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April 22, 2016

David R. Pearl Office of the Executive Secretary U.S. Department of the Treasury 1500 Pennsylvania Avenue, NW Washington, D.C. 20220

Re: Notice Seeking Public Comment on the Evolution of the Treasury Market Structure Docket No. TREAS-DO-2015-0013

Dear Mr. Pearl:

The FIA Principal Traders Group ("FIA PTG")<sup>1</sup> appreciates the opportunity to contribute to the above-referenced notice and request for information ("RFI"). <sup>2</sup> FIA PTG is an association comprised of principal trading firms ("PTFs"). As recognized in the RFI, "...technology advancements, and the associated growth in high-speed electronic trading has contributed to the growing presence of PTFs, with these firms now accounting for the majority of trading and standing quotes in the order book in both futures and interdealer cash markets." <sup>3</sup> We read with great interest the Joint Staff Report: The U.S. Treasury Market on October 15, 2014 ("Joint Report")<sup>4</sup> and on the one-year anniversary of this event, FIA PTG published our response<sup>5</sup> to the Joint Report that briefly commented on many of the topics covered in the RFI.

<sup>&</sup>lt;sup>1</sup> FIA PTG is an association of 25 firms that trade their own capital on exchanges in futures, options and equities markets worldwide. FIA PTG members engage in manual, automated, and hybrid methods of trading, and they are active in a wide variety of asset classes, including equities, fixed income, foreign exchange and commodities. FIA PTG member firms serve as a critical source of liquidity, allowing those who use the markets, including individual investors, to manage their risks and invest effectively. FIA PTG advocates for open access to markets, transparency, and data-driven policy.

 <sup>&</sup>lt;sup>2</sup> <u>https://www.treasury.gov/press-center/press-releases/Documents/Market%20Structure%20RFI%20Final.pdf</u>
 <sup>3</sup> Ibid. 2.

<sup>&</sup>lt;sup>4</sup> <u>https://www.treasury.gov/press-center/press-releases/Documents/Joint\_Staff\_Report\_Treasury\_10-15-2015.pdf</u>

https://ptg.fia.org/sites/default/files/content\_attachments/FIAPTG\_Response\_Joint\_Staff\_Report\_on\_US\_Treasury\_ Market\_0.pdf

David R. Pearl, U.S. Department of the Treasury April 22, 2016 Page 2

Our detailed responses to the questions in the RFI follow this letter – here are a few highlights from those responses:

**Diversification of liquidity providers benefits markets.** As noted in the RFI, historically the U.S. Treasury cash market has been split between the interdealer markets where dealers trade with one another and the dealer-to-customer market where dealers trade with their clients. Over the past decade with the launch of electronic trading platforms followed by opening access to non-dealers, trading on the inter-dealer cash platforms has evolved. As the Joint Report notes, the available data indicates PTFs now account for the majority of trading and the "vast majority" of market depth in the multilateral, platform-based U.S. Treasury markets. Diversity in market participants providing liquidity proved very valuable on October 15, 2014 when PTFs continued to provide liquidity and maintain tight bid-ask spreads, even during the period of unusually high volatility.

Any changes in U.S. Treasury market structure must first acknowledge the benefits afforded by technological innovations. As electronic trading in the U.S. Treasury market continues to evolve, FIA PTG expects to see additional evidence that the benefits automation and competition have brought to other markets are taking hold in the U.S. Treasury market. These benefits include:

- improved transparency for regulators and market participants,
- lower costs for investors from reduced bid-ask spreads and increased competitive pressures across the marketplace,
- more efficient price discovery as technology enables market participants to process and react to all relevant information, including that available in correlated markets, in a reliable and timely manner, and
- less concentration of liquidity providers leads to more resilient markets.

**FIA PTG supports the use of both pre- and post-trade risk controls as well as self-match prevention technology in the U.S. Treasury market.**<sup>6</sup> Rather than focus on "speed", FIA PTG believes that policy makers should focus on the benefits and risks of automation. Automation has provided the market many benefits including those detailed above as well as a highly transparent electronic audit trail. Automation also introduces new risks, and the industry has developed safeguards to manage these risks in many electronic markets. Automated trading is used by a range of market participants, all of whom we believe have a responsibility to implement appropriate risk controls.

<sup>&</sup>lt;sup>6</sup> FIA PTG, in conjunction with the FIA, has published various recommendations focused on pre- and post-trade risk controls, market access, and software development and change management over the past years. These documents can be found at <u>https://ptg.fia.org/key-issues/automated-trading</u>

David R. Pearl, U.S. Department of the Treasury April 22, 2016 Page 3

FIA PTG supports increased transaction transparency for the official sector particularly regulators. We have long advocated for comprehensive order and transaction data for regulatory monitoring, surveillance and analysis. One of the many benefits of automation is that it creates a clear and accessible record of all order and trade activity on a given trading platform. Prior to imposing new reporting requirements, regulators should inventory existing data. We believe much of the data necessary to analyze the U.S. Treasury market may already exist at the platform, clearing firm/prime broker or relevant designated contract market ('DCM"). We expect the process of collecting this data to be complicated by the fragmentation of the market. We recommend a scaled approach to data aggregation, recognizing that some data sources will be easier to aggregate and conform than others. Overall, we suggest that all data points and transactions should be subject to requirements that strive to increase transparency.

**FIA PTG supports efforts to increase transparency for market participants.** FIA PTG believes real-time public reporting should be required for all U.S. Treasury cash transactions executed in the secondary market. By providing the basic parameters of each transaction, market participants will be able to assess best execution and information asymmetries will be reduced. As is the case in other asset classes with real-time public reporting requirements, we support capped notionals for reporting the volume of large transactions, which will help protect market participants from being exposed to undue risk or information leakage when transacting in very large size.

If you have any questions, or if we can provide further information, please do not hesitate to contact Joanna Mallers (jmallers@fia.org).

Respectfully,

FIA Principal Traders Group

Jana Maller

Joanna Mallers Secretary

#### **DEPARTMENT OF THE TREASURY**

### Notice Seeking Public Comment on the Evolution of the Treasury Market Structure

#### Docket No. TREAS-DO-2015-0013

Section I	Further study of the evolution of the U.S. Treasury market and the implications for market
	structure and liquidity
INTRO	The U.S. Treasury market consists of several independent yet highly correlated pools of liquidity with varying levels of transparency. Over the past several years, certain segments of the U.S. Treasury market have evolved to become more transparent and open allowing market participants the ability to objectively analyze historical and current liquidity while others remain fairly opaque to regulators and the public making similar analysis difficult to perform.
	In particular, the adoption of electronic trading and central limit order books ("CLOB") in U.S. Treasury interdealer brokerage ("IDB") and derivatives markets has made several objectively measurable factors of liquidity available to regulators and market participants in real-time for continuous observation and analysis. Several studies, including the Joint Report, have highlighted the benefits afforded to these markets as a result of automated trading and a diversity of market participants including, but not limited to, tighter bid/ask spreads, more efficient price discovery, resiliency of liquidity during periods of volatility, and reduced execution costs.
	Conversely, it is relatively difficult to objectively measure changes in liquidity in opaque segments of the U.S. Treasury Market such as the dealer-to-customer markets. Likewise, it is difficult to objectively measure related aspects of liquidity such as those associated with the cost of trading capital, Treasury financing costs, and the availability of clearing services each of which has changed as a result of post-financial crisis regulation.
1.1	Have there been changes in the nature of liquidity provision, or demand for liquidity, in the U.S. Treasury market? If so, are these trends different in the futures, dealer-to-customer, or interdealer broker ("IDB") market, or in the "on-the-run" and "off-the-run" sectors, or across different types of Treasury securities (e.g. bills, nominal fixed rate coupon securities, nominal floating rate securities, and inflation-indexed securities)? Which factors have been responsible for any observed trends in liquidity provision and/or demand? In addressing those questions, please consider the dealer-to-customer market, trading on IDB platforms, and in the futures market, as applicable, and please provide or refer to data and/or analysis that support your conclusion. In addition, please consider the following questions, as applicable:
	Please refer to the following questions for our response.

