

# Active-Passive Navigator: 2020

The Active-Passive Navigator contains a comprehensive analysis of the performance of active managers over the last 10 years. In this report, we also assess the main trends that have influenced global market performance and how well active managers generated alpha in 2020.

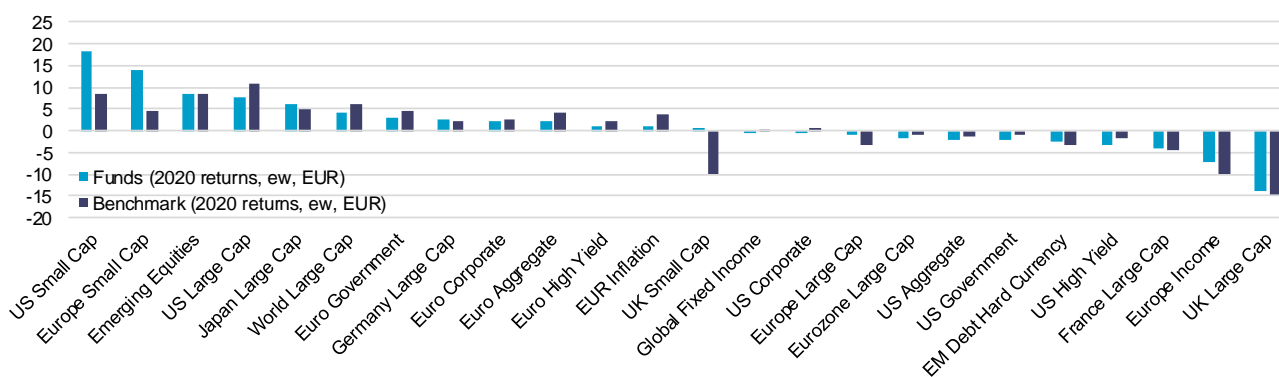
## Equities

- ▶ Active managers faced extremely challenging markets in 2020, and many have been able to navigate them successfully.
- ▶ Many **Large Cap** managers have been able to use the elevated dispersion and volatility to deliver strong alpha, in pretty much all asset classes except for World and US Large Cap.
- ▶ **Small Cap** managers strongly outperformed in 2020. Many identified alpha opportunities in sector rotation, stock picking and market timing. Excess return in small cap segments even exceeded 10% for UK Small Cap.

## Fixed Income

- ▶ It was a tough year for fixed income managers, who faced a liquidity squeeze in March, followed by a relentless bond rally and aggressive credit-spread compression thereafter.
- ▶ **Government Bonds:** The bond rally was challenging to beat for Sovereign strategies, especially in Europe. US and Global Aggregate were more resilient.
- ▶ **Corporate Bonds:** HY strategies' cautiousness in Q1 proved costly in H2 while dispersion in credit faded. Emerging Market managers benefited from many relative value opportunities and good market timing.

**A strong year overall for Equity active managers, rather mixed for Fixed Income (2020 returns per exposure in €)**



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not a reliable indicator of future returns.

## Lyxor Research Contributors

### ETF Research & Solutions

Vincent Denoiseux (Head)  
[vincent.denoiseux@lyxor.com](mailto:vincent.denoiseux@lyxor.com)

### Cross Asset Research

Jean-Baptiste Berthon (Senior strategist)  
[jean-baptiste.berthon@lyxor.com](mailto:jean-baptiste.berthon@lyxor.com)

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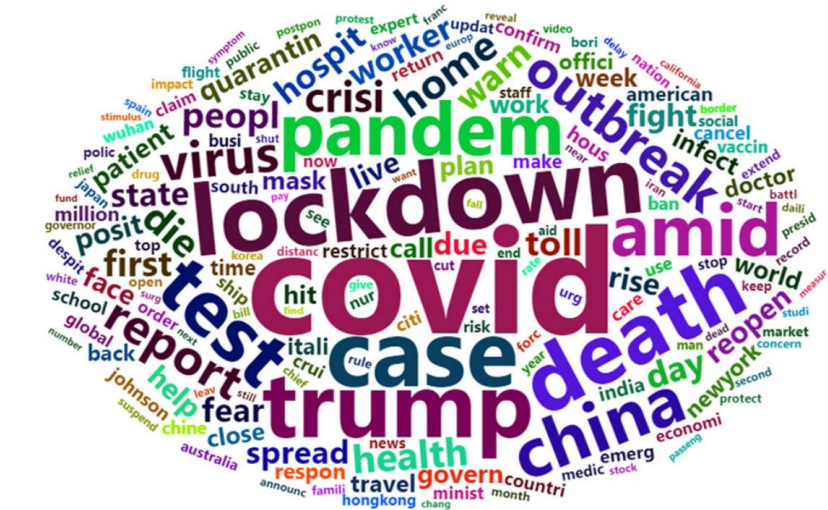
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# 2020... in 20 numbers

“Unprecedented” and “unique” ... these are two of the many words used to describe financial market conditions over the first half of 2020.

In the following pages we highlight 20 key numbers and themes that came under the spotlight in 2020 and provide some perspective on active performance and their main driving factors.



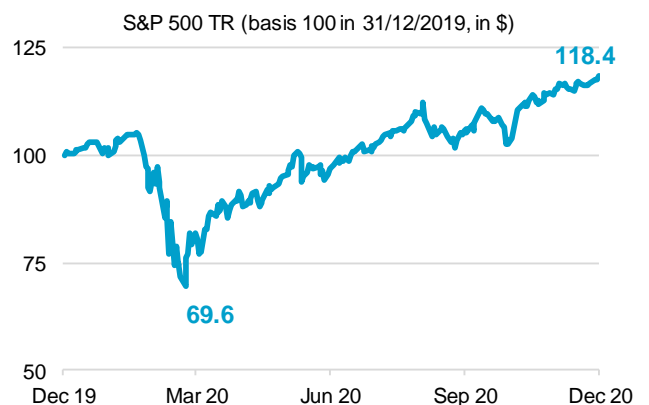
Source : Sentiments and emotions evoked by news headlines of coronavirus disease, <https://doi.org/10.1057/s41599-020-0523-3>

## 51%: the magnitude of the S&P 500's V-Shape recovery in 2020

After a 30.4% collapse, the market recovered fast to end 2020 with 18.4% upside

- ▶ In response to widespread activity restrictions to contain the spread of the Covid-19 virus, central banks and governments across the globe took unprecedented steps to support liquidity and activity.
- ▶ The strong market reversal has been very challenging for active managers, especially Fixed Income managers who had to face record outflows in March 2020 and subsequent liquidity issues on bonds.

**S&P 500: navigating the V-Shape**  
Total return, basis 100 in 31/12/2012



Have a look at our [Money Monitor, 2020 in review](#) for more insights on market liquidity and flows

Source: Bloomberg LP, Lyxor International Asset Management. Data as at 15/01/2021. Past performance is not a reliable indicator of future returns.

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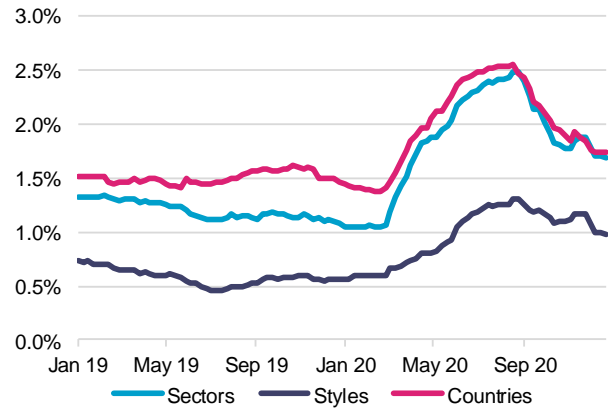
## 50%: the increase in dispersion across World Equity factors compared to 2019

Active managers have benefited from a greater set of opportunities to outperform

- ▶ A favourable market environment and valuation dispersion are among factors allowing Active managers to deliver strong excess returns
- ▶ This can be measured with market breadth metrics. To give an example: in a market where all stocks would have the same valuation (say, the Price to Earnings ratio), then there would be no opportunity hence no “view”, for a value-oriented strategy.
- ▶ Alpha generation approach can be simplified as:  
**“Outperformance = Skills \* Opportunities”**
- ▶ Bearing this in mind, investors have not been short of opportunities in 2020.

Return dispersion – as measured by the standard deviation of weekly returns - has jumped across Sectors, Countries and Styles by 50% on average (here on World Equities) and arising opportunities for Equity Managers to outperform.

**Alpha opportunities: elevated dispersion in 2020**  
 Cross sectional standard deviation of several factor indices, observed on World Equities (weekly returns, 26-week average, in €)



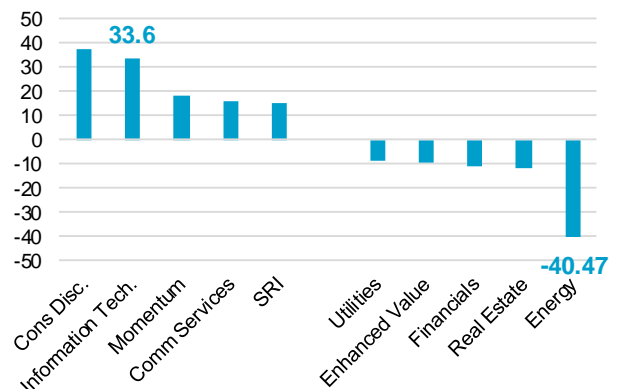
Source: Morningstar, Lyxor International Asset Management. Data as at 15/01/2021. Past performance is not a reliable indicator of future returns.

## 74%: the 2020 return spread between USA IT and Energy sectors

Sector rotation has been one of the most relevant themes for Equity managers

- ▶ Sector Rotation has been actively played across Equity markets.
- ▶ Sector Return dispersion has surged in 2020 as seen in the Energy (-40.5%) and Information Technologies (33.6%) sectors.

**Cumulated 2020 performance of USA factors**  
 Net return of Top 5/Bottom 5 MSCI Sectors, Styles and ESG indices (in €, %)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not a reliable indicator of future returns.

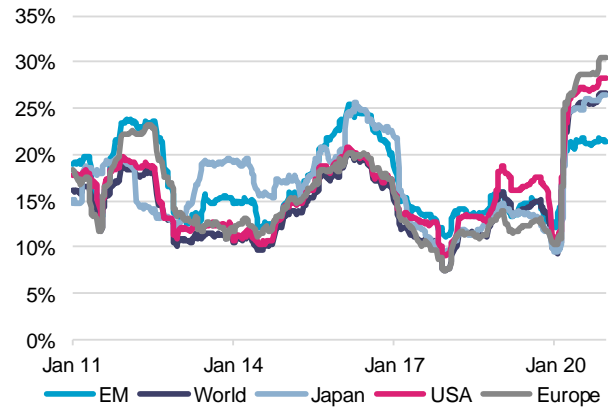
## 27%: the average Equity markets' volatility in 2020

### Elevated volatility provides both risk and opportunities

- ▶ Active managers take advantage of market volatility to increase or reduce portfolio exposure and deliver alpha. Allocation decisions can be translated either explicitly (i.e. buying or selling risky assets) or implicitly (i.e. increasing or reducing portfolio beta by switching between high vol or low vol stocks as an example)
- ▶ In 2020, asset price volatility has been a double-edged sword for active managers. While market volatility can offer opportunities for portfolio adjustments, it can be challenging to manage in periods of heightened market dislocation as seen in March.
- ▶ Market volatility has overshot across regions in 2020 compared to the last decade.

### Volatility has been flying high across regions

52-week annualized standard deviation of returns (in %)



Source: Morningstar, MSCI, Lyxor International Asset Management. Data as at 15/01/2021. Past performance is not a reliable indicator of future returns.

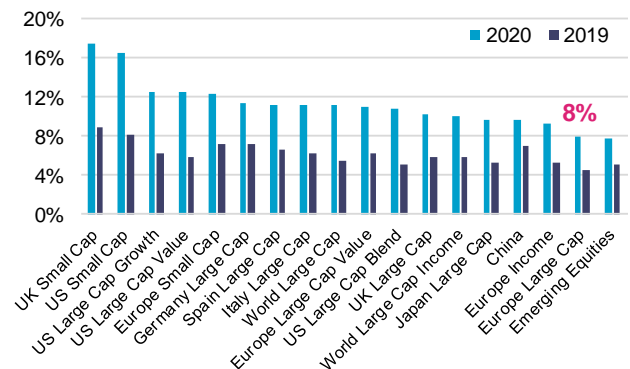
## 8%: the average tracking-error of Europe Equity funds in 2020

### This is twice as much compared to 2019 and a reflection of increased dispersion and volatility

- ▶ The tracking-error of active funds increased for all asset segments, a direct consequence of heightened volatility and dispersion.
- ▶ Active manager's tracking-error has sometimes doubled as seen for Europe Equity funds.
- ▶ We will see hereafter whether this elevated tracking-error has been translated into positive excess returns.

### Tracking-error of active funds

Standard deviation of weekly excess returns (ann., in %)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not a reliable indicator of future returns.

## 66%: the hit ratio of Europe Equity Large Cap managers in 2020

A strong result for this asset class which has benefitted from many alpha opportunities

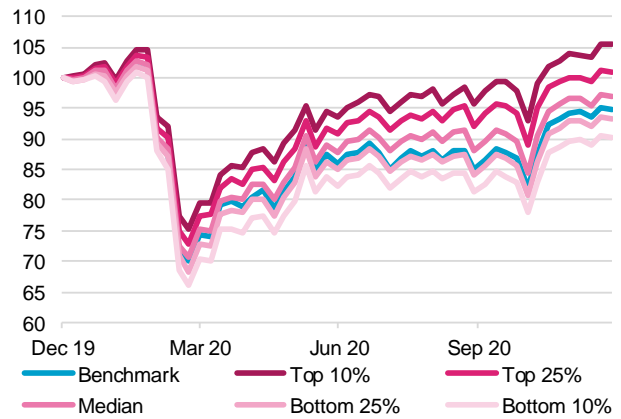
► The widespread dispersion in performance across regions was due to:

1. The Covid virus spread starting from China, then Asia more broadly, gradually reaching Europe, the US, and the rest of the world to reach pandemic status. Financial markets attempted to price the timing of this fast expansion.
2. The impact on economic activity and local market performance has been uneven and heavily dependent on countries' response to the crisis (political, organisational and economic).

► The challenging market context created a range of opportunities for active managers, like those focusing on Europe Large Cap Equities.

### Most managers navigated the European V-Shape

Funds and benchmark wealth curve (in € basis 100 Dec 19)



Source: Morningstar, Lyxor International Asset Management. Data as at 15/01/2021. Past performance is not a reliable indicator of future returns.

## In 70% of asset classes, large-size funds outperformed their smaller peers

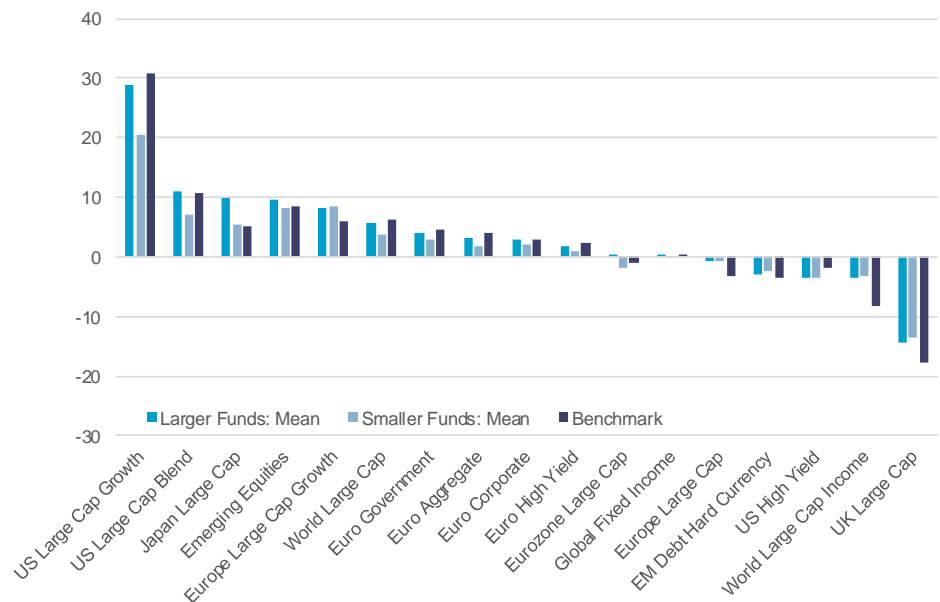
Large funds (€500+ M) have significantly outperformed their smaller peers

► Large investors such as multi asset managers tend to allocate in larger funds.

► In 2020, €500M+ funds have, on average, outperformed their smaller peers.

### 2020 return large funds (€500M) vs smaller peers

Cumulated returns of large, smaller fund and their respective asset class benchmark (in €)



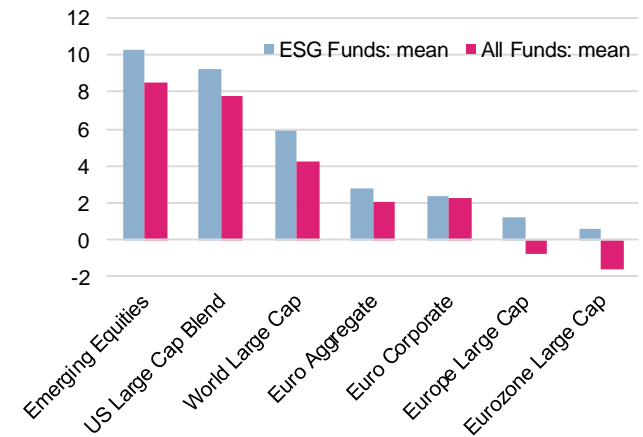
Source: Morningstar, MSCI, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not a reliable indicator of future returns. Asset segments with less than 25 relevant funds have been dismissed.

## Across all covered asset classes, ESG funds outperformed their peers on average

In 2020, ESG funds delivered an average of 1.4% excess return against respective peers' average

- ▶ Flows into ESG funds and ETFs surged in 2020 (see [Money Monitor, 2020 in review](#)).
- ▶ When comparing ESG funds' performance across exposures to their respective mean returns in 2020, we found that ESG funds have significantly outperformed peers (1.4% average excess return). This phenomenon has been also observed on financial indices as discussed in our previous [Expert's View](#) on ESG's outperformance.
- ▶ Several factors have influenced this outperformance through 2020: a) many of these funds had an overweight to tech b) many underweighted Oil & Gas and c) ESG had a strong correlation with Quality, a factor that outperformed strongly during the crisis.

**ESG active funds outperformed**  
2020 returns per exposure (in €)



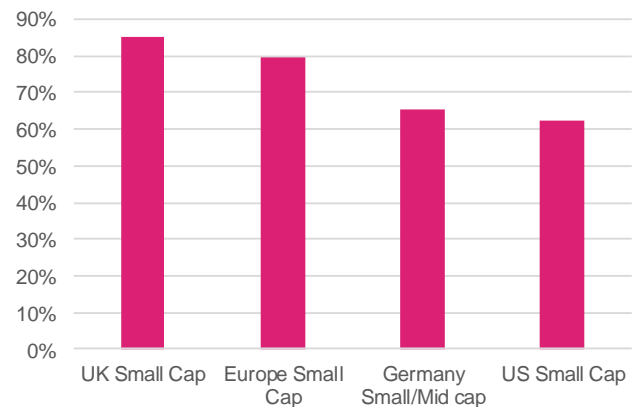
Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not a reliable indicator of future returns. Exposures with less than 25 relevant funds have been dismissed.

## 80%: the average hit ratio for Europe Small Cap managers

This underlines small cap managers' resilience during the crisis

- ▶ As such, Small Caps usually receive less analyst coverage compared to large caps. They offer investors more stock picking alpha opportunities.
- ▶ 2020 has been a great year for small cap asset managers. Small cap active funds exhibited high hit ratios and large average excess return across regions.

**2020 Hit Ratio of Equity Small Cap active funds**  
2020 Hit Ratio (in %)



Source: Morningstar, MSCI, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not a reliable indicator of future returns.

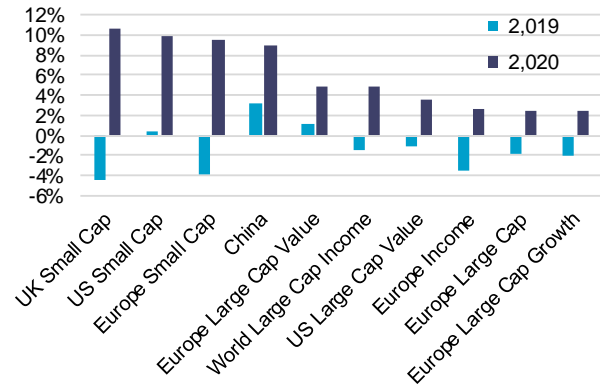
## In 85% of asset classes, the average excess return in 2020 exceeded 2019 results

2020 has been an excellent year for active managers, especially compared to 2019

- ▶ 2019 was a tough year for active managers with -2.15% excess returns on average across exposures. Compared to the last decade, the average percentile of the same excess return per category was standing at a low 38%.
- ▶ In comparison, active manager stood out in 2020. The average excess returns delivered by active managers has increased for 85% of the asset segments.

### 2020: much better than 2019

Top 10 of 2020 excess returns per exposure (in €)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not a reliable indicator of future returns.

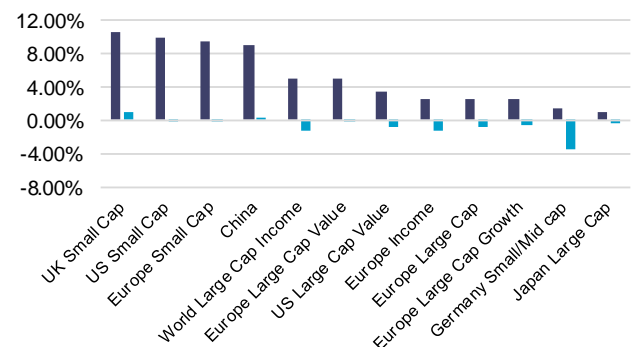
## In 3/4 of asset classes, 2020 results exceeded their 10Y average

2020 has been an outstanding year in light of last decade's results

- ▶ Active managers have successfully navigated rising equity dispersion and volatility in 2020 as shown by their strong outperformance versus 10-year mean.
- ▶ Overall, active excess returns in 2020 exceeded their 10 year average over 3/4 of the asset segments. The outperformance of Small Cap managers has been outstanding.

### 2020 a strong year compared to the last decade

2020 excess returns per exposure (in €)



■ 2020: Average Excess Return per Exposure  
 ■ Last 10Y: Average Excess Return per Exposure (average over 10Y)

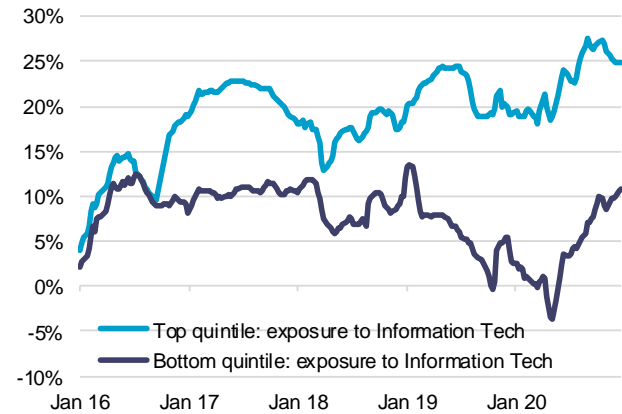
Source: Morningstar, MSCI, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not a reliable indicator of future returns.

## 14%: difference of exposure to IT of US Equity funds top and bottom quintiles

In 2020 funds' exposure to Information Technology was paramount to deliver alpha

- ▶ We have built a detailed return-based factor analysis across the entire European fund universe. Going forward, we will provide more colour on these results.
- ▶ Here we compared IT exposure of the top quintile of US Equity Large Cap managers with the IT exposure of the bottom quintile .
- ▶ As we saw above, IT's performance sky-rocketed in 2020. Top managers have been able to capture this trend by keeping and even increasing their high exposure to this sector.

### US Equity: exposure to IT was critical Exposure of funds 2020's top and bottom quintile



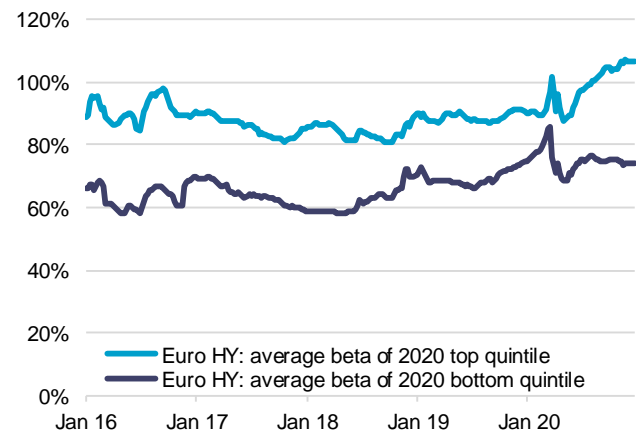
Source: Morningstar, MSCI, Lyxor International Asset Management. Data as at 15/01/2021. Past performance is not a reliable indicator of future returns.

## 98% average beta over 2020 for the EUR High Yield top performers

“Keep calm and carry on”: 2020's motto for top Active EUR High Yield managers

- ▶ Fixed Income funds and ETFs domiciled across the world posted their largest outflows on record (\$-508.3bn - see [Money Monitor, 2020 in review](#)). Outflows from EUR Fixed Income were widespread across all sub-categories. In USD Fixed Income, Government Bonds remained the safe asset of choice. Riskier Fixed Income sub-segments such as High Yield and EM debt suffered from very significant outflows.
- ▶ In such a challenging environment, it was very tough to keep the right exposure. EUR High Yield top managers were slightly under-weighted before the crisis and have been able to increase their risk exposure through Q2 and Q3. This was an opportunistic bet that paid off towards year-end.

### In 2020, EUR HY top funds kept a stable exposure Beta of funds 2020's top and bottom quintiles



Source: Morningstar, MSCI, Lyxor International Asset Management. Data as at 15/01/2021. Past performance is not a reliable indicator of future returns.



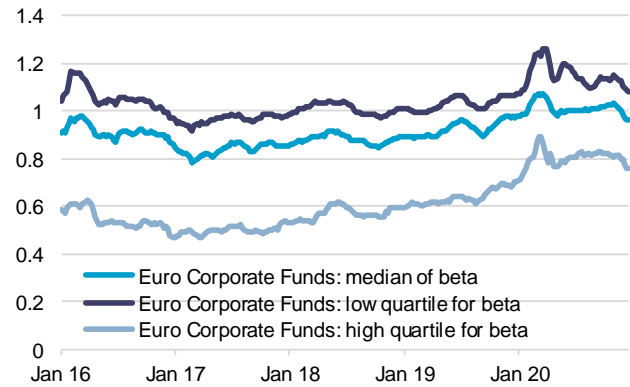
## 98%: median beta of EUR Corporate funds in the 3 months before the market crash

In the first part of 2020, EUR Corporate managers suffered from their high exposure

- ▶ IG Corporate managers struggled on average to deliver excess return on the back of a high historical beta at the beginning of the year.

Some managers suffered from heavy outflows and had to sell significant assets. This eventually triggered important liquidity issues at the height of the crisis in late March 2020.

### Euro Corporate: 2020's initial beta was elevated Beta of 2020's top and bottom quintile



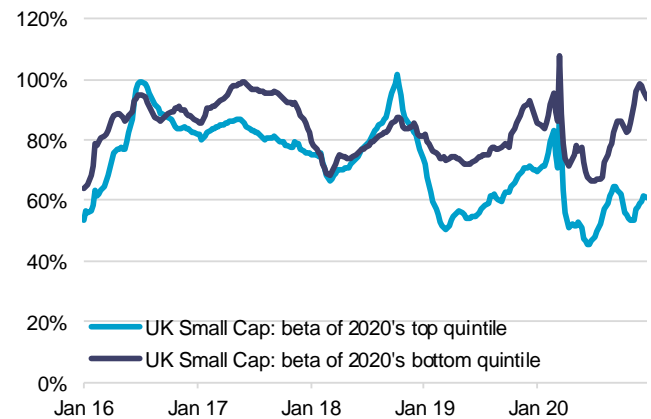
Source: Morningstar, MSCI, Lyxor International Asset Management. Data as at 15/01/2021. Past performance is not a reliable indicator of future returns.

## 60% average beta over 2020 for the UK Small Cap top performers

UK Small Cap managers have been rewarded by their defensive stance

- ▶ Not all asset classes delivered high performance in 2020 including UK Small Cap.
- ▶ The best UK Small Cap managers successfully navigated a very difficult market dominated by Covid and Brexit uncertainty. Their defensive stance (lower portfolio beta and opportunistic stock picking) paid off.

### In 2020 top UK Small Cap funds kept a low beta Beta of 2020's top and bottom quintile (returns in €)



Source: Morningstar, MSCI, Lyxor International Asset Management. Data as at 15/01/2021. Past performance is not a reliable indicator of future returns.

## Only 12% of active World Equity managers outperformed in both 2019 and 2020

### Alpha consistency is still a complicated endeavour

- ▶ 2020 has provided many opportunities for equities and stock pickers. Nonetheless, many investors have a longer-term investment horizon, sticking to their asset allocation for several years.
- ▶ We looked at the consistency of the excess returns observed on World Equity managers in 2019 and 2020.
- ▶ Only 12% of active managers delivered positive excess returns in both years. While some active investors might be able to juggle between active managers, this number is a strong reminder that alpha generation is hardly consistent across market cycles.

### World Equity: alpha's consistency was limited Annual excess returns in 2019 and 2020



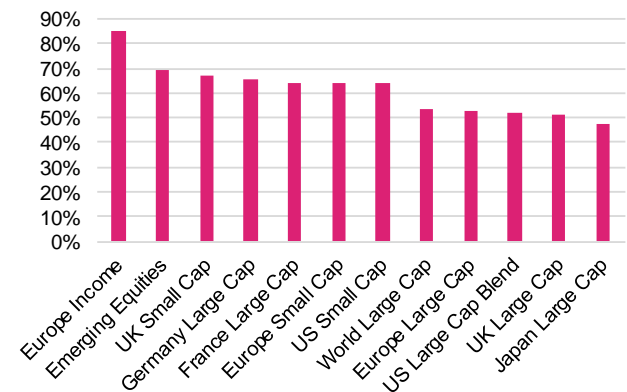
Source: Morningstar, MSCI, Lyxor International Asset Management. Data as at 15/01/2021. Past performance is not a reliable indicator of future returns.

## 52%: 10Y survivorship of US Equity Large Cap funds

### Funds are launched, managed, and sometimes closed

- ▶ The fund market is a lively place. Funds are launched, managed and sometimes restructured. Whilst fund restructuring doesn't always happen due to underperformance, limited performance often leads to commercial struggles and a potential closure of unviable funds.
- ▶ Equity Fund's survivorship is fairly low over a 10 years span with most survivorship rates ranging from 80% to just 50%, depending on the exposure.

### 10Y active fund survivorship is rather limited Survivorship rate of Equity Funds over 10Y



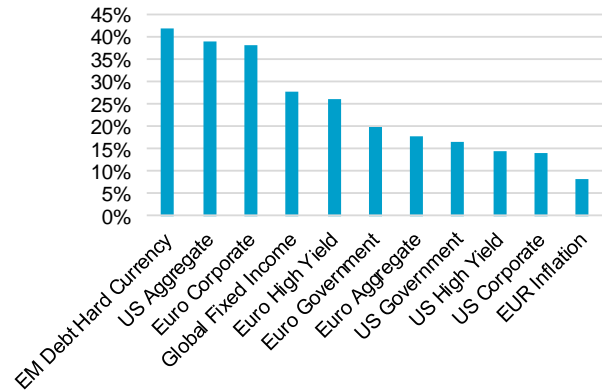
Source: Morningstar, MSCI, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not a reliable indicator of future returns.

## 38%: 5Y hit ratio of Euro Corporate Funds

One of the highest hit ratios among Fixed Income Funds managers

- ▶ Over several years, alpha opportunities happen, but fees and transaction cost are compounding.
- ▶ In the Fixed Income space, ultra-low interest rate levels in the last few years have made active manager's job hard. However, many have been able to position their portfolio in an adequate manner.
- ▶ Over 5Y, active Europe Corporate funds managers delivered positive excess return in 38% of the cases.

**Fixed Income: Hit Ratio over 5Y**  
Hit Ratio of live funds only (returns in €)



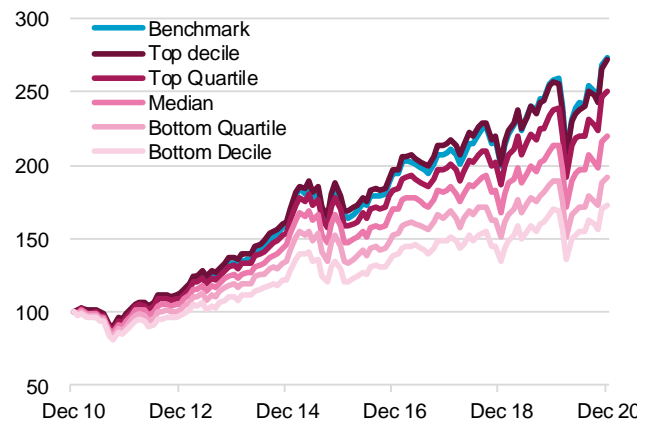
Source: Morningstar, MSCI, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not a reliable indicator of future returns.

## 9%: 10Y hit ratio of World Equity Large cap funds

Limited alpha consistency has compounded over time, leading to disappointing results

- ▶ The fantastic Equity rally observed over the last decade has been very tough to follow for active managers.
- ▶ Only 9% of World equities managers have been able to consistently outperform their Net Benchmark.

**World Equities: the 10Y rally was hard to match**  
Cumulated monthly returns (basis 100, in €)



Source: Morningstar, MSCI, Lyxor International Asset Management. Data was collected on 15/01/2020. Past performance is not a reliable indicator of future returns.

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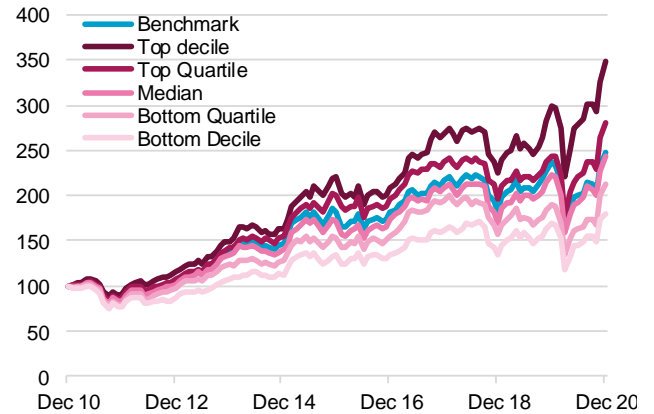
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## 43%: 5Y hit ratio of Europe Small Cap Funds

Many active Small Cap managers weathered the tumultuous 10 Y Europe Equity rally.

- ▶ In less liquid exposures, such as Europe Small Cap managers have favoured stock picking and sector rotation opportunities. This has paid off with positive alpha generation.
- ▶ 43% of active Europe Small Cap managers outperformed over the long term.

### Europe Small Cap: decent long-term alpha Cumulated monthly returns (basis 100, in €)



Source: Morningstar, MSCI, Lyxor International Asset Management. Data as at 15/01/2021. Past performance is not a reliable indicator of future returns.

## What's happened in H2 2020?

[Return to Summary](#)

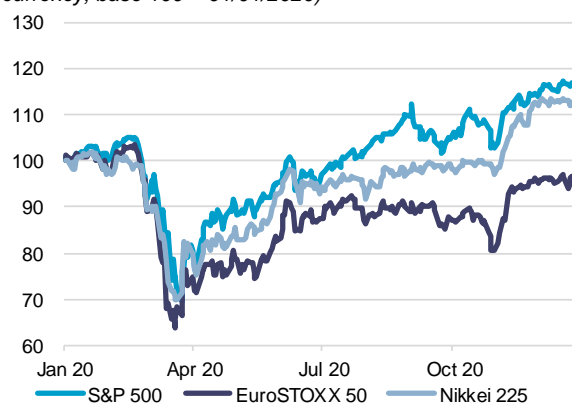
### Equity: Small caps managers maintained their lead

Equity managers proved resilient in 2020, a year of many challenges. They benefitted from the recovery in global activity over the second half of the year, allowing for a greater focus on stock fundamentals as return dispersion have arisen. However, some failed to keep up with the strong market rally and heavy sector rotation towards cyclicals, following the surprise Covid 19 vaccine breakthrough in November and reduced political uncertainty as the year came to an end.

Small cap managers accelerated their lead from H1, along with managers focused on UK and China equities. The former successfully navigated H2, at a time when the dispersion in equities return allowed for a greater focus on corporate fundamentals and revived corporate actions. UK small caps managers benefitted from portfolio reweighting towards stocks that would benefit from an orderly Brexit and reduced exposure to those most sensitive to a weaker economic activity. EM equities managers successfully allocated into Asia cyclical stocks at the expense of other regions, but some missed the recovery in Latin America towards year end.

In contrast developed market performance stalled at the turn of the summer after a strong V shaped market recovery. Profit taking in the US tech sector sparked a broader market correction, amid a re-acceleration in virus infection in Europe and resurging political uncertainty (US fiscal negotiations, US presidential elections outcome, Brexit deadline). In November, the surprise Pfizer/BioNTech vaccine announcement and Joe Biden's victory as US president elect was painful for alpha. Some managers failed to shift exposures towards more cyclical bets and lagged. As an example, European equities managers missed part of the rally due to reduced exposures to Value stocks and to Southern Europe – that were the hardest hit during the pandemic. US and World large caps managers underperformed further as a result.

**2020: a full V-shape for most regional Equity indices**  
Performance of the main equity indices (Net total return, in local currency, base 100 = 01/01/2020)



Source: Bloomberg, Lyxor International Asset Management, data as at 15/01/2020. Past performance is not a reliable indicator of future performance.

### Equity Managers' Excess Return in 2020

Equal-weighted average of the relative performance of active funds by exposure (in EUR)

Exposure	Funds Return (ew)	Excess Return (ew)
UK Small Cap	0.7%	10.7%
US Small Cap	18.5%	9.9%
Europe Small Cap	14.1%	9.5%
China	29.0%	9.0%
Europe Large Cap Value	-8.0%	4.9%
World Large Cap Income	-3.4%	4.9%
US Large Cap Value	-4.7%	3.5%
Europe Income	-7.2%	2.6%
Europe Large Cap	-0.8%	2.5%
Europe Large Cap Growth	8.3%	2.5%
Germany Small/Mid cap	16.6%	1.5%
Japan Large Cap	6.1%	1.1%
Italy Large Cap	-2.9%	1.0%
UK Large Cap	-13.7%	0.9%
France Large Cap	-4.0%	0.5%
Switzerland Large Cap	4.8%	0.5%
Germany Large Cap	2.6%	0.2%
Emerging Equities	8.5%	-0.1%
Spain Large Cap	-12.9%	-0.2%
Eurozone Large Cap	-1.6%	-0.6%
World Large Cap	4.2%	-2.1%
US Large Cap Blend	7.8%	-3.0%
US Large Cap Growth	23.2%	-7.8%

Source: Morningstar, Lyxor International Asset Management. Excess Return is calculated against each respective Benchmark, gross of fees. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Fixed Income managers: EM hard currency debt managers ahead of the pack

The market environment proved more challenging for Fixed Income managers in H2 2020. EM hard currency debt managers proved the most resilient, while alpha generation opportunities were much more limited for Govies managers, particularly towards year end.

EM hard-currency debt managers strongly outperformed their benchmark. Not only did they increase risks by reinforcing allocation on medium-term dated issues but also shifted towards weaker quality and corporate paper. They did however well navigate elevated dispersion in EM debt market as EM inflation and central bank stimulus trends were diverging. Greater exposure to EMEA at the expense of Asian issues and a preference for higher-yielding countries and corporate issues also paid off.

US Sovereign and Aggregate funds took advantage of the changing yield curve, higher inflation, and found alpha in securitised and quasi sovereign issues. US and Global Aggregate managers' earlier moves toward munis, MBS, while favouring IG and quasi sovereign issues at the expense of treasuries, all positively contributed. They benefitted from greater infrastructure spending prospects, with market liquidity tailwinds in most regions. Broad portfolio risk was initially raised on both govies and inflation-linked assets over the summer, to then be positioned towards bear curve steepening strategies as the economic backdrop improved. US Inflation-linked exposures not only benefited from the recovery in inflation data but also from the Fed's policy shift towards average inflation targets at the Jackson Hole symposium. However, excess returns were hit when long-term yields reversed alongside the equity markets' correction in October ahead of the US elections.

Meanwhile, European Sovereign, Aggregate benefitted to some extent from a slight steepening of the EUR curve. Their preference for periphery spreads - especially Spain and Ireland (confidence on an orderly Brexit) - also contributed positively. However, uncertainties on the timing of the implementation of the Recovery Fund capped their gains.

In credit markets, US and EU managers lost some ground, with broad based spread tightening in both IG and HY markets, leaving limited opportunities for alpha generation.

### Fixed Income Managers' Alpha in 2020

Equal-weighted average of the relative performance of active funds by exposure (in EUR)

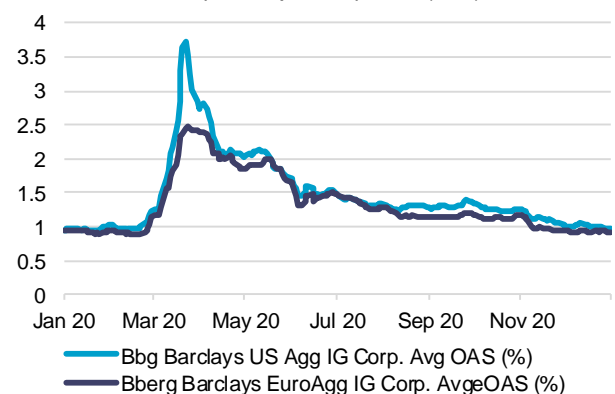
Exposure	Funds Return (ew)	Excess Return (ew)
EM Debt Hard Currency	-2.6%	0.8%
Global Fixed Income	-0.1%	-0.3%
Euro Corporate	2.2%	-0.6%
US Aggregate	-2.1%	-0.7%
Euro High Yield	1.2%	-1.1%
US Government	-2.1%	-1.2%
US Corporate	-0.6%	-1.4%
Euro Government	3.1%	-1.6%
US High Yield	-3.4%	-1.7%
Euro Aggregate	2.1%	-2.0%
EUR Inflation	1.2%	-2.6%

Source: Morningstar, Lyxor International Asset Management.

Excess Return is calculated against each respective Benchmark, gross of fees. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

### Credit spread across EUR and USD segments

Investment Grade option-adjusted spreads (in %)



Source: Bloomberg, Lyxor International Asset Management, data as at 15/01/2020. Past performance is not a reliable indicator of future performance.

However, some managers benefitted from exposures on MBS, ABS and convertibles, pushed up by the recovery in US housing markets and in consumption. US IG managers benefitted from increased exposure in consumer cyclical and utilities ahead of the US elections and chances of a Democrat “Blue Wave”. Those sectors emerged as potential prime beneficiaries from larger fiscal stimulus and infrastructure spending. Finally, High Yield managers struggled to keep up with the relentless spread tightening across issuers. The preference to cheaper medium-to-long dated issues and more defensive crossovers proved costly on a relative basis. They failed to keep up with the massive rotation in favour of the names most hit by the pandemic, especially in the highest yielding segments.

### Fixed Income Managers' Hit Ratio in 2020

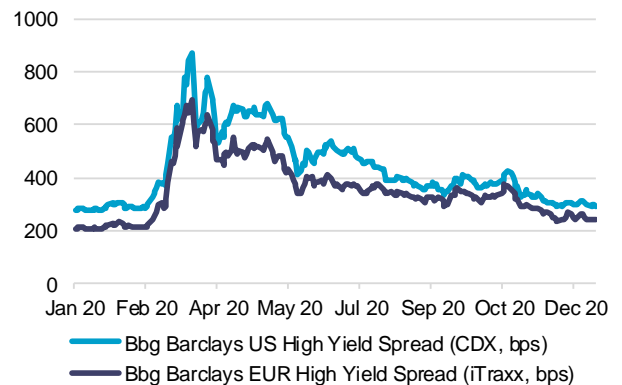
Percentage of reporting funds outperforming their respective net benchmark

Exposure	Hit Ratio
EM Debt Hard Currency	69%
US Aggregate	54%
Global Fixed Income	52%
Euro High Yield	41%
US Corporate	40%
Euro Corporate	39%
US High Yield	29%
Euro Government	24%
US Government	23%
Euro Aggregate	20%
EUR Inflation	7%

Source: Morningstar, Lyxor International Asset Management. Hit Ratio is calculated against each respective Net Benchmark, ie net of fees. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

### Credit spread across EUR and USD HY segments

High Yield credit spreads across 2020 (in bps)



Source: Bloomberg, Lyxor International Asset Management, data as at 15/01/2020. Past performance is not a reliable indicator of future performance.

## Active management performance in 2020

[Return to Summary](#)

In 2020, the ability of active managers to outperform vastly differed across exposures.

### Equity

Exposure	Hit Ratio	Exposure	Funds Return (ew)	Excess Return (ew)
Europe Large Cap Value	91%	UK Small Cap	0.7%	10.7%
UK Small Cap	85%	US Small Cap	18.5%	9.9%
Europe Small Cap	80%	Europe Small Cap	14.1%	9.5%
World Large Cap Income	78%	China	29.0%	9.0%
Europe Income	69%	Europe Large Cap Value	-8.0%	4.9%
China	68%	World Large Cap Income	-3.4%	4.9%
US Large Cap Value	68%	US Large Cap Value	-4.7%	3.5%
Europe Large Cap	66%	Europe Income	-7.2%	2.6%
Germany Small/Mid cap	65%	Europe Large Cap	-0.8%	2.5%
Europe Large Cap Growth	63%	Europe Large Cap Growth	8.3%	2.5%
US Small Cap	62%	Germany Small/Mid cap	16.6%	1.5%
Switzerland Large Cap	58%	Japan Large Cap	6.1%	1.1%
UK Large Cap	57%	Italy Large Cap	-2.9%	1.0%
Italy Large Cap	55%	UK Large Cap	-13.7%	0.9%
Germany Large Cap	49%	France Large Cap	-4.0%	0.5%
France Large Cap	48%	Switzerland Large Cap	4.8%	0.5%
Spain Large Cap	48%	Germany Large Cap	2.6%	0.2%
Japan Large Cap	47%	Emerging Equities	8.5%	-0.1%
Eurozone Large Cap	46%	Spain Large Cap	-12.9%	-0.2%
Emerging Equities	46%	Eurozone Large Cap	-1.6%	-0.6%
World Large Cap	36%	World Large Cap	4.2%	-2.1%
US Large Cap Blend	26%	US Large Cap Blend	7.8%	-3.0%
US Large Cap Growth	16%	US Large Cap Growth	23.2%	-7.8%

Source: Morningstar, Lyxor International Asset Management. Hit Ratio is calculated against the Benchmark, net of fees. Excess Return is calculated against each respective Benchmark, gross of fees. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

### Fixed Income

Exposure	Hit Ratio	Exposure	Funds Return (ew)	Excess Return (ew)
EM Debt Hard Currency	69%	EM Debt Hard Currency	-2.6%	0.8%
US Aggregate	54%	Global Fixed Income	-0.1%	-0.3%
Global Fixed Income	52%	Euro Corporate	2.2%	-0.6%
Euro High Yield	41%	US Aggregate	-2.1%	-0.7%
US Corporate	40%	Euro High Yield	1.2%	-1.1%
Euro Corporate	39%	US Government	-2.1%	-1.2%
US High Yield	29%	US Corporate	-0.6%	-1.4%
Euro Government	24%	Euro Government	3.1%	-1.6%
US Government	23%	US High Yield	-3.4%	-1.7%
Euro Aggregate	20%	Euro Aggregate	2.1%	-2.0%
EUR Inflation	7%	EUR Inflation	1.2%	-2.6%

Source: Morningstar, Lyxor International Asset Management. Hit Ratio is calculated against the Benchmark, net of fees. Excess Return is calculated against the Benchmark, gross of fees. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## The long-term view: hit ratios by exposure

In the 2 tables below, we show a long-term perspective of active funds' outperformance calculated as the 'hit ratio' for each Exposure. The hit ratio is the percentage of active funds for each respective Exposure which have outperformed their corresponding Net Benchmark. As described above, each Exposure shows very different outperformance metrics. This does not come as a surprise as dispersion, analyst coverage and importance of macro-economic factors vastly differ. Nonetheless, when looking at the broad evolution of the hit ratio over different timeframe (e.g. by looking at its cross-exposure average), results show that it can be more complicated to generate sustainable alpha over a longer period.

### Equity

Exposure	Benchmark	YtD	Hit Ratio		
			1Y	3Y	5Y
Europe Large Cap Value	MSCI Europe Value	91%	91%	71%	55%
UK Small Cap	MSCI UK Small Cap	85%	85%	86%	88%
Europe Small Cap	MSCI Europe Small Cap	80%	80%	57%	72%
World Large Cap Income	MSCI World High Dividend Yield	78%	78%	50%	46%
Europe Income	MSCI Europe High Div Yld	69%	69%	19%	25%
China	MSCI China 10/40	68%	68%	73%	66%
US Large Cap Value	MSCI USA Value	68%	68%	56%	50%
Europe Large Cap	MSCI Europe	66%	66%	43%	32%
Germany Small/Mid cap	MSCI Germany Small Cap	65%	65%	41%	10%
Europe Large Cap Growth	MSCI Europe Growth	63%	63%	50%	44%
US Small Cap	MSCI USA Small Cap	62%	62%	55%	53%
Switzerland Large Cap	Swiss Performance Index	58%	58%	31%	48%
UK Large Cap	FTSE All Share	57%	57%	52%	30%
Italy Large Cap	FTSE MIB	55%	55%	17%	35%
Germany Large Cap	MSCI Germany	49%	49%	35%	42%
France Large Cap	MSCI France	48%	48%	15%	10%
Spain Large Cap	MSCI Spain	48%	48%	38%	38%
Japan Large Cap	MSCI Japan	47%	47%	40%	47%
Eurozone Large Cap	MSCI EMU	46%	46%	33%	26%
Emerging Equities	MSCI Emerging Markets	46%	46%	41%	40%
World Large Cap	MSCI World	36%	36%	17%	14%
US Large Cap Blend	MSCI USA	26%	26%	16%	11%
US Large Cap Growth	MSCI USA Growth	16%	16%	18%	15%

### Fixed Income

Exposure	Benchmark	YtD	Hit Ratio		
			1Y	3Y	5Y
EM Debt Hard Currency	JP EMBI Global Diversified	69%	69%	30%	42%
US Aggregate	Bbg Barclays US Aggregate	54%	54%	33%	39%
Global Fixed Income	Bbg Barclays Global Aggregate	52%	52%	26%	28%
Euro High Yield	Bbg Barclays Euro High Yield	41%	41%	32%	26%
US Corporate	Bbg Barclays US Corporate	40%	40%	27%	14%
Euro Corporate	Bbg Barclays Euro Corporate	39%	39%	32%	38%
US High Yield	Bbg Barclays US High Yield	29%	29%	21%	14%
Euro Government	Bbg Barclays Euro Government	24%	24%	22%	20%
US Government	Bbg Barclays US Treasury	23%	23%	11%	17%
Euro Aggregate	Bbg Barclays Euro Aggregate	20%	20%	15%	18%
EUR Inflation	Bbg Barclays Euro Inflation	7%	7%	5%	8%

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## The long-term view: fund survivorship

### How many funds stayed afloat?

In the table below, we look at the fund universe 1Y, 5Y and 10Y ago, count the number of funds which were operating and how many of them were operational at the end of March. This is what we call the “survivorship”.

Results show that the survivorship is very high (95% on average, across all Exposures over 1 year) over short periods of time. However, survivorship decreases as the observation window increases. On average, 62% of the funds that were operational 10 years ago were still active at the end of March 2020.

Exposure	Survivorship 1Y	Survivorship 5Y	Survivorship 10Y
China	95%	83%	64%
EM Debt Hard Currency	97%	84%	72%
EUR Inflation	98%	79%	55%
Emerging Equities	96%	79%	70%
Euro Aggregate	95%	75%	53%
Euro Corporate	97%	82%	66%
Euro Government	98%	76%	54%
Euro High Yield	97%	85%	76%
Europe Income	95%	88%	85%
Europe Large Cap	94%	76%	53%
Europe Large Cap Growth	100%	91%	69%
Europe Large Cap Value	97%	78%	42%
Europe Small Cap	98%	89%	64%
Eurozone Large Cap	97%	84%	58%
France Large Cap	99%	80%	64%
Germany Large Cap	91%	78%	66%
Germany Small/Mid cap	88%	72%	56%
Global Fixed Income	94%	78%	64%
Italy Large Cap	98%	85%	55%
Japan Large Cap	98%	78%	47%
Spain Large Cap	92%	80%	55%
Switzerland Large Cap	95%	85%	63%
UK Large Cap	94%	72%	52%
UK Small Cap	97%	85%	67%
US Aggregate	93%	73%	53%
US Corporate	96%	81%	74%
US Government	91%	71%	54%
US High Yield	94%	88%	91%
US Large Cap Blend	96%	76%	52%
US Large Cap Growth	99%	86%	62%
US Large Cap Value	88%	73%	62%
US Small Cap	96%	76%	64%
World Large Cap	96%	75%	54%
World Large Cap Income	93%	81%	83%
<b>Average</b>	<b>95%</b>	<b>80%</b>	<b>62%</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## The long-term view: survivorship bias

[Return to Summary](#)

### What's the performance difference between reporting and closed funds?

In the analysis below, we complement our previous survivorship analysis and compare the performance of the funds which stayed operational to those that were closed.

