



OESTERREICHISCHE NATIONALBANK  
EUROSYSTEM

# Financial Stability: Are We Well Equipped to Deal With Potential Turbulence? A Financial Market Perspective

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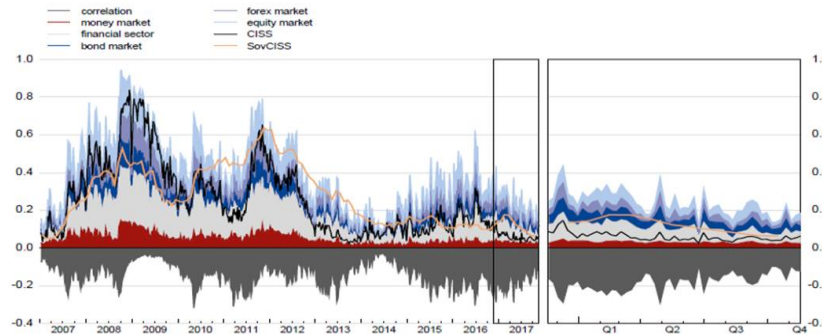
National Bank of the Republic of Macedonia and Reinventing Bretton Woods Committee Conference:  
“A New Normal? The Global Economic Expansion, Inflation Dynamics, Financial Stability and Its  
Meaning for Global Asset Management”

Skopje, February 16, 2018

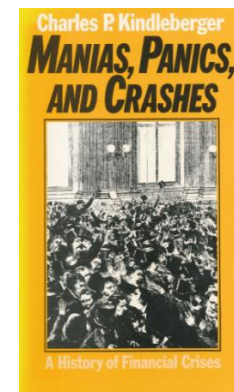
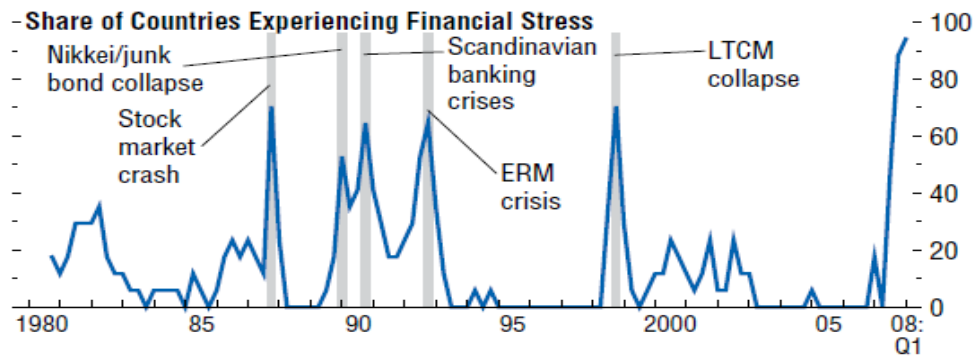
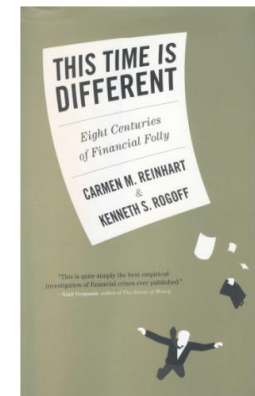
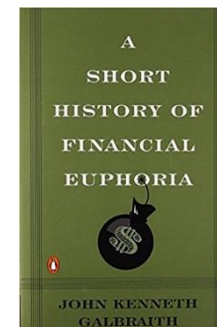
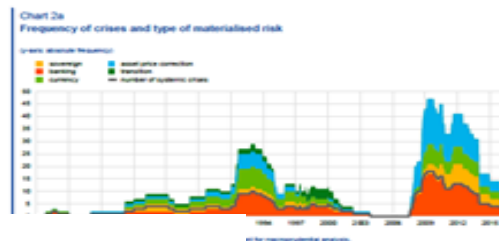
# Prologue: Economic History - A History of Financial Crises...



1.1 Composite indicator of systemic stress  
(Last observation: 17 Nov. 2017)



Sources: Thomson Reuters, ECB and ECB calculations.  
Notes: The CISS is unit-free and constrained to lie within the interval (0, 1). See Hollo, D., Kremer, M. and Lo Duca, M., "CISS - a composite indicator of systemic stress in the financial system", Working Paper Series, No 1426, ECB, March 2012. The Sovereign CISS applies the same methodological concept of the CISS.



