



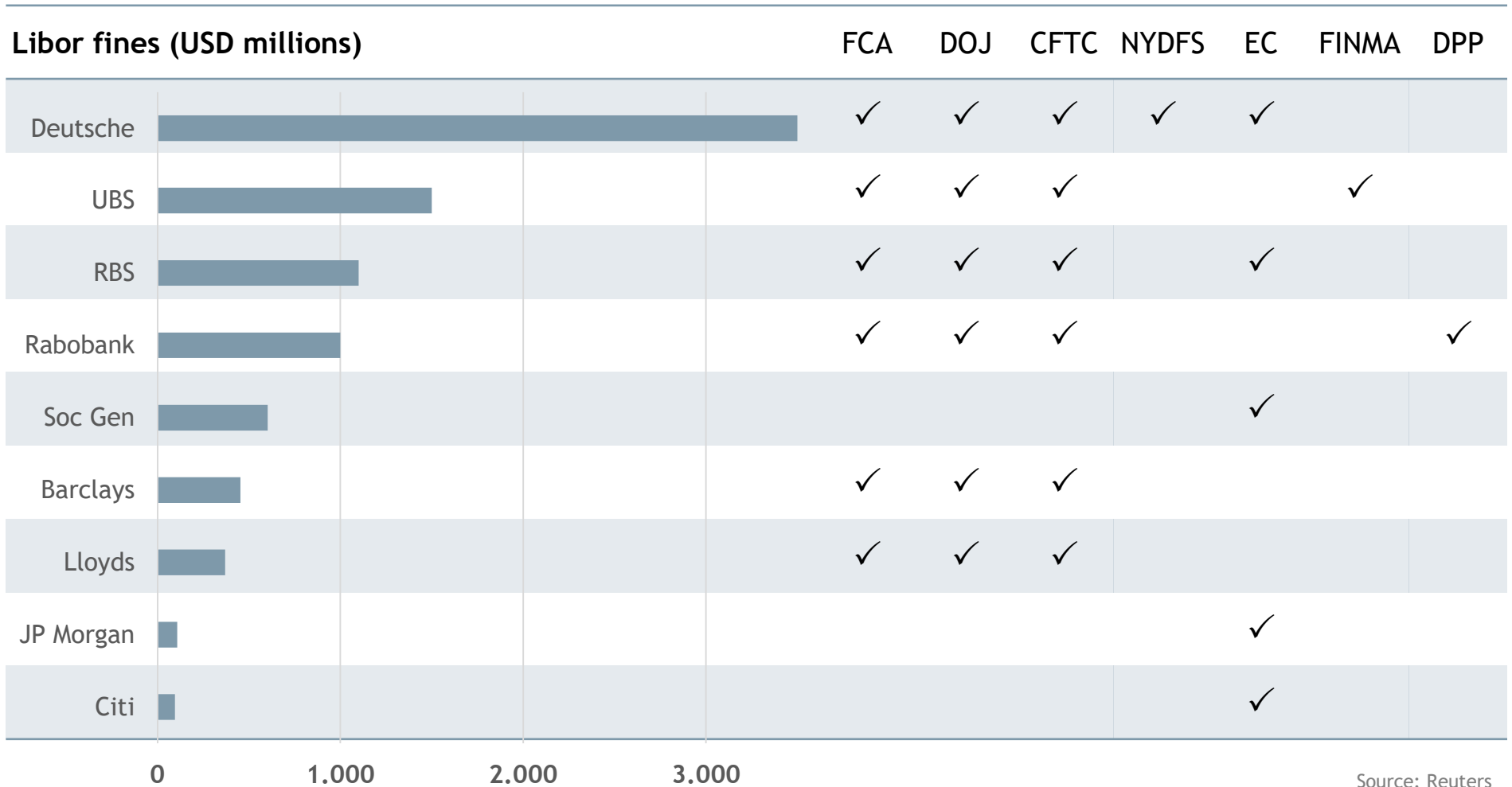
GETTING READY FOR THE FUTURE OF IBORS

CONTEXT AND IMPLICATIONS FOR THE INTEREST RATE TRANSITION

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TRUE NORTH PARTNERS
FINANCE | RISK | STRATEGY

You may have seen this before



A neon sign with the words 'QUIZ TIME' in a stylized, bubbly font. The sign is mounted on a dark brick wall. The word 'QUIZ' is in pink neon, and 'TIME' is