1BP333 – MODERN TRENDS IN BANKING AND FINANCIAL SECTOR

WWW.VSE.CZ

Source: https://www.livewireindia.com/blog/data-science-training-trivandrum/

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Bank Regulation

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EVROPSKÁ UNIE
Evropské strukturální a investiční fondy
Operační program Výzkum, vývoj a vzdělávání

MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY

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Contents

Source: https://digneconsult.com/sg/4-reasons-why-self-reflection-is-important/

1. Theoretical background
Regulation vs supervision

Sanctions are important!!!

1) To create and enforce the conditions, rules and operational framework of banking institutions (**banking regulation "ex ante"**)
2) To control if the rules are followed and to set and enforce sanctions for non-compliance (**banking supervision "ex post"**).

- The basic framework of regulations is set by the Basel Committee on Banking Supervision (BCBS)/Bank for International Settlements (BIS), which proposes global standards.
- Regulatory and supervisory tasks are usually performed either by the
  - central bank (Czech Republic, the Netherlands, France) or
  - special financial authority (formerly the UK).

1. Theoretical background
Regulation in theory

Zdroj: https://www.hbs.edu/news/articles/Pages/nobel-prize-making-of-heritage-brand.aspx

- Stigler (1971)* – regulatory capture
- Kane (1983)** – regulatory dialectic
- Dewatripont and Tirole*** (1993) – representation hypothesis
- Lall (2012)**** – regulatory capture in the context of neoproceduralism
- Teplý (2012)***** - 5Gs of effective regulation

Sources: * Stigler, G. (1971). The theory of economic regulation. The Bell Journal of Economics and Management Science, (2)1: 3-21.
**Kane, E. J. (1983). The metamorphosis in Financial –Services Delivery and Production. San Franciso: Federal Home Loan of San Francisco, 49-64.
***Dewatripont, M., Tirole, J. (1993). The Prudential Regulation of Banks. Cambridge: MM PRESS.
**** Lall, R. (2012). From Failure to Failure: The Politics of International Bank Regulation, Review of International Political Economy, 19(4): 609–38.
***** Teplý, P. et al. (2012). Economic capital and risk management, Prague: Karolinum press

1. Theoretical background

Mission impossible of effective regulation!

Source: https://www.moldmakingtechnology.com/blog/post/we-must-become-more-productive

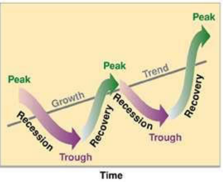
We know that excessive regulation involve costs, but what are they?

Source: https://images.app.goo.gl/f6EwvryBNTohdJvL6

We also know that under-regulation can unleash disaster observed ex-post only!

Source: https://www.deviantart.com/sd-designs/art/Question-mark-man-159794049

Optimum regulation = the art of balancing the immeasurable against the unknowable



Source: https://images.app.goo.gl/MmER5niWZ82Howg39

Recurring financial crises

Source: Author based on Acharya, A. et al. (2010). Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance, Wiley Finance

1. Theoretical background
5Gs of effective regulation*

1) Guarantee of strong supervisor (powerful and independent)
2) Guarantee of international coordination
3) Guarantee of risk coverage (simple and easy ratios of capital, liquidity, shocks absorption buffers etc.)
4) Guarantee of crisis management (crisis resolution, bankruptcy law, recapitalisation rules etc.)
5) Guarantee of personal responsibility

Source: http://pcolaredhead.blogspot.com/2012/01/responsibility-part-iv-personal-life.html

Is it all of this achievable? No, just "a salami tactic"

-> **Mission impossible of effective regulation!**

Source: Teplý, P. et al. (2012). Economic capital and risk management, Prague: Karolinum press

* Benefits of regulation exceed its costs

1. Theoretical background
4 pillars of effective regulatory architecture

1) Encourages innovation and efficiency
2) Provides transparency
3) Ensure safety and soundness
4) Promote competitiveness in global markets

- *See the next lecture on Banking capital and Basel I, II, III*

Source: Acharya, A. et al. (2010). Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance, Wiley Finance

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Source: https://digneconsult.com/sg/4-reasons-why-self-reflection-is-important/

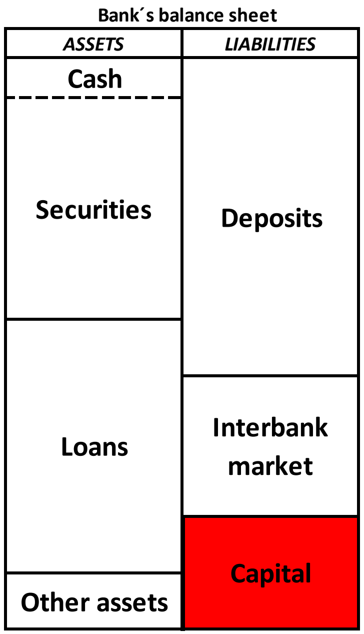
Three main reasons for bank regulation

1) information asymmetry

(adverse selection + moral hazard)

2) systemic risk

3) high leverage of a bank



Source: Author

1. Information asymmetry

- **Information asymmetry** - two participants of the exchange have different information on the conditions of the contract/exchange to be concluded.
- The „**principal – agent**“ problem in banking through the relationships:
- creditor – debtor
- depositor – bank
- bank owners – managers
- bank headquarters – branches

Source: http://www.kreativtnorge.no/KreativeTeknikker/Divergens_Konvergens.htm

Adverse selection (ex-ante)

- a problem arises before the transaction occurs.
- *Example 1:* before granting a loan, the credit applications will come more frequently and with strongest endeavor from applicants representing the highest risk for the bank, and the risk premium itself will not compensate for that risk
- *Example 2:* subsidized loans from the Czech Export Bank, a state-owned bank, attract risky clients and projects (at the expense of a taxpayer)

Moral hazard (ex-post)

- a problem arises before the transaction occurs
- In case of a vague loan agreement, some debtors will have the opportunity to become interested in *immoral behaviour* that is contrary to the debtor's interests (e.g. borrowed funds will not be used for the agreed purpose).
- hence it lowers the probability of meeting the debtor's obligation to repay the loan, while the debtor remains unsanctioned.
- <u>100% deposit insurance in the EU = institutional moral hazard</u>

2. Systemic risk

- = the risk of widespread disruption to the provision of financial services that is caused by an impairment of all or parts of the financial system, which can cause serious negative consequences for the real economy (IMF et al., 2016*).
- = threat of market contangion
- Related terms: bank run, panic, chaos

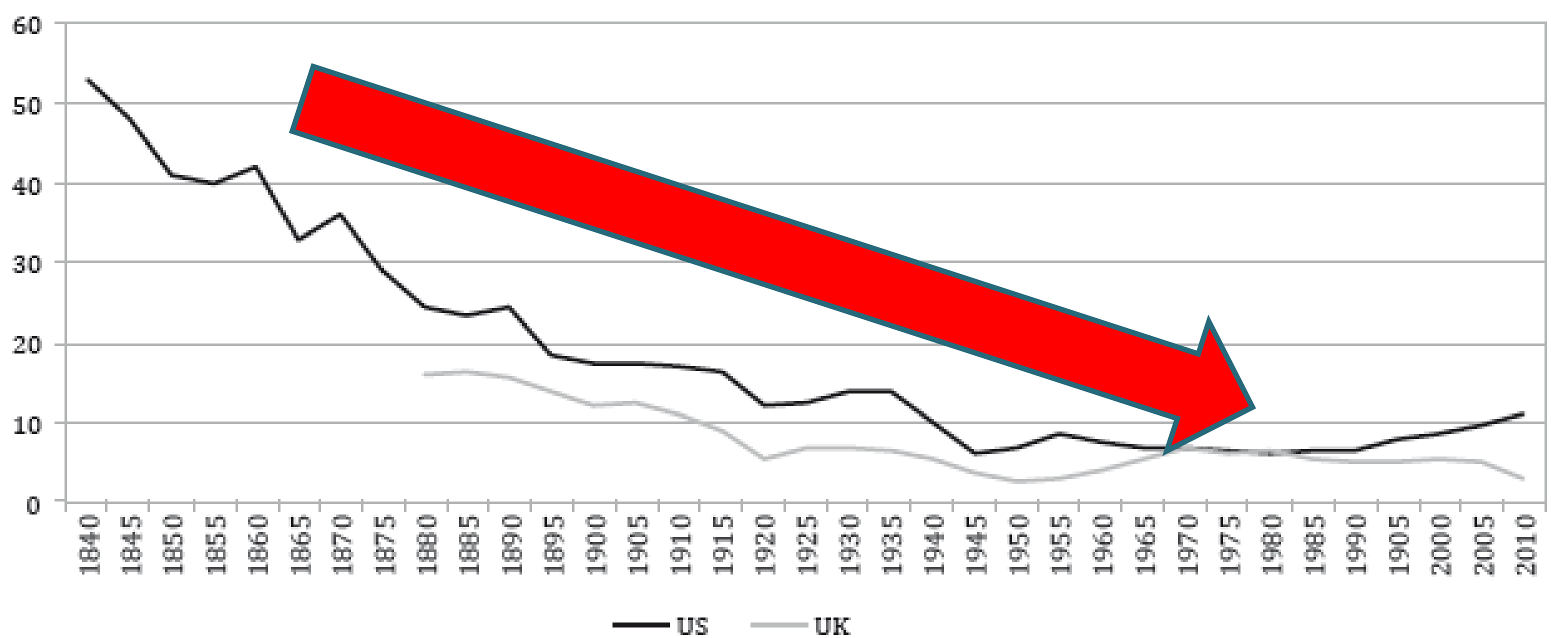
* Source: International Monetary Fund, Financial Stability Board, and Bank for International Settlements (2016). “Elements of Effective Macroprudential Policies: Lessons from International Experience.” Washington, DC, August 31.

