

WisdomTree

SHORT & LEVERAGED ETPs Global Flows

December 2021



Short and leveraged exchange-traded products are only intended for investors who understand the risks involved in investing in a product with short and/or leveraged exposure and who intend to invest on a short term basis. Any investment in short and/or leveraged products should be monitored on a daily basis to ensure consistency with your investment strategy. You should understand that investments in short and/or leveraged exchange-traded products held for a period of longer than one day may not provide returns equivalent to the return from the relevant unleveraged investment multiplied by the relevant leverage factor. Potential losses in short and/or leveraged exchange-traded products may be magnified in comparison to investments that do not incorporate these strategies. Please refer to the section entitled "Risk Factors" in the relevant prospectus for further details of these and other risks associated with an investment in short and/or leveraged exchange-traded products. You should consult an independent investment adviser prior to making an investment in short and/or leveraged exchange-traded products in order to determine its suitability to your circumstances.

Importance of WisdomTree Short & Leveraged ETPs Report

Money moves fast in the Short & Leveraged (S&L) world and around \$118 billion as of 31/12/2021 sits within Short & Leveraged ETPs. The WisdomTree Short & Leveraged ETP report tries to make sense of the money moving in and out of S&L ETPs.

Solely looking at inflows and outflows of long-only ETPs fails to present the true picture of investor sentiment. We believe a better measure of sentiment is to try and understand how bullish or how bearish investors are on a particular market. Investors allocating to 3x leveraged exposures demonstrates a bullish sentiment better than looking at long-only ETP inflows. Similarly, a 3x short exposure would demonstrate a bearish view better than looking at long-only ETP outflows.

By illustrating S&L ETPs flows, the WisdomTree Short & Leveraged ETP report provides a nuanced view of investor sentiment for the past month across a range of exposures which cannot be seen using trading flow data.

About the WisdomTree S&L ETP flows report

WisdomTree is a market leading S&L ETP issuer, providing unique data through its monthly S&L ETP flows report. The WisdomTree S&L ETP flows report is compiled through a proprietary global Short & leveraged ETP database which covers and categorises every S&L ETP globally in terms of the underlying investment and leverage factors.

All data provided in this report is sourced from calculations by WisdomTree, which are performed on underlying price, return, AUM, currency and market capitalisation data from Bloomberg®. All data is as of 31st December 2021. All figures are denominated in USD.

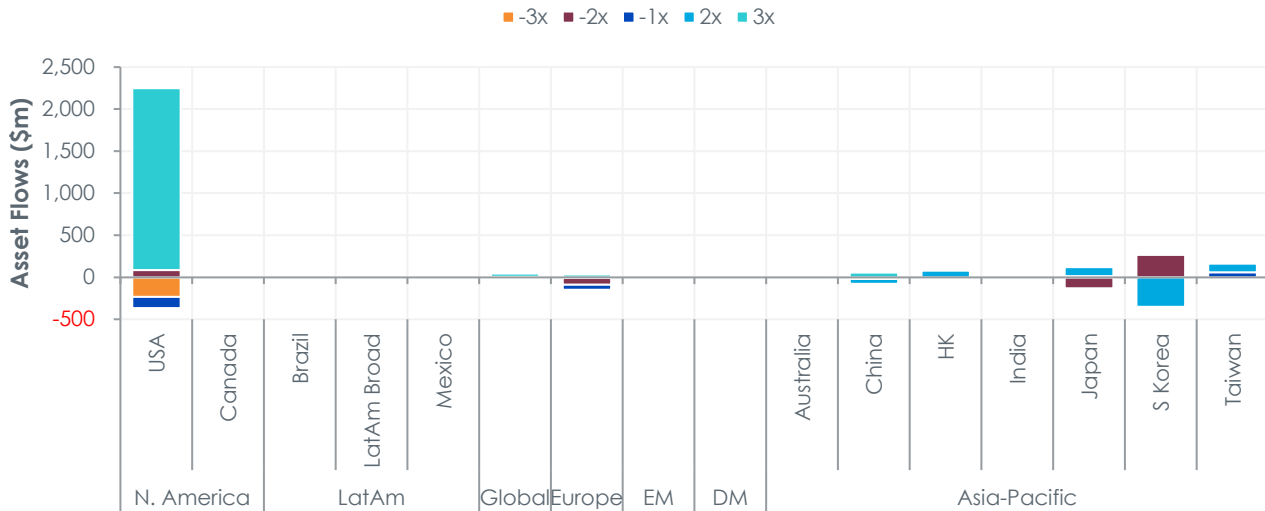
You cannot invest directly in an index. Historical performance is not an indication of future performance and any investments may go down in value.

Executive Summary

US equities attract long trades in an eventful month in December

- Bullish trades dominated among short and leveraged investors in US equities during December.
- Markets were still grappling with the development of the Omicron variant in December when the US Federal Reserve also started showing signs of a hawkish tilt. And although US equities ended the month on a high, this didn't happen without the CBOE Volatility Index (VIX) exceeding 30 during the month.

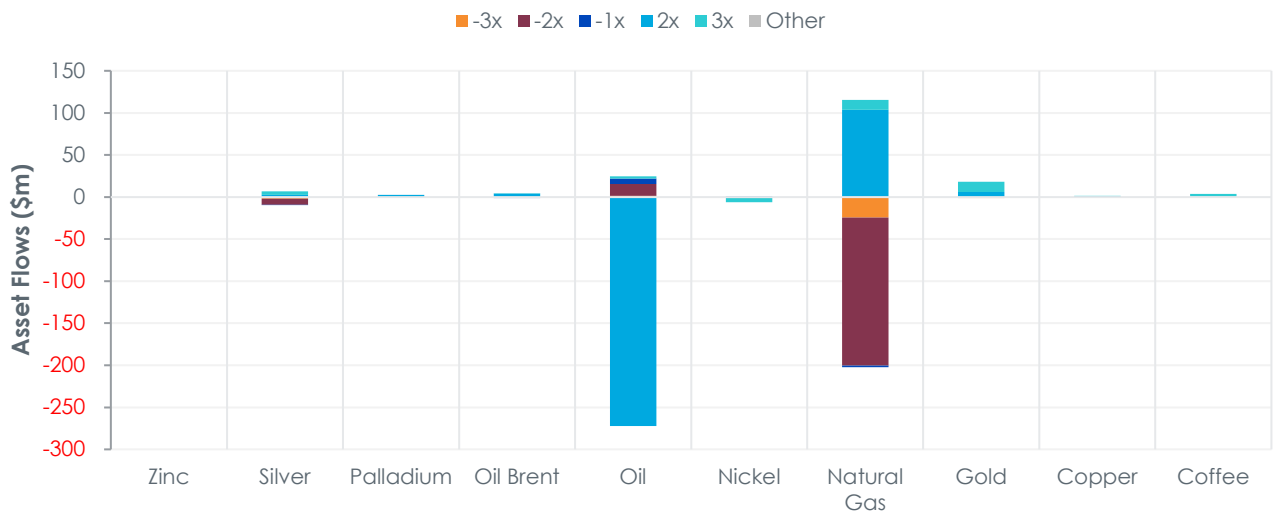
Global Equities December 2021 Flows - Asset Flows by Leverage Factor



Bullish bets on natural gas and bearish bets on oil dominated commodities in December

- Investors sold their leveraged long positions in oil during December. However, in natural gas, investors sold their shorts and added long positions.
- Oil prices took a sharp hit in November on the emergence of the Omicron variant but started to recover in December. Tactical investors likely took profits as prices improved over the month.
- Natural gas prices have also been buoyed in January on colder US temperatures, vindicating investors' long positions during a relatively flat December.

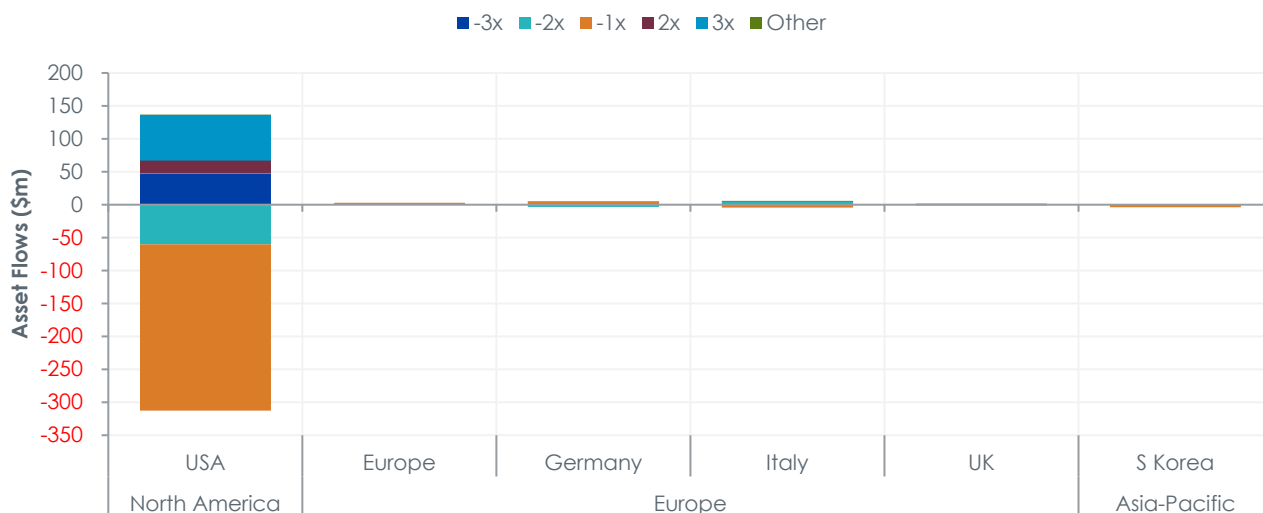
Global Commodities December 2021 Flows - Asset Flows by Leverage Factor



Fed seems ready to tackle inflation while S&L investors decrease their short positions ahead of year-end

- In December, S&L investors decreased their positions in short US Government Bond ETPs and increased their long positions (-\$60mln in 2x, -\$252mln in -1x, +\$19mln in 2x and +\$69mln in 3x). Following the Federal Open Market Committee meeting in December, the Federal Reserve (Fed) continued pivoting towards a more hawkish tone touching on both balance sheet normalisation and the possibility of interest rate hikes sooner than anticipated in 2022. With a more hawkish Fed and rising Omicron cases in the US and globally, S&L investors reduced their short US Government bonds positions before year-end given.
- Investors in S&L fixed income ETPs remained pretty quiet in other regions.

Global Debt December 2021 Flows - Asset Flows by Leverage Factor



Global Asset Allocation

- The total global AUM of Short & Leveraged (S&L) ETPs was \$118.5 billion as of 31/12/2021
- 21% of AUM is held in short products with leverage factors ranging between -1x to -3x. 79% of AUM is held in long products with leverage factors ranging from +2 and above. The leverage factor with the most assets is +3x, with 47% of AUM.
- In terms of S&L asset allocation, equity ETPs are the most popular with 87% of AUM, followed by commodities with 7% and debts with 5%. The remainder is allocated between currency and alternative ETPs.