1.1a	How do you define liquidity? How do you define liquidity provision?
	Liquidity is the ability for market participants to trade what they want, when they want, at a mutually agreed upon price for a specific quantity. Liquidity provision is commonly understood as the act of posting resting orders in the marketplace at a price that accurately reflects all available information regarding an asset including the risk associated with transacting that asset. However, liquidity provision can be conducted by any participant who is immediately ready to interact with the visible book and take risk (or cross the spread) to transact.
1.1b	Which measures are most indicative of the degree of liquidity? How might these measures be refined or expanded, if you were not limited by the availability of data?
	The adoption of electronic trading and central limit order books, particularly in U.S. Treasury IDB and derivatives markets, has made several objectively measurable factors of liquidity available to market participants in real-time for continuous observation and analysis. These measures include, but are not limited to the:
	<ol> <li>(1) bid/ask spread of a product,</li> <li>(2) depth of book for a product as measured by the executable quantity available at each price level,</li> <li>(3) traded volume, and</li> <li>(4) composition of an order book.</li> </ol>
	Although each participant may interpret each of these measures' contribution to the overall liquidity of the marketplace slightly differently, they may do so in a data-driven manner. Without electronic trading, open access, CLOBs, and the real-time dissemination of data, some of these measures of liquidity would not be available to market participants.
	Several factors may be indicative of liquidity that are observable outside of CLOBs. Whereas the measures previously described are typically indicative of the structure and availability of liquidity in a given product on a real-time basis, the following measures are typically more operational in nature and indicative of the macro health of the entirety of the U.S. Treasury market on extended timelines. Such factors include the:
	<ul> <li>(5) cost of trading capital for market participants,</li> <li>(6) total balance sheet made available to market participants,</li> <li>(7) diversity of market participants within each liquidity pool,</li> <li>(8) ease of market access,</li> <li>(9) cost of clearing,</li> <li>(10) diversity of clearing options,</li> </ul>
	<ul> <li>(10) diversity of clearing options,</li> <li>(11) activity measured by type of trading venue–lit, dark, internalized, etc.,</li> <li>(12) total amount of a security inventoried versus available for trading, and</li> <li>(13) frequency of material gaps in transaction history for a security.</li> </ul>

We believe that, despite potentially being interpreted differently from market participant to market	l
participant, the measures of liquidity available in a CLOB (measures 1, 2, 3, and 4) are already	
highly refined as they are derived directly from widely-observable market participation.	l

On the contrary, measures of liquidity observed outside of the CLOB (measures 5, 6, 7, 8, 9, 10, 11, 12, and 13) have much lower levels of refinement. This is due primarily to the lack of transparency into dealer-to-customer markets, dark liquidity pools, internalized order flow, and clearing organizations. While some measures such as (5) (6) (9) (10) must not be disclosed publicly due to intellectual property concerns, other measures such as (7) (8) (11) (13) if improved or disclosed would allow regulators and market participants to better understand and assess the true liquidity of the marketplace.

For example:

(7) Diversity of market participants within each liquidity pool - Data on diversity would allow market participants to determine if there is concentration risk in any single market. The Joint Report highlighted that a diversity of market participants, in particular PTFs and primary dealers, allowed for more resiliency of liquidity during the October 15<sup>th</sup> event. Such diversity may not exist within all pools of liquidity.

(8) Ease of market access – In markets where access is limited or prohibited, there will be fewer participants than in a market where access is open. Limiting participants increases the concentration risk for a liquidity pool. This measure can be seen as a proxy for diversity of market participants.

(11) – Activity measured by type of trading venue – Due to the lack of transparency into certain liquidity pools, it is not currently possible for market participants to measure all liquidity and trading activity in U.S. Treasury cash products. This is particularly impactful for less-liquid U.S. Treasury products. This lack of transparency is in stark contrast to U.S. Treasury derivatives listed on U.S. DCMs where there is a much clearer picture of market activity.

(13) – Frequency of material gaps in transaction history for a security – Our concerns here are the same as those described above for (11).

### 1.1c How do different indicators provide information on different aspects of liquidity, and in what ways?

Please see our response to 1.1b

## 1.1dWhich measures best represent the resilience of liquidity, or the relationships between<br/>liquidity and volatility?

Please see our response to 1.1b

1.1e	To what extent are these measures of liquidity and the resilience of liquidity different from measures used in other markets that have witnessed similar market structure changes? What are the idiosyncratic factors unique to Treasury cash markets that may cause these measures to differ?
	It is difficult to compare the structure of the U.S. Treasury market to that of other markets due to one fundamental difference—estimates suggest that the majority of U.S. Treasury market transactions, measured in notional value, take place in the dealer-to-customer segment of the market, <sup>7</sup> which lacks post-trade transparency and open access to trading venues. This difference plays a significant role in structural and liquidity differences seen in the U.S. Treasury market.
	When comparing solely the IDB and DCM CLOBs of the U.S. Treasury market to other CLOBs the various measures of liquidity (as we described in 1.1b) are materially similaralthough, it is difficult to decouple the liquidity available in IDB and DCM CLOBs from that in the dealer-to-customer markets.
1.1f	What changes, if any, have you observed in these measures over recent years? Over recent months?
	We acknowledge the Joint Report highlights many changes in the composition of liquidity providers over recent years.
	In particular, many of the measures observable in the CLOB have been indicative of sustained or improved liquidity despite external pressures on capital requirements and availability as the result of (1) new participants entering the market to provide liquidity and (2) the adoption of technology to make liquidity providing more efficient.
	Recently, though it is difficult to quantify directly, we have noticed that market participants seem to be less willing to inventory U.S. Treasury products than they have in previous years. We believe this is because of the increasing capital requirements and reduced balance sheet available for such products.
1.1g	What microstructure features of the U.S. Treasury futures and cash markets, including both IDB venues and dealer-to-client markets, have affected the functioning, liquidity, efficiency and participation in these markets? What features have affected the functioning of the Treasury market as a whole?
	Historically, most liquidity in the U.S. Treasury markets was provided by large dealing banks. The

<sup>&</sup>lt;sup>7</sup> "Primary Dealer Participation in the Secondary U.S. Treasury Market", Michael Fleming, Frank Keane, and Ernst Schaumburg, Liberty Street Economics (Feb. 12, 2016), <u>http://libertystreeteconomics.newyorkfed.org/2016/02/primary-dealer-participation-in-the-secondary-us-treasury-market.html#.VwK0a08rJaQ</u>

Joint Report explains how today different classes of liquidity providers provide different types of liquidity, and how that diversity benefits markets.

Prior to the introduction of CLOBs in the IDB and DCM markets, the majority of liquidity was typically provided on a short- and long-term basis by a class of market participants that had substantial balance sheets and the ability to carry significant inventory. These same liquidity providers had limited capabilities to process market information from many independent but correlated sources in a timely manner. The end result of this was a group of liquidity providers that could buy or sell and hold large amounts of U.S. Treasury assets but needed to do so with a relatively large bid/ask spread to account for the negative selection associated with the inefficient processing of information relevant to price discovery. These bid/ask spreads were able to persist at such levels due to the lack of transparency and open access in the OTC and dealer-to-client markets. Without transparency and open access, competitive forces were limited in their ability to make the U.S. Treasury market more efficient.

Due to the introduction of recent regulations, the capital requirements associated with inventorying large positions in U.S. Treasury assets have materially increased. Limitations on balance sheets has the potential to materially reduce the willingness of traditional liquidity providers to inventory U.S. Treasury assets. For similar reasons, there is the potential for a reduction in the balance sheet made available to market participants by those guaranteeing their trades.

With the introduction of CLOBs in the IDB and DCM markets, as the Joint Report identified, a new class of market participant has begun providing liquidity in on-the-run U.S. Treasury cash assets as well as U.S. Treasury derivatives. These participants typically have less balance sheet available to them when compared to larger participants such as primary dealers. As a result, they may be less likely to inventory substantial positions in U.S. Treasury assets for prolonged periods of time. This limitation is offset by this class of participants' ability to process new information relevant to price discovery and manage their risk very efficiently. As acknowledged in the Joint Report, these liquidity providers are able to maintain very tight and persistent bid/ask spreads regardless of the volatility in the market.

1.2 What changes, if any, have you made or observed in investment, hedging, and trading practices in response to shifts in Treasury market structure?

We acknowledge that there have been significant changes to the capital requirements associated with inventorying U.S. Treasury assets following the financial crisis. Market participants are still in the process of adapting to these changes most of which require each participant to be more efficient in their use of capital. Those that are unable to adapt to these changes will likely have to reduce their participation in these markets.

