SPEECHES & TESTIMONY

Remarks of Chairman J. Christopher Giancarlo before 2018 Financial Stability Conference, Federal Reserve Bank of Cleveland, Office of Financial Research, Washington, D.C.

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Good afternoon.

The theme of this year's conference – financial markets and their implications for financial stability – is a fascinating one.

As a market regulator thinking about financial stability, I am drawn to Andrew Lo's adaptive markets hypothesis that markets are inherently dynamic, evolving and adapting in fits and starts over time.[1] They cannot be readily modelled and plotted using concepts from physics. Rather, they are most aptly viewed as complex biological ecosystems.

If Lo is right (and I believe he is), then market management is less a task of putting in place brilliantly designed market frameworks and stepping back to let them operate, but rather the work of active and continuing market engagement and husbandry, testing market resilience, enhancing vitality and mitigating fragility. In this view, market reform, in which we all have been mightily engaged these past ten years, is not "one and done" but continuous, agile and iterative.

I would like to highlight two critical efforts that CFTC is engaged in. First, adjusting swaps market reform to enable greater diversity in regulated trade execution and reducing impediments to swaps clearing, and second, benchmark reform and the transition from LIBOR to alternative risk free rates.

Derivatives Markets Reform

The G-20 reforms from over 10 years ago aimed to strengthen the stability of the global financial system by requiring: (1) banks to hold more capital, (2) central clearing for standardized swaps, (3) exchange of margins for uncleared swaps, (4) public and regulatory reporting of swap transactions, and finally, (5) where appropriate, for trading of swaps on regulated platforms.

Congress was prompt in adopting most of these swaps market reforms in Title VII of the Dodd-Frank Act. The CFTC was also quick out of the gate to implement all of the major Dodd-Frank rules – a great credit to my predecessor chairmen. Since then, the Commission remains engaged in multiple efforts to continually assess the impact of these rules on US markets.

Greater Diversity of Trade Execution Methods

I have been a consistent supporter of Title VII of Dodd-Frank and support much of the way the CFTC has implemented the law. Yet, I have been critical of the CFTC's implementation of the trading mandate, questioning whether prescriptive CFTC rules on execution methods for swaps trading actually helps improve financial stability or just increases market concentration by platform operators with limited methods of trade execution, threatening the very financial stability we seek to enhance.

When presented with evidence that targeted changes can help improve overall market functioning without impacting the larger financial stability goals, I believe we must remain willing to adjust our rule frameworks. That is why the Commission voted on a proposal a few weeks ago for changes to our swaps trading rules to encompass a wider scope of trading activity while enabling greater transactional flexibility to encourage increased competition and innovation. We look forward to wide ranging public input and discussion on this proposal.

Removing Impediments to Clearing

We also look outside our turf to other rules, both in the US and internationally, potentially impacting the US derivatives markets. In particular, there has been bipartisan concern at the Commission about the impact of the bank capital rules on incentives to submit swaps transactions to central counterparty clearing, one of the key G-20 swaps market reforms.

Fortunately, about a year and a half ago, the Financial Stability Board (FSB) decided to sponsor a study on impact of the interaction of capital, clearing, and margin rules on the incentives of firms to centrally clear swaps transactions.

Due to its expertise in derivatives markets and implementation of swaps reform, the CFTC was invited to co-chair the study by the FSB's Derivative Assessment Team (DAT), despite not being a member of the FSB. The other co-chair was the Bank of England. This co-captain arrangement ensured that expertise from both banking (so-called macro prudential policy) and markets (micro prudential policy) underlay the study.

The final report was published earlier this month.[2] I would like to highlight a few key learnings from the process, the analysis and the findings.

First, given the broad scope as well as the complex interaction among the regulatory factors, diverse set of institutions, and the dynamics of the derivatives market structure, the study draws upon a rich data set – a mix of qualitative and quantitative information.

