

The Wheatley Review
HM Treasury
1 Horse Guards Road
London SW1A 2HQ

7 September 2012

Dear Sirs,

Response submission from the International Capital Market Association (ICMA)

Re: initial discussion paper - "The Wheatley Review of LIBOR"

#### Introduction:

The ICMA<sup>1</sup> is a pan-European self regulatory organisation and an influential voice for the global capital market. It has a membership of over 420 firms and represents a broad range of capital market interests including global investment banks and smaller regional banks, as well as asset managers, exchanges and other venues, central banks, law firms and other professional advisers. The ICMA's market conventions and standards have been the pillars of the international debt market for well over 40 years.

The ICMA notes that on 10 August the initial discussion paper "The Wheatley Review of LIBOR" was published for public consultation; and that the introduction in the executive summary thereof states that "The Wheatley Review, commissioned by the Chancellor of the Exchequer following the emergence of attempted manipulation of LIBOR and EURIBOR, will report on the following:

- necessary reforms to the current framework for setting and governing LIBOR;
- · the adequacy and scope of sanctions to appropriately tackle LIBOR abuse; and
- whether analysis of the failings of LIBOR has implications on other global benchmarks.

This 10 August discussion paper sets out the direction of the Review's initial thinking on these issues."

The ICMA further notes that the Wheatley Review has been tasked with reporting by the end of the summer, enabling any immediate recommendations regarding the regulation of LIBOR and other benchmarks to be considered by the Government in time for any proposals taken forward to be included in the already tabled Financial Services Bill. Consequently the Review aims to present its findings to the Chancellor of the Exchequer by the end of September, only allowing for a brief period of consultation, until 7 September, on this discussion paper.

<sup>&</sup>lt;sup>1</sup> For more information regarding ICMA please go to <a href="http://www.icmagroup.org/">http://www.icmagroup.org/</a>

#### Overall commentary on proposals:

Whilst the Review team has invited responses to 16 specific questions, as summarised in Annex C of the discussion paper, the ICMA has determined that it will be of greatest value for its submission to focus on those few points of most direct relevance to the international capital market and where it seems most likely that the ICMA may have distinctive points to contribute. In overall terms, the ICMA considers that:

- (i) the authorities' focus in reforming LIBOR should be on regulating the governance of the process for setting LIBOR to ensure that it cannot be manipulated and to prevent market abuse;
- (ii) it is important that any reform of the rate-setting process for existing transactions referenced to LIBOR does not disrupt the international capital market;
- (iii) it is for the market to choose, as a commercial matter, which reference rates to use for new transactions; and
- (iv) any market abuse should be covered by appropriate market abuse regulation.

In our response, we focus on (ii) and (iii), with the more detailed text below: (A) addressing how changes to, or transition from, LIBOR could affect certain types of financial contract; (B) commenting on certain points pertaining to the consideration of alternatives to LIBOR; and (C) offering some brief observations regarding other existing benchmarks.

Before covering these points the ICMA wishes to highlight the existence of other official initiatives concerning the overall issue, including the work of the European Commission and that within the central banking community. Inevitably there are elements of overlap amongst these initiatives and there is a risk that the proposals which emerge may not necessarily all fit neatly together. Since the implications of any combination of actual proposed changes may differ (for a variety of reasons, including that outstanding LIBOR based contracts are governed by a variety of different laws), and cannot be assessed in advance of an actual change proposal, the ICMA respectfully requests that every effort be made to sustain on-going dialogues – both between the requisite officials and with the markets. It is in everyone's best interests that the issues are adequately addressed, whilst at the same time avoiding any unnecessary adverse implications for the international capital market.

## A. Comments concerning how certain types of financial contract could be affected:

## 1. FRNs; and other LIBOR based debt securities

Based upon Dealogic data, the discussion paper reports an estimate of ~\$3tn of floating rate notes ("FRNs") with LIBOR (rather than other bases such as EURIBOR) as benchmark (as per Table 2.A). The discussion paper also indicates that the vast majority of these FRNs are based on US Dollar, Yen and Sterling LIBOR rates of either 1, 3 or 6 month tenors (as per Table 2.C), although in this analysis the discussion paper does not disaggregate the FRN data from that for interest rate swaps (of which there are an estimated \$165 - \$230tn).

