February 22, 2018

Robert W. Errett
Deputy Secretary
Securities and Exchange Commission,
100 F Street, NE
Washington, DC 20549

RE: FILE NUMBER SR-FICC-2018-001

Dear Mr Errett:

Ronin Capital, LLC ("Ronin") appreciates the opportunity to comment on a proposed rule change by the Fixed Income Clearing Corporation ("FICC") to make changes to the Required Fund Deposit Calculation in the Government Securities Division ("GSD") Rulebook.[1] As stated by the FICC, this proposed rule change is intended to "address GSD's existing VaR model deficiencies by replacing the full evaluation approach with the sensitivity approach."[2] For the reasons described below, Ronin strongly urges the Securities and Exchange Commission (the "Commission") to reject such rule modification in favor of developing a VaR model approach more commensurate with the risks of the U.S. Treasury market.

Rule 17Ad-22(e)(6)(i) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), requires the FICC to establish a risk-based margin system that produces margin levels that are "commensurate with, the risks and particular attributes of each relevant product, portfolio, and market."[3] Ronin believes the FICC's proposed sensitivity VaR model, as applied, fails to meet this standard and imposes an unnecessary competitive burden on its non-bank Netting Members. In our view, the preferred path forward should be to use the proposed sensitivity VaR model in a manner that more accurately reflects actual risk and to require the implementation of data sharing among the clearing agencies. This approach would enable more accurate assessment of risk, create more stability in the markets, and ensure greater liquidity in the U.S. Treasury market. In contrast, the FICC's proposed application of the sensitivity model wrongly uses only a subset of each Netting Member's portfolio and aggregates the risk of that subset across all Netting Members to determine the adequacy of the assets held in the Clearing Fund without utilizing data from the other clearing agencies that would provide a more complete view of risk to the Clearing Fund.

Background

Ronin Capital, LLC is a registered broker-dealer headquartered in Chicago. We engage in proprietary trading and do not have any customers. We trade a diversified list of products and deploy an equally diversified list of strategies among the various assets classes traded. We are active participants in the U.S. Treasury market and are self-clearing members of both the Fixed Income Clearing Corporation ("FICC") and the Chicago Mercantile Exchange ("CME"). Our trading strategies within the U.S. Fixed Income market would be best characterized as relative value and basis trading. Because we trade our own capital, we are acutely cognizant of the importance of managing our own risk. Given we hold overnight positions, we have a vested interest in the proper functioning of the U.S. Treasury market. We have served as "shock absorbers" and liquidity providers during the nearly two decades we have been involved in trading U.S. Treasuries, providing liquidity when volatility (and often opportunity) presents itself in the market.

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[1] SEC Release No. 34-82588; File No. SR-FICC-2018-001

[2] SEC Release No. 34-82588 p. 11

[3] See 17 CFR 240.17Ad-22(e)(6)(i)

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Introduction

The FICC states the need for making a change to its VaR methodology with the following statement:

> During the fourth quarter of 2016, FICC's current methodology for calculating the VaR
> Charge did not respond effectively to the market volatility that existed at that time. As a
> result, the VaR Charge did not achieve backtesting coverage at a 99% confidence level
> and therefore yielded backtesting deficiencies beyond FICC's risk tolerance.[4]

A simplistic solution for resolving any "backtesting deficiencies" is to construct a new VaR model that simply requires increased margin from Netting Members. While simply increasing the size of the Clearing Fund should result in fewer backtesting exceptions, the FICC must also ensure that any rule changes do not "impose any burden on competition not necessary or appropriate" in furtherance of the Exchange Act.[5] The FICC acknowledges that this proposed rule change might impose a competitive burden:

> At any point in time when the proposed change to the calculation of the Required Fund
> Deposit produces relatively greater increases in Required Fund Deposits for Netting
> Members that have lower operating margins or higher costs of capital than other Netting
> Members, the proposed change would burden competition.[6]

Ronin contends that this proposed rule change unduly burdens competition and that a VaR model redesign necessitating higher margin levels is unnecessary and unfair. Ronin believes certain flaws in the FICC's current backtesting methodology should be carefully examined before using violations under such methodology as justification for the proposed sensitivity VaR model.

