I. Further Study of the Evolution of the U.S. Treasury Market and the Implications for Market Structure and Liquidity

Questions for Public Comment

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:

- *Our comments are in the context of the Dealer to Customer market*
- *Some of our Counterparties (CPs) have indicated difficulty in quoting/sourcing securities, especially off the run ones*
- *Such CPs have indicated reduction in the balance sheet support and new regulations preventing / substantially reducing the carrying of inventory for market making purposes to be behind their reduced ability to provide competitive quotes*

a. How do you define liquidity? How do you define liquidity provision?

Market liquidity may refer to the market's ability to execute a sale or purchase transaction of a standard lot at the prevailing prices with minimum impact cost.

- *We consider 2 aspects while defining liquidity provision namely the **Breadth** and the **Depth** of liquidity*
- *Breadth of liquidity refers to the number of participants present and participating in a market. These participants include market makers as well as buy side firms like Insurance companies, Pension funds, Sovereign wealth funds, etc.*
- *Depth of liquidity refers to the volume of transactions being undertaken (both buying and selling) by the participants in a market.*
- *Depth and Breadth of liquidity complement each other in ensuring that the market participants have the confidence that they would be able to put through the transactions of a reasonable size at minimum cost and without causing volatility in the market prices. Such a liquid market should also be able to minimize the impact of large transactions.*

b. 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?

- *Bid- Ask spreads have generally been considered the most reliable indicator of the degree of liquidity available in a market*
- *As mentioned in our answer to question (a) above, information on the Depth and Breadth of the market from a reliable source would be a useful addition to the information about the degree of liquidity available in the market.*

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

- *Please see our answer to question (a) above*

d. Which measures best represent the resilience of liquidity, or the relationships between liquidity and volatility?

- *Impact cost*

e. 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?

- *In the context of the Dealer to Customer market, which is an OTC market, we do not get an idea about the depth of the market at a particular point of time as is available in an exchange traded market.*

f. What changes, if any, have you observed in these measures over recent years? Over recent months?

- *Due to the supposed difficulty of the Counterparties (CPs) in quoting/sourcing securities, especially off the runs the bid-ask spreads in such securities have widened.*

g. 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?

- *Please see our answer to question (e) above*

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?

- *No comments*

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?

- *We avoid significant transaction volumes during periods of high stress or volatility*

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?

- *No comments.*

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?

- *Greater transparency regarding the depth of the market would help real money investors like ourselves.*

- *It is not necessary that only banks should do intermediation. If banks are losing volumes, intermediary business should shift ideally to non-bank intermediaries. If volumes shift instead to non-market-makers, intermediation function in the UST market is likely to suffer, with long term negative consequences for market liquidity.*

- *One way to deal with the shift in volume to non-intermediaries is to develop a microstructure that reduces the need for intermediaries – for instance, by consolidating order books across the Treasury market. To take a simplistic example, this could happen if all (or most) trading in UST market can be routed through a centralized trading system, as it happens on exchanges for equities or futures.*

- *Alternatively, intermediation needs to be incentivized. This could happen through beneficial regulatory treatment for market making, well-defined market access (e.g., absence of end-users in inter-dealer markets) etc.*

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?

- *Liquidity of the market is a bigger concern for us than the speed with which the transactions are being executed.*

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 expect it to develop? What implications for the Treasury market, if any, do you see as a result of these developments?

- *No comments.*

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

Questions for Public Comment

We request comment on the questions below. We are interested in what further steps the public and private sectors can take to address any outstanding risks, including operational risks to market functioning and risks to market integrity. We are also interested in the extent to which rules and practices applicable in other markets may be effective, in whole or in part, in improving the resilience of U.S. Treasury markets.

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:

a. 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.

- *There is a need for introducing guaranteed settlement in US Treasury cash markets*.

b. 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?

