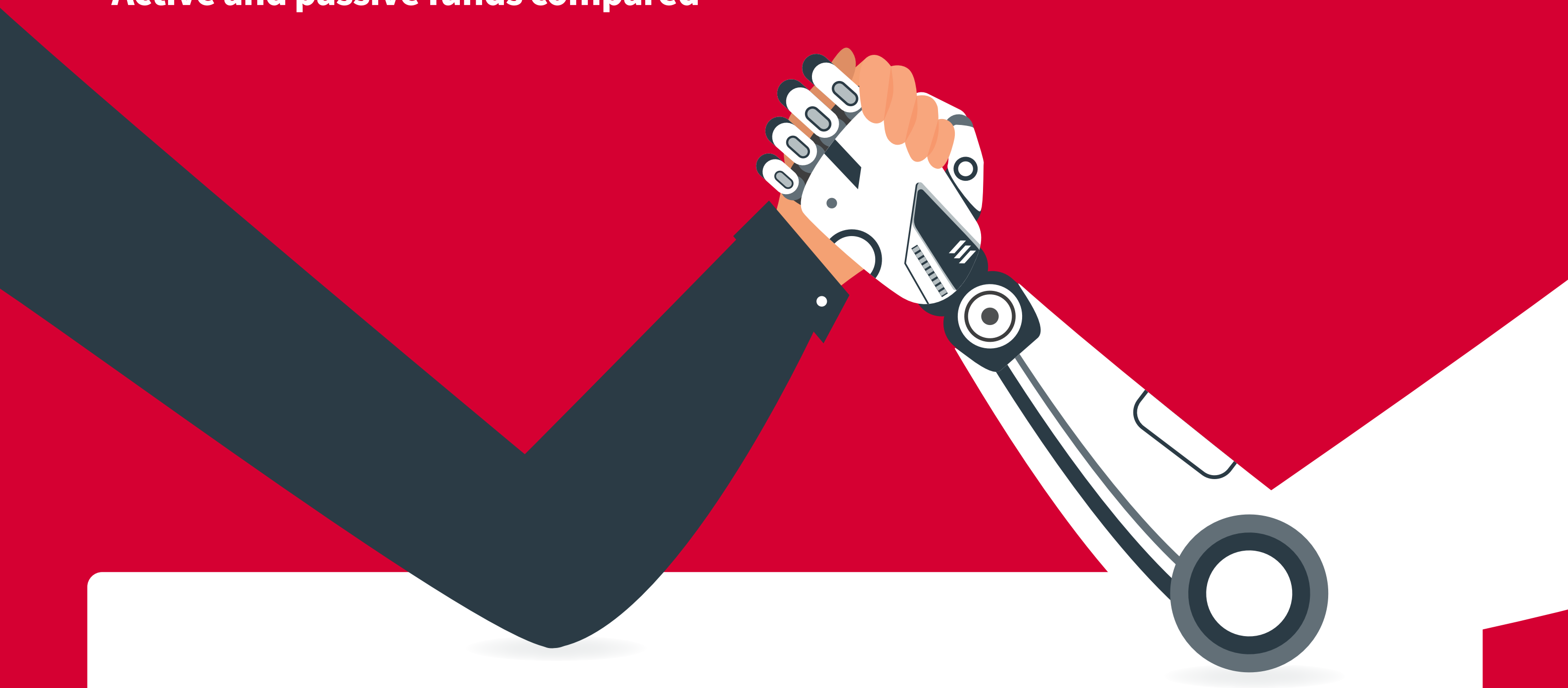
Manager versus Machine

Active and passive funds compared



In a year when markets have been falling and long-standing trends have gone into reverse, you might have expected active fund managers to perform better than the passive machines that simply track the index. But our latest **Manager versus Machine** report for H1 2022 shows that's not the case.

