

iSHARES INVESTIGATES: ETF MARKET REALITIES

Answers to 10 popular questions about ETFs

1. How do ETFs impact market liquidity?

Exchange-traded funds (ETFs) are unique; they provide exposure to a diversified collection of assets, like a mutual fund, but trade on exchange, like a stock. This structure makes the liquidity of ETFs unique, too.

Liquidity refers to the ease of buying or selling a stock. ETFs have two layers of liquidity: *primary* market liquidity, which is provided by the underlying securities or instruments of the ETF, and *secondary* market liquidity, which is provided by the ability to trade ETFs on exchange.

This means that ETFs are **net contributors** to market liquidity. At a minimum, an ETF will be as liquid as its underlying securities or instruments; often, however, ETFs provide even greater market liquidity than their underlying instruments.

2. Do ETFs drive the direction of markets?

Given the size of some of the largest ETFs, one might think that buying and selling within those funds actually moves market prices.

In fact, asset allocation decisions made by asset owners, such as pension funds and individuals, drive flows into different asset classes, sectors, and geographies.

Their allocation decisions are guided by factors such as macroeconomic developments (like global interest rate policy), risk preferences, and investment horizon.

ETFs are just **one way** for investors to express their views about the market. If ETFs didn't exist, investors could use other tools, like single stocks, mutual funds, and derivatives.

3. How big is the ETF market?

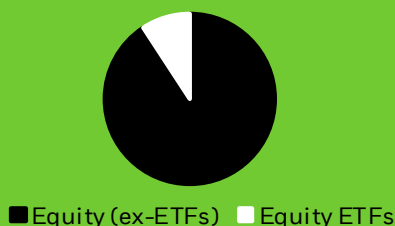
As of 30 June, 2020, there were \$6.2 trillion of ETF assets worldwide.¹ This means that ETF assets represent approximately 7% of the global market capitalisation, or dollar value of the global market.²

Even within the United States—the largest ETF market—ETFs are only a **fraction** of the total financial market. Just 9% of the total assets invested in U.S. equities are in U.S.-listed equity ETFs.³ The fixed income ETF market is even smaller, at 2% of the total U.S. bond market.⁴

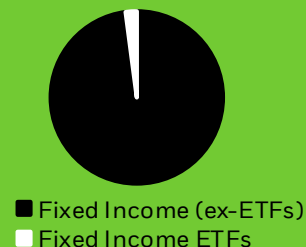
Global ETF AUM



U.S. Equity ETF AUM



U.S. Fixed Income ETF AUM



¹ All figures in USD unless otherwise noted. Source: Markit, BlackRock (as of 30 June, 2020). ² Source: SIFMA (as of 31 May, 2020), Markit, BlackRock (as of 30 June, 2020). ³ Equity (ex-ETFs) represented by the market capitalisation of the Russell 3000 index. Source: Bloomberg, BlackRock (as of 30 June, 2020). ⁴ Source: Bank for International Settlements (BIS) (as of 31 March, 2020), Bloomberg, BlackRock (as of 30 June, 2020).

4. Do ETFs increase market volatility?

Typically, no. In fact, ETFs have acted as “**shock absorbers**” during many volatile trading sessions as buyers and sellers transact on the exchange, at real-time prices, without having to trade the underlying stocks and bonds.

What’s more, since ETF shares are traded directly by buyers and sellers on-exchange, an ETF can circumvent “forced selling”, something a mutual fund may need to do when investors want to sell their shares. This means that most ETF trading occurs without transactions taking place in the underlying securities. For more information about the differences between ETFs and mutual funds, please see the end of this document.

5. Are all exchange-traded products the same?

While all exchange-traded products share certain characteristics, some have embedded structural risks that go beyond the scope of “plain vanilla” ETFs.

BlackRock defines an ETF as a publicly offered investment fund that:

- **Trades** on an exchange.
- **Tracks** underlying securities of stocks, bonds or other investment instruments.
- Does **not** seek to provide a leveraged or inverse return

Investors need to understand what they own. BlackRock, along with others in the industry, has called for a clear-cut ETF naming convention to better serve investors.

6. Do index rebalances make index investing less efficient?

Indices are periodically rebalanced as changes in market prices affect the relative weightings of individual securities. Funds that track indices are **professionally managed**, and there’s a lot of work that goes on behind the scenes by skilled professionals to make sure these publicised events are smoothly executed.

- Some funds use knowledge of the indexing process in an effort to capture price movements or lessen any temporary price effects by trading in names added to the index. Others may try to capture information by predicting inclusions and deletions.
- Competition helps ensure any indexing effects are modest, however. It is not easy to beat index benchmarks.

