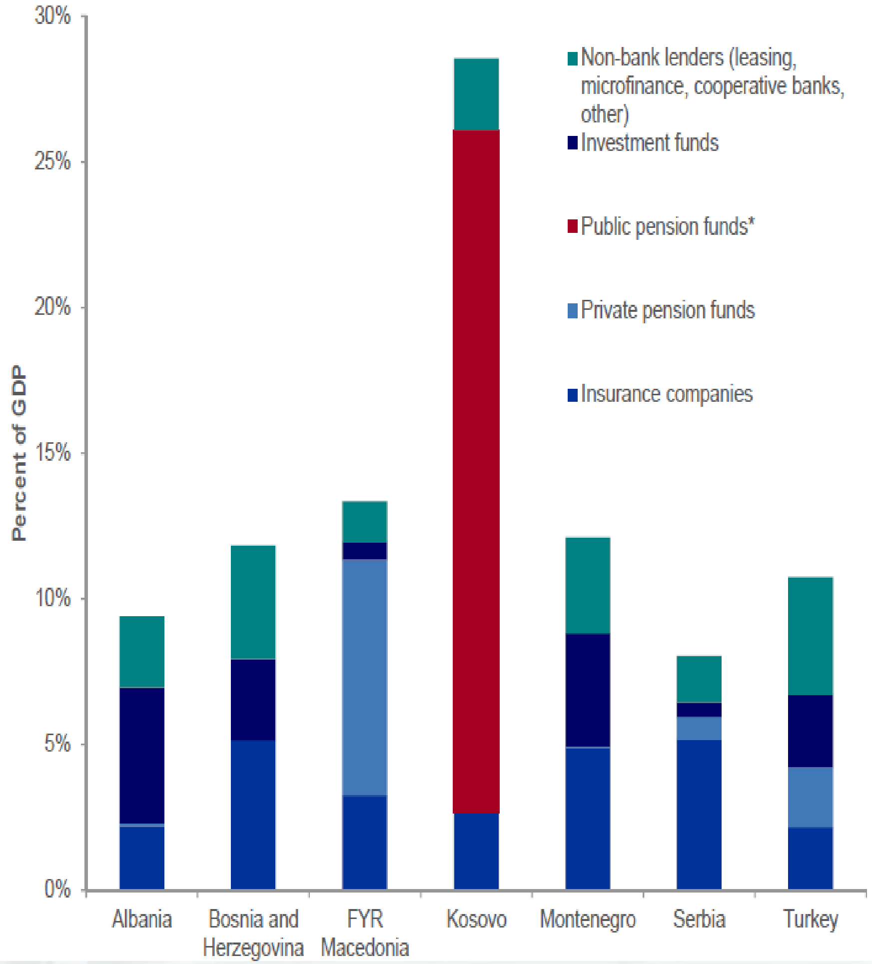
[1] Average Bosnia Herzegovina, Macedonia, Montenegro and Serbia.

[2] Average Czech Rep., Hungary, Poland, and Romania.

[3] Excludes mandatory pension funds.

Sources: Country authorities; IMF, FSAPs; and IMF staff estimates.

