AERIAL VIEW

ACCESS A BROADER MARKET PERSPECTIVE



BY KATY BURNE

\$5.57 TRILLION

Total assets under management in global ETF/ETP industry¹

\$26 BILLION

Amount of ETF collateral pledged or received by clients of BNY Mellon Markets globally²

3.93 PERCENT

Share ETFs represent of total equity collateral at BNY Mellon³

2.6 PERCENT

Share ETFs represent of average securities loan balances⁴

1993

Year of the first ETF launch⁵

954

Number of ETFs launched in 2018⁶

64 PERCENT

Share of global collateral that is non-cash⁷

SOURCES:

- 1. ETFGI, as of April 30, 2019
- 2. BNY Mellon Markets data, as of July 24, 2019
- 3. BNY Mellon Markets data, as of July 24, 2019
- 4. IHS Markit data, as of Aug 20, 2019
- 5. Bloomberg Intelligence
- 6. ETFGI, as of Dec. 31, 2018
- 7. IHS Markit, as of May 13, 2019

PHOTO: GETTY

INSTITUTIONS, FACED WITH AN INCREASING NEED TO FIND DIVERSIFIED FORMS OF COLLATERAL AGAINST SECURITIES LOANS AND OTHER TRADES, ARE TURNING THEIR ATTENTION TO EXCHANGE-TRADED FUNDS (ETFs).

BY KATY BURNE

he market for exchangetraded funds (ETFs) has skyrocketed over the past quarter-century, thanks to the trillions of dollars investors are putting to work in passive, index-tracking strategies. What hasn't yet exploded is the use of ETFs backing securities-financing arrangements and loans.

Clients of BNY Mellon were pledging and receiving \$26 billion of ETFs daily as of late July, up from a low of \$14 billion four years ago but down from highs of nearly \$38 billion at the start of 2018. The share those funds represent of overall equity collateral balances at BNY Mellon has barely budged, hovering around 4% of equity collateral and just 0.7% of total collateral.

Many participants say this could

change, if participants can overcome their early skepticism toward ETFs and regulators can allow more favorable terms between those pledging and receiving collateral—at least for fixed-income ETFs containing securities that can be easily converted to cash.

Several signs point to a wider adoption of ETF collateral, even though some on the front lines are not currently pushing it. Some buyside firms that previously rejected ETFs are now warming up to receiving them against securities loans and repurchase agreements or "repos" where their risk committees will allow.

At the same time, there is a growing interest on the part of some lenders and brokers to pledge fixed-income ETFs rather than other assets in their

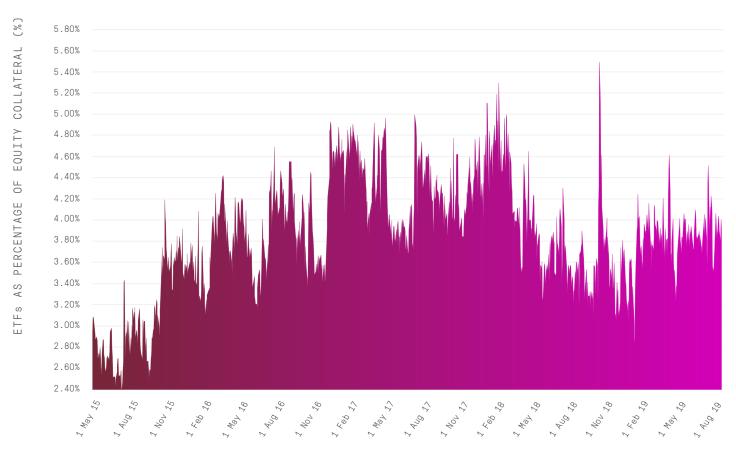
inventory. There is also an opinion, on the part of some traders, that regulators might one day allow ETFs full of short-dated Treasury bills to be counted as high-quality liquid assets (HQLA) for regulatory collateral purposes. This could increase the demand for fixed-income ETFs in general.

Proponents say the more ETFs are mobilized as collateral, the more it will increase the funds' liquidity and reduce market friction. Additionally, for those jurisdictions and credit arrangements where cash collateral may be restricted, ETFs could be easier to move and manage than other assets.

Our discussion will be presented in four categories: the background, the arguments for ETF collateral, the road-blocks, and a path forward.