2. Basic terms

3. High leverage of banks: a decreasing capital ratio in the past. Why?

- Low share of equity on bank´s total liabilities (5-10%)

Figure V-1: Banks' equity as % of assets in the US and the UK in December 31, 1840 – December 31, 2010



Source: Author

2. Basic terms

Because shareholders maximize Return On Average Equity (ROAE)

Financial firms

$$ROAE(\uparrow) = \frac{Net\ profit\ (\uparrow)}{Average\ equity(\downarrow)}$$

Source: https://images.app.goo.gl/CCV2CAheZqC8YYBd6

Focus on profit maximization

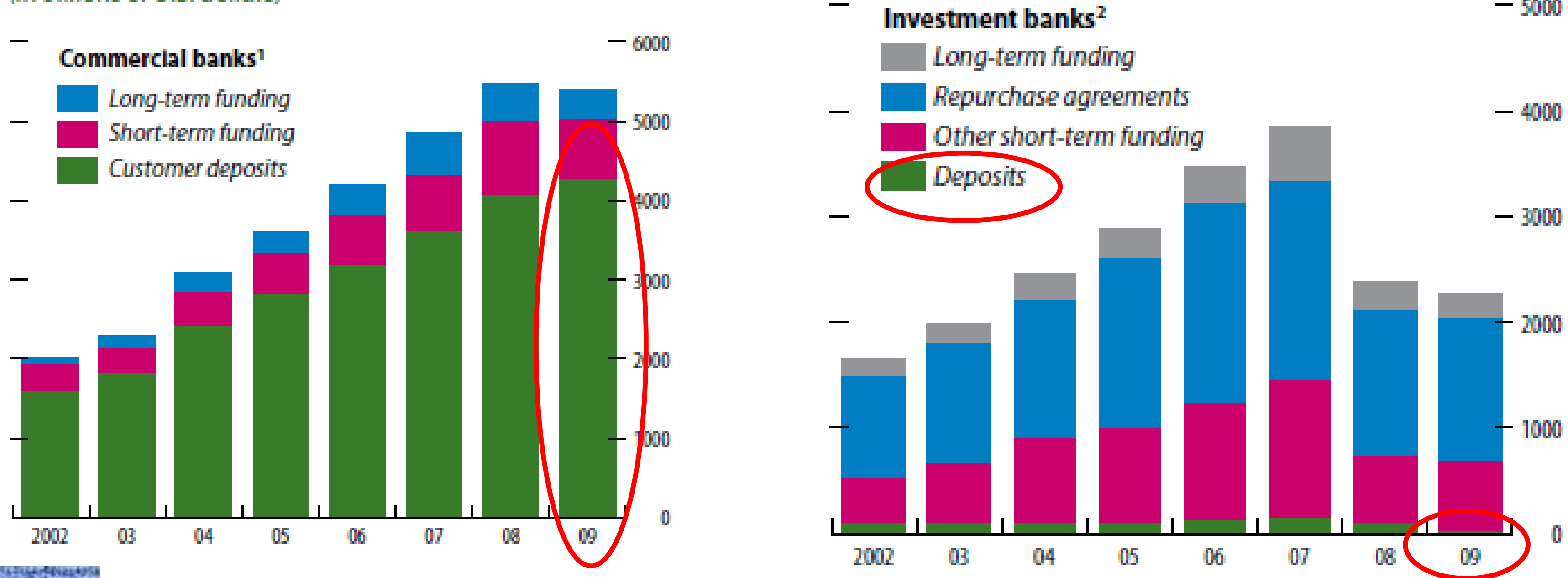
Source: http://youpulse.info/capital-gains-losses/

Universal vs. separate banking system

1. **Universal banking**
   - classical products of **commercial banking (CB)** – savings, loans, payments
   - products of **investment banking (IB)** – securities issuances, securities trades, depot trades, asset management, mergers and acquisitions
2. **Separate banking**
   - strict separation of investment and commercial banking
   - Glass-Steagall Act (1933) **IBxCB**
   - The Gramm-Leach-Bliley Act (1999) **IB+CB**
   - The Dodd-Frank Act (2010) **IBxCB**
   - The Trump administration (2017+) **x(IBxCB)**, i.e. loosening regulations

Different funding structure of commercial and of investment banks

Figure 2.11. United States: Funding Structure of Selected Largest Commercial and Investment Banks
(In billions of U.S. dollars)



Source: ©2003 Bureau van Dijk Electronic Publishing-Bankscope.
Note: Short-term funding is funding with maturity less than one year.
[1]Top 10 commercial banks in terms of total assets.
[2]Data for investment banks capture 60 percent of total investment bank assets as reported by Bankscope. For 2008 and 2009, data exclude Lehman Brothers and Bear Stearns.

Source: IMF (2010). Global Financial Stability Report, October 2010, International Monetary Fund

The 2008-2009 global financial crisis (GFC) = end of an era in investment banking

- **Lehman Brothers**' bankruptcy
- **Merrill Lynch** taken over by Bank of America
- **Morgan Stanley** and **Goldman Sachs** applied to become regulated banks (broker-dealers became commercial banks)
- **Deutsche Bank** (now in big troubles...)

Source: https://www.sikelianews.it/wps/notizie/mps-pubblicata-la-lista-dei-grandi-debitori-insolventi/

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Source: https://digneconsult.com/sg/4-reasons-why-self-reflection-is-important/

Bank regulation in CR (legal framework)

Source: https://images.app.goo.gl/oSLx1qttUzhHnFmm8

- Act No 6/1993 Coll. on the Czech National Bank as ammended
- Act No 21/1992 Coll. on Banks as ammended
- Prudential rules (Decrees of CNB), based on BCBS recommendations (Basel II and III)
- Central register of credits and other registers
- The Guaranteed System of The Financial Market (The Deposit Insurance Fund + The Bank Resolution Fund)
- **CNB Decree No. 163/2014 Coll. on the performance of the activities of banks, credit unions and investment firms**

3. Bank reg. & supervision in the CR

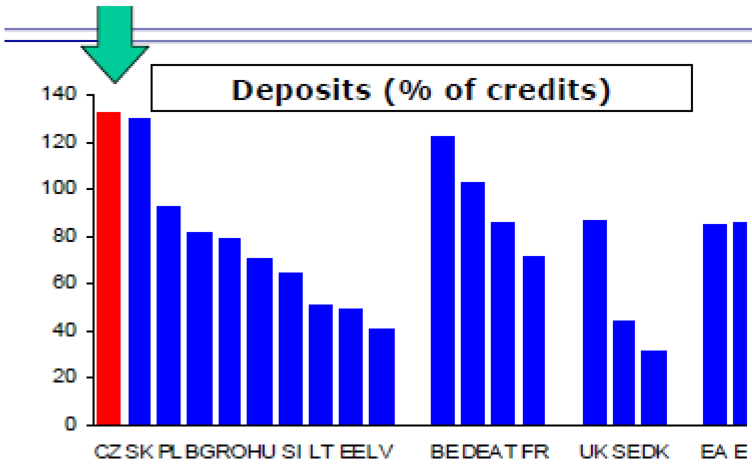
Source:
https://images.app.goo.gl/oSLx1qttUzhHnFmm8

Other (indirect) instruments of regulation

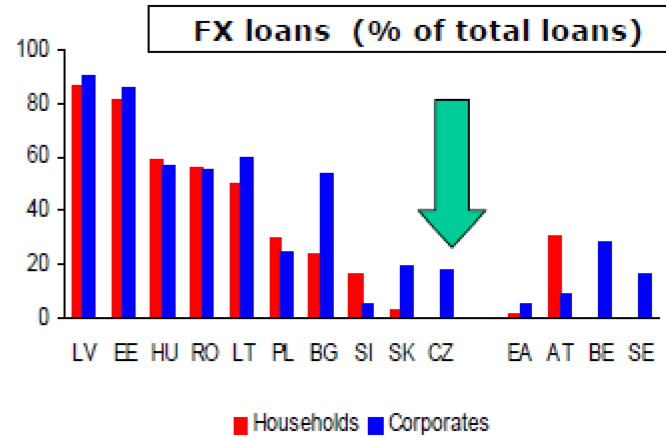
- Monetary policy measures
  - Open market transactions (especially repo and reverse repo transactions) – see the last lecture
  - Basic rates of the CNB: 2W repo rate, discount rate, lombard rate
  - Minimum reserves (mandatory minimum reserves requirement = 2%)
  - LOLR (central bank as a lender of last resort)
  - FX market interventions (e.g. CNB in 5/1997 and 11/2013 – 4/2017)

