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into investment insight



Impact of Fed Intervention on the Mortgage Market

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Fed Intervention during Covid



Fed Intervention during Covid

A Story in Four Chapters

Chapter 1: The initial phase -- March 2020

Chapter 2: Continued purchases in 2020

Chapter 3: Home prices going up

Chapter 4: The unwind (2022 - ?)

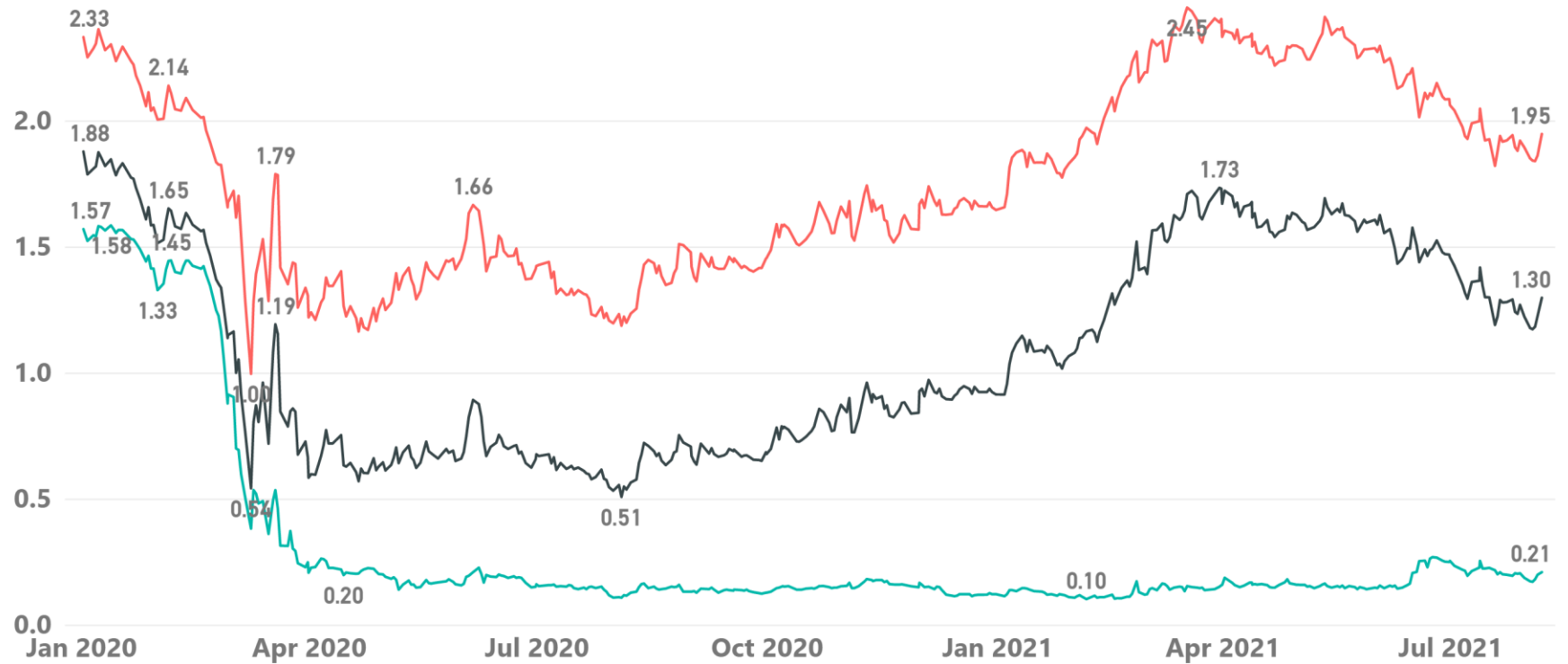
The Main Characters

- Ten Year Treasury (Tsy10)
- MBS Current Coupon (Secondary)
 - TBA
 - Rolls
- Mortgage Rate (Primary)

US Rates

Market Interest Rates

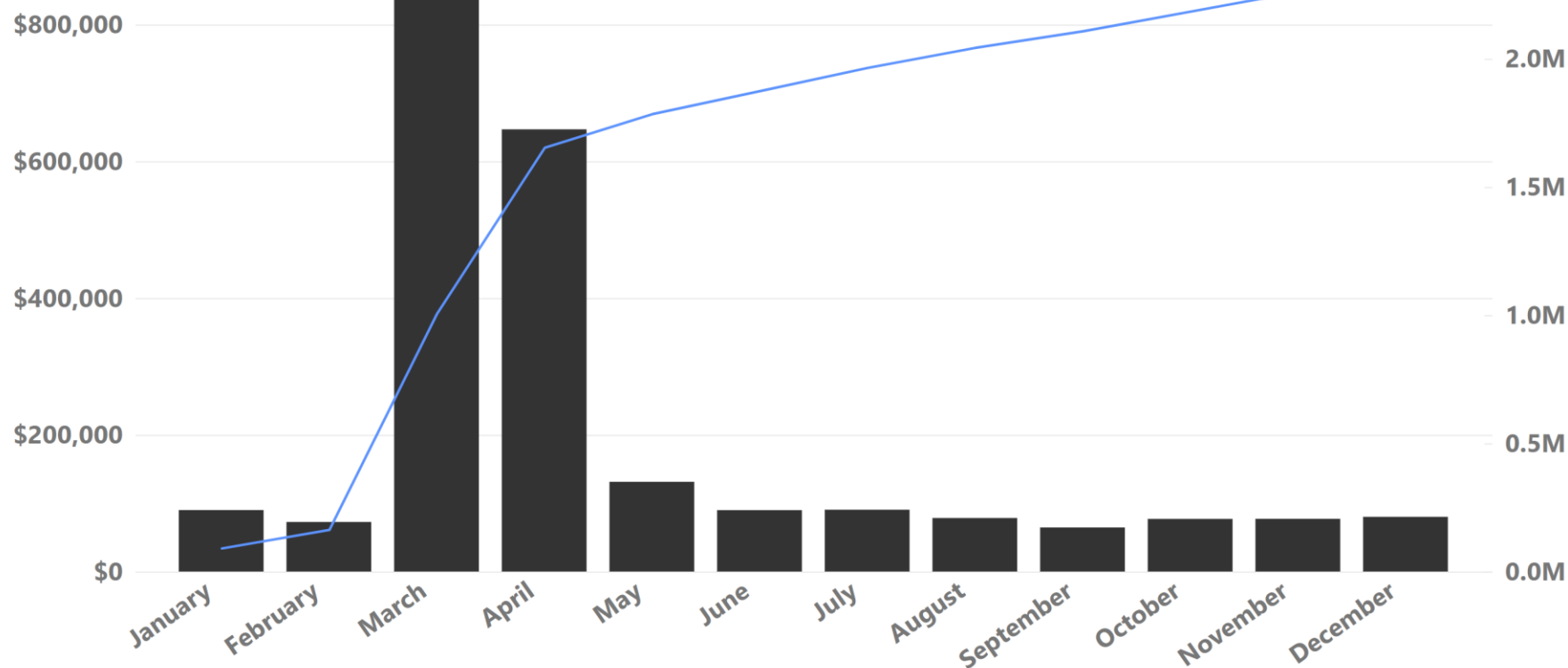
— TSY02 — TSY10 — TSY30



Fed UST Purchases

Fed UST Purchases (\$Millions)

