



NATIONAL BANK OF ROMANIA

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Romania's approach to the implementation of macroprudential capital buffers

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Note: The opinions expressed in this presentation are those of the author and do not necessarily reflect the views of the National Bank of Romania

Agenda

I) Capital Buffers Implementation

- Capital Conservation Buffer
- Countercyclical Capital Buffer
- O-SII Buffer
- Systemic Risk Buffer

II) Buffer Aggregation and Impact on Credit Growth Strategy

- Impact of buffers on banks' financing plans
- Early warning of excessive credit growth

I) Capital Buffers Implementation

Capital Conservation Buffer

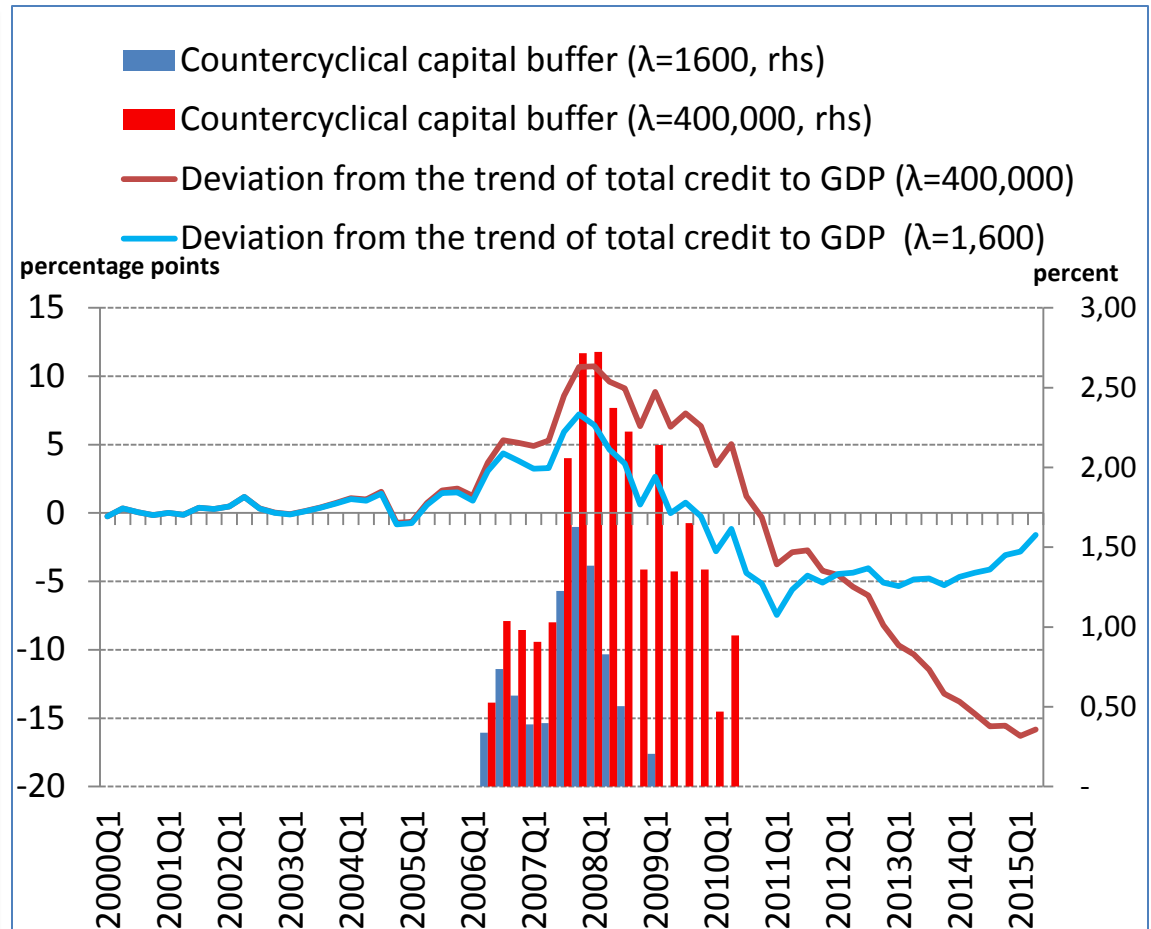
- CET1 – 2.5 percent of the total RWA
- Implementation decision to be taken in December 2015
- NBR proposal: accelerated implementation starting
January 1st 2016