Second, the study follows extensive outreach with active market participants. It considered extensive empirical analysis using quantitative data sourced from authorities and from surveys of large dealers to examine in detail the specific aspects of the capital rules and highlights inefficiencies in the calibration of these rules.

Third, the study evaluated the data through the lens of the trade-off between financial stability goals and our collective interest in efficient and resilient market functioning.

Specifically, the DAT study found that large banks and large buy-side firms, especially those active in the derivatives markets, are incentivized to clear. But for different reasons – capital rules for banks, and trading liquidity for the active clients. As these firms collectively are key transmission mechanisms for financial shocks, the G-20 reforms are helping to mitigate systemic risks from the derivatives markets.

On the other hand, the reforms appear to be having a negative impact on smaller and less active market participants that are nevertheless obligated to centrally clear standardized swaps. That is because clearing service providers, mostly affiliates of large banks, are dis-incentivized by capital rules from accepting the business of such less active market participants. The report provides some interesting narrative on the various efforts by the clearing members to balance their dual responsibility – helping key corporate clients access the derivatives markets, while earning sufficient revenue to cover costs.

Finally, the report has identified multiple areas for further study and research both by the official sector, as well as by academic experts, like those assembled here today. I remain a big fan of econometric analysis, and will encourage the Cleveland Fed and the Office of Financial Research to dedicate next year's conference to show-case research on some of the issues flagged in the DAT report.

The CFTC remains committed to working with the US banking regulators, the Board of Governors of the Federal Reserve System, the FDIC, and the OCC, the key agencies who hold the pen on capital rules for the US banking system, as well as the Basel Committee and its other members, to educate them about the regulatory framework in place for cleared derivatives.

A key point of elucidation is that US law prohibits banks providing clearing services from leveraging client clearing margin for any purposes other than to cover clients' derivatives exposures. This point is not adequately reflected in US banking regulators current formulation of the supplementary leverage ratio that treats such clearing margin as leveragable bank capital.

The DAT study team worked closely with the Basel Committee and other standard setting bodies. You might be aware that the Basel Committee has also issued a consultation seeking comments of specific proposals to re-calibrate the leverage ratio.[3] The US authorities also have a proposal out for comments on related aspects of the Basel III rules.[4] I remain optimistic that given the empirical evidence presented by the DAT study, various authorities will consider amendments to their rules to help incentivize central clearing, without having to compromise financial stability goals.

Benchmark Reform

I now turn to the matter of benchmark reform.

I am sure everyone here is familiar with the LIBOR, the short-term unsecured interest rate benchmark. It used to reflect the rate of interest at which money center banks were willing to lend money to each other. Following unfortunate incidents of LIBOR rate rigging, for which the CFTC and others brought numerous enforcement actions that led to subsequent benchmark regulation in Europe, the Financial Conduct Authority regulated the ICE Benchmark Administrator. Changes to the methodology and improved controls at contributor banks have reduced the risk of rate manipulation.

Despite these efforts, markets have moved on. Money center banks no longer fund their operations through short-term unsecured loans for 1-month, 3-month, 6-month and so on. Instead, they borrow and lend money overnight on an unsecured basis, enter into overnight secured transactions called repos and borrow money from the capital markets by issuing corporate bonds – 2 year, 5 year tenors.

The fact is that there is no longer a liquid market in unsecured inter-bank term lending underpinning LIBOR. Based on statistics shared by the Federal Reserve Board, there are less than six to seven transactions per day at market rates to support one-and three-month LIBOR across all the submitting banks. [5] Longer maturities have fewer than these. For three-month LIBOR - the standard reference rate in the derivatives markets - on most days, there is less than $ 1 billion of borrowings among the largest banks; on many less days, we see less than $100 million. For one-month LIBOR, the median daily number of actual borrowing transactions which are observable in the marketplace in Q2 2018 was five.