Key points:

- **Less than a third (30%) of active equity funds have outperformed a passive alternative so far this year**
  - Down from 34% in 2021
- **Active performance has been particularly miserable in the UK, where only 12% of active funds have outperformed a passive alternative**
  - Mid and small cap exposure has proved an Achilles heel for active managers
  - UK active fund investors have not enjoyed the relatively strong performance of the FTSE 100
- **40% of US funds outperformed, a marked improvement on just 19% last year**
  - It's been a good year for active funds in this region by their own modest standards
  - The tech sell off has played a big part in fund performance
- **Active Global Emerging Markets funds haven't fared well, with only 21% outperforming**
  - The passive machines have coped better with market disruption
- **The most costly UK tracker fund is 21 times more expensive than the cheapest**
  - Even passive funds have shown a wide range of returns in some regions, but it's not all down to charges

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Laith Khalaf, Head of Investment Analysis, AJ Bell

Laith Khalaf is Head of Investment Analysis at AJ Bell, and specialises in researching and writing about funds, markets and investing. He has over 20 years of industry experience, covering a wide range of roles across pensions and investments, analysing and providing commentary on key issues for both DIY investors and financial advisers.

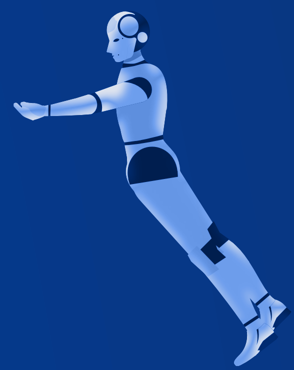
Summary

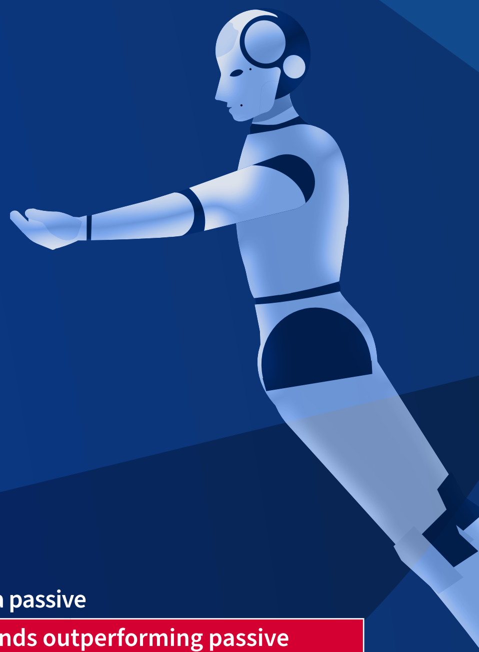
Our Manager versus Machine report looks at active funds in seven key equity fund sectors, and compares performance to that of the average passive fund in each sector, rather than a benchmark index. This provides a real world comparison, reflecting the practical investment choice that faces retail investors, between active and passive funds, as opposed to a benchmark index which can't be bought or sold easily.

While there has been a considerable improvement in active fund performance compared to last year amongst US funds, and a modest improvement in Global funds, very few active managers in the UK All Companies sector have been able to beat a typical tracker fund. There are so many funds in this sector that a poor showing here has been a big swing factor for active management as a whole, with the result that overall active fund performance has deteriorated in 2022 compared to last year.

The longer term figures look more positive for active funds, with 45% outperforming a passive alternative over 10 years. That's less than half of course, and will be flattered by survivorship bias, as unsuccessful funds will tend to wind down or be merged into others.

Nonetheless that does still mean a large chunk of active funds have outperformed an index tracker over the last decade, which gives active fund investors some cause for optimism. So does the fact that the success of active managers is not uniform across fund sectors, which furnishes investors with the opportunity to pick and choose which parts of their portfolio they populate with active and passive strategies.





Manager versus Machine Results

2022 is not shaping up to be a good year for active fund managers. Overall, only 30% have beaten a passive alternative, down from 34% in our 2021 Manager versus Machine report (issued last December). The most widespread underperformance has been evident in the UK sector, where only 12% of active funds have managed to beat a passive alternative, compared with 41% in 2021. The average UK active fund returned -13.5% in the first half of 2022, compared to -4.4% from the average passive fund.

