INTRODUCTION

Since the last Conference of the ILA, held in Sydney, Australia, in August 2018, the Committee (better known by its acronym, MOCOMILA) has continued its study of the legal aspects of money, payments, currency, and financial stability. Specifically, the Committee held two meetings: in Hong Kong, SAR, China (26-27 April 2019), and Basel, Switzerland (15-16 November 2019). MOCOMILA had a third meeting planned in Luxembourg for 20-21 March 2020, which unfortunately had to be cancelled because of the coronavirus pandemic. The meeting in Hong Kong was held at the Hong Kong Monetary Authority, where the Committee discussed issues including payment systems, the regulation of crypto assets, the cessation of LIBOR, and sustainable finance. The Basel conference took place at the Bank for International Settlements and focused on the BIS as an international organisation, legal aspects of the international standard-setting process, recent developments regarding the FSB policy agenda, reform of the international financial architecture, EU construction after BREXIT, challenges affecting the construction of the European economic and monetary process, and institutional evolutions.
of the IMF. Keeping full track of recent developments in the monetary and banking system, including those caused by the pandemic crisis, MOCOMILA has taken the initiative to compile a book on *International Monetary and Banking Law in the post COVID-19 World*, with contributions by its members, which is expected to be published in 2021.

The subjects of the foregoing meetings and other topics discussed by the Committee are reflected in the following sections of this report.

I. Letting LIBOR Go: Legal Implications Arising From the End of Finance’s Most Significant Number (by Mr T Baxter)

II. Letting EONIA (and EURIBOR) Go: European Legal Issues (by Professor C Zilioli)

III. The Evolution of the Institutional and Regulatory Framework Governing the (European) Banking Union: Completed and Uncompleted Reform Proposals and the Impact of the Current Pandemic Crisis (by Professor C Gortsos)

IV. Lex Cryptographica Financiera (by Professor R.M. Lastra and Professor J.G. Allen)

V. International Financial Regulation in Changing Times – The Role of the Financial Stability Board (by Dr E Hüpkes)

VI. Third-Party Service Providers Under the EU PSD2 (by Professor B Geva)

VII. Regulation of Crypto Assets: The EU Perspective (by Dr K P Follak)

This report reflects the views of the individual members and not necessarily those of any institutions with which they are affiliated.

I. Letting LIBOR Go: Legal Implications Arising From the End of Finance’s Most Significant Number

Financial products and contracts are the lifeblood of a global system that connects the economies of the industrialized world and the emerging markets. Contained within many of these products and contracts, there are payment terms requiring one party to pay to another a sum of money, together with interest. This is true whether the product or contract is characterized as a loan, a security, or some form of derivative transaction.¹ The payment terms within such instruments will be expressed in a currency, and the most common media of exchange for contracts that cross a border are the U.S. Dollar, the Euro, the Yen, the Swiss Franc and the Pound Sterling. The interest rate associated with each of these currencies is ordinarily expressed as a so-called “IBOR”, which is shorthand for “interbank offered rate”.

LIBOR, which stands for the London Interbank Offered Rate, is the IBOR rate associated with the U.S. Dollar and it represents the average cost at which large, money-center banks borrow the funds that they use to conduct a banking business. Because the U.S. Dollar is the principal currency used for international trade and finance, the interest rate associated with the funding of large financial institutions is the most important of the IBORs. This fact of financial life has led some to say that LIBOR is “the most important number in the world”.

The Federal Reserve estimates that LIBOR is now being used in contracts totaling $200 trillion.² This aggregated amount of financial contracts is roughly 10 times the U.S. gross domestic product. Euribor

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¹ For a more thorough listing of the instruments that are covered, see Financial Stability Board, *Reforming Major Interest Rate Benchmarks* (July 22, 2014) (hereinafter cited as “FSB Reform Paper”).

² Remarks by Vice Chairman Randal K. Quarles, Vice Chairman for Supervision, Board of Governors of the Federal Reserve System, Before the Alternative Reference Rates Committee Roundtable (July 19, 2018) (hereinafter cited as “Quarles at Roundtable”).
is the interest rate associated with the Euro, and TIBOR is the rate associated with the Yen. The other “IBORs” that are considered important in international trade and finance are Sterling LIBOR and Swiss Franc LIBOR.

During the global financial crisis, it became apparent that some market participants were manipulating LIBOR to advantage themselves in certain financial contracts. This “market integrity” problem undermined confidence in the reliability and robustness of LIBOR and the IBOR benchmarks more generally. The disclosure of specific instances of manipulation led to a series of enforcement actions and to civil and criminal litigation against institutions and individual malefactors. The “LIBOR scandal”, as it came to be known, also stigmatized the British Bankers Association, which then served as the administrator for LIBOR. In part because of this stigma, the administration of the IBORs was transferred from the British Bankers Association to ICE Benchmark Administration (“ICE”).

The International Association of Securities Supervisors, or IOSCO, stepped forward to remedy the market integrity problem that undermined the credibility of LIBOR. IOSCO developed a series of principles that could be employed to generate a benchmark that would not be easily manipulated. Today, there is a widely shared view that no benchmark should be used if it is not “IOSCO compliant”, meaning that a credible benchmark is one that is produced in conformity with the IOSCO principles. One of the key IOSCO principles is the Data Sufficiency Principle (Principle 7), which requires that a benchmark be based upon a sufficient number of transactions during normal and stress conditions. Of course, a sufficient number of transactions makes the benchmark resistant to manipulation, because significant volume makes the rate derived from that volume more difficult to move. Consequently, when a benchmark is IOSCO compliant it is a benchmark likely to avoid in the future the kinds of market integrity problems that have challenged LIBOR in the not-so-distant past. The IOSCO principles also require benchmark administrators to adhere to a Code of Conduct that explicitly prohibits manipulative conduct.

While the official community worked to address the market integrity issues that had arisen with the IBORs, the conditions in the global interbank lending markets changed materially. In the time that has elapsed since the global financial crisis, the market for unsecured, interbank borrowing contracted sharply among money-center financial institutions, especially in the number of transactions done in the longer tenors of LIBOR. Randal Quarles, the Vice Chairman for Supervision of the Board of Governors of the Federal Reserve System, described the situation for one-year LIBOR as follows:

“On average, we observe six or seven transactions per day at market rates that could underpin one- and three-month LIBOR across all of the panel banks. The longer maturities have even fewer transactions. There are two to three transactions each day for six-month LIBOR. On average, there is only one transaction that we see underlying one-year LIBOR, and many days there are no transactions at all.”

The decline in the number of transactions in the longer tenors of LIBOR made it difficult to comply with the Data Sufficiency Principle developed by IOSCO, and correspondingly, elevated concerns about a recurrence of market integrity problems. Together, these forces prompted the official sector to make an important policy decision to transition away from LIBOR to benchmarks that were “less fraught”.

Consequently, the Financial Stability Board, after careful consideration, decided on an approach that would create, for each of the IBOR currencies, a “multiple rate” approach. There would be a benchmark that would strengthen the existing IBOR and would incorporate credit, liquidity, and term premia that were characteristic of the IBORs and led to the IBOR’s popularity. This benchmark would be suitable for lending and other cash transactions. In addition, there would be another benchmark that would be “closer to risk-free”. This rate would be suitable for derivative transactions. This benchmark would, as the situation in the United States later demonstrated, likely be based upon repurchase agreement transactions in U.S. government securities.

approach outlined by the Financial Stability Board. Originally, the ARRC pursued the objective of a “multiple rate” approach – there would be a risk-free rate that would be used for derivatives, and there would be a credit-sensitive rate that would be used for loans and other cash transactions. However, at some point, the ARRC concluded that it could not find a sufficient number of transactions upon which to base the credit-sensitive alternative. In other words, the credit-sensitive alternative would fail IOSCO’s Data Sufficiency Principle. Accordingly, ARRC abandoned the search for a credit-sensitive benchmark and placed all of its effort into the development of a risk-free reference rate. In 2017, after proceeding through a series of preliminary objectives, the ARRC selected the Secured Overnight Financing Rate (“SOFR”) as the preferred alternative reference rate to LIBOR. SOFR is a risk-free rate, derived from overnight repurchase agreement transactions secured by U.S. government securities.

As previously mentioned, the British Bankers Association experienced considerable reputational risk arising out of the LIBOR scandal, and transferred the benchmark administration business related to the IBORs to ICE. In 2013, after consideration by a formal tendering committee, ICE was appointed the administrator of the IBORs. It conducts this activity from offices in the City of London, operating under the supervision of a United Kingdom authority called the Financial Conduct Authority. To determine an IBOR, ICE needs banks to submit funding rates to the administrator so that a benchmark can be announced.