Some market participants are concerned that these regulations will affect their ability to continue

	providing liquidity and clearing services. Despite these concerns, initial data driven studies indicate that there has been no material degradation of liquidity. <sup>8</sup> This is in part due to the open access on IDB and DCM platforms. Such openness fosters a large diversity of market participants providing liquidity. As the Joint Report notes, the available data indicates PTFs now account for the majority of trading and the "vast majority" of market depth in the multilateral, platform-based U.S. Treasury markets.
	As the industry continues to adapt to the post-financial crisis regulations, close attention should be paid to the impact of these regulations on both market participants and the U.S. Treasury markets themselves.
1.3	How does the way in which you transact in or provide liquidity to the U.S. Treasury market change during periods of stress?
	As indicated in the Joint Report, on Oct 15, PTFs continued to provide liquidity and maintain tight bid-ask spreads, even during the period of unusually high volatility, while engaging in sound risk management practices.
	More generally speaking, automated trading systems respond to publicly available data in a timely manner. Market events that transpire are reflected in the data and the systems respond accordingly. As a result, these systems are designed to act objectively despite any observed market stress.
1.4	Looking forward, do you anticipate significant changes in the structure of the U.S. Treasury market absent further regulatory changes? What would be the key benefits and/or risks of these changes in market structure? What key factors are likely to drive these changes? What changes are you planning to your firm's investment and trading policies, strategies, and practices?
	We expect that, as electronic trading in the U.S. Treasury market continues to evolve, we will see additional evidence that the benefits it has brought to other markets are taking hold in the U.S. Treasury market as well. These benefits include:
	<ol> <li>(1) Improved transparency for market participants and regulators because of open access, central limit order books and finely grained audit trails. This transparency allows for data-driven analysis of market behavior.</li> <li>(2) Lower costs for end-users from reduced bid-ask spreads and competitive pressures in liquidity provision, on trading platforms, and for clearing and technology services.</li> <li>(3) More efficient price discovery as technology enables market participants to process and react to all relevant information, including that available in correlated markets, in a</li> </ol>

<sup>&</sup>lt;sup>8</sup> See "Has U.S. Treasury Market Liquidity Deteriorated?", Tobias Adrian, Michael Fleming, Daniel Stackman, and Erik Vogt, Liberty Street Economics (August 17, 2015), <u>http://libertystreeteconomics.newyorkfed.org/2015/08/has-us-treasury-market-liquidity-deteriorated.html#.Vv7zy08rJaQ</u>

	<ul> <li>reliable and timely manner. As price discovery becomes more efficient investor confidence improves.</li> <li>(4) An increase in the diversity of liquidity providers. Less concentration of liquidity providers leads to markets that are more resilient.</li> <li>As market structure continues to evolve a primary question should be: If the cost of trading capital, clearing, and market access increase will there be an impact on market participant diversity and liquidity in certain segments of the U.S. Treasury market?</li> </ul>
	Although we anticipate improved transparency and trade reporting in the dealer-to-customer market, we question if this will happen absent regulator intervention.
1.5	What changes to the U.S. Treasury market structure, whether through public or private sector initiatives, might be advisable given the recent and expected future evolution? What role should the public sector play in driving or facilitating these changes?
	FIA PTG, like all market participants, shares an interest in ensuring the U.S. Treasury market continues to evolve towards a structure that best meets the needs of its participants. In order to effect such changes market participants and policy makers must evaluate the current state of the market and base any actions on data rather than conjecture. Any changes in U.S. Treasury market structure must first acknowledge the benefits afforded by technological innovations in these markets in recent years – automation, improved market access, and increased competition have in turn increased transparency, improved liquidity, and made the price discovery process across correlated products more efficient.
	One of the primary issues facing market participants and policy makers today is that the details necessary to understand the entirety of the U.S. Treasury market are unavailable. Prior to making any type of change to market structure, particularly one as important as the U.S. Treasury market, we must first be able to understand each aspect of the market. Unfortunately, there is little transparency into the dealer-to-customer market. This lack of transparency should be addressed prior to making any change to the structure of the U.S. Treasury market.
	Historically, we have been proponents of allowing markets to evolve naturally to continue to meet the needs of their participants. While acknowledging a certain amount of regulation is necessary to ensure market integrity, we have been wary of regulatory constructs that artificially limit the evolution of market structure. In this case, we believe it is the lack of regulatory action that has limited the evolution of the U.S. Treasury market. In particular, certain liquidity pools within the U.S. Treasury market have limited access to certain types of market participants and do not provide post-trade transparency regarding trading activity. The official sector should consider taking steps towards making access to such markets impartial and open in order to allow for their continued evolution and to avoid stagnation.
	FIA PTG supports fair and impartial access standards and suggests that regulators look to apply such principles to trading venues in the U.S. Treasury market. Fair and impartial access standards

	will encourage an improvement in bid/ask spread, cost of execution, and price discovery as a result of allowing a diversified participant pool.
1.6	What are the benefits and risks from the increased speed with which secondary market transactions take place? Do these benefits and risks differ across individual products (e.g. on-the-run versus off-the run securities)? How have market participants and trading venues responded to, or facilitated, improvements in speed, and how, if at all, should policy makers respond?
	We believe "speed" is a red herring and too subjective for the purpose of this conversation. What was considered "fast" 10 years ago would be considered slow by today's standards. "Speed" is merely a function of the technology available to make the dissemination of market information and risk management as efficient as possible.
	FIA PTG believes that an efficient market is one that is capable of reflecting all relevant information in as real-time as possible. As such, we believe any technology or process that allows markets to reflect all relevant information immediately provides an inherent benefit to the marketplace. Further, we believe that having the ability to manage risk—be it associated with open positions or currently working orders—in a timely manner provides a similar inherent benefit to the market. Both of these benefits ultimately lead to a market participant's willingness to provide a higher quality of liquidity. For instance, the Joint Report noted that PTF organizations that have been associated with automation and latency sensitive technology were able to provide tight two-sided markets during the October 15 event despite high levels of market volatility. If it were not for those firms' ability to leverage such technology, we believe that PTFs would have needed to widen their markets to account for the risks associated with an inability to efficiently manage their open orders.
	Rather than focus on "speed", FIA PTG has long believed that policy makers should instead focus their attention on the benefits and risks of automation. Automation has provided the market many benefits including a highly transparent electronic audit trail and more efficient price discovery. Conversely, automation also introduces risks that are not typically associated with OTC or manual electronic trading. In that regard, we refer regulators to the work we've done previously on pre-and post-trade risk controls:
	Guide to the Development and Operation of Automated Trading Systems, March 2015 Drop Copy Recommendations, September 2013 Software Development and Change Management Recommendations, March 2012 Recommendations for Risk Controls at Trading Firms, November 2010 Market Access Risk Management Recommendations, April 2010

1.7 To what extent have changes in Treasury financing markets affected liquidity in cash Treasury markets, and what is the best evidence of those effects? Looking forward, do you anticipate major changes in the Treasury financing markets and how would this impact the functioning of the cash Treasury markets? How have firms modified their trading strategies in response to, or in anticipation of, these changes? What changes in Treasury financing markets could improve market efficiency? What are the potential benefits and risks to the Treasury market of increased access to central clearing of Treasury repurchase agreement ("repo") transactions? The capacity of the Treasury financing market has diminished, and will continue to do so, as a result of the implementation of Supplementary Leverage Ratio rules. We believe that regulators should assess whether increased clearing of repo transactions could address the limitations imposed on those organizations providing Treasury financing and whether, by centrally clearing repo transactions, the required amount of balance sheet for such transactions could be reduced in order to ultimately increase the total available capacity of the repo market. 1.8 What share of trading (in the case of dealers, your own trading) is internalized? To what extent does it vary depending on security type (e.g., on-the-run, off-the run)? How has this changed over time and how do you expect it to develop? What implications for the Treasury market, if any, do you see as a result of these developments? Since there is currently no transparency into the dealer-to-customer market we do not have information on the amount of internalization that is occurring. As we have stated previously, FIA PTG believes that open and transparent markets provide many benefits including the ability to better facilitate price discovery and improve liquidity.

Section II Continued monitoring of trading and risk management practices across the U.S. Treasury market and a review of the current regulatory requirements applicable to the government securities market and its participants, INTRO FIA PTG appreciates the importance of risk controls at various points in the market infrastructure, including self-match prevention technology. The application of such controls should be principlesbased to afford much needed flexibility and address the nuances associated with each market participant as well as the products with which they interact. A principles-based approach would effectively advance the goals of transparency and fairness, while reducing the risk of market disruption. In response to these issues, FIA PTG, in conjunction with FIA, has published recommendations focused on pre- and post-trade risk controls, market access, and software development, and change management. 2.1 Are the risk management controls currently in place at U.S. Treasury cash and futures trading venues, as well as firms transacting in those venues, properly calibrated to support the health of the U.S. Treasury market? Why or why not? Please list the types of controls that are employed, as well as planned changes or improvements. In addressing these questions, please consider the dealer-to-customer market, trading on IDB platforms, and the futures market, as applicable. In addition, please consider the following questions: FIA PTG, as it has for many years in the futures markets, supports the use of both pre- and posttrade risk controls as well as self-match prevention technology in the U.S. Treasury market. Automated trading is used by a range of market participants, all of whom have a responsibility to implement risk controls appropriate to their role in the life of an order, whether that role is initiating the order, routing the order, executing the trade, or clearing the trade. Risk control requirements should be principles-based so they can evolve with markets, technology, and trading strategies as well as allow for sufficient flexibility, which is increasingly necessary in today's automated financial markets. Specifically regarding pre-trade risk controls, FIA PTG has supported the use and implementation of risk controls at various points in the order flow (*i.e.*, at the trading venue, broker, trader, etc.) and at various levels of aggregation (*i.e.*, trading venue, trading firm, account, or trader). Certain controls indicative of the type of safeguard that may provide significant protections to markets and their participants include maximum order sizes, platform-based dynamic price collars, and message throttles. Additionally FIA PTG supports the use of self-match prevention technology and believes that venue adoption of this safeguard is ultimately the fairest and most effective way to significantly reduce the number of inadvertent self-matches. Please see our response to 2.7 for a more detailed response, but generally speaking we believe there is a clear distinction between unintentional selftrades and illegal intentional, manipulative wash trades. Intentional wash trades are illegal self-

