

# **Clearing and Settlement in the Secondary Market for U.S. Treasuries**

December 3, 2018

# TMPG Clearing & Settlement

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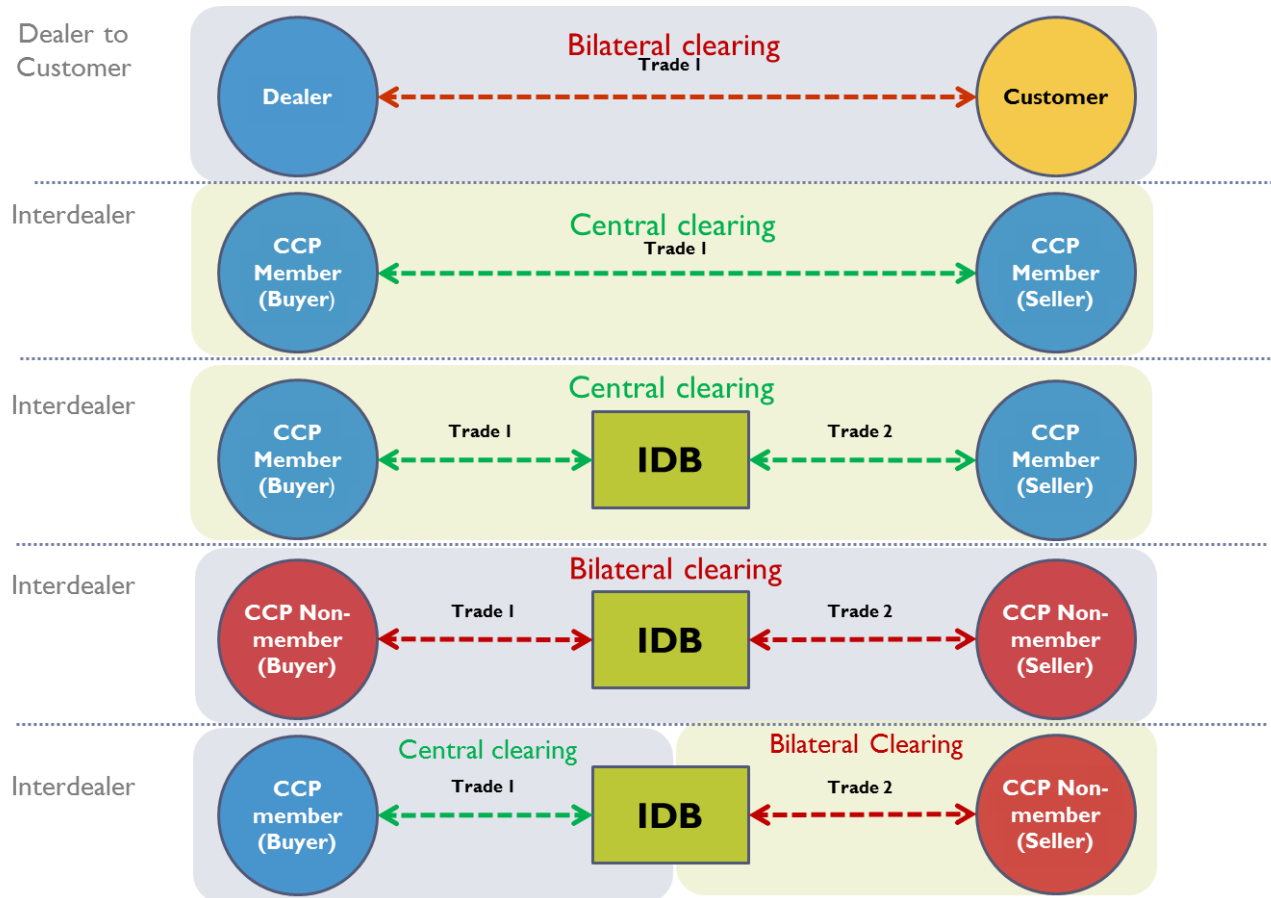
- ▶ Following the Joint Staff Report (2015), TMPG began study of clearing and settlement practices in 2016 to see if they have kept pace with market evolution
- ▶ In July of 2018, TMPG published a consultative white paper and set of maps, illustrating range of practices and identifying risk and resiliency issues
- ▶ TMPG engaged in a public comment period to get feedback
- ▶ TMPG expects to finalize the White Paper soon and plans to develop best practice recommendations around clearing and settlement
- ▶ Some risk and resiliency issues extend beyond best practices