The ICMA has sought to compile its own analysis of LIBOR based FRNs and reports its data (source: Dealogic) in Annex 1 of this response submission. This data illustrates a lower aggregate total of outstanding FRNs with LIBOR as benchmark, \$1.5tn versus the \$3tn reported in the discussion paper, but is in other ways broadly consistent with that reported in the discussion paper. In particular outstanding LIBOR based FRNs are predominantly US Dollar denominated, with smaller amounts of transactions in Sterling and Yen; and LIBOR rates predominantly of 3 month tenor, with smaller amounts of 1 and 6 month tenors.

Whilst performing this analysis the ICMA has also observed that there are equally significant amounts of other types of LIBOR based securities outstanding, particularly US Dollar, euro and Sterling structured finance securities (many of these are undoubtedly MBSs linked to underlying pools of LIBOR based mortgages), but also MTNs. Furthermore, the ICMA's analysis indicates that whilst 75% will have matured by the end of 2015, there is an extended maturity profile applicable to the remainder of the currently outstanding LIBOR based FRNs (as is also the case for other LIBOR based securities) – indeed some such securities have no fixed maturity date; and there are securities which although they currently pay a fixed rate of interest will start to pay a LIBOR based amount if they remain outstanding beyond some specified future date. The ICMA has also examined FRN issuance volumes over the past decade and finds that, following a period of growth, activity levels have fluctuated quite significantly through the period of the financial crisis.

In compiling its data analysis, the ICMA has focussed specifically on those transactions which include LIBOR based payments. The ICMA notes that this includes only a small amount of euro denominated activity (referencing euro LIBOR) as most such euro denominated transactions are referenced to EURIBOR; and that the aggregate amount of EURIBOR based FRNs currently outstanding is broadly equivalent to the aggregate outstanding amount of LIBOR based FRNs.

Given the ICMA's central role in sustaining and promoting an efficient international bond market, the ICMA is extremely anxious to see that LIBOR based bond contracts continue to have a readily available LIBOR pricing reference for so long as they are outstanding in the market. Naturally the ICMA is as keen as anyone that the market can have confidence in the LIBOR values which are used to price these instruments, such that current and, for so long as it remains commercially desirable to issue such instruments, future LIBOR based FRNs (and other LIBOR based securities) can be originated and traded with confidence. Clearly such confidence needs to be shared by both LIBOR based interest payers and receivers. Given this the ICMA sees a clear case for effective governance of LIBOR (or any other important reference rate or index) to restore trust in the rate setting process. This should include appropriate regulatory powers, both to discourage any abusive behaviour and to administer proportionate sanctions in case any future cases of market abuse were to occur.

The ICMA is particularly concerned by the potential for disruption in the market which could arise in case any changes to LIBOR were to lead to issues regarding the continuity of existing securities contracts. Bond contracts are bi-lateral as between issuers and each individual bondholder. This means that it is highly impractical to make changes to the use of LIBOR within outstanding contracts, as holders would have to agree any changes with the issuers – either in noteholder meetings or possibly through written noteholder votes. As LIBOR is one of the key pricing terms for a LIBOR based FRN a majority, or indeed in some cases unanimity, amongst holders would be necessary, in respect of each outstanding series of notes, in order to effect a change.

Accordingly, the ICMA is pleased to see that the discussion paper quite clearly indicates that the Wheatley Review is already highly cognisant of the need to proceed very carefully in case of any move away from the use of LIBOR – to quote paragraph 4.2: "Any migration to new benchmarks would require a carefully planned and managed transition, in order to limit disruption to the huge volume of outstanding contracts that reference LIBOR." Indeed the discussion paper also shows clear recognition that even a change which prompts a small shift in the value of LIBOR would be liable to have significant consequences – as stated in paragraph 4.25: "A non-transitory change in the LIBOR time series (a step-up or –down), or a structural increase in volatility, would have a significant effect on the value of contracts. ...".

The ICMA observes that there are a range of conceptual scenarios, from one extreme of immediately "switching off" LIBOR through to the other extreme of continuing with all the existing daily LIBOR quotes calculated on the existing basis. From the ICMA's perspective the evident need to support the continuity of FRN (and other LIBOR based securities') contracts should rule out any notion of immediately switching off LIBOR. Whatever the problems that have been experienced, the negative disruptive consequences that would flow from such a change must surely be worse. Understanding that there is a reasonable desire to introduce some level of improvement to the existing daily LIBOR quotes, the questions then are what changes should be anticipated and what effect would these have.