in cyan neon. The sign is framed by a neon border that is pink on the top, bottom, and right sides, and cyan on the left side. The border has a jagged, speech-bubble-like shape at the bottom right.

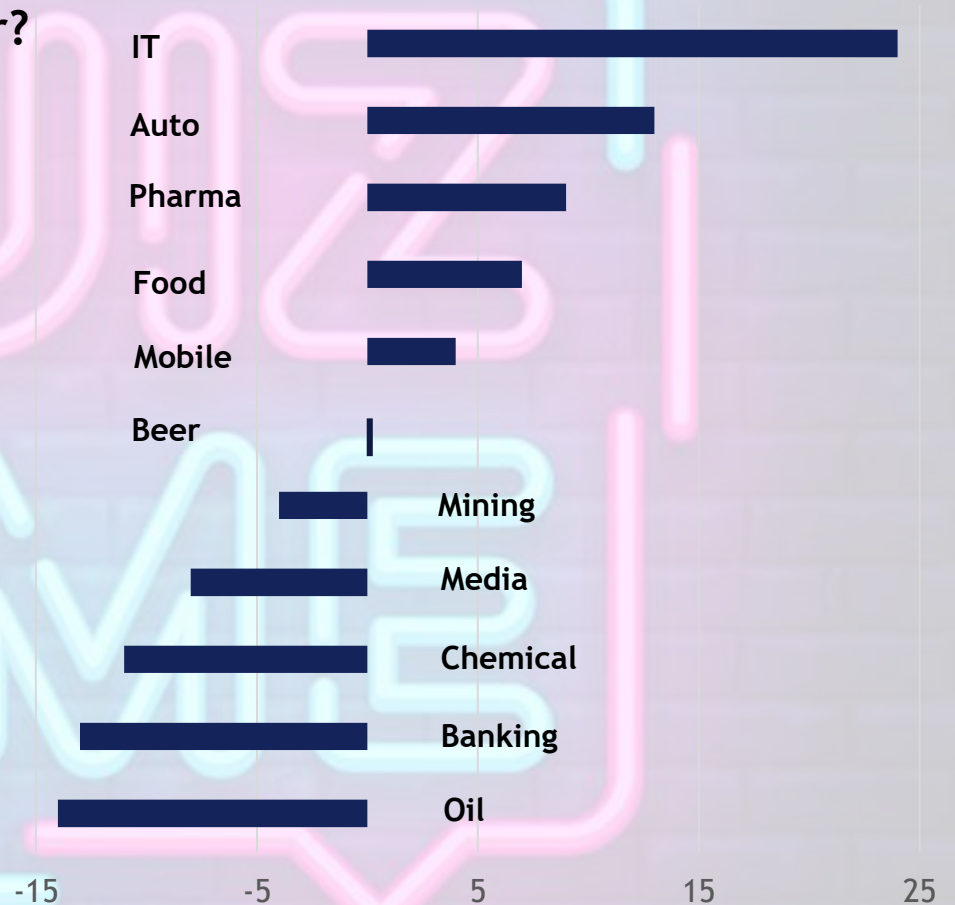
QUIZ
TIME

Net trust in industry sectors

How many of you trust the banking sector?

How many of you are bankers?

Do you think others agree with you?



This is one of the reasons...