The Global Emerging Markets sector also saw a big drop off in active fund outperformance, with only 21% of funds in this sector beating a passive alternative, down from 50% in 2021. There has been undoubted disruption in these markets, with the Russian stock market being suspended and facing sanctions, COVID lockdowns in China undermining confidence, and a rotation from growth sectors like technology to value sectors like energy. Yet in performance terms, the passive machines have taken these disturbances in their stride better than active managers.

Longer term performance is more encouraging for active fund investors, with 45% of active funds outperforming over the last decade. Even over this extended time frame, there is a clear difference in active fund success between different regions, which suggests that there are long term structural forces at play which make it harder for active managers to outperform in certain sectors.

Table 1. Proportion of active funds outperforming a passive

	% of active funds outperforming passive			
IA sector	**H1 2022**	**5 years**	**10 years**	**2021**
Asia Pacific Ex Japan	**27%**	**47%**	**59%**	**26%**
Europe Ex UK	49%	46%	57%	53%
Global	31%	26%	28%	25%
Global Emerging Markets	21%	37%	42%	50%
Japan	40%	43%	51%	47%
North America	40%	25%	28%	19%
UK All Companies	12%	31%	63%	41%
TOTAL	**30%**	**33%**	**45%**	**34%**

Source: AJ Bell, Morningstar total return in GBP to 30th June 2022
2021 data from 1st Jan 2021 to 1st Dec 2021

Table 2. Active and passive fund performance

	H1 2022		5 years		10 years	
IA sector	Active	Passive	Active	Passive	Active	Passive
Asia Pacific Ex Japan	-7.5	-4.6	27.6	27.9	127.5	122.2
Europe Ex UK	-16.3	-16.2	17.3	18.4	152.5	149.0
Global	-14.7	-11.7	43.5	52.8	184.7	219.7
Global Emerging Markets	-12.5	-8.0	14.9	18.3	75.6	82.7
Japan	-13.4	-11.5	13.6	15.6	123.7	121.5
North America	-13.3	-11.8	66.8	77.8	284.1	310.6
UK All Companies	-13.5	-4.4	10.7	16.0	101.1	90.3

Source: AJ Bell, Morningstar total return in GBP to 30th June 2022

There has been a big improvement in the number of US funds outperforming the typical passive alternative, up from 19% in 2021 to 40% in the first half of 2022. But the US has proved a particularly challenging arena for active managers over a longer time frame. Just 28% have beaten a passive alternative over 10 years, returning on average 284.1% compared to 310.6% from the average passive fund. Even the top quartile of active performers only just sneaks ahead of the average passive fund, returning 315.8% over ten years (**Table 9**). The same dynamics carry over into the global sector, where US exposure makes up around two thirds of the typical passive fund. In both cases investors have been rewarded with stellar absolute returns, which likely takes much of the edge off active underperformance.

The UK equity fund sector is a different kettle of fish. Long term returns have been substantially weaker than the US over the last decade, but active management has been more successful. 63% of active funds have outperformed over the last ten years, returning on average 101.1% compared to the average passive fund which has returned 90.3%. A top quartile UK equity fund has opened up a considerable margin over passive competitors over this time frame, recording a total return of 128.5% (**Table 9**).

The Achilles heel for UK active managers

Exposure to mid and small cap areas of the market has proved to be an Achilles heel for UK active managers in 2022, though it's been a big tailwind in the longer term. As **Table 3** shows, the typical UK fund is considerably underweight large caps and overweight mid and small caps compared to the average UK passive fund.

Table 3. UK fund cap style

	Morningstar Equity Category		
IA UK All Companies sector	Large cap %	Mid cap %	Small cap %
Average active fund	41	31	20
Average passive fund	63	25	6
% overweight/ underweight in average active fund	- 22	+ 6	+ 14
% of active funds overweight large cap	6%		

Source: AJ Bell, Morningstar, based on portfolios in January 2022
Rows may not sum to 100% due to cash and other holdings

Table 4. UK stock market performance

	Total return %		
	H1 2022	5 years	10 years
FTSE 100	-1.0	18.8	88.0
FTSE 250	-19.4	9.1	120.9
FTSE Small Cap	-15.1	29.0	176.3
FTSE All Share	-4.6	17.8	94.6

Source: Morningstar total return in GBP to 30th June 2022

There are a number of reasons for this. The very largest companies in the UK stock market have high weightings within the index. AstraZeneca and Shell each make up over 7% of the index, and HSBC makes up almost 5%. Even if an active fund manager had a high degree of confidence in one of these companies, they would need to hold a very big position in their fund in order to be neutral or overweight compared to the market. To match the amount held by tracker funds across all these mega caps, they would also have to have such confidence in a large number of them.

