

BETASHARES AUSTRALIAN ETF REVIEW

END OF YEAR 2021 REVIEW & MONTH ENDING DECEMBER 2021



AUSTRALIAN EXCHANGE TRADED FUND INDUSTRY: END OF YEAR REVIEW 2021

Momentum continues.



- Aided by record inflows and strong market conditions, the Australian ETF industry continued to grow rapidly, maintaining the very strong momentum of the previous 2 years
- After two successive years of >50% growth in 2019 and 2020, it is remarkable that the industry managed to grow by 44% over the course of 2021.
- Industry funds under management, which started 2021 at \$95B, ended the year at \$136.9B, an all-time high.
- The change in total industry size for the year was \$42B which is the largest \$ value change on record (previous record was \$33B of growth recorded in 2020).
- The growth for the year was assisted by market appreciation, which, at 45% of the year's total growth aided the industry growth substantially.
- That said, flows were very strong, and, at **\$23.2B** were the **highest net flows on record**, and a 13% increase v. 2020's record flows of \$20.5B
- The growth in flows is mirrored by the rapid rise in the **number of Australian ETF investors**, with our recently released BetaShares/Investment Trends ETF Report noting that there are now 1.7 million Australians investing in ETFs, representing investor growth of 33% v. the year before.
- We also continued to see strong trading values in the industry, after a break-out year in 2020. Trading values remained stable compared to last year, with \$96B of value traded on the ASX (down slightly v. \$99B in 2020)
- Flows by ETF manager continued to be concentrated, and significantly more so than last year, with the top 3 players (Vanguard, BetaShares and iShares) receiving 75% of the industry's flow combined (compared to 70% for the top 3 players in 2020).
- In terms of **product launches**, we saw product development activity come off slightly compared to the year before. Over the course of 2021, **33** funds were launched and 'net product growth' was 24 funds. Notably 40% (13 funds) of the new launches were Active ETFs with almost all being via the creation of traded

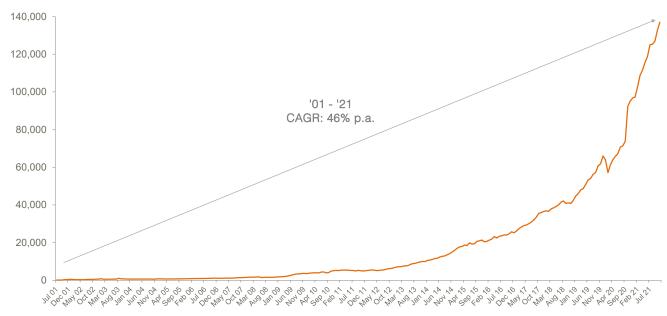
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classes of existing unlisted funds. We are predicting a record year of new product launches in 2022, as the industry continues to evolve and mature.

- By inflows, **passive products** captured the vast majority of flows with **92%** share. Notably, and notwithstanding the large number of Active ETF product launches, we actually saw a larger than ever proportion of the flows into passive ETFs, with the Active ETF sector dropping its share of flows from 10% in 2020 to 8% in 2021¹. This illustrates that notwithstanding the high levels of product launch activity, there is still some way to go to for mainstream adoption of Active ETFs in the industry, and a continued (and rising) preference by ETF investors for passive products.
- Within the passive category vanilla index-tracking funds once again dominated over smart-beta alternatives, with a similar share of flows to 2020 (83%).
- In terms of category flows we saw a very similar pattern to 2020, with 2021 flows heavily dominated by equities international equities in particular picking up the lion's share (over 50% of total flows). Like the year before it, fixed income flows were muted, as yield pressure caused investors to eschew the asset class. However multi-asset class or diversified ETFs rose in popularity, particularly with younger investors using them as the core to their portfolio or to get started with investing.
 - International equities ETFs received the highest level of flows at ~\$11.8B (v. ~\$8B in 2020)
 - Australian Equities ETFs also had a strong year for flows, with ~\$5.5B received. (v. \$6.8B in 2020)
 - Fixed Income ETFs received \$2.9B (v. \$2.4B in 2020)
 - Multi-asset/diversified products received \$1.7B (a dramatic increase compared to \$664M in 2020)
- Geared U.S Equities took the number one spot for best performance over the course of the year, with our GGUS fund returning 66%. Strong performance was also recorded in Crude Oil and Global REIT exposures.
- In our year-end report for 2020, I wrote "we believe the industry will continue to grow strongly in 2021, and forecast total industry FuM at end 2021 to be in the range of \$110B-\$120B. We expect that the industry will break the \$100B milestone by the end of the first quarter". The industry did indeed break that milestone in March 2021, but my absolute forecast was smashed (\$136B).
- In terms of 2022, we believe the industry will continue to grow strongly, although we doubt it will be as assisted by the market as occurred in 2020. We forecast total industry FuM at end 2022 to be in the range of \$180-\$190B.

