The European Commercial Paper and Certificates of Deposit Market

A white paper by the ICMA Commercial Paper Committee

September 2021

Author: Andy Hill, ICMA

ICMA would like to thank all of its members who contributed to this report, providing a diverse wealth of insights, perspectives, and guidance. ICMA is further indebted to the International Money Market Fund Association (IMMFA), the European Money Market Institute (EMMI), and NowCP for their helpful contributions and additional edits. Finally, ICMA is grateful to the various data providers cited in this report, in particular CMDPortal and Banque de France.

The European Commercial Paper and Certificates of Deposit Market

An overview of the European short-term credit markets, their performance during the Covid turmoil, and recommendations to support market development and resilience

Table of contents

Executive summary

This paper seeks to: (i) map the landscape of the European commercial paper (CP) and certificates of deposit (CD) markets; (ii) describe how the CP market performed during the Covid-related turmoil of March-April 2020 and after; and (iii) propose initiatives that could support the development of market structure and enhance resilience, particularly in the event of future shocks.

Current market structure

When viewing the European CP market, it is important to highlight that there is no single pan-European market as such, and that the market consists of a number of different markets, each with their own legal frameworks, post-trade structures, participants, and dynamics. This makes the European market highly distinct from the US CP market.

In the European market, issuers can broadly be divided into four distinct types: financial institutions, including banks, sovereign and supranational agencies (SSA), non-financial corporates (NFCs), and asset backed conduits (ABCP). For all these entities, issuing CP provides a flexible means to manage short-term funding, working capital requirements, or outflows, and, in the case of corporate issuers, an alternative to drawing on bank credit lines.

Due to the wholesale nature of the CP market (issuance tends to be in sizable nominal amounts with large minimum denominations), investors are almost exclusively institutional. Given the underlying nature of the product, being a continuously offered, short-term investment and liquidity management instrument, it attracts a broad and diverse investor base, including pension funds, insurance funds, SSAs, and corporates. Investments can be direct or indirect, either in the form of a separate account with an asset manager, or via pooled vehicles such as Money Market Funds (MMFs).

Dealers play a central role in the market structure for CP, intermediating between issuers and investors. They invariably act as principal, purchasing issuers' CP onto their own books, before selling it on to their client base. Usually, they purchase and sell CP simultaneously but, in some cases, they will buy the CP from the issuers and hold it (or a portion of it) on their books until they find a buyer. Dealers are also a source of information to issuers, providing information to market participants on market demand and supply. Dealers can also provide secondary market liquidity by bidding paper back from clients. Dealers are investment or commercial banks, where they are part of the fixed income trading division. Many banks are also direct issuers, placing their own CP or CDs on behalf of their treasuries.

The legal frameworks for issuing CP vary between European countries, which results in a landscape characterised by a relatively large international ECP market, complemented by a number of other markets (of which the NEU CP market is the most prominent), rather than a single European or 'Eurozone' CP market. This creates a legal terrain that is perhaps more fragmented than that for the European medium term note (MTN) market.

The March-April 2020 market turmoil and aftermath

Corporate issuers, many of whom depend on the CP markets for certain aspects of their funding, report that the CP market ceased to fulfil its function of being a reliable funding source during March and April 2020. Many investors curtailed their investing at this time, including not rolling over maturities, and, in some cases, pulled back from the market altogether. This was a reflection of the global 'dash for cash' (more accurately described as a 'dash for liquidity'), to which corporates themselves were particularly vulnerable given the sudden collapse of cash flows in many sectors.

According to dealer feedback, March and April can be described by a rapid change in investor preference which had impacts on market liquidity as *a dash for liquidity*. Investors who had previously been quite happy to roll (i.e. renew) three-month maturities were suddenly looking to roll for one, two, or three weeks, or even not to roll at all and instead looking to trade into more liquid names, specifically SSAs, government securities, or large Tier 1 corporate issuers. This was not a credit flight to quality, but more a flight to liquidity. It is reported that there were many situations where investors asked dealers to bid back longer-dated paper, but they were unwilling, or unable, to provide a price. This was perhaps exacerbated by the fact that in mid-March banks were approaching their quarter-end, which further complicated the ability of the dealer community to provide liquidity for investors.

As the pandemic took hold in March 2020, there was a precautionary approach to liquidity across markets with many investors seeking to ensure that they had sufficient access to cash should they need it. This initially led to inflows across many MMFs, but this was followed by acute outflow pressures on some funds as end-investors needed to draw on the most readily available source of liquidity to meet their obligations, which for some was MMFs (noting that the vast majority of MMFs remained above their weekly liquidity thresholds). While much of this liquidity requirement was driven by cashflow needs arising from the pandemic, some end users of MMFs such as pension funds, experienced an increased demand for cash to meet margin requirements, as term rates markets sold off. This led them to redeem MMF holdings in order to meet these margin requirements.

An additional point made by asset managers is that irrespective of the investor flows, the way the market behaved with respect to liquidity raising reflected the lack of underlying market liquidity. Due to the fact that dealers struggled to add risk on their books, not least since they were the only buyers in the market, MMFs, regardless of their view, were forced to bias their liquidity buffers higher, by retaining maturing securities rather than reinvesting them, given that there was no market liquidity.

Stakeholders cite that the interventions by the Federal Reserve were critical in assisting the European CP market. While issuers with US Programmes were able to source financing through the US market, those with European Programmes felt an indirect benefit as the Federal Reserve's interventions helped to calm markets and restore confidence more globally. While recognising that it did help to restore broader market confidence over time, stakeholders recognise that extending the ECB's purchase programmes to include CP, at least initially, faced some logistical challenges.

Recommendations to develop the European CP/CD market

Participants have indicated that they would like to see greater standardisation and harmonisation in terms of legal and regulatory frameworks, documentation, issuer eligibility, maturity and denomination profiles, and settlement cycles. Lower barriers to entry to the market, particularly for corporate issuers, would also be welcomed which perhaps requires further analysis.

While there are a number of commercial initiatives that are helping to consolidate post-trade data and statistics on issuance and outstandings across the different market segments, a level of fully consolidated publicly available information could play a role in supporting greater confidence for potential issuers, investors, and intermediaries, as well as helping with price formation, particularly in the secondary market.

Perhaps one of the starkest realisations from the March-April 2020 turmoil is how thin and vulnerable the secondary market is for CP in stressed market conditions; noting that this is not unique to CP and that this was observed across a whole range of asset classes, including corporate and sovereign bonds. While CP is generally considered a buy-to-hold instrument, often matching investors' short-term liquidity horizons, its value as a money market instrument also hinge on its liquidity post-issuance, particularly in times of market stress.

While platforms, e-protocols, and new technologies generally develop organically and in response to market participant needs, as well as being driven by technological advances, it is important to encourage initiatives that help to promote standardisation of data representation and processes as well as market interoperability. However, as illustrated by the Covid turmoil, platforms are not a substitute for liquidity, particularly in times of volatility or market stress, and ultimately a CP market requires dealer expertise, intermediation, and capacity to take positions, in order to function as intended.

Introduction

Why this paper?

In November 2020, in response to requests from members, the International Capital Market Association (ICMA) hosted a workshop entitled *The European Commercial Paper Market Reimagined.*[1] The objectives of the workshop were: (i) to look back on how the European Commercial Paper (CP) market performed during the peak of the Covid crisis, and (ii) to identify possible initiatives, whether market-based or regulatory, that could help in developing the market. Participants in the workshop included issuers (financial and corporate), investors (including asset managers and asset owners), dealers, and financial market infrastructures (FMIs). The view was very much that the events of March and April 2020 exposed a number of structural vulnerabilities in the short-term European credit markets and it was incumbent upon the industry to attempt to fix this.

The workshop prompted a reconstitution of ICMA's existing Euro Commercial Paper Committee, which consisted purely of ECP dealers, to become the ICMA Commercial Paper and Certificates of Deposit Committee (CPC), embracing the broader ecosystem of issuers, dealers, investors and FMIs involved in the pan-European short-term markets.[2] It was further agreed to extend the scope of the underlying market covered by the Committee from just ECP to include all CP and CDs issued in Europe.

The newly formed CPC agreed that an initial output should be a white paper that seeks to: (i) map the landscape of the European CP and certificates of deposit (CD) markets; (ii) describe how the CP market performed during the Covid-related turmoil of March-April 2020 and after; and (iii) propose initiatives that could support the development of market structure and enhance resilience, particularly in the event of future shocks.

The importance of commercial paper

Short-term credit markets, which for the purposes of this paper includes CP and CDs, are a vital component of developed financial markets. The European CP market had its inception in the early 1980s and endeavoured to emulate the successful characteristics of the long standing and deep US domestic market. Since then, it has grown significantly, and has provided an enormously important funding source for a wide range of issuers. This growth illustrates its utility value, and many issuers would confirm that it has become an important source of financing for them. Likewise, many investors would point to its importance as an asset class. Despite this remarkable success, the development of the European CP market has been hampered by a number of factors that this paper will aim to explore. Most notably, compared to the single currency and unified regime of its US counterpart, the European market consists of multiple component parts, the largest of which is the ECP market, followed by the Negotiable European CP (NEU CP) market, as well as a range of other smaller domestic markets.

CP and CDs provide a flexible means to access short-term funding for a range of institutions and entities, including sovereign and supranational agencies, banks and financial institutions, as well as corporates. In the case of many borrowers, such as corporates, the market provides an alternative to reliance on bank lending. Furthermore, the fact that papers are negotiable (i.e. transferable and tradeable) facilitates not only cheaper funding levels, but opens the market up to a far broader and deeper pool of short-term finance for borrowers. The fact that issuers have the flexibility to issue with different maturities and in a range of different currencies (often driven by currency basis) further provides access to different potential investors.

CP also provides an important tool for investors, allowing them a means to manage their short-term cash and liquidity, either directly or indirectly through a separate account with an asset manager or via pooled investment vehicles such as money market funds (MMFs). This extends the investable universe beyond direct bank deposits, government t-bills, or repurchase agreements. And while CP is in most cases held to maturity, the dealer-centric structure of some CP markets, at least in non-stressed markets, provides a source of secondary market liquidity.