Fund managers also often find more compelling investment opportunities in the small and mid-cap space, where there is lower coverage by sell-side analysts and overseas investors, and more scope for high levels of growth. Indeed, within the UK All Companies sector there are funds which specifically target mid and small cap segments, as well as those which maintain a flexible approach across all company sizes. On top of which ESG funds will tend to be weighted more towards small and mid-caps, and away from blue chip carbon guzzlers like Shell and BP. Indeed, even more mainstream funds with a light ESG input may not be comfortable with a market weighting in these stocks. It comes as no great surprise then that only 6% of UK active funds are overweight large caps, with 94% being underweight compared to the average passive fund.

The higher exposure to mid and small caps has undoubtedly been a drag in 2022 so far, as **Table 4** shows. While energy stocks have acted as buoyancy aid for the FTSE 100, sentiment towards the growth stocks that feature heavily in the small and mid-cap areas of the London Stock Exchange has turned sour, and resulted in steep price falls this year. This in turn has taken its toll on UK active managers as a whole, and means that many UK active fund investors haven't benefited from the relatively strong performance of the FTSE 100 in 2022. The UK's benchmark index fell by just 1% in the first half of the year. The average active fund fell by 13.5%.

The longer term performance figures show that carrying a higher exposure to the small and mid-cap areas of the market has been a significant boon for UK active managers, and acts as a key differentiator from index trackers. Looking forward we can therefore probably expect that to continue to be the case, albeit with some setbacks along the way.

(N.B. The Morningstar equity categores in Table 3 don't precisely overlap with the segments of the FTSE All Share, for instance the Morningstar Large Cap Equity category accounts for the top 75% of the FTSE 100, the remainder is included in the Mid Cap Equity category).

A 'good' year for US active managers

The story of the US stock market this year so far has been dominated by the sell-off in growth stocks, especially within the technology sector. These stocks dominate the top of the US index, and by extension, the funds that track it. Looking at some of the biggest tech names in the index, they have fallen by on average 30.9% so far this year, compared to the average S&P 500 stock which has fallen 6.7% (in pounds and pence - see **Table 5**).

Table 5. Tech titans' performance

	H1 2022 return %
Alphabet Inc	-15.7
Amazon.com Inc	-28.9
Apple Inc	-13.9
Meta Platforms Inc	-46.5
Microsoft Corp	-14.5
Netflix Inc	-67.6
Tesla Inc	-28.9
Average tech titans	-30.9
Average S&P 500 stock	-6.7

Source: AJ Bell, Morningstar total return in GBP to 30th June 2022

One might have thought that the sell-off in big tech would have afforded active managers in the US an opportunity to play catch up on their passive rivals, who blindly buy into the biggest companies in the market, come what may. However, the average tech exposure of US active funds was only just shy of passive funds at the beginning of the year, making up 25.4% of the typical active fund compared to 25.9% of the typical tracker. Nonetheless that means just under half of active funds were underweight technology stocks, and combined with the scale of poor performance from the tech sector, that has helped to lift the number of active funds outperforming, from a pretty low base.

In total, 40% of active US funds outperformed a passive alternative in the first half of the year. That may not look too impressive, but it's a significant improvement on the 19% who made the grade in 2021, and compares favourably to the 28% who have outperformed over ten years. By their own modest standards therefore, it's been a good year for US active managers.