I) Capital Buffers Implementation

Countercyclical Capital Buffer

(1)

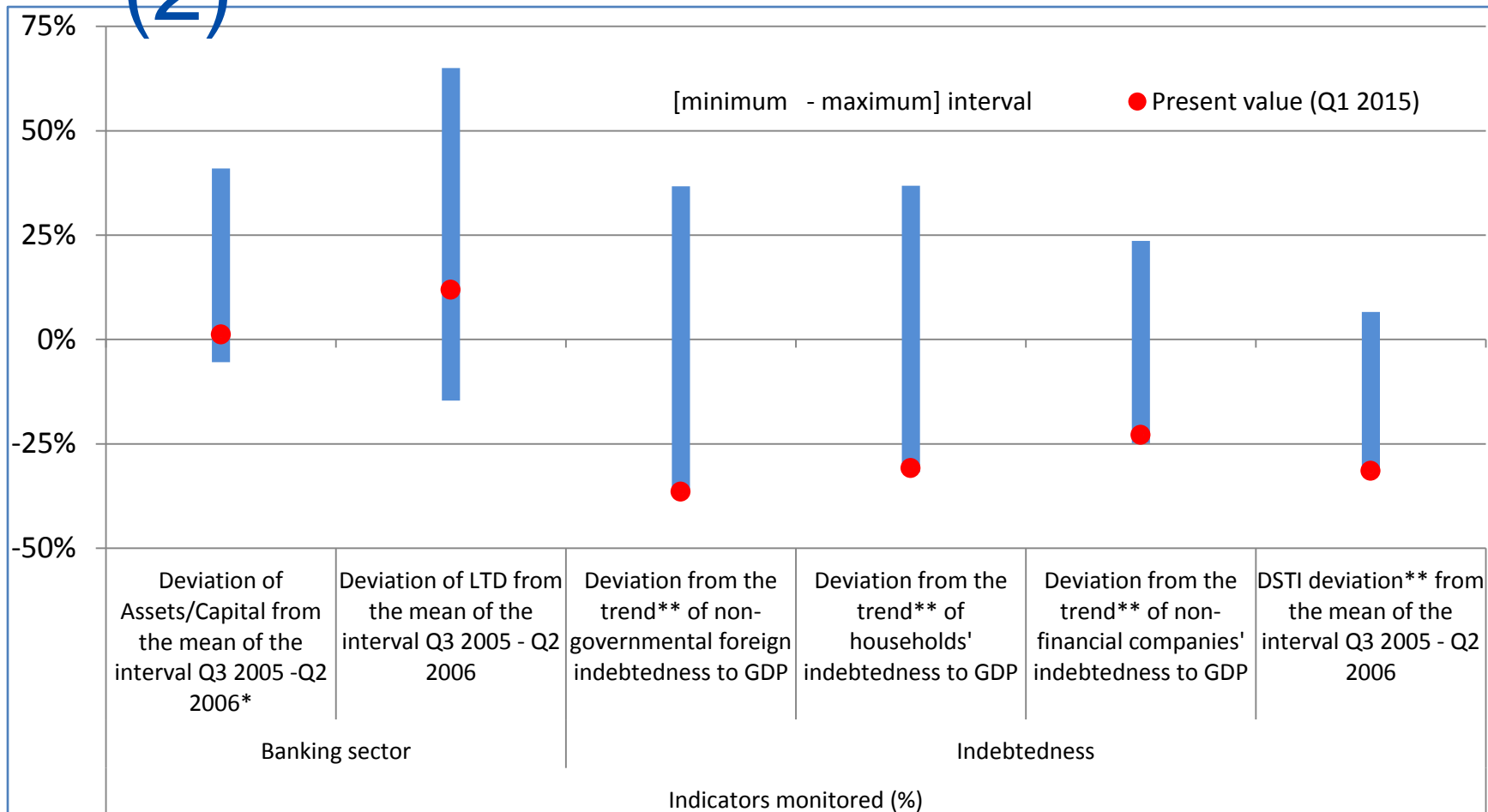
- Results using the credit - to GDP gap indicator signals rising risks starting June 2006 => CCB application starting June 2007, maintained for 3y
- Structural analysis – excessive credit growth signal determined by both non-financial companies and population indebtedness



I) Capital Buffers Implementation

Countercyclical Capital Buffer

(2)



I) Capital Buffers Implementation

O-SII Buffer (1)

- NBR - implemented the EBA Guidelines on the criteria to determine the conditions of application of Article 131(3) of Directive 2013/36/EU (CRD) in relation to the assessment of other systemically important institutions (O-SIIs)

- Criteria for determining the O-SII on a national level
 - ❖ **Phase I:** Score based on the mandatory indicators in the EBA guidelines - banks with score higher than 350 - automatically flagged as O-SII

 - ❖ **Phase II:** Supplementary indicators, reflecting the particularities of the national banking system, chosen by the NCA from the list provided by the EBA.

