



Eonia / Euribor  
Past, Present and Future  
Milan, 13th June 2017

Sascha Weil  
Head of € Funding and Short Term Investments

# Agenda

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## 1. Euribor's dilemma

- Regulatory Challenges
- EMMIs Pre-Live Verification (PLV)
- Market Reactions
- Depth (or death?) of Interbank Money Markets
- Euribor Hybrid Model

## 2. EONIA's dilemma

- Panel bank decline
- Lending or borrowing – where lies the truth?
- Comparison to other benchmarks

# Euribor's dilemma

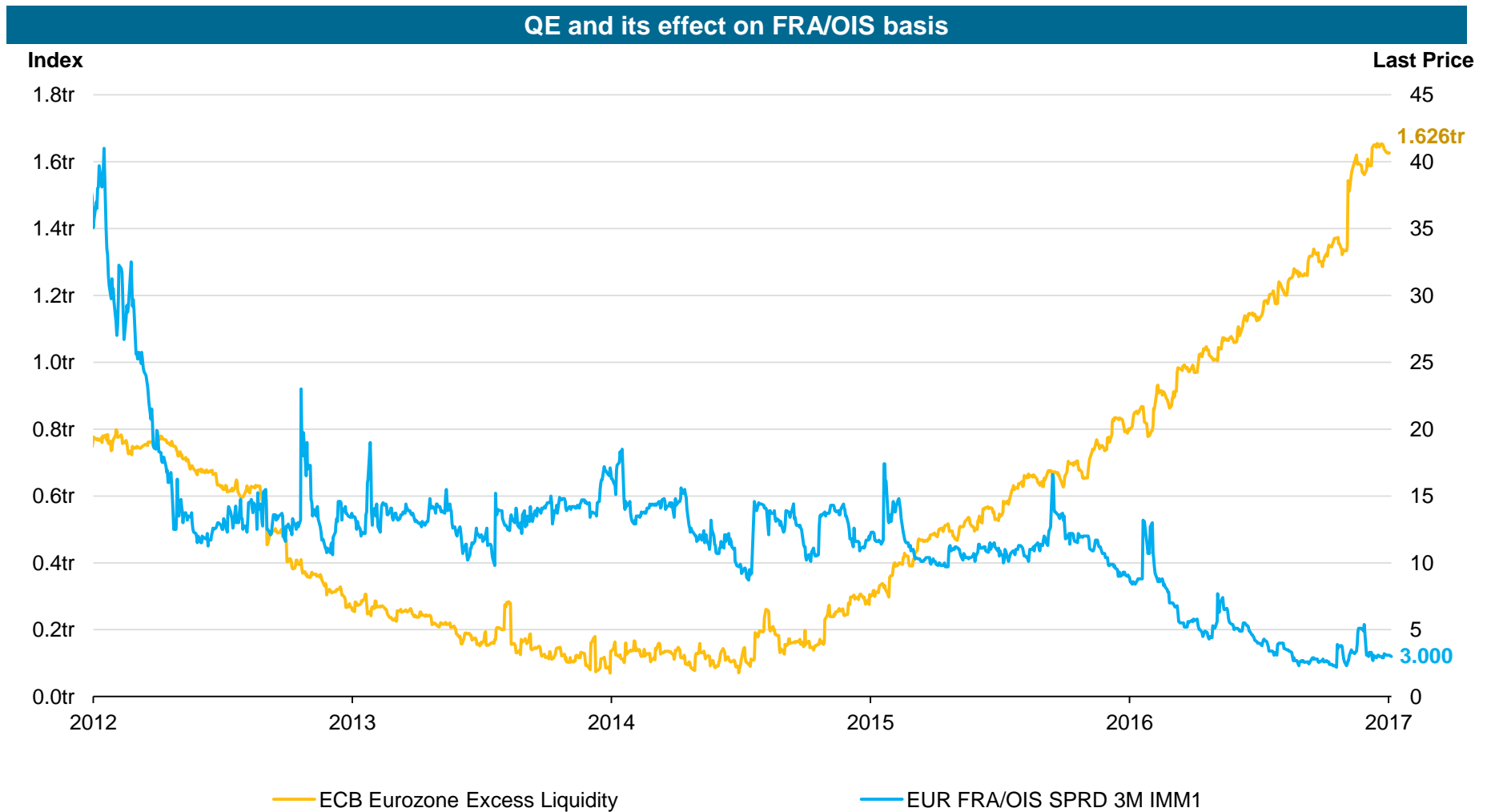
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## Background

- Departure of panel banks from 44 banks in 2012 down to 20 banks in 2017
- Definition challenge
  - ***Euribor® is the rate at which Euro interbank term deposits are offered by one prime bank to another prime bank within the EMU zone, and is calculated at 11:00 a.m. (CET) for spot value (T+2).***
- Regulatory challenge
  - Basel III head winds
    - ◆ RWA
    - ◆ Leveraged Balance Sheet
    - ◆ LCR / NSFR
- Behavioral challenge
  - Benchmark Users: what is the downside to not participate? 'Free lunch mentality'
  - Benchmark Contributors: what is the upside to participate? Unbalanced Risk/Reward?
- Transactional / Data challenge
  - Money Market Statistical Reporting (MMSR) into PLV
  - Discounting wholesale liquidity pockets outside of banking

