

## Exchange Traded Funds

# Money in the Middle: initiating on 28 midcap ETFs

ETF Research

## Mid-caps fly under the radar despite strong returns

US mid cap stocks have gained 12.7% per year since 1984, with slightly higher volatility than large caps (Exhibit 2). \$100 invested in mid-caps 40 years ago would be \$13,400 today vs \$9,500 for large caps and \$5,000 for small. Despite strong performance, mid-caps typically fly under the radar. We maintain our favorable view on mid cap ETFs.

## 3 reasons to buy: light positioning, cyclical exposure, value

Mid-caps are under-owned. The group has attracted just 5% of total ETF flows in the past 20 years despite accounting for 33% of US corporate EPS growth since 1995 (Exhibit 3). Mid cap ETFs have just \$344bn in total assets compared to >\$5tn for large.

Cyclical expansion should bolster mid cap returns. The US manufacturing ISM is >50 for the first time since October 2022 and US policy looks primed to revitalize domestic industry. Higher activity should support returns—mid caps are overweight cyclical sectors like industrials and materials, with a >20% underweight to tech.

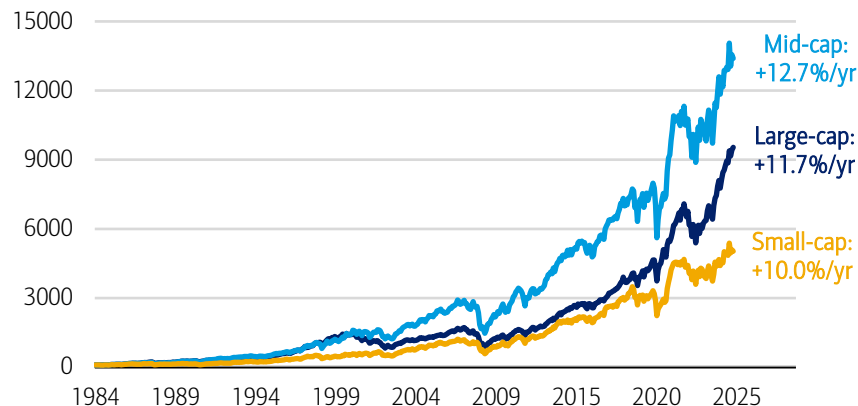
Earnings growth is strong at attractive valuations. Mid cap valuations trade 20% below historical norms relative to mega-caps. Our equity strategists expect mid cap earnings to grow faster than large caps in 2025 after two years of slower growth.

## Initiating on mid cap ETFs: adding 28 ETFs

We initiate coverage of value and growth mid cap ETFs and add to our broad mid cap exposure. Multi-factor strategies that enhance profitability have led to higher risk adjusted returns historically across value, growth, and broad mid cap categories. Top rated funds are **FLQM** for broad exposure, **IMCG** for growth, and **IMCV** for value. 28 mid cap initiations and 6 ratings changes can be found on page 12.

### Exhibit 2: US mid cap stocks have outperformed large- and small caps by 100-270bps per year

Total cumulative return of different S&P US equity size indexes



Source: BofA Global Research, Global Financial Data. Note mid cap = S&P 400; large cap = S&P 500; small cap = S&P 600

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06 March 2025 Corrected

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### Exhibit 1: 1-rated mid cap ETFs

Category, ticker, rating

	New?	Ticker	Rating
Broad	X	FLQM	1-FV
		JHMM	1-FV
		IMCB	1-FV
		VO	1-FV
	X	SMIG	1-FV
		IWR	1-FV
	X	CZA	1-FV
	X	JPME	1-FV
Growth	X	GRPM	1-FV
	X	IMCG	1-FV
	X	IWP	1-FV
Value	X	VOT	1-FV
	X	IMCV	1-FV
		RWK	1-FV
	X	VOE	1-FV
	X	USVM	1-FV

Source: BofA Global Research; for all ratings changes and fund ratings, see page 12.

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# Three reasons to add mid-caps

## 1. Under-owned

Mid-caps have contributed 33% of total US corporate EPS since 1995 and 48% of total equity market returns since 1984 (Exhibit 3).

Average annual returns for mid-caps have outpaced large and small caps by 100bps and 270bps, respectively, for forty years (Exhibit 2). Large caps have exhibited lower volatility, but not enough to compensate for strong mid cap returns.

Despite their strong economic contribution, mid cap ETFs have accounted for just 5% of total inflows since 2003 (Exhibit 4) and just 6% of total equity ETF assets (Exhibit 5).

### Exhibit 3: Mid-caps = 33% of EPS but just 7.2% of US equity market cap

Market cap, ETF flows, and EPS stats for different capitalization indexes

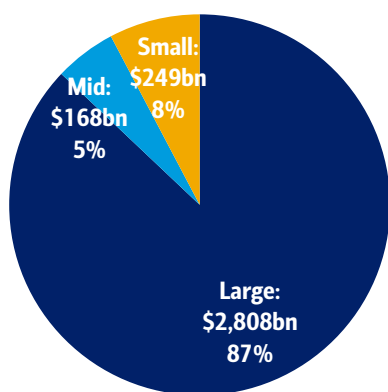
	Small	Mid	Large
S&P size cutoffs	\$1bn-7.5bn	\$7.5bn-20.5bn	>\$20.5bn
Total index market cap (\$tr)	3.5	4.8	58.5
Total ETF inflows since 2003 (\$bn)	248.9	168.6	2,808.5
Share of ETF inflows	7.7%	5.2%	87.1%
\$100 in 1984 today is...	\$5,035	\$13,397	\$9,537
Average annualized total return since 1984	10.0%	12.7%	11.7%
Average annual EPS growth rate since 1995	25.0%	11.7%	7.9%
Share of total corporate EPS since 1995	15.5%	32.9%	51.6%

**Source:** BofA Global Research, Global Financial Data, Bloomberg. Note: we use S&P size indexes for all calculations (small = S&P 600; mid= S&P 400; large = S&P 500).

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### Exhibit 4: Mid cap ETFs garnered just 5% of US equity flows since '03

Cumulative ETF flows from May 2003 to January 2025

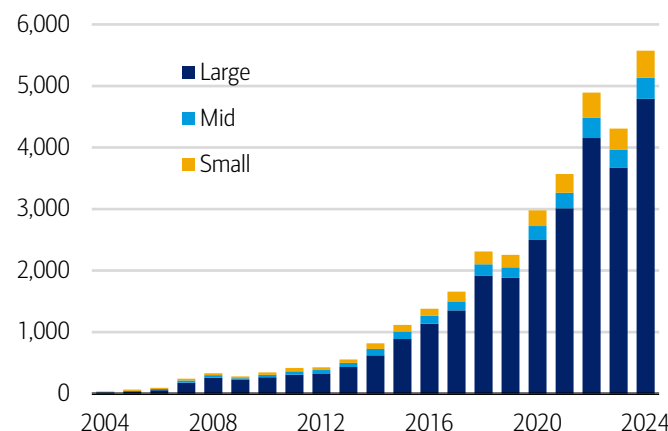


**Source:** BofA Global Research, EPFR

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### Exhibit 5: Mid cap ETFs have \$344bn in assets vs \$4.8tn for large caps

Total fund assets for different US equity market cap ETF categories, \$bn



**Source:** BofA Global Research, EPFR

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## 2. Better cyclical exposure

Mid-caps could benefit from a US manufacturing rebound. The US ISM is above 50 for the first time since October 2022, signaling expansion (Exhibit 6). Historically, mid-caps have performed well relative to large caps as activity rises.

Exhibit 7 illustrates that the US mid-caps index has higher exposure to cyclical sectors like industrials and materials. Mid-caps are >20% underweight tech and 8% underweight communication services relative to large caps, which helps explain recent underperformance.