To do so we need to estimate the “missing” returns, i.e. to provide a reasonable estimate for the returns that an investor would have generated following the fund closure. Academic research on this theme suggests taking an investor’s perspective and replace missing returns (following a fund closure) by the average returns of the funds belonging to the same fund category.

The table below shows that on average and across Exposures, funds that have been closed tend to have significantly lower hit ratio than those still in operation. This means that when we look at long term hit ratios (e.g. 10y), for a true picture it’s critical to adjust statistics for this “survivorship bias”.

Exposure	Hit Ratio by observation window			
	5Y, live funds	5Y, all funds	10Y, live funds	10Y, all funds
China	66%	64%	61%	57%
EM Debt Hard Currency	42%	39%	8%	7%
EUR Inflation	8%	9%	3%	2%
Emerging Equities	40%	35%	39%	33%
Euro Aggregate	18%	14%	16%	9%
Euro Corporate	38%	33%	38%	28%
Euro Government	20%	17%	28%	16%
Euro High Yield	26%	23%	14%	12%
Europe Income	25%	25%	19%	20%
Europe Large Cap	32%	28%	34%	23%
Europe Large Cap Growth	44%	43%	41%	36%
Europe Large Cap Value	55%	56%	65%	59%
Europe Small Cap	72%	74%	43%	43%
Eurozone Large Cap	26%	23%	31%	21%
France Large Cap	10%	8%	18%	11%
Germany Large Cap	42%	35%	39%	38%
Germany Small/Mid cap	10%	7%	22%	19%
Global Fixed Income	28%	23%	24%	18%
Italy Large Cap	35%	32%	73%	76%
Japan Large Cap	47%	48%	41%	34%
Spain Large Cap	38%	33%	55%	57%
Switzerland Large Cap	48%	46%	35%	24%
UK Large Cap	30%	28%	61%	51%
UK Small Cap	88%	85%	86%	80%
US Aggregate	39%	32%	30%	19%
US Corporate	14%	11%	4%	3%
US Government	17%	15%	14%	12%
US High Yield	14%	17%	19%	20%
US Large Cap Blend	11%	9%	3%	2%
US Large Cap Growth	15%	13%	12%	7%
US Large Cap Value	50%	51%	45%	37%
US Small Cap	53%	58%	47%	47%
World Large Cap	14%	11%	9%	5%
World Large Cap Income	46%	42%	31%	26%
<b>Average</b>	<b>34%</b>	<b>32%</b>	<b>33%</b>	<b>28%</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Methodology

### [Return to Summary](#)

Investing is all about return and risk, and the monitoring of performance is key for investors. Increasing data transparency over recent years has significantly increased the quality of fund performance analysis. Benchmarks and financial indices have become an industry standard and Index Funds and ETFs have become an effective way to track those indices at low cost.

While there are many tools available to compare a small universe of investment funds with their respective benchmarks, it remains difficult to get a grip of the broader picture. There are many challenges to address when attempting such an analysis, mainly in ensuring a fair comparison of returns.

The Active-Passive Navigator aims for a comprehensive analysis of the performance of funds and ETFs domiciled in Europe. For each asset category it compares fund and ETF performance against the most investable and replicable benchmarks.

### Fund Universe and Classification

We screen the fund universe as defined by Morningstar Direct, a market leader in funds' data. We primarily use Morningstar Funds and ETF classifications. In some instances, we can use other sources such as Bloomberg, Lyxor International Asset Management, providers' websites and regulatory filings. Feeder funds and funds of funds are excluded from the analysis.

The initial universe of funds screened by this report covers funds and ETFs, performances and asset under management are as at 31/12/2020 and most of the data was collected on 15/01/2020.

### Fund's Survivorship and Performances

To reduce survivorship bias, our analysis includes liquidated funds.

We a) indicate the survivorship level over each reported time; and b) reconstruct an estimated performance of the entire fund universe (equal-weighted and asset-weighted) and swap any fund that has been liquidated by the equal-weighted performance of the remaining funds in the universe.

In this process, we replicate what an average investor would most likely have done, i.e. redeeming his or her investment from the liquidated funds and investing in the remaining funds of the same fund category.

### Fund's Share Classes and Returns

Historical assets under management (AuM) data are essential to calculate asset-weighted funds returns. For each fund, we extract long-term performance and AuM time series for open-ended funds (Active and Index Funds) and exchange-traded funds (ETFs) domiciled in Europe, using Morningstar data.

When comparing returns, we look at each fund's Oldest Share Class as defined by Morningstar ("the most appropriate share class to use for performance-comparison purposes"<sup>1</sup>).

### Benchmark and Net Benchmark

For each market segment, before comparing returns, we define a financial index as the Benchmark. The choice of benchmark relies on broad recognition by the investment community and availability (e.g. a long track record for the Total Return, net of withholding taxes). When calculating the "Hit Ratio", i.e. the percentage of funds which outperformed their respective benchmark, we deduct the average Net Expense Ratio of the ETFs within the same category. The Net Expense Ratio is asset-weighted and observed over the last 3 years.

---

<sup>1</sup> See "Oldest Share Class Methodology", 31 October 2016, Morningstar

## Glossary: definitions

[Return to Summary](#)

**Active Funds:** this relates to the funds specified as “Index Fund = No” by Morningstar.

**Asset-Weighted Average Performance (“aw”):** it is the average performance of all funds related to an Exposure weighted by their AUM.

**All funds:** it is the number of funds which are classified to be belonging to a particular Exposure. These funds might be either still operating or merged or liquidated. (see **Operating funds**)

**Avg. Active Fee (aw):** it is the average of the management fee for the active funds related to an Exposure. It is determined as the arithmetic (asset-weighted, respectively) with data available at as of 15/01/2020.

**Avg. ETF fee (aw):** it is the average of the management fee for the ETFs related to an Exposure. It calculated as the arithmetic (asset-weighted, respectively) average with data available at as of 15/01/2020.

**Avg. ETF Exp. Ratio (aw):** it is the average of the expense ratio of the ETFs related to an Exposure. It calculated as the arithmetic average (asset-weighted, respectively), and the Expense Ratio is calculated as the average over the last 3 calendar years preceding 15/01/2020. See **Exposure Average Expense Ratio**.

**Benchmark:** it is the Representative Index which has been selected as a relevant metric to compare funds’ performance within a particular Exposure. Association between Exposures and Benchmarks are represented among others in page 17.

**Equal-Weighted Average Performance (or “ew”):** it is the arithmetic average of the performance for the active funds related to an Exposure.

**Excess Return (ew):** it is the difference between the equal-weighted average performance of the Exposure’s funds with the Benchmark (for avoidance of doubt, the Excess Return is calculated with the gross of fees performance of the Benchmark).

**Exposure:** a fund universe which is deemed to be representative of a homogeneous category of funds. Each Exposure is associated with one or several Morningstar categories.

**Exposure Average Expense Ratio:** with respect to an Exposure, represents the asset-weighted average of the Expense Ratio of all ETFs observed over the last 3 years.

**Fees:** the fund returns are net of fees and the Benchmarks’ returns are calculated either gross or net of fees, depending on the calculating being performed.

**Funds Returns (ew):** is the equal-weighted average of fund’s total return over a particular horizon window and with respect to a particular Exposure.

**Hit Ratio:** in this study, it is the percentage of active funds related to a particular Exposure that outperformed the prevailing Net Benchmark over a certain observation window. Except otherwise specified, this percentage does not consider the funds that were liquidated or merged over this period and as such, this number might underestimated. However we provide a full estimation for both including or excluding merged or liquidated fund in pages 18 to 19.

**Hit ratio (vs reporting funds):** it is the percentage of existing active funds related to a particular Exposure that outperformed the prevailing Net Benchmark over a certain observation window. This percentage does not consider the funds that were liquidated or merged over this period and as such, this number might underestimated.

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**Hit ratio (vs all funds):** it is the percentage of existing active funds related to an Exposure that outperformed its prevailing Net Benchmark over a certain observation window. This percentage considers all fund belonging to the Exposure, and as such includes the funds that were liquidated or merged over this period.

**Net Benchmark:** the performance of the Net Benchmark over a particular horizon window is calculated by deducting the Exposure's Benchmark by the corresponding pro-rata of Exposure Average Expense Ratio.

**Operating Funds (Active):** it is the number of funds (Active funds, respectively) which are not recorded as Obsolete as per Morningstar and as of 15/01/2020.

**Passive Funds (or Index Funds):** this relates to the funds related to an Exposure and recorded as Index Funds by Morningstar.

**Quantile Breakpoints:** 75% of the funds outperform the Top Quartile (25% quantile, and 25% underperform the Top Quartile), 50% of the funds outperform the Median (50% quantile), 25% of the funds outperform the **Bottom Quartile** (75% quantile).

**Representative Index:** a financial index which is deemed to be relevant to analyse or study a particular asset segment or Exposure. Through this study, we interchangeably use the terms Benchmark and Representative Index.

**Survivorship (%)**: with respect to an Exposure, it is the percentage of funds that survived (neither merged nor liquidated) over a defined period.

**Survivorship Bias:** some of the calculations in this study are adjusted for the survivorship bias i.e. merged or liquidated funds are considered in this study. This allows representing the entire opportunities available for investors at the beginning of each period under the scope of this study. We also disclosed the survivor rate for each category i.e. the percentage of funds existing at the beginning of the period that still exist at the end of the period. (see pages 18 to 19).

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# Main Publications

## Daily Numbers

The daily dashboard to keep our investors connected throughout the Covid crisis.

**Daily Numbers**  
Keeping you connected

We share in our Daily Numbers report a snapshot of the main market parameters across asset classes, covering Trading Volume, Market Sentiment, Liquidity and Fund Flows.

**Markets**

Asset Class	Last	1D Chg.	1W Chg.	1M Chg.
S&P 500	3,135	-1.8%	-8.7%	8.2%
Euro Stoxx 50	3,172	-0.4%	-3.3%	2.6%
Nikkei 225	23,338	0.7%	0.7%	2.6%

**Spotlight: Fixed Income**

Daily flow of Funds and ETFs in EU denominated, in EUR

Asset Class	Last	1D Chg.	1W Chg.	1M Chg.
Equity	1,810	-1.0%	-3.2%	0.1%
Fixed Income	1,010	0.3%	0.8%	0.0%
Other	820	0.2%	0.1%	0.1%

**COVID-19 Update: new cases**

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## Weekly Pulse

Weekly market and flow review with our key insights and positioning ideas.

**Weekly Pulse**

Risk assets performed well during the week, supported by resilient activity, buoyant liquidity and the start of some China 10 auctions campaign. There was no agreement on US stimulus bill of 600 bn, and political uncertainty still lingers on the year close. Fund and ETF flows were concentrated into equities, especially EM, Japan and US exposures. Fixed Income flow went into global aggregate debt and EM.

**Chart of the week**

2020 a record-breaking year

Key insights:

- Climate benchmarks will rise up the investor agenda. We found that the S&P Global Developed PAB index allows for a much lower implied temperature impact compared to the MSCI World SRI index. It also benefits from a greater diversification of assets.
- Europe is likely to support a 'green wave'. Coordinated efforts at the EU level to support economic activity and increase investment funding for environmental projects are essential to green bonds in a fixed income portfolio might benefit from policy support.
- Japanese equities could be a good portfolio diversifier. Japanese equities offer low correlation to most developed equity markets. Japan has an undervalued, underweighted equity market.

**COVID-19 update: new cases per day**

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## Money Monitor

Monthly and historical flows in the European ETF and Fund market.

**Money Monitor: 2020 in review**

In the first Money Monitor of 2021, we look back on December flows and 2020's key numbers. The second half of this report contains a comprehensive analysis of flows in European open-ended funds and ETFs.

**Key takeaways:**

- 2020 ended on a very strong note, with more than €70bn invested in Equity funds and €17.5bn in December, while Fixed Income gathered €21.5bn.
- ESG ETFs continue to set new records in asset gathering, with €10.2bn in December. Across 2020, ESG ETFs had inflows of €45.5bn.
- Smart Beta ETFs gathered €1.1bn, in another good month for value and equal-weighted ETFs.
- Fixed Income funds and ETFs gathered a combined €31.5bn in net new assets, mostly into Global and EM, with €27.1bn into open-end funds and €4.4bn into ETFs.
- Equity funds and ETFs raised €57bn of net new assets, with 30.5bn into funds and €16.1bn into ETFs. US and China were in demand while UK suffered from the Brexit uncertainty.

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## Active-Passive Navigator

A holistic quarterly review of the performance of Active managers.

**Active-Passive Navigator: Q3 2020**

Active-Passive Navigator looks at the main trends that influenced global market performance and alpha generation by active managers in the first 3 quarters of 2020. This is followed by a comprehensive analysis of the performance of active managers through the last 10 years.

**What's happened in Q3 2020**

- Equities: Q3 2020 was a positive quarter for equity managers. The rotating economic recovery and greater stock diversification allowed small cap managers to perform well. European, UK and Japan managers achieved a strong run. In contrast, US and Developed Markets managers focusing on highly anticipated large stock underperformed.
- Fixed Income: Fixed Income funds struggled with the 'flat' market environment in Q3. Rates remained within a tight range and small spreads opened over other markets. US and Global Aggregate bond funds outperformed. Those focusing on strategies such as yield curve, US inflation, and MBS stood out. European High Yield managers underperformed the rest.

**2020 - a year of wide dispersion inside asset classes, providing opportunities to active managers**

Source: Morningstar, Lyxor International Asset Management, performance as at 30/09/2020. Past performance is not a reliable indicator of future performance.

## Inflation & Rates Explorer

A detailed perspective on an important asset class.

**US Inflation & Rates Explorer: Q3 2020**

Lyxor's US Inflation & Rates Explorer monitors the performance of selected US Fixed Income indices. We review the main trends in the US Fixed Income market over the past quarter, and how these trends influenced the performance of the indices.

**Key takeaways**

- Inflation-linked strategies led bond performance in Q3. Inflation expectations got a further boost after the Fed announced it would adjust average inflation targets at the end of the summer. Flows into US Inflation-linked ETFs remained strong over the quarter.
- Floating Rate Note (FRN) had a strong Q3 but a modest Q2. Corporate credit spreads finally changed after the strong compression seen in Q2, while the USD 3-month Libor rate hit new lows of 0.1%. Flows into US IG corporate bonds were also much lower in Q3 than in Q2.
- Curve strategies suffered from the lack of direction in the 2-10y US yield curve in Q3. US Treasury yields stayed anchored at rock-bottom levels across maturities.

**Performance overview**

- Q3 2020: 12%
- 10Y US Inflation-linked bonds: 6.2%
- US Inflation-linked bonds: 6.2%
- US 10-year Treasury: 6.2%
- US Floating Rate Note (FRN): 6.2%
- US Treasuries: 6.2%
- Flattened 2-10ys: 6.2%
- Steepened 2-10ys: 6.2%

## Expert's View

Timely in-depth insights on various topical themes.

**Expert's View**

Climate benchmarks go beyond the 'E' in ESG

Climate-aligned benchmarks are designed for climate action, immediately reducing a portfolio's carbon intensity and absolute emission levels based on a target trajectory. This goal can also help address other environmental and societal issues - ones that are usually identified in separate ESG strategies. In this report, we review the ESG characteristics of S&P Global Developed PAB climate indices and compare them with ESG benchmarks.

**Facts and overview**

- Climate benchmarks can go beyond the 'E' in ESG. While the significant reduction in a portfolio's carbon intensity naturally improves its environmental score, climate benchmarks can also address broader societal issues.
- Climate benchmarks penalize rather than exclude. If the application of lower ESG bars in a climate index is too strict, companies leading the climate transition are at risk to be excluded from the index rather than just penalized with a lower weight.
- Climate benchmarks go beyond the 'E' in ESG. S&P Global Developed PAB benefited from a better diversification of returns vs MSCI World SRI. The index shows a similar performance profile to MSCI World SRI. However, our analysis of performance attribution shows that the source of underperformance for MSCI World SRI vs MSCI World was just a handful of constituents.

**Our key takeaways**

- The S&P Global Developed PAB index allows for a much lower implied temperature trajectory compared to the MSCI World SRI index (among the most restrictive ESG indices).
- S&P Global Developed PAB benefited from a better diversification of returns vs MSCI World SRI. The index shows a similar performance profile to MSCI World SRI. However, our analysis of performance attribution shows that the source of underperformance for MSCI World SRI vs MSCI World was just a handful of constituents.

**Climate benchmarks go beyond the 'E' in ESG. S&P Global Developed PAB benefited from a better diversification of returns vs MSCI World SRI.**

Year to date index performance (Base 100 = 31/12/2019, in USD)

Source: S&P Global, Morningstar, Lyxor International Asset Management as at 30/09/2020. Past performance is not a reliable indicator of future performance.



## Asset Class Deep Dive: China

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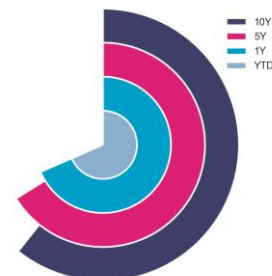
This universe covers Europe domiciled Funds which invest in China Equities, with a focus on large capitalisations and a balanced investment style.

The universe covers EUR 59.3bn, of which EUR 54.8 bn is invested in 99 active operating funds.

Compared to an investment in MSCI China 10/40 net of 0.66 % (average expense ratio of the ETFs of this universe) 68% of the active, operating funds belonging to this universe have outperformed over 1Y (66% over 5Y and 61% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

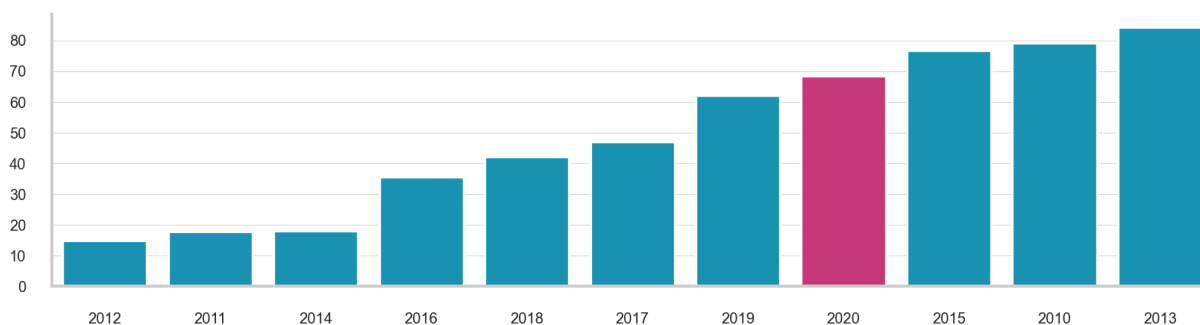
	MSCI China 10/40	Active Funds (ew)
YtD	19.95 %	<b>28.96 %</b>
1Y	19.95 %	<b>28.96 %</b>
3Y (pa)	8.62 %	<b>10.91 %</b>
5Y (pa)	11.69 %	<b>12.09 %</b>
10Y (pa)	8.34 %	<b>7.98 %</b>

### Fund Universe: Overview

All funds	193
Operating funds (Active)	120 (99)
Total AUM	EUR 59.3 bn
Active / Passive AUM	EUR 54.8 / 4.5 bn
Funds / ETFs AUM	EUR 55.3 / 4.1 bn
Avg. Active Fee (aw)	1.11 % (1.38 %)
Avg. ETF fee (aw)	0.54 % (0.49 %)
Avg. ETF Exp. Ratio (aw)	0.65 % (0.66 %)
Benchmark	MSCI China 10/40

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	19.95	24.43	-14.15	31.17	3.42	2.47	23.44	-0.75	21.05	-15.64	11.77
Net Benchmark	19.17	23.62	-14.72	30.32	2.74	1.79	22.63	-1.41	20.26	-16.21	11.04
Funds (ew)	28.96	27.63	-15.65	29.76	0.84	6.72	17.38	6.42	6.42	-20.38	16.07
Funds (aw)	23.03	30.21	-13.99	30.94	2.37	7.81	17.28	6.04	15.27	-18.02	15.29
<b>Hit Ratio vs Net Benchmark</b>	<b>68 %</b>	<b>62 %</b>	<b>42 %</b>	<b>47 %</b>	<b>36 %</b>	<b>77 %</b>	<b>18 %</b>	<b>84 %</b>	<b>15 %</b>	<b>18 %</b>	<b>79 %</b>
Hit Ratio vs Gross Benchmark	66 %	61 %	39 %	47 %	31 %	76 %	16 %	81 %	13 %	15 %	78 %
Funds (#)	92	90	83	83	84	82	88	89	93	89	82

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	11.70	5.85	11.82	-9.27	10.65	-0.47	-5.23	19.22
Net Benchmark	11.52	5.67	11.64	-9.42	10.48	-0.64	-5.39	19.04
Funds (ew)	11.69	7.03	17.11	-8.42	8.76	0.54	-3.65	20.95
Funds (aw)	9.17	6.92	15.07	-8.40	9.43	0.97	-3.00	21.48
<b>Hit ratio vs Net Benchmark</b>	<b>48 %</b>	<b>66 %</b>	<b>86 %</b>	<b>55 %</b>	<b>21 %</b>	<b>63 %</b>	<b>79 %</b>	<b>63 %</b>
Hit ratio vs Gross Benchmark	48 %	64 %	84 %	55 %	20 %	62 %	73 %	61 %
Reporting funds (#)	96	96	95	95	94	92	90	90

## Monthly performance

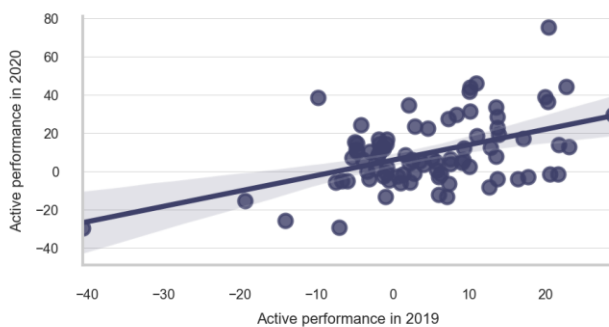
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	2.21	3.59	5.31	-1.65	3.96	3.34	7.44	-2.30	6.34	-6.97	1.64	-4.22
Funds (ew)	4.47	2.02	4.78	-1.42	4.22	4.15	9.47	-1.11	8.16	-7.29	1.04	-2.21
Funds (aw)	3.22	1.45	4.25	-1.15	4.18	3.83	8.80	-1.82	7.72	-6.77	1.48	-3.18
<b>Hit ratio vs Net</b>	<b>81 %</b>	<b>18 %</b>	<b>44 %</b>	<b>61 %</b>	<b>51 %</b>	<b>68 %</b>	<b>80 %</b>	<b>64 %</b>	<b>85 %</b>	<b>44 %</b>	<b>46 %</b>	<b>72 %</b>
Hit Ratio vs Gross	81 %	15 %	39 %	59 %	49 %	66 %	80 %	63 %	84 %	43 %	45 %	72 %
Funds (#)	97	97	98	98	97	96	96	95	96	96	98	97

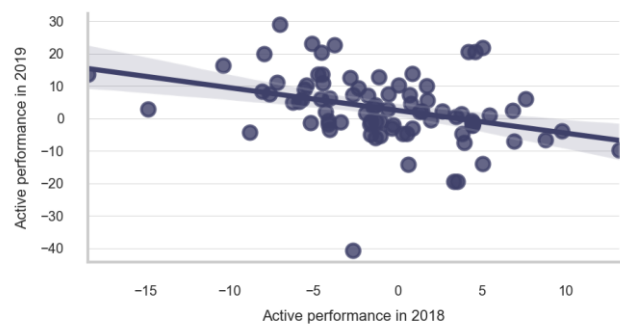
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	19.95	19.95	8.62	11.69	8.34
Funds: equal-weighted average	28.96	28.96	10.91	12.09	7.98
Funds: asset-weighted average	23.03	23.03	11.28	13.05	8.87
Funds: top decile	52.65	52.65	20.49	17.39	11.00
Funds: top quartile	36.66	36.66	13.69	14.38	9.72
Funds: median	<b>25.76</b>	<b>25.76</b>	<b>9.97</b>	<b>11.75</b>	<b>8.55</b>
Funds: bottom quartile	17.65	17.65	7.86	10.24	6.38
Funds: bottom decile	13.26	13.26	5.18	8.51	4.87
Net Benchmark	<b>19.17</b>	<b>19.17</b>	<b>7.90</b>	<b>10.96</b>	<b>7.63</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	92	92	79	71	56
All funds = reporting + non-reporting	97	97	90	86	88
<b>Survivorship: %of reporting funds vs total</b>	<b>95 %</b>	<b>95 %</b>	<b>88 %</b>	<b>83 %</b>	<b>64 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

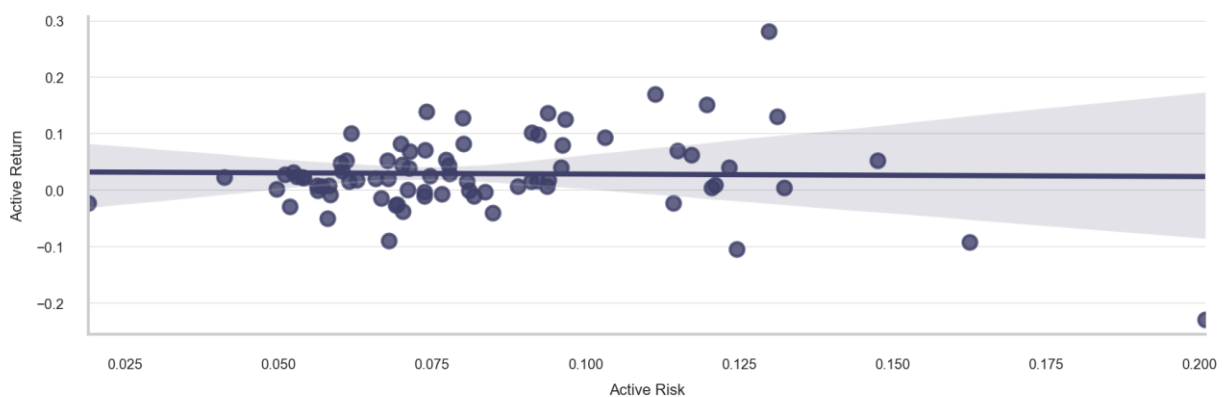
	YtD	1Y	3Y	5Y	10Y
Benchmark	19.95	19.95	8.62	11.69	8.34
Net Benchmark	19.17	19.17	7.90	10.96	7.63
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>68 %</b>	<b>68 %</b>	<b>73 %</b>	<b>66 %</b>	<b>61 %</b>
Hit ratio (vs Net Benchmark, all funds)	68 %	68 %	72 %	64 %	57 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: EM Debt Hard Currency

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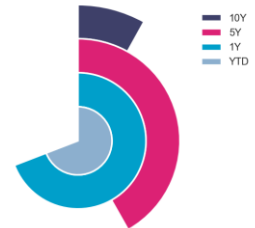
This universe covers Europe domiciled funds which invest in Emerging Market debt, denominated in US dollar across all issuers and durations.

The universe covers EUR 142.9bn, of which EUR 116.8 bn is invested in 215 active operating funds.

Compared to an investment in JP EMBI Global Diversified net of 0.44 % (average expense ratio of the ETFs of this universe) 69% of the active, operating funds belonging to this universe have outperformed over 1Y (42% over 5Y and 8% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

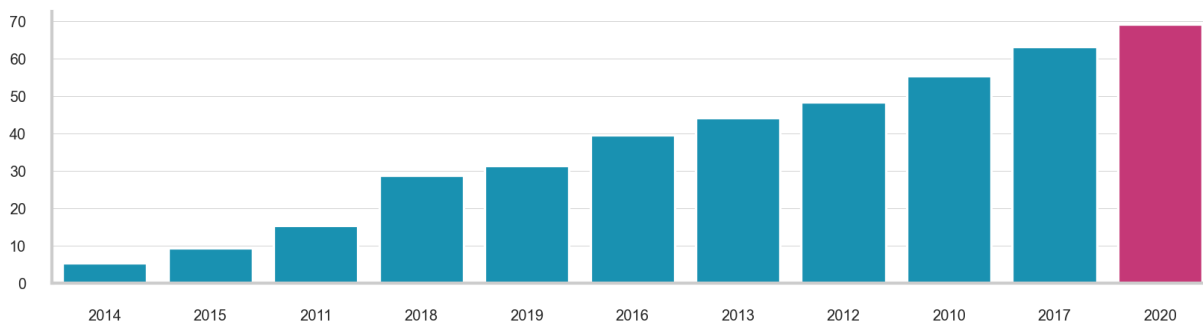
	JP EMBI Global Diversified	Active Funds (ew)
YtD	-3.43 %	<b>-2.60 %</b>
1Y	-3.43 %	<b>-2.60 %</b>
3Y (pa)	4.39 %	<b>3.08 %</b>
5Y (pa)	4.56 %	<b>3.75 %</b>
10Y (pa)	7.19 %	<b>5.01 %</b>

### Fund Universe: Overview

All funds	390
Operating funds (Active)	238 (215)
Total AUM	EUR 142.9 bn
Active / Passive AUM	EUR 116.8 / 26.1 bn
Funds / ETFs AUM	EUR 128.5 / 14.4 bn
Avg. Active Fee (aw)	0.81 % (0.77 %)
Avg. ETF fee (aw)	0.36 % (0.43 %)
Avg. ETF Exp. Ratio (aw)	0.42 % (0.44 %)
Benchmark	JP EMBI Global Diversified

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-3.43	17.13	0.57	-3.16	13.45	12.71	22.33	-9.35	15.62	10.91	20.04
Net Benchmark	-3.86	16.62	0.13	-3.59	12.96	12.22	21.80	-9.75	15.12	10.43	19.52
Funds (ew)	-2.60	14.11	-1.31	-2.22	11.92	6.48	14.62	-9.04	-9.04	6.03	18.87
Funds (aw)	-3.37	13.85	-1.20	-3.60	11.97	7.48	15.21	-9.16	13.66	6.28	16.49
<b>Hit Ratio vs Net Benchmark</b>	<b>69 %</b>	<b>31 %</b>	<b>29 %</b>	<b>63 %</b>	<b>40 %</b>	<b>9 %</b>	<b>6 %</b>	<b>44 %</b>	<b>48 %</b>	<b>15 %</b>	<b>55 %</b>
Hit Ratio vs Gross Benchmark	63 %	22 %	23 %	58 %	36 %	6 %	6 %	40 %	40 %	8 %	46 %
Funds (#)	188	175	166	149	144	128	127	111	93	84	74

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	1.40	-2.00	9.67	-11.39	-1.13	6.03	2.62	8.88
Net Benchmark	1.29	-2.11	9.56	-11.49	-1.24	5.91	2.51	8.76
Funds (ew)	2.87	-1.52	9.93	-12.34	-0.05	4.05	2.35	7.21
Funds (aw)	2.73	-1.69	11.00	-13.81	-0.31	3.89	2.19	7.58
<b>Hit ratio vs Net Benchmark</b>	<b>78 %</b>	<b>62 %</b>	<b>53 %</b>	<b>40 %</b>	<b>85 %</b>	<b>13 %</b>	<b>48 %</b>	<b>27 %</b>
Hit ratio vs Gross Benchmark	78 %	57 %	52 %	39 %	83 %	10 %	43 %	23 %
Reporting funds (#)	205	198	195	193	192	188	181	176

## Monthly performance

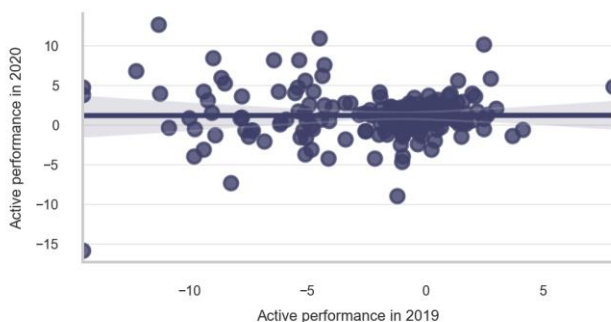
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	-0.42	1.10	0.60	0.06	-0.66	-1.53	2.48	4.40	2.39	-13.79	-0.13	2.79
Funds (ew)	0.25	1.81	0.78	-0.00	-0.12	-1.38	2.09	4.61	2.90	-13.80	-0.37	2.12
Funds (aw)	0.20	1.90	0.61	-0.11	-0.16	-1.42	2.49	5.10	3.05	-15.22	-0.53	2.21
<b>Hit ratio vs Net</b>	<b>78 %</b>	<b>73 %</b>	<b>65 %</b>	<b>47 %</b>	<b>82 %</b>	<b>51 %</b>	<b>36 %</b>	<b>60 %</b>	<b>65 %</b>	<b>47 %</b>	<b>46 %</b>	<b>24 %</b>
Hit Ratio vs Gross	76 %	70 %	63 %	43 %	79 %	47 %	35 %	59 %	65 %	46 %	43 %	23 %
Funds (#)	206	205	206	203	201	198	197	199	197	195	194	196

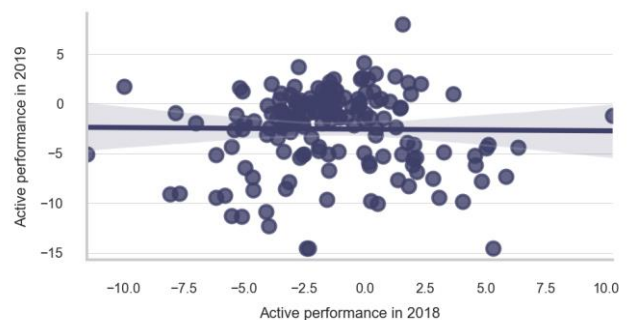
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-3.43	-3.43	4.39	4.56	7.19
Funds: equal-weighted average	-2.60	-2.60	3.08	3.75	5.01
Funds: asset-weighted average	-3.37	-3.37	2.82	3.25	4.77
Funds: top decile	0.54	0.54	5.02	5.42	6.53
Funds: top quartile	-1.26	-1.26	4.15	4.72	6.18
Funds: median	<b>-2.75</b>	<b>-2.75</b>	<b>3.20</b>	<b>3.94</b>	<b>5.41</b>
Funds: bottom quartile	-4.36	-4.36	2.01	2.78	4.12
Funds: bottom decile	-5.54	-5.54	0.97	1.55	2.84
Net Benchmark	<b>-3.86</b>	<b>-3.86</b>	<b>3.93</b>	<b>4.10</b>	<b>6.73</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	188	188	155	122	62
All funds = reporting + non-reporting	193	193	175	146	86
<b>Survivorship: %of reporting funds vs total</b>	<b>97 %</b>	<b>97 %</b>	<b>89 %</b>	<b>84 %</b>	<b>72 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

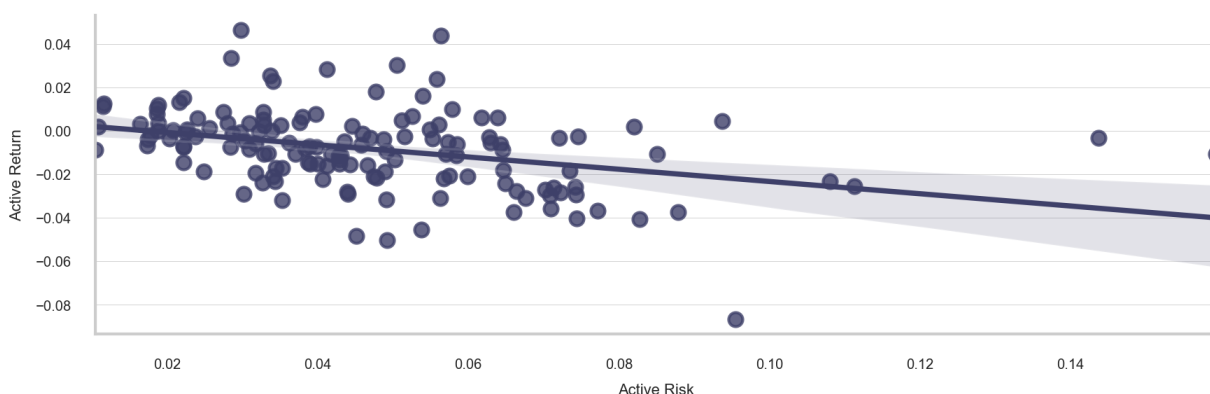
	YtD	1Y	3Y	5Y	10Y
Benchmark	-3.43	-3.43	4.39	4.56	7.19
Net Benchmark	-3.86	-3.86	3.93	4.10	6.73
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>69 %</b>	<b>69 %</b>	<b>30 %</b>	<b>42 %</b>	<b>8 %</b>
Hit ratio (vs Net Benchmark, all funds)	69 %	69 %	29 %	39 %	7 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: EUR Inflation

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EUR Inflation-Linked Bond funds invest principally in inflation-linked bonds denominated in or hedged into EUR

The universe covers EUR 11.5bn, of which EUR 6.7 bn is invested in 44 active operating funds.

Compared to an investment in Bbg Barclays Euro Inflation net of 0.24 % (average expense ratio of the ETFs of this universe) 7% of the active, operating funds belonging to this universe have outperformed over 1Y (8% over 5Y and 3% over 10Y).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

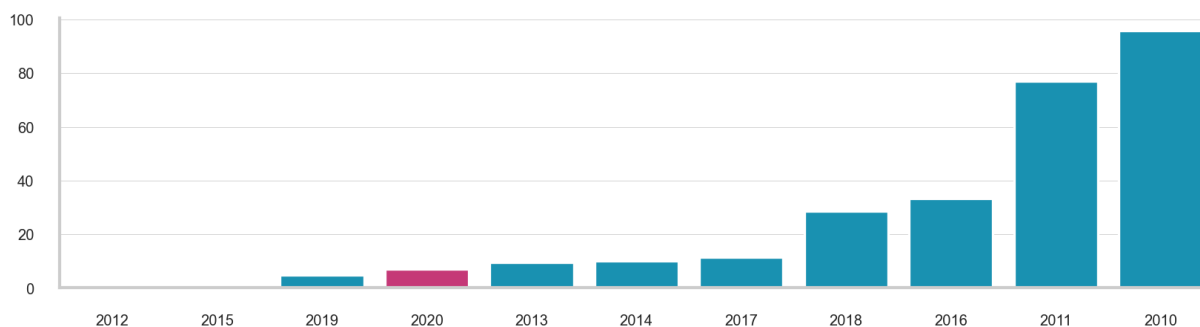
	Bbg Barclays Euro Inflation	Active Funds (ew)
YtD	3.77 %	1.15 %
1Y	3.77 %	1.15 %
3Y (pa)	3.09 %	1.02 %
5Y (pa)	2.94 %	1.37 %
10Y (pa)	4.14 %	2.33 %

### Fund Universe: Overview

All funds	110
Operating funds (Active)	56 (44)
Total AUM	EUR 11.5 bn
Active / Passive AUM	EUR 6.7 / 4.9 bn
Funds / ETFs AUM	EUR 8.9 / 2.6 bn
Avg. Active Fee (aw)	0.49 % (0.37 %)
Avg. ETF fee (aw)	0.18 % (0.20 %)
Avg. ETF Exp. Ratio (aw)	0.21 % (0.24 %)
Benchmark	Bbg Barclays Euro Inflation

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	3.77	7.13	-1.45	1.61	3.82	2.59	9.13	-0.05	18.33	-1.99	-2.35
Net Benchmark	3.52	6.88	-1.68	1.37	3.58	2.35	8.87	-0.29	18.06	-2.23	-2.58
Funds (ew)	1.15	4.23	-2.24	0.56	3.44	0.82	4.97	-2.35	-2.35	-0.10	0.36
Funds (aw)	2.10	3.94	-1.89	0.52	3.90	0.63	4.92	-2.83	9.87	0.55	0.42
<b>Hit Ratio vs Net Benchmark</b>	<b>7 %</b>	<b>5 %</b>	<b>29 %</b>	<b>11 %</b>	<b>33 %</b>	<b>0 %</b>	<b>10 %</b>	<b>10 %</b>	<b>0 %</b>	<b>77 %</b>	<b>96 %</b>
Hit Ratio vs Gross Benchmark	5 %	2 %	21 %	9 %	29 %	0 %	8 %	8 %	0 %	75 %	94 %
Funds (#)	43	42	42	44	45	46	50	52	53	52	48

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	3.40	1.88	4.21	-5.47	-1.52	4.35	2.99	1.23
Net Benchmark	3.34	1.82	4.15	-5.53	-1.58	4.29	2.93	1.17
Funds (ew)	2.21	1.13	3.00	-5.00	-0.86	2.37	1.72	0.89
Funds (aw)	2.48	1.43	3.39	-4.99	-1.37	2.48	1.74	1.08
<b>Hit ratio vs Net Benchmark</b>	<b>5 %</b>	<b>16 %</b>	<b>14 %</b>	<b>70 %</b>	<b>79 %</b>	<b>2 %</b>	<b>2 %</b>	<b>32 %</b>
Hit ratio vs Gross Benchmark	2 %	9 %	12 %	70 %	79 %	2 %	2 %	30 %
Reporting funds (#)	43	43	43	43	43	44	43	44

## Monthly performance

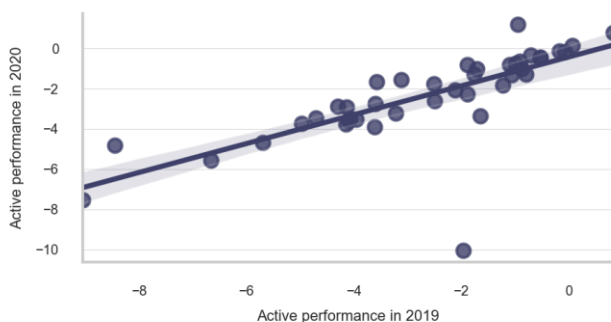
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	0.62	1.60	1.08	0.18	-0.33	1.97	2.38	0.83	0.89	-6.59	-1.00	2.16
Funds (ew)	0.44	1.14	0.61	-0.15	-0.17	1.46	1.70	0.64	0.64	-5.32	-0.79	1.14
Funds (aw)	0.53	1.23	0.69	0.05	-0.37	1.76	1.94	0.45	0.97	-5.92	-0.58	1.58
<b>Hit ratio vs Net</b>	<b>11 %</b>	<b>0 %</b>	<b>5 %</b>	<b>23 %</b>	<b>56 %</b>	<b>19 %</b>	<b>12 %</b>	<b>26 %</b>	<b>28 %</b>	<b>84 %</b>	<b>61 %</b>	<b>5 %</b>
Hit Ratio vs Gross	9 %	0 %	5 %	19 %	56 %	19 %	9 %	23 %	26 %	81 %	59 %	5 %
Funds (#)	44	43	43	43	43	43	43	43	43	43	44	44

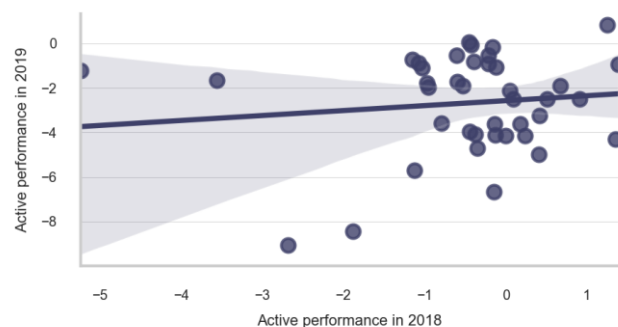
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	3.77	3.77	3.09	2.94	4.14
Funds: equal-weighted average	1.15	1.15	1.02	1.37	2.33
Funds: asset-weighted average	2.10	2.10	1.35	1.69	2.11
Funds: top decile	3.32	3.32	2.63	2.59	3.29
Funds: top quartile	2.71	2.71	2.02	2.16	2.81
Funds: median	<b>1.70</b>	<b>1.70</b>	<b>1.35</b>	<b>1.39</b>	<b>2.61</b>
Funds: bottom quartile	0.01	0.01	0.24	0.67	1.60
Funds: bottom decile	-1.27	-1.27	-1.00	-0.26	1.26
Net Benchmark	<b>3.52</b>	<b>3.52</b>	<b>2.85</b>	<b>2.70</b>	<b>3.89</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	43	43	39	37	29
All funds = reporting + non-reporting	44	44	47	47	53
<b>Survivorship: %of reporting funds vs total</b>	<b>98 %</b>	<b>98 %</b>	<b>83 %</b>	<b>79 %</b>	<b>55 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

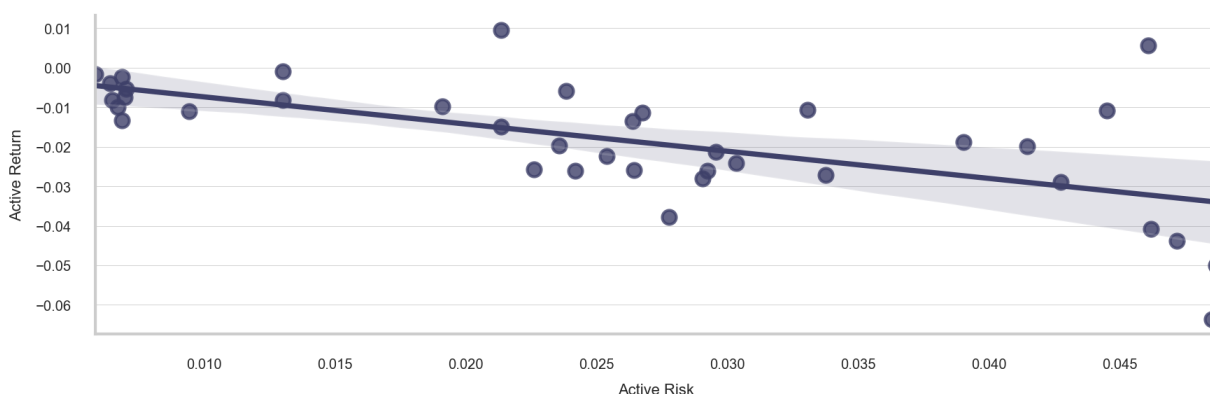
	YtD	1Y	3Y	5Y	10Y
Benchmark	3.77	3.77	3.09	2.94	4.14
Net Benchmark	3.52	3.52	2.85	2.70	3.89
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>7 %</b>	<b>7 %</b>	<b>5 %</b>	<b>8 %</b>	<b>3 %</b>
Hit ratio (vs Net Benchmark, all funds)	7 %	7 %	4 %	9 %	2 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Emerging Equities

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This universe covers Europe domiciled Funds which invest in Emerging Markets Equities, with a focus on large capitalisations and a balanced investment style.

The universe covers EUR 344.4bn, of which EUR 221.3 bn is invested in 468 active operating funds.

Compared to an investment in MSCI Emerging Markets net of 0.35 % (average expense ratio of the ETFs of this universe) 46% of the active, operating funds belonging to this universe have outperformed over 1Y (40% over 5Y and 39% over 10Y).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

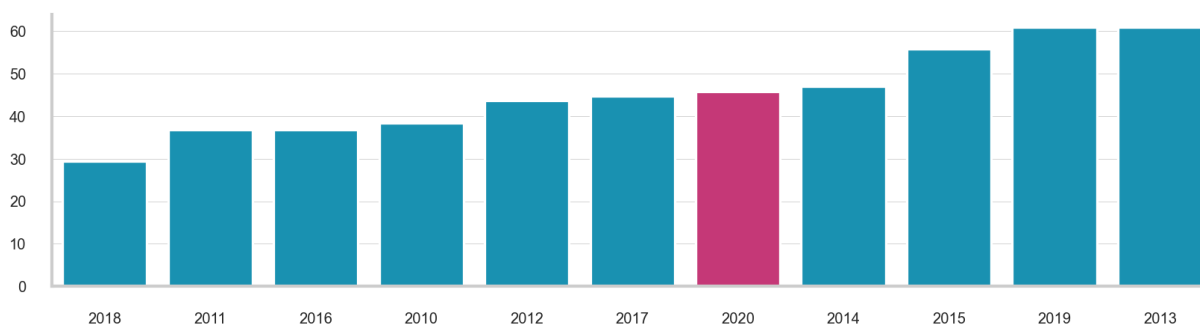
	MSCI Emerging Markets	Active Funds (ew)
YtD	8.53 %	8.48 %
1Y	8.53 %	8.48 %
3Y (pa)	5.51 %	4.68 %
5Y (pa)	10.16 %	8.99 %
10Y (pa)	4.59 %	3.82 %

### Fund Universe: Overview

All funds	916
Operating funds (Active)	563 (468)
Total AUM	EUR 344.4 bn
Active / Passive AUM	EUR 221.3 / 123.2 bn
Funds / ETFs AUM	EUR 299.7 / 44.2 bn
Avg. Active Fee (aw)	0.98 % (0.86 %)
Avg. ETF fee (aw)	0.39 % (0.26 %)
Avg. ETF Exp. Ratio (aw)	0.48 % (0.35 %)
Benchmark	MSCI Emerging Markets

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	8.53	20.58	-10.26	20.61	14.51	-5.23	11.38	-6.81	16.40	-15.68	27.14
Net Benchmark	8.16	20.17	-10.57	20.20	14.11	-5.56	10.99	-7.14	16.00	-15.98	26.71
Funds (ew)	8.48	21.66	-12.50	19.25	12.21	-4.42	10.48	-5.26	-5.26	-17.50	26.00
Funds (aw)	9.60	22.58	-12.56	19.07	12.45	-4.07	11.14	-5.09	16.33	-15.78	26.06
<b>Hit Ratio vs Net Benchmark</b>	<b>46 %</b>	<b>61 %</b>	<b>29 %</b>	<b>45 %</b>	<b>37 %</b>	<b>56 %</b>	<b>47 %</b>	<b>61 %</b>	<b>44 %</b>	<b>37 %</b>	<b>38 %</b>
Hit Ratio vs Gross Benchmark	44 %	59 %	26 %	42 %	34 %	54 %	44 %	58 %	40 %	35 %	37 %
Funds (#)	426	419	416	412	415	402	409	391	364	318	284

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	14.72	4.93	15.35	-21.84	8.62	0.02	-0.81	11.90
Net Benchmark	14.62	4.84	15.26	-21.91	8.53	-0.07	-0.89	11.80
Funds (ew)	15.69	4.63	16.54	-23.33	7.80	0.29	0.17	12.30
Funds (aw)	16.01	5.16	16.38	-22.80	7.82	0.43	0.54	12.59
<b>Hit ratio vs Net Benchmark</b>	<b>58 %</b>	<b>50 %</b>	<b>58 %</b>	<b>34 %</b>	<b>43 %</b>	<b>59 %</b>	<b>75 %</b>	<b>57 %</b>
Hit ratio vs Gross Benchmark	57 %	47 %	57 %	32 %	40 %	57 %	72 %	56 %
Reporting funds (#)	448	446	444	447	442	436	427	431

## Monthly performance

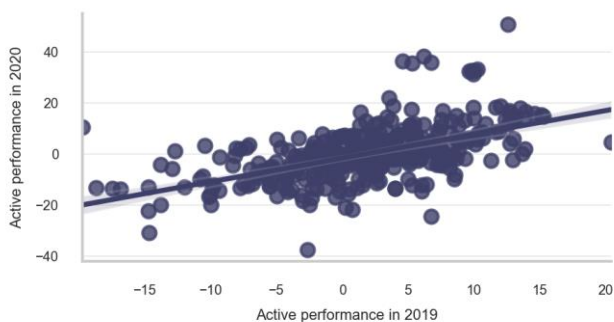
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	4.92	6.36	2.71	0.32	1.03	3.44	6.29	-0.81	9.32	-15.34	-4.46	-3.46
Funds (ew)	4.98	7.22	2.73	-0.41	1.74	3.26	6.44	-0.40	9.93	-16.85	-5.15	-2.79
Funds (aw)	5.12	7.03	3.10	-0.23	1.77	3.57	6.75	-0.69	9.78	-16.22	-5.32	-2.68
<b>Hit ratio vs Net</b>	<b>52 %</b>	<b>61 %</b>	<b>52 %</b>	<b>32 %</b>	<b>61 %</b>	<b>54 %</b>	<b>55 %</b>	<b>54 %</b>	<b>59 %</b>	<b>31 %</b>	<b>35 %</b>	<b>61 %</b>
Hit Ratio vs Gross	50 %	60 %	51 %	31 %	60 %	53 %	54 %	53 %	58 %	30 %	35 %	60 %
Funds (#)	455	453	455	452	452	448	447	449	451	451	451	450

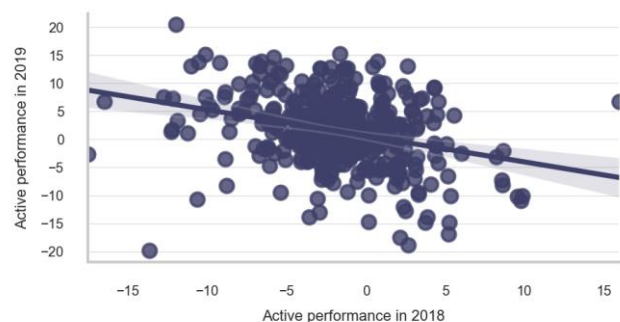
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	8.53	8.53	5.51	10.16	4.59
Funds: equal-weighted average	8.48	8.48	4.68	8.99	3.82
Funds: asset-weighted average	9.60	9.60	5.52	9.48	4.54
Funds: top decile	20.64	20.64	9.48	12.75	6.58
Funds: top quartile	13.14	13.14	6.91	10.98	5.07
Funds: median	<b>7.33</b>	<b>7.33</b>	<b>4.58</b>	<b>9.14</b>	<b>3.68</b>
Funds: bottom quartile	2.85	2.85	2.14	7.00	2.53
Funds: bottom decile	-4.12	-4.12	-0.29	5.09	1.61
Net Benchmark	<b>8.16</b>	<b>8.16</b>	<b>5.14</b>	<b>9.78</b>	<b>4.22</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	426	426	375	343	221
All funds = reporting + non-reporting	444	444	427	435	317
<b>Survivorship: %of reporting funds vs total</b>	<b>96 %</b>	<b>96 %</b>	<b>88 %</b>	<b>79 %</b>	<b>70 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

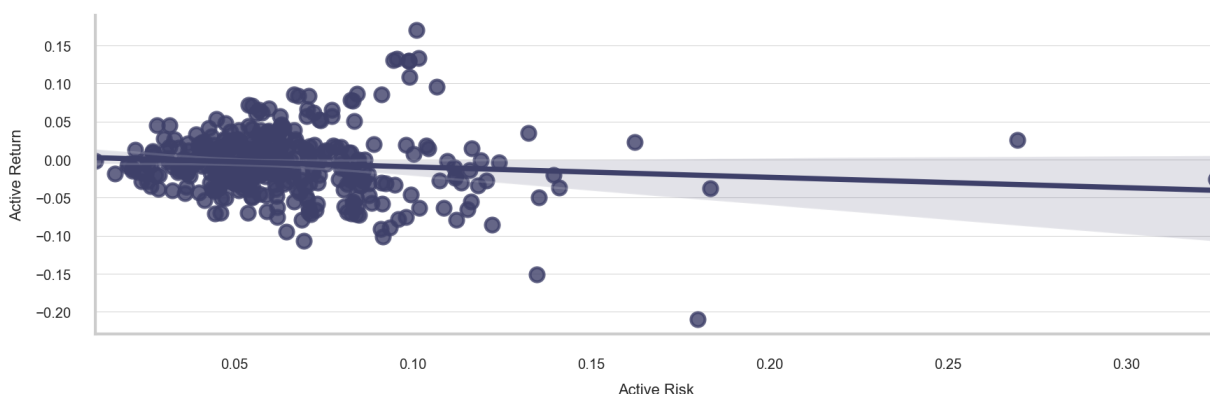
	YtD	1Y	3Y	5Y	10Y
Benchmark	8.53	8.53	5.51	10.16	4.59
Net Benchmark	8.16	8.16	5.14	9.78	4.22
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>46 %</b>	<b>46 %</b>	<b>41 %</b>	<b>40 %</b>	<b>39 %</b>
Hit ratio (vs Net Benchmark, all funds)	45 %	45 %	40 %	35 %	33 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Euro Aggregate

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This universe covers Europe domiciled funds which invest in Euro denominated investment grade bonds across all issuers and durations.

