Towards a European Governance Framework for Cryptoassets

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While the size of the cryptoasset market remains below the threshold of systemic importance, the proposed launch of "Libra" makes it timely consider the next steps. We discuss four challenges to the governance of cryptoassets in Europe: (i) the "definition problem", (ii) the "property problem" (iii) the "money problem", and (iv) the "borders problem". Our position is that a coordinated response at the European level is desirable. While no structural reform in the EU or Eurozone is necessarily required, some fine-tuning may help to minimise gaps in the complex, multi-level institutional design of the Eurosystem to respond adequately to changes in financial services – cryptoassets being only one instance of FinTech manifesting systemic implications. In any case, work at the Member State level is necessary, because some of the challenges posed by cryptoassets flow from national definitions of cryptoassets, the distribution of regulatory competences at the national level and, more importantly, from basic features of national legal systems, and the inherently "borderless" Internet-based financial services. A coordinated European response, we argue, will help to ensure the best possible global response to this phenomenon.

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1. Introduction

This Policy Note explores recent developments and identifies some future challenges in the European law and regulation of cryptoassets. While the size of the cryptoasset market remains below the threshold of systemic importance, the proposed launch of "Libra", a cryptoasset-based payment system, by Facebook and its consortium makes it timely consider the next steps.

In particular, we discuss four challenges to the "European" governance of cryptoassets: (i) the "definition problem" (i.e. defining what is meant by "cryptoassets" such that regulatory perimeters can be adjusted, if necessary, around them), (ii) the "property problem" (i.e. treatment of cryptoassets under national property law undermining regulatory harmonisation), (iii) the "money problem" (i.e. determining when a cryptoasset might acquire "money status" and thus impinge on the money creation and monetary policy role of central banks in the Eurosystem), and (iv) the "borders problem", (i.e. the inherent difficulties of governing transnational financial markets through national and supranational regulatory systems).

Our position is that a coordinated response at the European level is desirable. By "European", we mean a coherent approach across European jurisdictions, with emphasis on the Member States of the European Union ("EU") and in particular on the Eurosystem (the Member States of the Eurozone). Ideally, we would see a coordinated response at the global level, particularly in response to proposals of the scale of Libra. But Europe must play an important role in catalysing and guiding that response. While no structural reform is necessarily required, some fine-tuning may help to minimise gaps in the complex, multi-level institutional design of the Eurosystem to respond adequately to changes in financial services – cryptoassets being only one instance of new financial technology ("FinTech") manifesting systemic implications. In any case, work at the Member State level is necessary, because some of the challenges posed by cryptoassets flow from national definitions of cryptoassets, the distribution of regulatory competences at the national level and, more importantly, from basic features of national legal systems. Perhaps Europe, which contains a number of legal systems which have been influential elsewhere, can pave the way for a more harmonised international treatment of cryptoassets at law, as well as in regulation.

Beyond the obvious imperative of preventing financial crime, the two most important policy considerations that should inform the legal and regulatory response to cryptoassets, in our view, are (i) consumer protection and (ii) systemic risk. However, there is also a third goal, which needs to be weighed against these two, namely (iii) the promotion of beneficial innovation in the use of technology in the financial markets. Consistently with the history and culture of the European project, the governance framework that is emerging will find a distinctly European balance between these goals, and we argue that clarity and commitment is essential for Europe to chart a "third way" through an increasingly polarised landscape in cyberspace.

2. The State of Play

Since the launch of Bitcoin in 2009, cryptoassets have moved towards mainstream commerce and finance – and onto the policy radar. But they have moved in a punctuated, not linear fashion. Bitcoin had the early days of the cryptoasset phenomenon were thus marked by a punctuated, not linear fashion. Bitcoin had the history and culture of the European project, the governance framework that is emerging will find a distinctly European balance between these goals, and we argue that clarity and commitment is essential for Europe to chart a "third way" through an increasingly polarised landscape in cyberspace.

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1 See https://libra.org/en-US/white-paper?noredirect=en-US. The proposal also includes "Calibra", a newly formed Facebook subsidiary whose goal is to provide financial services that will let people access and participate in the Libra network.


our attention back to the monetary aspect, and may alter the speed of change.

