Financial Systemic
Analysis & Resilience Center

# US Treasuries (UST) Initiative Highlights

Treasury Market Practices Group (TMPG)

October 23, 2018

**TLP WHITE**

# FSARC Overview

FSARC

The goal of the Financial Systemic Analysis and Resilience Center (FSARC) is to improve the resiliency of the critical functions that underpin the U.S. financial sector and to develop intelligence to protect and defend them.

This is accomplished through operational collaboration and joint analysis between participating firms, industry, and government partners.

# FSARC Risk Committee Overview

FSARC member firms closely collaborate through the Risk Committee to identify and prioritize the most pressing systemic operational risks to the U.S. financial sector.

U.S. Government partners across regulatory and security arenas also participate in this effort for awareness, which creates a venue to have an open and ongoing dialogue with key sector stakeholders.

# FSARC Risk Register Overview

FSARC

## The Risk Committee builds the Risk Register

FSARC and Treasury co-lead the Risk Committee

### FSARC Member Firms

share ownership of the Risk Committee and provide input to the Risk Register

- **Input**
- **Ownership**

### Financial Sector Organizations

are involved for awareness and can provide input to the Risk Register

- **Input**
- **Awareness**

### U.S. Government Partners

are involved for awareness

- **Awareness**

# FSARC Risk Register Overview *(Continued)*

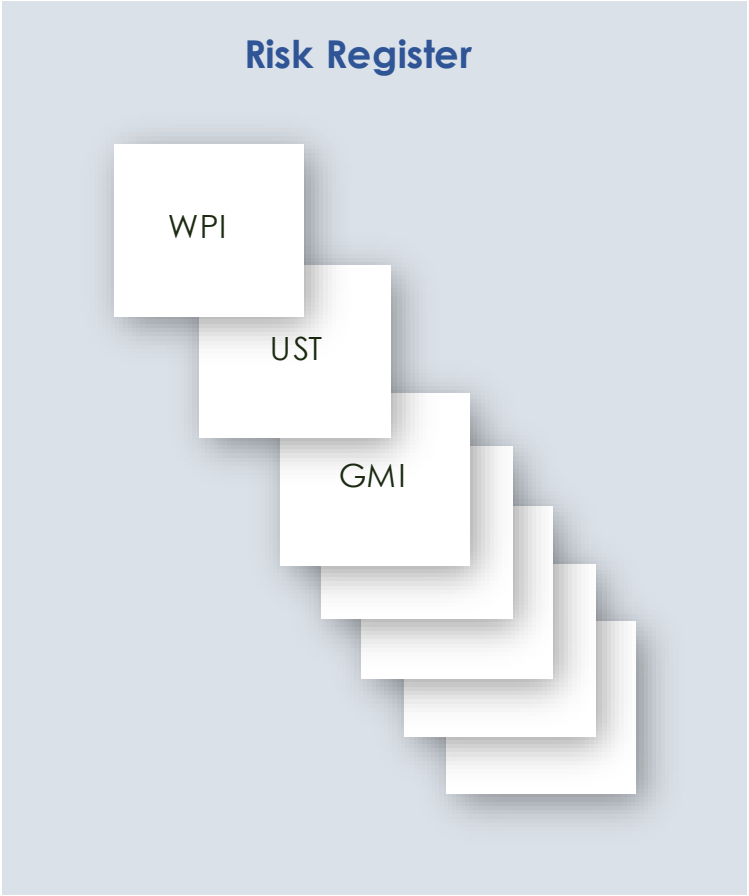
The Risk Register is comprised of Identified Systemic Assets—systemically relevant business processes, functions, and technologies underpinning the U.S. financial sector which, if compromised, could lead to systemic risk.

The Risk Register is the first repository of its kind that provides a structured, sustainable, central location for the collection and recording of systemic risks validated by key sector participants.