The universe covers EUR 137.8bn, of which EUR 133.1 bn is invested in 481 active operating funds.

Compared to an investment in Bbg Barclays Euro Aggregate net of 0.22 % (average expense ratio of the ETFs of this universe) 20% of the active, operating funds belonging to this universe have outperformed over 1Y (18% over 5Y and 16% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

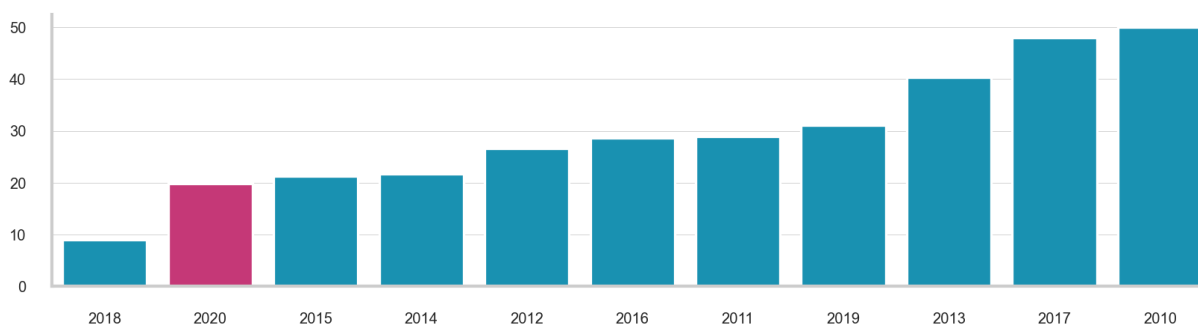
	Bbg Barclays Euro Aggregate	Active Funds (ew)
YtD	4.04 %	<b>2.05 %</b>
1Y	4.04 %	<b>2.05 %</b>
3Y (pa)	3.45 %	<b>1.57 %</b>
5Y (pa)	2.87 %	<b>1.60 %</b>
10Y (pa)	4.25 %	<b>2.76 %</b>

### Fund Universe: Overview

All funds	1376
Operating funds (Active)	489 (481)
Total AUM	EUR 137.8 bn
Active / Passive AUM	EUR 133.1 / 4.7 bn
Funds / ETFs AUM	EUR 134.8 / 2.9 bn
Avg. Active Fee (aw)	0.68 % (0.55 %)
Avg. ETF fee (aw)	0.23 % (0.23 %)
Avg. ETF Exp. Ratio (aw)	0.18 % (0.22 %)
Benchmark	Bbg Barclays Euro Aggregate

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	4.04	5.98	0.41	0.68	3.33	1.01	11.11	2.15	11.19	3.24	2.19
Net Benchmark	3.81	5.75	0.18	0.45	3.10	0.79	10.86	1.93	10.95	3.01	1.96
Funds (ew)	2.05	4.22	-1.56	0.64	2.30	0.03	7.20	1.51	1.51	1.35	2.03
Funds (aw)	3.05	4.99	-1.06	0.61	2.59	0.36	8.63	1.43	9.43	1.82	2.41
<b>Hit Ratio vs Net Benchmark</b>	<b>20 %</b>	<b>31 %</b>	<b>9 %</b>	<b>48 %</b>	<b>29 %</b>	<b>21 %</b>	<b>22 %</b>	<b>40 %</b>	<b>27 %</b>	<b>29 %</b>	<b>50 %</b>
Hit Ratio vs Gross Benchmark	17 %	28 %	7 %	41 %	23 %	16 %	19 %	35 %	24 %	25 %	46 %
Funds (#)	454	467	470	483	502	522	549	572	589	601	626

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	1.25	1.50	2.39	-1.12	-2.25	2.86	2.83	2.51
Net Benchmark	1.20	1.44	2.33	-1.18	-2.31	2.80	2.77	2.46
Funds (ew)	1.39	1.28	2.97	-3.51	-1.03	1.58	1.76	1.88
Funds (aw)	1.36	1.43	2.98	-2.68	-1.51	2.07	2.24	2.15
<b>Hit ratio vs Net Benchmark</b>	<b>52 %</b>	<b>43 %</b>	<b>62 %</b>	<b>21 %</b>	<b>87 %</b>	<b>18 %</b>	<b>23 %</b>	<b>28 %</b>
Hit ratio vs Gross Benchmark	48 %	39 %	62 %	20 %	85 %	15 %	22 %	27 %
Reporting funds (#)	464	476	484	485	483	480	472	478

## Monthly performance

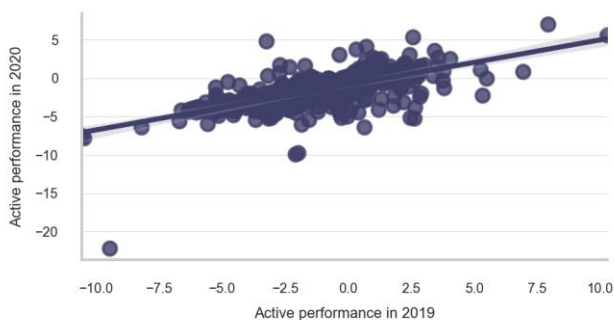
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	0.12	0.25	0.82	1.00	-0.56	1.00	0.96	0.19	1.16	-3.41	0.33	1.97
Funds (ew)	0.14	0.74	0.50	0.46	-0.10	0.90	0.96	0.58	1.39	-4.43	-0.11	1.05
Funds (aw)	0.13	0.64	0.59	0.68	-0.27	1.02	1.00	0.50	1.45	-4.10	0.10	1.39
<b>Hit ratio vs Net</b>	<b>40 %</b>	<b>74 %</b>	<b>14 %</b>	<b>17 %</b>	<b>85 %</b>	<b>46 %</b>	<b>49 %</b>	<b>77 %</b>	<b>55 %</b>	<b>34 %</b>	<b>17 %</b>	<b>13 %</b>
Hit Ratio vs Gross	36 %	73 %	11 %	14 %	83 %	43 %	46 %	75 %	55 %	34 %	16 %	12 %
Funds (#)	472	474	477	477	481	483	485	484	487	487	488	487

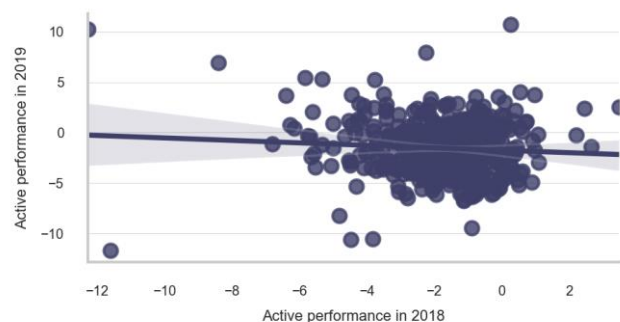
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	4.04	4.04	3.45	2.87	4.25
Funds: equal-weighted average	2.05	2.05	1.57	1.60	2.76
Funds: asset-weighted average	3.05	3.05	2.29	2.01	3.13
Funds: top decile	4.77	4.77	3.52	2.98	4.31
Funds: top quartile	3.41	3.41	2.72	2.41	3.75
Funds: median	<b>1.97</b>	<b>1.97</b>	<b>1.55</b>	<b>1.65</b>	<b>2.82</b>
Funds: bottom quartile	0.60	0.60	0.41	0.77	1.85
Funds: bottom decile	-0.34	-0.34	-0.28	0.08	1.14
Net Benchmark	<b>3.81</b>	<b>3.81</b>	<b>3.22</b>	<b>2.64</b>	<b>4.02</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	454	454	424	398	340
All funds = reporting + non-reporting	480	480	491	528	646
<b>Survivorship: %of reporting funds vs total</b>	<b>95 %</b>	<b>95 %</b>	<b>86 %</b>	<b>75 %</b>	<b>53 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

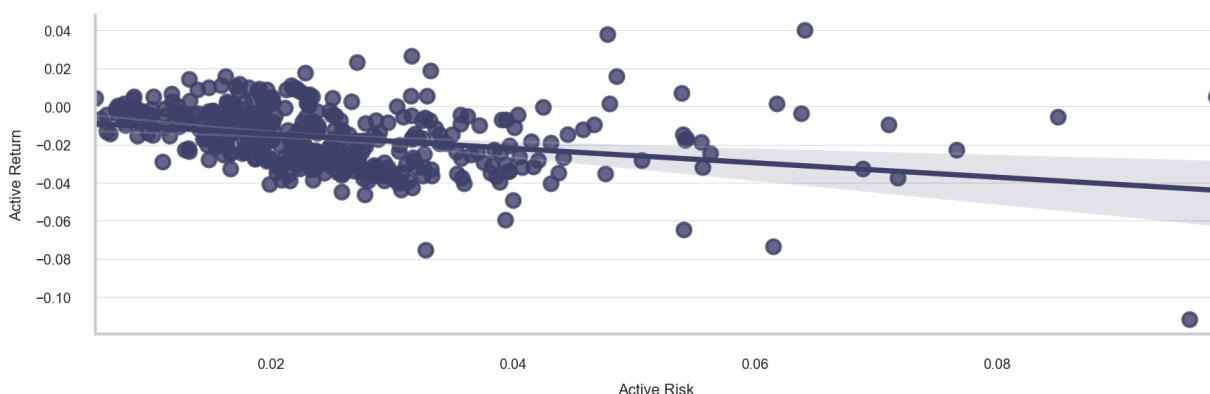
	YtD	1Y	3Y	5Y	10Y
Benchmark	4.04	4.04	3.45	2.87	4.25
Net Benchmark	3.81	3.81	3.22	2.64	4.02
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>20 %</b>	<b>20 %</b>	<b>15 %</b>	<b>18 %</b>	<b>16 %</b>
Hit ratio (vs Net Benchmark, all funds)	20 %	20 %	13 %	14 %	9 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Euro Corporate

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This universe covers Europe domiciled funds which invest in Euro denominated corporate bonds across all durations.

The universe covers EUR 210.5bn, of which EUR 159.3 bn is invested in 347 active operating funds.

Compared to an investment in Bbg Barclays Euro Corporate net of 0.20 % (average expense ratio of the ETFs of this universe) 39% of the active, operating funds belonging to this universe have outperformed over 1Y (38% over 5Y and 38% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

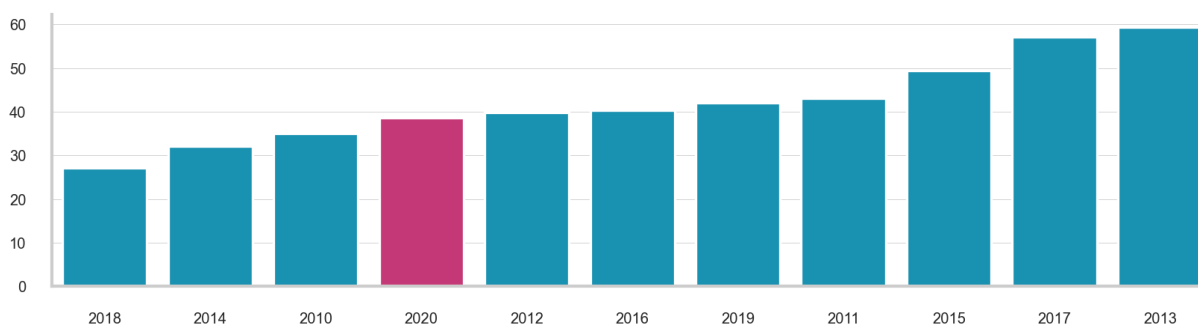
	Bbg Barclays Euro Corporate	Active Funds (ew)
YtD	2.78 %	2.20 %
1Y	2.78 %	2.20 %
3Y (pa)	2.55 %	1.81 %
5Y (pa)	2.95 %	2.37 %
10Y (pa)	3.94 %	3.31 %

### Fund Universe: Overview

All funds	617
Operating funds (Active)	406 (347)
Total AUM	EUR 210.5 bn
Active / Passive AUM	EUR 159.3 / 51.2 bn
Funds / ETFs AUM	EUR 175.2 / 35.0 bn
Avg. Active Fee (aw)	0.54 % (0.45 %)
Avg. ETF fee (aw)	0.16 % (0.16 %)
Avg. ETF Exp. Ratio (aw)	0.20 % (0.20 %)
Benchmark	Bbg Barclays Euro Corporate

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	2.78	6.26	-1.26	2.40	4.74	-0.57	8.40	2.38	13.59	1.48	4.76
Net Benchmark	2.57	6.05	-1.45	2.20	4.53	-0.76	8.19	2.18	13.37	1.28	4.55
Funds (ew)	2.20	5.61	-2.19	2.49	4.02	-0.76	6.62	2.67	2.67	0.37	3.92
Funds (aw)	2.97	6.41	-2.10	2.87	4.28	-0.80	7.38	2.85	13.56	0.34	4.17
<b>Hit Ratio vs Net Benchmark</b>	<b>39 %</b>	<b>42 %</b>	<b>27 %</b>	<b>57 %</b>	<b>40 %</b>	<b>49 %</b>	<b>32 %</b>	<b>59 %</b>	<b>40 %</b>	<b>43 %</b>	<b>35 %</b>
Hit Ratio vs Gross Benchmark	31 %	35 %	21 %	49 %	33 %	42 %	27 %	52 %	37 %	40 %	31 %
Funds (#)	331	324	305	308	308	318	317	320	314	304	285

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	1.99	1.99	5.28	-6.15	-0.51	1.30	2.16	3.20
Net Benchmark	1.94	1.94	5.23	-6.19	-0.56	1.25	2.11	3.15
Funds (ew)	2.17	1.82	5.22	-6.62	-0.23	1.13	1.88	2.75
Funds (aw)	2.30	1.93	5.44	-6.35	-0.28	1.32	2.20	3.06
<b>Hit ratio vs Net Benchmark</b>	<b>64 %</b>	<b>49 %</b>	<b>52 %</b>	<b>34 %</b>	<b>75 %</b>	<b>42 %</b>	<b>44 %</b>	<b>30 %</b>
Hit ratio vs Gross Benchmark	58 %	46 %	51 %	33 %	69 %	33 %	40 %	26 %
Reporting funds (#)	341	343	341	345	339	335	329	326

## Monthly performance

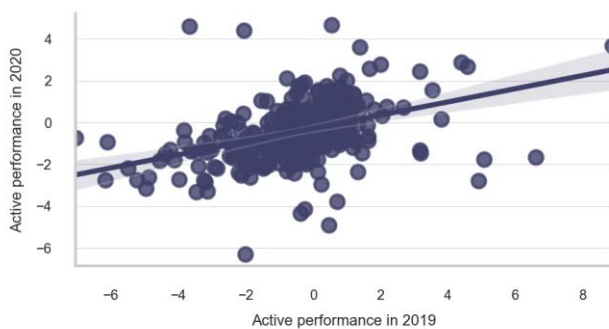
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	0.15	1.01	0.76	0.28	0.16	1.48	1.30	0.15	3.71	-6.87	-0.42	1.14
Funds (ew)	0.23	1.30	0.63	0.18	0.28	1.35	1.27	0.48	3.38	-7.01	-0.43	0.87
Funds (aw)	0.26	1.37	0.66	0.23	0.25	1.46	1.30	0.43	3.63	-6.90	-0.38	0.98
<b>Hit ratio vs Net</b>	<b>62 %</b>	<b>72 %</b>	<b>29 %</b>	<b>31 %</b>	<b>67 %</b>	<b>44 %</b>	<b>44 %</b>	<b>81 %</b>	<b>45 %</b>	<b>41 %</b>	<b>49 %</b>	<b>23 %</b>
Hit Ratio vs Gross	56 %	71 %	25 %	27 %	61 %	41 %	41 %	79 %	44 %	39 %	44 %	18 %
Funds (#)	341	342	343	345	345	344	345	347	346	348	348	346

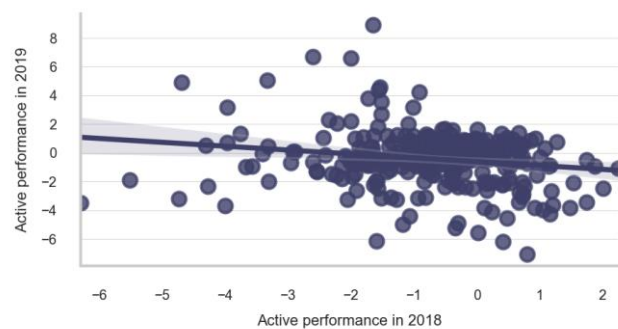
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	2.78	2.78	2.55	2.95	3.94
Funds: equal-weighted average	2.20	2.20	1.81	2.37	3.31
Funds: asset-weighted average	2.97	2.97	2.37	2.85	3.69
Funds: top decile	3.85	3.85	2.94	3.33	4.38
Funds: top quartile	3.02	3.02	2.47	3.01	3.96
Funds: median	<b>2.22</b>	<b>2.22</b>	<b>1.90</b>	<b>2.47</b>	<b>3.46</b>
Funds: bottom quartile	1.35	1.35	1.22	1.79	2.81
Funds: bottom decile	0.50	0.50	0.53	1.23	2.15
Net Benchmark	<b>2.57</b>	<b>2.57</b>	<b>2.34</b>	<b>2.75</b>	<b>3.73</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	331	331	287	266	204
All funds = reporting + non-reporting	342	342	313	324	311
<b>Survivorship: %of reporting funds vs total</b>	<b>97 %</b>	<b>97 %</b>	<b>92 %</b>	<b>82 %</b>	<b>66 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

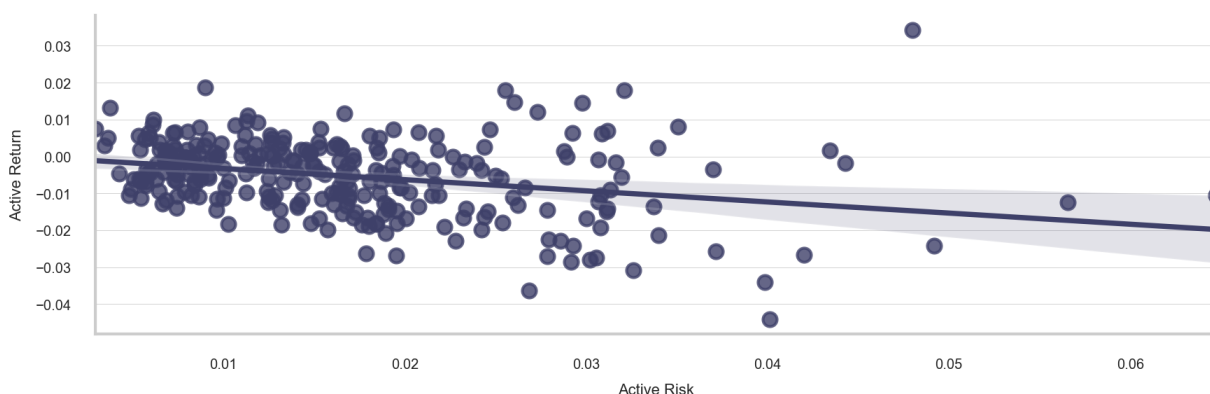
	YtD	1Y	3Y	5Y	10Y
Benchmark	2.78	2.78	2.55	2.95	3.94
Net Benchmark	2.57	2.57	2.34	2.75	3.73
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>39 %</b>	<b>39 %</b>	<b>32 %</b>	<b>38 %</b>	<b>38 %</b>
Hit ratio (vs Net Benchmark, all funds)	38 %	38 %	29 %	33 %	28 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Euro Government

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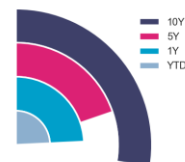
This universe covers Europe domiciled funds which invest in Euro denominated government bonds across durations.

The universe covers EUR 110.5bn, of which EUR 62.7 bn is invested in 207 active operating funds.

Compared to an investment in Bbg Barclays Euro Government net of 0.19 % (average expense ratio of the ETFs of this universe) 24% of the active, operating funds belonging to this universe have outperformed over 1Y (20% over 5Y and 28% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

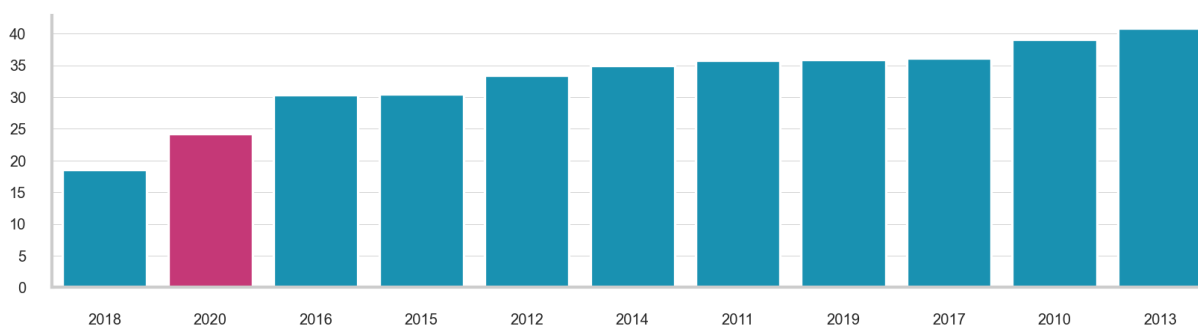
	Bbg Barclays Euro Government	Active Funds (ew)
YtD	4.73 %	3.09 %
1Y	4.73 %	3.09 %
3Y (pa)	3.98 %	2.46 %
5Y (pa)	3.04 %	1.88 %
10Y (pa)	4.48 %	3.40 %

### Fund Universe: Overview

All funds	673
Operating funds (Active)	307 (207)
Total AUM	EUR 110.5 bn
Active / Passive AUM	EUR 62.7 / 47.8 bn
Funds / ETFs AUM	EUR 81.4 / 29.1 bn
Avg. Active Fee (aw)	0.43 % (0.31 %)
Avg. ETF fee (aw)	0.18 % (0.14 %)
Avg. ETF Exp. Ratio (aw)	0.18 % (0.19 %)
Benchmark	Bbg Barclays Euro Government

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	4.73	6.36	0.92	0.20	3.14	1.52	12.44	2.12	10.54	3.52	1.49
Net Benchmark	4.53	6.16	0.73	0.01	2.95	1.33	12.23	1.93	10.34	3.33	1.30
Funds (ew)	3.09	4.55	-0.24	-0.11	2.11	0.73	9.90	1.57	1.57	2.65	0.93
Funds (aw)	3.84	5.23	-0.15	0.03	2.42	0.88	10.52	1.28	9.22	2.90	1.02
<b>Hit Ratio vs Net Benchmark</b>	<b>24 %</b>	<b>36 %</b>	<b>19 %</b>	<b>36 %</b>	<b>30 %</b>	<b>30 %</b>	<b>35 %</b>	<b>41 %</b>	<b>33 %</b>	<b>36 %</b>	<b>39 %</b>
Hit Ratio vs Gross Benchmark	20 %	32 %	13 %	29 %	22 %	21 %	33 %	34 %	29 %	33 %	33 %
Funds (#)	198	192	194	199	214	220	226	235	242	254	243

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	1.16	1.55	1.71	0.24	-2.81	3.53	3.19	2.44
Net Benchmark	1.12	1.50	1.66	0.19	-2.86	3.48	3.14	2.39
Funds (ew)	0.92	1.25	1.53	-0.62	-2.11	2.59	2.30	1.80
Funds (aw)	1.12	1.41	1.65	-0.37	-2.29	3.05	2.60	1.87
<b>Hit ratio vs Net Benchmark</b>	<b>36 %</b>	<b>46 %</b>	<b>40 %</b>	<b>28 %</b>	<b>65 %</b>	<b>39 %</b>	<b>30 %</b>	<b>34 %</b>
Hit ratio vs Gross Benchmark	32 %	43 %	34 %	27 %	64 %	36 %	27 %	30 %
Reporting funds (#)	200	201	202	204	200	195	193	198

## Monthly performance

Active performance net of fund fees & costs (% in EUR)

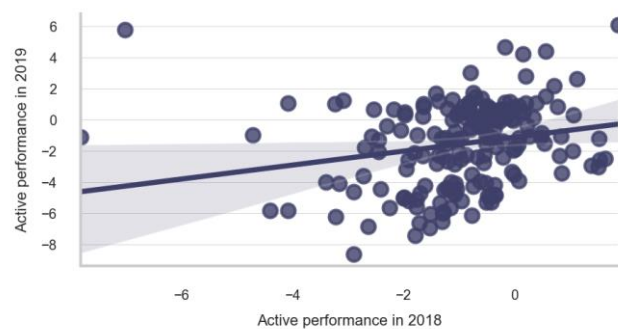
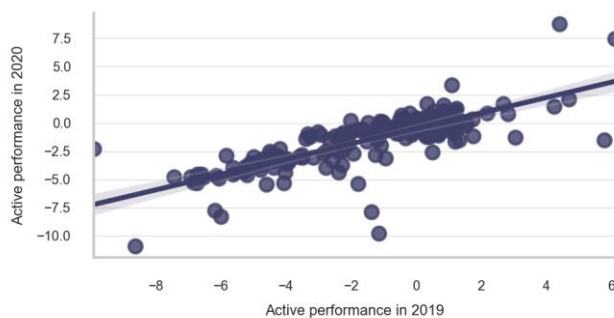
	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	0.12	0.07	0.91	1.29	-0.77	0.97	0.94	0.15	0.55	-2.58	0.49	2.33
Funds (ew)	0.05	0.26	0.61	0.95	-0.50	0.81	0.83	0.51	0.19	-2.35	0.17	1.60
Funds (aw)	0.11	0.28	0.72	1.08	-0.55	0.87	0.91	0.53	0.20	-2.44	0.28	1.83
<b>Hit ratio vs Net</b>	<b>30 %</b>	<b>58 %</b>	<b>20 %</b>	<b>33 %</b>	<b>76 %</b>	<b>39 %</b>	<b>39 %</b>	<b>78 %</b>	<b>24 %</b>	<b>62 %</b>	<b>20 %</b>	<b>21 %</b>
Hit Ratio vs Gross	24 %	56 %	15 %	31 %	75 %	37 %	37 %	76 %	22 %	61 %	19 %	19 %
Funds (#)	200	200	201	202	203	202	202	202	203	205	205	204

## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)

2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	4.73	4.73	3.98	3.04	4.48
Funds: equal-weighted average	3.09	3.09	2.46	1.88	3.40
Funds: asset-weighted average	3.84	3.84	2.95	2.26	3.56
Funds: top decile	5.25	5.25	4.16	3.24	4.75
Funds: top quartile	4.52	4.52	3.68	2.75	4.30
Funds: median	<b>3.48</b>	<b>3.48</b>	<b>2.95</b>	<b>2.21</b>	<b>3.66</b>
Funds: bottom quartile	1.44	1.44	0.98	0.85	2.33
Funds: bottom decile	0.17	0.17	0.09	0.03	1.49
Net Benchmark	<b>4.53</b>	<b>4.53</b>	<b>3.78</b>	<b>2.85</b>	<b>4.28</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	198	198	178	167	145
All funds = reporting + non-reporting	203	203	206	221	268
<b>Survivorship: %of reporting funds vs total</b>	<b>98 %</b>	<b>98 %</b>	<b>86 %</b>	<b>76 %</b>	<b>54 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

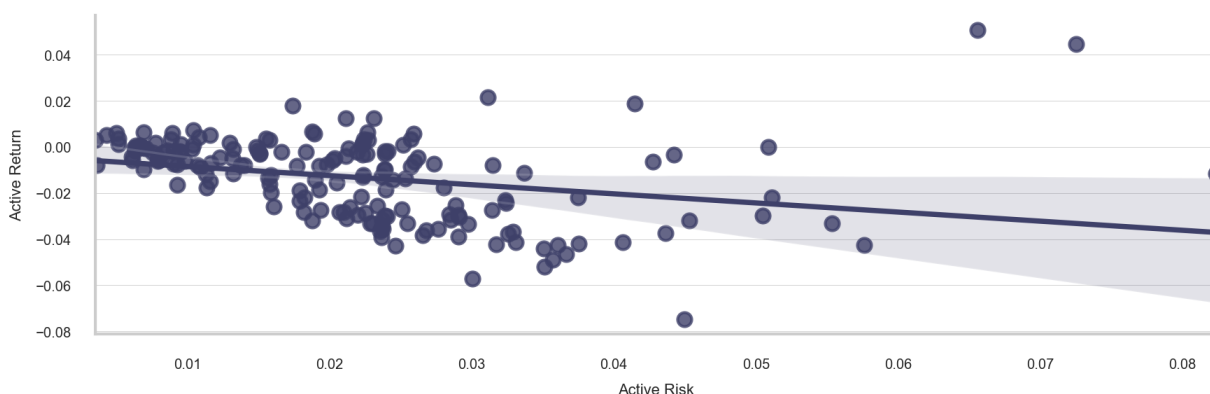
	YtD	1Y	3Y	5Y	10Y
Benchmark	4.73	4.73	3.98	3.04	4.48
Net Benchmark	4.53	4.53	3.78	2.85	4.28
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>24 %</b>	<b>24 %</b>	<b>22 %</b>	<b>20 %</b>	<b>28 %</b>
Hit ratio (vs Net Benchmark, all funds)	24 %	24 %	20 %	17 %	16 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Euro High Yield

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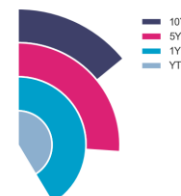
This universe covers Europe domiciled funds which invest in Euro denominated High Yield bonds across all durations.

The universe covers EUR 62.5bn, of which EUR 52.8 bn is invested in 170 active operating funds.

Compared to an investment in Bbg Barclays Euro High Yield net of 0.48 % (average expense ratio of the ETFs of this universe) 41% of the active, operating funds belonging to this universe have outperformed over 1Y (26% over 5Y and 14% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

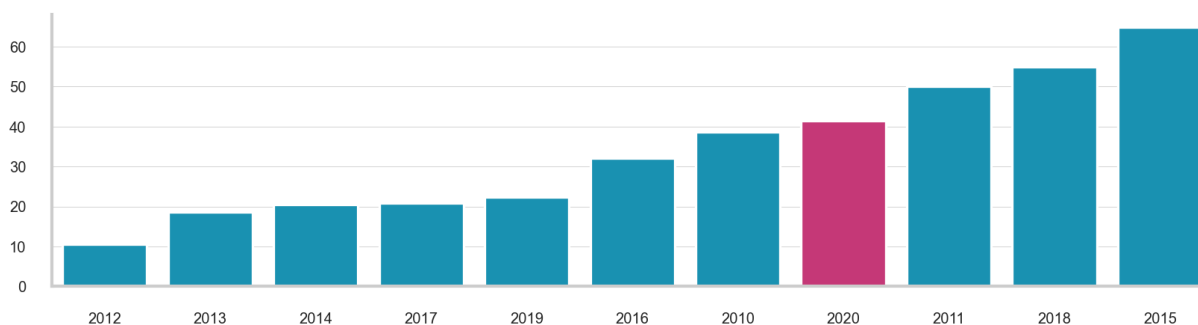
	Bbg Barclays Euro High Yield	Active Funds (ew)
YtD	2.28 %	1.19 %
1Y	2.28 %	1.19 %
3Y (pa)	3.07 %	1.71 %
5Y (pa)	5.02 %	3.54 %
10Y (pa)	6.37 %	4.56 %

### Fund Universe: Overview

All funds	306
Operating funds (Active)	182 (170)
Total AUM	EUR 62.5 bn
Active / Passive AUM	EUR 52.8 / 9.7 bn
Funds / ETFs AUM	EUR 52.8 / 9.7 bn
Avg. Active Fee (aw)	0.76 % (0.72 %)
Avg. ETF fee (aw)	0.37 % (0.45 %)
Avg. ETF Exp. Ratio (aw)	0.39 % (0.48 %)
Benchmark	Bbg Barclays Euro High Yield

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	2.28	11.33	-3.82	6.92	9.11	1.01	5.83	10.15	27.32	-3.21	14.15
Net Benchmark	1.79	10.80	-4.29	6.40	8.59	0.53	5.32	9.62	26.72	-3.67	13.61
Funds (ew)	1.19	8.88	-4.35	4.94	7.61	1.18	3.36	7.46	7.46	-3.74	12.28
Funds (aw)	1.88	9.07	-3.98	4.97	7.42	1.42	3.41	8.17	21.41	-3.67	13.24
<b>Hit Ratio vs Net Benchmark</b>	<b>41 %</b>	<b>22 %</b>	<b>55 %</b>	<b>21 %</b>	<b>32 %</b>	<b>65 %</b>	<b>20 %</b>	<b>19 %</b>	<b>11 %</b>	<b>50 %</b>	<b>39 %</b>
Hit Ratio vs Gross Benchmark	30 %	15 %	46 %	14 %	21 %	54 %	9 %	15 %	9 %	44 %	35 %
Funds (#)	157	147	144	129	128	131	127	118	113	100	93

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	5.15	2.60	11.24	-14.77	1.77	1.49	2.39	5.27
Net Benchmark	5.03	2.47	11.11	-14.88	1.64	1.37	2.27	5.14
Funds (ew)	4.82	2.18	9.64	-13.95	1.47	1.03	1.85	4.27
Funds (aw)	4.92	2.27	9.99	-13.67	1.56	0.99	1.98	4.27
<b>Hit ratio vs Net Benchmark</b>	<b>47 %</b>	<b>30 %</b>	<b>30 %</b>	<b>64 %</b>	<b>39 %</b>	<b>25 %</b>	<b>27 %</b>	<b>23 %</b>
Hit ratio vs Gross Benchmark	41 %	25 %	27 %	62 %	31 %	20 %	25 %	17 %
Reporting funds (#)	165	162	164	162	157	154	153	150

## Monthly performance

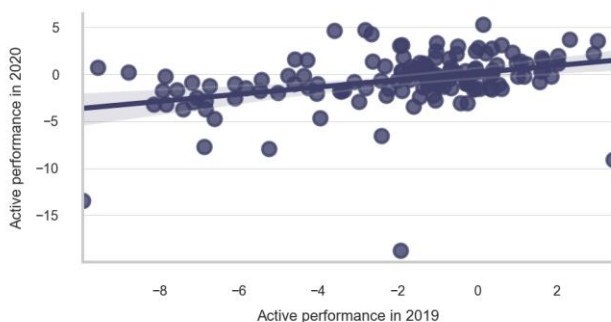
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	0.71	4.11	0.17	-0.64	1.42	1.69	1.93	2.73	6.11	-13.38	-1.90	0.17
Funds (ew)	0.75	3.89	0.14	-0.66	1.30	1.51	1.71	2.41	5.21	-12.60	-1.63	0.10
Funds (aw)	0.71	4.02	0.16	-0.74	1.37	1.64	1.59	2.43	5.70	-12.33	-1.64	0.12
<b>Hit ratio vs Net</b>	<b>64 %</b>	<b>41 %</b>	<b>47 %</b>	<b>42 %</b>	<b>46 %</b>	<b>39 %</b>	<b>38 %</b>	<b>35 %</b>	<b>32 %</b>	<b>61 %</b>	<b>68 %</b>	<b>38 %</b>
Hit Ratio vs Gross	54 %	39 %	33 %	39 %	37 %	36 %	38 %	33 %	30 %	59 %	65 %	35 %
Funds (#)	168	167	165	165	166	166	165	165	165	164	163	162

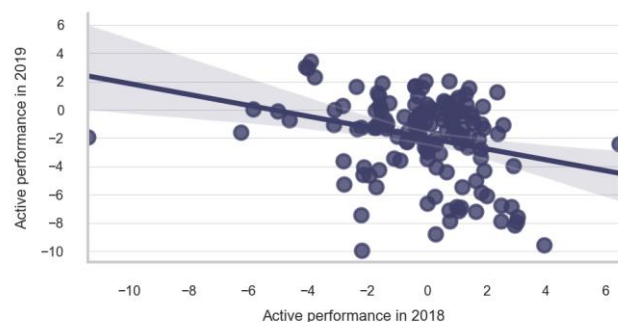
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	2.28	2.28	3.07	5.02	6.37
Funds: equal-weighted average	1.19	1.19	1.71	3.54	4.56
Funds: asset-weighted average	1.88	1.88	2.18	3.77	4.79
Funds: top decile	4.17	4.17	3.55	4.99	6.00
Funds: top quartile	2.69	2.69	2.75	4.56	5.47
Funds: median	<b>1.40</b>	<b>1.40</b>	<b>2.04</b>	<b>3.95</b>	<b>4.88</b>
Funds: bottom quartile	0.20	0.20	0.90	2.93	3.94
Funds: bottom decile	-1.23	-1.23	-0.07	1.18	2.37
Net Benchmark	<b>1.79</b>	<b>1.79</b>	<b>2.58</b>	<b>4.52</b>	<b>5.86</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	157	157	135	115	78
All funds = reporting + non-reporting	162	162	144	136	103
<b>Survivorship: %of reporting funds vs total</b>	<b>97 %</b>	<b>97 %</b>	<b>94 %</b>	<b>85 %</b>	<b>76 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

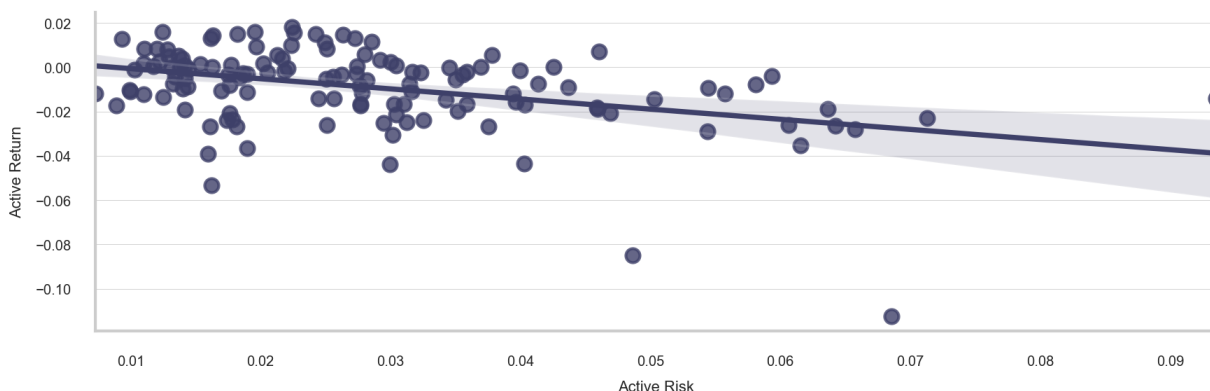
	YtD	1Y	3Y	5Y	10Y
Benchmark	2.28	2.28	3.07	5.02	6.37
Net Benchmark	1.79	1.79	2.58	4.52	5.86
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>41 %</b>	<b>41 %</b>	<b>32 %</b>	<b>26 %</b>	<b>14 %</b>
Hit ratio (vs Net Benchmark, all funds)	41 %	41 %	31 %	23 %	12 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Europe Income

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This universe covers Europe domiciled funds which invest in European equities with a focus on large market capitalisations and higher expected dividends.

The universe covers EUR 15.5bn, of which EUR 14.5 bn is invested in 76 active operating funds.

Compared to an investment in MSCI Europe High Div Yld net of 0.30 % (average expense ratio of the ETFs of this universe) 69% of the active, operating funds belonging to this universe have outperformed over 1Y (25% over 5Y and 19% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

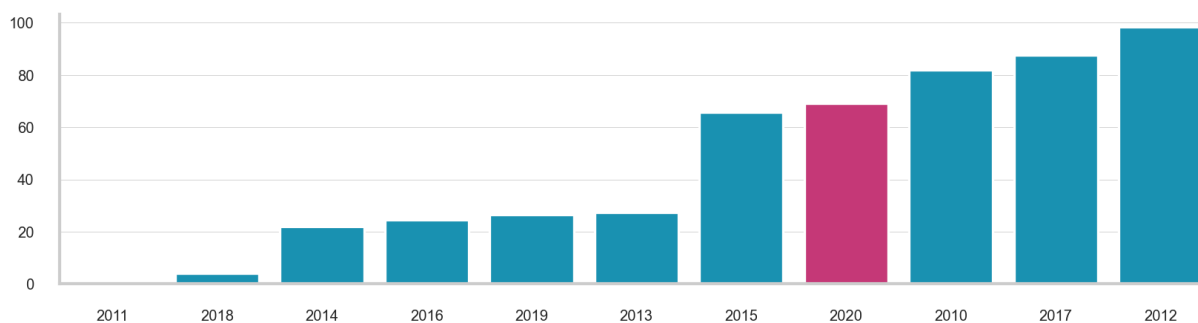
	MSCI Europe High Div Yld	Active Funds (ew)
YtD	-9.83 %	<b>-7.18 %</b>
1Y	-9.83 %	<b>-7.18 %</b>
3Y (pa)	2.43 %	<b>-0.19 %</b>
5Y (pa)	3.13 %	<b>1.55 %</b>
10Y (pa)	6.18 %	<b>4.46 %</b>

### Fund Universe: Overview

All funds	111
Operating funds (Active)	85 (76)
Total AUM	EUR 15.5 bn
Active / Passive AUM	EUR 14.5 / 1.0 bn
Funds / ETFs AUM	EUR 14.5 / 1.0 bn
Avg. Active Fee (aw)	0.95 % (1.12 %)
Avg. ETF fee (aw)	0.27 % (0.29 %)
Avg. ETF Exp. Ratio (aw)	0.29 % (0.30 %)
Benchmark	MSCI Europe High Div Yld

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-9.83	25.74	-5.22	4.52	3.89	7.70	9.80	21.72	6.44	1.88	3.83
Net Benchmark	-10.10	25.36	-5.51	4.21	3.57	7.38	9.47	21.36	6.12	1.57	3.51
Funds (ew)	-7.18	22.23	-11.66	8.43	0.76	9.40	6.89	19.19	19.19	-8.34	7.27
Funds (aw)	-7.69	20.25	-10.89	7.73	-0.89	9.07	6.71	18.43	14.07	-9.43	5.29
<b>Hit Ratio vs Net Benchmark</b>	<b>69 %</b>	<b>26 %</b>	<b>4 %</b>	<b>88 %</b>	<b>25 %</b>	<b>66 %</b>	<b>22 %</b>	<b>27 %</b>	<b>98 %</b>	<b>0 %</b>	<b>82 %</b>
Hit Ratio vs Gross Benchmark	69 %	25 %	4 %	88 %	23 %	64 %	15 %	27 %	98 %	0 %	80 %
Funds (#)	71	72	73	73	73	67	68	66	62	55	50

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	11.77	-2.30	10.79	-25.47	7.07	3.26	1.53	12.01
Net Benchmark	11.69	-2.37	10.71	-25.53	6.99	3.18	1.46	11.93
Funds (ew)	10.30	-0.81	13.36	-24.82	5.57	2.09	2.04	11.05
Funds (aw)	9.82	-0.90	12.89	-24.86	5.34	2.50	1.09	10.18
<b>Hit ratio vs Net Benchmark</b>	<b>27 %</b>	<b>80 %</b>	<b>80 %</b>	<b>60 %</b>	<b>16 %</b>	<b>19 %</b>	<b>64 %</b>	<b>27 %</b>
Hit ratio vs Gross Benchmark	26 %	78 %	79 %	59 %	16 %	18 %	63 %	27 %
Reporting funds (#)	74	74	76	75	74	74	73	73

## Monthly performance

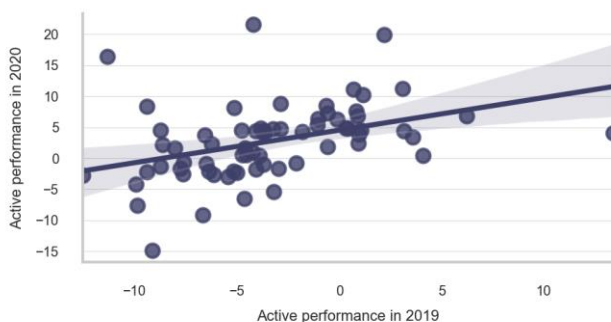
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	2.36	15.56	-5.59	-1.48	1.31	-2.20	3.16	1.74	5.47	-15.98	-9.39	-2.20
Funds (ew)	1.60	15.10	-5.68	-2.37	2.73	-1.11	3.12	2.69	7.06	-16.68	-8.35	-1.47
Funds (aw)	1.35	15.28	-6.01	-2.15	2.35	-1.05	3.32	2.33	6.78	-16.82	-8.76	-1.00
<b>Hit ratio vs Net</b>	<b>26 %</b>	<b>39 %</b>	<b>43 %</b>	<b>23 %</b>	<b>95 %</b>	<b>84 %</b>	<b>57 %</b>	<b>76 %</b>	<b>63 %</b>	<b>51 %</b>	<b>83 %</b>	<b>75 %</b>
Hit Ratio vs Gross	26 %	36 %	43 %	22 %	95 %	83 %	55 %	75 %	63 %	51 %	82 %	75 %
Funds (#)	74	74	74	74	76	76	76	76	76	77	76	75

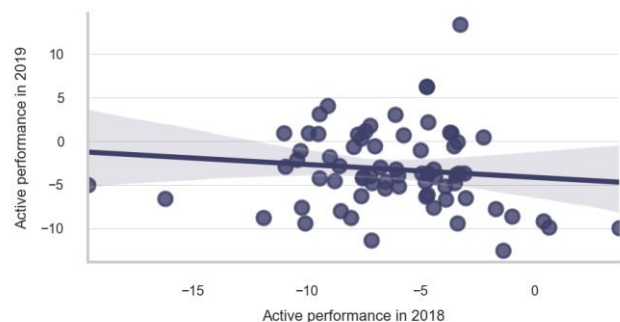
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-9.83	-9.83	2.43	3.13	6.18
Funds: equal-weighted average	-7.18	-7.18	-0.19	1.55	4.46
Funds: asset-weighted average	-7.69	-7.69	-0.36	1.10	4.17
Funds: top decile	-1.33	-1.33	3.26	3.86	6.63
Funds: top quartile	-4.29	-4.29	1.76	2.81	5.23
Funds: median	<b>-6.42</b>	<b>-6.42</b>	<b>-0.28</b>	<b>1.67</b>	<b>4.19</b>
Funds: bottom quartile	-11.29	-11.29	-2.16	0.29	3.62
Funds: bottom decile	-12.85	-12.85	-3.58	-1.37	3.03
Net Benchmark	<b>-10.10</b>	<b>-10.10</b>	<b>2.12</b>	<b>2.82</b>	<b>5.86</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	71	71	67	63	47
All funds = reporting + non-reporting	75	75	75	72	55
<b>Survivorship: %of reporting funds vs total</b>	<b>95 %</b>	<b>95 %</b>	<b>89 %</b>	<b>88 %</b>	<b>85 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

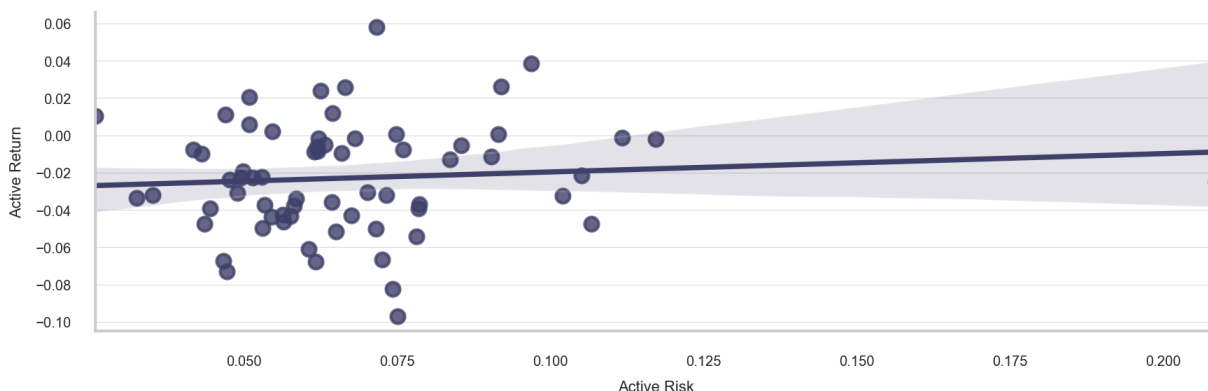
	YtD	1Y	3Y	5Y	10Y
Benchmark	-9.83	-9.83	2.43	3.13	6.18
Net Benchmark	-10.10	-10.10	2.12	2.82	5.86
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>69 %</b>	<b>69 %</b>	<b>19 %</b>	<b>25 %</b>	<b>19 %</b>
Hit ratio (vs Net Benchmark, all funds)	69 %	69 %	19 %	25 %	20 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Europe Large Cap

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This universe covers Europe domiciled funds which invest globally in European large cap stocks and a balanced investment style.

The universe covers EUR 189.5bn, of which EUR 111.4 bn is invested in 466 active operating funds.

