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THE EMPIRICAL STRIKES BACK

A Pragmatic Framework for Selecting Investment Vehicles

By Theodore P. Enders, CFA®



INVESTMENTS & WEALTH INSTITUTE®

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The persistent twin trends of outflows from actively managed mutual funds and inflows to exchange-traded funds (ETFs) are sometimes cast as evidence that passive investing has won the investment strategy debate. In our view, declaring a victor misses the point.

Professional investors in our experience are intensely focused on practical goals—for instance, increasing returns, or reducing risk in the smartest way possible. The investment vehicle of choice is typically simply a tool in the pursuit of these goals.

“Mutual fund or ETF?” in our view is a more practical statement of the “active or passive?” question so often posed. Our examination of performance and due diligence issues across these fund types in the United States suggests roles for both mutual funds and ETFs in well-diversified investment portfolios. Here, we present a framework for empirically minded investors to use to think through a range of selection criteria.

Product depth and accessibility matter in investment decisions. Besides performance and fees, professional investors, in our opinion, should consider the role of a sufficiently deep product bench. Our analysis shows that mutual funds historically offered more product depth than ETFs for several asset classes. Professional investors, especially intermediaries, may face a due diligence “fallback risk” by allocating to categories where only a handful

of backup options exist. This fallback and performance screen analysis informs the mutual fund-ETF allocation framework we present below, which shows ranges between 27–81 percent ETFs and 19–73 percent mutual funds for long-only tax-exempt portfolios and 13–26 percent ETFs and 74–87 percent mutual funds for taxable income-focused portfolios.

Not all asset classes are created equal.

Active managers have faced brighter prospects in some areas than in others. We present a diversity of historical outcomes in several asset classes that have been more positive for active managers than the well-publicized, challenged area of U.S. equities. International real estate (REITs), preferred stock, energy limited partnership, infrastructure, and high yield bonds are five areas where active managers have frequently had success (see “Not All Asset Classes Are Created Equal,” below).

Asset allocation decisions are inherently active. We think contemporary “mutual fund versus ETF” and “active or passive” debates often miss this point, because they center on manager-level performance in one or two asset classes, such as U.S. equities, instead of the often decisive impact of asset allocation. Despite common references to a “60/40” portfolio as a default, asset allocation must be tailored to individuals’ risk profiles and, therefore, there is no default asset allocation. For this reason, the choice of asset classes in a portfolio can be critical.

PRODUCT DEPTH AND ACCESSIBILITY MATTER

The decision to use ETFs over mutual funds often is motivated by fees or short-term performance.

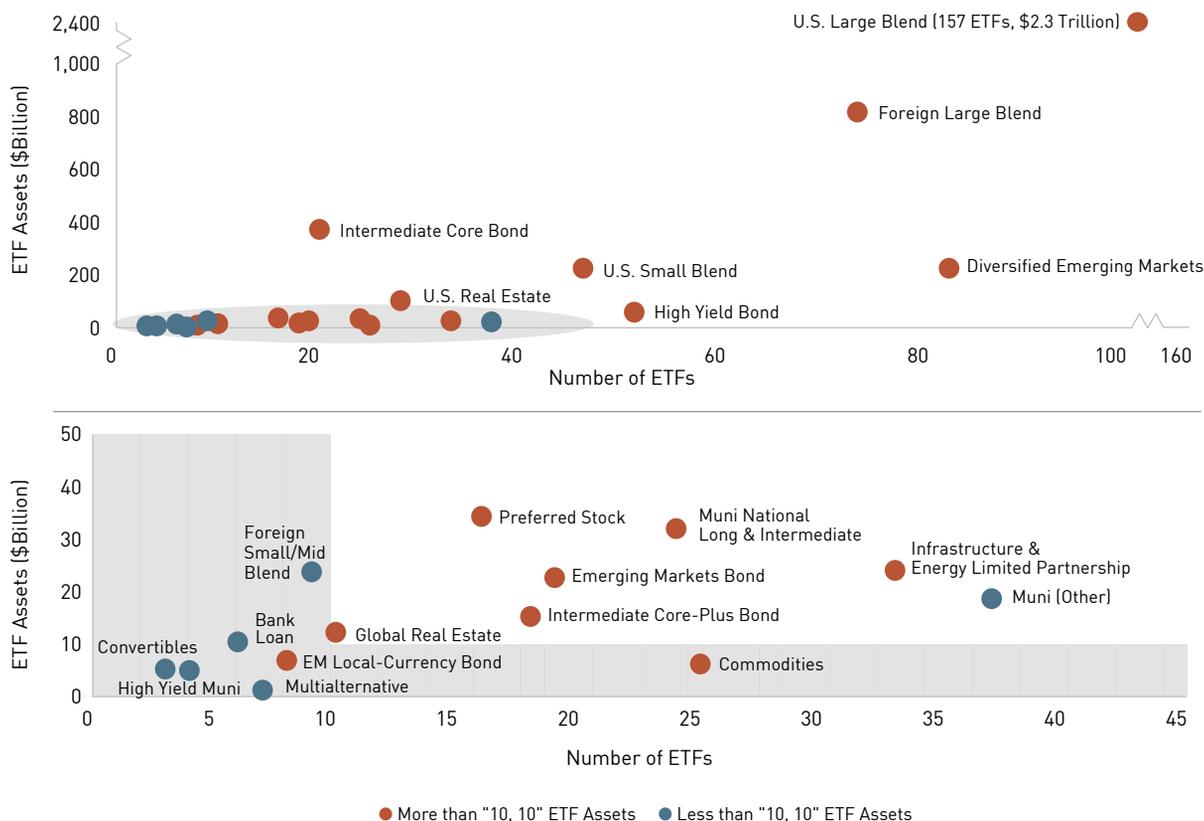
But the range of criteria that professional investors consider today goes beyond these metrics. Ensuring a defensible number of backup implementation options for a given investment allocation is a prime example. The reality of mutual funds and ETFs today is that many mutual funds may be available for a given asset class, but ETFs may be less numerous. Industry figures tell the story: Approximately 2,100 exchange-traded products were available in the U.S. market as of December 2019, compared to nearly 8,000 (non-ETF) open-end mutual funds available to investors.¹