Longer-term, a commitment among US policy makers to revitalizing domestic industry could support stronger mid cap returns (see [The RIC Report: Ten surprises for 2025](#) for more). US industrial production has stagnated and hovers near highs seen in 2014 (Exhibit 8). Mid-caps have lagged large caps by nearly 100% over the past decade amid extreme large cap concentration and unprecedented liquidity.

### Exhibit 6: ISM >50 should bolster mid cap rebound

US ISM vs rolling relative returns for US mid and large caps



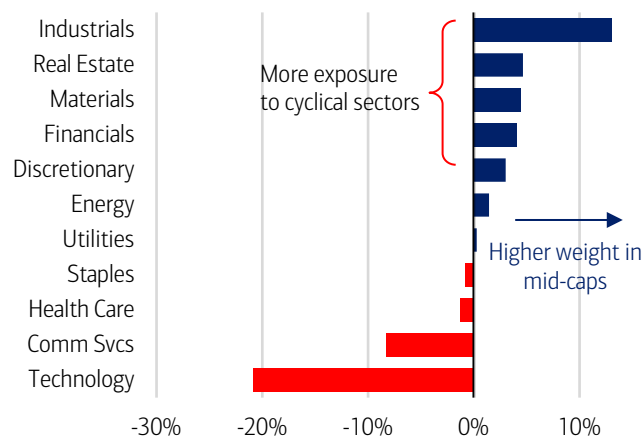
**Source:** BofA Global Research, Bloomberg, mid cap = S&P 400; large cap = S&P 500

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**Exhibit 7: Mid-caps are more geared toward cyclicals**

S&amp;P 400 minus S&amp;P 500 sector exposure

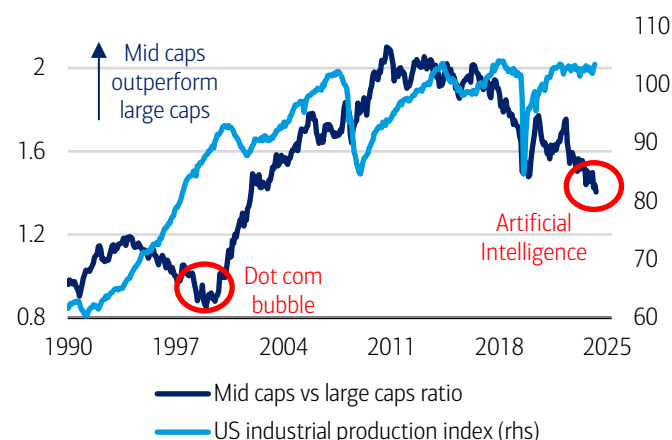


Source: BofA Global Research, Bloomberg

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**Exhibit 8: Large cap concentration & stagnant production bad for mid**

US industrial production vs ratio of US mid-caps to large caps



Source: BofA Global Research, Bloomberg, Global Financial Data

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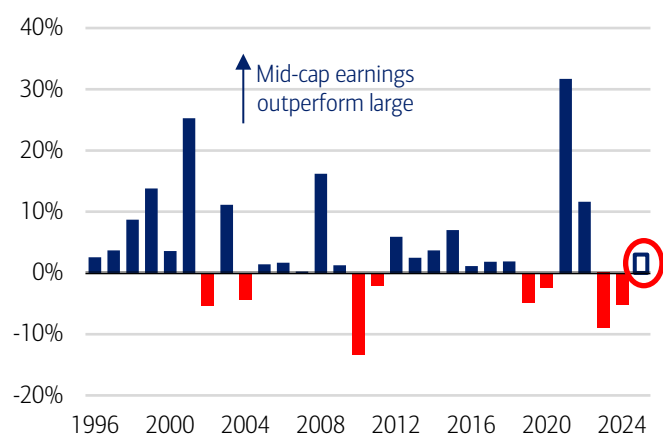
**3. Strong earnings growth at attractive valuations**

Mid cap earnings growth has been stronger than large caps in 21 of the past 29 years (72% of the time—Exhibit 9). Our US equity strategists forecast a mid-cap earnings rebound relative to large caps after two years of slower growth.

US SMID equity strategist Jill Hall sees the best risk-reward in mid-caps in the near-term. Small caps have elevated rate risk, more tariff risk, and poor earnings revision/guidance. Large caps are more expensive and should see earnings growth slow. Mid cap forward P/E trades 20% below the long-term average relative to mega-caps, implying 3% annualized price return outperformance over the next decade (Exhibit 10—see [Small/Mid cap Valuations: The trend continues for small caps: P/E up, E down](#)).

**Exhibit 9: Mid cap earnings growth should lead large in 2025**

Trailing 12-month EPS, US mid-caps minus large caps



Source: BofA Global Research, Bloomberg, BofA US Equity &amp; Quant Strategy

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**Exhibit 10: Mid-caps remain historically inexpensive vs mega caps**

Relative Forward PE of Russell Midcap vs Russell Top 200, 1985-01/31/2024



Source: BofA US Equity &amp; Quant Strategy, FactSet

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## Mid cap ETF ratings – Favorable view

### Index construction matters

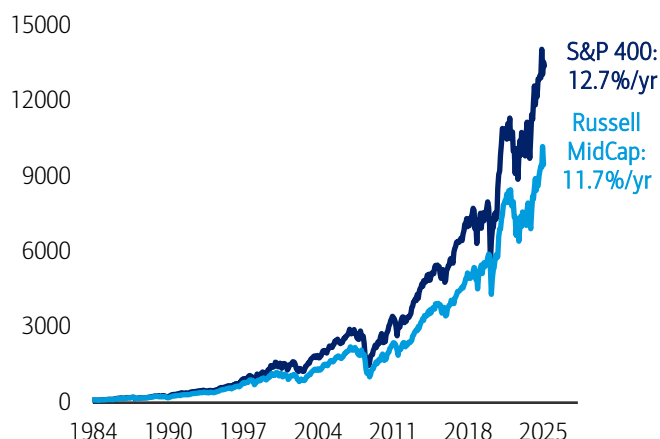
All mid cap indexes are not alike. The S&P 600 has outperformed the Russell mid cap index by 1% per year since 1984. Different company universes and index criteria can help explain the differences:

- **S&P 400:** the middle 400 stocks by float-adjusted market cap in the S&P 1500. At the December 2024 rebalance, the threshold for inclusion was a market cap between \$7.4–20.5bn. Stocks must have high liquidity (min 250,000 shares traded in each of preceding six months) and positive earnings in the most recent quarter and over the past 12 months. A committee screens for eligibility and carries out quarterly rebalances.
- **Russell MidCap:** the bottom 800 stocks in the Russell 1000. This index does not have explicit profitability or liquidity requirements and rebalances once a year in June. As a result, there can be higher overlap with large cap benchmarks like the S&P 500.

For example, the two largest stocks in the Russell MidCap index today are Palantir (\$250bn market cap) and AppLovin (\$180bn). 308 stocks in the Russell MidCap are also in the S&P 500, representing 63% of the Russell index.

### Exhibit 11: Index selection matters in mid-caps

Cumulative total returns of different mid cap indexes since 1984



Source: BofA Global Research, Bloomberg, Global Financial Data

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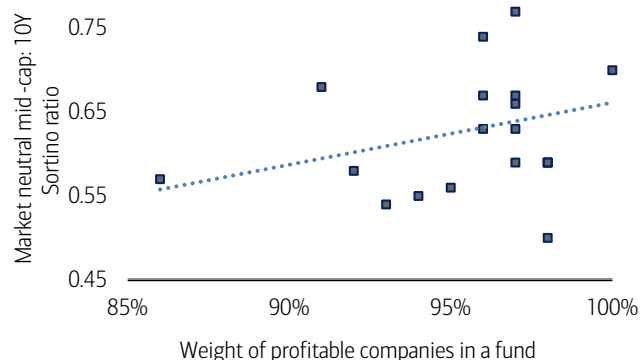
### Factor neutral mid cap ETF ratings: Favorable view

We update our coverage of factor neutral mid cap ETFs, initiating on 12 funds totaling to \$43bn AUM (Exhibit 14). Factor neutral mid cap ETFs use few factor overlays or have balanced strategies that use both value and growth screens simultaneously.