Compared to an investment in MSCI Europe net of 0.25 % (average expense ratio of the ETFs of this universe) 66% of the active, operating funds belonging to this universe have outperformed over 1Y (32% over 5Y and 34% over 10Y).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

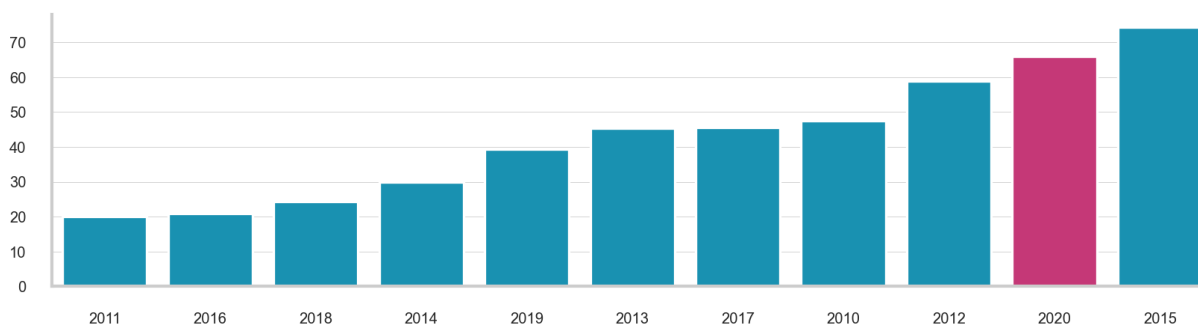
	MSCI Europe	Active Funds (ew)
YtD	-3.32 %	<b>-0.80 %</b>
1Y	-3.32 %	<b>-0.80 %</b>
3Y (pa)	2.91 %	<b>2.12 %</b>
5Y (pa)	4.27 %	<b>3.09 %</b>
10Y (pa)	6.30 %	<b>5.27 %</b>

### Fund Universe: Overview

All funds	1224
Operating funds (Active)	584 (466)
Total AUM	EUR 189.5 bn
Active / Passive AUM	EUR 111.4 / 78.1 bn
Funds / ETFs AUM	EUR 144.8 / 44.2 bn
Avg. Active Fee (aw)	0.95 % (0.71 %)
Avg. ETF fee (aw)	0.25 % (0.15 %)
Avg. ETF Exp. Ratio (aw)	0.30 % (0.25 %)
Benchmark	MSCI Europe

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-3.32	26.05	-10.56	10.26	2.57	8.22	6.85	19.82	17.30	-8.07	11.08
Net Benchmark	-3.57	25.74	-10.79	9.98	2.32	7.95	6.58	19.52	17.01	-8.30	10.80
Funds (ew)	-0.80	24.25	-13.27	10.12	-0.55	10.60	4.96	19.25	19.25	-11.41	10.49
Funds (aw)	-1.45	24.63	-12.14	10.00	-0.58	11.63	6.09	19.24	17.04	-10.50	11.41
<b>Hit Ratio vs Net Benchmark</b>	<b>66 %</b>	<b>39 %</b>	<b>24 %</b>	<b>46 %</b>	<b>21 %</b>	<b>74 %</b>	<b>30 %</b>	<b>45 %</b>	<b>59 %</b>	<b>20 %</b>	<b>48 %</b>
Hit Ratio vs Gross Benchmark	64 %	36 %	22 %	42 %	19 %	72 %	27 %	41 %	55 %	19 %	45 %
Funds (#)	431	427	411	403	397	386	392	406	408	432	471

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	10.81	0.10	12.60	-22.59	5.72	2.57	3.01	12.84
Net Benchmark	10.74	0.03	12.54	-22.65	5.65	2.51	2.95	12.77
Funds (ew)	10.03	1.59	14.51	-22.37	5.81	1.65	2.94	12.27
Funds (aw)	9.30	1.35	14.35	-22.20	5.86	1.95	2.62	12.53
<b>Hit ratio vs Net Benchmark</b>	<b>34 %</b>	<b>72 %</b>	<b>80 %</b>	<b>53 %</b>	<b>52 %</b>	<b>28 %</b>	<b>49 %</b>	<b>42 %</b>
Hit ratio vs Gross Benchmark	32 %	71 %	79 %	52 %	49 %	27 %	48 %	40 %
Reporting funds (#)	456	454	451	454	447	439	435	436

## Monthly performance

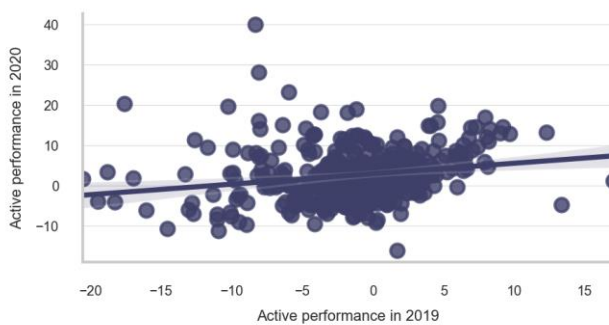
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	2.35	13.93	-5.03	-1.43	2.92	-1.39	3.05	2.93	6.10	-14.37	-8.49	-1.28
Funds (ew)	2.46	13.21	-5.17	-1.30	3.03	-0.09	2.98	3.58	7.34	-14.94	-7.74	-1.12
Funds (aw)	2.28	12.79	-5.25	-1.30	2.85	-0.16	2.98	3.29	7.50	-14.73	-8.03	-0.79
<b>Hit ratio vs Net</b>	<b>47 %</b>	<b>37 %</b>	<b>42 %</b>	<b>56 %</b>	<b>51 %</b>	<b>81 %</b>	<b>52 %</b>	<b>69 %</b>	<b>71 %</b>	<b>44 %</b>	<b>69 %</b>	<b>58 %</b>
Hit Ratio vs Gross	46 %	36 %	40 %	56 %	50 %	80 %	51 %	68 %	71 %	44 %	67 %	56 %
Funds (#)	459	462	463	460	458	458	457	456	458	457	461	461

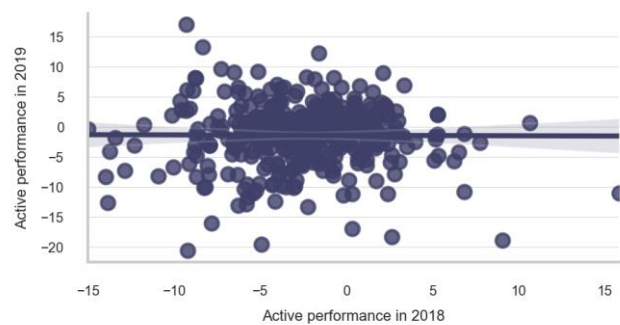
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-3.32	-3.32	2.91	4.27	6.30
Funds: equal-weighted average	-0.80	-0.80	2.12	3.09	5.27
Funds: asset-weighted average	-1.45	-1.45	2.57	3.37	5.73
Funds: top decile	7.58	7.58	6.12	5.62	7.60
Funds: top quartile	2.74	2.74	3.97	4.30	6.47
Funds: median	<b>-1.18</b>	<b>-1.18</b>	<b>2.19</b>	<b>3.18</b>	<b>5.36</b>
Funds: bottom quartile	-5.21	-5.21	0.15	1.71	4.16
Funds: bottom decile	-8.21	-8.21	-1.64	0.46	2.84
Net Benchmark	<b>-3.57</b>	<b>-3.57</b>	<b>2.65</b>	<b>4.01</b>	<b>6.03</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	431	431	370	318	246
All funds = reporting + non-reporting	459	459	431	417	468
<b>Survivorship: %of reporting funds vs total</b>	<b>94 %</b>	<b>94 %</b>	<b>86 %</b>	<b>76 %</b>	<b>53 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

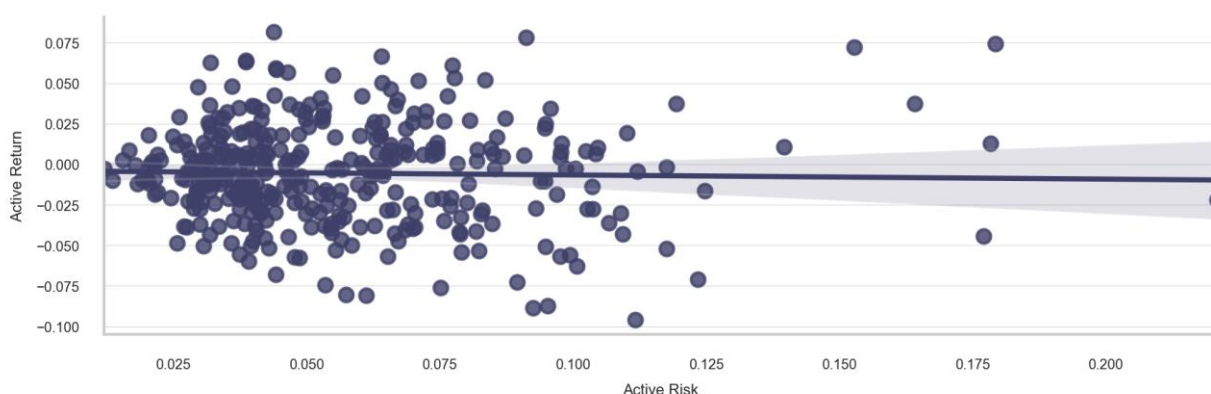
	YtD	1Y	3Y	5Y	10Y
Benchmark	-3.32	-3.32	2.91	4.27	6.30
Net Benchmark	-3.57	-3.57	2.65	4.01	6.03
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>66 %</b>	<b>66 %</b>	<b>43 %</b>	<b>32 %</b>	<b>34 %</b>
Hit ratio (vs Net Benchmark, all funds)	66 %	66 %	43 %	28 %	23 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Europe Large Cap Growth

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This universe covers Europe domiciled funds which invest globally in European large cap stocks and a growth investment style.

The universe covers EUR 52.6bn, of which EUR 51.5 bn is invested in 85 active operating funds.

Compared to an investment in MSCI Europe Growth net of 0.42 % (average expense ratio of the ETFs of this universe) 63% of the active, operating funds belonging to this universe have outperformed over 1Y (44% over 5Y and 41% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

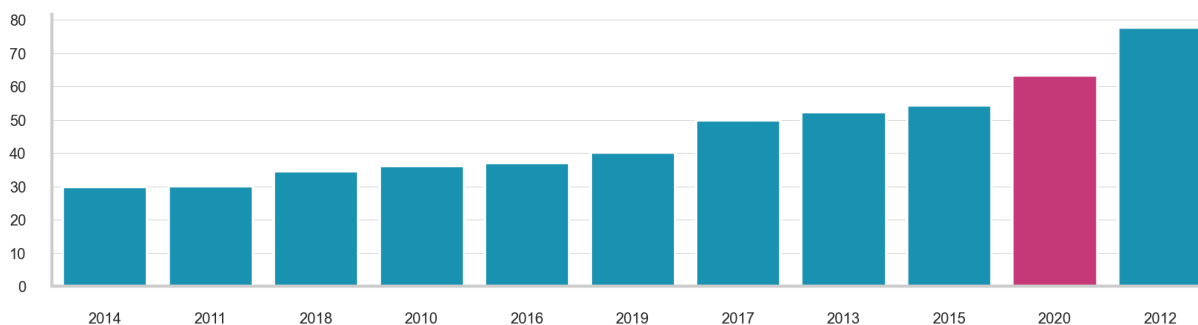
	MSCI Europe Growth	Active Funds (ew)
YtD	5.87 %	<b>8.35 %</b>
1Y	5.87 %	<b>8.35 %</b>
3Y (pa)	8.25 %	<b>7.34 %</b>
5Y (pa)	6.87 %	<b>6.02 %</b>
10Y (pa)	8.53 %	<b>7.68 %</b>

### Fund Universe: Overview

All funds	146
Operating funds (Active)	90 (85)
Total AUM	EUR 52.6 bn
Active / Passive AUM	EUR 51.5 / 1.1 bn
Funds / ETFs AUM	EUR 51.6 / 1.0 bn
Avg. Active Fee (aw)	1.24 % (1.28 %)
Avg. ETF fee (aw)	0.31 % (0.31 %)
Avg. ETF Exp. Ratio (aw)	0.46 % (0.42 %)
Benchmark	MSCI Europe Growth

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	5.87	32.42	-9.53	12.34	-2.18	15.87	8.05	18.18	17.87	-6.71	17.98
Net Benchmark	5.43	31.88	-9.91	11.88	-2.59	15.39	7.60	17.69	17.38	-7.10	17.49
Funds (ew)	8.35	30.38	-11.22	12.24	-3.20	14.78	5.47	17.92	17.92	-9.48	16.36
Funds (aw)	8.29	32.03	-11.00	12.66	-4.27	15.76	5.61	18.11	21.61	-8.66	17.27
<b>Hit Ratio vs Net Benchmark</b>	<b>63 %</b>	<b>40 %</b>	<b>35 %</b>	<b>50 %</b>	<b>37 %</b>	<b>54 %</b>	<b>30 %</b>	<b>52 %</b>	<b>78 %</b>	<b>30 %</b>	<b>36 %</b>
Hit Ratio vs Gross Benchmark	59 %	34 %	33 %	46 %	32 %	49 %	30 %	48 %	75 %	30 %	33 %
Funds (#)	82	77	75	78	78	79	80	80	81	83	83

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	6.50	4.06	13.80	-16.06	5.65	3.15	5.63	15.04
Net Benchmark	6.39	3.96	13.69	-16.15	5.55	3.04	5.52	14.92
Funds (ew)	8.07	4.37	15.56	-16.87	6.93	1.77	4.93	14.13
Funds (aw)	6.92	4.14	15.87	-16.07	7.83	1.75	5.06	14.55
<b>Hit ratio vs Net Benchmark</b>	<b>62 %</b>	<b>43 %</b>	<b>72 %</b>	<b>48 %</b>	<b>76 %</b>	<b>16 %</b>	<b>34 %</b>	<b>33 %</b>
Hit ratio vs Gross Benchmark	62 %	41 %	72 %	46 %	72 %	14 %	31 %	32 %
Reporting funds (#)	84	83	83	82	79	79	77	78

## Monthly performance

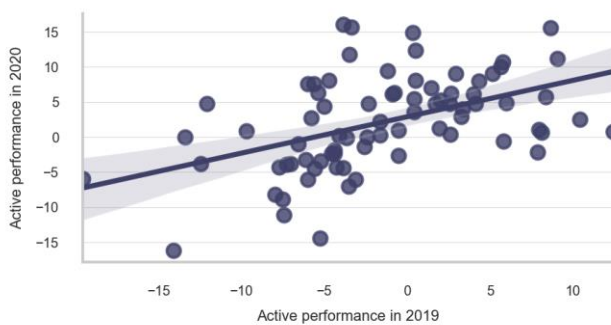
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	3.05	8.58	-4.90	0.59	2.44	0.90	1.89	4.03	7.27	-9.81	-7.58	0.61
Funds (ew)	3.08	10.29	-4.98	0.13	2.98	1.14	2.17	4.86	7.87	-11.28	-6.61	0.26
Funds (aw)	2.81	9.85	-5.33	0.19	2.80	1.11	2.24	5.12	7.81	-10.59	-6.62	0.53
<b>Hit ratio vs Net</b>	<b>38 %</b>	<b>73 %</b>	<b>55 %</b>	<b>29 %</b>	<b>55 %</b>	<b>45 %</b>	<b>63 %</b>	<b>71 %</b>	<b>64 %</b>	<b>29 %</b>	<b>82 %</b>	<b>40 %</b>
Hit Ratio vs Gross	35 %	70 %	54 %	25 %	55 %	42 %	61 %	71 %	63 %	29 %	80 %	39 %
Funds (#)	84	84	84	83	83	83	83	83	83	83	82	82

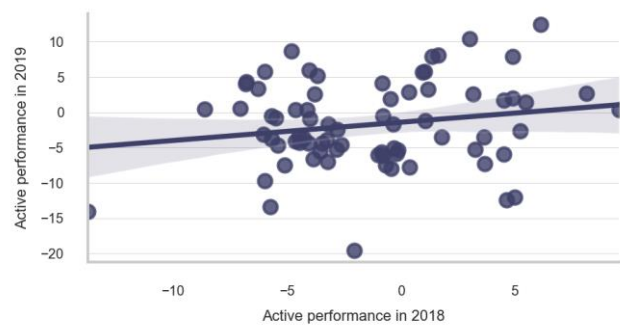
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	5.87	5.87	8.25	6.87	8.53
Funds: equal-weighted average	8.35	8.35	7.34	6.02	7.68
Funds: asset-weighted average	8.29	8.29	8.36	6.53	8.21
Funds: top decile	16.60	16.60	12.13	8.69	10.61
Funds: top quartile	11.77	11.77	10.48	7.58	9.09
Funds: median	<b>7.79</b>	<b>7.79</b>	<b>7.81</b>	<b>6.28</b>	<b>7.44</b>
Funds: bottom quartile	3.13	3.13	4.71	4.51	6.43
Funds: bottom decile	-0.40	-0.40	2.71	3.63	5.40
Net Benchmark	<b>5.43</b>	<b>5.43</b>	<b>7.80</b>	<b>6.42</b>	<b>8.08</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	82	82	74	72	61
All funds = reporting + non-reporting	82	82	78	79	88
<b>Survivorship: %of reporting funds vs total</b>	<b>100 %</b>	<b>100 %</b>	<b>95 %</b>	<b>91 %</b>	<b>69 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

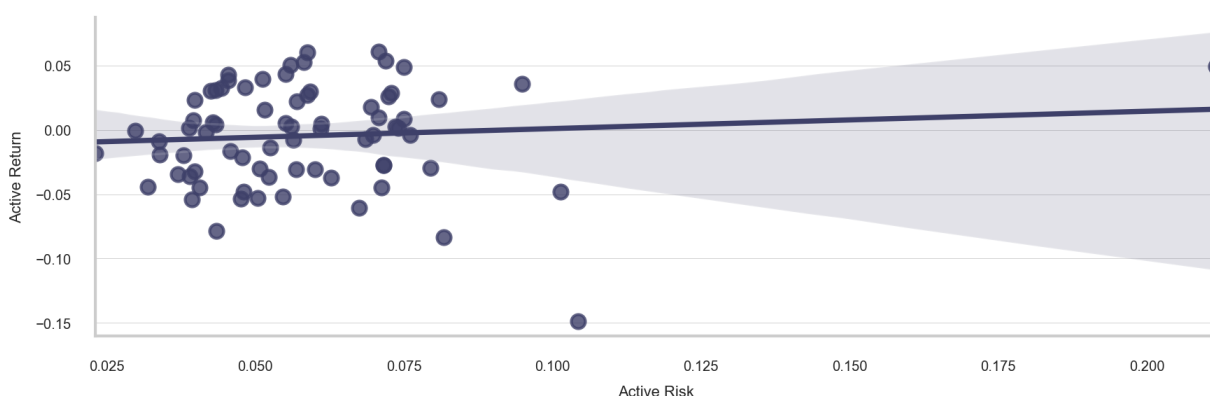
	YtD	1Y	3Y	5Y	10Y
Benchmark	5.87	5.87	8.25	6.87	8.53
Net Benchmark	5.43	5.43	7.80	6.42	8.08
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>63 %</b>	<b>63 %</b>	<b>50 %</b>	<b>44 %</b>	<b>41 %</b>
Hit ratio (vs Net Benchmark, all funds)	63 %	63 %	49 %	43 %	36 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Europe Large Cap Value

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This universe covers Europe domiciled funds which invest globally in European large cap stocks and a value investment style.

The universe covers EUR 20.8bn, of which EUR 18.1 bn is invested in 77 active operating funds.

Compared to an investment in MSCI Europe Value net of 0.25 % (average expense ratio of the ETFs of this universe) 91% of the active, operating funds belonging to this universe have outperformed over 1Y (55% over 5Y and 65% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

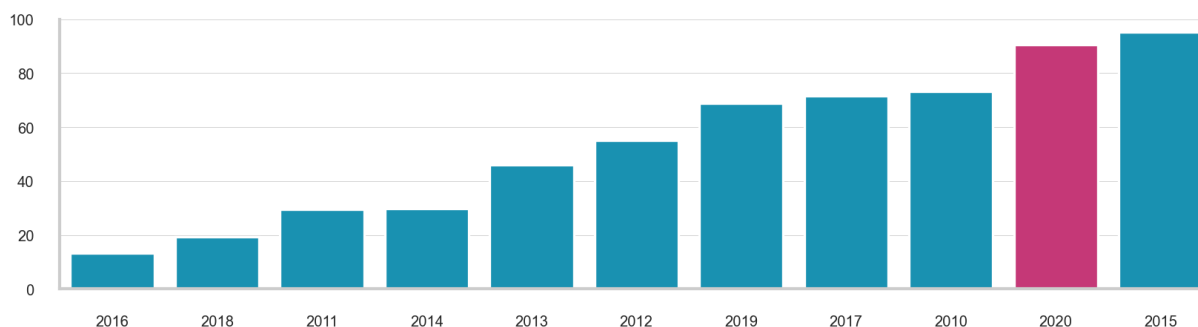
	MSCI Europe Value	Active Funds (ew)
YtD	-12.91 %	<b>-7.98 %</b>
1Y	-12.91 %	<b>-7.98 %</b>
3Y (pa)	-2.75 %	<b>-2.03 %</b>
5Y (pa)	1.35 %	<b>1.02 %</b>
10Y (pa)	3.81 %	<b>3.86 %</b>

### Fund Universe: Overview

All funds	268
Operating funds (Active)	87 (77)
Total AUM	EUR 20.8 bn
Active / Passive AUM	EUR 18.1 / 2.7 bn
Funds / ETFs AUM	EUR 18.5 / 2.3 bn
Avg. Active Fee (aw)	1.22 % (1.12 %)
Avg. ETF fee (aw)	0.32 % (0.23 %)
Avg. ETF Exp. Ratio (aw)	0.30 % (0.25 %)
Benchmark	MSCI Europe Value

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-12.91	19.55	-11.65	8.25	7.39	0.66	5.58	21.35	16.41	-9.46	4.12
Net Benchmark	-13.14	19.25	-11.87	7.98	7.12	0.41	5.32	21.05	16.12	-9.69	3.86
Funds (ew)	-7.98	20.68	-15.21	9.25	2.50	8.66	3.25	20.17	20.17	-13.20	7.09
Funds (aw)	-7.87	20.41	-15.71	8.75	1.69	9.61	3.05	23.95	17.91	-11.93	8.94
<b>Hit Ratio vs Net Benchmark</b>	<b>91 %</b>	<b>69 %</b>	<b>19 %</b>	<b>72 %</b>	<b>13 %</b>	<b>95 %</b>	<b>30 %</b>	<b>46 %</b>	<b>55 %</b>	<b>29 %</b>	<b>73 %</b>
Hit Ratio vs Gross Benchmark	91 %	69 %	13 %	69 %	12 %	94 %	26 %	43 %	54 %	29 %	71 %
Funds (#)	75	77	78	81	83	84	94	104	116	129	142

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	15.35	-3.75	10.82	-29.22	5.73	1.94	0.25	10.64
Net Benchmark	15.28	-3.81	10.75	-29.27	5.67	1.88	0.19	10.57
Funds (ew)	13.66	-0.89	13.59	-27.94	6.03	1.61	1.26	10.59
Funds (aw)	15.60	-1.08	14.18	-29.44	6.34	1.80	0.71	10.44
<b>Hit ratio vs Net Benchmark</b>	<b>36 %</b>	<b>90 %</b>	<b>92 %</b>	<b>64 %</b>	<b>55 %</b>	<b>50 %</b>	<b>73 %</b>	<b>51 %</b>
Hit ratio vs Gross Benchmark	34 %	88 %	91 %	62 %	54 %	49 %	73 %	49 %
Reporting funds (#)	76	78	78	78	78	78	77	79

## Monthly performance

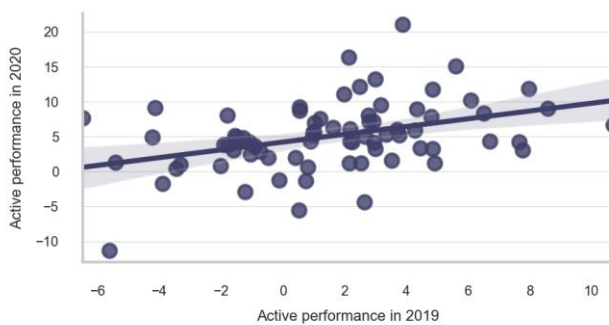
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	1.67	19.57	-5.17	-3.49	3.40	-3.61	4.18	1.56	4.68	-19.30	-9.46	-3.19
Funds (ew)	2.23	17.32	-5.30	-2.72	3.36	-1.42	3.29	2.37	7.42	-19.37	-8.24	-2.66
Funds (aw)	2.39	19.25	-5.32	-3.22	3.92	-1.65	3.42	2.47	7.75	-20.17	-9.05	-2.81
<b>Hit ratio vs Net</b>	<b>78 %</b>	<b>33 %</b>	<b>44 %</b>	<b>72 %</b>	<b>44 %</b>	<b>96 %</b>	<b>29 %</b>	<b>76 %</b>	<b>92 %</b>	<b>50 %</b>	<b>79 %</b>	<b>63 %</b>
Hit Ratio vs Gross	75 %	32 %	42 %	71 %	42 %	96 %	28 %	76 %	91 %	50 %	79 %	63 %
Funds (#)	76	78	79	79	78	78	78	78	78	78	78	78

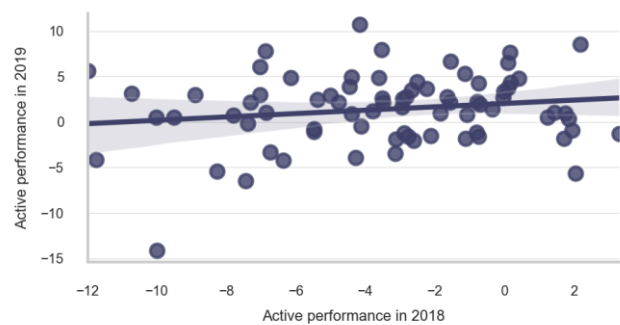
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-12.91	-12.91	-2.75	1.35	3.81
Funds: equal-weighted average	-7.98	-7.98	-2.03	1.02	3.86
Funds: asset-weighted average	-7.87	-7.87	-2.21	0.67	4.16
Funds: top decile	-2.41	-2.41	1.10	3.03	6.03
Funds: top quartile	-5.19	-5.19	-0.16	2.33	4.92
Funds: median	<b>-8.20</b>	<b>-8.20</b>	<b>-1.85</b>	<b>1.32</b>	<b>4.28</b>
Funds: bottom quartile	-10.48	-10.48	-3.66	-0.09	3.01
Funds: bottom decile	-12.64	-12.64	-5.49	-1.25	0.66
Net Benchmark	<b>-13.14</b>	<b>-13.14</b>	<b>-2.99</b>	<b>1.10</b>	<b>3.55</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	75	75	73	67	60
All funds = reporting + non-reporting	77	77	85	86	143
<b>Survivorship: %of reporting funds vs total</b>	<b>97 %</b>	<b>97 %</b>	<b>86 %</b>	<b>78 %</b>	<b>42 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

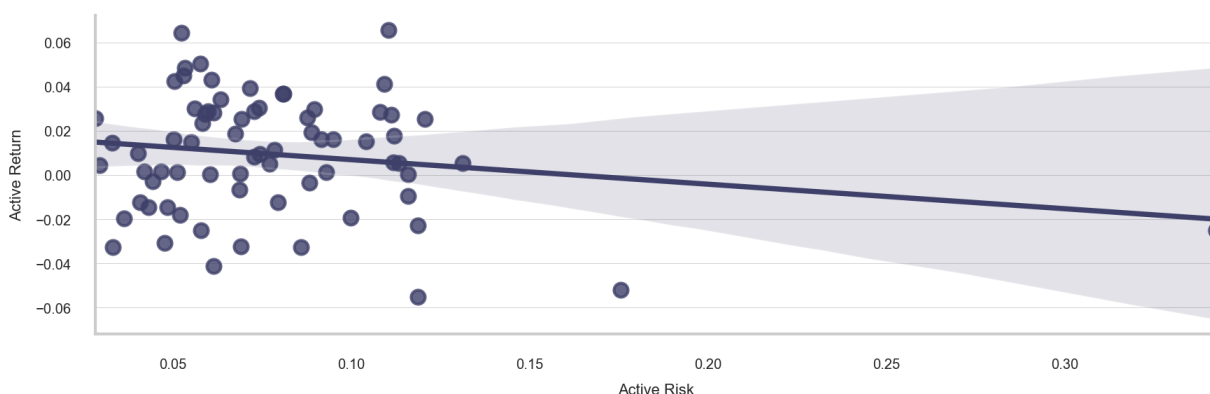
	YtD	1Y	3Y	5Y	10Y
Benchmark	-12.91	-12.91	-2.75	1.35	3.81
Net Benchmark	-13.14	-13.14	-2.99	1.10	3.55
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>91 %</b>	<b>91 %</b>	<b>71 %</b>	<b>55 %</b>	<b>65 %</b>
Hit ratio (vs Net Benchmark, all funds)	91 %	91 %	75 %	56 %	59 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Europe Small Cap

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This universe covers Europe domiciled funds which invest in European small cap stocks with a balanced investment style.

The universe covers EUR 25.3bn, of which EUR 24.1 bn is invested in 135 active operating funds.

Compared to an investment in MSCI Europe Small Cap net of 0.31 % (average expense ratio of the ETFs of this universe) 80% of the active, operating funds belonging to this universe have outperformed over 1Y (72% over 5Y and 43% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

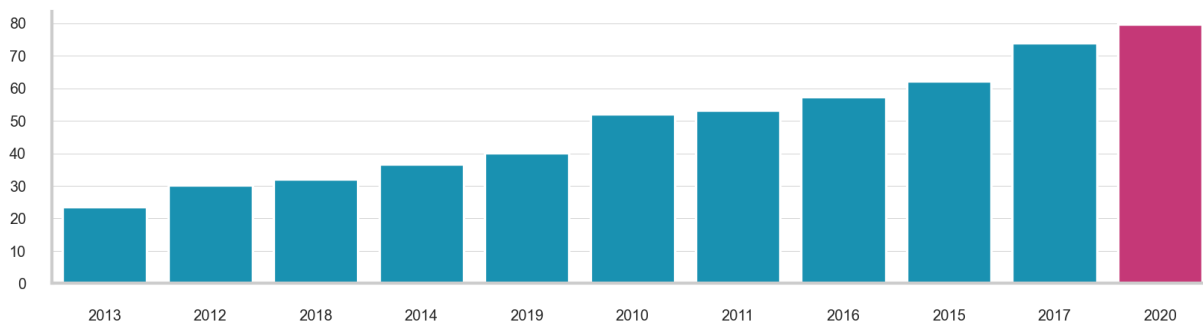
	MSCI Europe Small Cap	Active Funds (ew)
YtD	4.58 %	<b>14.10 %</b>
1Y	4.58 %	<b>14.10 %</b>
3Y (pa)	4.97 %	<b>5.54 %</b>
5Y (pa)	6.79 %	<b>8.31 %</b>
10Y (pa)	9.83 %	<b>9.36 %</b>

### Fund Universe: Overview

All funds	256
Operating funds (Active)	142 (135)
Total AUM	EUR 25.3 bn
Active / Passive AUM	EUR 24.1 / 1.3 bn
Funds / ETFs AUM	EUR 24.1 / 1.2 bn
Avg. Active Fee (aw)	1.29 % (1.25 %)
Avg. ETF fee (aw)	0.30 % (0.22 %)
Avg. ETF Exp. Ratio (aw)	0.32 % (0.31 %)
Benchmark	MSCI Europe Small Cap

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	4.58	31.42	-15.84	19.02	0.87	23.51	6.47	33.40	26.97	-17.46	29.92
Net Benchmark	4.26	31.02	-16.11	18.66	0.56	23.14	6.14	33.00	26.59	-17.72	29.52
Funds (ew)	14.10	27.54	-18.92	22.96	3.66	24.64	4.88	28.20	28.20	-16.92	28.16
Funds (aw)	14.41	28.43	-17.32	22.12	-1.32	26.46	4.45	26.69	23.92	-16.28	29.95
<b>Hit Ratio vs Net Benchmark</b>	<b>80 %</b>	<b>40 %</b>	<b>32 %</b>	<b>74 %</b>	<b>57 %</b>	<b>62 %</b>	<b>37 %</b>	<b>23 %</b>	<b>30 %</b>	<b>53 %</b>	<b>52 %</b>
Hit Ratio vs Gross Benchmark	79 %	37 %	29 %	73 %	55 %	59 %	36 %	22 %	30 %	49 %	51 %
Funds (#)	128	127	122	111	101	98	87	81	86	90	94

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	16.62	6.24	18.65	-28.86	11.74	1.63	1.34	14.19
Net Benchmark	16.54	6.16	18.56	-28.92	11.66	1.55	1.27	14.11
Funds (ew)	16.88	8.48	21.47	-26.12	11.08	-1.33	3.83	12.02
Funds (aw)	16.67	9.14	21.93	-26.31	11.51	-1.13	3.51	12.54
<b>Hit ratio vs Net Benchmark</b>	<b>50 %</b>	<b>68 %</b>	<b>71 %</b>	<b>68 %</b>	<b>50 %</b>	<b>10 %</b>	<b>84 %</b>	<b>22 %</b>
Hit ratio vs Gross Benchmark	48 %	68 %	69 %	67 %	47 %	9 %	84 %	22 %
Reporting funds (#)	130	131	133	132	131	131	128	130

## Monthly performance

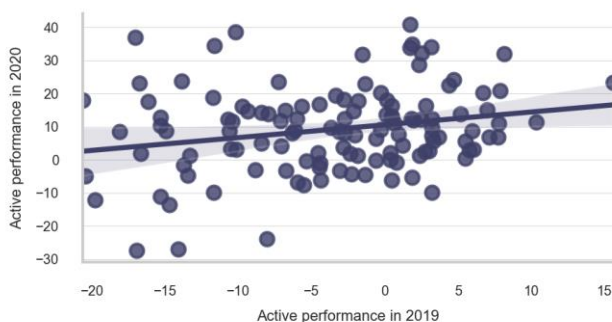
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	5.93	15.10	-4.43	-0.62	5.67	1.08	1.29	5.12	11.34	-21.31	-8.08	-1.75
Funds (ew)	6.53	13.65	-3.43	0.08	5.76	2.47	1.62	5.77	12.99	-19.40	-7.76	-0.70
Funds (aw)	6.43	13.45	-3.37	0.16	5.99	2.81	1.43	6.24	13.15	-19.28	-8.11	-0.65
<b>Hit ratio vs Net</b>	<b>62 %</b>	<b>30 %</b>	<b>70 %</b>	<b>66 %</b>	<b>48 %</b>	<b>76 %</b>	<b>59 %</b>	<b>61 %</b>	<b>74 %</b>	<b>67 %</b>	<b>53 %</b>	<b>72 %</b>
Hit Ratio vs Gross	61 %	30 %	69 %	64 %	48 %	76 %	58 %	60 %	74 %	67 %	53 %	72 %
Funds (#)	132	132	131	131	131	131	133	133	133	133	133	133

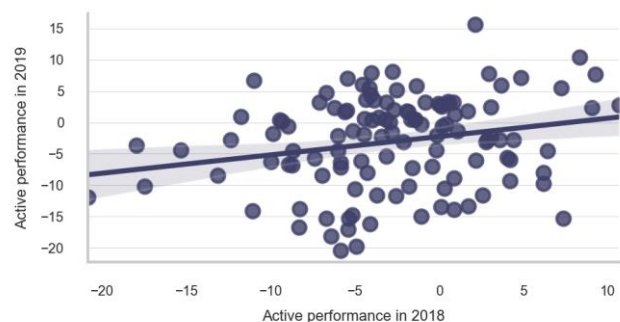
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	4.58	4.58	4.97	6.79	9.83
Funds: equal-weighted average	14.10	14.10	5.54	8.31	9.36
Funds: asset-weighted average	14.41	14.41	6.70	7.92	9.78
Funds: top decile	28.97	28.97	12.66	12.27	13.33
Funds: top quartile	20.56	20.56	9.03	10.57	10.88
Funds: median	<b>13.25</b>	<b>13.25</b>	<b>6.06</b>	<b>8.54</b>	<b>9.28</b>
Funds: bottom quartile	6.00	6.00	2.15	6.10	7.83
Funds: bottom decile	-0.73	-0.73	-1.11	3.32	6.10
Net Benchmark	<b>4.26</b>	<b>4.26</b>	<b>4.65</b>	<b>6.46</b>	<b>9.49</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	128	128	115	92	60
All funds = reporting + non-reporting	131	131	124	103	94
<b>Survivorship: %of reporting funds vs total</b>	<b>98 %</b>	<b>98 %</b>	<b>93 %</b>	<b>89 %</b>	<b>64 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

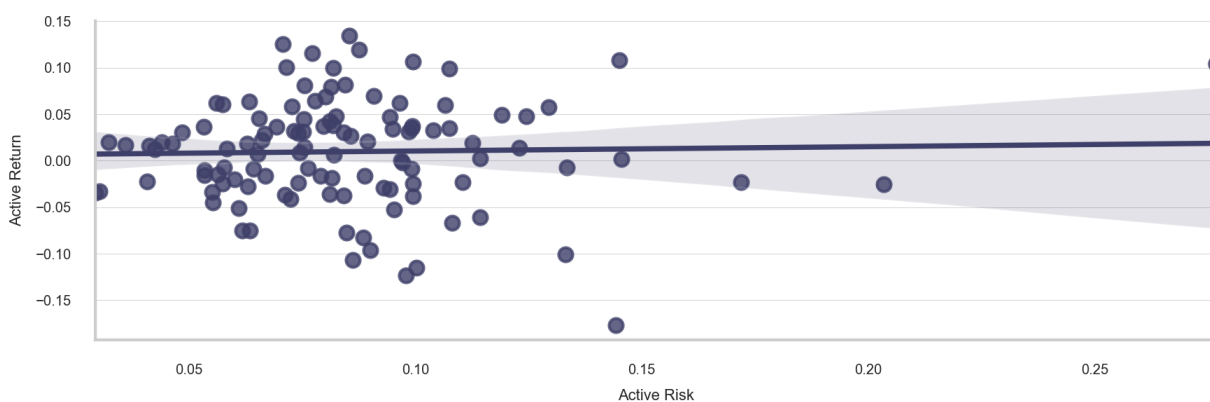
	YtD	1Y	3Y	5Y	10Y
Benchmark	4.58	4.58	4.97	6.79	9.83
Net Benchmark	4.26	4.26	4.65	6.46	9.49
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>80 %</b>	<b>80 %</b>	<b>57 %</b>	<b>72 %</b>	<b>43 %</b>
Hit ratio (vs Net Benchmark, all funds)	79 %	79 %	56 %	74 %	43 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Eurozone Large Cap

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This universe covers Europe domiciled funds which invest in the Eurozone stock market with a focus on large capitalisations and a balanced investment style.

The universe covers EUR 149.3bn, of which EUR 85.5 bn is invested in 344 active operating funds.

Compared to an investment in MSCI EMU net of 0.20 % (average expense ratio of the ETFs of this universe) 46% of the active, operating funds belonging to this universe have outperformed over 1Y (26% over 5Y and 31% over 10Y).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

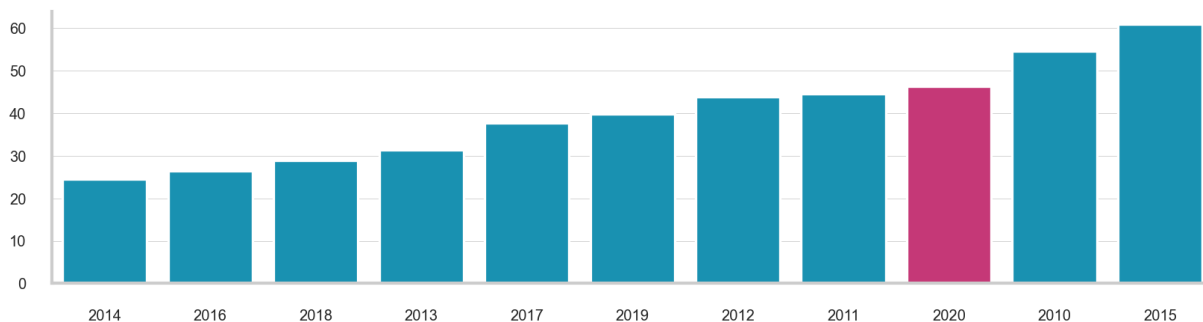
	MSCI EMU	Active Funds (ew)
YtD	-1.01 %	<b>-1.63 %</b>
1Y	-1.01 %	<b>-1.63 %</b>
3Y (pa)	2.73 %	<b>1.21 %</b>
5Y (pa)	4.94 %	<b>3.36 %</b>
10Y (pa)	6.21 %	<b>4.98 %</b>

### Fund Universe: Overview

All funds	1210
Operating funds (Active)	436 (344)
Total AUM	EUR 149.3 bn
Active / Passive AUM	EUR 85.5 / 63.8 bn
Funds / ETFs AUM	EUR 101.1 / 48.2 bn
Avg. Active Fee (aw)	0.99 % (0.63 %)
Avg. ETF fee (aw)	0.28 % (0.13 %)
Avg. ETF Exp. Ratio (aw)	0.26 % (0.20 %)
Benchmark	MSCI EMU

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-1.01	25.47	-12.72	12.49	4.34	9.83	4.31	23.37	19.33	-14.90	2.39
Net Benchmark	-1.20	25.23	-12.89	12.27	4.14	9.61	4.11	23.13	19.09	-15.07	2.19
Funds (ew)	-1.63	23.46	-14.41	11.39	2.30	10.52	2.21	21.43	21.43	-15.71	2.73
Funds (aw)	0.19	24.52	-14.79	11.98	2.24	12.42	2.04	22.61	20.12	-15.53	3.37
<b>Hit Ratio vs Net Benchmark</b>	<b>46 %</b>	<b>40 %</b>	<b>29 %</b>	<b>38 %</b>	<b>27 %</b>	<b>61 %</b>	<b>24 %</b>	<b>31 %</b>	<b>44 %</b>	<b>45 %</b>	<b>55 %</b>
Hit Ratio vs Gross Benchmark	44 %	37 %	27 %	35 %	24 %	59 %	22 %	29 %	42 %	42 %	52 %
Funds (#)	326	331	318	327	328	330	335	350	365	377	394

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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### Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	12.74	0.19	16.98	-25.09	5.06	2.59	4.00	11.94
Net Benchmark	12.69	0.14	16.93	-25.13	5.00	2.54	3.95	11.88
Funds (ew)	10.80	0.59	16.26	-24.16	4.88	1.86	3.87	11.23
Funds (aw)	11.12	0.94	17.39	-23.90	5.30	2.08	3.98	11.40
<b>Hit ratio vs Net Benchmark</b>	<b>23 %</b>	<b>57 %</b>	<b>47 %</b>	<b>58 %</b>	<b>45 %</b>	<b>30 %</b>	<b>50 %</b>	<b>38 %</b>
Hit ratio vs Gross Benchmark	23 %	55 %	45 %	57 %	45 %	27 %	49 %	37 %
Reporting funds (#)	333	341	338	339	338	336	334	334

### Monthly performance

Active performance net of fund fees & costs (% in EUR)

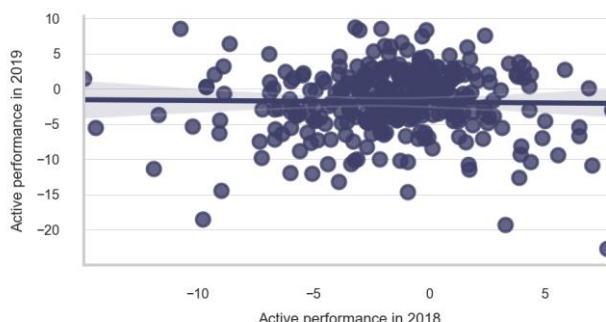
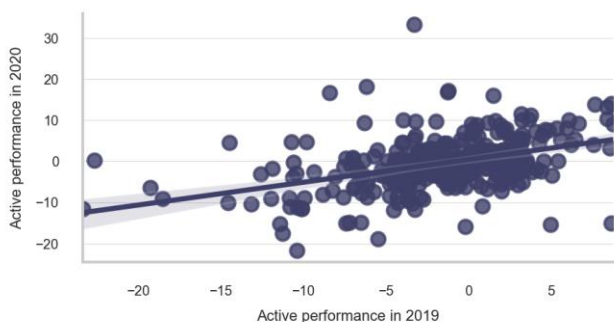
	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	1.95	17.08	-5.60	-1.84	3.49	-1.43	4.87	4.71	6.47	-17.23	-7.94	-1.75
Funds (ew)	1.77	15.52	-5.74	-1.75	3.12	-0.73	4.56	4.38	6.50	-16.62	-7.42	-1.82
Funds (aw)	1.77	16.10	-5.96	-1.60	3.08	-0.49	4.81	4.70	6.98	-16.33	-7.54	-1.63
<b>Hit ratio vs Net</b>	<b>35 %</b>	<b>30 %</b>	<b>37 %</b>	<b>54 %</b>	<b>33 %</b>	<b>74 %</b>	<b>48 %</b>	<b>39 %</b>	<b>46 %</b>	<b>59 %</b>	<b>67 %</b>	<b>45 %</b>
Hit Ratio vs Gross	34 %	30 %	36 %	53 %	31 %	73 %	48 %	38 %	45 %	59 %	65 %	45 %
Funds (#)	335	338	340	341	343	343	342	339	339	340	340	341

### Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)

2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-1.01	-1.01	2.73	4.94	6.21
Funds: equal-weighted average	-1.63	-1.63	1.21	3.36	4.98
Funds: asset-weighted average	0.19	0.19	2.06	4.01	5.68
Funds: top decile	6.49	6.49	5.45	6.02	7.32
Funds: top quartile	1.60	1.60	3.09	4.78	6.22
Funds: median	-1.71	-1.71	1.48	3.68	5.16
Funds: bottom quartile	-5.09	-5.09	-0.68	1.99	3.77
Funds: bottom decile	-9.62	-9.62	-3.19	0.28	2.31
Net Benchmark	-1.20	-1.20	2.53	4.73	6.00

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	326	326	299	281	236
All funds = reporting + non-reporting	337	337	330	336	408
<b>Survivorship: %of reporting funds vs total</b>	<b>97 %</b>	<b>97 %</b>	<b>91 %</b>	<b>84 %</b>	<b>58 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

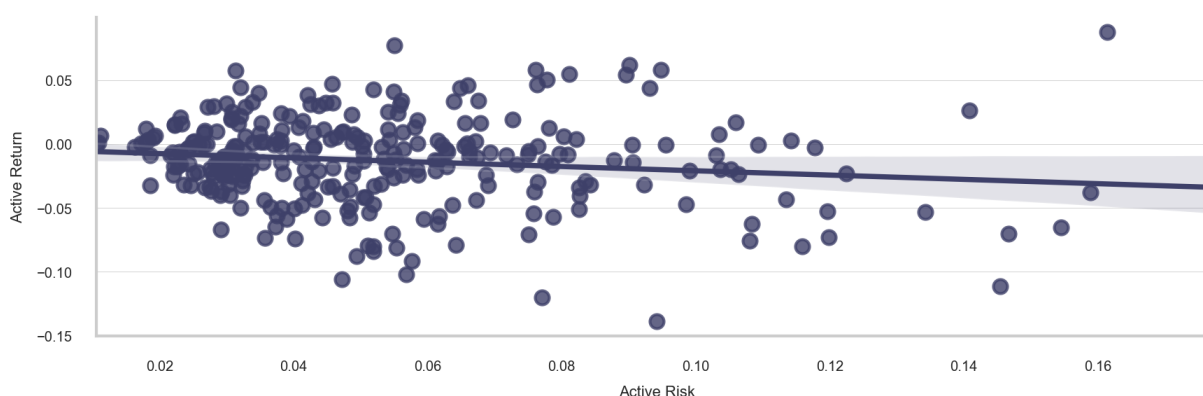
	YtD	1Y	3Y	5Y	10Y
Benchmark	-1.01	-1.01	2.73	4.94	6.21
Net Benchmark	-1.20	-1.20	2.53	4.73	6.00
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>46 %</b>	<b>46 %</b>	<b>33 %</b>	<b>26 %</b>	<b>31 %</b>
Hit ratio (vs Net Benchmark, all funds)	46 %	46 %	31 %	23 %	21 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: France Large Cap

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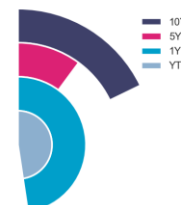
This universe covers Europe domiciled funds which invest in the French stock market with a focus on large capitalisations and a balanced investment style.

The universe covers EUR 34.6bn, of which EUR 22.0 bn is invested in 88 active operating funds.

Compared to an investment in MSCI France net of 0.25 % (average expense ratio of the ETFs of this universe) 48% of the active, operating funds belonging to this universe have outperformed over 1Y (10% over 5Y and 18% over 10Y).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

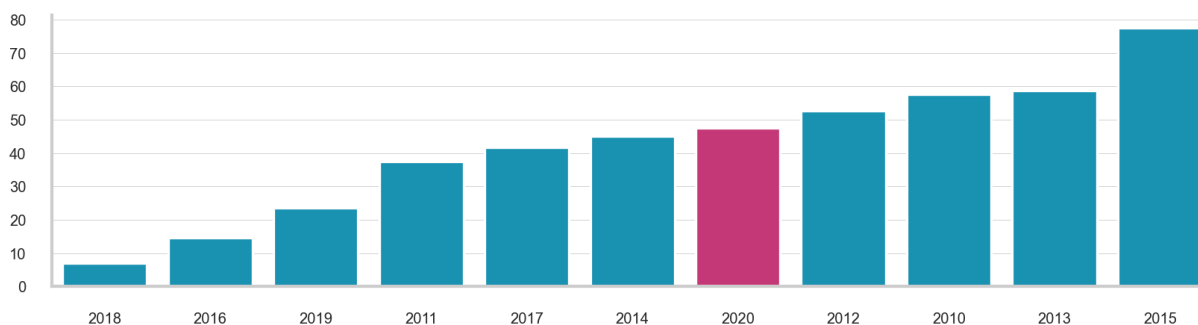
	MSCI France	Active Funds (ew)
YtD	-4.52 %	<b>-4.00 %</b>
1Y	-4.52 %	<b>-4.00 %</b>
3Y (pa)	3.86 %	<b>0.42 %</b>
5Y (pa)	6.47 %	<b>3.59 %</b>
10Y (pa)	6.83 %	<b>5.44 %</b>

### Fund Universe: Overview

All funds	189
Operating funds (Active)	105 (88)
Total AUM	EUR 34.6 bn
Active / Passive AUM	EUR 22.0 / 12.7 bn
Funds / ETFs AUM	EUR 29.2 / 5.4 bn
Avg. Active Fee (aw)	1.39 % (1.10 %)
Avg. ETF fee (aw)	0.22 % (0.23 %)
Avg. ETF Exp. Ratio (aw)	0.25 % (0.25 %)
Benchmark	MSCI France

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-4.52	28.02	-8.35	13.07	8.00	11.25	2.59	20.87	19.43	-14.09	2.55
Net Benchmark	-4.76	27.71	-8.59	12.79	7.74	10.97	2.34	20.58	19.14	-14.30	2.30
Funds (ew)	-4.00	24.02	-14.68	12.49	4.38	13.13	1.98	21.54	21.54	-15.55	4.32
Funds (aw)	-3.59	24.39	-14.27	12.47	5.07	13.71	2.28	22.94	19.07	-14.79	2.68
<b>Hit Ratio vs Net Benchmark</b>	<b>48 %</b>	<b>24 %</b>	<b>7 %</b>	<b>42 %</b>	<b>15 %</b>	<b>78 %</b>	<b>45 %</b>	<b>59 %</b>	<b>53 %</b>	<b>38 %</b>	<b>58 %</b>
Hit Ratio vs Gross Benchmark	44 %	21 %	5 %	38 %	12 %	74 %	40 %	53 %	45 %	32 %	53 %
Funds (#)	84	85	86	91	95	98	100	109	112	112	111

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	15.35	-1.58	13.47	-25.88	5.38	2.65	5.00	12.71
Net Benchmark	15.28	-1.64	13.40	-25.93	5.32	2.59	4.93	12.64
Funds (ew)	13.84	-0.74	14.51	-25.76	4.67	1.12	5.04	11.39
Funds (aw)	14.13	-0.82	14.44	-25.57	4.55	1.48	5.14	11.51
<b>Hit ratio vs Net Benchmark</b>	<b>31 %</b>	<b>58 %</b>	<b>61 %</b>	<b>52 %</b>	<b>26 %</b>	<b>9 %</b>	<b>60 %</b>	<b>33 %</b>
Hit ratio vs Gross Benchmark	28 %	57 %	61 %	52 %	23 %	6 %	56 %	33 %
Reporting funds (#)	85	84	85	85	86	86	86	89

## Monthly performance

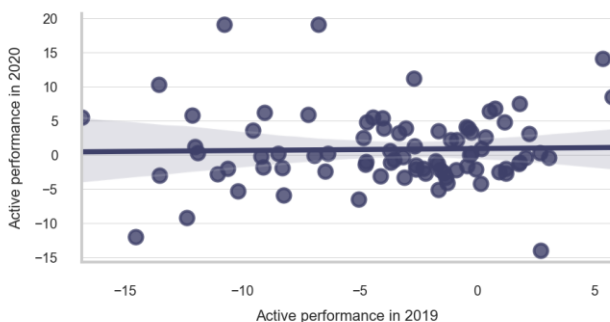
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	0.52	19.68	-4.17	-2.68	3.58	-2.42	4.98	3.31	4.56	-17.63	-8.08	-2.17
Funds (ew)	1.57	17.93	-4.75	-2.41	3.21	-1.43	4.57	3.97	5.32	-17.98	-7.54	-2.11
Funds (aw)	1.40	18.58	-5.08	-2.46	3.39	-1.65	4.81	3.83	5.16	-18.10	-7.40	-1.86
<b>Hit ratio vs Net</b>	<b>76 %</b>	<b>33 %</b>	<b>26 %</b>	<b>58 %</b>	<b>28 %</b>	<b>75 %</b>	<b>35 %</b>	<b>72 %</b>	<b>59 %</b>	<b>54 %</b>	<b>64 %</b>	<b>44 %</b>
Hit Ratio vs Gross	74 %	32 %	26 %	55 %	27 %	75 %	34 %	69 %	56 %	54 %	62 %	41 %
Funds (#)	87	85	85	85	85	85	85	85	85	85	85	86

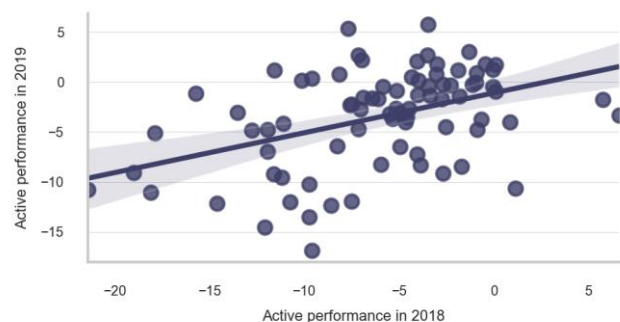
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-4.52	-4.52	3.86	6.47	6.83
Funds: equal-weighted average	-4.00	-4.00	0.42	3.59	5.44
Funds: asset-weighted average	-3.59	-3.59	0.93	3.97	5.83
Funds: top decile	1.62	1.62	4.22	6.19	7.30
Funds: top quartile	-1.05	-1.05	2.59	5.14	6.33
Funds: median	<b>-5.00</b>	<b>-5.00</b>	<b>0.66</b>	<b>3.72</b>	<b>5.64</b>
Funds: bottom quartile	-6.92	-6.92	-1.95	1.94	4.89
Funds: bottom decile	-8.92	-8.92	-3.51	0.77	3.82
Net Benchmark	<b>-4.76</b>	<b>-4.76</b>	<b>3.60</b>	<b>6.20</b>	<b>6.57</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	84	84	80	79	73
All funds = reporting + non-reporting	85	85	92	99	114
<b>Survivorship: %of reporting funds vs total</b>	<b>99 %</b>	<b>99 %</b>	<b>87 %</b>	<b>80 %</b>	<b>64 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

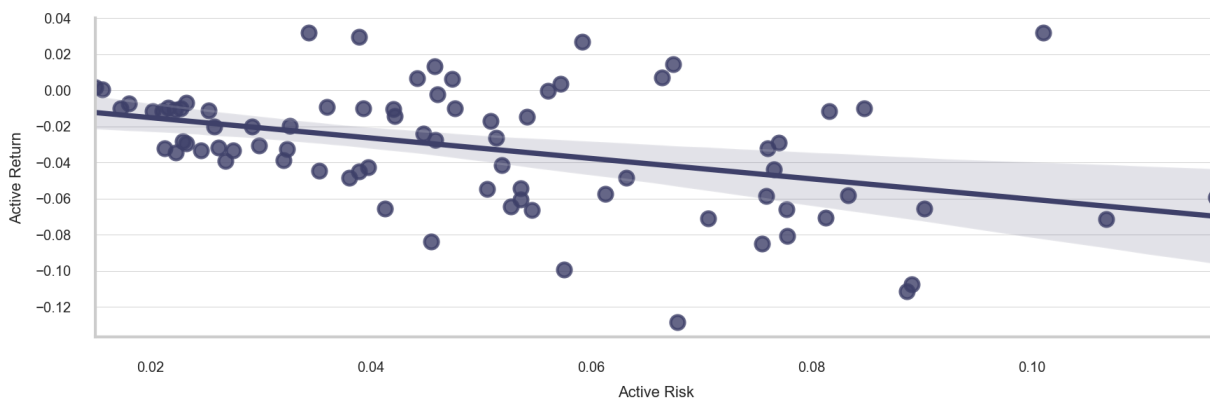
	YtD	1Y	3Y	5Y	10Y
Benchmark	-4.52	-4.52	3.86	6.47	6.83
Net Benchmark	-4.76	-4.76	3.60	6.20	6.57
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>48 %</b>	<b>48 %</b>	<b>15 %</b>	<b>10 %</b>	<b>18 %</b>
Hit ratio (vs Net Benchmark, all funds)	47 %	47 %	13 %	8 %	11 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Germany Large Cap

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This universe covers Europe domiciled Funds which invest in the German stock market with a focus on large capitalisations and a balanced investment style.