	trades that can manipulate markets by giving the impression of legitimate trading activity. FIA PTG continues to support efforts to prohibit this illegal activity. On the other hand, we believe there are also two forms of self-matches that can occur unintentionally:
	<ol> <li>One type is part of legitimate price discovery in a competitive marketplace, and it occurs when trades from different units within the same firm happen to cross each other. This can happen when independent decision makers initiate trades for legitimate and separate business purposes without knowledge of the other's order.</li> <li>The other type occurs when, despite good faith efforts to avoid self-matching, trades from the same trading desk or unit are matched. This is due in part to the technical and operational limits of today's matching engine technology.</li> </ol>
	Finally, FIA PTG believes that certain post-trade controls, such as real-time drop copies, afford market participants the ability to independently reconcile their activity.
2.1a	What policies and risk management practices at U.S. Treasury cash and futures trading venues, as well as at firms transacting in those venues, could be improved or developed to mitigate potential risks associated with increased automation, speed, and order complexity? Please consider the risks posed by trading, risk transfer, and clearing and settlement.
	FIA PTG, in conjunction with FIA, has published various recommendations focused on pre- and post-trade risk controls, market access, and software development and change management over the past years, including:
	Guide to the Development and Operation of Automated Trading Systems, March 2015 Drop Copy Recommendations, September 2013 Software Development and Change Management Recommendations, March 2012
	Recommendations for Risk Controls at Trading Firms, November 2010 Market Access Risk Management Recommendations, April 2010
	FIA PTG believes that while requirements should be flexible enough to allow firms to tailor solutions to their specific facts and circumstances, the above recommendations provide a meaningful starting point for discussions pertaining to risk management practices for U.S. Treasury markets and the related futures markets.
2.1b	To what extent should venue-level risk management practices be uniform across Treasury cash and futures trading venues? For example, should there be trading halts in the Treasury cash market and should they be coordinated between Treasury cash and futures markets, and if so, how? Should Treasury cash, futures, options, and/or swaps venues coordinate intraday risk monitoring, and if so, at what frequency? If there were trading halts, how should they be implemented for bilateral trading activity in the Treasury cash market? What would be the primary challenges in implementing such trading halts, particularly given that trading in the

	U.S. Treasury cash market is over-the-counter, global in nature, and conducted on a 24-hour basis? <sup>9</sup>
	FIA PTG believes that risk management practices should be implemented with a goal of fostering transparency and fairness while reducing the risk of market disruption. While we believe that there is room for differentiation in certain practices across U.S. Treasury cash and futures trading venues, there may also be room for harmonization where consensus exists on a best practice. However when assessing any proposed market wide halts it is important to note the complex nuances of not only the generic "Treasury" market as a whole but also each individual "Treasury" product, including cash Treasuries, futures, swaps, ETFs and other related products. Each of these products has unique features including type of venue, level of transparency, pool of market participants, and other microstructural issues that would make market wide halts extremely difficult, if not impossible. Any conversation regarding coordination or harmonization among the various U.S. Treasury-related products and/or markets should be a data driven discussion, which would require greater levels of transparency from some segments of the U.S. Treasury cash market.
2.1c	To what extent should U.S. Treasury cash market platforms be responsible for monitoring, identifying, and/or reporting suspicious trading activity?
	FIA PTG believes that the trading platforms should be responsible for monitoring, identifying, and reporting suspicious activity. These trading platforms facilitate and monetarily benefit from the trading on their platforms and, accordingly, should have the accompanying monitoring and reporting obligations associated with the facilitation of that activity. This should be in addition to the general obligation to adhere to all relevant rules and laws.
2.2	What internal risk controls are commonly employed by firms using automated, including algorithmic, trading strategies in the Treasury cash market? Are these different or similar to those used in the Treasury futures markets, and what are the reasons for any differences? How are such controls designed and triggered? How frequently are they triggered? What internal process controls commonly govern the implementation and modifications of trading algorithms?
	In addition to our response to 2.1a, FIA PTG believes that although the internal processes and controls are at times similar to the controls in place on non-Treasury venues, they may also differ based on the specific facts and circumstances associated with the product, venue, and other market characteristics. Accordingly, each market participant may utilize a unique suite of tools with various settings and triggers appropriate to their particular trading strategy or risk tolerance.

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<sup>&</sup>lt;sup>9</sup> Currently, under the GSA Treasury does not have the statutory authority to suspend trading or establish limit up/limit down thresholds for Treasury securities.

2.3	What types of algorithmic trading strategies are commonly used by participants in the U.S. Treasury market? What features do those strategies have in common, and what features differ across strategies? What are the potential benefits and risks to an effective U.S. Treasury market functioning resulting from certain algorithmic trading strategies, certain order types, and/or particular trading venue policies or practices.
	Similar to our response to 2.2, the algorithmic strategies used by market participants in the U.S. Treasury cash market are sometimes, but not always, similar to the strategies used in other markets. There exists an extraordinary diversity of strategy types utilized by firms active in U.S. Treasury markets. Regardless of the strategy, FIA PTG recommends that all orders, regardless of asset class or trading strategy, be subject to pre-trade risk controls.
2.4	How are best practices used in evaluating, and updating, risk management systems at a given firm? How does your firm make use of TMPG's best practices (referenced above) for operations in the Treasury cash market? How can best practice recommendations be utilized in order to reinforce market integrity? What are the benefits and limitations of best practice recommendations?
	FIA PTG, in conjunction with the FIA, has published various recommendations focused on pre- and post-trade risk controls, market access, and software development and change management over the past years, including:
	<u>Guide to the Development and Operation of Automated Trading Systems, March 2015</u> Drop Copy Recommendations, September 2013
	Software Development and Change Management Recommendations, March 2012 Recommendations for Risk Controls at Trading Firms, November 2010 Market Access Risk Management Recommendations, April 2010
	FIA PTG's members are familiar with TMPG's best practice documents. Like any best practice document, however, the document serves as a starting point for an internal assessment of what may work best for the particular nuances associated with a market participant's activity.
2.5	What are the benefits and risks associated with the current structure for clearing and settling Treasury securities transactions in the dealer-to-customer market and on IDB platforms, as applicable. For example:
2.5a	Are intraday margining practices in the Treasury cash market for both cleared and non- cleared transactions currently sufficient to protect against counterparty risk, especially in light of the speed at which positions can be accumulated? What options are available to improve margining practices? Should the maximum potential intraday exposure of firms be calibrated relative to their level of capital? If so, how should it be calibrated? Are alternative measures of potential exposure more meaningful for automated trading strategies, and if so,

	which type of measures?
	FIA PTG has not formed an opinion on this topic.
2.5b	Currently, there are no statutory requirements that require participants to centrally clear cash Treasury transactions. Should such a requirement apply to any participants, particularly those with large trading activity or large positions? Would the secondary market for cash Treasury securities benefit from broader participation in centralized clearing? Why or why not?
	FIA PTG has not formed an opinion on this topic.
2.6	Many of the standards applicable to U.S. securities, commodities, and derivatives markets are not applicable to the U.S. Treasury cash market. Which differences, if any, should be addressed and how should standards be aligned? How will these affect the cost of accessing or participating in these markets, as well as of transacting in these markets? Would there be any implications to U.S. federal government borrowing costs? In addressing these questions, please consider the dealer-to-customer market, trading on IDB platforms, and the futures market, as applicable. In addition, please consider the following:
	FIA PTG believes that the U.S. Treasury market should consider the experience of the related U.S. Treasury futures markets, specifically regarding transparency, open access, and clearing. However when assessing any proposed harmonization it is important to note the complex nuances of not only the generic "Treasury" market as a whole, but also each individual "Treasury" product, including U.S. Treasuries cash, futures, swaps, ETFs and other related products. Each of these products has unique features including type of venue, level of transparency, pool of market participants, and other microstructural issues that would need to be assessed. The level of transparency is a notable difference between the U.S. Treasury cash market and other related products. Specifically, futures trade data is publicly disseminated, and market participants have widely available access to such data. Currently, much of the U.S. Treasury market activity is taking place in the dealer-to-customer market where trade data is neither publicly disseminated nor reported to regulators. Additionally, U.S. Treasury futures trades are cleared. Access to clearing is a necessary component of a U.S. Treasury futures trade. Conversely, in the U.S. Treasury cash market, clearing is not mandatory and access to the Fixed Income Clearing Corporation ("FICC") is not easily attainable for many participants.