GRASSROOTS MOVEMENT

ETFs as a percentage of total equity collateral at BNY Mellon*



*DAILY BALANCES

SOURCE: BNY MELLON TRIPARTY COLLATERAL MANAGEMENT DATA

"ETFs have become more ubiquitous throughout the financial system so it's natural that collateral would be another use. People are just now really becoming aware of the desire to do this and figuring out the best way."

SAMARA COHEN, HEAD OF ISHARES GLOBAL MARKETS, BLACKROCK

GREEN SHOOTS

As of April 30, there were 7,774 ETFs or exchange-traded products globally with assets of \$5.57 trillion across 58 countries, according to ETFGI. The data provider thinks the industry will reach \$14 trillion by 2024. But while ETFs have grown since their invention in the early 1990s, the perception of the funds' safety has not.

They remain a rounding error in collateral terms, accounting for 3.93% of the \$662.3 billion in equity collateral across BNY Mellon's global client balances as of July 24 this year, down from 5.5% last September. Those are on trades where BNY Mellon sits in between two parties as a middleman or "triparty" agent, agnostic to which collateral clients use.

When a host of lenders and broker dealers were asked in an informal BNY Mellon poll this spring whether ETFs were a meaningful part of the collateral they pledge today, they indicated it was negligible (see survey). Most said they had an appetite to pledge more, however, especially if liquidity increases and collateral receivers are open to it.

The picture is different on the collateral receiver side. Our survey suggested the majority of firms on the buyside are willing to take ETFs and many larger ones already are. In practice, however, many smaller clients still are not. Some

do not have explicit permission from their risk teams.

"Right now ETF collateral is underutilized and trapped," said Staffan Ahlner, head of clearance and collateral management in EMEA for BNY Mellon. "Making it more mainstream would increase liquidity and provide more choice for clients in their funding strategies."

There are several reasons for the hesitation. While ETFs are useful baskets that allow investors to get broadbased exposure through one security, few understand how the funds trade under severe market stress and how they would be redeemed. That's why many investors tend to sell their ETFs as whole units through exchanges. It then becomes the job of Wall Street service providers or "authorized participants" to deconstruct the basket and deliver cash back to the investor.

Some risk managers would rather take a single share of Apple stock than a share of an ETF that exposes them to a plethora of blue-chip corporate names – or even a bunch of short-term Treasury bills – to avoid some of those steps. They tend not to have the bandwidth to sort through how the funds' liquidity works or what securities are in the underlying basket.

This is despite there being relatively few instances of ETF disruption. Some

firms have had a stab at addressing the perception problem. In 2015, IHS Markit introduced a list of equity and fixed-income ETFs that had broadly conservative parameters, such as not holding derivatives. ETF collateral balances at BNY Mellon Markets rose around 40% the year after those lists came out.

"It's just a matter of time before we see ETFs as an established security in the collateral ecosystem," says Siamak Mashoof, director in ETF and equity sales at IHS Markit. Today, he added, "It still remains a difficult sell to the risk officers, who ultimately determine collateral schedules."

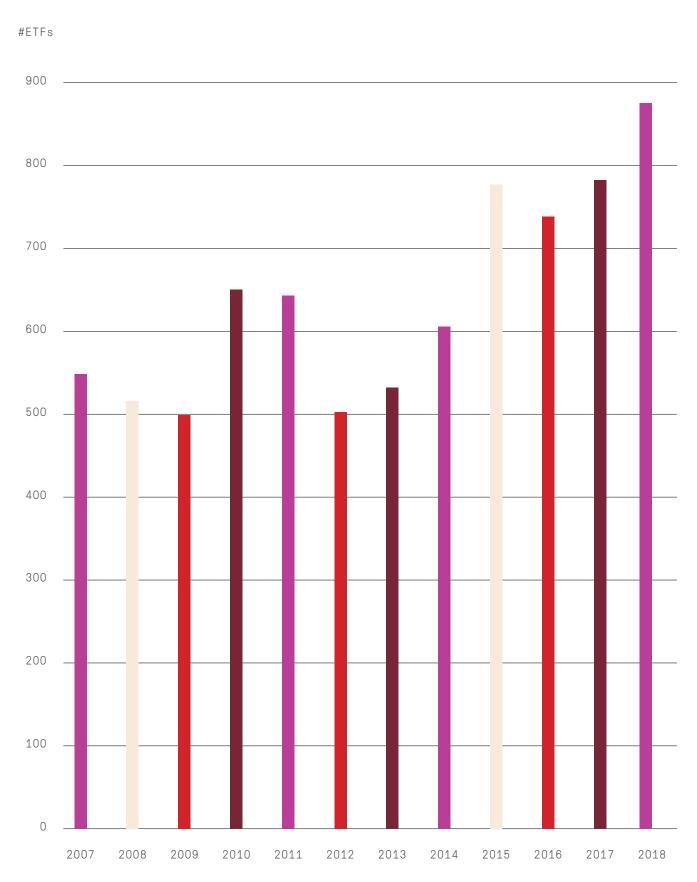
IHS Markit is now working on releasing a second iteration of its collateral lists, in part to expand the number of ETFs represented and to relax the criteria for inclusion and move away from naming specific indices. Another goal is to provide an overlap score showing what percentage of the funds' underlying securities are accepted by collateral managers.