- *Answers are in the context of US treasury cash market.*
- *Introduction of trading halts in the US treasury cash market which serves as a safe haven in times of stress or turmoil in other financial markets is likely to detract from its status as a safe haven .*

c. To what extent should U.S. Treasury cash market platforms be responsible for monitoring, identifying, and/or reporting suspicious trading activity?

- *No comments*

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?

- *No comments.*

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.

- *No comments.*

2.4 How best practices are 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?

- *No comments.*

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:

a. 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?

- *No comments.*

b. 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?

- *Centralised clearing of cash Treasury transactions is a desirable goal .While broader participation is preferable it should at least cover all dealers ,brokers and end-users above a threshold volume*

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.

- *Central clearing.*

- *Guaranteed settlement*

- *Settlement risk management may be done through members of the clearing house. Users would settle through such members. Any user wishing to settle directly will be required to adhere to the clearing house requirements.*

- *Introduction of such rules might raise the short term cost of participating in the market, but over time as market efficiencies and liquidity are benefited, cost of participation would be offset.*

a. What implications would a registration requirement for firms conducting certain types of automated trading, or certain volume of trading, in the U.S. Treasury market have on market structure and efficiency, investor protection, and oversight?

- *Registration and dissemination of market data would have a positive impact on efficiency, investor protection and oversight.*

b. 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?

- *No comments.*

2.7 Should self-trading be expressly prohibited in the cash Treasuries market? Does self-trading 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?

- *Self-trading should be discouraged as it may give the impression of adequate liquidity which is not accessible.*

III. An Assessment of the Data Available to the Official Sector on U.S. Treasury Cash Securities Markets

Questions for Public Comment

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? 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? What aspects of U.S. Treasury market monitoring require data collection across cash and derivatives markets?

- *As the cash and derivative markets are interconnected and movement in one affects the other it is advisable that the regulator has visibility across all US Treasury Cash and derivatives markets. Data collection on risk exposure (position, long or short), excessive interest in specific securities can be collected across cash and derivatives markets.*

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? 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?

- *Transaction data would add further transparency and should be disseminated as close to real time as possible.*

- *Reporting of inventory and position can be at lesser frequency, say quarterly.*

a. 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 transactions in securities issued by Treasury be subject to reporting , to preempt transactions shifting to non-reported securities*

b. Should repurchase agreement transactions be reportable?

- *Repurchase agreement transactions be reportable, particularly so far as they are used to deliver into shorts.*

3.3 What criteria should be used to determine who should report to the official sector? Should both counterparties (buyer and seller) be required to report a trade or is one-sided reporting preferable? Should reporting requirements depend on the platform or execution method? Should only a subset of participants, such as brokers, dealers, futures commission merchants (FCMs) and commercial bank dealers be required to report transactions? Should other parties to a transaction, such as banks and PTFs, be required to report? 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?

- *Volume data can be reported by all market makers (for OTC) and all trading venues.*

- *Inventory can be reported by depositories. Positions can be reported by all regulated entities.*

3.4 Should transaction reporting include identifiers for categories of end investors? What are the costs and benefits of this approach? What alternatives should be considered to permit monitoring of positions and market activity?

- *There need not be any obligation to report on end users, as long as they transact through recognized market makers or on recognized trading venues.*

3.5 For those instruments subject to official sector reporting requirements:

a. Should all transactions be subject to the same reporting time requirement? Are the answers different for different types of transactions or instruments?

- *See answer to question no. 3.2*

b. Should cross market transactions have special indicators to link the different legs of the transactions?

- *While this may be advisable, the compliance burden should be considered*.

c. 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)?

- *No comments*

d. Are there other industry practices and/or special situation information that should be considered for reporting?

- *No comments*

e. Should trade allocations be reported? 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?

- *No comments*

f. Should settlement date and/or other settlement terms be reportable?

- *No comments*

g. Are there any special considerations/conditions for determining the time that a trade is executed? Does this differ across trade types or venues?