Low profitability could signal a strategy with low risk adjusted returns over multiple economic cycles (Exhibit 12). Profitability is now a fund rating criterion in our model, along with valuation and earnings based fundamental criteria. Investors bought \$13bn factor-neutral small cap ETFs over the last 12 months despite relative underperformance (Exhibit 13).

### Exhibit 12: Low profitability could portend low risk adjusted returns in market neutral mid cap ETFs

10Y Sortino Ratio, weight of profitable companies in market neutral mid cap ETFs

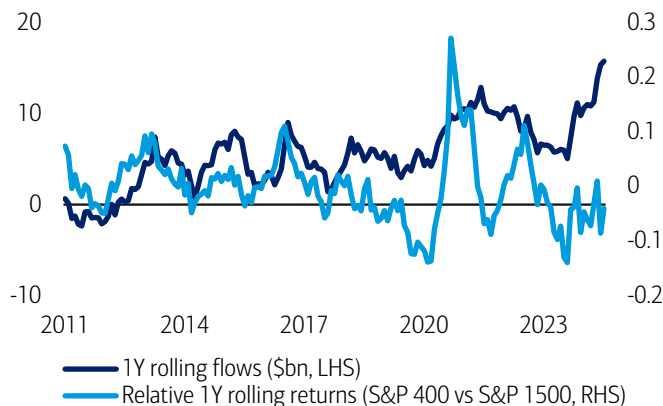


Source: BofA Global Research, Bloomberg; Data represents funds in our coverage

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### Exhibit 13: ETF investors add \$15bn of mid cap funds in 2024 despite underperformance relative to broad market

1Y rolling flows for market neutral mid cap ETFs, 1Y rolling relative returns of S&P 400 relative to S&P 1500



Source: BofA Global Research, Bloomberg; Data represents funds in our coverage

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**Exhibit 14: Factor neutral mid cap ETF ratings**

Summary of Covered ETF Efficiency, Technical and Fundamental characteristics

New ?	Ticker	Name	Rating	Total score	Efficiency		Technical		Fundamental				
					Expense ratio	Constituent average daily value traded (\$mn)	Price momentum	Sortino ratio (10Y)	Buy rated stock exposure ratio	% pos EPS	Value composite valuation rank (lower is better)	Growth composite valuation rank (lower is better)	Earnings revision ratio
X	FLQM	Franklin U.S. Mid Cap Multifactor Index ETF	1-FV	90	0.30%	196	-1.5%	0.76	23%	99%	8	2	0.19
	JHMM	John Hancock Multi-Factor Mid Cap ETF	1-FV	86	0.42%	154	-1.5%	0.76	44%	97%	10	10	0.17
	IMCB	iShares Morningstar Mid-Cap ETF	1-FV	81	0.04%	355	0.0%	0.66	48%	97%	15	9	0.15
	VO	Vanguard Mid-Cap ETF	1-FV	77	0.04%	393	0.2%	0.62	49%	97%	18	4	0.12
X	SMIG	Bahl & Gaynor Small/Mid Cap Income Growth ETF	1-FV	75	0.60%	116	0.1%	0.70	58%	100%	9	16	0.02
	IWR	iShares Russell Mid-Cap ETF	1-FV	70	0.19%	309	-0.4%	0.60	46%	96%	16	6	0.15
X	CZA	Invesco Zacks Mid-Cap ETF	1-FV	62	0.69%	118	-1.3%	0.58	33%	97%	14	3	0.22
X	JPME	JPMorgan Diversified Return US Mid Cap Equity ETF	1-FV	59	0.24%	169	-1.2%	0.64	35%	97%	7	11	0.09
X	GRPM	Invesco S&P MidCap 400 GARP ETF	1-FV	56	0.35%	93	-5.2%	0.70	47%	96%	1	1	0.08
X	SPMD	SPDR Portfolio S&P 400 Mid Cap ETF	2-FV	54	0.03%	102	-2.7%	0.56	41%	98%	5	13	0.11
	MDY	SPDR S&P MidCap 400 ETF Trust	2-FV	52	0.23%	102	-2.7%	0.56	42%	98%	6	12	0.11
X	IVOO	Vanguard S&P Mid-Cap 400 ETF	2-FV	51	0.07%	102	-2.7%	0.56	42%	98%	4	14	0.10
X	BKMC	BNY Mellon US Mid Cap Core Equity ETF	2-FV	47	0.04%	128	-0.7%	0.52	38%	94%	13	7	0.15
X	FSMD	Fidelity Small-Mid Multifactor ETF	2-FV	45	0.16%	62	-2.4%	0.64	39%	91%	3	17	0.14
	SCHM	Schwab U.S. Mid-Cap ETF	3-FV	43	0.04%	144	-1.4%	0.52	41%	93%	11	15	0.13
X	BBMC	JPMorgan BetaBuilders US Mid Cap Equity ETF	3-FV	42	0.07%	110	-1.1%	0.55	41%	92%	12	5	0.11
	FNX	First Trust Mid Cap Core AlphaDEX Fund	3-FV	38	0.58%	89	-2.6%	0.55	35%	95%	2	18	0.21
X	PTMC	Pacer Trendpilot US Mid Cap ETF	3-FV	35	0.60%	102	-2.9%	0.47	41%	98%	17	19	0.11
X	VXF	Vanguard Extended Market ETF	3-FV	26	0.05%	60	-1.0%	0.52	45%	86%	19	8	0.04
Average					0.25%	153	-1.6%	0.60	42%	96%	10	10	0.13

Source: BofA Global Research, Bloomberg, Factset; Total score out of 100

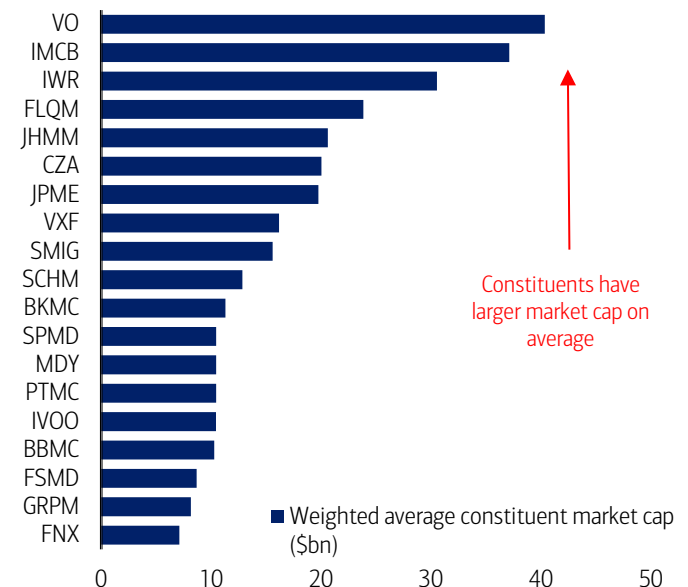
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**Top rated factor neutral mid cap ETFs:**

- **Franklin U.S. Mid Cap Multifactor Index ETF (1-FV):** FLQM's strategy targets companies with factor signals like quality, value, momentum, and low volatility. With 99% exposure to profitable companies, FLQM also has the best risk adjusted returns for funds in our coverage. We initiate at 1-FV.
- **John Hancock Multi-Factor Mid Cap ETF (1-FV):** Skewing towards the higher-capitalization mid cap stocks, JHMM is a multifactor weighted index that focuses on identifying momentum while minimizing turnover in the 200-950 largest companies. Of 750 inclusion candidates, JHMM only holds 665. Selectivity leads to 97% constituent profitability. The fund has above average scores across efficiency, technical, and fundamental characteristics. We upgrade JHMM from 2-FV to 1-FV.
- **iShares Morningstar Mid Cap ETF (1-FV):** IMCB tracks securities between the top 70<sup>th</sup> and 90<sup>th</sup> percentile market cap thresholds of the total stock market. IMCB is passive, market cap weighted, and one of the lowest cost funds in our coverage. Even with low fees and a straightforward strategy, IMCB has above average risk adjusted returns, leading us to upgrade from 2-FV to 1-FV.
- **Vanguard Mid Cap ETF (1-FV):** VO captures US domiciled companies that fall between the top 70<sup>th</sup> to 85<sup>th</sup> percentiles of the total US stock market by market