I) Capital Buffers Implementation

O-SII Buffer (2)

Phase II indicators

- Contribution of credit institution to the real economy financing
- Contribution of credit institution to financial intermediation
- Relevance of the credit institution in respect to the interbank market and the extent of a possible contagion of other banks in case of default, through both direct exposures and feedback effects from the real sector;
- Assessment of systemically important institutions in the payment system ReGIS;
- Evaluation of effects caused by credit institutions on the government securities market;
- Contagion vulnerability from the parent to subsidiary banks through the common lender channel (capital country origin)

I) Capital Buffers Implementation

O-SII Buffer (3)

Buffer levels

- Maximum(1% of RWA, G-SII or O-SII buffer level applicable by the banking group on a consolidated level) for subsidiaries of foreign banking groups

- 2% of RWA for domestic institutions

Analysis frequency

- Quarterly analysis for determining O-SII -> 8 O-SII banks
- Annual revision of O-SII buffer level

I) Capital Buffers Implementation

Systemic Risk Buffer(1)

- No official decision on the necessity to activate and the levels of SRB
- The most suitable methodology for Romania still under research

Alternative methodologies published to date

- Bank of Estonia approach
- Czech National Bank approach

I) Capital Buffers Implementation

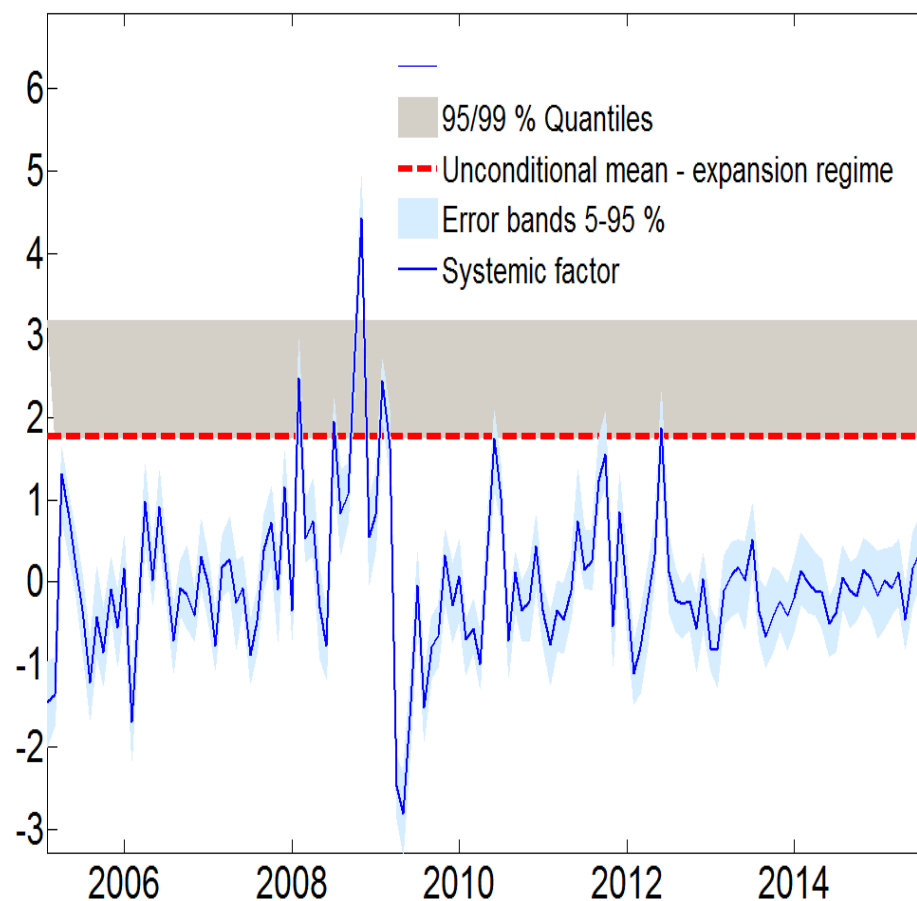
Systemic Risk Buffer(2)