# Key Findings

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- ▶ The TMPG observed that market participants may not be applying the same risk management rigor to the clearing and settlement of their U.S. Treasury activities as they do to other aspects of risk taking
  - ▶ Unlike swaps and other markets, bilateral clearing has grown in Treasuries; it is now over 75 percent of volume due largely to increase in non-clearing members trading on interdealer platforms
  - ▶ Likely increased aggregate market risk due to growth in bilateral clearing
  - ▶ Room for trade matching and allocation practices to be improved; some are slow to match trade details increasing operational risk
  - ▶ Incomplete understanding of who holds counterparty risk at various times in the settlement life cycle
  - ▶ Traditional risk management practices may not have kept pace with the speed of execution technology

# Trades in Treasury Cash Market

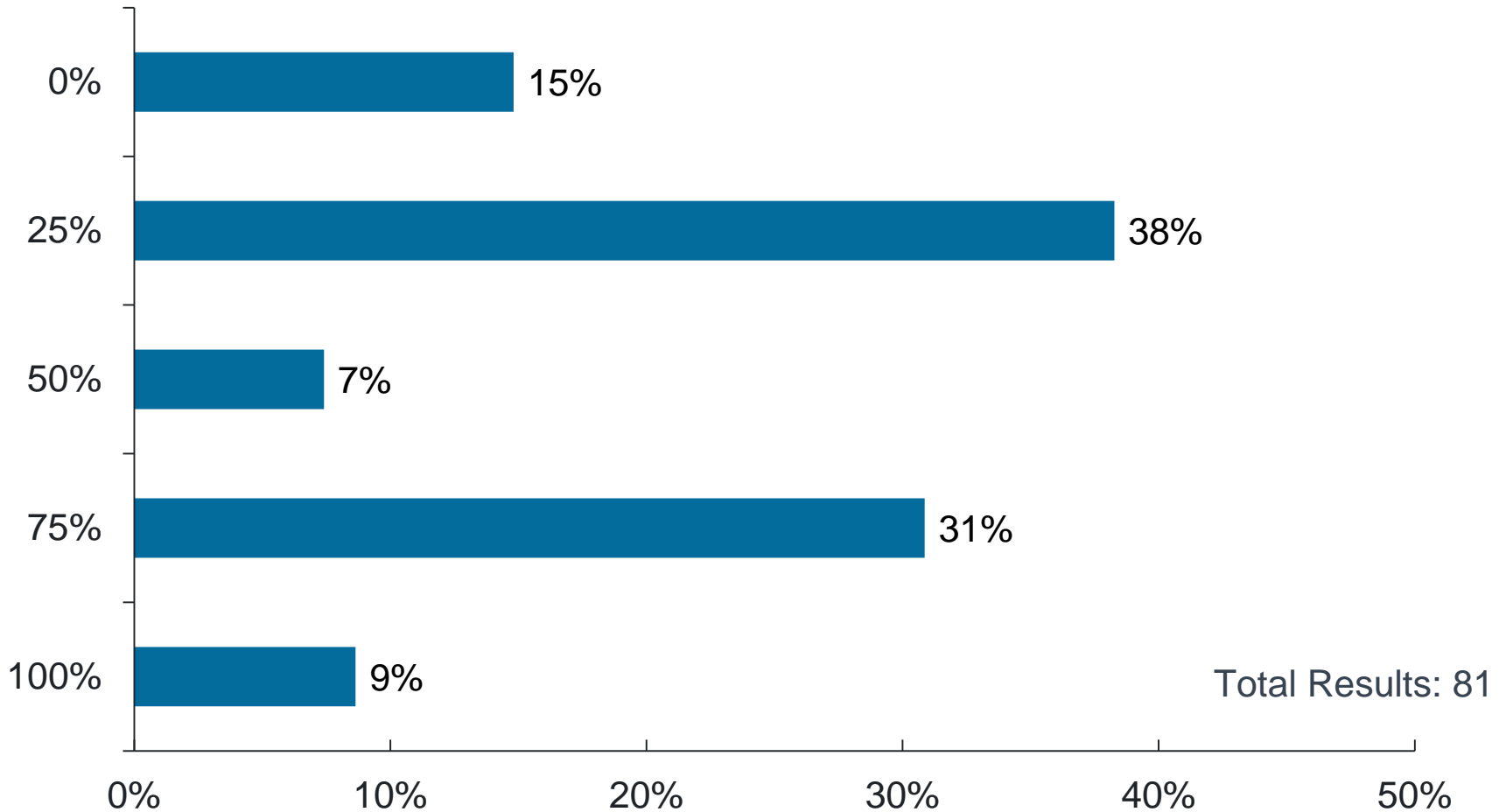


**Bilateral clearing:** Credit risk managed by counterparties bilaterally; clearing completed by T+1

**Central clearing:** Credit risk transfers rapidly to CCP on novation which occurs within minutes of execution on T+0

## Audience Poll:

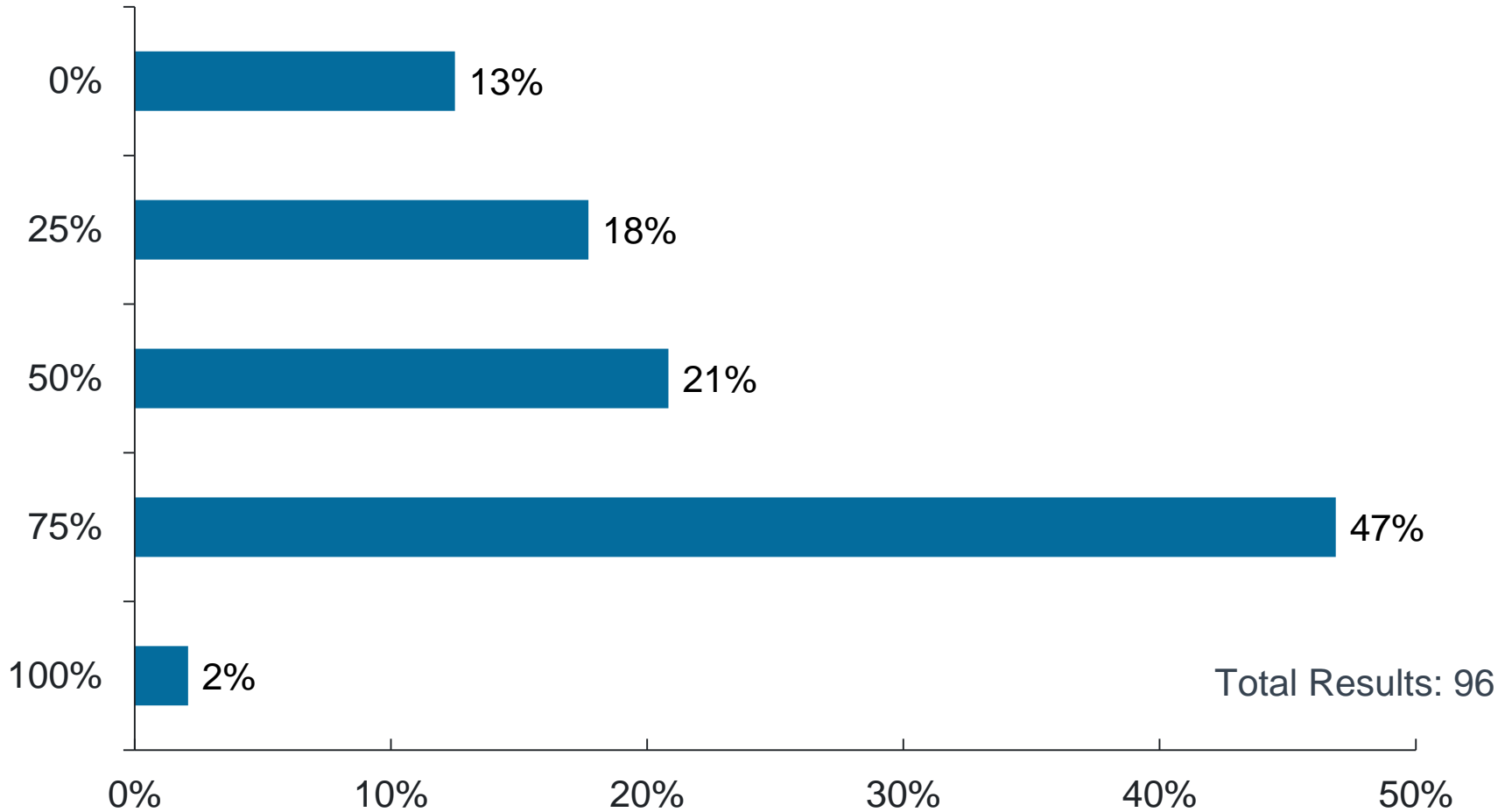
Roughly what percentage of secondary cash Treasury trading on inter-dealer broker platforms cleared bilaterally *prior to 2000*?