**Exhibit 15: VO holds the largest companies among market cap neutral mid cap ETFs**

Weighted average constituent market cap (\$bn) for market neutral mid cap ETFs



Source: BofA Global Research, Bloomberg; Data represents funds in our coverage

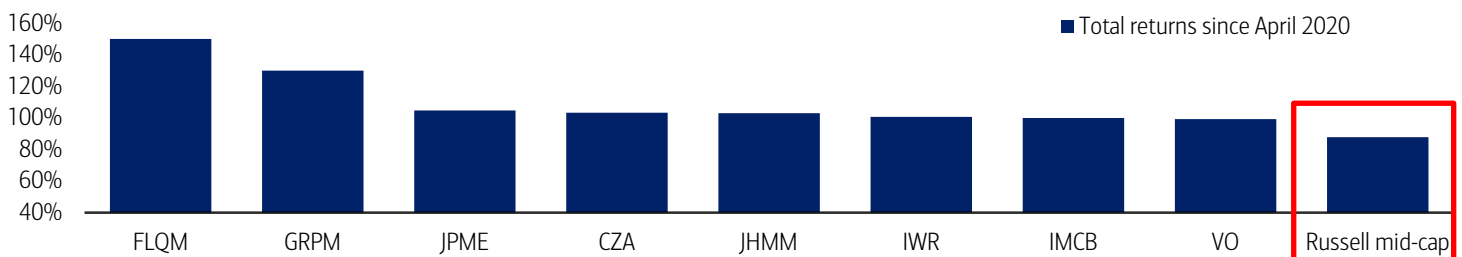
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capitalization. Similar to IMCB, VO is a low cost, straightforward midcap strategy. VO strength comes from its high efficiency score. We reiterate our 1-FV rating.

- **Bahl & Gaynor Small/Mid Cap Income Growth ETF (1-FV):** The only mid cap ETF in our coverage with a dividend focus, we initiate on SMIG with a 1-FV rating. In our view, dividend growth is similar to other expressions of earnings quality and revenue growth. SMIG is the only fund in our coverage with 100% weighted average constituent profitability. Above average BofA Buy-Rated stock exposure and risk adjusted returns reinforce our top rating. We note that SMIG is actively managed, leading to a higher expense ratio relative to its passive peers.
- **iShares Russell Mid Cap ETF (1-FV):** Screening on the Russell 1000, IWR includes the 800 smallest securities of the broader index. IWR has above average Buy-rated stock exposure and earnings revision ratio. We upgrade IWR from 2-FV to 1-FV.
- **Invesco Zacks Mid Cap ETF (1-FV):** Unlike most mid cap ETFs, CZA's underlying universe includes MLPs, ADRs, and BDCs. Even with this unique profile, CZA's risk adjusted returns are roughly in line with average. This fund is most suitable for investors willing to add exposures outside of traditional mid cap indexes and we initiate at 1-FV.
- **JPMorgan Diversified Return US Mid Cap Equity ETF (2-FV):** JPME implements a risk-based portfolio strategy combined with multifactor overlays. JPME has slightly above average scores across fundamental, efficiency, and fundamental inputs, leading to its 1-FV rating.
- **Invesco S&P Mid Cap 400 GARP ETF (1-FV):** GRPM implements a "growth at a reasonable price" strategy that includes a multifactor screen with growth, value, and quality characteristics. Holding 62 companies, GRPM's equally weighted GARP approach has the third best risk adjusted returns in our coverage. GRPM also has the best scores across growth and value composite valuations. We initiate at 1-FV.

#### Exhibit 16: Top rated funds in our coverage have all outperformed the Russell mid cap benchmark since April 2020

Total returns for top rated funds in BofA factor neutral mid cap ETF coverage



Source: BofA Global Research, Bloomberg; Data represents funds in our coverage. ~5Y history has seen three very different market cycles – Post COVID rally, Fed hikes, AI + resilience

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#### Other factor neutral mid cap ETF initiations and updates:

- **SPDR Portfolio S&P 400 Mid Cap ETF (2-FV):** The cheapest fund in our coverage, we initiate on SPDM at 2-FV. SPDM is passive, market cap weighted, and tracks the S&P 400 index. Buy rated stock exposure, profitability, and earnings revision ratios are all average compared to our mid cap coverage. Of all S&P 400 index tracking ETFs in our coverage, SPDM has the lowest expense ratio.
- **SPDR S&P Mid Cap 400 ETF Trust (2-FV):** MDY has a similar strategy to other S&P 400 index tracking ETFs in our coverage, but with a slightly higher expense ratio. We maintain our 2-FV rating.





- **Vanguard S&P Mid Cap 400 ETF (2-FV):** IVOO has marginal differences that relative to other S&P 400 tracking funds. Its expense ratio is above SPMD and would be less appropriate for long-term, expense ratio sensitive investors. We initiate at 2-FV.
- **BNY Mellon US Mid Cap Core Equity ETF (2-FV):** BKMC tracks the Solactive GBS United States 400 Index which captures the largest 400 mid cap companies from the US stock market. BKMC's strategy is similar to the S&P 400 but has produced slightly lower risk adjusted returns over the last 10 years. The strategy also has a lower percentage of profitable companies. BKMC's expense ratio makes it a competitive option for cost sensitive investors, and we initiate at 2-FV.
- **Fidelity Small-Mid Multifactor ETF (2-FV):** FSMD's multifactor strategy seeks to capture the performance of US-based small and mid-cap stocks with attractive valuations, high-quality profiles, strong momentum, and lower volatility. FSMD has strong risk adjusted returns and but lacks exposure to profitable companies relative to other funds in our coverage. We initiate at 2-FV.
- **Schwab U.S. Mid Cap ETF (3-FV):** SCHM seeks to replicate the Dow Jones U.S. Mid cap Total Stock Market Index, selecting 500 companies selected from a universe of 700 companies that are between size ranks of 401 and 1,100 in the total US stock market. SCHM is below average on profitability and 10Y risk adjusted returns, contributing to its 3-FV initiation.
- **JPMorgan BetaBuilders US Mid Cap Equity ETF (3-FV):** BBMC's straightforward fund design tracks companies that fall between the 85<sup>th</sup> and 95<sup>th</sup> percentiles of the total stock market by market cap. Tracking the Morningstar US Mid Cap Target Market Exposure Extended Index, BBMC's expense ratio is below average, but the fund lacks strong technical and fundamental scores, leading to a 3-FV initiation.
- **First Trust Mid Cap Core AlphaDEX Fund (3-FV):** FNX screens on the Nasdaq US 600 Mid Cap Index that meet certain criteria. Nasdaq constructs the Index by ranking the eligible stocks for value and growth criteria. Potential constituents are then ranked separately on the sum of ranks for the growth and value inputs. This strategy has produced below average risk adjusted returns while having one of the highest expense ratios. We reiterate our 3-FV rating.
- **Pacer Trendpilot US Mid Cap ETF (3-FV):** PTMC uses a passive, momentum-based signal to determine an allocation between the S&P 400 and Treasury bills, using the 200-day simple moving average threshold as a guide. This strategy can limit downside volatility but has also stifled total returns relative to other mid cap ETFs. PTMC's valuation ranks are well below average for value and growth composites. We initiate coverage with a 3-FV rating.
- **Vanguard Extended Market ETF (3-FV):** With 3500 constituents, VXF offers a way for investors to hold the total stock market excluding the S&P 500. The fund is low cost and tracks \$21bn in AUM. The fund ranks poorly in our ETF rating model due to low profitability and below average risk adjusted returns. We initiate on VXF at 3-FV.