7. Does index investing increase asset price correlation?

Correlation measures the degree to which two securities’ prices move in relation to one another. Correlation between stocks has risen in recent years, giving rise to a misperception that the growth of index funds is the cause; in other words, that the unique, fundamental drivers of individual stock prices are being superseded by their inclusion in an index. (See question #2)

In reality, correlation isn’t the same as causation. Stock correlations actually **decreased** between 2015 and 2017—a period when index funds were achieving record growth.⁵

There are other, more plausible causes for increased correlations in stock and other asset prices, including **macroeconomic factors**, like global interest rate policy or the price of raw materials, which can cause asset prices to move in tandem, and **heightened market volatility**, as we saw during the 2008 Financial Crisis.

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

⁵ As of 31 March, 2019. Source: BlackRock, based on data from CRSP, Bloomberg. Cross-stock correlations represent the average return correlation between any two pairs of stocks in the S&P 500. Indices are unmanaged and one cannot invest directly in an index

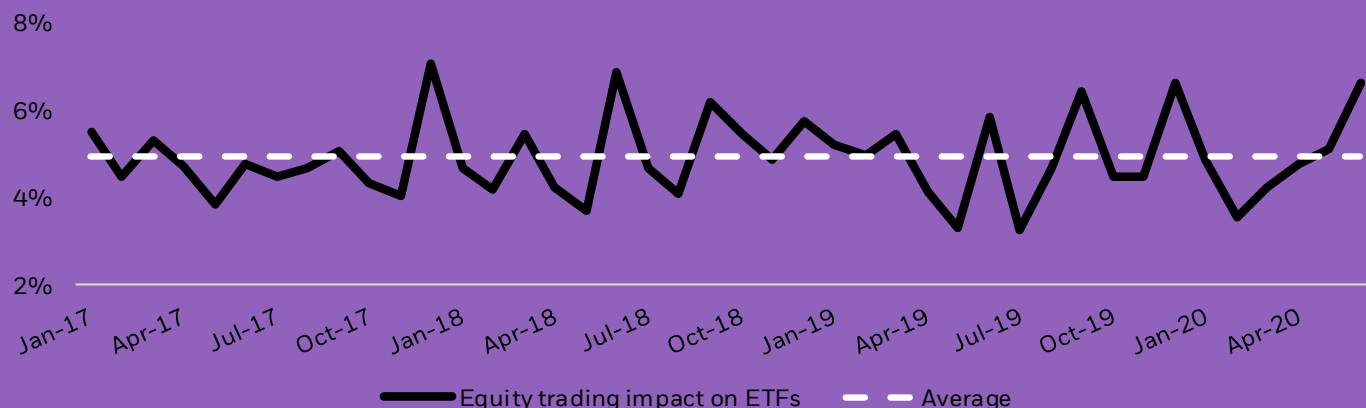
8. How do ETFs impact stock prices?

Questions sometimes arise about whether ETFs influence the prices of the stocks they hold. In short, the majority of ETF activity doesn't affect the market prices of underlying stocks.

On average, approximately **5%** of trading in individual stocks in the U.S. is attributable to ETF flows.⁶

This is because 80% of U.S. ETF activity takes place on-exchange between buyers and sellers of ETF shares, which means that, most of the time, shares of underlying stocks do not need to be bought or sold to adjust for changes in investor demand.⁷

Estimated impact of ETF flows on U.S. stock prices⁶



9. What would happen if an authorised participant or market maker withdrew from the ETF market?

An authorised participant (AP) is a financial institution that manages the creation and redemption of ETF shares in the primary market. Each AP has an agreement with an ETF sponsor that gives it the right (but not the obligation) to create and redeem ETF shares. APs may act on their own, or on behalf of market participants.

Market makers are broker dealers that regularly provide two-sided (buy and sell) quotes to clients. In some instances, an ETF's market makers may also be APs.

APs and market makers operate in a highly competitive environment, and are **economically incentivised** to take part in making or trading ETF shares. If an AP were to withdraw from the ETF market, other APs would likely step in to facilitate the creation and redemption of ETF shares, particularly if there was a significant premium or discount to its net asset value (NAV), or difference between the price of the ETF and its underlying holdings. In that case, the remaining APs would take advantage of **arbitrage opportunities** arising from that difference. That same incentive holds true for market makers as well.

Ultimately it is this "arbitrage mechanism" that helps keep the ETF's market price close to the value of its underlying holdings each day.

(There has never been a scenario in which all APs withdrew at once. But if that were to happen, the creation and redemption process would be temporarily frozen and the supply of ETF shares could be fixed in the short run.)