In the summer of 2017, the Chief Executive of the FCA startled the financial world when he said, in very plain English, that “we do not think markets can rely on LIBOR continuing to be available indefinitely.” He then added that the FCA would look at year-end 2021 as a deadline for LIBOR’s cessation, at which point “it would no longer be necessary for the FCA to persuade, or compel, banks to submit to LIBOR.” Two years later, in the summer of 2019, the Chief Executive was even more categorical. He said “[t]he base case assumption should be that there will be no LIBOR publication after end-2021.” As 2019 drew to a close, the FCA said this: “The end-2021 date by which market participants need to be ready for life without LIBOR will be familiar to most, if not all in the room.”

Consequently, the global financial system is now on notice that USD LIBOR will cease to exist on December 31, 2021. It will then be replaced by another benchmark rate, and as this is written, the most likely alternative is SOFR. Of course, SOFR is a risk-free rate, and if it is used for cash transactions, there will need to be an additional element known as a “spread adjustment” to make the new benchmark a closer equivalent to the benchmark that it is replacing.

As we approach the onset of Spring in 2020, the financial industry is assiduously working toward replacing the most important number in finance at the end of 2021. For the legal community, two very important challenges are presented. The first challenge concerns what are characterized as “legacy contracts”. Legacy contracts are financial instruments issued before the date of LIBOR’s cessation (i.e., December 31, 2021) and that mature after LIBOR cessation, and are referenced to LIBOR “as of” the issuance date. When LIBOR goes away, the reference rate in these legacy instruments will transition to a new replacement reference rate. If the new reference rate should cause the economics of the instrument to change, this could be the source of contractual disputes.

The second challenge concerns what might be characterized as “new instruments”. What should an issuing bank do when making new instruments in an environment where the day for LIBOR cessation can be seen on the horizon? This challenge is sharpened by a focus on instruments that will mature after LIBOR cessation when a different reference rate will be inserted in the new instrument.

4 Alternative Rates Reference Committee, ARRC Consultation on Spread Adjustment Methodologies for Fallbacks in Cash Products Referencing USD LIBOR 2 (Jan. 21, 2020).

5 Speech by Andrew Bailey, Chief Executive, Financial Conduct Authority at Bloomberg London (July 27, 2017).

6 Speech by Andrew Bailey, Chief Executive, Financial Conduct Authority at SIFMA’s LIBOR Transition Briefing (July 15, 2019).

7 Speech by Edwin Schooling Latter, Director of Markets and Wholesale Policy, Financial Conduct Authority (November 21, 2019).
Taking the second challenge first, the General Counsel of the Federal Reserve Bank of New York has given wise counsel about this situation. He said that “if you find yourself in a hole, stop digging.” If you are issuing new instruments in an environment where you know that LIBOR will no longer exist when the instrument matures, perhaps this is a good reason to select an alternative benchmark that will exist until the instrument matures. The selection of an alternative will avoid the possibility of being in a situation where the selection of an alternative benchmark (because LIBOR has gone away) will inadvertently change the economics of the instrument, and give rise to a contract dispute. If this happens across markets and in significant volume (recalling that there are $200 trillion in such instruments outstanding), this could produce what the Fed’s General Counsel called a “DEFCON 1 Litigation Event”.

Of course, the stopping of digging can alleviate problems with new instruments, but it cannot solve the problems presented by the first challenge – the so-called legacy instruments. The legacy instruments have several different problems. The first problem concerns instruments which are referenced to LIBOR but have no fallback language. These instruments are resoundingly silent about LIBOR cessation, and proceed obliviously, not envisioning what will happen if LIBOR goes away. A lesson from analogous cases dealing with situations where banks issued instruments referenced to their own “prime rate”, but then failed, is that a court will look to borrow an “analogous” rate. But, what is an analogous rate? Is it a risk-free rate like SOFR? Alternatively, perhaps it might be a risk-free rate that is adjusted by a spread adjustment? Does this adjustment make the rate analogous? Does it mean the rate is not analogous without the spread adjustment? Is the spread adjustment itself correct and properly calculated?

Another problem concerns legacy instruments with fallback language that yield an unacceptable outcome. For example, some instruments have language that says, if LIBOR should no longer be available, the fallback rate will be the last posted LIBOR rate (turning the instrument from a floating rate instrument to a fixed rate instrument), or to a fixed rate of some kind. This provision will also likely change the economics of the instrument, and changing the economics is the likely trigger to a DEFCON 1 litigation event. Other instruments that require the use of an alternative benchmark that is “based upon comparable information.” But is SOFR such a rate, given that it is based upon repurchase agreements in government securities and not on what money-center banks pay for their funding? Remembering that a dandelion is comparable to a redwood tree, in that both grow upward from the ground, we can fairly ask, “how comparable is comparable enough?”

For all of these reasons, many practitioners believe that the solution to the problems of legacy instruments must come from the legislature. Some contend that the New York legislature could solve the LIBOR cessation problems with many legacy instruments because the governing law clause in those instruments renders them subject to New York law. A well-tailored correction to the New York law will, through the magic of the governing-law clause, import the needed reference rate into the instrument with the force and effect of law. While the logic is cogent as a legal matter, it would not solve the LIBOR cessation problems with instruments governed by the law of other states, and it would not solve certain problems that arise out of Federal law. While New York law may well work some magic, the magic cannot overcome the Supremacy Clause of the U.S. Constitution, and Federal law will continue to supersede any inconsistent state law.

With respect to Federal law, there is a provision of the Trust Indenture Act that addresses certain covered securities, and it requires that, whenever the payment terms of a covered security are to be amended, 100 percent of the securities holders must agree to the change in the payment terms. If unanimity is not achieved, then the change is ineffective. For widely held securities, there is no

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9 Id.

10 New York has a statute that enables the parties to select the law of New York to govern their contracts “whether or not such contract, agreement or undertaking bears a reasonable relationship to this state.” N.Y. Gen. Oblig. L. § 5-1401(1).
practical ability to obtain the agreement of 100 percent of the holders of the securities. Consequently, many believe that the better legislative solution would be an amendment to Federal law (which could either complement the New York law change or supplant it entirely). Federal law could work the very same magic as the law of the state of New York, and would have the additional power of the Supremacy Clause behind it. This means that Federal law would preempt and override any inconsistent state law, and a governing law clause importing the law of any one of the 50 states should, because Federal law is the supreme law of the land, import the superseding federal law through the governing law clause.

If USD LIBOR problems are resolved with a legislative solution, this leaves open what might happen with respect to other IBORs, that are also used in international transactions. We will now turn to the other major currency used as an international medium of exchange, namely the Euro.

II. Letting EONIA (and EURIBOR) Go: European Legal Issues

We will now turn to the other major currency used as an international medium of exchange, namely the euro. It is indeed the case that there are many similarities, but also some important differences, in the legal implications which arise from the use of the main interest rate benchmarks denominated in euro - namely EONIA and EURIBOR - in international transactions.

The first similarity is that the volume of contracts in which these benchmarks are being used is very high. There were around EUR 13.7 trillion of EONIA Overnight Interest Swap contracts outstanding after 2 October 2019, and EUR 3.7 trillion will remain outstanding even after 2022, when EONIA will no longer be published.11 It is estimated that EURIBOR underpins more than EUR 180,000 billion worth of contracts. While these contracts are mostly interest rate swaps, EURIBOR also covers more than EUR 1,000 billion of retail mortgages.12

Secondly, it is clear that there were very similar driving forces that led the official sectors in the US and EU to decide to transition away from the IBORs to other benchmarks or rates. Serious cases of manipulation of benchmarks such as LIBOR and EURIBOR had demonstrated that benchmarks can be subject to conflicts of interest, undermining their market integrity. In the European Union, this led to the enactment by the European Parliament and Council of the Benchmarks Regulation,13 as well as the preparation of a range of implementing and delegated acts, which share the legislative objective of ensuring the accuracy, robustness, and integrity of benchmarks and of the benchmark determination process. The Benchmarks Regulation applies to the provision of benchmarks, the contribution of input data to a benchmark, and the use of a benchmark within the European Union, but excludes central banks from the scope of its application.

Like the US and UK authorities, the ECB had been closely involved in long-running work in support of efforts to reform EONIA and EURIBOR, including participation in the FSB’s Official Sector Steering Group’s work on reforms to major interest rate benchmarks.14 After it had, however, become clear that the administrator of EONIA and EURIBOR, the European Money Markets Institute (“EMMI”), faced significant challenges to ensure the compliance of these critical benchmarks with the requirements of the Benchmarks Regulation, the Governing Council of the ECB announced in September 2017 that it


would develop a euro unsecured overnight interest rate based on money market statistical data already available to the Eurosystem. The “euro short term rate”, or €STR, has been published since 2 October 2019.