No stronger regulation needed during the GFC in the CR

Source: https://images.app.goo.gl/oSLx1qttUzhHnFmm8



Source: CNB, IFS, IMF



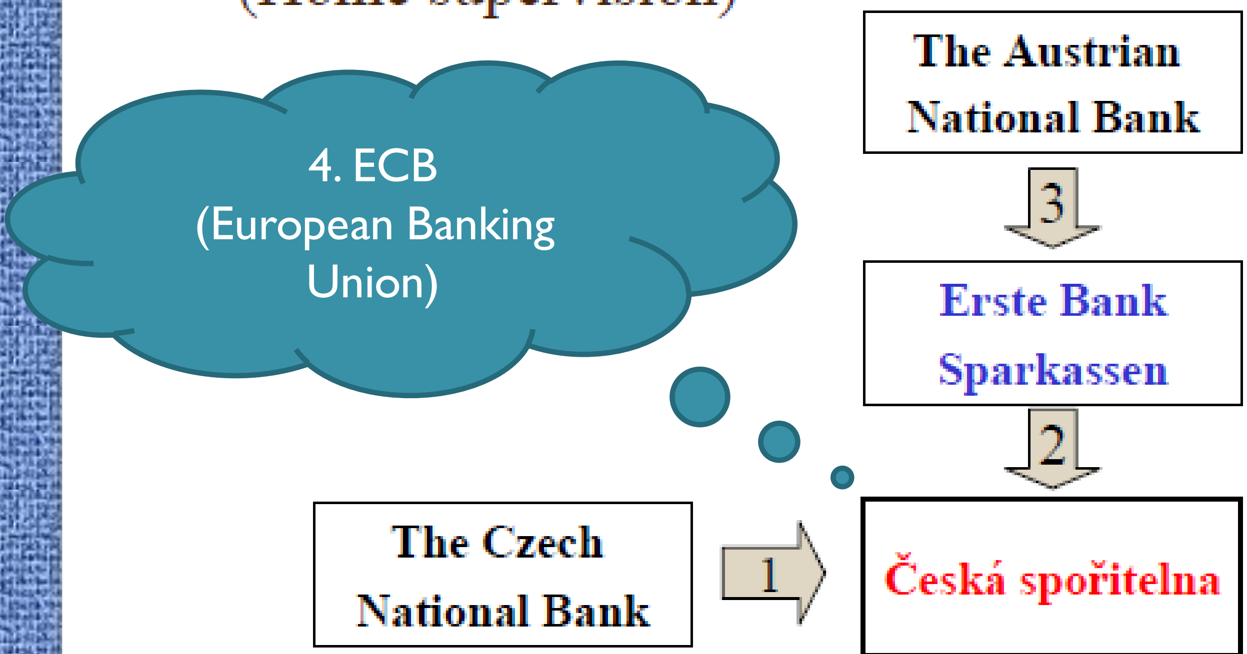
- Sufficient liquidity – deposit-to-loan ratio 130 % = the highest value in the EU in 2008
- A low share of FX loans in corporate sector (20%), almost no FX loans drawn by households
- No liquidity support for banks, state bailouts, guarantees, asset purchases needed in the aftermath of the crisis

Source: https://images.app.goo.gl/oSLx1qttUzhHnFmm8

3. Bank reg. & supervision in the CR

Quadriple Supervision of Česká spořitelna

1. CNB Supervision (Host supervision)
2. Internal Erste Bank Supervision
3. Austrian Supervision of Erste Bank and its subsidiaries (Home supervision)



Source: Author

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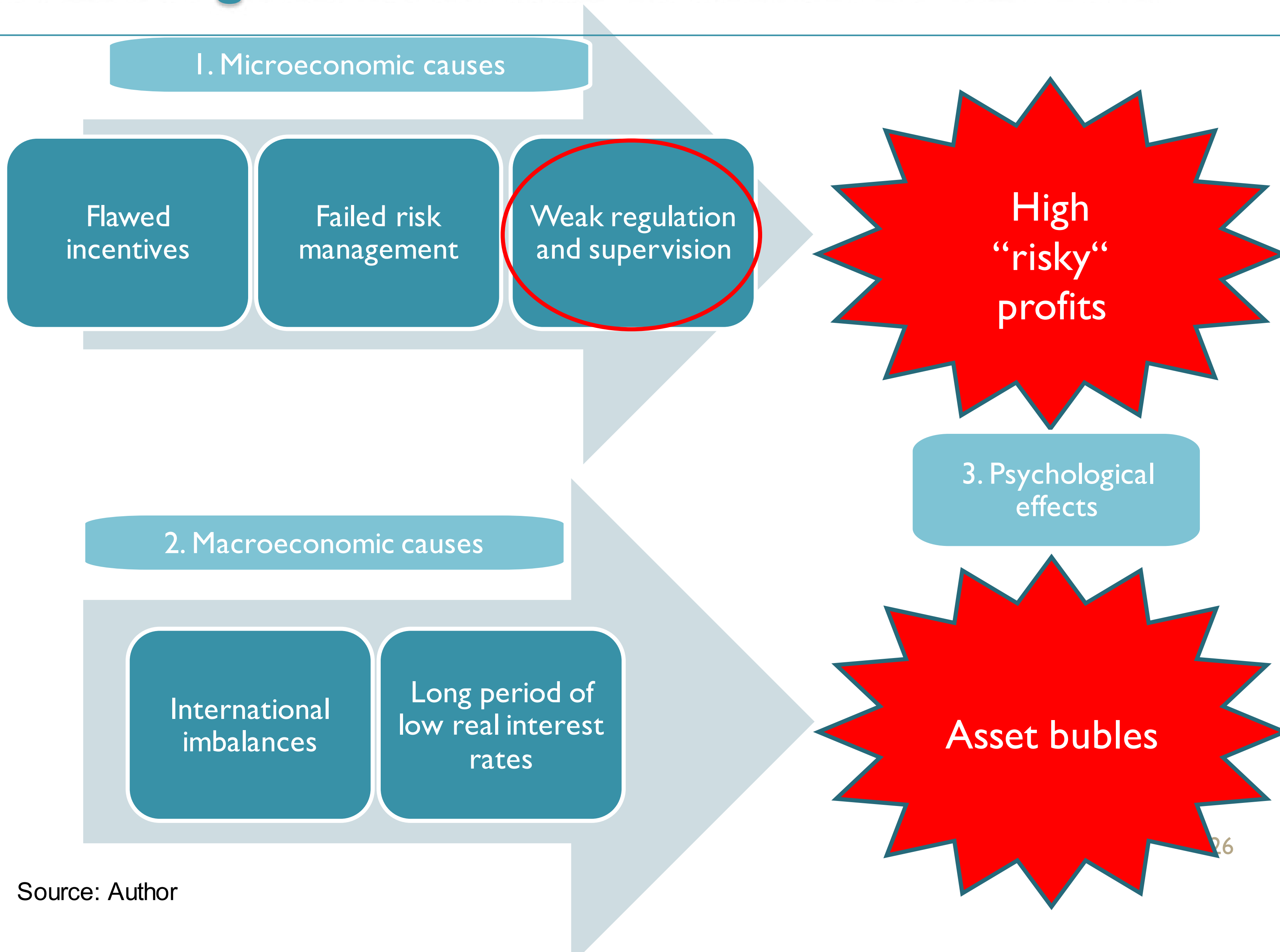
Source: https://digneconsult.com/sg/4-reasons-why-self-reflection-is-important/

4. Regulation after the GFC
7 main topics

1) Weak regulation as one of causes of the GFC
2) Aims of the new regulatory architecture
3) Recent trend: separation of investment and commercial banking
4) New European Supervisory Framework
5) The European Banking Union (EBU)
6) The Bank Recovery and Resolution Directive (BRRD)
7) Application of the bail-in tool

4. Regulation after the GFC

Weak regulation as one of causes of the GFC



Source: Author

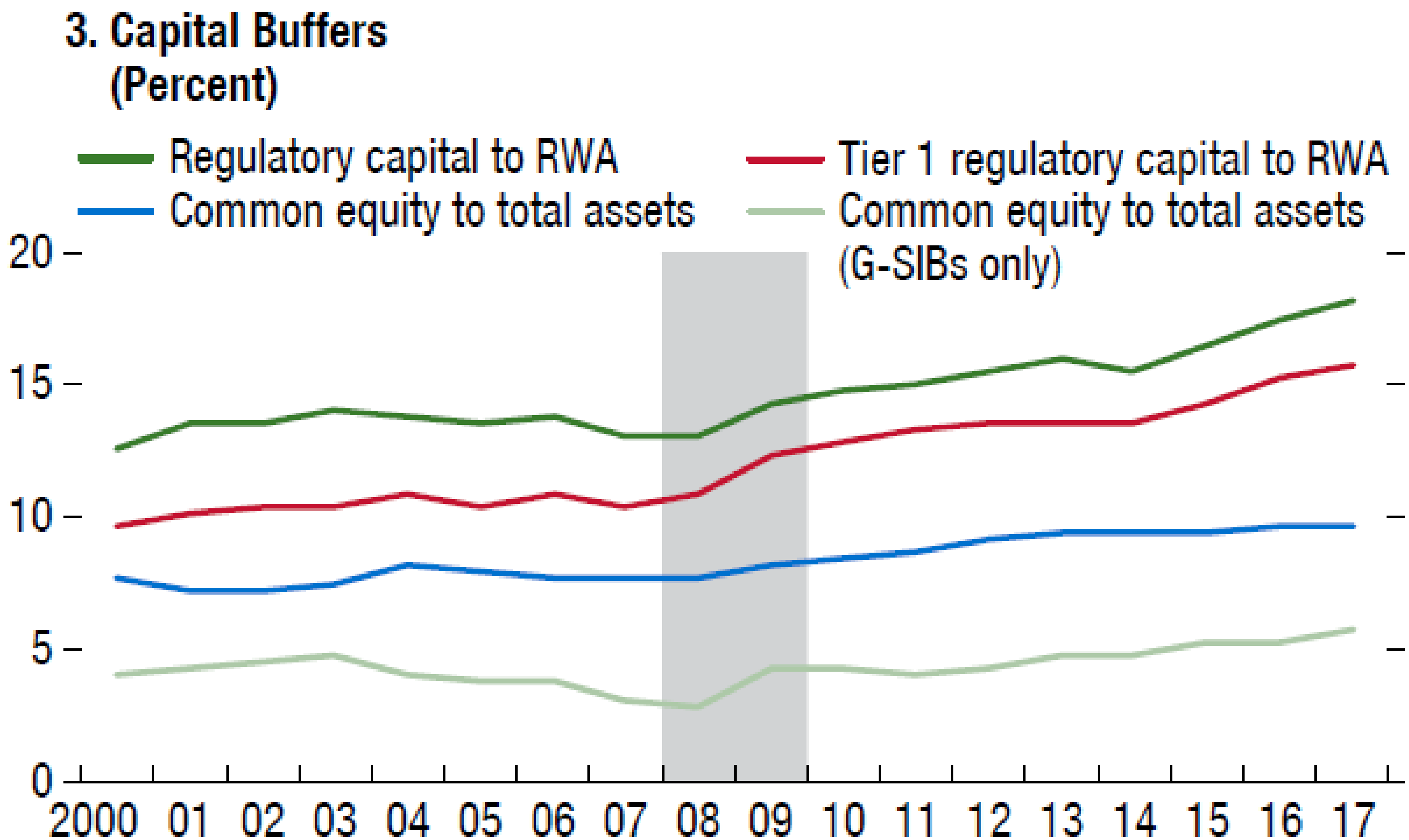
Aims of the new regulatory architecture after the GFC

1) enhance capital buffers and reduce leverage and financial procyclicality (see the next slide),
2) contain funding mismatches and currency risk,
3) enhance the regulation and supervision of large and interconnected institutions,
4) improve the supervision of a complex financial system,
5) align governance and compensation practices of banks with prudent risk taking
6) resolution regimes of large financial institutions.