1 For a note of the workshop, see: https://www.icmagroup.org/assets/documents/Regulatory/Primary-Markets/ICMAThe-European-CP-Market-ReimaginedNov-4-2020summary-note-updated-Feb-2021-170221.pdf
2 For more information about the CPC see: https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/short-term-markets/icma-commercial-paper-and-certificates-of-deposit-committee/

Chapter I: Current market structure

Structural dimensions

When viewing the European CP market, it is important to highlight that there is no single pan-European market as such, and that the market consists of a number of different markets, each with their own legal frameworks, post-trade structures, participants, and dynamics. This makes the European market highly distinct from the US CP market.

Issuers

The standard (largely US-centric) definition of CP is: *"an unsecured promissory note issued for a specific amount and maturing on a specific day. All commercial paper is negotiable, but most paper sold to investors is held by them to maturity. Commercial paper is issued not only by industrial and manufacturing firms, but [also] by finance companies. Finance companies normally sell their paper directly to investors.[3] Industrial firms, in contrast, typically issue their paper through dealers. Over the years, bank holding companies, municipalities and municipal authorities have joined the ranks of commercial paper issuers."[4]*

It could be added to this definition that the notes are issued under a Programme supported by an information memorandum. Issuers such as public entities, supranational organisations and financing vehicles have become prominent players on the issuer side.

In the European market, issuers can broadly be divided into four distinct types: financial institutions, including banks, sovereign and supranational agencies (SSAs), non-financial corporates (NFCs), and asset backed conduits (ABCP). For all these entities, issuing CP provides a flexible means to manage short-term funding, working capital requirements, or outflows, and, in the case of corporate issuers, an alternative to drawing on bank credit lines.

Investors

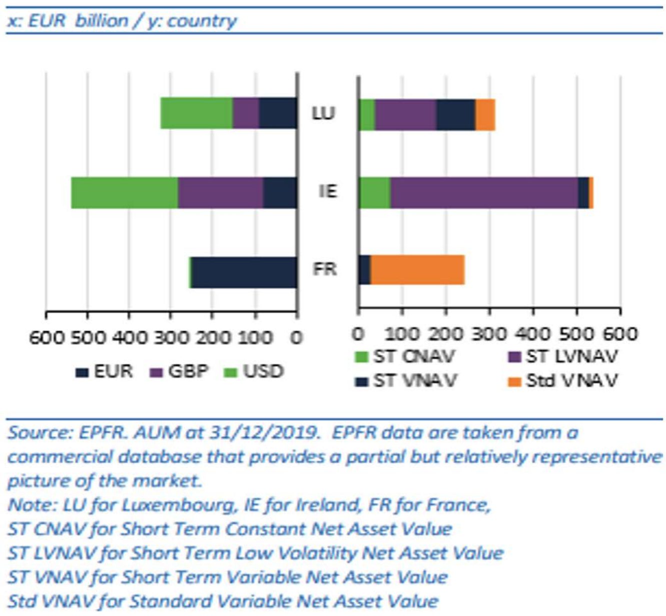
Due to the wholesale nature of the CP market (issuance tends to be in sizable nominal amounts with large minimum denominations), investors are almost exclusively institutional. Given the underlying nature of the product, being a continuously offered, short-term investment and liquidity management instrument, it attracts a broad and diverse investor base, including pension funds, insurance funds, SSAs, and corporates. Investments can be direct, or indirect, either through a separate account with an asset manager or via pooled vehicles such as MMFs. While it is difficult to obtain comprehensive data on the European CP market, it is believed that direct purchases (by asset owners) and indirect purchases (by asset managers) of CP are roughly similar in size, with MMFs representing the greater part of indirect investments. In contrast, MMFs represent around 20% of the investment base for CP market in the US, which is perhaps a reflection of more developed short-term markets.

European MMF investors broadly fall into two categories: Short Term MMFs and Standard MMFs. Under Short Term MMFs, three structures are permitted: Public Debt Constant Net Asset Value (CNAV), Low Volatility NAV (LVNAV), and Variable NAV (VNAV), all of which are required to have Weighted Average Maturity (WAM) limits of 60 days or less, and a final maturity limit of 13 months. Standard MMFs, by contrast, are allowed to invest longer in duration and have WAM limits of 6 months and a final maturity limit of two years. In March 2020, Short Term MMFs had 28% of assets under management (AUM) invested in CP and Standard MMFs had 30%.[5]

It is also noted that the investor base for domestic CP markets also tends to be largely domestic, with different investment criteria or mandates, which plays an important role in shaping the structure of these local markets.

3 This is far less the case in the European market, where financial CP is commonly placed by dealers.
4 M. Stigum, The Money Market, third edition, 1990, p. 48.
5 Source: EFAMA

Figure 1: European MMF AUM



Source: Banque de France citing EPFR data

Dealers

Dealers play a central role in the market structure for CP, intermediating between issuers and investors. Dealers invariably act as principal, purchasing issuers' CP onto their own books, before selling it on to their client base, taking a small commission in the form of a spread. Usually, they purchase and sell CP simultaneously but, in some cases, they will buy the CP from the issuers and hold it (or a portion of it) on their books until they find a buyer. Dealers are also a source of information to issuers, providing intelligence on market demand on market demand and supply. Dealers can also provide secondary market liquidity by bidding paper back from clients. Dealers are investment or commercial banks, where they are part of the fixed income trading division. Many banks are also direct issuers, placing their own CP or CDs on behalf of their treasuries.

Historically, an important component of the dealer ecosystem has been the interdealer broker (IDB) community. IDBs help to facilitate risk transference and price discovery between dealers, which further supports secondary market liquidity.

Legal frameworks

The legal frameworks for issuing CP vary between European countries, which results in a landscape characterised by a relatively large international ECP market, complemented by a number of other (including domestic) markets (of which the NEU CP market is next most prominent), rather than a single European or 'Eurozone' CP market. This creates a legal terrain that is perhaps more fragmented than that for the European medium term note (MTN) market.

The international, multi-currency euro commercial paper (ECP) market, which has historically been centred in London, is mainly governed by English Law. Standard documentation for ECP Programmes is provided by ICMA. The ICMA Primary Market Handbook[6] provides that the minimum maturity for ECP should be one day and the maximum maturity should be less than one year. It also recommends minimum denominations and incremental amounts above the minimum denomination for various currencies.

The NEU CP market, which has historically been centred in Paris, is governed by French Law, as far as the Programme set-up and functioning is concerned. NEU CP has a maximum maturity of one year and a minimum denomination of €150,000 (€200,000 if the documentation is in English).

6 See: https://www.icmagroup.org/index.php/Regulatory-Policy-and-Market-Practice/Primary-Markets/ipma-handbook-home/

At the domestic level, national regulation will determine which types of entities are eligible to issue CP (e.g. in some cases it is restricted to NFCs), the amount of CP that can be issued, as well as any limitations on the duration of the CP (which in some cases can range from one day to one year, or, in others, can be longer than a year, in particular CDs). While some jurisdictions provide a legal basis for CP as a defined financial instrument (e.g. France), others do not. Restrictions rarely apply to the nature of issuers (and investors) and their nationality on European CP markets

Taxation

Tax treatments, for issuers and especially for investors, may also vary between countries. Tax considerations relating to CP/CDs are beyond the scope of this analysis.

Settlement systems

With the exception of ECP, CP is generally cleared and settled along domestic lines. For example, NEU CP is issued through Euroclear France and cleared either domestically or internationally. ECP (which includes most of the UK sterling market) is cleared and settled through the two main international central securities depositories (ICSDs), Euroclear and Clearstream. ECP also tends to be issued with an 'XS' ISIN[7], while domestic CP will usually take the relevant local ISIN (e.g. FR, DE, etc.).

The standard settlement cycle for CP tends to be T+2, which is largely in line with other money market products. ECP, for example, has historically been linked to the FX swaps market, and is therefore commonly settled on a T+2 basis. Some CP markets, however, such as NEU CP, provide for more compressed settlement cycles, including same day.

Ratings

As with longer dated bonds, external credit ratings are an important guideline, and often a requirement, for investors in CP. CP usually carries a short-term rating from one or more of the three main rating agencies (S&P, Moody's, and Fitch). The very top tier of CP is assigned ratings of A1+/P1/F1+. The top tier carries ratings of A1/P1/F1, and the second tier (considered 'satisfactory' credit) being A2/P2/F2. Some CP can carry mixed ratings (e.g. A1/P2/F1). There is also a third rating tier of A3/P3/F3 (considered 'adequate' credit) as well as a fourth ('speculative'), before default. Most CP issued in the European market carries either very top or top tier ratings (considered 'superior' credit).

Some markets have developed significant activities on the non-rated sector (mainly for corporates) with issuance and placement conducted mainly domestically. These developments have been made with the blessing of local financial authorities which consider this segment as crucial for the financing of the real economy.

Credit quality	S&P	Moody's	Fitch
Superior	A1+/A1	P1	F1+/F1
Satisfactory	A2	P2	F2
Adequate	A3	P3	F3
Speculative	B, C	NP	F4
Defaulted	D	NP	F5

MMFs are required to invest in high quality assets, although the definition is not explicit in Article 19 of the Money Market Fund Regulations.[8] Those MMFs that carry the highest MMF rating will typically have a minimum floor of Superior Credit Quality. Short Term MMFs account for 96% of rated EU MMF types.[9]

7 An ISIN code is a 12 digit alphanumeric financial security reference data identifier that uniquely identifies securities. A two letter prefix is usually used to indicate the relevant jurisdiction of the issuer. 'XS' is used to denote securities that are primarily assigned to clear or settle in the international central securities depositories (Euroclear and Clearstream).

8 Regulation (EU) 2077/1131

9 Source: S&P

Transparency

Transparency in the European CP market can be fragmented, with no single public or private holistic overview of the pan-European market. Banque de France provides publicly (and free of charge) a range of statistics relating to the NEU CP market,[10] including daily, weekly, and monthly issuance and outstandings, as well as weekly and monthly issuance rates data by maturity and rating.[11] Issuer information memoranda are also publicly available.[12] The European Money Market Institute (EMMI) and ECB also publish publicly available data on CP with the Short-Term European Paper (STEP) label (see further on). This includes monthly gross issuance and outstanding amounts, as well as some rates data by issuer type and maturity.[13] Meanwhile, the Bank of England provides monthly statistics on both the sterling and non-sterling UK CP market.[14]

There are also a number of commercial data sources providing a more holistic and extensive overview of the market, such as Euroclear (which covers the bulk of the ECP market – and some of whose data is publicly available on their website[15]), Dealogic, and CMDPortal[16] (which covers both ECP and other short-term markets).