Yet, while LIBOR is no longer based on a thriving market, there is no question that LIBOR remains of systemic importance to global financial markets. Based on estimates published by the US Federal Reserve, there are over $200 trillion worth of financial instruments (equivalent to 10 times US GDP) referencing the US$ LIBOR.[6] While most of this exposure, approximately 95%, is in derivatives (futures and swaps), it also serves as a reference rate for:

- $3.4 trillion in business loans
- $1.8 trillion in floating rate debt
- $1.8 trillion in securitizations, and
- $1.3 trillion in retail mortgages and other consumer and student loans.

LIBOR clearly touches each one of us. From the terms of the most basic home mortgage, to student loan agreements, auto financing contracts, and credit card purchases, LIBOR is pervasive throughout the consumer economy. It is similarly extensive in business and trade finance worldwide.

Regulatory Response

So, on one hand LIBOR is widely used across the financial system and, on the other hand, it is built upon a dwindling market: a heavy edifice on a deteriorating foundation, a tower waiting to fall. The potential for systemic risk posed by this situation is obvious. A regulatory response is clearly appropriate.

Yet, reforming benchmarks is a complex and delicate process, and cannot be done through heavy handed regulatory rulemaking. It was recognized early on by my predecessor, CFTC Chairman Tim Massad, and his contemporaries at the FCA and the Fed that reform should be driven primarily by the private sector with active public sector encouragement and coordination.

In July 2013, the FSB established an Official Sector Steering Group (OSSG), which includes senior officials from central banks and regulatory agencies, including the CFTC Chair.[7] The OSSG serves to focus the FSB's work on the interest rate benchmarks that are considered to play the most fundamental role in the global financial system.

The FSB published its recommendations in July 2014 and called for the development of alternative interest rate benchmarks. A determination was made that the banks' funding behavior has changed fundamentally, and the benchmarks should reflect these changes.

In November 2014, the Alternate Reference Rates Committee, or ARRC,[8] was convened by the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York. The ARRC consists of a group of banks, market participants, industry associations, the CFTC and other US financial regulators.

The ARRC was tasked with two primary goals:

- identify an alternative reference rate to replace LIBOR; and
- develop a market strategy to effect the transition.

After deliberating for over two years, in June 2017, the ARRC selected the Secured Overnight Financing Rate (or SOFR) as the replacement for LIBOR.[9] SOFR's publication began in April of this year.

SOFR is calculated by the official sector and is based on actual transactions in the repo markets – interestingly, compared to the less than US$1 billion on a good day transacted in the 3-month LIBOR, the SOFR is according to ARRC based on daily repo volumes of over US$700 billion.

Trading in SOFR futures began in the United States in May and the initial trading volumes and liquidity are quite promising. Daily trading volumes for this relatively brand new contract are bigger than the 3-month LIBOR transactions.[10] Firms have started transacting cleared swaps referencing SOFR.

LIBOR'S Days Numbered

The days are numbered for LIBOR. Undoubtedly, there have been huge improvements in the governance process to produce the LIBOR for which the benchmark administrator and the contributing banks deserve much credit. Yet, governance improvements cannot offset the fact that banks have left the marketplace for 3-month unsecured loans. Today, it is only the regulatory authority of the FCA that causes major banks to continue making submissions from which LIBOR is calculated. And that also will not last. Earlier this year, FCA Chief Executive Andrew Bailey[11] said that come 2021, the FCA will no longer be willing to exercise this authority to compel LIBOR submissions.

At some point thereafter, as a critical mass of panel banks quit, the FCA may have to make a determination that the LIBOR is no longer a representative benchmark. If the FCA makes such a determination, supervised firms such as banks, corporates, exchanges, and CCPs operating under UK or EU jurisdiction may no longer be allowed under EU regulation to reference LIBOR for any new derivatives or securities.

Legacy trades can continue to reference LIBOR – what is already being called "*Zombie* LIBOR" – but imagine the havoc that will be caused in the marketplace if exchanges de-list their contracts, if CCPs cannot accept new swaps for clearing – the whole ecosystem developed to support efficient risk-transfer in our global markets will be in dis-array. Hence, it is critical that legacy positions too move from LIBOR.