The Need for a New VaR Model

The FICC is critically tasked with determining that each Netting Member's deposit to the GSD Clearing Fund is adequate to satisfy losses that may arise from the liquidation of that Netting Member's portfolio under a default scenario. Historical backtesting conducted by the FICC is intended to statistically validate the adequacy of deposits held in the Clearing Fund. As mandated by the Exchange Act, each clearing agency must also ensure that "backtesting practices are appropriate for determining the adequacy of the covered clearing agency's margin resources."[7] Ronin believes the backtesting practices currently employed by the FICC lack statistical rigor. The backtesting methodology arbitrarily assumes a three-day liquidation following a Netting Member default. FICC qualifies the "margin period of risk" as follows:

> The three-day liquidation period is sometimes referred to as the "margin period of risk"
> or "closeout-period." This period reflects the time between the most recent collection of
> the Required Fund Deposit from a defaulting Netting Member and the liquidation of such
> Netting Member's portfolio. FICC currently assumes that it would take three days to
> liquidate or hedge a portfolio in normal market conditions.[8]

First of all, the assumption that it would take three days to liquidate or hedge the portfolio of a defaulted Netting Member is simplistic and arbitrary. Notwithstanding vast differences in portfolio composition and size among Netting Members, the FICC assumes liquidity needs following a default will be identical for all Netting Members. Certainly, assuming a three-day liquidation period for all Netting Members is not "commensurate with the risks" facing the FICC during all possible member default scenarios.

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[4] SEC Release No. 34-82588 p. 10

[5] See 15 U.S.C. 78q-1(b)(3)(I)

[6] SEC Release No. 34-82588 p. 58

[7] See 17 CFR 240.17Ad-22(e)(6)(vi)(B)

[8] SEC Release No. 34-82588 p. 7

Furthermore, this "three-day liquidation period" assumption creates an arbitrary and extremely high hurdle for historical backtesting by overestimating the "closeout-period" risk posed to the FICC by many, if not all, of its Netting Members. This is simply because a single large market move is triple counted for backtesting purposes, which, practically speaking, ensures that backtesting coverage will not achieve the 99% confidence level whenever there is a single outsized market move. Ronin believes triple counting a single event, like the U.S. presidential election, because of an arbitrarily defined three-day "closeout-period" is not warranted or required by the Exchange Act. A Netting Member can only default a single time. Following an outsized market move, a Netting Member is either able to post the required margin or suffers a default. Counting a single event three times, when performing backtesting analysis, serves no true purpose on a statistical basis. Therefore, Ronin believes the FICC's apparent loss of confidence in the current VaR model is unfounded (see the Appendix for more detail).[9]

Outright Versus Basis Risk

The U.S. Treasury market plays a critical role in the global economy, serving as a "significant hedging vehicle" and a "risk-free benchmark for other financial instruments."[10] Despite the utility of U.S. Treasuries as a hedging instrument, the GSD is generally unable to differentiate hedged position taking from outright risk among its membership. In stark contrast, prime brokers, who have a complete understanding of each client's entire portfolio, are able to margin their clients more efficiently and effectively. Without the will or incentive for the clearing agencies to work together for the benefit of their respective members, however, the GSD lacks visibility into its members' true risk. Regrettably, clearing members bear the cost of this lack of visibility in the form of over-margining.

Consequently, Ronin believes that the FICC does not have a VaR model problem, but rather a data sharing problem. The GSD division of the FICC only "sees" a small subset of each Netting Member's portfolio. Better coordination with other clearing agencies would certainly enable the FICC to differentiate basis risk from outright risk and more efficiently and effectively margin its Netting Members. Ultimately, better coordination among clearing agencies would benefit both the FICC and its membership. It is intuitive that better data sharing among the clearing agencies would bring greater stability to the U.S. financial system. Yet, Ronin understands that such a directive would not be a trivial undertaking. However, successful implementation would certainly enable both clearing agencies and regulators to differentiate hedged position taking from outright risk, and therefore better safeguard the U.S. financial system.