# Liquidity Surplus is causing the tightening the basis

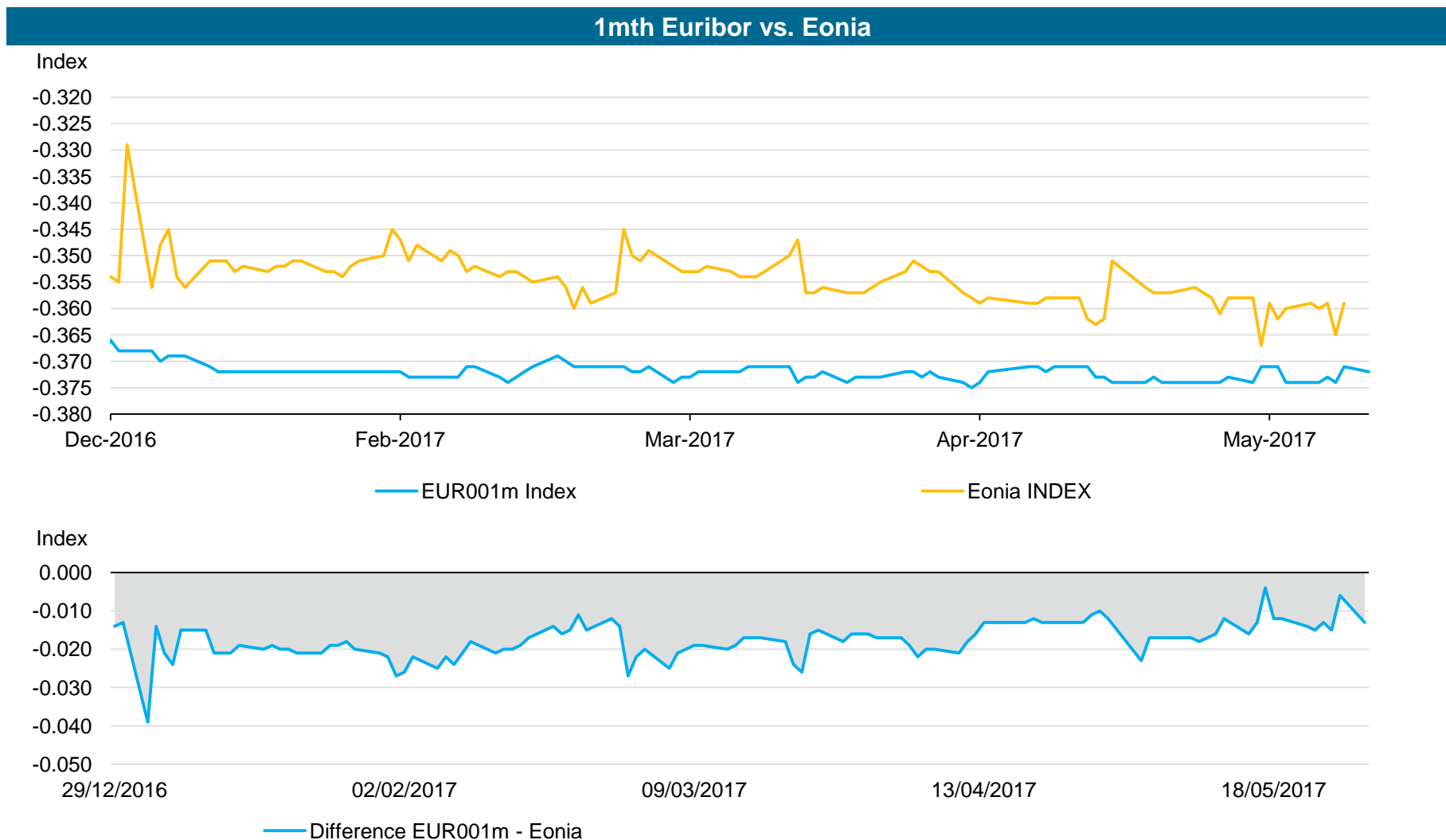
## Is FRA/OIS still fit for purpose as a bellwether of Interbank Markets?



Source: Bloomberg.