As such it is very difficult for either market participants or public authorities to have a clear, definitive picture of the size of the overall European market (except in cases where, like MMFs, those participants are directly regulated and subject to their own specific transparency requirements).

It has been proposed that a stock exchange listing also provides a source of transparency. While a number of prominent issuers do take advantage of the offerings from various listing providers, others observe that CP is rarely listed, as it is argued that, unlike MTNs, CP is a continuously offered product. However, this possibility would seem to be something worth exploring further.

Trading venues and automation

Despite Goldman Sachs introducing the first platform for transacting US CP electronically in 1985, electronification of the market, particularly in Europe, has lagged other fixed income markets over recent decades, primarily due to the negotiated, over-the counter (OTC) nature of the market. In the past few years, however, Europe has seen the emergence of a number of trading platforms, in many cases as part of broader primary market issuance solutions. These platforms generally bring together issuers, dealers, and investors, automating both the negotiation and transaction processes, as well as clearing and settlement. Some platforms are also capable of linking to firms order or execution management systems (OMS/EMS). ICMA's most recent Primary Markets Technology Directory[17] lists 17 different trading platforms for CP/CDs in Europe. As well as bringing efficiencies to the market, trading venues are potentially seen as improving price discovery and broadening market access.

However, investors stress that trading venues also have their limitations. The fact that some (though not all) are anonymous makes it difficult to carry out credit due diligence on the dealer counterparty before the trade is executed. Not all available currencies are necessarily supported (although EUR, USD, and GBP usually are). In some circumstances, it can be quicker to negotiate directly with the dealer. Dealers would also contend that venues risk eroding already extremely thin margins. Some market participants highlight that the substitution of a dealer environment to one that is purely platform based could have a detrimental effect on secondary market liquidity, noting that trading venues do not provide liquidity by themselves and lack the capacity to deal for their own account.

10 It also provides information memoranda for each Programme.
11 See: https://www.banque-france.fr/en/monetary-policy/market-financing/commercial-paper-and-medium-term-note-market-neu-cp-neu-mtn/statistical-reports-and-analysis
12 See: https://eucpmtn.banque-france.fr/public/#/liste-des-emetteurs
13 See: https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/step/html/index.en.html
14 See: https://www.bankofengland.co.uk/boeapps/database/FromShowColumns.asp?Travel=NIxAZxI3x&FromCategoryList=Yes&NewMeaningId=COMPAP,ACP,LCP&CategId=6&HighlightCatValueDisplay=Commercial%20paper
15 See: https://www.euroclear.com/services/en/primary-issuance/primary-issuance-euroclear-bank/euro-commercial-paper.html
16 CMDportal also provides some public data. See: https://www.cmdportal.com/Home/PublicData
17 See: https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/fintech/primary-markets-technology-mapping/

Regulatory frameworks

Regulatory frameworks can be analysed along different dimensions:

a) Regulation allowing issuers to use CP Programmes and investors to use the instrument:

Central banks and, more importantly, national competent authorities (NCAs) play an important role in ensuring that issuers comply with issuance rules at the domestic level under each national jurisdiction. In most countries in Europe, no restriction applies to the use (as issuer or as investor) of CP.

b) Regulation concerning the set up and the functioning of the Programme:

At the domestic level, regulation governing CP issuance tends in a limited number of cases to be implemented by the relevant central bank by means of civil code. The NEU CP market, for instance, is regulated under the French Monetary and Financial Code. Under EU and UK law, CP is exempt from the requirements of the EU and UK Prospectus Regulations, but it is classified as a 'financial instrument' for the purposes of EU MiFID II/R, UK MiFIR and the FCA Handbook.

c) Regulation concerning the credit risk carried out by the investor:

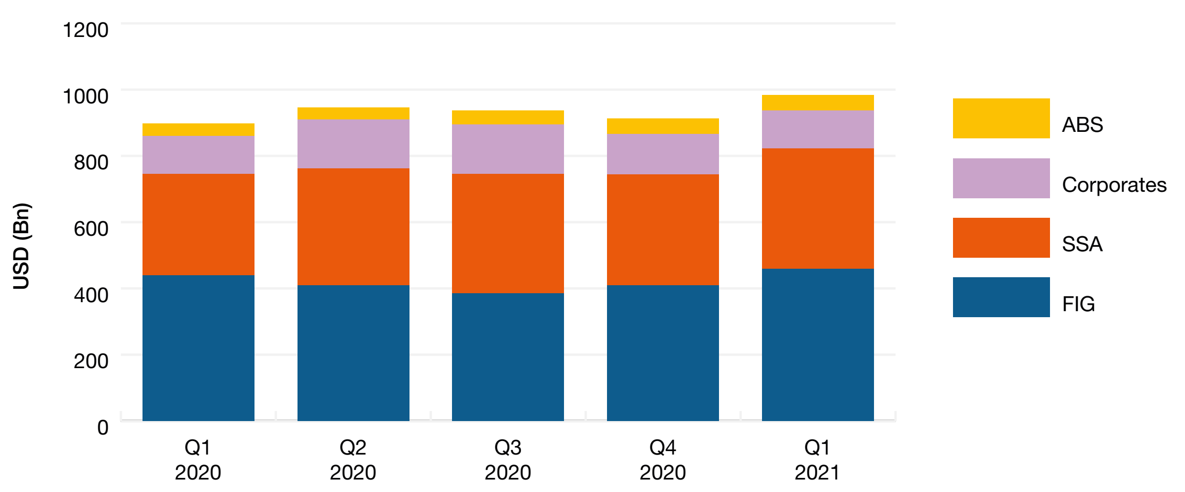
The assessment by the investor of the credit risk related to an insolvency of the issuer is to be carried out on the basis of the legal regime of the country of incorporation of the issuer, independently from the type or governing law of CP.

European CP markets

The ECP market

The Euro Commercial Paper (ECP) market began life in 1985 as a means for issuers to tap the offshore short-term USD market outside of US jurisprudence.[18] Traditionally based in London, the ECP market has established itself as a significant component of the European and international CP market, drawing issuers and investors globally, with issuance in multiple currencies. Over time, the ECP market has also largely absorbed the UK domestic sterling CP market.

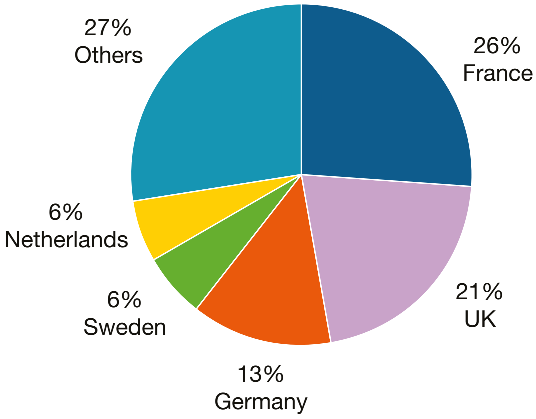
Figure 2: European CP/CP outstandings
(As of 31/03/2021) Less than 1 year



Source: 2021 © CMDportal.com

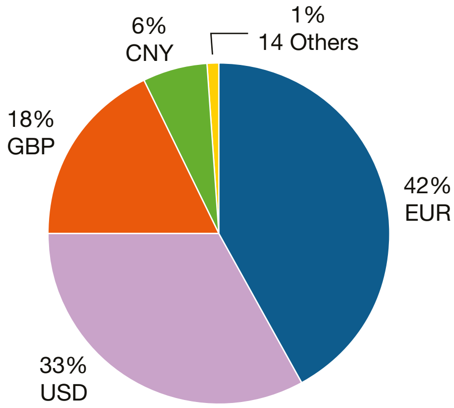
18 As the ECP does not comply with an SEC exemption, it cannot be sold to US domiciled investors

Figure 3: European ECP/CD outstandings by country
(As of 31/03/2021) Less than 1 year



Source: 2021 © CMDportal.com

Figure 4: European ECP/CD outstandings by currency
(As of 31/03/2021) Less then 1 year



Source: 2021 © CMDportal.com

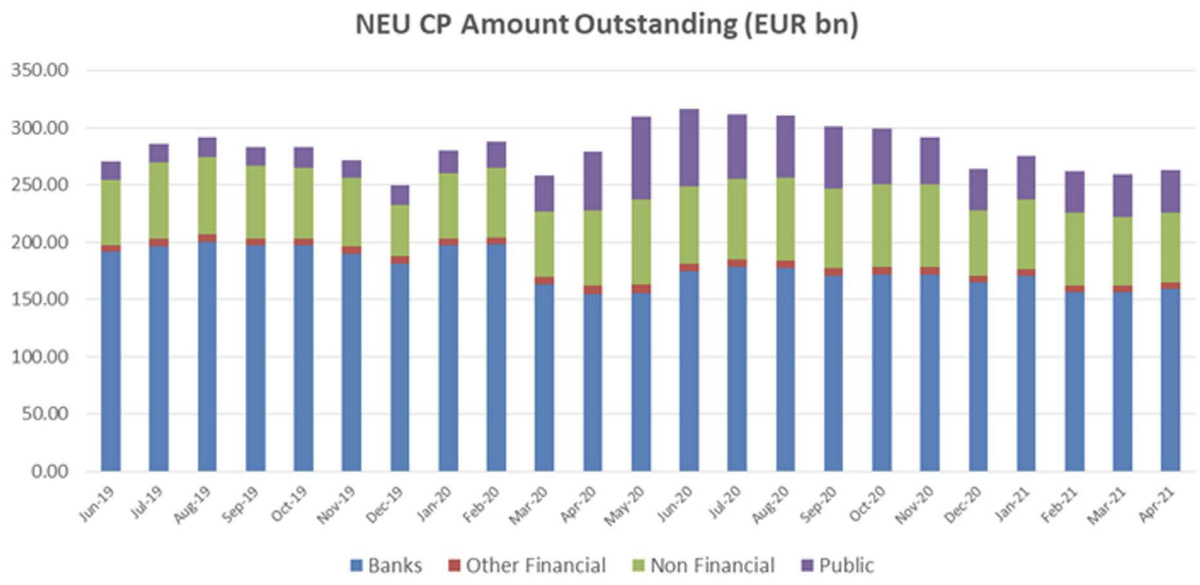
NEU CP market

The NEU CP and CD market also began life in the late-1980s as part of the larger 'TCN' (Titres de Créances Négociables) market, which included CDs, CP, and MTNs. The rapid development of the market was supported by the Banque de France and spurred by the large domestic presence of money market funds. The market was subject to different reforms. In the late 1990s, the use of English language for the documentation relating the TCN Programmes was authorised, resulting in a massive inflow of foreign issuers. In March 2016, the TCN market was reformed with the former 'Billets de Trésorerie' (for NFIs) and 'Certificats de Dépôts' (FIs) being merged into a single denomination as the Negotiable European Commercial Paper market (or NEU CP market), the possibility to draft the information memorandum in English with no requirement to provide a summary in French, a broader acceptance of accounting standards, an extension to the list of rating agencies (to include all those recognised by ESMA) and a simplification of the regulatory texts (with one Order, instead of the previous four).

