The different application of the systemic risk buffer of the Capital Requirements Directive IV by the national prudential supervisors throughout Europe. Is there a level playing field?

*Doctoral Summer School, Lepanina, Estonia*

3 August 2016
Topics of the presentation

- Too-Big-To-Fail and Too-Interconnected-To-Fail
- Generic requirements bank capital
- Regime for systemically important institutions
- The collapse of Lehman Brothers: the origin of it all!
- Basel III + SIFI Framework
- Regime for systemically important institutions
- Global Framework Revised Capital Requirements
- Generic requirements plus SIFI Buffers
- European framework constituting SIFI-buffers plus Systemic Risk Buffer
- How do the accumulation rules work for SRB v. SIFI Buffers?
- SRB buffers in Europe
- Final observations

3 August 2016
Too-Big-To-Fail and Too-Interconnected-To-Fail

What Is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?

GEORGE G. KAUFMAN AND KENNETH E. SCOTT

Dangers of Systemic Risk

Both the chain-reaction and the common-shock concepts of systemic risk involve speedy contagion and require some actual or perceived direct or indirect connection among the parties at risk (Kaufman 1994). Banks are connected directly through interbank deposits, loans, and payment-system clearings and indirectly through serving the same or similar deposit or loan markets. In addition, to the extent that banks operate across national borders, they link the countries in which they operate. Thus, an adverse shock that generates losses at one bank large enough to drive it into insolvency may transmit the shock to other banks along the transmission chain. Moreover, adverse shocks in the financial sector appear to be transmitted more rapidly than similar shocks in other sectors. Both theory and evidence suggest that the probability, strength, and breadth of any contagious systemic risk are greater for banking, the larger and more significant is the bank experiencing the initial shock. It follows that the transmission and danger of systemic risk are likely to differ depending on the strength of the initial shock and on the characteristics of the bank initially affected.

Regime for systemically important institutions

The main concepts driving the specific regime for systemically important institutions are based on the hypothesis that:

- if a bank/financial institution is “Too Big” in itself it represents the risk that its failure will result in a systemic reaction (contagion risk other banks, whether these other banks are solvent or not);
- if a bank is “Too Interconnected” with other banks or financial institution, this results in an increased risk of cascade effects;
- if a bank is operating on a cross border basis, the risks of collapsing is increased in view of the risks of intragroup contagion).
The collapse of Lehman Brothers: the origin of it all!

“This book demonstrates that “contagion”, not “connectedness”, was the most potentially destructive feature of the 2008 financial crisis. Connectedness occurs when financial institutions are directly overexposed to one another and the failure of one institution would therefore directly bankrupt other institutions, resulting in a chain reaction of failures. Contagion is a different phenomenon. It is an indiscriminate run by short-term creditors of financial institutions that can render otherwise solvent institutions insolvent due to the fire sale of assets that are necessary to fund withdrawals and the resulting decline in asset prices triggered by such sales.” (Emphasis, BJO)
Basel III + SIFI Framework

Basel Committee Basel III

Supplementing Basel II of 2004 with:
(1) new qualitative requirements own funds (numerator) and
(2) some additional capital requirements to address derivatives and structured finance positions

Basel Committee Basel III

(1) Countercyclical Buffer
(2) Capital Conservation Buffer
(3) Leverage Ratio
(4) Liquidity Coverage Ratio
(5) Net Stable Funding Ratio

Financial Stability Board + Basel Committee

(1) Methodology for assessing global systemically important banks
(2) Methodology for assessing domestic systemically important banks

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Joosen -- Systemic Risk Buffer
Generic requirements bank capital

*From Basel I to Basel III:*

- **Basel I of 1988** introduced BIS ratio of 8% for ordinary credit risk weighting and counterparty risk (derivatives)
- **Basel 1.5 of 1996** introduced market risk as another risk factor obliging to quantify for risk and hold capital
- **Basel II of 2004** introduced operational risk another risk factor obliging to quantify for risk and hold capital
- **Basel III of 2010** introduced comprehensive rules for the quality of bank regulatory capital, particularly focusing on the numerator of the BIS ratio. Also some additional rules have been introduced for risks concerning derivatives and structured finance positions
Generic requirements bank capital

**BIS-Ratio:**

\[
\frac{\text{Core Equity Tier 1} + \text{Additional Tier 1} + \text{Tier 2}}{\text{RWA Credit} + \text{Counterparty Credit Risk} + \text{Credit Valuation Adjustment} + \text{Market Risk} + \text{Operational Risk}} \geq 8\%
\]

