



## EM Equity and Debt ETFs Benefit in July

Data in this report is as of 29th July 2016

### European ETP Monthly Highlights (Assets & Flows)

- **Assets:** European ETPs assets increased by €21bn and stood at \$559bn (€500bn) at the end of Jul'16, up by 4.4% (MoM in € terms).
- **Flows:** European domiciled ETPs registered strong inflows of +€9.6bn across all major asset classes (equity, fixed income and commodity). Fixed Income ETFs lead with inflows of +€4.9bn followed by Commodity ETPs (+€2.5bn) and Equity ETFs (+€2.1bn).

### New Product Launches – 5 new products

WisdomTree listed 2 equity ETFs which includes 1 Smart Beta and 1 China focused RQFII ETF while BlackRock listed 2 equity ETFs based on the MSCI USA SRI and Emerging Markets SRI Indices. ComStage also listed a Smart Beta ETF during July.

### Investment Themes for the Month

- Global EM and US exposed ETFs attracted inflows of +€1.2bn and +€0.8bn respectively.
- Minimum volatility products continue to be popular with a sharp rise of inflows in July (+€1.2bn vs +€0.5bn in June). Dividend ETFs also benefitted last month.
- Broad European equities (e.g. MSCI Europe / STOXX 600) and Germany focused ETFs witnessed outflows of -€1.7bn, & -€0.4bn respectively.
- Corporate (+€2.6bn) and Sovereign (+€2.3bn) bond ETFs were the strongest segments within Fixed Income. Interestingly, EM Bond ETFs were particularly popular with inflows of +€1.9bn.
- Gold ETPs registered inflows of +€1.6bn (+€7.3bn so far this year).

### Turnover: MoM turnover activity down by 21%

The total turnover activity into European ETPs was down by 21% (€74bn) from the previous month's total (€93.6bn). At the asset class level, on a MoM basis, Equity ETFs turnover activity decreased by -23% followed by Commodity (-19%) and fixed income ETFs (-16%).

### Price premium/discount to NAV monitor

The maximum premiums/discounts to NAV in June were observed in the following categories:

- Equities: Deepest discount (-0.33%) in Size ETFs and highest premium (0.39%) occurred within Regional ETFs.
- Fixed Income: Deepest discount in Credit (CDS) ETFs (-0.42%) while highest premium in Corporate ETFs (0.61%).

### US Market: Outflows continues from European exposure ETFs

European equity exposure ETFs listed in US had outflows of -\$4.4bn during July (-\$16.7bn so far this year).

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## European ETP Highlights

**Assets:** European ETPs AUM increased by €21bn on a MoM basis and ended the month at €500bn. On MoM basis, Commodity ETPs assets increased the most (6%) followed by Fixed Income (4%) and Equity ETFs (4%). For more details please refer to [Assets](#) section on page 54.

**Flows:** European domiciled ETPs registered strong inflows of +€9.6bn across all major asset classes (equity, fixed income and commodity). Fixed Income ETFs lead with inflows of +€4.9bn followed by Commodity ETPs (+€2.5bn) and Equity ETFs (+€2.1bn). For more details please refer to [Cash Flow Analysis](#) section on page 17.

## Global ETPs Highlights

Global ETPs assets increased by \$155bn and reached \$3.22 trillion at the end of Jul'16, 5% up from last month-end levels. Global ETPs registered inflows of +\$54bn during July (+\$25bn for June). US listed ETPs benefitted from inflows of +\$46bn while we observed net outflows of -\$3bn for Asia-Pac listed ETPs.

**Figure 1: Global ETPs Snapshot** | ETPs | Global |

| Region        | AUM (\$bn)     |                |                | Cash Flow (\$bn) |              | Turnover (\$bn) |                |                  | Market Share (%) |             |             |
|---------------|----------------|----------------|----------------|------------------|--------------|-----------------|----------------|------------------|------------------|-------------|-------------|
|               | Jul-16         | Jun-16         | MoM Change (%) | Jul-16           | Jun-16       | Jul-16          | Jun-16         | MoM Change (%)   | AUM              | Cash Flows* | Turnover    |
| US            | 2358.01        | 2237.77        | ↑ 5.37%        | 45.69            | 19.62        | 1330.04         | 1798.24        | ↓ -26.04%        | 73%              | 2.0%        | 84%         |
| Europe        | 558.79         | 531.69         | ↑ 5.10%        | 10.60            | 4.98         | 81.75           | 104.85         | ↓ -22.04%        | 17%              | 2.0%        | 5%          |
| Asia-Pacific  | 305.98         | 298.11         | ↑ 2.64%        | -2.59            | 0.62         | 164.56          | 194.29         | ↓ -15.30%        | 9%               | -0.9%       | 10%         |
| <b>Global</b> | <b>3222.78</b> | <b>3067.57</b> | <b>↑ 5.06%</b> | <b>53.70</b>     | <b>25.22</b> | <b>1576.34</b>  | <b>2097.38</b> | <b>↓ -24.84%</b> | <b>100%</b>      | <b>1.8%</b> | <b>100%</b> |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.  
\*Cash Flow Market Share corresponds to Jul-16 Monthly Cash Flow / End of Jun-16 AUM

## New Launch Activity: 5 Products launches in July

European ETP market witnessed 5 new product launches in July. WisdomTree listed 2 equity ETFs which includes 1 Smart beta and 1 China focused RQFII ETF while BlackRock listed 2 equity ETFs based on the MSCI USA SRI and Emerging Markets SRI Indices. ComStage also listed a smart beta ETF during July.

**Figure 2: New Launches in July** | ETFs | Europe |

| ETF Name  | BBG Ticker | Issuer     | TER   | Exchange Listed |
|---|------------|------------|-------|-----------------|
| WisdomTree Eurozone Quality Dividend Growth UCITS ETF   | EGRA IM    | WisdomTree | 0.29% | Borsa Italiana  |
| ICBCCS WisdomTree S&P China 500 UCITS ETF               | CHIN LN    | WisdomTree | 0.75% | London SE       |
| iShares Sustainable MSCI USA SRI UCITS ETF              | QDVR GY    | BlackRock  | 0.30% | Deutsche Borse  |
| iShares Sustainable MSCI Emerging Markets SRI UCITS ETF | QDVS GY    | BlackRock  | 0.35% | Deutsche Borse  |
| ComStage Alpha Dividende Plus UCITS ETF                 | F750 GY    | ComStage   | 0.68% | Deutsche Borse  |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

For additional information on new product launches please refer to [Product Review](#) on page 25.



## Investment Themes for the Month

### Global EM and S&P500 exposed ETFs benefitted from inflows

Investors trading European-listed ETPs were net buyers of Global Emerging Markets (+€1.2bn) focused ETFs. iShares MSCI Emerging Markets UCITS ETF (Inc) (IEEM LN) and iShares MSCI Emerging Markets IMI UCITS ETF (EMIM NA) were the primary beneficiaries with monthly inflows of +€342mn and +€321mn respectively.

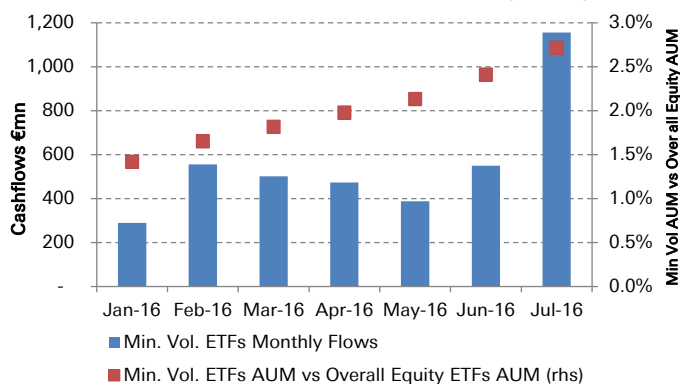
US focused ETFs listed in Europe also benefitted in July with monthly inflows of +€0.8bn (+€2.4bn YTD flows). The 3 largest inflows were into S&P 500 ETFs (VUSA, SPY5 and CSSPX).

ETFs tracking broad European indices (e.g. MSCI Europe / STOXX 600) experienced net outflows of -€1.7bn in July (-€9bn so far this year). Country-wise, Germany focused ETFs suffered redemptions of -€0.4bn (YTD -€1.9bn).

### Robust inflows into Minimum Volatility products, Dividend ETFs also benefit

European listed smart beta ETFs continued their positive run and registered +€1.8bn worth of new money in July, taking YTD inflows above +€6bn. Minimum volatility remains popular amongst investors where we observed inflows into a variety of Min Vol products which includes exposure to Europe, Global and US equities. Dividend ETFs also benefitted where two products in particular saw healthy inflows (SPDR S&P US Dividend Aristocrats and SPDR S&P Euro Dividend Aristocrats). Figure below illustrates monthly flows into minimum volatility ETFs and their AUM vs Overall Equity ETFs AUM.

Figure 3: Monthly Flows into Min. Vol. ETFs | ETFs | Europe



Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

### EM Bond ETFs dominates within the Sovereign bond category

Both Corporate and Sovereign bond ETFs contributed significantly to the overall Fixed Income flows, attracting +€2.6bn and +€2.3bn respectively. Interestingly, Emerging Markets bond ETFs were popular taking up the top 3 ranks by net inflows into the Fixed Income asset class.

### Gold ETPs continue to draw investment

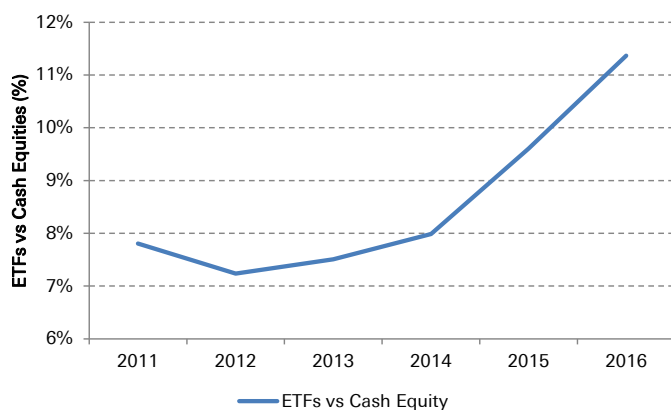
Commodity ETPs flows remained strong during the month of July with inflows of +€2.5bn (YTD +€9.4bn). This was primarily driven by inflows into Gold ETPs (+€1.5bn). Gold ETPs have now registered net inflows of +€7.3bn this year while Equities ETFs are in negative territory (-€0.7bn YTD flows).



## Turnover: MoM turnover activity down by 21%

The total turnover activity into European ETPs was down by 21% (€74bn) from the previous month's total (€93.6bn). At the asset class level, on a MoM basis, Equity ETFs turnover activity decreased by -23% followed by Commodity (-19%) and fixed income ETFs (-16%). ETFs turnover compared to cash equities has been increased significantly for the last 2 years amid elevated volatility in the markets. For more details please refer to [Trading Perspective](#) on page 40.

Figure 4: ETFs vs Cash Equities (%) | ETPs | Europe |



Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

## Price discounts/premium to NAV Monitor

The price of ETFs may not trade in-line with its respective NAVs driven by multiple factors such as supply/demand, market access, duty and varying trading time zones of stocks within an index. In this section we highlight, for ETFs with European equity exposure only, the median, maximum premium and maximum discount observed in varying categories for this month. Figures below illustrate the Price premium/discount to NAV for European ETFs.

- **Equities:** Deepest discount (-0.33%) in Size ETFs and highest premium (0.39%) occurred within Regional ETFs.
- **Fixed Income:** Deepest discount in Credit (CDS) ETFs (-0.42%) while highest premium in Corporate ETFs (0.61%).