Recent developments include Banque de France providing new issuers, arrangers, and advisers with a digital portal for the Information Memorandum for their issuance Programmes. Another important characteristic of the NEU CP market is that is settled via TARGET2-Securities and so in central bank money, as opposed to most CP (including ECP) which is settled in commercial bank money.

The NEU CP market is estimated to represent around one-third of the overall European CP market.

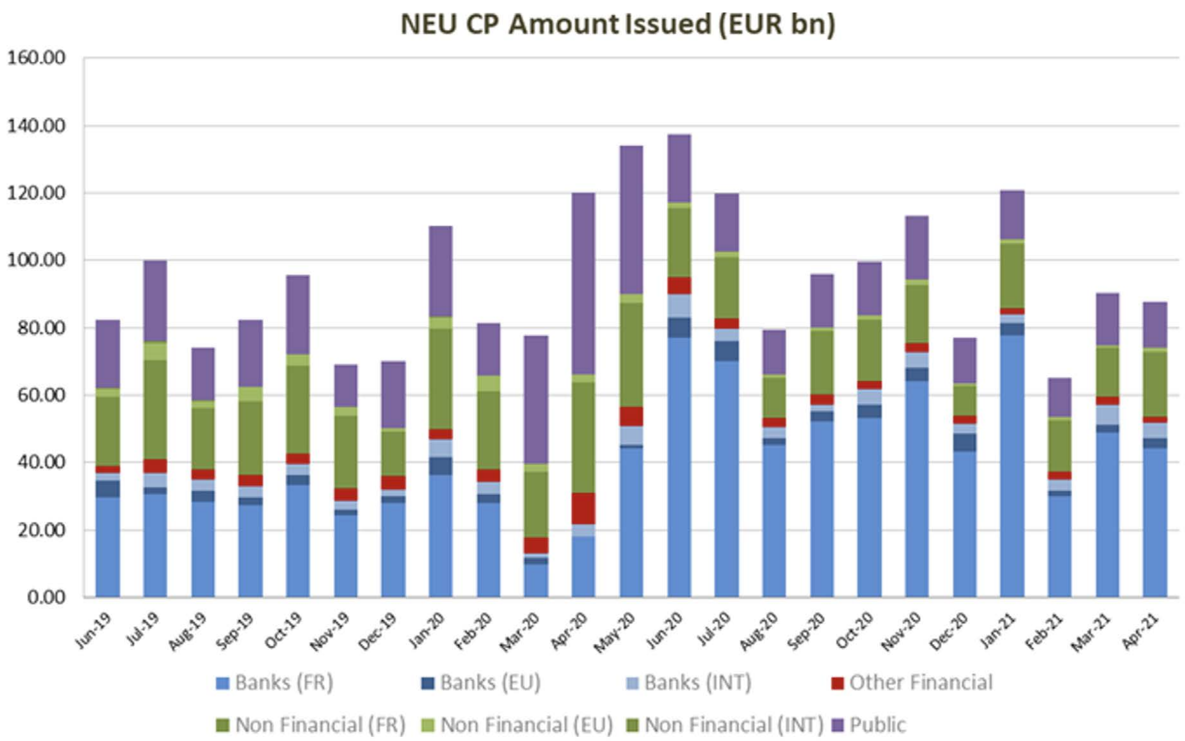
Figure 5: NEU CP outstandings



Source: Banque de France

Figure 6 illustrates the relative importance of French domestic entities with respect to overall market issuance.

Figure 6: NEU CP issuance



Source: Banque de France

Other domestic markets

There are a number of other, well-established domestic CP markets, mainly serving domestic issuers and investors. These include Belgium, Germany, and Spain. Meanwhile, some jurisdictions are in the process of developing their own domestic CP markets, notably Italy.

The ABCP market

The Asset Backed Commercial Paper (ABCP) market, which is typically issued under ECP or NEU CP Programmes, is a key source of funding for economic activity, particularly for medium sized firms that cannot access capital markets directly or large corporation looking to enhance their liquidity and improve their balance sheet structure. Underlying assets used are mostly short-term assets (about 50% of trade receivables, 30% of automobile loans/leases and 20% of credit cards, equipment leases and other assets). All ABCP conduits sponsored by European banks, these days, are backed by fully supported liquidity lines provided by the sponsor bank meaning that investors are protected from ABCP funding risks by the sponsor banks. ABCP transactions are structured with conservative eligibility criteria on assets, robust structures and sufficient credit enhancement so to get a high underlying rating for transactions to minimise risks and risk weighted asset scores (RWAs) on the liquidity line backing the transactions.

It could be argued that the image of the ABCP market more globally, seriously deteriorated, as a result of the stigma associated with the broader securitisation sector following the 2007-08 financial crisis. Thanks to regulatory reforms, the move to fully supported structures and restoration of investors' confidence, it has been recovering slowly since.

The main investors in European conduits are EU MMFs. Ratings of ABCP issued are usually Tier 1 with A1/P1/FI rating (although can be Tier 2 for Italian and German bank sponsors). As of H1 2019, outstandings of European based ABCP were $97bn equivalent (US CP $52bn; ECP $39bn, NEU CP $6bn).[19]

The ECD market

Bank issuance in Europe is generally either in the format of CP or Euro Certificates of Deposit (ECD). Issuers may establish a combined Programme for the issuance of both ECP and ECD, which will include an information memorandum (i.e. the Programme disclosure document) that covers both ECP and ECD. Alternatively, ECD may be issued on a standalone basis with more limited documentation. This is primarily observed in, but not limited to, the London CD market.

Attempts at standardisation

The STEP label

The Short-Term European Paper label was launched in 2006 by the European Banking Federation (EBF) and the Association Cambiste Internationale Financial Markets Association (ACI FMA) with the support of the European System of Central Banks (ESCB). The specific objective of the task force (in which ACI FMA and ICMA were equally represented) was to foster the integration of the European markets for short-term paper through the convergence of market standards and practices. The STEP initiative is governed by the STEP Convention, which lays down the criteria that short-term paper Programmes must fulfill to be STEP compliant and the procedures for granting and withdrawing the STEP label. A STEP label is not an indication of creditworthiness, but rather that Programmes conform to a standardised set of features. There is also a requirement for STEP Programmes to allow relevant STEP eligible securities settlement systems (SSS) to provide statistical data to the ECB. The central bank then aggregates these data and makes them publicly available on its website (see Transparency section above). The STEP governance structure consists of a secretariat, managed by the European Money Markets Institute (EMMI),[20] and a STEP Committee, made

19 As at the end of 2020 this increased to $105.1bn equivalent (source Moody's EMEA ABCP Sector Update: H2 2020, May 2021)

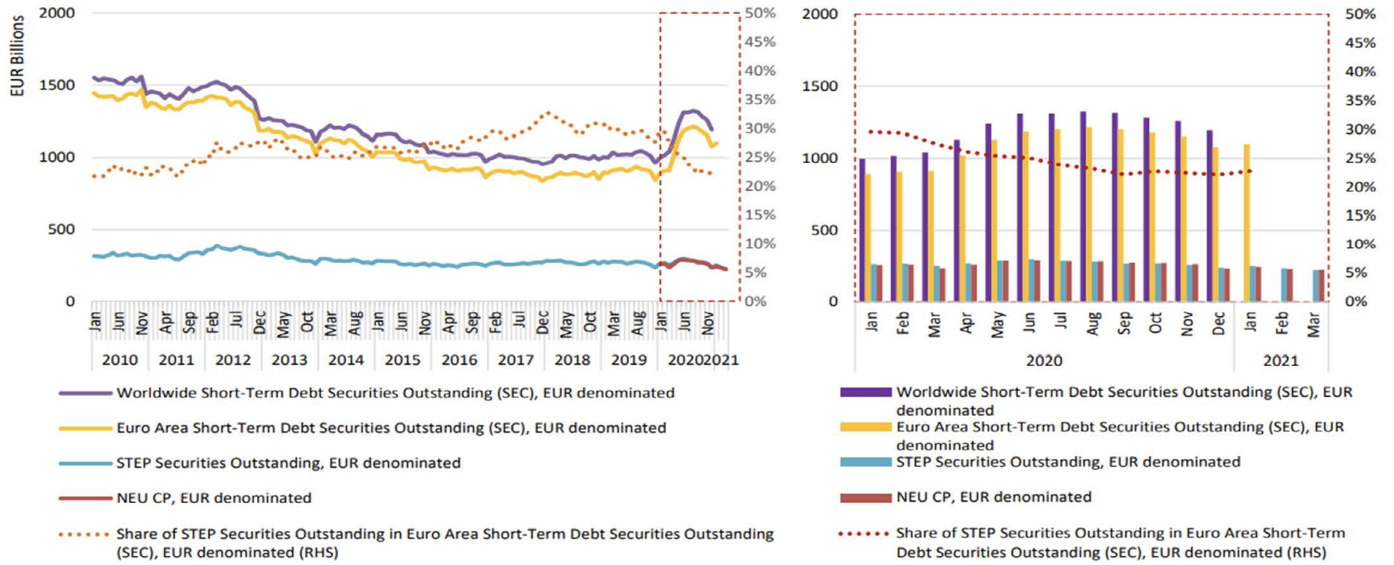
20 European Money Markets Institute (EMMI) is an international non-profit making association under Belgian law founded in 1999 with the launch of the Euro and based in Brussels. Its members are National Banking Associations in the Member States of the European Union which are involved in the Eurozone and the Euro-system. More on the STEP label can be found here: https://www.stepmarket.org/

of market participants. STEP also accredits SSS where STEP labelled paper can be settled, which includes the two ICSDs and a number of domestic CSDs.