**Definition of capital adequacy ratio**

Measure of the financial strength of a bank, expressed as a ratio of its capital to its assets. The Bank for International Settlements' Basel committee for international banking supervision has drawn up global standards for capital adequacy and also established criteria for the classification of loans in terms of risk. The Basel committee’s target capital adequacy ratios - how much capital a bank should set aside as a proportion of risky assets - are called Basel ratios, or sometimes BIS ratios or just capital ratios.
Generic requirements bank capital

Core Equity Tier 1 + Additional Tier 1 + Tier 2

\[
\frac{RWA\ Credit + Counterparty\ Credit\ Risk + Credit\ Valuation\ Adjustment + Market\ Risk + Operational\ Risk}{\text{BaselIII = 2010}} = \geq 8\%
\]

Basel I = 1988

Basel III = 2010

Basel 1.5 = 1996

Basel II = 2004

“BIS Ratio”
Global framework for revised capital requirements

- **BIS Ratio**
  - Credit, counterparty, market and operational risk
  - Ordinary ratio of 8%

- **Additional Capital Buffers**
  - Countercyclical buffer of maximum 2.5%
  - Capital conservation buffer of maximum 2.5%

- **SIFI Buffer**
  - Global SIFI Buffer of up to 3.5%
  - Domestic SIFI Buffer of up to 2%
### Generic requirements bank capital

#### Position Risk (BIS Ratio)
- CET1: 4.5%
- Additional Tier 1: 1.5%
- Tier 2: 2%

#### Capital Conservation buffer
- 2.5%
- Saving in good times for times of economic downturn

#### Countercyclical buffer
- 2.5%
- Avoidance ‘credit bubbles’

#### SIFI buffer
- 1.0-3.5%
- Systemically important institutions

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3 August 2016
### Table 1

<table>
<thead>
<tr>
<th>Category (and weighting)</th>
<th>Individual indicator</th>
<th>Indicator weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-jurisdictional activity (20%)</td>
<td>Cross-jurisdictional claims</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Cross-jurisdictional liabilities</td>
<td>10%</td>
</tr>
<tr>
<td>Size (20%)</td>
<td>Total exposures as defined for use in the Basel III leverage ratio</td>
<td>20%</td>
</tr>
<tr>
<td>Interconnectedness (20%)</td>
<td>Intra-financial system assets</td>
<td>6.67%</td>
</tr>
<tr>
<td></td>
<td>Intra-financial system liabilities</td>
<td>6.67%</td>
</tr>
<tr>
<td></td>
<td>Securities outstanding</td>
<td>6.67%</td>
</tr>
<tr>
<td>Substitutability/financial institution infrastructure (20%)</td>
<td>Assets under custody</td>
<td>6.67%</td>
</tr>
<tr>
<td></td>
<td>Payments activity</td>
<td>6.67%</td>
</tr>
<tr>
<td></td>
<td>Underwritten transactions in debt and equity markets</td>
<td>6.67%</td>
</tr>
<tr>
<td>Complexity (20%)</td>
<td>Notional amount of over-the-counter (OTC) derivatives</td>
<td>6.67%</td>
</tr>
<tr>
<td></td>
<td>Level 3 assets</td>
<td>6.67%</td>
</tr>
<tr>
<td></td>
<td>Trading and available-for-sale securities</td>
<td>6.67%</td>
</tr>
</tbody>
</table>
### Table 2

<table>
<thead>
<tr>
<th>Bucket</th>
<th>Score range*</th>
<th>Higher loss absorbency requirement (common equity as a percentage of risk-weighted assets)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>D–E</td>
<td>3.5%</td>
</tr>
<tr>
<td>4</td>
<td>C–D</td>
<td>2.5%</td>
</tr>
<tr>
<td>3</td>
<td>B–C</td>
<td>2.0%</td>
</tr>
<tr>
<td>2</td>
<td>A–B</td>
<td>1.5%</td>
</tr>
<tr>
<td>1</td>
<td>Cutoff point–A</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

* All score ranges are equal in size. Scores equal to one of the boundaries are assigned to the higher bucket.
Generic requirements bank capital

Countercyclical Buffer
Capital Conservation Buffer
Tier 2
Add Tier 1
CET1

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Total capital requirements including SIFI surcharge

3 August 2016
Joosen -- Systemic Risk Buffer
The list of other systemically important credit institutions and the requirement for the other systemically important institutions buffer

Passed 30.05.2016 Annex 7

This decree is established on the basis of subsections 86.48 (3) and (7) of the Credit Institutions Act.

