



EUROPEAN CENTRAL BANK

EUROSYSTEM

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New macroprudential institutions, regulations and actions

Goethe University Frankfurt jointly with the
Institut für Bank- und Finanzgeschichte e.V.
and the Research Center SAFE

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All view expressed are those of the speaker and not necessarily those of the ECB.

“Why did nobody notice it?” (2008)



- 1 The financial crisis and policy responses
- 2 Institutional responses
- 3 The ESRB and its macro-prudential powers
- 4 The Single Supervisory Mechanism and its macro-prudential powers
- 5 The Single Resolution Mechanism
- 6 The ECB's role in financial stability
- 7 Concluding remarks

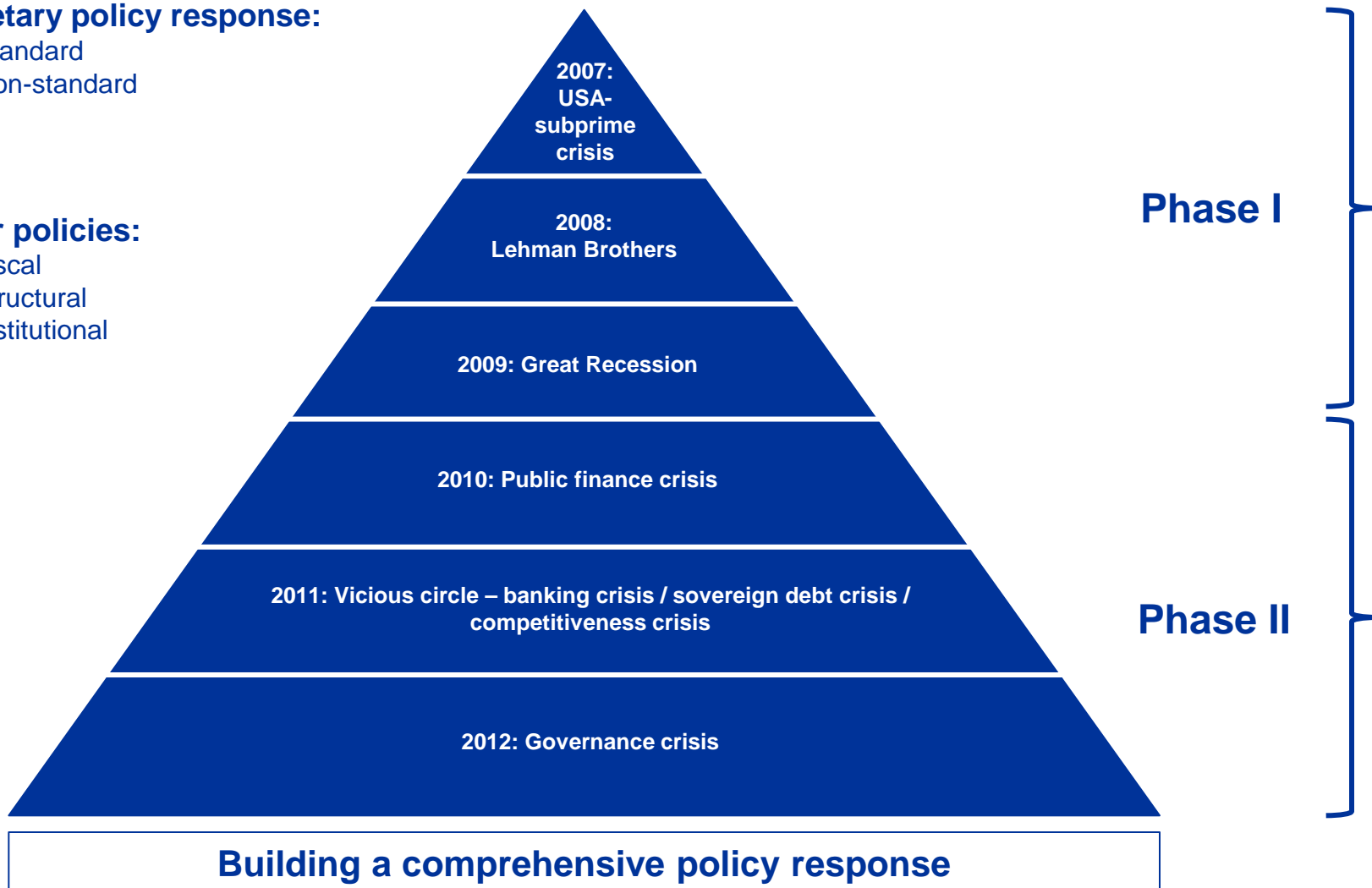
The financial crisis: chronology and policy responses

Monetary policy response:

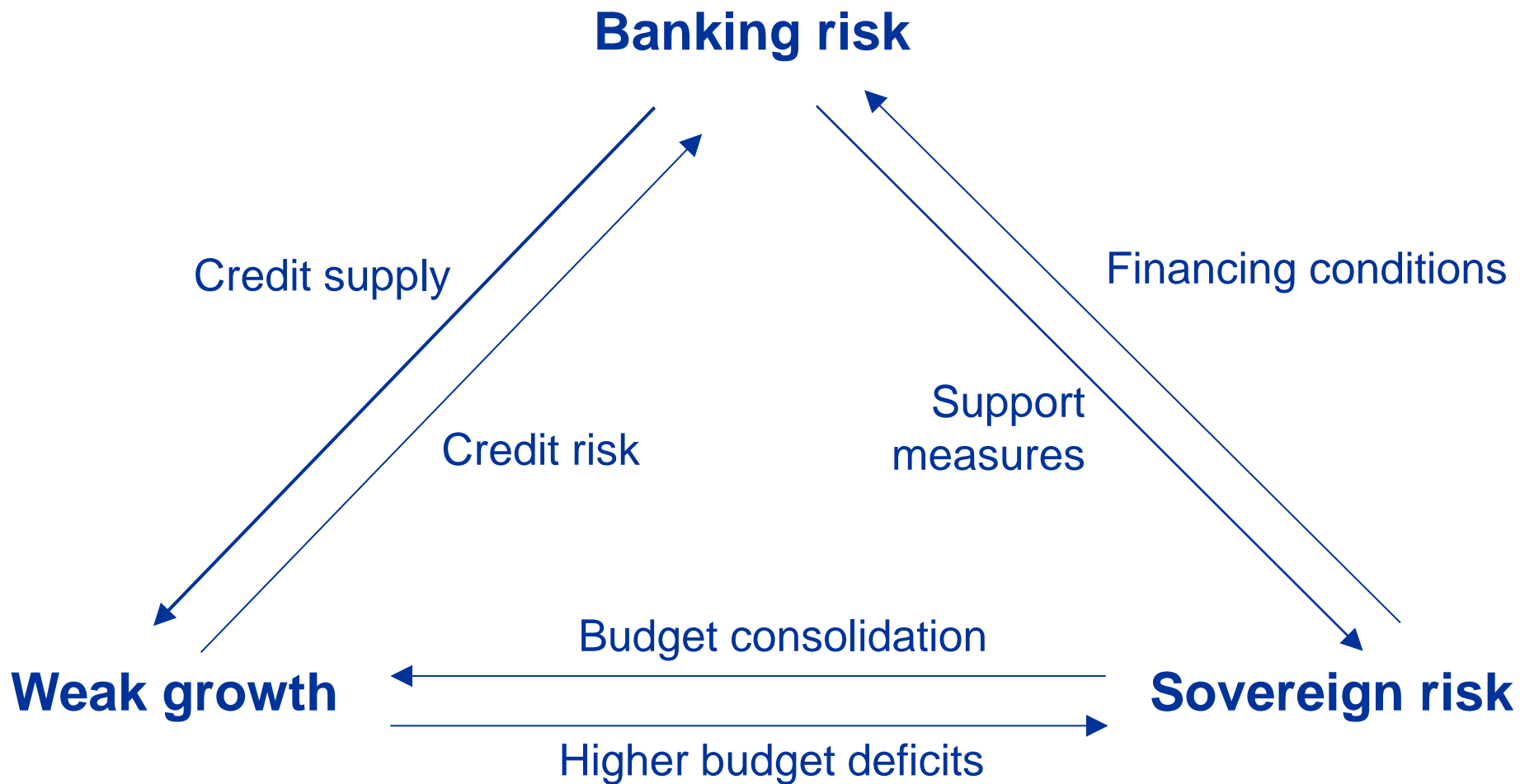
- Standard
- Non-standard

Other policies:

- Fiscal
- Structural
- Institutional



The triple challenge



The G20 launched a comprehensive programme of financial reforms post-crisis to increase the resilience of the global financial system

The Financial Stability Board (FSB) created in 2009 aims at:

- making financial institutions more resilient;
- ending too-big-to-fail (TBTF);

The multifaceted nature of the crisis in Europe

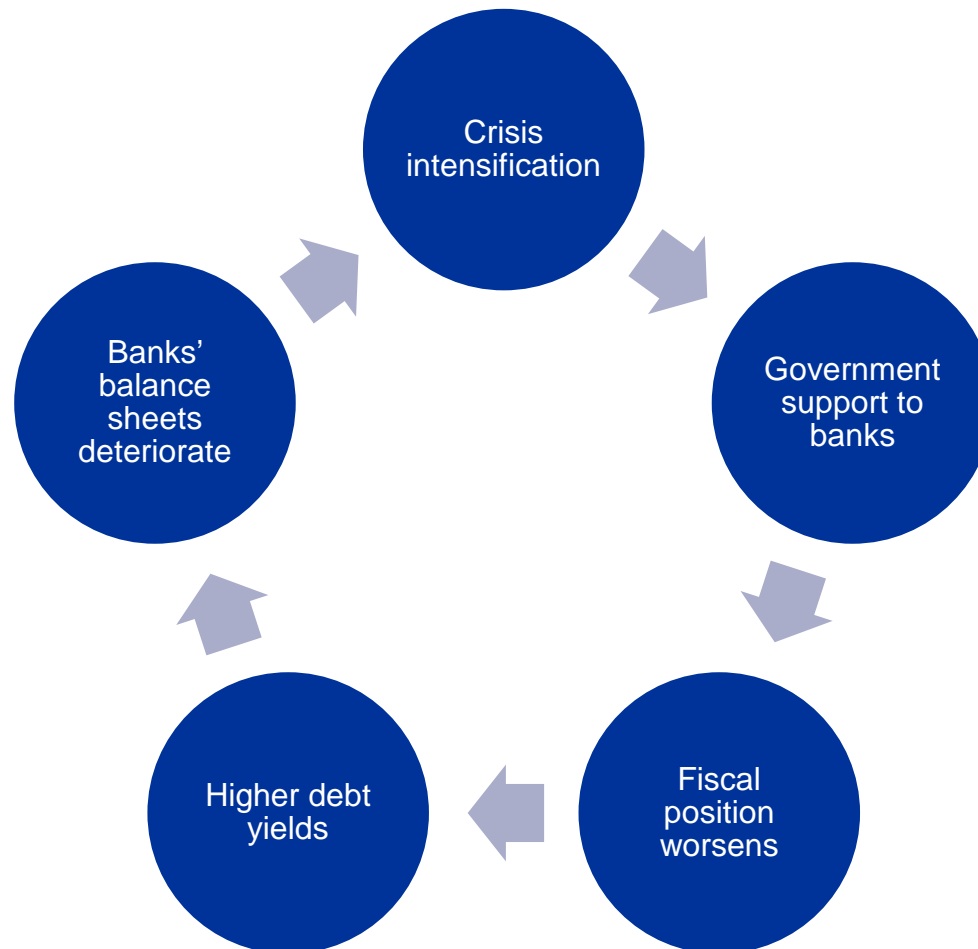
1. Debt crisis (private and sovereign)
2. Banking crisis
3. Competitiveness and growth crisis
4. Political crisis (national & European levels)

Crisis of confidence

No easy or single remedy – Europe faces years of adjustments

Phase II of the financial crisis

Vicious circle which is affecting euro area economies heterogeneously



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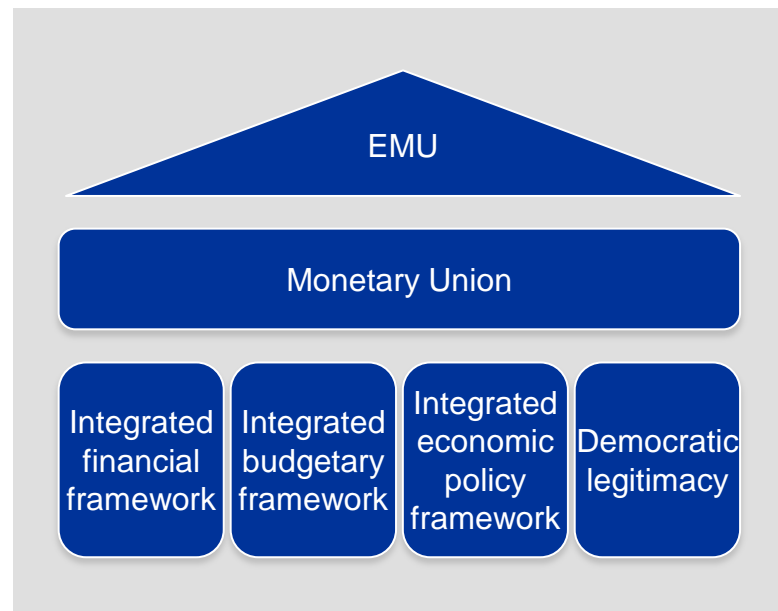
First ideas about EU macro- and micro prudential frameworks

Macro-prudential vision in De Larosière report – DLR (2009)