The regulatory response to cryptoassets has tracked this course, sometimes focusing on one aspect of the new phenomenon and sometimes on another, sometimes critical and sometimes facilitative, sometimes alarmist and sometimes dismissive. The bid for monetary status in the literature of the “crypto movement” was reflected in the regulatory responses it generated. Generally, we can observe that the official terminology has changed from “virtual currencies” in earlier official publications to other terms such as “cryptoassets” or “digital tokens” in later ones.5

A picture of the current regulatory landscape is given in a recent study by the Cambridge Centre for Alternative Finance (“CCAF”).6 Central banks were generally the first authorities to respond to the questions raised by cryptoassets,7 followed by government departments and financial supervisory authorities. Within many of the jurisdictions studied, the regulatory perimeters of different authorities overlap, but there are also gaps where cryptoassets are under-regulated. Although securities, banking, and financial crime have received plenty of regulatory attention, unclear terminology and classification have compounded the inherent limitations of regulatory principles and jurisdictional arbitrage to challenge regulators’ ability to define and enforce their regulatory perimeters. The first step in most jurisdictions has been to distinguish cryptoassets that count as “securities” from those that do not, and a taxonomy has emerged in several jurisdictions that distinguishes “security tokens” from “payment tokens” and “utility tokens”. However, this approach has limitations, and the study advises a more basic, multi-dimensional approach that takes account of all the relevant technical and economic features of the given cryptoasset as a socio-technical system.

There are a number of blind-spots that demand attention going forward. Certain infrastructure providers (such as “miners”, “developers”, and “nodes”) have neither been included within, nor exempted from, the emerging regulatory framework. Attention has been focussed on initial coin offerings (“ICOs”) while other token distribution mechanisms such as “airdrops” and “forks” have been neglected. Decentralised exchanges have gone largely under the radar while attention has been directed towards centralised and peer-to-peer exchanges. The problems raised by so-called “privacy coins” from a financial crime perspective have not been satisfactorily answered. The regulatory response to “stablecoins” (cryptoassets whose price is connected to an underlying asset or basket of assets including fiat currency or conventional securities) is still relatively unclear, not least because fiat-backed stablecoins would appear to fall under different regulations (being “e-money”) to cryptoasset-backed or algorithmically-based stablecoins.8 As the cryptoasset market develops, some of these blind spots will require attention, as the Libra proposal again illustrates.

2.1 The European Institutional Framework

At the European level, there are a number of bodies potentially competent to regulate the cryptoasset market in some way. The European Commission and Parliament, the European Securities and Markets Authority (“ESMA”) and the European Banking Authority (“EBA”) all have competences that have been or may be enlivened as the market develops. A number of existing EU Directives apply to certain dealings with cryptoassets, including MiFID II (and related Directives), the E-Money Directive, and the Payment Services Directive. The only targeted intervention at the European level thus far, however, is the inclusion of “virtual currencies” in the 5th Anti-Money Laundering Directive (EU) 2018/843. Meanwhile, the absence of EU-level coordination,


7 Probably in response to the early claims of money status or at least monetary function.

8 Apolline Blandin et al, “Global Cryptoasset Regulatory Lanscape Study” (CCAF and Nomura Research Institute, April 2019), 50-53.
national regulators and legislators are leading the way to respond to the sub-systemic risks that they perceive. Recent developments in France are conspicuous in this respect. France is the first major European jurisdiction to have introduced a bespoke regulatory framework for cryptocurrencies at the national level, and the French government has been cited as encouraging its model as the best available practice for other European jurisdictions.9

European institutions have, however, been watching the space. Two recent reports are indicative:

- The European Banking Authority ("EBA") released the findings of a year-long study in January 2019. It concluded that the relatively low level of crypto-asset activity currently observed in the EU does not give rise to implications for financial stability, but that (i) cryptoasset activities tend to fall outside EU banking, payments, and e-money law, that (ii) risks exist for consumers which are not addressed at the EU level, and that (iii) divergent approaches were emerging across the Member States.10 In particular, the EBA observed that the latter might (iv) jeopardise the existence of a "level playing field" within the Single Market. It therefore recommended that a cost/benefit analysis be carried out by the European Commission to determine whether EU-level action is appropriate.