Source: IMF (2018). Global Financial Stability Report, International Monetary Fund October 2018

4. Regulation after the GFC

Higher regulatory capital ratios (e.g. capital/RWA), but still low accounting ratios (e.g. equity/assets)



Source: IMF (2018). Global Financial Stability Report, International Monetary Fund October 2018

Recent trend: separation of investment and commercial banking

- USA: Volcker rule: the restoration of Glass-Steagall Act

(institutional separation)

- EU: Liikanen report (subsidarisation)
- GB: Sir Vicker´s report (ring-fencing)

Source: https://images.app.goo.gl/JhR32XoXGUBmF9c78

4. Regulation after the GFC

Volcker (US) vs. Liikanen (EU) vs. Vickers (GB)

A stylised comparison of selected structural reform proposals — Table 1

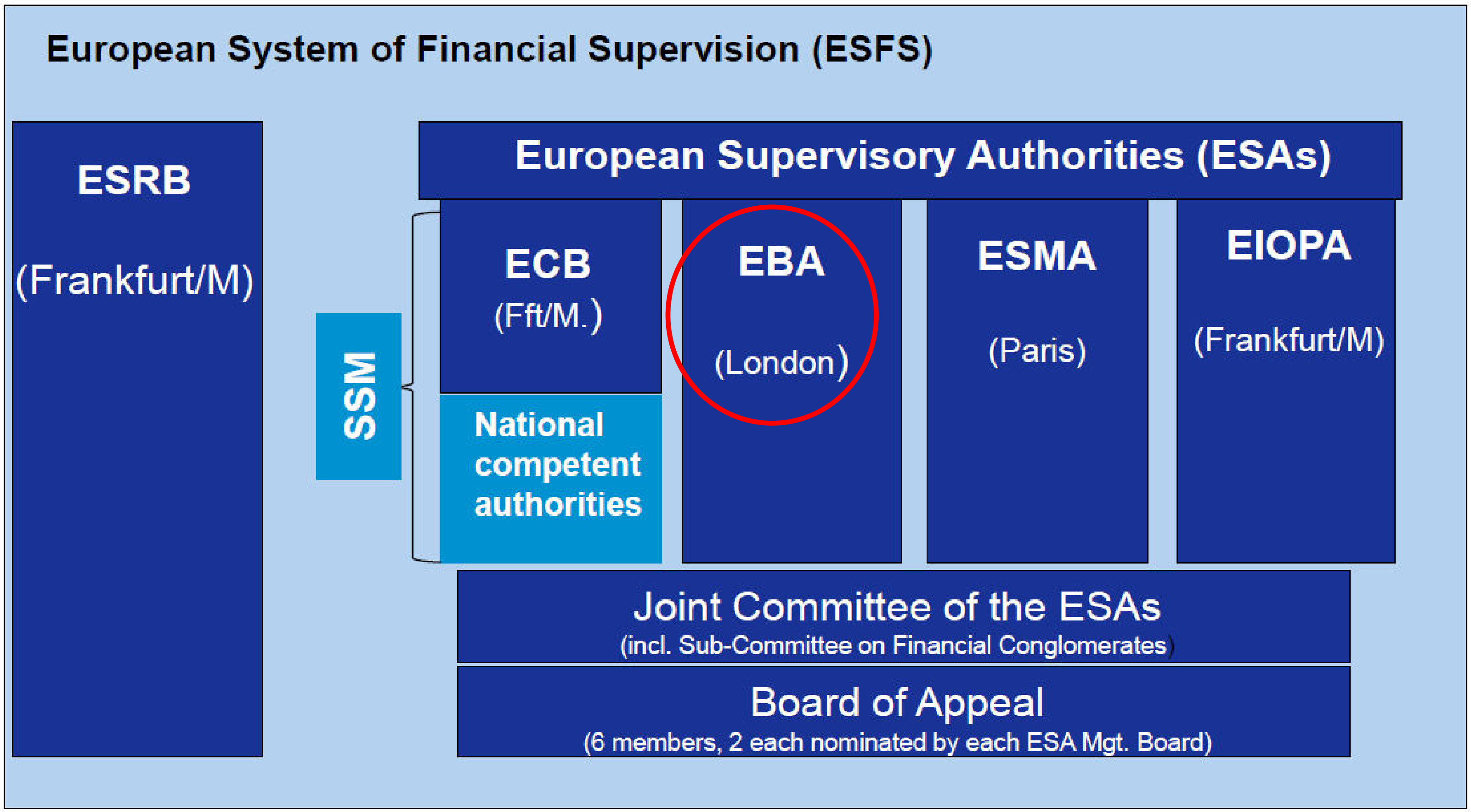
	Volcker	Liikanen	Vickers
Broad approach	**Institutional separation** of commercial banking and certain investment activities	**Subsidiarisation**: proprietary and higher-risk trading activity have to be placed in a separate legal entity	**Ring-fencing**: structural separation of activities via a ring fence for retail banks
Deposit-taking institution may:			
- deal as principal in securities and derivatives	No	No	No
- engage in market-making	Yes	No	No
- perform underwriting business	Yes[1]	Yes	Restricted
- hold non-trading exposures to other financial intermediaries	Unrestricted	Unrestricted	Restricted (inside the group)
Holding company with banking and trading subsidiaries	Not permitted	Permitted	Permitted
Geographical restrictions	No	No	Limitations for ring-fenced banks in the UK to provide services outside the European Economic Area

[1] Underwriting in response to client/counterparty demand.

Source: Gambacorta, L., van Rixtel, A. (2013). Structural bank regulation initiatives: approaches and implications, BIS Working Paper , No. 412

European Supervisory Framework (2011)

Comprehensive approach, but multiple players



Source: Schildbach, J. (2014). Banking & regulatory trends in Europe, Deutsche Bank Research, 21. 10. 2014

4. Regulation after the GFC

The European Banking Union (EBU) – Purpose and 3 pillars

- Purpose of the EBU: "…*to break the vicious circle between banks and sovereigns*"

1) single rule book for banks (including capital requirements under CRD IV,* harmonization of deposit insurance and resolution);
2) single supervision (encompassing Single Supervisory Mechanism (SSM) under the ECB since November 4, 2014);
3) single resolution regime for banks in trouble (Single Resolution Mechanism (SRM), supported by a Single Resolution Fund (SRF));

*Capital Requirements Directive IV = Capital Requirements Regulation (CRR)10 and Capital Requirements Directive (CRD) dated June 2013

4. Regulation after the GFC
EBU framework in detail

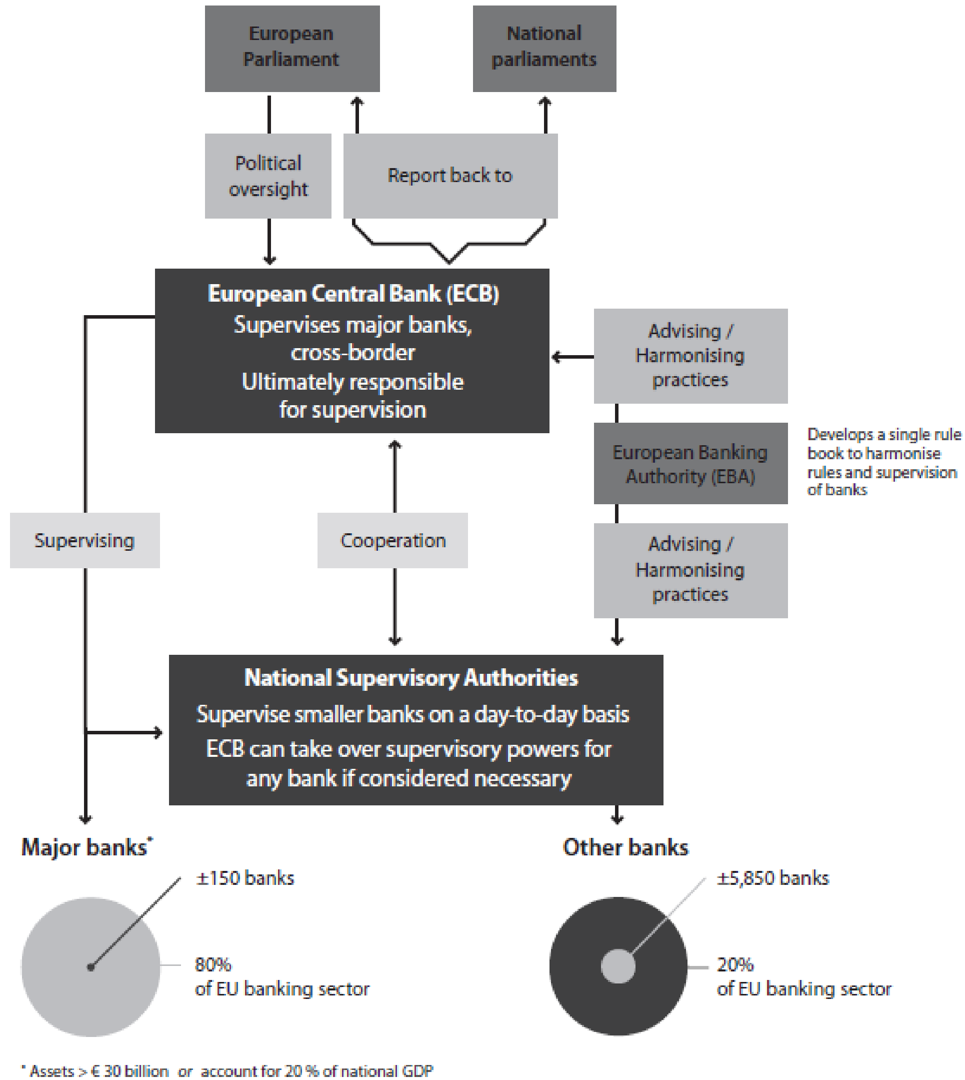
Motivation:
- Breaking the link between financial and fiscal instability
- Securing the single financial market; avoiding (re-)fragmentation