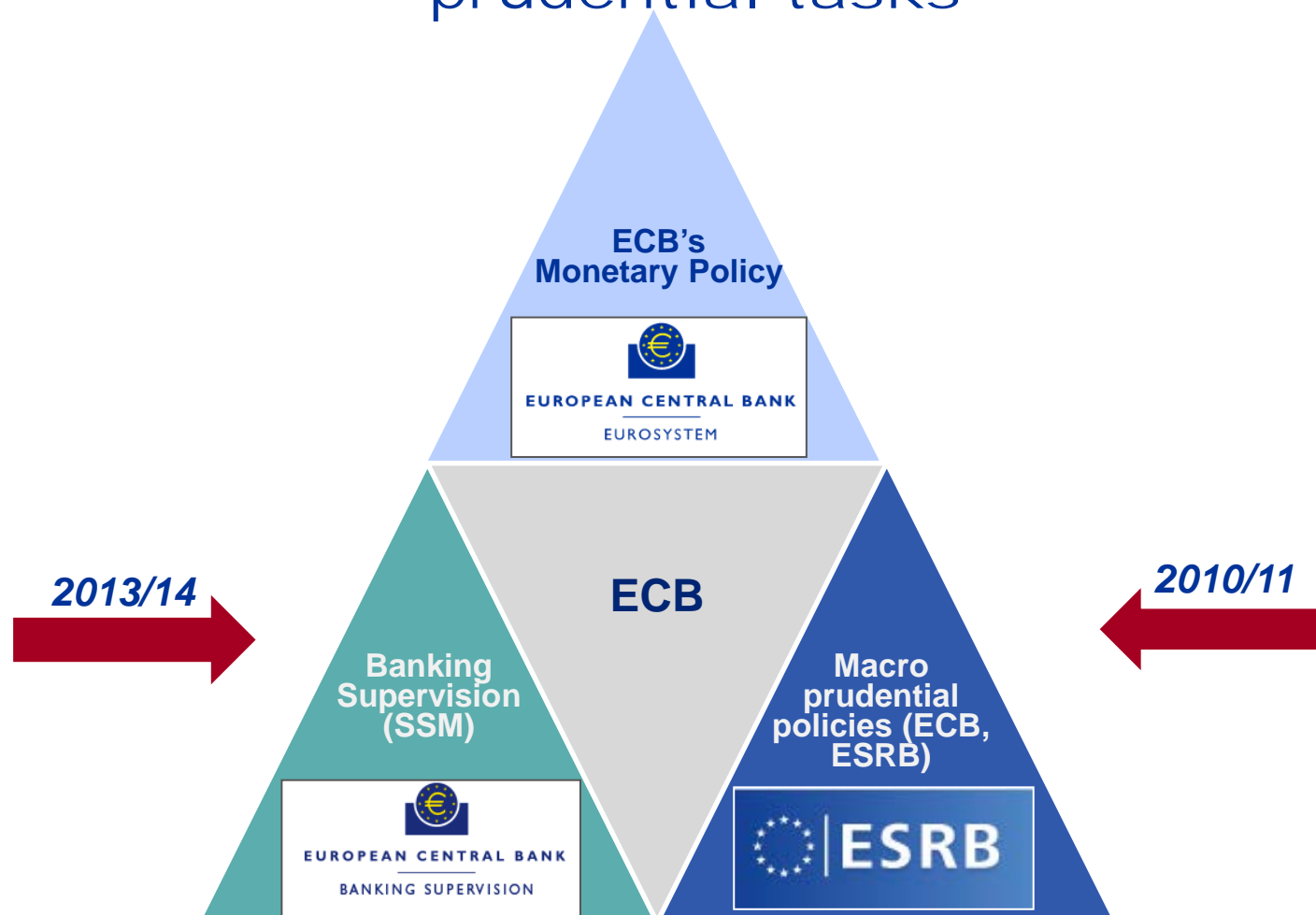
Single Supervisory Mechanism part of the four Presidents' report for a genuine EMU (December 2012)

The DLR outlines the vision of
supervisory reform:

- New body to reinforce the **Macro Prudential Supervision**
- New framework for **EU financial supervision is a European System of Financial Supervisors.**



As part of the response, the ECB has been mandated with new macro-prudential tasks



Crisis and establishment of the EU macro-prudential framework

Phase I
Post Lehman Brother
banks' rescue,
government
guarantees
2008

Phase II
Eurozone
sovereign debt
crisis and
banking
2010

Four presidents'
report
2012

Five presidents'
report
2015

**Setting up of national
macro-prudential
authorities**
Since 2013



**De Larosière
report**
2009

**Creation of the
EFSF
(ESRB/ESAs)**
2010 Dec

**Recommendation
from ESRB to create
national macro-
prudential
authorities**
2011 Dec

**CRD IV/CRR
applies**
Jan 2014

**SSM
operational**
2014 Nov

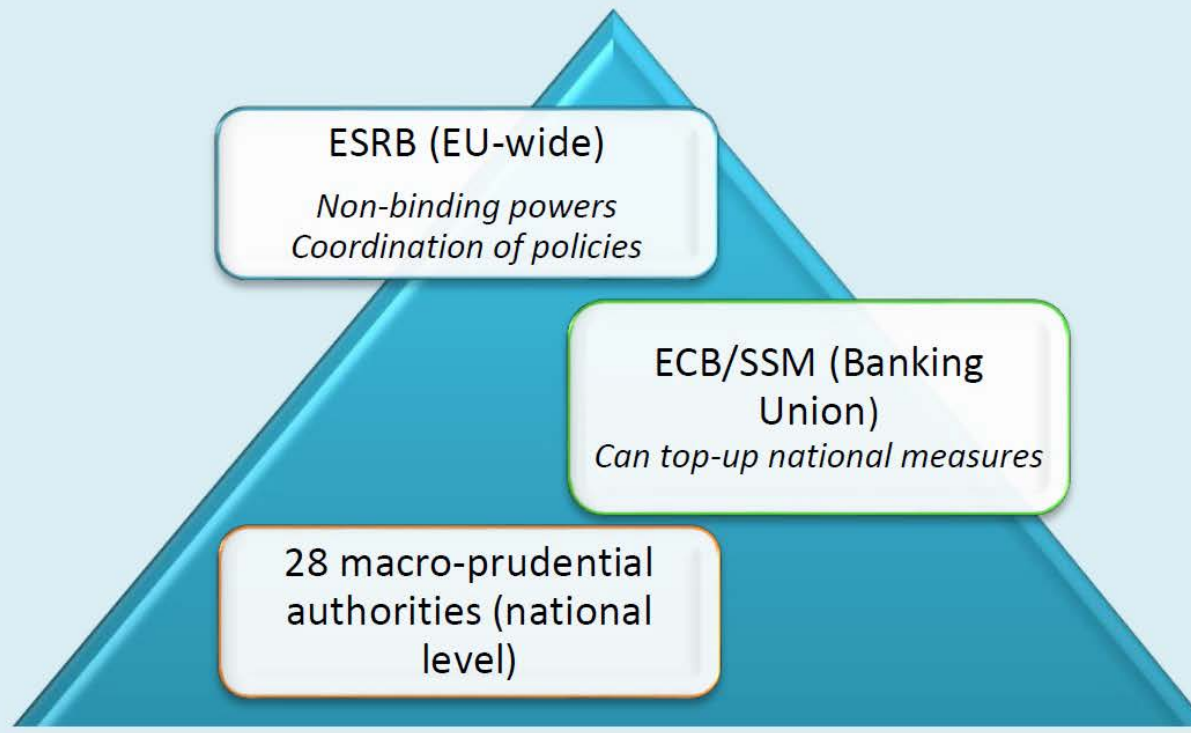
**Review
CRDIV**
Nov 2016

**Review of the
EFSF
ESRB/ESAs**
Sep 2017

SRB/SRM
Jan 2015

After the ESRB issued recommendation to have national macroprudential authorities in every member country in 2012:

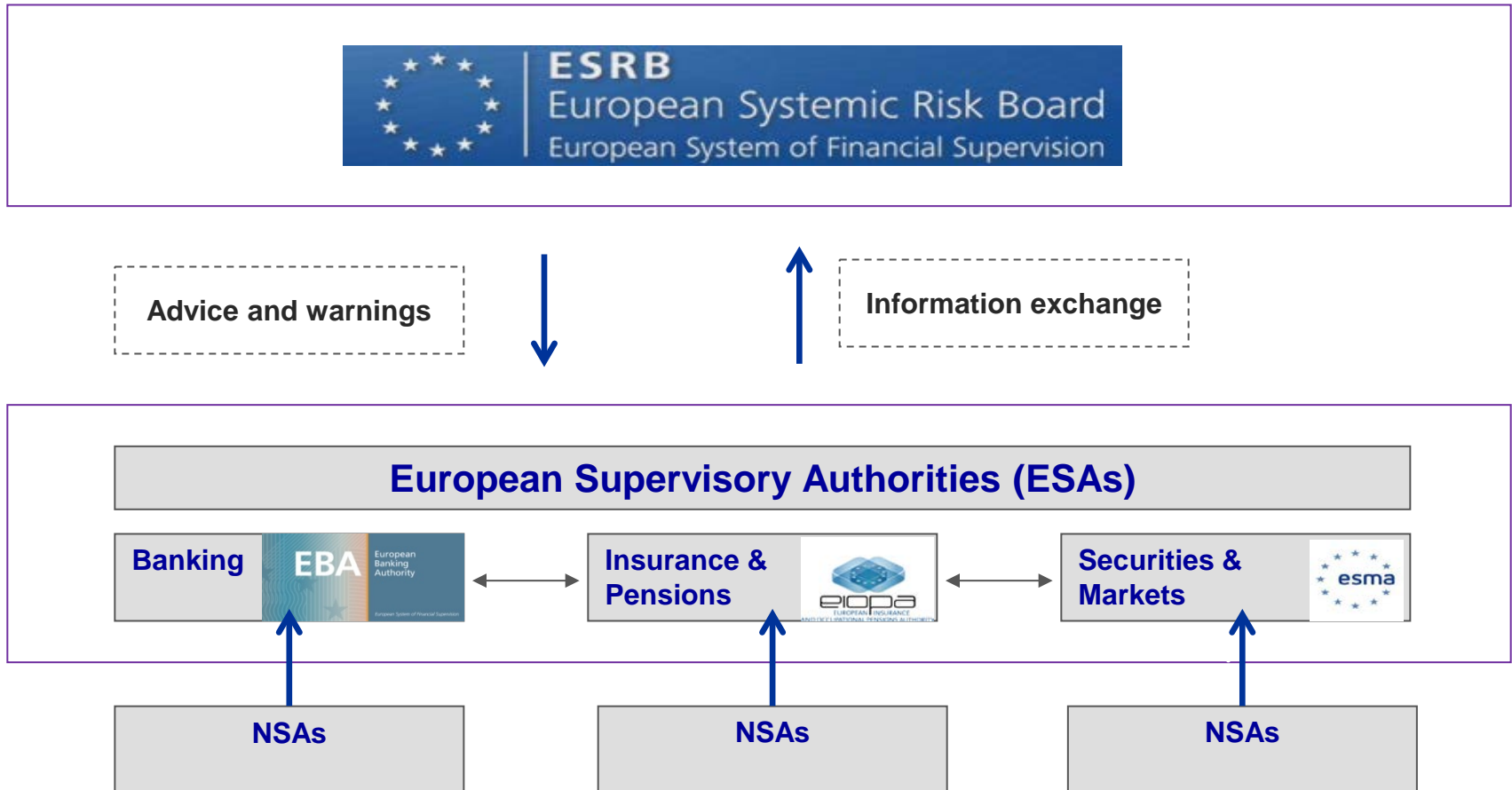
Box 1: EU macro-prudential policy framework



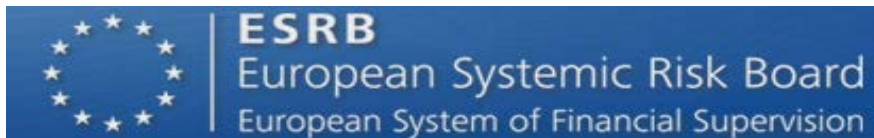
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Initial institutional response to the financial crisis

The New EU Supervisory Framework: European System of Financial Supervision (2010)



The new macro-prudential institution (2010)



- The ESRB is an EU body established in December 2010 with a mandate to oversee risks in the financial system as a whole
- The **ECB provides** analytical, **statistical**, administrative and logistical support to the ESRB
- Legal obligation to define a risk dashboard
- ESRB Risk Dashboard defined in cooperation with the European Supervisory Authorities and the ECB

1st Vice-Chair

**Chair
ECB President**

**2nd Vice-Chair
EBA/ESMA/EIOPA**

Central banks

**ECB President and
Vice-President**

ESCB Governors

3 ESAs Chairs

**Nat. supervisory
authorities high-
level representative**

Supervisors and
regulators



**European
Commission
Member**

EFC President

ATC Chair

**ASC Chair and
2 Vice-Chairs**

Regula-
tor

Min.
Finance

Sub-structures

The ESRB tasks include collecting data, identifying and analysing systemic risks, issuing non-binding warnings and recommendations where appropriate

EU legislation (CRD IV/CRR) has entrusted the ESRB with specific tasks to co-ordinate Member States' macro-prudential policies

Guidance

- On countercyclical capital buffer (Art. 135 CRD)

Opinions

- On systemic risk buffer (Art 133 CRD)
- On flexibility measures (Art 458 CRR)

Recommendations

- On some systemic risk buffers (Art 133 CRD)

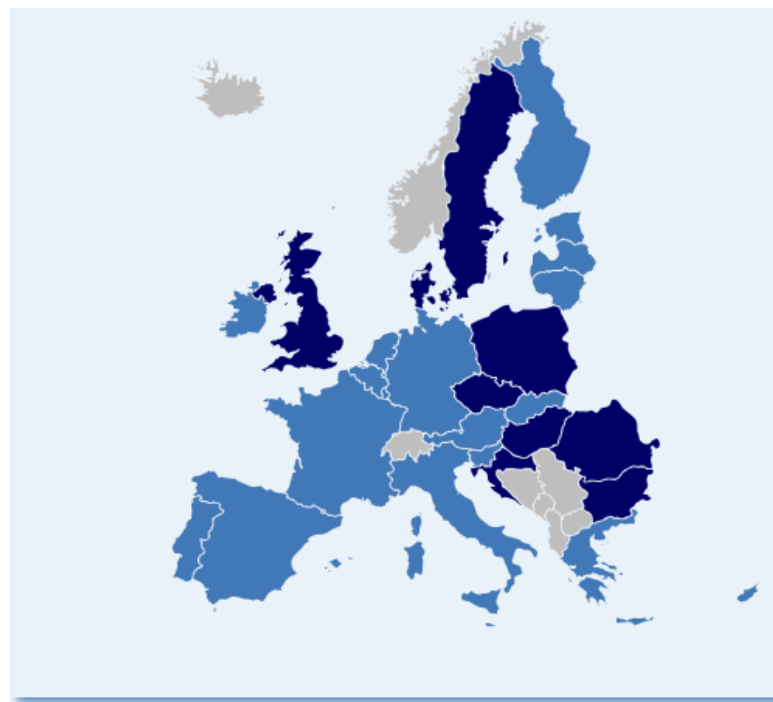
Recommendations published up to now:

- Lending in foreign currencies
- US dollar-denominated funding
- Funding of credit institutions
- Money market funds
- **Macro-prudential mandate of national authorities**
- Intermediate objectives and instruments of macro-prudential policy
- Guidance for setting countercyclical buffer rates
- Recognising and setting countercyclical buffer rates for exposures to third countries
- Assessment of cross-border effects of and voluntary reciprocity for macroprudential policy measures
- Closing real estate data gaps
- Liquidity and leverage risks in investment funds

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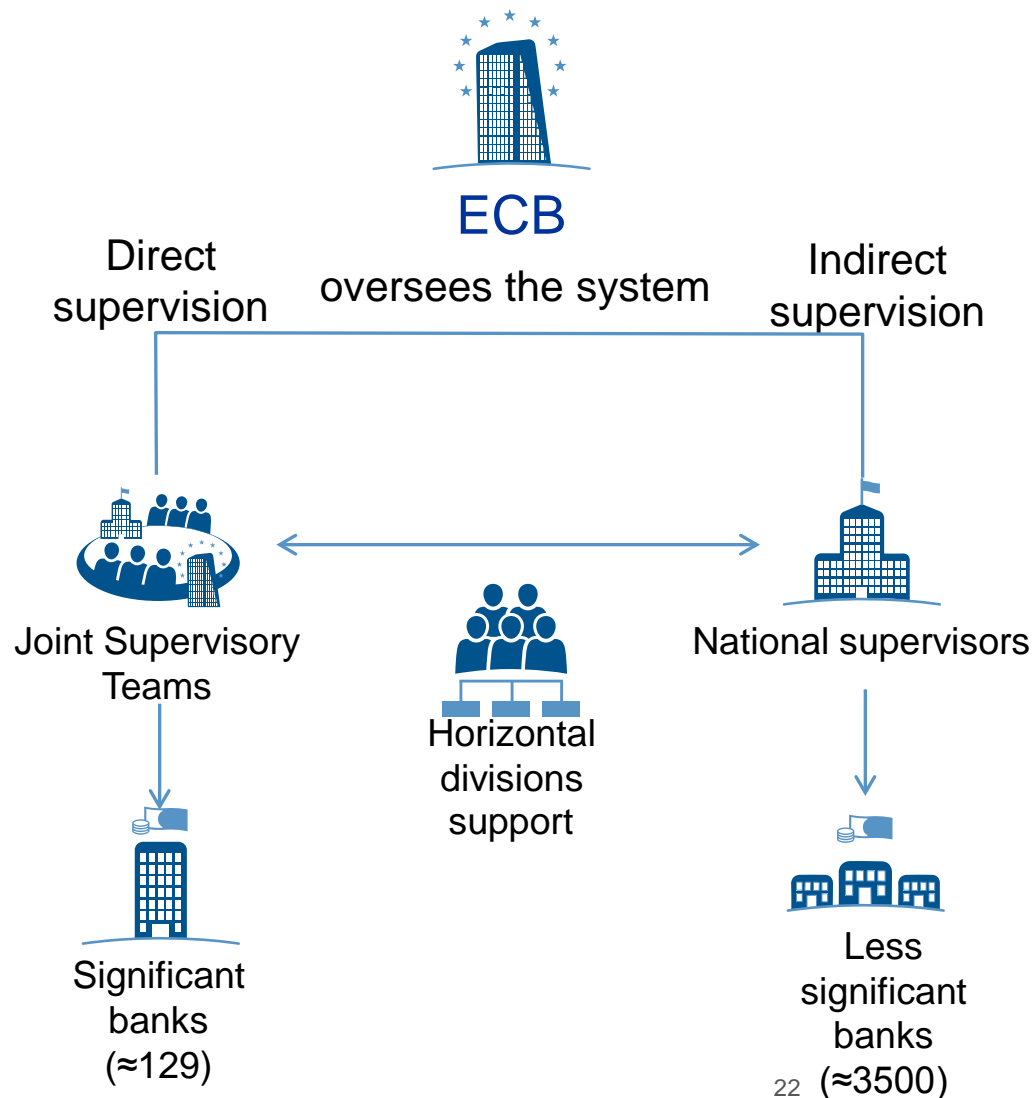
The Single Supervisory Mechanism (SSM)

- Since November 2014 the ECB is the competent supervisory authority for all banks in the euro area, in close cooperation with NCAs
- Non-euro area countries can – voluntarily – join the SSM and enter into close cooperation arrangements



- EU member using the euro
- EU member not using the euro
- Non-EU country

European banking supervision (Single Supervisory Mechanism, SSM)



Significant banks:

- value of total assets of over €30bn
- representing over 20% of a country's GDP/3 largest banks of a country
- or receive direct ESM financing

ECB 'call back right' for non-significant banks

Wide-ranging micro- and macro-prudential powers

Based on common rules and supervisory practices

Open to non-EA EU countries

Separation from monetary policy

The ECB has specific powers in the field of macroprudential policies under the SSM Regulation



Micro-prudential tools

Grant or withdraw bank licences

Authorise acquisitions of qualified holdings

Monitor compliance with all prudential requirements laid down in EU banking rules

Conduct investigations and on-site inspections

Set prudential requirements (own funds, large exposure limits, liquidity, leverage and disclosure, internal governance and controls, “fit and proper tests”)

Carry out supervisory reviews

Impose corrective measures and sanctions



Macro-prudential tools

Define **higher requirements for capital buffers** than applied by national supervisory authorities and **set a buffer rate** if the national supervisor has not done so (“topping up”)

ECB’s Governing Council and Supervisory Board members meet four times a year in the “Macroprudential Forum”

The SSM Regulation assigns macroprudential powers to both the national authorities and the ECB

Macroprudential policy instruments can be distinguished along three lines:

- capital-based measures
- borrower-based measures
- liquidity-based measures

Important aspects:

Timing

Transmission mechanism

Cross-border/cross-sector leakages

Cost-benefit analysis (short-term costs vs. long-term benefits)

Capital-based measures as of 2 January 2018

Country	CCoB	CCyB	The higher of			Combined buffer requirement
			G-SII buffer	O-SII buffer	SRB	
Austria	1.875%	0%		6 banks: 0.5%-1%	13 banks: 0.25%-1%	1.875%-2.875%
Belgium	1.875%	0%		8 banks: 0.75%-1.5%		1.875%-3.375%
Cyprus	1.875%	0%		6 banks: n/a		1.88%
Estonia	2.5%	0%		3 banks: 0.5%-2%	All banks: 1%	3.5%-5.5%
Finland	2.5%	0%		2 banks: 0.5%-2%		2.5%-4.5%
France	1.875%	0%	3 banks: 0.75%-1.5%	6 banks: 0.1875%-1.125%		1.875%-3.375%
Germany	1.875%	0%	1 bank: 1.5%	13 banks: 0.32%-1.32%		1.875%-3.375%
Greece	1.875%	0%		4 banks: n/a		1.875%
Ireland	1.875%	0%		6 banks: n/a		1.875%
Italy	1.875%	0%	1 bank: 0.75%	4 banks: 0%-0.25%		1.875%-2.625%
Latvia	2.5%	0%		6 banks: 0.75%-1%		2.5%-3.5%
Lithuania	2.5%	0%		4 banks: 0.5%-2%		2.5%-4.5%
Luxembourg	2.5%	0%		8 banks: 0.375%-0.75%		2.5%-3.25%
Malta	1.875%	0%		3 banks: 0.375%-1.5%		1.875%-3.375%
Netherlands	1.875%	0%	1 bank: 0.75%	5 banks: 0.75%-1.5%	3 banks: 2.25%	1.875%-4.125%
Portugal	1.875%	0%		6 banks: 0.063%-0.25%		1.875%-2.125%
Slovakia	2.5%	0.5%		5 banks: 0.5%-1%	3 banks: 1%	3%-5%
Slovenia	1.875%	0%		7 banks: n/a		1.875%
Spain	1.875%	0%	1 bank: 0.75%	5 banks: 0.1875%-0.75%		1.875%-2.625%

