CHAPTER 5

The Regulatory Framework and Initiatives

Abstract FinTech activities often take place within an unregulated space or are subject to non-homogeneous regulatory frameworks. After a prevalent approach of "wait-and-see" by regulators, followed by an intense (still ongoing) debate on the opportunity to regulate, national authorities and international regulatory bodies have started to design regulatory provisions. The main aims are to eliminate the space for regulatory arbitrage and ensure the financial markets greater stability and resilience, as well as to provide customers and investors with a higher degree of protection. Co-operation between authorities in this area of regulation is key to the success of the new provisions, given the pervasiveness and innovative features of FinTech. This chapter reviews the regulatory approaches adopted so far and describes the main regulatory actions taken at the European level.

Keywords Level playing field • Regulatory arbitrage • Banking licence • Innovation hub • Regulatory sandbox

5.1 FinTech Regulatory State-of-the-Art

In the course of this work, it has emerged that FinTech firms work on an uneven regulatory playing field in which similar or equivalent activities are subject to diverse legal frameworks and sometimes to none at all. Some FinTech firms were set up to exploit gaps in relation to some financial

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activities not reserved to financial intermediaries, such as peer-to-peer lending, for example (Zetzsche et al. 2017). In 2017, the European Banking Authority reported that over 30% of the FinTech firms doing business in Europe are subject to no regulatory regimes whatsoever (EBA 2017).

The fragmentation of the phenomenon and the various degrees of FinTech development shown in the various countries have contributed powerfully to the current co-existence of a range of regulatory frameworks (BIS-BCBS 2018; EBA 2017). It has been emphasised that FinTech's rapid evolution may modify the risk profiles to which intermediaries and the financial markets are exposed and contribute to generating new, or amplifying existing, risks (EBA 2018c). Despite this, divergent opinions have emerged internationally on the need to regulate the FinTech phenomenon (BIS-FSB 2017).

This has led to slow decision-making on the action to be taken (Enria 2018) and brought a "wait-and-see" approach to the fore for some time (Arner et al. 2016; OICV-IOSCO 2017). This attitude by the regulators is called for when new and powerful technological innovations emerge because the authorities need to observe the new phenomenon before drawing up new rules, where extending the existing rules is not possible and/or advisable. Furthermore, the regulators must equip themselves with specific expertise as regards technological innovations in order to gain a clearer understanding of the scope and possible consequences of the innovations put forward by the new operators and the new business model used.[1]

It should be underlined that this wait-and-see approach as regards FinTech is also the outcome of a belief that the benefits expected from market digitalisation will outweigh the risks (BIS-FSB 2017; Enria 2018; FSB 2017). A premature legal intervention was held to be inopportune for two reasons. On one hand, regulation might reduce the financial sector's competitive, innovative and development potential, blocking the implementation of a series of advantages in terms of greater availability of innovative products, a multiplicity of channels, cost reductions and more efficient services for clients (BIS-FSB 2017). On the other hand, the risks generated by FinTech, including lower loan standards, the pro-cyclical impact and the emergence of aggressive pricing policies are not considered sufficiently serious to generate systemic risks, also in consideration of the limited scope of the phenomenon (FSB 2017).

Over time, the debate on the advisability of regulating FinTech came up against growth in FinTech and BigTech business volumes as well as concrete cases of regulatory arbitrage and limited transparency phenom-

ena by some operators which have not infrequently resulted in episodes of crisis and fraud.[2] Thus a belief in the advisability of regulatory norms to safeguard stability and the correct functioning of the financial markets has grown (Bofondi and Gobbi 2017; Vives 2017). An awareness of the importance of coordinated international legal regulation of FinTech has also grown (Enria 2018; IMF 2018).

Light has been thrown on the fact that the survival of certain activity segments not subject to regulation and the co-existence of differentiated frameworks may lead to an increase in market risk to the detriment of the correct functioning of the financial systems, level playing field conditions and a potential lack of respect for client and investor safeguards (ESMA 2017a; IMF 2018). Furthermore, with specific reference to BigTech, it has been highlighted that, in the event that the financial services supplied are not subject to prudential regulations, risk management by these firms may be less well-developed and effective than regulated financial intermediaries and this may constitute a market risk (FSB 2019).