- The European Central Bank ("ECB") published the conclusions of its Crypto-Assets Task Force in May 2019.11 The Task Force examined three main questions: (i) the definition of "cryptoassets", (ii) the interaction of the cryptoasset market with the mainstream financial markets and economy, and (iii) the impact of cryptoassets on monetary policy, payments and markets infrastructures, and monetary stability. It found that the risks posed by cryptoassets are manageable on the basis of existing regulatory and oversight frameworks, but that this assessment is subject to change.

In short, cryptoassets are seen as posing problems at the level of financial crime and consumer protection, but not yet any systemic risks at the European level. This is primarily due to the relatively small size, thus far, of the cryptoasset market. However, the latter is recognised as being liable to change if the growth of the sector continues, and as more conventional economic actors (including financial institutions) become entangled with cryptoassets. In our view, one should take seriously the possibility that cryptoasset activity will continue to rise and to enter the mainstream. Perhaps the Libra announcement has brought this point home, with implications for central banking and monetary control. Systemic risks are seldom foreseen as what they are; systemic shockwaves have arisen in the past from sources that conventional wisdom regarded as too small or too isolated. Indeed, any risk can turn systemic in the event of contagion. It seems that much of the response from central bankers, including the ECB, so far has been part of a policy of warning consumers against exposing themselves in the cryptoasset market and countering the "hype" by downplaying their (actual or potential) systemic importance. But, in our opinion, no time should be lost in conceptualising a coherent European approach to the law and regulation of cryptoassets.

2.2 A Word on Brexit

Obviously, Brexit will change the financial services landscape in Europe. It suffices to make three observations in relation to cryptoassets. First, even the hardest Brexit would not render the UK's position as a financial marketplace nugatory. Secondly, the risk of “offshoring” cryptoasset activity does entail some risk of regulatory arbitrage and “race to the bottom” style competition. One might be forgiven for associating such risks with proposals for a

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9 See "France to ask EU partners to adopt its cryptocurrency regulation" (Reuters, 15 April 2019), URL: https://www.reuters.com/article/us-france-cryptocurrencies/france-to-ask-eu-partners-to-adopt-its-cryptocurrency-regulation-idUSKCN1RR1Y0.


“Singapore-on-Thames”. Thirdly, coordination within the EU 27 will be even more important post-Brexit. We hope that, whatever shape the UK-EU agreement takes, it will maintain a close and cooperative relationship between the UK and the Single Market. The challenge is to find common standards that allow jurisdictions to play to their comparative advantage without condoning consumer protection or systemic risk in other jurisdictions. This is inherently difficult given the apparently borderless nature of cryptoasset activities.

3. Challenges at Four Levels

The challenges facing this project can be analysed at different “levels”. Recently, Sir Geoffrey Vos drew a distinction between “regulatory” and “legal” questions in the treatment of cryptoassets. Before one starts to regulate economic activity, he said, one needs to understand precisely the activity that is being regulated. There is a meaningful difference between asking whether the issuer of a cryptoasset must issue a prospectus, and asking how cryptoassets qualify as objects of property rights, for example.

The dividing line is not always clear. For example, the denial of monetary status to (any currently existing) cryptoassets by the ECB determines the ECB’s regulatory perimeter – if bitcoins (for example) are not “money”, Bitcoin does not threaten the ECB’s monopoly of note issue. The proposal of an “Estcoin”, on the other hand, was assumed to be “money” (because issued by a National Central Bank (“NCB”)), which is reserved to the ECB under the Treaty on the Functioning of the European Union (“TFEU”). Such “regulatory” decisions beg answers to one of the most complex and conceptual questions of all – the nature of money itself. For this reason, it is advisable to proceed in an iterative, reflective manner from more specific, concrete to more abstract, conceptual questions.

To date, more attention has been directed towards the "regulatory" questions than the purely "legal" ones. As noted earlier, the majority of regulators have tended to retrofit existing regulations to fit cryptoassets. There is an ounce of common sense in this; good laws and regulations aspire to “technology neutrality”, are stated in terms of principles and outcomes, and can be applied analogically by well-informed and pro-active regulators. But the downside to assuming that the existing framework is adequate is that some important questions can get swept aside in the effort to categorise a new species of financial asset within the existing regulatory framework.