Necessary elements		Status quo
Single Rule Book	→	- incl.CRD IV /CRR, deposit insurance and resolution - some progress, not perfect.
Single Supervisory Mechanism (SSM)	→	– To start November 2014 – for 120 significant credit institutions (85% of assets) the ECB will be in charge directly; for others joined responsibility with national authorities – Precondition: comprehensive assessment (supervisory risk assessment, AQR, stress test) currently under way with results expected end of Oct. 2014
Single Resolution Mechanism (SRM)	→	– basis: common rules for resolution, crisis prevention; bail-in as basic principle instead of bail-out > agreement reached and new rules being implemented – Single resolution mechanism: agreement to set up a joint mechanism to decide about resolution incl. financing
Single Resolution Fund (SRF)	→	– so far only national funds in some member states – SRF: Common resolution fund financed by banks; 55bn € target level to be reached over 8 years, gradual mutualization of compartments

Current critical issues:
- Communication of AQR results: ensure dialogue with ECB, appropriate validation, transparent & robust process
- Detailed rules for calculation of fund contributions

Source: Schildbach, J. (2014). Banking & regulatory trends in Europe, Deutsche Bank Research, 21. 10. 2014

4. Regulation after the GFC
Pillar 2 - Single Supervisory Mechanism (SSM)



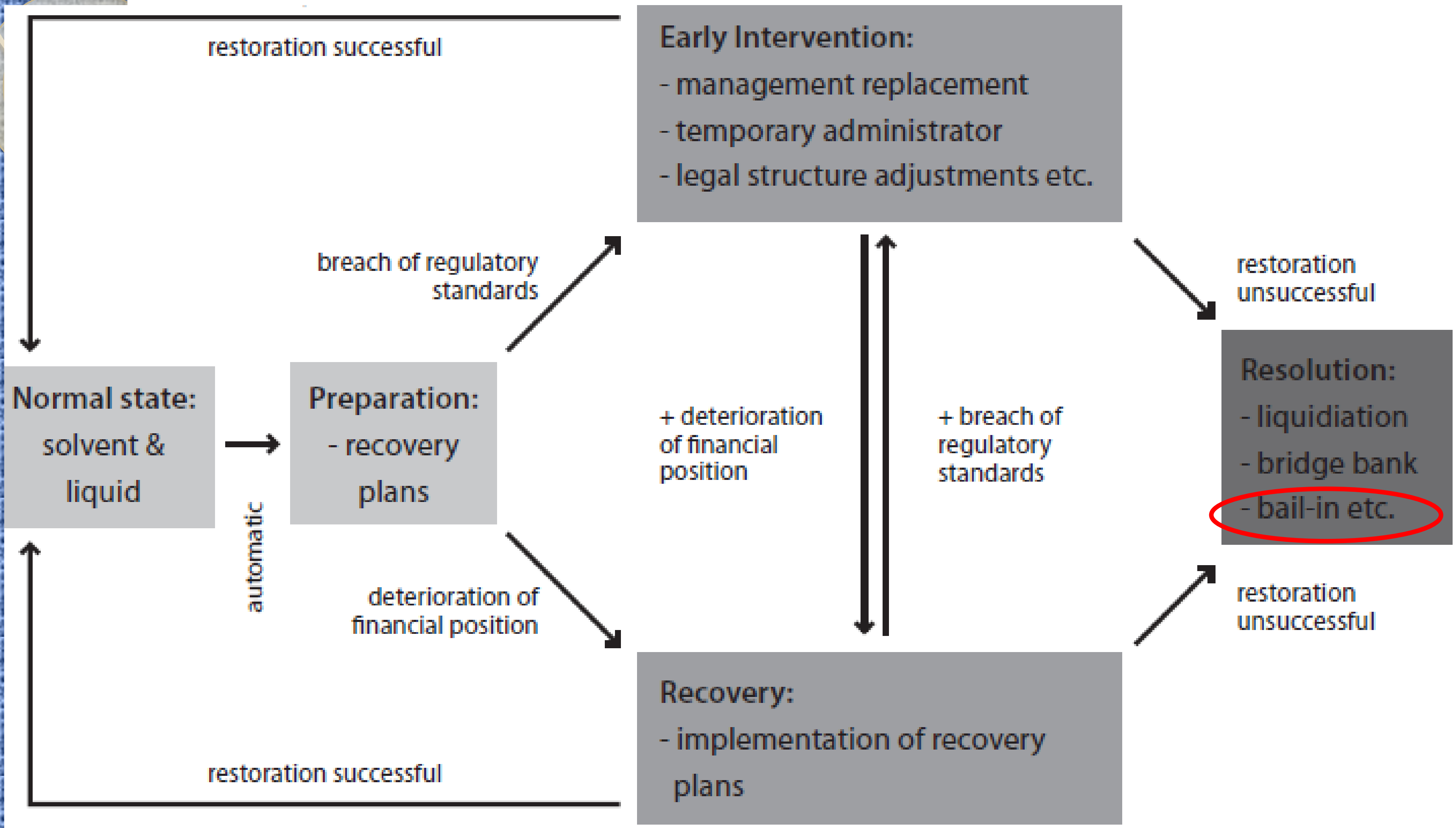
Source: Kabelík, K. (2014). Banking Regulation: Trends & Impacts. The Czech Banking Association

Pillar 3 – SRM: The Bank Recovery and Resolution Directive (BRRD)

- The Bank Recovery and Resolution Directive No. 2014/59/EU ("**BRRD**") establishes a common framework for the recovery and resolution of banks and large investment firms in the EU.
- Shareholders and creditors of failing institutions will pay their share of costs through a "**bail-in**" mechanism, whereby the value of shares, bonds, uninsured deposits or other liabilities of any such institution may be written down or liabilities may be converted into equity.
- The bail-in is subject to the order of priority specified in the implementing legislation, which may to some extent differ across the EU.
- Case study: Monte dei Paschi di Siena (Italian bank)

Source: White & Case (2016). Italy implements the Bank Recovery and Resolution Directive

BRRD: Recovery and Resolution Process



Source: Kabelík, K. (2014). Banking Regulation: Trends & Impacts. The Czech Banking Association

4. Regulation after the GFC

BRRD: Resolution tools

Sale of business	Sale to a third party purchaser of the shares or part or all of the assets, rights or liabilities of the institution under resolution.
Bridge institution	Transfer of the shares or part or all of the assets, rights or liabilities of the institution under resolution to a temporary "bridge" entity wholly or partially owned by the resolution fund (or other public authorities) and created with a view to maintaining access to critical functions and selling the transferred shares, assets, rights and liabilities.
Asset separation	Transfer of assets, rights or liabilities of the institution under resolution to an asset management vehicle (also known as a "bad bank").
Bail-in	Write-down and/or conversion of the liabilities of the institution under resolution.

- These resolution tools may be applied individually or in any combination.
- However, the asset separation tool may only be applied together with another resolution tool.