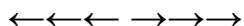
# Outline

- **Prologue:**  
Economic History: A History of Financial Crises...
- **What** Do We Think Financial Stability Is?
- **What** Did Financial Regulation Since 2008 Address?
- **What** Was/Is the Role of Monetary Policy/Central Banks In All This?
- **Any** Conclusions?

# What Do We Think Financial Stability Is?

## Status of Financial System

**Financial Stability**



**Financial Crisis**

= „Absence of financial crisis“

← *In Reality: Different Degrees of Financial Fragility* →

## Two Different Financial Crisis Perspectives

**Institutional Perspective**

→ Banking Crisis

→ Sovereign Debt Crisis

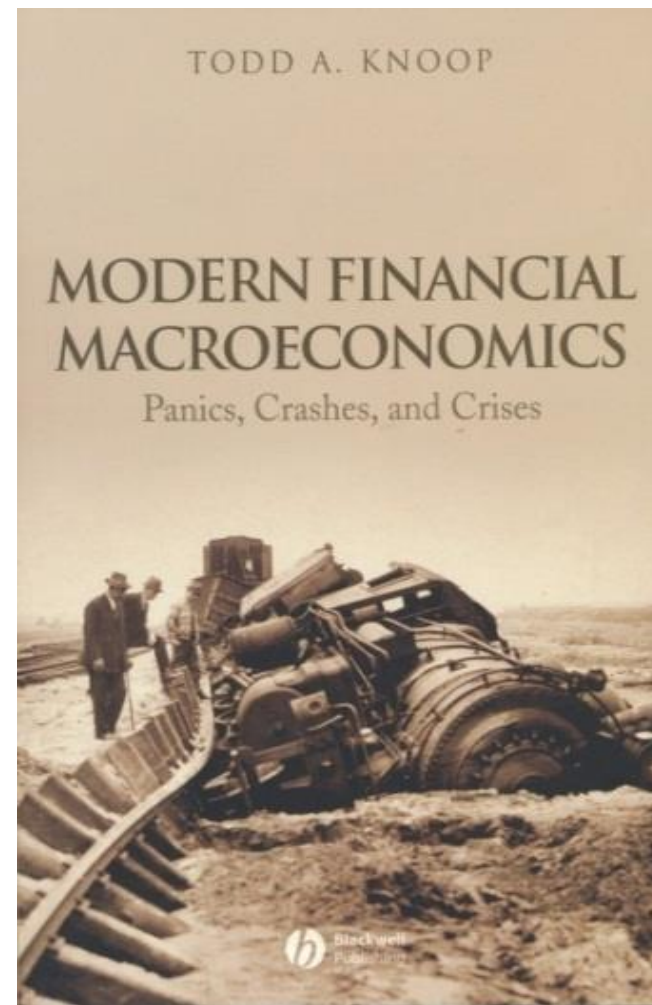
→ .....???