The universe covers EUR 47.6bn, of which EUR 31.6 bn is invested in 56 active operating funds.

Compared to an investment in MSCI Germany net of 0.16 % (average expense ratio of the ETFs of this universe) 49% of the active, operating funds belonging to this universe have outperformed over 1Y (42% over 5Y and 39% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

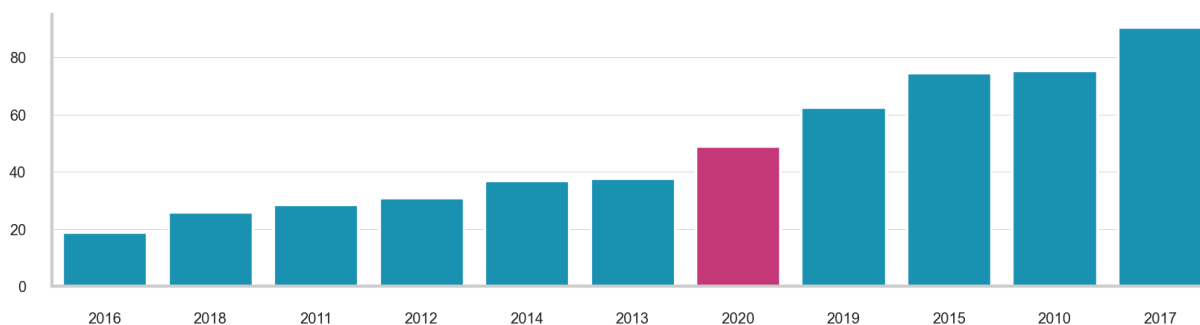
	MSCI Germany	Active Funds (ew)
YtD	2.34 %	<b>2.58 %</b>
1Y	2.34 %	<b>2.58 %</b>
3Y (pa)	0.97 %	<b>0.04 %</b>
5Y (pa)	4.08 %	<b>3.54 %</b>
10Y (pa)	6.45 %	<b>5.78 %</b>

### Fund Universe: Overview

All funds	153
Operating funds (Active)	78 (56)
Total AUM	EUR 47.6 bn
Active / Passive AUM	EUR 31.6 / 16.0 bn
Funds / ETFs AUM	EUR 31.8 / 15.8 bn
Avg. Active Fee (aw)	1.02 % (0.95 %)
Avg. ETF fee (aw)	0.21 % (0.12 %)
Avg. ETF Exp. Ratio (aw)	0.25 % (0.16 %)
Benchmark	MSCI Germany

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	2.34	23.01	-18.24	12.15	5.83	9.29	2.09	25.70	28.87	-15.35	15.97
Net Benchmark	2.18	22.82	-18.37	11.98	5.66	9.12	1.93	25.50	28.67	-15.48	15.79
Funds (ew)	2.58	23.17	-20.42	16.07	2.54	12.28	1.14	24.30	24.30	-16.79	17.98
Funds (aw)	4.20	25.63	-21.82	17.69	3.27	14.76	2.05	26.00	30.16	-17.16	19.86
<b>Hit Ratio vs Net Benchmark</b>	<b>49 %</b>	<b>62 %</b>	<b>26 %</b>	<b>91 %</b>	<b>19 %</b>	<b>75 %</b>	<b>37 %</b>	<b>38 %</b>	<b>31 %</b>	<b>29 %</b>	<b>75 %</b>
Hit Ratio vs Gross Benchmark	49 %	61 %	24 %	89 %	15 %	71 %	37 %	38 %	31 %	29 %	72 %
Funds (#)	53	56	54	53	53	55	54	53	55	56	57

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	6.85	3.75	23.63	-25.33	6.73	0.24	5.62	8.85
Net Benchmark	6.81	3.71	23.58	-25.36	6.69	0.20	5.58	8.81
Funds (ew)	9.67	3.75	21.41	-26.01	7.27	-0.44	4.92	9.53
Funds (aw)	10.12	3.54	24.57	-26.64	7.79	-0.11	5.84	10.23
<b>Hit ratio vs Net Benchmark</b>	<b>80 %</b>	<b>46 %</b>	<b>39 %</b>	<b>45 %</b>	<b>64 %</b>	<b>39 %</b>	<b>45 %</b>	<b>71 %</b>
Hit ratio vs Gross Benchmark	80 %	46 %	39 %	45 %	63 %	39 %	43 %	69 %
Reporting funds (#)	54	56	56	56	59	59	58	58

## Monthly performance

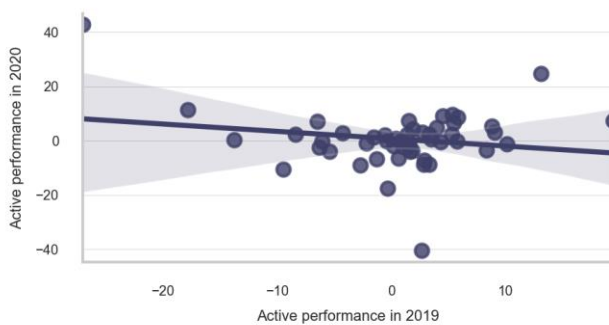
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	3.66	14.08	-9.67	-1.14	5.19	-0.26	5.17	6.96	9.87	-16.95	-8.44	-1.83
Funds (ew)	3.62	14.93	-7.89	-1.75	4.89	0.65	3.52	6.25	10.38	-17.82	-8.90	-1.29
Funds (aw)	3.75	16.50	-8.89	-2.38	4.81	1.20	4.55	6.81	11.55	-18.07	-10.04	-0.45
<b>Hit ratio vs Net</b>	<b>38 %</b>	<b>69 %</b>	<b>78 %</b>	<b>39 %</b>	<b>39 %</b>	<b>75 %</b>	<b>23 %</b>	<b>33 %</b>	<b>64 %</b>	<b>38 %</b>	<b>32 %</b>	<b>59 %</b>
Hit Ratio vs Gross	38 %	69 %	78 %	39 %	39 %	74 %	21 %	33 %	64 %	38 %	32 %	57 %
Funds (#)	55	54	55	56	56	57	57	57	56	56	57	58

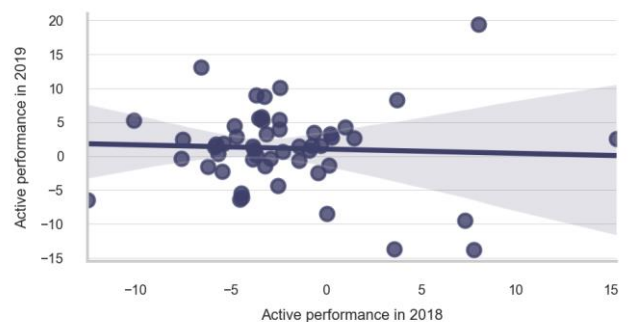
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	2.34	2.34	0.97	4.08	6.45
Funds: equal-weighted average	2.58	2.58	0.04	3.54	5.78
Funds: asset-weighted average	4.20	4.20	0.77	4.46	7.06
Funds: top decile	10.52	10.52	3.46	5.81	8.54
Funds: top quartile	5.77	5.77	2.22	5.20	7.17
Funds: median	<b>2.18</b>	<b>2.18</b>	<b>-0.44</b>	<b>3.53</b>	<b>5.76</b>
Funds: bottom quartile	-1.15	-1.15	-1.80	2.48	4.62
Funds: bottom decile	-6.50	-6.50	-3.25	1.30	2.31
Net Benchmark	<b>2.18</b>	<b>2.18</b>	<b>0.81</b>	<b>3.92</b>	<b>6.29</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	53	53	46	43	38
All funds = reporting + non-reporting	58	58	56	55	58
<b>Survivorship: %of reporting funds vs total</b>	<b>91 %</b>	<b>91 %</b>	<b>82 %</b>	<b>78 %</b>	<b>66 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

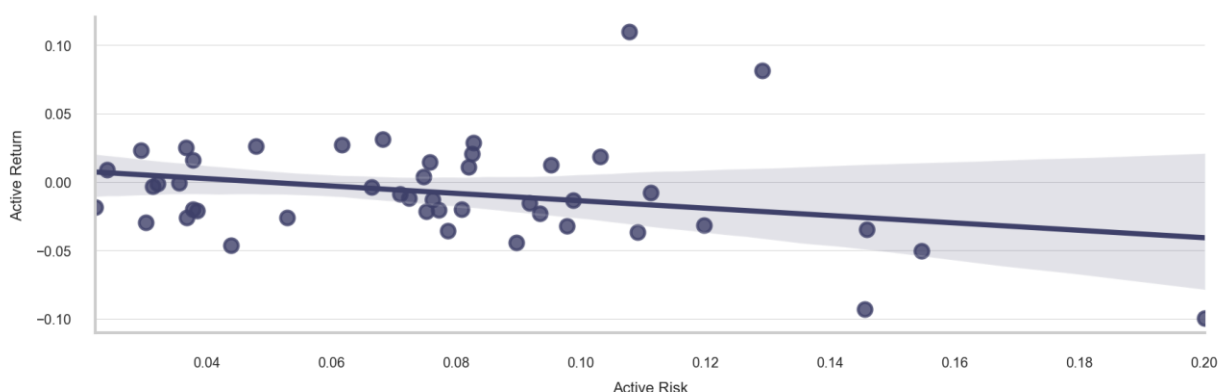
	YtD	1Y	3Y	5Y	10Y
Benchmark	2.34	2.34	0.97	4.08	6.45
Net Benchmark	2.18	2.18	0.81	3.92	6.29
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>49 %</b>	<b>49 %</b>	<b>35 %</b>	<b>42 %</b>	<b>39 %</b>
Hit ratio (vs Net Benchmark, all funds)	45 %	45 %	29 %	35 %	38 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Germany Small/Mid cap

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This universe covers Europe domiciled Funds which invest in the German stock market with a focus on small and medium capitalisations and a balanced investment style.

The universe covers EUR 9.1bn, of which EUR 5.7 bn is invested in 23 active operating funds.

Compared to an investment in MSCI Germany Small Cap net of 0.49 % (average expense ratio of the ETFs of this universe) 65% of the active, operating funds belonging to this universe have outperformed over 1Y (10% over 5Y and 22% over 10Y).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

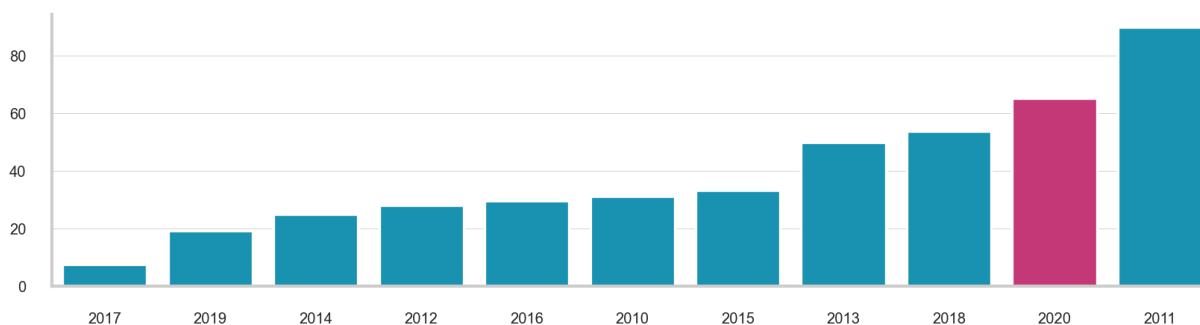
	MSCI Germany Small Cap	Active Funds (ew)
YtD	15.16 %	16.62 %
1Y	15.16 %	16.62 %
3Y (pa)	6.73 %	3.90 %
5Y (pa)	11.84 %	7.76 %
10Y (pa)	12.16 %	9.05 %

### Fund Universe: Overview

All funds	55
Operating funds (Active)	32 (23)
Total AUM	EUR 9.1 bn
Active / Passive AUM	EUR 5.7 / 3.4 bn
Funds / ETFs AUM	EUR 5.7 / 3.4 bn
Avg. Active Fee (aw)	1.19 % (1.12 %)
Avg. ETF fee (aw)	0.34 % (0.39 %)
Avg. ETF Exp. Ratio (aw)	0.48 % (0.49 %)
Benchmark	MSCI Germany Small Cap

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	15.16	31.36	-19.63	38.16	4.16	24.34	8.57	28.88	27.40	-18.74	34.56
Net Benchmark	14.60	30.73	-20.03	37.50	3.66	23.75	8.05	28.26	26.79	-19.15	33.92
Funds (ew)	16.62	21.73	-19.67	24.51	2.59	17.64	2.12	27.18	27.18	-11.01	28.40
Funds (aw)	16.59	26.28	-20.28	27.84	0.96	20.91	4.02	32.46	28.67	-13.20	30.50
<b>Hit Ratio vs Net Benchmark</b>	<b>65 %</b>	<b>19 %</b>	<b>54 %</b>	<b>8 %</b>	<b>30 %</b>	<b>33 %</b>	<b>25 %</b>	<b>50 %</b>	<b>28 %</b>	<b>90 %</b>	<b>31 %</b>
Hit Ratio vs Gross Benchmark	52 %	19 %	54 %	8 %	30 %	30 %	25 %	50 %	28 %	87 %	31 %
Funds (#)	23	26	26	26	27	30	32	30	32	30	32

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	16.03	5.93	25.18	-25.15	11.27	-0.13	2.56	15.25
Net Benchmark	15.90	5.80	25.04	-25.25	11.14	-0.25	2.44	15.12
Funds (ew)	14.94	5.85	21.98	-21.44	8.79	-1.16	3.54	9.10
Funds (aw)	15.83	5.22	23.18	-22.34	12.59	-1.35	3.73	9.60
<b>Hit ratio vs Net Benchmark</b>	<b>35 %</b>	<b>42 %</b>	<b>31 %</b>	<b>69 %</b>	<b>38 %</b>	<b>42 %</b>	<b>69 %</b>	<b>15 %</b>
Hit ratio vs Gross Benchmark	35 %	42 %	31 %	69 %	38 %	42 %	69 %	15 %
Reporting funds (#)	23	26	26	26	26	26	26	27

## Monthly performance

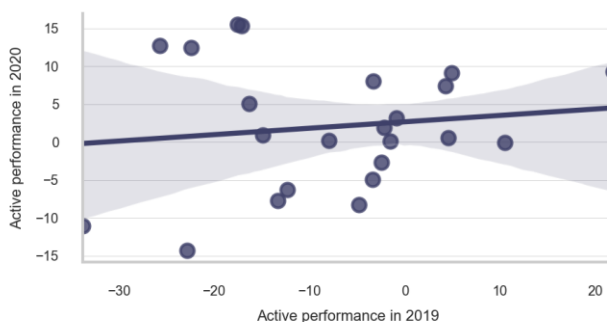
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	6.69	18.53	-8.35	0.63	5.36	-0.21	3.02	10.02	10.32	-16.75	-8.32	-2.06
Funds (ew)	4.97	15.28	-5.23	-0.74	5.60	0.98	2.20	6.99	11.54	-15.68	-6.56	-0.47
Funds (aw)	6.27	16.17	-6.18	-1.68	5.58	1.36	2.00	8.64	11.15	-15.44	-7.96	-0.22
<b>Hit ratio vs Net</b>	<b>22 %</b>	<b>21 %</b>	<b>92 %</b>	<b>31 %</b>	<b>54 %</b>	<b>77 %</b>	<b>23 %</b>	<b>23 %</b>	<b>73 %</b>	<b>58 %</b>	<b>62 %</b>	<b>85 %</b>
Hit Ratio vs Gross	22 %	21 %	92 %	31 %	54 %	77 %	23 %	23 %	73 %	58 %	62 %	85 %
Funds (#)	23	24	24	26	26	26	26	26	26	26	26	26

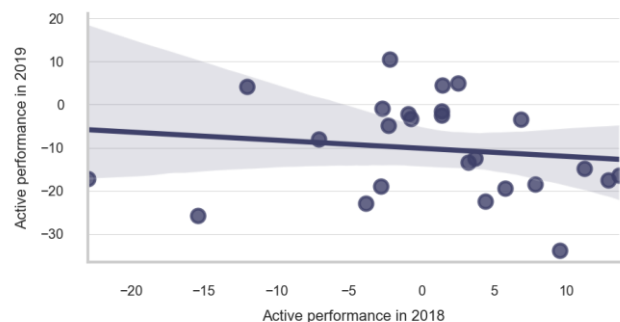
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	15.16	15.16	6.73	11.84	12.16
Funds: equal-weighted average	16.62	16.62	3.90	7.76	9.05
Funds: asset-weighted average	16.59	16.59	5.49	8.66	10.92
Funds: top decile	27.30	27.30	8.54	11.29	13.64
Funds: top quartile	23.18	23.18	7.23	9.85	11.51
Funds: median	<b>15.48</b>	<b>15.48</b>	<b>5.50</b>	<b>8.20</b>	<b>9.45</b>
Funds: bottom quartile	10.80	10.80	1.33	5.04	7.64
Funds: bottom decile	6.40	6.40	-4.69	2.45	3.67
Net Benchmark	<b>14.60</b>	<b>14.60</b>	<b>6.21</b>	<b>11.30</b>	<b>11.62</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	23	23	22	21	18
All funds = reporting + non-reporting	26	26	27	29	32
<b>Survivorship: %of reporting funds vs total</b>	<b>88 %</b>	<b>88 %</b>	<b>81 %</b>	<b>72 %</b>	<b>56 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

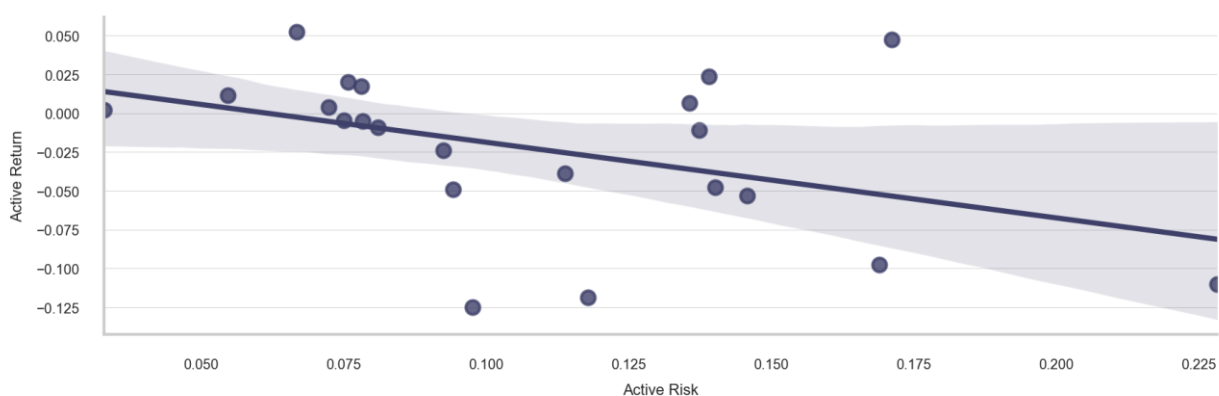
	YtD	1Y	3Y	5Y	10Y
Benchmark	15.16	15.16	6.73	11.84	12.16
Net Benchmark	14.60	14.60	6.21	11.30	11.62
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>65 %</b>	<b>65 %</b>	<b>41 %</b>	<b>10 %</b>	<b>22 %</b>
Hit ratio (vs Net Benchmark, all funds)	65 %	65 %	33 %	7 %	19 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Global Fixed Income

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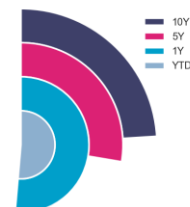
This universe covers Europe domiciled funds which invest globally in investment grade bonds across all issuer types and durations.

The universe covers EUR 81.2bn, of which EUR 57.0 bn is invested in 234 active operating funds.

Compared to an investment in Bbg Barclays Global Aggregate net of 0.13 % (average expense ratio of the ETFs of this universe) 51% of the active, operating funds belonging to this universe have outperformed over 1Y (28% over 5Y and 24% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

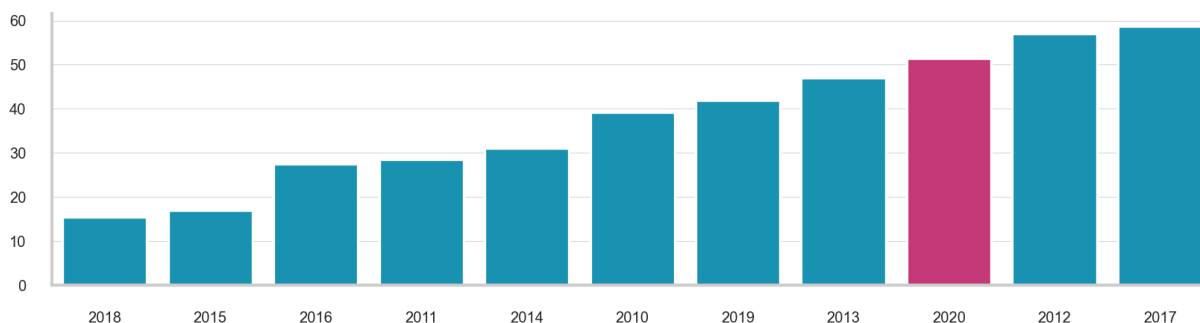
	Bbg Barclays Global Aggregate	Active Funds (ew)
YtD	0.18 %	-0.09 %
1Y	0.18 %	-0.09 %
3Y (pa)	4.20 %	2.88 %
5Y (pa)	2.33 %	1.49 %
10Y (pa)	3.78 %	2.85 %

### Fund Universe: Overview

All funds	385
Operating funds (Active)	257 (234)
Total AUM	EUR 81.2 bn
Active / Passive AUM	EUR 57.0 / 24.3 bn
Funds / ETFs AUM	EUR 73.5 / 7.8 bn
Avg. Active Fee (aw)	0.58 % (0.49 %)
Avg. ETF fee (aw)	0.11 % (0.12 %)
Avg. ETF Exp. Ratio (aw)	0.15 % (0.13 %)
Benchmark	Bbg Barclays Global Aggregate

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	0.18	8.82	3.77	-5.65	5.14	7.88	14.55	-6.83	2.73	9.20	12.90
Net Benchmark	0.05	8.68	3.64	-5.77	5.00	7.74	14.41	-6.94	2.60	9.06	12.76
Funds (ew)	-0.09	7.77	1.29	-4.56	3.54	5.15	12.14	-6.28	-6.28	6.78	11.03
Funds (aw)	0.18	8.54	1.56	-4.49	4.23	4.72	12.60	-6.32	4.59	7.22	11.85
<b>Hit Ratio vs Net Benchmark</b>	<b>52 %</b>	<b>42 %</b>	<b>16 %</b>	<b>59 %</b>	<b>28 %</b>	<b>17 %</b>	<b>31 %</b>	<b>47 %</b>	<b>57 %</b>	<b>28 %</b>	<b>39 %</b>
Hit Ratio vs Gross Benchmark	48 %	38 %	14 %	56 %	27 %	15 %	28 %	46 %	56 %	26 %	38 %
Funds (#)	218	219	219	206	207	205	206	202	193	193	189

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	-1.01	-1.68	0.94	1.97	-2.40	5.21	1.85	4.05
Net Benchmark	-1.04	-1.71	0.90	1.94	-2.43	5.18	1.82	4.02
Funds (ew)	-0.01	-0.92	2.38	-1.30	-1.47	3.95	1.55	3.63
Funds (aw)	-0.28	-1.00	2.32	-0.83	-1.61	4.32	1.82	3.85
<b>Hit ratio vs Net Benchmark</b>	<b>62 %</b>	<b>73 %</b>	<b>69 %</b>	<b>31 %</b>	<b>64 %</b>	<b>31 %</b>	<b>48 %</b>	<b>36 %</b>
Hit ratio vs Gross Benchmark	62 %	72 %	68 %	31 %	63 %	29 %	44 %	35 %
Reporting funds (#)	229	230	229	232	230	230	223	228

## Monthly performance

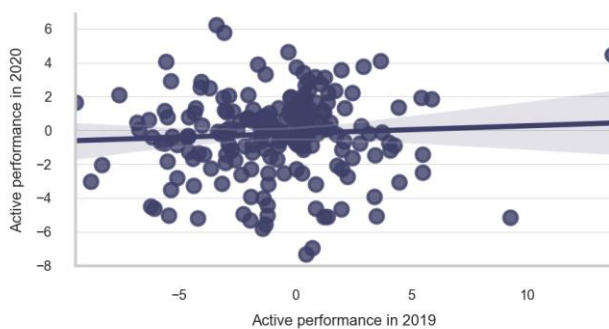
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	-0.93	-0.86	0.76	1.61	-1.29	-2.00	-0.09	-1.11	2.13	-2.14	1.56	2.57
Funds (ew)	-0.52	0.05	0.08	0.93	-0.84	-0.98	0.16	-0.12	2.31	-3.72	0.54	1.91
Funds (aw)	-0.65	-0.15	0.53	1.19	-1.01	-1.17	0.13	-0.18	2.37	-3.49	0.69	2.05
<b>Hit ratio vs Net</b>	<b>64 %</b>	<b>71 %</b>	<b>25 %</b>	<b>29 %</b>	<b>65 %</b>	<b>83 %</b>	<b>60 %</b>	<b>74 %</b>	<b>49 %</b>	<b>35 %</b>	<b>20 %</b>	<b>33 %</b>
Hit Ratio vs Gross	63 %	71 %	24 %	27 %	64 %	82 %	59 %	73 %	49 %	35 %	19 %	31 %
Funds (#)	230	230	233	234	236	232	230	231	231	234	234	232

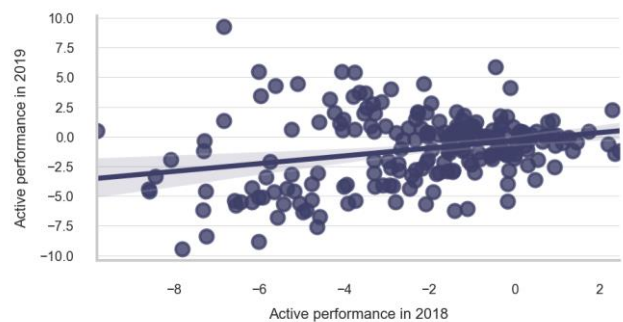
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	0.18	0.18	4.20	2.33	3.78
Funds: equal-weighted average	-0.09	-0.09	2.88	1.49	2.85
Funds: asset-weighted average	0.18	0.18	3.36	1.91	3.14
Funds: top decile	2.63	2.63	4.64	2.95	4.15
Funds: top quartile	1.33	1.33	4.08	2.23	3.60
Funds: median	<b>0.10</b>	<b>0.10</b>	<b>3.12</b>	<b>1.58</b>	<b>3.05</b>
Funds: bottom quartile	-1.27	-1.27	2.13	0.87	2.26
Funds: bottom decile	-3.60	-3.60	0.37	-0.20	1.66
Net Benchmark	<b>0.05</b>	<b>0.05</b>	<b>4.07</b>	<b>2.20</b>	<b>3.65</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	218	218	197	170	125
All funds = reporting + non-reporting	231	231	227	218	196
<b>Survivorship: %of reporting funds vs total</b>	<b>94 %</b>	<b>94 %</b>	<b>87 %</b>	<b>78 %</b>	<b>64 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

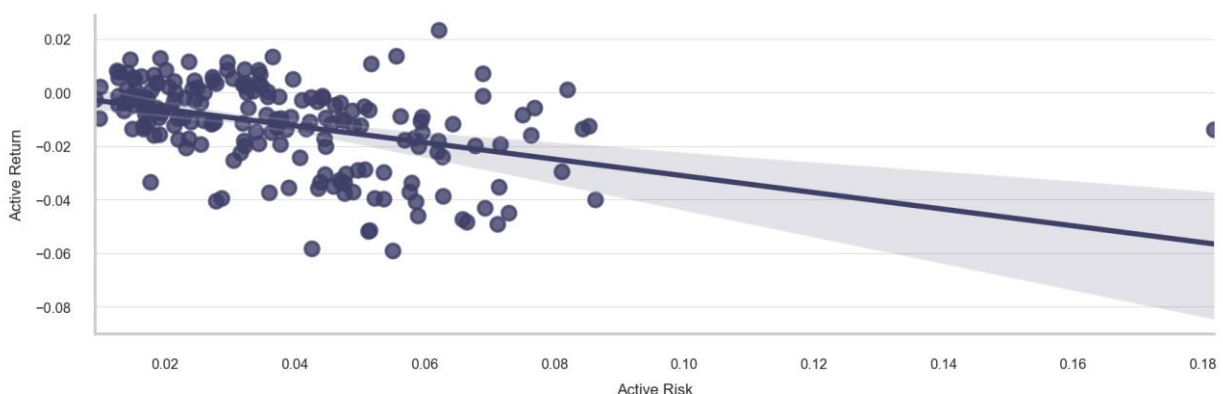
	YtD	1Y	3Y	5Y	10Y
Benchmark	0.18	0.18	4.20	2.33	3.78
Net Benchmark	0.05	0.05	4.07	2.20	3.65
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>52 %</b>	<b>51 %</b>	<b>26 %</b>	<b>28 %</b>	<b>24 %</b>
Hit ratio (vs Net Benchmark, all funds)	52 %	51 %	24 %	23 %	18 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Italy Large Cap

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This universe covers Europe domiciled Funds which invest in the Italian stock market with a focus on large capitalisations and a balanced investment style.

The universe covers EUR 9.7bn, of which EUR 8.8 bn is invested in 52 active operating funds.

Compared to an investment in FTSE MIB net of 0.34 % (average expense ratio of the ETFs of this universe) 55% of the active, operating funds belonging to this universe have outperformed over 1Y (35% over 5Y and 73% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

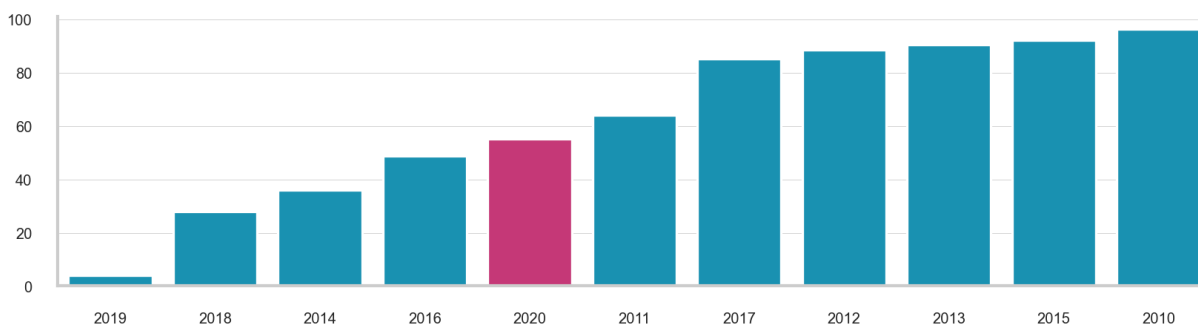
	FTSE MIB	Active Funds (ew)
YtD	-3.86 %	<b>-2.91 %</b>
1Y	-3.86 %	<b>-2.91 %</b>
3Y (pa)	3.08 %	<b>0.62 %</b>
5Y (pa)	3.35 %	<b>2.66 %</b>
10Y (pa)	3.60 %	<b>4.76 %</b>

### Fund Universe: Overview

All funds	142
Operating funds (Active)	62 (52)
Total AUM	EUR 9.7 bn
Active / Passive AUM	EUR 8.8 / 0.9 bn
Funds / ETFs AUM	EUR 8.8 / 0.9 bn
Avg. Active Fee (aw)	1.17 % (1.00 %)
Avg. ETF fee (aw)	0.28 % (0.33 %)
Avg. ETF Exp. Ratio (aw)	0.33 % (0.34 %)
Benchmark	FTSE MIB

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-3.86	32.45	-13.99	16.33	-7.47	14.97	2.37	19.69	11.29	-22.91	-10.75
Net Benchmark	-4.19	32.01	-14.28	15.94	-7.79	14.58	2.02	19.29	10.92	-23.18	-11.05
Funds (ew)	-2.91	25.36	-16.25	21.40	-7.91	20.78	0.65	28.88	28.88	-22.07	-3.26
Funds (aw)	-3.70	24.25	-15.07	17.55	-7.57	19.02	0.41	27.41	14.87	-21.19	-3.30
<b>Hit Ratio vs Net Benchmark</b>	<b>55 %</b>	<b>4 %</b>	<b>28 %</b>	<b>85 %</b>	<b>49 %</b>	<b>92 %</b>	<b>36 %</b>	<b>90 %</b>	<b>89 %</b>	<b>64 %</b>	<b>96 %</b>
Hit Ratio vs Gross Benchmark	55 %	2 %	24 %	83 %	46 %	92 %	36 %	90 %	86 %	62 %	96 %
Funds (#)	47	49	50	41	41	38	39	42	44	50	55

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	16.99	-1.52	14.70	-27.24	6.48	4.61	2.03	16.55
Net Benchmark	16.89	-1.61	14.60	-27.31	6.39	4.52	1.94	16.45
Funds (ew)	13.32	1.12	14.84	-26.07	6.33	2.43	1.07	13.75
Funds (aw)	13.67	0.91	13.85	-26.25	6.04	2.65	0.77	13.28
<b>Hit ratio vs Net Benchmark</b>	<b>8 %</b>	<b>92 %</b>	<b>47 %</b>	<b>57 %</b>	<b>49 %</b>	<b>10 %</b>	<b>20 %</b>	<b>6 %</b>
Hit ratio vs Gross Benchmark	8 %	90 %	47 %	57 %	45 %	10 %	20 %	6 %
Reporting funds (#)	49	49	51	49	49	49	49	51

## Monthly performance

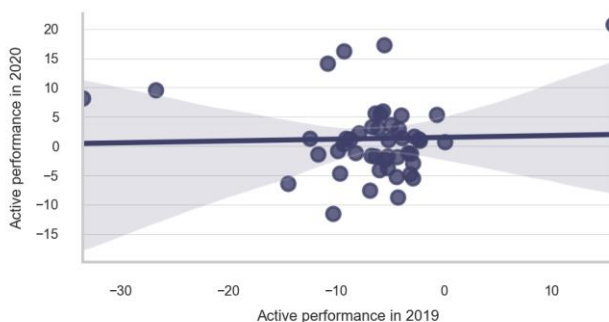
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	0.75	22.99	-5.67	-3.10	2.81	-1.24	6.70	3.50	3.77	-22.46	-5.42	-0.89
Funds (ew)	2.89	17.56	-6.25	-1.38	2.82	-0.30	3.68	4.11	6.41	-20.37	-5.38	-1.97
Funds (aw)	2.13	18.67	-6.22	-1.56	2.98	-0.46	4.07	3.65	5.55	-20.71	-5.17	-1.92
<b>Hit ratio vs Net</b>	<b>98 %</b>	<b>4 %</b>	<b>29 %</b>	<b>94 %</b>	<b>65 %</b>	<b>70 %</b>	<b>0 %</b>	<b>61 %</b>	<b>90 %</b>	<b>73 %</b>	<b>50 %</b>	<b>6 %</b>
Hit Ratio vs Gross	98 %	2 %	29 %	94 %	61 %	70 %	0 %	59 %	90 %	71 %	48 %	6 %
Funds (#)	49	49	49	49	49	50	51	51	51	51	50	49

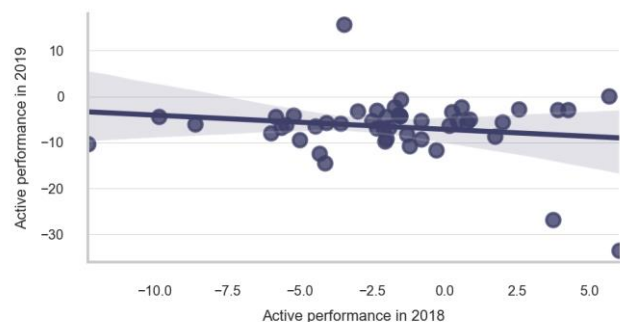
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-3.86	-3.86	3.08	3.35	3.60
Funds: equal-weighted average	-2.91	-2.91	0.62	2.66	4.76
Funds: asset-weighted average	-3.70	-3.70	0.53	2.00	4.29
Funds: top decile	4.55	4.55	3.93	5.12	7.29
Funds: top quartile	-0.77	-0.77	1.80	3.22	5.85
Funds: median	<b>-3.24</b>	<b>-3.24</b>	<b>0.62</b>	<b>2.78</b>	<b>4.57</b>
Funds: bottom quartile	-6.27	-6.27	-1.01	1.36	3.24
Funds: bottom decile	-9.53	-9.53	-2.55	-0.64	2.89
Net Benchmark	<b>-4.19</b>	<b>-4.19</b>	<b>2.73</b>	<b>3.00</b>	<b>3.25</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	47	47	46	34	30
All funds = reporting + non-reporting	48	48	49	40	55
<b>Survivorship: %of reporting funds vs total</b>	<b>98 %</b>	<b>98 %</b>	<b>94 %</b>	<b>85 %</b>	<b>55 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

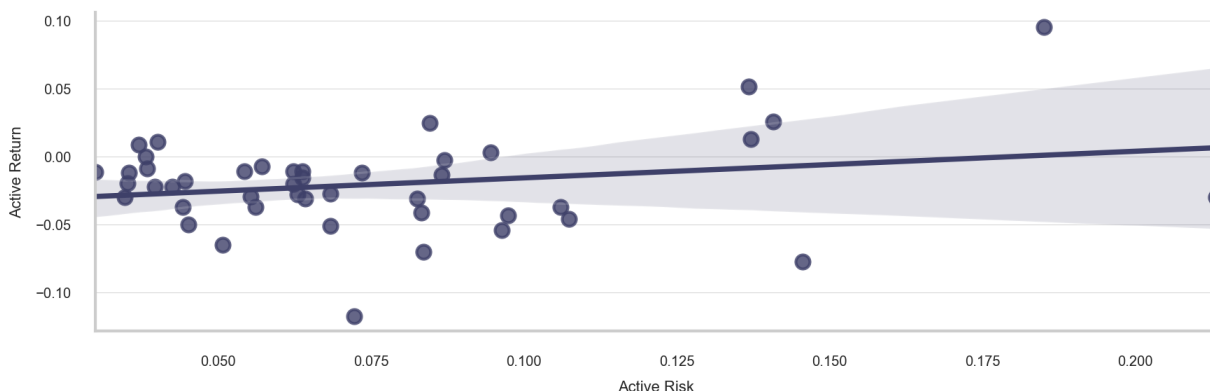
	YtD	1Y	3Y	5Y	10Y
Benchmark	-3.86	-3.86	3.08	3.35	3.60
Net Benchmark	-4.19	-4.19	2.73	3.00	3.25
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>55 %</b>	<b>55 %</b>	<b>17 %</b>	<b>35 %</b>	<b>73 %</b>
Hit ratio (vs Net Benchmark, all funds)	55 %	55 %	18 %	32 %	76 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Japan Large Cap

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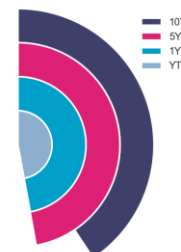
This universe covers Europe domiciled funds which invest in the Japan stock with a focus on stocks with small market capitalisations and a balanced investment style.

The universe covers EUR 107.0bn, of which EUR 58.0 bn is invested in 180 active operating funds.

Compared to an investment in MSCI Japan net of 0.32 % (average expense ratio of the ETFs of this universe) 47% of the active, operating funds belonging to this universe have outperformed over 1Y (47% over 5Y and 41% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

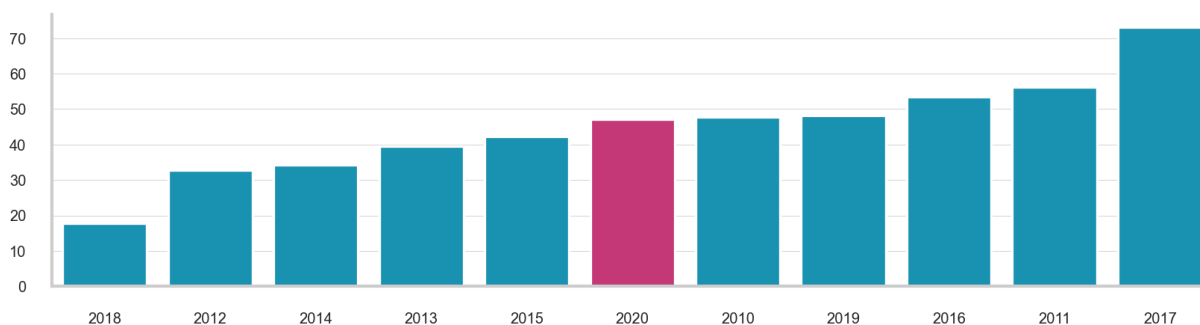
	MSCI Japan	Active Funds (ew)
YtD	5.01 %	6.11 %
1Y	5.01 %	6.11 %
3Y (pa)	5.39 %	4.17 %
5Y (pa)	6.09 %	5.86 %
10Y (pa)	7.48 %	7.10 %

### Fund Universe: Overview

All funds	709
Operating funds (Active)	264 (180)
Total AUM	EUR 107.0 bn
Active / Passive AUM	EUR 58.0 / 49.1 bn
Funds / ETFs AUM	EUR 85.7 / 21.2 bn
Avg. Active Fee (aw)	0.97 % (0.73 %)
Avg. ETF fee (aw)	0.29 % (0.20 %)
Avg. ETF Exp. Ratio (aw)	0.39 % (0.32 %)
Benchmark	MSCI Japan

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	5.01	21.82	-8.48	8.91	5.42	22.05	9.29	21.67	6.52	-11.46	23.48
Net Benchmark	4.67	21.44	-8.78	8.56	5.09	21.67	8.94	21.29	6.18	-11.74	23.09
Funds (ew)	6.11	21.41	-11.92	12.20	5.53	21.14	7.35	21.38	21.38	-10.78	22.13
Funds (aw)	9.99	21.69	-11.34	11.48	6.59	21.85	7.43	21.76	5.35	-9.97	23.35
<b>Hit Ratio vs Net Benchmark</b>	<b>47 %</b>	<b>48 %</b>	<b>18 %</b>	<b>73 %</b>	<b>54 %</b>	<b>42 %</b>	<b>34 %</b>	<b>40 %</b>	<b>33 %</b>	<b>56 %</b>	<b>48 %</b>
Hit Ratio vs Gross Benchmark	44 %	42 %	15 %	71 %	47 %	39 %	29 %	36 %	29 %	53 %	43 %
Funds (#)	172	172	168	171	168	175	190	200	226	244	259

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	10.46	2.42	9.04	-14.88	4.54	7.73	-0.39	8.59
Net Benchmark	10.38	2.33	8.96	-14.95	4.46	7.65	-0.47	8.51
Funds (ew)	10.13	3.40	11.30	-16.64	4.85	7.02	-0.47	8.74
Funds (aw)	10.44	5.24	13.43	-16.57	4.66	6.51	-0.19	9.38
<b>Hit ratio vs Net Benchmark</b>	<b>47 %</b>	<b>57 %</b>	<b>61 %</b>	<b>34 %</b>	<b>61 %</b>	<b>34 %</b>	<b>49 %</b>	<b>46 %</b>
Hit ratio vs Gross Benchmark	43 %	56 %	61 %	32 %	59 %	33 %	47 %	44 %
Reporting funds (#)	176	178	179	177	176	176	173	181

## Monthly performance

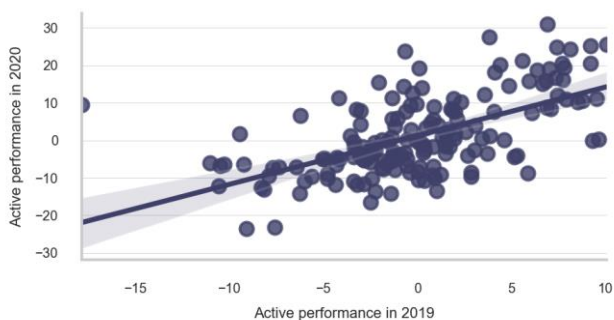
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	1.77	9.51	-0.97	2.95	6.37	-6.56	-1.01	4.27	5.55	-7.08	-8.37	-0.12
Funds (ew)	1.64	9.12	-0.74	3.94	5.59	-5.77	-0.81	4.84	7.02	-7.07	-9.37	-0.97
Funds (aw)	1.04	9.70	-0.36	5.12	5.62	-5.22	-0.63	5.51	8.19	-6.50	-9.72	-1.16
<b>Hit ratio vs Net</b>	<b>48 %</b>	<b>40 %</b>	<b>54 %</b>	<b>65 %</b>	<b>27 %</b>	<b>61 %</b>	<b>51 %</b>	<b>57 %</b>	<b>71 %</b>	<b>50 %</b>	<b>16 %</b>	<b>20 %</b>
Hit Ratio vs Gross	46 %	38 %	53 %	65 %	26 %	60 %	51 %	57 %	69 %	49 %	16 %	20 %
Funds (#)	177	178	177	178	178	179	179	181	181	178	177	177

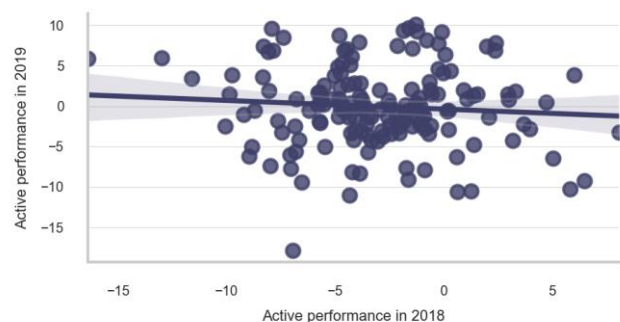
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	5.01	5.01	5.39	6.09	7.48
Funds: equal-weighted average	6.11	6.11	4.17	5.86	7.10
Funds: asset-weighted average	9.99	9.99	5.87	7.11	7.86
Funds: top decile	21.38	21.38	9.80	10.48	9.85
Funds: top quartile	13.22	13.22	6.95	7.52	8.17
Funds: median	<b>4.19</b>	<b>4.19</b>	<b>3.32</b>	<b>5.50</b>	<b>6.68</b>
Funds: bottom quartile	-1.48	-1.48	0.84	3.59	5.52
Funds: bottom decile	-5.49	-5.49	-1.46	2.31	4.64
Net Benchmark	<b>4.67</b>	<b>4.67</b>	<b>5.06</b>	<b>5.76</b>	<b>7.14</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	172	172	153	140	123
All funds = reporting + non-reporting	176	176	176	180	259
<b>Survivorship: %of reporting funds vs total</b>	<b>98 %</b>	<b>98 %</b>	<b>87 %</b>	<b>78 %</b>	<b>47 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

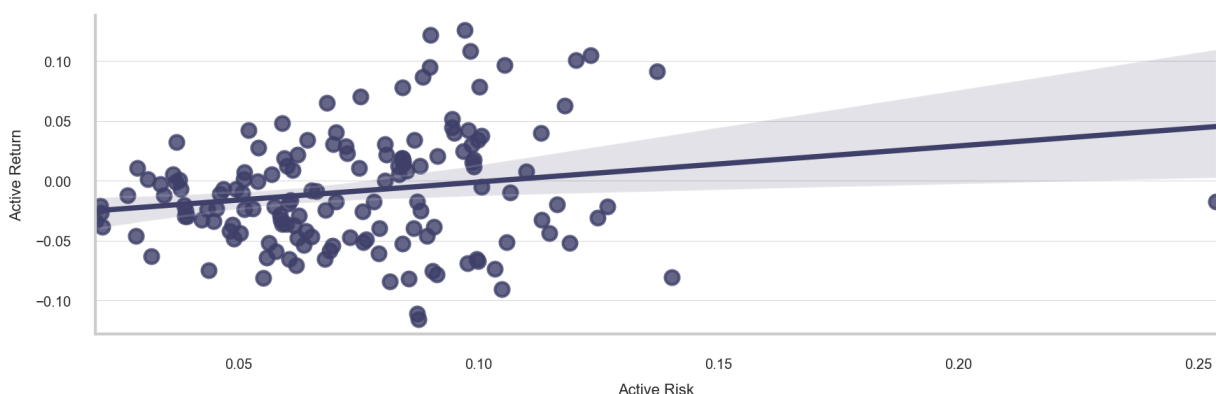
	YtD	1Y	3Y	5Y	10Y
Benchmark	5.01	5.01	5.39	6.09	7.48
Net Benchmark	4.67	4.67	5.06	5.76	7.14
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>47 %</b>	<b>47 %</b>	<b>40 %</b>	<b>47 %</b>	<b>41 %</b>
Hit ratio (vs Net Benchmark, all funds)	47 %	47 %	36 %	48 %	34 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Spain Large Cap

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This universe covers Europe domiciled Funds which invest in the Spanish stock market with a focus on large capitalisations and a balanced investment style.

The universe covers EUR 6.1bn, of which EUR 4.5 bn is invested in 83 active operating funds.