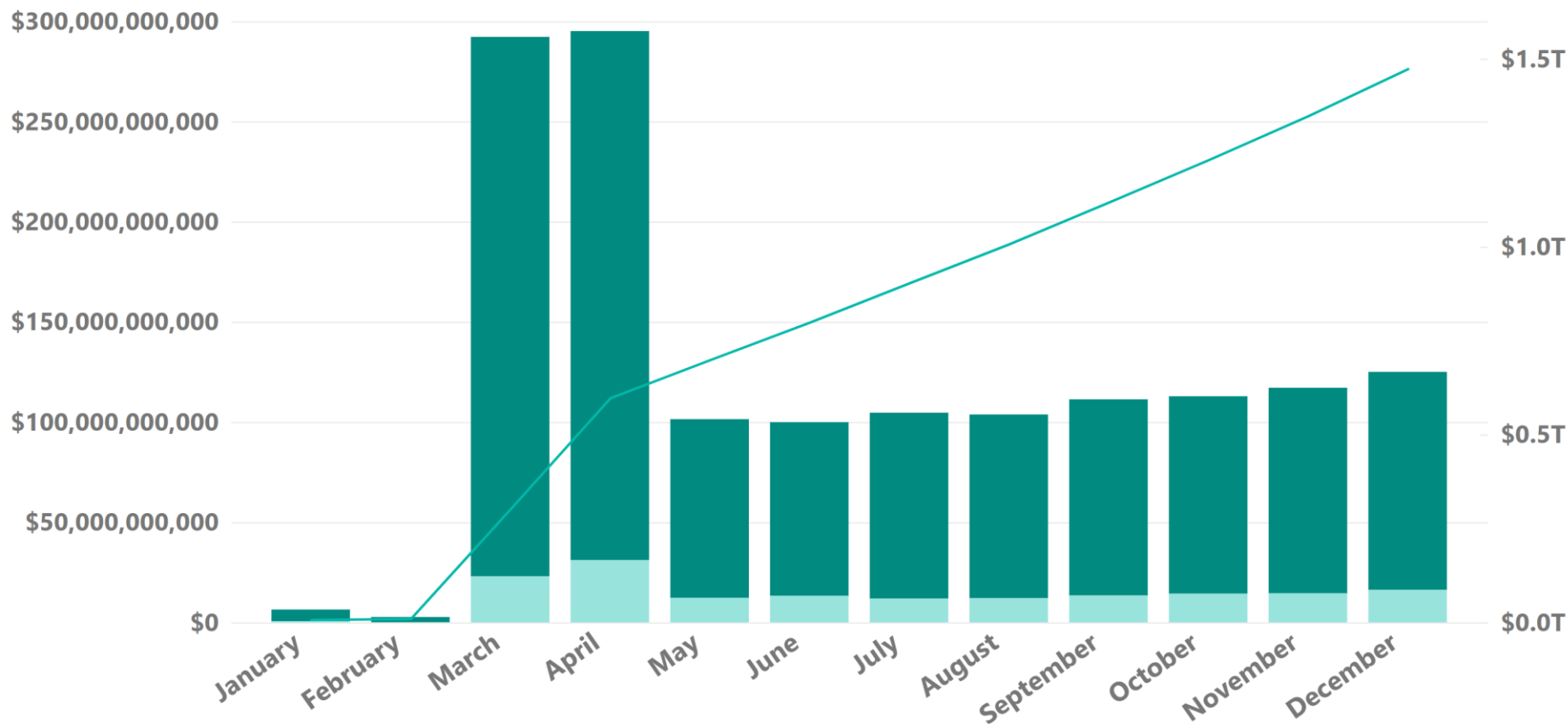
● Purchases (Millions) ● Running Total



Fed MBS Purchases

Fed Outright MBS Purchases

Term 15Yr 30Yr Running Total



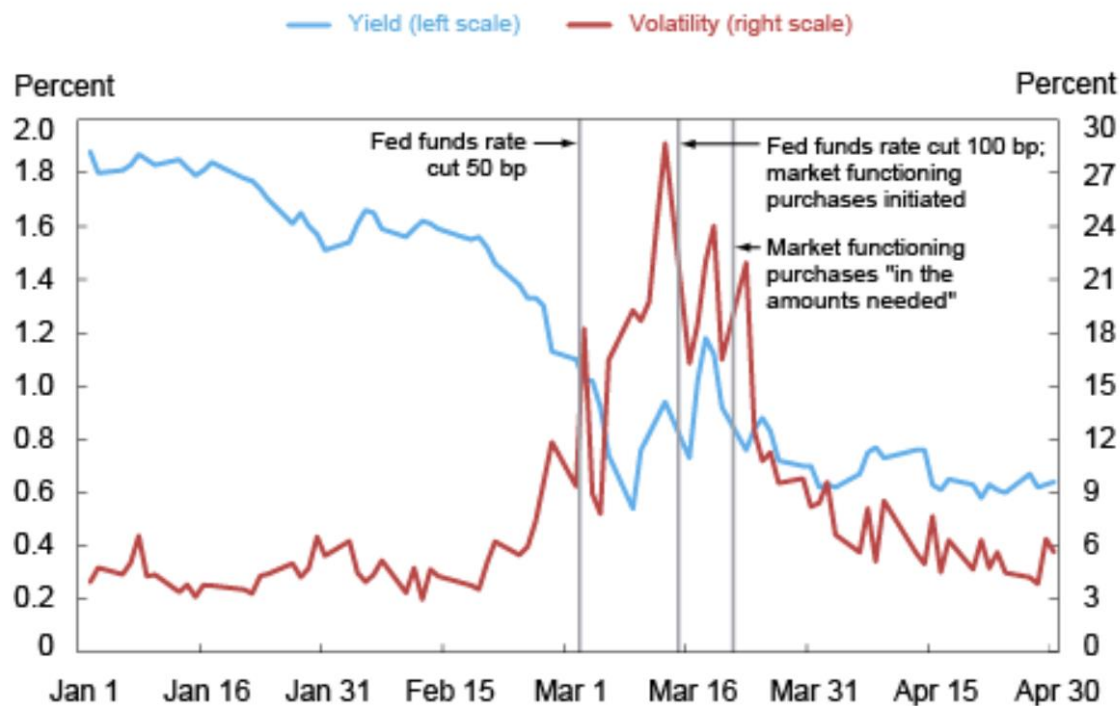
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Chapter 1: The initial phase (March/April 2020)

- As rates fell in early 2020, the sudden gapping out and instability of MBS spreads to Treasuries, threatened the orderly execution, liquidity and functioning of the secondary mortgage market.
- Aggressive Fed action and purchases of MBS in March and April of 2020 reversed rapidly declining MBS prices, but volatile swings in rates and MBS prices resulted, facilitated by the lack of clear Fed messaging.
- This volatility led to losses, capital and finance risk, and operation dysfunction among primary market originators— with lasting effects.
- Mortgage originators were experiencing overwhelming volume and engaging up in credit tactics to avoid losses from loans in forbearance that curtailed credit to lower tier and alt-borrowers.
- No TALF type facility was put in place support credit to non-conforming markets.

Fed Actions during Chapter 1

Treasury Yields Decline and Price Volatility Increases in Early 2020



Source: Author's calculations, based on data from BrokerTec.