Source: White & Case (2016). Italy implements the Bank Recovery and Resolution Directive

4. Regulation after the GFC

Application of the bail-in tool 1/3

Assets (A)		Liabilities (L)	
Loans	30	20	Insured deposits[a]
Gov't bonds	20	20	Uninsured deposits
Investment securities	20	45	Senior debt
Physical assets	20	5	Subordinated (junior) debt
Cash	10	10	Equity
Σ_A 100		Σ_L 100	

Crisis

certain assets lose value

Assets (A)		Liabilities (L)	
Loans	**20**	20	Insured deposits[a]
Gov't bonds	20	20	Uninsured deposits
Investment securities	**10**	45	Senior debt
Physical assets	**15**	5	Subordinated (junior) debt
Cash	10	10	Equity
Σ_A 75		Σ_L 100	

Source: Kabelík, K. (2014). Banking Regulation: Trends & Impacts. The Czech Banking Association

4. Regulation after the GFC
Application of the bail-in tool 2/3

Assets (A)		Liabilities (L)	
Loans	**20**	20	Insured deposits[a]
Gov't bonds	20	20	Uninsured deposits
Investment securities	**10**	**42**	**Senior debt**
Physical assets	**15**	**0**	**Subordinated (junior) debt**
Cash	10	**0**	**Equity**
Σ_A 75		Σ_L 82	

Bail-in Tool

Step 1: equity written down (10→0)

NAV = A – L + Equity = 75 – 90 + 0 = -15

Step 2: subordinated debt written down (5→0)

NAV = A – L + Equity = 75 – 85 + 0 = -10

Step 3: senior debt written down (45→42; assuming a minimum write-down to reach the minimum bail-in limit of 8%[b])

NAV = 75 – 82 + 0 = -7

Step 2 + Step 3: bail-in of 8% of total original liabilities (excludes equity writedown)

Source: Kabelík, K. (2014). Banking Regulation: Trends & Impacts. The Czech Banking Association

4. Regulation after the GFC

Application of the bail-in tool 3/3

Assets (A)		Liabilities (L)	
Loans	**20**	20	Insured deposits[a]
Gov't bonds	20	20	Uninsured deposits
Investment securities	**10**	**42**	**Senior debt**
Physical assets	**15**	**0**	**Subordinated (junior) debt**
Cash	10	**0**	**Equity**
Resolution fund assets	**5**		
Bail-out funds	**2**		
Σ_A 82		Σ_L 82	

10

After the Bail-in

Step 4: resolution fund assets (0→5)

- here the fund is used for covering losses rather than recapitalisation

NAV = 80 – 82 + 0 = -2

Step 5: taxpayers' bail-out (0 2):

NAV = 82 – 82 +0 = 0

(Step 6: convert 10 of senior debt into equity in order to comply with capital ratios)

Note: [a] protected by deposit guarantee scheme

[b] Step 3 can reduce the amount of senior debt to 35 and thereby ensure zero NAV straight away. However, circumstances are expected to determine whether the route of maximum possible bail-in or its minimum 8% limit (shown here) will be pursued.

Source: Kabelík, K. (2014). Banking Regulation: Trends & Impacts. The Czech Banking Association

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Source: https://digneconsult.com/sg/4-reasons-why-self-reflection-is-important/

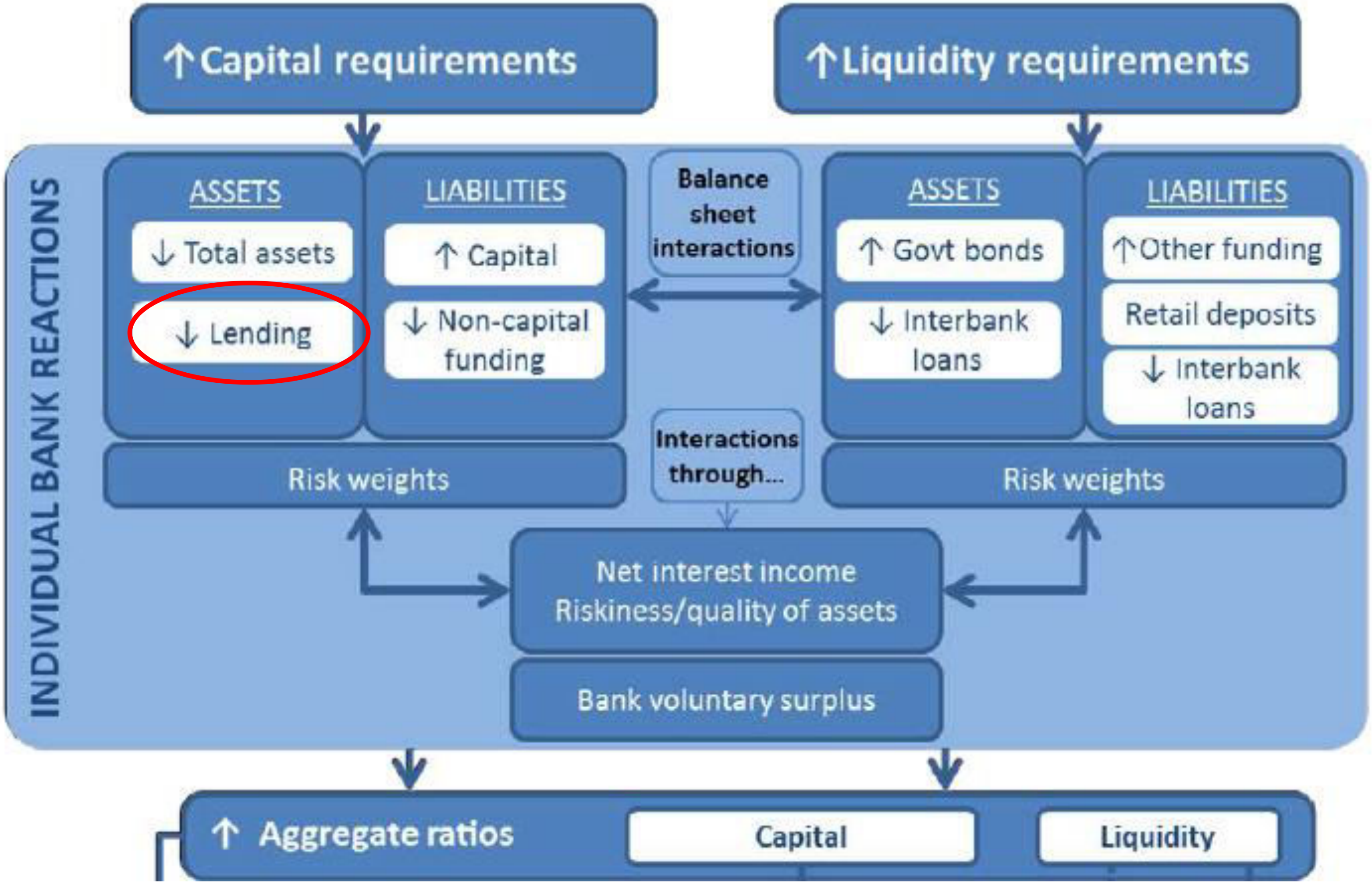
5. Assessment of regulation

The long-term economic impact (LEI) of stronger capital and liquidity requirements

- The LEI methodology proceeds in two steps:
  - (i) it assesses the long-term **expected benefits** of higher bank capital requirements via the reduction in expected output losses from systemic banking crises; and
  - (ii) it compares these benefits with **the expected costs in terms of forgone output** (impacts on: i) the lending channel and ii) economic activity).
- In deriving these estimates, the LEI adopts an explicitly very conservative approach by making assumptions that overestimate costs and downplay expected benefits.
- Finally, net benefits are calculated (i.e. benefits-costs)

Source: BIS (2016). Annual report 2015/2016. Bank for International Settlements

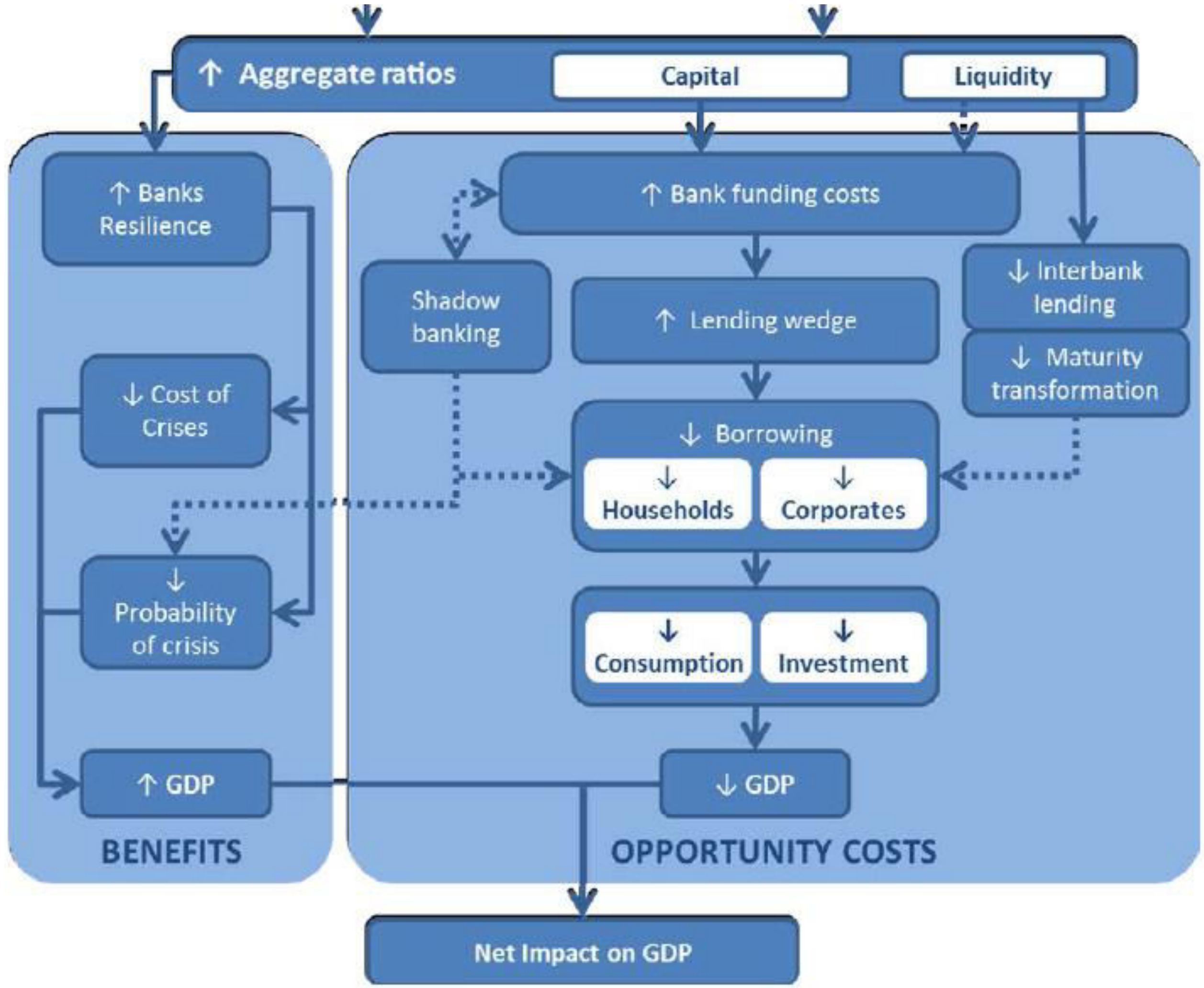
5. Assessment of regulation
Transmission mechanism of regulatory requirements to economic activity (1/2)