**Figure 5: Price premium/discount to NAV** | ETFs | Europe |

|                     | Jul-16       |             |        | Jun-16       |             |        | YTD          |             |        |
|---------------------|--------------|-------------|--------|--------------|-------------|--------|--------------|-------------|--------|
|                     | Max Discount | Max Premium | Median | Max Discount | Max Premium | Median | Max Discount | Max Premium | Median |
| <b>Equity</b>       |              |             |        |              |             |        |              |             |        |
| Country             | -0.12%       | 0.31%       | 0.02%  | -0.15%       | 0.41%       | 0.09%  | -0.67%       | 0.60%       | 0.05%  |
| Regional            | -0.27%       | 0.39%       | -0.07% | -0.52%       | 0.45%       | 0.06%  | -0.83%       | 0.65%       | -0.02% |
| Size                | -0.33%       | 0.19%       | -0.17% | -1.06%       | 0.39%       | -0.01% | -1.06%       | 0.48%       | -0.08% |
| Style               | -0.26%       | 0.24%       | -0.08% | -0.63%       | 0.50%       | 0.03%  | -0.68%       | 0.70%       | -0.02% |
| Sector              | -0.23%       | 0.30%       | -0.03% | -0.32%       | 0.49%       | 0.04%  | -0.68%       | 0.71%       | 0.02%  |
| Strategy            | -0.04%       | 0.17%       | 0.08%  | -0.12%       | 0.42%       | 0.04%  | -0.13%       | 0.42%       | 0.04%  |
| <b>Fixed Income</b> |              |             |        |              |             |        |              |             |        |
| Sovereign           | -0.11%       | 0.03%       | -0.02% | -0.13%       | 0.07%       | -0.03% | -0.13%       | 0.07%       | -0.03% |
| Corporates          | -            | 0.61%       | 0.40%  | -0.06%       | 0.61%       | 0.23%  | -0.22%       | 1.64%       | 0.29%  |
| Broad               | -0.35%       | 0.19%       | -0.02% | -0.33%       | 0.26%       | -0.02% | -0.61%       | 0.48%       | -0.02% |
| Money Market        | -0.01%       | 0.00%       | 0.00%  | -            | 0.00%       | 0.00%  | -0.02%       | 0.01%       | 0.00%  |
| Credit exposure     | -0.42%       | -           | -0.31% | -0.99%       | -           | -0.29% | -0.99%       | 0.24%       | -0.31% |
| Covered Bonds       | -0.21%       | 0.19%       | 0.02%  | -0.16%       | 0.49%       | 0.09%  | -0.28%       | 0.49%       | 0.02%  |

**\*Universe:** Europe Listed ETFs with European focus (DM only), AUM>€200mn.  
**\*Calculation Methodology:** We have calculated asset weighted daily avg. Price premium/discount to Nav of a category and then derived max. discount/premium and median for a period.  
Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

## US Market: Outflows continues from European Exposed ETFs

US domiciled ETPs recorded inflows of +\$45.7bn in July (+\$19.6bn in Jun'16) taking YTD flows to above +\$110bn. The equity segment was the largest contributor drawing +\$32.7bn worth of inflows. Flows for fixed Income (+\$10.8bn) and commodity ETPs (+\$1.9bn) were also in the positive territory for the last month.

Investors trading US ETPs exercised a more cautious stance on Europe considering the significant outflows (-\$4.4bn in Jul'16) from ETPs tracking European equities with net outflows of -\$16.7bn so far this year. Figure below illustrates the top 3 outflows from European focused ETFs listed in US.

**Figure 6: Top 3 outflows from European focused ETFs listed in US**

| Name                                 | Bloomberg | Issuer     | TER   | AUM Jul'16 (\$bn) | CF Jul'16 (\$bn) |
|--------------------------------------|-----------|------------|-------|-------------------|------------------|
| Vanguard FTSE Europe ETF             | VGK US    | Vanguard   | 0.12% | 11.7              | -1.4             |
| iShares MSCI Eurozone ETF            | EZU US    | BlackRock  | 0.48% | 8.8               | -1.3             |
| WisdomTree Europe Hedged Equity Fund | HEDJ US   | WisdomTree | 0.58% | 9.8               | -1.2             |

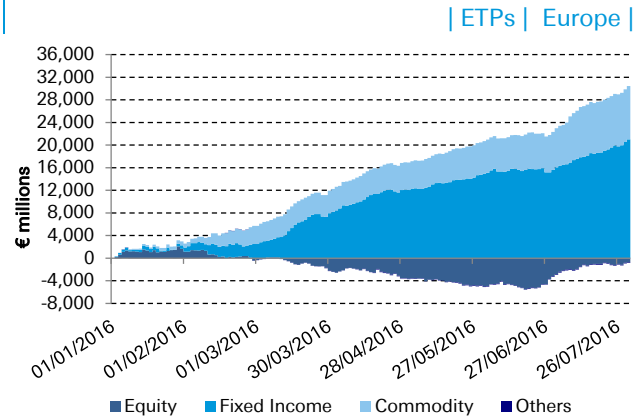
Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



# 1. Investment Trends<sup>1</sup>

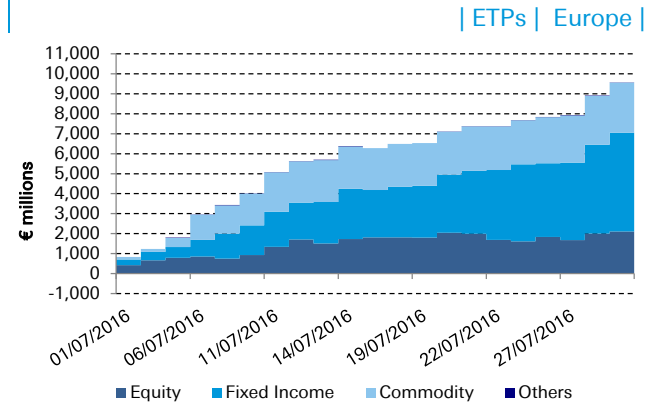
## Cross-Asset Class ETPs

Figure 7: Cash flows by asset class – YTD



Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 8: Cash flows by asset class – Month



Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

<sup>1</sup> Investment trends as expressed by cumulative monthly and YTD cash flows

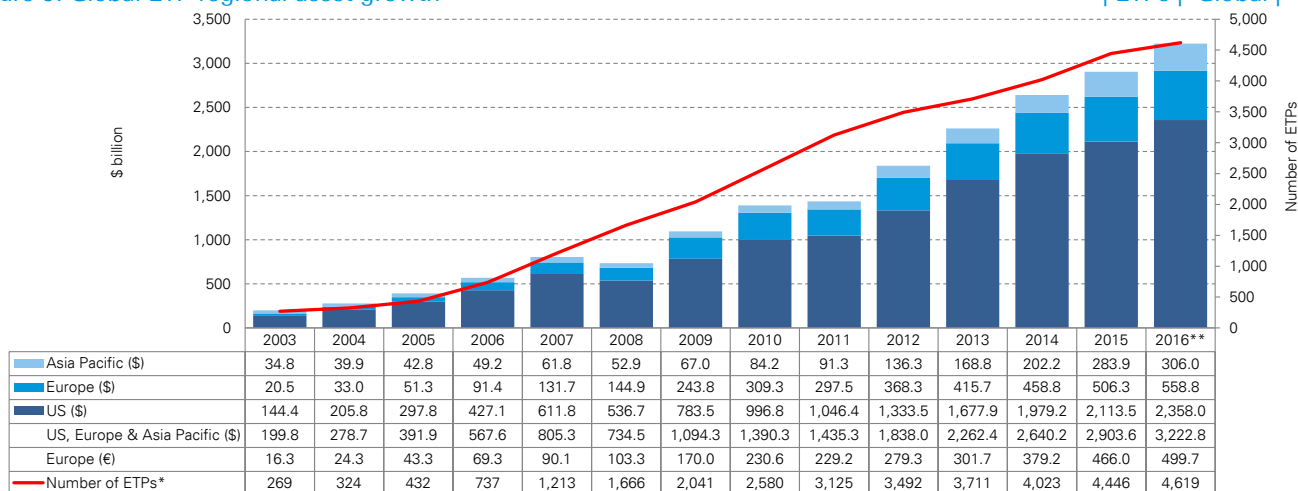


## 2. Market Metrics

### ETF Industry Asset Evolution

Figure 9: Global ETP regional asset growth

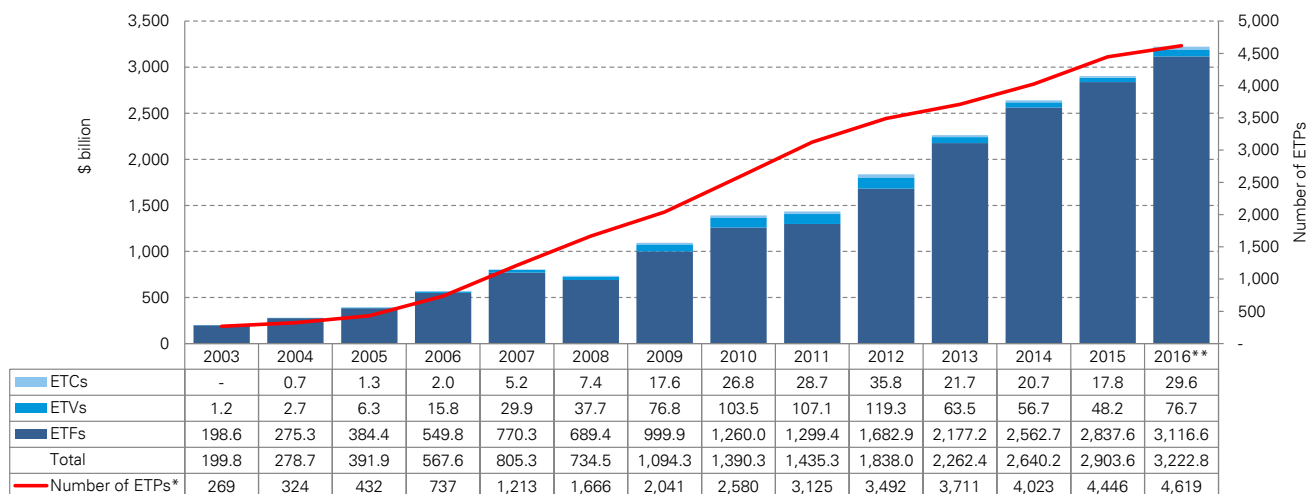
| ETPs | Global |



Source: Deutsche Bank, Bloomberg Finance LP, Reuters.  
\*Number of ETPs at the end of the year is net of delistings for the period.  
\*\* As of last month

Figure 10: Global ETPs (ETF, ETV & ETC) asset growth

| ETPs | Global |



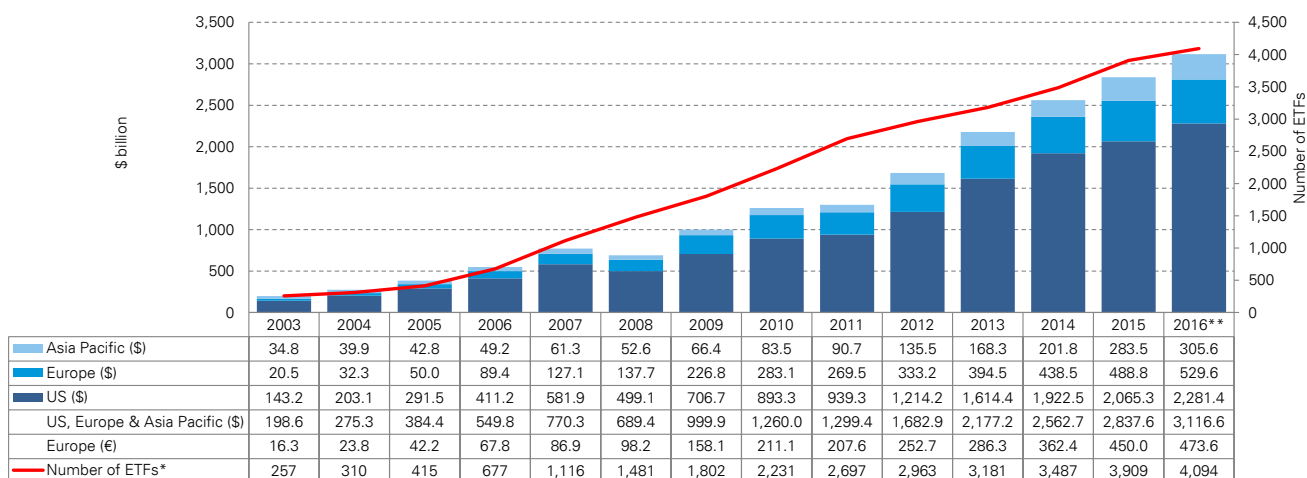
Source: Deutsche Bank, Bloomberg Finance LP, Reuters.  
\*Number of ETPs at the end of the year is net of delistings for the period.  
\*\* As of last month