The adoption of the STEP label increased following the inclusion of CP in the ECB's purchase Programmes, since the listing on a regulated or accepted market is an eligibility criterion. However, the STEP label is not the only accepted market, nor does the label ensure eligibility.

As of April 2021, STEP labelled outstanding amounts were around €390bn. STEP labelled paper is estimated to represent around 25%-30% of the Euro denominated short-term market.

Figure 7: STEP EUR-denominated market



Source: EMMI

Chapter II: The March-April 2020 market turmoil and aftermath – the ‘dash for liquidity’

End user perspectives

Corporate Issuers

Corporate issuers, many of whom depend on the CP markets for certain aspects of their funding, report that the CP market ceased to fulfil its function in being a reliable funding source during March and April 2020. Many investors curtailed their investing at this time, including not rolling-over maturities, and, in some cases, pulled back from the market altogether. This was a reflection of the global ‘dash for cash’ (more accurately described as a ‘dash for liquidity’), to which corporates themselves were particularly vulnerable given the sudden collapse of cash flows in many sectors. As CP is uncommitted funding, investors and dealers have no obligation to roll maturities. Dealers are also unlikely to buy paper if they do not have investors on the other side of the transaction. This funding hiatus was clearly of concern to central banks who instituted various facilities in attempts to ensure continuity of funding for corporate borrowers.

The impact of these measures on the various CP markets was mixed depending on the credit quality of the issuer and eligibility to the ECB’s PEPP. For PEPP eligible issuers, the normalisation occurred very quickly (around two weeks in particular for rolls), spreading to other, non-eligible, issuers the two following weeks.

These issuers report that while it was possible to place some paper for very short maturities, for instance, up to a week, anything beyond that was extremely challenging (although PEPP-eligible issuers report fewer challenges, at least from early April). One issuer reported that they could no longer assume certainty of funding for such purposes as seasonal cash flows. This was the case for all of March and most of April 2020. By late April/early May the situation improved, but by that time they had covered their funding requirements via the US CP market, which recovered much more quickly and more strongly than the ECP market, and largely due to the Federal Reserve’s interventions. With regard to conditions in different currencies, in light of the market challenges, one corporate borrower that normally issues in USD and Euro signalled to investors that they were open to issue ECP in different currencies, including GBP, JPY, CHF; although they add that there was little interest from investors (potentially due to the currency basis becoming unattractive as a result of the scramble for USD).

SSA issuers

In contrast to corporates and financials, and supported by CNAV fund inflows, the SSA community report that they enjoyed good liquidity and continued to issue during the turmoil, with outstandings actually increasing as investors sought the most liquid and highest credit quality issuers and Programmes. Some investors report that one of the reasons why investors moved into SSA MMFs (CNAV when applicable) was the fact that they were aware of the pressure of possible distressed selling weighting on some VNAV standard MMFs with non-SSA exposure.

This may have been unprecedented as banks, which are usually willing to support their own debt for commercial and reputational reasons, could not make up for the usual absence of a two-way market by offering their own balance sheet as a buyer of last resort. It is posited that the usual shallowness of the secondary market liquidity pool is explained by both ‘buy-to-hold’ investment strategies and overlapping exposures of MMFs. However, asset managers also report that during the peak of the turmoil in mid-March, even finding secondary bids for some SSA paper was challenging.

Asset owners

Asset owners (direct investors) report that they sold CP holdings as market volatility increased and in anticipation of margin calls. While initially these sales incurred a discount of around 4-5bps, bids later became both wider and harder to find. Furthermore, they shortened the average maturity of their CP holdings in order to preserve liquidity, However, CP is not necessarily the optimal instrument for raising liquidity, and generally they use sovereign t-bills which provide greater flexibility (although it is noted that even core European t-bills came under pressure with widening bid-ask spreads). In terms of indirect investment, one asset owner reported withdrawing funds from a MMF when its weekly liquidity buffer fell below 30%, raising concerns about the imposition of gates (i.e. less than 30% of the AUM matures in one week or less).

Intermediary perspectives

Dealers

According to dealer feedback, March and April can be described by a rapid change in investor preference which had impacts on market liquidity. In mid-March, in the US, we observe what has been described as a 'dash for cash', however this is better characterised as a *dash for liquidity*. Investors who had previously been quite happy to roll (i.e. renew) three-month maturities were suddenly looking to roll for one, two, or three weeks, or even not to roll at all and instead looking to trade into more liquid names, specifically SSAs, government securities, or large Tier 1 corporate issuers. This was not a credit flight to quality, but more a flight to liquidity. It is reported that there were many situations where investors asked dealers to bid back longer-dated paper, but they were unwilling, or unable, to provide a price. This was perhaps exacerbated by the fact that in mid-March banks were approaching their quarter-end, which further complicated the ability of the dealer community to provide liquidity for investors. It quickly became clear that the first bid for any investor's paper was likely to be the best bid and pricing became very volatile with prices gapping wider, particularly as issuers themselves were looking for funding to meet month-end requirements. This led to pricing dislocations both across maturities and credit.

Banks that are also active issuers were looking to raise liquidity in anticipation of revolving credit facility (RCF) drawdowns from issuers who, as a result of Covid, might have needed incremental liquidity. Some banks paid up for liquidity, others declined to chase the market, either in the form of shorter maturities or higher costs, and some banks report that they were able to provide bids to buy back their own paper. As we moved further into March, central bank activity was critical in restoring confidence to the market as much as providing liquidity, specifically the Bank of England Covid Corporate Financing Facility (CCFF) Programme which provided liquidity to investment grade borrowers in sterling. In step with this, the ECB announced the Pandemic Emergency Purchase Programme (PEPP) and additional Targeted Longer-Term Refinancing Operations (TLTROs). These Programmes helped to reduce the need for banks to issue commercial paper, although it is suggested that this did little to introduce secondary market liquidity. Meanwhile in the US the Federal Reserve reintroduced the Commercial Paper Funding Facility (CPFF) and Money Market Mutual Fund Liquidity Facility (MMLF) Programmes, which were critical and immediate in boosting market confidence and stability as well as providing liquidity for money funds.

Asset managers

As the pandemic took hold in March 2020, there was a precautionary approach to liquidity across markets with many investors seeking to ensure that they had sufficient access to cash should they need it. This initially led to inflows across many MMFs, but was followed by acute outflow pressures on some funds as end-investors needed to draw on the most readily available source of liquidity to meet their obligations, which for some was MMFs (though corporates also drew on credit lines with banks). While much of this liquidity requirement was driven by cashflow needs arising from the pandemic, some end users of MMFs such as pension funds, experienced an increased demand for cash to meet margin requirements, as term rates markets sold off. This led them to redeem MMF holdings in order to meet these margin requirements.

In the US, a meaningful source of this outflow pressure was a significant rotation out of Prime Funds, into Government Funds (over the course of March 2020, US prime funds saw total outflows of approximately $140bn, while US government funds saw inflows of around $600bn). In contrast, European funds did not see as significant rotation from one fund type to another; while there was some spill-over in USD funds (the investment policies of some USD investors in Europe can be driven by their US based headquarters and result in global changes to investment policies), no such rotation occurred in EUR or GBP funds. Euro and Sterling Government Funds are de minimis in size, and no such switch from credit to government liquidity funds took place. Flows between USD fund types were perhaps amplified by the more readily available option of switching out of credit funds into government funds, but the inflows also demonstrate the demand for daily liquidity in order to manage the uncertainty brought about by the pandemic.

In Europe, outflows from MMFs were not of the scale experienced in the USA and there were differing experiences across the different fund types and currencies. Overall, in Europe, the most significant outflows were concentrated in USD LVNAV funds and in EUR Standard VNAV funds. EUR Standard VNAV MMF AUM was 15% lower at the end of March compared to mid-February. Whilst EUR LVNAV saw outflows of 16% over seven consecutive days in March, they finished the month with higher AUM than in February. Similarly Sterling LVNAV MMFs saw outflows of 11% over the worst seven-day period in March but ended the month with higher AUM. In contrast, USD LVNAV MMFs saw outflows of 29% over a longer time period in March, as (previously explained) the activity of many USD investors in Europe is driven by their US based headquarters and decision makers.

One common observation by MMF managers both in the US and Europe was around the functioning of regulatory liquidity buffers. In the US, there was a fear that if US Prime Funds fell below their 30% weekly liquid asset threshold then liquidity fees or redemption gates would be imposed.[21] This meant that in reality the 30% weekly liquid asset buffers became floors and were not able to be used to meet outflow pressures. Although the regulatory construct of these rules is slightly different in Europe, managers still felt the incentive to increase their liquidity positioning rather than using the buffers to meet outflows.

MMF managers in Europe report that they wanted to ensure that WLA levels did not move too close to the regulatory limit of 30%, at which point the process of considering imposing gates and fees is triggered, and therefore looked to sell some holdings (such as ECP, CDs, NEU CP) to bolster levels of liquidity. However, secondary market liquidity was hard to find, and largely limited to some issuer banks buying back their own paper (CP and CDs), while some banks would not bid back their paper, citing balance sheet constraints. MMFs did have some success in selling euro t-bills. The stresses were exacerbated by dealer banks lack of balance sheet to intermediate, a lack of any buyers to sell secondary paper onto, and their own risk management limits. Even in top quality agency ECP (such as AAA German agencies), there was no bid.

