

# Taxonomy of a Crisis

---

For investment professional use only

A company of Allianz 

# Disclosures

---

## **IMPORTANT NOTICE**

Please note that the following contains the opinions of the manager as of the date noted, and may not have been updated to reflect real time market developments. All opinions are subject to change without notice.

Pacific Investment Management Company LLC, 650 Newport Center Drive, Newport Beach, CA 92660, 949-720-6000

---

CMR2020-0521-1194422

## Biographical Information

---



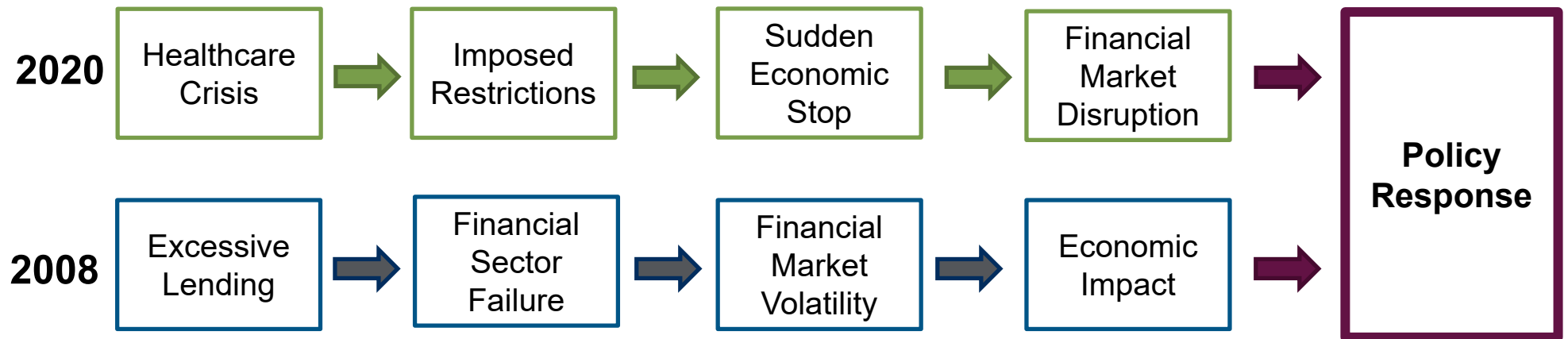
### **Marc Seidner**

Mr. Seidner is the CIO of Non-traditional Strategies, a managing director and head of portfolio management in the New York office. He is also a generalist portfolio manager and a member of the Investment Committee. He rejoined PIMCO in November 2014 after serving as head of fixed income at GMO LLC, and previously he was a PIMCO managing director, generalist portfolio manager and member of the Investment Committee until January 2014. Prior to joining PIMCO in 2009, he was a managing director and domestic fixed income portfolio manager at Harvard Management Company. Previously, he was director of active core strategies at Standish Mellon Asset Management and a senior portfolio manager at Fidelity Management and Research. He has 32 years of investment experience and holds an undergraduate degree in economics from Boston College.

# Cause and Effect

*Very different causes, but similar effect*

---



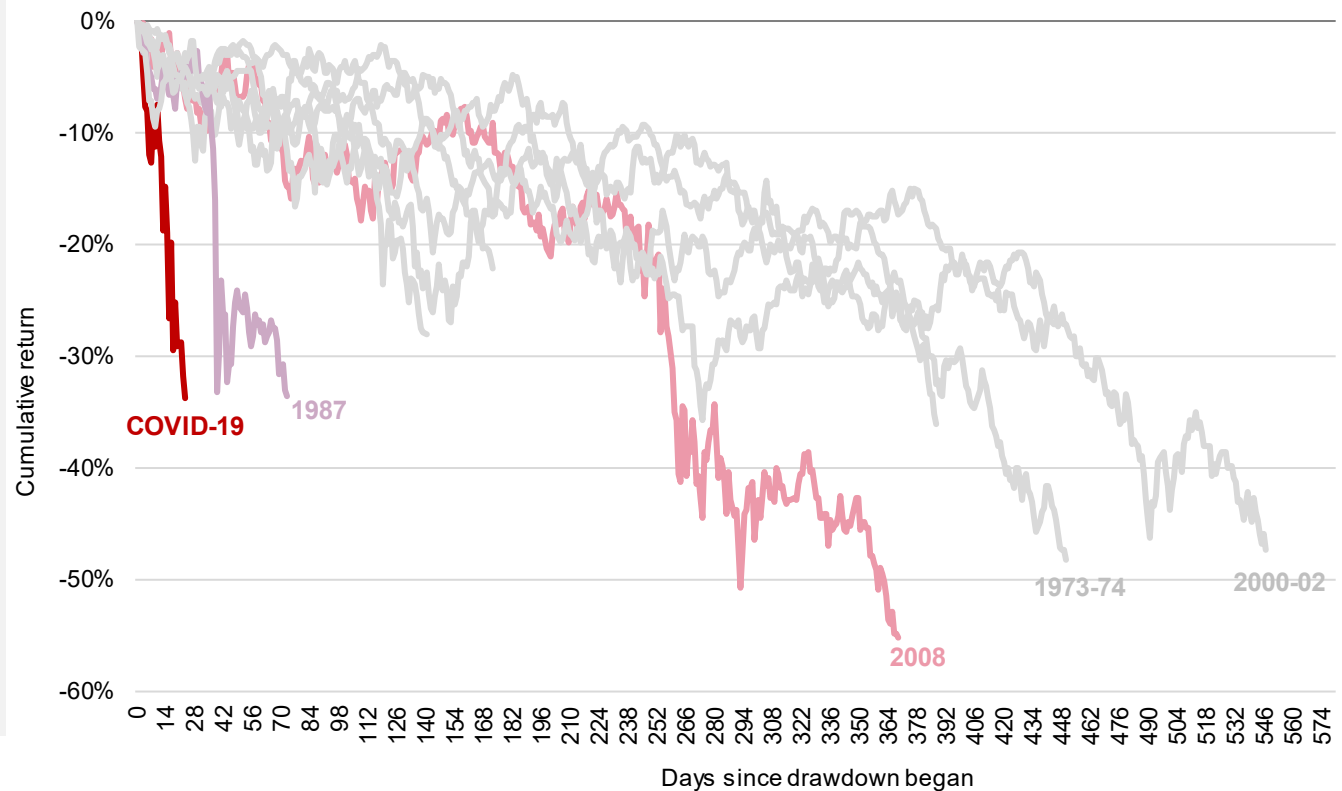
# The speed and depth of the equity drawdown was remarkable