**Market Perspective**

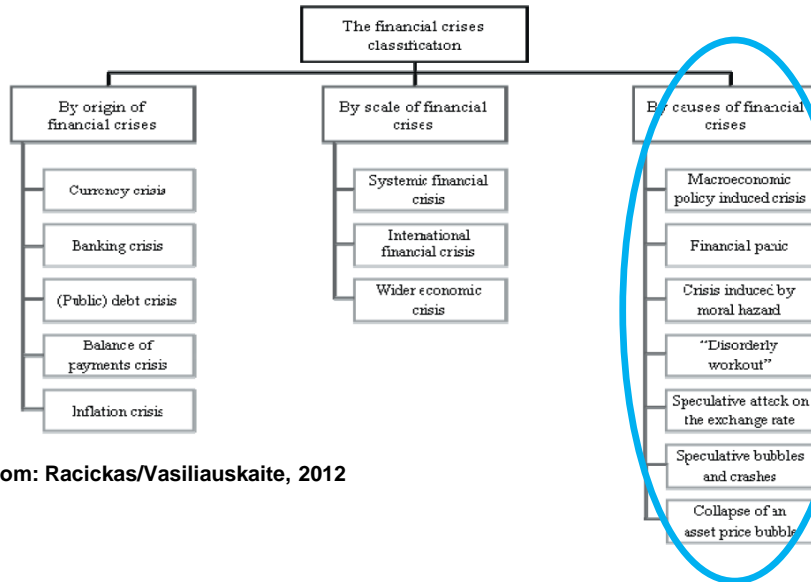
→ Currency Crisis

→ Stock Market Crisis

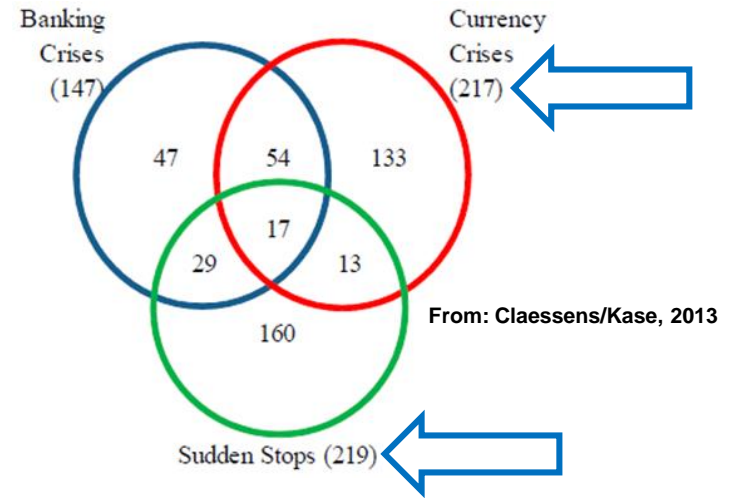
→ .....???



# Crisis Causes and Origin: Market Developments Dominate

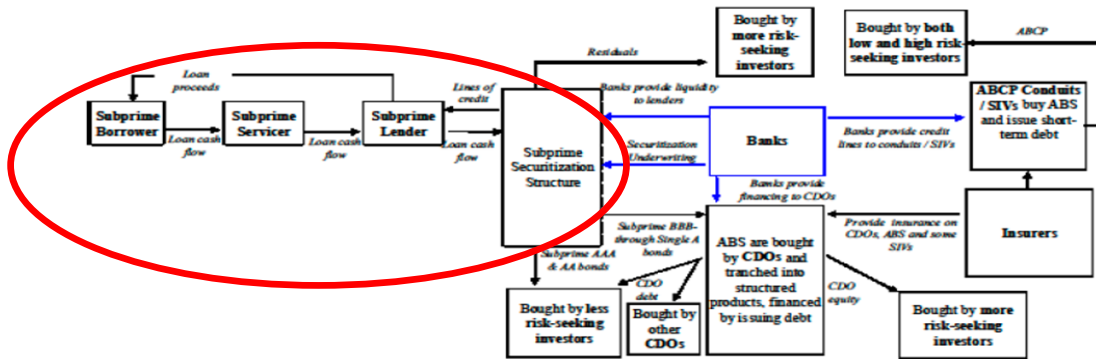


From: Racickas/Vasiliauskaite, 2012



From: Claessens/Kase, 2013

Figure 2. A Visual Sense of the Complexity: From Mortgages to Securities



Source. Adapted from Figure 1.10: Mortgage Market Flows and Risk Exposures, Chapter 1, p. 11, Global Financial Stability Report, October 2007

From: Blanchard, 2009

# August 2007: Financial Market Turbulence Long Before Lehman Breakdown

Chart 2 Spread between the three-month EURIBOR and the overnight indexed swap rate



Sources: Bloomberg and ECB.  
 Note: The swap rate is the fixed rate that banks are willing to pay in exchange for receiving the average overnight of the swap agreement. It reflects the same negligible credit and liquidity risk premium as the overnight rate. The spread is relatively immune to changes in liquidity or credit risk.

From: ECB Monthly Bulletin, October 2010



FINANCIAL TIMES

## ECB injects €95bn to help markets

Gillian Tett in London, Richard Milne in Frankfurt and Krishna Guha in Washington  
 AUGUST 10, 2007

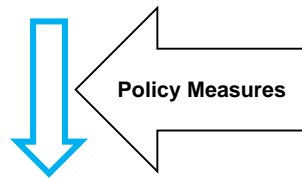
The European Central Bank scrambled to head off a potential financial crisis on Thursday by pumping an emergency €94.8bn (\$131bn) into the region's banking system after liquidity in the interbank market started to dry up, threatening banks' access to short-term funds.

The cash injection was the biggest in the ECB's history, exceeding the €69bn provided the day after the terrorist attacks of September 11 2001. The ECB also made an unprecedented one-day pledge to meet 100 per cent of all funding requests from financial institutions.