Bank of Estonia approach adaptation

Systemic Risk Indicator

- Estimated using a **Dynamic Factor Model (DFM)**
- Contains 9 macroeconomic and financial variables (IIP, NPL rate, CDS, credit growth and others)
- Higher level = increased systemic risk

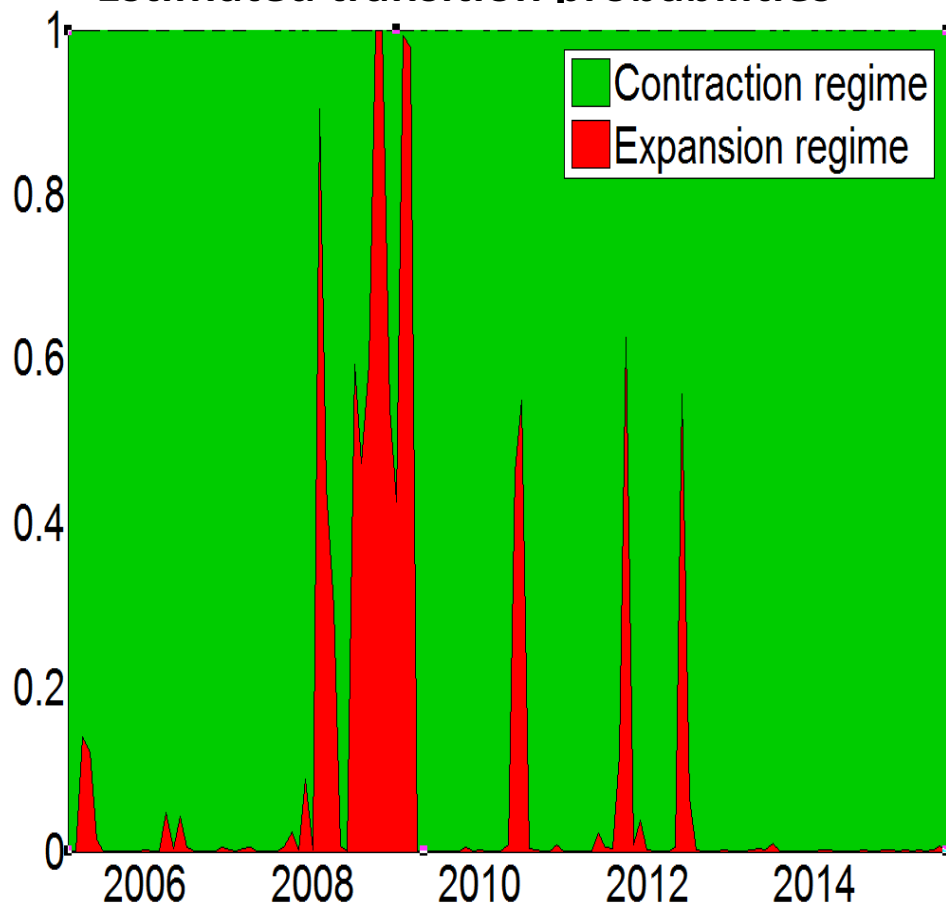
Factorial Systemic Risk Indicator



I) Capital Buffers Implementation

Systemic Risk Buffer(3)

Estimated transition probabilities



➤ Estimated **transition probability** via Markov Switching Model

➤ Identifies high systemic risk periods (*red*) and low systemic risk regimes (*green*)

➤ Significant impact of the financial crisis

I) Capital Buffers Implementation

Systemic Risk Buffer (4)

Czech National Bank approach adaptation

Cost to society of a bank failing should be the same for all banks => probability of default of each bank based on reference bank