## Mid cap growth ETF ratings: Favorable view

Breaking out mid cap growth from the rest of our mid cap coverage, we add eight funds to our coverage (\$50bn AUM). Mid cap growth funds often screen broader parent universes (e.g., S&P 400, Russell mid cap) on measures such as revenue growth rate, operating profit, earnings per-share, and return on invested capital. Today, mid cap value is under owned relative to growth, a reversal since 2022 (Exhibit 18).

Within mid cap growth, we reiterate our preference for fund universes similar to the S&P index methodology (profitability and momentum selection criteria). These funds have quality features that add resilience in risk-off markets (Exhibit 17). We do note that in some cases, highly selective screens can miss rapidly rising companies. Recently, the S&P 400 and similar indexes have underperformed from lack of exposure to Palantir.

### Exhibit 17: It only takes one stock: Palantir's growth emphasizes the difference between S&P and Russell selection criteria

S&P 600 growth, Russell 2000 growth total returns ratio index since 2020

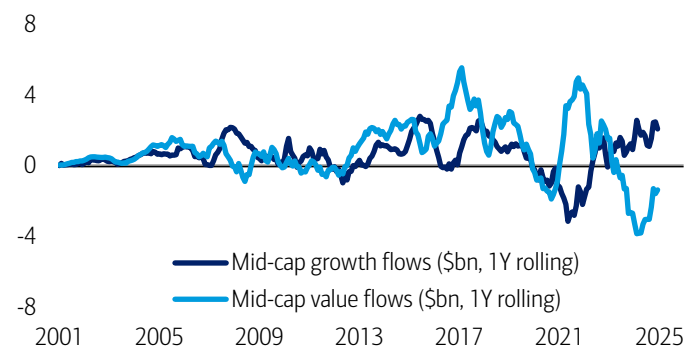


Source: BofA Global Research, Bloomberg; S&P 400 growth used as an example of a strategy that uses a profitability screen, while the Russell mid cap growth index does not.

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### Exhibit 18: Investors have been net sellers of mid cap value, net buyers of growth over the last 12 months

1Y rolling flows for small cap value and growth funds in BofA coverage



Source: BofA Global Research, Bloomberg; Data represents funds in our coverage

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### Exhibit 19: Mid cap growth ETF ratings

Summary of Covered ETF Efficiency, Technical and Fundamental characteristics

New ?	Ticker	Name	Rating	Total score	Efficiency		Technical		Fundamental				
					Expense ratio	Constituent average daily value traded (\$mn)	Price momentum	Sortino ratio (10Y)	Buy rated stock exposure	% positive EPS	Value composite valuation rank (lower is better)	Growth composite valuation rank (lower is better)	Earnings revision ratio
X	IMCG	iShares Morningstar Mid-Cap Growth ETF	1-FV	90	0.06%	434	-0.1%	0.70	51%	96%	6	2	0.24
X	IWP	iShares Russell Mid-Cap Growth ETF	1-FV	80	0.23%	898	-0.4%	0.71	51%	95%	7	1	0.17
X	VOT	Vanguard Mid-Cap Growth ETF	1-FV	80	0.07%	596	0.3%	0.65	54%	96%	8	3	0.26
X	IJK	iShares S&P Mid-Cap 400 Growth ETF	2-FV	71	0.17%	119	-4.2%	0.57	49%	98%	5	6	0.18
X	MDYG	SPDR S&P 400 Mid Cap Growth ETF	2-FV	71	0.15%	120	-4.2%	0.57	49%	98%	4	7	0.18
X	IVOG	Vanguard S&P Mid-Cap 400 Growth ETF	2-FV	69	0.10%	121	-4.5%	0.55	49%	98%	3	5	0.21
X	JSMD	Janus Henderson Small/Mid Cap Growth Alpha ETF	3-FV	58	0.30%	89	-3.3%	0.67	35%	94%	2	4	0.03
X	RFG	Invesco S&P MidCap 400 Pure Growth ETF	3-FV	23	0.35%	118	-5.4%	0.41	50%	97%	1	8	0.27
Average					0.23%	339	-3.3%	0.65	49%	96%	5	5	0.20

Source: BofA Global Research, Bloomberg, Factset; Total score out of one hundred

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### Top rated mid cap growth ETFs:

- **iShares Morningstar Mid Cap Growth ETF (1-FV):** In addition to being the cheapest fund in our coverage, IMCG has the best risk adjusted returns over the last 10 years. The strategy uses Morning Star's 10 factor model to identify growth features. IMCG is market cap weighted, passive, and rebalanced quarterly. We initiate at 1-FV.





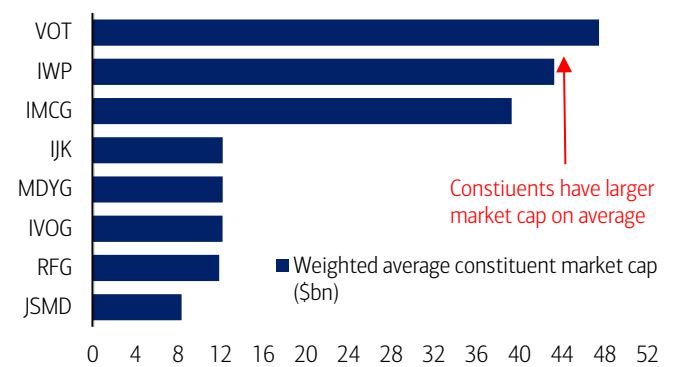
- **iShares Russell Mid Cap Growth ETF (1-FV):** IWP has the best growth composite valuation rank in our coverage, and we initiate at 1-FV. Designed to replicate the Russell Midcap Growth Index, IWP's strategy screens Russell Midcap Index companies with higher price-to-book ratios, higher forecasted earnings growth, and higher sales per share historical growth. IWP rebalances annually and has benefitted from inclusion of larger-market capitalization funds (e.g., Palantir).
- **Vanguard Mid Cap Growth ETF (1-FV):** Combining low cost with strong profitability, buy-rated stock exposure, and growth valuation, we initiate on VOT at 1-FV. VOT tracks the CRSP US Mid Cap Growth Index which targets growth companies in the 70<sup>th</sup> to 85<sup>th</sup> percentiles of the total US stock market by market cap.

#### Other mid cap growth ETF initiations and updates:

- **iShares S&P Mid Cap 400 Growth ETF (2-FV):** Using three growth metrics, sales growth, the ratio of earnings changes to price, and momentum, IJK screens on the S&P 400. IJK has one of the highest profitability measures in our coverage and average composite valuations. We initiate at 2-FV but point to IJK's liquidity for active traders looking to invest in the S&P 400.
- **SPDR S&P 400 Mid Cap Growth ETF (2-FV):** MDYG shares most of its features with IJK. Slight constituent differences lead to a marginally lower score. MDYG has a slightly lower expense ratio relative to IJK but is a less liquid option for active ETF traders. We initiate at 2-FV.
- **Vanguard S&P Mid Cap 400 Growth ETF (2-FV):** We highlight few material differences between IJK, MDYG, and IVOG. We initiate at 2-FV and note that none of the three S&P 400 tracking ETFs perfectly resemble their underlying index due to minor constituent and weighting differences.
- **Janus Henderson Small/Mid Cap Growth Alpha ETF (3-FV):** JSMD tracks a strategy that evaluates a small and mid-cap universe on ten fundamental factors to screen for companies with resilient growth. The fund has strong risk adjusted returns historically but has below average Buy-rated stock exposure and earnings revision ratio. We initiate at 3-FV.
- **Invesco S&P Mid Cap 400 Pure Growth ETF:** With a narrower focus of constituents, the S&P 400 pure growth strategy underperforms its broader peers on a risk adjusted basis. The fund has strong profitability and earnings revisions, but is the most expensive fund in our coverage, earning a 3-FV initiation.