Selecting an ETF for an asset class in which only a few implementation options exist creates what we would describe as a fallback risk. A dearth of fallback options may create reinvestment risk if capital is deployed outside a given category’s dominant ETFs or in the event of portfolio adjustments, such as tax-loss harvesting.

We attempt to quantify fallback risk by applying what we call the “10, 10” rule. The “10, 10” rule (see figure 1) categorizes an asset class as posing an ETF fallback risk if there is less than \$10 billion invested across the category’s ETFs or if there are fewer than 10 ETFs in the market. Morningstar categories where the “10, 10” rule identifies ETF fallback risk

Figure 1

POTENTIAL ETF OPPORTUNITY SET AND 'FALLBACK RISK'



Highlighted area denotes Morningstar Categories with either lower assets (< \$10 billion in assets under management) or fewer choices (< 10 vehicles).

Source: GSAM Strategic Advisory Solutions/Portfolio Strategy, Morningstar, as of December 31, 2019, latest available. For illustrative purposes only. Morningstar Categories in the lower left-hand corner (gray) are Foreign Small/Mid Blend, High Yield Muni, Commodities, Bank Loan, Convertibles, Emerging Market Local-Currency Bond, and Multialternative. Infrastructure & Energy Limited Partnerships combined Infrastructure and Energy Limited Partnership Morningstar Categories. Muni (Other) includes Muni California Intermediate, California Long, National Short, New York Intermediate, New York Long, and Muni Target Maturity Morningstar categories. Investments in alternatives expose investors to risks that have the potential to result in losses. These risks may not be present in more traditional (e.g., equity or fixed income) asset classes. In an effort to distinguish funds by what they own, as well as by their prospectus objectives and styles, Morningstar developed the Morningstar Categories. Although the prospectus objective identifies a fund's investment goals based on the wording in the fund prospectus, the Morningstar Category identifies funds based on their actual investment styles as measured by their underlying portfolio holdings (portfolio and other statistics over the past three years). Please see important additional disclosures at the end of this article.

include Convertibles, High Yield Muni, Bank Loan, Multialternative, Emerging Market Local-Currency Bond, Foreign Small/Mid Blend, and Commodities.

NOT ALL ASSET CLASSES ARE CREATED EQUAL

Few observations are as widely noted in financial commentary as the scarcity of U.S. large-cap equity mutual fund managers who beat their respective benchmarks. The observation, after all, is apt: Precious few managers outperform in the highly competitive U.S. equity market. Our analysis shows that only about 30 percent of mutual fund managers in Morningstar's U.S. Large Blend category beat the largest ETFs

over rolling three-year data during 1998-2019. But U.S. equities are just part of a portfolio. We believe investors should look across a range of potentially attractive asset classes—they might be surprised by what they find.

We found various equity and fixed income asset classes—each of which we regard as important components of well-diversified investment portfolios—where manager track records have been more positive (see figure 2, bottom, and figure 3).

As an example, the majority of Morningstar-tracked Preferred Stock and Infrastructure mutual funds beat the

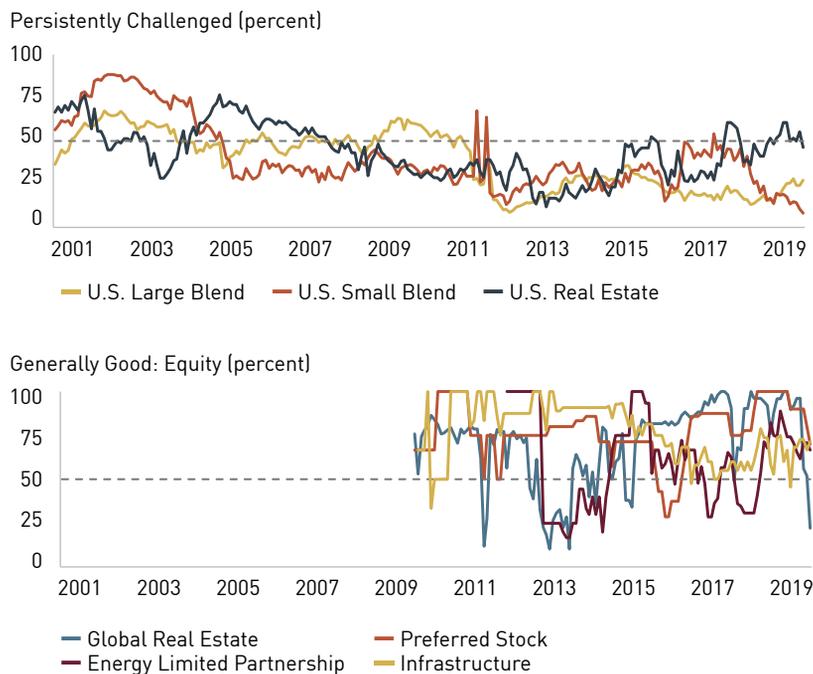
largest comparable ETF over available timeframes on a three-year rolling returns basis. Another category we would characterize as generally good in relation to comparable ETFs is High Yield Bonds, as shown in figure 3.