Figure 11: Global ETF regional asset growth

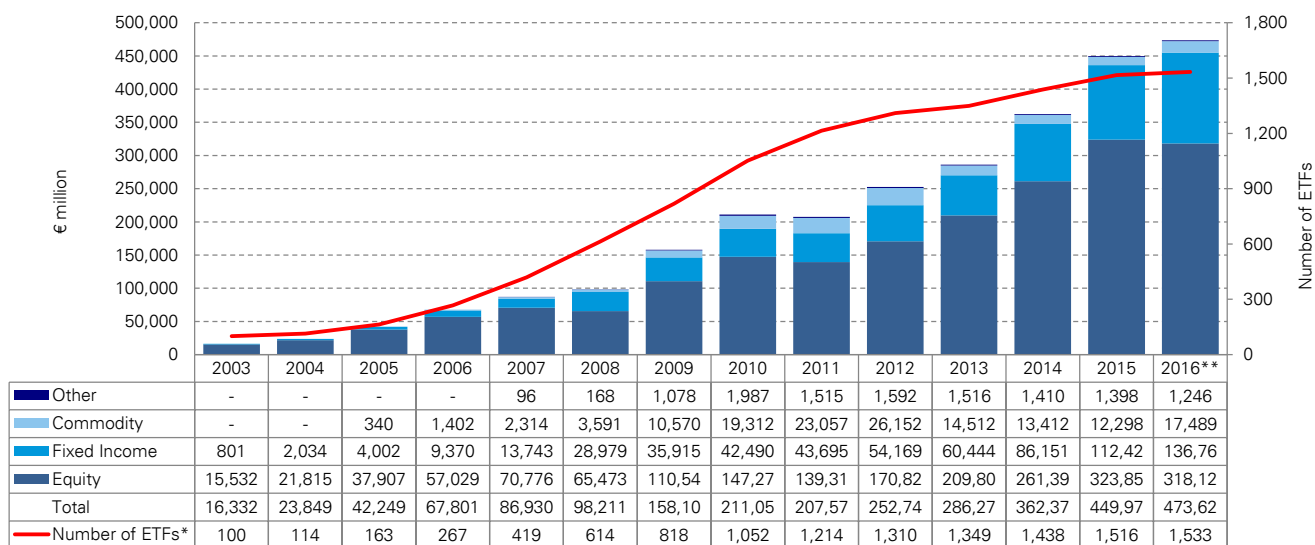
| ETFs | Global |



Source: Deutsche Bank, Bloomberg Finance LP, Reuters.  
\*Number of ETFs at the end of the year is net of delistings for the period.  
\*\* As of last month

Figure 12: European ETF asset growth by asset class

| ETFs | Europe |

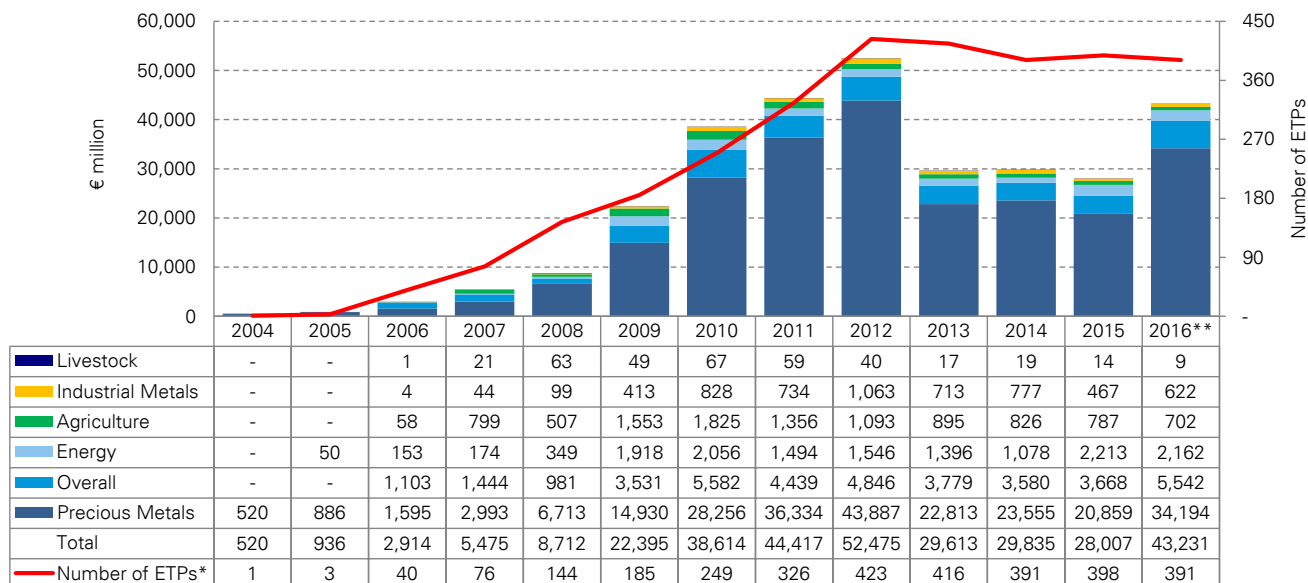


Source: Deutsche Bank, Bloomberg Finance LP, Reuters.  
\*Number of ETFs at the end of the year is net of delistings for the period.  
\*\* As of last month



Figure 13: European Commodity ETP (ETF & ETC) asset growth by segment

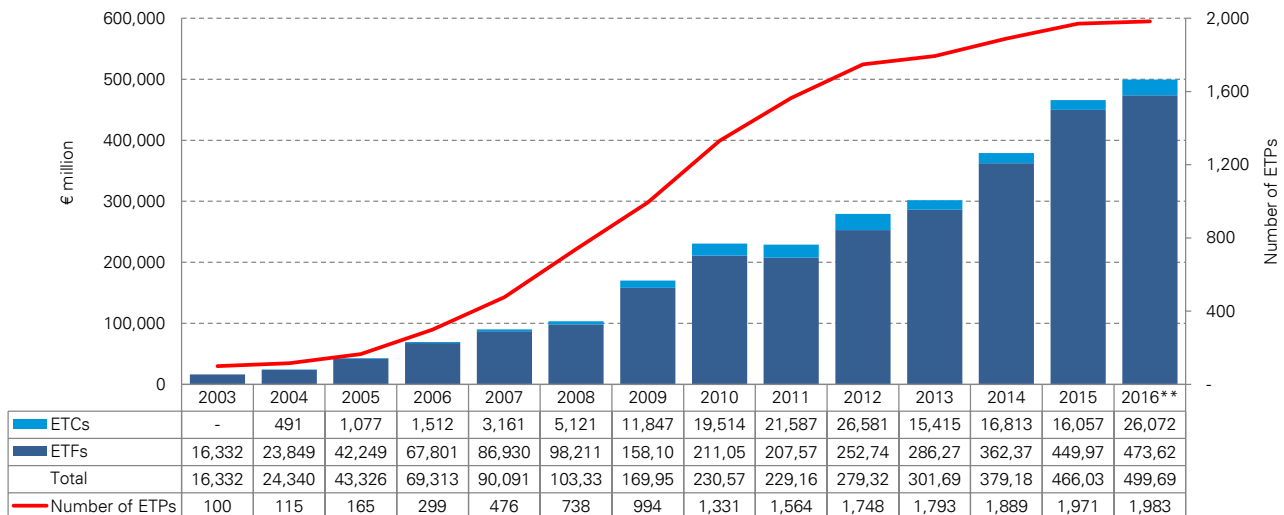
| ETPs | Europe |



Source: Deutsche Bank, Bloomberg Finance LP, Reuters.  
\*Number of ETPs at the end of the year is net of delistings for the period.  
\*\* As of last month

Figure 14: European ETPs (ETF & ETC) asset growth

| ETPs | Europe |



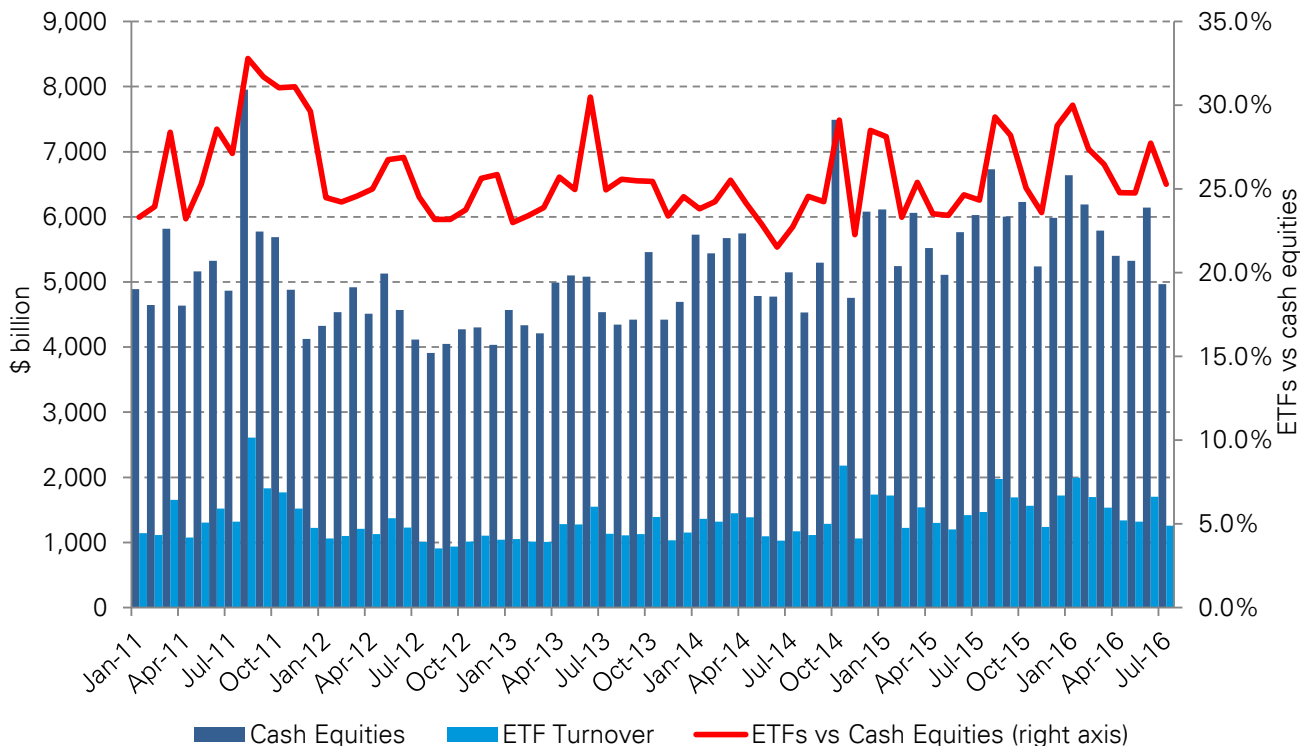
Source: Deutsche Bank, Bloomberg Finance LP, Reuters.  
\*Number of ETPs at the end of the year is net of delistings for the period.  
\*\* As of last month