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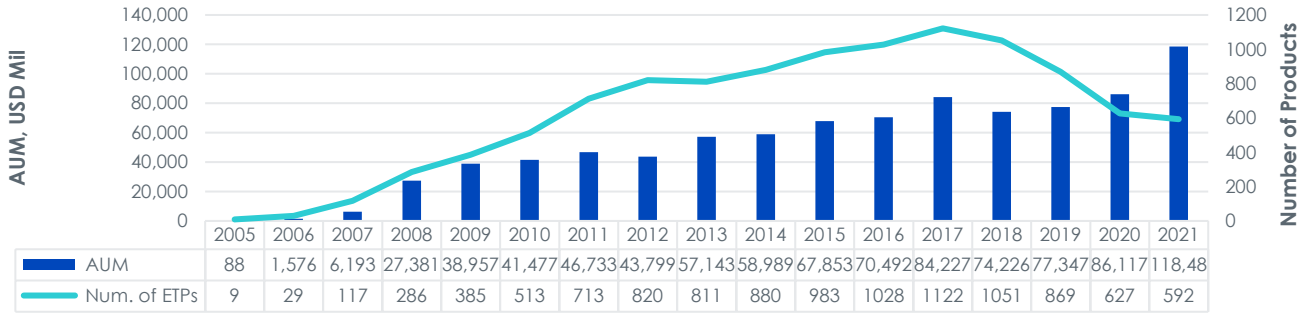
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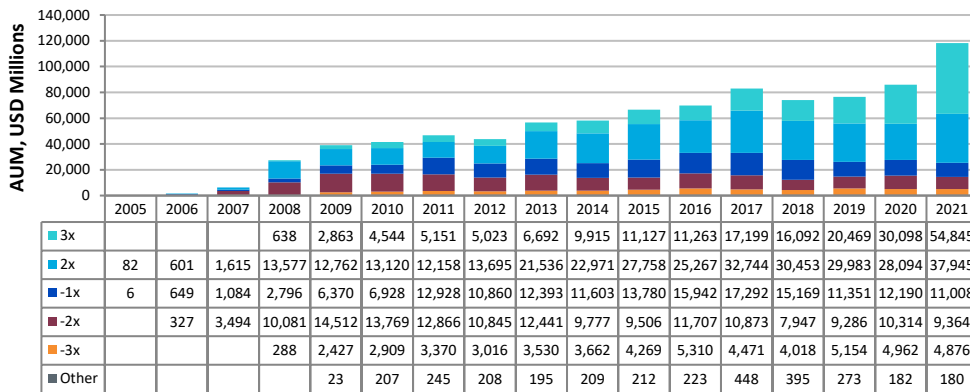
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Global Growth of S&L ETFs/ETPs

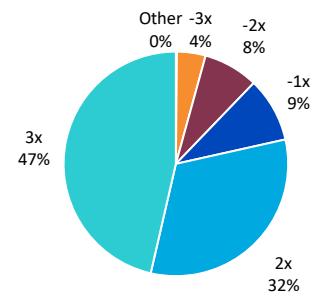
AUM and Number of Products



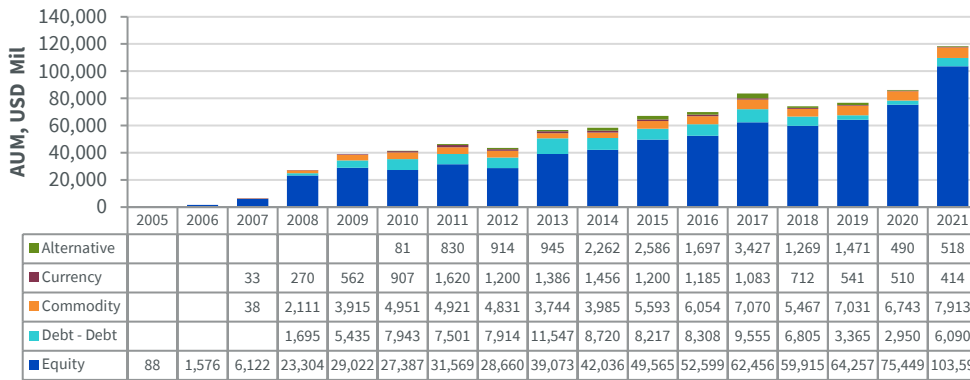
AUM by Leverage Factor



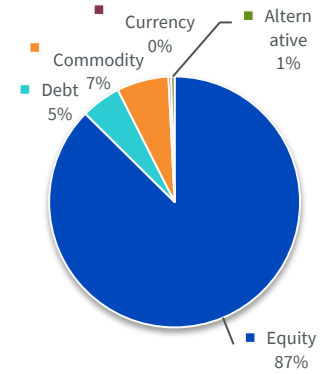
As of 31st December 2021



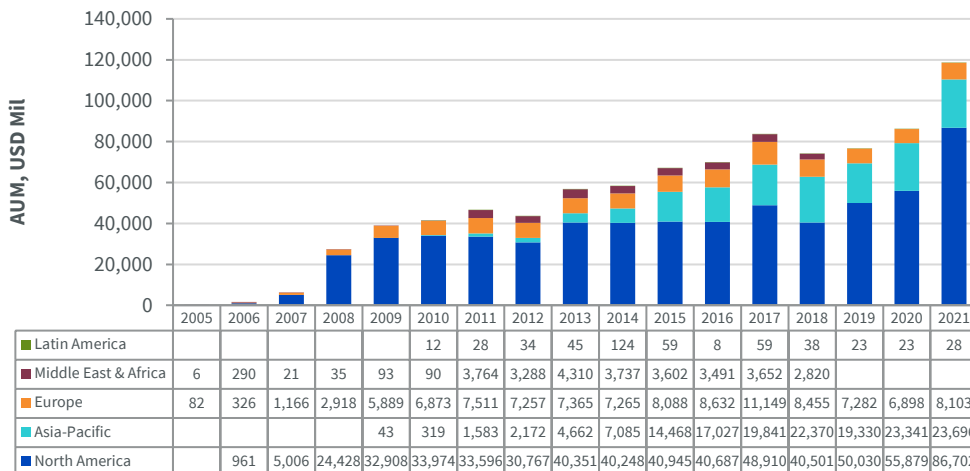
AUM by Asset Class



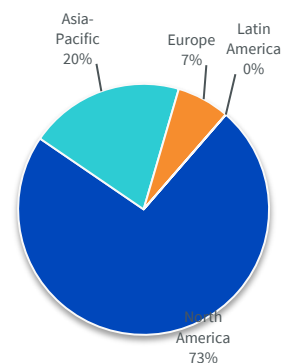
As of 31st December 2021



AUM by Domicile Region



As of 31st December 2021

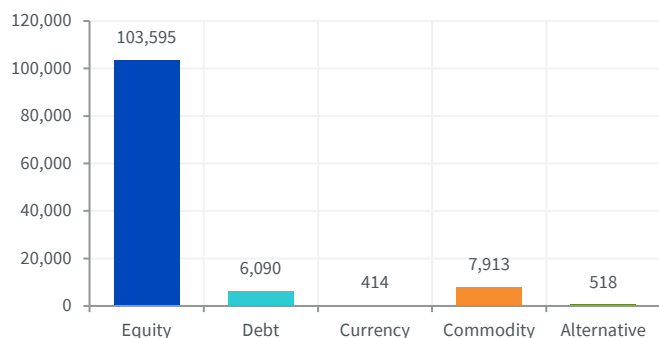


Global Asset Allocation

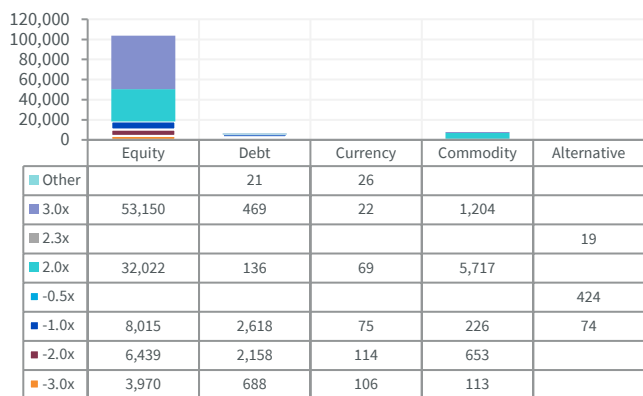
Current Allocations

As of 31st December 2021; Figures in USD Mil.

AUM

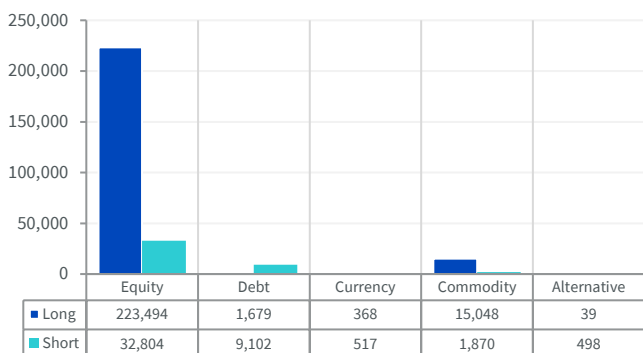


AUM by Leverage Factor



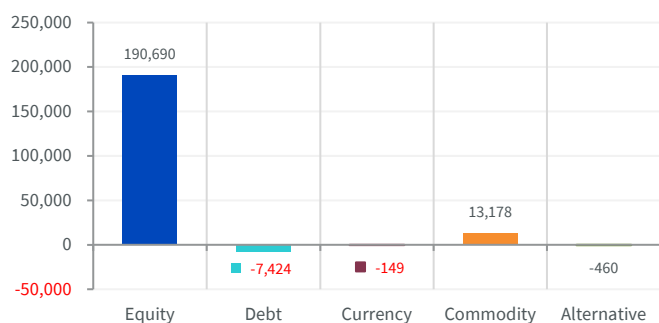
Notional AUM by Long / Short ETPs

The sum of the AUM in each ETP multiplied by the absolute value of its leverage factor. E.g., \$1 of assets in a 3x leverage or a 3x short ETP equals \$3 of notional AUM



Net Position

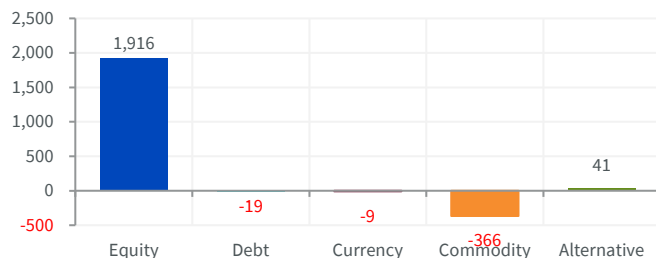
The notional AUM in long ETPs minus the notional AUM in short ETPs. A negative figure indicates investors have a net short, or net bearish position; a positive figure indicates a net long or net bullish position



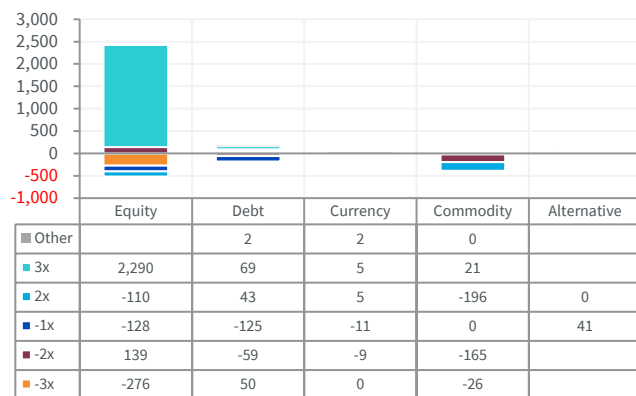
December 2021 Flows

Over December 2021; Figures in USD Mil.

Asset Flows

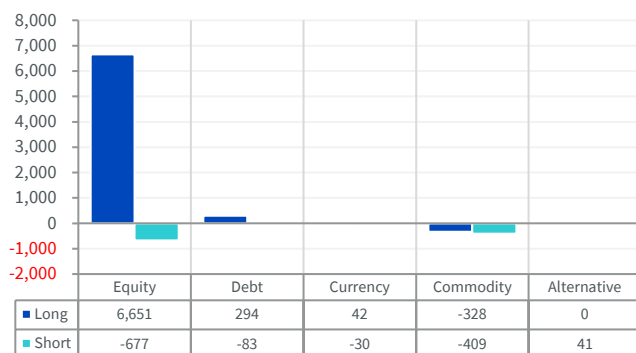


Asset Flows by Leverage Factor



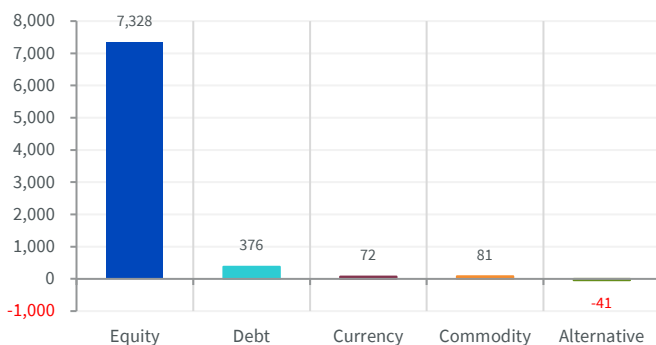
Notional Flows by Long / Short ETPs

The net subscriptions for each ETP multiplied by the absolute value of its leverage factor. E.g., \$1 of outflows from a 3x leverage ETP equals -\$3 of notional flow