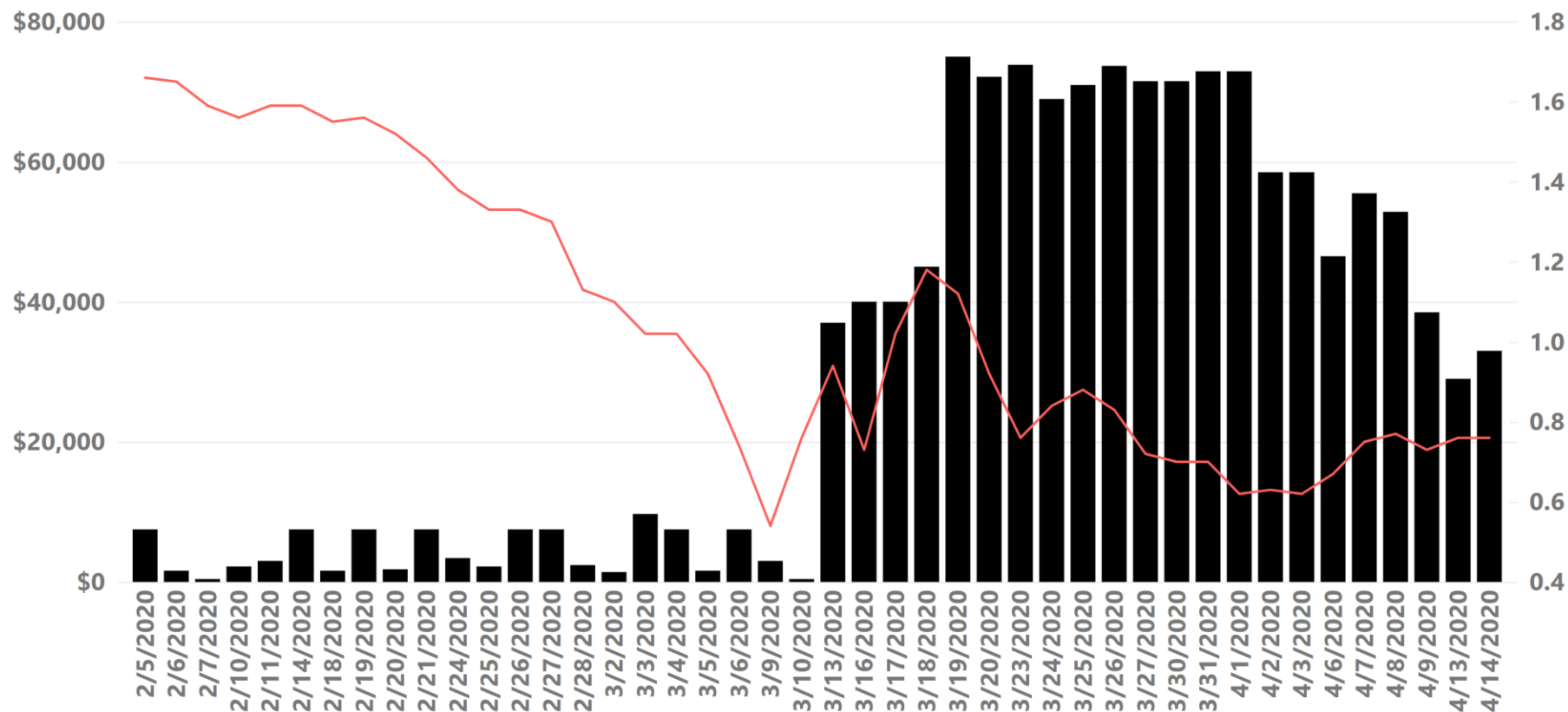
Notes: The chart plots the closing yield and price volatility by day for the on-the-run ten-year note. Price volatility is calculated by summing squared five-minute returns (log changes in midpoint prices) for New York trading hours (7:30 a.m. – 5 p.m.), annualizing by multiplying by 251, and then taking the square root. Both yields and price volatility are in percent.

<https://libertystreeteconomics.newyorkfed.org/2020/05/treasury-market-liquidity-and-the-federal-reserve-during-the-covid-19-pandemic/>

Treasury Purchases

Fed UST Purchases, UST 10-Year

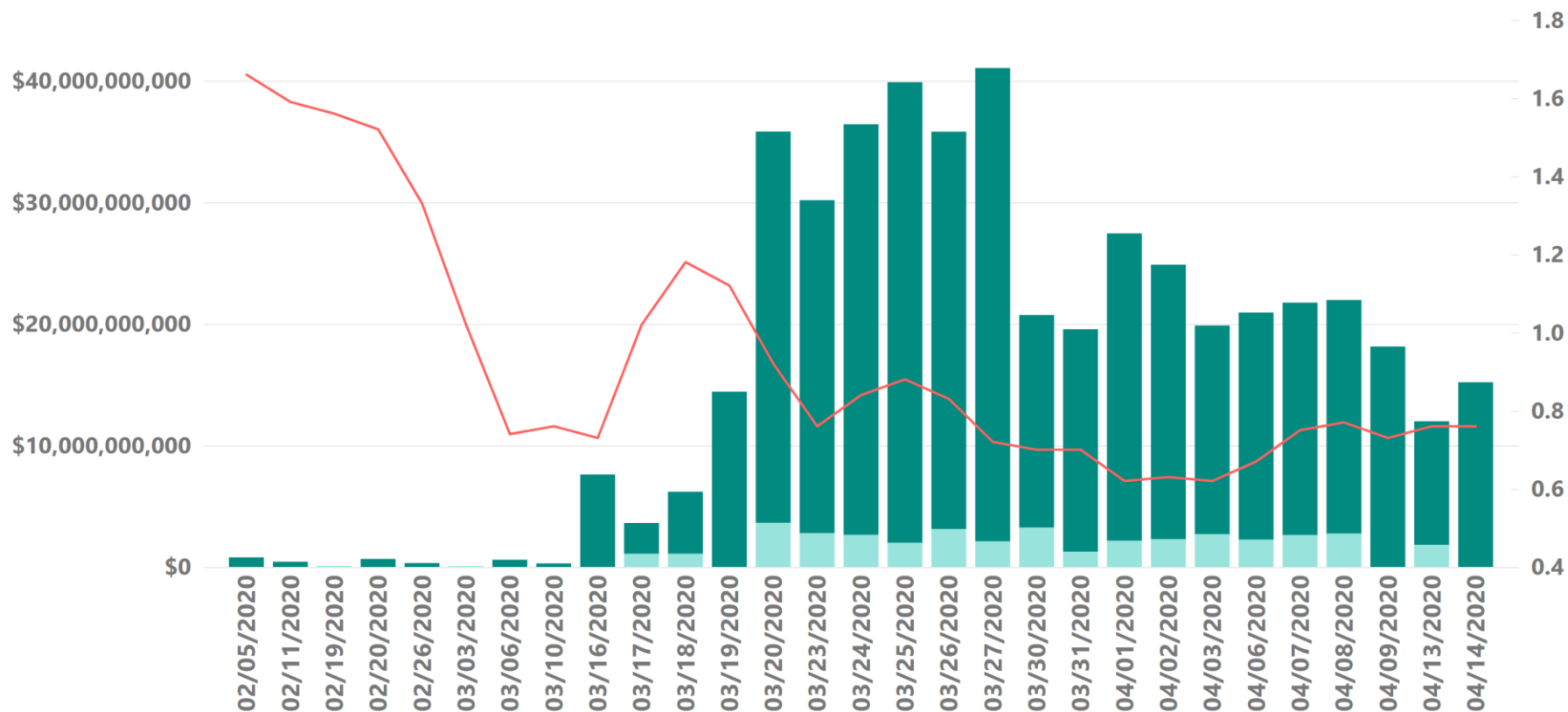
● Total Par Amt Accepted (\$Millions) — Average of UST 10Y-Yr