It should also be added that the regulatory authorities have no power to sanction or to carry out checks on subjects not encompassed by their regulatory jurisdiction as defined by the law from time to time. The European Banking Authority highlighted this “legal vacuum” some time ago and came down in favour of the advisability of drawing up uniform European laws, especially for crowdfunding operators in consideration of the risks generated by their activities and to avoid regulatory arbitrage (directed at the European Commission, European Parliament and the European Union Council) (EBA 2015).

It is now commonly believed internationally that the objective of a new legal framework regarding financial innovation should be to reduce regulatory arbitrage and provide a response proportional to risk (IMF 2018), taking into account the benefits of greater market competitivity and greater financial inclusion and channel diversification with the need to safeguards savers and investors (BIS-FSB 2017; IMF 2018).

5.2 European Action

European debates on the FinTech regulatory theme have, over time, highlighted the risks and opportunities involved in financial market innovation and digitalisation. Debates around FinTech legal issues have taken place both at individual nation level and at the European level (European Commission 2017, 2018a) and led to the publication of an Action Plan

regarding FinTech in 2018 (European Commission 2018a). The purpose of the European Commission's Action Plan was to foster a competitive and innovative financial market in three ways:

- encouraging the adoption of innovative business models;
- improving cybersecurity and IT management system resilience;
- supporting new technology adoption.

As regards the first aspect, the Commission drew up a series of legal interventions designed to establish across the board laws relating to access to markets by FinTech with uniform licensing standards, for example. The Commission drew up a regulatory proposal for crowdfunding (which we will look at in more detail in Sect. 5.2.2) and incentivised dialogue between the various operators involved in the digitalisation of the financial markets. From this perspective the Commission believes that creating "innovation facilitators" (or innovation hubs) and "regulatory sandboxes" is an effective way of encouraging knowledge and expertise exchanges between FinTech and incumbent firms and regulators (European Commission 2018a).

Effectively innovation facilitators and regulatory sandboxes have already been implemented in various regions. Australia, Japan, Hong Kong and Singapore are some of the states to have set up innovation hubs and regulatory sandboxes (BIS-BCBS 2018), testifying to the growing attention being paid to FinTech by the international regulatory authorities.

As far as Europe is concerned, innovation hubs have been set up in 21 EU member states and three Eastern European countries in different ways and involving diverse commitments by the regulatory authorities (ESAs 2018a), but with a shared overall objective of facilitating exchanges between FinTech and incumbent firms and the regulators.

There are fewer sandboxes, on the other hand, with five already active (Denmark, Lithuania, the Netherlands, Poland and the UK) and one which will begin work in 2019 (Norway) (ESAs 2018a). The purpose of the regulatory sandbox idea is to enable operators to test especially innovative business models, processes or products in a specific environment in order to evaluate their validity, sustainability and riskiness. This testing process takes place in accordance with regulatory provisions according to methods agreed with the regulatory authorities and is subject to ongoing monitoring by the latter (ESAs 2018a). Taking part in regulatory sandboxes does not involve exemptions or lightening of the burden of legal

and regulatory obligations, where FinTech firms carry out limited or regulated activities on financial markets.

The solutions implemented with reference to the sandboxes are highly variegated in terms of the interaction between those involved, participation methods and specific objectives. In general, the sandboxes aim to raise awareness of the regulatory requisites by FinTech firms, increase the supervisory authorities' technological innovation know-how and foster innovation in the widest sense (ESAs 2018a).

A recent example is provided by the FinTech start-up firm 20|30, authorised by the Financial Conduct Authority (FCA) within its sandbox. The firm experimented in April 2019 the first Security Token Offering in a regulated stock market, thanks to the partnership with the London Stock Exchange (LSE). The same 20|30 will provide the platform for the tokenisation of the future issues admitted to trading.[3] The issue and the subsequent trading of a security token on the LSE constitutes a first institutional step towards the digital evolution of stock markets, thanks to the digitalisation of securities that allows eliminating most of the back-office operations linked to securities and allowing the securitisation of a wider array of assets.[4]

The sandbox theme was cited in a recent intervention by the vice president of the European Commission (Dombrovskis 2019), who argued for the importance of regulatory sandboxes and innovation hubs. He also announced the launching of the European Network of Innovation Facilitators on 2 April 2019 to facilitate co-ordination between the national authorities and allow firms taking part in the programme to achieve European scope more easily.