# Short end FRA/OIS trades in negative terrain

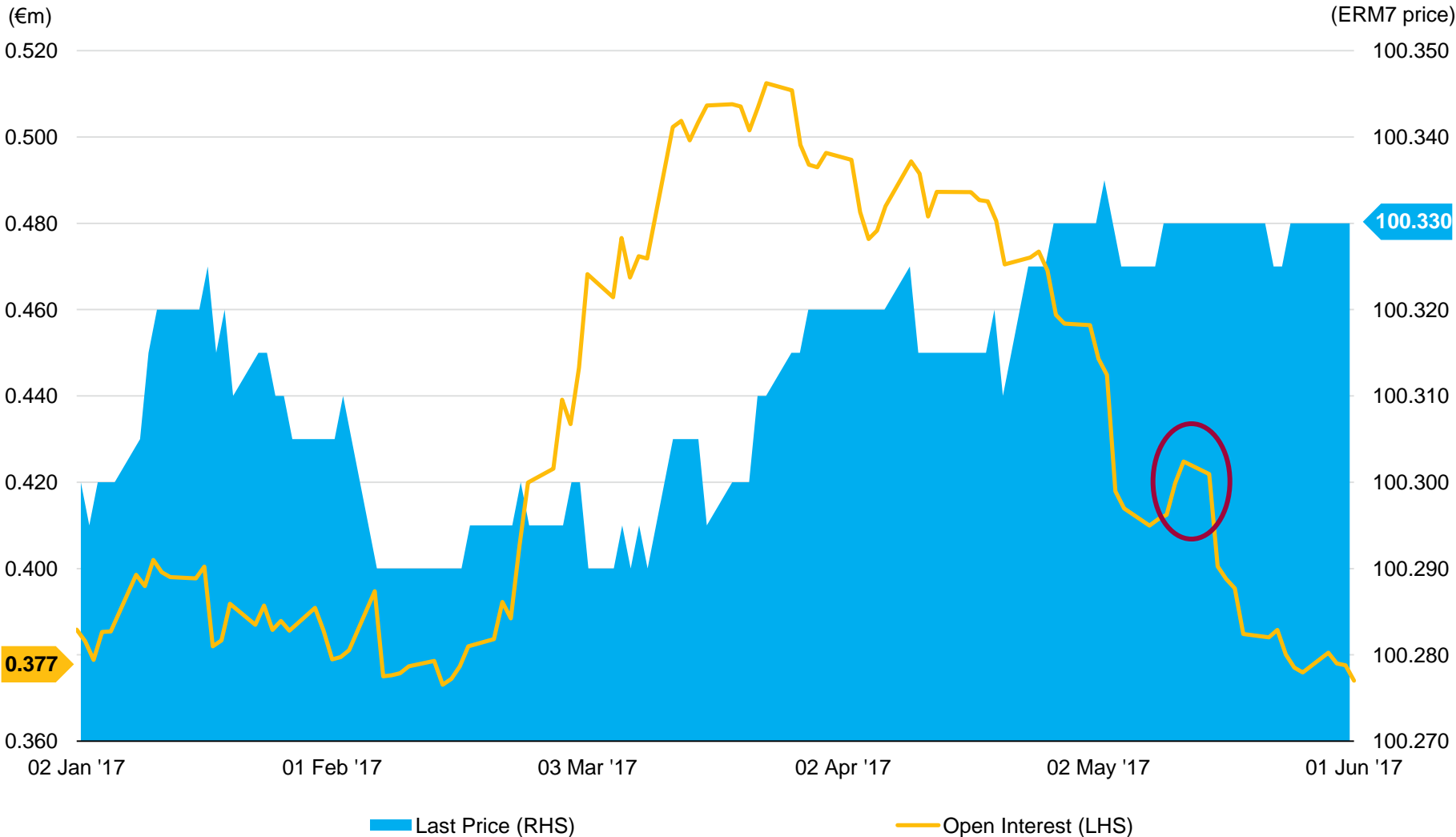
Is each benchmark definition fit for purpose?



Source: Bloomberg.

# PLV Announcement on 4<sup>th</sup> May: Open interest declines

Market expectation has been disappointed...?

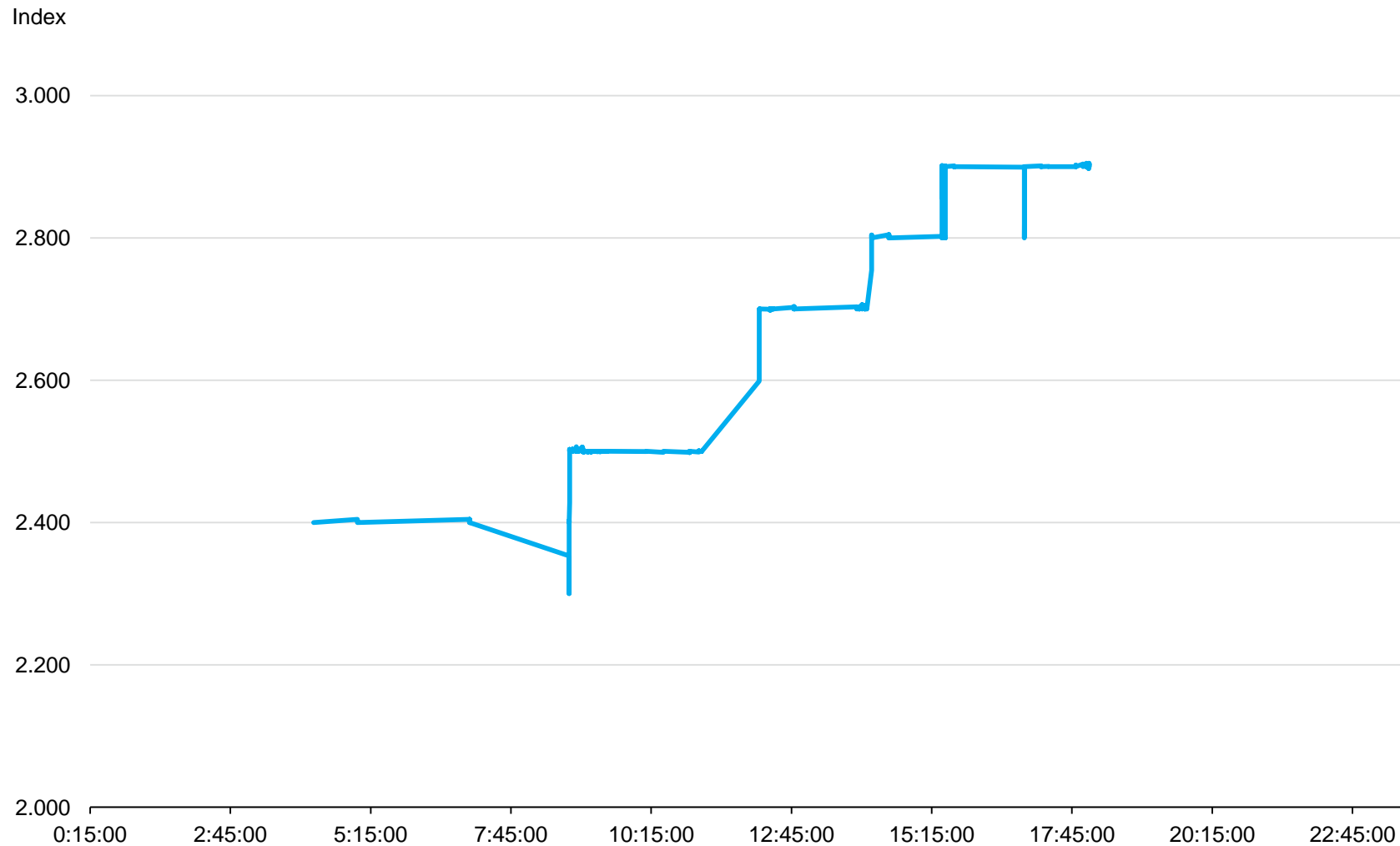


Source: Bloomberg.