Composition of the non-bank financial sector

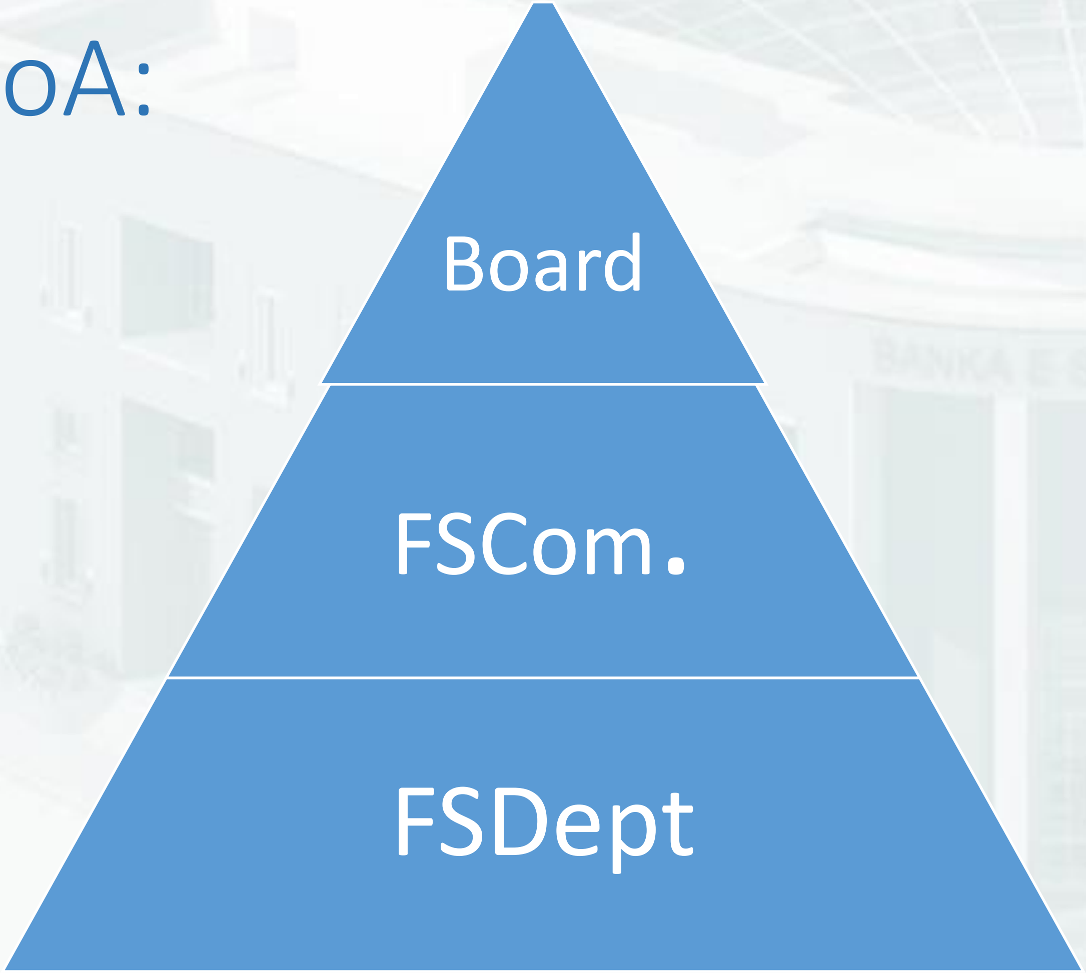


- There is considerable heterogeneity in the composition of the sector
- In half of the countries the insurance sector is largest, in others pension funds, investment funds or non-bank lenders dominate