§ 1. Other systemically important institutions operating in Estonia in the meaning of section 86.48 of the Credit Institutions Act are:
1) Swedbank AS
2) AS SEB Pank

§ 2. The credit institutions named in § 1 must hold other systemically important institutions buffer at the following rates:
1) Swedbank AS: 2%
2) AS SEB Pank: 2%

§ 3. The other systemically important institutions buffer requirement is applied to the total risk exposure as calculated in accordance with Article 92(3) of the Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (OJ L 176, 27.06.2013, pp 1-337).

§ 4. The other systemically important institutions buffer must be met on an individual and a sub-consolidated basis.

§ 5. The Decree of the Governor of Eesti Pank No 10 of 1 December 2015 “Other Systemically Important Institutions” (RT I, 02.12.2015, 16) is repealed.

§ 6. This decree enters into force on 1 August 2016.

Ardo Hansson
Governor

3 August 2016
European framework constituting SIFI-buffers plus Systemic Risk Buffer

European law of 2013 implements three types of buffers:

- Global Systemically Important Institution Buffer
- Other Systemically Important Institution Buffer
- Systemic Risk Buffer

See article 131 and article 133 Capital Requirements Directive IV (Directive 2013/36/EU)
European framework constituting SIFI-buffers plus Systemic Risk Buffer

Recital (85) of the Capital Requirements Directive IV

(85) Member States should be able to require certain institutions to hold, in addition to a capital conservation buffer and a countercyclical capital buffer, a systemic risk buffer in order to prevent and mitigate long-term non-cyclical systemic or macroprudential risks not covered by Regulation (EU) No 575/2013, where there is a risk of disruption in the financial system with the potential to have serious negative consequences for the financial system and the real economy in a specific Member State. The systemic risk buffer rate should apply to all institutions, or to one or more subsets of those institutions, where the institutions exhibit similar risk profiles in their business activities.
European framework for a Systemic Risk Buffer

Recital (90) of the Capital Requirements Directive IV

(90) Authorities are expected to impose higher own funds requirements on global systemically important institutions (G-SIIs) in order to compensate for the higher risk that G-SIIs represent for the financial system and the potential impact of their failure on taxpayers. Where an authority imposes the systemic risk buffer and the G-SII buffer is applicable, the higher of the two should apply. Where the systemic risk buffer only applies to domestic exposures, it should be cumulative with the G-SII buffer or the buffer relating to other systemically important institutions (O-SIIs) which is applied in accordance with this Directive.
European framework for a Systemic Risk Buffer

The definition of “systemic risk” in the Capital Requirements Directive IV

(10) 'systemic risk' means a risk of disruption in the financial system with the potential to have serious negative consequences for the financial system and the real economy;

The definition of “systemically important institution” in the Capital Requirements Directive IV

(30) 'systemically important institution' means an EU parent institution, an EU parent financial holding company, an EU parent mixed financial holding company or an institution the failure or malfunction of which could lead to systemic risk;
European framework for a Systemic Risk Buffer

Article 133 Capital Requirements Directive IV

Requirement to maintain a systemic risk buffer

1. Each Member State may introduce a systemic risk buffer of Common Equity Tier 1 capital for the financial sector or one or more subsets of that sector, in order to prevent and mitigate long term non-cyclical systemic or macroprudential risks not covered by Regulation (EU) No 575/2013, in the meaning of a risk of disruption in the financial system with the potential to have serious negative consequences to the financial system and the real economy in a specific Member State.
European framework for a Systemic Risk Buffer

- The systemic risk buffer is minimal 1 % and maximum 3% in the ordinary procedure of Member States setting this SRB
- After following an *additional procedure* the Member State may even set the level of the SRB at maximum 5%
- After following an *extraordinary procedure* the Member state may set the level of the SRB to exceed 5%
How do the accumulation rules work for SRB v. SIFI Buffers?

Article 131 Capital Requirements Directive IV

14. Where a group, on a consolidated basis, is subject to the following, the higher buffer shall apply in each case:

(a) a G-SII buffer and an O-SII buffer;

(b) a G-SII buffer, an O-SII buffer and a systemic risk buffer in accordance with Article 133.