3.1 The “Definition Problem”

The first task is to define our subject matter. Preferences seem to be converging globally on “cryptoassets”, but there is no accepted meaning of that term. There is a broad, intermediate, and narrow view, depending on (i) the openness of the DLT system and (ii) the function played by the crypto “tokens” in that system. The CCAF study noted good reasons for taking the narrow view, but the weight of opinion seems to favour the broad view, which includes any digital representation of value that utilises some kind of DLT. We would advocate the adoption of a broad view in Europe. With such a broad definition, however, it is necessary to distinguish between different cryptoassets carefully, because they present very different opportunities and challenges. Generally, the technical features and (intended) economic function of any given

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12 See e.g. Owen Paterson, “Don’t listen to the terrified Europeans. The Singapore model is our Brexit opportunity” (Telegraph, 21 November 2017), URL: https://www.telegraph.co.uk/news/2017/11/20/dont-listen-terrified-europeans-singapore-model-brexit-opportunity/.

13 Chancellor of the High Court of England and Wales and Chair of the UK’s LawTech Delivery Panel UK Jurisdiction Taskforce, which is currently conducting a public consultation on the legal nature of cryptoassets.


15 See B.A. Greenberg, "Rethinking Technology Neutrality" (2016) 100 Minnesota Law Review 1495.

16 After all, the fundamentally new characteristic of a “natively-digital” cryptoasset is the incentive role it plays in a particular network.
application of DLT go hand-in-hand, and their interaction determines the legal characterisation of the system. For example, there are important differences between cryptoassets that represent off-chain value (whether things or rights) and cryptoassets that do not. Appropriate terminology will have to be found to describe this axis of differentiation. And generally, “permissioned” ledgers pose different regulatory challenges to “permissionless” ledgers, because they implicate a known, central counterparty. Further, the cryptographic “token” that is the cryptoasset sometimes plays an essential role in the functioning of the DLT system, and sometimes does not.

The “payment tokens”, “security tokens”, and “utility tokens” taxonomy does not account well for “hybrid” tokens, which might fall outside the regulatory perimeter set by these definitions, or might be subject to various regulations (i.e. as “payment instruments” and “securities”) in either a cumulative or a hierarchical manner. Further, these tri-partite taxonomies do not always do justice to the technical and economic differentiators of the cryptoasset in question, or the relevant legal landscape on top of which those regulations operate. The absence of consensus on definitions and classification can hamper the development of a robust regulatory framework and including regulatory harmonisation across jurisdictions, and encourage regulatory arbitrage. Some recent analyses seem to be attempting to moving past the tri-partite classification. For example, the UK Financial Conduct Authority’s most recent guidance has reframed the taxonomy of cryptoassets to comprise “regulated tokens” (including “security tokens” and “e-money tokens”), and “unregulated tokens” (which includes all “exchange tokens” that do not count as e-money and “utility tokens”). In our view, this effort is welcome, but making the regulated status of a cryptoasset the basis of a summa divisio seems to put the cart before the horse – the second-order features in this approach remain much the same. In the European context, it is necessary to work from the ground up, taking account of the following features in particular: (i) the existence and nature of a counterparty; (ii) whether the cryptoasset represents off-chain value and, if so, what type of value; (iii) the technical function of the cryptoasset within the protocol; (iv) the rights attached to “holding” a cryptoasset; (v) the underlying infrastructure of the protocol (e.g. “permissioned” or “permissionless”); (vi) users’ access to the DLT protocol; (vii) redress in the case that the protocol behaves in a manner that does not conform to parties’ expectations.

3.2 The “Property Problem”

More recently, attention has turned to the categorisation of cryptoassets as objects of property rights. A well-known example is provided by the Mt. Gox insolvency proceedings in Japan, where proprietary remedies were held to be unavailable because bitcoins could not be “owned”. Recently, the High Court of England and Wales has granted an asset protection order over bitcoins, assuming a prima facie property status. The “property problem”, we think, has the potential to create significant divergences in practice in the legal treatment of cryptoassets across Europe, even assuming common definitions. The crux of the issue is that the very notion of (legally cognisable) “cryptoassets” assumes that changes to the state of a DLT ledger effect, or reflect, changes in the legal position of the parties to the transaction. While the basic premise of this assumption may be sound – the law should, after all, follow the practice of the market – work remains to be done to map exactly