The ECB has also established the Working Group on Risk Free Rates (“WG RFR”)16 in February 2018, together with the Financial Services and Markets Authority (“FSMA”), the European Securities and Markets Authority (“ESMA”) and the European Commission. These public institutions have observer status in the working group, which is led by the private sector, and comprises 21 credit institutions as voting members. The group recommended on 13 September 2018 that the €STR be used as the risk-free rate for the euro area and is now focused on supporting the market with transitioning.17

Transition efforts in the European Union have initially been focussed on the replacement of EONIA with the €STR. Like SOFR, the €STR is a risk-free rate and its application as a direct substitute for EONIA, which measured interbank lending using a different methodology and data, would have resulted in a change in the valuation of the transactions and contracts tied to the rate. There was therefore a need for a “spread adjustment” to reflect the difference between the two rates. In order to facilitate the move by market participants to replace EONIA with the €STR, the WG RFR recommended that EMMI reform the EONIA methodology from its panel-based methodology to the €STR plus a spread for a limited period of time. In line with this recommendation, EMMI has published EONIA under this reformed methodology since 2 October 2019 and will continue to do so until 3 January 2022, when the recalibrated EONIA will be discontinued.19

The transition path for EURIBOR has, however, followed a very different path. In contrast to the position that has been taken by the FCA in relation to LIBOR, EURIBOR will continue to exist alongside €STR for the foreseeable future. This follows from the decision of FSMA in July 2019 to authorise EMMI under Article 34 of the Benchmarks Regulation for the provision and administration of EURIBOR, following the work that was undertaken to develop a hybrid methodology for the benchmark.20

For the legal community, these important changes in the main euro-denominated rates have significant implications.

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19 https://www.emmi-benchmarks.eu/assets/files/EONIA%20202102019/EONIA%20publication%20new%20determination%20methodology%20and%20FSMA%20filing_FINAL.pdf. The spread of 8.5 basis points was calculated by the ECB on 31 May 2019 and reflects the historical difference between the underlying interests of the interbank lending rate for EONIA against the wholesale borrowing rate for €STR.

20 https://www.emmi-benchmarks.eu/assets/files/D0428A-2019-EMMI%20GRANTED%20AUTHORISATION%20BY%20BELGIAN%20FSMA%20FOR%20PROVISION%20AND%20ADMINISTRATION%20OF%20EONIA_final.pdf. The methodology consists of a waterfall, which prioritises the use of real transactions whenever available and appropriate. However, in the absence of such transactions it relies on other related market pricing sources to calculate the benchmark.
Taking the issues that arise in new contracts and instruments first, what should an issuing bank do when making new instruments, in particular, in an environment when the cessation date for EONIA has been specified, and the instruments mature after this date? As the WG RFR has recommended in its EONIA to €STR legal action plan,21 the proactive selection of €STR instead of EONIA will help to mitigate the risk that the cessation of the benchmark will change the economics of the instruments and give rise to contractual disputes. However, where new instruments still reference EONIA and mature after the cessation date for EONIA, lawyers need to either replace EONIA as the primary rate as soon as possible or ensure the contractual documentation includes robust fall-back arrangements that provide for the reference rate to switch upon the permanent discontinuation of EONIA. In this context, the WG RFR has recommended €STR plus a spread as the EONIA fallback rate for all products and purposes.22

This approach is in line, first, with the IOSCO principles, which encourage contracts or instruments that reference a benchmark to have robust fall-back provisions in the event of material changes to or cessation of the benchmark. Secondly, with a legal requirement in the European Union for supervised entities entering into certain contracts to use a benchmark to produce and maintain robust written plans setting out the action they would take in the event that a benchmark materially changes or ceases to be provided. This action must also be reflected in the entities’ contractual relationships with clients.23

Turning to EURIBOR, the challenge of ensuring the compliance of the benchmark with the Benchmarks Regulation has been met for present purposes for EMMI as administrator and provider of the benchmark. As a result, the industry can continue to use EURIBOR for the foreseeable future24 and is not yet compelled to select an alternative benchmark for new contracts or instruments. But there still remains an important task for the users of EURIBOR, which is to ensure that contracts include robust fall-back provisions in case EURIBOR materially changes or ceases to be provided.25 Such an outcome cannot be excluded if it proves over time that there are deficient levels of transaction data and more frequent reliance needs to be placed on “Level 3” of the hybrid methodology involving the panel banks’ judgment. At present, however, there is considerable uncertainty as to what rate could be used as a fallback for EURIBOR. The WG RFR is looking at identifying fallbacks for EURIBOR based on the €STR and to date has recommended a methodology to calculate a forward-looking term structure that would be based on the future €STR derivatives market.26 But this relies on the development of this market and the adequacy of the data that would be produced. The WG RFR is also analysing backward-looking methodologies and working on a EURIBOR legal action plan to guide market participants in their contract amendments. Many market associations are closely involved in adapting


22 Ibid.

23 See Article 28(2) of the Benchmarks Regulation.

24 See the speech by Steven Maijoor, Chair, European Securities and Markets Authority, on 25 September 2019 at the Second Roundtable on euro risk-free rates at https://www.esma.europa.eu/sites/default/files/library/esma71-319-141_speech_esma_chair_roundtable_eur_rfr_25_09_19.pdf, stating “the authorisation of EURIBOR in July 2019 by the FSMA is certainly a key step forward, confirming that the new hybrid methodology is robust, resilient and transparent. I believe that the new hybrid methodology measures the same underlying interest of the previous methodology of EURIBOR, just in a better, BMR-compliant way. Indeed, the authorisation of EURIBOR allows EU supervised entities to continue using EURIBOR for the foreseeable future.”

25 This is a legal requirement for EU supervised entities, but also recommended for all users of EURIBOR in the Report with high-level recommendations for fallback provisions in contracts for cash products and derivatives transactions referencing EURIBOR at https://www.ecb.europa.eu/pub/pdf/other/ecb.wgeurofr_highlevelrecommendatioseuriborfallbacks-abc6ca6268.en.pdf.

their documentation to reflect the requirements of the Benchmarks Regulation. However, we are still far from a position of legal certainty, where the selection of an alternative benchmark could be relied upon in case EURIBOR materially changes or ceases to be provided.

The issues that arise in relation to legacy contracts are, however, even more difficult to resolve than those which arise in relation to new contracts. It has already been noted that legacy instruments referencing LIBOR may have no fall-back language or fall-back language that yields an unacceptable outcome. The same issue arises in contracts referencing EONIA or EURIBOR, which in some cases only contemplated the temporary unavailability of the rate and did not address the possibility of a permanent cessation or any difference in the underlying interest represented by the possible replacement rates. In these contracts, a material change or cessation in the rate is likely to result in changes to the economics of the original transaction, which is a likely catalyst for litigation.

The problem is particularly acute in relation to certain asset classes where the procedures for amending the contracts raise difficulties or it may even not be possible to change the relevant terms. By way of example, floating rate notes require amendment pursuant to a consent solicitation process, which is voluntary. Loan and mortgage products in the wholesale sector require the consent of all the parties to the contract or in accordance with the terms of the contract, in which case the level of consent required may vary (e.g. ranging from all lenders to a majority or a super-majority). Retail products may also be subject to consumer protection laws that require customers to provide their prior explicit consent to changes. In these cases, the costs of amendment may be high and the outcome uncertain, and as there is no legal requirement to amend pre-2018 contracts or contracts outside the scope of the Benchmarks Regulation, any change in favour of robust rates or fall-back provisions may be limited.

The problems related to retail products are clearly illustrated by recent case-law of the Court of Justice of the European Union, which provided a preliminary ruling on the question of whether a term of a mortgage loan agreement specifying the agreed interest rate was void on account of its alleged unfairness. In this case, the Court ruled that if a national court finds that a term referring to a statutory index for calculating the variable interest rate applicable to a mortgage loan contract with a consumer is unfair, it can replace the term with another index provided for under national law. The replacement can be ordered, if the mortgage loan agreement at issue is not capable of continuing in existence without the term and if the annulment of the agreement would expose the consumer to particularly unfavourable consequences. The ruling establishes clearly that if a bank seeks to change a term of a mortgage loan agreement (or indeed fails to change a term) referring to an agreed interest rate and the term is judged as unfair, it is possible for the national court to replace the term with another rate provided for under national law. Whether or not national legislatures have provided for a replacement rate, which is to apply in the absence of other arrangements established by the parties to the contract, may well vary from Member State to Member State.

This case therefore points to the reasons why, in the European Union as in the US, many practitioners believe that the most appropriate solution to the problem of legacy contracts should come from the

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28 This is more likely in the event of a contract pre-dating the entry into effect of the Benchmarks Regulation on 1 January 2018 or products not covered by the Benchmarks Regulation. It is noted that contracts entered into prior to 1 January 2018 that fall within the scope of the Benchmarks Regulation are expected to be amended where practicable and on a best efforts basis (see ESMA Q&A on the Benchmarks Regulation, Question 8.1, added in December 2017 at https://www.esma.europa.eu/sites/default/files/library/esma70-145-114_qas_on_bmr.pdf).