In addition to these initiatives, a series of legal and regulatory actions is emerging, in the European context, which is beginning to outline a regulatory framework for FinTech activities which we will examine in subsequent sections.[5]

5.2.1 Banking Activities

The FinTech phenomenon has led to the birth and development of digital banks and FinTech credit institutions. Whatever the technological or innovation level of the business, banking, as a regulated activity, requires a licence issued by the relevant authorities. In Europe this is the national authorities and the European Central Bank (ECB). In the light of an increase in banking licences granted to FinTech firms and the, to some

extent, divergent attitude by some national authorities in relation to the procedure involved in checking and issuing banking licences, the ECB considers it important to intervene with guidelines. In particular, it issued banking licences to FinTech credit institution guidelines in 2018 (ECB 2018a, b) and in January 2019 published a comprehensive guide to the issuing of licences for both FinTech firms and traditional credit institutions (ECB 2019).

In a March 2018 document, the FinTech banks were defined by the ECB as banks with "*a business model in which the production and delivery of banking products and services are based on technology-enabled innovation*" (ECB 2018b). The FinTech bank guidelines clarify that providing banking services via platforms, with a lean organisational structure and via the use of technologically advanced tools does not exempt those engaging in it from the regulations applying to traditional banking institutions. The central bank considers that FinTech firms can be exposed to risks which are difficult to evaluate (including cyber risks) precisely because of the peculiarities of the service offered and the pronounced use of technologies. For this reason, it is possible that the ECB may require additional organisational, asset or governance requisites in the authorisation phase (ECB 2018a, b, c). In particular, the ECB guidelines highlight the need for asset and governance compliance and careful internal controls for FinTech firms wanting to expand their operations into banking. FinTech firms applying for licences to work in banking will thus have to guarantee compliance with the regulations and the governance skills and sustainability of their business models.

5.2.2 Marketplace Activities: Peer-to-Peer Lending and Equity Crowdfunding

As far as FinTech credit companies are concerned, in 2017 the European Banking Authority underlined that these frequently work outside the legal framework. Globally a recent update supplied by the Bank for International Settlements (Claessens et al. 2018) on the current FinTech credit regulation status quo has confirmed a variety of approaches. However, the direction taken by policy developments involves paying greater attention to regulating the sector. For example, Brazil and Mexico introduced specific lending via platform laws in early 2018, whilst Spain, the UK and Switzerland introduced minimum capital requirements for platforms from 2019 onwards (Claessens et al. 2018).

On a European level, one of the first countries to intervene on peer-to-peer lending was Italy. Banca d'Italia issued a regulation for the collection of savings by subjects different from banks ("Disposizioni in materia di raccolta del risparmio da parte dei soggetti diversi dalle banche"), in force since 2017 (Banca d'Italia 2016), which clarified the constraints within which peer-to-peer lending must take place if it is to avoid falling into the credit authorisation sphere. Platforms must comply with bans on collecting sight deposits and allow contracts based on personalised negotiations: borrowers and lenders should have the power to intervene on contract's clauses whilst platforms should limit themselves to supporting activities. In the event that this does not occur, such as when platforms have a stake in loans (including a share of them), they are acting as credit intermediaries and must have licences (e.g. in consumer credit and factoring).

Also with reference to equity crowdfunding, one of the first countries in the world to require specific regulations was Italy (OICV-IOSCO 2017). In fact, as early as 2013, the national authority on the markets (Consob) published regulations applicable to online portal management and capital collection provision, requiring entry criteria for equity crowdfunding operators and their functioning methods.[6] Since 2013, then, firms operating in equity crowdfunding in Italy have had to be licensed by Consob and registered. Over time other countries have also established functioning rules for equity crowdfunding platforms and drawn up specific laws to protect savers including: investment limits for retail investors; investor right to withdraw within a specified period from the investment; a ban on providing investment advice on a firm's own site and mandatory conduct (OICV-IOSCO 2017).

The risks inherent in this fragmentation in regulatory approaches on the marketplace on a Europe wide level have prompted the European authorities to intervene with their own specific policy. A first version was published in March 2018, by the European Commission. The objective of this intervention was to delineate a clearer regulatory framework in accordance with the wishes of the International Monetary Fund (IMF 2018) which, in the context of the Bali FinTech Agenda, highlighted the need to adapt the regulatory framework and supervisory practices to the advent of FinTech in order to foster an ordered market development and ensure stability, monitoring the risks and promoting consumer trust.

The European choice would thus appear to be to draw up specific crowdfunding regulations which do not apply the same rules applying to regulated intermediaries and financial markets.[7]

This regulation proposal requires lending and equity crowdfunding platforms to adopt governance procedures guaranteeing transparency, controls over investors' financial know-how and their ability to sustain any losses.