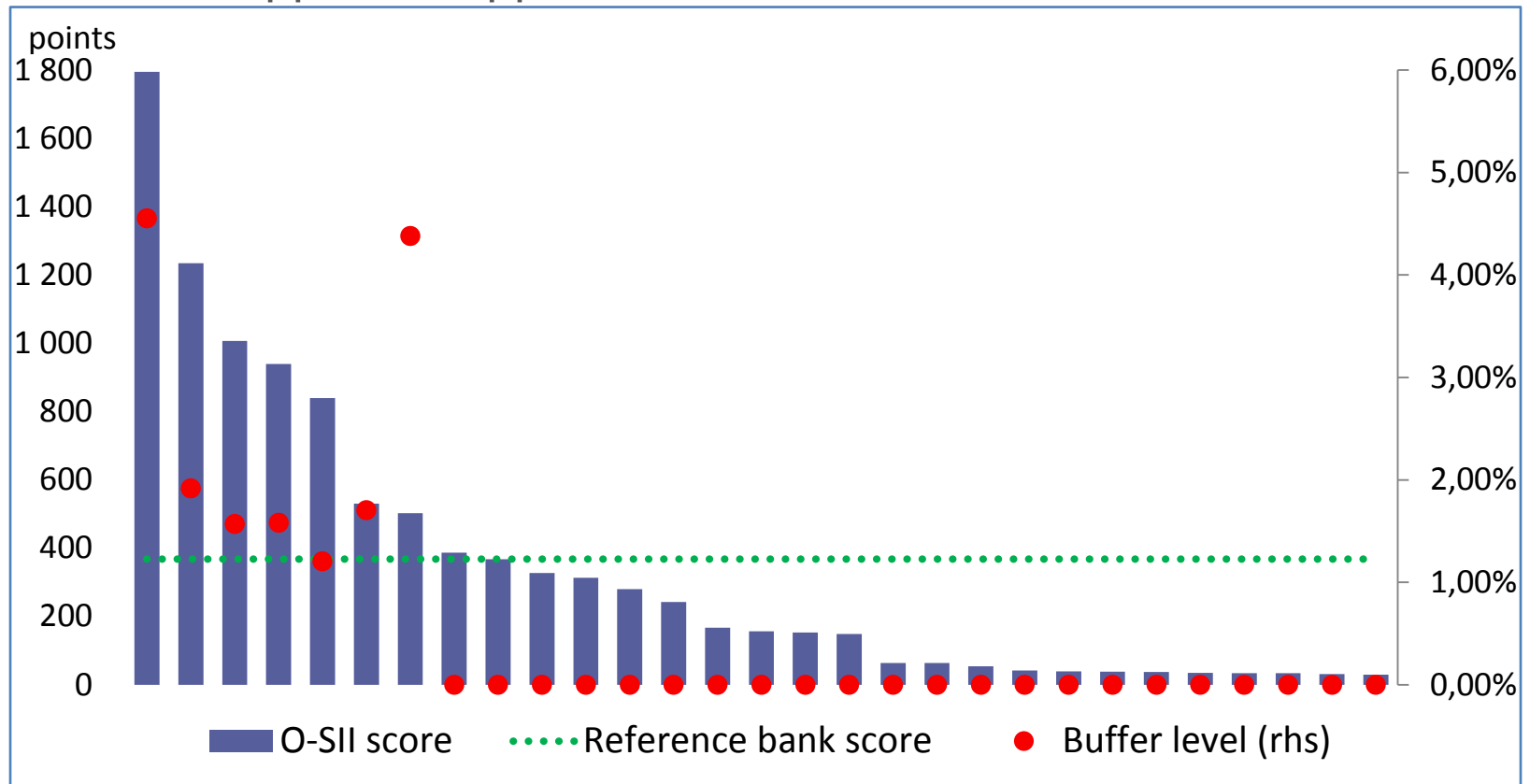
$$P[k(sb)] * C(sb) = P[k(Ref)] * C(Ref)$$
$$P[K(sb)] = P(RORWA \leq -2.5\%)$$

- Reference bank – O-SII bank with lowest score
- Quarterly RORWA data for O-SII banks (2004-2015)
- Proxy for cost to society ratio – O-SII score

I) Capital Buffers Implementation

Systemic Risk Buffer(5)

CNB approach application to Romanian banks - results



*banks with O-SII score over 30

II) Capital buffers aggregation and credit growth strategy

Impact of buffers on banks' financing plans (1)