15. Notwithstanding paragraph 14, where the systemic risk buffer applies to all exposures located in the Member State that sets that buffer to address the macroprudential risk of that Member State, but does not apply to exposures outside the Member State, that systemic risk buffer shall be cumulative with the O-SII or G-SII buffer that is applied in accordance with this Article.
1. Austria  
2. Bulgaria  
3. Croatia  
4. Czech Republic  
5. Denmark  
6. Estonia  
7. Hungary  
8. Norway  
9. Romania  
10. Slovakia  
11. Sweden  
12. The Netherlands
<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Authority Setting SRB</th>
<th>Percentage</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Finanzmarktaufsicht</td>
<td>2% and 3%</td>
<td>Misaligned incentives</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Българска народна банка(Bulgarian National Bank)</td>
<td>3%</td>
<td>Misaligned incentives</td>
</tr>
<tr>
<td>Croatia</td>
<td>Hrvatska narodna banka</td>
<td>1.5% and 3%</td>
<td>Credit growth and leverage</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Česká národní banka</td>
<td>1%-3%</td>
<td>Misaligned incentives</td>
</tr>
<tr>
<td>Denmark</td>
<td>Erhvervs-og Vækstminister (Minister of Business and Growth)</td>
<td>1%-3%</td>
<td>Misaligned incentives</td>
</tr>
<tr>
<td>Estonia</td>
<td>Eesti Pank</td>
<td>1%</td>
<td>Credit growth and leverage</td>
</tr>
<tr>
<td>Hungary</td>
<td>Magyar Nemzeti Bank</td>
<td>0%-2%</td>
<td>Credit growth and leverage</td>
</tr>
<tr>
<td>Norway</td>
<td>Finansdepartementet (Ministry of Finance)</td>
<td>3%</td>
<td>Exposure concentration</td>
</tr>
<tr>
<td>Romania</td>
<td>Banca Națională a României</td>
<td>Not known yet</td>
<td>Credit growth and leverage</td>
</tr>
<tr>
<td>Slovakia</td>
<td>Národná banka Slovenska</td>
<td>Up to 1%</td>
<td>Misaligned incentives</td>
</tr>
<tr>
<td>Sweden</td>
<td>Finansinspektionen</td>
<td>3%</td>
<td>Misaligned incentives</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>De Nederlandsche Bank</td>
<td>3%</td>
<td>Misaligned incentives</td>
</tr>
</tbody>
</table>
Establishment of the requirement for the systemic risk buffer

Passed 30.05.2016 Annex 6

This decree is established on the basis of subsection 86(1) of the Credit Institutions Act.

§ 1. This decree establishes the systemic risk buffer for credit institutions that have been granted an authorisation in Estonia at the level of 1.0 per cent of the total risk exposure located in Estonia as calculated in accordance with Article 92(3) of the Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (OJ L 176, 27.06.2013, pp 1-337).

§ 2. The systemic risk buffer requirement must be met by each credit institution on an individual and a consolidated basis.

§ 3. The Decree of the Governor of Eesti Pank No 12 of 9 July 2014 “Establishment of the requirement for the systemic risk buffer to a credit institution and the consolidation group of a credit institution” (RT I, 11.07.2014, 29) is repealed.

§ 4. This decree enters into force on 1 August 2016.

Ardo Hämsson
Governor
Eesti Pank

The **reasons** for maintaining the systemic risk buffer lie in the structural vulnerability of the Estonian economy. The risks from the concentration of the banking sector, which were the second reason behind the systemic risk buffer in 2014, will be covered from 1 August 2016 by a new buffer requirement that will apply to systemically important credit institutions.

Estonia’s economy is vulnerable because it is small and open. This lets problems caused by unforeseen negative shocks emerge rapidly and to a greater extent than in many other European countries. The risks are compounded by the high proportion and concentration of exports and investment, the relatively large debt of the non-financial sector in relation to incomes, the comparatively modest level of household financial buffers, and the very bank-centred financial sector. Having sufficient capital on hand can help banks cope with unexpected financial problems.

In order to increase awareness of the structural vulnerabilities in the Estonian economy and to ensure a level playing field, Eesti Pank is requesting the authorities of other member states to apply equivalent additional buffer requirements to the banks that provide banking services in Estonia through branches or directly cross-border for their risk exposure in Estonia.
The O-SII buffer is applied at the consolidated level, which avoids (jurisdictional) shifts of activities within groups due to regulatory arbitrage. Systemic banks may take measures to reduce their systemic importance, possibly including a shift of activities to non-regulated entities. However, due to the phase-in period and the current capital level of Rabobank we expect these incentives to be small. Furthermore, if banks reduce their systemic importance in an orderly manner, this could also be beneficial for financial stability.
Final observations

- There are basically two reasons to impose the systemic risk buffer:
  - Credit growth and leverage
  - Misaligned incentives
- The “misaligned incentives” objective may be applied in instances where the local member state authority considers the systemically relevant institution buffer to be too low, therefore creating a possibility to increase the overall capital buffer with higher percentages;
- Where “credit growth and leverage” is given as a rationale for the SRB, there is often no use of the “countercyclical buffer” to address the underlying problem. Therefore there is a question as to the correct application of the various buffer requirements;
- The manner of application of the SRB and O-SII buffers seems to be arbitrary and not harmonised throughout the EU. A level playing field is therefore missing.
The slides will be available via the Doctoral Summer School