The context

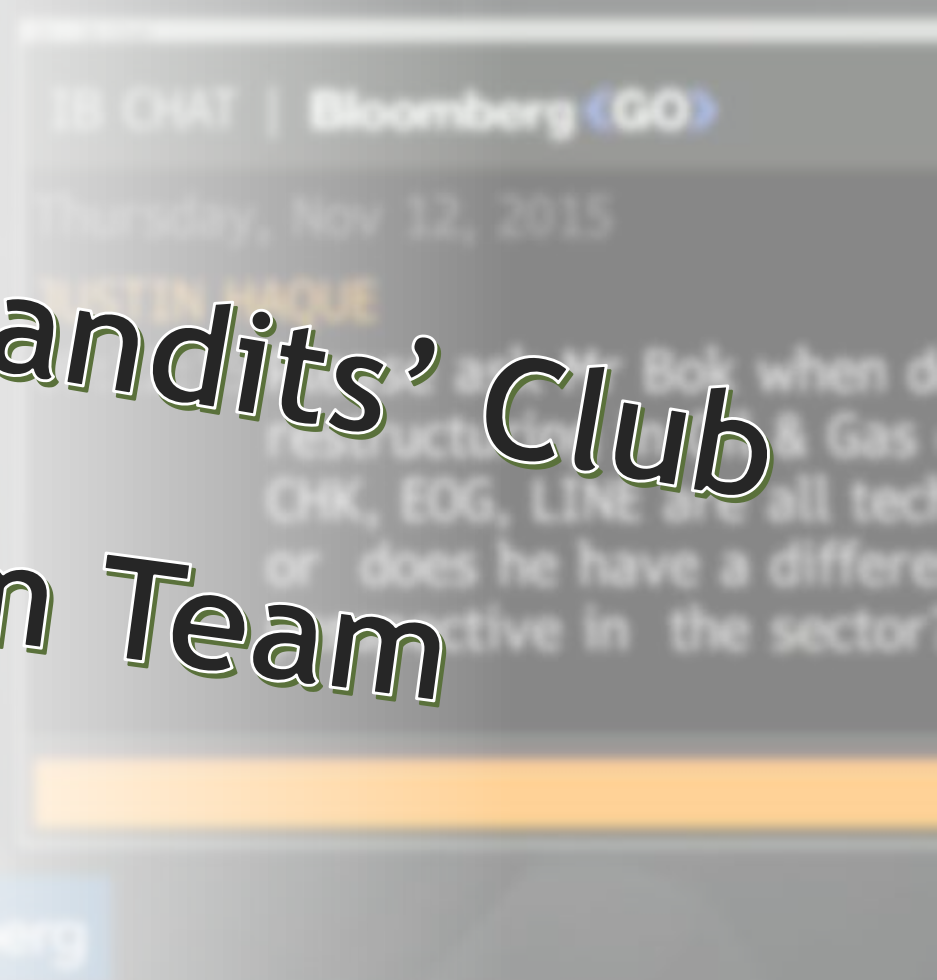
Have you ever heard of...?

The Cartel

The Bandits' Club

The Dream Team

The Mafia



IOSCO principles

Principles for Benchmark Administration

Governance

- 1) Overall responsibility of the administrator
- 2) Oversight of third parties
- 3) Conflict of interest for administrators
- 4) Control framework for administrators
- 5) Internal Oversight function

Quality of benchmark

- 6) Benchmark design
- 7) Data sufficiency
- 8) Hierarchy of data inputs (use of proxies and expert judgment)
- 9) Transparency of benchmark determination
- 10) Periodic review of methodology design, credibility to function

Quality of methodology

- 11) Content of methodology
- 12) Changes to methodology
- 13) Transition (cessation of a benchmark)
- 14) Submitters code of conduct
- 15) Internal controls of data collection

Accountability

- 16) Complaints procedure
- 17) Audits
- 18) Audit trails
- 19) Cooperation with regulatory authorities

Principles for Financial Benchmarks

Final Report



IOSCO

THE BOARD
OF THE
INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS

FR07/13

JULY 2013



What does this mean?

LIBOR

The amount of business loans, consumer loans, FRNs and securitised products referencing USD LIBOR with a maturity date after 2022 exceeds \$2 trillion

Blackrock, 2018

‘Risk Free’ Rates (RFRs)



- There is no such thing as ‘risk free’



- But we can come quite close to it...