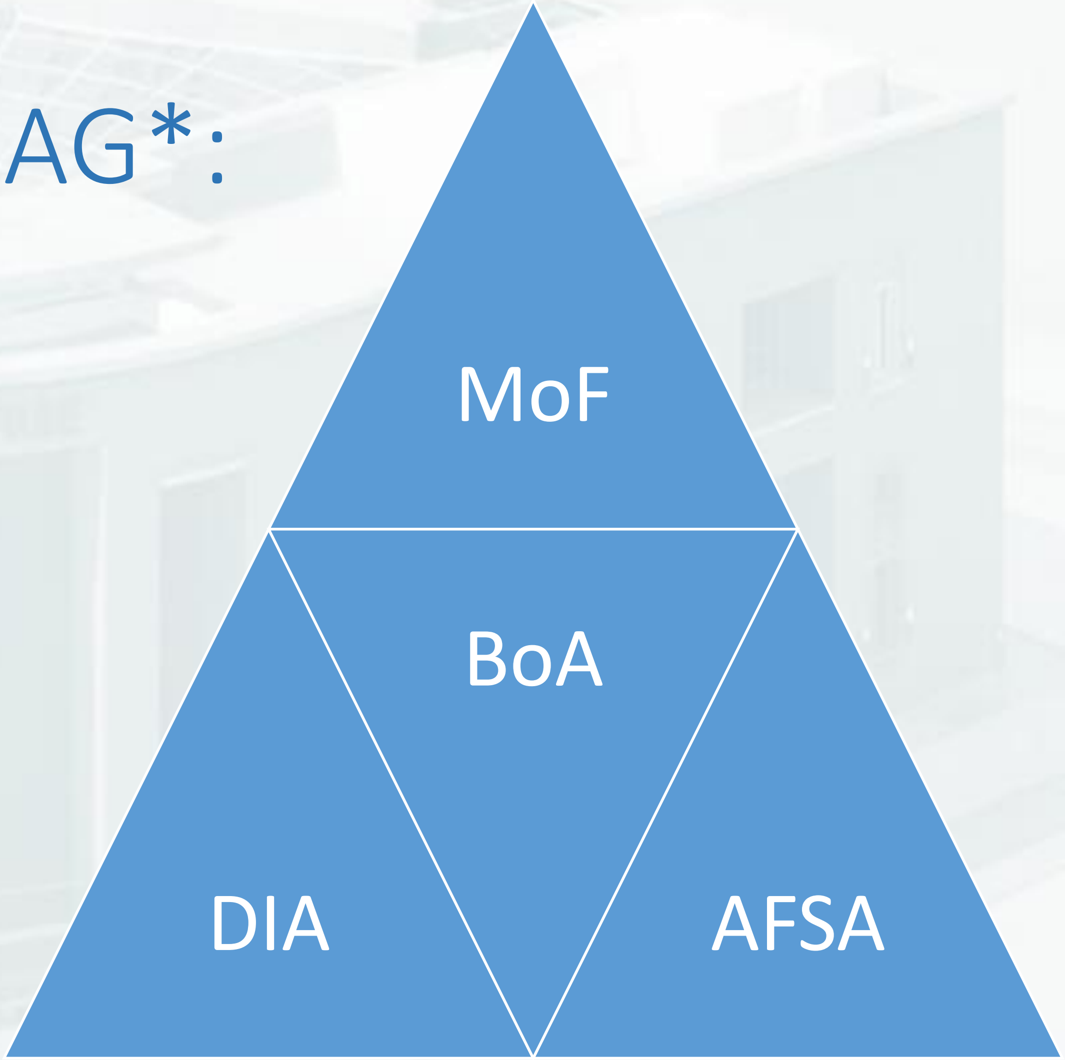
II. Institutional Architecture

Mandate, power, coordinate

BoA:



FSAG*:



*Financial Stability Advisory Group

II. Institutional Architecture

Policy interaction of macroprudential policy with:

Microprudential policy	Fiscal policy	Crisis Management
▪ Stable single financial institutions (banks) are not sufficient to achieve stable financial system • Microprudential supervison/on single institutions, macroprudential policy/systemic risk	▪ Fiscal policy, direct impact on financial system clients and its stability; ▪ Macroprudential policy effectiveness relies on coordination;	▪ Macroprudential policy : prevent and mitigate systemic risk ▪ Crisis management function aims to protect the critical functions of a financial institutions or
Financial Stability Committee	Financial Stability Advisory Group	Coordination in the recovery and resolution framework currently being developed
Monetary vs. Macroprudential policy		

Content

Zooming in Systemic Risk

Current work, already done:

For both dimensions (structural & cyclical):

- a systemic risk perception survey (semiannual) with banks;
- a methodology for constructing a risk map;
- stress-testing: top-down and bottom-up; results are published in a summarized manner in the Financial Stability Report;
- A semiannual survey for capturing prices of real estate nationwide (in cooperation with INSTAT)

For cross sectional (structural) dimension:

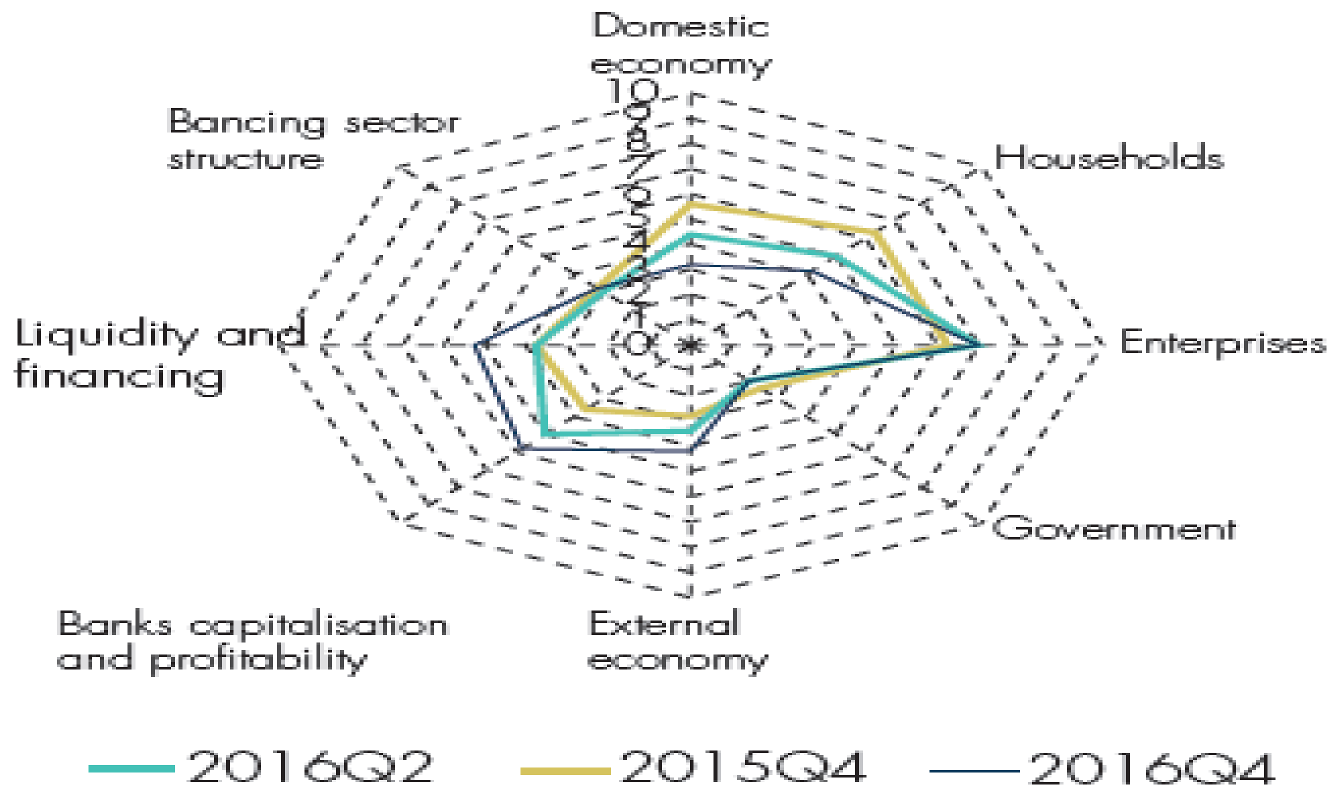
- a methodology for measuring a bank's contribution to systemic risk;
- a methodology for assessing banks with systemic importance;
- capturing more information on interbank exposures/common exposure

For Time (cyclical) dimension:.

- an index that indicates the stress in the financial system,
- an index that indicates the financial strength of the banking sector;
- a semiannual *survey* on financial state and debt burden of businesses and households;
- A Macro financial model, assessing the relationship between the financial sector and the macroeconomic indicators (in cooperation with Research Dept.)