¹ "Passive" products defined as passive/rules-based products (i.e. rather than as legally defined by ASIC/ASX) and include products with an element of investment discretion. "Active" defined as Active ETFs

MARKET SIZE AND GROWTH: CALENDAR YEAR 2021



CAGR: Compound Annual Growth Rate Source: ASX, Chi-X, BetaShares

MARKET CAP

- Australian Exchange Traded Funds Market Cap (ASX + Chi-X): \$136.9B New all-time high
- Market cap growth for year: 44%, +\$41.8B largest absolute annual \$ growth on record.

NEW MONEY

 Net new money: +\$23.2B – all time high annual flows on record (13% increase on previous annual record, \$20.5B in 2020)

PRODUCTS

- 280 Exchange Traded Products trading on the ASX (vs 256 as at end 2020)
- New products: 33 new products launched in the year (vs. 38 in 2020), 9 products closed/matured

TRADING VALUE

• After the all-time record of 2020 (which included a \$17B month in March 2020), trading value remained stable (-3% compared to 2020) – with \$96B of value traded on the ASX (v. \$99B in 2020)

PERFORMANCE

Geared U.S Equities took the number one spot for best performance over the course of the year, with our GGUS fund returning 66%. Strong performance was also recorded in Crude Oil and Global REIT exposures.

TOP 10 PRODUCTS: END OF YEAR 2021

Ticker	Product	Issuer	Market Cap	Rank Movement
MGOC	Magellan Global Fund (Open Class) (Managed Fund)	Magellan	\$14,228,414,686	-
VAS	Vanguard Australian Shares Index ETF	Vanguard	\$10,124,396,409	-
IVV	iShares S&P 500 ETF	iShares	\$5,576,658,825	+2
IOZ	iShares Core S&P/ASX 200 ETF	iShares	\$4,961,066,914	-
STW	SPDR S&P/ASX 200	State Street	\$4,816,817,672	-2
VGS	Vanguard MSCI Index International Shares ETF	Vanguard	\$4,726,926,542	-
VTS	Vanguard US Total Market Shares Index ETF	Vanguard	\$3,219,768,713	+1
QUAL	VanEck Vectors MSCI World Ex-Australia Quality ETF	VanEck	\$2,831,333,163	+8
NDQ	BetaShares NASDAQ 100 ETF	BetaShares	\$2,819,053,779	+8
100	iShares S&P Global 100 ETF	iShares	\$2,721,475,226	-

While there was no change to the first and second spots, we saw relatively significant movement in terms of the top 10 largest ETFs in Australia, with the <u>Nasdaq 100 ETF (NDQ)</u> and a Global Quality ETF the fastest movers, both rising 8 spots on the table.