The original version of the European regulations involved issuing authorisations for crowdfunding platforms on condition that these work in a standardised legal environment and, certainly, with the chance to work in conditions of reciprocal recognition in all member states (European Commission 2018b). Initial proposals to subject these to the European Securities and Markets Authority (ESMA) supervision were then left out of the subsequent version which took on board certain amendments (ECON 2018b), drawing on a series of other aspects summarised in Table 5.1. In general, the amended version retained the idea of setting up a regulatory framework, requiring minimum capital sums for platforms and establishing maximum thresholds for investments (above all to protect retail investors). The Initial Coin Offerings (ICOs) are also mentioned and the relative risks clarified.

5.2.3 *Financial Advice and Investment Services*

The digitalisation of the financial markets has allowed for the development of advisory and digitalised asset management services. Despite provision via technologically avant-garde tools (including robo advice) these activities are subject to provisions applying to traditional investment financial advice and services (in particular, for Europe, MiFID II and the Alternative Investment Fund Managers Directive (or AIFMD)). Proposals involving investing in specific financial tools formulated for clients are explicitly cited in the regulations as the exclusive preserve of regulated entities. The regulatory challenge in this context is thus not a matter of understanding whether the regulations should apply to FinTechs interfacing as consultants: these carry out regulated activities and must thus necessarily be authorised as financial intermediaries or, if they give independent financial advice, be officially registered as independent consultants (AA.VV. 2019).

The truly critical issue in this sphere is the fact that not all FinTechs operating in the investment area overtly offer clients financial advice and investment services (EBA 2018c). Certain FinTech firms present potential theoretical portfolios, including via robo advice or algorithms, which clients can construct on the basis of their own characteristics (i.e. the data which have fed the algorithm). Others supply technological type tools

Table 5.1 European regulatory proposal on marketplaces: proposed amendments

Provisions	*Note*
Regulatory regime, saver safeguards and supervisory activities	
Offer threshold	Increase in thresholds to 8 million euros for platforms from the 1 million required in the first draft. The value required in the first draft cited the threshold value for the publication of prospectuses in accordance with European regulation. The new statement, on the other hand, takes account of the fact that certain member states currently have higher thresholds. The Commission argued that retaining a lower threshold for crowdfunding than for prospectus limits (higher) could make crowdfunding less attractive
Authorisations for platform and institution operators for supervisory regimes by the authorities	In contrast to the first draft, the amendments would seem to accord primary responsibility in this sphere to national authorities, which act in accordance with a common supervisory framework and report to ESMA. The proposal also foresees extending the opportunity to work in Europe by third-party crowdfunding platforms demonstrating compliance with the standard required for European platforms
Proportionality according to business model	Differentiated regimes for the most straightforward platforms (which facilitate investor and project proposer matching) and for the more advanced platforms
Proposed maximum investment thresholds for retail clients	At present no single value has been established but annual and single investment limits have been set
Platform obligations	
Minimum capital	The proposal cites a minimum capital or an insurance contract to cover any damage potentially deriving from failure to fulfil legal requirements
Project default rate	Default rate disclosure for projects funded via the platform.
Due diligence and project evaluation	Crowdfunding platforms will have to check the following aspects: • the absence of convictions for failure to comply with commercial, bankruptcy, financial services, anti-money laundering, fraud and professional responsibility laws; • the headquarters of the firm promoting the project on the platform must not be on a list of non-co-operating countries, high-risk countries or those not complying with EU or international transparency and information exchange standards
Disclosure level	Where possible, firms proposing projects must publish profitability, liquidity and efficiency statements. Platforms must check the truthfulness of the data and publish it in comparable format
ICOs	Planned further standards and norms for operations and platforms involving ICOs as well as defining consumer safeguard tools. Once again on the ICO theme, certain amendments supply a formal definition of the tools and make risks explicit: market, fraud and cybersecurity risks

Source: The authors' elaboration of European Commission (2018b) and ECON (2018a, b) data

(platforms or apps) which enable investors to replicate the strategies of other traders enrolled on the same platform (so-called copy trading). In such cases whilst it is true that such Fintech firms do not directly supply advice they can certainly orientate users' investments decisions (ESAs 2016) whilst not being subject to the regulations and consequently without having to comply with provisions generally set up to protect investors, including dispositions on suitability, transparency, accuracy and conflict of interest disclosure.