Compared to an investment in MSCI Spain net of 0.25 % (average expense ratio of the ETFs of this universe) 48% of the active, operating funds belonging to this universe have outperformed over 1Y (38% over 5Y and 55% over 10Y).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

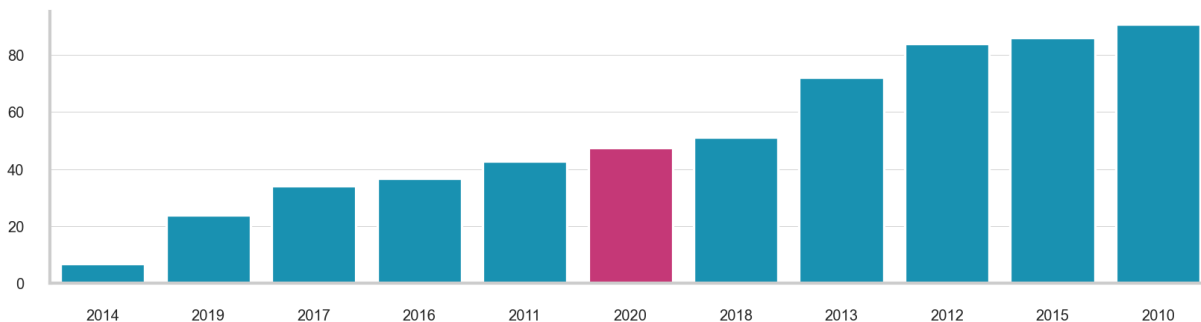
	MSCI Spain	Active Funds (ew)
YtD	-12.65 %	<b>-12.90 %</b>
1Y	-12.65 %	<b>-12.90 %</b>
3Y (pa)	-4.28 %	<b>-5.37 %</b>
5Y (pa)	-0.04 %	<b>-0.95 %</b>
10Y (pa)	1.64 %	<b>1.93 %</b>

### Fund Universe: Overview

All funds	204
Operating funds (Active)	95 (83)
Total AUM	EUR 6.1 bn
Active / Passive AUM	EUR 4.5 / 1.6 bn
Funds / ETFs AUM	EUR 5.6 / 0.5 bn
Avg. Active Fee (aw)	1.43 % (0.96 %)
Avg. ETF fee (aw)	0.34 % (0.26 %)
Avg. ETF Exp. Ratio (aw)	0.25 % (0.25 %)
Benchmark	MSCI Spain

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-12.65	14.05	-11.96	11.61	1.94	-6.02	8.59	25.65	1.43	-9.33	-16.53
Net Benchmark	-12.87	13.77	-12.18	11.33	1.68	-6.26	8.32	25.34	1.18	-9.56	-16.74
Funds (ew)	-12.90	10.34	-11.87	10.75	1.93	0.26	3.17	29.04	29.04	-10.37	-11.00
Funds (aw)	-11.83	10.21	-11.16	12.38	1.58	3.42	1.81	30.06	7.45	-10.64	-9.51
<b>Hit Ratio vs Net Benchmark</b>	<b>48 %</b>	<b>24 %</b>	<b>51 %</b>	<b>34 %</b>	<b>37 %</b>	<b>86 %</b>	<b>7 %</b>	<b>72 %</b>	<b>84 %</b>	<b>43 %</b>	<b>91 %</b>
Hit Ratio vs Gross Benchmark	48 %	21 %	50 %	32 %	37 %	85 %	7 %	68 %	81 %	40 %	90 %
Funds (#)	80	84	82	79	79	71	73	72	81	91	97

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	22.41	-7.84	7.74	-28.14	2.95	0.50	1.19	8.92
Net Benchmark	22.34	-7.89	7.68	-28.19	2.89	0.44	1.13	8.86
Funds (ew)	21.62	-5.03	8.54	-30.65	6.10	-2.13	-0.74	7.12
Funds (aw)	21.72	-4.21	8.71	-30.44	6.57	-2.48	-0.62	6.71
<b>Hit ratio vs Net Benchmark</b>	<b>40 %</b>	<b>87 %</b>	<b>67 %</b>	<b>36 %</b>	<b>98 %</b>	<b>17 %</b>	<b>14 %</b>	<b>14 %</b>
Hit ratio vs Gross Benchmark	39 %	86 %	66 %	36 %	98 %	16 %	11 %	14 %
Reporting funds (#)	82	85	86	86	87	87	84	84

## Monthly performance

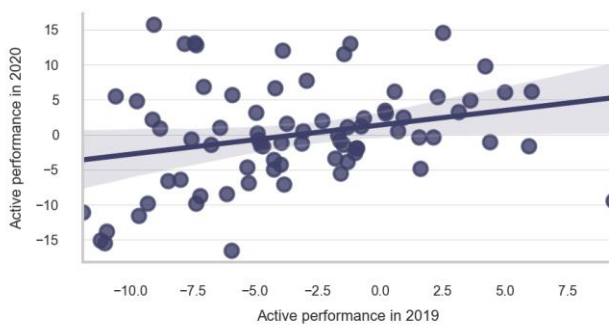
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	0.44	26.11	-3.41	-3.70	0.48	-4.81	3.25	2.67	1.58	-22.01	-6.52	-1.50
Funds (ew)	3.02	23.55	-4.48	-2.79	1.62	-3.85	1.30	1.74	5.29	-22.32	-7.43	-3.26
Funds (aw)	3.77	22.90	-4.56	-2.05	1.35	-3.52	1.31	1.81	5.40	-22.20	-7.33	-3.51
<b>Hit ratio vs Net</b>	<b>90 %</b>	<b>24 %</b>	<b>18 %</b>	<b>78 %</b>	<b>80 %</b>	<b>72 %</b>	<b>8 %</b>	<b>18 %</b>	<b>98 %</b>	<b>52 %</b>	<b>29 %</b>	<b>11 %</b>
Hit Ratio vs Gross	89 %	24 %	18 %	74 %	80 %	71 %	7 %	17 %	98 %	51 %	29 %	11 %
Funds (#)	82	84	84	85	85	86	86	87	88	88	86	87

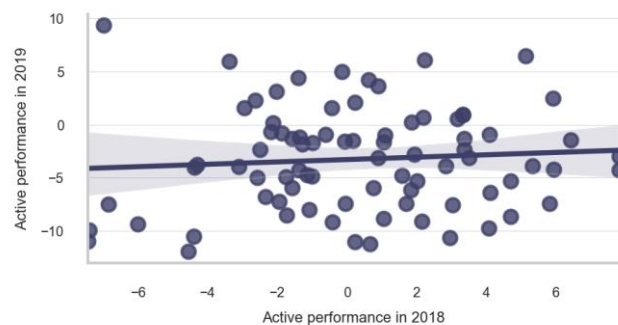
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-12.65	-12.65	-4.28	-0.04	1.64
Funds: equal-weighted average	-12.90	-12.90	-5.37	-0.95	1.93
Funds: asset-weighted average	-11.83	-11.83	-4.78	-0.29	2.62
Funds: top decile	-1.24	-1.24	-0.87	3.14	5.35
Funds: top quartile	-7.97	-7.97	-3.26	1.62	3.64
Funds: median	<b>-13.23</b>	<b>-13.23</b>	<b>-5.04</b>	<b>-1.50</b>	<b>1.66</b>
Funds: bottom quartile	-17.57	-17.57	-6.95	-2.53	-0.00
Funds: bottom decile	-22.63	-22.63	-9.89	-4.11	-0.83
Net Benchmark	<b>-12.87</b>	<b>-12.87</b>	<b>-4.52</b>	<b>-0.29</b>	<b>1.39</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	80	80	73	66	53
All funds = reporting + non-reporting	87	87	83	82	97
<b>Survivorship: %of reporting funds vs total</b>	<b>92 %</b>	<b>92 %</b>	<b>88 %</b>	<b>80 %</b>	<b>55 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

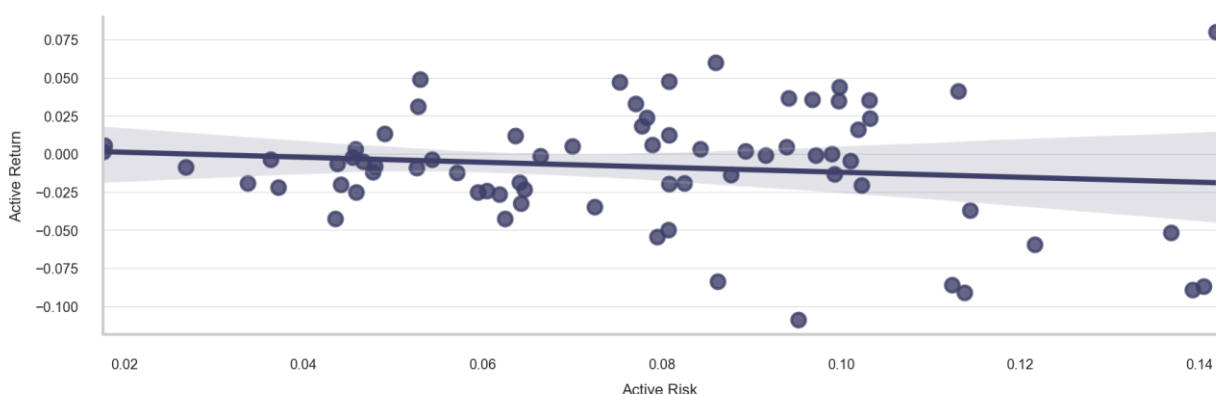
	YtD	1Y	3Y	5Y	10Y
Benchmark	-12.65	-12.65	-4.28	-0.04	1.64
Net Benchmark	-12.87	-12.87	-4.52	-0.29	1.39
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>48 %</b>	<b>48 %</b>	<b>38 %</b>	<b>38 %</b>	<b>55 %</b>
Hit ratio (vs Net Benchmark, all funds)	48 %	48 %	37 %	33 %	57 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: Switzerland Large Cap

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This universe covers Europe domiciled funds which invest in the Swiss stock market with a focus on large capitalisations and a balanced investment style.

The universe covers EUR 87.2bn, of which EUR 31.0 bn is invested in 152 active operating funds.

Compared to an investment in Swiss Performance Index net of 0.22 % (average expense ratio of the ETFs of this universe) 58% of the active, operating funds belonging to this universe have outperformed over 1Y (48% over 5Y and 35% over 10Y).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

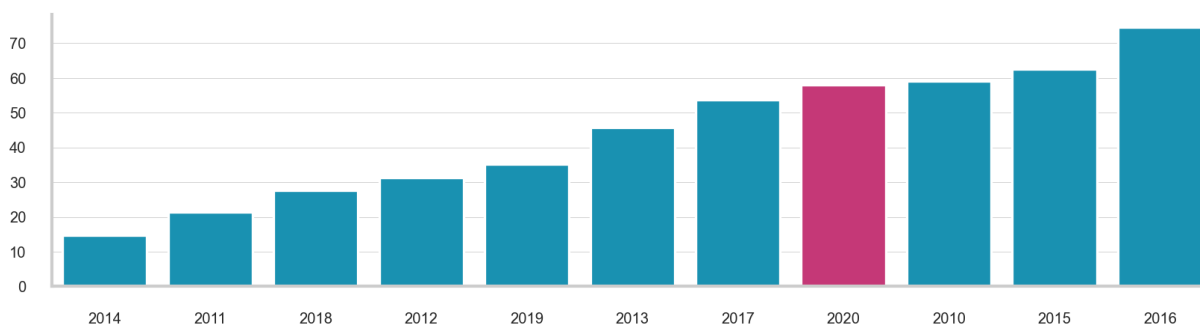
	Swiss Performance Index	Active Funds (ew)
YtD	4.33 %	4.79 %
1Y	4.33 %	4.79 %
3Y (pa)	10.27 %	8.67 %
5Y (pa)	8.05 %	7.65 %
10Y (pa)	10.28 %	9.29 %

### Fund Universe: Overview

All funds	328
Operating funds (Active)	203 (152)
Total AUM	EUR 87.2 bn
Active / Passive AUM	EUR 31.0 / 56.2 bn
Funds / ETFs AUM	EUR 75.2 / 12.0 bn
Avg. Active Fee (aw)	0.75 % (0.36 %)
Avg. ETF fee (aw)	0.26 % (0.21 %)
Avg. ETF Exp. Ratio (aw)	0.29 % (0.22 %)
Benchmark	Swiss Performance Index

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	4.33	35.36	-5.05	9.85	0.00	13.54	15.16	22.70	18.41	-4.96	22.05
Net Benchmark	4.10	35.07	-5.26	9.61	-0.21	13.30	14.92	22.44	18.15	-5.17	21.79
Funds (ew)	4.79	33.19	-8.13	10.15	2.35	14.38	12.63	22.02	22.02	-9.21	23.26
Funds (aw)	5.05	32.70	-6.61	10.06	1.21	13.75	12.82	22.05	17.14	-7.29	22.55
<b>Hit Ratio vs Net Benchmark</b>	<b>58 %</b>	<b>35 %</b>	<b>28 %</b>	<b>54 %</b>	<b>75 %</b>	<b>62 %</b>	<b>15 %</b>	<b>46 %</b>	<b>31 %</b>	<b>21 %</b>	<b>59 %</b>
Hit Ratio vs Gross Benchmark	53 %	29 %	23 %	48 %	72 %	61 %	10 %	42 %	26 %	19 %	55 %
Funds (#)	138	139	130	121	122	120	115	116	121	126	117

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	4.33	1.08	9.60	-9.73	4.95	4.31	7.30	15.24
Net Benchmark	4.27	1.02	9.54	-9.78	4.89	4.25	7.24	15.18
Funds (ew)	5.17	2.33	10.20	-11.71	5.82	3.55	6.94	13.63
Funds (aw)	4.63	1.97	9.61	-10.17	5.34	3.94	6.72	13.57
<b>Hit ratio vs Net Benchmark</b>	<b>68 %</b>	<b>74 %</b>	<b>61 %</b>	<b>30 %</b>	<b>75 %</b>	<b>32 %</b>	<b>37 %</b>	<b>20 %</b>
Hit ratio vs Gross Benchmark	65 %	70 %	56 %	29 %	72 %	32 %	35 %	18 %
Reporting funds (#)	146	149	145	146	145	140	139	140

## Monthly performance

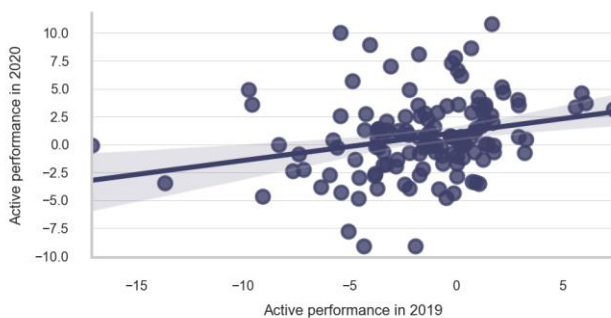
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	2.60	6.86	-4.90	0.45	1.90	-1.31	1.95	1.73	5.61	-4.74	-7.10	1.94
Funds (ew)	2.62	7.36	-4.57	0.41	2.59	-0.66	2.26	2.00	5.55	-6.72	-6.87	1.67
Funds (aw)	2.54	7.06	-4.68	0.40	2.48	-0.89	2.07	1.85	5.44	-5.41	-6.75	1.84
<b>Hit ratio vs Net</b>	<b>48 %</b>	<b>60 %</b>	<b>66 %</b>	<b>45 %</b>	<b>70 %</b>	<b>75 %</b>	<b>62 %</b>	<b>52 %</b>	<b>44 %</b>	<b>29 %</b>	<b>45 %</b>	<b>37 %</b>
Hit Ratio vs Gross	47 %	59 %	64 %	44 %	70 %	72 %	60 %	51 %	42 %	29 %	43 %	34 %
Funds (#)	150	149	148	149	149	149	149	148	147	150	148	148

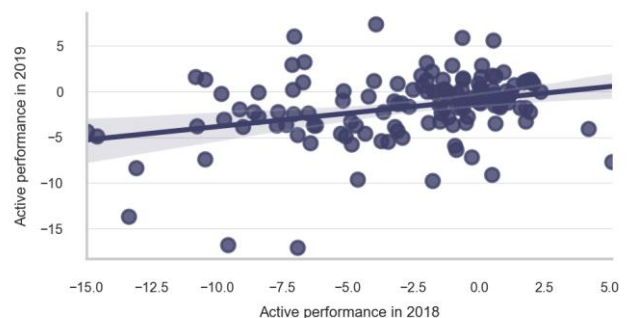
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	4.33	4.33	10.27	8.05	10.28
Funds: equal-weighted average	4.79	4.79	8.67	7.65	9.29
Funds: asset-weighted average	5.05	5.05	9.19	7.72	9.45
Funds: top decile	9.09	9.09	11.52	9.85	10.80
Funds: top quartile	6.92	6.92	10.29	8.61	10.40
Funds: median	<b>4.66</b>	<b>4.66</b>	<b>9.15</b>	<b>7.75</b>	<b>9.34</b>
Funds: bottom quartile	2.77	2.77	7.08	6.55	8.53
Funds: bottom decile	0.58	0.58	5.57	5.16	7.12
Net Benchmark	<b>4.10</b>	<b>4.10</b>	<b>10.03</b>	<b>7.82</b>	<b>10.04</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	138	138	124	104	78
All funds = reporting + non-reporting	145	145	136	123	123
<b>Survivorship: %of reporting funds vs total</b>	<b>95 %</b>	<b>95 %</b>	<b>91 %</b>	<b>85 %</b>	<b>63 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

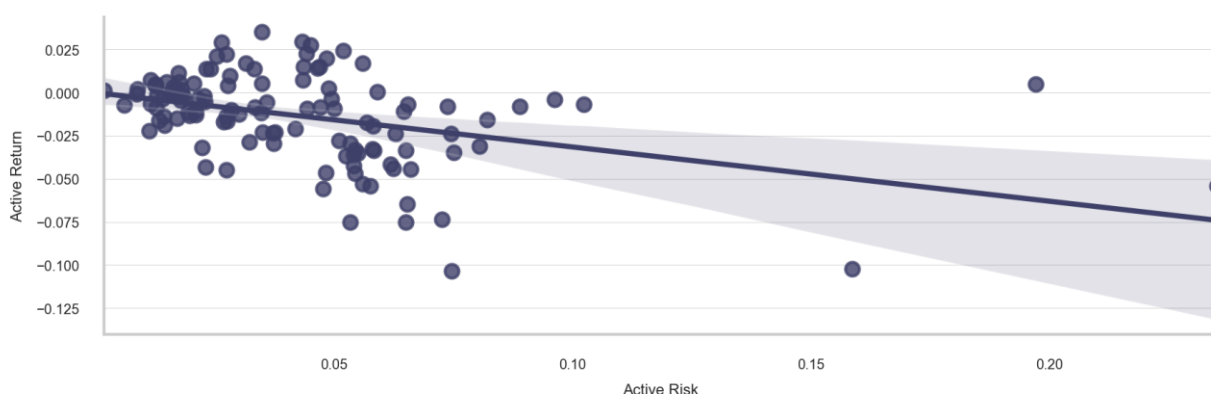
	YtD	1Y	3Y	5Y	10Y
Benchmark	4.33	4.33	10.27	8.05	10.28
Net Benchmark	4.10	4.10	10.03	7.82	10.04
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>58 %</b>	<b>58 %</b>	<b>31 %</b>	<b>48 %</b>	<b>35 %</b>
Hit ratio (vs Net Benchmark, all funds)	58 %	58 %	29 %	46 %	24 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: UK Large Cap

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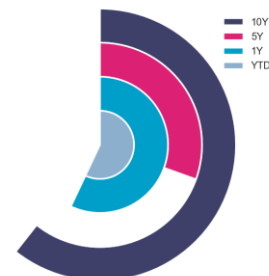
This universe covers Europe domiciled funds which invest in the UK stock market with a focus on large capitalisations and a balanced investment style.

The universe covers EUR 175.2bn, of which EUR 65.0 bn is invested in 138 active operating funds.

Compared to an investment in FTSE All Share net of 0.10 % (average expense ratio of the ETFs of this universe) 57% of the active, operating funds belonging to this universe have outperformed over 1Y (30% over 5Y and 61% over 10Y).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

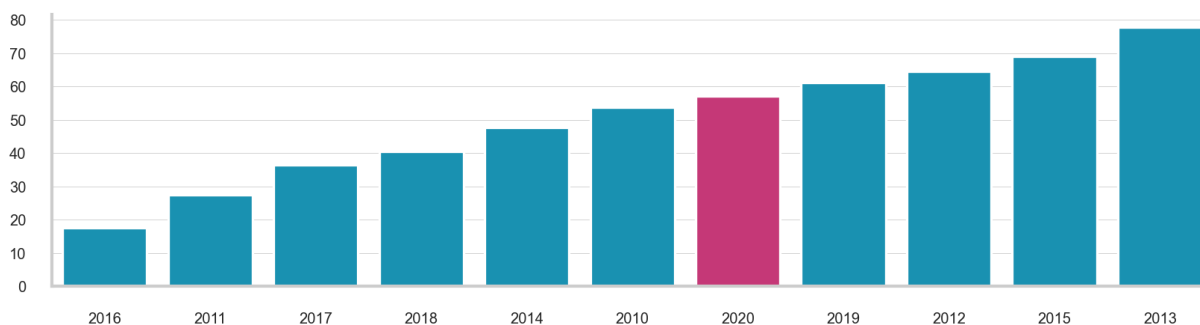
	FTSE All Share	Active Funds (ew)
YtD	-14.62 %	<b>-13.74 %</b>
1Y	-14.62 %	<b>-13.74 %</b>
3Y (pa)	-1.19 %	<b>-1.26 %</b>
5Y (pa)	1.13 %	<b>0.18 %</b>
10Y (pa)	5.11 %	<b>5.23 %</b>

### Fund Universe: Overview

All funds	450
Operating funds (Active)	206 (138)
Total AUM	EUR 175.2 bn
Active / Passive AUM	EUR 65.0 / 110.3 bn
Funds / ETFs AUM	EUR 156.2 / 19.1 bn
Avg. Active Fee (aw)	0.80 % (0.44 %)
Avg. ETF fee (aw)	0.23 % (0.10 %)
Avg. ETF Exp. Ratio (aw)	0.20 % (0.10 %)
Benchmark	FTSE All Share

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-14.62	26.22	-10.47	8.77	0.81	6.33	8.48	17.77	15.67	-0.95	18.76
Net Benchmark	-14.71	26.10	-10.56	8.66	0.71	6.23	8.37	17.66	15.56	-1.05	18.64
Funds (ew)	-13.74	27.21	-11.09	7.20	-3.14	8.42	8.32	21.93	21.93	-3.07	19.35
Funds (aw)	-15.78	26.36	-10.29	6.78	-2.50	7.99	8.31	20.61	16.97	-2.96	18.98
<b>Hit Ratio vs Net Benchmark</b>	<b>57 %</b>	<b>61 %</b>	<b>40 %</b>	<b>36 %</b>	<b>18 %</b>	<b>69 %</b>	<b>48 %</b>	<b>78 %</b>	<b>64 %</b>	<b>28 %</b>	<b>54 %</b>
Hit Ratio vs Gross Benchmark	55 %	60 %	39 %	35 %	18 %	68 %	47 %	77 %	62 %	26 %	51 %
Funds (#)	128	134	136	137	137	142	149	153	169	167	182

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	14.14	-2.72	7.26	-28.31	8.74	2.42	-0.56	13.97
Net Benchmark	14.11	-2.74	7.24	-28.33	8.72	2.39	-0.58	13.94
Funds (ew)	14.79	-1.90	9.37	-29.72	9.75	2.39	-0.43	13.71
Funds (aw)	11.27	-1.80	9.45	-29.58	9.36	2.43	-0.48	13.34
<b>Hit ratio vs Net Benchmark</b>	<b>55 %</b>	<b>58 %</b>	<b>81 %</b>	<b>33 %</b>	<b>64 %</b>	<b>54 %</b>	<b>49 %</b>	<b>41 %</b>
Hit ratio vs Gross Benchmark	55 %	58 %	81 %	33 %	64 %	53 %	49 %	40 %
Reporting funds (#)	130	132	134	135	137	138	138	146

## Monthly performance

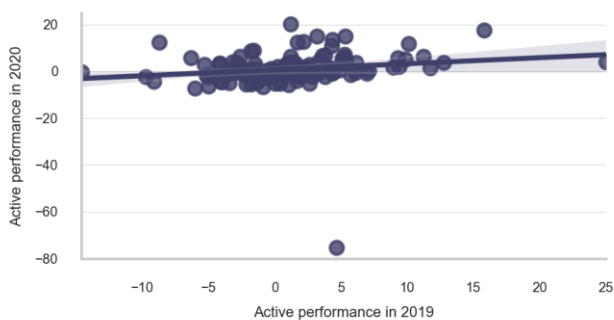
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	3.96	13.35	-3.17	-3.21	3.30	-2.73	0.50	-0.20	6.91	-17.47	-10.95	-2.49
Funds (ew)	3.38	14.96	-3.46	-3.40	3.42	-1.83	-0.21	-0.86	10.58	-19.06	-11.25	-2.03
Funds (aw)	0.99	14.48	-3.75	-3.08	3.07	-1.68	-0.33	-1.08	11.01	-19.01	-11.25	-2.03
<b>Hit ratio vs Net</b>	<b>50 %</b>	<b>68 %</b>	<b>35 %</b>	<b>45 %</b>	<b>41 %</b>	<b>72 %</b>	<b>22 %</b>	<b>29 %</b>	<b>93 %</b>	<b>26 %</b>	<b>29 %</b>	<b>60 %</b>
Hit Ratio vs Gross	50 %	68 %	34 %	44 %	41 %	71 %	22 %	29 %	93 %	26 %	27 %	60 %
Funds (#)	134	134	133	133	133	133	134	135	135	136	135	136

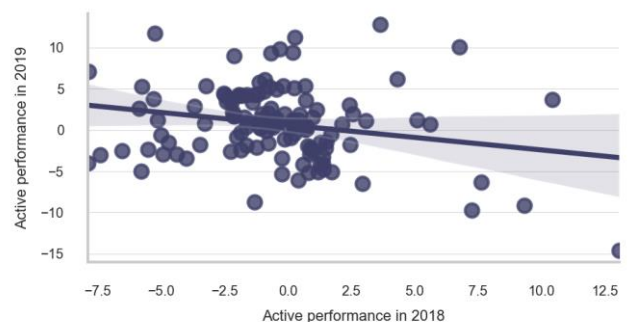
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-14.62	-14.62	-1.19	1.13	5.11
Funds: equal-weighted average	-13.74	-13.74	-1.26	0.18	5.23
Funds: asset-weighted average	-15.78	-15.78	-1.53	-0.12	4.76
Funds: top decile	-7.69	-7.69	3.03	2.43	6.97
Funds: top quartile	-11.25	-11.25	0.47	1.16	5.94
Funds: median	<b>-14.14</b>	<b>-14.14</b>	<b>-1.13</b>	<b>0.28</b>	<b>5.33</b>
Funds: bottom quartile	-16.15	-16.15	-2.39	-0.85	4.33
Funds: bottom decile	-19.14	-19.14	-3.82	-2.62	3.37
Net Benchmark	<b>-14.71</b>	<b>-14.71</b>	<b>-1.28</b>	<b>1.03</b>	<b>5.01</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	128	128	114	105	94
All funds = reporting + non-reporting	136	136	140	146	182
<b>Survivorship: %of reporting funds vs total</b>	<b>94 %</b>	<b>94 %</b>	<b>81 %</b>	<b>72 %</b>	<b>52 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

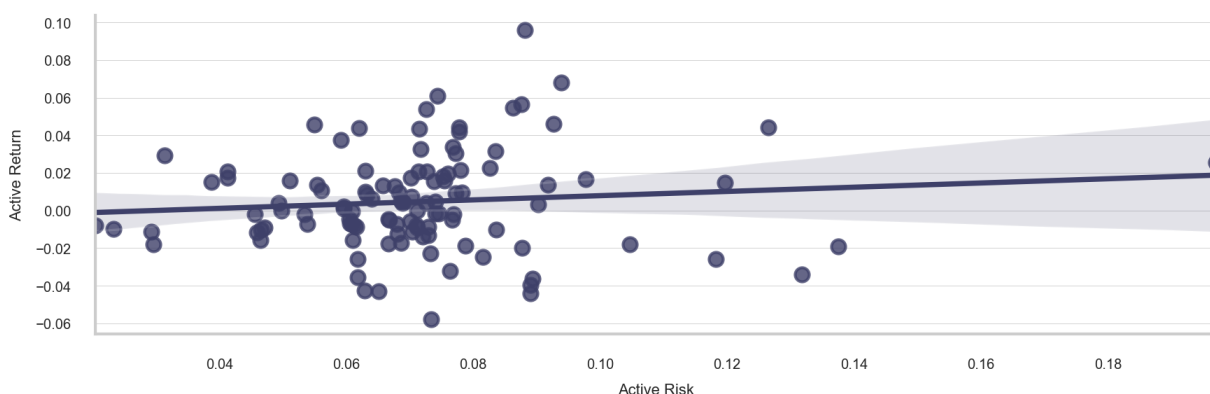
	YtD	1Y	3Y	5Y	10Y
Benchmark	-14.62	-14.62	-1.19	1.13	5.11
Net Benchmark	-14.71	-14.71	-1.28	1.03	5.01
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>57 %</b>	<b>57 %</b>	<b>52 %</b>	<b>30 %</b>	<b>61 %</b>
Hit ratio (vs Net Benchmark, all funds)	57 %	57 %	54 %	28 %	51 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: UK Small Cap

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This universe covers Europe domiciled funds which invest in the UK stock market, with a focus on small and medium capitalisations and a balanced investment style.

The universe covers EUR 26.1bn, of which EUR 25.8 bn is invested in 70 active operating funds.

Compared to an investment in MSCI UK Small Cap net of 0.58 % (average expense ratio of the ETFs of this universe) 85% of the active, operating funds belonging to this universe have outperformed over 1Y (88% over 5Y and 86% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

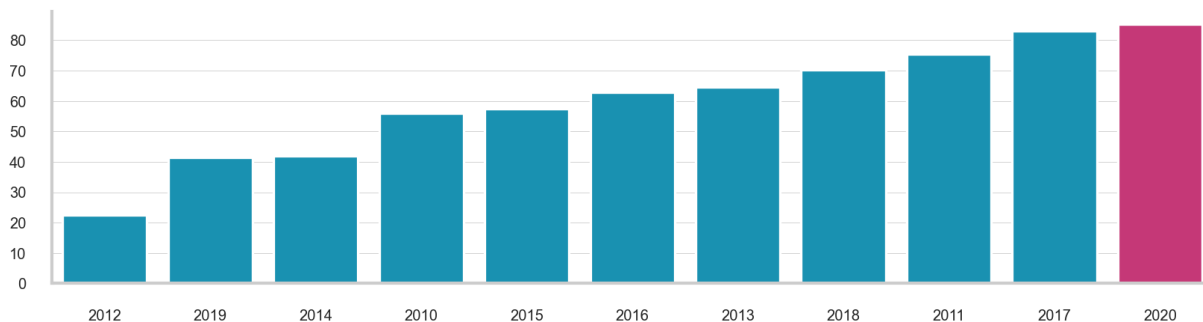
	MSCI UK Small Cap	Active Funds (ew)
YtD	-9.94 %	<b>0.75 %</b>
1Y	-9.94 %	<b>0.75 %</b>
3Y (pa)	1.40 %	<b>5.47 %</b>
5Y (pa)	2.27 %	<b>5.94 %</b>
10Y (pa)	8.88 %	<b>10.86 %</b>

### Fund Universe: Overview

All funds	136
Operating funds (Active)	71 (70)
Total AUM	EUR 26.1 bn
Active / Passive AUM	EUR 25.8 / 0.3 bn
Funds / ETFs AUM	EUR 25.8 / 0.3 bn
Avg. Active Fee (aw)	1.07 % (1.11 %)
Avg. ETF fee (aw)	0.58 % (0.58 %)
Avg. ETF Exp. Ratio (aw)	0.58 % (0.58 %)
Benchmark	MSCI UK Small Cap

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-9.94	37.75	-15.96	16.35	-7.78	20.86	7.38	33.13	33.91	-9.50	35.78
Net Benchmark	-10.47	36.98	-16.45	15.69	-8.32	20.17	6.77	32.37	33.15	-10.03	35.01
Funds (ew)	0.75	33.21	-12.82	21.43	-6.63	20.85	6.92	34.18	34.18	-6.44	36.42
Funds (aw)	1.38	35.81	-13.70	22.02	-7.44	23.05	5.52	34.66	28.26	-6.10	37.71
<b>Hit Ratio vs Net Benchmark</b>	<b>85 %</b>	<b>41 %</b>	<b>70 %</b>	<b>83 %</b>	<b>63 %</b>	<b>57 %</b>	<b>42 %</b>	<b>65 %</b>	<b>23 %</b>	<b>75 %</b>	<b>56 %</b>
Hit Ratio vs Gross Benchmark	85 %	37 %	66 %	78 %	60 %	54 %	39 %	59 %	15 %	73 %	56 %
Funds (#)	68	70	67	65	62	68	69	68	71	73	75

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	21.35	1.96	12.12	-35.08	16.00	3.35	-1.65	16.83
Net Benchmark	21.19	1.81	11.97	-35.19	15.84	3.21	-1.80	16.67
Funds (ew)	22.58	5.29	16.21	-32.88	18.34	0.08	0.80	11.41
Funds (aw)	21.95	5.64	15.87	-32.08	18.88	0.76	1.23	12.02
<b>Hit ratio vs Net Benchmark</b>	<b>59 %</b>	<b>81 %</b>	<b>79 %</b>	<b>63 %</b>	<b>80 %</b>	<b>13 %</b>	<b>83 %</b>	<b>7 %</b>
Hit ratio vs Gross Benchmark	57 %	80 %	79 %	63 %	80 %	13 %	82 %	7 %
Reporting funds (#)	68	70	70	71	71	71	71	70

## Monthly performance

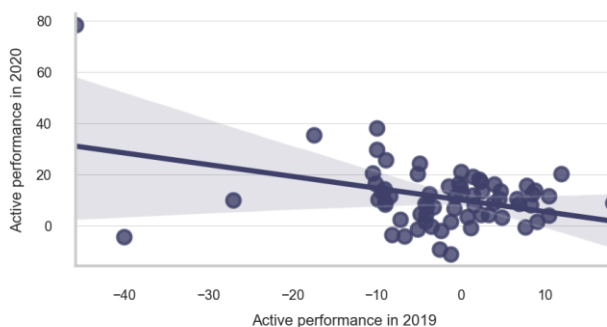
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	7.14	13.96	-0.75	-3.59	6.46	-0.81	-1.15	0.67	12.51	-25.52	-10.60	-2.67
Funds (ew)	7.19	13.23	0.97	-2.59	6.39	1.59	-0.45	0.40	16.20	-24.65	-11.92	1.04
Funds (aw)	7.54	12.04	1.22	-2.48	6.41	1.79	-0.75	0.71	15.92	-23.78	-11.88	1.12
<b>Hit ratio vs Net</b>	<b>49 %</b>	<b>44 %</b>	<b>83 %</b>	<b>74 %</b>	<b>43 %</b>	<b>84 %</b>	<b>57 %</b>	<b>40 %</b>	<b>91 %</b>	<b>59 %</b>	<b>15 %</b>	<b>96 %</b>
Hit Ratio vs Gross	46 %	44 %	83 %	73 %	41 %	84 %	56 %	40 %	91 %	56 %	15 %	96 %
Funds (#)	68	68	69	70	70	70	70	70	70	71	71	71

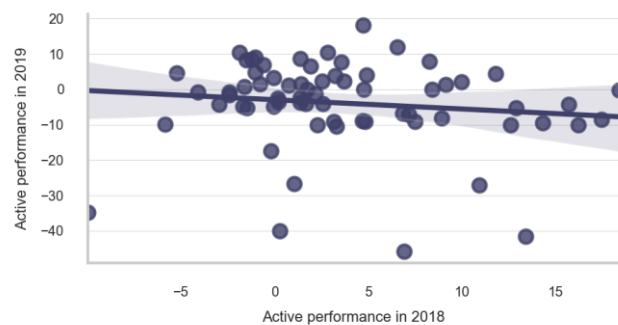
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-9.94	-9.94	1.40	2.27	8.88
Funds: equal-weighted average	0.75	0.75	5.47	5.94	10.86
Funds: asset-weighted average	1.38	1.38	5.92	6.06	10.95
Funds: top decile	10.33	10.33	11.73	10.66	13.79
Funds: top quartile	5.08	5.08	8.96	7.77	12.32
Funds: median	<b>-0.04</b>	<b>-0.04</b>	<b>5.02</b>	<b>5.60</b>	<b>11.57</b>
Funds: bottom quartile	-6.24	-6.24	2.57	3.69	8.89
Funds: bottom decile	-11.40	-11.40	-0.06	1.41	7.48
Net Benchmark	<b>-10.47</b>	<b>-10.47</b>	<b>0.81</b>	<b>1.68</b>	<b>8.26</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	68	68	64	57	51
All funds = reporting + non-reporting	70	70	68	67	76
<b>Survivorship: %of reporting funds vs total</b>	<b>97 %</b>	<b>97 %</b>	<b>94 %</b>	<b>85 %</b>	<b>67 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

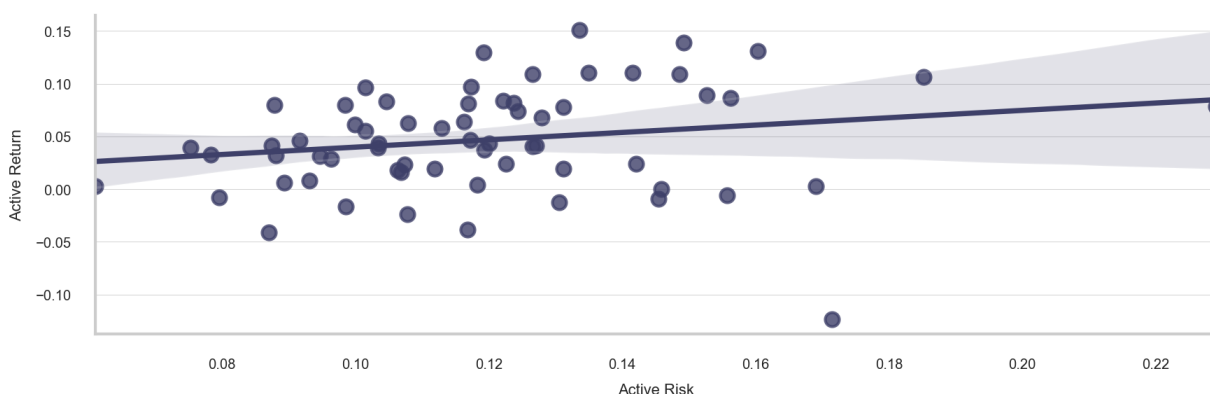
	YtD	1Y	3Y	5Y	10Y
Benchmark	-9.94	-9.94	1.40	2.27	8.88
Net Benchmark	-10.47	-10.47	0.81	1.68	8.26
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>85 %</b>	<b>85 %</b>	<b>86 %</b>	<b>88 %</b>	<b>86 %</b>
Hit ratio (vs Net Benchmark, all funds)	84 %	84 %	85 %	85 %	80 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: US Aggregate

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This universe covers Europe domiciled funds which invest in US dollar denominated bonds across all issuers and durations.

The universe covers EUR 41.2bn, of which EUR 36.0 bn is invested in 82 active operating funds.

Compared to an investment in Bbg Barclays US Aggregate net of 0.25 % (average expense ratio of the ETFs of this universe) 54% of the active, operating funds belonging to this universe have outperformed over 1Y (39% over 5Y and 30% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

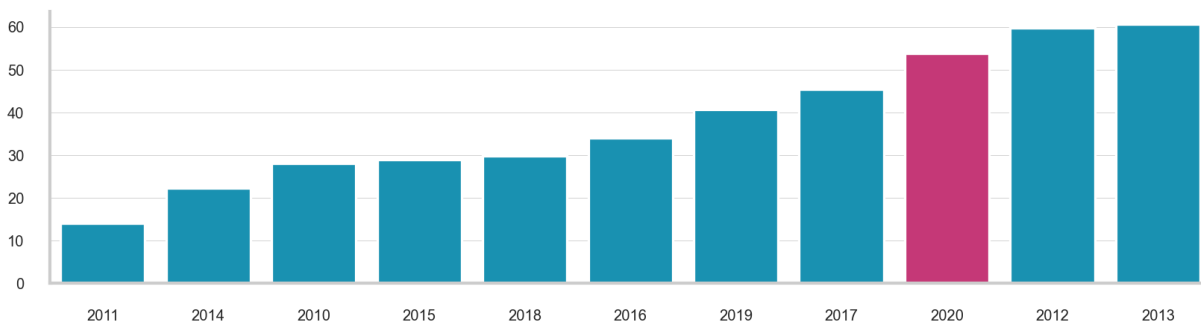
	Bbg Barclays US Aggregate	Active Funds (ew)
YtD	-1.37 %	<b>-2.09 %</b>
1Y	-1.37 %	<b>-2.09 %</b>
3Y (pa)	4.68 %	<b>3.67 %</b>
5Y (pa)	1.98 %	<b>1.14 %</b>
10Y (pa)	4.80 %	<b>3.78 %</b>

### Fund Universe: Overview

All funds	285
Operating funds (Active)	85 (82)
Total AUM	EUR 41.2 bn
Active / Passive AUM	EUR 36.0 / 5.2 bn
Funds / ETFs AUM	EUR 38.2 / 3.0 bn
Avg. Active Fee (aw)	0.71 % (0.58 %)
Avg. ETF fee (aw)	0.21 % (0.25 %)
Avg. ETF Exp. Ratio (aw)	0.19 % (0.25 %)
Benchmark	Bbg Barclays US Aggregate

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-1.37	10.71	5.05	-9.04	5.71	12.00	20.67	-6.26	2.63	11.44	13.93
Net Benchmark	-1.62	10.44	4.79	-9.27	5.45	11.73	20.37	-6.50	2.37	11.17	13.65
Funds (ew)	-2.09	9.69	3.89	-9.22	4.97	10.76	18.19	-6.04	-6.04	7.56	11.99
Funds (aw)	-0.53	10.03	4.27	-8.66	5.71	11.57	18.69	-6.18	6.15	7.28	13.97
<b>Hit Ratio vs Net Benchmark</b>	<b>54 %</b>	<b>41 %</b>	<b>30 %</b>	<b>45 %</b>	<b>34 %</b>	<b>29 %</b>	<b>22 %</b>	<b>61 %</b>	<b>60 %</b>	<b>14 %</b>	<b>28 %</b>
Hit Ratio vs Gross Benchmark	49 %	37 %	25 %	41 %	28 %	18 %	17 %	54 %	56 %	12 %	22 %
Funds (#)	78	81	84	86	88	93	90	94	97	100	107

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	-3.52	-3.63	0.53	5.52	-2.71	6.83	1.63	4.80
Net Benchmark	-3.58	-3.69	0.46	5.45	-2.77	6.77	1.57	4.74
Funds (ew)	-3.07	-3.35	1.89	2.65	-2.52	6.20	1.17	4.74
Funds (aw)	-2.59	-2.90	2.86	2.24	-2.48	6.26	1.44	4.68
<b>Hit ratio vs Net Benchmark</b>	<b>67 %</b>	<b>69 %</b>	<b>70 %</b>	<b>20 %</b>	<b>70 %</b>	<b>29 %</b>	<b>35 %</b>	<b>57 %</b>
Hit ratio vs Gross Benchmark	63 %	68 %	69 %	20 %	60 %	24 %	30 %	54 %
Reporting funds (#)	79	80	81	83	83	82	81	83

## Monthly performance

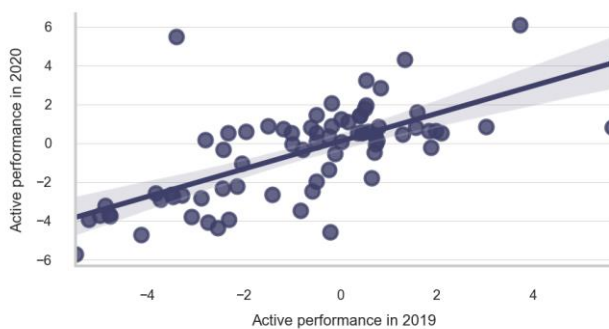
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	-2.12	-1.69	0.20	1.91	-1.94	-3.62	-0.36	-1.09	1.94	-0.50	2.68	3.22
Funds (ew)	-1.93	-1.53	0.38	1.88	-1.51	-3.68	0.05	-0.68	2.52	-2.17	2.00	2.85
Funds (aw)	-1.73	-1.18	0.31	1.84	-1.40	-3.30	0.26	-0.48	3.09	-2.66	2.02	2.95
<b>Hit ratio vs Net</b>	<b>74 %</b>	<b>58 %</b>	<b>77 %</b>	<b>45 %</b>	<b>80 %</b>	<b>47 %</b>	<b>77 %</b>	<b>72 %</b>	<b>65 %</b>	<b>31 %</b>	<b>16 %</b>	<b>38 %</b>
Hit Ratio vs Gross	67 %	56 %	70 %	39 %	77 %	46 %	77 %	72 %	61 %	31 %	15 %	36 %
Funds (#)	81	81	81	82	82	81	81	83	83	83	85	85

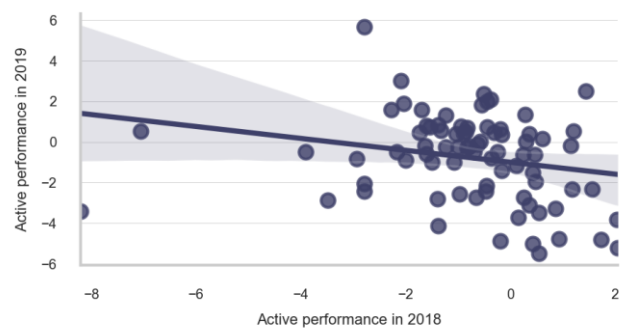
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-1.37	-1.37	4.68	1.98	4.80
Funds: equal-weighted average	-2.09	-2.09	3.67	1.14	3.78
Funds: asset-weighted average	-0.53	-0.53	4.50	1.96	4.54
Funds: top decile	0.38	0.38	5.06	2.29	4.92
Funds: top quartile	-0.78	-0.78	4.63	1.95	4.67
Funds: median	<b>-1.46</b>	<b>-1.46</b>	<b>4.13</b>	<b>1.46</b>	<b>3.94</b>
Funds: bottom quartile	-4.24	-4.24	2.58	0.30	3.08
Funds: bottom decile	-5.39	-5.39	1.96	-0.40	2.34
Net Benchmark	<b>-1.62</b>	<b>-1.62</b>	<b>4.42</b>	<b>1.73</b>	<b>4.54</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	78	78	72	69	57
All funds = reporting + non-reporting	84	84	89	95	108
<b>Survivorship: %of reporting funds vs total</b>	<b>93 %</b>	<b>93 %</b>	<b>81 %</b>	<b>73 %</b>	<b>53 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

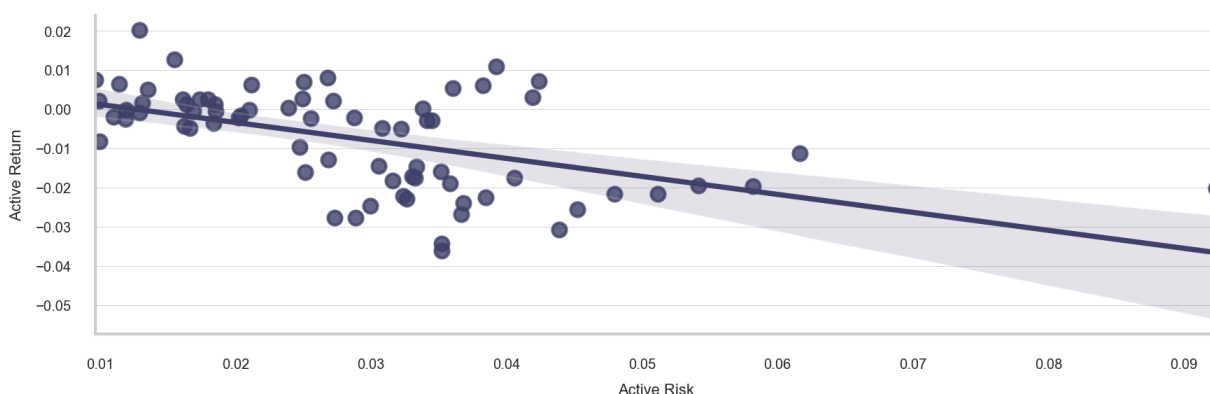
	YtD	1Y	3Y	5Y	10Y
Benchmark	-1.37	-1.37	4.68	1.98	4.80
Net Benchmark	-1.62	-1.62	4.42	1.73	4.54
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>54 %</b>	<b>54 %</b>	<b>33 %</b>	<b>39 %</b>	<b>30 %</b>
Hit ratio (vs Net Benchmark, all funds)	55 %	55 %	31 %	32 %	19 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: US Corporate

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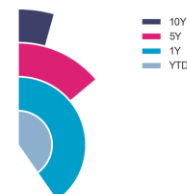
This universe covers Europe domiciled funds which invest in US dollar denominated investment grade corporate bonds across all durations.

The universe covers EUR 64.8bn, of which EUR 35.7 bn is invested in 69 active operating funds.

Compared to an investment in Bbg Barclays US Corporate net of 0.18 % (average expense ratio of the ETFs of this universe) 40% of the active, operating funds belonging to this universe have outperformed over 1Y (14% over 5Y and 4% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

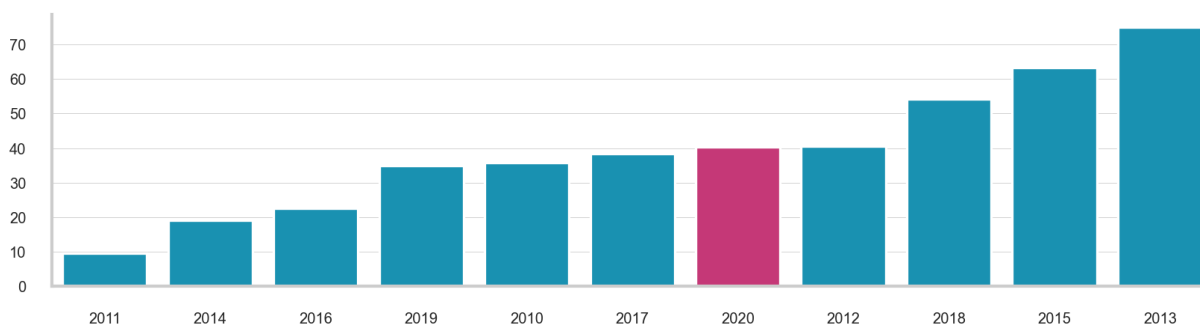
	Bbg Barclays US Corporate	Active Funds (ew)
YtD	0.81 %	<b>-0.58 %</b>
1Y	0.81 %	<b>-0.58 %</b>
3Y (pa)	6.39 %	<b>5.12 %</b>
5Y (pa)	4.23 %	<b>2.71 %</b>
10Y (pa)	6.61 %	<b>5.11 %</b>

### Fund Universe: Overview

All funds	136
Operating funds (Active)	103 (69)
Total AUM	EUR 64.8 bn
Active / Passive AUM	EUR 35.7 / 29.0 bn
Funds / ETFs AUM	EUR 40.5 / 24.1 bn
Avg. Active Fee (aw)	0.36 % (0.33 %)
Avg. ETF fee (aw)	0.14 % (0.17 %)
Avg. ETF Exp. Ratio (aw)	0.17 % (0.18 %)
Benchmark	Bbg Barclays US Corporate

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	0.81	16.65	2.40	-6.53	9.27	10.63	22.38	-5.79	8.13	11.77	16.57
Net Benchmark	0.62	16.44	2.21	-6.70	9.08	10.43	22.16	-5.97	7.93	11.57	16.36
Funds (ew)	-0.58	13.77	2.86	-7.50	7.61	10.24	18.57	-4.53	-4.53	7.51	13.99
Funds (aw)	-0.18	13.36	3.14	-7.20	8.42	9.93	20.37	-5.56	7.77	11.03	13.21
<b>Hit Ratio vs Net Benchmark</b>	<b>40 %</b>	<b>35 %</b>	<b>54 %</b>	<b>38 %</b>	<b>23 %</b>	<b>63 %</b>	<b>19 %</b>	<b>75 %</b>	<b>41 %</b>	<b>10 %</b>	<b>36 %</b>
Hit Ratio vs Gross Benchmark	34 %	29 %	51 %	30 %	21 %	59 %	17 %	72 %	38 %	6 %	32 %
Funds (#)	67	66	59	60	53	49	42	36	32	31	28

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	-1.24	-2.76	6.47	-1.42	-1.73	7.64	3.02	7.05
Net Benchmark	-1.29	-2.80	6.43	-1.46	-1.78	7.59	2.98	7.00
Funds (ew)	-1.77	-2.81	5.60	-1.39	-1.85	6.82	2.12	6.24
Funds (aw)	-1.68	-2.76	6.15	-1.65	-1.85	6.68	2.03	6.11
<b>Hit ratio vs Net Benchmark</b>	<b>30 %</b>	<b>46 %</b>	<b>40 %</b>	<b>55 %</b>	<b>44 %</b>	<b>24 %</b>	<b>25 %</b>	<b>41 %</b>
Hit ratio vs Gross Benchmark	25 %	43 %	39 %	55 %	34 %	21 %	24 %	35 %
Reporting funds (#)	69	68	67	69	70	67	67	66

## Monthly performance

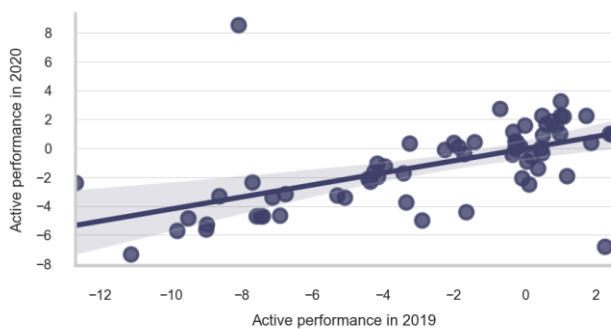
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	-1.83	0.07	0.47	1.67	-2.51	-1.95	0.96	-0.01	5.41	-7.00	2.22	3.64
Funds (ew)	-1.80	-0.51	0.54	1.73	-1.85	-2.65	0.77	0.05	4.72	-5.99	1.76	3.09
Funds (aw)	-1.77	-0.50	0.60	1.77	-1.80	-2.69	0.94	0.07	5.09	-6.36	1.88	3.10
<b>Hit ratio vs Net</b>	<b>52 %</b>	<b>33 %</b>	<b>71 %</b>	<b>66 %</b>	<b>74 %</b>	<b>22 %</b>	<b>41 %</b>	<b>55 %</b>	<b>41 %</b>	<b>68 %</b>	<b>14 %</b>	<b>27 %</b>
Hit Ratio vs Gross	48 %	30 %	67 %	63 %	71 %	21 %	40 %	52 %	41 %	68 %	13 %	26 %
Funds (#)	69	69	69	68	68	68	68	69	69	69	69	70

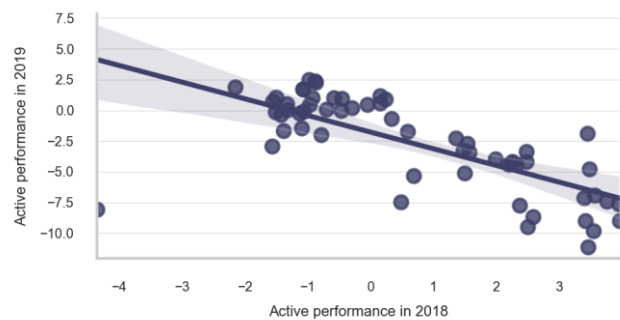
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	0.81	0.81	6.39	4.23	6.61
Funds: equal-weighted average	-0.58	-0.58	5.12	2.71	5.11
Funds: asset-weighted average	-0.18	-0.18	5.29	3.27	5.79
Funds: top decile	2.64	2.64	7.00	4.53	6.18
Funds: top quartile	1.33	1.33	6.28	3.71	5.99
Funds: median	<b>-0.09</b>	<b>-0.09</b>	<b>5.41</b>	<b>3.01</b>	<b>5.79</b>
Funds: bottom quartile	-2.66	-2.66	3.88	1.70	4.18
Funds: bottom decile	-4.26	-4.26	2.92	0.58	3.01
Net Benchmark	<b>0.62</b>	<b>0.62</b>	<b>6.20</b>	<b>4.04</b>	<b>6.41</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	67	67	56	43	23
All funds = reporting + non-reporting	70	70	64	53	31
<b>Survivorship: %of reporting funds vs total</b>	<b>96 %</b>	<b>96 %</b>	<b>88 %</b>	<b>81 %</b>	<b>74 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

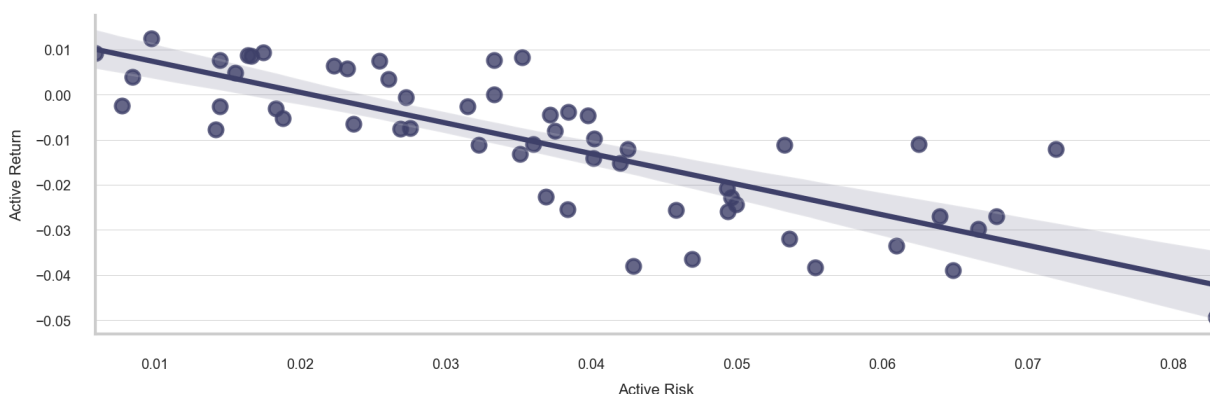
	YtD	1Y	3Y	5Y	10Y
Benchmark	0.81	0.81	6.39	4.23	6.61
Net Benchmark	0.62	0.62	6.20	4.04	6.41
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>40 %</b>	<b>40 %</b>	<b>27 %</b>	<b>14 %</b>	<b>4 %</b>
Hit ratio (vs Net Benchmark, all funds)	39 %	39 %	25 %	11 %	3 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: US Government

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This universe covers Europe domiciled funds which invest in US dollar denominated government bonds across all durations.