## By the Numbers

**Current** drawdown fastest decline since 1929

- **Depth:** COVID-19 drawdown ~**60%** of 2008's drawdown
- **Speed:** COVID-19 drawdown occurred in **6%** of time it took for 2008's drawdown to unfold

Largest U.S. equity (S&P 500) drawdowns since 1950



## Fixed Income is a very heterogeneous market

---

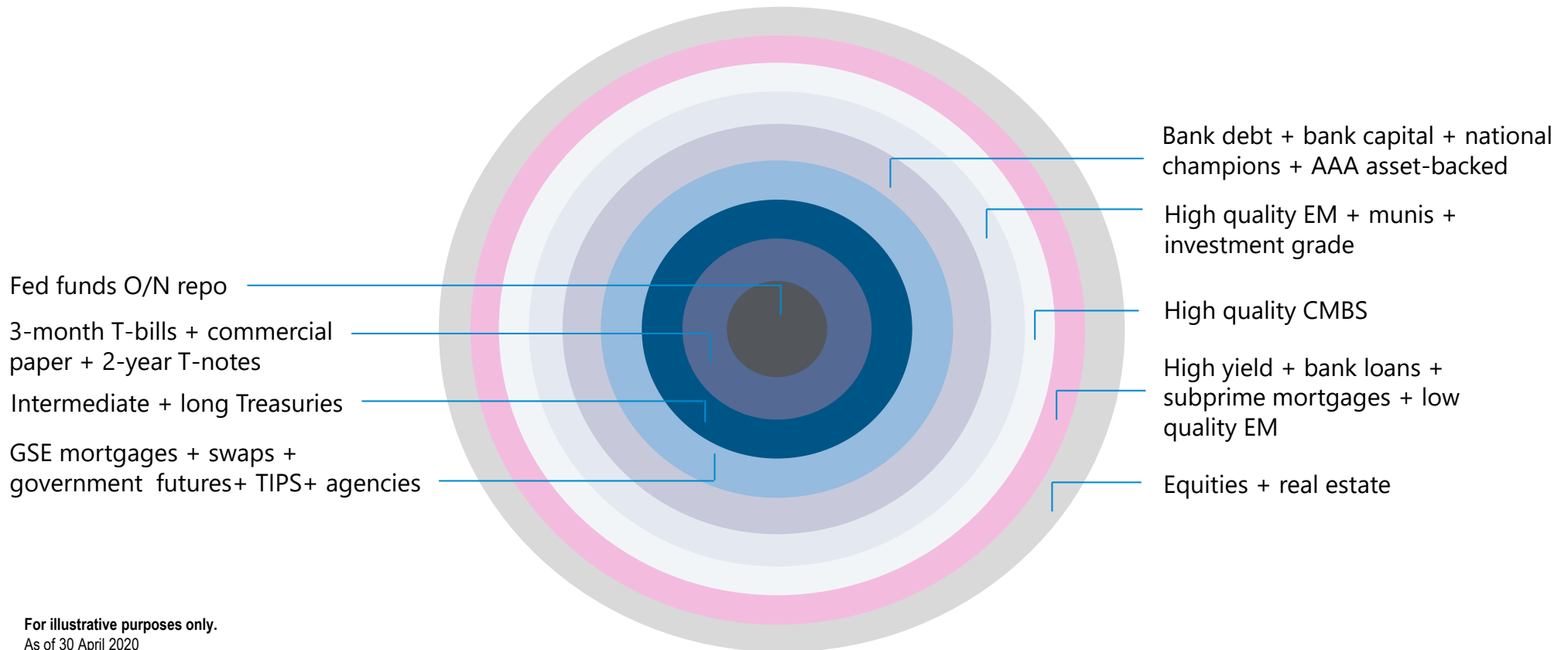
Not all participants seek to maximize total return

- Discretionary investors vs. rules-based investors
- Unleveraged investors vs. leveraged investors
- Mutual funds vs. ETFs
- Regulated vs. Unregulated
- Total Return vs. Book Yield

# PIMCO's Concentric Circles: Framing relative risk across asset classes

- Investments closer to the core represent the least amount of risk, while those at the periphery have more cash flow uncertainty
- Liquidity moves from the center to the outer periphery
- In March, there was no differentiation