Overnight RFRs

- Overnight RFRs provide an appealing fallback alternative to IBORs
- Overnight RFRs should be:
 - Based on observable overnight trades
 - Anchored in actual transactions...
 - ...in active and liquid underlying markets

Referencing overnight RFRs (such as SOFR or SONIA) instead of LIBOR is expected to be relatively straightforward

- Derivative market participants already have substantial experience with overnight index swaps (OIS) that reference rates such as the effective federal funds rate (EFFR)
- RFR futures and OIS contracts are already on offer in some markets

Term RFRs

- The development of new, *forward looking* term rates, measuring forward expectations of overnight RFRs over a designated period, is more challenging
- Prospective term rates derived from overnight RFRs (“term RFRs”) can only be firmly anchored in transactions and executable quotes (and therefore compliant with the IOSCO principles) if overnight RFR derivative markets are active

Therefore, while developing term rates derived from compounded observed overnight rates may be feasible in markets with sufficient depth, the possibility to do so in other markets may be significantly constrained



I cannot guarantee that efforts to produce term rates will be successful, or the precise timing of their arrival

Andrew Bailey, FCA, 2019



Regulatory transition context

United States

Rate Proposed	Secured Overnight Financing Rate (SOFR) - available now
Secured	Yes
Overnight	Yes
Methodology for Curves	Volume weighted median (50th percentile) for the combined tri-party, GCF and bi-lateral repo datasets
Futures	Trading in 1 month and 3 month SOFR futures on CME, LCH and ICE exchanges currently
Wholesale non-bank counter-parties	Yes
Multiple rate approach	In progress



United Kingdom

Rate Proposed	Sterling Overnight Index Average (SONIA) - available now
Secured	No
Overnight	Yes
Methodology for Curves	Volume weighted median (50th percentile) of eligible transactions reported to BOE Sterling Money Market daily data collection
Futures	Trading in 1 month and 3 month SONIA futures on CME, LCH and ICE exchanges currently
Wholesale non-bank counterparties	Yes
Multiple rate approach	In progress