We would stress that some environments are more favorable for active managers than others, and market dynamics can shift over time. Manager performance in the Global Real Estate category, for instance, has been volatile, dropping below 20-percent outperformance versus the comparable ETF for a few rolling three-year periods in 2011-2013 before rising more than 80 percent during 2015-2018.

Figure 2

COMPARING MUTUAL FUND AND ETF PERFORMANCE

Percentage of Morningstar-tracked mutual funds outperforming the most widely used ETF for the same Morningstar category based on three-year rolling returns



Source: GSAM Strategic Advisory Solutions/Portfolio Strategy, Morningstar, as of December 31, 2019, latest available. For illustrative purposes only. Figure 2 shows the performance of the rolling three-year performance (net of fees) for mutual funds against the largest ETF in their respective Morningstar Category at the point of each investment period. “Persistently Challenged” and “Generally Good” have been determined by the trend in performance relative to the largest ETF in the respective Morningstar Category. The number of funds in the corresponding Morningstar Category are listed in parentheses (as of December 31, 2019). U.S. Large Blend (973), U.S. Small Blend (361), U.S. Real Estate (121), Global Real Estate (90), Preferred Stock (15), Energy Limited Partnership (36), and Infrastructure (33). **Past performance does not guarantee future results, which may vary.**

In other cases, investors can identify cyclical drivers of outperformance or underperformance. In figure 3, Intermediate Core-Plus mutual funds managers, which have the flexibility to have more credit exposure, outperformed Intermediate Core ETF managers during credit bull markets but underperformed during market pullbacks (2008–2010). Another example is the Emerging Market Bond Morningstar category.

In some cases, performance alone does not give a strong suggestion toward either passive or active strategies. We count a few asset classes where the evidence is mixed, including Foreign Large Blend, Diversified Emerging Markets, Emerging Markets Bond (USD), and Intermediate Core Bond.

To recap, the trends prevailing in one asset class are not always uniform across others—quite the opposite. The key, as we see it, is informing investment decisions with empirical track records, which we think helps investors avoid oversimplified, black-and-white thinking about their choices.

ASSET ALLOCATION IS INHERENTLY ACTIVE

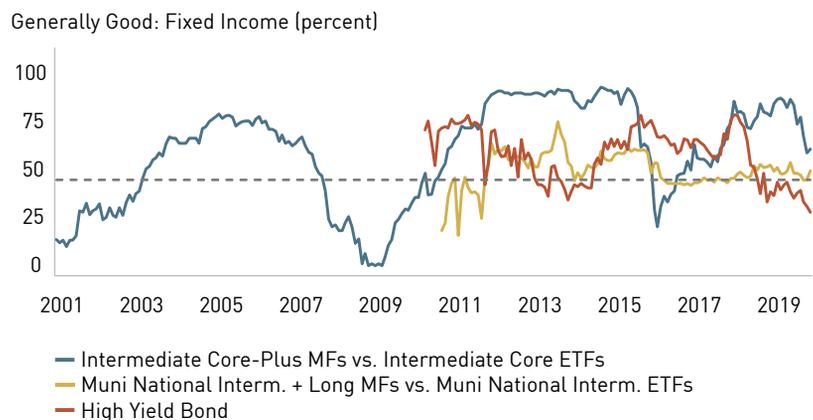
Despite frequent mentions of a “60/40” portfolio as a default, there is no “passive” asset allocation. Today’s professional investor tailors asset allocation to an individual client’s risk profile. Asset allocation choices may be even more important in shaping overall returns than questions of active and passive investing within individual asset classes.

As figure 4 shows, the performance of a given asset class in any given year is difficult to predict. The period from 2013–2017, as well as 2019, with its strong U.S. equity performance, tested even the most resolute diversifiers. And yet a range of opportunities can be pursued by investors who expand the scope of asset classes they include in their portfolios.