Top 10 Inflows (by \$) - 2021

Ticker	Product	Inflow Value
VAS	Vanguard Australian Shares Index ETF	\$1,924,965,251
VGS	Vanguard MSCI Index International Shares ETF	\$1,267,970,364
	Hyperion Global Growth Companies Fund (Managed	
HYGG	Fund)	\$906,030,672
VDHG	Vanguard Diversified High Growth Index ETF	\$853,012,750
NDQ	BetaShares NASDAQ 100 ETF	\$814,756,526
ETHI	BetaShares Global Sustainability Leaders ETF	\$786,319,026
IOZ	iShares Core S&P/ASX 200 ETF	\$783,150,502
QUAL	VanEck Vectors MSCI World Ex-Australia Quality ETF	\$705,585,731
A200	Betashares Australia 200 ETF	\$703,631,330
IVV	iShares S&P 500 ETF	\$636,424,084

Top 10 Outflows (by \$) - 2021

Ticker	Product	Inflow Value
MGOC	Magellan Global Fund (Open Class) (Managed Fund)	-\$1,391,663,629
BILL	iShares Core Cash ETF	-\$200,420,397
MHHT	Magellan High Conviction Trust (Managed Fund)	-\$188,475,152
SELF	SelfWealth SMSF Leaders ETF	-\$103,795,658
VAF	Vanguard Australian Fixed Interest Index ETF	-\$91,659,485
IHVV	iShares S&P 500 AUD Hedged ETF	-\$88,976,855
000	BetaShares Crude Oil Index ETF-Currency Hedged (Synthetic)	-\$83,590,789
MCSI	MFG Core Infrastructure Fund (Managed Fund)	-\$75,920,301
QPON	BetaShares Australian Bank Senior Floating Rate Bond ETF	-\$66,506,584
MVOL	iShares Edge MSCI Australia Minimum Volatility ETF	-\$46,272,678

For the first time since compiling this report, every one of the top 10 funds for flows was an equities exposure¹. For the second time in a row an ESG/ethical fund made its way into the top 10 for flows, with our <u>ETHI</u> fund taking in ~\$800m of net new money over the year. Notably, in terms of fund outflows, 3 of the top 10 funds for outflows were managed by Magellan, whose investment style fell significantly out of favour in 2021.

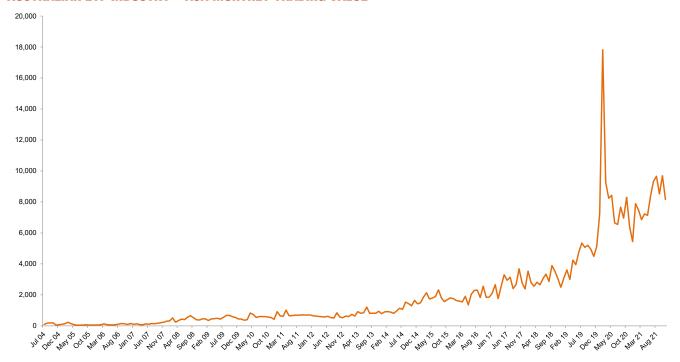
¹ VDHG has 10% exposure to bonds

By Average Daily Trading Value (12 month)

Ticker	Product	Issuer	ADTV 12 month	Rank Movement
BBOZ	BetaShares Australian Strong Bear (Hedge Fund)	BetaShares	\$52,098,098	-
VAS	Vanguard Australian Shares Index ETF	Vanguard	\$50,182,527	-
IOZ	iShares Core S&P/ASX 200 ETF	iShares	\$37,709,531	-
STW	SPDR S&P/ASX 200	State Street	\$32,969,798	+1
AAA	Betashares Australian High Interest Cash ETF	BetaShares	\$30,562,396	-1
BBUS	BetaShares US Equities Strong Bear Currency Hedged (Hedge Fund)	BetaShares	\$20,189,445	-
GOLD	ETFS Physical Gold	ETF Securities	\$17,402,373	-
A200	Betashares Australia 200 ETF	BetaShares	\$16,975,429	+2
IVV	iShares S&P 500 ETF	iShares	\$16,619,022	-
VGS	Vanguard MSCI Index International Shares ETF	BetaShares	\$16,023,319	+2