Of the 40% of US funds that outperformed a tracker in the first half of 2022, 76% were underweight the technology sector at the beginning of the year. Or to look at this through a different lens, the average performance of active US funds that were overweight technology was -20.3% in the first half of this year, while the average performance of funds that were underweight was -11.0%. Clearly tech exposure was therefore an extremely large determinant of performance, and the turmoil in the part of the market created the conditions for more US active managers to outperform.

Long term US underperformance

While 40% of US active funds outperformed a passive alternative in the first half of 2022, only 28% have outperformed over the last ten years. This probably comes down in part to active managers' propensity to be underweight large caps. As with UK equity funds, active managers investing in US shares are also underweight large caps, albeit to a lesser extent (see **Table 6**).

Table 6. US fund cap style

	Morningstar Equity Category		
IA North American sector	Large cap %	Mid cap %	Small cap %
Average active fund	72	21	2
Average passive fund	83	16	0
% overweight/ underweight in average active fund	- 11	+ 5	+ 2
% of active funds overweight large cap	20%		

Source: AJ Bell, Morningstar, based on portfolios in January 2022
Rows may not sum to 100% due to cash and other holdings

The closer alignment between active and passive large cap exposure in the US, in comparison to the UK, might be because active managers think the big tech companies of the S&P 500 have a brighter future than old economy banks and mining companies that dominate the top of the UK stock market. These tech stocks will also tend to score better in terms of ESG ratings, which may mean active managers allow themselves a fuller weight in their portfolios.
The large cap portion of the US stock market also simply includes many more companies, so managers may feel they

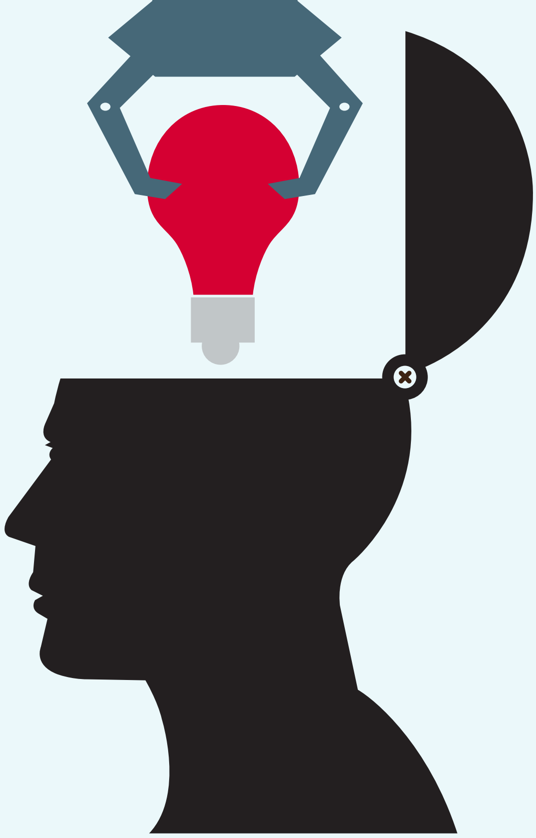
Table 7. US stock market performance

	Total return %		
	H1 2022	5 years	10 years
S&P 500 (large caps)	-10.7	82.7	336.7
S&P MidCap 400 (mid-caps)	-10.3	50.2	263.4
Russell 2000 (small caps)	-14.6	37.6	215.8

Source: AJ Bell, Morningstar total return in GBP to 30th June 2022 can more easily build a differentiated and diversified portfolio without looking further down the cap scale.

In the long term, the underweight position in large caps has had the opposite effect on US active managers than in the UK sector though. That's because in the US it has been the large cap stocks which have led market performance over the last ten years, leaving mid and small caps trailing in their wake (see **Table 7**). Being underweight large caps compared to a passive fund therefore has left active managers at a performance disadvantage, simply by virtue of the size profile of stocks within their portfolio.

At the same time, large caps still make up the lion's share of a typical active US equity fund. With so many analytical eyes on the large cap segment of the market, active managers will find it difficult to unearth hidden gems which can drive stock selection, and performance. These dynamics probably go a long way to explaining why so few active managers in the US have been able to outperform their passive peers over the long term.



How have top quartile active funds done?