Zooming in: Systemic risk monitoring tools

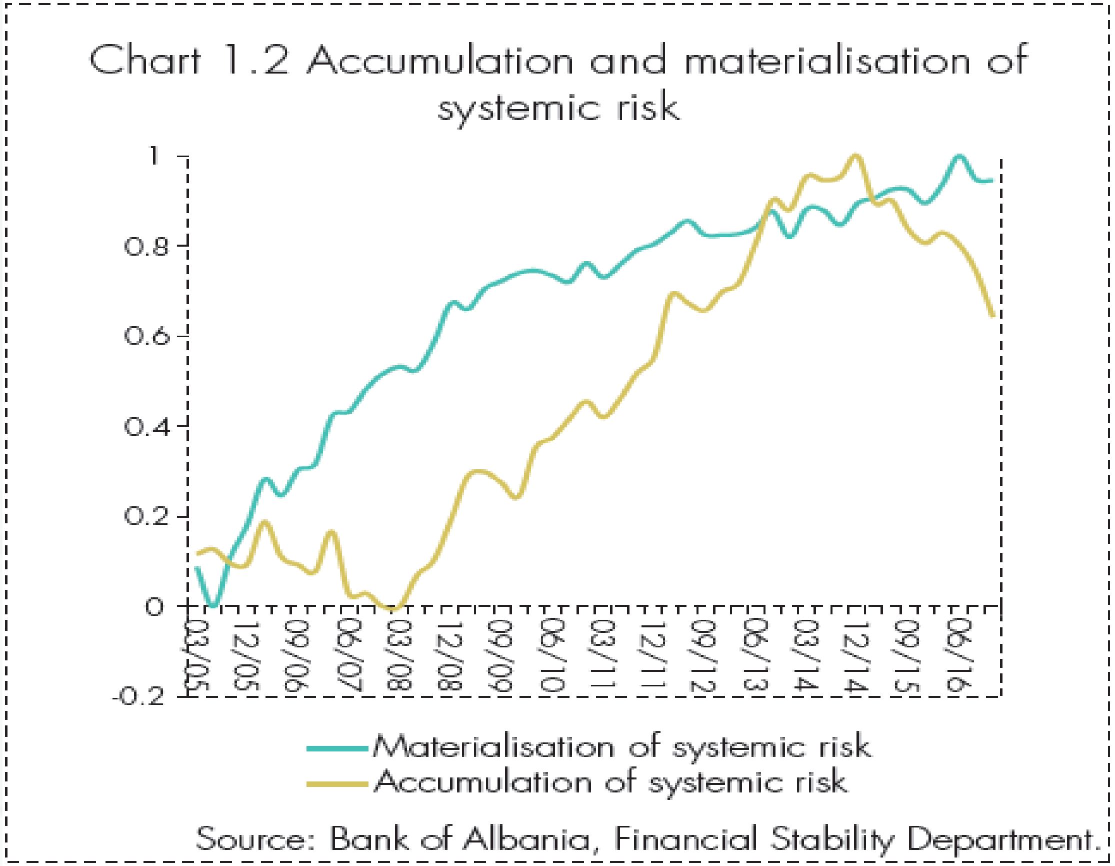
Chart 1.1 Financial Stability Map

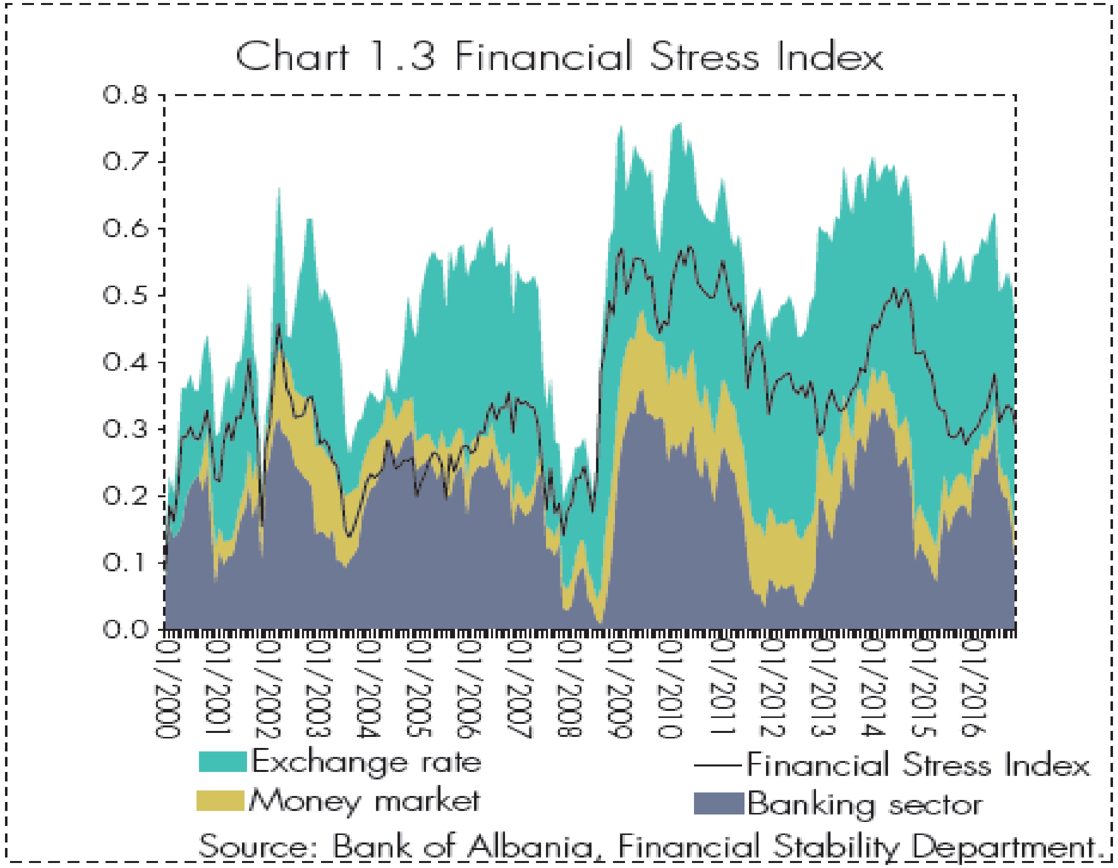


*Risk is rated: low for scores 0-3 in the map, average for scores 4-5, moderate for scores 6-8, and high for scores 9-10. The farther from the centre, the higher the risk is

Source: Bank of Albania.