Union legislature. But to date, the legislative amendments which have been enacted have been modest, extending the transitional period in which a critical benchmark such as EURIBOR could be published and used without authorisation from by two years to 31 December 2021, and empowering competent authorities to extend the maximum period for the mandatory provision of a critical benchmark to five years.31

More recently, the European Commission commenced a review of the Benchmarks Regulation,32 seeking comments on its roadmap for the review in March 2020.33 The Commission clearly identifies the significant financial stability risks that arise if there is a cessation of a critical benchmark without a replacement rate in place or without a solution for legacy contracts that continue to reference the old IBOR rates. The main issue it identifies is that competent authorities do not have sufficient powers under the Benchmarks Regulation to ensure the orderly transition from a critical benchmark to a replacement rate; indeed they may even inhibit such a transition, given that they may withdraw authorisation and require an administrator to stop publishing a critical benchmark, without appropriate transitional arrangements in place. The main objective of the Commission’s initiative is therefore to equip competent authorities with supervisory powers, including the power to mandate the continued provision of a critical benchmark using a different methodology or use of a replacement rate.

However, there will be many issues and questions that will need to be clarified in relation to a proposal for legislative change. In particular, if the focus is on enhancing the competent authority’s power to require the necessary changes to be made to ensure a benchmark’s methodology or a replacement rate is representative of the market or the economic reality it was intended to represent, what criteria would the authority need to take into account when exercising this power? And could the public authority provide sufficient comfort that the new methodology or the replacement rate is representative of the underlying market or economic reality represented by the predecessor rate? What risk and liability might it accrue when exercising a decision-making power of this kind?

And, perhaps most importantly, is the proposal to enhance the powers of the competent authorities an appropriate measure to mitigate the risks to parties to legacy contracts and instruments referencing EONIA or EURIBOR, where a material change or cessation in the rate may result in changes to the economics of the original transaction? The proposal of the ARRC for New York State Legislation for US Dollar LIBOR contracts takes a different approach, as it would establish a recommended benchmark replacement as a commercially reasonable substitute for LIBOR, provide a safe harbour from litigation for the use of the recommended replacement and prohibit a party from refusing to perform or declaring a breach of contract as a result of LIBOR discontinuance or use of the recommended replacement.34 The provisions would apply to a substantial number of financial contracts that reference US dollar LIBOR, which are governed by New York Law. Such an approach - based on intervening in the contract between the parties to affected contracts – would be more complex and difficult to achieve in the European Union, given that contracts are governed by national law. It would also be important to ensure it would not contradict the legislative objective of the Benchmarks Regulation, which was to avoid the fragmentation of the internal market arising from divergent approaches to rules affecting administrators and users of benchmarks in different Member States.


This is one reason why EU authorities have tended to support policies that encourage private sector actors to implement changes in financial contracts and instruments to give effect to benchmark reform. It remains to be seen if new legislative initiatives will grant wider powers to the competent authorities to mitigate the risks arising “from the end of the most important number in finance” or if they will intervene more directly in legacy contracts referencing EONIA and EURIBOR to afford greater legal certainty to the parties.

III. The Evolution of the Institutional and Regulatory Framework Governing the (European) Banking Union: Completed and Uncompleted Reform Proposals and the Impact of the Current Pandemic Crisis

A. The Three Pillars of the Banking Union

1. The creation of the (European) Banking Union (BU) was tabled at the Euro Area Summit of 29 June 2012, amidst the fiscal crisis in the euro area, which became manifest in 2010. The main rationale behind this initiative was summarised in the following sentence of the Summit’s Statement: “We affirm that it is imperative to break the vicious circle between banks and sovereigns.”

The three main pillars of the BU, notably the new EU mechanisms and funds, are designed to apply in principle to the euro area Member States.

2. The BU’s first pillar is the Single Supervisory Mechanism (SSM), which is operating since 4 November 2014 on the basis of Council Regulation (EU) No 1024/2013 of 15 October 2013 (SSMR). This conferred upon the European Central Bank (ECB) specific tasks in relation to the micro- and macro-prudential supervision of credit institutions and some other categories of supervised entities, exercised within the SSM. The institutional framework pertaining to the SSM is further specified in several legal acts of the ECB, including its Regulation (EU) No 468/2014 of 16 April 2014 (ECB/2014/17) (SSM Framework Regulation).

The underlying single rulebook, which applies to all Member States and governs (mainly) the granting and withdrawal of authorisation of credit institutions, the acquisition and disposal of qualifying holdings in them, their micro-prudential supervision (including the supervisory review and evaluation process (SREP), as well as their micro- and macro-prudential regulation, is based on two legal acts of the European Parliament and of the Council: Regulation (EU) No 575/2013 (‘Capital Requirements Regulation’ or CRR) and Directive 2013/36/EU (‘Capital Requirements Directive IV’ or CRD IV). Both these two legal acts are in force since 1 January 2014 and their rules reflect to a large extent the framework developed in 2010 (immediately after the recent (2007-2009) international financial crisis) by the Basel Committee on Banking Supervision on this field (Basel III regulatory framework).

3. The second pillar of the BU consists of the Single Resolution Mechanism (SRM) and the European Single Resolution Fund (SRF), established on the basis of Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 (the SRMR), and the Intergovernmental Agreement (No 8457/14) by 26 EU Member States (the ‘SRF Agreement’). Both these acts are applicable from 1 January 2016. The Regulation establishes uniform rules and a uniform procedure for the (orderly) resolution of credit institutions, which are exercised by the Single Resolution Board (Board or SRB), together with the Council, the Commission and the national resolution authorities within the framework of the SRM.


38 OJ L 176, 27.6.2013, pp. 1-337 and 338-436, respectively

The underlying single rulebook governing resolution planning, early intervention measures, as well as resolution tools and powers, which also applies to all Member States, is based on Directive 2014/59/EU of the European Parliament and the Council (the ‘Bank Recovery and Resolution Directive’ or BRRD). As in the case of the CRR and the CRD IV, the impact of public international law on the BRRD, which is applicable from 1 January 2015, was considerable as well. Its content was heavily influenced by the 2011 Report of the Financial Stability Board (FSB) entitled “Key Attributes of Effective Resolution Regimes for Financial Institutions”.

4. The third pillar of the BU, namely a European Deposit Insurance Scheme (EDIS), is not yet in place. On 24 November 2015, the Commission submitted a proposal for a Regulation of the European Parliament and of the Council “amending Regulation EU No 806/2014 in order to establish a European Deposit Insurance Scheme”, the process of the adoption of which is still halted. The EDIS would be introduced gradually, in three stages, while a European Deposit Insurance Fund (EDIF) should also be set up from the outset, directly financed through risk-adjusted contributions made by credit institutions. The EDIF’s management would be entrusted to the SRB. On the other hand, the single rulebook on the establishment and functioning of national deposit guarantee schemes (DGSs) in all Member States is governed by Directive 2014/49/EU of the European Parliament and of the Council, which repealed since 3 July 2015 Directive 94/19/EC of the same EU institutions.

B. Recent Regulatory Developments

1. The above-mentioned legal framework governing the BU and (mainly) the underlying single rulebook is currently under amendment. On 23 November 2016, the Commission tabled, on the basis of its Communication of 24 November 2015 “Towards the completion of the Banking Union”, a legislative “banking package” concerning the amendment of several aspects of the BRRD, the SRMR, the CRR and the CRD IV with a view to reducing risks and further strengthening the resilience of EU credit institutions. This was followed by a new Commission Communication of 11 October 2017 “on completing the Banking Union”, which is broadly based on the conclusions of its Reflection Paper “on the deepening of the economic and monetary union” of 31 May 2017 and laid down in this respect six priorities, which can be categorised in two groups: the first group contained ‘risk reduction’ measures, including the (quick) adoption of the legislative 2016 “banking package”, the creation of sovereign bond-backed securities, the undertaking of actions to address non-performing loans (NPLs), in accordance with the Council Action Plan “on Non-Performing Loans” of July 2017, and the continuation of the attempt to ensure high quality supervision; the second group comprised two ‘risk sharing’ measures (implementation of which might follow the effective application of the above-mentioned risk reduction measure), and in particular: the establishment of the EDIS, and the creation of a ‘common backstop’ to the SRB for the SRF. The priority character of the above-mentioned actions was further reinforced in the Commission Communication of 6 December 2017 “Further steps towards completing Europe’s Economic and Monetary Union: A roadmap”, which outlined a comprehensive


package of six proposals to strengthen the EMU – including the BU and the Capital Markets Union, i.e., the two pillars of the ‘Financial Union’.

2. The above-mentioned legislative “banking package” was adopted in 2018-2019. In particular, the Proposal for a Directive of the European Parliament and of the Council “amending [the BRRD] as regards the ranking of unsecured debt instruments in insolvency hierarchy”, which provides for the amendment of Article 108 BRRD, was adopted on 12 December 2017 (Directive (EU) 2017/2399).