## ETFs vs. Cash Equities

Figure 15: ETFs vs. cash equities turnover – US market

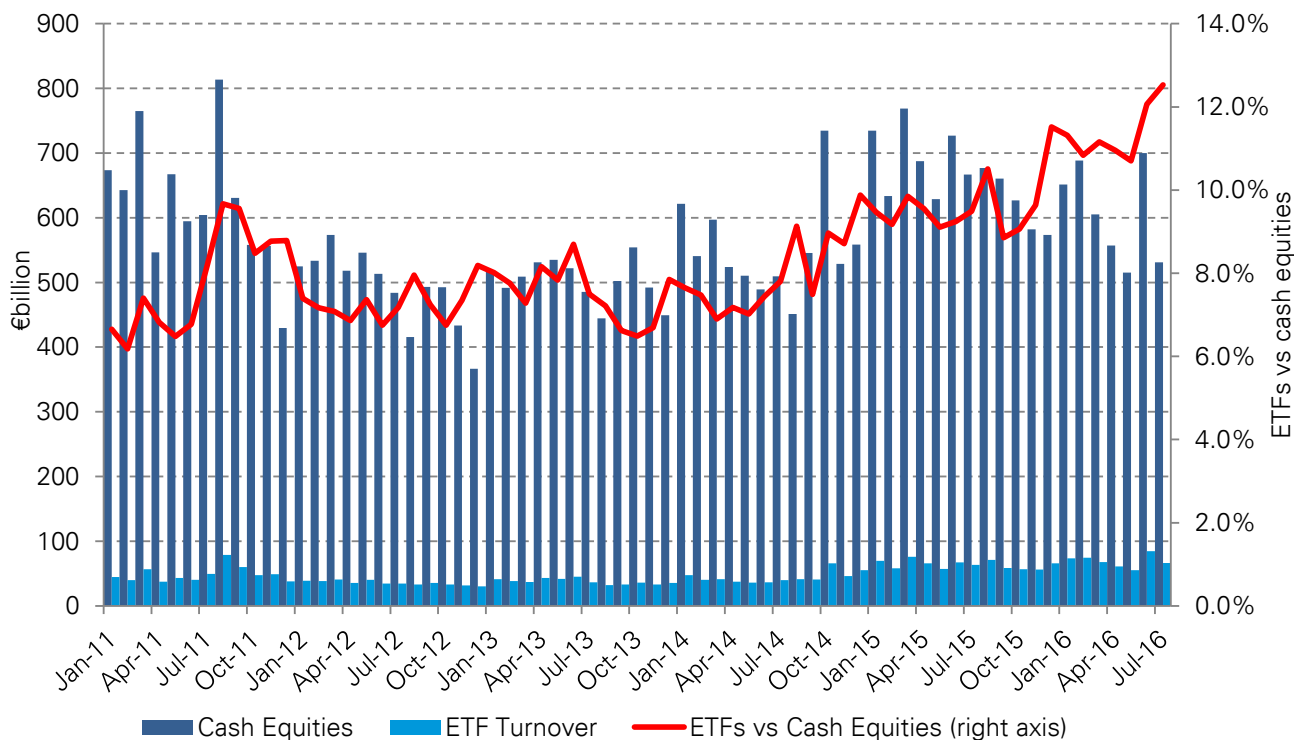
| ETFs | US |



Source: Deutsche Bank, Bloomberg Finance LP, Reuters

Figure 16: ETFs vs. cash equities turnover – European market

| ETFs | Europe |

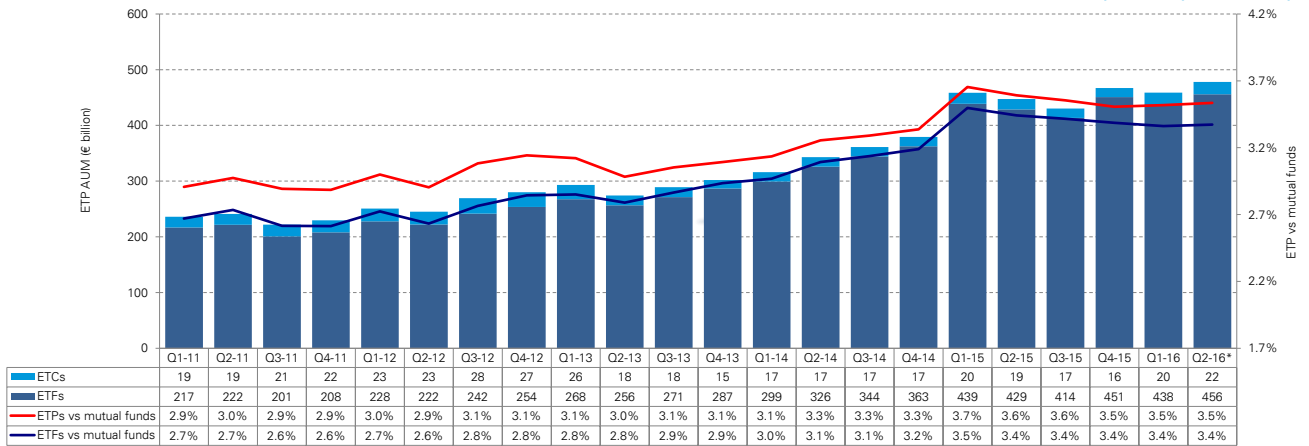


Source: Deutsche Bank, Bloomberg Finance LP, Reuters



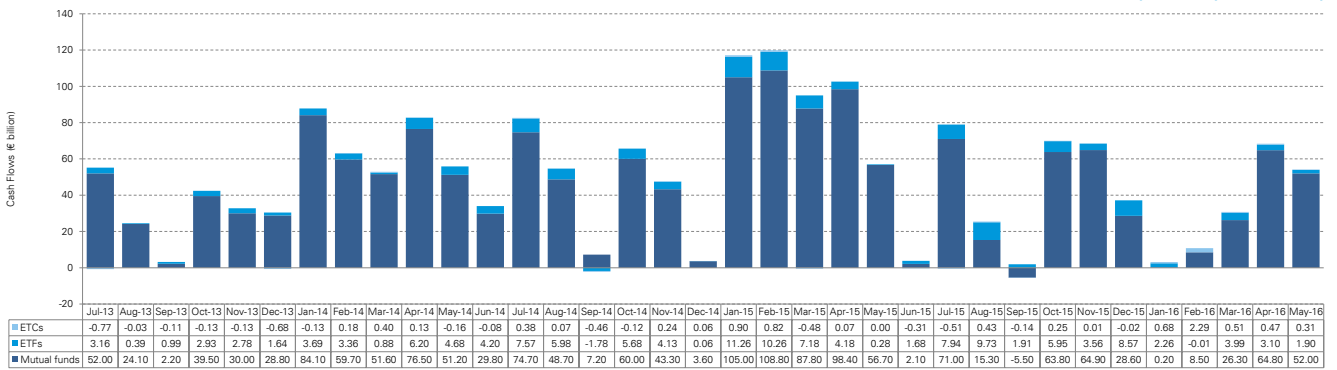
## ETFs vs. Unlisted Mutual Funds

Figure 17: European ETP vs mutual fund assets | ETPs | Europe |



\*Data as of 31-May-2016.  
Source: Deutsche Bank, European Fund Management Association (EFAMA), Reuters, Bloomberg Finance LP

Figure 18: European ETP vs mutual fund cash flows | ETPs | Europe |

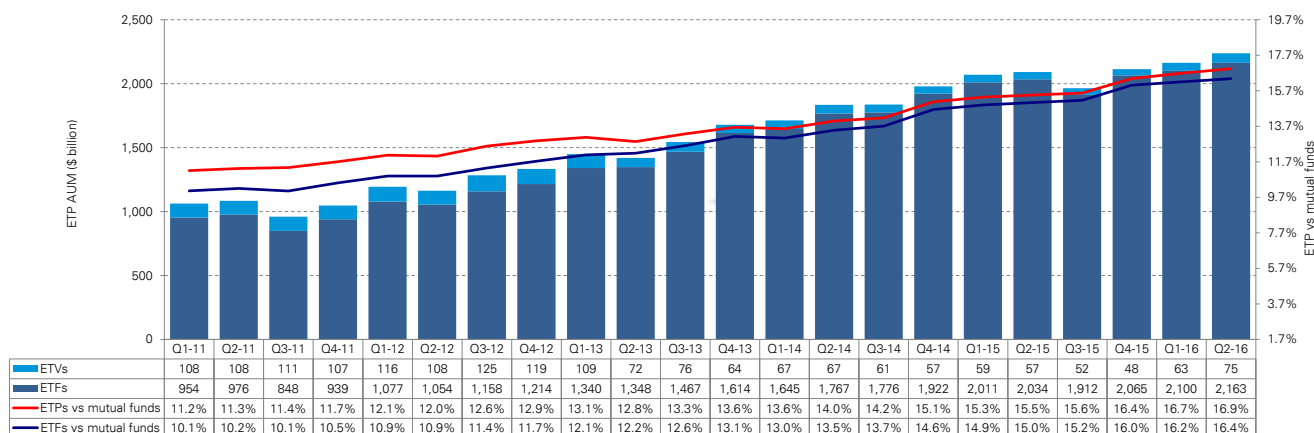


Source: Deutsche Bank, European Fund Management Association (EFAMA), Reuters, Bloomberg Finance LP



Figure 19: US ETP vs mutual fund assets

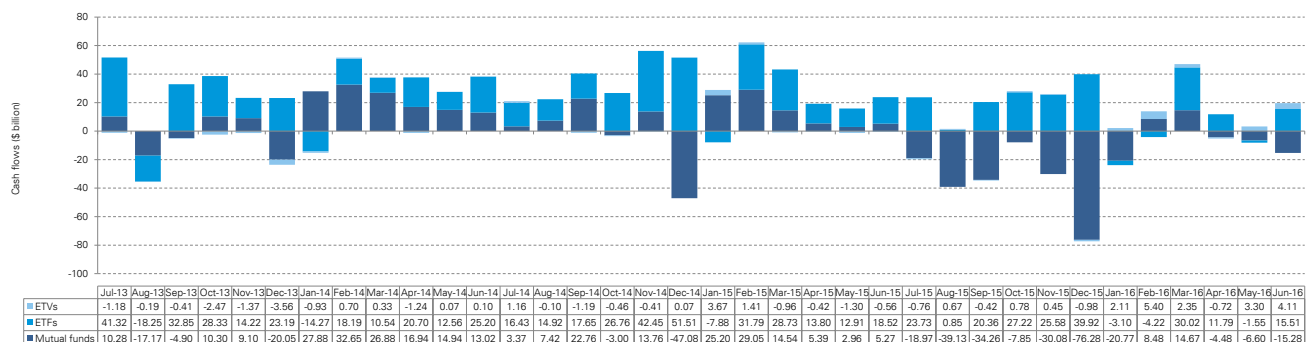
| ETPs | US |



Source: Deutsche Bank, Bloomberg Finance LP, ICI

Figure 20: US ETP vs mutual fund cash flows

| ETPs | US |



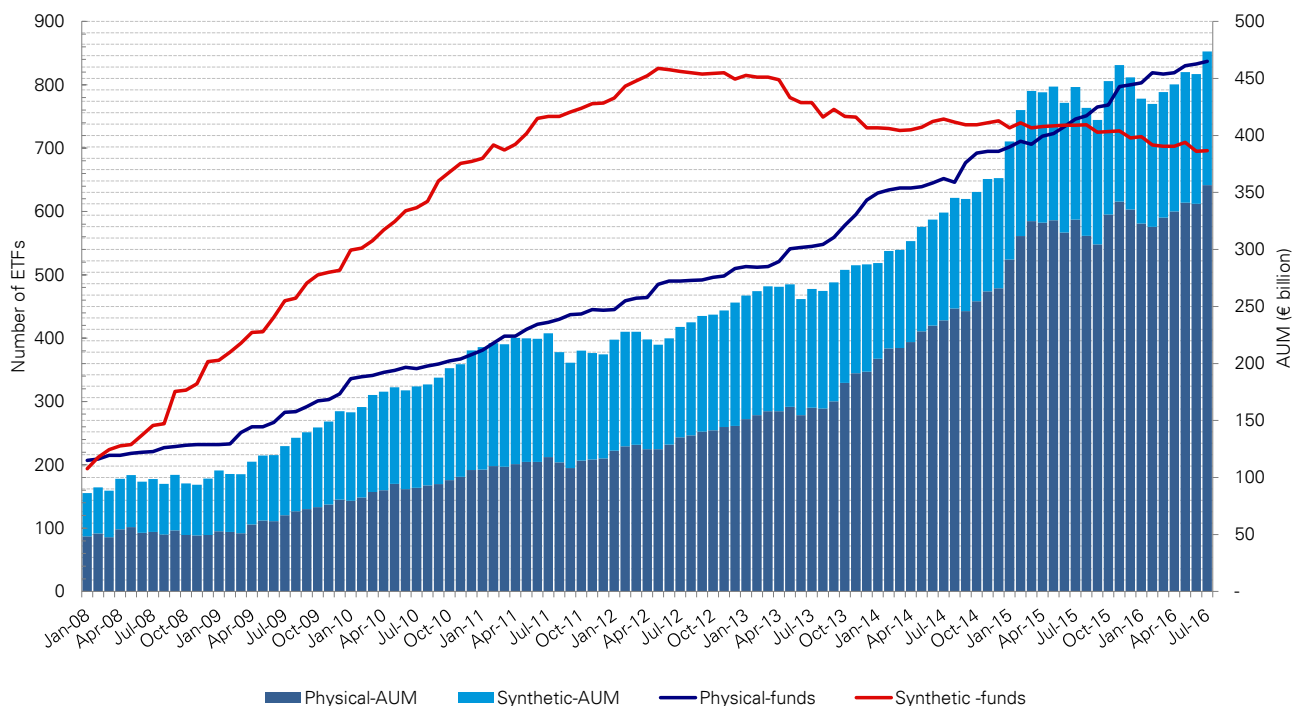
Source: Deutsche Bank, Bloomberg Finance LP, ICI