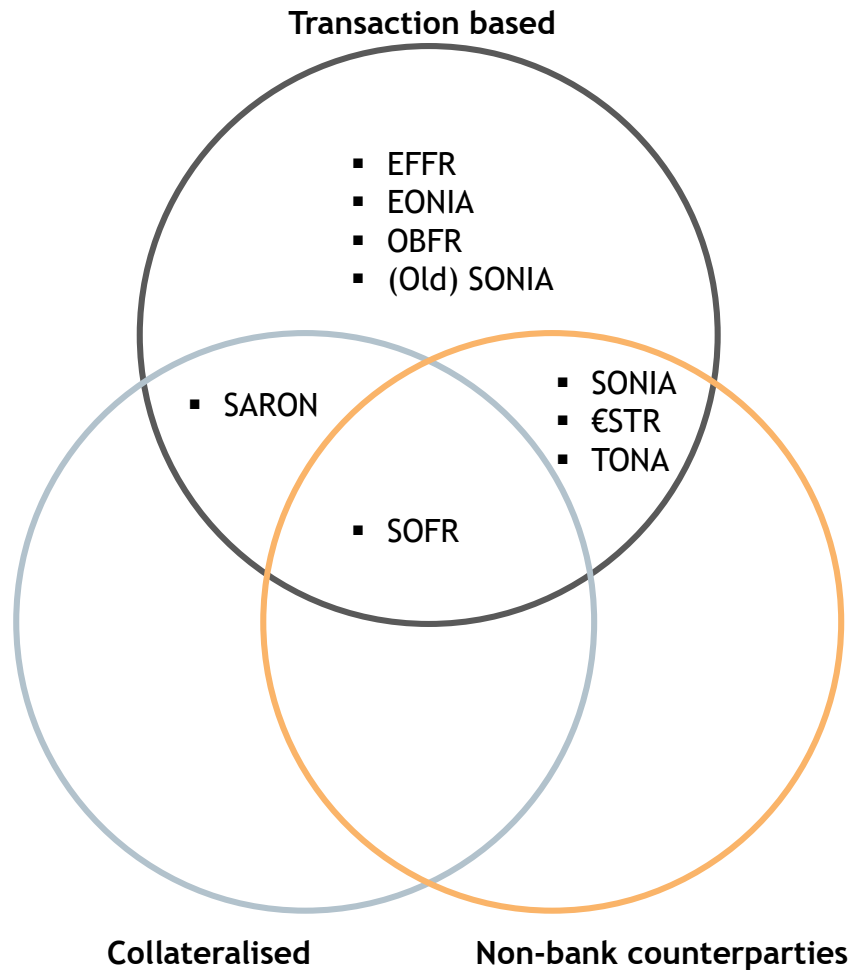


European Union

Rate Proposed	Euro Short Term Rate (€STR) available Oct 2019
Secured	No
Overnight	Yes
Methodology for Curves	Based on MMSR dataset for unsecured overnight deposits - volume weighted trimmed mean of deposits over €1mn
Futures	None yet
Wholesale non-bank counter-parties	No
Multiple rate approach	Not available (Euribor currently being reformed)



In summary



Collateralised

Pros:

- (Theoretically) closer approximation to 'risk free'

Cons:

- Secured RFRs susceptible to fluctuations due to supply & demand changes in securities that serve as collateral (e.g. QE programmes)
- In periods of stress, secured RFRs may move in the opposite direction to unsecured ones
- In the EU secured RFRs would have been problematic due to the fragmentation of repo markets using sovereign bonds of different credit quality

Wholesale (non-bank) counterparties

Pros:

- Wider pool of underlying transactions

Cons:

- Cost of funding from non-banks usually lower than the interbank market



What does this mean for you?

We think that any firms still delaying transition until term rates arrive are making a mistake

Andrew Bailey, FCA, 2019

Conceptual challenges

All contracts referencing LIBORs (including EURIBOR) will have to be revisited

All contracts stretching beyond 2021 will have to be amended or replaced

Cash products relying on forward looking estimates of rates may be disrupted



Practical challenges

Legal

- Do we have fallback language in existing loan and derivative contracts?
- Can our legal team handle the contract review and amendment workload?

Systems & Models

- Can our systems support the revised rates?
- Can we re-develop and validate our pricing and capital models?

Operational

- Can we land this project using our internal PMO resources?
- Which organisational participants need to be brought in and when?

Clients

- When do we communicate with clients regarding changes?
- How do we prioritise client communication, given available coverage resources?





The way forward

How do we go about it?

Start now!

0 Update documentation for new transactions

- Implement new/revised fallback language in all new contracts to limit scope of inventory - as soon as possible!
- Reference alternative rates in new contract where possible

1 Impact Assessment and Programme Implementation

- Undertake survey of inventory of benchmarks; review existing legal contracts for fallback language
- Undertake transition impact assessment
- Create PMO and review staff and governance requirements

2 Communication

- Prepare internal training, executive reporting strategy
- Prepare and agree client communication strategy
- Prepare and agree response with regulator and peer groups

3 Detailed Book of Work

- Valuation of impact by client
- Amend existing contracts
- New product design and implementation
- Backtest results
- Client negotiations
- Consultation period with clients (IOSCO)

4 Implementation

- Risk systems and models update
- Review and amend operational processes, systems and data
- Finalise all contract changes
- Communicate results to clients

Communication and engagement with clients, regulator, press and industry bodies

“Global markets remain overly reliant on LIBOR, a benchmark that may not exist beyond 2021. That reliance is neither desirable nor sustainable.”

Mark Carney, Governor of the Bank of England

For a White Paper on the topic

Email me

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TNP White Paper Series | October 2019

Reference Rate Reform

IBORs, ARRs and transition considerations



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