Some expect the new universe will cover more than 50% of the total global ETF assets under management that are eligible to be accepted as collateral today, versus only 15% before.

"The first two [Markit] lists were very vanilla," says Matthew Fowles, director

RAMPING UP PRODUCTION

The growth in ETF launches has been rapid over the past decade



"It is just a matter of time before we see ETFs as an established security in the collateral ecosystem."

SIAMAK MASHOOF, DIRECTOR IN ETF AND EQUITY SALES, IHS MARKIT

in iShares Global Markets for EMEA at BlackRock. "But they were a proof of concept to assist risk managers to understand their construct and promote adoption. That's happened now, and hence there is a real need for a second generation of these lists."

BlackRock accepts physically replicating ETFs as collateral from a number of issuers including iShares as collateral in its securities lending program. ETFs now make up 2.6% of the \$2.3 trillion in 2019 average securities loan balances, up from 1.32% in 2007, according to IHS Markit data.

TIME IS RIPE

There are several market forces that might increase the potential for ETF collateral use. Many institutions are growing more comfortable with how ETF baskets are built and dismantled, and collateral flexibility is becoming increasingly important.

"ETFs have become more ubiquitous throughout the financial system so it's natural that collateral would be another use," says Samara Cohen, head of iShares Global Markets at BlackRock. "People are just now really becoming aware of the desire to do this and figuring out the best way."

A second factor is how much easier ETFs are to move through the plumbing underneath Wall Street's securities markets than cash. Money market fund shares, while safe, settle through the individual fund companies that issue them, whereas ETFs settle like equities.

"The world is better piped to move equities than money market funds," says James Slater, global head of business solutions for asset servicing at BNY Mellon. "The need to collateralize transactions is increasing and in some cases regulations restrict the use of cash."

The International Swaps and Derivatives Association, a trade group, is exploring ways to help market participants prepare for new rules requiring waves of investors to post margin collateral against non-standard derivatives that cannot be processed through clearinghouses.

As of September 1 this year, any financial firm trading \$750 billion or

more of these non-cleared derivatives was required to post a percentage of its trading exposure as collateral. By September 2020, that same margin requirement will cover anyone with \$50 billion of non-cleared derivatives exposure. Global regulators also are pushing financial firms to hold more high-quality liquid assets or "HQLA" to meet various new capital and leverage tests.

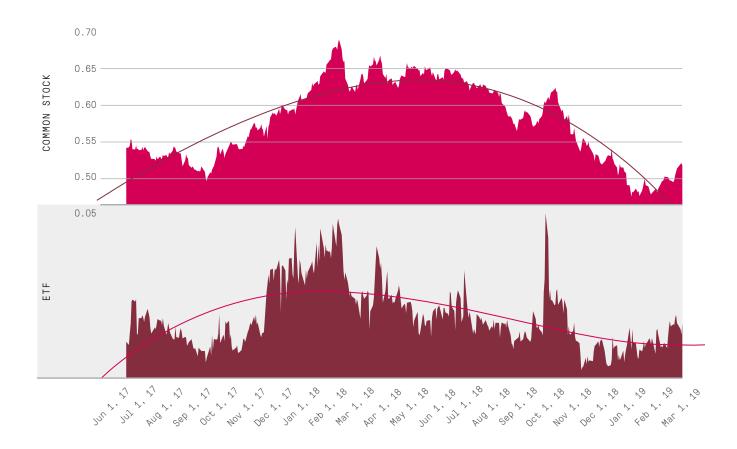
One discussion is around the potential for additional forms of non-cash collateral. Clive Ansell, head of market infrastructure and technology at ISDA, says this might include money market funds and UCITS funds, and some market participants have inquired about using ETFs as collateral.