On 20 May 2019, the European Parliament and the Council adopted Regulation (EU) 2019/877 of “amending the SRMR as regards loss-absorbing and recapitalisation capacity for credit institutions and investment firms” (SRMR II) and Directive (EU) 2019/879 of the same institutions “amending the BRRD on loss-absorbing and recapitalisation capacity of credit institutions and investment firms (...)”(BRRD II). This package reviewed the minimum requirement for own funds and eligible liabilities (MREL) and implemented in the EU legal framework the total loss-absorbing capacity (TLAC) standard of the FSB. On the same date, Regulation (EU) 2019/877 (CRR II) and Directive (EU) 2019/878 (CRD V) were also adopted by the same institutions. The first amended the CRR in respect, inter alia, to the leverage and the net stable funding ratios; counterparty credit and market risks; exposures to central counterparties; large exposures; and reporting and disclosure requirements, the amendments to the CRD IV refer, inter alia, to remuneration; supervisory measures and powers; and capital conservation measures.

3. The vast majority of the proposals on the amendment of the CRR and the CRD IV are broadly based on aspects of the above-mentioned “Basel III regulatory framework” of the Basel Committee on Banking Supervision, which were not included in these two EU legal acts at the time of their adoption (in 2013). This framework is again under amendment after the endorsement, on 7 December 2017, of the Report “Basel III: Finalising post-crisis reforms”. Accordingly, it is expected that the Commission will submit new proposals for further amendments to the CRR.

C. The Uncompleted Agenda

1. Establishment of the EDIS

1. The progress on adopting the Regulation establishing the EDIS was slow and, in view of this development, the Commission identified in its EMU reflection paper the establishment of the EDIS as one of the key outstanding components for the completion of the BU. In this respect, in its (above-mentioned) Communication of 11 October 2017 concerning the completion of all parts of the BU by 2018, the Commission submitted (unsuccessfully) a compromise solution, proposing a more gradual introduction of the EDIS compared with the original proposal in only two phases.

2. The Euro Summit meeting, of 14 December 2018, did not make any explicit reference to the progress of negotiations on the EDIS. Nevertheless, according to the “Eurogroup report to Leaders on


50 OJ 150, 7.6.2019, pp. 226-252 and 296-344, respectively.

51 From an operational point of view, the harmonised minimum level of the TLAC standard for global systemically important institutions (G-SIIs) (referred to as ‘TLAC minimum requirement’) will be introduced in the EU through the CRR II. On the other hand, the ‘institution specific add-on’ for G-SIIs and the ‘institution-specific requirement’ for non-G-SIIs will be addressed through the targeted amendments to the BRRD and the SRMR (BRRD II and SRMR II, respectively) and will be imposed when the TLAC minimum requirement is not sufficient to absorb losses and recapitalise a G-SII.

52 OJ 150, 7.6.2019, pp. 1-225 and 253-295, respectively.

53 All these new rules will apply, in principle, from end December 2020 to June 2021.
EMU deepening”, of 4 December 2018, work has started on a roadmap for beginning political negotiations on the EDIS in line with the mandate from the June 2018 Euro Summit. In addition, the establishment of a High-level working group was decided to work on the next steps and report to the Euro Summit of June 2019. The Euro Summit meeting, of 21 June 2019 was, nevertheless, silent on this subject, even though the risk reduction measures had been adopted a month ago. Its Statement concluded with a general remark: “We look forward to the continuation of the technical work on the further strengthening of the Banking Union.” The same applies to the recent Euro Summit meeting, of 13 December 2019. Accordingly, the establishment of the EDIS and the DIF is (in realistic terms) not envisaged before 2021.

2. The ‘Common Backstop’ to the SRB for the SRF

1. A main element of the above-mentioned comprehensive package of measures proposed by the Commission in its Communication of 6 December 2017 to strengthen the EMU was the proposal for a Council Regulation “on the establishment of the European Monetary Fund”⁵⁴ (EMF Regulation). The proposal provided for the establishment of a European Monetary Fund (EMF) based Article 352 TFEU, hence anchored in the EU institutional framework. The objective of the EMF, which would succeed to and replace the European Stability Mechanism (ESM) with its current financial and institutional structures essentially preserved, would be the contribution to safeguarding financial stability in the euro area. For the achievement of its objective, the EMF would be assigned two tasks, the second consisting of providing credit lines or setting guarantees in support of the SRB (the so-called ‘common backstop’). The legal basis for the provision of financial support to the SRF by the EMF would be Article 22 EMF Statute, and ultimately Article 74 SRMR (on ‘access to financial facility’), which provides that the SRB can contract for the SRF public financial arrangements regarding the immediate availability of ‘additional financial means’ to be used if bank contributions raised or available are not sufficient to meet the SRF’s obligations.

2. The Euro Summit meeting, of 14 December 2018, agreed on endorsing the terms of reference for the operationalisation of the common backstop and the term sheet developed by the Eurogroup on the further development, by reform, of the ESM and asked the Eurogroup to prepare, by June 2019, the necessary amendments to the ESM Treaty.⁵⁵ The establishment of the EMF is not envisaged anymore and, under the current political agenda, the common backstop will be provided by an enhanced ESM. Developments on this front are, nevertheless, slow. The Euro Summit meeting, of 21 June 2019, noted the broad agreement reached on the revision of the ESM Treaty, stating its expectation for a final agreement in December 2019. Nevertheless, the statement of the latest Euro Summit meeting, of 13 December 2019, was brief as well, noting that the Eurogroup should continue to work on both the ESM package of reforms, pending national procedures, and on all elements of the further strengthening of the banking union.

3. Harmonisation of Rules on the Winding-up of Credit Institutions

1. Another important missing element in the architecture is the harmonisation at EU level of the rules on the winding-up of credit institutions. In particular, the regime for the winding-up of insolvent credit institutions is governed by Directive 2001/24/EC of the European Parliament and of the Council of 4 April 2001 “on the reorganisation and winding-up of credit institutions”⁵⁶ (as in force after its amendment, inter alia, by Article 117 BRRD). This legal act does not provide for a minimum harmonisation of national winding-up proceedings but mainly the principle of their mutual recognition, whereby the administrative or judicial authorities of the home Member State, which are responsible for winding-up, are solely competent to decide on the opening of winding-up proceedings concerning a credit institution, including its branches established in other Member States.


2. The discussions on setting up the BU did not touch upon the prospect of amending this regime. Accordingly, credit institutions’ winding-up proceedings remain national and are expected to remain so at least for the foreseeable future, also activating the repayment procedure of national DGSs (albeit upon an ECB decision for the withdrawal of an authorisation). This aspect became nevertheless topical in June 2017, when the SRB decided not to take resolution action in respect of two Italian credit institutions, namely Banca Popolare di Vicenza S.p.A. and Veneto Banca S.p.A.

4. Creation of Sovereign Bond-Backed Securities

On 24 May 2018, the Commission submitted a “Proposal for a Regulation of the European Parliament and the Council on sovereign bond-backed securities”, whose objective is to lay down an EU “general framework” for sovereign bond-backed securities (SBBSs). The first objective of this framework is the reduction of systemic risk by allowing credit institutions, insurance companies and other investors to diversify their government bond portfolios at relatively low transaction costs. The second objective is mitigation of financial fragmentation – and ultimately reduction of the ‘bank-sovereign loop’ by allowing all participating Member States to contribute to the symmetrical supply of low-risk euro assets. The finalisation of this legislative act is still pending as well.

D. The Impact of the Current Pandemic Crisis

1. The current pandemic crisis induced EU institutions to take numerous measures and initiatives in order to deal with health emergency needs, support economic activity and employment, and prepare the ground for recovery. These include a blend of extensive fiscal stimuli, emergency liquidity and monetary policy measures of the ECB within the Eurosystem, and measures relating to the application of banking micro- and (mainly) macro-prudential regulations. In relation to the latter aspect, since the EU prudential regulatory framework provides certain elements of ‘flexibility’ and on the basis of the consideration that making full use of this flexibility is essential to overcome the financing pressures faced by firms and households, the guidance provided by the ECB (within the SSM) and the European Banking Authority (EBA) to credit institutions in relation to the following related aspects is significant:58

The first was the interpretation and application of the micro-prudential regulatory requirements in the current exceptional circumstances. In this respect, the ECB announced that it will provide operational flexibility in the implementation of bank-specific supervisory measures as a response to the pandemic crisis.59 In addition, the EBA made a statement on actions to mitigate the impact of COVID-19 on the EU banking sector, provided clarity on the application of the prudential framework in light of the crisis and adopted Guidelines “on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis” (EBA/GL/2020/02).60 The second aspect was the release of capital and liquidity buffers embedded in the micro- and macro-prudential banking regulatory framework. In this respect, the ECB provided that credit institutions are allowed temporarily to operate below the level of capital defined by the Pillar 2 Guidance (P2G), under the SREP framework,61 the capital conservation buffer (CCB), and the liquidity coverage ratio (LCR),62 considering that these temporary measures will be enhanced by the appropriate relaxation of the institution-specific countercyclical capital buffer (CCyB) by national macroprudential authorities.63 They are also allowed to partially use capital


58 On the equivalent initiatives undertaken at global level by the Basel Committee on Banking Supervision, see: https://www.bis.org/bcbs/publ/d498.htm.