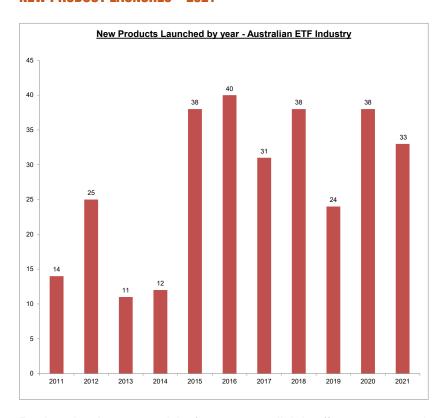
After a record year of trading in 2020, it was notable that trading values remained elevated once again in 2021, with the industry clearly now in a new 'trading level'. The most traded funds remained relatively stable, with the leveraged short Australian shares product, <u>BBOZ</u>, once again toping the table in terms of value traded, albeit with a notable higher ADTV of \$52m (v. ~\$30m in 2020).

AUSTRALIAN ETF INDUSTRY - ASX MONTHLY TRADING VALUE



The longer term 'monthly ASX value traded' chart illustrates that over the course of 2021, the ETF industry has reached a new trading 'level', set after the tremendous spike in trading activity in March 2020. That period has brought a large number of new investors into the market which has sustained high trading value and looks likely to continue to do so.

NEW PRODUCT LAUNCHES - 2021



Product development activity for year was slightly off pace compared to 2020, with 33 new products launched this year (v. 38 in 2020) and 'net product growth' of 24 funds. 9 products were closed. Notably 40% (13 funds) of the new launches were Active ETFs with almost all being via the creation of traded classes of existing unlisted funds.

ANALYSIS OF INFLOWS: 2021

	Inflow Value	2021 (%)	2020 (%)	2019 (%)	2018 (%)
Passive	\$21,468,170,361	92%	90%	89%	88%
Active	\$1,765,905,508	8%	10%	11%	12%

In terms of net inflows, the bulk of flows this year continued to be in Passive products, which have remained at ~90% of flows for the last 5 years. Notably, and notwithstanding the large number of Active ETF product launches we actually saw a larger than ever proportion of the flows into passive ETFs, indicating that notwithstanding the high levels of product lauch activity, there is still some way to go to for mainstream adoption of Active ETFs in the industry. In fact, as the below table illustrates, we saw more flows into Smart Beta ETFs than Active ETFs in 2021, something that has not occurred in the last 4 years.

Product Style	Inflow Value - 2021	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)
Index	\$19,395,813,230	83%	83%	79%	78%	79%
Smart Beta	\$2,072,357,131	9%	7%	10%	9%	8%
Active	\$1,765,905,508	8%	10%	11%	12%	13%

Category	Inflow Value	Rank Movement	
International Equities	\$11,776,576,903	-	
Australian Equities	\$5,494,767,550	-	
Fixed Income	\$2,923,703,789	-	
Multi-Asset	\$1,746,883,638	+2	
Listed Property	\$627,236,492	+2	

2021 was a year dominated by equities in terms of flows, with international equities in particular picking up the lions share (over 50% of total flows). Fixed income flows were far more muted as yield pressure caused investors to eschew the asset class. However <u>multi-asset class or diversified ETFs</u> rose in popularity, particularly with younger investors using them as the core to their portfolio or to get started with investing.

Sub-Category	Inflow Value	Rank Movement	
Australian Equities - Broad	\$4,242,043,945	+1	
International Equities - Developed World	\$4,220,846,894	-1	
International Equities - Sector	\$2,461,313,829	+1	
Australian Bonds	\$2,255,418,847	-1	
International Equities - US	\$2,062,542,340	+1	

The sub-category flows mirrored those of the broad categories although it was broad Australian equity products that took out the top place. There was a notable and substantial increase in investment into global sector products in 2020, largely due to an increase in interest in <u>technology exposures</u>. There were essentially no outflows at a category level, with outflows limited to specific individual exposures rather than categories more generally