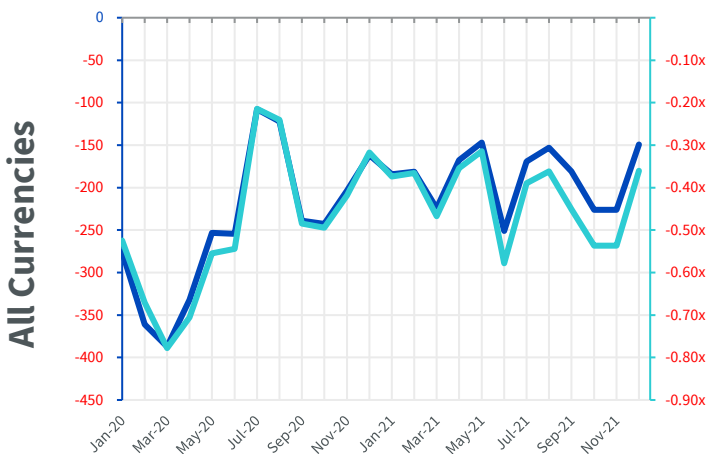
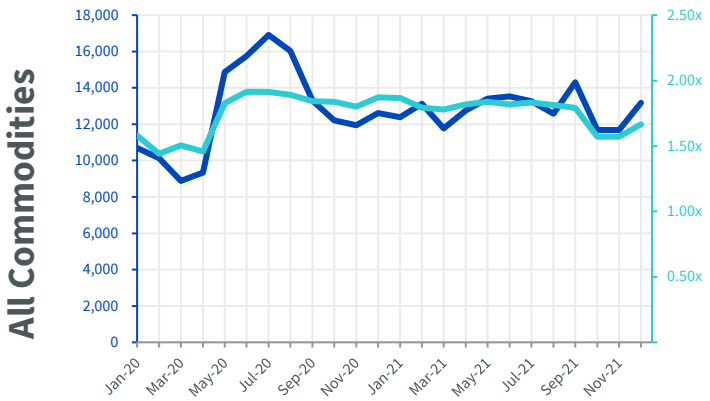
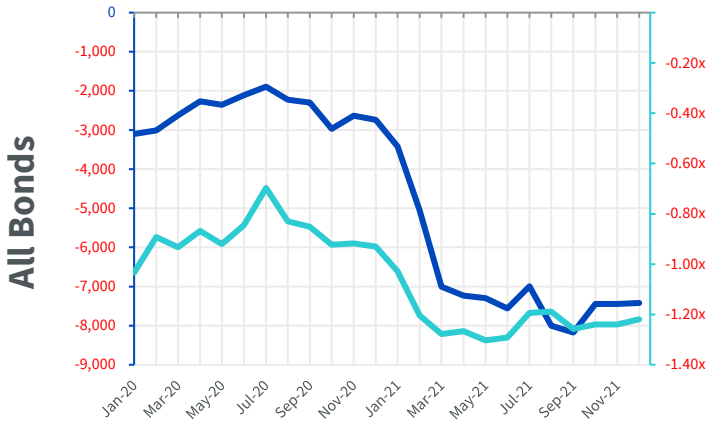
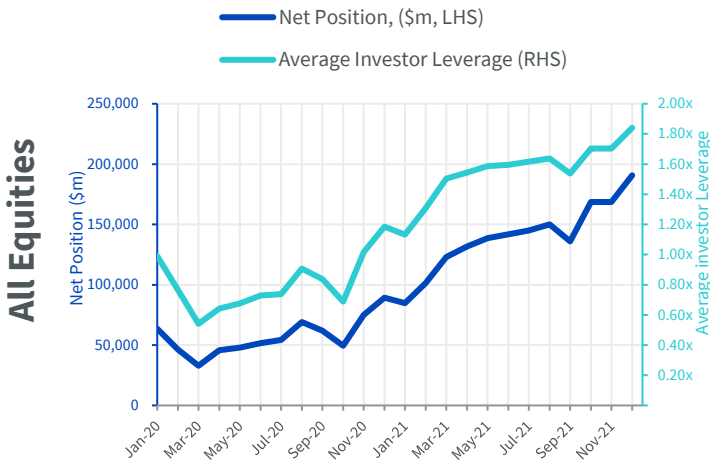
Net Position Flows

The notional flow in long ETPs minus the notional flow in short ETPs. A negative figure indicates net bearish flows, while a positive figure indicates net bullish flows

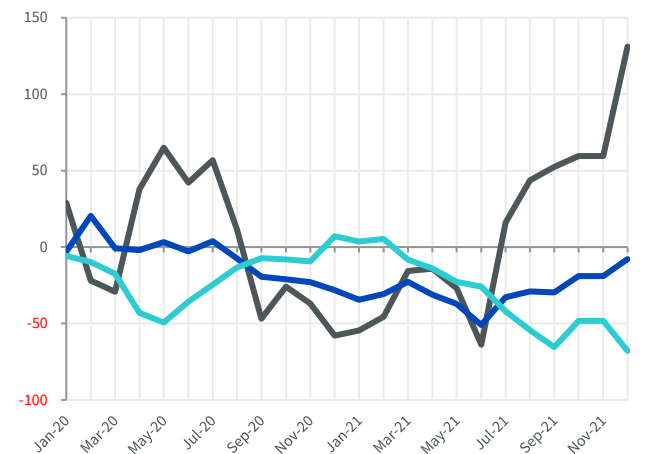
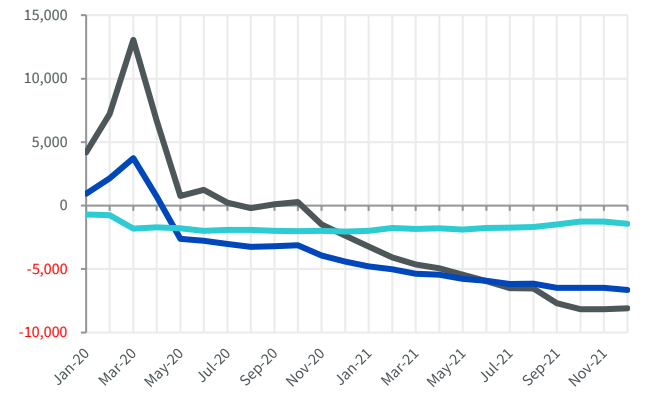
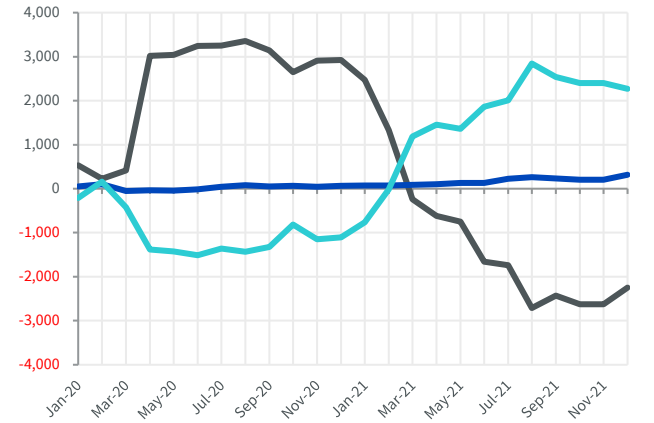
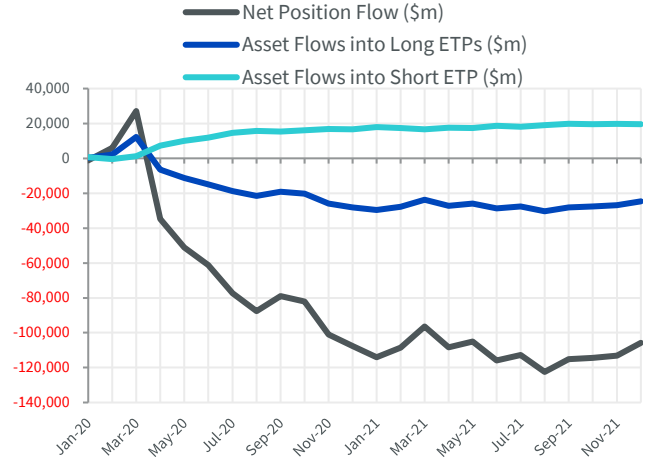


Global Asset Allocation - Historical View

Net Position and Average Investor Leverage



Cumulative Asset Flows into Short / Long ETPs and Net Position Flows



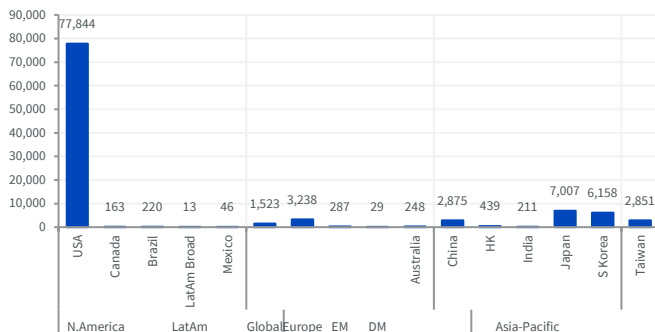
Short & Leveraged Equities

Global Equities

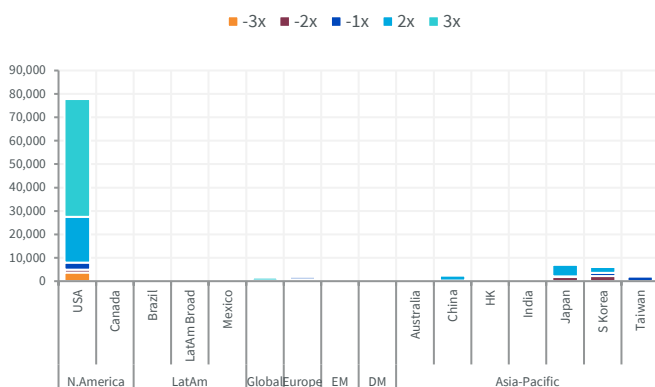
Current Allocations

By Geographic Exposure; As of 31st December 2021; Figures in USD Mil.
 "Europe" represents the sum total of ETPs exposed to Europe or European countries.

AUM

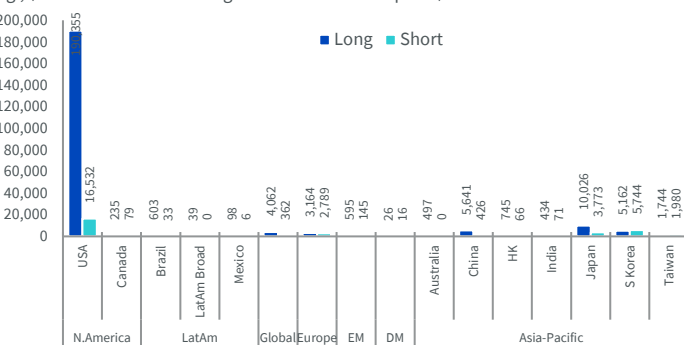


AUM by Leverage Factor



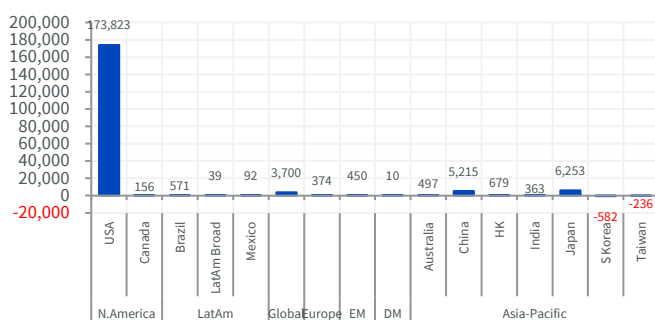
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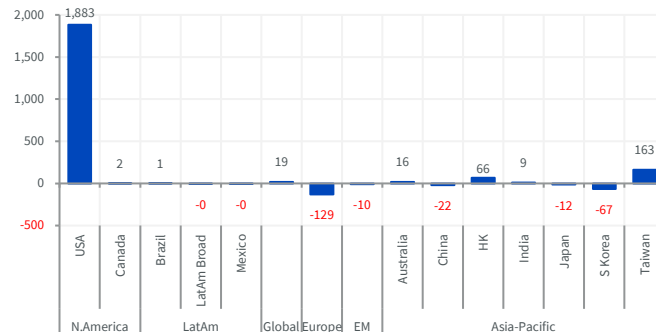
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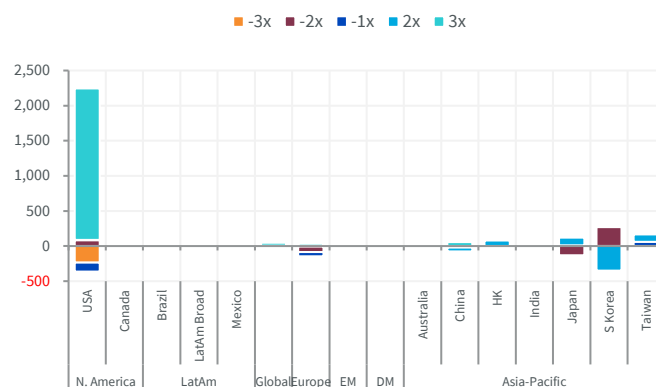
December 2021 Flows

By Geographic Exposure; During December 2021; Figures in USD Mil.