Source: BCBS (2016). Literature review on integration of regulatory capital and liquidity instruments. BCBS Working Paper 30

5. Assessment of regulation

Transmission mechanism of regulatory requirements to economic activity (2/2)



Source: BCBS (2016). Literature review on integration of regulatory capital and liquidity instruments. BCBS Working Paper 30

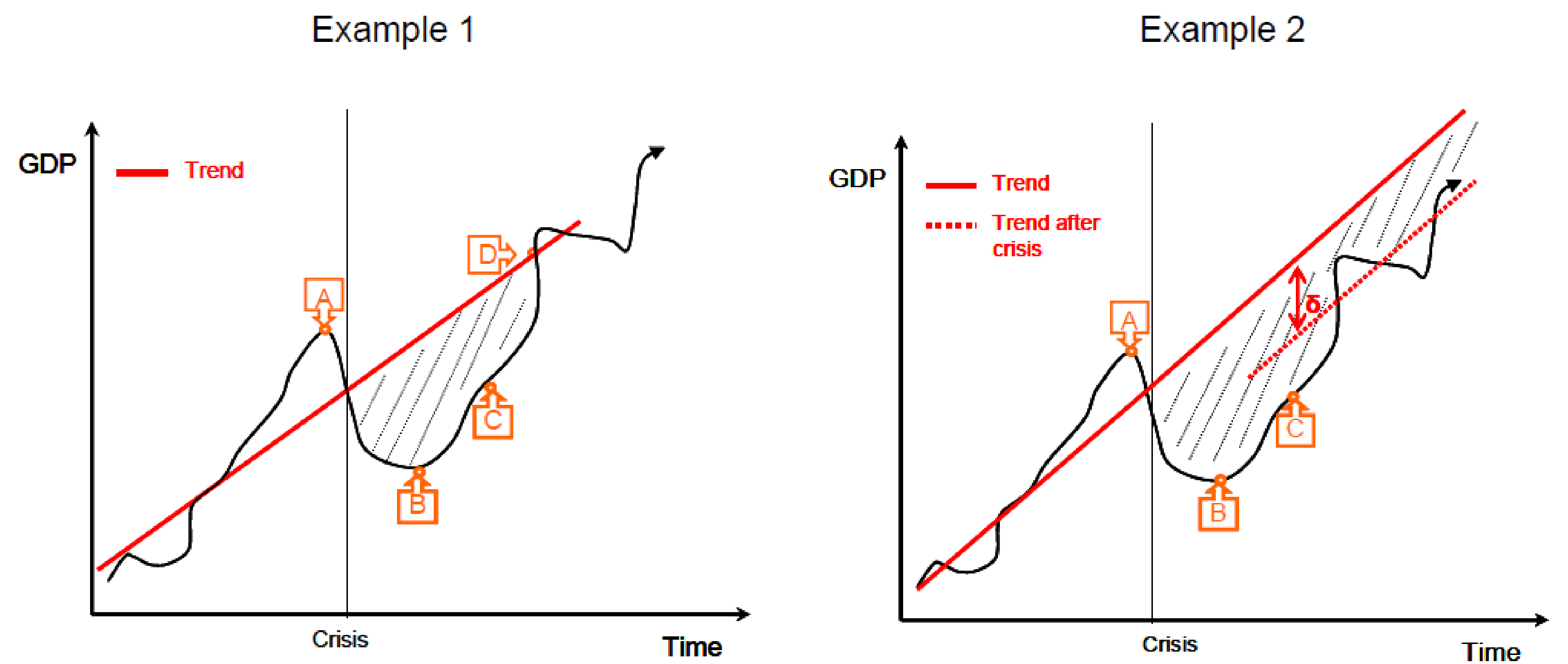
1. Estimating benefits: lower cost of crises 1/2

- The main justification for increasing capital requirements on banks is to reduce the likelihood of financial crises driven by the banking sector, while higher capital may also decrease **the cost of crises**.
- **Better capitalised banks are less vulnerable to shocks** (*vs. maximalization of ROAE!*). More bank capital reduces the probability and expected costs of future banking crises.
- There is evidence in the literature that better capitalised banks make the provision of credit more stable, even in a downturn by preserving long-term lending relationships

Source: BCBS (2016). Literature review on integration of regulatory capital and liquidity instruments. BCBS Working Paper 30

5. Assessment of regulation

1. Estimating benefits: lower cost of crises 2/2



Point A: pre-crisis peak. Point B: post-crisis trough. Point C: GDP growth equals trend GDP growth for the first time after the crisis. Point D: the level of GDP returns to the pre-crisis level.

Source: BCBS (2010). An assessment of the long-term economic impact of stronger capital and liquidity requirements.

5. Assessment of regulation

2. Estimating costs: i) impact on the lending channel

Estimates for lending reduction due to an increase in capital requirements — Table 1

	Lending reduction (%)	Credit growth reduction (%)	Sample	Estimation period	Period of the accumulated effect (months)
MAG (2010)	1.4		Average 15 countries		24
Fraisse et al (2015)	1–8		France	2008–2011	12
Aiyar et al (2014b)		4.6	UK	1998–2007	<3
Bridges et al (2014)	3.5		UK	1990–2011	36
Messonier and Monks (2014)		1.2	France	2011–2012	9
Noss and Toffano (2014)	1.4		UK	1986–2010	Long run
Meeks (2014)	0.2 (mortgage) 0.5 (corporate)		UK	1989–2008	Long run
Mendicino et al (2015)2	0.15 (mortgage) 0.43 (corporate)		Euro area	2001–2013	Long run
Sutorova and Teply (2013)	1.4–3.5	1.2–4.6	Europe	2006–2011	Long run
De-Ramon et al (2012)	1.6		UK	1992–2010	Long run

[1] 1% at the intensive margin, 8% considering both the intensive and extensive margins. [2] Authors' calculations.

- The first step of the assessment focusses on the "pure" lending transmission channel, estimating directly the impact of capital requirements on either lending interest rates (or the spread between lending and deposit interest rates) or on lending growth (or both)

Source: BCBS (2016). Literature review on integration of regulatory capital and liquidity instruments. BCBS Working Paper 30

5. Assessment of regulation

2. Estimating costs: i) impact on the lending channel (case study)

JEL Classification: G18, G21, G32
Keywords: Basel III, bank, capital requirements, EU, lending rates, regulation

The Impact of Basel III on Lending Rates of EU Banks*

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Abstract

In this paper we focus on practical aspects of the new framework for banking regulation in the European Union as defined in Basel III and Capital Requirements Directive IV. We employ a simultaneous equations model where banks choose the optimal level of capital, which is seen as a call option. In our modeling, we employ data on 594 banks in the European Union during the 2006–2011 period. Our results predict a modest drop in the level of loans provided of about 2% from the current level. The drop in loans is not expected to be large because (i) many European banks are already complying with the capital requirements even though they are not yet fully compulsory, (ii) the impact of a one percentage point increase in the common equity ratio should lead to an increase in lending rates of only 18.8 basis points, and (iii) the elasticity of demand for loans in the EU is reported to be relatively low. Taking into consideration the seven-year implementation period for the new capital requirements, the impacts should not be very perceptible for the EU economies.

Source: Šútorová, B., Teplý, P. (2013), "The Impact of Basel III on Lending Rates of EU Banks." Czech Journal of Finance, Vol. 63, No. 3, pp. 226-243

5. Assessment of regulation

2. Estimating costs: ii) impacts on economic activity (lending / GDP)

Impact on steady-state GDP level of increasing the capital ratio of capital[1] — Table 3

	Impact (median)	Range	Country	Size of change in capital ratio
LEI (2010)	0.09%	0.02–0.35%	13 OECD	1 percentage point in ratio of capital to RWAs
MAG (2010)	0.10%	Maximum 0.15% after 8 years	17 OECD	
Slovik and Cournède (2011)	0.20%	Impact achieved after 5 years	3 OECD	
Angelini and Gerali (2012)	0.05%	0–0.36%	Euro area	
Roger and Vitek (2012)	0.11	0.09–0.24	15 advanced and emerging economies	
Mendicino et al (2015)[2]	0.04%		Euro Area	
De-Ramon et al (2012)	0.30		UK	Full Basel III increase in ratio of capital to risk-weighted assets
Miles et al (2013)	0.25		UK	1% increase in cost of capital

[1] Table is taken from Rochet (2014) and augmented with relevant studies shown in the table [2] Authors' calculations.