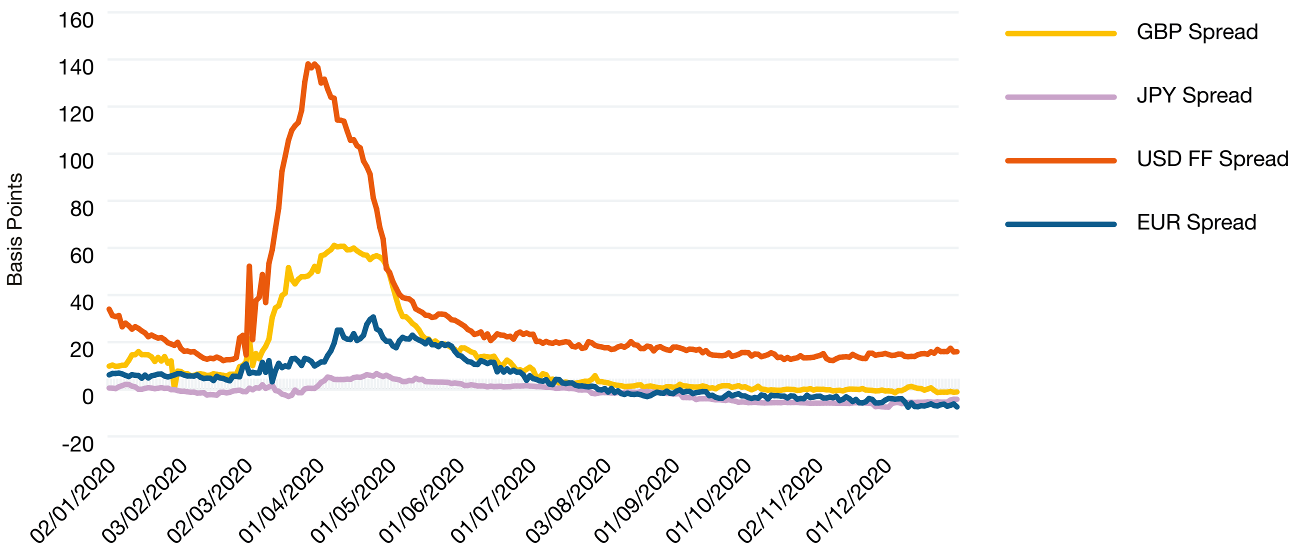
Following Federal Reserve intervention, the market quickly stabilised in the US. While Bank of England and ECB asset purchases were not seen as providing significant liquidity easing in European short term markets, by the end of March 2020, market-wide conditions had eased significantly and all types of MMFs observed continued interest. In Europe, outflows from EUR Standard VNAV MMFs slowed, although their AUM continued to decline before picking up towards the end of May. EUR and Sterling LVNAV funds recovered AUM quickly and ended March with assets under management higher than at the end of February. In USD whilst assets in USD Public Debt CNAV funds remained elevated, USD LVNAV recovered half of the AUM outflows by the end of April and were back to pre-March levels by late 2020, and in the US, despite some closures of Prime Funds, AUMs also recovered to early 2020 levels. While it was ‘a bumpy ride’, MMFs largely performed the way they are supposed to perform. In the US we saw sponsors stepping in to support funds over the two weeks prior to the Federal Reserve intervention, while in Europe LVNAV Funds performed as expected, with no fees or gates being imposed, and very few funds breached the 30% weekly liquid asset threshold and then only for a very short period of time.

Very few LVNAV funds dipped below the 30% threshold, which was perhaps due to cash buffers being considered a floor rather than counter-cyclical, when combined with fees and gates. Despite the mark-to-market valuations of a few LVNAV funds moving close to the 20bps collar on both the upside and downside, this did not appear to accelerate any investor behaviour. In terms of Standard VNAV funds, outflows continued, although more modest with French VNAV (of which the majority are Standard MMF) experiencing €8bn outflows in the period from end of March to May.

21 It is important to note that some funds that have links between gates and fees and funds with their buffers, and others that do not (such as standard VNAVs); in the case of the former those buffers were not used, and in the case of the latter they were.

An additional point made by asset managers is that irrespective of the investor flows, the way the market behaved with respect to liquidity raising reflected the lack of underlying market liquidity. Due to the fact that dealers struggled to add risk to their books, in light of the one directional skew of client flows MMFs, regardless of their view, were forced to bias their liquidity buffers higher, by retaining maturing securities rather than reinvesting them, given that there was no market liquidity.[22]

Figure 8: Libor-OIS spreads[23]



Source: ICMA analysis using Bloomberg data

The spread between the 3mth London Interbank Offered Rate (LIBOR) or equivalent and the overnight index swap (OIS) (often referred to as the 'LOIS') is a useful barometer of money market stress, indicating the disparity between overnight and three-month term funding all other things being equal. The above chart illustrates how the US short-term markets were most severely impacted, with stress levels in the GBP and EUR markets notably less.

Central bank intervention

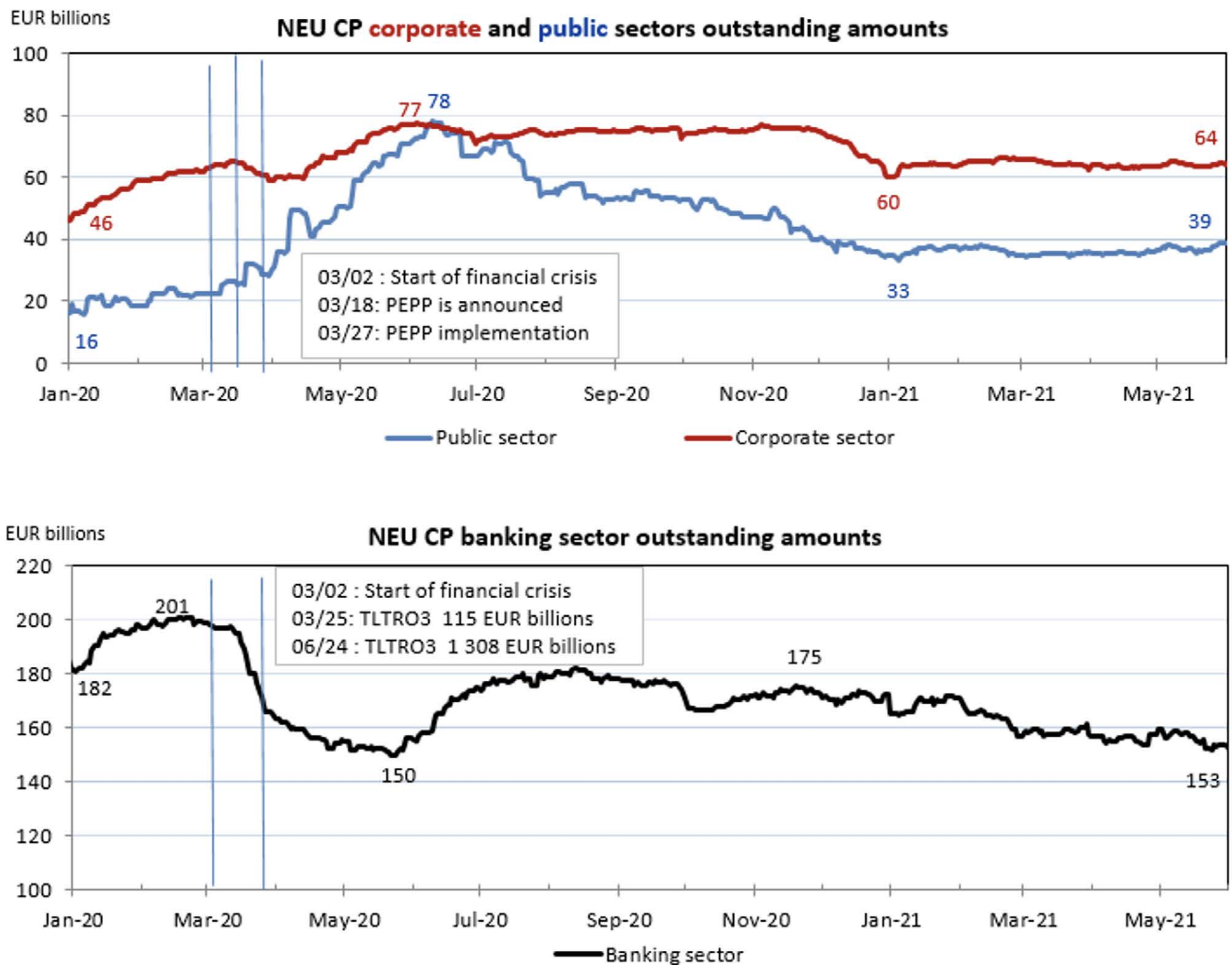
Stakeholders cite that the interventions by the Federal Reserve were critical in assisting the European CP market. While issuers with US Programmes were able to source financing through the US market, those with European Programmes felt an indirect benefit as the Federal Reserve's interventions helped to calm markets and restore confidence more globally.

While recognising that it did help to restore broader market confidence over time, stakeholders paint a more mixed picture with respect to the ECB's interventions, even though its first CP purchases occurred only one week after the announcement of the PEPP (March 18, 2020). As one issuer explains, with respect to the ECB programme the structure was not really catering to a segment of the European market that was not ECB eligible as collateral, such as the European CP market not issued under a STEP label and specifically the German CP market, which mainly consists of corporate CP programmes usually utilising classical global notes, not being listed.

On the contrary, for issuers whose paper was eligible for purchase under the PEPP (i.e. non-financial corporations with adequate credit quality) the positive effect of the set-up of the PEPP was relatively immediate and very efficient. On the NEU CP market, which is an eligible market, this can be seen from the following charts.

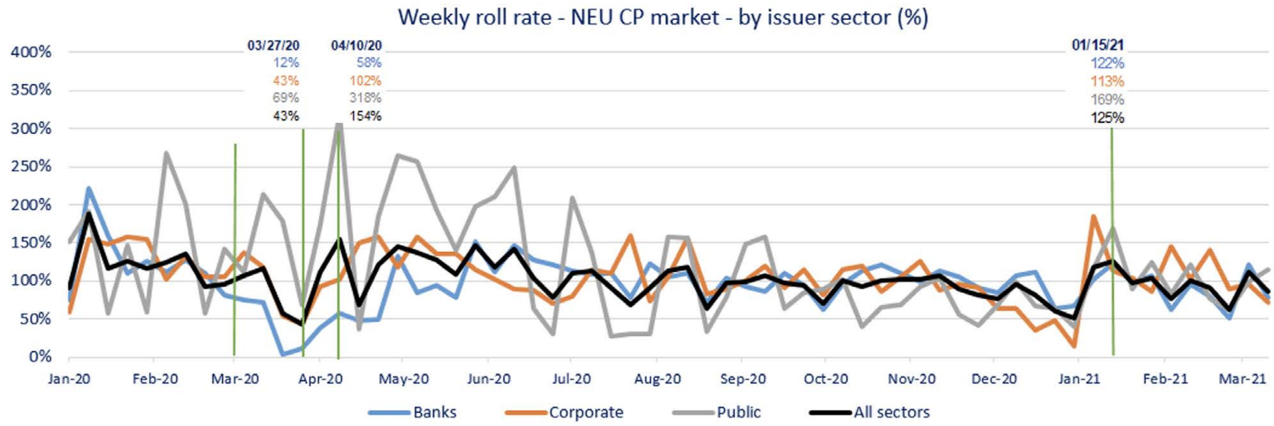
22 See also the ICMA AMIC response to the ESMA consultation on the framework for EU money market funds (June 2021)
23 The spread between the 3mth London Interbank Offered Rate (LIBOR) or equivalent and the overnight index swap (OIS) (often referred to as the 'LOIS') is a useful barometer of money market stress, indicating the disparity between secured and unsecured short-term funding.