Fed MBS Purchases

Fed Outright MBS Purchases, UST 10-Year

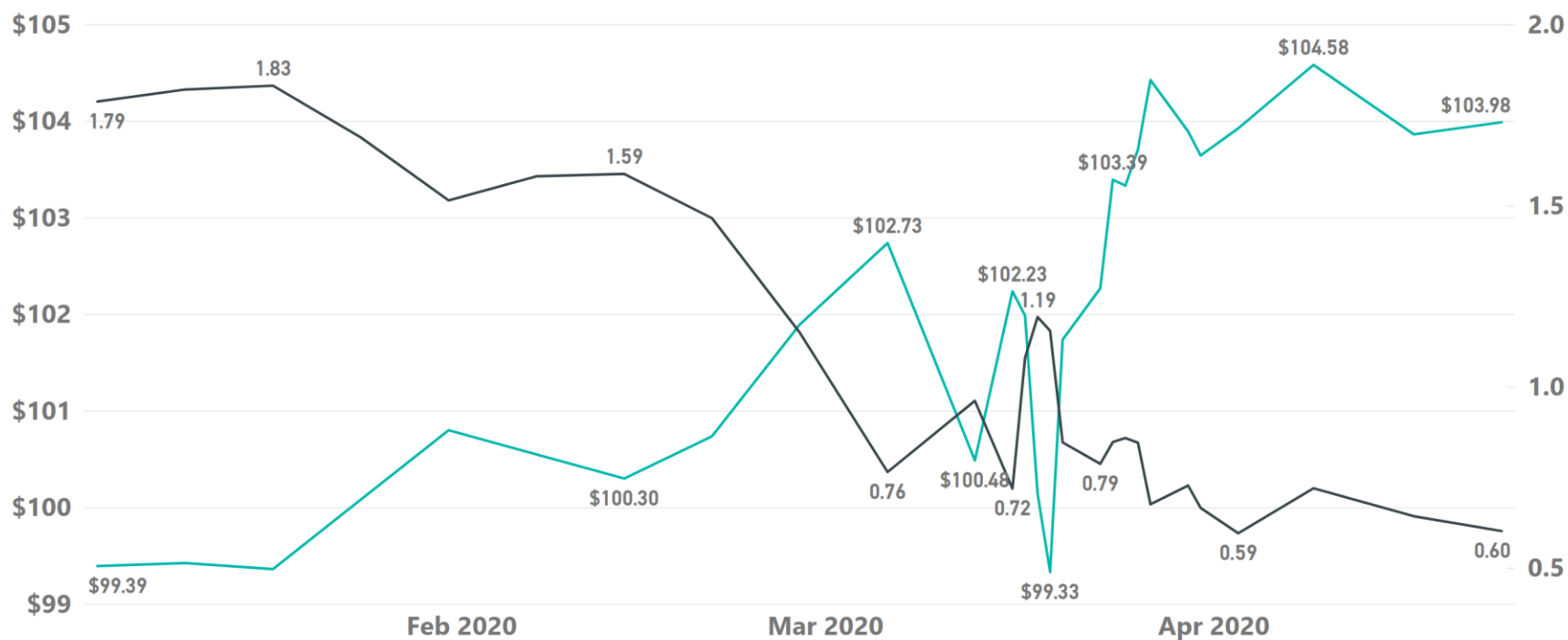
Term 15Yr 30Yr Average of UST 10-Yr



Treasury Rates and MBS Prices

FNMA 2.5% MBS Prices

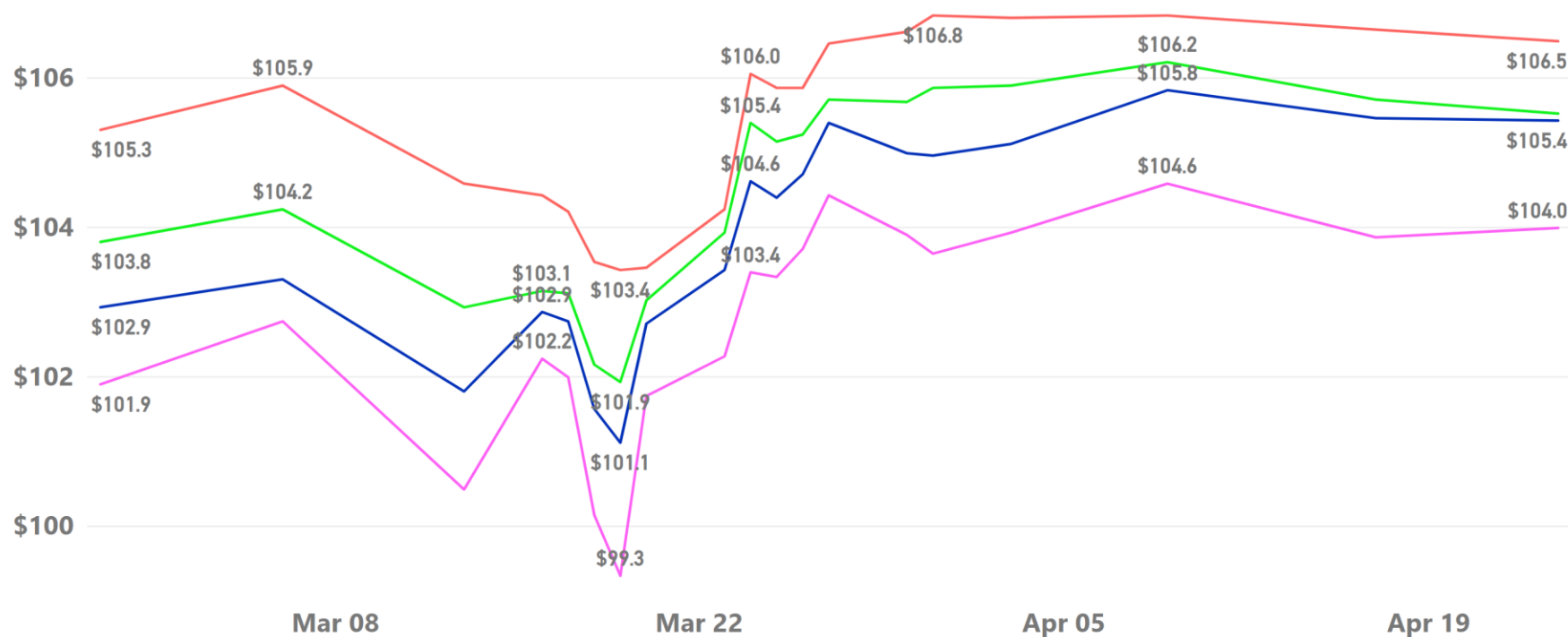
— Average of Price — Average of TSY10



MBS Prices – Hedging the Gap

FNMA MBS Prices By Coupon

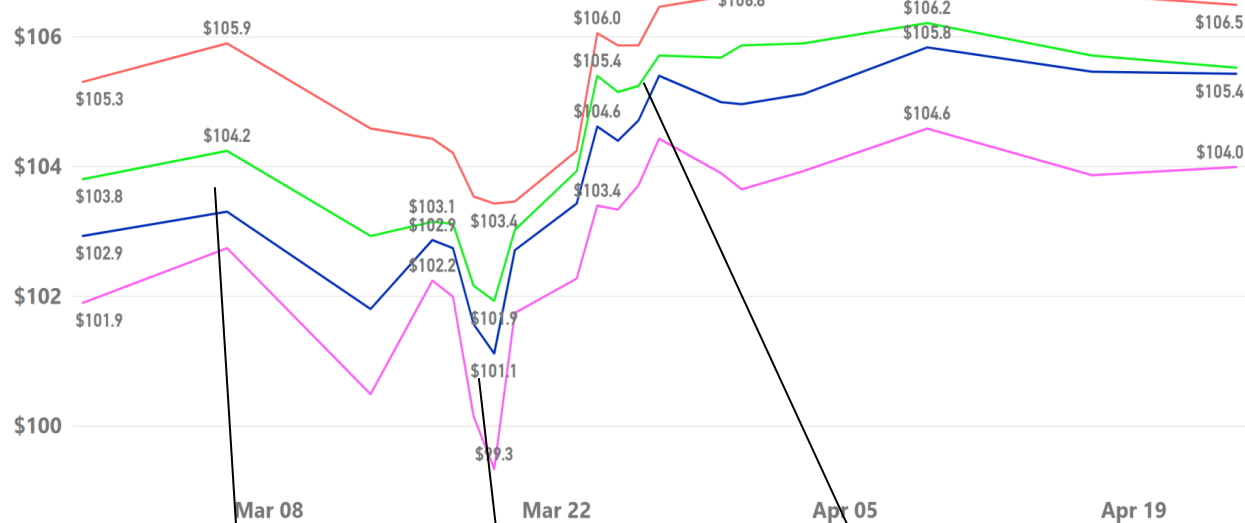
Initial Net Coupon — 2.50 — 3.00 — 3.50 — 4.00



Whipsaw!