The universe covers EUR 46.3bn, of which EUR 7.8 bn is invested in 33 active operating funds.

Compared to an investment in Bbg Barclays US Treasury net of 0.20 % (average expense ratio of the ETFs of this universe) 23% of the active, operating funds belonging to this universe have outperformed over 1Y (17% over 5Y and 14% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

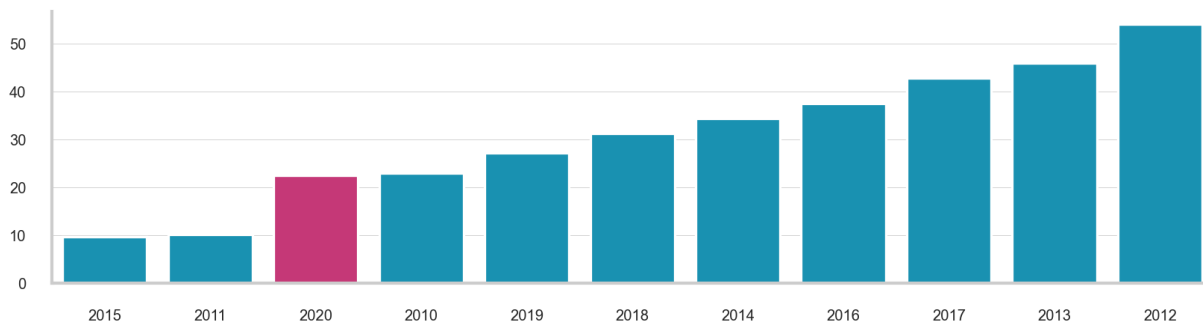
	Bbg Barclays US Treasury	Active Funds (ew)
YtD	-0.91 %	<b>-2.12 %</b>
1Y	-0.91 %	<b>-2.12 %</b>
3Y (pa)	4.54 %	<b>3.06 %</b>
5Y (pa)	1.33 %	<b>0.39 %</b>
10Y (pa)	4.29 %	<b>3.30 %</b>

### Fund Universe: Overview

All funds	151
Operating funds (Active)	81 (33)
Total AUM	EUR 46.3 bn
Active / Passive AUM	EUR 7.8 / 38.5 bn
Funds / ETFs AUM	EUR 15.2 / 31.1 bn
Avg. Active Fee (aw)	0.31 % (0.18 %)
Avg. ETF fee (aw)	0.12 % (0.09 %)
Avg. ETF Exp. Ratio (aw)	0.16 % (0.20 %)
Benchmark	Bbg Barclays US Treasury

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-0.91	8.82	5.95	-10.15	4.05	12.34	19.63	-6.96	0.42	13.50	13.22
Net Benchmark	-1.11	8.61	5.74	-10.33	3.85	12.12	19.39	-7.15	0.22	13.28	13.00
Funds (ew)	-2.12	7.64	4.52	-9.82	3.46	10.52	17.45	-6.96	-6.96	10.13	11.25
Funds (aw)	-2.41	7.90	4.12	-9.97	3.34	10.84	17.38	-6.30	0.83	10.19	11.89
<b>Hit Ratio vs Net Benchmark</b>	<b>23 %</b>	<b>27 %</b>	<b>31 %</b>	<b>43 %</b>	<b>38 %</b>	<b>10 %</b>	<b>34 %</b>	<b>46 %</b>	<b>54 %</b>	<b>10 %</b>	<b>23 %</b>
Hit Ratio vs Gross Benchmark	19 %	24 %	25 %	32 %	38 %	6 %	28 %	43 %	54 %	10 %	18 %
Funds (#)	31	33	32	28	32	31	32	37	37	39	39

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	-4.95	-4.05	-1.85	10.70	-3.64	6.97	1.56	3.95
Net Benchmark	-5.00	-4.10	-1.90	10.65	-3.69	6.92	1.51	3.90
Funds (ew)	-4.25	-3.68	-1.24	7.49	-3.20	6.14	1.05	3.94
Funds (aw)	-4.07	-3.83	-1.40	7.29	-3.08	6.14	0.99	3.86
<b>Hit ratio vs Net Benchmark</b>	<b>69 %</b>	<b>62 %</b>	<b>61 %</b>	<b>18 %</b>	<b>68 %</b>	<b>26 %</b>	<b>24 %</b>	<b>44 %</b>
Hit ratio vs Gross Benchmark	66 %	50 %	58 %	18 %	68 %	26 %	21 %	44 %
Reporting funds (#)	32	34	33	34	34	34	33	34

## Monthly performance

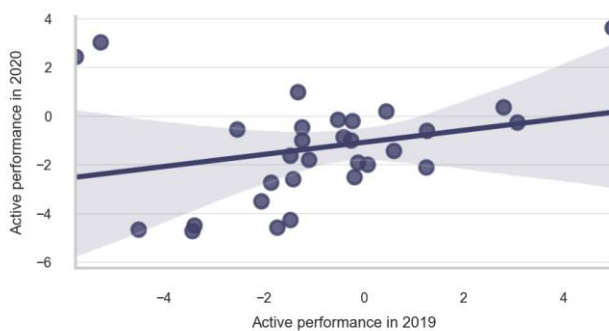
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	-2.48	-2.30	-0.30	2.11	-2.23	-3.95	-0.89	-1.80	0.79	2.99	3.54	3.75
Funds (ew)	-2.17	-1.99	-0.15	2.09	-1.83	-3.89	-0.51	-1.58	0.84	1.51	2.62	3.16
Funds (aw)	-2.14	-1.96	-0.00	1.94	-1.76	-3.97	-0.67	-1.49	0.76	1.43	2.66	3.04
<b>Hit ratio vs Net</b>	<b>69 %</b>	<b>62 %</b>	<b>58 %</b>	<b>35 %</b>	<b>68 %</b>	<b>53 %</b>	<b>76 %</b>	<b>68 %</b>	<b>35 %</b>	<b>32 %</b>	<b>18 %</b>	<b>29 %</b>
Hit Ratio vs Gross	66 %	59 %	55 %	32 %	68 %	53 %	71 %	68 %	32 %	29 %	18 %	29 %
Funds (#)	32	32	33	34	34	34	34	34	34	34	34	34

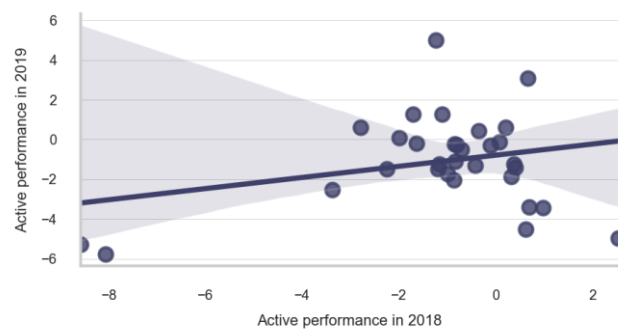
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-0.91	-0.91	4.54	1.33	4.29
Funds: equal-weighted average	-2.12	-2.12	3.06	0.39	3.30
Funds: asset-weighted average	-2.41	-2.41	3.12	0.40	3.29
Funds: top decile	1.32	1.32	4.21	1.17	4.16
Funds: top quartile	-1.28	-1.28	3.74	0.79	3.87
Funds: median	<b>-2.10</b>	<b>-2.10</b>	<b>3.08</b>	<b>0.34</b>	<b>3.54</b>
Funds: bottom quartile	-3.66	-3.66	2.08	0.04	2.93
Funds: bottom decile	-5.59	-5.59	1.55	-0.66	1.75
Net Benchmark	<b>-1.11</b>	<b>-1.11</b>	<b>4.33</b>	<b>1.12</b>	<b>4.08</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	31	31	28	24	22
All funds = reporting + non-reporting	34	34	33	34	41
<b>Survivorship: %of reporting funds vs total</b>	<b>91 %</b>	<b>91 %</b>	<b>85 %</b>	<b>71 %</b>	<b>54 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

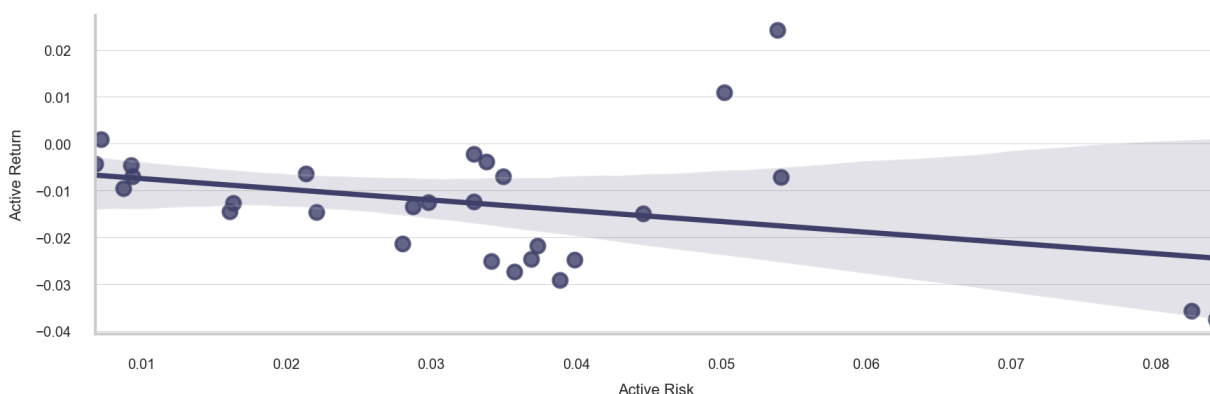
	YtD	1Y	3Y	5Y	10Y
Benchmark	-0.91	-0.91	4.54	1.33	4.29
Net Benchmark	-1.11	-1.11	4.33	1.12	4.08
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>23 %</b>	<b>23 %</b>	<b>11 %</b>	<b>17 %</b>	<b>14 %</b>
Hit ratio (vs Net Benchmark, all funds)	24 %	24 %	12 %	15 %	12 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: US High Yield

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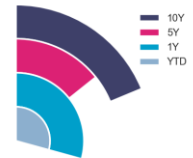
This universe covers Europe domiciled funds which invest in US dollar denominated High Yield bonds across all durations.

The universe covers EUR 59.0bn, of which EUR 49.2 bn is invested in 89 active operating funds.

Compared to an investment in Bbg Barclays US High Yield net of 0.48 % (average expense ratio of the ETFs of this universe) 29% of the active, operating funds belonging to this universe have outperformed over 1Y (14% over 5Y and 19% over 10Y).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

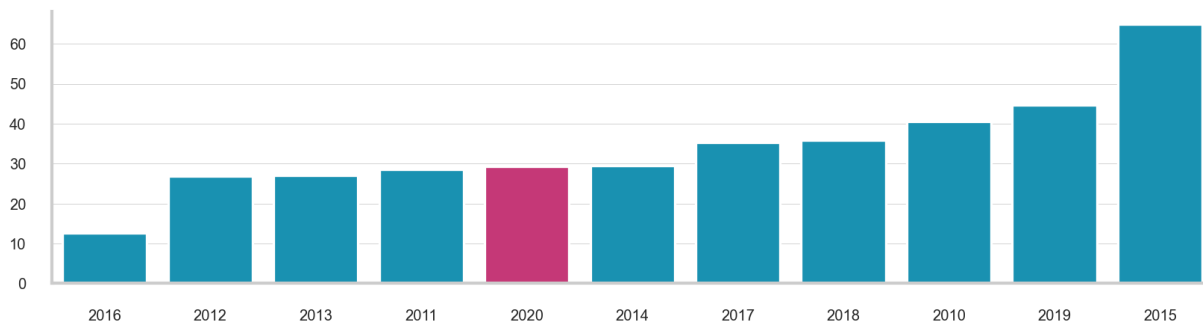
	Bbg Barclays US High Yield	Active Funds (ew)
YtD	-1.72 %	<b>-3.44 %</b>
1Y	-1.72 %	<b>-3.44 %</b>
3Y (pa)	5.58 %	<b>4.18 %</b>
5Y (pa)	6.04 %	<b>4.21 %</b>
10Y (pa)	7.79 %	<b>6.29 %</b>

### Fund Universe: Overview

All funds	112
Operating funds (Active)	99 (89)
Total AUM	EUR 59.0 bn
Active / Passive AUM	EUR 49.2 / 9.8 bn
Funds / ETFs AUM	EUR 49.2 / 9.8 bn
Avg. Active Fee (aw)	0.63 % (0.63 %)
Avg. ETF fee (aw)	0.39 % (0.48 %)
Avg. ETF Exp. Ratio (aw)	0.40 % (0.48 %)
Benchmark	Bbg Barclays US High Yield

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-1.72	16.42	2.87	-5.57	20.64	6.43	16.68	2.81	14.03	8.48	23.11
Net Benchmark	-2.19	15.87	2.37	-6.02	20.07	5.92	16.13	2.32	13.49	7.96	22.53
Funds (ew)	-3.44	14.95	2.18	-6.47	16.45	6.84	15.09	1.91	1.91	6.02	22.17
Funds (aw)	-3.37	14.77	2.34	-6.76	15.16	6.77	14.59	1.78	11.46	6.37	20.65
<b>Hit Ratio vs Net Benchmark</b>	<b>29 %</b>	<b>45 %</b>	<b>36 %</b>	<b>35 %</b>	<b>13 %</b>	<b>65 %</b>	<b>29 %</b>	<b>27 %</b>	<b>27 %</b>	<b>29 %</b>	<b>41 %</b>
Hit Ratio vs Gross Benchmark	20 %	33 %	27 %	23 %	11 %	60 %	29 %	23 %	22 %	17 %	31 %
Funds (#)	82	83	81	71	63	57	51	48	41	35	32

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	2.01	0.18	7.64	-10.67	-0.34	5.85	1.06	9.20
Net Benchmark	1.89	0.06	7.52	-10.78	-0.46	5.73	0.94	9.07
Funds (ew)	1.41	-0.12	6.42	-10.35	-0.64	5.79	0.78	8.51
Funds (aw)	1.40	-0.06	6.22	-10.23	-0.54	5.80	0.70	8.31
<b>Hit ratio vs Net Benchmark</b>	<b>44 %</b>	<b>50 %</b>	<b>26 %</b>	<b>49 %</b>	<b>42 %</b>	<b>60 %</b>	<b>45 %</b>	<b>37 %</b>
Hit ratio vs Gross Benchmark	36 %	43 %	26 %	48 %	34 %	45 %	39 %	33 %
Reporting funds (#)	87	84	84	86	86	85	85	84

## Monthly performance

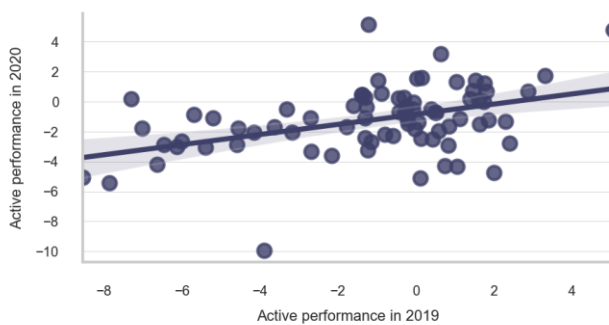
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	-0.44	1.19	1.14	0.90	-0.22	-0.61	-0.03	2.77	4.65	-11.40	-0.57	1.28
Funds (ew)	-0.64	0.98	1.07	1.06	-0.06	-1.11	-0.12	2.59	3.86	-11.06	-0.55	1.33
Funds (aw)	-0.64	0.98	1.07	1.05	-0.07	-1.02	-0.35	2.53	3.96	-10.80	-0.57	1.22
<b>Hit ratio vs Net</b>	<b>31 %</b>	<b>40 %</b>	<b>44 %</b>	<b>55 %</b>	<b>61 %</b>	<b>29 %</b>	<b>36 %</b>	<b>47 %</b>	<b>27 %</b>	<b>52 %</b>	<b>46 %</b>	<b>49 %</b>
Hit Ratio vs Gross	29 %	39 %	37 %	52 %	55 %	27 %	29 %	45 %	22 %	51 %	43 %	38 %
Funds (#)	89	89	87	85	85	84	84	86	86	86	87	87

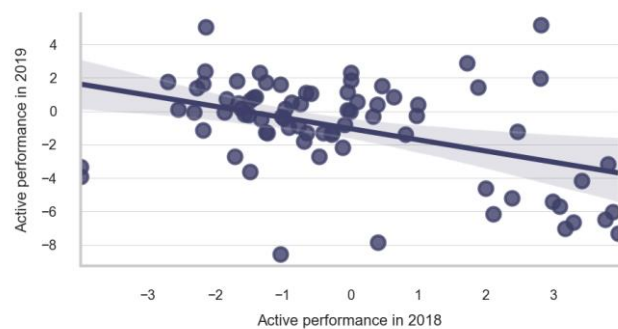
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-1.72	-1.72	5.58	6.04	7.79
Funds: equal-weighted average	-3.44	-3.44	4.18	4.21	6.29
Funds: asset-weighted average	-3.37	-3.37	4.31	4.03	6.05
Funds: top decile	-0.78	-0.78	5.23	5.82	7.61
Funds: top quartile	-2.01	-2.01	4.90	5.09	6.91
Funds: median	<b>-3.35</b>	<b>-3.35</b>	<b>4.26</b>	<b>4.46</b>	<b>6.35</b>
Funds: bottom quartile	-4.70	-4.70	3.51	3.50	5.86
Funds: bottom decile	-6.33	-6.33	2.86	2.05	4.96
Net Benchmark	<b>-2.19</b>	<b>-2.19</b>	<b>5.08</b>	<b>5.54</b>	<b>7.28</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	82	82	72	56	32
All funds = reporting + non-reporting	87	87	82	64	35
<b>Survivorship: %of reporting funds vs total</b>	<b>94 %</b>	<b>94 %</b>	<b>88 %</b>	<b>88 %</b>	<b>91 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

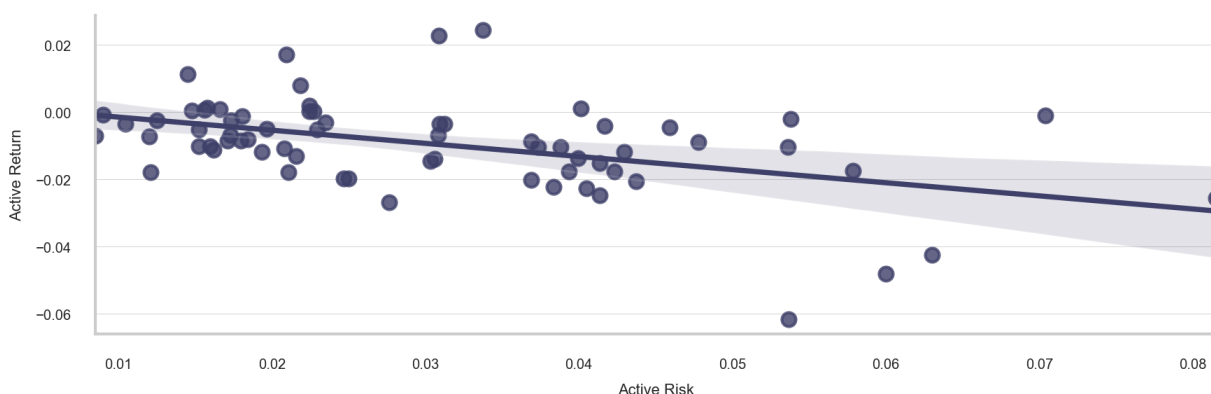
	YtD	1Y	3Y	5Y	10Y
Benchmark	-1.72	-1.72	5.58	6.04	7.79
Net Benchmark	-2.19	-2.19	5.08	5.54	7.28
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>29 %</b>	<b>29 %</b>	<b>21 %</b>	<b>14 %</b>	<b>19 %</b>
Hit ratio (vs Net Benchmark, all funds)	28 %	28 %	20 %	17 %	20 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: US Large Cap Blend

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This universe covers Europe domiciled funds which invest in the US stock market with a focus on large capitalisations and a balanced investment style.

The universe covers EUR 418.9bn, of which EUR 108.3 bn is invested in 348 active operating funds.

Compared to an investment in MSCI USA net of 0.13 % (average expense ratio of the ETFs of this universe) 26% of the active, operating funds belonging to this universe have outperformed over 1Y (11% over 5Y and 3% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

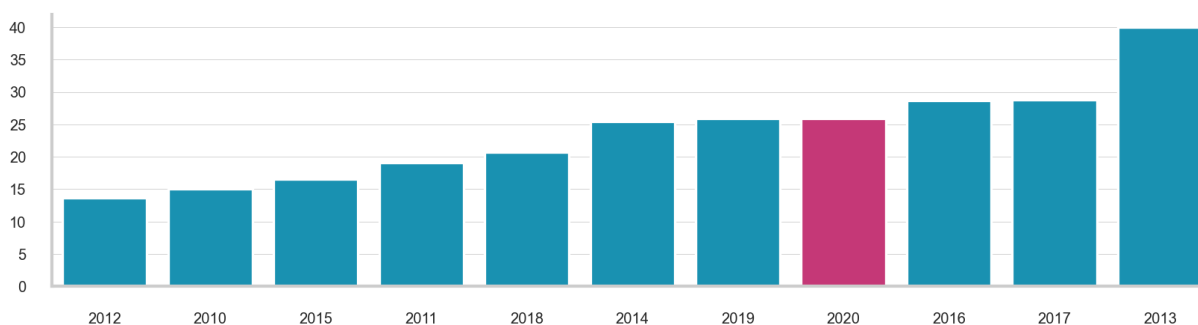
	MSCI USA	Active Funds (ew)
YtD	10.77 %	7.77 %
1Y	10.77 %	7.77 %
3Y (pa)	13.77 %	10.50 %
5Y (pa)	12.36 %	9.58 %
10Y (pa)	14.48 %	11.49 %

### Fund Universe: Overview

All funds	1009
Operating funds (Active)	522 (348)
Total AUM	EUR 418.9 bn
Active / Passive AUM	EUR 108.3 / 310.5 bn
Funds / ETFs AUM	EUR 260.9 / 157.4 bn
Avg. Active Fee (aw)	0.79 % (0.34 %)
Avg. ETF fee (aw)	0.27 % (0.10 %)
Avg. ETF Exp. Ratio (aw)	0.28 % (0.13 %)
Benchmark	MSCI USA

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	10.77	33.28	-0.26	6.47	14.22	12.15	28.32	26.09	13.55	4.76	22.73
Net Benchmark	10.62	33.10	-0.39	6.32	14.06	12.01	28.15	25.93	13.40	4.62	22.57
Funds (ew)	7.77	30.11	-3.11	4.75	12.11	8.85	25.37	24.98	24.98	1.17	19.30
Funds (aw)	8.84	30.68	-2.85	5.40	11.79	9.24	25.92	24.60	10.57	1.08	19.67
<b>Hit Ratio vs Net Benchmark</b>	<b>26 %</b>	<b>26 %</b>	<b>21 %</b>	<b>29 %</b>	<b>29 %</b>	<b>17 %</b>	<b>25 %</b>	<b>40 %</b>	<b>14 %</b>	<b>19 %</b>	<b>15 %</b>
Hit Ratio vs Gross Benchmark	25 %	25 %	19 %	28 %	28 %	17 %	24 %	39 %	13 %	16 %	14 %
Funds (#)	320	309	294	281	275	278	267	270	285	299	311

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	8.30	4.90	18.79	-17.92	5.83	5.93	2.67	15.80
Net Benchmark	8.27	4.87	18.75	-17.95	5.80	5.89	2.63	15.76
Funds (ew)	7.68	4.29	17.25	-18.21	5.12	5.02	2.49	14.93
Funds (aw)	7.77	4.91	17.42	-18.01	5.44	5.15	2.45	15.05
<b>Hit ratio vs Net Benchmark</b>	<b>34 %</b>	<b>35 %</b>	<b>27 %</b>	<b>52 %</b>	<b>33 %</b>	<b>32 %</b>	<b>46 %</b>	<b>34 %</b>
Hit ratio vs Gross Benchmark	33 %	34 %	27 %	52 %	32 %	30 %	45 %	32 %
Reporting funds (#)	343	337	330	330	325	321	316	320

## Monthly performance

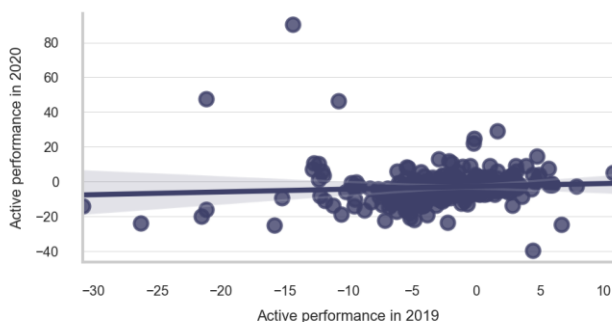
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	1.74	8.58	-1.99	-1.86	6.24	0.58	1.25	3.51	13.31	-12.64	-7.41	1.44
Funds (ew)	1.25	8.19	-1.71	-1.66	5.64	0.40	0.75	3.07	12.78	-12.53	-7.90	1.58
Funds (aw)	1.29	8.38	-1.83	-1.83	6.01	0.80	0.85	2.99	13.05	-12.03	-8.30	1.64
<b>Hit ratio vs Net</b>	<b>27 %</b>	<b>36 %</b>	<b>57 %</b>	<b>53 %</b>	<b>35 %</b>	<b>40 %</b>	<b>32 %</b>	<b>35 %</b>	<b>33 %</b>	<b>53 %</b>	<b>39 %</b>	<b>48 %</b>
Hit Ratio vs Gross	26 %	34 %	56 %	51 %	34 %	38 %	31 %	34 %	33 %	53 %	39 %	47 %
Funds (#)	346	346	344	341	339	338	335	336	336	335	336	335

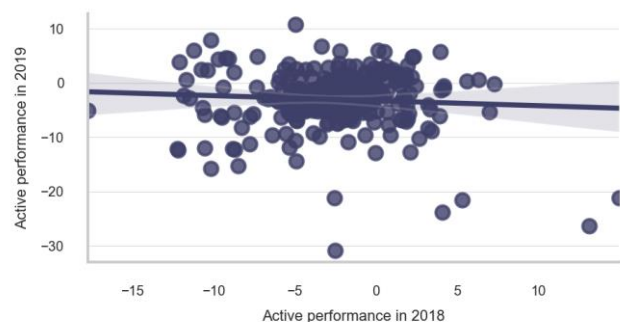
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	10.77	10.77	13.77	12.36	14.48
Funds: equal-weighted average	7.77	7.77	10.50	9.58	11.49
Funds: asset-weighted average	8.84	8.84	11.38	10.24	12.05
Funds: top decile	16.04	16.04	14.81	12.33	13.51
Funds: top quartile	10.74	10.74	12.84	11.16	12.79
Funds: median	<b>7.54</b>	<b>7.54</b>	<b>10.40</b>	<b>9.78</b>	<b>11.73</b>
Funds: bottom quartile	3.52	3.52	8.65	7.90	10.60
Funds: bottom decile	-2.39	-2.39	5.59	6.19	9.06
Net Benchmark	<b>10.62</b>	<b>10.62</b>	<b>13.62</b>	<b>12.21</b>	<b>14.32</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	320	320	269	225	168
All funds = reporting + non-reporting	334	334	310	298	323
<b>Survivorship: %of reporting funds vs total</b>	<b>96 %</b>	<b>96 %</b>	<b>87 %</b>	<b>76 %</b>	<b>52 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

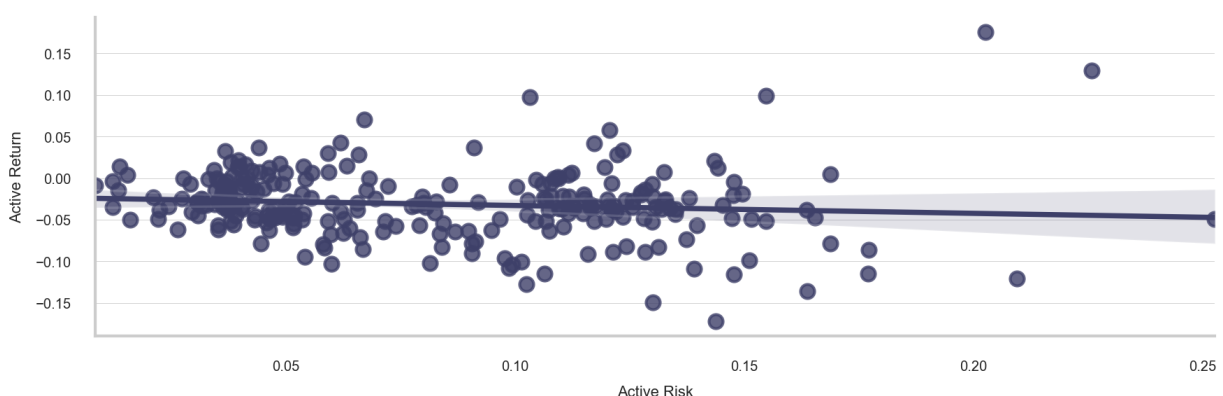
	YtD	1Y	3Y	5Y	10Y
Benchmark	10.77	10.77	13.77	12.36	14.48
Net Benchmark	10.62	10.62	13.62	12.21	14.32
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>26 %</b>	<b>26 %</b>	<b>16 %</b>	<b>11 %</b>	<b>3 %</b>
Hit ratio (vs Net Benchmark, all funds)	26 %	26 %	15 %	9 %	2 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: US Large Cap Growth

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This universe covers Europe domiciled funds which invest in the US stock market with a focus on stocks with large market capitalisations and a Growth investment style.

The universe covers EUR 110.7bn, of which EUR 97.0 bn is invested in 114 active operating funds.

Compared to an investment in MSCI USA Growth net of 0.32 % (average expense ratio of the ETFs of this universe) 16% of the active, operating funds belonging to this universe have outperformed over 1Y (15% over 5Y and 12% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

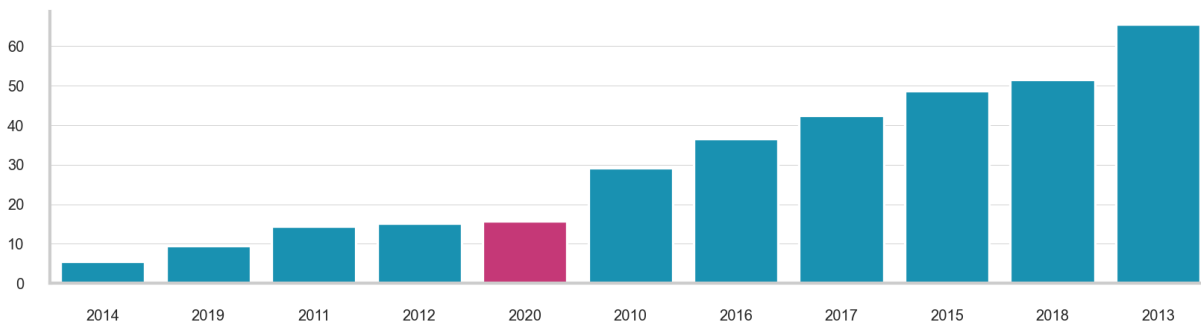
	MSCI USA Growth	Active Funds (ew)
YtD	30.95 %	<b>23.15 %</b>
1Y	30.95 %	<b>23.15 %</b>
3Y (pa)	23.40 %	<b>18.85 %</b>
5Y (pa)	18.26 %	<b>14.43 %</b>
10Y (pa)	18.24 %	<b>15.01 %</b>

### Fund Universe: Overview

All funds	267
Operating funds (Active)	122 (114)
Total AUM	EUR 110.7 bn
Active / Passive AUM	EUR 97.0 / 13.8 bn
Funds / ETFs AUM	EUR 97.2 / 13.5 bn
Avg. Active Fee (aw)	1.07 % (0.92 %)
Avg. ETF fee (aw)	0.30 % (0.30 %)
Avg. ETF Exp. Ratio (aw)	0.31 % (0.32 %)
Benchmark	MSCI USA Growth

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	30.95	39.83	2.61	12.68	9.24	16.05	29.78	26.56	14.92	5.38	24.20
Net Benchmark	30.55	39.40	2.29	12.33	8.90	15.69	29.38	26.17	14.57	5.05	23.81
Funds (ew)	23.15	34.36	2.02	11.40	6.30	14.72	24.33	26.95	26.95	0.51	21.06
Funds (aw)	31.42	33.54	3.55	11.95	6.22	15.72	24.29	27.48	11.60	2.51	19.93
<b>Hit Ratio vs Net Benchmark</b>	<b>16 %</b>	<b>9 %</b>	<b>51 %</b>	<b>42 %</b>	<b>36 %</b>	<b>49 %</b>	<b>6 %</b>	<b>65 %</b>	<b>15 %</b>	<b>15 %</b>	<b>29 %</b>
Hit Ratio vs Gross Benchmark	16 %	9 %	48 %	41 %	35 %	49 %	3 %	63 %	15 %	12 %	26 %
Funds (#)	108	106	103	104	107	109	108	110	112	117	120

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	7.84	8.49	26.76	-11.70	7.58	5.69	3.87	18.40
Net Benchmark	7.75	8.41	26.67	-11.77	7.50	5.60	3.79	18.31
Funds (ew)	7.84	6.54	22.53	-13.23	6.11	3.98	3.67	17.52
Funds (aw)	8.68	8.22	26.30	-11.52	5.56	3.51	3.97	17.55
<b>Hit ratio vs Net Benchmark</b>	<b>40 %</b>	<b>18 %</b>	<b>18 %</b>	<b>42 %</b>	<b>28 %</b>	<b>24 %</b>	<b>40 %</b>	<b>36 %</b>
Hit ratio vs Gross Benchmark	38 %	17 %	18 %	40 %	27 %	24 %	38 %	35 %
Reporting funds (#)	112	111	111	110	108	107	107	106

## Monthly performance

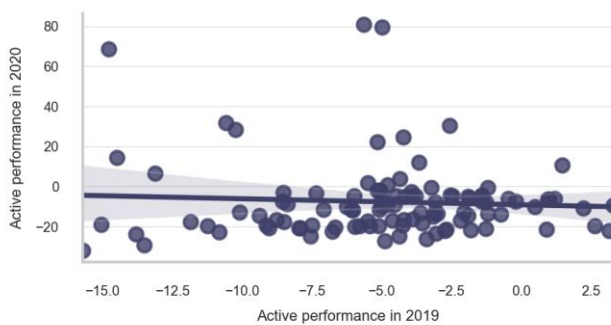
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	2.63	7.42	-2.27	-3.09	9.23	2.40	4.05	5.42	15.47	-9.94	-5.95	4.15
Funds (ew)	1.71	7.81	-1.68	-1.59	6.91	1.29	2.17	4.87	14.26	-10.04	-6.79	3.49
Funds (aw)	1.81	8.44	-1.56	-0.98	6.97	2.16	3.31	5.94	15.40	-8.74	-7.08	4.34
<b>Hit ratio vs Net</b>	<b>19 %</b>	<b>51 %</b>	<b>64 %</b>	<b>89 %</b>	<b>8 %</b>	<b>20 %</b>	<b>13 %</b>	<b>31 %</b>	<b>20 %</b>	<b>57 %</b>	<b>42 %</b>	<b>36 %</b>
Hit Ratio vs Gross	19 %	51 %	64 %	89 %	8 %	20 %	13 %	30 %	19 %	56 %	42 %	36 %
Funds (#)	112	113	113	113	113	111	111	111	111	112	110	110

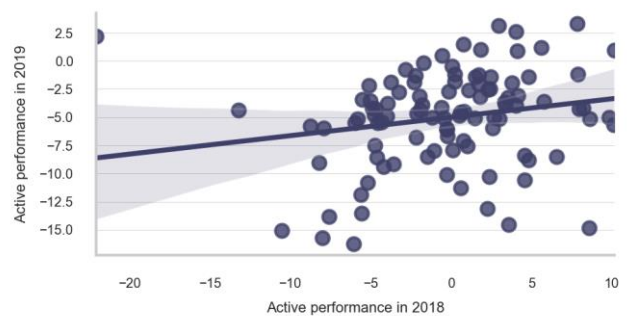
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	30.95	30.95	23.40	18.26	18.24
Funds: equal-weighted average	23.15	23.15	18.85	14.43	15.01
Funds: asset-weighted average	31.42	31.42	22.03	16.66	16.32
Funds: top decile	41.66	41.66	25.74	18.03	17.89
Funds: top quartile	26.03	26.03	21.88	16.15	16.41
Funds: median	<b>19.53</b>	<b>19.53</b>	<b>18.20</b>	<b>14.39</b>	<b>15.04</b>
Funds: bottom quartile	11.11	11.11	13.99	12.00	13.62
Funds: bottom decile	8.59	8.59	11.44	10.10	11.42
Net Benchmark	<b>30.55</b>	<b>30.55</b>	<b>23.01</b>	<b>17.89</b>	<b>17.87</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	108	108	100	94	75
All funds = reporting + non-reporting	109	109	105	109	121
<b>Survivorship: %of reporting funds vs total</b>	<b>99 %</b>	<b>99 %</b>	<b>95 %</b>	<b>86 %</b>	<b>62 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

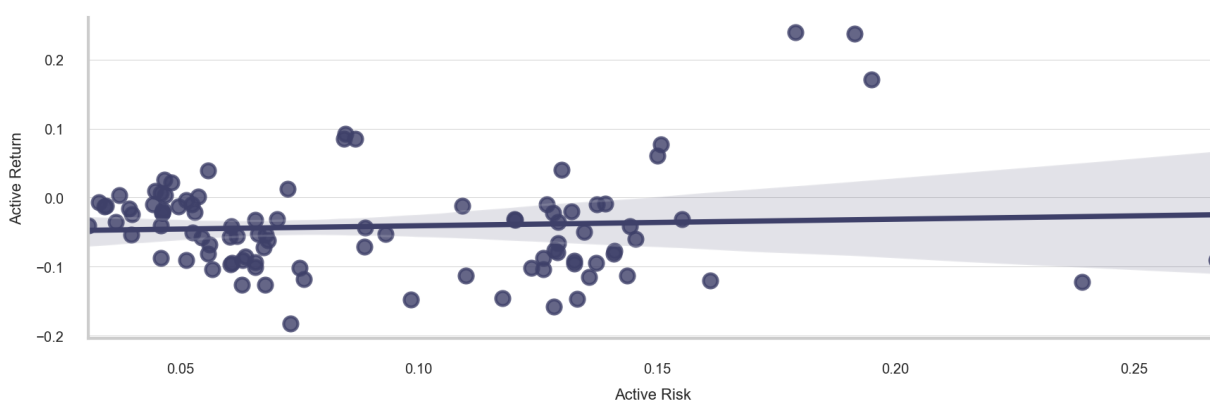
	YtD	1Y	3Y	5Y	10Y
Benchmark	30.95	30.95	23.40	18.26	18.24
Net Benchmark	30.55	30.55	23.01	17.89	17.87
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>16 %</b>	<b>16 %</b>	<b>18 %</b>	<b>15 %</b>	<b>12 %</b>
Hit ratio (vs Net Benchmark, all funds)	16 %	16 %	17 %	13 %	7 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: US Large Cap Value

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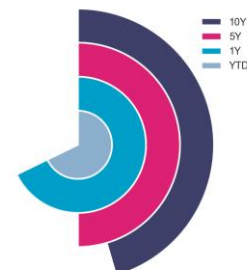
This universe covers Europe domiciled Funds which invest in the US stock market, with a focus on stocks with large capitalisations and a Value investment style.

The universe covers EUR 29.0bn, of which EUR 22.4 bn is invested in 92 active operating funds.

Compared to an investment in MSCI USA Value net of 0.30 % (average expense ratio of the ETFs of this universe) 68% of the active, operating funds belonging to this universe have outperformed over 1Y (50% over 5Y and 45% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

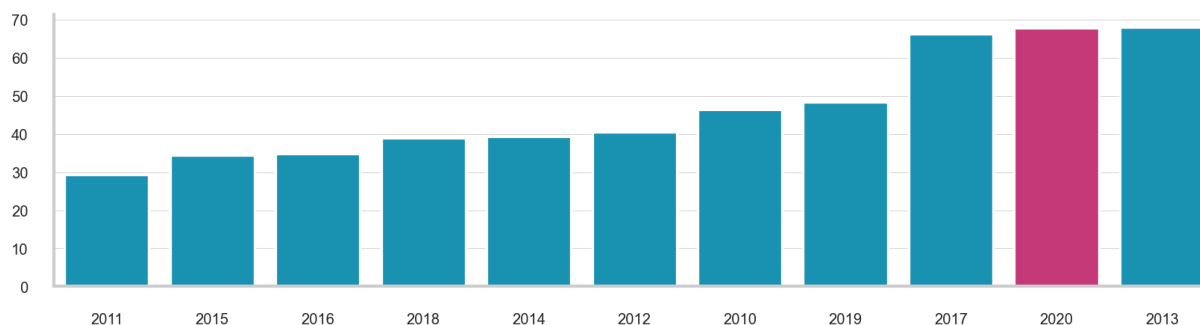
	MSCI USA Value	Active Funds (ew)
YtD	-8.21 %	<b>-4.70 %</b>
1Y	-8.21 %	<b>-4.70 %</b>
3Y (pa)	4.03 %	<b>4.48 %</b>
5Y (pa)	6.19 %	<b>6.12 %</b>
10Y (pa)	10.50 %	<b>9.92 %</b>

### Fund Universe: Overview

All funds	201
Operating funds (Active)	110 (92)
Total AUM	EUR 29.0 bn
Active / Passive AUM	EUR 22.4 / 6.5 bn
Funds / ETFs AUM	EUR 22.7 / 6.2 bn
Avg. Active Fee (aw)	0.95 % (0.95 %)
Avg. ETF fee (aw)	0.35 % (0.29 %)
Avg. ETF Exp. Ratio (aw)	0.35 % (0.30 %)
Benchmark	MSCI USA Value

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-8.21	26.88	-3.32	0.50	19.31	8.25	26.81	25.53	12.22	4.00	21.35
Net Benchmark	-8.49	26.51	-3.61	0.20	18.96	7.94	26.45	25.16	11.89	3.69	20.99
Funds (ew)	-4.70	25.86	-5.09	1.38	17.26	5.76	25.55	27.00	27.00	1.22	20.71
Funds (aw)	-5.64	24.94	-5.22	-0.23	16.52	5.89	27.11	26.92	10.65	1.09	19.51
<b>Hit Ratio vs Net Benchmark</b>	<b>68 %</b>	<b>48 %</b>	<b>39 %</b>	<b>66 %</b>	<b>35 %</b>	<b>34 %</b>	<b>39 %</b>	<b>68 %</b>	<b>41 %</b>	<b>29 %</b>	<b>46 %</b>
Hit Ratio vs Gross Benchmark	66 %	43 %	34 %	65 %	34 %	29 %	36 %	65 %	35 %	29 %	45 %
Funds (#)	87	95	90	89	92	90	84	75	69	65	69

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	9.10	0.85	10.09	-24.21	4.07	6.16	1.44	13.22
Net Benchmark	9.02	0.77	10.01	-24.28	3.99	6.08	1.36	13.14
Funds (ew)	10.68	0.69	12.84	-24.47	4.25	5.32	1.25	13.29
Funds (aw)	10.77	0.89	12.03	-24.63	4.09	5.05	1.32	12.77
<b>Hit ratio vs Net Benchmark</b>	<b>58 %</b>	<b>54 %</b>	<b>77 %</b>	<b>51 %</b>	<b>57 %</b>	<b>37 %</b>	<b>49 %</b>	<b>50 %</b>
Hit ratio vs Gross Benchmark	56 %	53 %	77 %	51 %	55 %	35 %	47 %	49 %
Reporting funds (#)	89	93	95	96	99	95	95	98

## Monthly performance

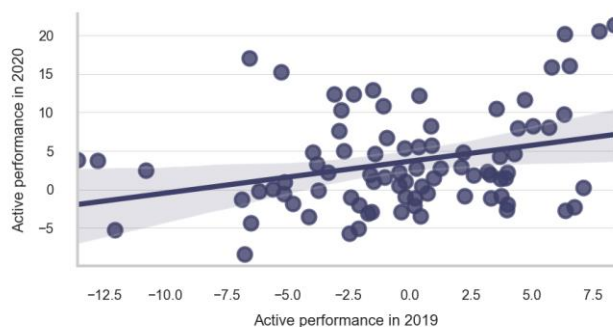
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	0.85	9.96	-1.68	-0.36	2.70	-1.51	-1.76	1.14	10.73	-15.67	-8.99	-1.32
Funds (ew)	0.85	10.77	-0.96	-1.37	3.29	-1.18	-0.37	1.51	11.53	-15.90	-9.27	-1.02
Funds (aw)	0.60	11.66	-1.39	-1.41	3.48	-1.11	-0.84	1.19	11.65	-15.46	-10.07	-0.87
<b>Hit ratio vs Net</b>	<b>52 %</b>	<b>55 %</b>	<b>68 %</b>	<b>20 %</b>	<b>58 %</b>	<b>63 %</b>	<b>86 %</b>	<b>61 %</b>	<b>71 %</b>	<b>56 %</b>	<b>46 %</b>	<b>58 %</b>
Hit Ratio vs Gross	52 %	54 %	66 %	19 %	58 %	62 %	85 %	60 %	71 %	56 %	44 %	57 %
Funds (#)	89	91	92	94	95	94	95	96	96	97	97	99

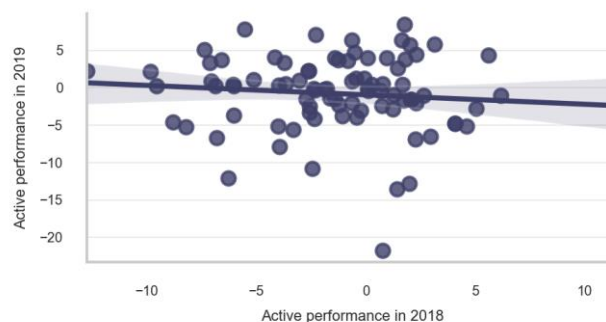
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-8.21	-8.21	4.03	6.19	10.50
Funds: equal-weighted average	-4.70	-4.70	4.48	6.12	9.92
Funds: asset-weighted average	-5.64	-5.64	3.77	5.37	9.52
Funds: top decile	4.12	4.12	9.04	9.41	12.17
Funds: top quartile	-0.67	-0.67	5.97	7.56	11.22
Funds: median	<b>-6.26</b>	<b>-6.26</b>	<b>4.11</b>	<b>5.81</b>	<b>9.92</b>
Funds: bottom quartile	-9.38	-9.38	2.16	4.70	8.77
Funds: bottom decile	-11.41	-11.41	0.76	3.17	7.28
Net Benchmark	<b>-8.49</b>	<b>-8.49</b>	<b>3.72</b>	<b>5.87</b>	<b>10.18</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	87	87	77	70	44
All funds = reporting + non-reporting	99	99	96	96	71
<b>Survivorship: %of reporting funds vs total</b>	<b>88 %</b>	<b>88 %</b>	<b>80 %</b>	<b>73 %</b>	<b>62 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

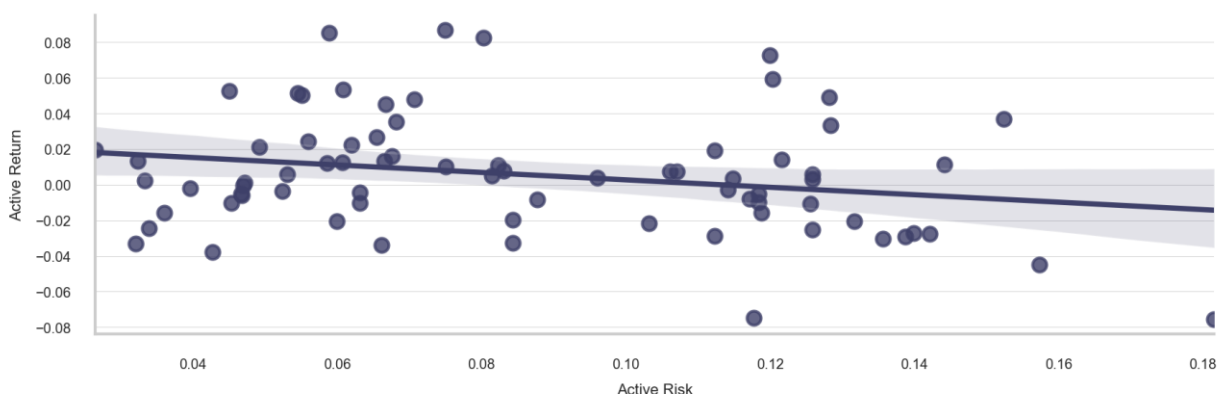
	YtD	1Y	3Y	5Y	10Y
Benchmark	-8.21	-8.21	4.03	6.19	10.50
Net Benchmark	-8.49	-8.49	3.72	5.87	10.18
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>68 %</b>	<b>68 %</b>	<b>56 %</b>	<b>50 %</b>	<b>45 %</b>
Hit ratio (vs Net Benchmark, all funds)	68 %	68 %	57 %	51 %	37 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: US Small Cap

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This universe covers Europe domiciled funds which invest in the US stock market with a focus on stocks with small market capitalisations and a balanced investment style.

The universe covers EUR 24.5bn, of which EUR 19.3 bn is invested in 69 active operating funds.