Figure 9: NEU CP outstandings

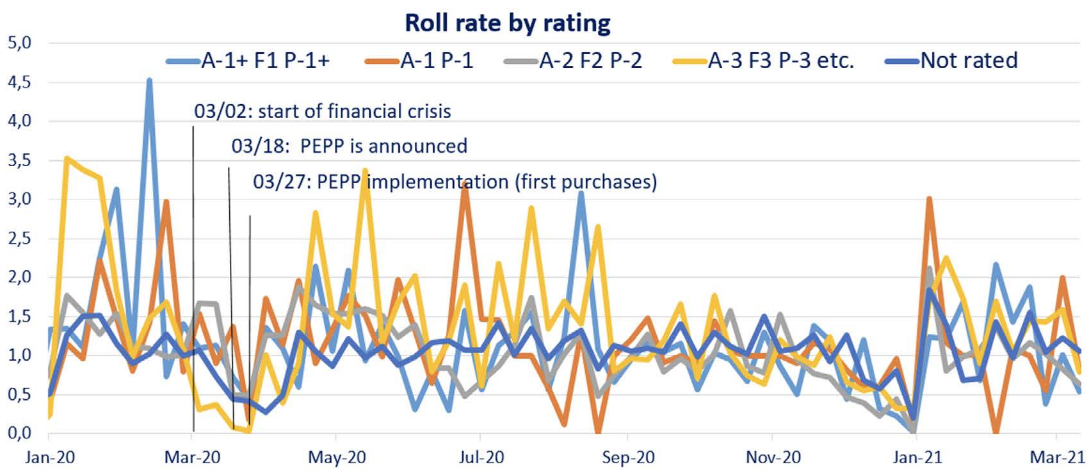


Source: Banque de France

Figure 10: NEU CP weekly roll-rate

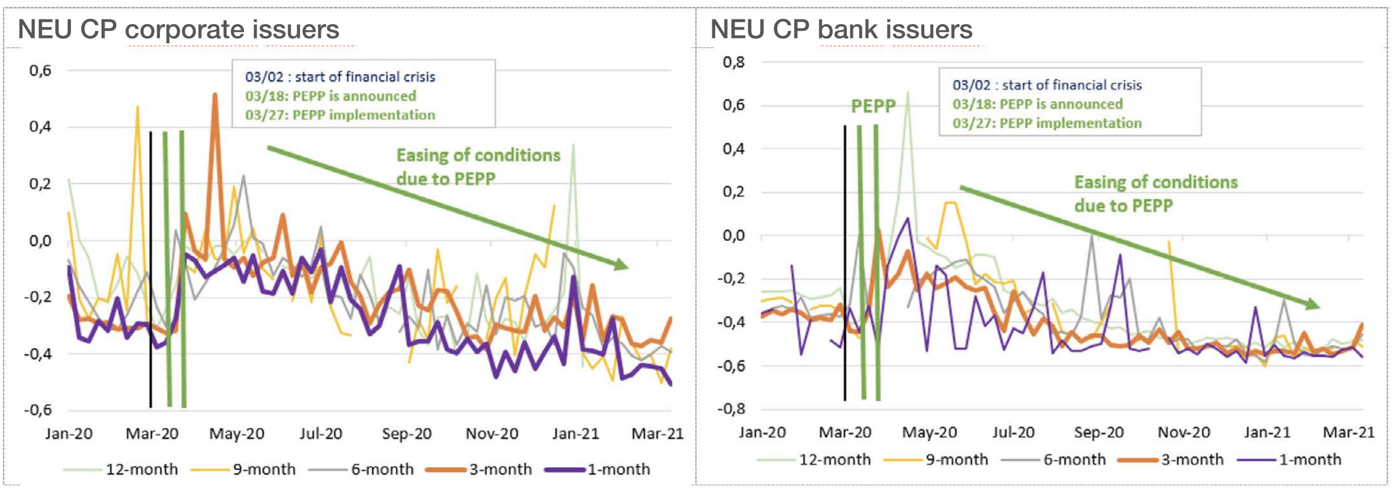


Source: Banque de France



Source: Banque de France

Figure 11: NEU CP weekly average interest rates



Source: Banque de France

Other notable exclusions from the ECB purchase Programmes were ABCP (which are not eligible as collateral) and CP issued by public sector entities (which are only eligible for secondary market purchase, due to monetary financing prohibition under EU Treaties); although in the case of the latter, secondary market liquidity was not as impaired as for other classes of CP.

Another issuer has noted that while the ECB's extension of the PEPP to include certain corporate CP was welcomed, it could have been introduced much more quickly. However, it could be argued that the announcement of the extension of the CSPP and PEPP to include some CP on March 18 occurred around the same date as the Federal Reserve and Bank of England announcements (March 17 and 18 2020, respectively), and the purchases started only one week later for the Eurosystem, while they started at the end of March for the Bank of England and mid-April for the Federal Reserve. It is notable that the position of active NEU CP market participants, in particular, is more positive than that of many other market stakeholders.

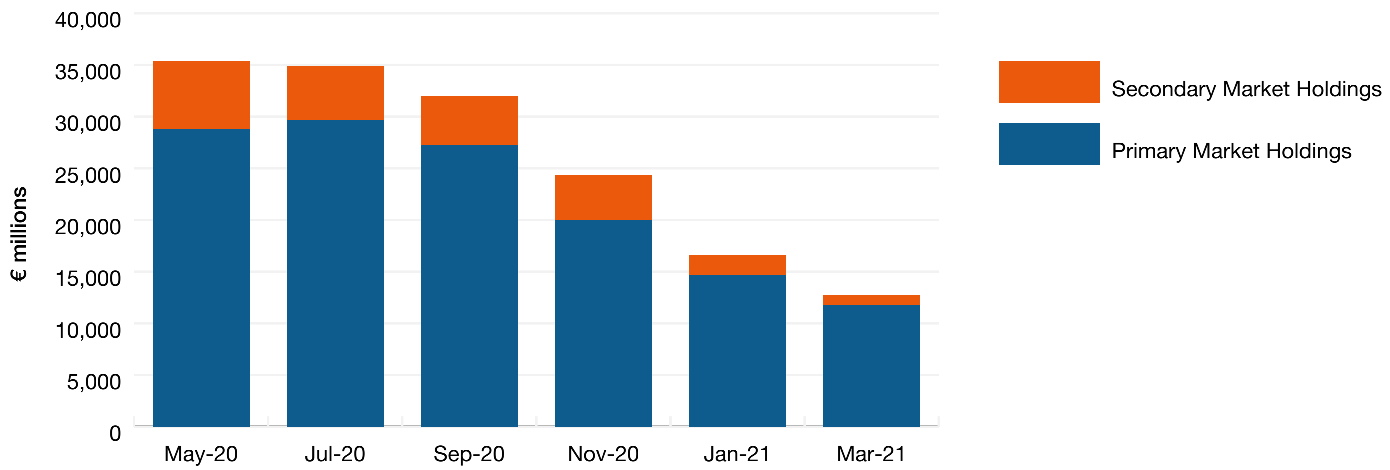
Investors note that PEPP eligibility was restricted to a relatively small universe of issuers and did not include financial paper, which forms perhaps 80-90% of MMF CP holdings. Some LVNAV MMF managers report that they held virtually no eligible paper in their funds. Standard MMF managers likely had more eligible paper as they can invest in A2/P2 issuers and so typically hold more corporate CP which otherwise would not be eligible for many Short Term MMFs carrying a AAA rating. There was a hope that by supporting corporate issuance, this might alleviate some of the pressure on dealer banks' revolving credit facilities, allowing them to buy-back their own paper; however this did not happen. Other investors suggest that even where they did hold eligible paper, the price guidance from dealers was erratic and unreliable. The indirect consequences of the PEPP in restoring market confidence, did enable NFCs to start issuing CP again by early April, reducing redemptions from MMFs.

In addition to the purchase of corporate CPs under the PEPP, the Eurosystem introduced collateral easing measures in order to alleviate pressure on counterparties and collateral availability. In particular, on April 8, 2020, it started to allow a higher concentration of bank bonds, including bank CP, in collateral pools up to 10% by issuer group, which likely helped to relax market pressure on this major segment of the CP market.

Some dealers report that trying to discover what the various central banks were happy, or felt able, to bid on was a very stressful process for the dealers, and even when they did show bids these were not reflective of where the market was pricing at that point. Ultimately dealers were not willing to realise losses on paper they had bought back from clients, so instead the result was that they held onto inventory, did not clear their books, and were unable to help investors when they needed bids on noneligible paper. However, the Eurosystem did successfully purchase EUR 35.4bn of CP between March and May 2020.

In contrast, stakeholders in the GBP CP market suggest that the Bank of England's CCFF, whilst also limited to non-financial issuers, was clearly defined, relatively unbureaucratic, and targeted issuers that needed liquidity quickly. It also provided a process whereby dealers could approach corporates who may not even have CP Programmes, and relatively quickly they could be approved, which gave them comfort that they could source liquidity as and when required.

Figure 12: CP holdings under the ECB's PEPP



Source: ICMA analysis using ECB data

Chapter III: Recommendations to develop the European CP/CD market

In discussions with members and stakeholders, and drawing on the lessons learned from the Covid market turmoil, four key themes can be identified from the perspective of potential vulnerabilities in the European CP market:

- Market fragmentation
- Lack of transparency
- Poor secondary market liquidity
- Lack of automation

While there are already a number of initiatives underway to address some of these challenges, market participants believe that more can be done to support the development of a more efficient and resilient pan-European CP market, involving all market stakeholders, including regulators and policy makers[24].