- The second step in the assessment of the economic costs of higher capital requirements is to evaluate the impact of higher lending spreads on the long-run level of GDP

Source: BCBS (2016). Literature review on integration of regulatory capital and liquidity instruments. BCBS Working Paper 30

3. Net benefit calculations 1/2

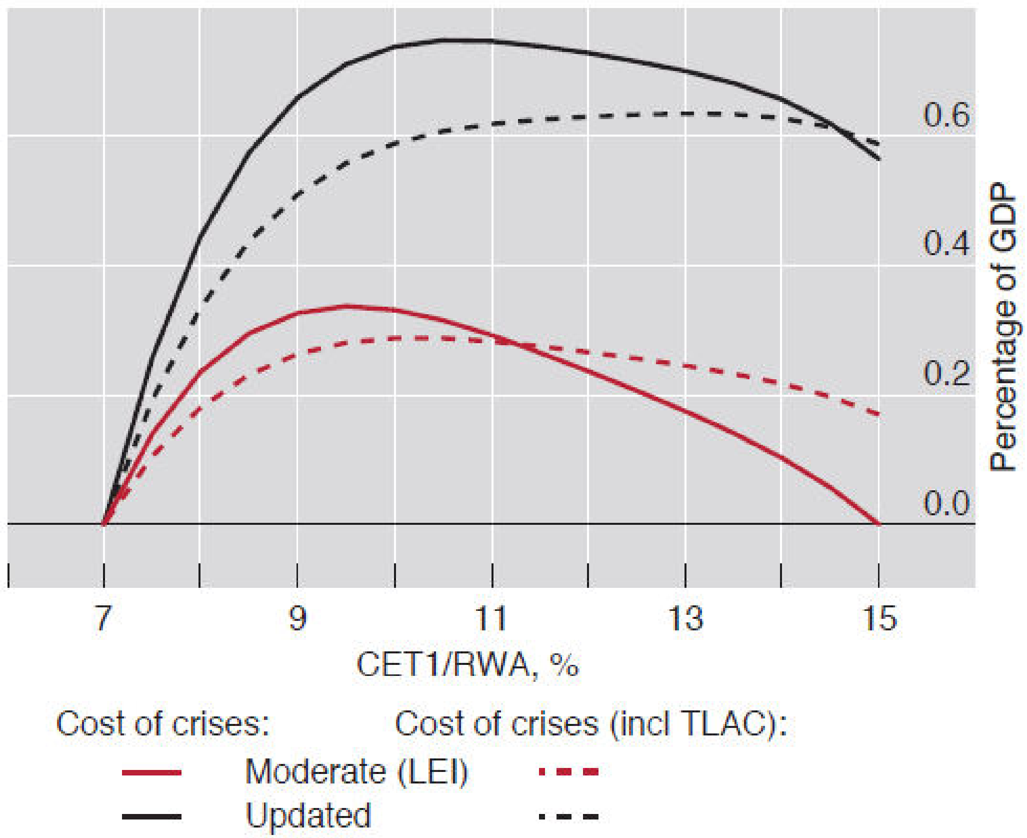
- Only a small number of the 60 or so surveyed studies make a comparison between the estimated benefits and costs of heightened capital requirements. **All of these papers conclude that benefits of the Basel regulations exceed costs.**
- BCBS (2010) concludes the net benefits of doubling the capital ratio from 7% to 14% when banking crises may impose large and permanent effects is about 5.8% of the steady-state level of GDP.
- De-Ramon et al (2012) find that the benefits of Basel III are nearly three times as large as the costs.
- Junge and Kugler (2013) argue that the impact of doubling the capital ratio is large for the Swiss banking sector, and that the net benefit will be in the order of 12% of GDP.

Source: BCBS (2016). Literature review on integration of regulatory capital and liquidity instruments. BCBS Working Paper 30

5. Assessment of regulation

3. Net benefit calculations 2/2

Expected net marginal benefits[2]



[2] The moderate crisis cost (LEI baseline) estimate assumes a cost of systemic crises equal to 63% of GDP, whereas the updated crisis cost estimate assumes a cost of 100% of GDP. The dashed lines show the corresponding estimates if the impact of introducing the new TLAC requirements and a 50% reduction in the cost of regulation ("Modigliani-Miller" offset) are taken into account.

Source: BIS (2016). Annual report 2015/2016. Bank for International Settlements

Contents

Source: https://digneconsult.com/sg/4-reasons-why-self-reflection-is-important/

The impact of Brexit (23 June 2016)

1) **Economic impacts**
   - ✓ UK-EU27 trading relationship (manageable)
   - ✓ Czech economy (manageable)
   - ✓ UK banks (***passporting vs equivalence***)
2) **Political impacts**
   - ✓ EU budget
   - ✓ Migration and labour mobility
   - ✓ Intra-EU political challenges

Source: Author based on Stehrer, R., Grieveson, R. (2017). Brexit: Small economic impact, but huge political risks ahead. https://wiiw.ac.at/brexit

6. Brexit implications for the UK

Brexit– three channels

1) Higher bank operating costs

- Moving operations out of London, subsidiaries instead of branches

2) Changes in the financial services "rulebook"

- 60% follows EU rules
- Revisions would require legal, compliance, operational, and information technology changes.

3) Macroeconomic impact

- Protracted negotiations might result in lower foreign investment and physical and human capital flows into the UK

Source: IMF (2016). Global Financial Stability Report, October 2016

6. Brexit implications for the UK
Passporting vs equivalence

- Being a member of the European Economic Area (EEA) and being bound by EU legislation confers **the right to "passport" certain services across the EEA**, either on a cross-border basis or through branches, without the need for additional local authorisations; these passports are not yet available to third country firms
- Some recent EU legislation has included some "third country regimes" which allow non-EEA firms to provide services into the EEA if their home country **regulatory regime is "equivalent" to EU standards**.
- Unlike an EEA "passport", the rights under these regimes **can be withdrawn** at any time if a home country deviates materially from EU standards

Source: Oliver Wyman (2016). The impact of the UK's exit from the EU on the UK-based financial services sector

6. Brexit implications for the UK

A spectrum of regulatory outcomes

HIGH ACCESS — LOW ACCESS

Full passporting and equivalence

- UK receives full equivalence and passporting across the full scope of Single Market Directives
- Includes negotiation of new access arrangements with the EU (for example, CRD, IDD)

Equivalence where provision already exists

- UK becomes third country[1]
- Receives equivalence across Single Market Directives and regulations where equivalence is already established
- No new arrangements are negotiated (for example, no new CRD regime for UK banks)
- Delegation of portfolio management is permitted to the UK in most areas in line with international norms
- Bilateral agreements with EU member states are secured to retain access where possible (for example, insurance)

Third country agreement (no preferential access)

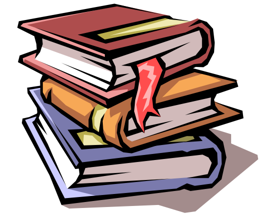
- UK becomes a third country[1] but does not receive equivalence across core Single Market Directives
- No new access arrangements are negotiated on a bilateral basis
- Delegation of portfolio management is permitted to the UK in most areas in line with international norms

1. The UK will become a third country when it moves outside the coverage of the EU Treaties, which confer single market access rights, "passporting", and the assumption of regulatory "equivalence"

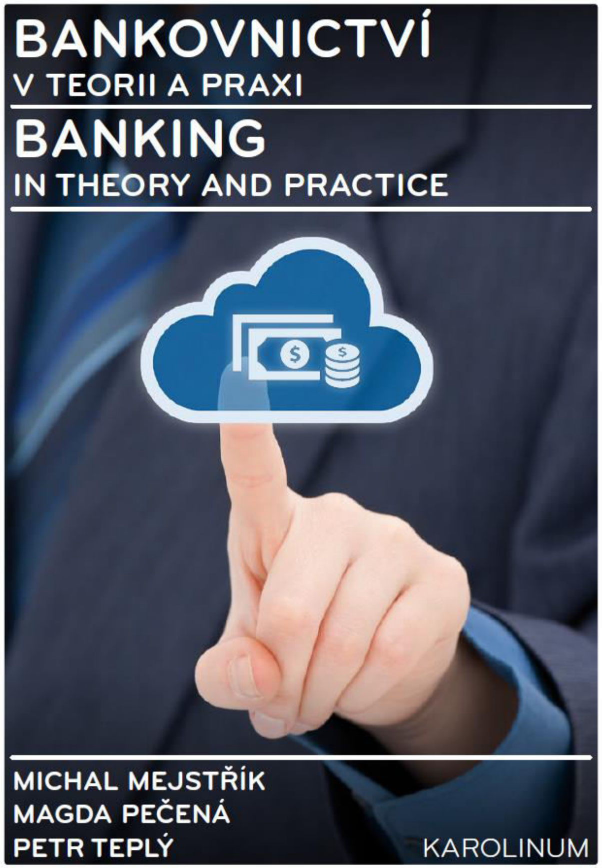
Note: Outline of future relationship here is an outcome based summary of the relationship and key aspects, rather than a comprehensive detailing of all legal and regulatory agreements

Source: Oliver Wyman (2016). The impact of the UK's exit from the EU on the UK-based financial services sector

Reading for the this lecture



Source: http://clipart-library.com/clipart/887869.htm

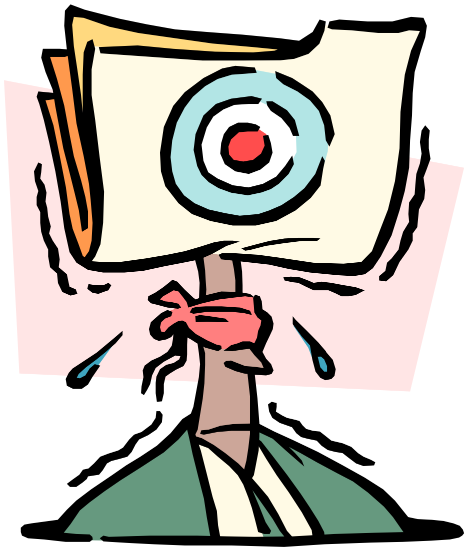


Source: https://www.megaknihy.cz/odborna-naucna/195343-bankovnictvi-v-teorii-a-praxi-banking-in-theory-and-practice.html

- ✓ **Chapter V/Bank regulation**

Discussion

Thanks for your attention.
Let´s discuss it now!



Source: https://vsoc.org.uk/rallies/rally-help/