Returning to the ICMA's concern to ensure the continuity of FRN (and other LIBOR based securities') contracts, the ICMA believes that the scope for changes to the derivation (as distinct from any enhancement of governance, regulatory powers, etc.) of LIBOR is constrained. Too great a change could potentially prompt contractual uncertainty just as disruptively as actually attempting to switch off LIBOR. Consequently the ICMA considers that it is indeed right to proceed in a carefully planned and managed way, such that any changes do not create unnecessary disruptive effects to existing FRNs (and other LIBOR based securities). The ICMA notes that any changes may impact the valuation of outstanding assets; and may also affect the market for future transactions.

As a practical matter this line of thinking should also encompass the operational servicing of FRNs (and other LIBOR based securities), where systems and procedures reflect specific details of the existing LIBOR quoting procedure. Operational risk will increase in case any changes to the existing LIBOR quoting procedure can only be supported by instigating changes to existing operational systems and procedures.

Looking at existing contracts, typical terms provide that the LIBOR rate to be used in a transaction will be found by reference to a specified Reuter's screen page (LIBO/LIBOR01), or "or such other page or service as may replace it for the purpose of displaying London interbank offered rates of major banks for [applicable currency] deposits". This then reflects the basic commercial intent of the contracting parties, which will be most suitably fulfilled so long as applicable London interbank offered rates continue to be published on the specified page (or a suitable replacement page).

In case applicable rates cease to be published, there are typically certain back-up provisions under which the relevant Agent bank will attempt to obtain direct quotes of London interbank offered rates from those banks who were previously contributing to published rates. In theory these back-up provisions should mean that it will continue to be possible to determine "LIBOR" in accordance with existing contracts even in case a relevant value is no longer being published, but significant legal uncertainties are likely, particularly given that not all parties will be residents of a single jurisdiction and not all contracts are governed by the same laws. In cases where it proves impossible to obtain suitable quotes it is also possible that these supposedly floating rate contracts could become locked into an historic LIBOR rate setting.

Additionally the ICMA is concerned by the fact that many FRNs (and other LIBOR based securities) will also have associated OTC derivatives contracts. Either issuers or bondholders, or both, may have entered into such OTC derivatives contracts to best manage their legitimate commercial interests. In many instances such OTC derivatives activity will involve swaps to transform the LIBOR based coupon flows of the bond into fixed rate flows, or some other floating basis rate flows; and these may have been sold as asset swap packages.

Where this is the case it is important to the commercial effectiveness of the combination of contracts that the determination of LIBOR is properly matched between the bond and the OTC derivative. The majority of OTC derivatives contracts are documented under market standard ISDA master agreements. It is quite likely that the effect of changes to LIBOR could lead to different outcomes under such contracts than those experienced in relation to the associated bond contracts, particularly in case a relevant value cease to be published and "LIBOR" consequently has to be determined under the relevant, different fall back provisions embedded in the respective contracts.

In the ICMA's opinion, the negative impact of these sorts of legal and commercial uncertainties would prove more damaging to the international capital markets than doubts over the on-going accuracy of the LIBOR rate setting process.

#### 2. Certain other financial contracts

Besides the direct use of LIBOR in the pricing of FRNs (and other LIBOR based securities) there are certain other contracts in fixed income markets which could also be affected by changes to LIBOR, albeit more tangentially. One specific example which ICMA has considered is repurchase agreements (repos) documented under ICMA's GMRA<sup>2</sup> ("Global Master Repurchase Agreement") 2000. The LIBOR rate shows up in such contracts as a potential interest rate to be used in case of payment defaults. Whilst this term could again be frustrated in case of radical changes to LIBOR as it currently exists, the ICMA considers that this is a much more manageable concern than that in respect of FRN pricing. In fact the ICMA's latest standard contract, GMRA 2011, has already removed this specific contractual reference to LIBOR, so there will be some migration away from its use as the market increasingly shifts to documenting contracts under GMRA 2011. The ICMA anticipates that this migration will take quite some time to complete, but this would not necessarily preclude the possibility that changes could be directly integrated into new contracts which are otherwise documented under GMRA 2000 or inserted into existing contracts (by way of market participants subscribing to an agreed change protocol).

The ICMA considers that it is likely there are other such examples where LIBOR will show up within the terms of fixed income contracts, but has not had time to attempt a comprehensive examination of the market ahead of the comment deadline. So long as the far more significant concerns relating to the FRN market are suitably taken into account in determining any changes to be adopted, the ICMA does not currently perceive that this should prove to be a significant issue.