Solution to the Wrong Problem

It is important to note that Ronin does not have any issue with the sensitivity VaR model as a statistical construct if applied correctly. The financial industry as a whole is very familiar with factor analysis. The FICC states that the sensitivity approach would improve transparency because "Netting Members typically use risk factor analysis for their own risk and financial reporting."[11] Unfortunately, there is a major difference between the utilization of factor analysis in industry practice when compared to the approach utilized by the FICC: industry participants apply statistical factor models to their entire portfolio whereas the FICC does not. The FICC is improperly employing a model meant to be applied to an entire portfolio to a portfolio subset. This certainly results in output that differs significantly from the VaR analysis conducted by Netting Members on their own internal portfolios. Ronin details this risk measurement disconnect in a previous comment letter[12] and will not repeat those arguments in this

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[9] See Appendix: Triple Counting a Single Event

[10] Joint Staff Report: The U.S. Treasury Market on October 15, 2014 p. 1

[11] SEC Release No. 34-82588 p. 17

[12] See letter from Robert E. Pooler Jr., Chief Financial Officer, Ronin, dated February 24, 2017, to Eduardo A. Aleman, Assistant Secretary, U.S. Securities and Exchange Commission ("Margin Proxy Comment Letter"); pp. 9-11

comment letter. However, it suffices to say that further cross-margin integration with the Chicago Mercantile Exchange (the "CME") and with the Mortgage-Backed Securities Division (the "MBSD") would enable the FICC to more appropriately margin the portfolios of Netting Members and help differentiate actual risk from the mere appearance of risk. Basis (or hedged) risk is much less volatile than outright risk (see Appendix for an example).[13] The FICC's inability to distinguish between basis risk and outright risk punishes hedged position taking and ultimately diminishes liquidity in the U.S. Treasury market.

The Desired End Justifies the Means

VaR models are statistical constructs. In order for statistical model-based output to prove valid, model input must also be valid and unbiased. Unfortunately, FICC intends to employ bias in its VaR analysis in order to maximize the amount of margin held in the Clearing Fund. The FICC is transparent regarding its intent to employ statistical bias:

> In the event FICC observes that the 10-year look-back period does not contain a sufficient number of stressed market conditions, FICC would have the ability to include an additional period of historically observed stressed market conditions to a 10-year lookback period or adjust the length of look-back period.[14]

This intention is clarified further:

> Under the proposed model, the 10-year look-back period would include the 2008/2009 financial crisis scenario.[15]

This is the very definition of statistical bias and ensures that Netting Members are continuously over-margined. As explained previously, the sensitivity VaR model has serious discriminatory side effects when applied incorrectly to portfolio subsets. Continuously retaining a "stressed period" does further statistical damage by employing significant bias. The statistical bias employed in this rule change as proposed is clearly unjustified, unless the desired end is to treat every day for risk-related purposes as if the market is continuously in the midst of the financial crisis or worse (see the Appendix for more detail).[16]

Final Note

While not specific to this rule proposal, Ronin would like to briefly comment on general trends regarding centralized clearing in the U.S. Treasury market. The FICC finds itself in a situation where significant volume in U.S. Treasuries continues to transact outside of centralized clearing because of an uncompelling cost/benefit model for high volume market participants. At the same time, regulatory changes have come fast and furious - adding to costs and reducing returns for Netting Members. As these cost pressures continue to increase, particularly challenging those Netting Members with higher costs of capital, the FICC might find itself in a situation where the only Netting Members remaining are Bank Netting Members. Lack of diversity among the Netting Membership could lead to serious problems if the next financial crisis is anything like the last. Certainly, lack of diversity could ultimately harm liquidity in the safest of asset classes - U.S. Treasuries.