FNMA MBS Prices By Coupon

Initial Net Coupon — 2.50 — 3.00 — 3.50 — 4.00



3/29 Massive hedge losses/ margin calls

3/19 Increase Hedge due to lower fallout forecast

3/8 Hedges in Place

Please Help!

WASHINGTON, D.C. (March 23, 2020) - MBA President and CEO Bob Broeksmit, CMB, released the following statement regarding the Federal Reserve's announcement that it will increase the scale and scope of purchases of agency mortgage-backed securities (MBS) in the amounts needed to support the smooth functioning of markets, and the purchase of agency commercial mortgage-backed securities (CMBS):

"MBA applauds the Fed for announcing its intent to increase the scale and scope of its purchase of agency MBS and agency commercial MBS. This will not only protect consumers by stabilizing mortgage rates for home purchases, but it will also help homeowners to refinance their loans and support multifamily real estate markets. Both are powerful forms of stimulus for the economy, which have been slowed due to unprecedented market volatility.

Not that much!



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CNBC TV

PUBLISHED SUN, MAR 29 2020•9:24 PM EDT | UPDATED MON, MAR 30 2020•12:02 PM EDT



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KEY POINTS

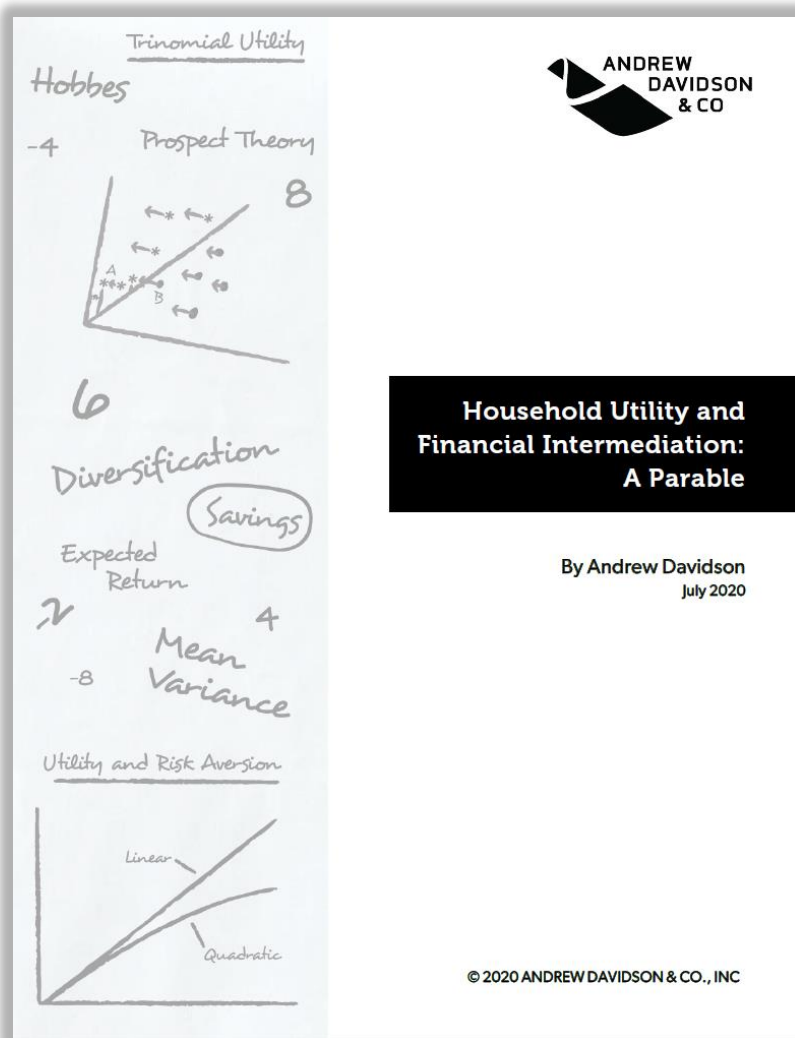
- The Mortgage Bankers Association warned that the housing market could face a "large-scale disruption," due to actions by the Fed that were meant to help the mortgage market.
- The Fed bought \$183 billion of purchases last week of mortgage-backed securities, in an effort to drive down rates, and they did.
- But the Fed's actions, amid a volatile market environment, helped add further strains that resulted in blowing up a widespread hedge that mortgage bankers use to protect themselves against rate increases, and now some lenders are facing margin calls that are eroding their working capital and threaten their ability to operate.

Stimulus or Liquidity?

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"MBA looks forward to continuing to work with all policymakers and stakeholders, including Congress and the administration, to help consumers, lenders, and mortgage servicers. A critically important program will be to provide support to impacted homeowners through forbearance. In order for this to succeed, liquidity is required for the residential mortgage servicing sector, which can come from a Ginnie Mae program and the creation of a dedicated Federal Reserve liquidity facility."

Managing Market Disruption



Theorem: A primary determinant of the price of an asset is the amount of low-cost financing available to the marginal buyer of that asset.

Corollary: When financing becomes unavailable asset values drop.

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Chapter 1: Summary

- Volatility created by Fed Action to lower rates caused significant losses to mortgage bankers looking to hedge originations.
- Moreover, servicers were required to offer forbearance with no clear funding mechanism.
- Many firms limited their capacity due to financial constraints setting up Chapter 2.
- Should the Fed's role be to stabilize funding/liquidity or stimulate the market? What was the role of Fed Funds cuts? The asset purchases?

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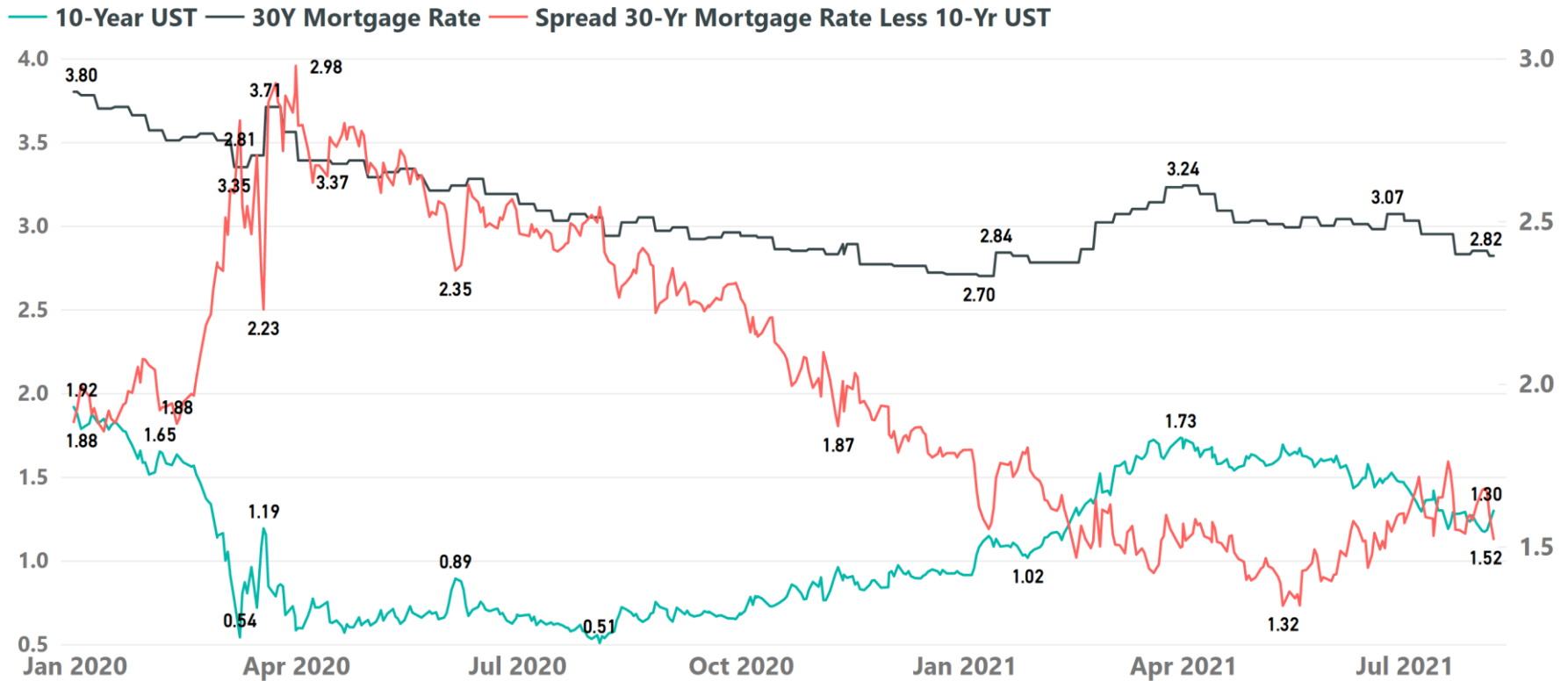
Chapter 2: On going Fed purchases