Pre-crisis, cash accounted for 63% of all collateral, whereas today 64% of collateral is non-cash, according to IHS Markit

A third driver is the new breed of ETFs coming to market containing short-term Treasuries. Their attractiveness to asset managers who typically pledge short-duration debt is clear:

NECK AND NECK

Balances of common stock collateral and ETF collateral have been closely aligned.



SOURCE: BNY MELLON TRIPARTY COLLATERAL MANAGEMENT DATA

"Right now, ETF collateral is underutilized and trapped. Making it more mainstream would increase liquidity and provide more choice for clients in their funding strategies."

STAFFAN AHLNER, HEAD OF CLEARANCE & COLLATERAL MANAGEMENT IN EMEA, BNY MELLON

Treasury bills need to be replaced or "rolled" on routine dates when those securities mature, whereas ETFs live on perpetually until they are switched out for something else.

"If you're a global macro hedge fund, and you don't have fixed-income expertise, you don't necessarily want to spend time on this," says Steve Sachs, head of capital markets at Goldman Sachs Asset Management, which created one of the Treasury bill ETF products. "It's operational and not an alpha-generation exercise."

The genesis of Goldman's idea was to deliver a money market fund experience in an ETF format, says Sachs. The Goldman fund, called "GBIL," launched in 2016, invests in Treasuries out to one year in duration, and now holds more than \$3 billion in assets. Users of GBIL are mostly registered investment advisors today. But Sachs says, "We do have a number of [institutional] clients that are using it for collateral purposes—the collateral usage aspect of GBIL was absolutely contemplated from day one."

One current sticking point is that

regulators determining what collateral can be pledged against derivatives currently treat GBIL no differently than an ETF containing Russell 2,000 stocks. When traders pledge \$100 of collateral, the regulators guide the receivers of that collateral how to discount its value in case one side goes belly up. With the typical equity-like haircut for ETF collateral, the requirement today can be north of 15%.

Invesco Ltd., which runs a Treasury collateral ETF with the ticker symbol "CLTL," received a waiver from the Securities and Exchange Commission in March 2018 to apply a 2% haircut for collateral posting. Next, the firm is waiting on a decision from the Commodity Futures Trading Commission, which currently does not allow any ETFs to be used for collateral on cleared derivatives.

Tim Urbanowicz, director in fixedincome ETF strategy at Invesco, said if the CFTC gives the green light for Invesco and its CLTL fund to be posted as eligible collateral on cleared transactions, it "opens up a whole new world of possibilities for the product." Goldman is in separate discussions with the CFTC to allow GBIL to be posted as collateral in cleared trades as well as exchange traded derivatives, and to lower the haircut to 2% or less from its current 15-50% range.

ROUGH TURF

For all these developments, the constraints to broader adoption of ETF collateral are not small. For securities dealers, it may be a question of prioritization. For an asset manager, it may be the risk management of ETFs or convincing a board of directors.

On top of that, very few ETFs are alike. Even the same ETF can trade on a dozen different exchanges. In the U.S., trading volumes have been easy to come by but in Europe, under Mifid II, there was no requirement to post trading volumes for ETFs until January 2018, so volumes were scarce.

Bloomberg LP has an analytics tool called Port that allows investors to drill down into an ETF's characteristics, based on the fund's underlying portfolio. This July, the company also launched new metrics that aggregate

the trading volumes in all ETFs globally across multiple trading venues.

ETF proponents believe that industry practitioners should be looking at the liquidity of the components anyway, not how often the fund trades. "The key collateral quality metric should be underlying liquidity and the collateral receivers' ability to liquidate through a liquidation agent," says Jean-Christophe Mas, head of ETF trading at BNY Mellon Capital Markets LLC, which is a broker dealer affiliate of the bank and authorized participant or "AP" for such funds.