There are clear solutions which would help reduce the economic cost of GSD Membership. All Netting Members would benefit tremendously if the FICC prioritized efforts for sharing data with other clearing agencies. Enhanced visibility would enable the FICC to differentiate outright risk from basis risk, while

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[13] See Appendix: Hedged Risk Versus Outright Risk

[14] SEC Release No. 34-82588 p. 18

[15] SEC Release No. 34-82588 p. 17

[16] See Appendix: Changing Input Data to Make the Statistics Work

cross-margin relief for Netting Members would ultimately benefit liquidity. Balance sheet restrictions have already had a negative effect on the prime broker model. Inefficient data sharing combined with increased margin demands threatens the economic viability of participation in centralized clearing for non-bank business models. Ironically, regulations focused on preventing future government bailouts are increasingly pressuring the very business models that did not require government assistance during the past financial crisis.

Conclusion

Ignoring the specific technical details of this new sensitivity VaR model, the overall effect of this proposed rule change is to treat every day as if the market was in the midst of a financial crisis and to require more margin from Netting Members at all times. Ronin contends that this blunt approach of requiring more margin by utilizing statistical bias is discriminatory and imposes an undue competitive burden on firms with a higher cost of capital.

Increasingly, changes to the GSD Rulebook are making it less economic for non-bank Netting Members to participate in centralized clearing. Smaller, non-bank Netting Members value direct participation in centralized clearing because direct participation enables a Netting Member to act on its own behalf. The ability to act independently proved crucial during the financial crisis, when bank balance sheets became constrained. Forced reliance on the prime broker model led to problems during the financial crisis when "clearing sponsors" encountered economic difficulties from their own proprietary trading. Centralized clearing is an essential safeguard for the U.S. financial system, but when the costs become uneconomic for non-bank business models, the loss of diversity could ultimately harm the U.S. financial system when the next crisis arrives.

In conclusion, Ronin contends that the newly proposed margining process is not "commensurate with, the risks and particular attributes of each relevant product, portfolio, and market."[17] As proposed, the sensitivity VaR model requires more margin of its Netting Members than is necessary, and thus, would unduly impose a competitive burden on Netting Members that have higher costs of capital. Over-margining also unfairly exposes smaller Netting Members, like Ronin, to greater potential risk of loss should one of the largest Netting Members default.[18] Consequently, Ronin believes the Commission should reject this proposed rule change and should, instead, support both data sharing among clearing agencies and the construction of a new VaR model that is statistically unbiased and a backtesting procedure that is more mathematically rigorous and commensurate with the risks of the U.S. Treasury market.

We thank the Commission for considering our comments. If you should have any questions, please contact me at ████████████████████ or ███████████ .

Sincerely,

Robert E. Pooler, Jr.
Chief Financial Officer
Ronin Capital, LLC

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[17] See 17 CFR 240.17Ad-22(e)(6)(i)

[18] See Margin Proxy Comment Letter p. 11

Appendix: Triple Counting a Single Event

A simple example is the best means of illustrating the "triple counting" flaw in FICC's current backtesting methodology. For this example, we assume the FICC charges 2% margin on a generic 7-YEAR security trading at par (similar to the margin rates that are currently associated with the Margin Proxy). For 100MM of this generic 7-YEAR security, the Netting Member would be required to post $2MM to the Clearing Fund (2% of $100MM).