Figure 3

COMPARING MUTUAL FUND AND ETF PERFORMANCE—FIXED INCOME

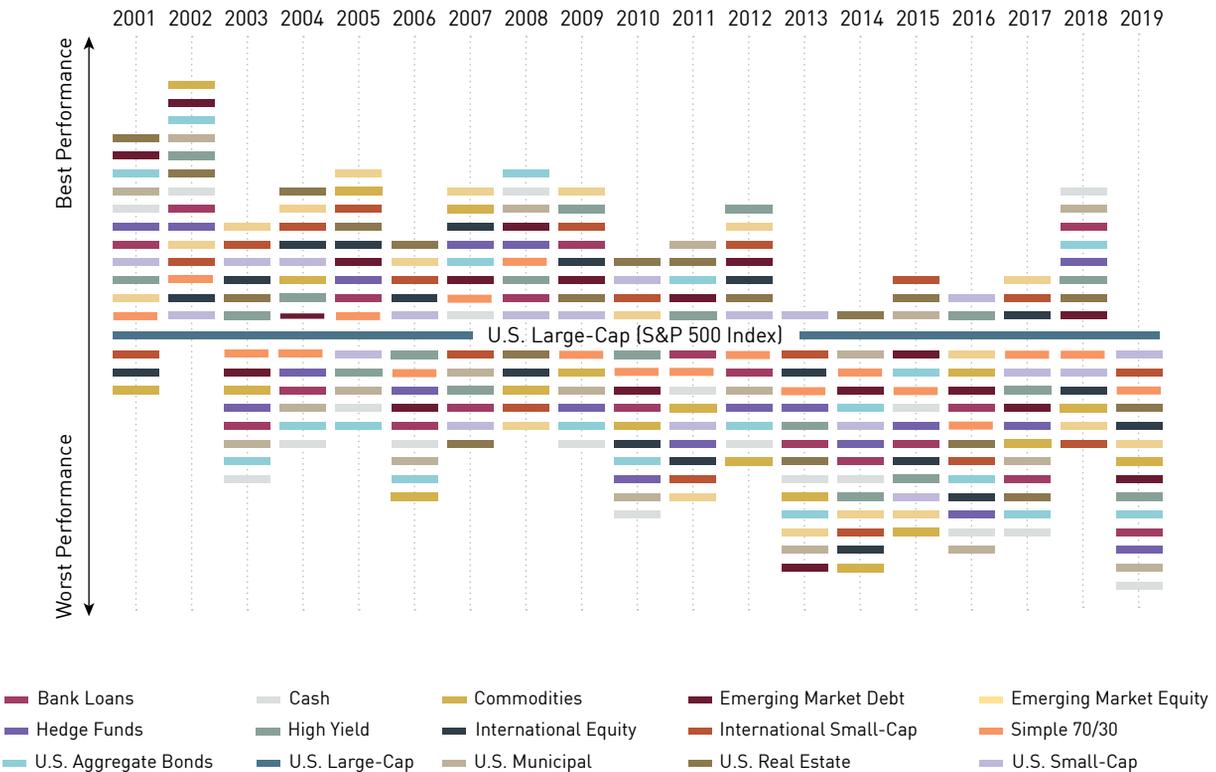
Percentage of Morningstar-tracked mutual funds outperforming the most widely used ETF for the same/similar Morningstar category based on three-year rolling returns



Source: GSAM Strategic Advisory Solutions/Portfolio Strategy, Morningstar, as of December 31, 2019, latest available. For illustrative purposes only. Figure 3 shows the performance of the rolling three-year performance (net of fees) for mutual funds against the largest ETF in their respective or similar Morningstar Category at the point of each investment period. The number of funds in the corresponding Morningstar Category are listed in parentheses (as of December 31, 2019). “Generally Good” has been determined by the trend in performance relative to the largest ETF in the respective Morningstar Category. Intermediate Core-Plus (163), U.S. Muni National Intermediate (163), U.S. Muni National Long (129), and High Yield Bond (333). **Past performance does not guarantee future results, which may vary.**

Figure
4

HISTORICAL PERFORMANCE OF A RANGE OF ASSET CLASSES, 2001–2019



Source: Bloomberg, Morningstar, and GSAM, as of December 31, 2019. All data represents total return. Past performance does not guarantee future results, which may vary. Please see additional disclosures for additional information.

We think discussions of “active” versus “passive” investment styles are incomplete without a more comprehensive view of the breadth of asset classes available to investors.

PUTTING DUE DILIGENCE AND PERFORMANCE FINDINGS TOGETHER

Assembling our “10, 10” rule plus our manager-level asset class performance findings, we think a hybrid mutual fund/ETF approach makes sense for a range of investment objectives. We believe ETFs may be deployed in large swaths of many types of investment portfolios, particularly in U.S. equities, where ETF availability is deep and fund managers’ performance record has been challenged.

At the same time, well-diversified portfolios generally require access to a relatively large number of asset classes.

In turn, covering an appropriately wide range of asset classes with more than a handful of backup options suggests the use of mutual funds in addition to ETFs, which do not always cover every asset class with the same breadth and depth as mutual funds (see table 1).

Figure 5 summarizes our findings for a range of common investment objectives: 70/30-percent tax-exempt portfolios, tax-exempt portfolios incorporating alternative investments, and income-focused tax-exempt portfolios, as well as taxable variants of the three just-mentioned groupings.

Generally, after applying our due diligence screens and manager performance findings, we envision larger ETF allocations within tax-exempt portfolios and comparatively smaller ETF allocations in taxable portfolios. This heavy

emphasis on ETFs in tax-exempt portfolios may strike some as counterintuitive in light of ETFs’ relative tax efficiency. Our result is explained by factors such as active tax-loss harvesting strategies, which generally require a broad array of replacement choices. It also reflects the deep bench that mutual funds enjoy in areas such as municipal bonds.