Continued high levels of Fed MBS purchases following March and April had effects beyond stabilization of MBS markets

- The spread of primary mortgage rates to lower UST and MBS yields gapped out and remained wide following the initial drops in rates.
- Lowering rates and MBS yields can have a limited influence on primary mortgage rates in the near term which are subject to primary market conditions.
- This led to ongoing windfall profits in the form of gain on sale for mortgage originators and sellers.

MBS to Treasury Spread

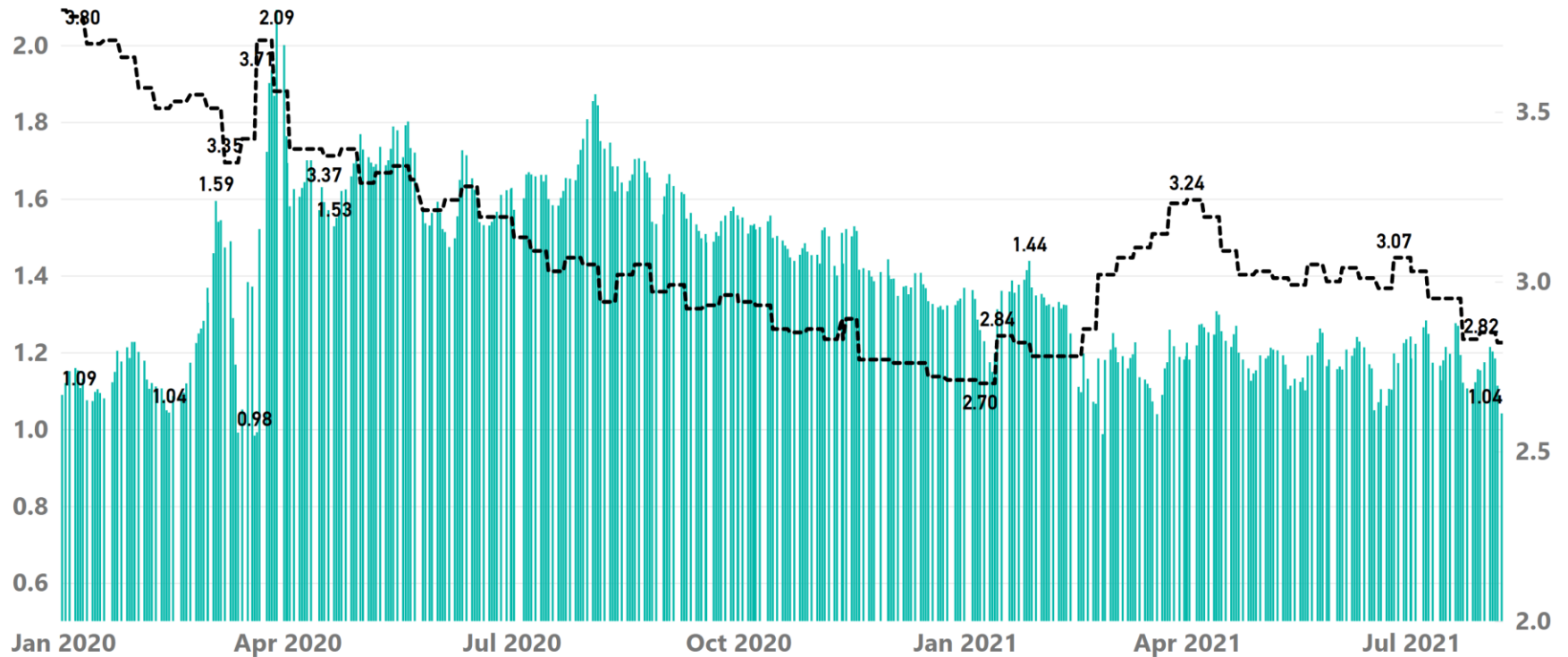
30-Year Mortgage Rate, 10-Yr UST, and Mortgage Rate to 10-Yr Spread