## European ETF Industry Replication Structure Composition (Synthetic vs. Physical)

Figure 21: Historical Composition by ETF Structure

| ETFs | Europe |



Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 22: European AUM ETF market historical asset class analysis by replication technique

| ETFs | Europe |

| AUM (€ million)                  | Physical       | Synthetic      | Physical       | Synthetic      | Physical       | Synthetic      |
|----------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                                  | 2015           |                | 2016*          |                | Jul-16         |                |
| Equity                           | 239,101        | 85,286         | 232,868        | 85,259         | 232,868        | 85,259         |
| Fixed Income                     | 87,026         | 26,050         | 110,834        | 25,928         | 110,834        | 25,928         |
| Commodity                        | 8,718          | 3,580          | 12,206         | 5,284          | 12,206         | 5,284          |
| Others                           | 396            | 1,003          | 444            | 802            | 444            | 802            |
| <b>Total</b>                     | <b>335,241</b> | <b>115,920</b> | <b>356,351</b> | <b>117,273</b> | <b>356,351</b> | <b>117,273</b> |
| <b>ETFs (number of products)</b> |                |                |                |                |                |                |
| Equity                           | 557            | 531            | 583            | 504            | 583            | 504            |
| Fixed Income                     | 203            | 155            | 225            | 157            | 225            | 157            |
| Commodity                        | 22             | 28             | 22             | 26             | 22             | 26             |
| Others                           | 9              | 13             | 7              | 9              | 7              | 9              |
| <b>Total</b>                     | <b>791</b>     | <b>727</b>     | <b>837</b>     | <b>696</b>     | <b>837</b>     | <b>696</b>     |
| <b>Cash Flows (€ million)</b>    |                |                |                |                |                |                |
| Equity                           | 36,258         | 9,398          | -2,658         | 1,941          | 1,485          | 620            |
| Fixed Income                     | 19,936         | 6,800          | 21,122         | -94            | 5,348          | -404           |
| Commodity                        | -815           | 958            | 1,111          | 1,653          | 183            | 918            |
| Others                           | 47             | -89            | 37             | -154           | 6              | 7              |
| <b>Total</b>                     | <b>55,426</b>  | <b>17,068</b>  | <b>19,613</b>  | <b>3,345</b>   | <b>7,021</b>   | <b>1,142</b>   |

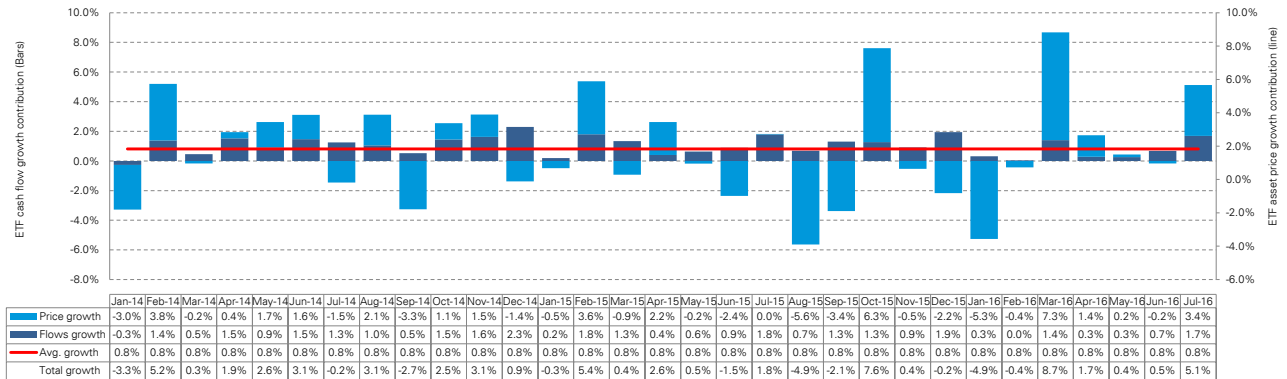
\*Year-to-date (upto 29-Jul-2016) numbers have been provided.  
Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



## Industry Growth Analysis

Figure 23: Global ETF Industry growth attribution

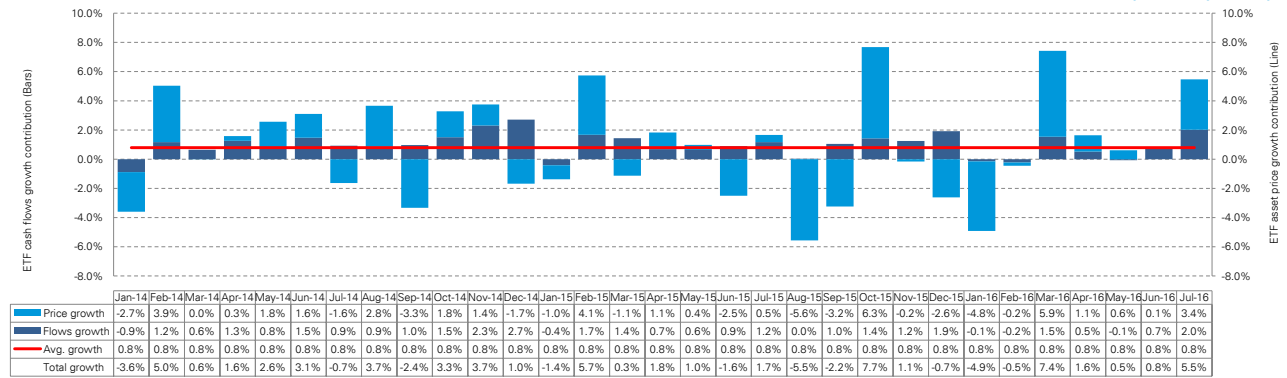
| ETFs | Global |



Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 24: US ETF Industry growth attribution

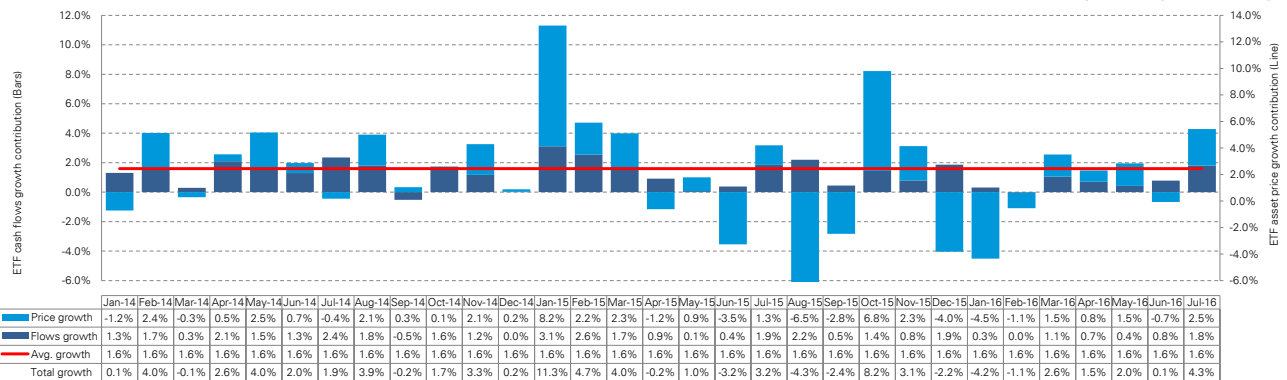
| ETFs | US |



Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 25: European ETF Industry growth attribution

| ETFs | Europe |

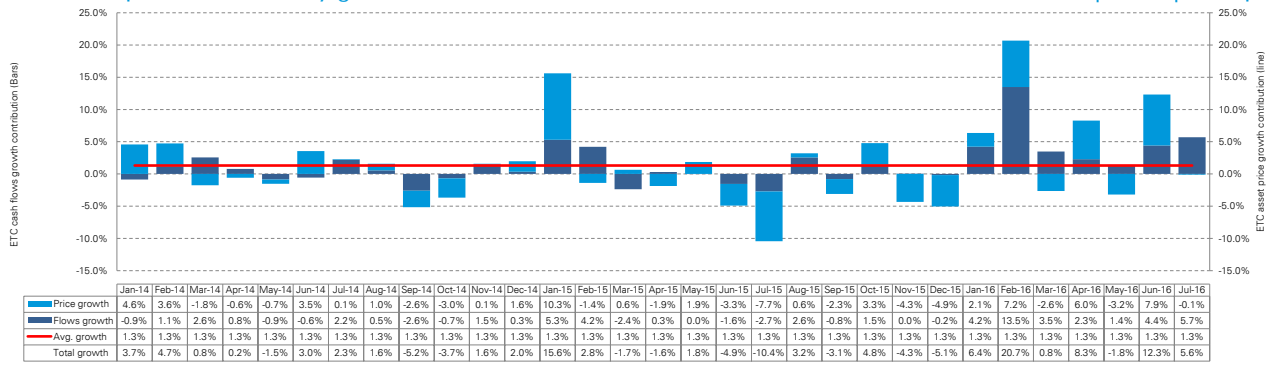


Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 26: European ETC Industry growth attribution

| ETCs | Europe |



Source: Deutsche Bank, Bloomberg Finance LP, Reuters.





## 3. Cash Flow Analysis

### Regional Cash Flow Analysis

**Figure 27: Global ETP cash flows by region and asset class** | ETPs | Global |

All figures in \$ million except where otherwise stated

| Asset Class      | Jul-16        |               |              |               |               | Jun-16        |              |              |            |               | YTD            |               |               |               |                |
|------------------|---------------|---------------|--------------|---------------|---------------|---------------|--------------|--------------|------------|---------------|----------------|---------------|---------------|---------------|----------------|
|                  | US            | EU (\$)       | EU (€)       | Asia          | Total         | US            | EU (\$)      | EU (€)       | Asia       | Total         | US             | EU (\$)       | EU (€)        | Asia          | Total          |
| <b>ETFs</b>      |               |               |              |               |               |               |              |              |            |               |                |               |               |               |                |
| Equity           | 32,707        | 2,337         | 2,105        | -684          | 34,360        | 6,715         | 2,163        | 1,946        | 7,009      | 15,888        | 31,342         | -902          | -717          | 22,081        | 52,521         |
| Fixed income     | 10,825        | 5,473         | 4,944        | -2,475        | 13,823        | 8,446         | 1,516        | 1,339        | -6,482     | 3,480         | 60,502         | 23,504        | 21,029        | -2,871        | 81,135         |
| Commodity        | 44            | 1,219         | 1,101        | 474           | 1,736         | 30            | 203          | 183          | 63         | 296           | 450            | 3,084         | 2,764         | 1,225         | 4,760          |
| Currency         | 2             | 0             | 0            | 38            | 40            | 14            | 0            | 0            | 52         | 66            | -30            | 0             | 0             | 95            | 66             |
| Multi Asset      | 150           | -19           | -17          | -1            | 130           | 345           | -1           | -1           | 0          | 344           | 70             | -20           | -18           | 49            | 100            |
| Alternative      | -26           | 33            | 30           | 56            | 62            | -41           | 20           | 18           | -33        | -55           | -179           | -111          | -98           | 234           | -56            |
| <b>Total</b>     | <b>43,701</b> | <b>9,043</b>  | <b>8,163</b> | <b>-2,592</b> | <b>50,152</b> | <b>15,509</b> | <b>3,900</b> | <b>3,484</b> | <b>609</b> | <b>20,019</b> | <b>92,156</b>  | <b>25,555</b> | <b>22,958</b> | <b>20,814</b> | <b>138,525</b> |
| <b>ETCs/ETVs</b> |               |               |              |               |               |               |              |              |            |               |                |               |               |               |                |
| Commodity        | 1,824         | 1,553         | 1,403        | 0             | 3,377         | 3,925         | 1,119        | 1,004        | 10         | 5,054         | 17,761         | 7,385         | 6,645         | -3            | 25,143         |
| Currency         | 123           | 5             | 4            | 0             | 127           | 213           | -37          | -33          | 0          | 176           | -304           | 6             | 3             | 0             | -298           |
| Alternative      | 44            | 0             | 0            | 0             | 44            | -27           | 0            | 0            | 0          | -27           | 1,090          | 0             | 0             | 0             | 1,090          |
| <b>Total</b>     | <b>1,991</b>  | <b>1,557</b>  | <b>1,407</b> | <b>0</b>      | <b>3,548</b>  | <b>4,111</b>  | <b>1,082</b> | <b>971</b>   | <b>10</b>  | <b>5,203</b>  | <b>18,547</b>  | <b>7,391</b>  | <b>6,648</b>  | <b>-3</b>     | <b>25,935</b>  |
| <b>ETPs</b>      |               |               |              |               |               |               |              |              |            |               |                |               |               |               |                |
| Equity           | 32,707        | 2,337         | 2,105        | -684          | 34,360        | 6,715         | 2,163        | 1,946        | 7,009      | 15,888        | 31,342         | -902          | -717          | 22,081        | 52,521         |
| Fixed income     | 10,825        | 5,473         | 4,944        | -2,475        | 13,823        | 8,446         | 1,516        | 1,339        | -6,482     | 3,480         | 60,502         | 23,504        | 21,029        | -2,871        | 81,135         |
| Commodity        | 1,868         | 2,772         | 2,504        | 474           | 5,113         | 3,955         | 1,322        | 1,187        | 73         | 5,350         | 18,211         | 10,470        | 9,409         | 1,222         | 29,903         |
| Currency         | 124           | 5             | 4            | 38            | 167           | 227           | -37          | -33          | 52         | 242           | -334           | 6             | 3             | 95            | -233           |
| Multi Asset      | 150           | -19           | -17          | -1            | 130           | 345           | -1           | -1           | 0          | 344           | 70             | -20           | -18           | 49            | 100            |
| Alternative      | 18            | 33            | 30           | 56            | 106           | -68           | 20           | 18           | -33        | -82           | 911            | -111          | -98           | 234           | 1,034          |
| <b>Total</b>     | <b>45,692</b> | <b>10,600</b> | <b>9,570</b> | <b>-2,592</b> | <b>53,700</b> | <b>19,620</b> | <b>4,983</b> | <b>4,455</b> | <b>619</b> | <b>25,221</b> | <b>110,703</b> | <b>32,946</b> | <b>29,607</b> | <b>20,811</b> | <b>164,460</b> |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