Source: Audience Polling, Polleverywhere

## **Audience Poll:**

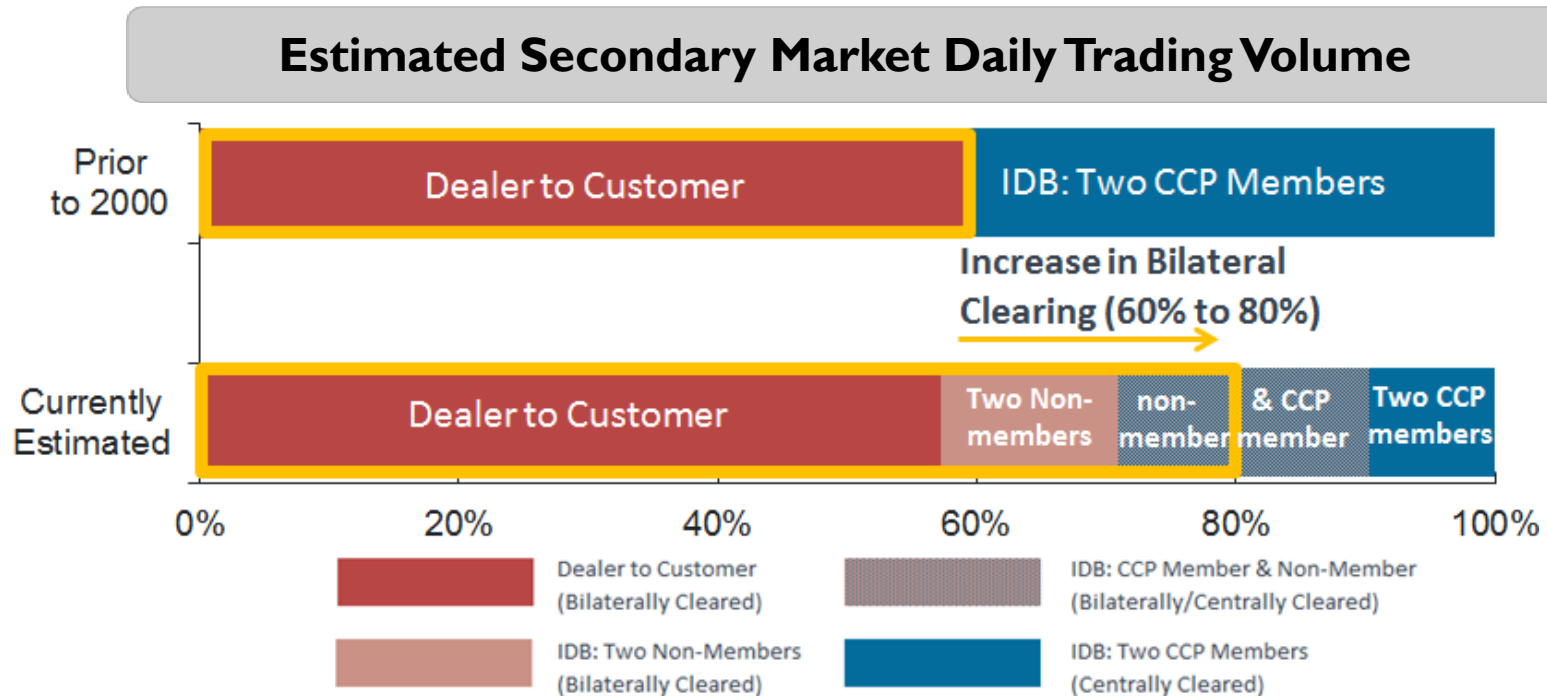
Roughly what percentage of secondary cash Treasury trading on inter-dealer broker platforms clears bilaterally **today**?