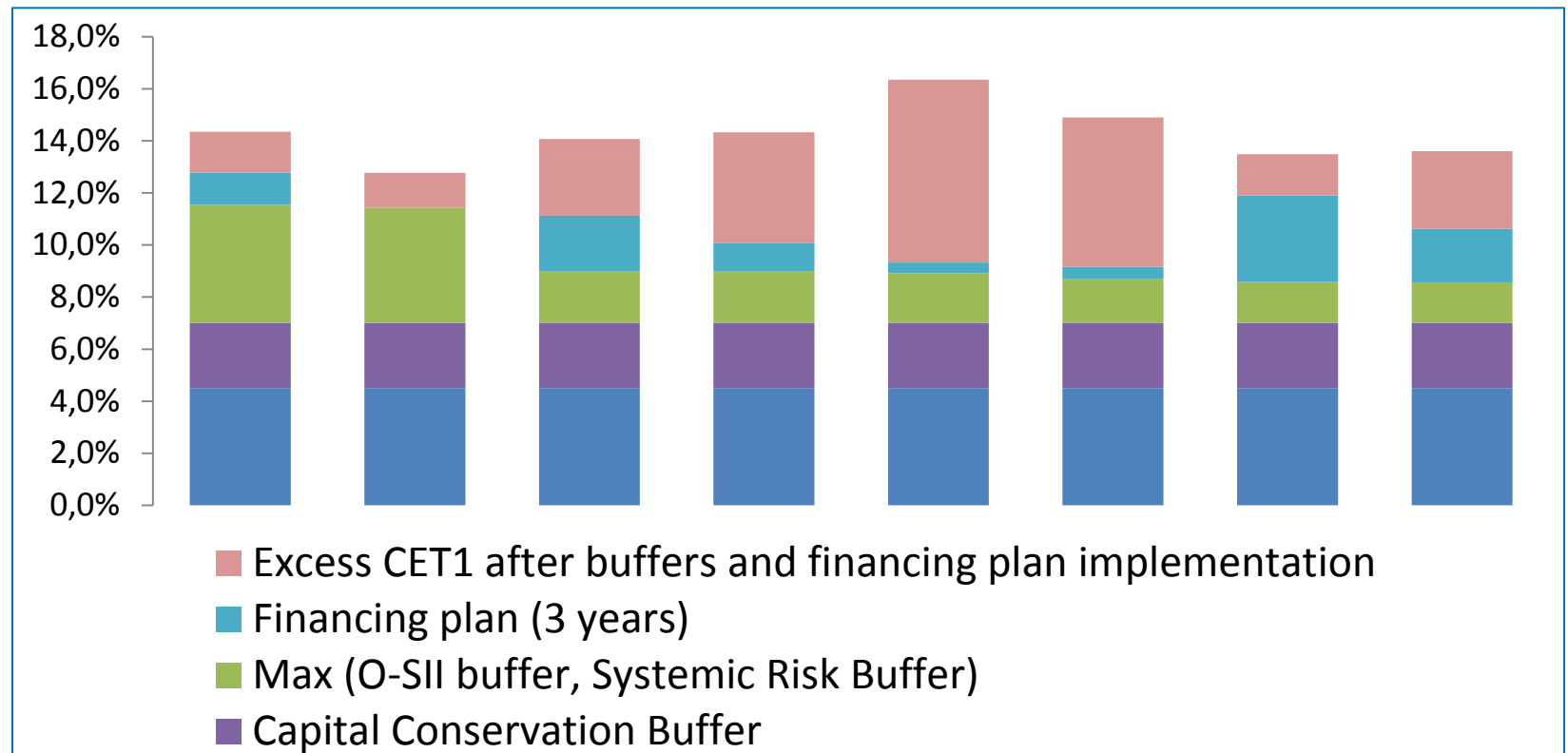
Methodology to implement the aggregate buffer level without hindering bank credit growth strategy

- ❖ Compare excess capital level available for each bank after aggregate buffer implementation with reported financing strategy of each bank
- ❖ If buffer level too large-> allow for a deduction from SRB level to mitigate the credit growth strategy and buffer level

II) Capital buffers aggregation and credit growth strategy

Impact of buffers on banks' financing plans (2)