MUTUAL FUND AND ETF: ACTIVE AND PASSIVE

In sum, we think mutual fund/ETF and active/passive investment debates go beyond cost and performance. Professional investors should seek to avoid fallback risk and examine performance across the spectrum of available asset classes, not just familiar ones. This means considering the full range of options in the marketplace today, and remaining empirical about the strategies used.

Table
1

SCREEN SUMMARY

The case for a mix of ETFs and mutual funds

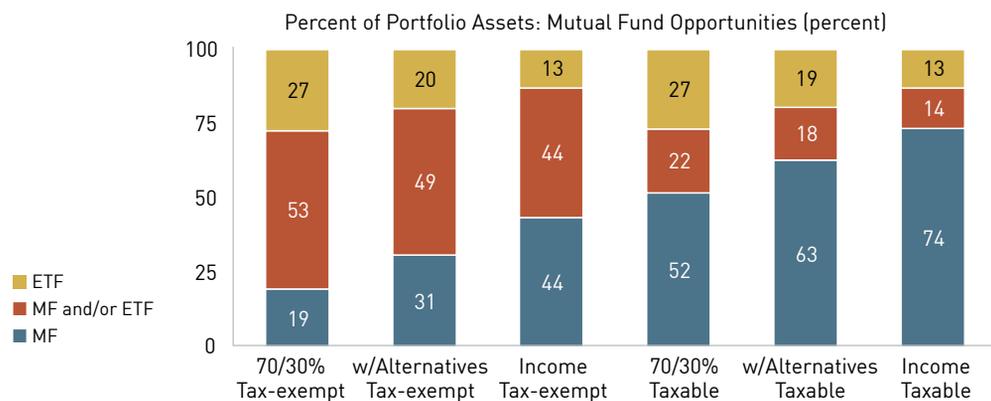
	Fallback Screen First, should we consider ETFs?	Performance Screen Then, should we use ETFs?	Illustrative Implementation
Asset Allocation	"10, 10" Product Depth Rule	Mutual Fund Performance	ETF, Mutual Fund, or Both
U.S. Large-Cap Equity	Pass	Challenged	ETF
U.S. Large-Cap Equity Buy-Write	Fail	→	Mutual Fund
U.S. Small-Cap Equity	Pass	Challenged	ETF
EAFE Equity	Pass	Subject to Debate	Mutual Fund and ETF
EAFE Equity Buy-Write	Fail	→	Mutual Fund
U.S. Aggregate Fixed Income	Pass	Subject to Debate	Mutual Fund and ETF
U.S. Municipal	Pass	Generally Good	Mutual Fund
Emerging Market Debt USD	Pass	Subject to Debate	Mutual Fund and ETF
Emerging Market Debt Local Currency	Fail	→	Mutual Fund
Global High Yield	Pass	Generally Good	Mutual Fund
Bank Loans	Fail	→	Mutual Fund
Emerging Markets Equity	Pass	Subject to Debate	Mutual Fund and ETF
Global ex-U.S. Developed Small-Cap	Fail	→	Mutual Fund
Global ex-U.S. Public Real Estate	Pass	Generally Good	Mutual Fund
U.S. Public Real Estate	Pass	Challenged	ETF
Global Infrastructure and MLPs	Pass	Generally Good	Mutual Fund
U.S. Municipal High Yield	Fail	→	Mutual Fund
Daily Liquid Alternatives	Fail	→	Mutual Fund

Source: GSAM Strategic Advisory Solutions/Portfolio Strategy, Morningstar, as of December 31, 2019, latest available. For illustrative purposes only. **Past performance does not guarantee future results, which may vary.** "10, 10" Product Depth Rule examines the ETF accessibility using the number of available ETFs and assets under management as categorized by Morningstar. "Fail" in "10, 10" Product Depth Rule refers to Morningstar Categories with either lower assets (< \$10 billion in assets under management) or fewer choices (< 10 vehicles). Please refer to figure 1 for detailed breakdown of the "10, 10" Product Depth Rule. A buy-write strategy refers to an investment that receives call premiums on an underlying equity position to generate income. Please note that buy-write strategies are not appropriate for all investors and are not riskless investments, so investors can lose money. In a rising market, due to limited upside participation, buy-write strategies could significantly underperform the market.

Figure
5

SIZING POTENTIAL FOR AN ILLUSTRATIVE 70/30-PERCENT PORTFOLIO

Covering an appropriately wide asset class footprint generally requires mutual funds