Source: Audience Polling, Polleverywhere

# C&S: Treasury Cash Market Segments

- ▶ Two segments in the Treasury cash market
  - ▶ Dealer to customer segment (DtC)
  - ▶ IDB platform segment
    - ▶ High speed central limit order book like futures, equities
    - ▶ Traditionally only broker-dealers, but since early 2000's open to others (mostly PTFs)

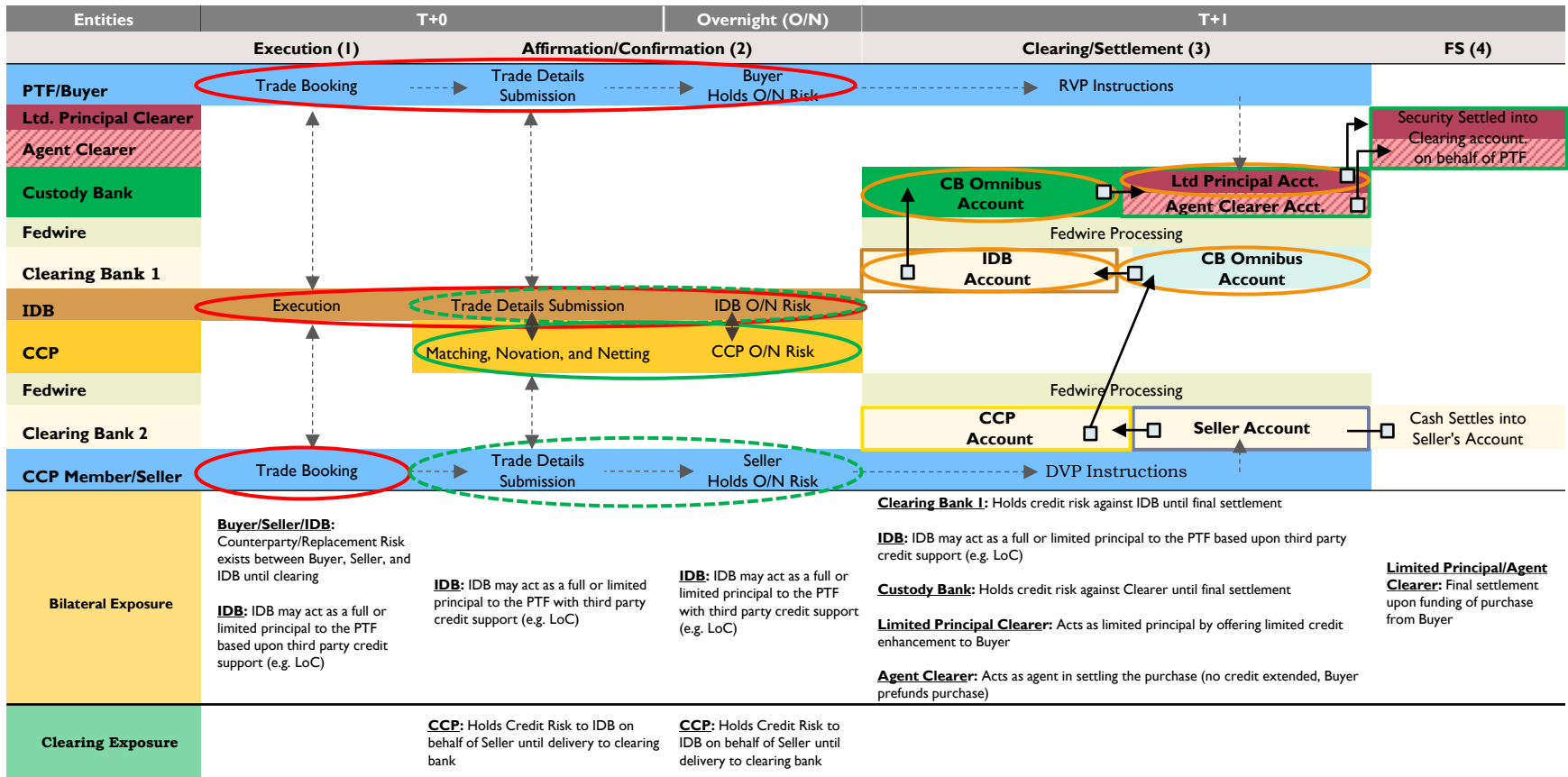


Notes: The figures are estimated using FR 2004 data covering the first half of 2017 and various assumptions, including that a) primary dealers account for all dealer activity, b) 5% of dealers' trading not through an IDB is with another dealer, c) the shares of dealer and non-dealer activity in the IDB market for coupon securities equal the weighted averages of the shares reported in the October 15 report (that is, 41.5% and 58.5%, respectively), d) only dealers trade bills, FRNs, and TIPS in the IDB market, and e) the likelihood of dealer and non-dealers trading with one another in the IDB market solely reflects their shares of overall volume.