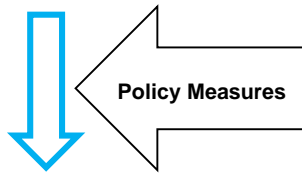
# Financial Institutions: Transmitting Shocks from Market Turbulence to the Real Economy



**Market Turbulence**

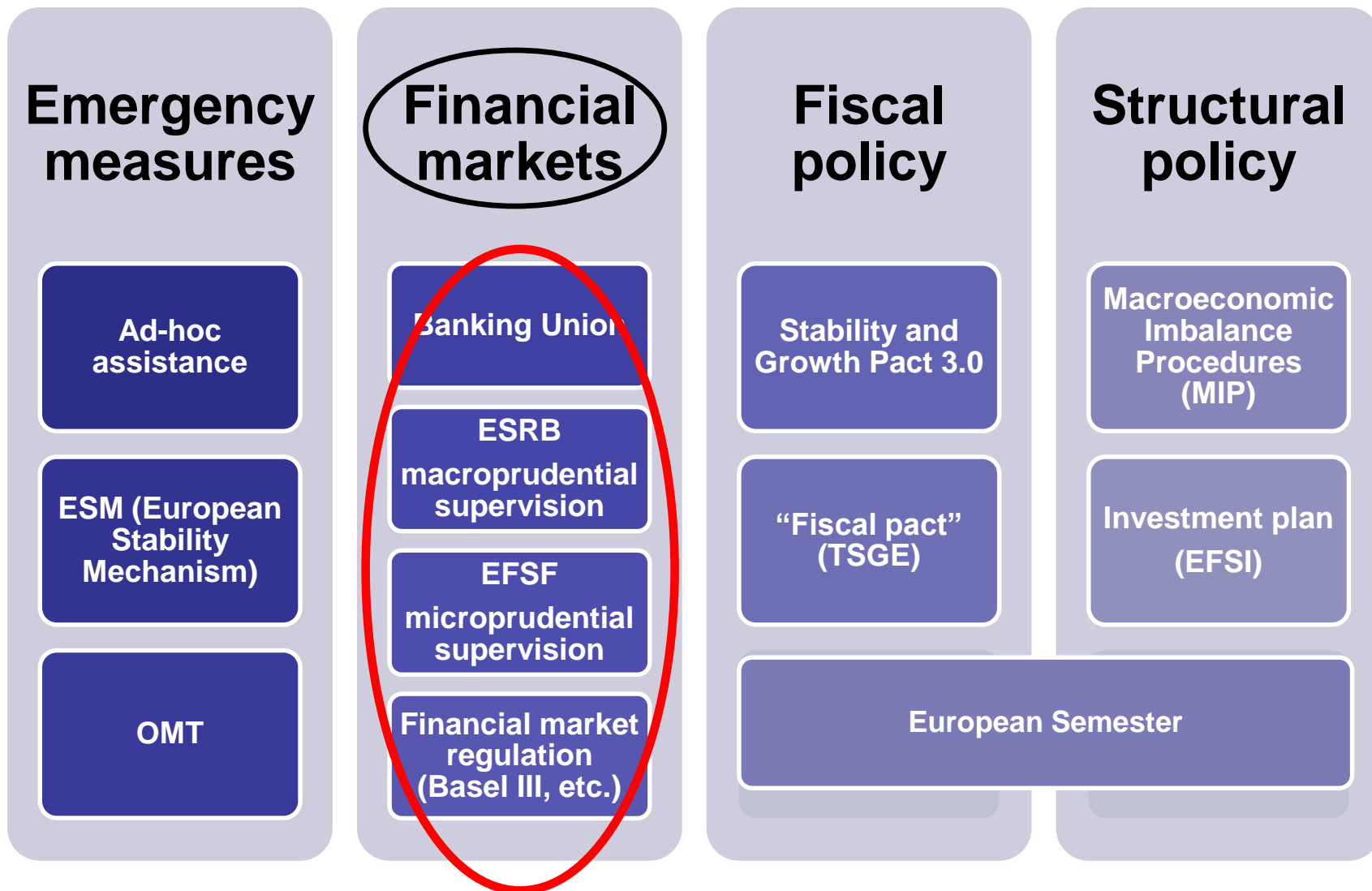


**Financial Institutions  
(„Banking System“)**



**Real Economy**

# Broad Based EU Crisis Response Since 2008





# EU Legislative Measures: Very Much Focussed on the Banking System

*„In the wake of the financial crisis, **more than 40 new pieces of EU legislation** were adopted to restore financial stability and market confidence.“*

(European Commission – Fact Sheet, 23. November 2016)

## **Risk Reduction Measures**

- **Capital Requirements Regulation**
- **Single Supervisory Mechanism**
- **Bank Recovery and Resolution**
- **Single Resolution Mechanism**
- **Deposit Guarantee Schemes**
- **Risk Reduction Measures Package**
- **Ranking of Unsecured Debt Instruments**
- **Treatment of Sovereign Exposures**
- **Measures to Tackle NPL's**

