WisdomTree

SHORT & LEVERAGED ETPs Global Flows December 2018



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Data, Methodology and Terms Used

This report provides statistics of AUM, flows and related measures for short & leveraged Exchange Traded Products (ETPs). Short & leveraged ETPs are ETPs whose leverage factor which respect to the underlying asset class is currently -1x or lower and +1.5x or higher. ETPs which offer a non-leveraged exposure are not included in the analysis.

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).

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[®]. Any fund description data is also obtained from Bloomberg. All data is as of 28th December 2018. All figures are denominated in USD.

Executive Summary

Big sell-off in global equity markets didn't stop S&L investors from adding their long positions

Record equity bullishness punished in December, but leveraged ETP investors double down as short ETP investors take profits

Short & Leverage (S&L) investors started December with record levels of bullishness on equities, which left them highly exposed to the worst December equity market since 1931. Despite the hit globally, leveraged ETP investors doubled down and bought the dip, funneling \$2.3 billion into leveraged ETPs, while short ETP investors took profits, taking nearly \$0.5 billion out of short equity ETPs. Accounting for leverage factors, this amounts to \$5 billion worth of flows into equities, or roughly 7% of investors' overall net position in equities (see Figure 1).

Figure 1: Global Asset Allocation- All Equities

Net Position and Average Investor Leverage





Investors in S&L ETPs continue to unwind short US fixed income positions, reaching a record low in fixed income shorts since January 2009

The US 10-year government bonds yield decreased by around 0.30% in December. S&L ETP investors continued to reduce their positions in short US fixed income. \$300mn were redeemed from short US government debt ETPs in December, representing 12% of overall AUM in S&L US government debt ETPs. We believe this reflects investors' increasingly bearish views on the inflation rate and the FED's pace of interest rate rises going forward (see Figure 2)

Figure 2: Global Debt - USA Government Bonds



S&L investors start 2019 with highest ever levels of bullishness on gold

Investors in S&L gold ETPs have been gradually increasing their bullishness since mid-2016, with 2018 providing a bump into record levels of bullishness on gold, potentially reflecting the possibility of a market downturn. The average investor leverage on gold ETPs went from 1.20x in January 2018, to the all-time-high level of 1.82x in December 2018 (see Figure 3).

Figure 3: Gold - Average Investor Leverage



Market Review

Global Asset Allocation

- The total global AUM of Short & Leveraged (S&L) ETPs at the end of December 2018 was \$74.2 billion, down -13% YTD.
- 36% of AUM is held in short products with leverage factors ranging between -1x to -3x. 64% of AUM is held in long products with leverage factors ranging from +2 and above. The leverage factor with the most assets is +2x, with 41% of AUM.
- In terms of S&L asset allocation, equity ETPs are the most popular with 81% of AUM, followed by debts with 9% and commodities with 7%. The remainder is allocated between currency and alternative ETPs.
- The largest individual S&L ETPs are leveraged long Japan equities: \$5.4 billion for Next Funds Nikkei 225 Leveraged Index ETF.

Short & Leveraged Equities

- Currently there is \$59.7 billion of AUM held in S&L equity ETPs, a decrease of -4.6% YTD. 69% of equity ETPs globally are held in leveraged (long) ETPs, 31% in short ETPs.
- AUM in S&L US equity ETPs (including Size and Style but excluding Sectors as objective^{*}) was \$21.9 billion whilst US sector focused equity ETPs had \$6.5 billion in AUM.
- Investors in S&L ETPs globally ("S&L investors") maintained their bullishness on equities. Investors put \$2.2 billion into leveraged equity ETPs in December and redeemed \$460m of short equity ETPs.
- Current AUM of S&L equity ETPs tracking Europe (including Size and Style but excluding Sectors as objective^{*}) stands at \$4.1 billion with \$1.3 billion tracking the European region and \$2.8 billion tracking individual European countries. The AUM of ETPs tracking European sectors (region and country specific) remains small.

Short & Leveraged Debt: Global

- The AUM of S&L debt ETPs globally is currently \$6.6 billion. With 96% of AUM held in short ETPs, S&L investors remain overwhelmingly bearishly positioned in debt.
- Breaking down the AUM of S&L debt ETPs, \$5.6 billion is in government debt ETPs and \$1.0 billion in corporate debt and preferred stock ETPs.
- 46% of the AUM of S&L government debt ETPs is in S&L ETPs tracking US government debt. S&L ETPs tracking European government debt account for \$2.6 billion in AUM, or 47% of S&L government debt ETPs, most of which is German government bonds. The remaining 7% of AUM in S&L ETPs track Asian debt (predominantly South Korea government bonds) and the Middle Eastern debt. (Israel).

Short & Leveraged Commodities: Global

- S&L commodity ETPs are dominated by oil, natural gas, gold and silver representing 96% of total AUM. Oil is currently the largest commodity ETP with \$2.2 billion in AUM, followed by Natural gas with \$1.1 billion in AUM. Gold and Silver are the 3rd and 4th largest commodity ETPs, with \$1 billion and \$721 million in AUM, respectively.
- AUM of S&L commodity ETPs reached \$5.5 billion in December 2018, a 23% decrease YTD.