### Asset Class Cash Flow Analysis

**Figure 28: European Equity ETF cash flow summary (€ million)** | ETFs | Europe |

| Equity Cash Flows     | Jul-16       |             | Jun-16       |             | YTD         |              |
|-----------------------|--------------|-------------|--------------|-------------|-------------|--------------|
|                       | Net Flows    | % of AUM    | Net Flows    | % of AUM    | Net Flows   | % of AUM     |
| Developed Markets     | -748         | -0.4%       | 301          | 0.1%        | -10,138     | -4.3%        |
| Emerging Markets      | 1,381        | 5.5%        | -189         | -0.8%       | 3,471       | 15.6%        |
| Global Markets        | 130          | 2.6%        | 65           | 1.4%        | 174         | 3.5%         |
| Sector                | -150         | -0.8%       | 551          | 3.0%        | -163        | -0.8%        |
| Capitalization        | -205         | -3.5%       | -214         | -3.4%       | -1,112      | -15.6%       |
| Strategy              | 1,189        | 6.6%        | 1,252        | 7.4%        | 6,042       | 45.5%        |
| Style                 | 561          | 3.4%        | 82           | 0.5%        | 758         | 4.6%         |
| Thematic              | -53          | -1.1%       | 99           | 2.2%        | 250         | 6.4%         |
| <b>Total equities</b> | <b>2,105</b> | <b>0.7%</b> | <b>1,946</b> | <b>0.6%</b> | <b>-717</b> | <b>-0.2%</b> |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



| Figure 28A: European Equity ETF cash flow summary - A (€ Million) |           |          |           |          | ETFs   Europe |          |
|---|-----------|----------|-----------|----------|---------------|----------|
| Equity Cash Flows   | Jul-16    |          | Jun-16    |          | YTD           |          |
| All figures in € million  | Net Flows | % of AUM | Net Flows | % of AUM | Net Flows     | % of AUM |
| <b>Sector</b>   | -150      | -0.8%    | 551       | 3.0%     | -163          | -0.8%    |
| Consumer discretionary  | -85       | -10.2%   | 6         | 0.7%     | -39           | -4.4%    |
| Consumer staples  | 50        | 5.8%     | -25       | -2.9%    | -81           | -8.2%    |
| Energy  | 41        | 2.4%     | -7        | -0.4%    | 48            | 3.2%     |
| Financials  | -181      | -2.1%    | 531       | 5.8%     | -133          | -1.3%    |
| Healthcare  | -33       | -1.6%    | 80        | 4.1%     | -59           | -2.9%    |
| Industrials   | -34       | -6.4%    | 34        | 6.3%     | 0             | 0.0%     |
| Information Technology  | 26        | 2.0%     | -34       | -2.5%    | -33           | -2.3%    |
| Materials   | -21       | -2.7%    | -5        | -0.7%    | 37            | 5.5%     |
| Telecommunications  | 36        | 5.1%     | -19       | -2.4%    | 36            | 4.6%     |
| Utilities   | 50        | 10.8%    | -10       | -2.1%    | 61            | 13.6%    |
| <b>Capitalization</b>   | -205      | -3.5%    | -214      | -3.4%    | -1,112        | -15.6%   |
| Large Cap   | 2         | 0.6%     | 1         | 0.2%     | -6            | -1.7%    |
| Mid Cap   | -157      | -9.0%    | -135      | -6.8%    | -656          | -27.6%   |
| Small Cap   | -50       | -1.3%    | -80       | -2.0%    | -449          | -10.3%   |
| <b>Strategy</b>   | 1,189     | 6.6%     | 1,252     | 7.4%     | 6,042         | 45.5%    |
| Fundamental   | -154      | -10.4%   | -28       | -1.8%    | -189          | -12.3%   |
| Leveraged Long  | 1         | 0.1%     | 43        | 2.3%     | -12           | -0.6%    |
| Leveraged Short   | -10       | -0.9%    | 66        | 6.4%     | 306           | 38.3%    |
| Options Strategy  | 0         | 0.0%     | 0         | 0.0%     | 0             | 0.0%     |
| Quantitative  | 1,439     | 12.0%    | 1,128     | 10.5%    | 5,637         | 76.9%    |
| Short   | -88       | -4.9%    | 43        | 2.5%     | 300           | 21.3%    |
| <b>Style</b>  | 561       | 3.4%     | 82        | 0.5%     | 758           | 4.6%     |
| Dividend  | 755       | 5.0%     | 98        | 0.6%     | 991           | 6.7%     |
| Growth  | 4         | 2.0%     | -17       | -8.1%    | -91           | -30.4%   |
| Value   | -198      | -15.2%   | 0         | 0.0%     | -142          | -10.5%   |
| <b>Thematic</b>   | -53       | -1.1%    | 99        | 2.2%     | 250           | 6.4%     |
| Commodities   | -22       | -1.8%    | -22       | -2.1%    | -47           | -6.9%    |
| Faith   | 10        | 4.8%     | 2         | 1.1%     | 17            | 8.9%     |
| Other Theme   | 92        | 9.7%     | 5         | 0.5%     | 135           | 15.6%    |
| Sustainability  | -132      | -5.5%    | 114       | 4.9%     | 145           | 6.7%     |
| <b>Total</b>  | 1,342     | 2.1%     | 1,769     | 2.81%    | 5,776         | 9.6%     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



| Figure 28B: European Equity ETF cash flow summary – B (€ million) |           |          |           |          |           | ETFs   Europe |  |
|---|-----------|----------|-----------|----------|-----------|---------------|--|
| Equity Cash Flows   | Jul-16    |          | Jun-16    |          | YTD       |               |  |
| All figures in € million  | Net Flows | % of AUM | Net Flows | % of AUM | Net Flows | % of AUM      |  |
| <b>Developed Markets</b>  |           |          |           |          |           |               |  |
| <b>Europe</b>   | -2,722    | -2.4%    | -499      | -0.4%    | -11,560   | -8.7%         |  |
| Austria   | 1         | 0.3%     | -10       | -4.1%    | -143      | -36.1%        |  |
| Belgium   | -5        | -11.2%   | 5         | 12.1%    | 0         | -0.6%         |  |
| Finland   | -2        | -1.1%    | 0         | 0.0%     | -7        | -4.2%         |  |
| France  | -28       | -0.6%    | -74       | -1.5%    | -322      | -6.4%         |  |
| Germany   | -423      | -2.4%    | 55        | 0.3%     | -1,911    | -8.9%         |  |
| Greece  | 2         | 1.1%     | -7        | -4.1%    | -20       | -10.2%        |  |
| Ireland   | 0         | 0.0%     | 0         | 0.0%     | 0         | 0.0%          |  |
| Italy   | -157      | -8.6%    | -81       | -3.9%    | -678      | -22.9%        |  |
| Netherlands   | -35       | -6.0%    | 26        | 4.5%     | -86       | -13.2%        |  |
| Norway  | 0         | 0.0%     | -16       | -6.1%    | 5         | 2.1%          |  |
| Portugal  | -20       | -31.3%   | 0         | 0.0%     | -20       | -26.7%        |  |
| Spain   | -102      | -8.5%    | -32       | -2.3%    | -392      | -23.1%        |  |
| Sweden  | 65        | 6.1%     | -11       | -1.0%    | -167      | -11.9%        |  |
| Switzerland   | -247      | -2.6%    | 122       | 1.3%     | -251      | -2.4%         |  |
| UK  | -88       | -0.6%    | 200       | 1.4%     | 1,443     | 11.0%         |  |
| Europe broad  | -1,681    | -2.8%    | -678      | -1.0%    | -9,009    | -12.0%        |  |
| <b>Americas</b>   |           |          |           |          |           |               |  |
| US  | 787       | 1.3%     | 570       | 1.0%     | 2,442     | 4.2%          |  |
| Canada  | 49        | 4.7%     | 14        | 1.4%     | 188       | 24.4%         |  |
| North America   | 21        | 0.0%     | 169       | 0.0%     | -76       | 0.0%          |  |
| <b>Asia</b>   |           |          |           |          |           |               |  |
| Australia   | 399       | 58.7%    | -13       | -1.8%    | 288       | 36.3%         |  |
| Hong Kong   | 10        | 6.1%     | -2        | -1.4%    | -78       | -29.8%        |  |
| Japan   | 109       | 0.8%     | -365      | -2.4%    | -3,356    | -16.6%        |  |
| Singapore   | 2         | 5.5%     | 2         | 5.8%     | -18       | -29.2%        |  |
| Asia Pacific broad  | 105       | 6.5%     | 59        | 3.8%     | 290       | 20.1%         |  |
| <b>Global</b>   |           |          |           |          |           |               |  |
| Broad indices   | 492       | 2.4%     | 365       | 1.8%     | 1,737     | 9.0%          |  |
| <b>DM Total</b>   | -748      | -0.4%    | 301       | 0.1%     | -10,143   | -4.3%         |  |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