Asset Flows

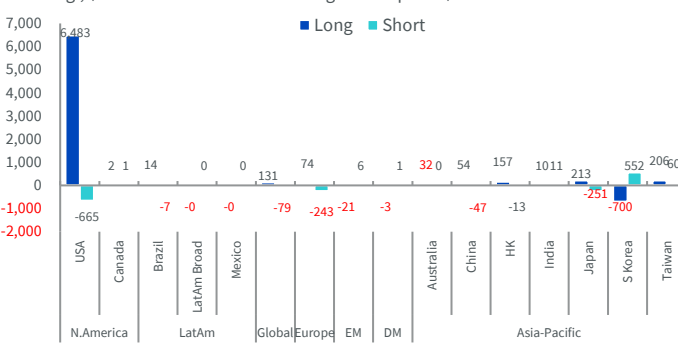


Asset Flows by Leverage Factor



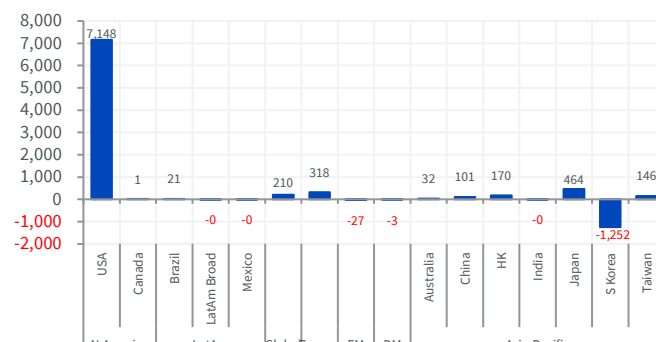
Notional Flows by Long / Short ETPs

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Net Position Flows

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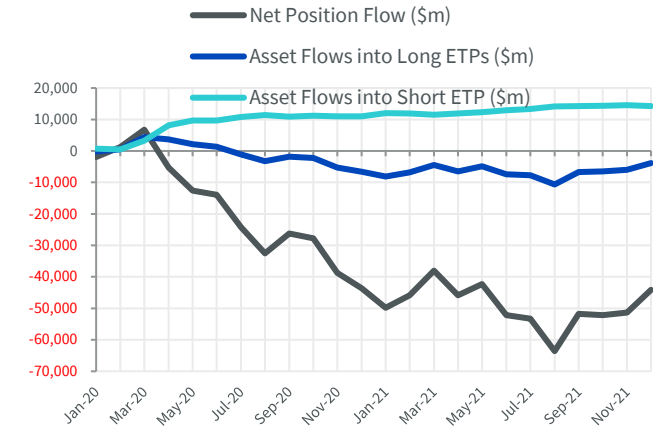
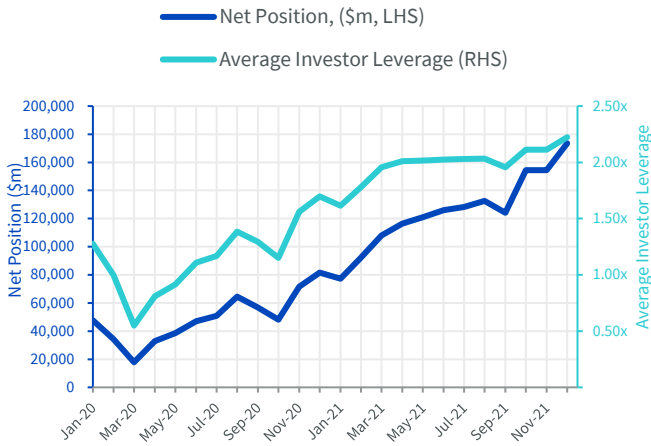


Global Equities - Historical View

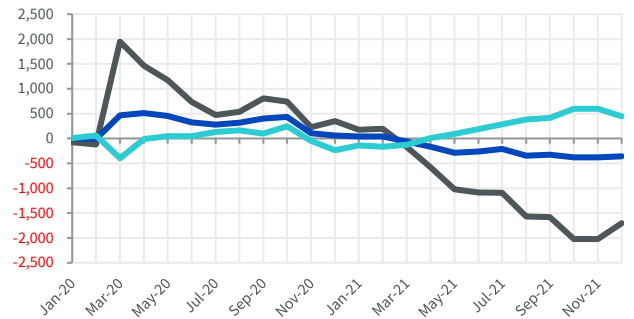
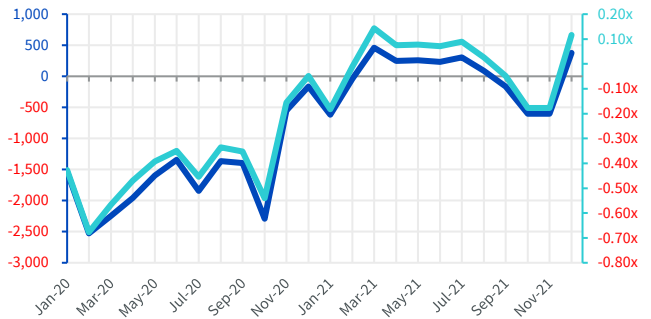
Net Position and Average Investor Leverage

Cumulative Asset Flows into Short / Long ETPs and Net Position Flows

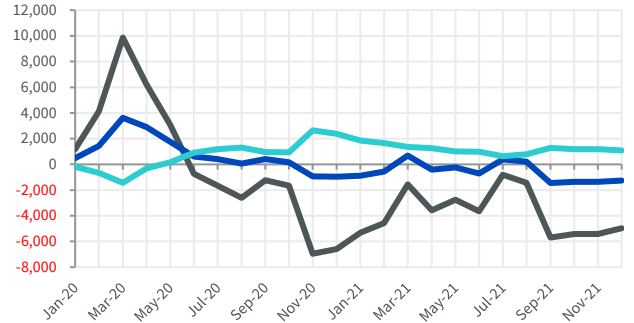
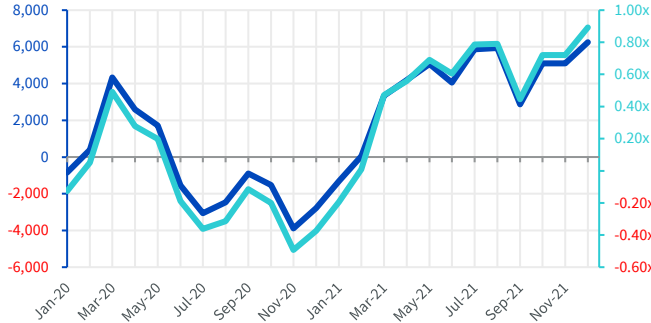
US Equities



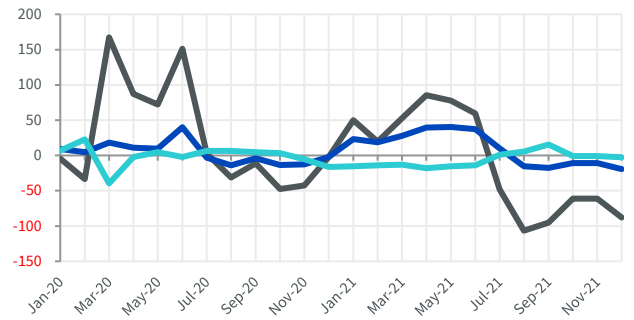
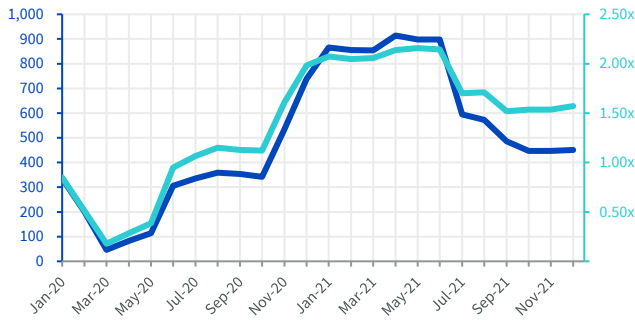
All Europe Equities



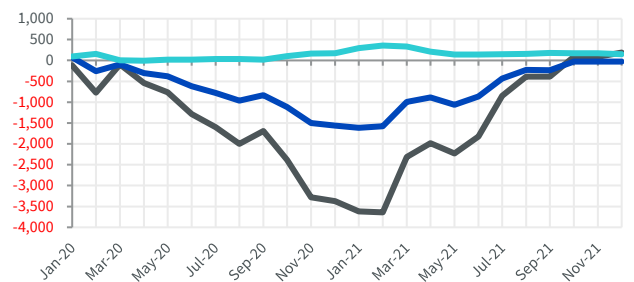
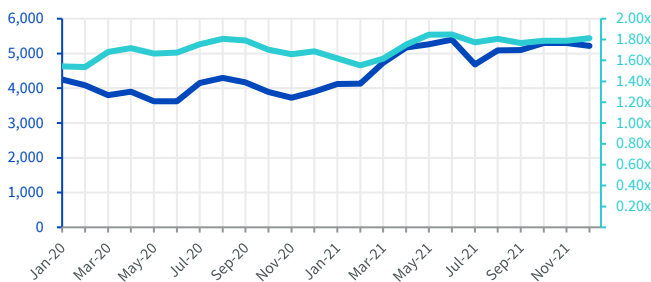
Japan Equities



EM Equities



China Equities



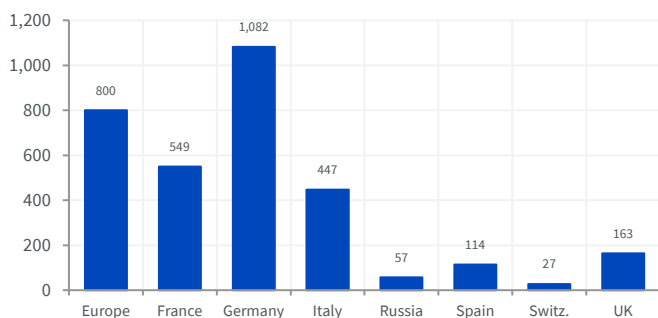
European Equities Breakdown

Current Allocations

By Geographic Exposure; As of 31st December 2021; Figures in USD Mil.
"Europe" represents ETPs exposed to Europe as a region.

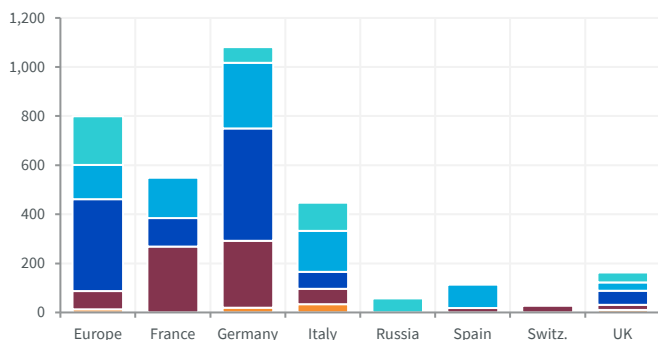
AUM

Showing countries with AUM above \$10mm



AUM by Leverage Factor

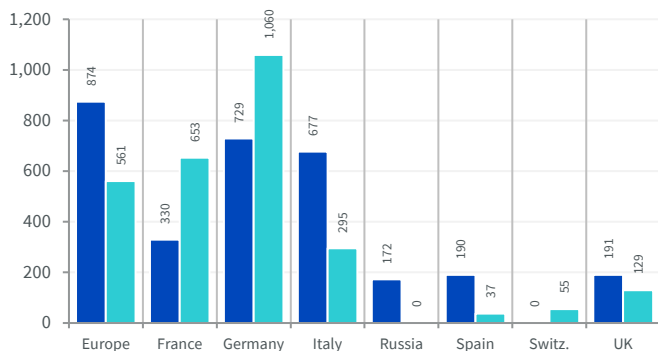
Legend: -3x, -2x, -1x, 2x, 3x



Notional AUM by Long / Short ETPs

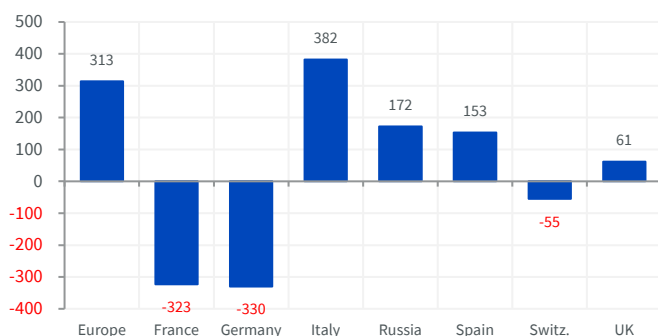
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Legend: Long (dark blue), Short (light blue)



Net Position

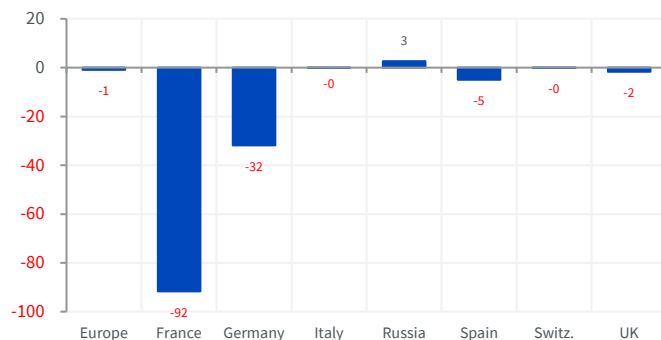
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December 2021 Flows

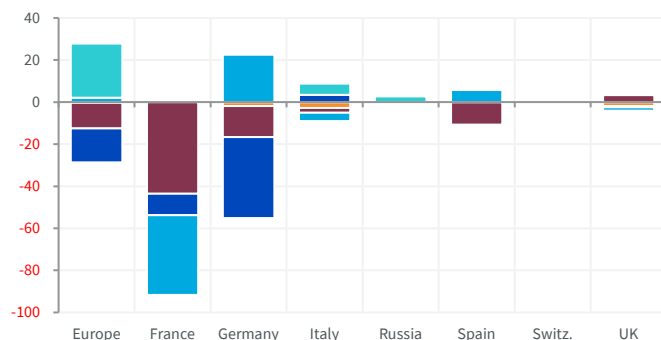
By Geographic Exposure; Over December 2021; Figures in USD Mil.