# Sample Detailed Flow Map

Figure 5A: Hybrid Clearing (IDB)

CCP member and CCP non-member trade via IDB; bilateral and central clearing



Indicator	Description	Indicator	Description	Indicator	Description	Indicator	Description
	Counterparty Credit Risk		Centrally Cleared Credit Risk		CCP Counterparty Risk		Credit Extension Risk
	Two Way Information Flow		One Way Information Flow		Security Movement		Cash Movement



# Bilateral Clearing Arrangement

	T+0 Start	T+0 End	Overnight	T+1 Start	T+1 End
	1. Execution	2. Affirmation/ Matching		3. Clearing/ Settlement	4. Final Settlement
<b>Seller</b>	<b>Book and Match Trade, Hold Overnight Risk</b>				
<b>Clearing Bank</b>					
<b>Custody Bank</b>				<b>Holds risk until final settle</b>	
<b>Buyer</b>	<b>Book and Match Trade, Hold Overnight Risk</b>				

- ▶ If seller does not perform, likely not known until T+1
- ▶ Manual matching processes could result in misunderstandings about a trade, increasing risk

# Central Clearing Arrangement

	T+0 Start	T+0 End	Overnight	T+1 Start	T+1 End
	1. Execution	2. Affirmation/ Matching		3. Clearing/ Settlement	4. Final Settlement
<b>Seller- CCP Member</b>	<b>Book Trade and Submit Trade Details</b>				
<b>IDB</b>	<b>Execute and Submit Trade Details</b>				
<b>CCP</b>		<b>Match, Novate, and Net Trades CCP; Hold Overnight Risk</b>			
<b>Clearing Bank</b>				<b>Holds risk until final settle</b>	
<b>Buyer- CPP Member</b>	<b>Book Trade and Submit Trade Details</b>				

- ▶ If seller does not perform, likely identification on trade date
- ▶ CCP facilitates timely trade matching and novation, central management of counterparty risks

# Hybrid Clearing Arrangement

	T+0 Start	T+0 End	Overnight	T+1 Start	T+1 End
	1. Execution	2. Affirmation/ Matching		3. Clearing/ Settlement	4. Final Settlement
<b>Seller- Non CCP Member</b>	<b>Book and Match Trade; Hold Overnight Risk</b>				
<b>Limited Princ. Clearer</b>					<b>Limited principle to seller</b>
<b>Custody Bank</b>				<b>Holds risk until final settle</b>	
<b>Clearing Bank</b>				<b>Holds risk until final settle</b>	
<b>IDB</b>	<b>Execute and Submit Trade Details, Hold Overnight Risk</b>				
<b>CCP</b>		<b>Match, Novate, and Net Trades CCP Hold Overnight Risk</b>			
<b>Buyer- CCP Member</b>	<b>Book and Match Trade; Hold Overnight Counterparty Risk to CCP</b>				

- ▶ If seller does not perform, likely not known until T+1
- ▶ Automated matching but increase in the number of participants, time of certain exposures, and misunderstandings of risk