I am sure there are some who would rather prefer that we regulators compel banks to continue making submissions. But that would be equivalent to perpetuating a fiction that it is business as usual in the inter-bank term lending markets – that LIBOR is based on hundreds of billions US$ of daily transactions. Unfortunately, we cannot countenance that fiction and the systemic risk it hazards.

Next Steps

Earlier I mentioned the Alternative Reference Rate Committee that has been tasked with leading and directing the transition away from LIBOR to SOFR. It is a private sector led effort. While the CFTC and other US regulators participate as ex-officio members, ARRC's decisions are made by its private sector members. For example, the decision to select the SOFR as the new reference rate for US Dollar instruments was voted upon by the members of ARRC and supported by the ARRC's advisory group of end users.

ARRC is now in its 2.0 phase. It is busy with the education and implementation of the transition from LIBOR to SOFR. Its membership has been expanded to a much wider group of market participants. Multiple working groups have been formed to focus on a slew of issues, not all directly related to the derivatives markets.

Let me list a few key initiatives – all happening even as we speak.

ISDA has just closed on a consultation on new fallback language and triggers for a few foreign currencies: GBP, CHF and JPY.[12] ISDA will soon be publishing the responses from the first survey,[13] and subsequently be issuing a similar consultation for the US Dollar and for the Euro.

ARRC has formed working groups to examine implications of this transition in other related, but non-derivatives markets – Floating Rate Notes, Business Loans and CLOs, Securitizations, and Mortgages and Consumer Loans. Like ISDA has done for derivatives contracts, consultations have been released for Floating Rate Notes and Syndicated Business Loans.[14] We expect the groups working on Securitizations and Bilateral Loans to publish their consultation in coming weeks.

In addition to these market-related groups, there are other working groups under the ARRC – Paced Transition, Market Structures, Term Rate, Regulatory Issues, Accounting and Tax, Legal, Outreach and Communications. The ARRC has already written to us and other US and global regulators alerting us to a slew of CFTC rules impacting the transition from LIBOR to SOFR.[15] I am happy to report that our staff has been interacting proactively with this group, looking to support an efficient transition. There is a strong commitment from the global regulatory community to ensure that we remove regulatory hurdles for this transition.

The CFTC's own Market Risk Advisory Committee (MRAC), under the guidance of Commissioner Rostin Behnam, has begun thoughtful consideration of a range of issues related to the transition from LIBOR to SOFR. At a recent meeting, MRAC reviewed the progress of benchmark transition and considered the effect of reform on CFTC regulated derivatives contracts.[16] I am confident that MRAC will help troubleshoot emerging issues and make important contributions to the establishment of SOFR as a sound and reliable underpinning for a broad range of traded derivatives.

Transition Underway

Clearly, there is a lot of work being done. Yet, some firms are concerned that a necessary condition for transitioning away from the LIBOR is the availability of a forward-looking SOFR-based term rate. Product development experts know how to do the math to compute a forward-looking term rate implied by SOFR futures and swaps. But, development of such a robust, IOSCO compliant rate[17] will depend on the liquidity in SOFR derivatives markets, both futures and swaps. If firms do not step up today and transact in SOFR derivatives, development of a robust-term rate will be a challenge.

LCH and CME are both clearing SOFR swaps and doing so quite successfully. Let me suggest that the next time that market participants call a dealer to price an Interest Rate Swap, they consider doing a SOFR swap and clearing it through one of these CCPs. Let me also suggest that the next time a bank calls a market participant offering an interesting trading opportunity on a 10-year rate swap where the floating rate is linked to the LIBOR, the market participant should ask the sales trader if he or she really expects LIBOR to be around for 10-years – and while at it, check to see if the bank is a member of ARRC.