## PIMCO's concentric circles



For illustrative purposes only.  
As of 30 April 2020  
SOURCE: PIMCO

# Market Disruption – ETF NAVs (Price / NAV)

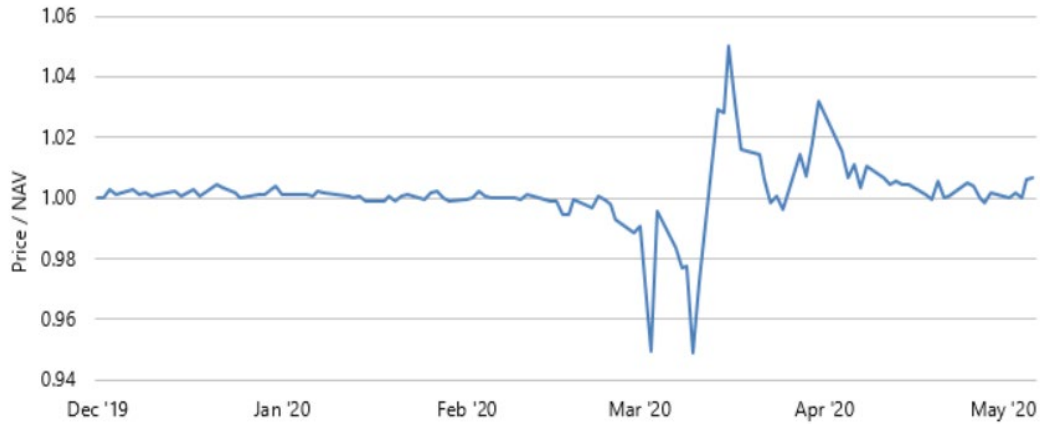
Example Short Maturity Bond ETF



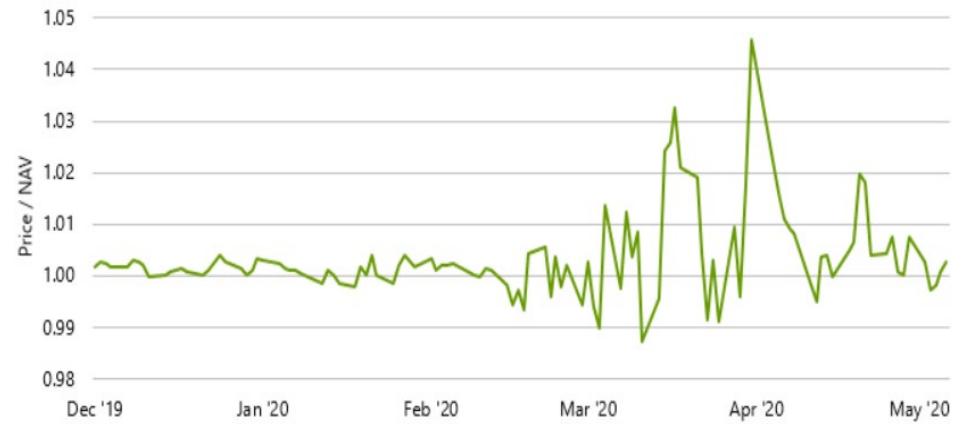
Example 20+ Year Treasury Bond ETF



Example Investment Grade Bond ETF



Example High Yield Corporate Bond ETF



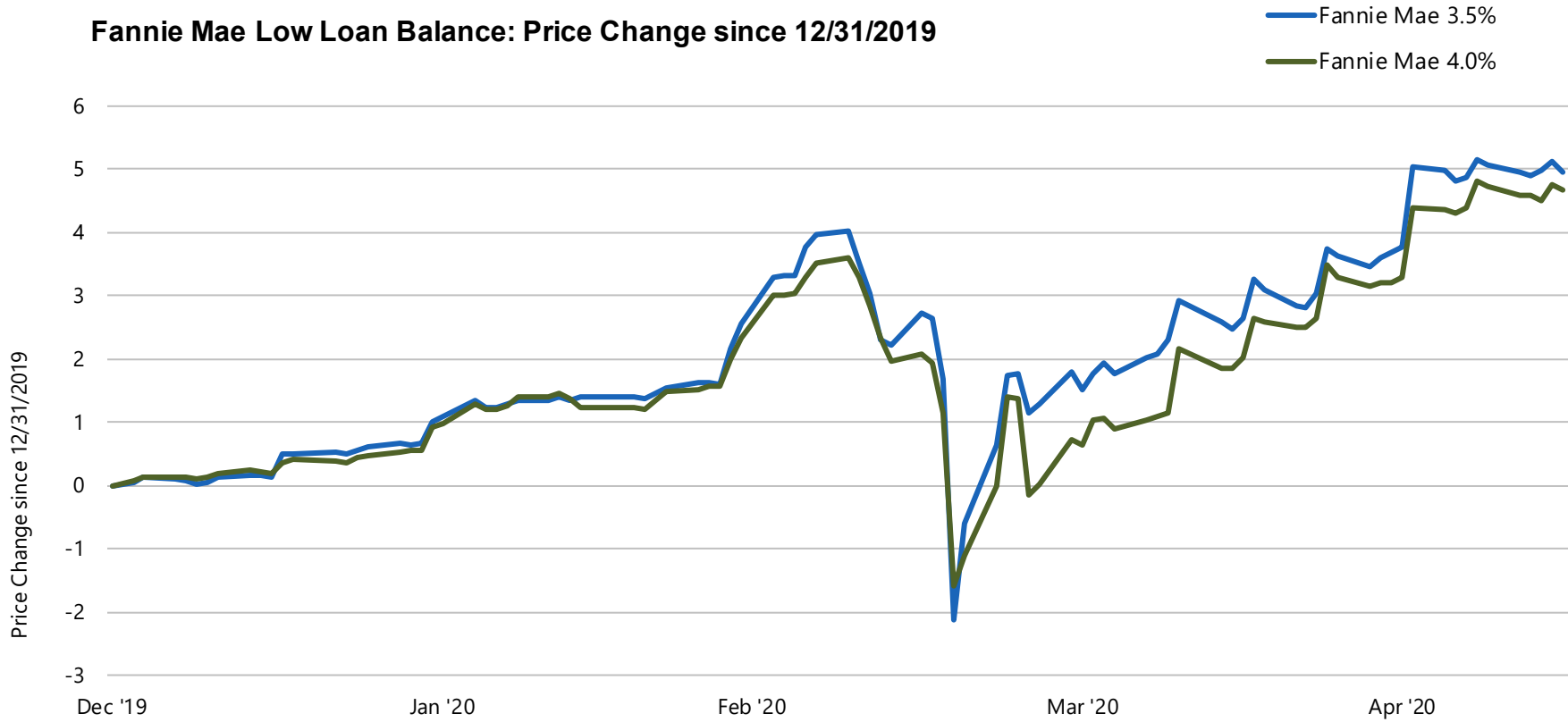
As of 15 May 2020

SOURCE: Bloomberg

Charts are provided for illustrative purposes and are not indicative of the past or future performance of any PIMCO product. **Past performance is not a guarantee or a reliable indicator of future results.**