Zooming in: Systemic risk accumulation and materialization





- ➢ Lower foreign currency credit ,public debt and external debt -decline of systemic risk accumulation.
- ➢ Improvement of credit quality to both enterprises and households, decline of unemployment and reduction of exchange rate volatility reduced the materialization of systemic risk,

Zooming in: Summary of Bank of Albania Stress Tests

Solvency

Top-down by BoA

- Macro tests (BOA); balance-sheet approach
- Sensitivity tests: domestic shocks

quarterly

16 banks

Bottom-up by Banks

- Macro scenarios provided by BOA
- Forecast of credit and income losses based on bank's own methodologies

annual

5 largest banks

Liquidity

Top-down by BoA (with input from banks)

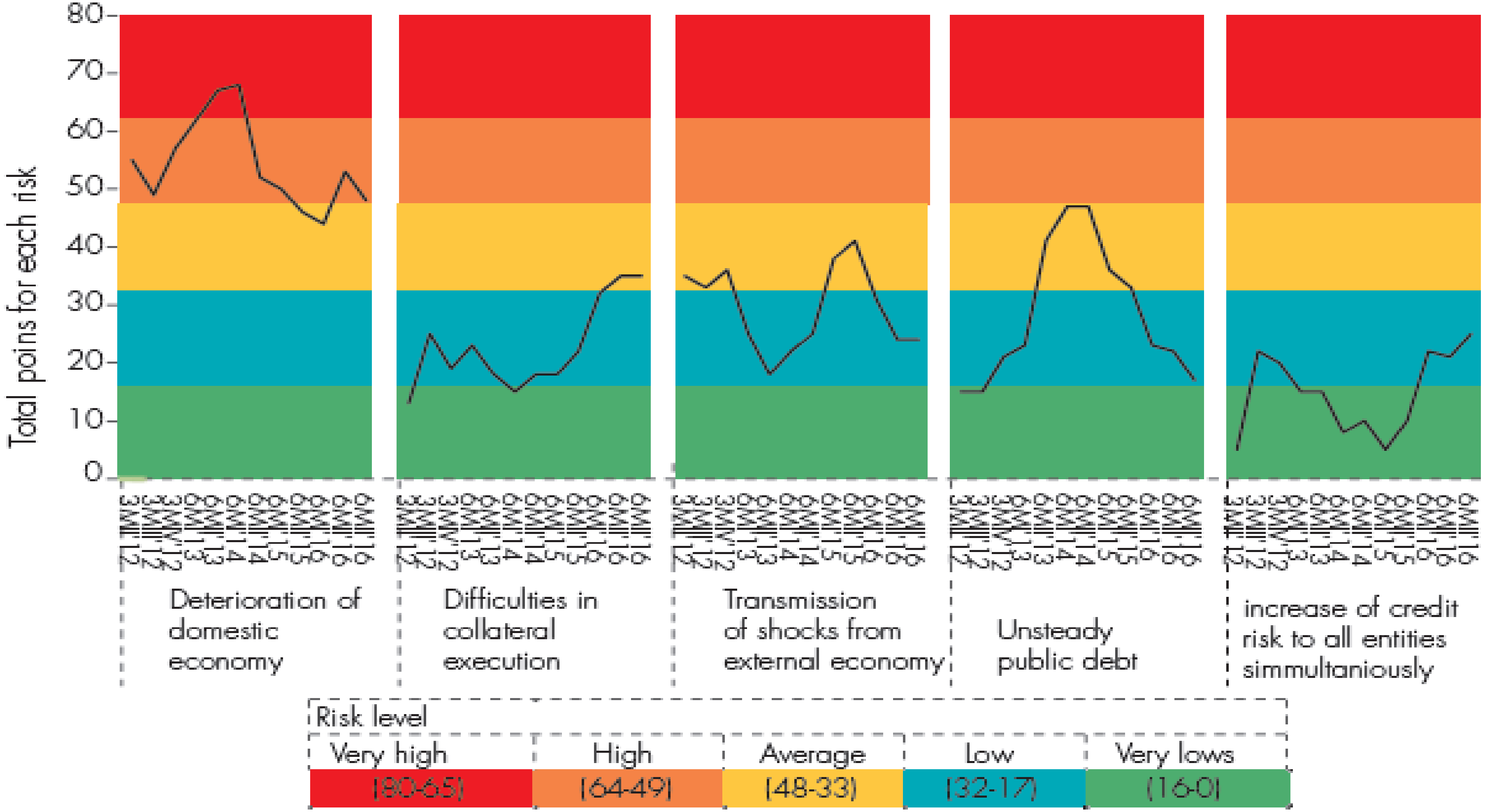
- Cash flow-based liquidity stress tests using maturity buckets in domestic (LEK) and foreign currencies (USD, EUR)
- Reverse liquidity sensitivity test in domestic and foreign currencies