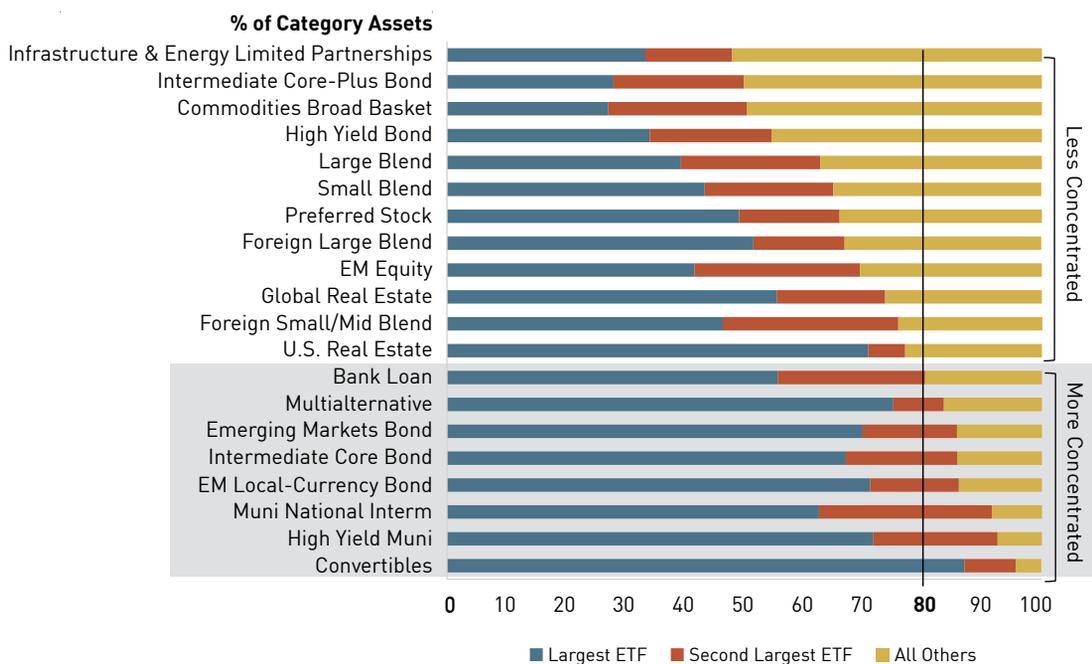


Illustrative Implementation Based on Due Diligence and Performance						
Potential ETF Implementation Size	27–81%	20–69%	13–56%	27–48%	19–37%	13–26%
Potential Mutual Fund Implementation Size	19–73%	31–80%	44–87%	52–73%	63–81%	74–87%

Source: GSAM Strategic Advisory Solutions/Portfolio Strategy, Morningstar, as of December 31, 2019, latest available. Potential ETF and potential mutual fund implementation size refer to the range of total implementation opportunities for ETFs and mutual funds, respectively. For illustrative purposes only. Goldman Sachs does not provide accounting, tax, or legal advice. Please see additional disclosures at the end of this article. Some "Percent of Portfolio Assets" totals may not sum to 100 percent due to rounding. There is no guarantee that these objectives will be met.

Figure
A1

QUANTIFYING 'FALLBACK RISK' BY ETF ASSET CONCENTRATION



Source: GSAM Strategic Advisory Solutions/Portfolio Strategy, Morningstar, as of December 31, 2019. For illustrative purposes only. Infrastructure & Energy Limited Partnerships combined Infrastructure and Energy Limited Partnership Morningstar Categories.

APPENDIX: ALTERNATIVE FALLBACK SCREEN '80, 2' CONCENTRATION RULE

We used the "10, 10" rule to categorize an asset class as posing an ETF fallback risk if there is less than \$10 billion invested across the category's ETFs or if there are fewer than 10 ETFs in the market. This is not the only screen investors can use to evaluate the fallback risk. Another potentially useful screen is what we call the "80, 2" rule (see figure A1). The "80, 2" rule deems fallback risk to exist for ETFs in a given asset class if two or fewer ETFs manage 80 percent or more of the category's ETF assets (see table A1).

To be sure, the market for individual ETFs in some cases can be deep and liquid while also being highly concentrated, and asset concentration in itself is not always problematic. Liquidity can be accessed in low-AUM ETFs through the creation-redemption process, by which ETF shares are issued or retired with the help of professional trading firms called authorized participants.

Our case for product depth instead is due diligence-based. We see unnecessary downside in limiting one's options to ETF-only implementation. We think professional investors should prefer a deep bench of many investable options, especially in cases when too-restrictive an approach would rule out attractive options.

ACKNOWLEDGMENTS

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ENDNOTE

1. Source: Investment Company Institute. For the most up-to-date figures about the fund industry, please visit www.ici.org/research/stats.

REFERENCES

Investment Company Institute. 2020. Trends in Mutual Fund Investing December 2019 (January). www.ici.org/research/stats.

Investment Company Institute. 2020. ETF Assets and Net Issuance December 2019 (January). www.ici.org/research/stats.

CONTINUING EDUCATION

To take the CE quiz online, go to www.investmentsandwealth.org/IWMquiz

Views are as of March 2, 2020, and subject to change in the future.

Index definitions

Bank Loans are represented by the Credit Suisse Leveraged Loan Index. The Credit Suisse Leveraged Loan Index tracks the investable leveraged loan market by representing tradable, senior-secured, US-dollar denominated, noninvestment-grade loans.

Cash is represented by J.P. Morgan 1 Month Cash index. The J.P. Morgan Cash Index measures the total return of a rolling investment in a notional short-term fixed income instrument.

Commodities are represented by the S&P GSCI Commodity Index. The S&P GSCI Commodity Index is a composite index of commodity sector returns, representing an unleveraged, long-only investment in commodity futures that is broadly diversified across the spectrum of commodities.