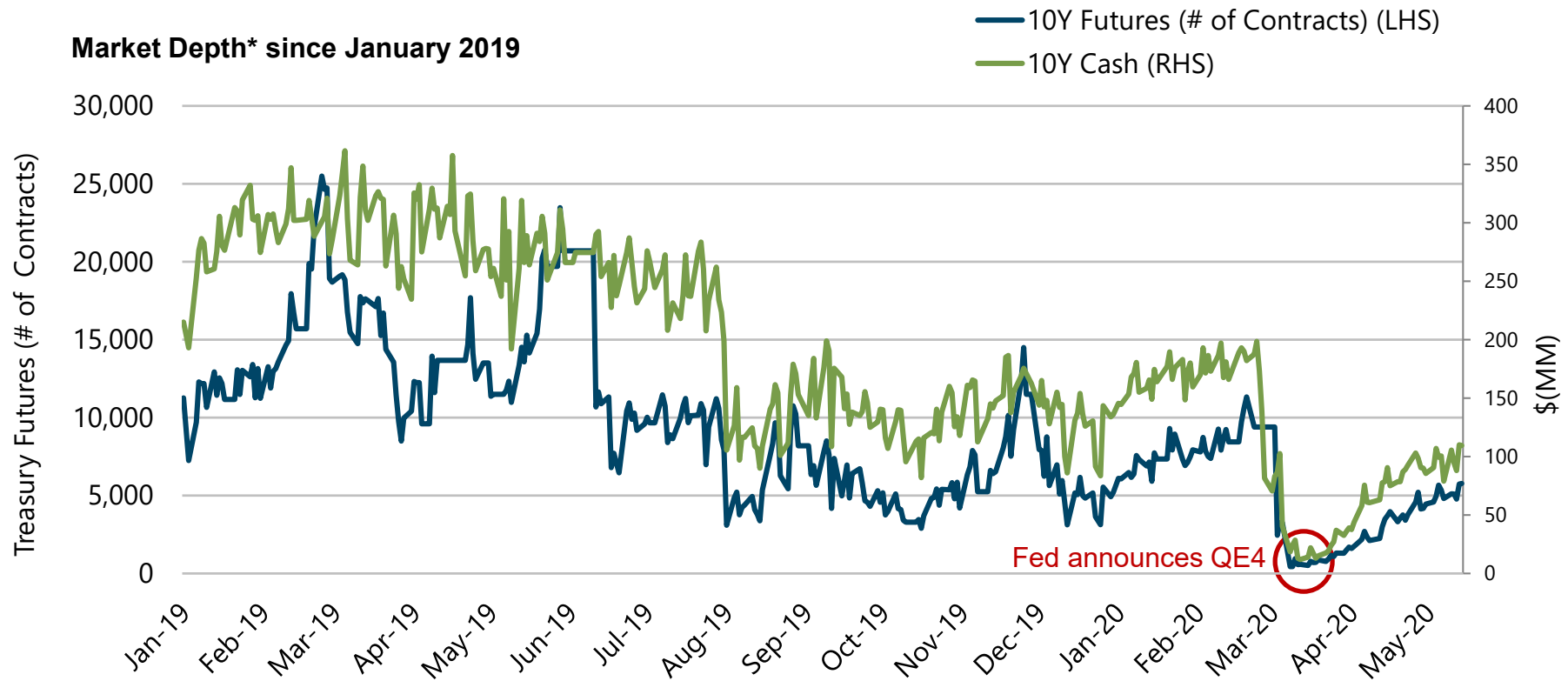
# Market Disruption – Deleveraging of REITS



As of 15 May 2020  
SOURCE: PIMCO, JPMorgan

# Market Disruption – Treasury market froze

- Market depth in duration markets were severely compromised during the March meltdown. Liquidity conditions deteriorated quickly with TYs trading ~450 contracts up and CT10s on ~\$13MM Notional per lot at the height of the crisis.



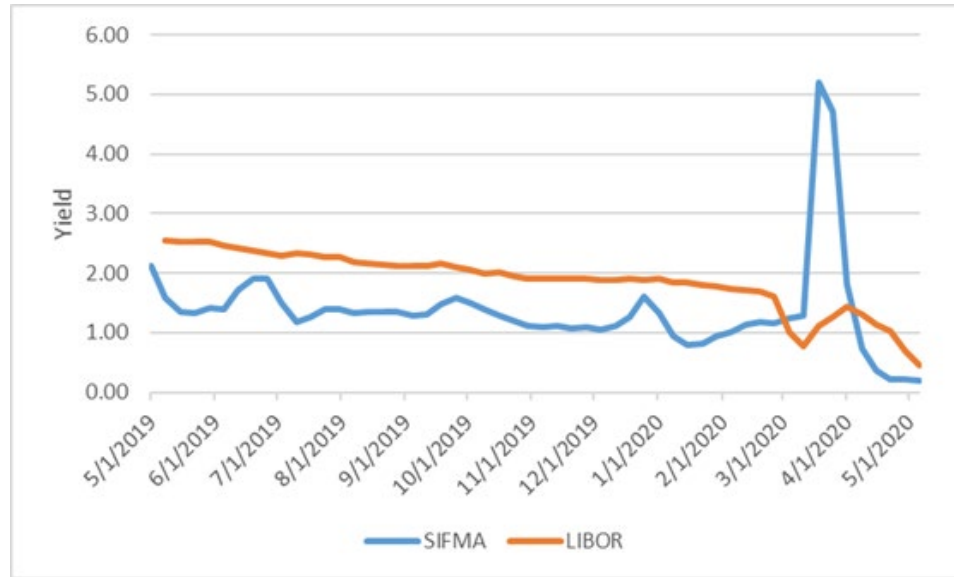
As of 15 May 2020

SOURCE: JPMorgan

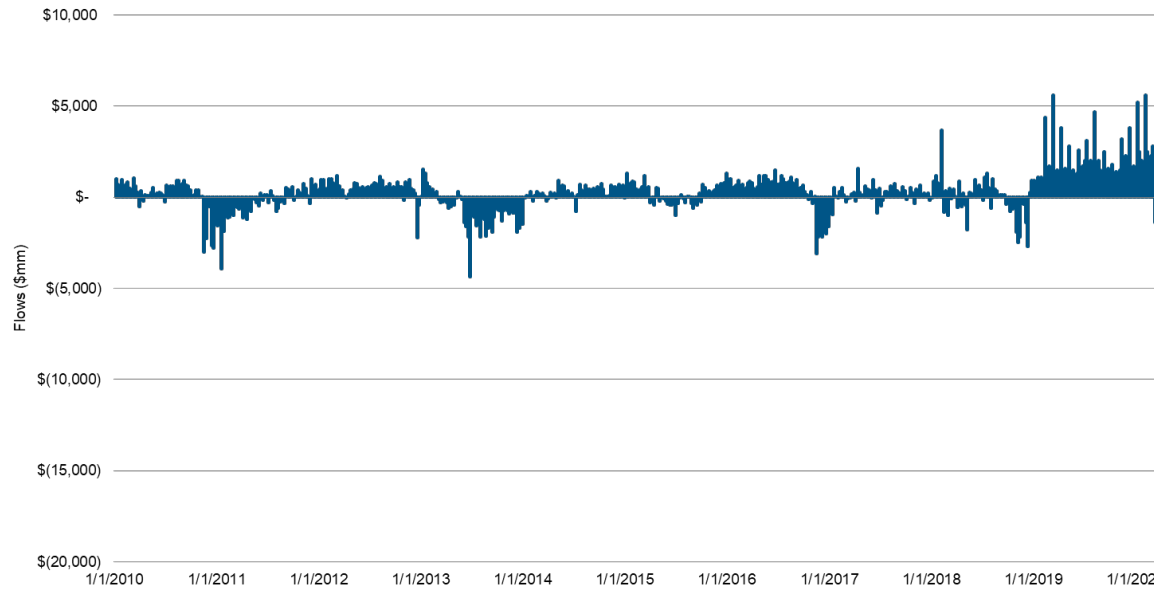
\*Market depth: cash market depth is the average of the top 3 bids and offers on-the-run Treasuries, averaged between 8:30am and 10:30am daily. Futures market depth is measured similarly to cash, including both the front and back contract.