| Figure 28C: European Equity ETF cash flow summary – C (€ million) |           |          |           |          |           | ETFs   Europe |  |
|---|-----------|----------|-----------|----------|-----------|---------------|--|
| Equity Cash Flows   | Jul-16    |          | Jun-16    |          | YTD       |               |  |
| All figures in € million  | Net Flows | % of AUM | Net Flows | % of AUM | Net Flows | % of AUM      |  |
| <b>Emerging Markets</b>   |           |          |           |          |           |               |  |
| <b>BRIC</b>   | -41       | -0.8%    | -270      | -5.1%    | -643      | -10.8%        |  |
| Brazil  | 5         | 0.8%     | -57       | -9.6%    | -86       | -16.3%        |  |
| Russia  | -6        | -0.8%    | -52       | -6.8%    | -66       | -9.6%         |  |
| India   | -4        | -0.2%    | -22       | -1.3%    | -111      | -6.1%         |  |
| China   | -37       | -1.6%    | -140      | -6.0%    | -381      | -13.0%        |  |
| <b>Latin America</b>  | 74        | 5.5%     | -39       | -3.1%    | 158       | 15.0%         |  |
| Chile   | 0         | 0.0%     | 0         | 0.0%     | 0         | 0.0%          |  |
| Mexico  | 2         | 1.5%     | -9        | -6.0%    | -9        | -5.7%         |  |
| LATAM broad   | 72        | 12.7%    | -30       | -5.6%    | 167       | 43.8%         |  |
| <b>Asia</b>   | 125       | 1.7%     | -30       | -0.4%    | 157       | 1.9%          |  |
| Bangladesh  | 1         | 6.7%     | 1         | 2.8%     | 0         | 1.4%          |  |
| Indonesia   | 23        | 16.8%    | -1        | -0.8%    | 25        | 20.7%         |  |
| Malaysia  | -2        | -3.8%    | -13       | -22.0%   | -3        | -6.0%         |  |
| Pakistan  | 7         | 30.4%    | 2         | 7.7%     | 8         | 36.7%         |  |
| Philippines   | 0         | 0.0%     | 7         | 13.7%    | 15        | 38.4%         |  |
| South Korea   | 10        | 1.5%     | -13       | -2.0%    | -129      | -15.9%        |  |
| Taiwan  | 20        | 4.5%     | 0         | -0.1%    | -118      | -21.0%        |  |
| Thailand  | 1         | 3.1%     | 0         | 0.0%     | 8         | 28.1%         |  |
| Vietnam   | 0         | 0.1%     | -3        | -0.8%    | -23       | -7.1%         |  |
| Asia Pacific broad  | 64        | 3.8%     | -9        | -0.6%    | 375       | 26.9%         |  |
| <b>EMEA</b>   | 40        | 4.7%     | -44       | -4.9%    | -8        | -0.9%         |  |
| Kuwait  | 0         | 0.0%     | 0         | 0.0%     | -2        | -23.9%        |  |
| Poland  | 9         | 18.6%    | 1         | 2.7%     | -3        | -4.2%         |  |
| South Africa  | 6         | 6.5%     | 13        | 18.6%    | 22        | 31.7%         |  |
| Turkey  | 5         | 2.1%     | -18       | -7.2%    | -71       | -25.0%        |  |
| Europe broad  | 19        | 5.8%     | -42       | -11.3%   | 30        | 9.4%          |  |
| Middle East & Africa  | 2         | 1.2%     | 1         | 0.9%     | 15        | 11.6%         |  |
| <b>Global Markets</b>   | 1,183     | 8.0%     | 195       | 1.4%     | 3,808     | 32.9%         |  |
| Global  | 1,183     | 8.0%     | 195       | 1.4%     | 3,808     | 32.9%         |  |
| <b>EM Total</b>   | 1,381     | 5.5%     | -189      | -0.8%    | 3,471     | 15.6%         |  |
| <b>Total (EM + DM)</b>  | 633       | 0.3%     | 112       | 0.0%     | -6,671    | -2.6%         |  |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



| Figure 29: European Fixed Income ETF cash flows (€ million) |              |             |              |             |               | ETFs   Europe |  |
|---|--------------|-------------|--------------|-------------|---------------|---------------|--|
| Fixed Income Cash   | Jul-16       |             | Jun-16       |             | YTD           |               |  |
| All figures in € million                                    | Net Flows    | % of AUM    | Net Flows    | % of AUM    | Net Flows     | % of AUM      |  |
| Overall   | 189          | 2.0%        | 69           | 0.8%        | 1,293         | 16.2%         |  |
| Corporates  | 2,626        | 4.8%        | 1,082        | 2.0%        | 12,691        | 29.3%         |  |
| Covered Bonds   | 69           | 2.0%        | 1            | 0.0%        | 335           | 11.0%         |  |
| Credit Exposure   | -121         | -27.0%      | 122          | 37.1%       | 50            | 17.9%         |  |
| Sovereign   | 2,271        | 3.7%        | 48           | 0.1%        | 6,937         | 12.6%         |  |
| Money Market  | -90          | -3.3%       | 16           | 0.6%        | -278          | -9.5%         |  |
| <b>Total Fixed Income</b>                                   | <b>4,944</b> | <b>3.8%</b> | <b>1,339</b> | <b>1.0%</b> | <b>21,029</b> | <b>18.7%</b>  |  |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 30: European Commodity ETP cash flow summary (€ million) | ETPs | Europe |

| Commodity Cash Flows       | Jul-16    |          | Jun-16    |          | YTD       |          |
|----------------------------|-----------|----------|-----------|----------|-----------|----------|
|                            | Net Flows | % of AUM | Net Flows | % of AUM | Net Flows | % of AUM |
| <b>Overall</b>             | 929       | 18.9%    | 36        | 0.8%     | 1,806     | 49.2%    |
| Overall                    | 901       | 19.1%    | 37        | 0.8%     | 1,811     | 52.6%    |
| Overall ex Energy          | 29        | 14.7%    | 0         | -0.2%    | -5        | -2.2%    |
| Overall Light Energy       | 0         | -1.7%    | 0         | -6.3%    | -1        | -11.3%   |
| Overall Ultra Light Energy | 0         | 0.0%     | 0         | 0.0%     | 0         | 0.0%     |
| <b>Agriculture</b>         | 34        | 4.8%     | -40       | -5.5%    | -79       | -10.0%   |
| Overall                    | -6        | -1.5%    | -28       | -6.6%    | -79       | -18.1%   |
| Cocoa                      | 2         | 13.4%    | 0         | 0.2%     | 3         | 22.9%    |
| Coffee                     | -7        | -8.7%    | -6        | -9.1%    | -16       | -19.5%   |
| Corn                       | 11        | 33.0%    | -3        | -6.9%    | 9         | 24.6%    |
| Cotton                     | -1        | -7.6%    | 0         | -1.5%    | -21       | -66.9%   |
| Grains                     | 6         | 20.1%    | 0         | 0.6%     | 2         | 7.8%     |
| Softs                      | 0         | 8.8%     | 0         | 0.0%     | -1        | -17.2%   |
| Soybean Oil                | 0         | 5.1%     | 0         | -2.4%    | 1         | 20.7%    |
| Soybeans                   | 1         | 13.1%    | -1        | -6.4%    | -1        | -12.0%   |
| Sugar                      | 0         | -1.2%    | -8        | -19.7%   | -19       | -40.0%   |
| Wheat                      | 28        | 30.9%    | 5         | 5.4%     | 43        | 48.0%    |
| <b>Energy</b>              | 27        | 1.1%     | -91       | -3.4%    | 34        | 1.5%     |
| Overall                    | -32       | -15.6%   | -2        | -1.1%    | -1        | -0.8%    |
| Carbon                     | 0         | 11.3%    | 0         | 0.0%     | 0         | 9.9%     |
| Crude Oil                  | 60        | 2.7%     | -70       | -3.0%    | 40        | 2.1%     |
| Gasoline                   | 0         | -4.8%    | 0         | -4.2%    | -3        | -24.0%   |
| Heating Oil                | 0         | -2.7%    | 2         | 43.5%    | 0         | -6.5%    |
| Natural Gas                | 0         | -0.2%    | -20       | -15.9%   | -2        | -1.1%    |
| Electricity                | 0         | 0.0%     | 0         | 0.0%     | 0         | 0.0%     |
| Uranium                    | 0         | 0.0%     | 0         | 0.0%     | 0         | 0.0%     |
| <b>Industrial Metals</b>   | 110       | 22.3%    | 8         | 1.8%     | 123       | 26.3%    |
| Overall                    | 44        | 26.7%    | 31        | 25.4%    | 47        | 30.2%    |
| Aluminium                  | 21        | 33.5%    | -17       | -22.2%   | -2        | -2.1%    |
| Copper                     | 46        | 31.6%    | -6        | -4.2%    | 75        | 64.0%    |
| Lead                       | 0         | 3.4%     | 0         | 0.0%     | 0         | -7.1%    |
| Nickel                     | 0         | 0.0%     | 0         | 0.1%     | 6         | 6.4%     |
| Tin                        | -1        | -16.9%   | 1         | 15.5%    | 0         | -10.5%   |
| Zinc                       | 0         | 1.1%     | -1        | -6.1%    | -3        | -20.6%   |
| <b>Precious Metals</b>     | 1,402     | 4.4%     | 1,276     | 4.6%     | 7,529     | 36.1%    |
| Overall                    | 5         | 3.3%     | 5         | 3.3%     | 29        | 25.6%    |
| Gold                       | 1,552     | 5.6%     | 1,112     | 4.6%     | 7,339     | 41.7%    |
| Palladium                  | 9         | 1.8%     | 2         | 0.5%     | 5         | 1.1%     |
| Platinum                   | -45       | -5.4%    | 7         | 0.9%     | 3         | 0.4%     |
| Rhodium                    | 0         | 0.0%     | 0         | 0.0%     | -26       | -47.1%   |
| Silver                     | -120      | -4.2%    | 149       | 6.5%     | 179       | 9.4%     |
| <b>Livestock</b>           | 1         | 6.6%     | -1        | -11.8%   | -3        | -23.6%   |
| Overall                    | 0         | 0.5%     | 0         | -4.2%    | -2        | -39.5%   |
| Cattle                     | 0         | 3.2%     | 0         | 4.8%     | 0         | 23.4%    |
| Lean Hogs                  | 1         | 12.9%    | -1        | -23.0%   | -1        | -23.4%   |
| <b>Total</b>               | 2,504     | 6.2%     | 1,187     | 3.3%     | 9,409     | 33.6%    |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



## Product Rankings

Figure 31: Top 10 monthly Equity ETF inflows (€ million)

|   |            |              |                  | ETFs   Europe       |                   |           |
|---|------------|--------------|------------------|---------------------|-------------------|-----------|
| ETF Name                                      | BBG Ticker | Issuer       | Invest. Strategy | Current Month Flows | Prev. Month Flows | YTD Flows |
| Vanguard S&P 500 ETF                          | VUSA LN    | Vanguard     | Beta             | 399.9               | 452.2             | 886.2     |
| iShares MSCI Australia UCITS ETF              | SAUS LN    | BlackRock    | Beta             | 393.0               | -12.4             | 264.7     |
| iShares S&P 500 Minimum Volatility UCITS ETF  | SPMV LN    | BlackRock    | Beta             | 366.1               | 0.2               | 1,470.0   |
| SPDR S&P 500 UCITS ETF                        | SPY5 GY    | State Street | Beta             | 344.8               | -19.5             | 258.8     |
| iShares MSCI Emerging Markets UCITS ETF (Inc) | IEEM LN    | BlackRock    | Beta             | 342.4               | -55.6             | 502.7     |
| iShares MSCI Emerging Markets IMI UCITS ETF   | EMIM NA    | BlackRock    | Beta             | 321.1               | 169.8             | 1,301.3   |
| SPDR S&P US Dividend Aristocrats ETF          | SPYD GY    | State Street | Beta             | 297.2               | 66.0              | 272.6     |
| iShares Core MSCI World UCITS ETF (Acc)       | SWDA LN    | BlackRock    | Beta             | 282.6               | 37.3              | 1,299.5   |
| db x-trackers MSCI World Index UCITS ETF 1C   | XMWO GR    | Deutsche AM  | Beta             | 274.5               | 45.5              | 308.1     |
| Amundi ETF MSCI Emerging Markets UCITS ETF    | AEEM FP    | Amundi       | Beta             | 255.1               | 11.5              | 1,120.7   |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 32: Top 10 monthly Fixed Income ETF inflows (€ million)

|  |            |              |                  | ETFs   Europe       |                   |           |
|--|------------|--------------|------------------|---------------------|-------------------|-----------|
| ETF Name   | BBG Ticker | Issuer       | Invest. Strategy | Current Month Flows | Prev. Month Flows | YTD Flows |
| iShares Emerging Markets Local Government Bond UCITS ETF | SEML LN    | Blackrock    | Beta             | 627.4               | 10.8              | 1,349.3   |
| iShares JP Morgan \$ EM Bond EUR Hedged UCITS ETF        | EMBE LN    | BlackRock    | Beta             | 512.7               | 53.5              | 777.7     |
| iShares J.P. Morgan \$ Emerging Markets Bond UCITS ETF   | SEMB LN    | BlackRock    | Beta             | 494.2               | 243.5             | 1,319.7   |
| iShares \$ Treasury Bond 7-10yr UCITS ETF                | IDTM LN    | BlackRock    | Beta             | 392.6               | 9.1               | 629.1     |
| iShares US Aggregate Bond UCITS ETF                      | SUAG LN    | BlackRock    | Beta             | 334.9               | 114.4             | 808.9     |
| iShares \$ Corporate Bond UCITS ETF                      | LQDE LN    | BlackRock    | Beta             | 333.5               | 73.5              | 1,428.8   |
| iShares Euro High Yield Corporate Bond UCITS ETF         | IHYG LN    | BlackRock    | Beta             | 332.6               | -275.8            | 1,504.1   |
| iShares Euro Corporate Bond UCITS ETF                    | IEBC LN    | BlackRock    | Beta             | 304.7               | 91.1              | 837.5     |
| iShares Euro Ultrashort Bond UCITS ETF                   | ERNE LN    | BlackRock    | Beta             | 256.2               | 51.7              | 753.3     |
| SPDR Barclays Capital Emerging Market Local Bond ETF     | SYBM GY    | State Street | Beta             | 236.6               | 104.8             | 693.6     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 33: Top 10 monthly Commodity ETP inflows (€ million)