Not all firms that receive ETFs as collateral have appointed an AP to help them liquidate those holdings in a turbulent market, so they may not be able to price the ETFs themselves or have the ability to create or redeem shares. If more firms were familiar with the redemption process, perhaps the fuller benefits of ETF collateral could be realized, Mas points out.

ABN AMRO Clearing brought its collateral activity to BNY Mellon's triparty systems after going live on the platform in 2018. Valerie Rossi, global head of securities finance of ABN AMRO Clearing based in Hong Kong, says she has noticed more widespread industry adoption of ETF collateral than four to five years ago, especially for ETFs that replicate main indices.

But she said there is still a reluctance on the part of some participants. "If the average traded volume of that ETF is significantly lower than its components, then firms may exercise caution and limit exposure to those instruments," says Rossi. For any "synthetic," leveraged or inverse ETFs she says, "The conversation becomes a lot more restrictive."

ABN AMRO Clearing primarily pledges ETFs and other forms of collateral to receive high quality assets such as government bonds in an arrangement known as a "collateral transformation" trade designed to optimize its balance sheet.

BNP Paribas Securities Services, a unit of BNP Paribas Group, last year

started accepting ETFs as collateral against securities lending arrangements where it acts as the principal lender. Yannick Bierre, head of principal lending, says the firm is now authorized to accept a finite list of ETFs from a handful of issuers—primarily ones it can reuse as collateral itself—but the list may evolve over time. "The ETF market is growing, so we are changing our approach on the product," he says.

Citigroup last year also added ETFs to its list of acceptable collateral against agency securities lending transactions, where the bank acts as an intermediary between a borrower and lender.

ON THE RADAR

The rise in ETF Collateral is on the minds of sophisticated players in the securities lending and collateral markets. But convincing hundreds of clients to add ETFs to their collateral schedules will take time. The process of adding them could be made easier with a new BNY Mellon tool called RULE ™, which can help clients with changes to their existing collateral schedules to include ETFs. A separate Continuous Portfolio Optimizer tool can also work out the optimal places for the client to deploy that collateral.

Educating participants about the uses and behaviors of ETFs is one nearterm focus, closely followed by getting regulatory attention on ETFs in the context of high-quality liquid assets, proponents say. Some commenters in the months leading up to the U.S. iteration of the Basel III Liquidity Coverage Ratio final rule argued that ETFs tracking indices of HQLA assets should be classified as HQLA. However the final rule does not include ETFs as US regulators indicated that they do not consider the liquidity characteristics of ETFs and their underlying components as identical.

Another conversation under way is designed to benefit clearing risk managers, and to educate clearinghouses about how to think about ETFs as a new form of margin. A critical step from

regulators would be allowing ETFs to back swaps that are not suitable for such clearinghouses. Eurex Clearing is one that has already extended the scope of its admissible collateral for margin purposes to include five ETFs in Europe back in April 2016.

Ultimately the long-term growth of fixed-income ETFs will in part depend on the industry's ability to position the products as viable sources of collateral. This will require coordination across the entire ecosystem, from regulators to collateral receivers and providers, who would need to agree that a Treasury ETF holding HQLA assets should receive look-through treatment.

For its part, BNY Mellon is getting questions from some securities borrowers who are aware the bank takes ETF collateral for clients in its triparty collateral platform and want to know when the firm will be able to accept ETF collateral for its own agent lending business. Simon Tomlinson, global head of agency lending trading at BNY Mellon, says the process of adding ETF collateral lists to the agency lending business is already under way, with a view to accepting it this fall. Beforehand, he says the demand had been sporadic and focused on ETFs outside of the IHS Markit lists. Now, with discussion about ETF collateral a topic in most borrower meetings and the anticipated expansion of those Markit lists, he says, "We expect to see demand increase significantly as we head into next year."

In the meantime, backers of GBIL and CLTL are in a wait-and-see mode to see if non-levered, physically backed Treasury bill ETFs will be viewed as similar enough to cash collateral. •

Katy Burne is Editor of Aerial View Magazine at BNY Mellon Markets in New York.

Questions or Comments? Write to Jeffrey.McCarthy@bnymellon.com in BNY Mellon Asset Servicing and John.Fox@bnymellon.com in BNY Mellon Markets, or reach out to your usual relationship manager.