No-one invests in an active fund in the hope or expectation that it will deliver just average performance, so how have strong performers done? Looking at the range of active fund performance within each sector, in both the UK and Global Emerging Markets sectors, being invested in a top quartile active fund didn't guarantee beating a passive alternative in the first half of 2022, and in several other sectors it was a close run thing. Again this highlights what a tough year it has been for active managers so far, and even for those investors who have backed a fund manager that has risen above most of their peers.

Over a ten year period, top quartile active funds have beaten the average passive alternative across all sectors. Outperformance has been particularly robust in the UK, Japan, Europe Ex UK, and Asia Pacific Ex Japan. However, even given such a long period in which active managers can showcase their skills, some top quartile funds in the Global and North America sector only just nudged ahead of the average tracker fund.

While a spread of performance is expected amongst active funds, it may come as some surprise to observe the range of outcomes delivered by passive funds in certain sectors. Mostly this comes down to index selection, though over the long term, charges play a part too.

Table 8. Top and bottom quartile funds H1 2022

	Active funds H1 2022 performance %			
IA Sector	Bottom Quartile	Average	Upper Quartile	Average passive
Asia Pacific Ex Japan	-10.4	-7.5	-4.5	-4.6
Europe Ex UK	-21.1	-16.3	-13.2	-16.2
Global	-20.3	-14.7	-10.6	-11.7
Global Emerging Markets	-16.3	-12.5	-9.6	-8.0
Japan	-20.4	-13.4	-8.2	-11.5
North America	-20.2	-13.3	-9.1	-11.8
UK All Companies	-20.4	-13.5	-6.5	-4.4

Source: AJ Bell, Morningstar total return in GBP to 30th June 2022

Table 9. Top and bottom quartile funds over ten years

	Active funds 10 year performance %			
IA Sector	Bottom Quartile	Average	Upper Quartile	Average passive
Asia Pacific Ex Japan	105.2	127.5	156.9	122.2
Europe Ex UK	138.2	152.5	171.4	149.0
Global	144.6	184.7	222.8	219.7
Global Emerging Markets	61.7	75.6	92.9	82.7
Japan	103.0	123.7	148.3	121.5
North America	242.6	284.1	315.8	310.6
UK All Companies	83.6	101.1	128.5	90.3

Source: AJ Bell, Morningstar total return in GBP to 30th June 2022

As mentioned previously, in the UK this year there has been a wide performance differential between large cap and mid-caps stocks, resulting in the best performing passive fund, a FTSE 100 tracker, returning 0.5% in the first half of 2022, and the worst performing fund, a FTSE 250 tracker, returning -21.1%.

In the Asia Pacific region, the high divergence in passive performance also comes down to a polarisation of funds around two different indices. The MSCI Pacific Ex Japan Index tracks the performance of four developed nations in the region, while the FTSE World Asia Pacific Ex Japan Index additionally incorporates advanced emerging economies, such as Korea and Taiwan. Funds that track the latter consequently have a higher weighting to the technology sector, in particular Samsung and Taiwan Semiconductor Manufacturing, which have sold off significantly in 2022, leading to weaker performance from this index.

Over the longer term the range of index tracker performance within some fund sectors remains significant, again representing a range of indices available within each market and the effect of different charging levels, which play a greater role over longer time periods.

The divergent performance of trackers within the same sector shows that index investors do still need to make decisions which will determine the performance of their investments, especially the index being tracked and the fund charges they pay. Even passive investing does therefore require some active choice.