As regards robo advisor activities—considered especially innovative—the European authorities have repeatedly emphasised the need for such products and services to comply with legal standards in all phases of product creation and service provision from product governance to marketing and distribution via the various channels (both telematic and physical) and post-sales safeguards (above all as regards complaints management) (ESMA 2017b, 2018).

The European authorities have frequently intervened on this theme, highlighting the potential benefits of such solutions and their related risks, contributing to the debate on the advisability of drawing up specific laws (ESAs 2015, 2016; EBA 2018c). The authorities have also highlighted the risks potentially arising from automised advisory services linked to the following factors: limited transparency and the inadequacy of the information supplied to investors as a basis for their decisions; errors in the functioning of the tools due to algorithm bias; the manipulation of these and cyberattacks; legal risks relating to limited asset allocation process transparency and, as a result of the potential lack of explicit agreements between the parties to the service partnership (e.g. FinTech and the banks), risks of market orientation in the direction of specific financial tools where different investors use robo advisor services to replace human consultants (ESAs 2016, 2018c). Recently, the ESAs (2018c) have highlighted that robo advisor services are currently primarily being offered by authorised financial intermediaries, although sometimes in partnership with FinTech firms specialising in robo advice (including via the white labelling mechanism). In consideration of this and the fact that the growth registered is slow and the risks feared by the authorities have not arisen, the ESAs argue that specific regulations are not currently required (ESAs 2018c). However, the attention of the authorities remains high and monitoring by regulators and supervisors into market development and, in particular, potential risk to investors has continued (ESMA 2018; EBA 2018c).

5.2.4 Payments

The payment area was the first area of FinTech development and it is still one of its most active, in terms both of operator numbers and volumes. As far as current laws and regulations are concerned, FinTech and BigTech had to apply for licences right from the start as legal tender transfers are the exclusive preserve of financial intermediaries. In the European context the BigTechs have formed subsidiaries with head offices in European countries and FinTech firms with head offices in one EU country can operate across the European Union on the strength of European "passports" acquired when they obtain a licence in a member state.

In the payment area entities, authorised as payment institutions or electronic money institutions (ELMIs) and those relying on authorised third parties (payment institutions or ELMIs) both operate. In this area of activity the coming into force of the new European Payment Services Directive (or PSD2) is a significant break with the past, with considerable fallout for the banking industry as it opens the way to open banking (EBA 2018b). Furthermore, this directive allows third-party providers (TPPs) access to data relating to banking clients' current accounts on condition that current account holders give their consent. This applies solely to TPPs subject to supervisor controls, however (EBA 2018b; Schena et al. 2018; Scopsi 2018). As we saw briefly in Sect. 2.2.3, this legal intervention, together with regulations on free cross-border circulation of data and information processing security (General Data Protection Regulation), will have a significant influence on competitive dynamics in financial markets in terms of access to information used to supply personalised services.

The new laws on data processing and payments may, however, constitute an opportunity for the banks too, as they may access their client information held by other FinTech or BigTech firms, on permission from clients. In this way, incumbent firms may be able to exploit personal data and big data to design and propose more personalised products and services rapidly and efficiently. This may bring with it certain advantages for clients themselves.

5.2.5 Crypto Currencies

There is still a very uneven regulatory playing field internationally as far as crypto currencies are concerned, principally as a result of the fact that, at the moment, macro-economic problems, impacts for the central banks

and risks of displacement of legal tender are not considered to be on the horizon (Lastra and Allen 2018; Claeys et al. 2018). This does not, however, rule out the risks inherent in virtual currencies. In fact, the issue of potential problems relating to monetary policy transmission mechanisms remains topical,[8] as do the difficulties which can derive from the decision to regulate only potentially risky ex-post phenomena.[9]

The central Japanese bank adopted a favourable approach to crypto currencies and Bitcoin was accorded legal tender status there in 2017, in a regulated market.[10] In a comparable way, the Swiss Financial Market Supervisory Authority (FINMA) authorised banking product and service provision in digital currency terms and regulated Initial Coin Offerings (FINMA 2018). In China, a free use of virtual currencies was allowed up to 2017, although these were not accorded legal tender status. Subsequently, the government and the central bank (People's Bank of China—PBC) banned virtual currencies, considering their circulation as a market currency to be unacceptable because of their lack of legal value (PBC 2017). The authorities also banned Initial Coin Offerings (PBC 2017), closed local markets in which virtual currencies were used and applied sanctions to these with the objective of blocking the crypto currencies market which had continued to develop in the face of legal restrictions via foreign sites and offshore platforms (Reuters 2018).