## **Risk Sharing Measures**

- **European Deposit Insurance Scheme**
- **Single Resolution Fund Backstop**

(European Commission: Note presenting a stock-take of Financial Reforms, 29. November 2017)

# Financial Market Environment: Limited and Specific Regulatory Initiatives Only

EMIR (OTC derivatives)

- Improving transparency & reducing counterparty risk

MMSR

- More information and transparency on money markets

Financial Benchmarks

- Preventing market abuse & more resilient benchmarks

MiFiR / MiFID II

- Improving transparency

Money Market Funds reform

- Enforcing resiliency of MMFs

Impact on markets

- Reduced opacity / more transparency
- Additional demand HQLA
- Higher asset encumbrance
- Higher cost of money market transactions
- Larger role non-banks

# G20 Priority Areas of Financial Reform: Mainly Banking

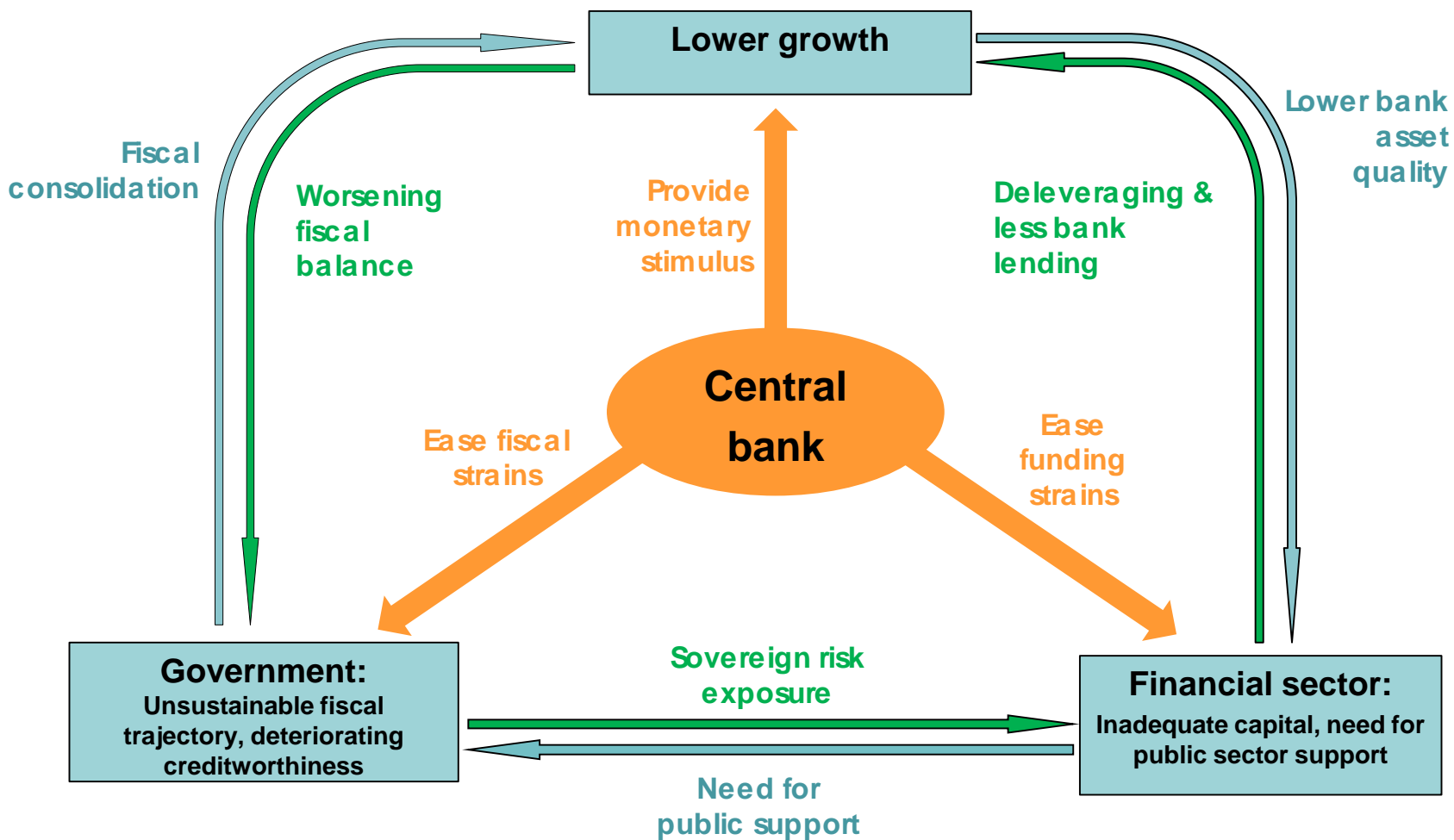


Table on implementation of reforms in priority areas by FSB jurisdictions (as of 30 June 2017)