# Lower Fixing expected?

Euribor/OIS Price action (Intraday) June IMM on 4th May 2017

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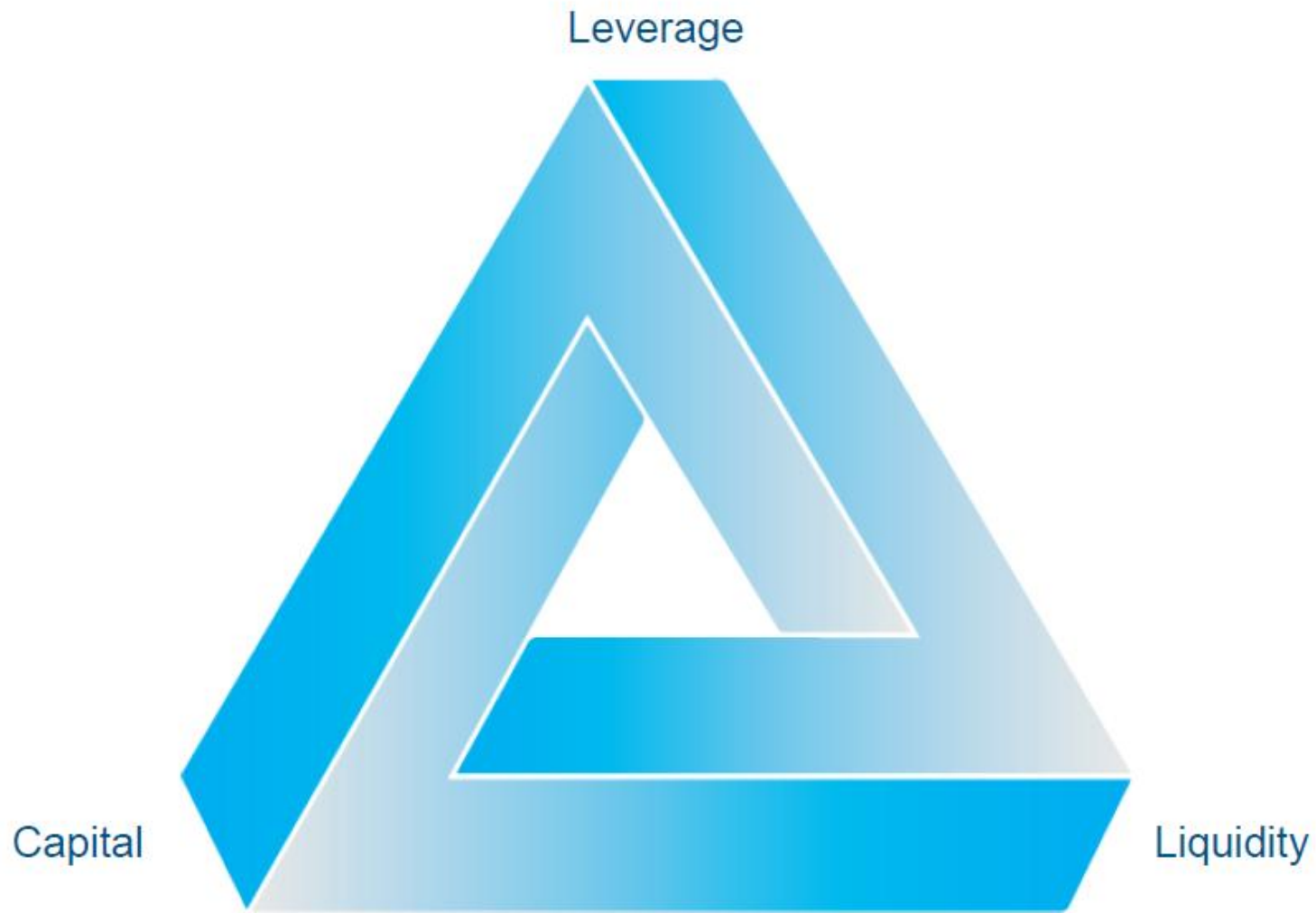


Source: Bloomberg (EUFOSC1).

# Regulatory headwinds hamper interbank funding market

Is this expected to change?

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## Dipping your Interbank toe into a 'new' pond of liquidity ...