Asset Flows



Asset Flows by Leverage Factor

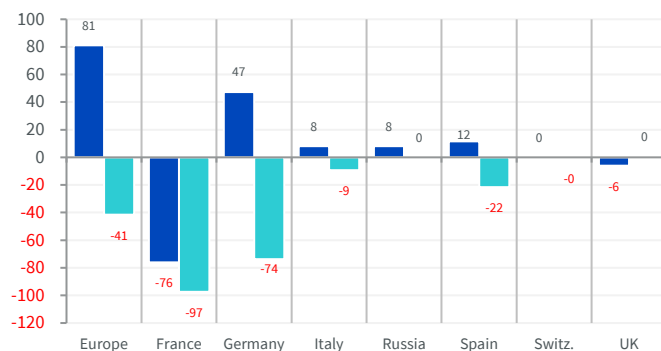
Legend: -3x, -2x, -1x, 2x, 3x



Notional Flows by Long / Short ETPs

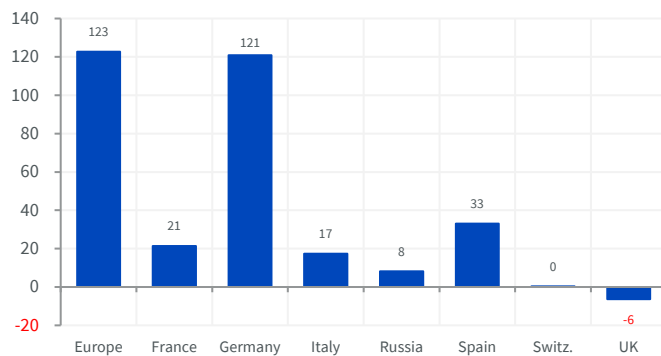
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Net Position Flows

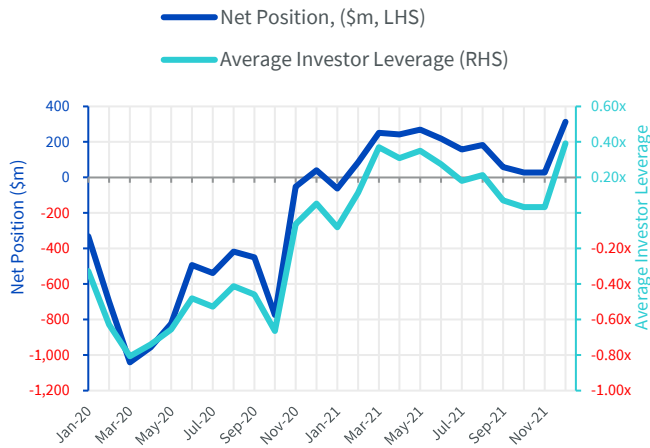
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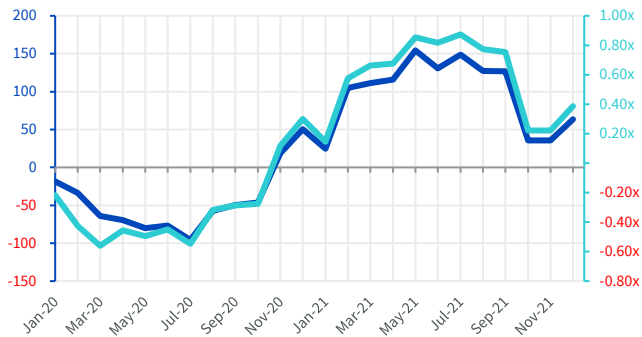
Europe Equities - Historical View

Net Position and Average Investor Leverage

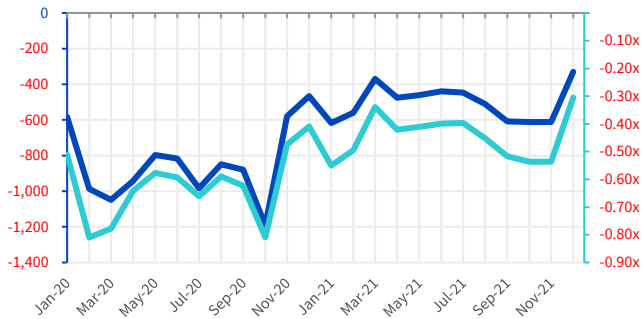
Broad Europe Equities



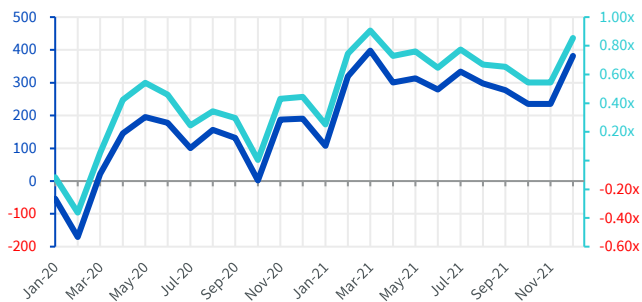
UK Equities



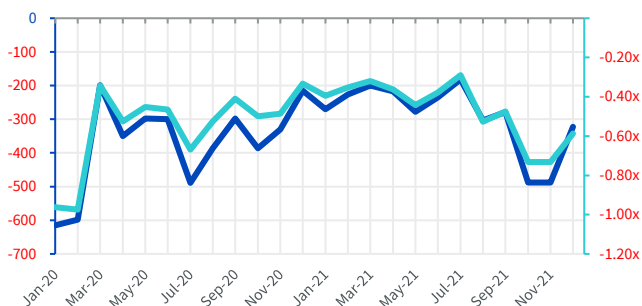
Germany Equities



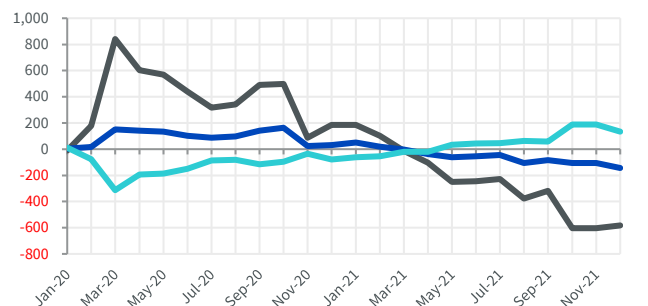
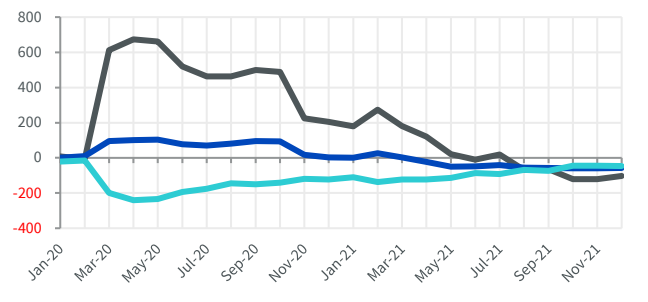
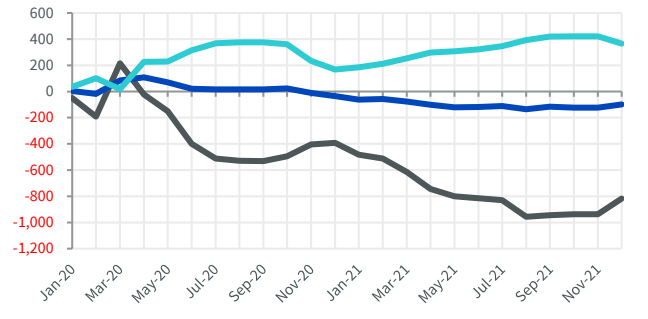
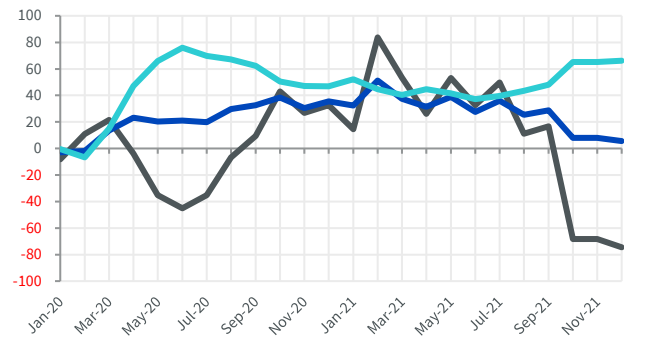
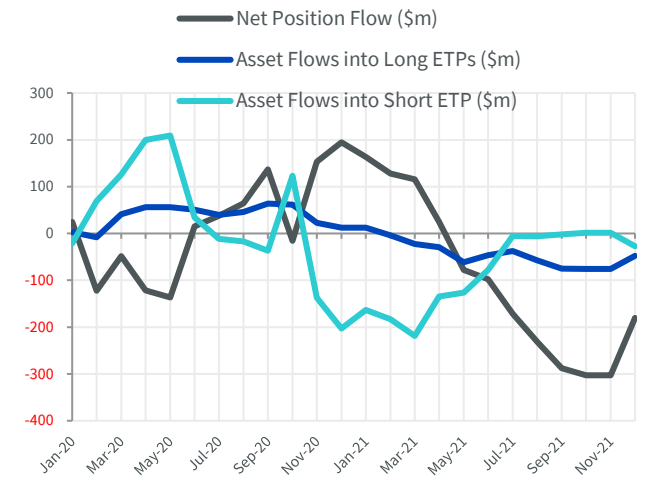
Italy Equities



France Equities



Cumulative Asset Flows into Short / Long ETPs and Net Position Flows



Short & Leveraged Government Debt

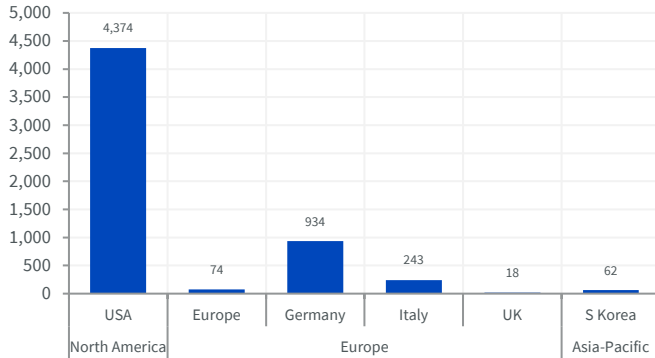
Global Debt

Current Allocations

By Geographic Exposure; As of 31st December 2021; Figures in USD Mil.

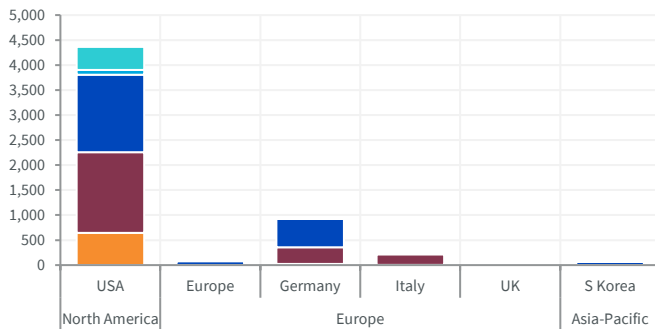
AUM

Showing countries with AUM above \$10mm



AUM by Leverage Factor

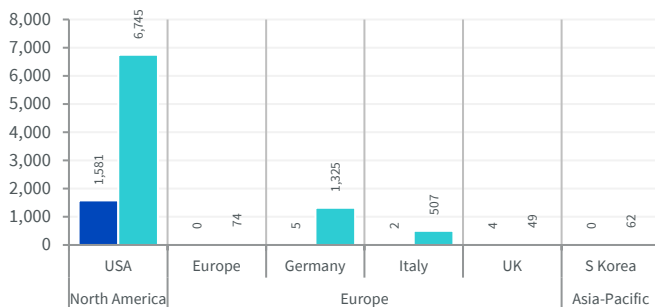
Legend: -3x, -2x, -1x, 2x, 3x, Other



Notional AUM by Long / Short ETPs

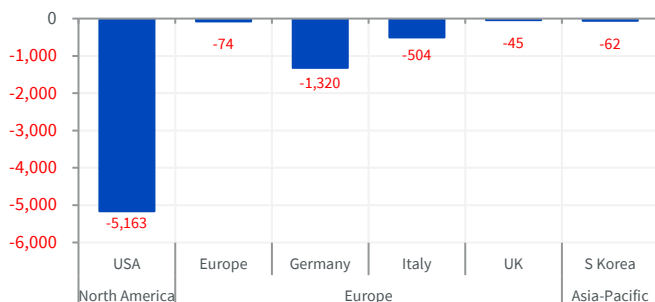
The sum of the AUM in each ETP multiplied by the absolute value of its leverage factor. E.g., \$1 of assets in a 3x leverage or a 3x short ETP equals \$3 of notional AUM