Source: [Macroprudential measures in countries subject to ECB Banking Supervision and notified to the ECB](#)

Borrower-based instruments

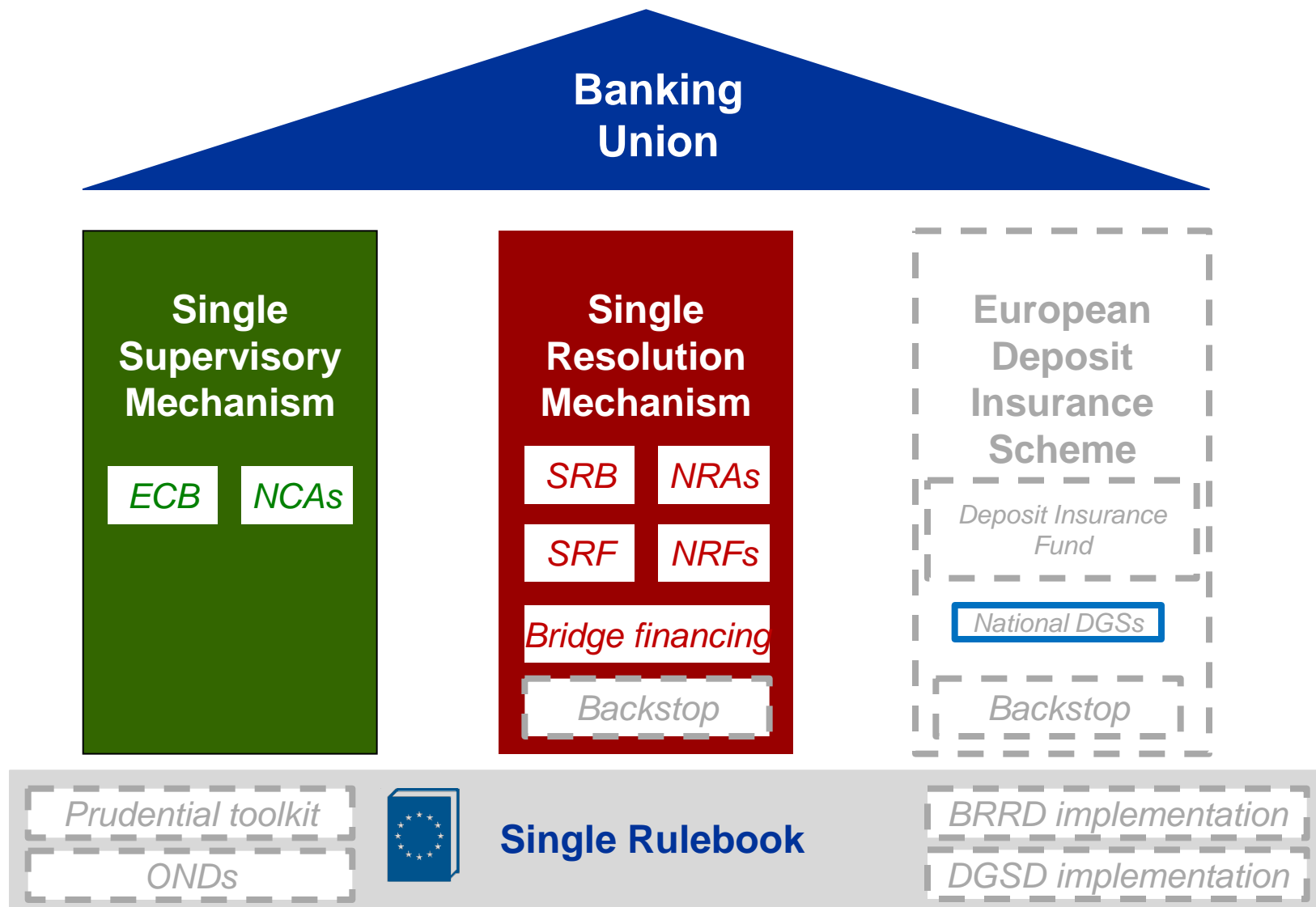
LTV and DSTI/LTI activated or adjusted jointly, sometimes with maturity cap

	LTV limits (reduces LGD)	Income-based limits (reduces PD)	Max. maturity restriction (reduces long-term interest rate sensitivity)	Risk weights
Belgium				5 p.p. add-on on RRE (recommended)
Cyprus	70%, 80%	DSTI: 80% (65% in case of FX loans)		
Estonia	85%, 90%	DSTI: 50%	30 years	
Finland	90%, 95%			15%
Ireland	70%, 80%, 90%	New loans with LTI >3.5 cannot exceed 20% for FTBs and 10% for SSBs		100% on CRE
Latvia	90%, 95%	Internal DSTI limits		
Lithuania	85%	DSTI: 40%-60% w/ interest rate sensitivity test at origination	30 years	
Luxembourg				15% floor RRE for IRB (Recommendation) 75% for part of loan exceeding LTV>80% for STA
Netherlands	100%	DSTI: 10 - 30%	30 years	
Slovakia	80%, 90%, 100%	DSTI: 80% (subject to 2 p.p. interest rate increase p.a. if interest rate is not fixed)	30 years (8 years for unsecured loans)	
Slovenia	80%	DSTI: 50 - 67%		

Sources: National authorities in SSM countries

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The Single Resolution Mechanism: 2nd pillar Banking Union



A **centralization of decision-making processes** and competences for forced resolution of insolvent or near-insolvent banking institutions via the SRM

Operational since January 2015

Its mandate to be a resolution authority with strong resolution capacity and the ability to react swiftly and in an appropriate, consistent and proportionate manner, enforcing an effective resolution regime for banks, thus avoiding future bail-ins.