Top Performing Products - 2020

Ticker	Product Name	Performance
GGUS	BetaShares Geared US Equity Fund Currency Hedged (Hedge Fund)	66.2%
LNAS	ETFS Ultra Long Nasdaq 100 Hedge Fund	64.7%
000	BetaShares Crude Oil Index ETF-Currency Hedged (Synthetic)	57.9%
DJRE	SPDR Dow Jones Global Select Real Estate Fund	38.6%
VVLU	Vanguard Global Value Equity Active ETF (Managed Fund)	38.2%

Geared U.S Equities took the number one spot for best performance over the course of the year, with our <u>GGUS</u> fund returning 66%. Strong performance was also recorded in <u>Crude Oil</u> and Global REIT exposures.

\$ Value Inflows/Outflows by Provider - 2021

The ETF industry's flows in 2021 were highly concentrated – the top 3 ETF issuers (Vanguard, BetaShares and iShares) receiving 75% of the industry flows (v. 70% in 2020). With the number of participants in the industry now at 34, its notable that concentration levels are actually rising, rather than falling – illustrating the importance of scale in the industry (mirrored globally). In a record year for the industry, the significant outflows recorded by Magellan are indicative of just how out of favour that manager is in the current market environment.

Provider	Inflow Value	% Industry
Vanguard	\$8,673,960,296	35.2%
BetaShares	\$6,501,393,824	26.4%
iShares	\$3,254,542,849	13.2%
VanEck	\$2,440,583,685	9.9%
ETF Securities	\$1,191,278,634	4.8%
Hyperion	\$906,030,672	3.7%
Fidante	\$506,658,432	2.1%
State Street	\$319,211,853	1.3%
Munro Partners	\$177,855,473	0.7%
Investsmart	\$89,842,111	0.4%
AllianceBernstein	\$88,411,656	0.4%
Janus Henderson	\$72,423,881	0.3%
Switzer	\$62,422,144	0.3%
Loftus Peak	\$58,939,864	0.2%
Schroder	\$55,990,015	0.2%
Perennial	\$53,048,350	0.2%
Morningstar	\$45,466,675	0.2%
Fidelity	\$36,960,475	0.1%
Gold Corporation	\$18,926,991	0.1%
Elstree	\$17,614,840	0.1%
Investors Mutual Limited	\$16,682,126	0.1%
Equity Trustees	\$13,525,283	0.1%
Australian Unity Funds Management Limited	\$13,518,465	0.1%
K2 Global	\$13,409,321	0.1%
Kapstream	\$6,003,985	0.0%
One Investment Management Funds Limited	\$5,206,620	0.0%
Perpetual	\$3,382,540	0.0%
Antipodes	\$2,333,014	0.0%
Monash Investors	-\$303,567	0.0%
Russell	-\$11,648,209	0.0%
Montgomery	-\$14,522,653	-0.1%
ACBC	-\$19,781,859	-0.1%
Platinum	-\$22,466,228	-0.1%
Magellan	-\$1,342,825,687	-5.4%

AUSTRALIAN EXCHANGE TRADED FUND INDUSTRY: MONTH OF DECEMBER 2021

MARKET CAP & NEW MONEY

- Market cap growth for month: 3.1%, \$4.1B
- Net new money: +\$2.0B
- 4 new products launched this month, including new thematic exposures from BetaShares in <u>Electric Vehicles (ASX: DRIV)</u> and <u>Future of Payments (ASX: IPAY)</u> and new Active ETFs from Fidelity and Perpetual.

TRADING VALUE

• Trading value decreased 16% month on month

PERFORMANCE

• <u>Crude Oil (via OOO)</u> was the best performing product for the month (~13%) followed by <u>Geared U.S. Equities (via GGUS)</u>.