#### Exhibit 20: VOT's constituents are larger on average relative to mid-cap growth ETFs in our coverage

Weighted average constituent market cap (\$bn) for mid cap growth ETFs

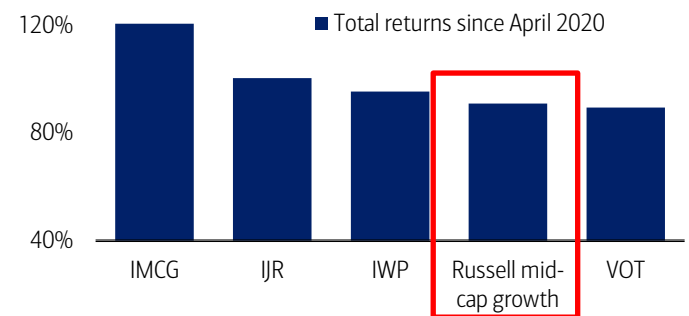


Source: BofA Global Research, Bloomberg

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#### Exhibit 21: Top rated funds in our coverage have outperformed or matched the Russell mid cap growth benchmark since April 2020

Total returns for top rated funds in BofA mid cap growth ETF coverage



Source: BofA Global Research, Bloomberg. ~5Y history has seen three very different market cycles  
– Post COVID rally, Fed hikes, AI + resilience

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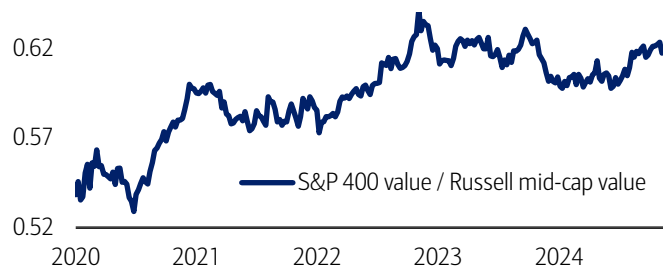
## Mid cap value ETF ratings: Neutral view

We initiate on eight funds (\$31bn AUM), featuring distinct expressions of value. Fund construction within mid cap value ETFs warrants extra consideration. Specific expressions of value vary among funds, and mid cap value funds can be prone to similar drawdowns as the broad market (Exhibit 23).

At the highest-level, high-quality value screens have been advantageous in risk-off markets (Exhibit 22). We discuss nuanced features and performance of small cap value ETF strategies on the following pages.

### Exhibit 22: Higher S&P 400 selectivity has contributed to outperformance vs Russell mid cap since 2020

S&P 400 value, Russell mid cap value total returns ratio index since 2020

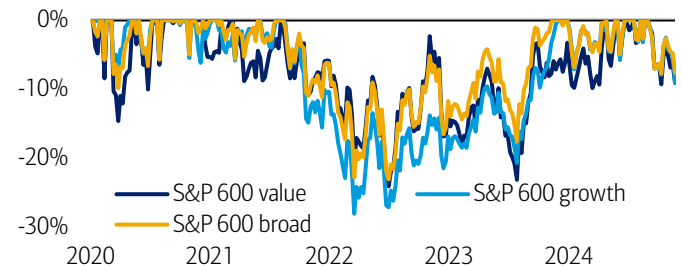


Source: BofA Global Research, Bloomberg

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### Exhibit 23: Mid cap value ETFs are still prone to drawdowns vs broad market mid cap

Max drawdown since 2020, S&P 400 value, growth, and factor neutral



Source: BofA Global Research, Bloomberg

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### Exhibit 24: Mid cap value ETF ratings

Summary of Covered ETF Efficiency, Technical and Fundamental characteristics

New ? Ticker Name	Ratin g	Total score	Efficiency		Technical		Fundamental				
			Expense ratio	Constituent average daily value traded (\$mn)	Price momentum	Sortino ratio (10Y)	Buy rated stock exposure	% positive EPS	Value composite valuation rank (lower is better)	Growth composite valuation rank (lower is better)	Earnings revision ratio
X IMCV iShares Morningstar Mid-Cap Value ETF	1-FV	77	0.06%	277	-0.3%	0.56	45%	98%	9	2	-0.25
RWK Invesco S&P Midcap 400 Revenue ETF	1-FV	77	0.39%	103	-2.3%	0.59	39%	96%	3	3	-0.14
X VOE Vanguard Mid-Cap Value ETF	1-FV	67	0.07%	249	-0.5%	0.53	46%	99%	10	4	-0.10
X USVM VictoryShares US Small Mid Cap Value Momentum ETF	1-FV	57	0.30%	58	-3.6%	0.62	29%	90%	5	9	0.00
X XMVM Invesco S&P MidCap Value with Momentum ETF	2-FV	55	0.39%	68	-2.2%	0.53	18%	99%	1	11	-0.01
X IVOV Vanguard S&P Mid-Cap 400 Value ETF	2-FV	53	0.10%	85	-1.8%	0.51	33%	97%	6	8	-0.26
X IJJ iShares S&P Mid-Cap 400 Value ETF	2-FV	52	0.18%	85	-1.1%	0.51	33%	97%	8	7	-0.26
X MDYV SPDR S&P 400 Mid Cap Value ETF	2-FV	51	0.15%	85	-1.1%	0.51	33%	97%	7	6	-0.26
X RFV Invesco S&P MidCap 400 Pure Value ETF	2-FV	50	0.35%	76	-0.8%	0.54	25%	94%	2	1	-0.42
IWS iShares Russell Mid-Cap Value ETF	3-FV	42	0.23%	153	-1.0%	0.49	43%	97%	11	5	-0.18
EZM WisdomTree US MidCap Fund	3-FV	41	0.38%	80	-1.3%	0.49	35%	97%	4	10	-0.07
Average			0.21%	132	-1.7%	0.55	35%	97%	6	6	-0.15

Source: BofA Global Research, Bloomberg, Factset; Total score out of one hundred

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### Top rated mid cap value ETFs:

- **iShares Morningstar Mid Cap Value ETF (1-FV):** Targeting value companies that fall between the 70<sup>th</sup> and 90<sup>th</sup> percentile of the Morningstar US Market Extended Index by market cap, IMCV offers above average profitability for a below average expense ratio. For IMCV, value is defined as low price-to-earnings, price-to-book value, price-to-sales, price-to-cash flow and high dividend yields. We initiate at 1-FV, also noting high BofA Buy-rated stock exposure.



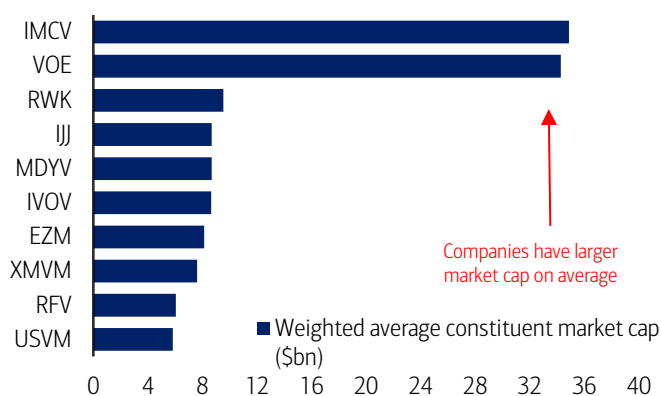
- **Invesco S&P Mid Cap 400 Revenue ETF (1-FV):** RWK is a value iteration of the S&P 400 index. Instead of market cap weighting, the fund weights companies by revenue, leading to a value tilt. As a result, the fund has high composite valuation scores across growth and value measures, and the second-best risk adjusted returns in our coverage. With above rated BofA Buy-rated stock exposure driving its fundamental score, we upgrade RWK from 3-FV to 1-FV.
- **Vanguard Mid Cap Value ETF (1-FV):** VOE replicates the strategy of CRSP US Mid Cap Value Index. The strategy targets value companies within the 70<sup>th</sup> to 85<sup>th</sup> percentiles of the total stock market by market cap. Like IMCV, VOE offers a profitability-focused strategy for a low expense ratio. VOE's risk adjusted returns are slightly below average but this is offset in our model scores by strong Buy-rated stock exposure. We initiate at 1-FV.
- **VictoryShares US Small Mid Cap Value Momentum ETF (1-FV):** USVM is a multifactor value strategy that also utilizes momentum and low volatility, and we initiate at 1-FV. Stocks with lower historical volatility are given higher weights. With some small cap exposure, USVM has lower profitability but maintains the best 10Y risk adjusted returns in our coverage.