Primary and Secondary Rate Spread

Primary to Secondary Spread

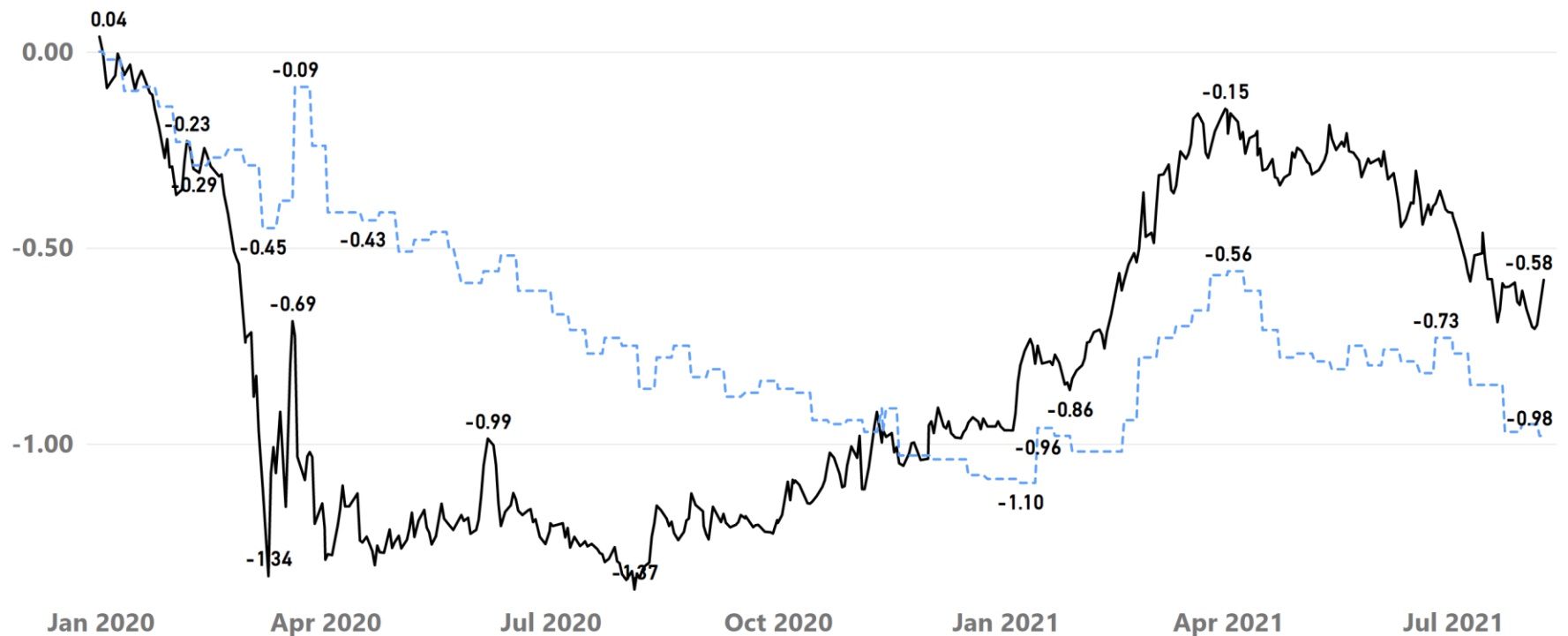
● PSS --- APORF30Y



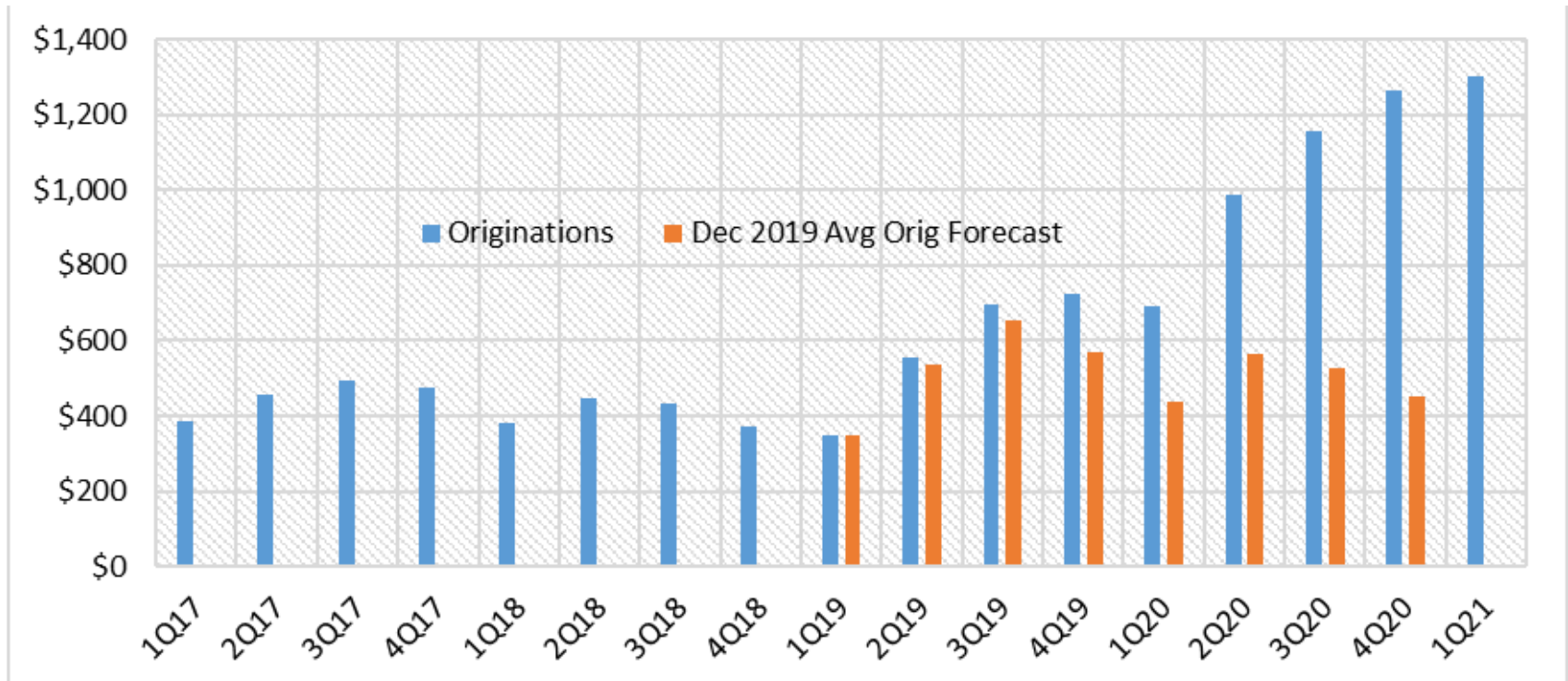
Broken link between UST and Mortgage Rates

Cumulative Changes 10-Yr UST and Mortgage Rates

— Cum Chg UST 10-Yr - - - Cum Chg 30 Yr Mortgage Rates



Transformation of the mortgage market



Saved and then some

Chapter 2: Effects on Mortgage Banking

	2019	2020
Production Volume	\$2.25 trillion	\$3.83 trillion
Refi Share (\$ vol)	34%	55%
Production Profit	58 basis points	157 basis points
Avg Loan Balance	\$266,533	\$278,725
Productivity	2.3 per employee	3.3 per employee
Servicing income (loss)	(\$116) per loan	(\$176) per loan