Now, assume some unexpected macro event occurs (like the U.S. presidential election or an S&P downgrade), which causes U.S. Treasuries to decline substantially in price. The example below graphically represents the price of our generic 7-YEAR trading at par for several days before selling off 3 points on **day t** and closing below par at 97. After establishing this new market level, our generic 7-YEAR continues closing below par at 97 for the next three days.
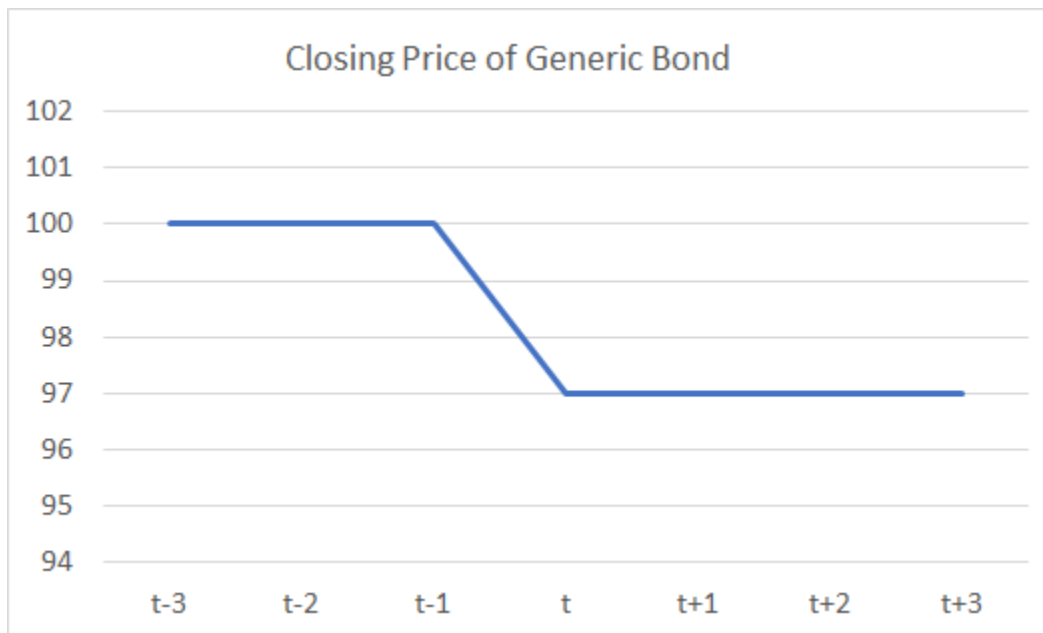
In this contrived example, a backtesting violation occurs. A $3MM mark-to-market loss is calculated after the close on **day t**. The $2MM posted to the Clearing Fund does not cover the $3MM loss - therefore the Netting Member fails the margin model backtest. However, because the FICC has arbitrarily defined a three-day "closeout-period," the backtesting violation caused by the outsized market move on **day t** is actually attributed to **day t-3**. Because the market continues to close at the newly established market level of 97 on subsequent days, the backtesting violations continue to pile up. There is a backtesting violation on **day t-2** and **day t-1** as well - a single market move is triple counted. Three backtesting violations in a single year results in a confidence level that falls below the 99% target - this is true simply because there are only around 250 trading days in a year. This "triple counting" of a single event overstates the risk to the Clearing Fund. On the morning of **day t+1**, the Netting Member either posts the required margin or defaults. Only a single default could originate from this unexpected market move. Triple counting the default risk of a single event makes no statistical sense.

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Appendix: Hedged Risk Versus Outright Risk

The following dataset details the significant difference between hedged risk and outright risk when analyzing the U.S. Treasury market in the period surrounding the 2016 U.S. presidential election. 3PM EST closing prices for the 10-YEAR on-the-run note (the 1 ½ 08/15/2026) are shown alongside the 3PM EST intraday snapshot of the Ultra 10-YEAR Dec16 treasury futures (TNZ16) contract for the dates surrounding the election.[19] Our internal risk model on 11/01/2016 showed dv01 equivalence for 100MM of the 10-YEAR and 704 contracts of TNZ16.

				PNL		
	10Y	TNZ16		10Y	TNZ16	
Date	Price (3PM)	Price (3PM)		100	-704	
11/1/2016	97.1484375	141.6796875				
11/2/2016	97.3359375	141.9765625		187,500	-209,000	-21,500
11/3/2016	97.2265625	141.8359375		-109,375	99,000	-10,375
11/4/2016	97.4765625	142.2265625		250,000	-275,000	-25,000
11/7/2016	97.0859375	141.6953125		-390,625	374,000	-16,625
11/8/2016	96.7734375	141.2109375		-312,500	341,000	28,500
11/9/2016	94.9765625	138.6640625		-1,796,875	1,793,000	-3,875
11/10/2016	94.4921875	137.9375		-484,375	511,500	27,125
11/14/2016	93.5546875	136.6640625		-937,500	896,500	-41,000
11/15/2016	93.3984375	136.3828125		-156,250	198,000	41,750
				-3,750,000	3,729,000	-21,000