TOP 10 PRODUCTS: DECEMBER 2020

Average Daily Trading Value (by \$) - Month

Ticker	Product	Issuer	ADTV	Rank Movement
VAS	Vanguard Australian Shares Index ETF	Vanguard	\$28,326,766	
IOZ	iShares Core S&P/ASX 200 ETF	iShares	\$20,103,677	
AAA	Betashares Australian High Interest Cash ETF	BetaShares	\$17,369,667	
BBOZ	BetaShares Australian Strong Bear (Hedge Fund)	BetaShares	\$16,477,645	+1
VGS	Vanguard MSCI Index International Shares ETF	Vanguard	\$14,321,713	+1
A200	Betashares Australia 200 ETF	BetaShares	\$12,338,200	-2
NDQ	BetaShares NASDAQ 100 ETF	BetaShares	\$11,537,056	+2
STW	SPDR S&P/ASX 200	State Street	\$9,627,916	
IVV	iShares S&P 500 ETF	iShares	\$8,538,904	+2
	BetaShares US Equities Strong Bear Currency Hedged (Hedge			
BBUS	Fund)	BetaShares	\$8,281,184	+10

Top 10 Inflows (by \$) - Month

Ticker	Product	Inflow Value
IOZ	iShares Core S&P/ASX 200 ETF	\$248,514,948
VAS	Vanguard Australian Shares Index ETF	\$188,857,772
IWLD	iShares Core MSCI World ex Australia ESG Leaders ETF	\$134,043,944
HYGG	Hyperion Global Growth Companies Fund (Managed Fund)	\$118,639,509
VGS	Vanguard MSCI Index International Shares ETF	\$111,253,662
NDQ	BetaShares NASDAQ 100 ETF	\$107,563,251
AAA	Betashares Australian High Interest Cash ETF	\$99,271,576
ETHI	BetaShares Global Sustainability Leaders ETF	\$87,784,864
A200	Betashares Australia 200 ETF	\$74,838,726
REIT	VanEck Vectors FTSE International Property (Hedged) ETF	\$71,245,423

Top 10 Outflows (by \$) - Month

Ticker	Product	Inflow Value
MGOC	Magellan Global Fund (Open Class) (Managed Fund)	-\$404,472,181
DJRE	SPDR Dow Jones Global Select Real Estate Fund	-\$63,861,024
IAF	iShares Core Composite Bond ETF	-\$41,104,139
IKO	iShares MSCI South Korea Capped Index ETF	-\$26,850,489
MHHT	Magellan High Conviction Trust (Managed Fund)	-\$25,514,255
MHG	Magellan Global Equities Fund (Currency Hedged) (Managed Fund)	-\$10,503,958
BILL	iShares Core Cash ETF	-\$10,024,453
PLUS	VanEck Vectors Australian Corporate Bond Plus ETF	-\$9,789,048
VAF	Vanguard Australian Fixed Interest Index ETF	-\$8,671,105
ASIA	BetaShares Asia Technology Tigers ETF	-\$7,630,841

Top 5 Category Inflows (by \$) - Month

Broad Category	Inflow Value	
Australian Equities	\$761,910,556	
International Equities	\$711,728,974	
Fixed Income	\$173,982,980	
Multi-Asset	\$139,309,965	
Listed Property	\$97,911,417	

Sub-Category Sub-Category	Inflow Value	
Australian Equities - Broad	\$610,111,134	
International Equities - US	\$235,622,414	
International Equities - Developed World	\$196,864,021	
International Equities - Ethical	\$142,888,486	
Multi-Asset	\$139,309,965	

Top Category Outflows (by \$) - Month

Broad Category	Inflow Value	
Currency	-\$1,931,093	

Sub-Category	Inflow Value	
International Equities - Asia	-\$27,660,584	
Currency	-\$1,931,093	

Top Performing Products – Month

Ticker	Product Name	Performance
000	BetaShares Crude Oil Index ETF-Currency Hedged (Synthetic)	13.6%
GGUS	BetaShares Geared US Equity Fund Currency Hedged (Hedge Fund)	11.0%
ETPMPD	ETFS Physical Palladium	8.8%
MICH	Magellan Infrastructure Fund (Currency Hedged) (Managed Fund)	7.3%
DRUG	BetaShares Global Healthcare ETF - Currency Hedged	7.1%