As noted below in our response to 2.6b, FIA PTG believes that there should not be a registration requirement. As a general matter, FIA PTG opposes the application of arbitrary thresholds when
determining the applicability of regulation. The current futures DCM self-regulatory organization ("SRO") model may be instructive. Currently, domestic futures DCM SROs require specific information to be present on all order activity, including identifiers indicating who the trader is and whether an automated trading system is used.
Specifically regarding the potential implications of a registration requirement on market structure, efficiency, investor protection, and oversight, it is difficult to cite specific changes that would occur, as there is currently no reference to a specific issue that needs to be addressed. As such, it is unlikely that a registration requirement would result in material benefits. Prior to the enactment of a registration requirement, FIA PTG urges that an assessment of what information is currently available on a market participant's order in the U.S. Treasury cash market be completed. If it is determined that additional information is required, merely making that information a required element of each order may address any regulatory concerns while reducing the burdens associated with registration. Registration would likely have no impact on the manner in which the significant market participants, most of whom are already registered in some capacity and subject to various elements of regulatory oversight, would interact with the market.
Should firms that conduct certain types of automated trading, or certain volume of trading, in the U.S. Treasury market be subject to capital requirements, examinations and supervision, conduct rules, and/or other standards? What would be the implications of each? FIA PTG believes that there should not be a registration requirement. As noted above, FIA PTG
opposes the application of arbitrary thresholds when determining the applicability of regulation, and the current futures DCM SRO model may be instructive. Specifically, there are requirements to identify the owner of an account or the individual utilizing a User ID that engages in activity on a DCM. Additionally, by virtue of becoming a member on a domestic futures DCM, there is an explicit acknowledgement of jurisdiction given to both the DCM itself and to federal regulators, which results in the ability to be subject to the SRO rules, relevant federal rules, and accompanying supervision and examinations. Furthermore, futures SROs are able to impose capital requirements via a relevant clearing house that sets margin requirements that must be met in order to initiate and maintain positions on the relevant DCMs.

2.7 Should self-trading be expressly prohibited in the cash Treasuries market?<sup>10</sup> Does selftrading provide any benefits to the markets? Are there risk management tools, either at trading firms or at trading platforms, which can effectively reduce levels of self-trading and improve trading efficiencies?

> There is a clear distinction between unintentional self-trades and illegal intentional, manipulative wash trades. Specifically, intentional wash trades are illegal self-trades that can manipulate markets by giving the impression of legitimate trading activity. FIA PTG continues to support efforts to prohibit this illegal activity. Conversely, unintentional self-trades are legal. Specifically, the CFTC, in its proposed Regulation AT, states that "[the CFTC] recognizes that there could be legitimate reasons for self-trades" making the distinction between legal and illegal self-trades based upon intent. They added that "intentional self-trades could constitute wash trades." The CFTC provided its intent by stating "[t]hese requirements are intended to prevent self-trading while still allowing [...] buy and sell orders for accounts with common beneficial ownership that are independently initiated for legitimate business purposes, but which coincidentally cross." FIA PTG believes that, generally, there are two forms of self-matches that can occur unintentionally. The first is a self-trade resulting from orders, each having originated from different decision makers. Such orders accordingly have independent and legitimate business purposes and no knowledge of the other decision maker's order. These self-trades often occur between different trading desks within the same firm but may also result from different decision makers within the same desk. These selftrades represent legitimate price discovery and are competitively executed. The second is a selftrade occurring when one decision maker, despite a reasonable good-faith attempt to avoid selftrading, sends orders to a DCM, which are unintentionally matched. Reasons for these legitimate self-trades include the current technical and operational limitations of trading infrastructures, system architecture, and DCM matching engines. FIA PTG supports controls that help reduce the frequency or prevent the occurrence of inadvertent self-trades; although, the controls provided by DCMs should be flexible enough to allow for an implementation that does not adversely impact the legitimate price discovery that takes place as a result of the legitimate activity of two different decision makers within a single firm.

<sup>&</sup>lt;sup>10</sup> For purposes of this RFI, self-trading is defined as a transaction in which the same legal entity takes both sides of the trade so that no change in beneficial ownership results.

Section III	An assessment of the data available to the official sector on U.S. Treasury cash securities markets
INTRO	FIA PTG has long advocated for transparent access to order and transaction data for regulatory monitoring, surveillance and analysis. A data-driven process can only occur when the official sector (particularly relevant regulatory bodies) has sufficient data. One of the many benefits of automation is that it creates a clear and accessible record of all order and trade activity on a given trading platform. Such transparency—a characteristic of well-functioning markets—should be considered as regulators evaluate U.S. Treasury market structure and liquidity.
	Prior to imposing new requirements, regulators should first take an inventory of all existing data pertaining to the auction and trade lifecycle of the U.S. Treasury market. Much of the data necessary to better analyze the U.S. Treasury market may already exist at the platform, clearing firm/prime broker or, in the case of interest rate futures, at the relevant DCM. Once the data from the different sources is identified, the next step should be to aggregate it in a manner that preserves temporal relationships across markets.
	We advocate for transparency and an effective regulatory system operating efficiently in cooperation between senior regulators, market operators and professional participants as a critical method to avoid harm to the market. In order for the regulatory process to operate effectively, and do no harm, the regulatory surveillance process should have all available information about the markets and the ability to understand that information. We acknowledge that the multiple data sources and forms of venues in this space are complex; however, the official sector should leverage the efforts of those venues to collect and understand market data.
	We are concerned that large portions of the daily U.S. Treasury cash market are currently not visible to the official sector due to the lack of regulatory reporting. A specific concern is that order and transaction specific information is not visible to regulators on a real-time basis; such data may only be available to regulators upon request, and in some cases is not available to them at all. In short, the official sector has a very limited ability to surveil the market.
	We recommend a multi-step approach to collecting and analyzing market data, similar to the market structure data efforts the SEC implemented subsequent to the 2010 "flash crash" including the creation of the MIDAS system. Readily accessible data from electronic central limit order book venues may provide a preliminary understanding of the types of technical and operational efforts that would be required to compile and understand the functioning of the overall U.S. Treasury market. Dealer-to-customer markets also have systematic recordkeeping aspects which should allow for comparison of market information that, when synchronized, would provide a better understanding of market activity. Once the data from the different sources is identified, the next step should be to aggregate it in a manner that preserves temporal relationships across markets.
3.1	To what extent can trading practices in U.S. Treasury cash and futures markets be effectively monitored using only transaction and/or order data from one, not both, of those markets?

	FIA PTG has historically made recommendations to market participants, venues and regulators regarding control and monitoring, but we do not advocate a particular model or one-regulator-fits all approach. As cross-market participants, we recognize the benefits for regulators in understanding the extent of strengths, dependencies and potential weaknesses between markets, particularly in order to refine their ability to effectively regulate and communicate across markets in the event of any market spanning issue.
	While each data set related to a part or fragment of the U.S. Treasury marketplace can lead to effective regulation of that portion, we believe it is appropriate for regulators to coordinate their oversight with both the individual and combined trading venues' market data. This is particularly true if market participants' activities span across asset classes – from cash to futures, for example. (For the avoidance of doubt, FIA PTG is not recommending the expansion of jurisdiction of regulators over products, venues, or participants that are not within their current purview; FIA PTG is simply advocating for coordination among regulators.)
	Is it necessary for regulators to have visibility across all U.S. Treasury cash and derivative markets in order to more effectively monitor and oversee trading behavior in any one market?
	We think it would be helpful to have increased and coordinated visibility across the markets, although we believe that data collection by the respective regulatory bodies should be the primary goal and first step before any coordination action is taken.
	Ultimately, we note that activity conducted on one market that is deemed to be problematic may lead regulators to other market activity that is problematic and may be difficult to monitor without a broad perspective. Likewise, a cross-market view of activity can provide insight into permissible cross-market trading activity that may otherwise appear to be problematic when looking at it in the context of a single market.
	What aspects of U.S. Treasury market monitoring require data collection across cash and derivatives markets?
	We believe a cross-market perspective including derivative markets related to Treasuries will enhance regulatory confidence. Access to data from both markets could provide awareness of activity that spans both markets and may be related and consequential. In order to monitor the health, functioning and behavior of the U.S. Treasury market, we expect the senior regulatory bodies to have, for example, similar to the equities and options markets the ability to monitor and share data from their correlated products. That being said, at present we are more concerned that non-platform activity represents a substantial amount of the U.S. Treasury market, and data regarding these activities currently do not appear to be regularly provided to regulators.
3.2	What frequency and type of additional data reporting to the official sector is necessary for it to effectively monitor functioning of the U.S. Treasury markets, including cash, futures, and financing markets?

We suggest that the goal should be for regulatory bodies responsible for the U.S. Treasury markets to develop data accessibility and technological resources similar to those that the venues and participants have developed. The amount of data and frequency will depend upon the capabilities of the regulatory body and the facet of the market to be monitored. Some amount of coordination and standardization across the data sets is important; however, normalizing the different portions is complex, may have varying degrees of usefulness for monitoring, and may take time to evolve.