Legend: Long, Short



Net Position

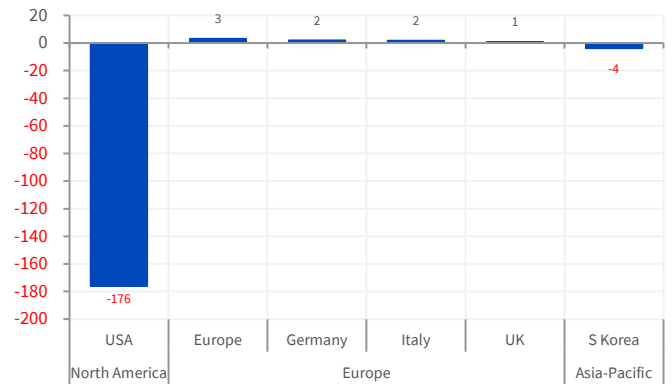
The notional AUM in long ETPs minus the notional AUM in short ETPs. A negative figure indicates investors have a net short, or net bearish position; a positive figure indicates a net long or net bullish position



December 2021 Flows

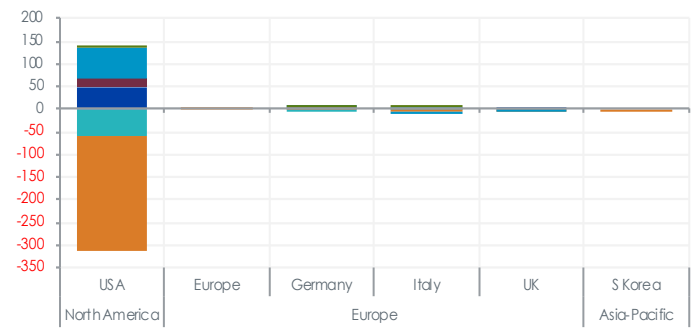
By Geographic Exposure; Over December 2021; Figures in USD Mil.

Asset Flows



Asset Flows by Leverage Factor

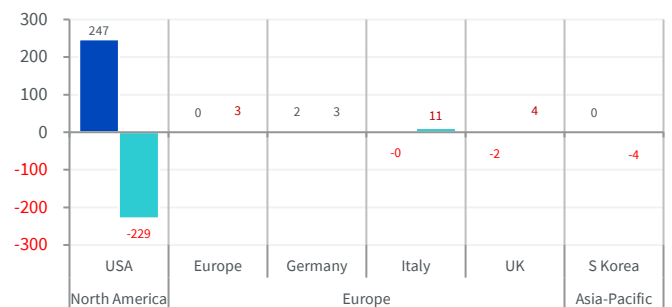
Legend: -3x, -2x, -1x, 2x, 3x, Other



Notional Flows by Long / Short ETPs

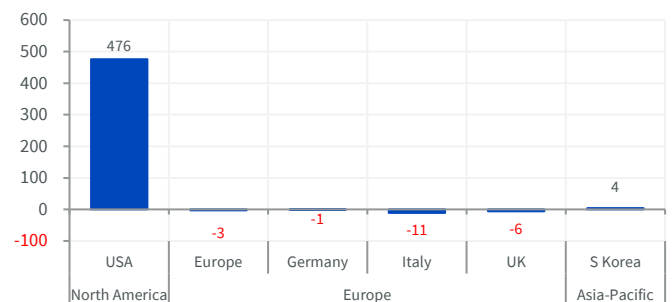
The net subscriptions for each ETP multiplied by the absolute value of its leverage factor. E.g., \$1 of outflows from a 3x leverage ETP equals -\$3 of notional flow

Legend: Long, Short



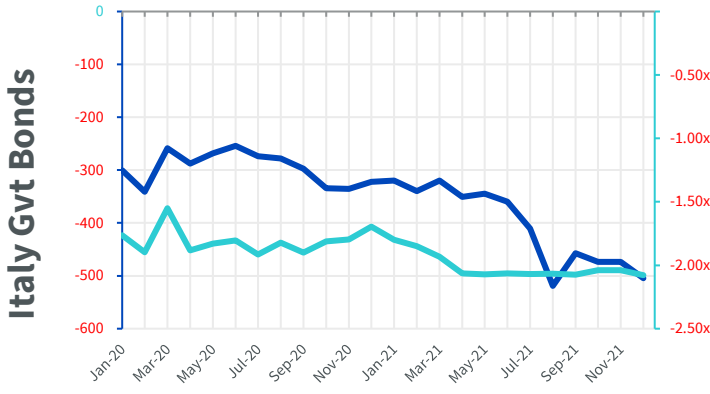
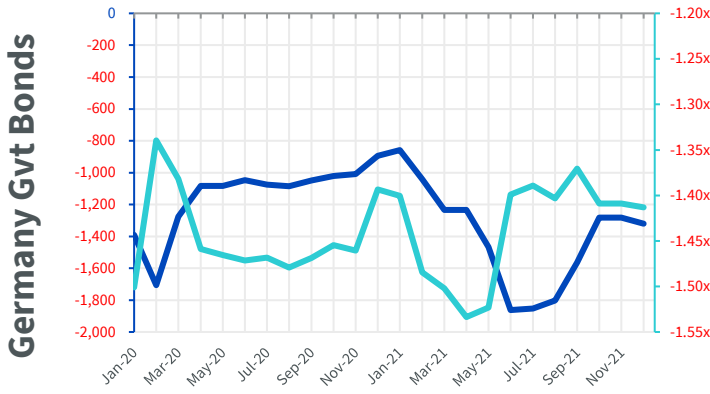
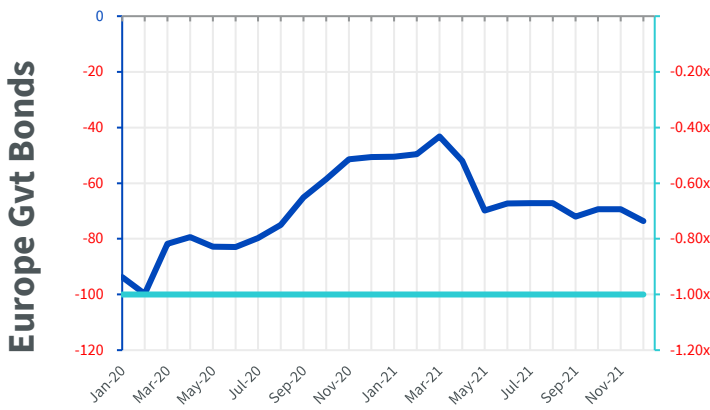
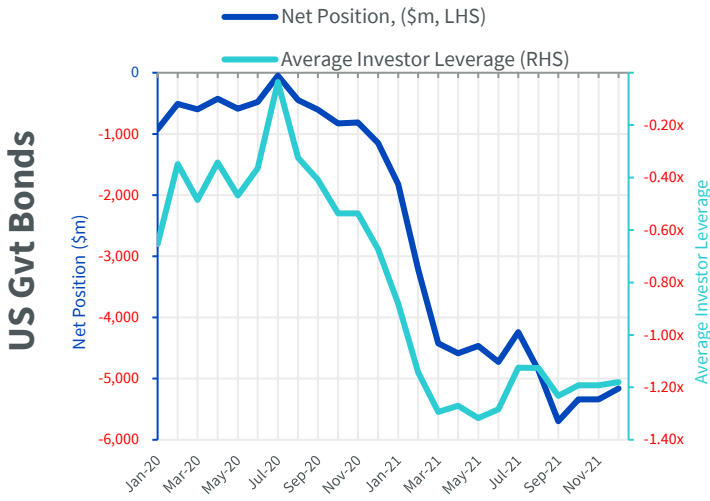
Net Position Flows

The notional flow in long ETPs minus the notional flow in short ETPs. A negative figure indicates net bearish flows, while a positive figure indicates net bullish flows

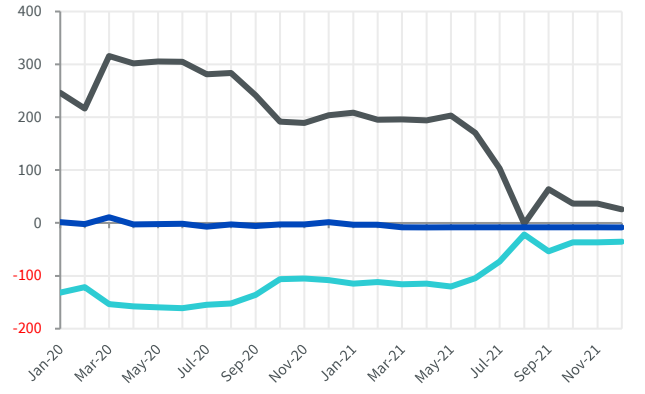
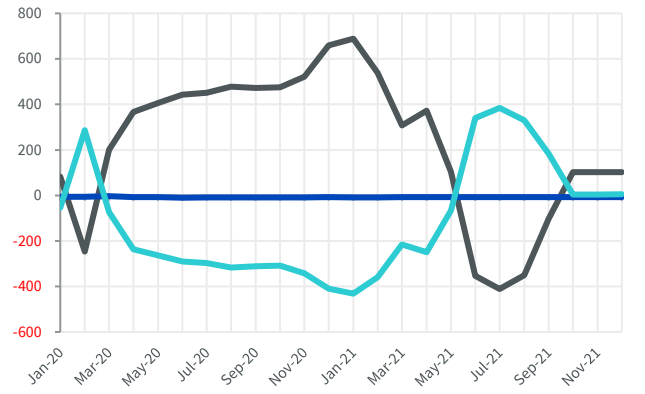
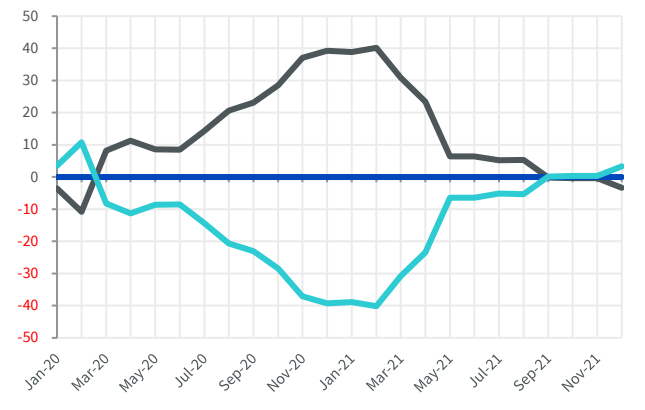
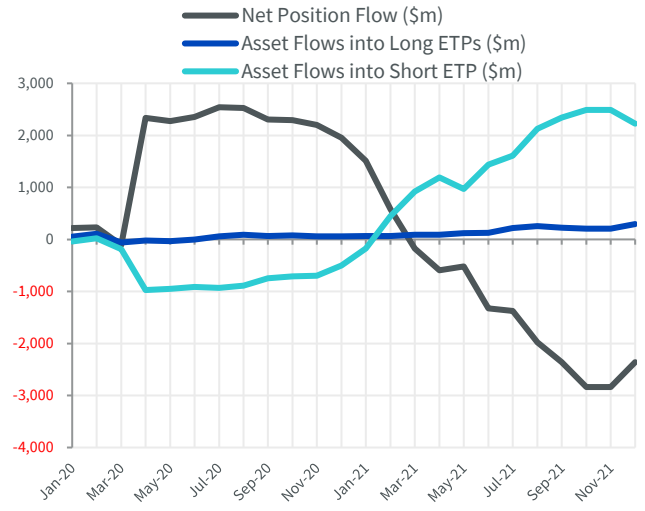


Global Debt - Historical View

Net Position and Average Investor Leverage



Cumulative Asset Flows into Short / Long ETPs and Net Position Flows



Short & Leveraged Commodities

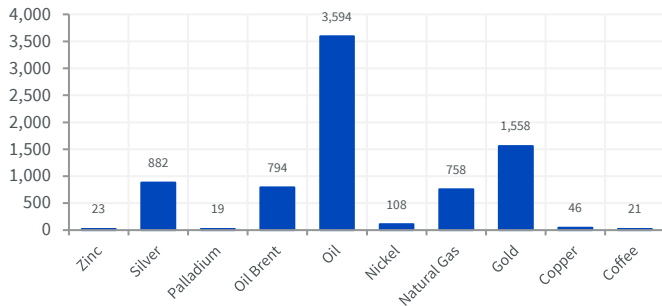
Global Commodities

Current Allocations

By commodity exposure; As of 31st December 2021; Figures in USD Mil; Showing the top 10 AUM commodity exposures