bi-annual

16 banks

Zooming in: Other tools for monitoring systemic risk

Chart 1.4 Banks' assessment of main systemic risks



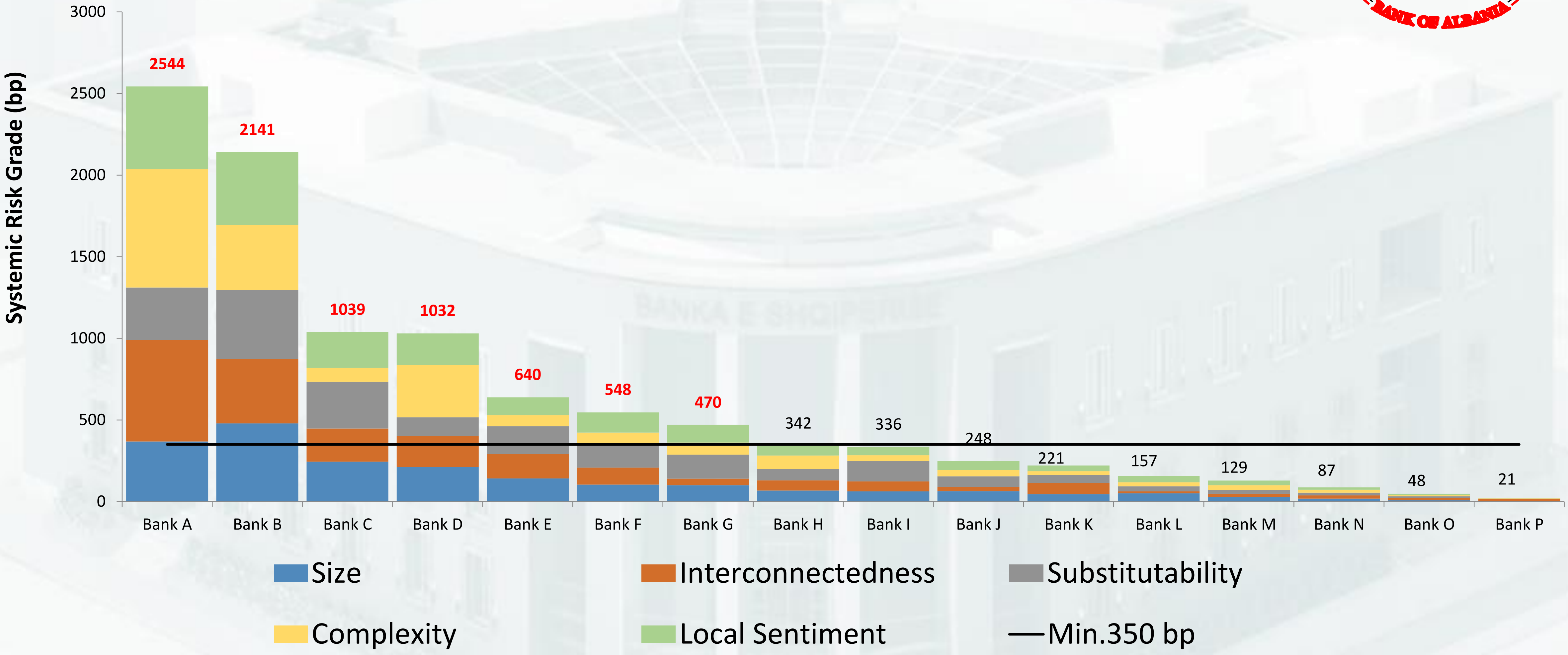
Source: Bank of Albania, Financial Stability Department.