- *No comments*

h. Should transactions executed on an ATS and/or in response to an electronic RFQ be identified as such? Should the specific ATS and/or RFQ platform be identified as part of the transaction report? Are there unique characteristics of such transactions that should be identified? Should the order type giving rise to a particular execution be captured? Are there any other unique methods of transacting in the Treasury market that should be identified?

- *Such level of granularity would be useful but the cost of such reporting should be kept in consideration.*

i. Should transaction counterparties be identified uniquely or categorized by counterparty type? If the latter, what counterparty types should be identified? Are there generally accepted definitions for these categories of counterparties?

- *Transaction counterparties be identified by type. It would be useful to cover categories like banks, insurance companies, Hedge funds, trust funds, retirement funds, SWFs etc.*

j. For transactions that are already subject to reporting requirements to the official sector, are there particular data standards or identifiers that should be used for the reporting of transactions in the Treasury cash market to aid harmonization? 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?

- *No comments*

k. 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 comments*

3.6 For those securities subject to official sector reporting requirements:

a. Should quotes and/or orders be reported? 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)? Are there any special considerations when defining an order and/or quote? How will these special considerations affect the ability of the official sector to analyze activity in the Treasury cash markets?

- *Both quotes and orders should be reported as they both add to the market information and affect prices*

b. Should transactions, quotes, and/or orders be reported on a real time basis? If not, what should be the reporting standard? How should orders that are executed over multiple days be handled? Are there other special considerations when defining the time of an order?

- *All transactional information should be reported /disseminated as close to real time as possible to improve transparency for the participants .Big orders may reported on the day of execution.*

c. 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? Should all order changes be reported? Is the answer different for electronically submitted versus voice submitted orders?

- *No comments*

d. Should the submitter of a quote and/or order be identified uniquely or categorized by counterparty type? If the latter, what counterparty types should be identified? Are there generally accepted definitions for these categories of counterparties?

- *Please see our response to question number 3.4 and 3.5(i)*

3.7 Is it appropriate to have transactions, orders, and quotes time stamped at a certain clock precision (*e.g.,* microsecond) level? 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)? Would the answer be different for trade reporting, quote reporting, or order reporting? Would the answer be different for different categories of market participants?

- *No comments*

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?

- *No comments*

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? Are there particular negative consequences from the implementation of data collection? If so, what are they and why do they arise?

- *No comments*

a. 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? 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?

- *As far as possible all near real time data reporting should be automated – from the trading venue or from the market maker's system to a public repository. This would minimize reporting burden.*

b. Would one approach impose fewer burdens on smaller reporters than another? If so, why and by how much?

- *Reporting burden should be on trading venues /market makers. Its impact on the end-users should be absent or minimal*

c. Is the answer different for trades, orders, quotes, or execution methods?

- *No*

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?

- *No comments*

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?

- *Greater transparency in the market is likely to have a positive impact on price discovery and market integrity.*

IV. An Assessment of the Data Available to the Public on U.S. Treasury Cash Securities Markets

Questions for Public Comment

We request comment on the questions below. We are interested in the appropriate level and form of data about Treasury market activity that should be made available to the public. This includes use of transmission protocols, data standards and identifiers to facilitate the public's ability to link and integrate data.

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 feel that information for U.S. Treasury market trading activity is not sufficiently accessible.*
- *The total volume of transactions undertaken per day (as currently available through SIFMA) should be complemented by other granular levels of data like % of trading undertaken by various types of participants, positioning etc.*

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?

- *Security-wise volume*
- *Impact assessment*
- *Bid-ask spreads*

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?

- *To begin with one could aim to disseminate trade information (price, volume, security) and market positions by type of participant.*

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?

- *Please* see *our answers to questions 3.9 (a)*

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:

a. Should information about order types, agreed upon fee arrangements, user agreements, and/or brokerage agreements be disclosed?

- *May not be of significant value for price discovery*

b. Should the degree to which subscribers to the platform may limit their interaction with or exposure to other subscribers be disclosed?

- *No comments*

c. Should the degree and extent to which the sponsor of a platform trades on the platform be disclosed?

- *No comments*