59 All ECB actions are available at its website (https://www.bankingsupervision.europa.eu).

60 All these EBA actions are available at its website (https://eba.europa.eu).

61 This process is governed by Articles 97-101 CRD IV.

62 The CCB is governed by Article 129 CRD IV and the LCR by Article 412 CRR.

63 This buffer is governed by Article 130.
instruments that do not qualify as Common Equity Tier 1 (CET1) capital, i.e., Additional Tier 1 or Tier 2 instruments, in order to meet the (additional) Pillar 2 Requirements (P2R), under the SREP framework as well.\textsuperscript{64}

2. Noteworthy are also three interventions made by the Chair of the SRB in April 2020\textsuperscript{66} in the context of monitoring the situation related to the pandemic crisis in the euro area and its impact on the financial system. By these interventions the Board presented its approach in view of the uncertainty and disruption caused to the economy by the crisis, setting out its remit on potential operational relief measures, its actions to support efforts to mitigate the economic impact of the crisis and its dealing with MREL targets. This approach is based on two complementary pillars: preservation of financial stability and flexibility in the application of the framework relating to resolution planning.

\section*{IV. Lex Cryptographica Financiera}

\textit{Introduction}

The title of this note combines two ideas: The idea of \textit{lex financiera}, which one of us (R.M. Lastra) has developed over many years,\textsuperscript{67} and the idea of \textit{lex cryptographia}, which has emerged more recently in the context of so-called “cryptocurrencies”. These two ideas are \textit{prima facie} at odds, but we suggest there is the need for reconciliation and indeed the possibility of synthesis, such that it is coherent to speak of a \textit{lex cryptographica financiera} as an emerging branch of international economic law.

In short, the \textit{lex cryptographica financiera} could be said to be a body of norms—sourced from various “levels” from private networks to governments and intergovernmental organisations—that rely on or incorporate automatic enforcement mechanisms in the digital information systems architecture of the financial system.

\textit{Background}

The basic challenge in international financial law is well-known: Financial markets and institutions are international, but their regulation, supervision, and, if necessary, resolution remain for the most part nationally based. This dichotomy has been exacerbated by recent developments in financial technology (FinTech), which have: (i) made transacting at a distance quicker and easier; (ii) have enabled the entry of new players (and new types of players including both “disruptive” start-ups and also “big-tech” giants) into the financial system; and (iii) have provided new opportunities for regulatory arbitrage, loopholes, and shadow institutions.

The domain of “cyberspace” that modern computer networks have created has become the site of important economic (including financial) activity. This adds a new layer of complexity to the interaction of transnational finance and national regulation, supervision, and resolution.\textsuperscript{68} This is

\textsuperscript{64} These instruments are defined in Articles 28(1)-(4), 29(1)-(5) or 31(1), Article 52(1) and Article 63 CRR, respectively.


especially the case because many actors in “cyberspace” claim that it is a domain parallel to and separate from the world of nation states and their jurisdictional boundaries. On the other hand, conventional actors also find a new array of tools at their disposal in cyberspace, and this points to the emergence of “RegTech” and “SupTech” as counterparts to FinTech.

The lex financiera and the lex cryptographia

The notion of lex financiera expresses the evolution of customary usage among market participants into an increasingly coherent and complete set of conventional norms that more closely approximates the paradigmatic case of “law”. The idea of lex financiera is inspired by analogy with the lex mercatoria, the body of custom shared among medieval European merchants that formed a kind of normative order that touched state law but operated largely independently within its self-contained domain of international trade. Although the independence of the lex mercatoria is often stressed, it is also important to note that it interacted positively with state law and that it was, ultimately, absorbed into the modern legal systems of Europe.

The emerging lex financiera is similar to the lex mercatoria in that its international character band relies upon a variety of sources. It is in the confluence of ‘hard law’ (legally enforceable rules), soft law of a ‘public law’ nature (which can complement, coexist, or turn into hard law), and soft law of a ‘private law’ nature (comprising rules of practice, standards, usages, and other forms of self-regulation as well as rules and principles agreed or proposed by scholars and experts) where the future of the lex financiera lies.

The idea of lex cryptographia is also inspired by analogy with the lex mercatoria. The idea is of order created in the absence of law, through technological design. In other words, it is a development of the political implications of information systems architecture. Instead of a (human-staffed) bureaucratic apparatus enforcing norms in the “real world”, sub-domains within cyberspace can “encode” norms in their very architecture that constrain the actions of actors within that space. The lex cryptographia refers specifically to the new public, “permissionless” distributed ledger platforms that have emerged over the past decade, which incorporate cryptographic protocols into their design. The idea of “code as law” and that digital environments are susceptible to wide-ranging control of users through system design is, however, also evident in pre-blockchain literature, for example that by Lawrence Lessig.

Antithesis and synthesis?

The notion of lex cryptographia appears to run, to a certain extent, counter to the notion of lex financiera. The latter operates through more or less conventional means, whereas the former avoids the normal “regulatory levers” directed at subjects (such as intermediaries) and relies on automatic enforcement implicit in the structure of the digital platform itself (on the basis of presumptions about economic actors’ motivations).

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However, there is nothing to say that the *lex financiera* could not incorporate norms “encoded” into Fintech systems like this, or that the designers of Fintech systems might not look to the *lex financiera* for the content of the *lex cryptographia* norms to encode. To this extent, a synthesis seems possible.

The apparent antithesis is rather ideological. The *lex cryptographia* is often described in a way that stresses the “bottom up” nature of the *lex mercatoria* and its independence from (rather than engagement with) modern state law.\(^74\) This is consistent with the syncretic, but broadly libertarian, ideology of the “cryptocurrency” movement.\(^75\) However, De Filippi and Wright argue that the Internet predicted by techno-libertarians in the 1990s did not come to fruition;\(^76\) instead, a more complex situation has arisen in which governments and conventional incumbents impinge on the “sovereignty of cyberspace”. (The dominance of a few large platform providers is particularly telling in this regard.) It would be incorrect, in their view, to see new technologies (like blockchain) as capable of delivering on the failed promise of an anarchist utopia in cyberspace.\(^77\) The tools of *lex cryptographia* can be used by anyone—whether to create techno-anarchist pockets of cyberspace or to extend the jurisdictional reach of conventional governments.

Thus, despite the *prima facie* tension between the notion of *lex financiera* as a conventional (institution-dependent) normative order and *lex cryptographia* as a technological regulation of human behaviour, there is the possibility of a synthesis: The *lex financiera* could adopt the tools of *lex cryptographia* in whole or in part.

Presumably all factions in this debate would accept Adam Smith’s claim that commerce cannot flourish without the regular administration of justice, secure property rights, legal support of private contracts, and the state enforcement of debts.\(^78\) The argument is rather about the *source and nature* of the regulation—the state *versus* market participants themselves, and (human-staffed) bureaucratic institutions *versus* deterministic technological processes.

The concept of *lex financiera* embraces both bottom-up norms (e.g. industry standards) and top-down norms (e.g. harmonised law from bodies like UNCITRAL). *Lex cryptographia*, too, might embrace top-down—encoded, for example, in the digital infrastructure provided by regulators to market participants—as well as bottom-up.

V. **International Financial Regulation in Changing Times – The Role of the Financial Stability Board**

A. **Introduction**

This contribution to the 2020 ILA report examines how the Financial Stability Board (FSB) has shaped the post-crisis global financial regulatory architecture over the past decade. It then looks ahead at the new challenges facing the global regulatory community, including the Covid-19 pandemic, financial innovation and shifts in financial globalization.

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B. The Role of the FSB

The FSB was established in 2009 and assumed an important role in promoting reforms in international financial regulation following the global financial crisis that began in 2007. Its overarching objective is to promote the resilience and effectiveness of an ever-changing international financial system. It brings together the main actors who set financial stability policies across jurisdictions and sectors, including central banks, supervisory and regulatory authorities and finance ministries, standard setting bodies, and international financial institutions.

The FSB is not a treaty-based organisation. Regulatory policies agreed at the FSB are not legally binding and do not replace jurisdictional rulemaking processes. The FSB seeks to promote financial stability by developing and coordinating strong financial sector policies and fostering implementation across sectors and jurisdictions. It regularly reports to the G20. The G20’s endorsement of the FSB’s policy actions and support for the implementation of agreed international standards lend moral strength to the policies and turn them into quasi-binding commitments. Ultimately, however, the extent to which coherence among jurisdictional regulatory arrangements is achieved depends on national decisions.

C. The First Ten Years

Much of the FSB’s first ten years has been focused on addressing the fault lines exposed by the global financial crisis of 2007 to 2009. At the core of the FSB’s reform agenda were policies to build resilient financial institutions by strengthening prudential standards, enhancing the quality and quantity of loss-absorbing resources, establishing effective resolution regimes, making financial market infrastructures more resilient, in particular central counterparties (CCPs), and addressing vulnerabilities in non-bank financial intermediation. Policymakers embraced macroprudential policies aimed at ensuring the stability of the financial system as a whole to supplement traditional microprudential regulation, for example through the adoption of additional capital charges for global systemically important banks.