Table 10. Passive performance dispersion H1 2022

	Passive fund H1 2022 performance %		
IA Sector	Min	Average	Max
Asia Pacific Ex Japan	-8.8	-4.6	-0.6
Europe Ex UK	-16.4	-16.2	-15.5
Global	-12.8	-11.7	-8.8
Global Emerging Markets	-8.1	-8.0	-5.1
Japan	-11.9	-11.5	-10.9
North America	-13.6	-11.8	-10.6
UK All Companies	-21.1	-4.4	0.5

Source: AJ Bell, Morningstar total return in GBP to 30th June 2022

Table 11. Passive performance dispersion over ten years

	Passive funds 10 year performance %		
IA Sector	Min	Average	Max
Asia Pacific Ex Japan	105.7	122.2	126.3
Europe Ex UK	127.8	149.0	152.6
Global	199.6	219.7	258.6
Global Emerging Markets	70.6	82.7	82.8
Japan	118.3	121.5	124.7
North America	305.7	310.6	320.7
UK All Companies	70.6	90.3	117.7

Source: AJ Bell, Morningstar total return in GBP to 30th June 2022

Charges

As **Table 12** shows, there is still a wide range of charges applied to tracker funds in each sector. The UK is a particularly stark example, where the most costly tracker fund is 21 times more expensive than the cheapest. It will come as little surprise to learn that the UK trackers with the highest charges also find themselves at the bottom of the passive performance table over ten years. There's simply no reason for investors to hold expensive trackers when they can buy a fund that does the same job at a fraction of the annual cost, which just means more money in their pocket at the end of the day.

Looking at how active and passive funds compare in terms of charges on average, the UK All Companies sector actually has the lowest average fee for active funds, and the lowest active premium above a typical tracker fund. Meanwhile the Global Emerging Markets sector collects all three booby prizes for having on average the most expensive tracker funds, most expensive active funds, and the largest difference between the two.

Table 12. Passive fund charges

	Passive funds ongoing charges %			
IA Sector	Cheapest	Average	Most expensive	Range
Asia Pacific Ex Japan	0.11	0.16	0.33	0.22
Europe Ex UK	0.05	0.12	0.50	0.45
Global	0.12	0.14	0.59	0.47
Global Emerging Markets	0.19	0.23	0.42	0.23
Japan	0.08	0.15	0.33	0.25
North America	0.05	0.10	0.29	0.24
UK All Companies	0.05	0.16	1.06	1.01

Source: AJ Bell, Morningstar

Table 13. Active v passive fund charges

	Ongoing charges %		
IA Sector	Average active	Average passive	Active premium
Asia Pacific Ex Japan	0.93	0.16	0.77
Europe Ex UK	0.87	0.12	0.75
Global	0.92	0.14	0.78
Global Emerging Markets	1.04	0.23	0.81
Japan	0.89	0.15	0.74
North America	0.85	0.10	0.76
UK All Companies	0.84	0.16	0.68

Source: AJ Bell, Morningstar

Conclusion

2022 has not been kind to investors, and it's notable that positive returns have been largely absent across both active and passive funds in the seven equity sectors covered in this report. In such febrile market conditions, one might expect managers to come out on top of the machines, but that hasn't proved to be the case.