## B. Points pertaining to the consideration of alternatives to LIBOR:

In the absence of a dependable daily flow of comparable data on actual unsecured interbank funding rates, across currencies and maturities, LIBOR was developed as a commercially appealing steady reference rate. This allowed banks a way to improve their ability to price their lending, whilst locking in a spread to their funding costs – thereby improving their asset and liability management capabilities. As cash and derivative markets evolved over time, the widely recognised benchmark represented by LIBOR became broadly adopted as a pricing reference for a variety of financial contracts entered into by a wide range of market participants. This background concerning "the development and use of LIBOR" is reflected in paragraphs 2.5 – 2.10 of the discussion paper.

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<sup>&</sup>lt;sup>2</sup> The GMRA is the most extensively used cross border repo master agreement and has reduced the risks associated with previously poorly documented repo transactions.

The discussion paper goes on to highlight (see Chart 3.A) that actual market transactions underlying LIBOR are currently concentrated in the shortest maturities, with only the few leading currencies seeing moderate activity as far out as one month maturity (three months for USD). The discussion paper recognises that this limits the extent to which actual transactions can be considered as an alternative to LIBOR, albeit that they could play some part in the process including by providing an element of corroboration of rates. The discussion paper also highlights that "even with a wider definition the number of eligible underlying transactions is likely to be small and might facilitate other users to influence the rate" (paragraph 3.13). Furthermore, if any such widening of the rate were intended to better reflect the realities of modern bank funding, the suggested array of funding instruments would have to include repo, but this would introduce unacceptable heterogeneity into the index.

The ICMA observes that, whilst the illiquidity of the unsecured interbank term deposit market is in part reflective of on-going financial crisis, the importance of that market in international transactions and its liquidity have been diminishing since at least the mid-1990s. This reflects factors such as tighter regulatory capital requirements for credit risk; competition for international equity by banks and allied pressure to improve their returns on equity; greater efficiency in FX with the automation of spot trading; the reduction in the number of European currencies with the introduction of the euro leading to the centralisation of liquidity management by international banks; the consolidation of banks and consequent reduction in credit lines to counterparties; and a switch from interbank lending to the funding of hedge funds and other securities dealers. The financial crisis has therefore served to accelerate a well-established trend and the regulatory response, in the form of enhanced capital and liquidity requirements, has reinforced this evolution. This means that, although the effects of the financial crisis have considerably exaggerated underlying problems, the unwinding of the crisis is unlikely to restore the liquidity of the interbank term deposit market. Nor can reform of the calculation mechanism of LIBOR solve the underlying problem of term illiquidity in this market. Given this, the ICMA sees that the value of reform lies in changes to best assure the production of a more impartial measure of an illiquid market.

Section 4 of the discussion paper explores "Alternatives to LIBOR" and presents an interesting comparison (Table 4.A) of interest rate instruments. As the discussion paper states (paragraph 4.17) "Each interest rate instrument has advantages and disadvantages" and "Ultimately, the decision over which type of benchmark should be used for a particular transaction will be taken depending on the intended use of the benchmark." The ICMA notes that key attractions which aided LIBORs growth included that it offered a steady and independent market benchmark. Broadly speaking, the ICMA considers that where market participants have chosen to utilise LIBOR this is reflective of the fact that it is commercially suitable. This does not mean that alternatives would not prove suitable in some instances, but if there already were significantly better alternatives it seems reasonable to expect that the market would have migrated towards their utilisation.

In case the market is to migrate away from LIBOR to any extent it will be important for those holding both LIBOR based assets and LIBOR based liabilities to be able to migrate both their assets and their liabilities in a coordinated manner. The ICMA wishes to emphasise that, whilst it believes that it is commercially appropriate for the market to determine which benchmarks are best suited to the needs of specific transactions, this does not contradict the establishment of relevant regulatory and governance frameworks to underpin the robustness of whichever benchmark the market opts to utilise.

Given its longstanding engagement with the ECP market the ICMA has looked particularly at paragraph 4.13 of the discussion paper, which concerns "Certificates of deposit (CDs) or commercial paper (CP)". The ICMA highlights that the vast majority of ECP activity is denominated in either EUR, USD or GBP; and that the weighted average tenor of all June new issues ( $\in$ ,  $\,$ \$,  $\,$ £) was 80 days (source: Euroclear). So activity in this market segment is concentrated in much the same way as the actual market transactions underlying LIBOR which the discussion paper illustrates (Chart 3.A).