Short & Leveraged Currencies: Global

- AUM of S&L currency ETPs reached \$712 million in December 2018, a 34% decrease YTD.
- Most of currency inflow in December went to AUS-USD pair (\$3 million)

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^{*} Size, Style and Sector are investment objective categories. Size is referred to as the categorization of securities by market capitalisation (large, mid and small-cap). Style is referred to as securities that are classified as capturing a value or growth proposition, or a blend of the two. Sectors are investment objectives focused on securities specific to one sector and which per asset class may have different sector classifications. For instance, equities capture sectors such as technology and energy, while fixed income sectors may include government and corporate.

Global Growth of S&L ETFs/ETPs

AUM and Number of Products



AUM by Leverage Factor



As of 28th December 2018





AUM by Asset Class







As of 28th December 2018



Global Asset Allocation

Current Allocations

As of 28^{th} December 2018; Figures in USD Mil.



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 2018 Flows

Over December 2018; 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



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 28th December 2018; Figures in USD Mil.

"Europe" represents the sum total of ETPs exposed to Europe or European countries.

AUM



AUM by Leverage Factor

30,000 25.000 20,000 15,000 10,000 5,000 0 Η¥ USA anada China ndia Israe Brazil lapan Mexica LatAm N.America ME&A LatAm DM Asia-Pacific

■-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



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 2018 Flows

By Geographic Exposure; During December 2018; 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



Global Equities - Historical View Net Position and Average Investor Leverage

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

Net Position Flow (\$m)

Asset Flows into Long ETPs (\$m)

Asset Flows into Short ETP (\$m)











Europe Equities

Current Allocations

By Geographic Exposure; As of 28th December 2018; Figures in USD Mil. "Europe" represents ETPs exposed to Europe as a region.



Showing countries with AUM above \$10mm



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 2018 Flows

By Geographic Exposure; Over December 2018; 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



Europe Equities - Historical View

Net Position and Average Investor Leverage

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



Short & Leveraged Government Debt Global Debt

Current Allocations

By Geographic Exposure; As of 28th December 2018; Figures in USD Mil.



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 2018 Flows

By Geographic Exposure; Over December 2018; 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

Long Short



Net Position Flows



Global Debt - Historical View

Net Position and Average Investor Leverage

Net Position Flow (\$m) Net Position, (\$m, LHS) Asset Flows into Long ETPs (\$m) Average Investor Leverage (RHS) 2,500 -1.40x 0 Asset Flows into Short ETP (\$m) 2,000 -1,000 **USA Gvt Bonds** -1.45x 1,500 -2,000 -1.50x 1.000 Average Investor Leverage -3,000 Net Position (\$m) -1.55x 500 -4.000 -1.60x 0 -5.000 -1.65x -500 -6.000 -1.000 -1.70x -7,000 -1,500 Janil Maril MayII Jul-17 Sepill 404.17 Jan-18 Mar-18 Mayila Jul-18 sepile -8,000 -1.75x Julia MayII Sep-11 NOV-17 Jan 18 Mar.18 Mayile Jul-18 Sep. 18 Jan 1 Maril Nov.18 0 200 150 **Europe Gvt Bonds** -100 -0.20x 100 -200 -0.40x 50 0 -300 -0.60x -50 -400 -0.80x -100 -500 -1.00x -150 -200 MayII -600 Maril 111-27 sep-11 -1 20x Janual Mar-18 May 18 141-28 Sep.18 Mayill 141-17 sep-11 NOV-11 Marile Jan-1 Marill Jan 18 Mayila Jul-18 \$ Sep. 18 ~2 NOV-18 0 -1.35x 1,000 **Germany Gvt Bonds** 800 -500 -1.40x 600 -1,000 400 -1.45x -1,500 200 -2,000 -1.50x 0 -2,500 -200 -1.55x -3,000 -400 -3,500 -1.60x -600 -4,000 -800 -1.65x -4,500 -1,000 -5,000 -1.70x -1,200 141-17 Sepill 404.17 1317-18 Mar.18 111-28 Marill MayII M84-18 MayII Jul-27 Sepill Janile Marile May-18 Jan-17 Jan-17 404.17 Sepile 404.18 Juli-18 Sept 8 2 0 1,000 -500 -0.50x 500 Italy Gvt Bonds -1,000 -1.00x 0 -1,500 -1.50x -500 -2,000 -2.00x -1,000 -2,500 -2.50x -1,500 1311-17 Maril MayII ' sepil . NON-11 1311-18 Mar.18 M84-18 Jul-18 Septe Jan-17 Mar.17 MayII 141-27 sepil NOV-17 Jan 18 Mar-18 Mayila Jul-18 Septe Nov.18 Jul-II

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

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Short & Leveraged Commodities Global Commodities

Current Allocations

By commodity exposure; As of 28 $^{\rm th}$ December 2018; Figures in USD Mil; Showing the top 10 AUM commodity exposures

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 2018 Flows

By commodity exposure; Over December 2018; Figures in USD Mil; Showing the top 10 Flows commodity exposures

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 Commodities - Historical View

Net Position and Average Investor Leverage

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

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Short & Leveraged Currencies Global Currencies

Current Allocations

By currency exposure; As of $28^{\rm th}$ December 2018; Figures in USD Mil; Showing the top 10 AUM currency exposures

AUM

Showing currency exposures with the top 10 AUMs



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 2018 Flows

By currency exposure; Over December 2018; Figures in USD Mil; Showing the top 10 Flows currency exposures

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



Global Currencies - Historical View

Net Position and Average Investor Leverage

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



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