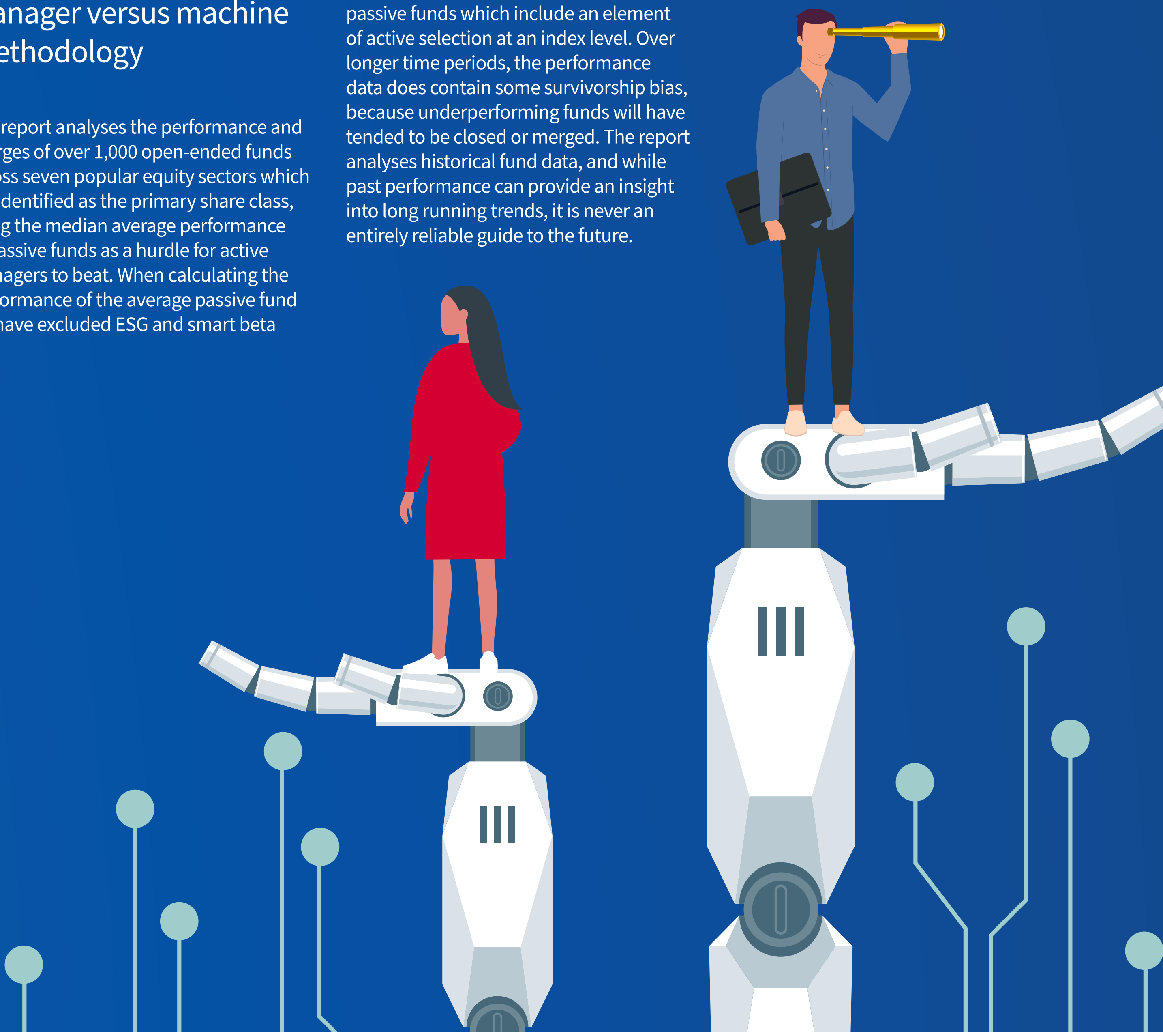
While recent performance is, almost by definition, more newsworthy, it's the long term picture which is most important for investors when considering whether to invest actively or passively. The longer term figures tell us that many active funds do outperform the typical passive fund in the long run, even after charges, though it's by no means a majority in every single sector.

While the statistics suggest that overall picking an active fund that outperforms over the long term is no better than a coin toss, investors can of course significantly tilt the odds in their favour. They can split their own portfolios between fund managers and passive machines, based on where they see the biggest rewards from active management, and indeed the most compelling performance prospects from specific active fund managers.

Unlike the most vociferous disciples of active or passive management, investors can afford to be pragmatic, not dogmatic, in their fund selection. By picking competitively priced tracker funds, and supplementing this with a bit of judicious active fund selection and diversification, they can give themselves a good chance of achieving portfolio outperformance in the long run, through a combination of both active and passive strategies.

Manager versus machine methodology

Our report analyses the performance and charges of over 1,000 open-ended funds across seven popular equity sectors which are identified as the primary share class, using the median average performance of passive funds as a hurdle for active managers to beat. When calculating the performance of the average passive fund we have excluded ESG and smart beta passive funds which include an element of active selection at an index level. Over longer time periods, the performance data does contain some survivorship bias, because underperforming funds will have tended to be closed or merged. The report analyses historical fund data, and while past performance can provide an insight into long running trends, it is never an entirely reliable guide to the future.



Notes to editors:
Past performance is not a reliable guide to the future and some investments need to be held for the long term. This content is intended for journalists only and should not be relied upon by individual investors.