Market fragmentation

Stakeholders point to the multivarious European landscape for CP, which very much consists of the more international ECP market, which includes a significant USD denominated element, as well as other non-European currencies, the NEU CP market, along with of a number of domestic markets,[25] of various sizes and stages of development. Participants have indicated that they would like to see greater standardisation and harmonisation in terms of legal and regulatory frameworks, documentation, issuer eligibility, maturity and denomination profiles, and settlement cycles. Lower barriers to entry to the market, particularly for corporate issuers, would also be welcomed which perhaps requires further analysis. While the STEP initiative is broadly recognised as being a concerted attempt to achieve improved standardisation for the European CP market, adoption remains around 30% of the market, and the view is that more could be done to help to create something closer to a truly pan-European CP market in the spirit of Capital Markets Union (CMU).

Transparency

Similar to the underlying structure of the European CP market, transparency is also relatively fragmented, and uneven, making it difficult to obtain a holistic overview of pre- and post-trade data, as well as comprehensive statistics on issuance, outstandings, and market structure. While levels of transparency are relatively high for the NEU CP market, and issues carrying the STEP-label, it is more mixed for ECP and some domestic markets, making overall visibility challenging.

While there are a number of commercial initiatives that are helping to consolidate post-trade data and statistics on issuance and outstandings across the different market segments, a level of fully consolidated publicly available information could play a role in supporting greater confidence for potential issuers, investors, and intermediaries, as well as helping with price formation, particularly in the secondary market. A consolidated tape for short-term markets, similar to those proposed for corporate bonds and equities, has been touted as a possible consideration.

Secondary market

Perhaps one of the starkest realisations from the March-April 2020 turmoil is how thin and vulnerable the secondary market is for CP in stressed market conditions; noting that this is not unique to CP and that this was observed across a whole range of asset classes, including corporate and sovereign bonds.[26] While CP is generally considered a buy-to-hold

24 These recommendations should also be considered as part of a wider package of initiatives for enhancing the European money markets alongside those outlined in the ICMA Asset Management and Investor Council (AMIC) response to the 2021 ESMA consultation on the Money Market Fund Regulation Review.
25 It is important to note that 'domestic' markets do not prohibit non-domestic issuers and investors.
26 See FSB's Holistic Review of the March Market Turmoil, November 2020

instrument, often matching investors' short-term liquidity horizons, its value as a money market instrument also hinges on its liquidity post-issuance, particularly in times of market stress. The fact that CP is a low margin, capital intensive business does not make it conducive to secondary trading; not least when banks' capital becomes a scarce resource.

There are a number of possible initiatives that could help to develop a functional, liquid secondary market:

(i) Capital and liquidity relief under the Basel rules[27] to enable dealers to hold inventory, particularly in times of market stress. The Federal Reserve's move to provide capital relief to banks buying back eligible assets under the MMLF was both critical and immediate in stabilising the US CP market in March 2020. Recognising highly rated CP as High Quality Liquid Assets (HQLA) in capital ratios would at least be a positive step.

(ii) A clearly defined 'back-stop' central bank purchase programme that provided a predictable 'bid of last resort' for a broad range of European CP (including financial and ABCP) would allow dealers to continue to support markets, particularly at times when balance sheet is restricted (such as over reporting periods), but more importantly in times of market stress.

(iii) Developing a repo market for CP would afford dealers greater flexibility in funding inventory, as well as provide a means for investors to raise liquidity against their CP holdings without having to liquidate them. CP is eminently repo-able, including in triparty structures, but it is seldom accepted by repo investors as it is difficult to value. Improved post-trade transparency, or even independently published CP repo curves (as provided by the Federal Reserve in the US market), would help to support accuracy and confidence in accepting CP as repo collateral.

(iv) Broader central bank eligibility of CP in money market operations would enhance the repo-ability of CP and provide another funding option for dealers, particularly for financial CP/CDs and ABCP.

(v) As previously discussed, improved price transparency across the CP market would support confidence in price formation and valuations, helping to underpin secondary market liquidity.

(vi) A more diverse investor base is viewed as being supportive of secondary market liquidity, particularly where there are different investment strategies or motivations for holding CP. Counter-cyclical flows help to smooth the high 'risk-on-risk-off' directional correlations observed with a more homogenous investor base, as well as attracting non-traditional liquidity providers.

Automation

While it is a truism that traders make prices, not venues, most market participants would agree that trading platforms can play a useful role in facilitating liquidity, at least under normal market conditions, both through consolidating multiple sources of liquidity and improving price discovery; as well as the core benefits of enhancing efficiencies in the price formation, execution, and settlement processes. While platforms, e-protocols, and new technologies generally develop organically and in response to market participant needs, as well as being driven by technological advances, it is important to encourage initiatives that help to promote standardisation of data representation and processes as well as market interoperability. However, as illustrated by the Covid turmoil, platforms are not a substitute for liquidity, particularly in times of volatility or market stress, and ultimately a CP market requires dealer expertise, intermediation, and capacity to take positions, in order to function as intended.

27 Most notably the Net Stable Funding Ratio (NSFR) treatment for dealer inventories.

Conclusion

This paper is an attempt to map the European CP/CD landscape as well as to draw on lessons learned from the market turmoil of early 2020 to identify potential vulnerabilities in market structure. What becomes clear is that there is no single European market, and that it is very much fragmented into a number of different markets, dominated by the ECP and NEU CP markets, along with multiple, smaller, domestic markets. While these markets have their own individual advantages, many stakeholders see benefits in the creation of a harmonised, single, multi-currency, pan-European market, consistent with the aspirations of the CMU initiative.

The events of March-April 2020, and after, expose a number of potential areas where market functioning and resilience could be improved. Beyond harmonisation of legal frameworks and improved transparency and public access to market data, the Covid turbulence highlights both the dealer-centric nature and inherent precariousness of secondary market liquidity in short-term credit markets, particularly in times of market stress. This presents an opportunity for central banks and other regulators to work with the industry in taking steps to underpin market liquidity and to ensure that secondary markets are able to function when they are most needed.

ICMA, through its newly reconstituted CPC, hopes that this paper can form the basis for greater collaboration between its members and market stakeholders more broadly, as well as deeper engagement with regulators and policy makers, in the common goal of developing and strengthening the European short-term credit markets.

Glossary

ABCP	Asset Backed Commercial Paper
ACI FMA	Association Cambiste Internationale Financial Markets Association
AUM	Assets Under Management
CCFF	Covid Corporate Financing Facility
CD	Certificates of Deposit
CMU	Capital Markets Union
CNAV	Constant Net Asset Value
CP	Commercial Paper
CPC	(ICMA) Commercial Paper and Certificates of Deposit Committee
CPFF	Commercial Paper Funding Facility
CSD	Central Securities Depository
CSPP	Corporate Sector Purchases Programme
ECB	European Central Bank
ECD	Euro Certificates of Deposit
ECP	Euro Commercial Paper
EMMI	European Money Market Institute
EMS	Execution Management System
ESCB	European System of Central Banks
ESMA	European Securities and Markets Authority
FCA	(UK) Financial Conduct Authority
FI	Financial Issuer
FMI	Financial Market Infrastructure
HQLA	High Quality Liquid Assets
ICMA	International Capital Market Association
IDB	Inter Dealer Broker
ICSD	International Central Securities Depository
IMMFA	International Money Market Fund Association
ISIN	International Securities Identification Number
LVNAV	Low Volatility Net Asset Value
MiFID II/R	Markets in Financial Instruments Directive (II) / Regulation
MMF	Money Market Fund
MMFR	Money Market Fund Regulation
MMLF	Money Market Mutual Fund Liquidity Facility
MTN	Medium Term Note
NCA	National Competent Authority
NEU CP	Negotiable European Commercial Paper
NFC	Non-Financial Corporate
NFI	Non-Financial Issuer
OMS	Order Management System
OTC	Over-The-Counter
PEPP	Pandemic Emergency Purchase Programme
RCF	Revolving Credit Facility
SEC	(US) Securities and Exchange Commission
SSA	Sovereign, Supranational, and Agency
STEP	Short-Term European Paper
TCN	Titres de Créances Négociables
TLTRO	Targeted Longer-Term Refinancing Operation
VNAV	Variable Net Asset Value
WAM	Weighted Average Maturity

References and bibliography

ICMA AMIC response to the ESMA CP on MMFR review, ICMA, June 2021

Policy Proposals to Enhance Money Market Fund Resilience, Consultation report, FSB, June 2021

The role of non-bank financial intermediaries in the 'dash for cash' in sterling markets, Bank of England, Financial Stability Paper No.47, June 2021

The Future of Money Market Funds, OMFIF, 2021

How effective is the EU Money Market Fund Regulation? Lessons from the COVID turmoil, ECB, April 2021

EU Money Market Fund Regulation – legislative Revie: Consultation Report, ESMA, March 2021

The persisting effect of the pandemic on Money Market Funds and money markets, Central Bank of Ireland, Economic Letter, Volume 2020, No. 9

Assessment of Risks to the French Financial System, December 2020

Holistic Review of the March Market Turmoil, FSB, November 2020

Money Market Funds during the March-April Episode: Thematic Note, IOSCO, November 2020

Money Market Funds in Europe – State of Play, EFAMA, October 2020

Lessons from COVID-19: The Experience of European MMFs in Short-Term Markets, BlackRock, July 2020

Seven Moments in Spring: Covid-19, financial markets and the Bank of England's balance sheet operations, Bank of England, Speech by Andrew Hausser, June 2020

Recent stress in money market funds has exposed potential risks for the wider financial system, ECB, part of Financial Stability Review, May 2020

Issues note on liquidity in the corporate bond and commercial paper markets, the procyclical impact of downgrades and implications for asset managers and insurers, ESRB, May 2020

Denton's Quick Guide to Euro Commercial Paper, June 2020

The Short-Term Paper Market in Europe: Recommendations for the development of a pan-European market, Consultation Report by the Euribor-ACI Short Term European Paper Task Force (the ACI-STEP Task Force), September 2002

The Money Market: Legal Aspects of Short-Term Securities, Consultation Report, EFMLG, September 2002

ICMA Zurich
T: +41 44 363 4222
Dreikönigstrasse 8
8002 Zurich

ICMA London
T: +44 20 7213 0310
110 Cannon Street
London EC4N 6EU

ICMA Paris
T: +33 1 70 17 64 72
62 rue la Boétie
75008 Paris

ICMA Brussels
T: +32 2 801 13 88
Avenue des Arts 56
1000 Brussels

ICMA Hong Kong
T: +852 2531 6592
Unit 3603, Tower 2, Lippo Centre
89 Queensway, Admiralty, Hong Kong

ICMA
International
Capital
Market
Association

icmagroup.org