Mirrors the SSM: all banks established in the euro area and other participating Member States

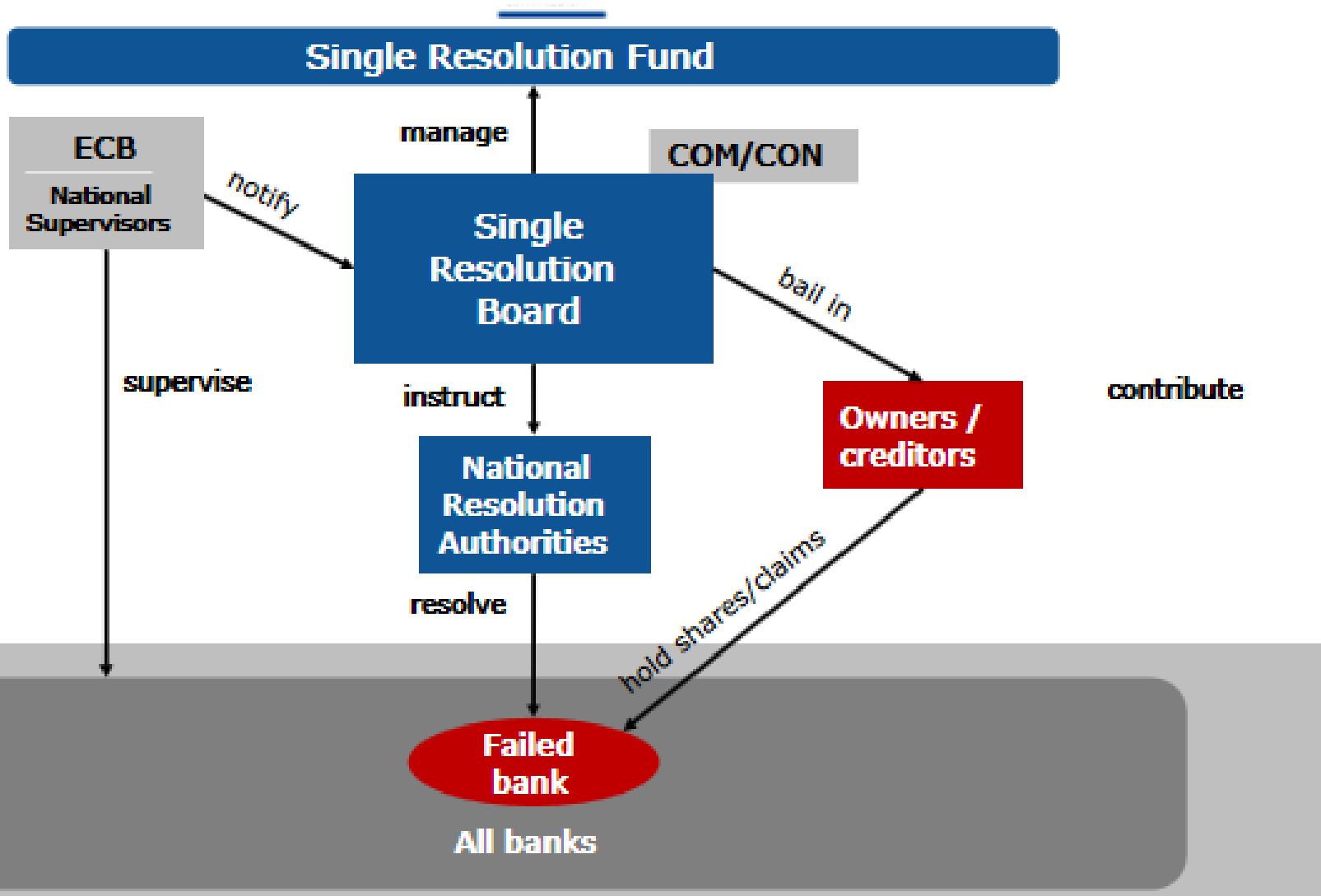
Distribution of tasks between SRB and NRAs:

* Board directly responsible for cross-border and significant banks (>30bn; about 200 banks)

* NRAs responsible for all other banks (also to adopt resolution decisions if no use of the Fund is required)

SRB ultimately responsible for **all banks**

How does it work?



Its actions (so far):

Resolution planning (proactively) for about 140 banks

Data collections, e.g. MREL - Minimum requirement for own funds and eligible liabilities

Operationalisation of Single Resolution Fund

**Resolution actions:
Banco Popular**

Resolving Banks without endangering financial stability: Example of Banco Popular

- The entity is failing or likely to fail (bank will be unable to pay its debt as it falls due)
- No reasonable prospect that any alternative private sector measures or supervisory action would prevent the failure within reasonable time
- Resolution action would be necessary in the public interest
- (Wind-down under normal insolvency proceedings would not meet those resolution objectives)
- Decision to transfer Banco Popular to Banco Santander (for €1,00)
- All the existing shares (Common Equity Tier 1), and Additional Tier 1 instruments were written down
- Tier 2 instruments were converted into new shares



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monitoring risks in the euro area financial system in much more detail than before the crisis

- The Financial Stability Review (FSR) assesses biannually the main sources of systemic risk and vulnerabilities for the euro area financial system – comprising intermediaries, markets and market infrastructures
- The FSR also plays an important role in relation to the ECB's new **microprudential and macroprudential competences**, including the power to top up national macroprudential measures

Financial stability

- To identify risks
- To assess risks

Macro-prudential policy

To apply more stringent measure compared to National Authorities

- counter-cyclical capital buffers
- systemic risk buffers (if implemented in national law)
- capital surcharges of systemically important institutions
- risk weights on real estate and intra financial sector exposures
- limits on large exposures
- additional disclosure requirements

To comment and object on National authorities planned measures

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Concluding remarks

Data and statistics for macroprudential uses

Organisational: ESRB contact Group on Data

**Achievements: ESRB risk dashboard
Macroprudential database
Database on Financial crises
MacroPrudential Policies
Evaluation Database**

**Open issues: Real estate data gaps
Shadow banking data gap
Data sharing**

Concluding remarks

Legal review to support macro-prudential policy



Bank regulation

A full and timely **implementation of the Basel III package**

The ongoing **review of the CRR and CRD IV** should be used to strengthen and harmonise the European regulatory architecture.

An ambitious set of targeted changes in the **EU macroprudential framework** should also be introduced in the context of the CRR/CRD IV review.



Non-bank financial sector regulation

The **regulatory and supervisory framework for non-banks** needs to be strengthened, including by adding macroprudential instruments on leverage and liquidity for investment funds.

The European Commission's decision to foster innovation and more coordinated approaches to standards for **fintech** is welcome.

Concluding remarks

Macroprudential policy for banking is increasingly used in Europe.

Sources of systemic risk are diverse, requiring targeted policy responses.

The macroprudential toolkit should be comprehensive.

Policy instruments should be chosen based on their effectiveness in addressing the identified risks.

Next challenges are:

- Developing a macroprudential stance concept
- Developing instruments targeting risks beyond banking
- Keeping abreast of new risk that need to be addressed with existing or new instruments

“But, even as we reduce or eliminate old vulnerabilities, we must not rest on our laurels, for new vulnerabilities will inevitably take their place.”

(W.C. Dudley, 2018)

Thank you for your attention!



Macro-prudential tools in the CRD IV

Instrument	Description	Legal reference	Available from
CRD IV			
Counter-cyclical capital buffer	Builds up capital buffers in good times that can be drawn down in periods of stress. It strengthens the resilience of the banking system in periods of excessive credit growth.	Articles 130 and 135-140	2016*
Systemic risk buffer	Sets capital buffer requirements for financial institutions if the structural features of the financial system justify. It strengthens the resilience of the banking system.	Articles 133-134	2014**
Global systemically important institutions (G-SII) and other systemically important institutions (O-SII) capital buffer	Sets capital requirements for those financial institutions that might be more systemic. It enhances the resilience of SII and discourages a further increase in their systemic importance.	Article 131	2016*

* Phased in gradually between 1 January 2016 and 31 December 2018. However, for the counter-cyclical capital buffer, Member States may impose a shorter transitional period. The recognition of the shorter transitional period would remain voluntary for the authorities of other Member States.