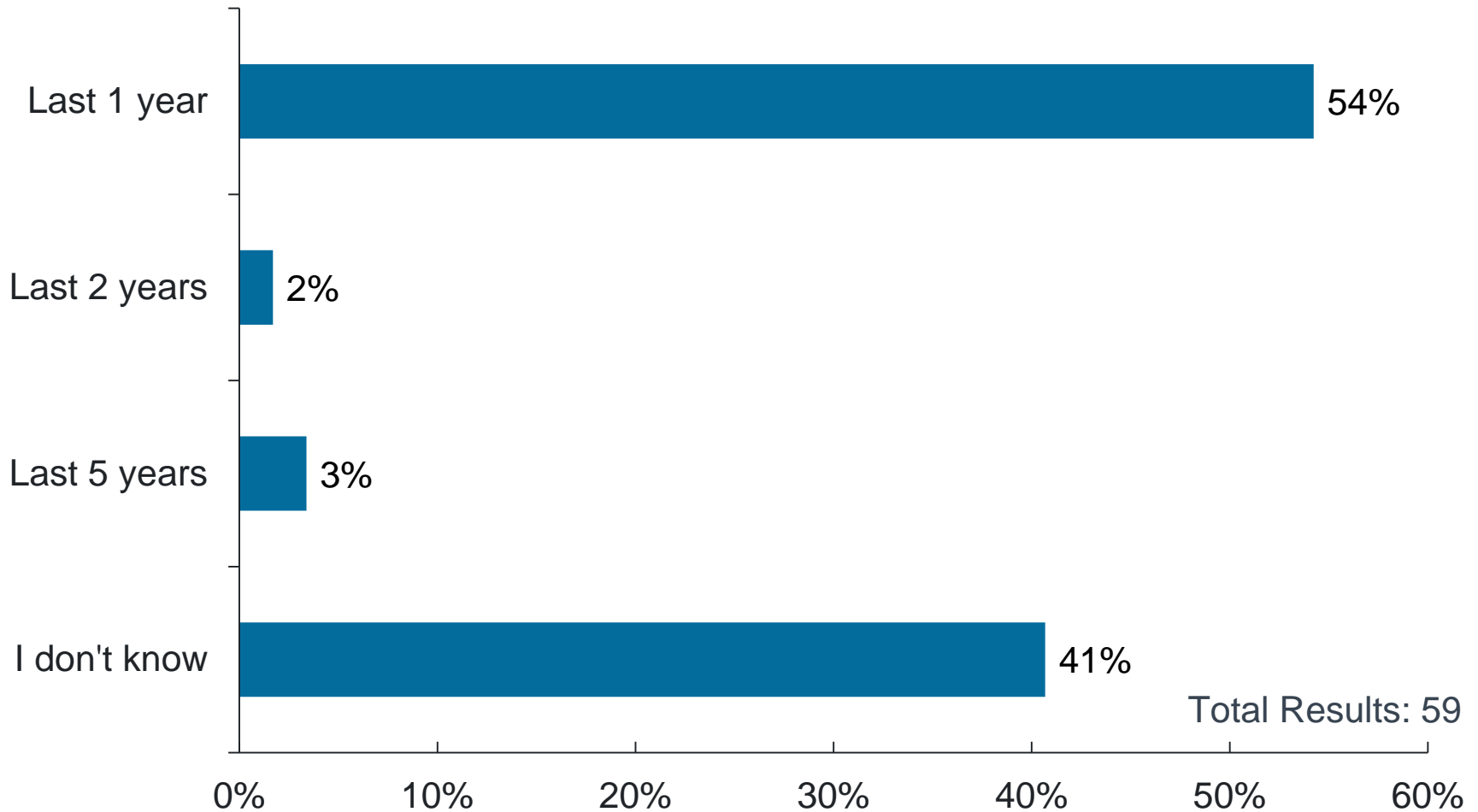
# Preliminary Feedback

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- ▶ The TMPG white paper received supportive feedback
- ▶ Some comments stressed a need for market participants to understand how the central clearing model could evolve to accommodate more types of market participants
  - ▶ Several possible ideas on broader participation in central clearing
- ▶ Some feedback acknowledged regulatory gaps and noted that government securities market participants and platforms should not be exempt from certain regulations
  - ▶ Some comments suggested there should be minimum requirements for active, unregulated participants (e.g. PTFs)
- ▶ Some highlighted importance of diversity and broad access
- ▶ Some noted that costs and benefits must be weighed carefully for any change in market practice or regulation

**Audience Poll:**

When was the last time you reviewed your clearing and settlement arrangements for cash Treasury trades?