The table provides a snapshot of the status of implementation progress by FSB jurisdiction across priority reform areas, based on information collected by FSB and standard-setting bodies' (SSBs) monitoring mechanisms. The colours and symbols in the table indicate the timeliness of implementation. For Basel III, the letters indicate the extent to which implementation is consistent with the international standard. For trade reporting, the letters indicate to what extent effectiveness is hampered by identified obstacles.

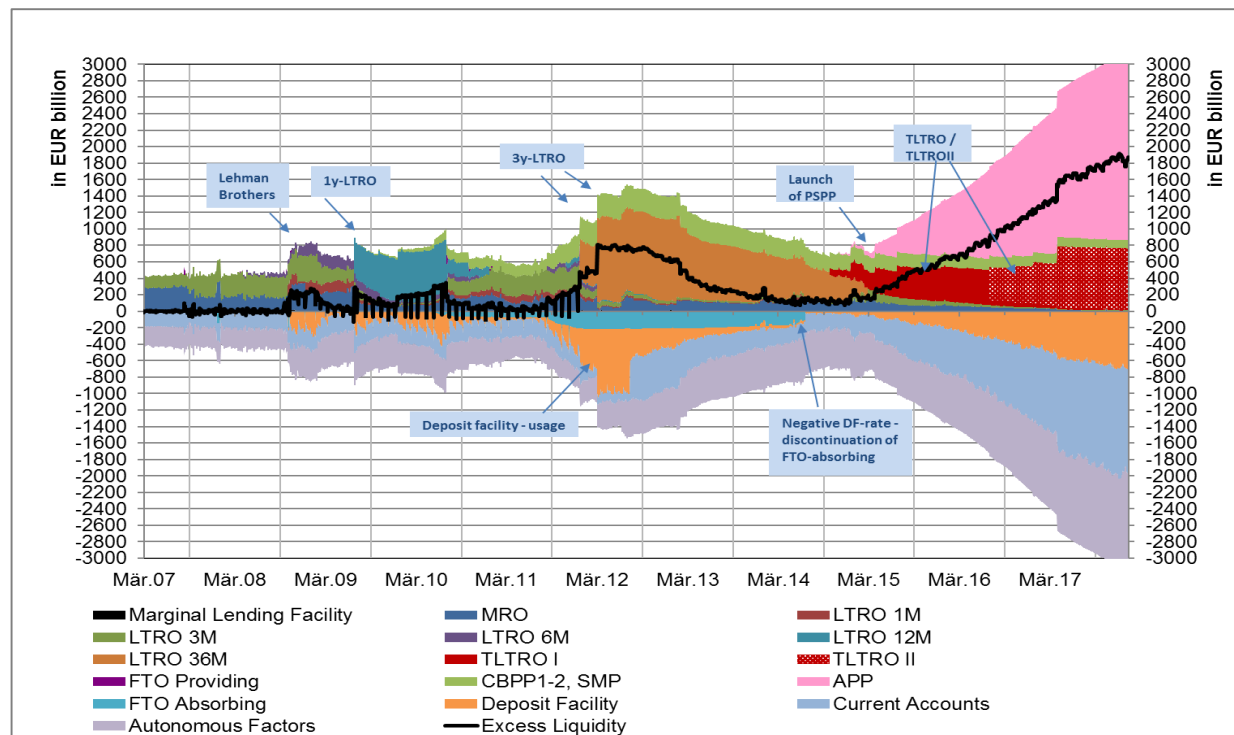
Reform Area	Basel III <sup>A</sup>						Compensation	Over-the-counter (OTC) derivatives (as of 30 June 2017)				Resolution				Shadow banking	
	Risk-based capital	Liquidity coverage ratio (LCR)	Higher loss absorbency for G-SIBs (home jurisdictions)	Requirements for D-SIBs	Leverage ratio	Net Stable Funding Ratio (NSFR)		Trade reporting	Central clearing	Platform trading	Margin	Minimum TLAC requirement for G-SIBs (home jurisdictions)	Transfer / bail-in / temporary stay powers for banks	Recovery and resolution planning for systemic banks	Transfer / bridge / run-off powers for insurers	Money market funds (MMFs)	Securitisation
	2013 (2019)	2015 (2019)	2016 (2019)	2016	2018	2018		end-2012	end-2012	end-2012	2016 (2020)	2019/2025 (2022/2028)					
Argentina	C	C					Δ								**	**	
Australia	C														*		
Brazil	C						Δ	F							**	**	
Canada	C							D, F							**		
China	C, Δ	C	C				Δ	R, D, F							**	*	
France	MNC	LC	C												**	*	
Germany	MNC	LC	C												**	*	
Hong Kong	C	C													**	*	
India	C	LC					Δ	D, F							**	*	
Indonesia	LC	C						R							**	*	
Italy	MNC	LC	C												**	*	
Japan	C	C	C					D							**	*	
Mexico	C	C						D							**	*	
Netherlands	MNC	LC	C												**	*	
Rep. of Korea	LC	C						D							**	*	
Russia	C	C					Δ								**	*	
Saudi Arabia	C	LC						R, D							**	*	
Singapore	C	C													**	*	
South Africa	C	C					Δ	D, F							**	*	
Spain	MNC	LC	C												**	*	
Switzerland	C		C												**	*	
Turkey	C	C						D, F							**	*	
United Kingdom	MNC	LC	C												**	*	
United States	LC	C	C	&			Δ								**	*	