Over the years the ICMA's European Repo Council ("ERC")<sup>4</sup> has contributed to the establishment of a robust infrastructure to underpin the European repo market, including through the development of the GMRA; and hence the ICMA has also closely considered paragraph 4.16 of the discussion paper, which concerns "Repurchase agreements ("repo rates")". The ICMA does not disagree with what is said in this paragraph of the discussion paper, but would like to add a few further thoughts regarding difficulties associated with the possible utilisation of repo indices as potential alternative benchmarks.

Repos are a popular recommendation as an alternative to LIBOR and other unsecured money market indices. This may seem a natural choice, given that repo has become a core component of many banks funding and that term repo rates are increasingly available (the maturity distribution of repo in Europe currently being less skewed to very short terms than that of unsecured interbank deposits). Unfortunately, experience highlights the difficulties with developing repo indices beyond overnight or tomorrow/next-day ("T/N"). Features such as haircuts/initial margins and rights of substitution are sometimes cited as problems but these are not insurmountable. The real issue is the sensitivity of term repo rates to the credit and liquidity risks of collateral. This fact has obviously posed a particular problem in the current crisis, which has seen a dramatic divergence in the yields of government bonds, which form the core of the repo market and were previously treated as comparable risks.

In normal market conditions, one would look for the GC ("general collateral") repo rate in a particular currency. These are the rates for borrowing against generally-acceptable collateral, based upon the concept of a "GC basket" comprised of securities (deemed to have virtually the same credit and liquidity risks) which most or all core repo market participants are willing to accept as collateral at the same rate. Which collateral securities are accepted as GC inevitably varies over time. Thus, on occasion, securities which were formerly treated as GC will suddenly start to be refused or accepted only at higher repo rates. Alternatively, some GC securities will "go on special", which happens when the repo rate for a particular security becomes distorted as relative demand for it prompts potential buyers in the repo market to bid lower repo rates (than the equivalent GC rate) for this particular security.

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<sup>&</sup>lt;sup>3</sup> The ICMA is concerned that the text of paragraph 4.13 of the discussion paper fails to convey an accurate reflection of this market segment. It is stated that "Prices of these instruments from trading in the secondary market can be used to generate a yield", but secondary market trades are not used in this way. Issuers set their pricing by basic supply and demand in the primary market, with the issuance of banks' CPs and CDs being very highly correlated to their cash issuance rates (indeed for most financial institutions their CP, CD and deposit rates are essentially the same). Paragraph 4.13 goes on to state that "CDs and CP are issued by commercial banks and hence reflect the credit risk of the issuer. CDs are also issued by some central banks (known as "bank bills"), which removes credit risk." The ICMA notes that in practice CDs and CPs are issued by a whole spectrum of banks, sovereigns, supranationals, agencies and corporates, with each issuer having its own credit risk characteristics (i.e. it is not the case that bill rates are free of credit risk). In its final point, paragraph 4.13 reports that "There are low volumes in both the primary and secondary markets for CDs and CP; these markets have been adversely affected by concerns for counterparty credit risk since 2007-08." Considering the first half of this sentence, the ICMA sees that taken in aggregate there are in fact quite meaningful levels of observable market activity (albeit concentrated in certain currencies and tenors). To illustrate, the amount of ECP outstanding continues to consistently exceed \$500bn (source: Euroclear); and there is a similarly sized French market, besides other domestic markets such as those for CDs in London and Belgium. Moving on to address the second half of the previously referenced sentence, the ICMA observes that the actual pattern of market activity cannot really be so simply characterised; and in fact counterparty credit risk aversion is to some extent a positive factor for the short end of the market, where assets are less risky.

So the best possible point of reference would seem to be one of the more formally defined GC baskets, which are fairly static, such as used in GC financing systems defined by CCPs or (in the case of Sterling DBV) the settlement system. The stability of most of these GC baskets depends on the guarantee offered by the CCP and/or their eligibility for refinancing at the central bank.

However, to date, formal baskets have generated only overnight indices, for example GC Pooling EUR Overnight Index ("GCPI"). The limitation of formal GC basket indices to the overnight tenor suggests that liquidity is skewed towards overnight and/or that collateral risks are still an issue within such baskets and make term repo rates too divergent, notwithstanding CCP or central bank guarantees (perhaps because of higher haircuts/initial margins and greater exposure to margin calls on some securities in a basket). But, even overnight and other one-day indices do not appear to have been widely adopted by the market; and in the case of the GCPI, there is a problem in that this index is relevant only to those banks which are members of Eurex Repo.