Source: Audience Polling, Polleverywhere

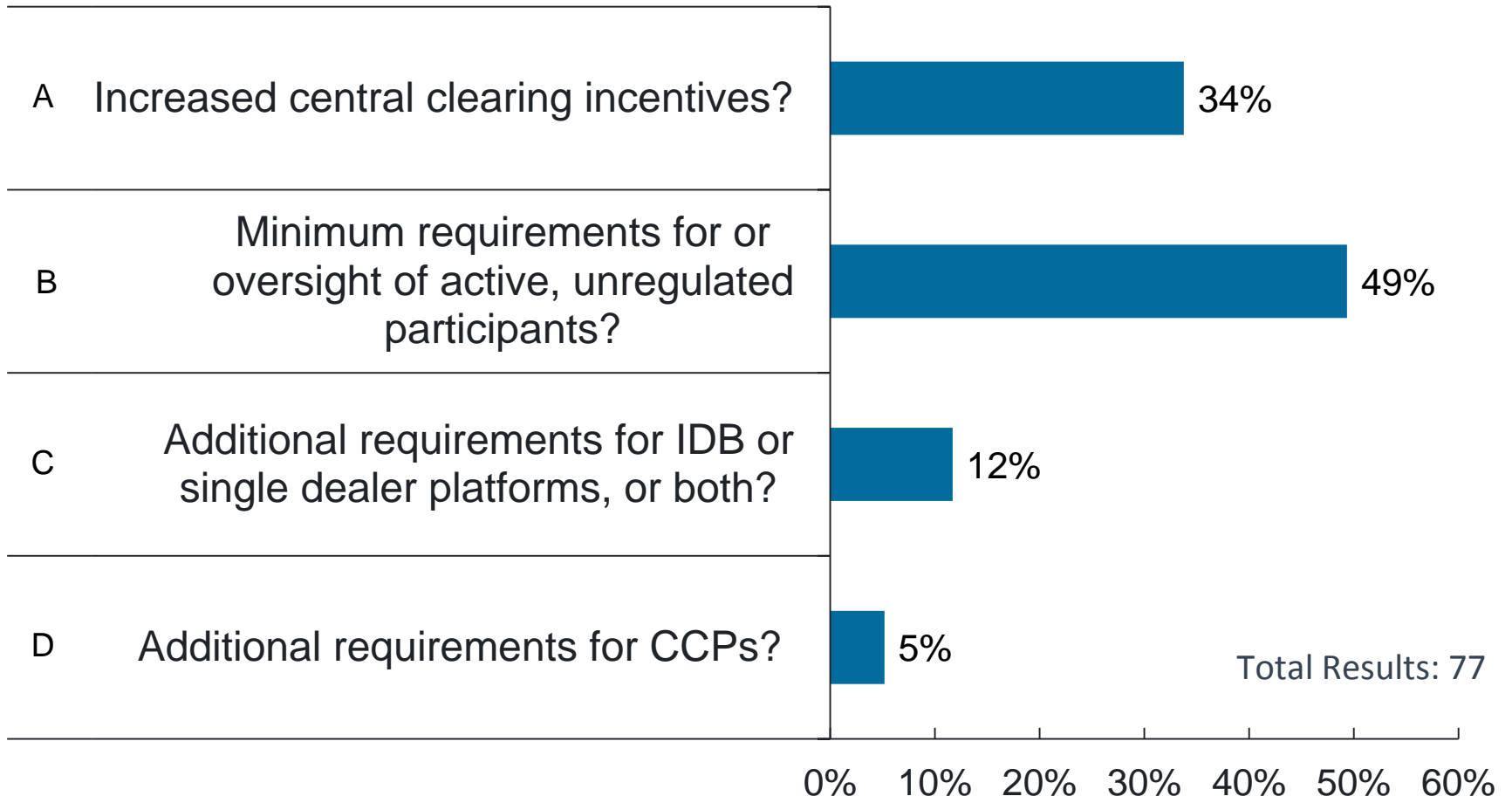
# What Should You Do?

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- ▶ Review your existing clearing and settlement arrangements
- ▶ Ensure your understanding of how counterparty and credit extension risks evolve over the settlement lifecycle

## Audience Poll:

Which of the following do you think is the most important question to address to improve the clearing and settlement infrastructure of this critical market?



Source: Audience Polling, Polleverywhere

# Information Handling Best Practices

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- ▶ The TMPG developed best practice guidance for handling of confidential information, and recommends that firms:
  - ▶ have policies in place
  - ▶ make these available to their counterparties
  - ▶ understand how their counterparties are using their own confidential information
- ▶ Final guidance published in January 2018, following a public comment period, and adoption is recommended by year end
- ▶ Find all the best practices at: <https://www.newyorkfed.org/tmpg>