⁶ As of 30 June, 2020. Source: Bloomberg, Markit, BlackRock. Derived from the collective weight of flows into all ETFs holding all U.S. stocks on a monthly basis from 2017 through 2020. ⁷ Source: BlackRock, Form N-CEN. As of 31/3/2020.

10. What role do ETFs play in price discovery?

Price discovery helps investors identify the proper market price of securities or other instruments based on factors like supply and demand. The on-exchange trading of ETFs plays an important role in price discovery across markets, sectors and individual stocks. For example, international ETFs traded during U.S. market hours help investors set prices daily when non-U.S. markets are closed. Additionally, during suspensions of international stocks or markets, U.S.-domiciled ETFs may be the **primary source** of pricing information available to market participants.

ETF flows provide crucial information. As greater numbers of sophisticated investors use ETFs to express their views, flows from one asset to another can serve as indicators of investor sentiment about potential risk and return.

Note that ETFs don't set prices or drive volatility. They hold up a mirror to what investors are thinking.

ETFs and mutual funds: Know the differences

- **Strategy:** Fund management styles are typically categorised as “active” or “index”. Active funds (most mutual funds) seek to outperform market indices, while “index” funds (some mutual funds and most ETFs) seek to match the fund’s performance to an established market index, such as the S&P 500.
- **Trading:** Mutual funds are bought and sold directly from the mutual fund company at the current day’s closing price, or the Net Asset Value (NAV). ETFs are traded throughout the day at the current market price, like a stock, and may cost slightly more or less than NAV. Mutual fund transactions do not include commissions to a brokerage, while some ETF transactions do.
- **Transaction fees:** For mutual funds, transaction fees may include sales charges (sales loads) or redemption fees. These are paid directly by investors. ETF transactions may include brokerage commissions (like stocks), which are paid directly by investors.
- **Tax implications:** Mutual fund shareholders redeem shares directly from the fund, so the fund manager must often sell fund securities to honour redemptions, potentially triggering capital gains for the fund’s remaining shareholders. Because ETF investors buy and sell shares with other investors on an exchange, the ETF manager doesn’t have to sell holdings – potentially creating capital gains – to meet investor redemptions. ETF shareholders can incur tax consequences when they sell shares on the exchange, but that tax consequence is not passed on to other ETF shareholders.
- **Transparency:** ETFs generally disclose holdings daily. Mutual funds generally disclose holdings quarterly.

	Mutual Funds	Index Mutual Funds	ETFs	Stocks
Diversified	✓	✓	✓	
Traded on exchange			✓	✓
Intraday pricing			✓	✓
Intraday trading			✓	✓
Management fees	✓	✓	✓	
Commission fees			✓	✓
Tax management*			✓	✓
Index-tracking		✓	✓	

* Due to fund structure, mutual fund holders may be subject to taxable capital gains distributions due to other investors’ redemptions directly to the mutual fund. Taxable capital gain distributions can occur to ETF investors based on stocks trading within the fund as the ETF creates and redeems shares and rebalances its holdings. ETFs and stocks will also distribute taxable capital gains when an investor sells their own shares. Certain traditional mutual funds can also be tax efficient.

Risks

Capital at risk. The value of investments and the income from them can fall as well as rise and are not guaranteed. Investors may not get back the amount originally invested.

Past performance is not a reliable indicator of current or future results and should not be the sole factor of consideration when selecting a product or strategy.

Changes in the rates of exchange between currencies may cause the value of investments to diminish or increase. Fluctuation may be particularly marked in the case of a higher volatility fund and the value of an investment may fall suddenly and substantially. Levels and basis of taxation may change from time to time.

All figures are denominated in U.S. dollars, unless otherwise noted.

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For U.S. investors: Carefully consider the Funds' investment objectives, risk factors, and charges and expenses before investing. This and other information can be found in the Funds' prospectuses or, if available, the summary prospectuses which may be obtained by visiting www.iShares.com or www.blackrock.com. Read the prospectus carefully before investing.

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Shares of iShares ETFs may be bought and sold throughout the day on the exchange through any brokerage account. Shares are not individually redeemable from the ETF, however, shares may be redeemed directly from an ETF by Authorized Participants, in very large creation/redemption units.

Although market makers will generally take advantage of differences between the NAV and the trading price of iShares ETF shares through arbitrage opportunities, there is no guarantee that they will do so.

Buying and selling shares of ETFs may result in brokerage commissions. Diversification may not protect against market risk or loss of principal.

There can be no assurance that an active trading market for shares of an ETF will develop or be maintained.

Investment comparisons are for illustrative purposes only. To better understand the similarities and differences between investments, including investment objectives, risks, fees and expenses, it is important to read the products' prospectuses.

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