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17 Apolline Blandin et al, “Global Cryptoasset Regulatory Lanscape Study” (CCAF and Nomura Research Institute, April 2019), 18, 54.


how dealings with the blockchain translate to legal consequences in each jurisdiction.\textsuperscript{22}

In our view, the “property problem” is readily solvable – but different solutions at the national legal level might undermine harmonisation at the regulatory level across Europe. For example, the same cryptoasset might count as something different in England, Germany, and France, with all sorts of implications in any given fact scenario. To use the example of insolvency law, the different characterisation of bitcoins in England and Germany might lead to divergence – and raise the difficult question of where a bitcoin is thought to be for the purposes of the lex situs analysis. For better or worse, reform can be catalysed at the European level, but much of the heavy lifting has to be done by Member States because the property problem arises from systemic features of national civil codes. A recent position paper by two German federal ministries is illustrative.\textsuperscript{23} The discussion paper notes that a EU-level harmonisation would take several years and that Member States should not wait to create competitive environments for Fintech innovation – not least because substantive securities law is not harmonised at the EU level anyway. On the other hand, it express the desideratum of avoiding a German “special path” that would have to be abandoned once action at the EU level is finally taken.

3.3 The “Money Problem”

In our analysis for the European Parliament Monetary Dialogue in July 2017, we observed that the threat of cryptoassets as a risky class of financial assets was perhaps more serious than the threat of cryptocurrencies as “money” candidates.\textsuperscript{24} In our advice, we observed that the “direct” challenge posed by virtual currencies (as the terms of reference called them) to central banks’ monopoly of note issue and oversight over money creation was not yet credible, but that this would be liable to change if new cryptoasset-based payment systems emerged that were capable of competing with incumbent payment systems (cash, commercial bank deposits, and e-money).

Despite disagreement about the nature of money, few would disagree that the function of payment is a constitutive feature of money status.\textsuperscript{25} Generally, therefore, non-bank payment services are challenging conventional concepts at a basic level; the Bank of England’s announced intention to allow non-banks to open central bank accounts speaks to the changes that could occur in the “monetary” dimension of the cryptoasset space over the coming years.\textsuperscript{26} We do not here take a position in the debate about whether Libra constitutes a “stablecoin” that can challenge the existing fiat money system, but it is clear that the Libra proposal highlights the importance of the “money question”, as something like Libra would pose a much more credible direct challenge as a candidate for money status than any currently existing cryptoasset.

3.4 The “Borders Problem”

The idea of borders is inherent in the notion of “regulatory perimeters”, but it is unclear how the borders of territorial jurisdictions extend into “cyberspace”.\textsuperscript{27} The core of the problem is that a distributed ledger is exists in many places in self-

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\item \textsuperscript{22} See David Fox, “Cryptocurrencies in the Common Law of Property” in David Fox and Sarah Green (eds.), Cryptocurrencies in Public and Private Law (Oxford University Press 2019), [6.49]. See also Daniel Carr, “Cryptocurrencies as Property in Civilian and Mixed Legal Systems” in the same volume.
\item \textsuperscript{23} BMF and BMJ, “Eckpunkte für die regulatorische Behandlung von elektronischen Wertpapieren und Krypto-Token: Digitale Innovationen ermöglichen, Anlegerschutz gewährleisten” (7 May 2019).
\item \textsuperscript{24} See Rosa María Lastra and Jason Grant Allen, “Virtual Currencies in the Eurosystem: Challenges Ahead” (Prepared for the ECON Monetary Dialogue, July 2018), 12.
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identical form at once; it cannot be straightforwardly pinned to any one geographical location. This is not actually entirely novel, as debts and bank accounts have presented similar problems for some time already.28 But DLT and cryptoassets bring the issues to a head in challenging new context.