And here is another suggestion for corporate treasurers, who may be raising funds by issuing fixed rate bonds and doing a fixed-float swap. In addition to checking the contractual language on the swap, find out if you really must have the floating rate linked to the LIBOR. Do the math on the potential impact when, in 2021, the bank wants to convert the reference rate from LIBOR to SOFR. Maybe ask the bank for a quote for both LIBOR and SOFR swaps?

Conclusion

I began these remarks by referring to Professor Andrew Lo's adaptive markets hypothesis. I am also drawn to Nassim Taleb's bold concept of "antifragility,"[18] the notion that some things actually benefit from shocks; they thrive and grow when exposed to volatility, randomness, disorder, and stress. Taleb warns that naïve over-intervention in complex systems such as financial markets make them more vulnerable, not less, to cascading runaway chains of reactions and ultimately fragile in the face of outsized crisis events. He argues that that financial markets that, instead, are allowed to grow organically through trial and error and gain and loss, with careful attention, but also plenty of diversity, redundancy, cyclical stresses and disorders, best resemble biological organisms that adapt and, indeed, thrive, in the face of shock and partial destruction.

Our current approach at the CFTC to market oversight is mindful of this insight. That is why we continue to focus on refining and increasing the flexibility of the CFTC's framework for regulated swaps execution and addressing disincentives posed by bank capital rules to central counterparty clearing. In both cases, our steps are designed not to intervene with ever more complex regulatory structures, but to increase market diversity and reduce the risk of concentration of market services – essential components of healthy market ecosystems.

At the same time, we continue to work with fellow regulators to encourage and coordinate – but not dictate the details of - the enormous project of LIBOR benchmark reform. The forward course for the US markets is clear – it is away from LIBOR toward SOFR. The official sector will assist and stay close by the course, helping coordinate and encourage, prod and explain. Yet, the means of travel is also clear. It is driven by market participants, with engagement by both the buy-side and the sell-side. Yet, it is ultimately a market derived solution.

Yes, there is a lot yet to be done. But it is worth the effort. As a great American once said about traveling to the moon, we go "not because [it] is easy, but because [it is] hard." You can say the same about enhancing financial stability. As stewards of trading markets, our work to make them healthier and more resilient goes on day after trading day, year after year. If done well, the work never ends.

Thank you.

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[1] *See generally*, Andrew W. Lo, *Adaptive Markets: Financial Evolution at the Speed of Thought* (Princeton University Press 2017).

[2] https://www.bis.org/publ/othp29.htm.

[3] https://www.bis.org/bcbs/publ/d451.htm.

[4] https://www.federalreserve.gov/newsevents/pressreleases/bcreg20181030a.htm.

[5] https://www.federalreserve.gov/newsevents/speech/quarles20180719a.htm.

[6] https://www.cftc.gov/sites/default/files/2018-07/mrac071218_AlternativeReferenceRates.pdf.

[7] http://www.fsb.org/what-we-do/policy-development/additional-policy-areas/reforming-financial-benchmarks/.

[8] https://www.newyorkfed.org/arrc.

[9] https://www.newyorkfed.org/medialibrary/microsites/arrc/files/2017/ARRC-press-release-Jun-22-2017.pdf.

[10] www.cmegroup.com.

[11] https://www.fca.org.uk/news/speeches/interest-rate-benchmark-reform-transition-world-without-libor.

[12] https://www.isda.org/2018/07/12/isda-publishes-consultation-on-benchmark-fallbacks/
[13] https://www.isda.org/2018/11/27/isda-publishes-preliminary-results-of-benchmark-consultation/.
[14] https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2018/ARRC-Sept-24-2018-announcement.pdf.
[15] https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2018/ARRC-July-16-2018-titleviiletter
[16] https://www.cftc.gov/About/CFTCCommittees/MarketRiskAdvisoryCommittee/mrac_meetings.html.
[17] http://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf.
[18] *See generally,* Nassim Nicholas Taleb, *Antifragile: Things That Gain From Disorder* (Random House 2012).