# Central Role of Central Banks In Crisis Management

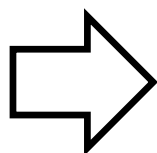


# What Have Central Banks Done, What Can They Do to Stabilize Financial Markets?

- Overall provision of (excess) liquidity
- Targeted liquidity provision
- Forward Guidance
- Selective Asset Purchases



*Bernanke (2009) lists more than 20 additional Programs and Measures of the Fed implemented in the course of the crisis.*



**Central Bank Measures in Times of Crisis: Provide Insurance Against Excessive (i) Financial Sector Instability and (ii) Financial Markets Instability**

# Eurosystem: Portfolio of Non-standard Monetary Policy Measures

- **Ample liquidity (to the banking system)**
  - Fixed rate full allotment (“unlimited liquidity provision”)
  - Long maturities (TLTROs), “funding for lending”
  - Change of eligibility rules for collateral
  - Change of interest rate corridor (“negative DFR”)
- **Forward guidance (mainly addressed to markets)**
  - On future interest rate path, on future liquidity amounts...
- **Asset purchase program (impact on banks and markets)**
  - Sovereign bonds, covered bonds, corporate bonds, ABS
  - Currently reduced from EUR 60 to EUR 30 billion per month

# Forward Guidance As a (New?) Central Bank Tool to Steer Market Expectations

## The ECB's forward guidance

### Key ECB interest rates

- expected to remain at present levels for an extended period of time
- and well past horizon of **net asset purchases**

### Asset Purchase Programme (APP)

- **net asset purchases** intended to continue at monthly pace of €30 billion, until end-Sep 2018
- or beyond, if necessary & in any case until GovC sees sustained adjustment in path of inflation (SAPI) consistent with inflation aim
- if outlook becomes less favourable, or if financial conditions become inconsistent with further progress towards SAPI, stand ready to increase APP in size and/or duration
- Eurosystem will reinvest principal payments from maturing securities for an extended period of time after end of net purchases, and in any case for as long as necessary