# Market Disruption – Muni Market funding stresses

SIFMA and LIBOR Yields

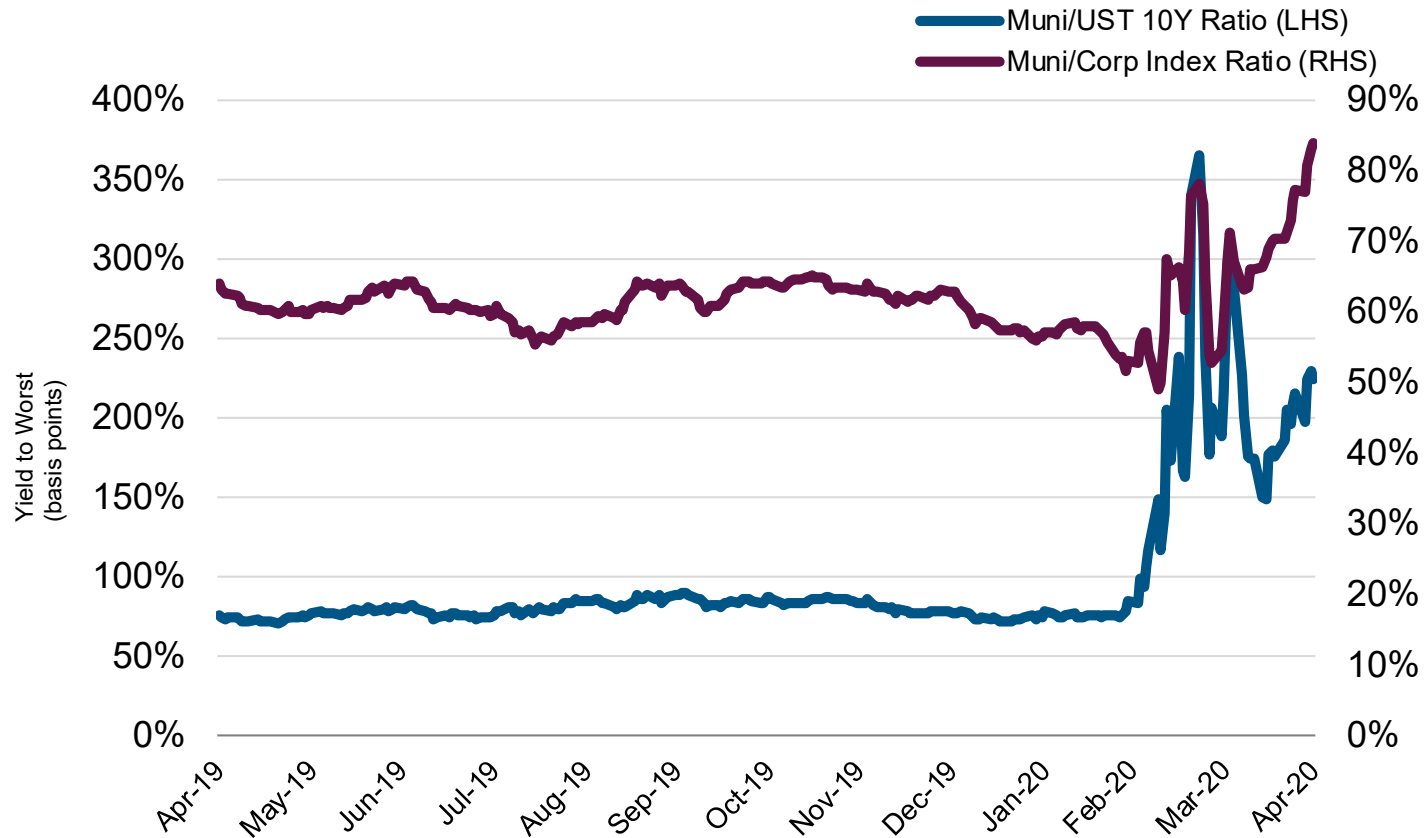


Municipal Mutual Fund Flows (2010 – 2020)



As of 30 April 2020  
SOURCE: Bloomberg

# Market Disruption – Muni Market historic cheapness



As of 30 April 2020  
 SOURCE: Bloomberg

The terms “cheap” and “rich” as used herein generally refer to a security or asset class that is deemed to be substantially under- or overpriced compared to both its historical average as well as to the investment manager’s future expectations. There is no guarantee of future results or that a security’s valuation will ensure a profit or protect against a loss.

The Muni/UST 1-Y Ratio measures the AAA ten-year muni yield to the ten-year U.S. Treasury yield, through Bloomberg ticker MUNSMT10.