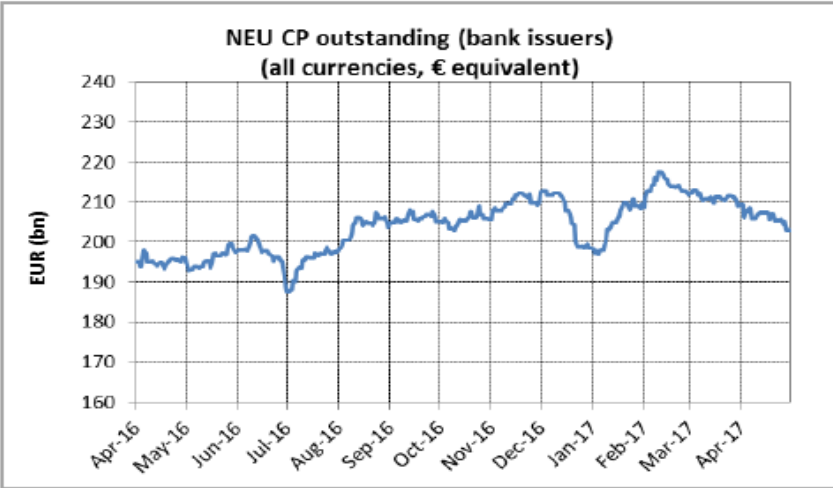
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Outstandings (in billions of euros)	Over the month		Change	2008-2017		2008-2017	
	31-Mar-17	30-Apr-17		Min.	Date	Max.	Date
<b>NEU CP</b>	280,5	277,6	-2,9	245,3	04/07/16	547,0	27/01/09
Bank issuers	209,3	202,9	-6,4	187,7	01/07/16	465,9	22/05/09
Corporate and public issuers	66,1	69,9	3,8	35,2	22/01/10	73,7	13/04/17
Securitization vehicles	5,1	4,8	-0,3	3,0	01/10/14	42,4	19/02/08
<b>NEU MTN</b>	46,4	47,5	1,1	40,1	14/11/16	79,5	24/01/14
<b>Total</b>	<b>326,9</b>	<b>325,1</b>	<b>-1,8</b>	<b>291,4</b>	<b>04/07/16</b>	<b>618,1</b>	<b>27/01/09</b>

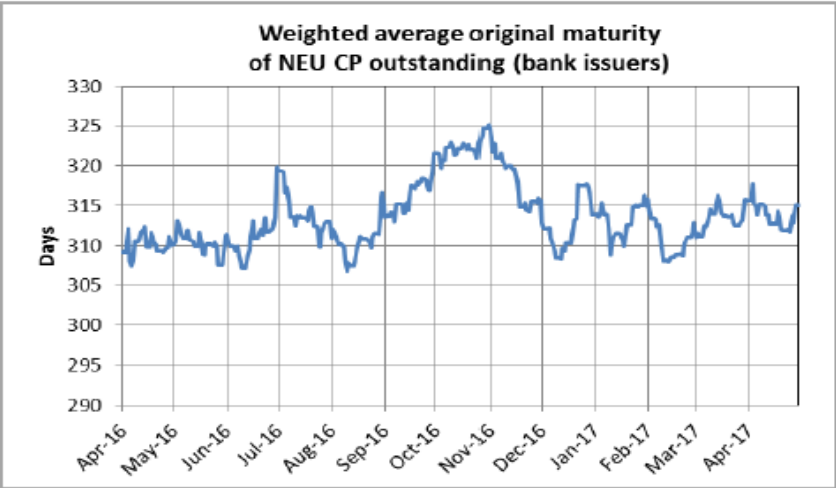
Source: [https://www.banque-france.fr/sites/default/files/media/2017/04/07/highlights\\_cp\\_mtn\\_april\\_2017\\_gb\\_post\\_ref.pdf](https://www.banque-france.fr/sites/default/files/media/2017/04/07/highlights_cp_mtn_april_2017_gb_post_ref.pdf).

# NEU CP (= former French CD)

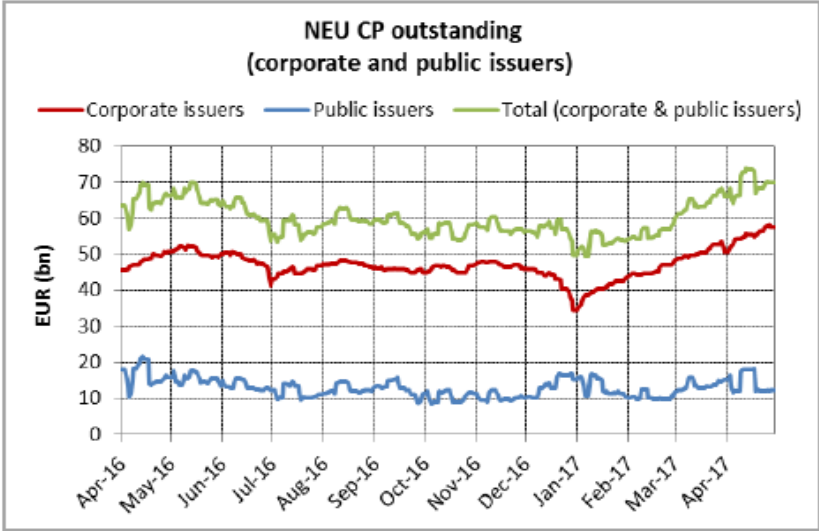
**NEU CP Outstanding amounts  
(in billions of euros)**



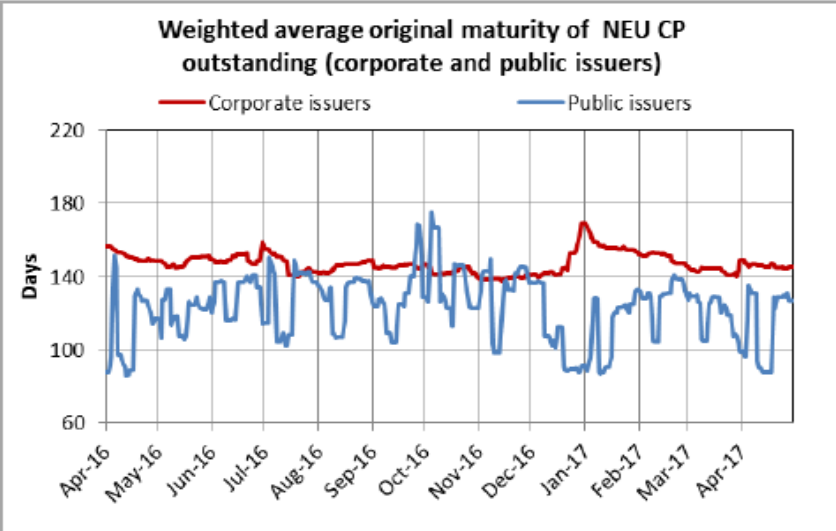
**NEU CP Original maturity (in days)**



**NEU CP outstanding  
(corporate and public issuers)**



**Weighted average original maturity of NEU CP  
outstanding (corporate and public issuers)**



Source: [https://www.banque-france.fr/sites/default/files/media/2017/04/07/highlights\\_cp\\_mtn\\_april\\_2017\\_gb\\_post\\_ref.pdf](https://www.banque-france.fr/sites/default/files/media/2017/04/07/highlights_cp_mtn_april_2017_gb_post_ref.pdf).