Another essential component of the reforms of the post-crisis period was the commitment to centrally clear certain standardized “over the counter” derivatives. This reform helped simplify the complex and opaque network of counterparty credit exposures among financial intermediaries by encouraging multilateral netting. However, it also made CCP functions too important to fail. Policymakers therefore adopted a range of measures to strengthen the resilience, recovery and resolvability of CCPs.

With the post-crisis reform agenda largely completed, the FSB’s focus turned to evaluating the effects and effectiveness of the reforms: whether reforms are working as intended and without unnecessary tradeoffs and without giving rise to market fragmentation or a distorted playing field. An evaluation is underway to assess to what extent reforms are reducing the systemic and moral hazard risks associated with systemically important banks and the broader effects of the reforms on the financial system and the economy.79

D. Scanning the Horizon for Emerging Risks – FinTech and Crypto Assets

Scanning the horizon to identify new and emerging risks to global financial stability is at the core of the FSB’s mandate. Innovations in financial technology (FinTech) are changing the way financial services are provided. Traditional business models of banks and other established financial intermediaries are being increasingly challenged by new service providers that rely on digital platforms, including big tech firms. Many of these financial innovations have the potential to enhance the efficiency of the provision of financial services. At the same time, that may generate risks to financial stability. The FSB is monitoring developments to understand the implications for financial stability and for supervision and regulation. One such development is the emergence of so-called “stablecoins”. The term “stablecoin” has become widely used to denote crypto-assets that seek to maintain a stable value relative to a specified asset, or a pool or basket of assets. Stablecoins that have the potential to be widely adopted across multiple jurisdictions (so-called “global stablecoin”) are like other crypto-assets and have the potential to enhance the efficiency of the provision of financial

services. However, they may also give rise to risks to financial stability. While such financial stability risks are currently limited by the relatively small scale of existing arrangements, this could change in the future.

The FSB responded to a call from the G20 to examine regulatory issues raised by “global stablecoin” arrangements, and released a consultative report containing a set of recommendations about the operation and regulation of global stable coins. The ease with which stablecoin arrangements can operate across borders and relocate their activities challenges the effectiveness of regulation, supervision, and enforcement. It also gives rise to the risk of regulatory arbitrage, with potential adverse implications for financial stability, not the least in emerging and developing economies.

The report and recommendations, which the FSB issued for public consultation in April 2020 and aims to finalise by the time of the G20 Summit, encourage authorities to clarify regulatory powers over the activities and risks of stablecoins, and address potential gaps in their respective domestic frameworks in order to achieve common regulatory outcomes and reduce opportunities for cross-border regulatory arbitrage. In many jurisdictions, activities such as the issuance and redemption of stablecoins and the stabilisation of their value, the transfer of coins, and the storing and exchanging of coins are subject to existing regulatory regimes as these functions share similarities with payment systems, bank deposits, or collective investment schemes. The most common approach is to identify the activity performed by a stablecoin arrangement and the participants involved, and apply the relevant existing regulation for that activity or entity according to the “same business, same risks, same rules” principle. In many jurisdictions there is still a need to clarify how existing regimes apply to stablecoins and their providers and provide further guidance or to adapt regulation as necessary to address potential gaps. Some activities may fall outside of traditional regulatory boundaries or legal classifications. Jurisdictions generally seek to apply their regulation to activities taking place in their jurisdiction, including in situations where they are offered to local users from abroad. However, enforcing a jurisdiction’s rules may be difficult as users access services on the Internet and providers of services may be located in different jurisdictions. Differentiated jurisdictional approaches could give rise to regulatory arbitrage and fragmentation. Consistent and coordinated regulatory approaches may help to ensure comprehensive regulatory coverage and reduce the scope for regulatory arbitrage. The FSB recommendations also provide that authorities should not permit the operation of any “global stablecoin” arrangement in their jurisdiction unless the arrangement meets all applicable regulatory, supervisory, and oversight requirements.

E. Cooperation to Maintain Financial Stability During Market Stress Related to COVID-19

The FSB’s track record of cooperation and collaboration has helped to strengthen relationships with and trust between authorities. These are essential for effective cross-border cooperation and coordination in the oversight of financial institutions and markets in normal times. They become crucial during times of stress. The FSB has responded to the implications of the COVID-19 pandemic for the stability of the global financial system by facilitating the sharing of information on evolving financial stability threats and on the policy measures that financial authorities are taking.

The COVID-19 pandemic constitutes a severe threat to the post-crisis international financial system. Thanks to the G20’s regulatory reforms in the aftermath of the 2007 to 2009 global financial crisis, the global financial system is more resilient. However it now faces the dual challenge of sustaining the flow of credit in the face of declining growth and managing heightened risks. On 15 April 2020, the FSB published a report to the G20 with a set of principles that should underpin authorities’ actions and foster international cooperation to address the financial stability implications of COVID-19. Under

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these principles, authorities will monitor and share information, use the flexibility built into existing financial standards and seek opportunities to temporarily reduce operational burdens on firms and authorities, continue to act consistently with international standards not compromise reforms, and coordinate on the future timely unwinding of the temporary measures taken.

VI. Third-Party Service Providers Under the EU PSD2

The scope of the first Directive on payment services in the internal market (“PSD”) was stated in Article 2(1) to “apply to payment services provided within the Community,” both national and cross-border.

With the advent of internet banking and other technological innovations in payments, the need arose to “upgrade” the PSD, primarily to accommodate an integrated European market for card, internet, and mobile payments. Specifically, accommodation was required to enable bank customers—both business and consumer—to give third-party service providers permission to retrieve their account data from their banks, as well as initiate payments on their behalf directly from their bank accounts. With the view of facilitating this, as well as some other revisions, particularly in relation to the authentication of payment transactions, the second Payment Services Directive (“Directive” or “PSD2”) was passed in 2015. Since then, it has been implemented in the various national legislations over the course of 2018.

PSD2 provides for two new types of payment services relating to payment initiation and account information. “Payment initiation service” (“PIS”) is defined in Article 4(15) as “a service to initiate a payment order at the request of the payment service user with respect to a payment account held at another payment service provider.” “Account information service” (“AIS”) is defined in Article 4(16) as “an online service to provide consolidated information on one or more payment accounts held by the payment service user with either another payment service provider or with more than one payment service provider.” The providers of such services are called the “payment initiation service providers”


83 Id. at 9. This was in departure from Directive 97/5/EC of the European Parliament and of the Council of 27 January, 1997 on Cross-Border Credit Transfers, 1997 O.J. (L 43) 25, which was superseded by Title III and repealed by the PSD.


86 Id.

87 Points 7 and 8, respectively. PSD2 annex I.
The functions of PISPs and AISPs in the provision of payment services and the rationale for their coverage by the Directive are set out in the PSD2 Preamble. Thus, paragraph 27 explains that a PISP “play[s] a part in e-commerce payments by establishing a software bridge between the website of the merchant and the online banking platform of the payer’s account servicing payment service provider in order to initiate internet payments on the basis of a credit transfer.”

Under a new definition, Article 4(17) defines “account servicing payment service provider” (“ASPSP”) to mean “a payment service provider providing and maintaining a payment account for a payer.” The ASPSP is the PSP in which the payer’s payment account is held. Effectively then, the PISP initiates a payment order at the request of the payment service user, as the payer, out of a payment account the payer has with the ASPSP. Preamble para 29 goes on to explain that:

[PIS]s enable the [PISP] to provide comfort to a payee that the payment has been initiated in order to provide an incentive to the payee to release the goods or to deliver the service without undue delay. Such services offer a low-cost solution for both merchants and consumers and provide consumers with a possibility to shop online even if they do not possess payment cards.

On the other hand, Preamble para 29 explains that lack of coverage to PIS would have “raise[d] a series of legal issues, such as consumer protection, security and liability as well as competition and data protection issues.”

For its part, Preamble para 32 elaborates on the modes of access by a PISP to the payer’s payment account held at the ASPSP as follows:

[PIS]s are based on direct or indirect access for the [PISP] to the payer’s account.

An [ASPSP] which provides a mechanism for indirect access should also allow direct access for the [PISP]s.

In a direct access mode, known as screen scraping, the PISP uses the customer’s account login and accesses the customer’s account, exactly as the customer would do, via the ASPSP’s webpage. Alternatively, in the indirect access mode, the ASPSP provides the PISP account access through a dedicated application programming interface (API). Regulatory standards favour the latter, which, unlike the former, is capable of limiting the data accessed by the PISP to only what is required for the provision of the service.