** The implementation of the systemic risk buffer in national legislation is only a possibility but not a mandatory requirement.

Depending on its calibration (i.e. below 3%, between 3% and 5% and above 5%), different coordination mechanisms are prescribed.

Macro-prudential tools in the CRR

Instrument	Description	Legal reference	Available from
CRR			
Level of own funds (minimum capital requirements)	Sets higher minimum capital requirements for financial institutions if risks to the financial system justify. It strengthens the resilience of the banking system.	Article 458	2014
Large exposure requirements	Set limits on overall large exposures towards one or more counterpart(s) or particular economic sectors. These limit the sensitivity of the financial institutions to common shocks and prevent an excessive concentration of risks.		2014
Public disclosure requirements	Impose market discipline in addition to regulatory and supervisory requirements. These mitigate the underlying market failure of informational asymmetries to reduce the probability of bank runs and liquidity spirals.		2014
Level of capital conservation buffer	Sets capital buffer requirements for financial institutions if risks to the financial system justify. It strengthens the resilience of the banking system.		2016*

*The capital conservation buffer will be phased in gradually between 1 January 2016 and 31 December 2018. However, Member States may impose a shorter transitional period. The recognition of the shorter transitional period would remain voluntary for the authorities of other Member States.

Macro-prudential tools in the CRR (cont'd)

Instrument	Description	Legal reference	Available from
CRR			
Liquidity requirements <ul style="list-style-type: none"> liquidity coverage ratio (LCR) net stable funding ratio (NSFR) 	<p>The LCR sets minimum liquidity requirements to ensure that banks hold a sufficient amount of liquid assets to withstand a stress period of 30 days. It enhances short-term resilience of the liquidity risk profile of banks.</p> <p>The NSFR limits the gap between the maturity of banks' assets and liabilities. It improves resilience over a longer (one-year) time horizon.</p>	Article 458	2015 (LCR) 2019 (NSFR)*
Risk weights in the residential and commercial property sectors**	<p>Set higher risk weights vis-à-vis real estate exposures in order to target asset bubbles. These strengthen the resilience of the banking system and, at the same time, mitigate and prevent excessive credit growth and leverage.</p>		2014
Intra-financial sector exposures	<p>Set higher risk weights vis-à-vis financial sector exposures. These strengthen the resilience of the banking system.</p>		2014

* The expected implementation date of the NSFR is 2019, subject to a report and a legislative proposal by the Commission to the European Parliament and the Council by 31 December 2016.

**As of 2014, competent authorities (i.e. micro-prudential supervisors) may also set a higher risk weight or stricter criteria for real estate exposures under Articles 124 and 164 of the CRR on the basis of financial stability considerations.

Macroprudential elements and gaps in existing EU legislation

Table 3

Macroprudential instruments (or instruments with macroprudential effects) for excessive credit and leverage and for procyclicality

End-borrower	Lenders			
Real estate transactions	Banks	Investment funds	Insurance and reinsurance undertakings	Derivatives and securities financing transactions
<p>National legislation: LTV/LTI caps for residential real estate</p> <p>Under discussion: LTV/LTI limits for commercial real estate (ESRB, 2015d)</p>	<p>EU: CRR/CRD IV: Countercyclical capital buffer Reporting and disclosure of leverage ratios</p> <p>Under discussion: Leverage ratio as a binding requirement Macroprudential use of the leverage ratio – including a countercyclical buffer mirroring the risk-based countercyclical buffer (ESRB, 2015a)</p>	<p>EU: alternative investment funds (AIFMD) Option to impose leverage limits</p> <p>EU: UCITS Directives: Borrowing up to 10% of assets allowed for temporary purposes; For UCITS using global exposure method, their exposure relating to derivatives limited to 2 times total net value of portfolio</p>	<p>Solvency II: Matching and volatility adjustment; Capital add-on²⁸; Extension of recovery period</p>	<p>Under discussion: Minimum or countercyclical margin and haircut requirements (ESRB, 2015b; BCBS-IOGCO, 2015; FSB, 2015).²⁹ Application should be to counterparties at transaction level including both centrally cleared and non-centrally cleared transactions (ECB, 2015b)</p>

Source: Adapted from Schoenmaker and Wierls (2015).

Table 4
Options for operationalisation and legislative review

Legislation	Operationalising existing policy with macroprudential implications	Options for legislative review
	ESRB members	Legislative authorities
AIFMD	<p>Provide advice on the application of leverage limits to counter systemic risks and advise ESMA on operationalising leverage restrictions</p> <p>Provide advice on a consistent range of effective liquidity management tools in investment funds, including guidance on the application of redemption limits</p> <p>Provide advice on the consistent calculation and reporting of leverage</p> <p>Enhance risk monitoring based on new data, including on leverage, in association with ESMA</p>	<p>Adjust data requirements, e.g. on liquidity/maturity mismatch</p> <p>Develop consistent measures of leverage for the investment fund sector</p> <p>Increase consistency of leverage requirements across sectors</p> <p>Macroprudential use of liquidity management tools</p>
UCITS Directives	<p>Provide advice on the consistent calculation and reporting of leverage</p> <p>Provide advice on a consistent range of effective liquidity management tools in investment funds, including advice on the application of redemption limits</p> <p>Explore the use of current liquidity management tools for macroprudential purposes</p>	<p>Adjust data requirements, e.g. on liquidity/maturity mismatch</p> <p>Develop consistent measures of leverage for the investment fund sector</p> <p>Macroprudential use of liquidity management tools</p>
MMF Regulation (Proposal)	Monitor compliance with the ESRB Recommendation on money market funds (ESRB/2012/1)	Establish political agreement building on the EU MMF Regulation
MIFID II/MIFIR	<p>Monitor the impact on market structure of trading obligations</p> <p>Monitor the impact on market liquidity of pre- and post-trade disclosure obligations</p>	
Short Selling Regulation	<p>Monitor the effects on volatility, liquidity and price discovery</p> <p>Develop a framework for notifications, disclosures and restrictions on short-selling and CDS transactions in exceptional circumstances</p>	Revise based on evidence on effectiveness
EMIR	Enhance risk monitoring based on new trade repository data and forthcoming stress-test exercises	Implement elements for the macroprudential use of margins and haircuts
Securities Financing Transactions Regulation	<p>Enhance risk monitoring based on new granular data (once available)</p> <p>Form a data hub on SFTs in the EU</p>	<p>Transpose FSB recommendations on minimum haircut requirements on non-centrally cleared SFTs</p> <p>Add elements for the macroprudential use of margins and haircuts</p>
Solvency II	<p>Use the tools available under the existing Solvency II framework to address systemic risks, e.g. stemming from the low interest rate environment</p> <p>Possible revisions to the UFR (ultimate forward rate) methodology</p>	Based on evidence, consider the introduction of further macroprudential tools
Institutions for Occupational Retirement Provision (IORP)	<p>Monitor the effects of the low interest rate environment</p> <p>Monitor the outcome of the trilogue discussion on recovery periods and the requirement of being fully funded "at all times" vs. "at the time of inception"</p>	