Muni/Corp Index Ratio is measured using the Bloomberg Barclays Municipal Bond Index Total Return Index and Bloomberg Barclays US Corporate Total Return Index

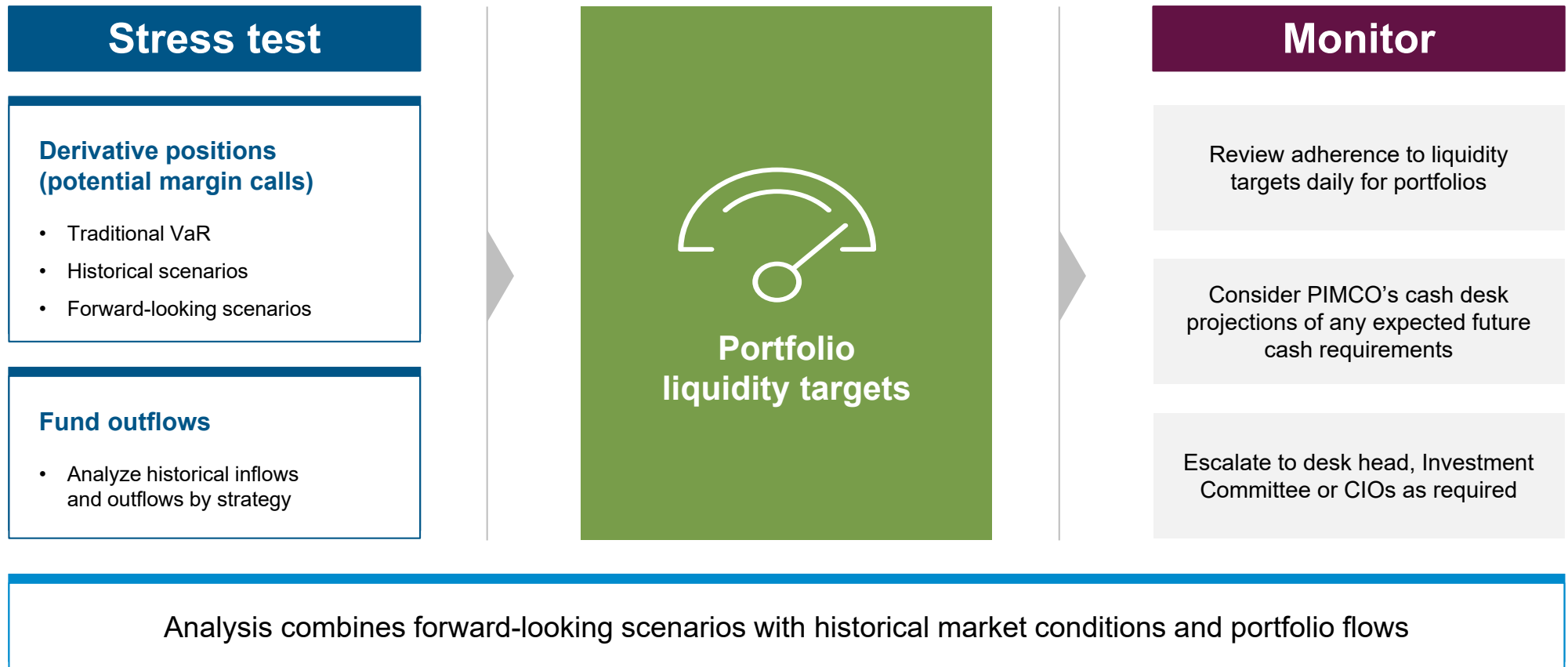
## Observations

---

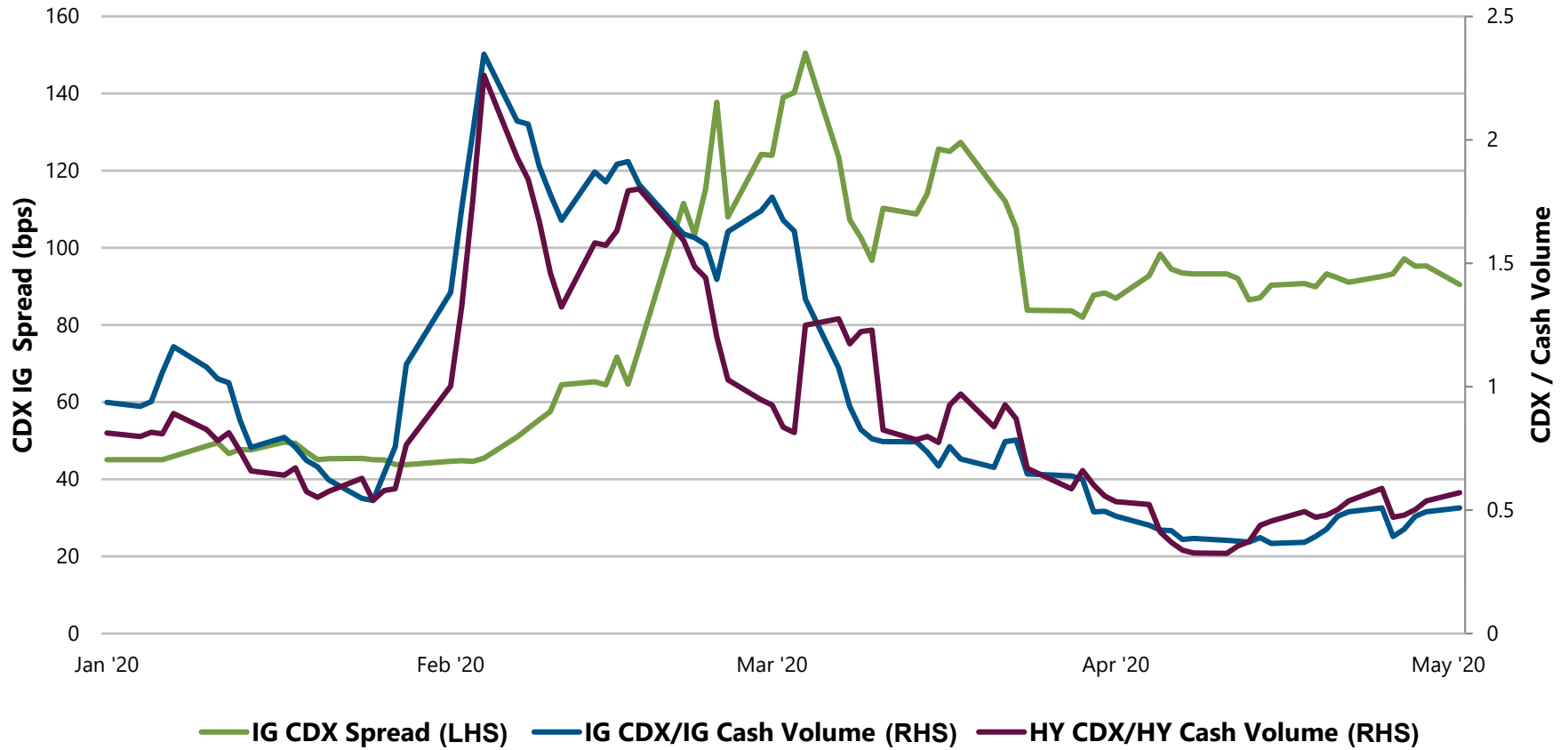
- Markets generally functioned/ system “worked”
- Derivatives helped risk transfer
- Direct access to Federal Reserve policy tools would help
- Opportunity for all-to-all trading platforms