# The Sequencing Challenge: Monetary Policy Exit from Non-Standard Measures Particular Market Sensitive

## End of Asset Purchases

- €30bn per month till September 2018

## First Hike in Deposit Facility Rate

- End of negative DFR

## First Hike in Main Refinancing Rate

- Main signalling effect for change of monetary policy stance

## Balance Sheet Reduction

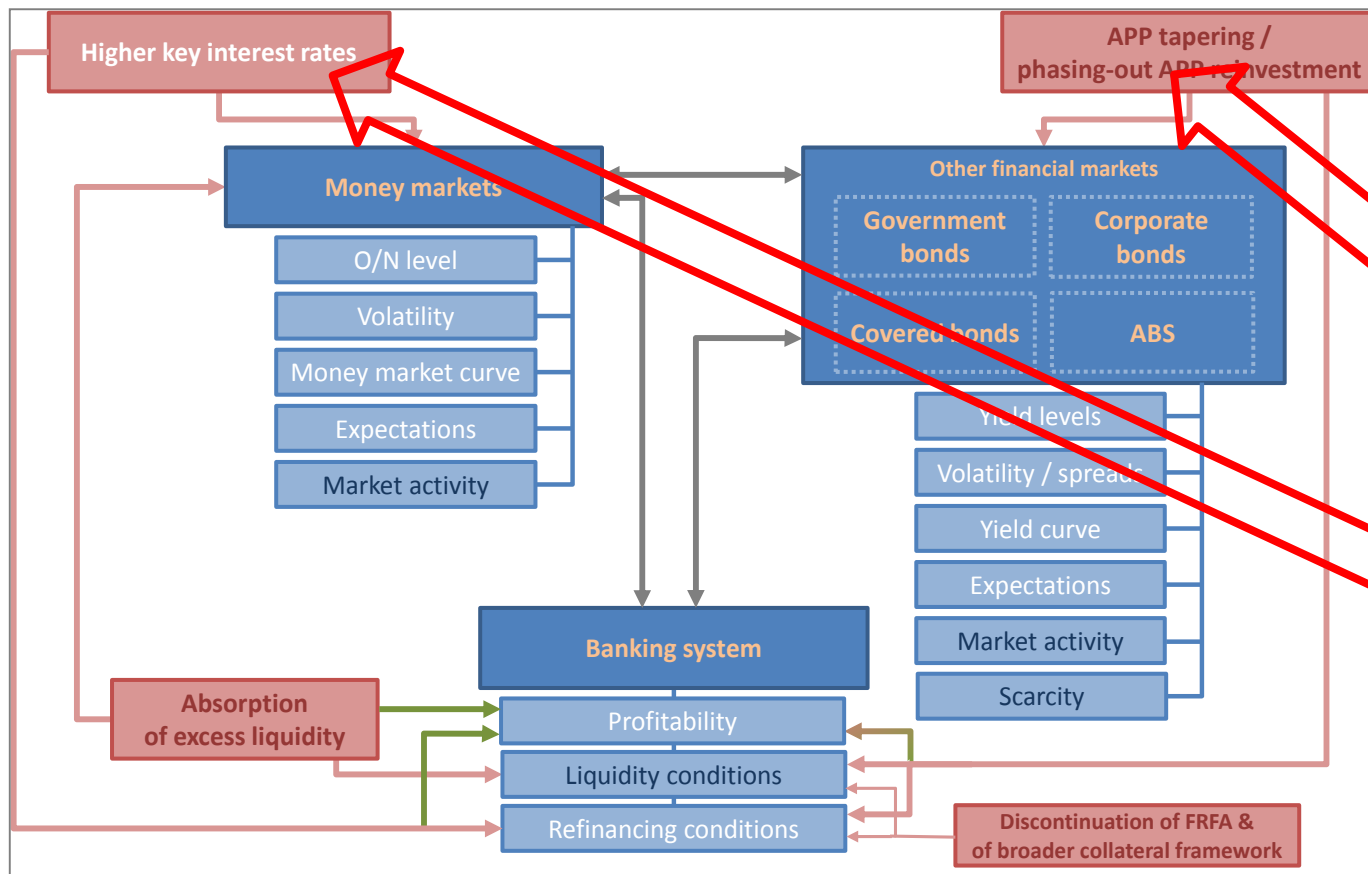
- End of reinvestments

## Reduction of Excess Liquidity

- Reduction of other elements of liquidity provision



# Looking Ahead: Significant and Complex Potential Financial Market Effects in Monetary Policy Exit Mode



**Remember:**  
**Bernanke's Taper Tantrum of May/June 2013**  
**Stock Market Correction of February 2018**

**Note:** White fonts indicate price/rate effects/channels, while dark fonts show quantity effects/channels. Red arrows represent predominantly restrictive effects, while green arrows indicate potentially expansionary effects.

## Any (*Tentative*) Conclusions?

- Financial crises are an **inherent characteristic** of our market economies
- For good reasons most regulatory and supervisory efforts to mitigate crisis effects **target the banking system**...  
...as banks are the main transmission channel of financial shocks to the real economy, the negative effects of which **we want to avoid**.
- Nevertheless it should be kept in mind, that **most financial crises originate from financial market turbulences**.
- We should think about how to tackle these **origins of crises** more directly...  
...even if this seems to be more complicated as it primarily asks for a **change in behaviour of financial market participants**.
- Given the **rise of financial market fragility** over the last decades...  
...Central Banks are increasingly playing an important role in dealing with all aspects of financial crises ...  
...as they are well equipped and able **to deal with both banking and market instability** at the same time.


 However, a **stronger focus on financial market stability** might help to avoid future „surprises“ of crises and – *the return of „This Time Is Different“ again?*



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