# Every little bit helps...

## Who is willing to support EMMI's Hybrid Model?

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- The new EU Benchmark Regulation comes into play from 1st Jan 2018
  - Implementation of governance systems and other controls to ensure integrity and reliability of in-scope benchmarks
- There are fixed (and floating) transactions within the market, what is holding us back from using them both?
- Don't be afraid to re-invent the benchmark
  - Further encouragement per country to join the Benchmark panel required
    - ◆ Operational and legal costs to stay within the panel
    - ◆ Make participation an honour, not a burden.
    - ◆ How to incentivize a bank to stay in or re-join?
    - ◆ Banks evaluate risk of spreads and Risk/Reward
    - ◆ Focus on 'the right' Money Market players across the full curve
  - Seamless transition to new benchmark & methodology required
  - Euribor contract frustration needs to be avoided
- Euribor @ Hybrid Model
  - Definition: Hybrid /'hɪbrɪd/ **“a thing made by combining two different element”**
  - Definition: Cost of Funds / Waterfall **“...describes a development method that is linear, sequential, a life cycle”**
- Are market users fully aware of their most active benchmark, its contingency and fallback procedures?
  - ◆ 1mth Euribor i.e. for Internal transfer pricing?
  - ◆ 3mth Euribor i.e. for CCY swaps?
  - ◆ 6mth Euribor i.e. for asset swaps?
  - ◆ 12mth Euribor i.e. for retail mortgages?

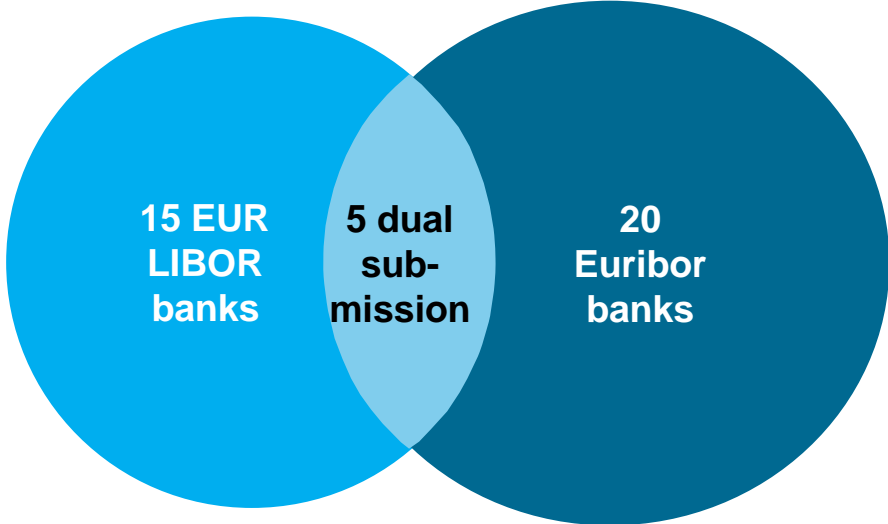
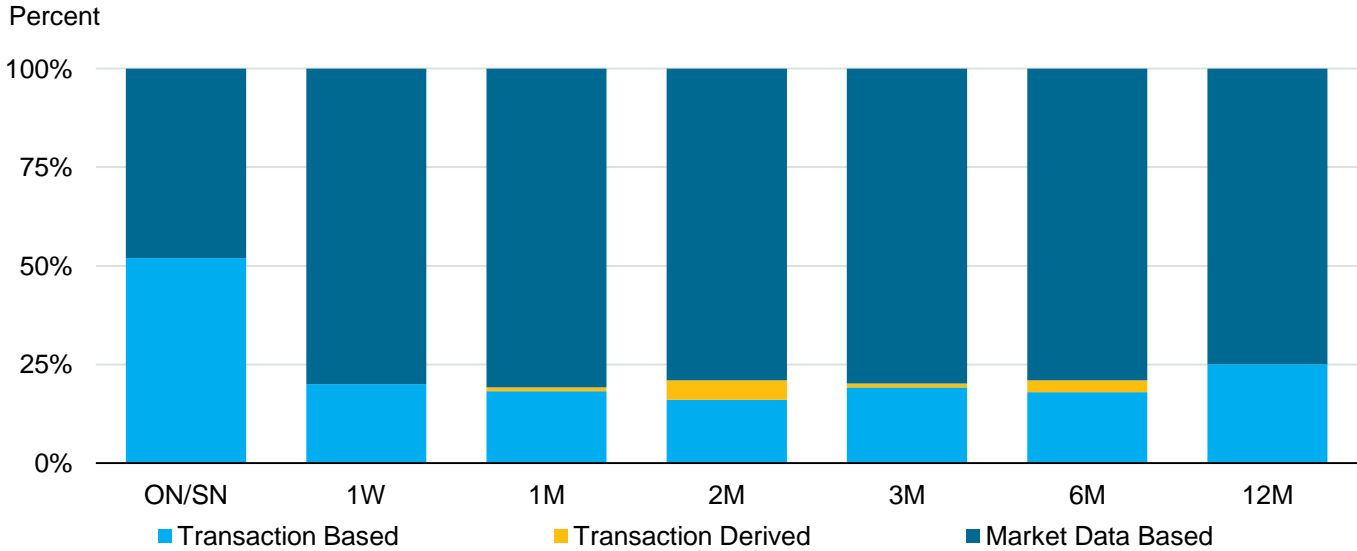
# The future of EUR LIBOR as per IBA