Zooming in: Identifying Systemically Important banks

- Based on EBA Guideline on “Criteria for the assessment of O-SIIs” (2014)

Criteria and the relevant Weights	Individual Indicators	
	Indicators	Weight
SIZE 20%	-Total assets (to residents)	20%
INTERCONNECTEDNESS 20%	- Intra-financial system assets	9.6%
	- Intra-financial system liabilities	10.4%
SUBSTITUTABILITY 20%	-Loans to households	9.2%
	-Loans to non-financial corporates	10.8%
COMPLEXITY 20%	- Investment securities	5.4%
	- Marketable securities	4.7%
	- Claims on non-residents	4.1%
	- Liabilities to non-residents	4.6%
	-Number of branches (territorial extension)	1.1%
LOCAL SENSITIVITY 20%	- Households deposits	20%

Zooming in: Systemic banks in Albania



*Bank with SRG > 350 basis points

Weights within each criteria were calculated by entropy method

III. Macro prudential Measures and Policies Tools

Establishing macroprudential policy tools , Operationalising the use of tools.

“translating the assessment of systemic risks to policy action to contain these risks”*

- Determining the set of indicators for each component of systemic risk (as identified by ESRB), along with appropriate thresholds, for triggering the use of macro-prudential instruments;
- Determining the financial cycle in Albania, which would then allow for conceptualizing the use of countercyclical capital buffer- first draft presented in this Conference
- Analyzing the current practice of banks with the use of LTV/DTI measures, and conceptualizing the use of such measures for macro-prudential policy purposes;
- Identifying a methodology for applying a systemic risk buffer for systemic banks in Albania;
- Providing a conversion matrix for adopting the capital buffers as identified in the CRD IV;

III. Macro prudential Measures and Policies Tools

Developing toolkit (work in progress)

Leading indicators-time dimension of systemic risk:
Identifying a set of reliable indicators that can serve as “predictors” of possible banking crisis

3 criteria for selecting the leading indicators (Drehmann and Juselius ,2013):

- *timing* -a good leading indicator should signal ahead in time enough for the policymakers to take preventive measures (at least 2-3 years before the crisis)

- *stability* -the indicator should be consistent in issuing signals and not fluctuate from one period to another inducing uncertainty.

- *interpretation* -signals that are difficult to interpret by policymakers are likely to be ignored.

Zooming in: **Macroprudential instruments***

	Time dimension (procyclicality)	Cross Sectoral Dimension (systemic risk)
Capital	• **Countercyclical capital buffer***	• **Capital buffer for systemically important banks***
Credit	• Credit growth cap • LTI and DSR cap • Dynamic Provisioning • Dynamic leverage ratio	• **Restrictions on large exposures*** • FX lending cap • Currency mismatch ceiling
Liquidity	• Required reserves* • Liquidity indicators*	
Structural		• **Resolution for systemically significant banks*** • Transparency

*** Work in progress/already in place**

Timeline

Fin Stab Dept

the Advisory Committee on Fin.Stab.

The Financial Stability Advisory Group

2006

Limits on credit growth

Limits on LTV and DTI

2007

2008

Higher capital requirements for credit in Fx

Stronger definiton of liquid assets

2012

Stress test: Bottom up, top down, liquidity

2013

Set of countercyclical measures of credit growth

2014-2015

Systemic Banks identification

2017

De euroization package

Full set of macroprudential instruments

forward

IV. The way forward

- Define a full set of macro prudential instruments :

- Identify the signaling power of the “potential” intermediate targets of macroprudential policy

- Identify the threshold level for each individual intermediate target, to signal the activation of the macroprudential tool/instrument.

- Focus on the forward looking framework of each objective of the macroprudential objective (develop forecasting tools) keeping in mind that:

  “the financial (in)stability paradox: a system is most vulnerable when it looks most robust!”*(FRAIT, CNB)*

IV. Key takeaways

- Successful programs requires:

- ➢ Evaluating effectiveness (ex post perspective)
- ➢ Improving the information base for macroprudential policy: Data gaps, legal power
- ➢ Communication of Macroprudential policy and Transparency

Covers:

- The institutional framework on macroprudential policy;
- The assessment of systemic risk;
- The use of macroprudential instruments;

Through:

- periodic reports, presentations, interviews, etc. The main platform is website.

- ➢ Strategic planning and foresight
- ➢ Strong recipient ownership and institutional culture/ training

Thank you!