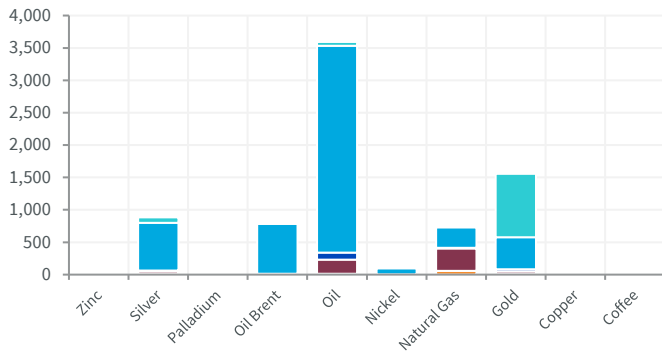
AUM

Showing commodity exposures with the top 10 AUMs



AUM by Leverage Factor

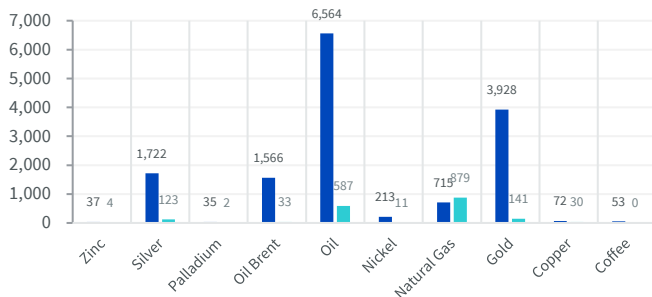
Legend: -3x, -2x, -1x, 2x, 3x, Other



Notional AUM by Long / Short ETPs

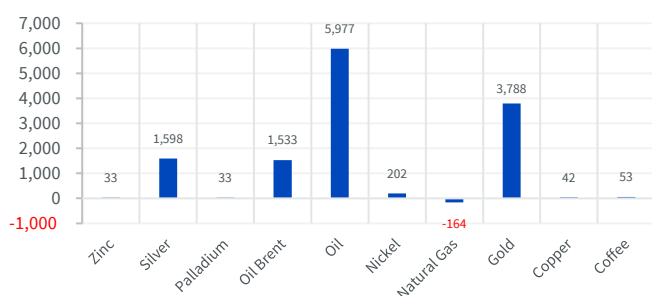
The sum of the AUM in each ETP multiplied by the absolute value of its leverage factor. E.g., \$1 of assets in a 3x leverage or a 3x short ETP equals \$3 of notional AUM

Legend: Long, Short



Net Position

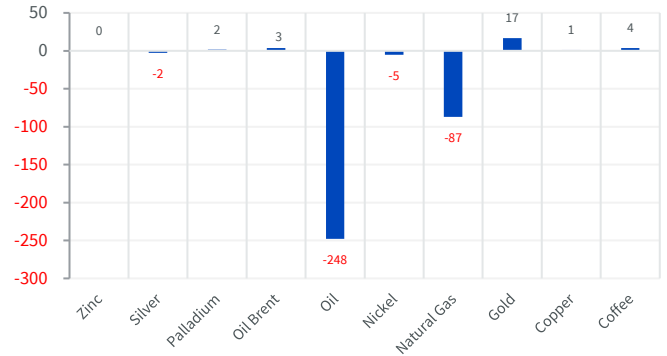
The notional AUM in long ETPs minus the notional AUM in short ETPs. A negative figure indicates investors have a net short, or net bearish position; a positive figure indicates a net long or net bullish position



December 2021 Flows

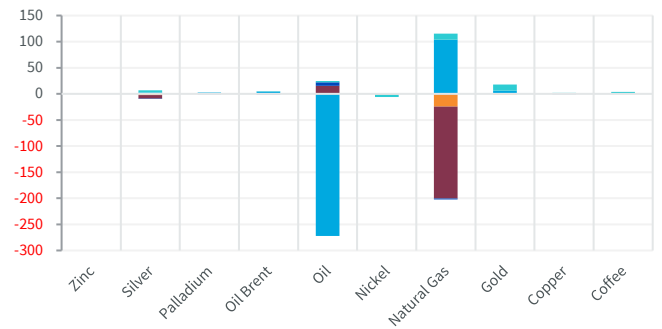
By commodity exposure; Over December 2021; Figures in USD Mil; Showing the Flows for top 10 AUM commodity exposures

Asset Flows



Asset Flows by Leverage Factor

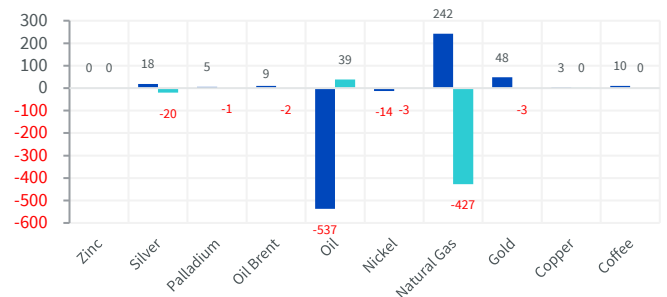
Legend: -3x, -2x, -1x, 2x, 3x, Other



Notional Flows by Long / Short ETPs

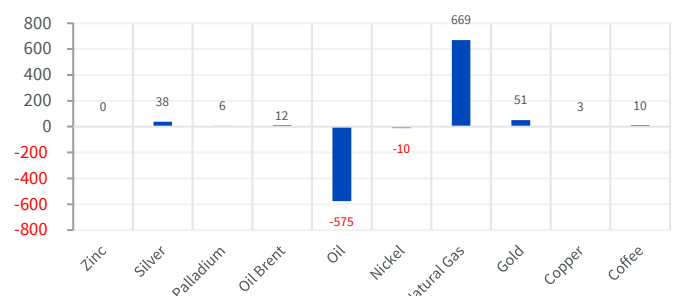
The net subscriptions for each ETP multiplied by the absolute value of its leverage factor. E.g., \$1 of outflows from a 3x leverage ETP equals -\$3 of notional flow

Legend: Long, Short



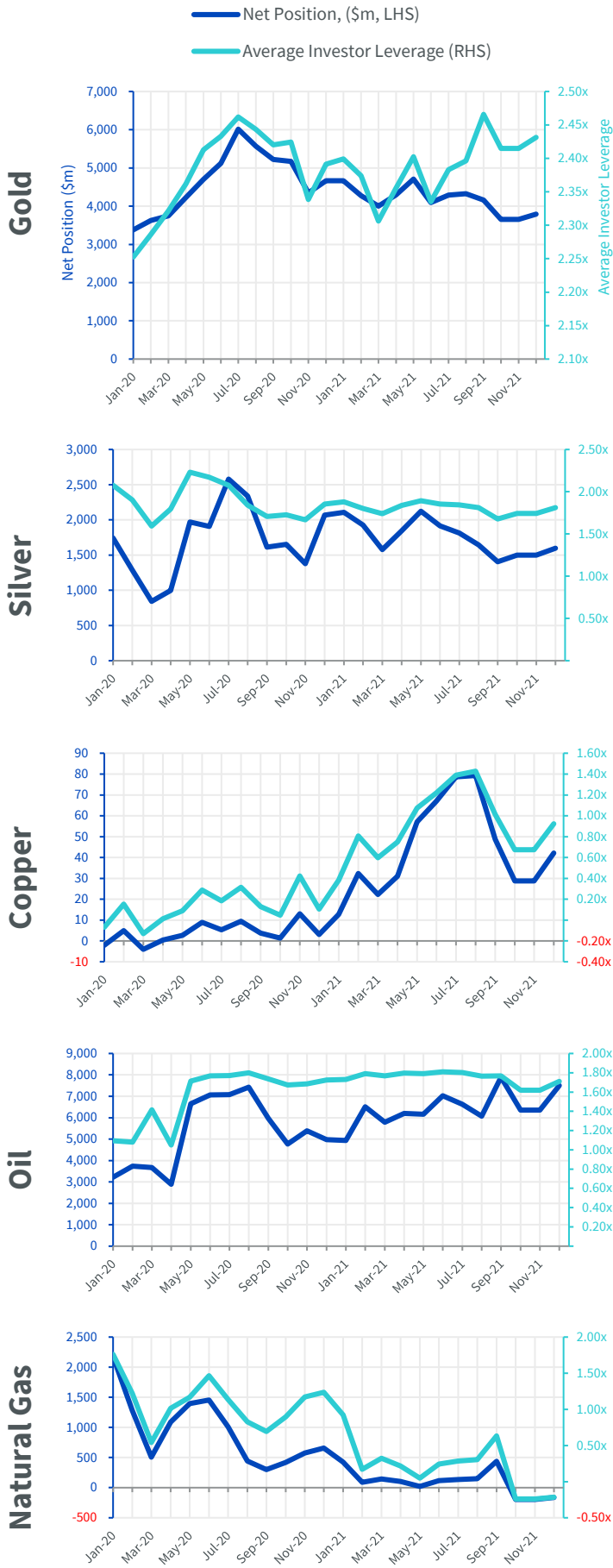
Net Position Flows

The notional flow in long ETPs minus the notional flow in short ETPs. A negative figure indicates net bearish flows, while a positive figure indicates net bullish flows

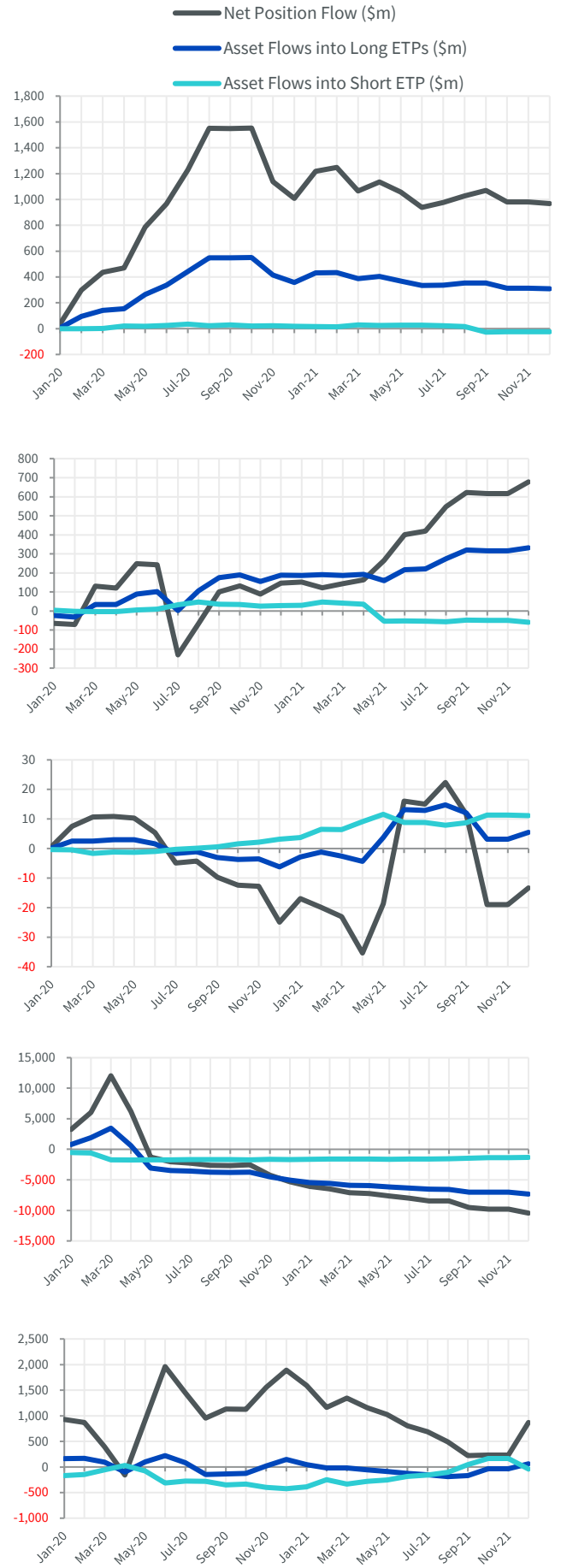


Global Commodities - Historical View

Net Position and Average Investor Leverage



Cumulative Asset Flows into Short / Long ETPs and Net Position Flows



Short & Leveraged Currencies

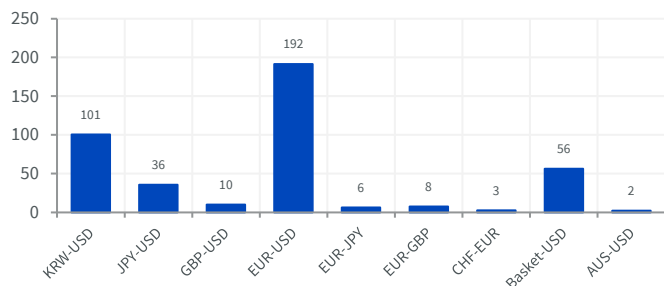
Global Currencies

Current Allocations

By currency exposure; As of 31st December 2021; Figures in USD Mil; Showing the top 10 AUM currency exposures