Emerging Market Debt is represented by the JPM EMBI Global Composite. The JPM EMBI is an unmanaged index tracking foreign currency denominated debt instruments of 31 emerging markets.

Emerging Market Equity is represented by the MSCI Emerging Markets Index. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets.

High Yield is represented by the Bloomberg Barclays Global High Yield Index. Global High Yield is represented by the Bloomberg Barclays Global High Yield Index, which provides a broad-based measure of the global high-yield fixed income market.

Table
A1

FALLBACK SCREEN SUMMARY

Asset Allocation	Fallback Screen First, should we consider ETFs?	
	Primary Screen "10, 10" Product Depth Rule	Alternative Screen "80, 2" Concentration Rule
U.S. Large-Cap Equity	Pass	Pass
U.S. Large-Cap Equity Buy-Write	Fail	Fail
U.S. Small-Cap Equity	Pass	Pass
EAFE Equity	Pass	Pass
EAFE Equity Buy-Write	Fail	Fail
U.S. Aggregate Fixed Income	Pass	Fail*
U.S. Municipal	Pass	Fail
Emerging Market Debt USD	Pass	Fail
Emerging Market Debt Local Currency	Fail	Fail
Global High Yield	Pass	Pass
Bank Loans	Fail	Fail
Emerging Markets Equity	Pass	Pass
Global ex-U.S. Developed Small-Cap	Fail	Pass
Global ex-U.S. Public Real Estate	Pass	Pass
U.S. Public Real Estate	Pass	Pass
Global Infrastructure and MLPs	Pass	Pass
U.S. Municipal High Yield	Fail	Fail
Daily Liquid Alternatives	Fail	Fail

*U.S. Aggregate Fixed Income may be represented by Intermediate Core Bond or Core-Plus Bond categories.

Source: GSAM Strategic Advisory Solutions/Portfolio Strategy, Morningstar, as of December 31, 2019. For illustrative purposes only. "Fail" in "10, 10" Product Depth Rule refers to Morningstar Categories with either lower assets (< \$10 billion in assets under management) or fewer choices (< 10 vehicles). "Fail" in "80, 2" Concentration Rule refers to asset classes in which over 80 percent of assets in the Morningstar Category are in two products. Please refer to table A1 for detailed breakdown of the "80, 2" Concentration Rule. A buy-write strategy refers to an investment that receives call premiums on an underlying equity position to generate income. Please note that buy-write strategies are not appropriate for all investors and are not riskless investments, so investors can lose money. In a rising market, due to limited upside participation, buy-write strategies could significantly underperform the market.

Hedge Funds are represented by the HFRI Fund of Funds Index. The HFRI Fund of Funds Index is an equal weighted, net of fee, index composed of approximately 800 fund-of-funds which report to HFR.

International Equity is represented by the MSCI EAFE. The unmanaged MSCI EAFE Index (unhedged) is a market capitalization weighted composite of securities in 21 developed markets.

International Real Estate is represented by the S&P Developed ex-U.S. Property Index. The S&P Developed ex-U.S. Property Index measures the performance of real estate companies domiciled in countries outside the United States.

International Small Cap is represented by the S&P Developed ex U.S. Small Cap Index. The S&P Developed ex U.S. Small Cap is represented by the Russell 2000. The Russell 2000 Index is an unmanaged index of common stock prices that measures the performance of the 2000 smallest companies in the Russell 3000 Index.

U.S. Aggregate Bonds are represented by the Bloomberg Barclays Aggregate Bond. The Bloomberg Barclays Aggregate Bond Index represents an unmanaged diversified portfolio of fixed income securities, including U.S. Treasuries, investment-grade corporate bonds, and mortgage backed and asset-backed securities.

U.S. Large Cap is represented by the S&P 500. The S&P 500 Index is the Standard & Poor's 500 Composite Index of 500 stocks, an unmanaged index of common stock prices.

U.S. Municipal is represented by the Bloomberg Barclays U.S. Municipal Bond Index. The Bloomberg Barclays U.S. Municipal

Index covers the USD-denominated long-term tax exempt bond market.

U.S. Real Estate is represented by the Dow Jones U.S. Select Real Estate Securities Index. The Dow Jones U.S. Select RESI is a float-weighted index that measures U.S. publicly traded real estate securities.

U.S. Small Cap is represented by the Russell 2000. The Russell 2000 Index is an unmanaged index of common stock prices that measures the performance of the 2000 smallest companies in the Russell 3000 Index.

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

Glossary

Asset allocation refers to an investment strategy that tries to balance risk and reward by adjusting a portfolio's assets according to an investor's goals, risk tolerance, and investment horizon.

Authorized participants are typically large financial institutions, providing a specified basket of securities, cash, or both into the exchange-traded fund (ETF).

Bull market refers to the condition of a financial market of group of securities in which prices are rising or are expected to rise.

Credit bull market refers to the condition of a financial market of lower-rated fixed income assets yield higher returns.

Fallback risk refers to the possibility that investors may not have enough substitutable investment strategies.

An intermediary refers to a financial institution or individual that serves as a middleman facilitating financial transactions.

Tax-loss harvesting refers to selling securities at a loss to offset a capital gains tax liability.