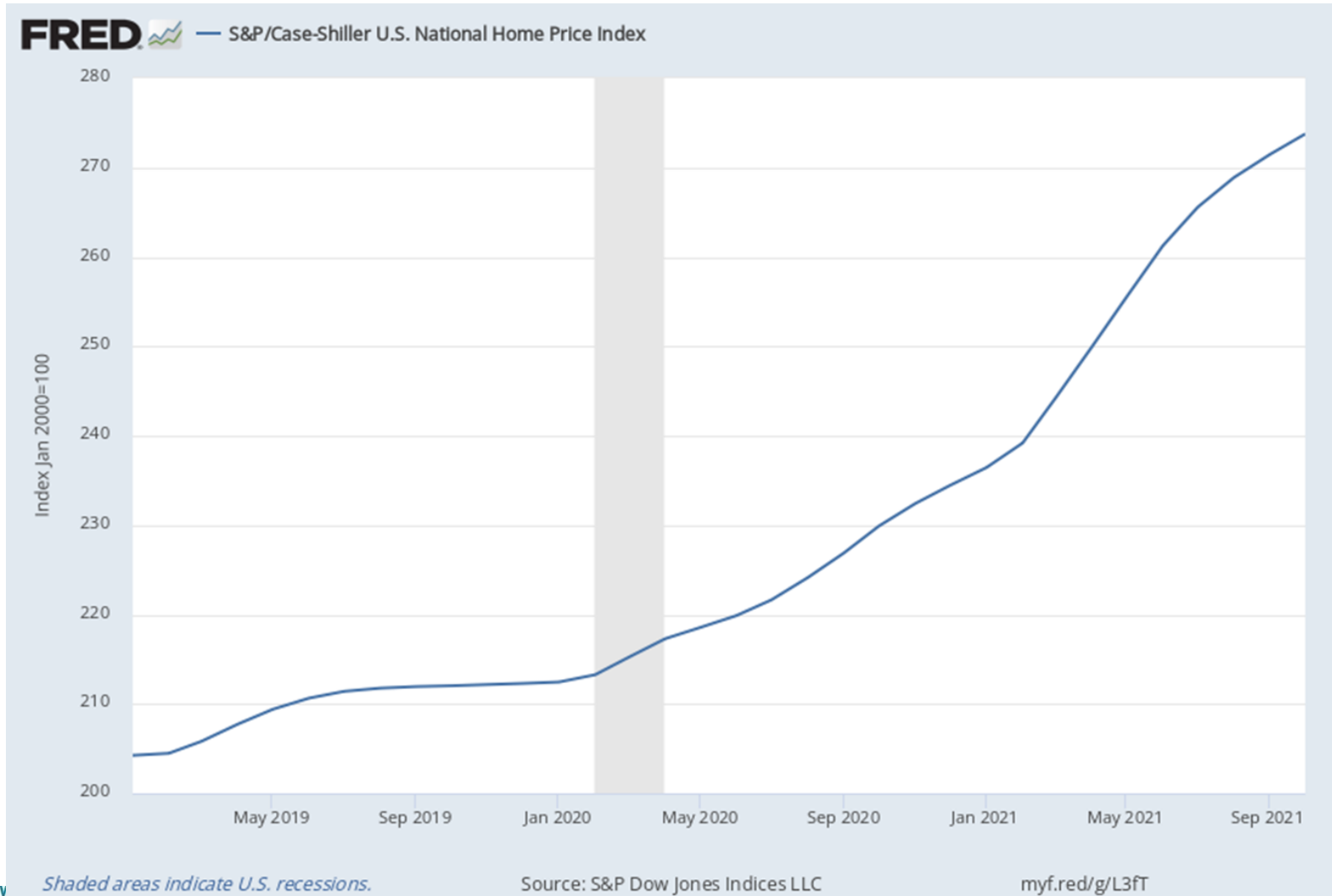
Source: MBA

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Chapter 3: Home Prices: Going up The Impact on Home Prices and Inequality

- The persistence of lower interest rates ultimately prompted high levels of refinances and double-digit rates of HPA during 2020. This tends to benefit relatively wealthy homeowners as a class, and the wealthiest cohorts among them.
- Home price appreciation—albeit under falling mortgage rates—weighs against affordability, higher homeownership rates, and the interests and wealth accumulation causes of first- time homebuyers.
- Intervention has significant impacts on wealth and inequality impacts.

Home Price Appreciation

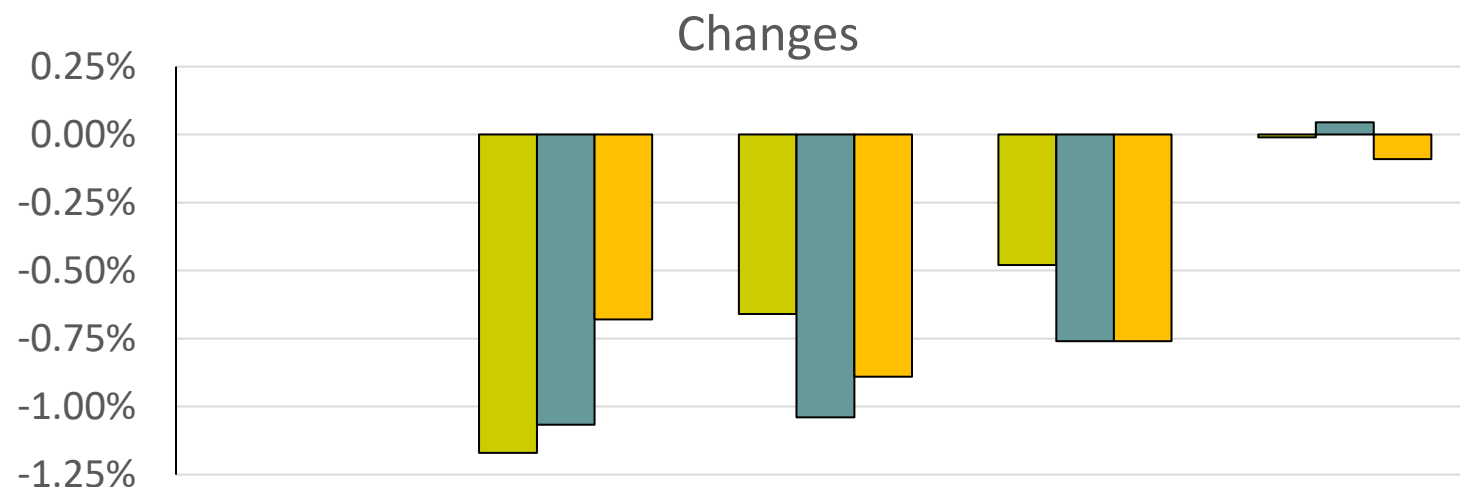
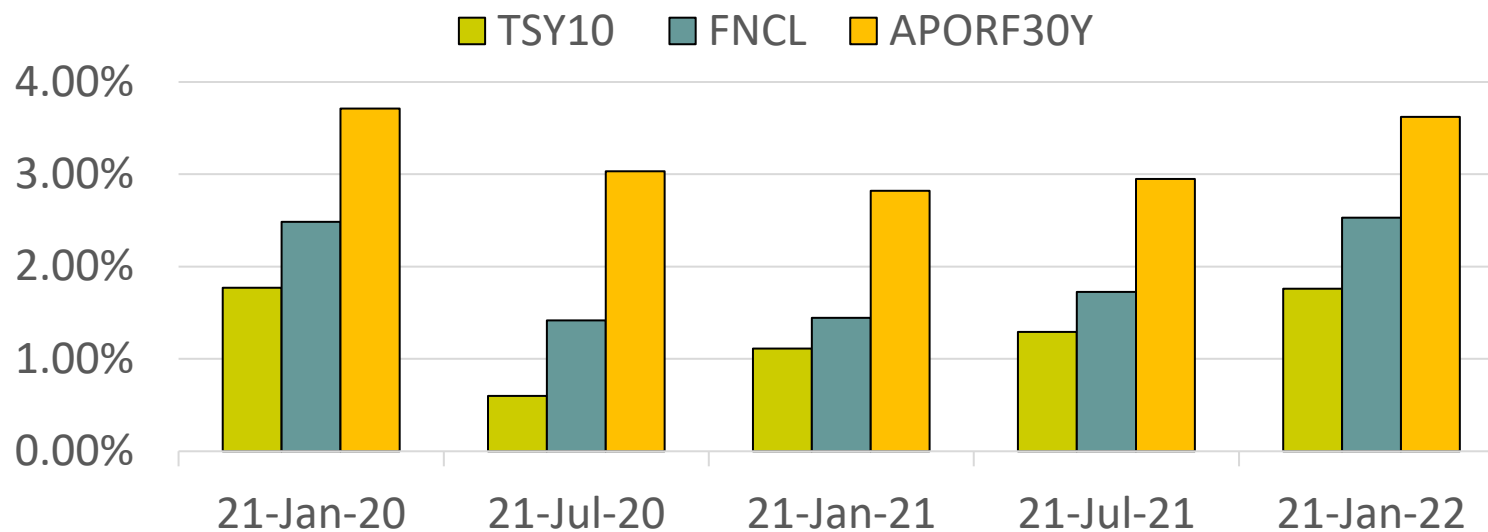


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Chapter 4: The Unwind

The rest is still unwritten.....

Back where they started....?



Book Group Discussion Questions

What is the role of monetary policy during a liquidity crisis?

What is the best mechanism to address a drop in demand for services? a drop in supply due to labor disruption?

Does the Fed have responsibility for secondary effects and economic distortions?

Without criticizing what was done then with imperfect information, what would you recommend in hindsight?

Is housing in a bubble? Or are the fundamentals in a “bubble”?

Links

- https://www.ad-co.com/system/files/adco-articles/Fed%202020%20Intervention%20and%20Mortgage%20Market%20Outcomes%20Policy%20Perspectives_1.pdf
- https://www.ad-co.com/system/files?file=adco-articles/Household_Utility_and_Financial_Intermediation.pdf
- <https://libertystreeteconomics.newyorkfed.org/2020/05/treasury-market-liquidity-and-the-federal-reserve-during-the-covid-19-pandemic/>
- <https://www.mba.org/2020-press-releases/march/mba-statement-on-fed-announcement-to-purchase-mortgage-backed-securities>
- <https://www.cnbc.com/2020/03/29/mortgage-bankers-warn-fed-purchases-of-mortgages-unbalanced-market-forcing-margin-calls.html>

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