Selection of credit institution for which the SRB would apply under CNB approach



II) Capital buffers aggregation and credit growth strategy

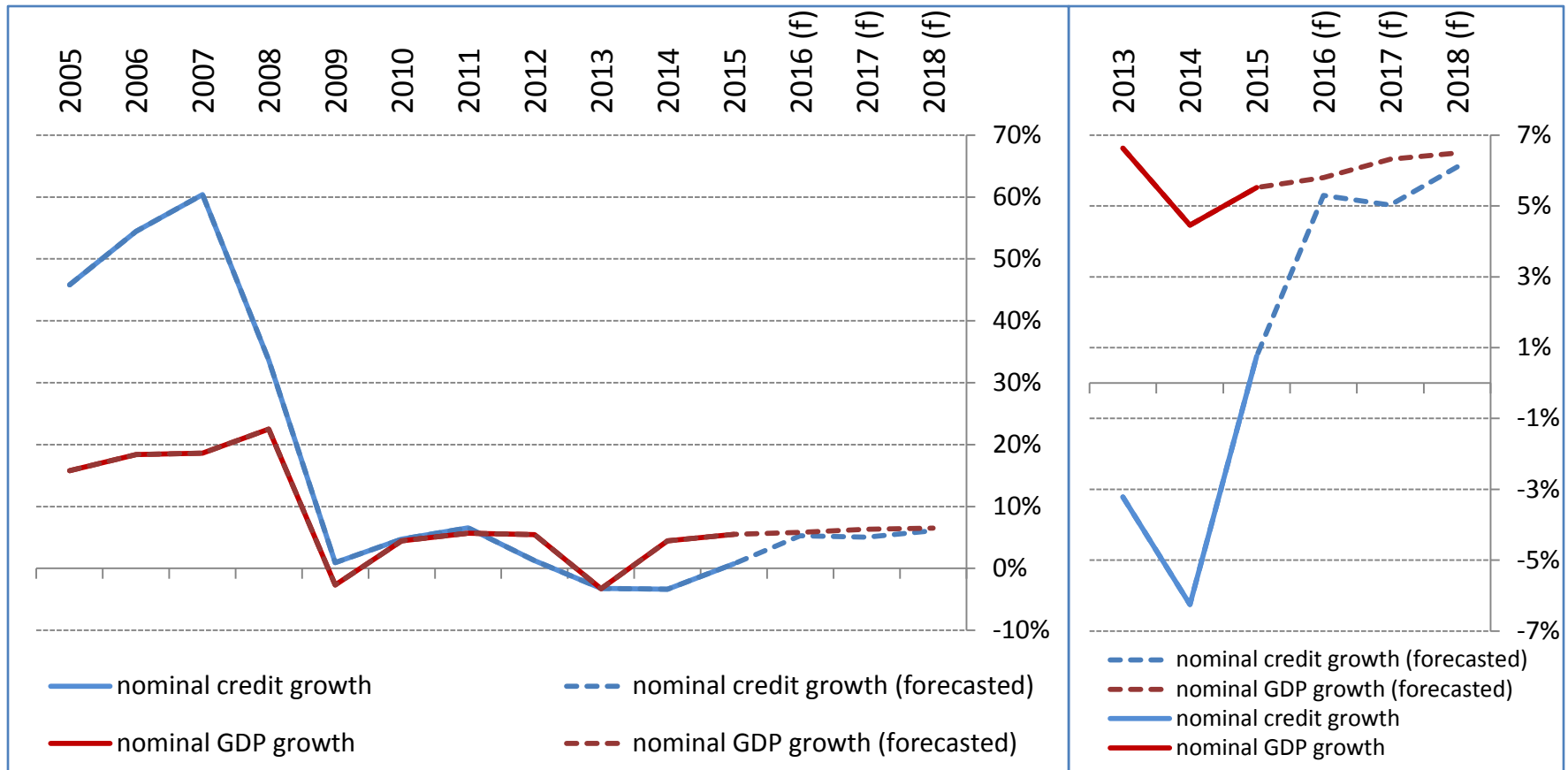
Early warning of excessive credit growth(1)

- Comparison of extrapolated, system level aggregate financing plans with forecasted GDP growth
- If credit growth too high -> early warning -> may require activation of CCB
- Results – Nominal estimated credit growth for the next 3y under nominal estimated GDP growth

II) Capital buffers aggregation and credit growth strategy

Early warning of excessive credit growth(2)

Evolution of GDP and credit growth



Conclusions

Buffer	ESRB requirement	Implementation in Romania	Level
Capital Conservation	2.5% of RWA Mandatory full implementation by 2019	Yes - proposed January 1 st 2016	Accelerated 2.5% of RWA
Countercyclical	Up to 2.5% of RWA	No	
O-SII	Up to 2% of RWA	Yes – proposed January 1 st 2016	- Max(1% of RWA, G-SII or O-SII buffer level for banking group on a consolidated level) for subsidiaries of foreign banking groups - 2% - domestic banks
Systemic Risk	Up to 3% of RWA Up to 5% of RWA - with EC approval	TBD	Methodology under further consideration



Thank you!