FSARC

# The Risk Register drives Risk Initiatives

**The Risk Register allows FSARC to prioritize specific initiatives to drive measurable improvements to sector resiliency.**



# US Treasuries (UST) Initiative Overview

FSARC

**The FSARC US Treasuries (UST) Initiative kicked off in early 2018 to address potential systemic risk to both the US Treasuries market and the broader financial sector.**

**The UST Initiative resulted in the following outputs:**

## Ecosystem Maps

- Level 1
  **Participants, Networks & Exchanges**
- Level 2
  **Tasks & Functions**
- Level 3
  **Technology *(Aspirational)***

## Playbook

**Action plans and solutions to be implemented by member firms**

## Watch Items

**Observations and trip-wires possibly indicative of threats to critical functions**

# UST Initiative Workstreams and Results

FSARC

**Over the course of the 5 month UST initiative, 250+ people across over 40 firms supported 68 workshops across 7 workstreams to reduce systemic risk within the US Treasuries market**

| Workstreams | Initiative Results |
|---|---|
| 1 Operations | Analyzed the secondary US Treasuries market to better understand key risk areas |
| 2 Communications and Customer Strategy | Mapped the US Treasuries secondary market HFT process to support identification of potential attack surfaces |
| | Developed briefing materials of the end-to-end HFT process to support broader education efforts |
| 3 Cyber Risk and Technology | Consolidated the components of a capability to support early identification of anomalous activity in the US Treasuries secondary market |
| | Developed a mutually agreed upon sector Playbook to support the response to a cyber crisis in the US Treasuries market |
| 4 Risk, Liquidity, and Interconnectedness | Established communication protocols describing the key touchpoints and recommended communications |
| 5 Legal and Compliance | Analyzed the market regulatory landscape to inform the Playbook action steps and communication points |
| | Developed guidelines that outline the key items that firms may need to consider to resume normal trading activity |
| 6 Indications and Warning | Enhanced the focus on cyber resiliency across participating firms across US Treasuries front office and support teams |
| 7 Exercise Planning | Supported enhanced collaboration between market participants across the value chain, in cybersecurity, regulators, and government |
| | Cyber security exercise of the Playbook to enhance industry coordination, communication, and familiarity |

# UST Initiative Products

FSARC

- **Playbook (and Playbook Summary)**
- **Report (and Report Summary)**
- **HFT briefing document**
- **Anomalous Market Activity Detection (AMAD) document**
- **HFT Process Flow Monitoring document**
- **Level 2 Process Flows**
- **Watch Items**

# Exercise Overview

FSARC

**Background**: On June 13, 2018, the FSARC conducted a large-scale industry cybersecurity exercise to examine detection, response, and recovery actions related to a significant cyber-induced disruption of the US Treasuries market.

**Primary Participants:** Business/Operations, Cyber, Tech, and key support functions from DTCC, FSARC member firms, FS-ISAC, and SIFMA. Observers included the Payments Risk Committee, the Treasury Market Practices Group, and several US Government entities.

**High-Level Scenario**: A fictitious adversary manipulated the trading algorithm at a high frequency trading firm resulting in the depletion of capital at the compromised firm, higher UST yields, and questions about data integrity in the market.

**Exercise Objectives:**

- **Stress tested** the FSARC UST Playbook to identify any gaps, built muscle memory in each participating institution, and examined potential solutions, communication/escalation protocols, and watch item monitoring
- Exercised **communication and coordination** processes to maintain trust and confidence in the financial system
- Discussed how and to what extent organizations might work together to **resume BAU operations**

# Exercise Key Observations

**Several observations were documented following the exercise that focused on key themes:**

- The UST Playbook demonstrated its utility as a mechanism to rapidly mobilize an effective sector-wide response to a systemic threat. Moving forward, the FSARC should consider socializing the UST Playbook with additional key stakeholders and continue to integrate within each member firm's crisis management processes and procedures.

- Industry groups should consider building customized rosters for key crisis coordination meetings that include appropriate business subject matter expertise. The specific remit, roles/responsibilities, external communications, and integration of public sector entities in these committees should also be considered

- Industry groups and FSARC member firms – in partnership with the US Government – should continue developing clear guidelines and governance around responsible trading resumption/reconnection following a cyber-induced disruption. Firms should seek to reach consensus on which entity should serve as the primary coordinating body to convene and facilitate the resumption/reconnection process for the financial sector.

Financial Systemic
Analysis & Resilience Center

TLP - WHITE