The "borders problem" reveals the importance of the competing visions for the future of the Internet. Keiron O’Hara and Wendy Hall identify "Four Internets" – the Silicon Valley “open Internet”, the Chinese “authoritarian Internet”, the Washington DC “commercial Internet”, and the Brussels “bourgeois Internet”. Europe’s political attitudes, they explain, are directed towards the project of peace, prosperity, and cohesion, and the EU has taken it upon itself to defend a “civilised bourgeois public space against incivility” of various kinds. Although there are concerns that it will be “harder to innovate” in Brussels’ Internet, “thanks to a preference for incumbents and distaste for disruptive newcomers”, the EU as a market is too large to ignore, and this allows Europe to take a standard-setting role.29

With caveats,30 we would endorse such a vision for the Internet, and by extension for Internet-based financial services. A balance must be struck between openness to new innovations, on the one hand, and a concern for “virtuous behaviour, civility and prudence” in cyberspace – grounded in the normative foundations of the European project. Our view is also aligned with the theory of multi-level governance.31 As a unique experiment in supra-state governance, we think that the EU can play an important role. But as Carlo Monticelli has recently argued, global economic governance has undergone a radical transformation with the emergence of a new and unsettled international financial order. Power has shifted from advanced to emerging economies, with consequences for international financial institutions. Europe “punched well below its weight” in the transformation of the global financial order that emerged following the 2008 Global Financial Crisis.32 We think it is particularly important for the Member States of the EU to maintain a consistent, common approach to “borders” in the coming years.

4. Conclusion and Outlook

Libra has the potential to alter the global payments system. The proposal has generally been met with consternation on the part of central banks, policy makers, experts, civil society – and indeed by many within the cryptoasset movement itself, who see the involvement of such large incumbents as inimical to the “technoliberal” ethos of the cryptocurrency movement. It is perhaps evidence of the increasing centralisation and “mainstreaming” of the cryptoasset industry, and may represent the tipping point at which central banks and other public authorities have to stop watching and start acting. The Libra proposal illustrates all four of our challenges: (i) it presents definitional questions as a “stablecoin” and possibly e-money;33 (ii) national jurisdictions will need to determine how, if at all, dealings with a Libra token effect changes in property rights to the underlying financial assets; (iii) Libra has stronger “money candidacy” than existing cryptoassets; and (iv) Libra is an unprecedented challenge to the existing international legal framework of the monetary system.

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30 The caveat is that the value of an open Internet should not be discounted lightly, that it is possible for Internet regulation to compromise this value without actually delivering tangible dividends in terms of other values (such as privacy), and that illiberal state intervention is easily cloaked by references to values like “public morality”.

31 See Liesbet Hooghe and Gary Marks, Multi-Level Governance and European Integration (Rowman & Littlefield 2001).

32 Carlo Monticelli, “Global economic governance at a crossroads” (SUERF Policy Note Issue No. 83, July 2019).

In our view, the proposal requires a coordinated regulatory response commensurate to its own size and scale. If this response is not timely and decisive, central banks around the world – especially in smaller economies – may miss the window to act effectively at all. We think that the Eurosystem stands at a pivotal point. The ECB bears responsibility in virtue of the size of the Euro monetary area. It is important that the ECB makes a bold decision on the posture it is going to adopt towards Libra, and the place that it thinks Libra (and similar initiatives) should have in the international financial and monetary system. To the extent that there is credible demand for something like Libra, we think that the notion of central bank digital currency ("CBDC") should be tabled for serious discussion.34

It is no accident that Bitcoin was launched in the aftermath of the Global Financial Crisis. We think it is also no accident that the best candidate for "crypto money" has very little to do with the Bitcoin proposal. We are at the start of what may well be seen, in retrospect, as a period of innovation not seen since the late 18th century development of financial instruments. Although the emerging cryptoasset-based economy is still relatively small, it has arisen ex nihilo in the space of a few years and we think that certain elements of it, at least, will prove to be enduring features of the 21st century financial economy. While it is prudent for regulators and lawmakers to watch the "Cambrian explosion" and wait to see what forms survive, they should not only be vigilant to the risk of contagion but also think a step ahead in terms of what more fundamental impacts these new data structures might have on the legal systems that govern them, what needs these innovations identify in the existing landscape of payment services (for example), and how (if at all) the underlying technologies might be put to use by public institutions themselves.

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34 A good deal of analysis has been conducted by central banks around the world on CBDC (See e.g. John Barrdear and Michael Kumhof, “The macroeconomics of central bank issued digital currencies” (Bank of England Working Paper No. 605, 18 July 2016), URL: https://www.bankofengland.co.uk/working-paper/2016/the-macroeconomics-of-central-bank-issued-digital-currencies), but to date this has remained academic in the Eurozone context.

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