The type of data or information should follow as much as possible from the set consistent with the venue where activity occurs. Granular information is currently available from CLOB venues; however, all electronic matching processes should have similar types of data. A challenge may be reconciling format and timestamp synchronization between different sources, although this reflects the types of challenges better resolved with fully-electronic venues.

With respect to the minimum frequency of time data should be reported, the accuracy and frequency should be reasonable to achieve a monitoring purpose and address market abnormalities. For example, a futures block trade is only required to have a time stamp to the nearest minute with reporting completed within five minutes of execution.

# What level of data granularity is necessary for sufficient monitoring to be performed (e.g., transaction data, inventories or positions, order book data, and other additional data) across venues?

FIA PTG believes that a goal of regulatory monitoring should be to consider all market data material to the pricing and functioning of the market – which in some cases may involve very granular information. However, timeliness, complexity, cost and value of data should all be considered when evaluating potential data to be captured for the monitoring process.

We expect that the CLOB venues provide the most accessible and detailed information for orders and transactions. Where inventory or position information is concerned, we recommend that the official sector draw from the experience of commodities and equities regulators in assessing the necessary level of granularity. Large position monitoring and the accompanying systems have high costs and long implementation times but serve critical regulatory functions. In other markets, the depository or central clearing entities are sources of data on carried positions and have developed or enhanced centralized reporting and monitoring functions.

The granularity of the data should be scaled to provide levels of increasing complexity over time. At first, execution information may be more obtainable from CLOB venues and lead to increased understanding of market dynamics; however, transaction data from the entire U.S. Treasury cash market is essential for regulators and order activity and other information may provide additional clarity and usefulness.

3.2a Should all transactions in securities issued by Treasury be subject to reporting or should reporting be limited to secondary market transactions, on-the-run benchmark issues, or some

	other subset of securities?
	All U.S. Treasury trading venues should report information to their respective regulatory bodies in the same manner they would provide that information to clearing firms, depositories and market participants respectively. We expect the process of collecting this data to be complicated by the fragmentation of the market; however, taking into consideration the sophistication of the participants and the technology used to transact and settle U.S. Treasury trading, we believe it is less complex than the efforts required to collect equities market data.
3.2b	Should repurchase agreement transactions be reportable?
	We believe that within the context of and consistent with overall transparency, all U.S. Treasury- related transactions should be reported and become incorporated into the overall regulatory monitoring process. Some transactions, such as repurchase agreements may have characteristics that make reporting less time-sensitive and non-standard as compared to electronic platform transactions.
	It should be noted that reports for repurchase agreement transactions may have information deemed confidential and should be treated as such by any regulatory body with access to such reports.
3.3	What criteria should be used to determine who should report to the official sector?
	Wherever possible, the official sector should use information provided by trading venues and depositories to support its information gathering. In the event that participant information is the sole source of material information, the official sector should consider a process informed by those participants to ascertain what is practical to provide on a routine basis and whether there are enhancements or opportunities for greater transparency without imposition of undue burdens.
	In cases where there is no trading venue, for example a bilateral trade, we suggest these transactions should be reported by the dealer. We recommend using data from existing systematic processes (for example, automated processes related to internal trade recordkeeping, settlement or clearing of the transaction) whenever available as data sources to minimize the impact on end user participants. Industry participants should be afforded the opportunity to respond and contribute to any uniform standards contemplated by the official sector should such be needed.
	Should both counterparties (buyer and seller) be required to report a trade or is one-sided reporting preferable?
	As noted above, FIA PTG recommends one-sided reporting by the dealer (per mutual consent of the parties). We recommend using existing systematic processes as noted above wherever available to minimize the impact on end user participants.
	Should reporting requirements depend on the platform or execution method?

	We recommend any mandated reporting requirements maintain a general and principled approach that allows the platforms with execution methods the flexibility to comply in the most cost efficient way. The official sector should consider all data that has the potential to impact market prices within the overall scope but should avoid specifying particular standards across the market as that may constrain innovation and efficiency.
	Should only a subset of participants, such as brokers, dealers, futures commission merchants (FCMs) and commercial bank dealers be required to report transactions?
	We recommend assessing the availability of reporting data and the accessibility to key data from trading venues and regulated participants, with the objective of posing the least burden on end user participants. This process should also involve input from the market participants directly whenever practical.
	Should other parties to a transaction, such as banks and PTFs, be required to report?
	As noted above, an overall objective in this process should be to pose the least burden on end user participants. Banks, PTFs, and other end user or direct participants, may be the sole sources of material data which fall in scope, and in such cases, the official sector should look for the method that is most efficient and least costly on market participants overall.
	Should trades executed on automated trading venues be reported by those venues and not the individual brokers, dealers, FCMs, bank dealers, etc. transacting on such venues?
	In this instance, we strongly believe that trading venues would be the appropriate source for reporting to the official sector rather than dealers, FCMs or participants. Data from the trading venue is more easily aggregated and analyzed because it is more likely to be standardized and consistent than if data is provided by a variety of entities such as FCMs, dealers, or a wide range of market participants.
	We believe it is inaccurate to refer to trading venues as "automated". Certain trading venues allow for electronic order submission that enables market participants to use automated trading strategies side-by-side with manual order submission. However, merely allowing for electronic order submission does not make a trading venue "automated".
3.4	Should transaction reporting include identifiers for categories of end investors?
	The official sector should consider the level of identifiers currently used by trading venues as a starting point for its monitoring needs. As with other U.S. markets, we believe that the regulatory authorities in the U.S. Treasury markets can use their current authority and information to determine the identity of market participants, in large part because both the venues and participants maintain sufficient recordkeeping systems to provide that information upon request.
	Currently, venues in the futures markets use identifiers to categorize the FCM, account, responsible

	person, and capacity of participant as member or customer. Some regulatory systems provide for additional identifiers, including for position monitoring and regulatory identification. However, such systems have a significant cost, implementation time and limitations. We do not believe these kinds of systems are necessary for the U.S. Treasury market and have concerns about the limited benefit of additional identification as well as confidentiality concerns regarding participant identity that could undermine the fairness of CLOB markets that rely on transparency of data and anonymity of participants.
	What are the costs and benefits of this approach?
	As noted above, we believe the cost of identifiers for end users to be unnecessary and should be carefully assessed to address cost benefit and implementation challenges.
	What alternatives should be considered to permit monitoring of positions and market activity?
	We expect a high cost and implementation time associated with methods of identifying underlying participants in the U.S. Treasury market; however, the U.S. Department of the Treasury should consider the SEC's Large Trader (13H) identification and filing program, the CFTC's Large Trader Reporting (Form 102) and Ownership and Control Reporting (OCR) programs, among other existing programs.
3.5	For those instruments subject to official sector reporting requirements:
3.5a	Should all transactions be subject to the same reporting time requirement?
	We understand there are a number of challenges with respect to reporting time, both with synchronization and with systemization of some transactions. As noted above, we recommend a scaled approach to data aggregation, recognizing that some data sources will be easier to aggregate and conform while other types of transactions may be more challenging. Overall, we suggest that all data points and transactions should be subject to proportional requirements that strive to increase transparency.
	Are the answers different for different types of transactions or instruments?
	We recognize that marketplaces have evolved different mechanisms for transacting some products and combinations of products. This includes, as some examples, managing less liquid instruments, handling of opening and closing auctions, managing large block orders or transacting complex order types with multiple legs in combination. There are likely to be a number of reasons why these types of transactions might have different expectations for reporting time, including very practical, technical and commercial aspects that should be carefully considered to avoid harm and consequence to the market, prior to any change. We cannot offer an opinion on how to address each outlier, aside from the overall suggestion to first obtain and review a meaningful sample of data related to all types of transactions and instruments. This is to hopefully build context for market

	events so the materiality and market consequence of each type of instrument and transaction can be better understood.
3.5b	Should cross market transactions have special indicators to link the different legs of the transactions?
	No, this would be very burdensome without clear benefit. It is our opinion that identifying cross- market transactions would be extremely difficult to engineer, and such relationships would be difficult to maintain as they evolve over time. Cross-market relationships may or may not be merely coincidental (unrelated), may be fleeting, or may be based on subjective analysis.
	In the event that orders are combined and/or two instruments are paired as a product, the inherent data for the trade should provide enough indication from an economic aspect to satisfy any need to highlight the combined transaction.
3.5c	Are there specific trades and/or trading strategies that should be considered for additional identification to ensure that regulatory organizations can accurately interpret the data (similar to Dollar Rolls or Stipulations on deliverable collateral in mortgage to-be-announced trading)?
	We do not recommend focusing on specific exogenous identifiers as a near-term objective for the reasons provided in 3.5b above.
3.5d	Are there other industry practices and/or special situation information that should be considered for reporting?
	As noted above, we recognize that marketplaces have evolved different mechanisms for transacting some products and combinations of products. There are likely to be a number of reasons why these practices might have different expectations for reporting including very practical, technical and commercial aspects that should be carefully considered prior to any change to avoid harm and consequence to the market. We cannot offer an opinion on how to address each outlier, aside from the overall suggestion to first obtain and review a meaningful sample of data related to all types of transactions and instruments.
3.5e	Should trade allocations be reported?
	Trade allocations that are conducted within end user participants who manage multiple accounts or funds should not be a goal of reporting, as this seems very burdensome without clear benefit. It is our opinion that a reporting system for internal allocations would be extremely difficult to engineer, and such information would be extremely difficult to assemble and maintain.
	Are there any special pricing issues that should be considered (e.g. mark ups, commissions, ATS fees) or is dollar price adequate for determining the price of the trade?