Survey

BNY Mellon Markets quickly polled a sample of collateral providers and receivers, indicative of the broader marketplace, about their current perspectives on ETF collateral and its usefulness. The survey of 20 collateral provider clients by BNY Mellon Markets found that, by and large, firms use a negligible amount ETF collateral today. Many see their usage growing, however, especially if liquidity and circulation of the funds increases or they can find buysiders to accept the funds.

We also polled 11 large collateral receivers, many big buysiders were already using ETFs as collateral and planning to expand their use cases. But the overwhelming feeling was that the existing Markit collateral lists are only a starting point because they are currently too restrictive.





1. Are ETFs a meaningful part of the collateral you pledge today?

25% No (0%)

40% Negligible (under 2%)

20% Between 2% and 10%

15% Yes (10% or greater)

2. Do you see your use of ETF collateral growing?

35% Yes

20% No

30% Depends on buyside appetite (If I can find somewhere to put it)

15% If ETF liquidity and circulation increases (giving me more inventory) 3. What factors would positively sway your opinion in relation to using more ETF collateral?

15% More favorable regulatory haircuts on ETF collateral

5% Increased transparency over the tracking difference between ETF and its underlying

25% Expanded Markit equity and fixed income lists

35% Increased volume and liquidity data

20% None of the above

4. How helpful are the current Markit ETF collateral lists in the context of this discussion?

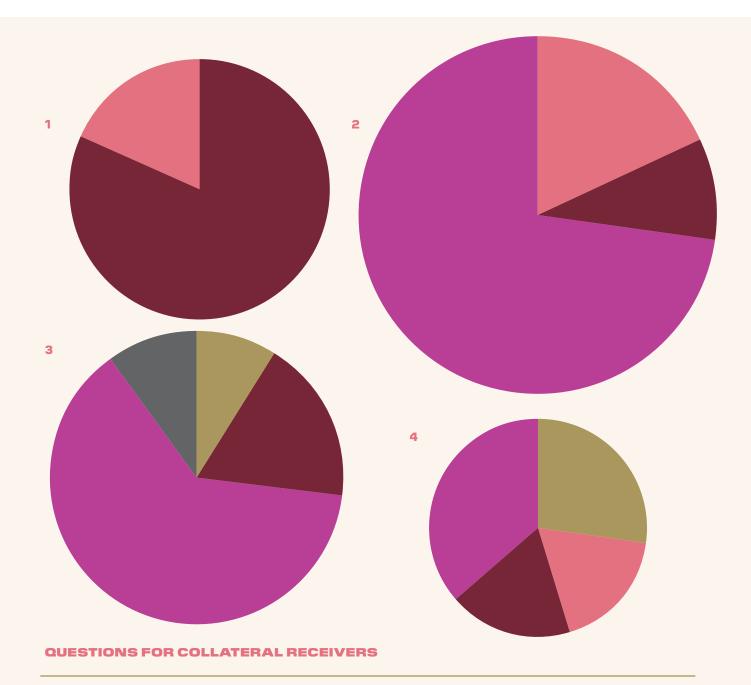
10% List is too conservative, need to relax the criteria

10% Too small an AUM of ETF universe covered

5% Requires further tweaking by sector, geography

40% All of the above

35% None of the above



1. Are you currently accepting ETFs as collateral?

81.81% Yes

18.18% No

0% Discussing with beneficial owners/ risk committees/ compliance

0% Working on adding ETFs to collateral schedule

2. If you don't currently accept ETFs, what is the reason?

0% No interest

18.18% Our risk teams do not permit us

9.09% Insufficient information on the asset class

0% Technology obstacles to risk managing ETFs

0% All of the above72.72% Not applicable

Not applicable (we accept them)

3. Has your opinion about the viability of ETF collateral changed over the last two years? If yes, how?

9.09% Interested in the discussion, but as a bystander

0% Prepared to now discuss taking ETFs as collateral

18.18% Considering ETFs as part of collateral schedule changes for 2019

63.63% Already accepting them and will be looking to expand use cases

9.09% None of the above

4. How helpful are the current Markit ETF collateral lists in the context of this discussion?

27.27% Too small an AUM of ETF universe

covered

18.18% Not conservative enough

18.18% Requires further tweaking in terms of sectors, geographies

36.36% All of the above





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