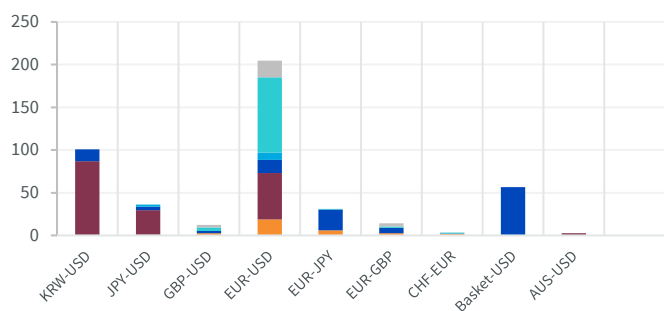
AUM

Showing currency exposures with the top 10 AUMs



AUM by Leverage Factor

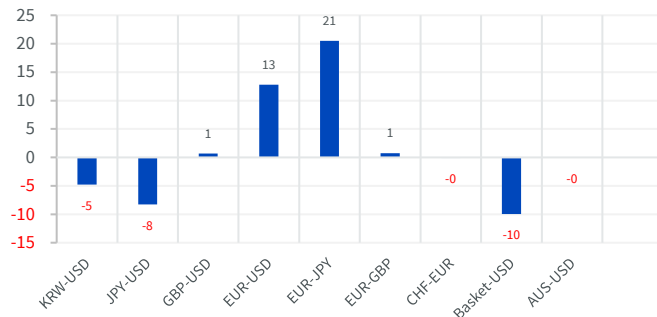
Legend: -3x, -2x, -1x, 2x, 3x, Other



December 2021 Flows

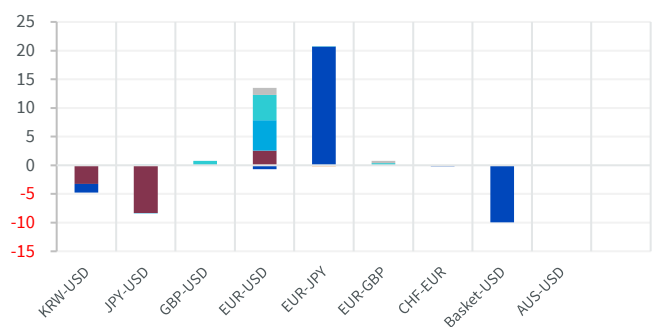
By currency exposure; Over December 2021; Figures in USD Mil; Showing the Flows for top 10 AUM currency exposures

Asset Flows



Asset Flows by Leverage Factor

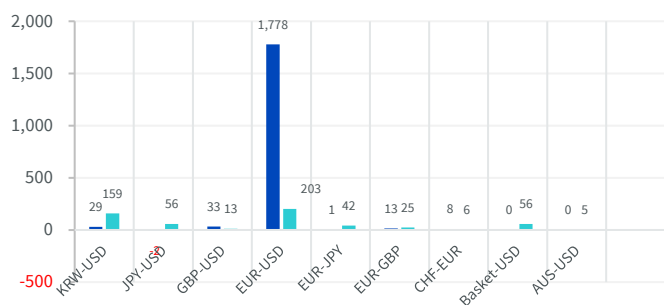
Legend: -3x, -2x, -1x, 2x, 3x, Other



Notional AUM by Long / Short ETPs

The sum of the AUM in each ETP multiplied by the absolute value of its leverage factor. E.g., \$1 of assets in a 3x leverage or a 3x short ETP equals \$3 of notional AUM

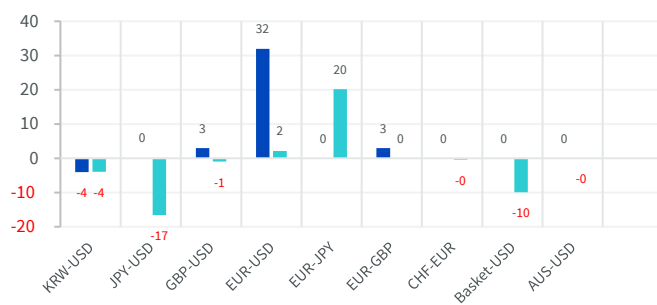
Legend: Long, Short



Notional Flows by Long / Short ETPs

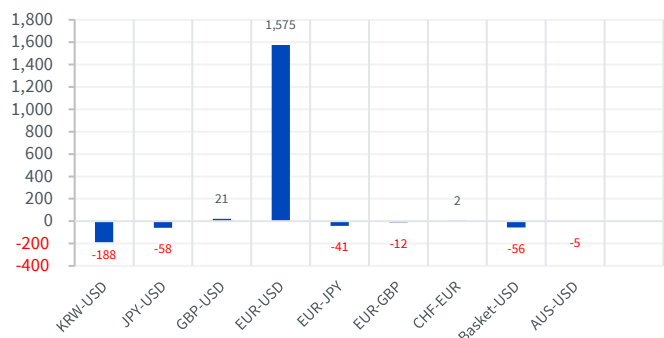
The net subscriptions for each ETP multiplied by the absolute value of its leverage factor. E.g., \$1 of outflows from a 3x leverage ETP equals -\$3 of notional flow

Legend: Long, Short



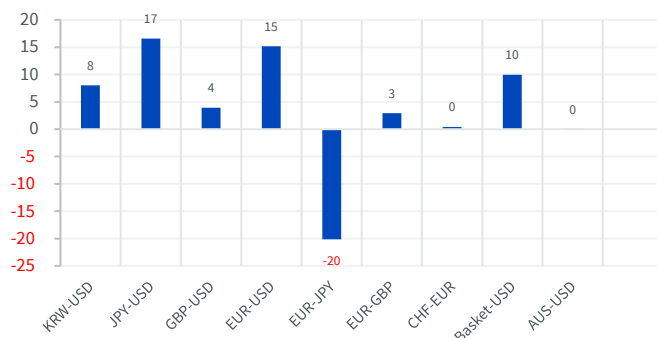
Net Position

The notional AUM in long ETPs minus the notional AUM in short ETPs. A negative figure indicates investors have a net short, or net bearish position; a positive figure indicates a net long or net bullish position



Net Position Flows

The notional flow in long ETPs minus the notional flow in short ETPs. A negative figure indicates net bearish flows, while a positive figure indicates net bullish flows

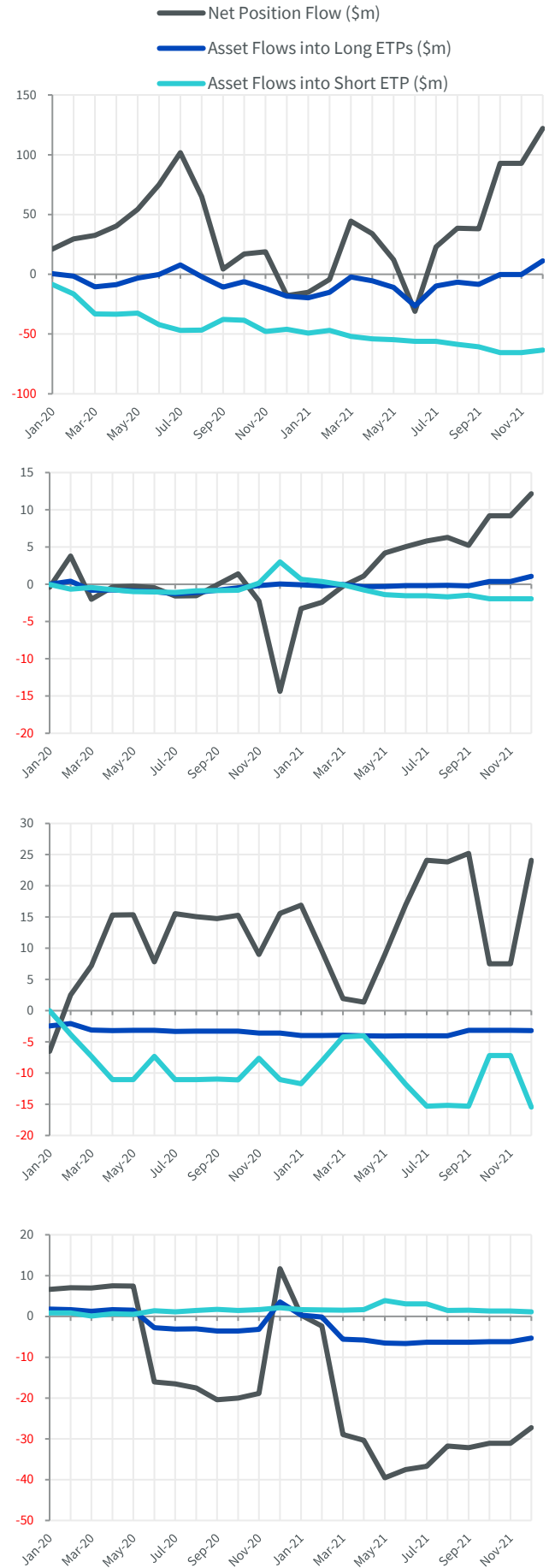


Global Currencies - Historical View

Net Position and Average Investor Leverage



Cumulative Asset Flows into Short / Long ETPs and Net Position Flows



Data, Methodology and Terms Used

This report provides statistics of AUM, flows and related measures for short & leveraged Exchange Traded Products (ETPs).

Following are some definitions for the terms used in the analyses:

ETP (Exchange Trade Product) is used as a generic, interchangeable term to refer to Exchange Traded Funds (ETFs), Exchange Traded Products (ETPs), Exchange Traded Notes (ETNs) and Exchange Traded Commodities (ETCs).

Short & Leveraged ETPs (S&L ETPs) are ETPs whose leverage factor with respect to the underlying asset class being tracked is different to 1.

Short ETPs are ETPs whose leverage factor with respect to the underlying asset class being tracked is negative, typically $-1x$, $-2x$ or lower.

Leveraged ETPs are ETPs whose leverage factor with respect to the underlying asset class being tracked is positive and higher than $+1x$.

AUM or Assets represents the assets under management in an ETP. For some ETPs for which the AUM is not available, their market capitalisations have been used where possible.

Asset Flow or Net Subscriptions is a measure representing the value of net subscriptions over the period, thus removing the effect of changes due to price.

Notional AUM is the sum of the AUM in each ETP multiplied by the absolute value of its leverage factor, e.g. \$1 in a 3x long ETP or \$1 in a -3x short ETP is \$3 of Notional AUM in both cases.

Notional Flow is the net subscriptions for each ETP multiplied by the absolute value of the leverage factor. Alternatively, it is the change in the Notional AUM that is not due to price changes.

Net Position is the sum of the AUM in each ETP multiplied by its leverage factor (which may be either negative or positive). A negative figure indicates investors are net short.

Net Position Flow or Repositioning is Notional Flow in long ETPs minus the Notional Flow in short ETPs. Alternatively, it is the change in the Net Position that is not due to price changes and indicates whether investors are bullish (net long) or bearish (net short) after taking leverage factor into account.

Average Investor Leverage is calculated as the average leverage factor across all ETPs of a certain index / exposure and is weighted by the total AUM and leverage factor for each ETP. Average Investor Leverage is used as a proxy for overall investor sentiment with regard to an asset. It may be biased due to leverage factors on offer for each index / exposure, and thus the change in Average Investor Leverage is the most relevant observation rather than the actual number.

All data provided in this report is sourced from calculations by WisdomTree, which are performed on underlying price, return, AUM, currency and market capitalisation data from Bloomberg®. All data is as of 31st December 2021. All figures are denominated in USD.

You cannot invest directly in an index. Historical performance is not an indication of future performance and any investments may go down in value.

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Any historical performance included in this document may be based on back testing. Back testing is the process of evaluating an investment strategy by applying it to historical data to simulate what the performance of such strategy would have been. However, back tested performance is purely hypothetical and is provided in this document solely for informational purposes. Back tested data does not represent actual performance and should not be interpreted as an indication of actual or future performance.

Short and leveraged exchange-traded products are only intended for investors who understand the risks involved in investing in a product with short and/or leveraged exposure and who intend to invest on a short term basis. Any investment in short and/or leveraged products should be monitored on a daily basis to ensure consistency with your investment strategy. You should understand that investments in short and/or leveraged exchange-traded products held for a period of longer than one day may not provide returns equivalent to the return from the relevant unleveraged investment multiplied by the relevant leverage factor. Potential losses in short and/or leveraged exchange-traded products may be magnified in comparison to investments that do not incorporate these strategies. Please refer to the section entitled “Risk Factors” in the relevant prospectus for further details of these and other risks associated with an investment in short and/or leveraged exchange-traded products. You should consult an independent investment adviser prior to making an investment in short and/or leveraged exchange-traded products in order to determine its suitability to your circumstances.