The European Union's approach was, by contrast, more cautious and whilst such currencies were not made illegal, virtual currencies have been cited in various circumstances as an especially risky asset (ECB 2012; EBA 2014; ESAs 2018b; European Parliament 2016). In particular, the authorities have called for client caution in consideration of risks linked not only to the volatility and limited liquidity of these assets but also the fact that crypto currencies platforms are not currently subject to supervisory controls nor anti-money laundering laws and can thus become illegal money, tax evasion and fraud against client channels (ESAs 2018b; Underwood 2018). It should also be added that virtual currencies were the subject of European Council and Parliament directive 2018/843, in the context of the wider issue of preventing the financial system from being used for money laundering or terrorism funding purposes. The directive's provisions comprise an obligation for the European Union's member states to introduce digital money status into their legal frameworks by January 2020.

Recent intervention by EBA (2019), at the behest of the European Commission, has also underlined the fact that this area is still outside the regulatory framework. At the same time, the EBA has emphasised that

certain member states are considering legislating crypto asset platforms, virtual currencies wallets and crypto currencies activities (e.g. investment or security tokens) of their own accord and some have already implemented these. For EBA, these non-standardised provisions risk creating a misalignment in European legal frameworks on crypto asset providers, generating areas of potential legal arbitrage. Furthermore, the authorities consider that, whilst crypto currencies development in Europe is still limited, the risks linked to their use are significant. For this reason, a standard approach to the matter is desirable to protect consumers, safeguard the resilience and integrity of the markets and guarantee a level playing field (EBA 2019).

Lastly, it should be highlighted that financial instruments based on crypto currencies or in which these are implicit are subject to financial instrument laws as ESMA (2017c) and the British Financial Conduct Authority make clear (FCA 2017a, b, c). In line with this approach the American market authorities (Security and Exchange Commission) have decided that Initial Coin Offerings are covered by their remit and have intervened repeatedly to block fraudulent ICOs or fine non-transparent operators.[11]

Notes

1. The route taken by the New York Federal Reserve involved setting up a Fintech Advisory Group made up of exponents of the finance industry and technology firms for the purpose of improving the authority's innovation-related know-how and fostering debate with operators (New York Fed 2019).
2. For an analysis of certain cases of crisis, see BIS/FSB (2017) and, in particular, crisis experiences by FinTech credit operators in the USA, China and Sweden, all generated by fraud. For an analysis of the current FinTech credit uneven legal playing field, see Claessens et al. (2018).
3. See https://www.telegraph.co.uk/technology/2019/04/15/london-stock-exchange-accepts-first-listing-blockchain-token/.
4. The characteristics of security tokens and the underlying smart contracts make a series of operation run by the various financial intermediaries involved in the traditional securities trading superfluous.
5. For further details, see Barbagallo (2018), Carstens (2018), and EBA (2017, 2018a, b).
6. The regulations issued by Consob in 2013 were amended in 2016 and 2017 (Consob 2017).

7. The 2017/1129 EU regulation relating to the statement to be published for public prospectus and admission to securities bargaining in a regulated market sets out an exemption from the obligation to issue for sums below a defined minimum threshold. The European Commission (2018b) proposed a maximum threshold of 8 million euros, below which small and medium-sized enterprises accessing a crowdfunding platform must not be considered issuers of public shares for legal purposes.
8. The existence of alternative payment systems to legal tender which do not pass through regulated financial intermediaries can reduce the efficacy of the monetary transmission strategies implemented by the central banks (European Parliament 2016) in the event that monetary resources start to flow out of banks accounts into virtual wallets or other alternative solutions.
9. Once again the Chinese experience offers some interesting insights. China was one of the main global crypto currencies markets, on the strength of the great freedom accorded platforms to set up and develop activities. In 2017, the Chinese government decided to ban both initial coin offerings (ICOs), and the circulation and use of virtual currencies whose legal value is not recognised (PBC 2017). Applying this ruling proved difficult because virtual money exchanges continued to take place in China in the face of the ban, via the use of foreign sites and offshore platforms.
10. As a result of crypto currencies regulations and the dissemination of the platform, the Japanese market authorities acted against two platforms in 2018, blocking their operations in the aftermath of a serious cyberattack which led to huge investor losses and required significant improvements in anti-money laundering policy terms from a further eight platforms (Financial Times 2018).
11. See the ICO Updates section on https://www.sec.gov/ICO.

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