#### Other mid cap value ETF initiations and updates:

- **Invesco S&P Mid Cap Value with Momentum ETF (2-FV):** Selecting 80 stocks from the S&P 400, XMVM targets companies with high value and momentum scores. XMVM has the best value composite valuation, however below average risk adjusted returns and an above average expense ratio lead to a balanced total score. We initiate at 2-FV.
- **Vanguard S&P Mid Cap 400 Value ETF (2-FV):** IVOV, tracks the S&P MidCap 400 Value index. Using three factors, the ratios of book value, earnings and sales to price, IVOV screens on the S&P 400 universe. Today, IVOV has over 300 constituents, having significant overlap with the factor neutral S&P 400. This overlap is reflected in average valuation scores. Below average risk adjusted returns and earnings revisions lead us to initiate on IVOV at 2-FV. We note that IVOV is the least expense fund among S&P 400 Value ETFs in our coverage.
- **iShares S&P Mid Cap 400 Value ETF (2-FV):** IJJ has nearly identical construction to IVOV and MDYV. Of the three, IJJ has the highest expense ratio. For those actively trading the S&P 400 Value Index, IJJ has the best fund level liquidity. We initiate at 2-FV.
- **SPDR S&P 400 Mid Cap Value ETF (2-FV):** With similar construction of IJJ and IVOV, MDYV tracks the S&P 400 Value Index. We note that MDYV has no distinct competitive advantage on liquidity or expense ratio and initiate at 2-FV.
- **Invesco S&P Mid Cap 400 Pure Value ETF (2-FV):** A narrower focus on S&P 400 value has boosted 10Y risk adjusted returns but lowered fund profitability relative to

#### Exhibit 25: IMCV's constituents are larger on average relative to mid-cap value ETFs in our coverage

Weighted average constituent market cap (\$bn) for mid cap value ETFs

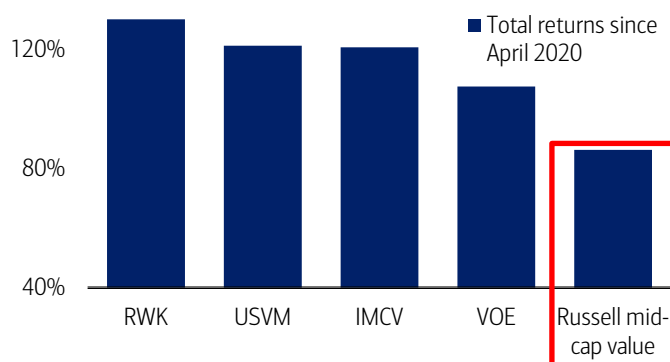


Source: BofA Global Research, Bloomberg; Data represents funds in our coverage

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#### Exhibit 26: Top rated funds in our coverage have all outperformed the Russell mid cap value benchmark since April 2020

Total returns for top rated funds in BofA mid cap value ETF coverage



Source: BofA Global Research, Bloomberg; Data represents funds in our coverage. ~5Y history has seen three very different market cycles – Post COVID rally, Fed hikes, AI + resilience

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broader S&P 400 value strategies. As a result, RFV scores similarly in our model to its S&P 400 peers. In line with its focused value strategy, RFV has the second-best value composite valuation score. We initiate at 2-FV given balanced tradeoffs with other S&P 400 value strategies and a slightly above average expense ratio.

- **iShares Russell Mid Cap Value ETF (3-FV):** Screening on the Russell Midcap Index, IWS selects constituents on lower price-to-book ratios, lower I/B/E/S forecast earnings growth, and lower sales per share historical growth. With this strategy, IWS has the lowest risk adjusted returns among mid cap value funds in our coverage and the lowest value composite valuation score. We initiate at 3-FV.
- **WisdomTree US Mid Cap Fund (3-FV):** EZM tracks earnings driven strategy that screens on the WisdomTree U.S. MidCap Index, creating a value tilt. EZM is earnings-weighted where companies with greater earnings have larger weights in the index. This strategy is similar to top rated fund RWK but has not produced similar risk adjusted returns. We initiate at 3-FV given below average technical and efficiency scores.

#### Exhibit 27: ETFs mentioned – Summary of ratings changes and initiations

Old rating, rating update, ticker, name, price

Old rating	ETF rank change	New?	Ticker	Name	Rating	Last price
-	Initiation	X	FLQM	Franklin U.S. Mid Cap Multifactor Index ETF	1-FV	55.13
2-FV	Upgrade		JHMM	John Hancock Multi-Factor Mid Cap ETF	1-FV	60.36
2-FV	Upgrade		IMCB	iShares Morningstar Mid-Cap ETF	1-FV	78.08
1-FV	No change		VO	Vanguard Mid-Cap ETF	1-FV	271.76
-	Initiation	X	SMIG	Bahl & Gaynor Small/Mid Cap Income Growth ETF	1-FV	29.92
2-FV	Upgrade		IWR	iShares Russell Mid-Cap ETF	1-FV	89.94
-	Initiation	X	CZA	Invesco Zacks Mid-Cap ETF	1-FV	108.00
-	Initiation	X	JPME	JPMorgan Diversified Return US Mid Cap Equity ETF	1-FV	104.49
-	Initiation	X	GRPM	Invesco S&P MidCap 400 GARP ETF	1-FV	107.85
-	Initiation	X	SPMD	SPDR Portfolio S&P 400 Mid Cap ETF	2-FV	54.42
2-FV	No change		MDY	SPDR S&P MidCap 400 ETF Trust	2-FV	566.81
-	Initiation	X	IVOO	Vanguard S&P Mid-Cap 400 ETF	2-FV	104.86
-	Initiation	X	BKMC	BNY Mellon US Mid Cap Core Equity ETF	2-FV	101.73
-	Initiation	X	FSMD	Fidelity Small-Mid Multifactor ETF	2-FV	40.99
1-FV	Downgrade		SCHM	Schwab U.S. Mid-Cap ETF	3-FV	27.95
-	Initiation	X	BBMC	JPMorgan BetaBuilders US Mid Cap Equity ETF	3-FV	96.51
3-FV	No change		FNX	First Trust Mid Cap Core AlphaDEX Fund	3-FV	114.99
-	Initiation	X	PTMC	Pacer Trendpilot US Mid Cap ETF	3-FV	36.66
-	Initiation	X	VXF	Vanguard Extended Market ETF	3-FV	188.21
-	Initiation	X	IMCG	iShares Morningstar Mid-Cap Growth ETF	1-FV	76.6691
-	Initiation	X	IWP	iShares Russell Mid-Cap Growth ETF	1-FV	127.795
-	Initiation	X	VOT	Vanguard Mid-Cap Growth ETF	1-FV	260.51
-	Initiation	X	IJK	iShares S&P Mid-Cap 400 Growth ETF	2-FV	89.12
-	Initiation	X	MDYG	SPDR S&P 400 Mid CapGrowth ETF	2-FV	85.03
-	Initiation	X	IVOG	Vanguard S&P Mid-Cap 400 Growth ETF	2-FV	110.37
-	Initiation	X	JSMD	Janus Henderson Small/Mid Cap Growth Alpha ETF	3-FV	72.32
-	Initiation	X	RFG	Invesco S&P MidCap 400 Pure Growth ETF	3-FV	47.20
-	Initiation	X	IMCV	iShares Morningstar Mid-Cap Value ETF	1-FV	76.67
3-FV	Upgrade		RWK	Invesco S&P Midcap 400 Revenue ETF	1-FV	116.0421
-	Initiation	X	VOE	Vanguard Mid-Cap Value ETF	1-FV	166.94
-	Initiation	X	USVM	VictoryShares US Small Mid Cap Value Momentum ETF	1-FV	82.59
-	Initiation	X	XMVM	Invesco S&P MidCap Value with Momentum ETF	2-FV	56.23
-	Initiation	X	IVOV	Vanguard S&P Mid-Cap 400 Value ETF	2-FV	96.47
-	Initiation	X	IJJ	iShares S&P Mid-Cap 400 Value ETF	2-FV	125.92
-	Initiation	X	MDYV	SPDR S&P 400 Mid Cap Value ETF	2-FV	80.98
-	Initiation	X	RFV	Invesco S&P MidCap 400 Pure Value ETF	2-FV	121.07
3-FV	No change		IWS	iShares Russell Mid-Cap Value ETF	3-FV	131.9801
2-FV	Downgrade		EZM	WisdomTree US MidCap Fund	3-FV	62.70