Compared to an investment in MSCI USA Small Cap net of 0.34 % (average expense ratio of the ETFs of this universe) 62% of the active, operating funds belonging to this universe have outperformed over 1Y (53% over 5Y and 47% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

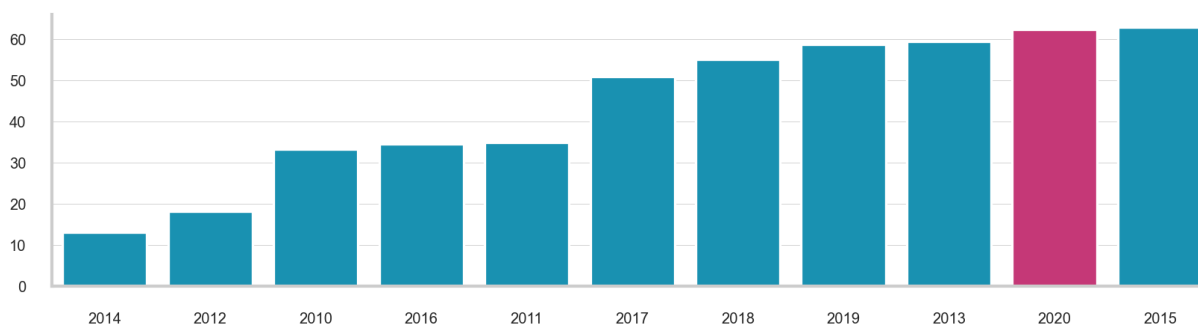
	MSCI USA Small Cap	Active Funds (ew)
YtD	8.55 %	<b>18.46 %</b>
1Y	8.55 %	<b>18.46 %</b>
3Y (pa)	9.66 %	<b>12.69 %</b>
5Y (pa)	10.66 %	<b>11.64 %</b>
10Y (pa)	12.63 %	<b>11.69 %</b>

### Fund Universe: Overview

All funds	159
Operating funds (Active)	81 (69)
Total AUM	EUR 24.5 bn
Active / Passive AUM	EUR 19.3 / 5.2 bn
Funds / ETFs AUM	EUR 19.4 / 5.1 bn
Avg. Active Fee (aw)	1.12 % (1.00 %)
Avg. ETF fee (aw)	0.36 % (0.29 %)
Avg. ETF Exp. Ratio (aw)	0.40 % (0.34 %)
Benchmark	MSCI USA Small Cap

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	8.55	29.05	-5.87	2.54	22.71	6.80	21.93	31.67	15.73	-0.20	36.34
Net Benchmark	8.18	28.62	-6.19	2.19	22.30	6.44	21.52	31.23	15.34	-0.55	35.88
Funds (ew)	18.46	29.50	-4.61	4.56	19.60	7.27	16.61	31.70	31.70	-3.37	33.84
Funds (aw)	18.71	31.27	-6.22	2.29	20.94	6.32	17.77	31.72	10.20	-2.57	31.94
<b>Hit Ratio vs Net Benchmark</b>	<b>62 %</b>	<b>59 %</b>	<b>55 %</b>	<b>51 %</b>	<b>35 %</b>	<b>63 %</b>	<b>13 %</b>	<b>60 %</b>	<b>18 %</b>	<b>35 %</b>	<b>33 %</b>
Hit Ratio vs Gross Benchmark	62 %	56 %	50 %	51 %	33 %	56 %	13 %	60 %	18 %	35 %	33 %
Funds (#)	64	63	58	57	55	54	53	47	44	43	45

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	23.40	1.04	24.00	-29.78	5.39	3.11	0.71	17.94
Net Benchmark	23.30	0.95	23.90	-29.85	5.30	3.02	0.62	17.84
Funds (ew)	21.33	3.00	25.96	-25.43	5.78	1.73	2.22	17.71
Funds (aw)	20.71	3.38	25.37	-24.12	5.56	2.45	2.80	18.08
<b>Hit ratio vs Net Benchmark</b>	<b>31 %</b>	<b>67 %</b>	<b>46 %</b>	<b>65 %</b>	<b>53 %</b>	<b>47 %</b>	<b>69 %</b>	<b>41 %</b>
Hit ratio vs Gross Benchmark	31 %	63 %	46 %	65 %	53 %	45 %	69 %	41 %
Reporting funds (#)	67	70	69	68	68	64	64	64

## Monthly performance

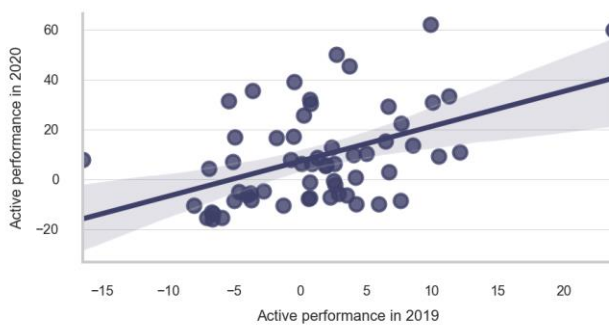
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	5.36	13.48	3.12	-1.03	3.32	-1.28	2.15	5.44	15.03	-22.65	-7.97	-1.46
Funds (ew)	5.47	12.35	2.38	-0.71	3.74	-0.14	2.07	6.26	15.95	-19.76	-7.72	0.59
Funds (aw)	5.20	12.00	2.45	-0.53	3.52	0.39	1.76	6.37	15.83	-18.50	-8.25	1.48
<b>Hit ratio vs Net</b>	<b>52 %</b>	<b>38 %</b>	<b>38 %</b>	<b>57 %</b>	<b>58 %</b>	<b>73 %</b>	<b>42 %</b>	<b>51 %</b>	<b>64 %</b>	<b>75 %</b>	<b>50 %</b>	<b>74 %</b>
Hit Ratio vs Gross	51 %	37 %	36 %	57 %	58 %	73 %	42 %	51 %	62 %	75 %	50 %	74 %
Funds (#)	67	68	69	70	71	71	71	70	69	69	68	68

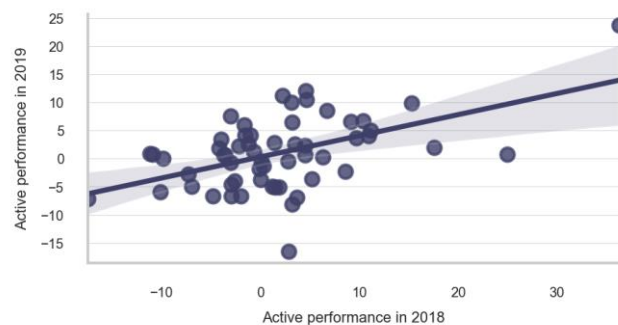
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	8.55	8.55	9.66	10.66	12.63
Funds: equal-weighted average	18.46	18.46	12.69	11.64	11.69
Funds: asset-weighted average	18.71	18.71	13.48	12.57	12.34
Funds: top decile	44.74	44.74	23.58	19.62	15.72
Funds: top quartile	31.44	31.44	18.21	14.51	15.01
Funds: median	<b>14.89</b>	<b>14.89</b>	<b>10.31</b>	<b>10.42</b>	<b>11.02</b>
Funds: bottom quartile	1.83	1.83	5.96	7.63	9.31
Funds: bottom decile	-2.09	-2.09	4.26	5.52	7.56
Net Benchmark	<b>8.18</b>	<b>8.18</b>	<b>9.29</b>	<b>10.28</b>	<b>12.25</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	64	64	55	45	30
All funds = reporting + non-reporting	67	67	61	59	47
<b>Survivorship: %of reporting funds vs total</b>	<b>96 %</b>	<b>96 %</b>	<b>90 %</b>	<b>76 %</b>	<b>64 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

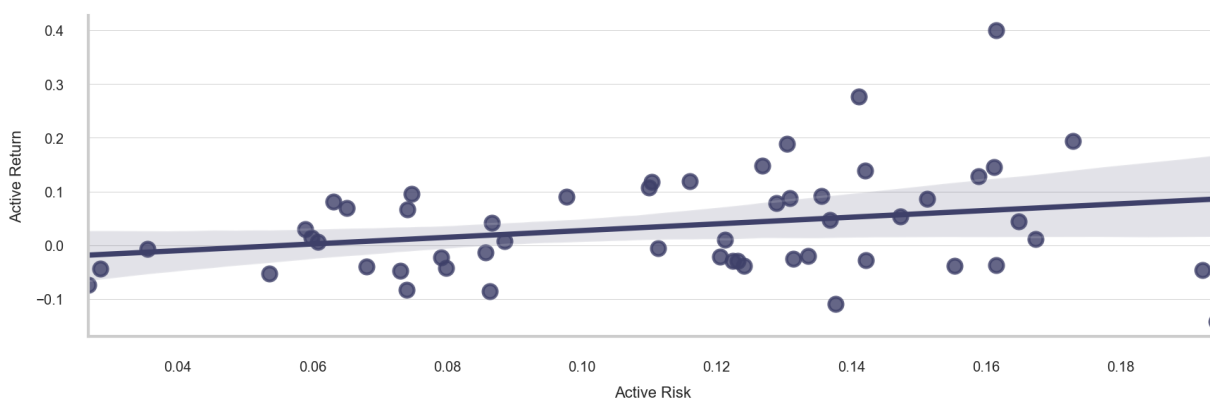
	YtD	1Y	3Y	5Y	10Y
Benchmark	8.55	8.55	9.66	10.66	12.63
Net Benchmark	8.18	8.18	9.29	10.28	12.25
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>62 %</b>	<b>62 %</b>	<b>55 %</b>	<b>53 %</b>	<b>47 %</b>
Hit ratio (vs Net Benchmark, all funds)	63 %	63 %	54 %	58 %	47 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: World Large Cap

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This universe covers Europe domiciled funds which invest globally in equities with a focus on large market capitalisations and a balanced investment style.

The universe covers EUR 681.3bn, of which EUR 419.6 bn is invested in 1206 active operating funds.

Compared to an investment in MSCI World net of 0.27 % (average expense ratio of the ETFs of this universe) 36% of the active, operating funds belonging to this universe have outperformed over 1Y (14% over 5Y and 9% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

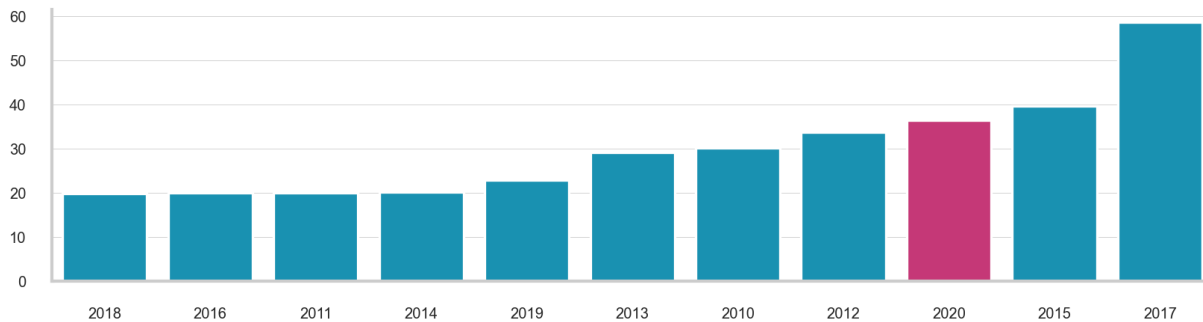
	MSCI World	Active Funds (ew)
YtD	6.33 %	4.22 %
1Y	6.33 %	4.22 %
3Y (pa)	9.85 %	6.37 %
5Y (pa)	9.55 %	6.76 %
10Y (pa)	10.88 %	8.01 %

### Fund Universe: Overview

All funds	2529
Operating funds (Active)	1394 (1206)
Total AUM	EUR 681.3 bn
Active / Passive AUM	EUR 419.6 / 261.7 bn
Funds / ETFs AUM	EUR 595.6 / 84.5 bn
Avg. Active Fee (aw)	0.93 % (0.71 %)
Avg. ETF fee (aw)	0.32 % (0.25 %)
Avg. ETF Exp. Ratio (aw)	0.35 % (0.27 %)
Benchmark	MSCI World

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	6.33	30.03	-4.11	7.50	10.71	10.43	19.51	21.22	14.05	-2.39	19.55
Net Benchmark	6.04	29.68	-4.37	7.21	10.41	10.13	19.19	20.89	13.74	-2.66	19.23
Funds (ew)	4.22	26.09	-7.67	7.75	6.82	8.92	14.74	17.52	17.52	-7.06	15.70
Funds (aw)	5.82	27.75	-6.74	8.51	8.22	9.69	16.60	19.11	13.26	-6.65	18.31
<b>Hit Ratio vs Net Benchmark</b>	<b>36 %</b>	<b>23 %</b>	<b>20 %</b>	<b>59 %</b>	<b>20 %</b>	<b>40 %</b>	<b>20 %</b>	<b>29 %</b>	<b>34 %</b>	<b>20 %</b>	<b>30 %</b>
Hit Ratio vs Gross Benchmark	34 %	20 %	18 %	55 %	17 %	35 %	18 %	26 %	30 %	18 %	28 %
Funds (#)	1,062	956	880	843	844	821	781	785	805	799	800

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	9.22	3.38	16.60	-19.24	5.44	5.02	2.54	14.51
Net Benchmark	9.15	3.31	16.53	-19.30	5.37	4.95	2.47	14.44
Funds (ew)	8.76	3.12	14.63	-18.97	5.32	3.74	1.94	13.16
Funds (aw)	9.55	3.65	15.49	-19.30	5.91	4.05	2.13	13.51
<b>Hit ratio vs Net Benchmark</b>	<b>41 %</b>	<b>45 %</b>	<b>29 %</b>	<b>54 %</b>	<b>54 %</b>	<b>22 %</b>	<b>37 %</b>	<b>24 %</b>
Hit ratio vs Gross Benchmark	40 %	43 %	28 %	54 %	51 %	20 %	35 %	22 %
Reporting funds (#)	1,149	1,136	1,117	1,097	1,062	1,018	983	968

## Monthly performance

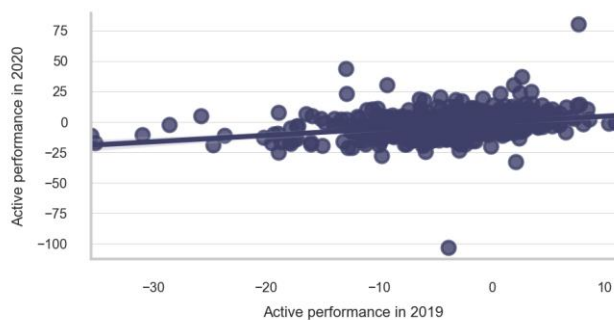
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	1.89	9.81	-2.44	-1.55	5.46	-0.49	1.64	3.20	11.10	-13.16	-7.66	0.65
Funds (ew)	1.93	8.95	-2.30	-1.22	4.32	0.06	1.41	2.46	10.23	-12.76	-7.46	0.36
Funds (aw)	1.92	9.55	-1.89	-1.46	4.96	0.22	1.67	2.56	10.75	-12.92	-7.78	0.49
<b>Hit ratio vs Net</b>	<b>49 %</b>	<b>30 %</b>	<b>61 %</b>	<b>62 %</b>	<b>23 %</b>	<b>65 %</b>	<b>46 %</b>	<b>31 %</b>	<b>37 %</b>	<b>58 %</b>	<b>55 %</b>	<b>41 %</b>
Hit Ratio vs Gross	47 %	30 %	60 %	61 %	22 %	63 %	44 %	31 %	36 %	57 %	54 %	40 %
Funds (#)	1,173	1,165	1,164	1,152	1,147	1,141	1,125	1,121	1,122	1,115	1,107	1,109

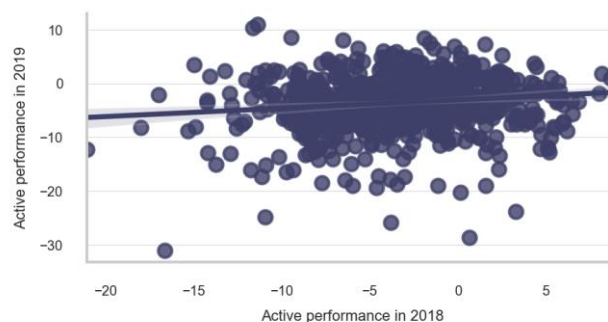
## Performance consistency: annual returns

The ability of fund managers to outperform over subsequent periods is key in delivering sustainable alpha. An upward sloping line usually indicates that the outperformers are consistent across time.

2020 vs 2019 (% in EUR)



2019 vs 2018 (% in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	6.33	6.33	9.85	9.55	10.88
Funds: equal-weighted average	4.22	4.22	6.37	6.76	8.01
Funds: asset-weighted average	5.82	5.82	8.03	8.16	9.08
Funds: top decile	12.80	12.80	10.55	9.71	10.51
Funds: top quartile	7.67	7.67	8.82	8.50	9.62
Funds: median	<b>4.03</b>	<b>4.03</b>	<b>6.53</b>	<b>6.80</b>	<b>8.20</b>
Funds: bottom quartile	-0.23	-0.23	4.19	5.30	6.74
Funds: bottom decile	-4.81	-4.81	2.35	3.84	5.64
Net Benchmark	<b>6.04</b>	<b>6.04</b>	<b>9.56</b>	<b>9.25</b>	<b>10.58</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	1,062	1,062	812	672	460
All funds = reporting + non-reporting	1,102	1,102	931	895	854
<b>Survivorship: %of reporting funds vs total</b>	<b>96 %</b>	<b>96 %</b>	<b>87 %</b>	<b>75 %</b>	<b>54 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

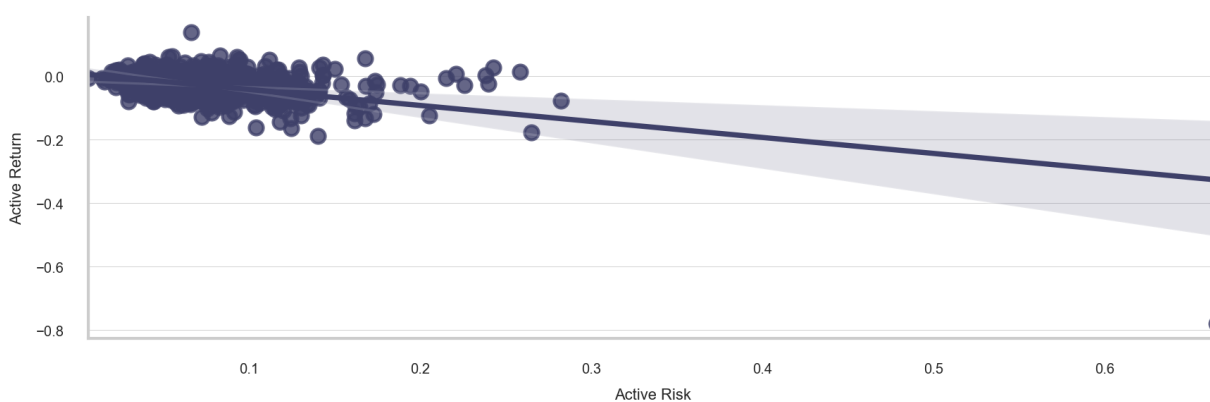
	YtD	1Y	3Y	5Y	10Y
Benchmark	6.33	6.33	9.85	9.55	10.88
Net Benchmark	6.04	6.04	9.56	9.25	10.58
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>36 %</b>	<b>36 %</b>	<b>17 %</b>	<b>14 %</b>	<b>9 %</b>
Hit ratio (vs Net Benchmark, all funds)	36 %	36 %	15 %	11 %	5 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Has a higher relative risk been rewarded by a higher active return over the last year?

An upward sloping line usually indicates that asset managers taking a higher Active Risk against the benchmark are on average rewarded by a higher Active Return.

3-year relative returns (in EUR) as a function of 3-year tracking-error (154 weekly returns, in EUR)



Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Asset Class Deep Dive: World Large Cap Income

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This universe covers Europe domiciled funds which invest globally in equities with a focus on large market capitalisations and higher expected dividends.

The universe covers EUR 87.0bn, of which EUR 81.5 bn is invested in 175 active operating funds.

Compared to an investment in MSCI World High Dividend Yield net of 0.45 % (average expense ratio of the ETFs of this universe) 78% of the active, operating funds belonging to this universe have outperformed over 1Y (46% over 5Y and 31% over 10Y ).

### Hit Ratio snapshot

Percentage of outperformers (% , in EUR)



### Market Performance

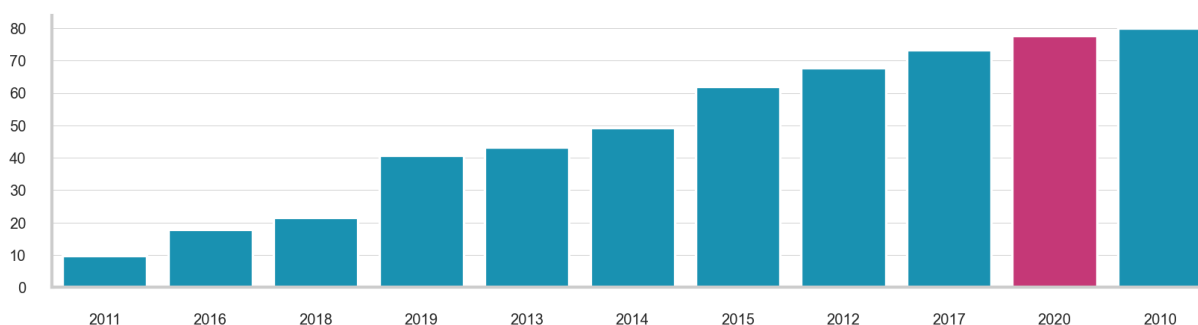
	MSCI World High Dividend Yield	Active Funds (ew)
YtD	-8.28 %	<b>-3.36 %</b>
1Y	-8.28 %	<b>-3.36 %</b>
3Y (pa)	3.75 %	<b>3.77 %</b>
5Y (pa)	5.46 %	<b>4.92 %</b>
10Y (pa)	8.55 %	<b>7.47 %</b>

### Fund Universe: Overview

All funds	241
Operating funds (Active)	189 (175)
Total AUM	EUR 87.0 bn
Active / Passive AUM	EUR 81.5 / 5.5 bn
Funds / ETFs AUM	EUR 81.7 / 5.3 bn
Avg. Active Fee (aw)	0.90 % (1.02 %)
Avg. ETF fee (aw)	0.41 % (0.40 %)
Avg. ETF Exp. Ratio (aw)	0.45 % (0.45 %)
Benchmark	MSCI World High Dividend Yield

### Hit ratio: 2020 (YtD) compared to previous years

Hit ratio of reporting funds vs. net benchmark, annual performances (% , in EUR, Year to Date for 2020)



### Calendar year performance

Active performance net of fund fees & costs (% , in EUR)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Benchmark	-8.28	25.42	-2.91	3.78	12.55	7.82	16.69	16.63	10.52	7.36	13.70
Net Benchmark	-8.69	24.87	-3.34	3.32	12.05	7.34	16.18	16.12	10.03	6.88	13.19
Funds (ew)	-3.36	24.00	-6.65	5.06	8.13	8.12	15.20	15.46	15.46	-0.77	16.01
Funds (aw)	-4.67	23.55	-5.28	3.82	9.32	8.80	15.22	14.75	11.65	2.54	15.99
<b>Hit Ratio vs Net Benchmark</b>	<b>78 %</b>	<b>41 %</b>	<b>22 %</b>	<b>73 %</b>	<b>18 %</b>	<b>62 %</b>	<b>49 %</b>	<b>43 %</b>	<b>68 %</b>	<b>10 %</b>	<b>80 %</b>
Hit Ratio vs Gross Benchmark	76 %	35 %	20 %	69 %	16 %	55 %	44 %	41 %	66 %	10 %	77 %
Funds (#)	161	162	157	150	146	134	128	113	99	82	65

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Quarterly performance

Active performance net of fund fees & costs (% in EUR)

	Q4 20	Q3 20	Q2 20	Q1 20	Q4 19	Q3 19	Q2 19	Q1 19
Benchmark	6.99	-1.21	8.50	-20.02	4.02	5.59	1.66	12.33
Net Benchmark	6.87	-1.32	8.38	-20.11	3.90	5.47	1.55	12.21
Funds (ew)	8.50	0.76	10.89	-20.48	4.77	4.19	1.54	11.89
Funds (aw)	7.85	0.28	9.24	-19.31	4.13	4.36	1.74	11.75
<b>Hit ratio vs Net Benchmark</b>	<b>62 %</b>	<b>81 %</b>	<b>80 %</b>	<b>52 %</b>	<b>69 %</b>	<b>23 %</b>	<b>43 %</b>	<b>45 %</b>
Hit ratio vs Gross Benchmark	60 %	80 %	79 %	52 %	66 %	22 %	42 %	43 %
Reporting funds (#)	167	171	172	171	166	166	165	164

## Monthly performance

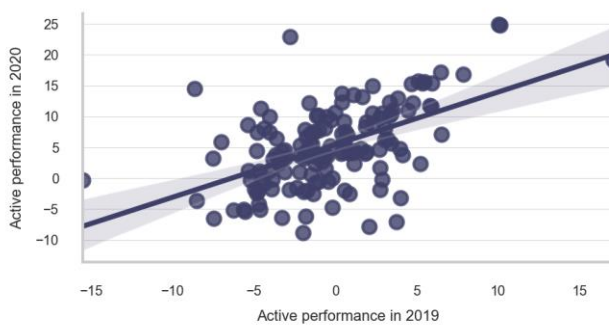
Active performance net of fund fees & costs (% in EUR)

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar	Feb	Jan
Net Benchmark	0.87	8.76	-2.59	-0.65	2.07	-2.70	-0.36	0.49	8.23	-11.46	-8.36	-1.55
Funds (ew)	1.27	10.38	-3.05	-1.05	2.80	-0.96	0.78	0.93	9.01	-13.08	-8.33	-0.26
Funds (aw)	0.81	10.33	-3.03	-1.22	2.20	-0.66	0.49	-0.20	8.94	-11.89	-8.58	0.17
<b>Hit ratio vs Net</b>	<b>64 %</b>	<b>72 %</b>	<b>38 %</b>	<b>37 %</b>	<b>72 %</b>	<b>87 %</b>	<b>81 %</b>	<b>63 %</b>	<b>72 %</b>	<b>35 %</b>	<b>50 %</b>	<b>81 %</b>
Hit Ratio vs Gross	63 %	72 %	37 %	36 %	71 %	87 %	81 %	63 %	72 %	34 %	47 %	79 %
Funds (#)	171	173	172	172	172	171	173	174	173	173	172	175

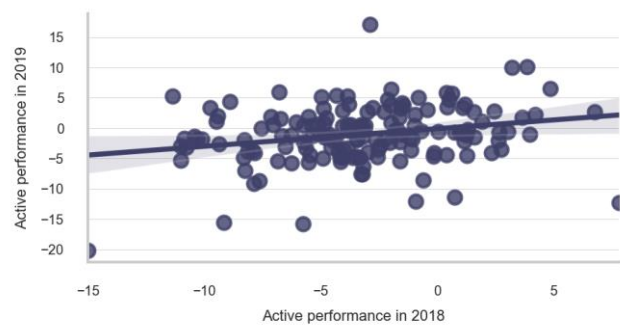
## Performance consistency: annual returns

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2020 vs 2019 (% in EUR)



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## Long term active performance of live funds

Performance over different time periods (in %, in EUR)

	YtD	1Y	3Y	5Y	10Y
Benchmark	-8.28	-8.28	3.75	5.46	8.55
Funds: equal-weighted average	-3.36	-3.36	3.77	4.92	7.47
Funds: asset-weighted average	-4.67	-4.67	3.72	4.83	7.63
Funds: top decile	5.06	5.06	8.76	7.69	9.78
Funds: top quartile	1.23	1.23	5.58	6.03	8.59
Funds: median	<b>-4.22</b>	<b>-4.22</b>	<b>3.28</b>	<b>4.72</b>	<b>7.39</b>
Funds: bottom quartile	-7.63	-7.63	1.50	3.46	6.25
Funds: bottom decile	-11.18	-11.18	-0.48	2.70	5.30
Net Benchmark	<b>-8.69</b>	<b>-8.69</b>	<b>3.29</b>	<b>4.99</b>	<b>8.07</b>

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

## Long term survivorship: how many funds stayed afloat?

Number of funds that stayed active over different investment horizons

	YtD	1Y	3Y	5Y	10Y
Reporting funds	161	161	141	121	67
All funds = reporting + non-reporting	173	173	164	149	81
<b>Survivorship: %of reporting funds vs total</b>	<b>93 %</b>	<b>93 %</b>	<b>86 %</b>	<b>81 %</b>	<b>83 %</b>

## Survivorship Bias: what's the performance difference between reporting and closed funds?

Percentage of live and closed funds (in EUR, estimated performance for closed funds)

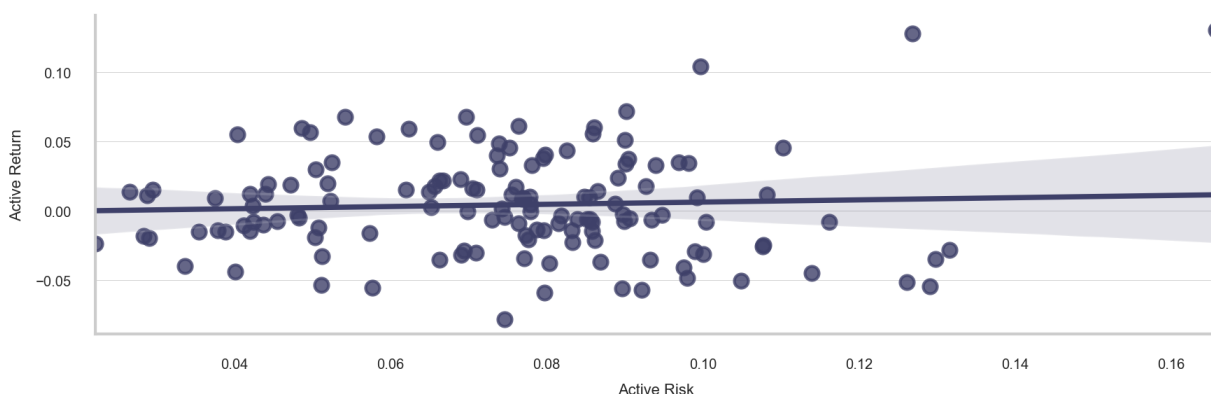
	YtD	1Y	3Y	5Y	10Y
Benchmark	-8.28	-8.28	3.75	5.46	8.55
Net Benchmark	-8.69	-8.69	3.29	4.99	8.07
<b>Hit ratio (vs Net Benchmark, reporting funds only)</b>	<b>78 %</b>	<b>78 %</b>	<b>50 %</b>	<b>46 %</b>	<b>31 %</b>
Hit ratio (vs Net Benchmark, all funds)	76 %	76 %	49 %	42 %	26 %

Source: Morningstar, Lyxor International Asset Management. Performances as at 31/12/2020, data was collected on 15/01/2020. Past performance is not indicative of future performance.

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## Glossary: exposures, fund categories and benchmarks

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Exposure	Morningstar Category	Benchmark
China	China Equity	MSCI China 10/40
EM Debt Hard Currency	Global Emerging Markets Bond	JP EMBI Global Diversified
EUR Inflation	Euro Inflation	Bbg Barclays Euro Inflation
Emerging Equities	Global Emerging Markets Equity	MSCI Emerging Markets
Euro Aggregate	EUR Diversified Bond	Bbg Barclays Euro Aggregate
Euro Corporate	EUR Corporate Bond	Bbg Barclays Euro Corporate
Euro Government	EUR Government Bond	Bbg Barclays Euro Government
Euro High Yield	EUR High Yield Bond	Bbg Barclays Euro High Yield
Europe Income	Europe Equity Income	MSCI Europe High Div Yld
Europe Large Cap	Europe Large-Cap Blend Equity	MSCI Europe
Europe Large Cap Growth	Europe Large-Cap Growth Equity	MSCI Europe Growth
Europe Large Cap Value	Europe Large-Cap Value Equity	MSCI Europe Value
Europe Small Cap	Europe Small-Cap Equity	MSCI Europe Small Cap
Eurozone Large Cap	Eurozone Large-Cap Equity	MSCI EMU
France Large Cap	France Equity	MSCI France
Germany Large Cap	Germany Equity	MSCI Germany
Germany Small/Mid cap	Germany Small/Mid-Cap Equity	MSCI Germany Small Cap
Global Fixed Income	Global Bond	Bbg Barclays Global Aggregate
Italy Large Cap	Italy Equity	FTSE MIB
Japan Large Cap	Japan Large-Cap Equity	MSCI Japan
Spain Large Cap	Spain Equity	MSCI Spain
Switzerland Large Cap	Switzerland Equity	Swiss Performance Index
UK Large Cap	UK Large-Cap Equity	FTSE All Share
UK Small Cap	UK Small-Cap Equity	MSCI UK Small Cap
US Aggregate	USD Diversified Bond	Bbg Barclays US Aggregate
US Corporate	USD Corporate Bond	Bbg Barclays US Corporate
US Government	USD Government Bond	Bbg Barclays US Treasury
US High Yield	USD High Yield Bond	Bbg Barclays US High Yield
US Large Cap Blend	US Large-Cap Blend Equity	MSCI USA
US Large Cap Growth	US Equity Large Cap Growth	MSCI USA Growth
US Large Cap Value	US Equity Large Cap Value	MSCI USA Value
US Small Cap	US Small-Cap Equity	MSCI USA Small Cap
World Large Cap	Global Large-Cap Blend Equity	MSCI World
World Large Cap Income	Global Equity Income	MSCI World High Dividend Yield

Source: Morningstar, Lyxor International Asset Management.

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## Glossary: indices

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Benchmark	Index Full Name	Index Description
<b>Bbg Barclays Euro Aggregate</b>	BBgBarc Euro Agg Bond TR EUR	The Bloomberg Barclays Euro Aggregate Bond Index includes fixed-rate, investment-grade Euro denominated bonds. Inclusion is based on the currency of the issue, and not the domicile of the issuer. The principal sectors in the index are the Treasury, corporate, government-related and securitised.
<b>Bbg Barclays Euro Corporate</b>	BBgBarc Euro Agg Corps TR EUR	The Bloomberg Barclays Euro-Aggregate: Corporates Index is a benchmark that measures the corporate component of the Euro Aggregate Index. It includes investment grade, euro-denominated, fixed-rate securities.
<b>Bbg Barclays Euro Government</b>	BBgBarc Euro Agg Govt TR EUR	The Bloomberg Barclays Euro Government Index is a benchmark that measures the component of the Euro-Aggregate that is issued by governments or government owned entities. It includes investment grade, euro-denominated, fixed-rate Treasury and Government-Related securities.
<b>Bbg Barclays Euro High Yield</b>	BBgBarc Pan Euro HY Euro TR EUR	The Bloomberg Barclays Pan-European High Yield Index measures the market of non-investment grade, fixed-rate corporate bonds denominated in the following currencies: euro, pounds sterling, Danish krone, Norwegian krone, Swedish krona, and Swiss franc. Inclusion is based on the currency of issue, and not the domicile of the issuer.
<b>Bbg Barclays Euro Inflation</b>	BBgBarc Gbl Infl Lkd EuroZ Euro TR EUR	The index measures the performance of euro-denominated, investment-grade, government inflation-linked debt. The bonds are screened by maturity, size and bond type.
<b>Bbg Barclays Global Aggregate</b>	BBgBarc Global Aggregate TR USD	The Bloomberg Barclays Global Aggregate Index is a flagship measure of global investment grade debt from twenty-four local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.
<b>Bbg Barclays US Aggregate</b>	BBgBarc US Agg Bond TR USD	The Bloomberg Barclays US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate pass-throughs), ABS and CMBS (agency and non-agency).
<b>Bbg Barclays US Corporate</b>	BBgBarc US Corp Bond TR USD	The Bloomberg Barclays US Corporate Bond Index measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers.
<b>Bbg Barclays US High Yield</b>	BBgBarc High Yield Corporate TR USD	The Bloomberg Barclays US Corporate High Yield Bond Index measures the USD-denominated, high yield, fixed-rate corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch and S is Ba1/BB+/BB+ or below. Bonds from issuers with an emerging markets country of risk, based on Barclays EM country definition, are excluded.
<b>Bbg Barclays US Treasury</b>	BBgBarc US Treasury TR USD(1987)	The Bloomberg Barclays US Treasury Index measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury. Treasury bills are excluded by the maturity constraint but are part of a separate Short Treasury Index. STRIPS are excluded from the index because their inclusion would result in double-counting.
<b>FTSE All Share</b>	FTSE AllSh TR GBP	The FTSE All-Share Index is a market capitalisation weighted index representing the performance of equities of all eligible companies listed on the London Stock Exchange's main market, which pass screening for size and liquidity, in accordance with the Index methodology. The

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		FTSE All-Share Index covers the combined universes of the FTSE 100, FTSE 250 and FTSE Small Cap Index and covers approximately 98% of the market capitalisation of the UK market.
<b>FTSE MIB</b>	FTSE MIB NR EUR	The FTSE MIB (Milano Indice di Borsa) (the S/MIB prior to June 2009) is the benchmark stock market index for the Borsa Italiana, the Italian national stock exchange, which superseded the MIB-30 in September 2004. The index consists of the 40 most-traded stock classes on the exchange. The index was administered by Standard Poor's from its inception until June 2009, when this responsibility was passed to FTSE Group, which is 100% owned by the Borsa Italiana's parent company London Stock Exchange Group.
<b>JP EMBI Global Diversified</b>	JPM EMBI Global Diversified TR USD	The JP Morgan EMBI Global Diversified Index is an unmanaged, market-capitalization weighted, total-return index tracking the traded market for U.S.-dollar-denominated Brady bonds, Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities.
<b>MSCI China 10/40</b>	MSCI China 10/40 NR USD	The MSCI China 10/40 Index is designed to measure the performance of large and mid-cap representation across China A shares, H shares, B shares, Red chips, P chips and foreign listings (e.g. ADRs). The MSCI 10/40 equity indexes are designed and maintained on a daily basis to take into consideration the 10% and 40% concentration constraints on funds subject to the UCITS III Directive. With 714 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in China.
<b>MSCI EMU</b>	MSCI EMU NR EUR	The MSCI EMU Index (European Economic and Monetary Union) captures large and mid-cap representation across the 10 Developed Markets countries in the EMU*. With 244 constituents, the index covers approximately 85% of the free float-adjusted market capitalization of the EMU.
<b>MSCI Emerging Markets</b>	MSCI EM NR USD	The MSCI Emerging Markets Index captures large and mid-cap representation across 26 Emerging Markets (EM) countries. With 1,403 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
<b>MSCI Europe</b>	MSCI Europe NR EUR	The MSCI Europe Index represents the performance of large and mid-cap equities across 15 developed countries in Europe. It covers approximately 85% of the free float-adjusted market capitalization in each country.
<b>MSCI Europe Growth</b>	MSCI Europe Growth NR USD	The MSCI Europe Growth Index captures large and mid-cap securities exhibiting overall growth style characteristics across the 15 Developed Markets (DM) countries in Europe*. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend.
<b>MSCI Europe High Div Yld</b>	MSCI Europe High Div Yld NR EUR	The MSCI Europe High Dividend Yield Index represents the performance of large and mid-cap equities across 15 developed countries in Europe. It covers approximately 85% of the free float-adjusted market capitalization in each country.
<b>MSCI Europe Small Cap</b>	MSCI Europe Small Cap NR EUR	The MSCI Europe Small Cap Index captures small cap representation across the 15 Developed Markets (DM) countries in Europe. With 963 constituents, the index covers approximately 14% of the free float-adjusted market capitalization in the European equity universe.
<b>MSCI Europe Value</b>	MSCI Europe Value NR USD	The MSCI Europe Value Index captures large and mid-cap securities exhibiting overall value style characteristics across the 15 Developed Markets (DM) countries in Europe*. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield.

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<b>MSCI France</b>	MSCI France NR EUR	The MSCI France Index is designed to measure the performance of the large and mid-cap segments of the French market. With 77 constituents, the index covers about 85% of the equity universe in France.
<b>MSCI Germany</b>	MSCI Germany NR EUR	The MSCI Germany Index is designed to measure the performance of the large and mid-cap segments of the German market. With 59 constituents, the index covers about 85% of the equity universe in Germany.
<b>MSCI Germany Small Cap</b>	MSCI Germany Small Cap NR EUR	The MSCI Germany Small Cap Index is designed to measure the performance of the small cap segment of the German market. With 109 constituents, the index represents approximately 14% of the free float-adjusted market capitalization of the Germany equity universe.
<b>MSCI Japan</b>	MSCI Japan NR USD	The MSCI Japan Index is designed to measure the performance of the large and mid-cap segments of the Japanese market. With 321 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in Japan.
<b>MSCI Spain</b>	MSCI Spain NR EUR	The MSCI Spain Index is designed to measure the performance of the large and mid-cap segments of the Spanish market. With 20 constituents, the index covers about 85% of the equity universe in Spain.
<b>MSCI UK Small Cap</b>	MSCI UK Small Cap NR USD	The MSCI UK Small Cap Index is designed to measure the performance of the small cap segment of the UK equity market. With 253 constituents, the index represents approximately 14% of the free float-adjusted market capitalization in the UK.
<b>MSCI USA</b>	MSCI USA NR USD	The MSCI USA Index is designed to measure the performance of the large and mid-cap segments of the US market. With 634 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in the US.
<b>MSCI USA Growth</b>	MSCI USA Growth NR USD	The MSCI USA Growth Index captures large and mid-cap securities exhibiting overall growth style characteristics in the US. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend.
<b>MSCI USA Small Cap</b>	MSCI USA Small Cap NR USD	The index measures the performance of the small-cap segment of the US equity universe. It is a subset of the Russell 3000 and includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership. Russell Investment Group is the source and owner of the trademarks, service marks and copyrights related to the Russell Indexes. Russell is a trademark of Russell Investment Group.
<b>MSCI USA Value</b>	MSCI USA Value NR USD	The MSCI USA Value Index captures large and mid-cap US securities exhibiting overall value style characteristics. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield.
<b>MSCI World</b>	MSCI World NR USD	The MSCI World Index captures large and mid-cap representation across 23 Developed Markets (DM) countries*. With 1,637 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
<b>MSCI World High Dividend Yield</b>	MSCI World High Dividend Yield NR USD	The MSCI World High Dividend Yield Index captures large and mid-cap representation across 23 Developed Markets (DM) countries*. With 1,637 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
<b>Swiss Performance Index</b>	SIX SPI TR CHF	The Swiss Performance Index (SPI) is a wide total-return index that tracks equity primarily listed on SIX Swiss Exchange with a free-float of at least 20% and excluding investment companies.[1] The index

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covers large, mid and small caps and is weighted by market capitalization. Most constituents, although not all, are domiciled in Switzerland or the Principality of Liechtenstein.

Source: Morningstar, Bloomberg, provider websites, Lyxor International Asset Management, data as at 15/01/2020. All indexes are unmanaged and an individual cannot invest directly in an index. Index returns do not include fees or expenses.

## Glossary: exposures and fund categories

[Return to Summary](#)

Exposure	Morningstar Category: Name	Morningstar Category: Description
China	China Equity	China Equity funds invest principally in Chinese companies listed on the stock exchanges in China and Hong Kong, and companies that derive significant revenues from or have substantial business ties with the China market, but excluding funds that principally invest in onshore, RMB-denominated Chinese companies listed on Shanghai or Shenzhen stock exchanges. These funds invest at least 75% of total assets in equities, and at least 75% of equity assets in Chinese or China-related companies defined as above. The funds usually invest less than 10% of total assets in Taiwanese equities.
EM Debt Hard Currency	Global Emerging Markets Bond	Global Emerging Market Bond funds are dedicated to fixed income securities of issuers in emerging market countries. They should invest across the global emerging markets universe without a country or regional focus. Funds in this category will generally have a hard currency bias but may exhibit a degree of local currency exposure.
EUR Inflation	Euro Inflation	EUR Inflation-Linked Bond funds invest principally in inflation-linked bonds denominated in or hedged into EUR
Emerging Equities	Global Emerging Markets Equity	Global Emerging Markets Equity funds tend to divide their assets among several emerging markets in Asia, Latin America, Europe, Middle East and/or Africa. These funds invest at least 75% of their total assets in equities and invest at least 75% of equity assets in global emerging markets.
Euro Aggregate	EUR Diversified Bond	EUR Diversified Bond funds invest principally in investment grade corporate and government issued bonds denominated in or hedged into EUR. These funds do not focus on a single sector. This category includes funds investing principally in Eurozone-domiciled issuers, global funds that invest exclusively in EUR denominated issuance and single currency offerings that hedge all their exposure back to EUR. It excludes funds investing in global currencies that are hedged fully or partially back to EUR, which are placed in the relevant Global Bond category.
Euro Corporate	EUR Corporate Bond	EUR Corporate Bond funds invest principally in investment grade corporate-issued securities denominated in or hedged into EUR.
Euro Government	EUR Government Bond	EUR Government Bond funds invest principally in government or explicitly government-backed agency securities denominated in or hedged into EUR.
Euro High Yield	EUR High Yield Bond	EUR High Yield Bond funds invest principally in sub-investment grade securities with a credit quality equivalent to BB, or lower and denominated in or hedged into EUR.
Europe Income	Europe Equity Income	Europe Equity Income funds invest principally in European equities that pay out above-market yields. Funds in this category can invest in companies of any size, though many exhibit a large-cap bias.
Europe Large Cap	Europe Large-Cap Blend Equity	Europe Large-Cap Blend Equity funds are fairly representative of the overall European equity market (including the UK) in size, growth rates and price. Equities in the top 70% of the European equity market (including the UK) are defined as large-cap. The blend style is assigned to funds where neither growth nor value characteristics predominate. These funds tend to invest across the spectrum of European industries. At least 75% of total assets are invested in equities and at least 75% of equity assets are invested in European equities.
Europe Large Cap Growth	Europe Large-Cap Growth Equity	Europe Large-Cap Growth Equity funds invest principally in the equities of large-cap European companies that are more expensive

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		or projected to grow faster than other European large caps. Equities in the top 70% of the capitalisation of the European equity market (including the UK) are defined as large-cap. Growth is defined based on fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields). Most of these funds focus on companies in rapidly expanding industries. At least 75% of total assets are invested in equities and at least 75% of equity assets are invested in European equities.
<b>Europe Large Cap Value</b>	Europe Large-Cap Value Equity	Europe Large-Cap Value Equity funds invest principally in the equities of large-cap European companies that are less expensive or growing more slowly than other European large caps. Equities in the top 70% of the capitalisation of the European equity market (including the UK) are defined as large-cap. Value is defined based on low valuations (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow). At least 75% of total assets are invested in equities and at least 75% of equity assets are invested in European equities.
<b>Europe Small Cap</b>	Europe Small-Cap Equity	Europe Small-Cap Equity funds invest principally in the equities of small-cap European companies. Equities in the bottom 10% of the European equity market (including the UK) are defined as small-cap. At least 75% of total assets are invested in equities and at least 75% of equity assets are invested in European equities.
<b>Eurozone Large Cap</b>	Eurozone Large-Cap Equity	Eurozone Large-Cap Equity funds invest principally in the equities of large-cap companies from the 12 Eurozone countries. Funds in this category typically invest across multiple countries in the Eurozone. Equities in the top 70% of the European equity market (including the UK) are defined as large-cap. These funds invest at least 75% of total assets in equities and invest at least 75% of equity assets in Eurozone equities.
<b>France Large Cap</b>	France Equity	France Large-Cap Equity funds invest principally in the equities of large-cap French companies. Equities in the top 70% of the European equity market (including the UK) are defined as large-cap. These funds invest at least 75% of total assets in equities and invest at least 75% of equity assets in French equities.
<b>Germany Large Cap</b>	Germany Equity	Germany Large-Cap Equity funds invest principally in the equities of large-cap German companies. Equities in the top 70% of the European equity market (including the UK) are defined as large-cap. These funds invest at least 75% of total assets in equities and invest at least 75% of equity assets in German equities.
<b>Germany Small/Mid cap</b>	Germany Small/Mid-Cap Equity	Germany Small/Mid-Cap Equity funds invest principally in the equities of small-cap and mid-cap German companies. Their holdings typically fall in the bottom 30% of the capitalisation of the European equity market (including the UK). The funds invest at least 75% of total assets in equities and invest at least 75% of equity assets in German equities.
<b>Global Fixed Income</b>	Global Bond	Global Bond funds invest in a diversified portfolio of principally investment grade bonds denominated in a diverse range of currencies and do not systematically hedge currency risk or display a notable currency bias that would qualify them for one of the other Global Bond categories.
<b>Italy Large Cap</b>	Italy Equity	Italy Equity funds invest principally in the equities of companies based in Italy. These funds invest at least 75% of total assets in equities and invest at least 75% of equity assets in Italian equities.
<b>Japan Large Cap</b>	Japan Large-Cap Equity	Japan Large-Cap Equity funds invest principally in the equities of large-cap Japanese companies. Equities in the top 70% of the capitalisation of the Japanese market are defined as large-cap. These funds invest at least 75% of total assets in equities and invest at least 75% of equity assets in Japanese equities.

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<b>Spain Large Cap</b>	Spain Equity	Spain Equity funds invest principally in the equities of companies based in Spain. These funds invest at least 75% of total assets in equities and invest at least 75% of equity assets in Spanish equities.
<b>Switzerland Large Cap</b>	Switzerland Equity	Switzerland Large-Cap Equity funds invest principally in the equities of large-cap Swiss companies. Equities in the top 70% of the European equity market (including the UK) are defined as large-cap. These funds invest at least 75% of total assets in equities and invest at least 75% of equity assets in Swiss equities.
<b>UK Large Cap</b>	UK Large-Cap Equity	UK Large-Cap Equity funds are fairly representative of the overall UK equity market in size, growth rates and price. Equities in the top 70% of the European equity market (including the UK) are defined as large-cap. The blend style is assigned to funds where neither growth nor value characteristics predominate. These funds tend to invest across the spectrum of UK industries. At least 75% of total assets are invested in equities and at least 75% of equity assets are invested in UK equities.
<b>UK Small Cap</b>	UK Small-Cap Equity	UK Small-Cap Equity funds invest principally in the equities of small-cap UK companies. Equities in the bottom 10% of the European equity market (including the UK) are defined as small-cap. At least 75% of total assets are invested in equities and at least 75% of equity assets are invested in UK equities.
<b>US Aggregate</b>	USD Diversified Bond	USD Diversified Bond funds invest principally in investment grade corporate and government issued bonds denominated in or hedged into USD. These funds do not focus on a single sector. This category includes funds investing principally in US-domiciled issuers, global funds that invest exclusively in USD-denominated issuance and single currency offerings that hedge all their exposure back to USD. It excludes funds investing in global currencies that are hedged fully or partially back to USD, which are placed in the relevant Global Bond category.
<b>US Corporate</b>	USD Corporate Bond	USD Corporate Bond funds invest principally in investment grade corporate-issued securities denominated in or hedged into USD.
<b>US Government</b>	USD Government Bond	USD Government Bond funds invest principally in government or explicitly government-backed agency securities denominated in or hedged into USD.
<b>US High Yield</b>	USD High Yield Bond	USD High Yield Bond funds invest principally in sub-investment grade securities with a credit quality equivalent to BB, or lower and denominated in or hedged into USD.
<b>US Large Cap Blend</b>	US Large-Cap Blend Equity	US Large-Cap Blend Equity funds are fairly representative of the overall US equity market in size, growth rates, and price. Equities in the top 70% of the capitalisation of the US equity market are defined as large cap. The blend style is assigned to funds where neither growth nor value characteristics predominate. These funds invest at least 75% of their total assets in equities and invest at least 75% of equity assets in US equities.
<b>US Large Cap Growth</b>	US Equity Large Cap Growth	US Large-Cap Growth Equity funds invest principally in the equities of large-cap US companies that are more expensive or projected to grow faster than other US large caps. Equities in the top 70% of the capitalisation of the US equity market are defined as large cap. Growth is defined based on fast growth (high growth rates for earnings, sales, book value, and cash flow) and high valuations (high price ratios and low dividend yields). Most of these funds focus on companies in rapidly expanding industries. These funds invest at least 75% of their total assets in equities and invest at least 75% of equity assets in US equities.
<b>US Large Cap Value</b>	US Equity Large Cap Value	US Large-Cap Value Equity funds invest principally in the equities of large-cap US companies that are less expensive or growing more slowly than other US large caps. Equities in the top 70% of the

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		capitalisation of the US equity market are defined as large cap. Value is defined based on low valuation (low price ratios and high dividend yields) and slow growth (low growth rates for earnings, sales, book value, and cash flow). These funds invest at least 75% of their total assets in equities and invest at least 75% of equity assets in US equities.
<b>US Small Cap</b>	US Small-Cap Equity	US Small-Cap Equity funds invest principally in the equities of small-cap US companies. Equities in the bottom 10% of the US equity market are defined as small cap. At least 75% of total assets are invested in equities and 75% of equity assets are invested in US equities.
<b>World Large Cap</b>	Global Large-Cap Blend Equity	Global Large-Cap Blend Equity funds invest principally in the equities of large-cap companies from around the globe. Most of these funds divide their assets among many developed markets and invest at least 20% of equity assets in North America and 15% in Greater Europe. Equities in the top 70% of the capitalisation of each of the seven regional Morningstar style zones are defined as large-cap. The blend style is assigned to funds where neither growth nor value characteristics predominate. At least 75% of total assets are invested in equities.
<b>World Large Cap Income</b>	Global Equity Income	Global Income Equity funds invest principally in the equities of large-cap companies from around the globe. Most of these funds divide their assets among many developed markets and invest at least 20% of equity assets in North America and 15% in Greater Europe. Equities in the top 70% of the capitalisation of each of the seven regional Morningstar style zones are defined as large-cap. The blend style is assigned to funds where neither growth nor value characteristics predominate. At least 75% of total assets are invested in equities.

Source: Morningstar, Lyxor International Asset Management, data as at 15/01/2020.

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**Capital at risk**

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**Replication risk**

The fund objectives might not be reached due to unexpected events on the underlying markets which will impact the index calculation and the efficient fund replication.

**Counterparty risk**

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**Liquidity risk**

Liquidity is provided by registered market-makers on the respective stock exchange where the ETF is listed, including Société Générale. Or exchange, liquidity may be limited as a result of a suspension in the underlying market represented by the Underlying index tracked by the ETF; a failure in the systems of one of the relevant stock exchanges, or other market-maker systems; or an abnormal trading situation or event.

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