Risk Considerations

Options are not suitable for all investors. Please ensure that you have read and understand the current options disclosure document before entering into any options transactions. The booklet entitled Characteristic and Risk of Standardized Options can be obtained at Goldman Sachs & Co., 200 West Street, New York, New York, 10282. The options disclosure document can also be found at <http://www.theocc.com/components/docs/riskstoc.pdf>. Supporting documentation for any comparisons, recommendations, statistics, technical data, or other information will be supplied upon request.

Buy-write strategies are subject to market risk, which means that the value of the securities in which it invests may go up or down in response to the prospects of individual companies, particular sectors and/or general economic conditions. They are also subject to the risks associated with writing (selling) call options, which limits the opportunity to profit from an increase in the market value of stocks in exchange for up-front cash at the time of selling the call option. In a rising market, the strategy could significantly underperform the market, and the options strategies may not fully protect it against declines in the value of the market. There may be additional risks that are not currently foreseen or considered.

The currency market affords investors a substantial degree of leverage. This leverage presents the potential for substantial profits but also entails a high degree of risk including the risk that losses may be similarly substantial. Such transactions are considered suitable only for investors who are experienced in transactions of that kind. Currency fluctuations will also affect the value of an investment.

Exchange-Traded Funds (ETFs) are subject to risks similar to those of stocks. Investment returns may fluctuate and are subject to market volatility, so that an investor's shares, when redeemed, or sold, may be worth more or less than their original cost. ETFs may yield investment results that, before expenses, generally correspond to the price and yield of a particular index. There is no assurance that the price and yield performance of the index can be fully matched.

Bank loans are subject to the risks associated with debt securities generally, including credit, liquidity, interest rate, call and extension risk. High yield, lower rated investments involve greater price volatility and present greater risks than higher rated fixed income securities.

Bonds are subject to interest rate, price and credit risks. Prices tend to be inversely affected by changes in interest rates. Typically, when interest rates rise, there is a corresponding decline in the market value of bonds.

Investments in foreign securities entail special risks such as currency, political, economic, and market risks. These risks are heightened in emerging markets.

Investments in MLPs are subject to certain risks, including risks related to limited control and limited rights to vote, potential conflicts of interest, cash flow risks, dilution risks, limited liquidity and risks related to the general partner's right to force sales at undesirable times or prices. MLPs are also subject to risks relating to their complex tax structure, including the risk that a distribution received from an MLP is treated as a return of capital, which may increase an investor's tax liability and require the investor to restate the character of its distributions and amend shareholder tax reporting previously issued, and the risk that an MLP could lose its tax status as a partnership, resulting in a reduction in the value of the investment in the MLP and lower income.

Investments in the infrastructure group of industries involve unique risks that may negatively impact infrastructure companies' businesses or operations, including costs associated with compliance with and changes in environmental, governmental and other regulations, rising interest costs in connection with capital construction and improvement programs, government budgetary constraints that impact publicly funded projects, the effects of general economic conditions throughout the world, surplus capacity and depletion concerns, increased competition from other providers of services, uncertainties regarding the availability of fuel and other natural resources at reasonable prices, the effects of energy conservation policies, unfavorable tax laws or accounting policies and high leverage.

An investment in real estate securities is subject to greater price volatility and the special risks associated with direct ownership of real estate.

Investments in commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates or factors affecting a particular industry or commodity.

Emerging markets securities may be less liquid and more volatile and are subject to a number of additional risks, including but not limited to currency fluctuations and political instability. The securities markets of emerging countries have less government regulation and are subject to less extensive accounting and financial reporting requirements than the markets of more developed countries.

International securities entail special risks such as currency, political, economic, and market risks.

High-yield, lower-rated securities involve greater price volatility and present greater credit risks than higher-rated fixed income securities.

Alternative investments may employ more complex strategies, investments, and portfolio structures. In doing so, some of these strategies are extremely speculative and may expose investors to a high degree of risks, including but not limited to short selling, leverage risk, counterparty risk, liquidity risk, commodity price volatility risk, and/or managed futures roll yield risk. Such practices may increase the volatility of performance and the risk of investment loss, including the loss of the entire amount that is invested.

Investors cannot invest directly in indices. Indices are unmanaged and the figures for the Index reflect the reinvestment of dividends, but do not include any deduction for fees, expenses or taxes. All indices are market capitalization weighted, except for the DJ U.S. Select REIT index and the Bloomberg Barclays Aggregate Bond Index. It is not possible to invest directly in an unmanaged index. The figures for the index reflect the reinvestment of dividends but do not reflect the deduction of any taxes, fees or expenses which would reduce returns.

Important Considerations between ETFs and mutual funds—ETFs generally have lower expenses than actively managed mutual funds due to their different management styles. Most ETFs are passively managed and are structured to track an index, whereas many mutual funds are actively managed and thus have higher management fees. In addition, unlike ETFs, actively managed mutual funds have the ability to react to market changes and the potential to outperform a stated benchmark. Since ordinary brokerage commissions apply for each ETF buy and sell transaction, frequent trading activity may increase the cost of ETFs. Furthermore, ETFs can be traded throughout the day, whereas mutual funds are traded only once a day. While extreme market conditions could result in illiquidity for ETFs, typically, some are more liquid than most traditional mutual funds because they trade on exchanges.

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