Nevertheless, the ICMA also highlights that the market is continuing to evolve and notes that in the US the DTCC GCF Repo Index fixing (overnight) is now being used as a benchmark for repo futures, which NYSE Liffe have recently started clearing. Meanwhile in Europe a topical example is the 20 August announcement that in Q4 2012 BrokerTec and MTS will launch a daily repo index series for the sovereign bond markets of the main eurozone countries. The indices will be calculated with one-day repo transactions, which represent the bulk of trading activity; and will be backed by traded volume, executed on electronic trading platforms and cleared via central counterparties, rather than based on indicative quotes.

#### C. Brief observations regarding other existing benchmarks:

The ICMA notes that the discussion paper already explores "other inter-bank rates" (paragraphs 5.5 – 5.9) including, but by no means restricted to, EURIBOR (which, although similar in some respects to LIBOR, is already subject to its own, different derivation procedures); and that it notes the SONIA and RONIA indices created by the WMBA. Given the extensive engagement which ICMA has with the European repo market, another index which is of particular interest to ICMA is Europe, which is sponsored by the European Banking Federation (EBF) and published by Thomson Reuters.

Eurepo is the rate at which, at 11.00 a.m. Brussels time, one bank offers, in the euro-zone and worldwide, funds in euro to another bank if in exchange the former receives from the latter the best collateral within the most actively traded European repo market. The range of Eurepo quoted maturities are T/N, 1, 2 and 3 weeks and 1, 2, 3, 6, 9 and 12 months, and these quotes are derived from panel banks submitting the best bids in the market – however, panel banks submitting the bids are expected, under normal circumstances, to transact at these levels. Eurepo may be used in a number of ways in financial markets (e.g. basis swaps against EURIBOR).

### **Concluding statement:**

The ICMA appreciates the valuable contribution made by the Wheatley Review through this public consultation process and would like to thank the Wheatley Review for its careful consideration of the points made in this response, which the ICMA would be happy to discuss in a meeting with the Wheatley Review team should they consider such to be helpful. The ICMA will continue to closely follow related developments and remains at your disposal to discuss any of the above points, or any further questions which may be relevant to the assessment of international capital market impacts as work progresses.

Yours faithfully,

David Hiscock

Senior Director - Market Practice and Regulatory Policy

**ICMA** 

#### Annex 1

# ICMA analysis of LIBOR based FRNs

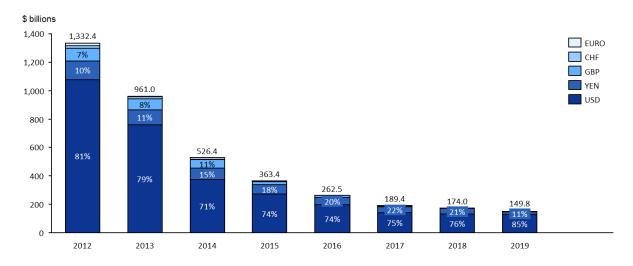
For the purposes of its analysis of LIBOR based FRNs, the ICMA has sourced Dealogic data to identify transactions with FRN issue types. On this basis, the ICMA finds that there is an amount of \$1.5tn equivalent of outstanding FRN transactions with LIBOR as benchmark as at 24 August 2012.

Akin to the illustration provided by Chart 2.C in the discussion paper, the ICMA has analysed this total outstanding amount of LIBOR based FRNs, by currency and by LIBOR tenor (amounts in currencies and tenors not shown are insignificant):

	1m	3m	6m	12m	Total
USD	12%	66%	5%	0%	82%
GBP	0%	6%	0%	0%	6%
EURO	0%	1%	0%	0%	1%
CHF	0%	2%	0%	0%	2%
YEN	0%	6%	2%	0%	9%
Total	12%	81%	7%	0%	100%

Considering this population of currently outstanding LIBOR based FRNs, the ICMA has reviewed the maturity dates of the transactions to identify how much of the aggregate \$1.5tn will still have a future maturity date as at the end of each year to the end of the decade:

# Maturity of Currently Outstanding LIBOR FRNs



Complementary to the above analysis of currently outstanding LIBOR based FRNs, the ICMA has also interrogated Dealogic to identify LIBOR FRN issuance volumes over the past decade. This shows the following evolution:

# Historical Issuance Volumes of LIBOR FRNs