# Critical Importance of Liquidity Management

PIMCO manages liquidity at the individual portfolio level, based on stress-testing each portfolio and monitoring adherence to liquidity targets on a daily basis

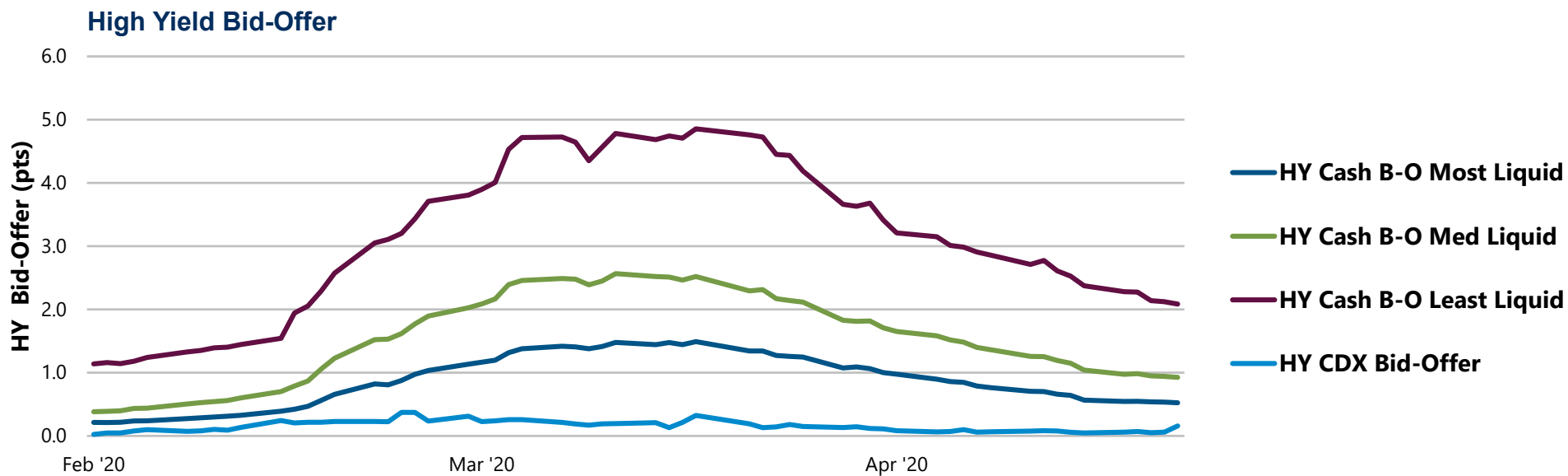
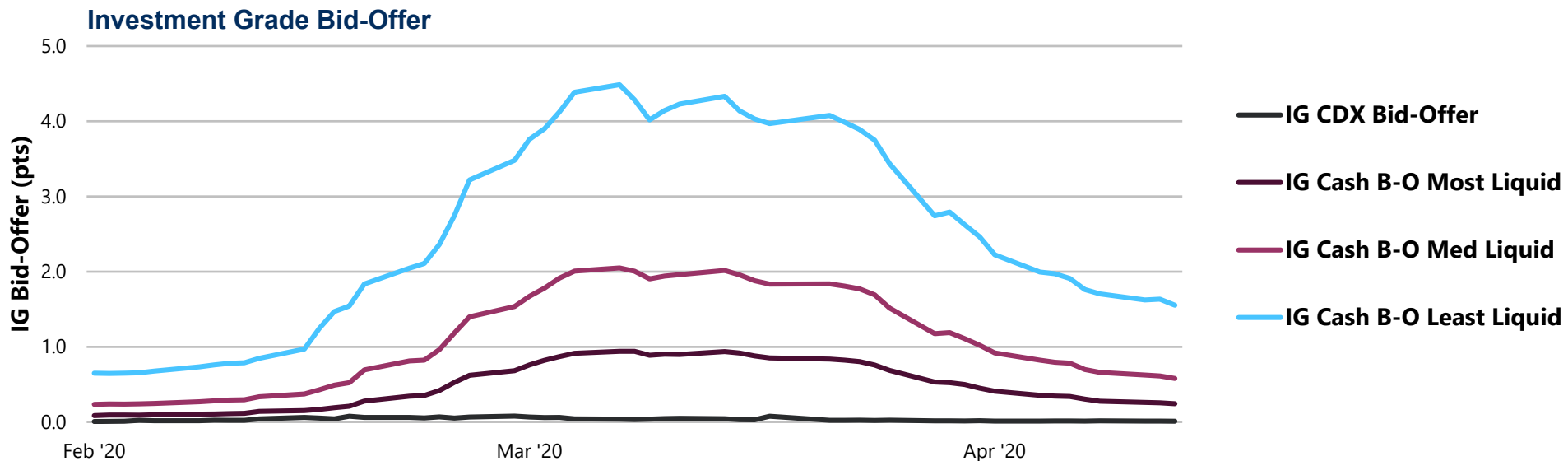