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- Financial Stability Board recommendation in 22 July 2014 to “Reform Major Benchmarks Interest Rates”
- LIBOR introduction of new submission methodology
  - Submissions will be non-subjective and fully transaction-based wherever feasible
  - IBA will implement a uniform submission methodology for LIBOR panel banks
  - IBA will publish a single, clear, comprehensive and robust LIBOR definition
    - ◆ Waterfall:
      - ▶ Level 1: Volume Weighted Average Price (VWAP) in unsecured deposits, CP’s and CD’s
      - ▶ Level 2: Transaction derived data including time-weighted historical transactions for market movements and interpolation
      - ▶ Level 3: If insufficient data in L1 and L2, internally approved procedure with IBA

# EUR LIBOR submissions are derived by ...

Expert judgement appears essential for most tenors



Source: <https://www.theice.com/iba/historical-data>.

# Observations regarding European benchmark submissions

## Grouping submissions by country at 12mth Point

***Euribor® is the rate at which Euro interbank term deposits are offered by one prime bank to another prime bank within the EMU zone, and is calculated at 11:00 a.m. (CET) for spot value (T+2).***

- Large spread in submissions
- Is the European geography fairly reflected, concentration issues?
- Do banks use consistent and similar methodologies?
- Do banks differentiate between LCR efficient cash in their submission (60% or 100% outflow?)

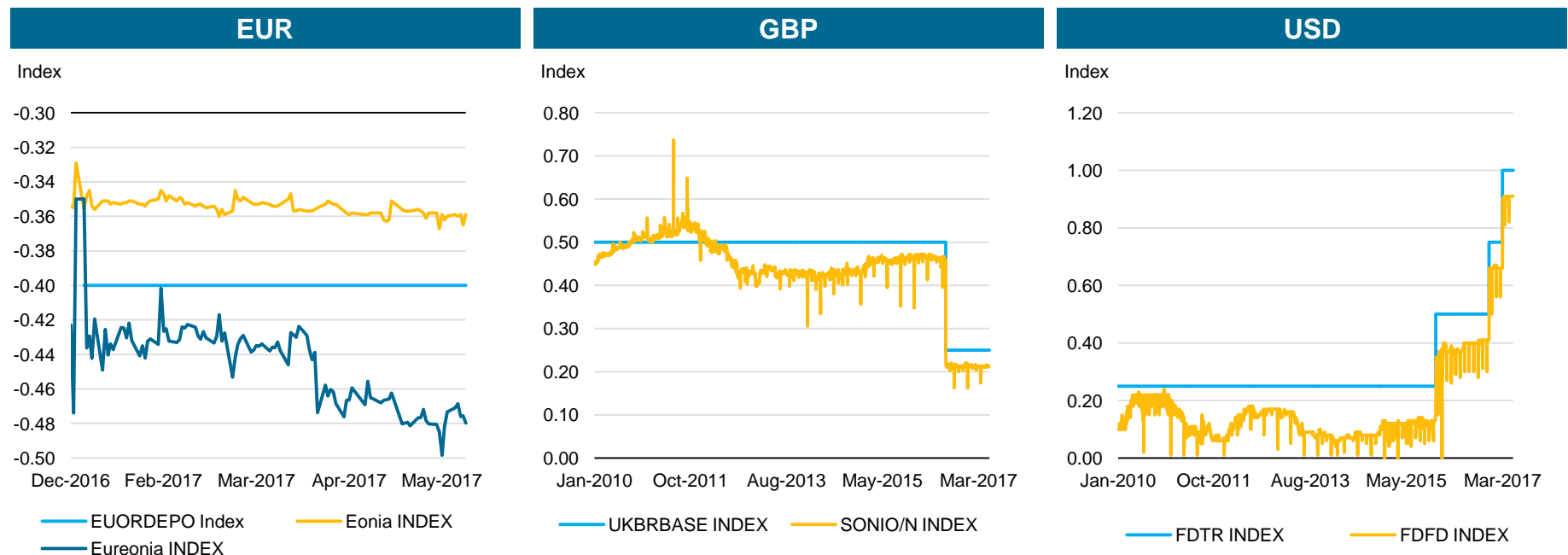
Country	Average Submission of panel banks	12mth Euribor	Submission / Libor	Generic 12mth Government Yield	12mth Germany	Government / Libor
France	-0.194	-0.131	-0.063	-0.550	-0.750	0.200
Belgium	-0.140	-0.131	-0.009	-0.567	-0.750	0.183
Luxembourg	-0.140	-0.131	-0.009			
Netherlands	-0.130	-0.131	0.001	-0.680	-0.750	0.070
Spain	-0.130	-0.131	0.001	-0.320	-0.750	0.430
Italy	-0.126	-0.131	0.005	-0.320	-0.750	0.430
Greece	-0.120	-0.131	0.011			
UK	-0.120	-0.131	0.011			
Germany	-0.090	-0.131	0.041	-0.750	-0.750	-
Portugal	-0.070	-0.131	0.061	-0.230	-0.750	0.520

Source: Bloomberg, per 30<sup>th</sup> May 2017.