During this short study, a 100MM LONG position of the 10-YEAR on-the-run would have suffered a $3.75MM loss when marked-to-market in isolation. However, hedging that same LONG position with a dv01 weighted position in TNZ16 futures - SHORT 704 futures contracts - would have resulted in a very small market-to-market loss of only 21K. This is significant, because the FICC has a cross-margin agreement with the CME and yet, Ultra 10-YEAR futures are not currently accepted as risk offsets. Obviously, better coordination between the CME and the FICC would help both clearing agencies better differentiate true risks to their respective clearing funds from risks that only exist because of insufficient sharing of data.

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[19] It is important as well as intuitive to utilize prices that are captured at the same time of day for doing any comparative analysis. Despite trading nearly 24 hours a day, the CME and U.S. Treasury markets have differing market close times.

Appendix: Changing Input Data to Make the Statistics Work

The graph below shows the path of 10-YEAR rates since the start of 2007 (graph courtesy of Bloomberg). As easily seen, the path of the 10-YEAR yield is rather jagged - some large yield changes appear to come quickly over relatively short periods of time.

Day over day changes in yield can also be quite significant. The table below (data also courtesy of Bloomberg) illustrates the most significant daily changes in the yield of the 10-YEAR note since the beginning of 2007. The largest daily change in yield for the 10-YEAR note occured on 3/18/2009 when the 10-YEAR yield declined over 47bps on the day QE was announced. The 20th largest change on day occurred on 11/09/2016 when the 10-YEAR yield rose 20bps on the day following the 2016 U.S. presidential election.

Date	Yield	Δ Yield	Date	Yield	Δ Yield
3/18/2009	2.533	-0.4737	8/11/2011	2.3399	0.2338
9/15/2008	3.3868	-0.3319	3/24/2008	3.5563	0.2228
11/20/2008	3.0131	-0.3074	8/4/2011	2.4028	-0.2174
9/29/2008	3.5776	-0.2743	11/25/2008	3.1078	-0.2158
9/19/2008	3.8105	0.2669	6/1/2009	3.6726	0.2132
12/16/2008	2.2558	-0.2569	11/19/2008	3.3205	-0.2089
9/30/2008	3.8234	0.2457	11/13/2008	3.8525	0.2059
2/17/2009	2.648	-0.2415	12/7/2010	3.1257	0.2056
8/8/2011	2.3179	-0.2406	10/31/2011	2.1133	-0.2034
7/5/2013	2.7391	0.2359	11/9/2016	2.0571	0.2024

It is significant that eight of the ten largest daily yield changes happened during a six-month period at the height of the financial crisis. Naturally, some other non-crisis entries exist on this list. Each of these other large moves is tied to a major global event or significant Federal Reserve policy change: QE announcements, BREXIT, Greek crisis, S&P downgrade of U.S. debt, tax cut extensions, etc. While it is clear that significant daily market moves have happened since the financial crisis, it is also readily

observable that 16 of the largest 27 daily moves in the 10-YEAR note occurred during a 1-year period at the height of the financial crisis.

The above observation is important because the FICC proposes to include an "additional stressed period" as part of its 10-year lookback.[20] This inclusion of a "stressed period" adds significant statistical bias to the output of the sensitivity VaR model. 10 years of data includes 2500 distinct observations. Adding a year of additional observations (the additional stressed period of 2008-2009) increases the number of observations to 2750. In order to achieve 99% confidence, the 27th worst observation will be utilized in order to determine the margin that each Netting Member is required to post to the Clearing Fund. Many of the most volatile observations will never age out of the VaR model because these observations will be retained as part of the "additional stressed period." This is certainly a perversion of statistics and results in the over-margining of Netting Members. It is elementary to conclude that Netting Members will need to meet a much higher standard than 99% statistical confidence when the input data is tailored explicitly to maximize the size of the Clearing Fund.

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[20] SEC Release No. 34-82588 p. 17