We expect that the transaction price for a treasury instrument will be equivalent across venues, particularly among CLOB venues. We expect that non-standard factors in treasury instrument transaction prices (such as embedding markup fees) would need to be separated from the transaction price and made explicit in order to correctly incorporate that transaction for analysis, and this kind of situation may bear out in early research. It is our understanding that venue fees and commissions are more commonly accounted for separately from the transaction price. 3.5f Should settlement date and/or other settlement terms be reportable? We expect that these are standardized terms that should not require reporting. However, in the event that settlement date or terms are varied and material, the regulatory bodies should consider making these terms reportable. 3.5g Are there any special considerations/conditions for determining the time that a trade is executed? Does this differ across trade types or venues? Generally, the time a trade is executed should be when the trade was agreed to, as is the case on an electronic venue. With voice or OTC trades, the time of the trade should be specific enough that it can be compared to the time a publicly quoted market was trading. For example, listing the minute of the day is often insufficient, as the electronic market may have traded at many different prices during that minute. 3.5h Should transactions executed on an ATS and/or in response to an electronic RFO be identified as such? Yes, with respect to the official sector, this type of information on the source of a transaction may provide additional understanding on the behavior or pattern of activity for the respective market. However, we believe that this level of granularity may not be appropriate for public dissemination depending upon its impact on confidentiality. Should the specific ATS and/or RFQ platform be identified as part of the transaction report? Yes, with respect to the official sector, this type of information on the source of a transaction may provide additional understanding of the behavior or pattern of activity for the respective market. However, we believe that this level of granularity may not be appropriate for public dissemination depending upon its impact on confidentiality. Are there unique characteristics of such transactions that should be identified? Should the order type giving rise to a particular execution be captured? We believe that within context and consistent with overall transparency, all U.S. Treasury related transactions, and all material conditions of those transactions, should be reported and become incorporated in the overall regulatory monitoring and market pricing process. Some transactions

	What transmission protocols, data standards and identifiers should be utilized to enhance authorities' ability to integrate data, share information and cooperate on analysis, for both existing and new data reporting?
	<ul> <li>there particular data standards or identifiers that should be used for the reporting of transactions in the Treasury cash market to aid harmonization?</li> <li>This aspect of data conformity may come up once data sources are compared. An advantage of the U.S. Treasury market is the relatively narrow universe of products and conformity around the trading symbol universe of those products. We expect most of the data relevant to the official sector will be available through CLOB venues and those venues would be in a better position to recommend potential harmonies for standards. However, we suggest avoiding standardizations as a matter of regulatory practice, particularly if the underlying protocols are materially similar.</li> </ul>
3.5j	<ul><li>FIA PTG has not formed an opinion on this topic.</li><li>For transactions that are already subject to reporting requirements to the official sector, are</li></ul>
	Are there generally accepted definitions for these categories of counterparties?
	We suggest that counterparties not be identified uniquely or by category as those may change over time with limited potential value. We understand, however, that the official sector may create and internally use categories of participant type in order to assess characteristics and risk. These categorizations should be confidential and restricted to the official sector.
	If the latter, what counterparty types should be identified?
	We believe that counterparty information should be considered highly confidential and wherever possible, standardized with generic identifiers in order to protect the identity of participants while allowing regulators the ability to know who the parties are by reference. We have significant concerns about the limited benefit of additional identification as well as confidentiality concerns regarding participant identity that could undermine the fairness of the markets.
3.5i	Should transaction counterparties be identified uniquely or categorized by counterparty type?
	FIA PTG has not formed an opinion on this topic.
	Are there any other unique methods of transacting in the Treasury market that should be identified?
	may have characteristics that are extraneous, undetermined, less time-sensitive and non-standard when compared to electronic venue-traded transactions; however, the reporting may have important characteristics and consequences for market pricing and should be considered in an appropriate and confidential manner.

	Use of each venue's protocol would be most efficient and minimize market risk. Specifying a single protocol would decrease the flexibility of venues and the implementation of a standard protocol would impose significant costs and risks on the venues and participants. We suggest analyzing the current protocols and the efforts of regulators in other fragmented markets to determine if a method for unifying the data exists.
3.5k	Should the identification of registered market participants be "normalized" across U.S. Treasury cash and futures transactions such that there is a consistent and unique moniker used to identify each individually registered entity
	No. As noted above, the official sector should consider the level of identifiers currently used by venues as a starting point for its monitoring needs. As with other U.S. markets, we believe that the regulatory authorities in the U.S. Treasury markets can use their current authority and information to determine the identity of participants, in large part because the venues and market participants maintain sufficient recordkeeping systems to provide that information upon request.
	Currently, venues in the futures markets use identifiers to categorize many things including the FCM, the clearing account, and the responsible trader. Some regulatory systems provide for additional identifiers, including for position monitoring and regulatory identification. However, such systems have a significant cost, implementation time and limitations. We do not believe these kinds of systems are necessary for the U.S. Treasury market and have concerns about the limited benefit of additional identification as well as confidentiality concerns regarding market participant identity.
3.6	For those securities subject to official sector reporting requirements:
3.6a	Should quotes and/or orders be reported?
	We believe that within the context of each venue's market system, and consistent with overall transparency, all U.S. Treasury related transactions should be reported and become incorporated in the overall regulatory monitoring and market pricing process. Reporting of orders and quotes may require a level of complexity that would be difficult to attain as an initial goal. However, in order to review and assess the functioning and behavior of a market participant, order and quote activity may need to be considered.
	If so, should special consideration be made for certain types of quotes and/or orders (e.g., electronically submitted orders versus voice orders versus RFQ)?
	We believe that consideration should be given to the type of transaction and incorporate relevant aspects of those transactions into the process for compiling official sector data. The fidelity and the granularity of the information should depend upon the market practice and venue. For example, it would be unnecessary to require multiple order variable reporting fields where all orders are entered with the same variables.

	Are there any special considerations when defining an order and/or quote?
	There may be special considerations needed for types of quotes, including mass-quotes, montag quotes or other systematic types of market quote provisions. This topic may vary by venue and would be a topic for further discussion once threshold data topics are addressed.
	How will these special considerations affect the ability of the official sector to analyze activity in the Treasury cash markets?
	We believe special considerations related to quotes and non-standard orders are items to address subsequent to the completion of the first-level of data collection challenges.
3.6b	Should transactions, quotes, and/or orders be reported on a real time basis?
	Initially we do not believe it would be feasible to capture, analyze and value U.S. Treasury market orders in real-time. Being able to use order data on a historical analysis level would be a helpful first step to analyzing whether real-time data is needed.
	If not, what should be the reporting standard?
	We believe a reasonable standard would target the end-of-trading-day as a starting point for reporting objectives. A real-time objective would be feasible for electronic venues includin CLOBs. However, the broader U.S. Treasury market includes legacy systems and processes that currently have overnight reporting requirements. These processes would need to be optimized changed or replaced and this would take significant cost and time. While real-time monitoring ma be an overall objective, it will likely be more efficient to start with data reporting on an extende timeline. This may allow the official sector to reduce the "noise" which may come from analyzin too much data too quickly.
	How should orders that are executed over multiple days be handled?
	FIA PTG has not formed an opinion on this topic.
	Are there other special considerations when defining the time of an order?
	FIA PTG has not formed an opinion on this topic.
3.6c	Are there additional elements that are important for regulators to understand beyond the categories of quote/order originator, price, size and time of the order (e.g., inventory or position data)?