Source: BofA Global Research, Bloomberg

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# Appendix

## Understanding our evaluation process

BofA Global Research ETF ratings include both a view on the broad category (FV=Favorable View; NV=Neutral View; UF=Unfavorable View) and the specific fund relative to its peers (1=More Attractive; 2=Attractive; 3=Less Attractive).

We evaluate individual funds in three categories: Efficiency, Technical, and Fundamental. These first two groups use similar criteria across ETF categories:

- **Efficiency:** includes expense ratio and the weighted average daily value traded of the fund constituents.
- **Technical:** focuses on price momentum and risk-adjusted returns via the Sortino Ratio (returns vs downside volatility).

Our **Fundamental** ranking is determined by four sector and industry measures: 1.) BofA Analyst rating 2.) Earnings revision ratio, 3.) % of companies with profitable EPS 4.) Growth and value valuation (scaled and ranked).

Where performance data is unavailable, we rely on 1.) underlying indexes; 2.) mutual fund data for ETFs that have been converted; or 3.) group average performance (does not penalize overall score).

## Understanding the ETF model output

ETF reports typically include a ratings table summarizing the key elements used to rate ETFs within a category. We provide a description of each column below within the context of our quality ETF model:

- **Rating:** The number represents the view on a specific fund (1=More Attractive; 2=Attractive; 3=Less Attractive). The letters represent the category outlook (FV=Favorable; NV=Neutral; UF=Unfavorable).
- **Total score:** Funds are rated on a 100-point scale. Each category (Efficiency, Technical, and Fundamental) has points available equivalent to the category's weight in the ranking. For example, if Efficiency was 33% of the overall score, a fund could achieve a maximum of 33 points in the Efficiency category. Funds are ranked against each other to determine the number of points received per category. The scores for each category are then summed to arrive at the total score.
- **Fundamental rank:** Funds were ranked by:
  - 1.) BofA Analyst rating: Weight of buy rated constituents minus weight of underperform rated constituents, adjusted for the total weight of covered stocks.
  - 2.) Earnings revision ratio: Number of upward revisions (3m) minus the number of downward revisions, divided by the total number of constituents in a fund
  - 3.) % of companies with positive EPS / profitability: % of ETF total weight with positive NTM consensus earnings (analyst mean).
  - 4.) Valuation:

Value: scaled and ranked P/E, EV/FCF, EV/EBITDA, and P/S, where lower is better.

Growth: scaled and ranked revenue growth, FCF growth, earnings growth, and EBITA growth, where higher is better.

Individual scaled values are averaged and then scored. Simple rank is shown in the model exhibits for simplicity.



- **Price momentum:** Three simple moving averages are used to calculate price momentum. We weight and sum the percent that a fund's closing price is above or below each moving average. A higher weighted percentage = stronger momentum.
- **Sortino ratio:** is used to measure risk-adjusted returns by comparing average annualized returns to downside deviation over the same period. Funds that have shown the highest returns relative to average pullbacks receive a higher rank.
- **Expense ratio:** The "all-in" net-expenses of a fund including management, interest, listing fees etc. as a percent of net assets under management.
- **Holdings based average daily value traded:** The average number of shares traded daily multiplied by the price that they traded at over the past three months. A higher number indicates greater liquidity and better efficiency. This calculation is repeated for all fund constituents, then a weighted average is taken. Funds with an average value traded greater than the group's median received a higher Efficiency score.

## Analyst Certification

I, Jared Woodard, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

## Special Disclosures

BofA Securities is currently acting as financial advisor to HPS Investment Partners LLC in connection with its proposed sale to Blackrock Inc, which was announced on December 3, 2024.

BofA Securities is currently acting as Financial Advisor to Braemar Hotels & Resorts Inc. on potential Activism Defense.

BofA Securities is currently acting as advisor to EQT AB in connection with its proposed acquisition of a stake in Acronis International GmbH, which was announced on August 7, 2024.





# Disclosures

## Important Disclosures

### Exchange-Traded Funds Investment Rating Distribution: Global Group (as of 31 Dec 2024)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	116	24.12%	Buy	72	62.07%
Hold	354	73.60%	Hold	263	74.29%
Sell	11	2.29%	Sell	7	63.64%

<sup>R1</sup> Exchange-traded funds (ETFs), or the ETF providers, that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only ETFs. An ETF rated 1-FV is included as a Buy; an ETF rated 2-FV, 3-FV, 1-NV, 2-NV, 3-NV, 1-UF or 2-UF is included as a Hold; and an ETF rated 3-UF is included as a Sell.

EXCHANGE-TRADED FUNDS (ETF) INVESTMENT OPINION KEY: Opinions reflect both an Outlook Rating and a Category Rating. OUTLOOK RATINGS reflect the analyst's assessment of the ETF's attractiveness relative to other ETFs within its category (including sector, region, asset class, thematic, and others). There are three outlook ratings: 1 - the ETF is more attractive than covered peers in the same category over the next 12 months; 2 - the ETF is similarly attractive to covered peers in the same category over the next 12 months; and 3 - the ETF is less attractive than covered peers in the same category over the next 12 months. CATEGORY RATINGS, indicators of the analyst's view of the ETF's category and which incorporate published views of BofA Global Research department analysts, are: FV - Favorable view, NV - Neutral view and UF - Unfavorable view.

Price Charts for the securities referenced in this research report are available on the [Price Charts website](#), or call 1-800-MERRILL to have them mailed.

BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: 1st Trust MidCap ETF, Bahl & Gaynor Small, BNY Mellon Mid Cap, Fidelity Small-Mid, Franklin Multi Mid, Inv Mid Value Mmntm, Invesco MidC 400 ETF, Invesco MidCap GARP, Invesco Pure Growth, Invesco Pure Value, Invesco Zacks Mid-Ca, iShares MidCap ETF, iShares MS MC Grow, iShares MS MC Value, iShares Russ Mid ETF, iShares Russ Mid G, iShares S&P MC Growt, iShares S&P MC Value, iShrs Rsl Value ETF, JH MultiFact Mid ETF, JH Smid Growth, JPM BB Mid Cap, JPM Div Mid Cap, Pacer Trendpilot Mid, Schwab US MidCap ETF, SPDR MidCap 400 ETF, SPDR S&P 400 Mid, SPDR S&P 400 MidG, SPDR S&P 400 MidV, Vanguard Ext Market, Vanguard MidCap ETF, Vanguard Mid-Cap Gro, Vanguard Mid-Cap Val, Vanguard S&P MC Grow, Vanguard S&P MC Valu, Vanguard S&P Mid-Cap, VS SMID Val Mmntm, WT US MidC Earn ETF.

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