# Credit derivatives enabled risk transfer...



As of 18 May 2020  
 SOURCE: Bloomberg

# ...in a very efficient manner



As of 15 May 2020  
SOURCE: Bloomberg



# Impact of policy and asset managers in market healing

Sector	Since 3/1/20 (\$BN)				
	Gross Supply	Maturities/Paydowns	Central Bank Purchases	Net Supply	Net Supply including Central Bank Purchases
<b>Sovereign Sectors</b>					
US Treasuries	\$462.0	\$348.9	\$1,504.1	\$113.1	(\$1,391.0)
Agency MBS	\$396.0	\$290.0	\$526.0	\$106.0	(\$420.0)
EUR and GBP Sovereigns	\$537.6	\$278.8	\$400.9	\$258.9	(\$142.0)
Asia Sovereigns	\$6.7	\$2.0	\$0.0	\$4.7	\$4.7
Emerging Markets ex-Asia Sovereigns	\$59.7	\$28.3	\$0.0	\$31.4	\$31.4
<b>Total Sovereign Sectors</b>	<b>\$1,462.0</b>	<b>\$948.1</b>	<b>\$2,431.0</b>	<b>\$514.0</b>	<b>(\$1,917.0)</b>
<b>Credit Sectors</b>					
US Investment Grade	\$588.0	\$193.0	\$0.0	\$395.0	\$395.0
US High Yield	\$49.0	\$46.0	\$0.0	\$3.0	\$3.0
US Loans	\$13.5	\$0.0	\$0.0	\$13.5	\$13.5
US Securitized (ex-Agency MBS)	\$32.8	\$26.4	\$0.0	\$6.4	\$6.4
European Securitized	\$6.1	\$13.0	\$6.5	(\$6.9)	(\$13.4)
Covered Bonds	\$20.5	\$33.5	\$26.0	(\$13.0)	(\$38.9)
European Credit	\$140.3	\$55.7	\$37.1	\$83.6	\$46.7
Asia Credit	\$32.7	\$51.6	\$0.0	(\$18.8)	(\$18.8)
Emerging Markets ex-Asia Credit	\$17.3	\$21.2	\$0.0	(\$3.9)	(\$3.9)
<b>Total Credit Sectors</b>	<b>\$900.2</b>	<b>\$440.4</b>	<b>\$69.5</b>	<b>\$458.8</b>	<b>\$389.6</b>
<b>TOTAL</b>	<b>\$2,362.2</b>	<b>\$1,388.5</b>	<b>\$2,500.5</b>	<b>\$972.8</b>	<b>(\$1,527.5)</b>

SOURCE: Intex, JPMorgan, eMBS, Federal Reserve, European Central Bank, Morgan Stanley, Bloomberg, PIMCO

# Appendix

---

**Past performance is not a guarantee or a reliable indicator of future results.**

## CHARTS

Performance results for certain charts and graphs may be limited by date ranges specified on those charts and graphs; different time periods may produce different results. Charts are provided for illustrative purposes and are not indicative of the past or future performance of any PIMCO product.

## INDEX

It is not possible to invest directly in an unmanaged index.

## INVESTMENT STRATEGY

There is no guarantee that these investment strategies will work under all market conditions or are suitable for all investors and each investor should evaluate their ability to invest long-term, especially during periods of downturn in the market.

## ISSUER

References to specific securities and their issuers are not intended and should not be interpreted as recommendations to purchase, sell or hold such securities. PIMCO products and strategies may or may not include the securities referenced and, if such securities are included, no representation is being made that such securities will continue to be included.

## OUTLOOK

Statements concerning financial market trends or portfolio strategies are based on current market conditions, which will fluctuate. There is no guarantee that these investment strategies will work under all market conditions, and each investor should evaluate their ability to invest for the long-term, especially during periods of downturn in the market. Outlook and strategies are subject to change without notice.

## RISK

Investing in the **bond market** is subject to risks, including market, interest rate, issuer, credit, inflation risk, and liquidity risk. The value of most bonds and bond strategies are impacted by changes in interest rates. Bonds and bond strategies with longer durations tend to be more sensitive and volatile than those with shorter durations; bond prices generally fall as interest rates rise, and low interest rate environments increase this risk. Reductions in bond counterparty capacity may contribute to decreased market liquidity and increased price volatility. Bond investments may be worth more or less than the original cost when redeemed. Income from **municipal bonds** is exempt from federal income tax and may be subject to state and local taxes and at times the alternative minimum tax. **REITs** are subject to risk, such as poor performance by the manager, adverse changes to tax laws or failure to qualify for tax-free pass-through of income. **High-yield, lower-rated** securities involve greater risk than higher rated securities; portfolios that invest in them may be subject to greater levels of credit and liquidity risk than portfolios that do not. **Equities** may decline in value due to both real and perceived general market, economic, and industry conditions. **Derivatives** may involve certain costs and risks such as liquidity, interest rate, market, credit, management and the risk that a position could not be closed when most advantageous. Investing in derivatives could lose more than the amount invested.

PIMCO as a general matter provides services to qualified institutions, financial intermediaries and institutional investors. Individual investors should contact their own financial professional to determine the most appropriate investment options for their financial situation. This material contains the current opinions of the manager and such opinions are subject to change without notice. Information contained herein has been obtained from sources believed to be reliable, but not guaranteed. This material has been distributed for informational purposes only and should not be considered as investment advice or a recommendation of any particular security, strategy or investment product. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission. PIMCO is a trademark of Allianz Asset Management of America L.P. in the United States and throughout the world. ©2020, PIMCO

These materials are being provided on the express basis that they and any related communications (whether written or oral) will not cause Pacific Investment Management Company LLC (or any affiliate) (collectively, "PIMCO") to become an investment advice fiduciary under ERISA or the Internal Revenue Code, as the recipients are fully aware that PIMCO (i) is not undertaking to provide impartial investment advice, make a recommendation regarding the acquisition, holding or disposal of an investment, act as an impartial adviser, or give advice in a fiduciary capacity, and (ii) has a financial interest in the offering and sale of one or more products and services, which may depend on a number of factors relating to PIMCO (and its affiliates') internal business objectives, and which has been disclosed to the recipient. These materials are also being provided on PIMCO's understanding that the recipients they are directed to are all financially sophisticated, capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies. If this is not the case, we ask that you inform us immediately. You should consult your own separate advisors before making any investment decisions.

These materials are also being provided on the express basis that they and any related communications will not cause PIMCO (or any affiliate) to become an investment advice fiduciary under ERISA or the Internal Revenue Code with respect to any recipient or any employee benefit plan or IRA because: (i) the recipients are all independent of PIMCO and its affiliates, and (ii) upon review of all relevant facts and circumstances, the recipients have concluded that they have no financial interest, ownership interest, or other relationship, agreement or understanding with PIMCO or any affiliate that would limit any fiduciary responsibility that any recipient may have with respect to any Plan on behalf of which this information may be utilized. If this is not the case, or if there is any relationship with any recipient of which you are aware that would call into question the recipient's ability to independently fulfill its responsibilities to any such Plan, we ask that you let us know immediately.

The information provided herein is intended to be used solely by the recipient in considering the products or services described herein and may not be used for any other reason, personal or otherwise.