	Should the type of an order or any special order instructions be collected?
	FIA PTG has not formed an opinion on this topic.
	Should all order changes be reported? Is the answer different for electronically submitted versus voice submitted orders?
	As noted above, we believe that within the context of each venue's market system, and consistent with overall transparency, all U.S. Treasury related transactions should be reported and become incorporated in the overall regulatory monitoring process. Reporting of order changes may require a level of complexity that is not possible as an initial goal. However, in order to review and assess the functioning and behavior of a market participant, developing systems to track order changes may need to be considered.
3.6d	Should the submitter of a quote and/or order be identified uniquely or categorized by counterparty type?
	No. As noted above, the official sector should consider the level of identifiers currently used by venues as a starting point for its monitoring needs. As with other U.S. markets, we believe that the regulatory authorities in the U.S. Treasury markets can use their current authority and information to determine the identity of end users and investors, in large part because both the venues and market participants maintain sufficient recordkeeping systems to provide that information upon request.
	If the latter, what counterparty types should be identified? Are there generally accepted definitions for these categories of counterparties?
	N/A
3.7	Is it appropriate to have transactions, orders, and quotes time stamped at a certain clock precision (e.g., microsecond) level?
	Yes, a critical part of cross-market monitoring is normalization of time differences between venues in order to monitor activity within similar time periods. The official sector should expect to expend a significant effort (as do market participants) in measuring and harmonizing transactions from different venues with timing differences. The more accurate and detailed the timing information and understanding of latencies the better.
	Are the answers to these questions different for different types of transactions (e.g., electronic or voice) or different products (e.g., Treasury bills, notes, bonds, on-the-runs, off-the-runs, cash, or futures)?
	For CLOB venues timestamp precision should not vary, however for some types of transactions, particularly those that are not systematic or immediately systemized, the precision will vary widely.

	As an ultimate goal, however, we advocate for systemizing all transactions for regulatory monitoring and market wide transparency.
	Would the answer be different for trade reporting, quote reporting, or order reporting?
	FIA PTG has not formed an opinion on this topic.
	Would the answer be different for different categories of market participants?
	FIA PTG has not formed an opinion on this topic.
3.8	Do commercial bank dealers and broker-dealers have technology infrastructures and order/execution handling in place to report trades on a continuous basis?
	FIA PTG has not formed an opinion on this topic.
3.9	As the official sector begins to collect additional data on the cash U.S. Treasury market, what operational or market factors should be assessed?
	FIA PTG has not formed an opinion on this topic.
	Are there particular negative consequences from the implementation of data collection? If so, what are they and why do they arise?
	Yes, some data collection processes can be rigidly constructed such that they impede the functioning of the trading system. We have concerns that prescriptive requirements regarding data collection could easily inhibit activity. We suggest working with market participants to understand this concern in more detail and identify opportunities for flexibility in the data collection processes.
3.9a	The official sector may consider different methods for receiving transaction data from Treasury markets. For instance, it may rely on existing reporting regimes, or it may seek to build an alternative reporting system. If the latter, what alternative reporting system should be used?
	We are aware of other reporting systems including TRACE, FINRA OATS, SEC Edgar, NFA ORS, FINRA ACT, as well as numerous other systems. We would not suggest a solution as a response to this RFI, however, would recommend a more thorough review, analysis and proposal process similar to the ongoing effort to develop a consolidated audit trail. This process should, as a starting point, research the alternatives and costs of a reporting system.
	What are the costs and benefits with these different approaches? Would one approach impose fewer burdens on reporters than others? If so, why and by how much?
	FIA PTG has not formed an opinion on this topic.

3.9b	Would one approach impose fewer burdens on smaller reporters than another? If so, why and by how much?
	FIA PTG has not formed an opinion on this topic.
3.9c	Is the answer different for trades, orders, quotes, or execution methods?
	FIA PTG has not formed an opinion on this topic.
3.10	What additional infrastructure would be necessary for market participants to begin reporting comprehensive U.S. Treasury market transaction data? Should reporting requirements be phased in? If yes, how and why? Does phasing affect the cost of implementation for market participants? What transmission protocols, data standards and identifiers should be utilized to minimize reporting burdens?
	Creating and maintaining an infrastructure for reporting comprehensive market data by participants is a complex, extensive and time-consuming task. We recommend first analyzing the available sources of market transaction data before contemplating a reporting system focused on participant resources. Examples of the difficulties of the process of creating and maintaining transaction reporting processes are evident with OATS, CAT, TRACE and other equities systems.
3.11	Will the requirement to report transactions in the Treasury markets affect competition in this market? Who would be affected and how? What data or empirical evidence support this position?
	Any requirement to report transactions will have an impact on participants, which includes cost, time, and resources. The ability to report and the consequences of failures are an additional operational burden for all participants who are required to negotiate such a need.

Section IV	An assessment of the data available to the public on U.S. Treasury cash securities markets
	FIA PTG supports efforts to increase transparency for market participants.
INTRO	Post-trade public transparency is important in order for market participants to be able to assess best execution and creates more competition between liquidity providers. In other asset classes, increased post-trade transparency has been shown to lead to better pricing for investors. Post-trade transparency also levels the playing field by removing information asymmetries and contributes to overall market resiliency, so market participants are not left wondering what others know that they do not.
4.1	Is the publicly available information for U.S. Treasury market trading activity sufficiently transparent to foster an efficient, healthy, and liquid market? What changes to public reporting would be most advisable, if any, including the use of data standards and identifiers?
	We believe additional information should be made available regarding U.S. Treasury cash transactions executed in the secondary market. While market participants may be able to access certain information by joining specific trading venues, assuming they are able to satisfy the relevant membership criteria, there is no publicly available information regarding the full universe of U.S. Treasury cash transactions executed in the secondary market. Given the number of transactions executed in the dealer-to-customer segment of the market, this results in a meaningful lack of transparency for market participants. This lack of post-trade public reporting is in stark contrast to the transparency provided in many other asset classes, such as equities, futures, swaps and corporate bonds, some of which are less liquid and have a lower percentage of electronic trading than the U.S. Treasury market.
4.2	What additional information should be made available to the public in order to better assess liquidity conditions in the U.S. Treasury market, and at what frequency? For instance, should there be readily available transaction cost data that accounts for price movements that occur from the initiation of a trade request on RFQ platforms?
	In order to better assess liquidity conditions in the U.S. Treasury market, FIA PTG believes real- time public reporting should be required for all U.S. Treasury cash transactions executed in the secondary market. By providing the price, time and size of each such transaction, market participants will be able to assess best execution and information asymmetries will be reduced. As is the case in other asset classes with real-time public reporting requirements, we support capped notionals for reporting the volume of large transactions which will help protect market participants from being exposed to undue risk or information leakage when transacting in very large size.
4.3	If additional public transparency is necessary at the transaction level, what is the most appropriate level of transparency for publicly available data on trading in the secondary market? Should additional public transparency be phased in over time in any way? Should all quotes and/or orders in the inter-dealer market be made public, or just "top of book"?

	What characteristics should be reported (e.g., participant type, aggressor side, volume, price)? Should the release of any or all of the data be in real time or delayed? Should the available data differ depending on the age of the security, size of the transaction or other characteristics of a particular security or transaction?
	As discussed above, we support the real-time public reporting of price, time and size for each U.S. Treasury cash transaction executed in the secondary market, with capped notionals for large transactions which will help protect market participants from being exposed to undue risk or information leakage when transacting in very large size. Reporting the size of transactions that are above an appropriately calibrated block threshold as being equal in size to the block threshold (i.e. capping notionals at the block threshold) will help protect market participants from being exposed to undue risk. We believe this requirement should be applied after sufficient advance notice in order to allow market participants and trading venues time to build the necessary infrastructure to comply with such a requirement. Experience in other asset classes, such as corporate bonds and swaps, can provide an indication of the suitable amount of lead-time.
	We do not believe additional data should be required to be made public at this stage.
4.4	Is there an existing public reporting model that would be appropriate, in whole or in part, for the U.S. Treasury market (e.g., swap data repositories for swaps, or FINRA's Trade Reporting and Compliance Engine (TRACE) for corporate bonds and agency mortgage- backed securities), or would the Treasury market benefit from a new model?FIA PTG has not formed an opinion on this topic.
4.5	What additional information should be available to the public about the operation of trading platforms or trade execution algorithms on trading platforms (for inter-dealer as well as dealer-to-customer platforms)? For example:
4.5a	Should information about order types, agreed upon fee arrangements, user agreements, and/or brokerage agreements be disclosed?
	FIA PTG also supports greater transparency from U.S. Treasury trading venues in order to ensure all market participants have the same amount of information regarding their operation and are able to evaluate them on their merits. This includes information with respect to fees and rebate and incentive programs.
4.5b	Should the degree to which subscribers to the platform may limit their interaction with or exposure to other subscribers be disclosed?
	We believe all trading venues should be required to clearly disclose membership criteria and any subscriber segmentation employed to limit interaction on the venue. These trading venues should also be subject to fair access requirements in order to ensure they are not permitted to arbitrarily exclude specific market participants. Interaction on the venue should be based on the characteristics

	of the order and not the identity of the participant.
4.5c	Should the degree and extent to which the sponsor of a platform trades on the platform be disclosed?
	We support trading venues being required to disclose any potential conflicts of interest, including with respect to the activities of the platform sponsor on the venue.