# EONIA compared to international peers

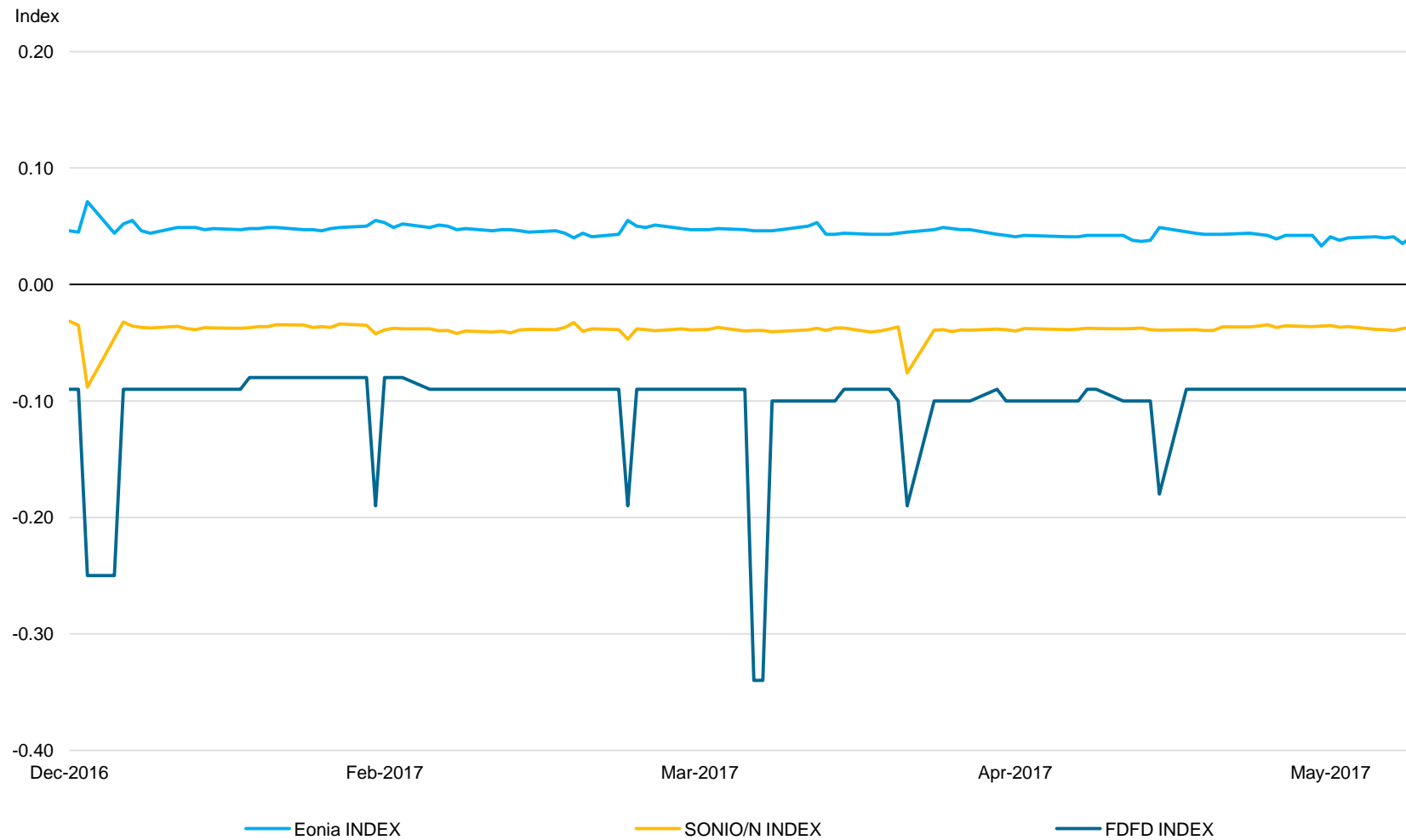
Background:

- Definition challenge: **EONIA (Euro OverNight Index Average) is computed as a weighted average of all overnight unsecured lending transactions in the interbank market, undertaken in the European Union and European Free Trade Association (EFTA) countries by the Panel Banks.**
- Departure of panel banks, 80% of daily transactions are coming from 5 banks.
- EONIA volume dropping on German bank holidays below €1bln, is EONIA really a Pan-European Benchmark?
- Does the definition of lending transactions reflect the market considering individual ways passing on regulatory costs?
- EONIA in comparison to global peers



Source: Bloomberg.

# OIS vs. Benchmark Rate



Source: Bloomberg.



# EUR overnight fixing

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- Since May 2017 additional two banks left the EONIA panel
- Could the future o/n Benchmark be moving from lending to borrowing?
- Could ECB make all MMSR data anonymously available to EMMI?
- Could a value date approach instead of trade date approach increase volumes considerably?
- Would banks create an underlying swap market on the ECB ?
- Could the ECB take a similar approach as taken by BOE and FED creating their own benchmarks?

# Summing up

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- Euribor is a systemic relevant Benchmark tied to c.€105tr in contracts
- Reduced number of panel banks (20) providing Euribor submissions could create challenges for the actual or perceived credibility of the benchmark
- EONIA volumes are shrinking
  - 2017 average below €10bn
  - Top 5 banks contribute >80% of the volume\*
  - Record low volume of €836m on 2nd June 2017
- A change to the benchmark definitions would help to maintain their credibility and relevance
- Collective interest in robust Interest Rate benchmarks for the functioning of markets and transition of monetary policies
- Mandatory contribution is not a long term solution – once triggered it begins the process of the wind down of the benchmark

\*Source:Eonia consultation paper 2016

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# Disclaimer

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