The need to regulate both PISPs and AISPs, particularly by reference to their position towards the ASPSP, is explained by the PSD2 Preamble in para 93 as follows:

88 PSD2 arts. 4(18) and (19) respectively.
89 PSD2 pmbl. para. 26.
It is necessary to set up a clear legal framework which sets out the conditions under which [PISP]s and [AISP]s can provide their services with the consent of the account holder without being required by the [ASPSP] to use a particular business model, whether based on direct or indirect access, for the provision of those types of services. The [PISP]s and the [AISP]s on the one hand and the [ASPSP] on the other, should observe the necessary data protection and security requirements established by, or referred to in, this Directive or included in the regulatory technical standards. Those regulatory technical standards should be compatible with the different technological solutions available. In order to ensure secure communication between the relevant actors in the context of those services, EBA should also specify the requirements of common and open standards of communication to be implemented by all [ASPSP]s that allow for the provision of online payment services. This means that those open standards should ensure the interoperability of different technological communication solutions. Those common and open standards should also ensure that the [ASPSP] is aware that he is being contacted by a [PISP] or an [AISP] and not by the client itself. The standards should also ensure that [PISP]s and [AISP]s communicate with the [ASPSP] and with the customers involved in a secure manner. In developing those requirements, EBA should pay particular attention to the fact that the standards to be applied are to allow for the use of all common types of devices (such as computers, tablets and mobile phones) for carrying out different payment services.

To obtain authorization, PISPs and AISPs are required to “hold a professional indemnity insurance, covering the territories in which they offer services, or some other comparable guarantee against liability.”

In relation to capital requirements, PISPs are categorized as payment institutions. More directly, Article 33(2) mandates that AISPs “shall be treated as payment institutions.” However, “Titles III and IV shall not apply [to AISPs],” other than specified provisions addressing information requirements (Articles 45 and 52); burden of proof as to compliance with information requirements (Article 41); rules on access to and use of payment account information in the case of account information services (Article 67); obligations of the payment service user in relation to payment instruments and personalized security credentials (Article 69); and operational and security risks and authentication (Articles 95–98). Article 33(1) further relaxes the application of rules governing applications for authorization (Article 5) and registration (Article 15).

Paragraph 33 of the PSD2 Preamble states that “[a]ny payment service provider, including the [ASPSP] of the payment service user, should be able to offer [PIS]s.” As for the access of a PISP to the payer’s funds, and position vis-à-vis the ASPS, paragraph 30, explains:

The personalized security credentials used for secure customer authentication by the payment service user or by the [PISP] are usually those issued by the [ASPSP]s. [PISP]s do not necessarily enter into a contractual relationship with the [ASPSP]s and, regardless of the business model used by the [PISP]s, the [ASPSP]s should make it possible for [PISP]s to rely on the authentication procedures provided by the [ASPSP]s to initiate a specific payment on behalf of the payer.

In rationalizing the application of the Directive to AISs, Preamble para 28 explains that they “provide the payment service user with aggregated online information on one or more payment accounts held with one or more other [PSP]s and accessed via online interfaces of the [ASPSP].” They thus enable the payment service user “to have an overall view of its financial situation immediately at any given moment.” In this context, the Directive coverage is thus required “to provide consumers with adequate protection for their payment and account data as well as legal certainty about the status of [AISP]s.”

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92 PSD2 arts. 5(2)–(3).
VII. Regulation of Crypto Assets: The EU Perspective

A. Regulatory subject

1. Asset Category: Among international regulators, the “Crypto” Asset category is still slightly opaque in that a clear definition in the sense of a legal term does not (yet) exist. Nevertheless, there is consensus on its broad characteristics as a type of private asset that:

(a) depends on cryptography and Distributed Ledger Technology (DLT) as part of its perceived or inherent value (digital representation of assets);

(b) is neither issued nor guaranteed by a central bank or public authority; and

(c) can be used as a means of exchange and/or for investment purposes and/or to access a good or service.

Crypto Assets are closely correlated with tokenisation, a method that converts rights to an asset into a digital token as opposed to a traditional deed on paper. It is effectively a means to represent ownership of assets via DLT – a means of saving information through a distributed ledger, i.e., a repeated digital copy of data available at multiple locations, such as Blockchain. Virtually anything can be tokenised, ranging from physical goods to traditional financial instruments. It can be expected that tokenisation is a global structural development similar to securitisation.

2. Market volume: Crypto Asset volumes still represent a relatively small market share of the global financial system with a total market capitalisation at around US $130 billion, compared with US $22 trillion for the S&P 500 alone (end-December 2018) and daily trading volumes below US $ 70 billion.

B. Current regulatory baseline

On the EU level, there are two general regulatory lines that can catch Crypto Assets: Product-related application and Institution-related application. A third line is specifically focused on AML aspects.

1 On the product-related side, financial instruments, electronic money, and other products (i.e., none of the foregoing) have to be distinguished.

a) The ESMAs guiding principle in qualifying Crypto Assets as financial instruments is “substance over form”; they would have to be standardised, transferable, and tradable in financial markets. Under MiFID II Art. 4(1)(15)/Annex I sect. C, they are typically transferable securities, money market instruments, units in collective investment undertakings, and certain derivatives. In case Crypto Assets are qualified as financial instruments, a set of specific regulatory frameworks is applied: (i) Markets in Financial Instruments framework (MiFID, MiFIR); (ii) Alternative Investment Fund Managers Directive (AIFMD); (iii) Prospectus Directive and Regulation; (iv) Transparency Directive; (v) Market Abuse and Short Selling Directive; (vi) Investor Compensation Directive; and (vii) Central Securities Depositories Regulation (CSDR).

b) According to Art. 2 (2) EMD2 and Art. 4 (25) PSD 2, Annex I Crypto Assets in the shape of tokens are classified as electronic money, if they: (i) are electronically stored; (ii) have monetary value; (iii) represent a claim on the issuer; (iv) are issued on receipt of funds; (v) are issued for the purpose of making payment transactions; and (vi) are accepted by persons other than the issuer. In this case, a licence as an E-money institution would be required, and the related regulatory regime would be applied.

c) Crypto Assets not classified as financial instruments or electronic money may fall inside national financial product-related regulation of a Member State. Currently,
France, Liechtenstein, and Malta are in the process of implementing specific regimes for crypto assets not covered by the existing EU framework.

2 In the institution-related regulatory line, EU law does not prohibit financial institutions, including credit institutions, investment firms, payment institutions, and electronic money institutions from holding or gaining exposure to Crypto Assets or from offering services relating to Crypto Assets. In the case of Crypto Assets not classified as financial instruments or electronic money, application of the following general principles may require attention with a view to the specific profile of such Crypto Assets:

a) Credit institutions/investment firms: (i) internal governance such as adequate risk management and control mechanisms (Art. 74 CRD); (ii) supervisory review and evaluation process including adequacy of own capital and liquidity resources (Art. 97 CRD); and (iii) supervisory powers such as imposing business restrictions, risk reduction and additional own funds or liquidity requirements.

b) Payment institutions: (i) regulators may require a separate legal entity (Art. 11(5)PSD2); (ii) power to impose additional own funds (Art. 8(2) and 9(3) PSD2); and (iii) enhanced requirements re. supervision (Art. 23 PSD2).

c) E-money institutions: (i) regulatory powers according to Art. 3(1) and 6(1)(e) EMD2.

3 The amended AML Directive 5 now includes as “obliged entities”: (a) providers engaged in exchange services between virtual currencies and fiat currencies; and (b) custodian wallet providers.

C. Outlook

Global standard setters have been dealing with the subject matter for a few years. According to their joint opinion, Crypto Assets are currently not threatening global financial stability; nevertheless related AML issues are updated on a regular basis.

In January 2019, the European Banking Authority (EBA) and the European Securities Markets Authority (ESMA) published reports on the subject matter. The ESMA proposed to implement an explicit regime for specific types of Crypto Assets to address investor protection and market integrity concerns. The EBA has issued repeated warnings related to heightened risks and requires further assessment whether EU level action is appropriate and feasible with a view to consumer protection, operational resilience, market integrity, and the level playing field. After the 2019 elections of the European Parliament, the EU legislators are taking up the subject. In September 2019, Commission President Von der Leyen issued a mission letter emphasising the need to “ensure a common approach with Member States on cryptocurrencies to ensure we understand how to make the most of the opportunities they create and address the new risks they pose.” Vice-President Dombrovski indicated his intention to propose new legislation for a common EU approach on Crypto-Assets, including the so-called stablecoins. As a first result, the Commission published a paper on the initiation of formal proceedings with the headline “Inception Impact Assessment – Directive/regulation establishing a European framework for markets in crypto assets” (19.12.2019, Commission Ref. Ares (2019) 7834655). According to this paper, the likely type of the initiative will be a legislative proposal; the related indicative planning is set for 2020. “The overarching problem is the lack of legal certainty that currently exists around treatment of crypto-assets in EU financial regulation. There is currently no EU definition of what constitutes a crypto-asset nor is it clear if and how the existing EU financial regulatory framework applies to them” (p. 1). “This is true for both crypto-assets that present key characteristics of financial instruments or e-money (thereby falling into the scope of existing regulation) as well as crypto-assets that due to their features are not currently covered by existing EU regulation” (p.2). Further, the Commission has launched an open public consultation related to this initiative.