|   |            |                |                  | ETPs   Europe       |                   |           |
|---|------------|----------------|------------------|---------------------|-------------------|-----------|
| ETP Name  | BBG Ticker | Issuer         | Invest. Strategy | Current Month Flows | Prev. Month Flows | YTD Flows |
| iShares Diversified Commodity Swap UCITS ETF DE | DJCOMEX GR | BlackRock      | Beta             | 713.9               | -6.0              | 855.7     |
| ETFS Physical Gold                              | PHAU LN    | ETF Securities | Beta             | 706.0               | 209.1             | 1,571.2   |
| Gold Bullion Securities                         | GBS LN     | ETF Securities | Beta             | 229.7               | -49.8             | 1,177.2   |
| iShares Physical Gold ETC                       | SGLN LN    | Blackrock      | Beta             | 180.8               | 430.3             | 1,251.3   |
| Source Physical Gold ETC (P-ETC)                | SGLD LN    | Source         | Beta             | 151.4               | 277.6             | 1,449.5   |
| iShares Gold CHF Hedged CH                      | CSGLDC SW  | BlackRock      | Beta             | 101.8               | -30.0             | 106.1     |
| db Physical Gold ETC (EUR)                      | XAD5 GR    | Deutsche AM    | Beta             | 89.6                | 56.0              | 175.2     |
| ComStage ETF Commerzbank Commodity EW Index TR  | CBCOMM GR  | ComStage       | Beta             | 49.9                | 32.1              | 107.3     |
| ETFS Copper                                     | COPA LN    | ETF Securities | Beta             | 46.9                | -4.0              | 96.0      |
| ETFS Longer Dated All Commodities GO UCITS ETF  | COMF LN    | ETF Securities | Beta             | 38.4                | 31.6              | 238.6     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 34: Top 10 monthly Equity ETF outflows (€ million)

|  |            |             |                  | ETFs   Europe       |                   |           |
|--|------------|-------------|------------------|---------------------|-------------------|-----------|
| ETF Name   | BBG Ticker | Issuer      | Invest. Strategy | Current Month Flows | Prev. Month Flows | YTD Flows |
| Amundi ETF MSCI USA UCITS ETF                    | CU2 FP     | Amundi      | Beta             | -252.7              | 1.9               | -392.5    |
| iShares STOXX 600 (DE)                           | SXXPIEX GR | BlackRock   | Beta             | -247.0              | -317.8            | -938.3    |
| db x-trackers Euro Stoxx 50® UCITS ETF (DR) - 1D | XESX GR    | Deutsche AM | Beta             | -243.0              | 24.4              | -321.8    |
| iShares EURO STOXX 50 UCITS ETF (Inc)            | EUNE SW    | BlackRock   | Beta             | -238.4              | 19.0              | -723.9    |
| iShares MSCI World UCITS ETF (Inc)               | IWRD LN    | BlackRock   | Beta             | -221.7              | -18.4             | -554.0    |
| db x-trackers MSCI Europe Index UCITS ETF (DR)   | XMEU GR    | Deutsche AM | Beta             | -201.9              | -10.3             | -181.7    |
| UBS-ETF MSCI EMU Value                           | EMVEUA SW  | UBS         | Beta             | -199.4              | -3.1              | -124.5    |
| db x-trackers DAX® UCITS ETF (DR) 1C             | XDAX GR    | Deutsche AM | Beta             | -180.8              | -55.9             | -1,039.7  |
| HSBC ESI Worldwide Equity UCITS ETF              | HEWD LN    | HSBC        | Beta             | -169.3              | 0.0               | -169.3    |
| Lyxor UCITS ETF STOXX Europe 600 Banks           | BNK FP     | Lyxor       | Beta             | -158.6              | 259.1             | -99.5     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 35: Top 10 monthly Fixed Income ETF outflows (€ million)

|   |            |                        |                  | ETFs   Europe       |                   |           |
|---|------------|------------------------|------------------|---------------------|-------------------|-----------|
| ETF Name  | BBG Ticker | Issuer                 | Invest. Strategy | Current Month Flows | Prev. Month Flows | YTD Flows |
| iShares Italy Government Bond UCITS ETF                             | SITB LN    | BlackRock              | Beta             | -200.2              | -29.1             | -382.0    |
| iShares Euro Inflation Linked Government Bond UCITS ETF             | IBCI LN    | BlackRock              | Beta             | -127.9              | 32.5              | 64.1      |
| iShares UK Gilts 0-5yr UCITS ETF                                    | IGLS LN    | BlackRock              | Beta             | -125.6              | 46.2              | -78.2     |
| db x-trackers II iTraxx Crossover 5-Year TR Index UCITS ETF         | XTXC GR    | Deutsche AM            | Beta             | -119.7              | 88.2              | 16.5      |
| db x-trackers II EONIA TR Index UCITS ETF                           | XEON GR    | Deutsche AM            | Beta             | -103.0              | 37.6              | -151.2    |
| Think iBoxx Government Bond Tracker                                 | TGBT NA    | ThinkCapital ETFs N.V. | Beta             | -100.7              | 82.9              | -47.8     |
| db X-trackers II iBoxx Sovereigns Eurozone Yield Plus 1-3 UCITS ETF | XYP1 GY    | Deutsche AM            | Beta             | -94.5               | -53.3             | -578.5    |
| iShares £ Index-Linked Gilts UCITS ETF                              | INXG LN    | BlackRock              | Beta             | -94.3               | -63.2             | -80.7     |
| UBS-ETF Barclays Capital US 1-3 Year Treasury Bond A                | UEFF GY    | UBS                    | Beta             | -87.2               | 10.6              | -80.7     |
| Amundi ETF Floating Rate Euro Corporate 1-3 UCITS ETF               | AFRN FP    | Amundi                 | Beta             | -86.5               | 1.5               | -84.9     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 36: Top 10 monthly Commodity ETP outflows (€ million)

|                                    |            |                |                  | ETPs   Europe       |                   |           |
|------------------------------------|------------|----------------|------------------|---------------------|-------------------|-----------|
| ETP Name                           | BBG Ticker | Issuer         | Invest. Strategy | Current Month Flows | Prev. Month Flows | YTD Flows |
| ETFS Physical Silver               | PHAG LN    | ETF Securities | Beta             | -64.8               | 57.7              | 61.4      |
| ETFS Physical Platinum             | PHPT LN    | ETF Securities | Beta             | -45.9               | 1.4               | 7.6       |
| db Physical Silver Euro Hedged ETC | XAD2 GR    | Deutsche AM    | Beta             | -42.6               | 29.6              | 22.1      |
| db Energy Booster Euro Hedged ETC  | XCTH GR    | Deutsche AM    | Beta             | -30.3               | 3.7               | 31.7      |
| ETFS Silver                        | SLVR LN    | ETF Securities | Beta             | -18.9               | 16.5              | 2.2       |
| ETFS Daily Short Brent Crude       | SBRT LN    | ETF Securities | Beta+            | -15.7               | 15.3              | 0.4       |
| db Physical Gold Euro Hedged ETC   | XAD1 GR    | Deutsche AM    | Beta             | -14.5               | 9.9               | 376.7     |
| ETFS Daily Leveraged Silver        | LSIL LN    | ETF Securities | Beta+            | -11.7               | -1.0              | -24.0     |
| ETFS Daily Leveraged Gold          | LBUL LN    | ETF Securities | Beta+            | -10.2               | 1.6               | -2.1      |
| Boost Wti Oil 3X Short Daily ETP   | 3OIS LN    | Boost          | Beta+            | -9.7                | -9.3              | 20.0      |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.





## 4. Product Review

### New Products Launched in the Month

**Figure 37: Number of ETPs by Asset Class** | ETPs | Global |

| Asset Class       | Jul-16       |               | Jun-16       |           | MoM Change    |              | End of 2015 |               | YTD Change |  |
|-------------------|--------------|---------------|--------------|-----------|---------------|--------------|-------------|---------------|------------|--|
|                   | Nu.          | Mkt Share %   | Nu.          | Nu.       | %             | Nu.          | Nu.         | %             |            |  |
| <b>ETFs</b>       |              |               |              |           |               |              |             |               |            |  |
| Equity            | 3,108        | 67.3%         | 3,083        | 25        | 67.2%         | 2,970        | 138         | 66.8%         |            |  |
| Fixed income      | 763          | 16.5%         | 760          | 3         | 16.6%         | 718          | 45          | 16.1%         |            |  |
| Commodity         | 110          | 2.4%          | 110          | -         | 2.4%          | 110          | -           | 2.5%          |            |  |
| Currency          | 16           | 0.3%          | 16           | -         | 0.3%          | 16           | -           | 0.4%          |            |  |
| Multi Asset       | 48           | 1.0%          | 48           | -         | 1.0%          | 42           | 6           | 0.9%          |            |  |
| Alternative       | 49           | 1.1%          | 49           | -         | 1.1%          | 53           | (4)         | 1.2%          |            |  |
| <b>Total</b>      | <b>4,094</b> | <b>88.6%</b>  | <b>4,066</b> | <b>28</b> | <b>88.6%</b>  | <b>3,909</b> | <b>185</b>  | <b>87.9%</b>  |            |  |
| <b>ETC/Vs</b>     |              |               |              |           |               |              |             |               |            |  |
| Equity            | -            | 0.0%          | 0            | -         | 0.0%          | 0            | -           | 0.0%          |            |  |
| Commodity         | 397          | 8.6%          | 397          | -         | 8.6%          | 409          | (12)        | 9.2%          |            |  |
| Currency          | 124          | 2.7%          | 124          | -         | 2.7%          | 124          | -           | 2.8%          |            |  |
| Alternative       | 4            | 0.1%          | 4            | -         | 0.1%          | 4            | -           | 0.1%          |            |  |
| <b>Total</b>      | <b>525</b>   | <b>11.4%</b>  | <b>525</b>   | <b>-</b>  | <b>11.4%</b>  | <b>537</b>   | <b>(12)</b> | <b>12.1%</b>  |            |  |
| <b>Total ETPs</b> | <b>4,619</b> | <b>100.0%</b> | <b>4,591</b> | <b>28</b> | <b>100.0%</b> | <b>4,446</b> | <b>173</b>  | <b>100.0%</b> |            |  |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

**Figure 38: Number of ETPs by Asset Class** | ETPs | Europe |

| Asset Class       | Jul-16       |               | Jun-16       |          | MoM Change  |              | End of 2015 |              | YTD Change |  |
|-------------------|--------------|---------------|--------------|----------|-------------|--------------|-------------|--------------|------------|--|
|                   | Nu.          | Mkt Share %   | Nu.          | Nu.      | %           | Nu.          | Nu.         | %            |            |  |
| <b>ETFs</b>       |              |               |              |          |             |              |             |              |            |  |
| Equity            | 1,087        | 54.8%         | 1,082        | 5        | 0.3%        | 1,086        | 1           | 0.1%         |            |  |
| Fixed income      | 382          | 19.3%         | 382          | -        | 0.0%        | 358          | 24          | 1.2%         |            |  |
| Commodity         | 48           | 2.4%          | 48           | -        | 0.0%        | 50           | (2)         | -0.1%        |            |  |
| Currency          | -            | 0.0%          | 0            | -        | 0.0%        | 0            | -           | 0.0%         |            |  |
| Multi Asset       | 8            | 0.4%          | 8            | -        | 0.0%        | 8            | -           | 0.0%         |            |  |
| Alternative       | 8            | 0.4%          | 8            | -        | 0.0%        | 14           | (6)         | -0.3%        |            |  |
| <b>Total</b>      | <b>1,533</b> | <b>77.3%</b>  | <b>1,528</b> | <b>5</b> | <b>0.3%</b> | <b>1,516</b> | <b>17</b>   | <b>0.9%</b>  |            |  |
| <b>ETCs</b>       |              |               |              |          |             |              |             |              |            |  |
| Commodity         | 343          | 17.3%         | 343          | -        | 0.0%        | 348          | (5)         | -0.3%        |            |  |
| Currency          | 107          | 5.4%          | 107          | -        | 0.0%        | 107          | -           | 0.0%         |            |  |
| <b>Total</b>      | <b>450</b>   | <b>22.7%</b>  | <b>450</b>   | <b>-</b> | <b>0.0%</b> | <b>455</b>   | <b>(5)</b>  | <b>-0.3%</b> |            |  |
| <b>Total ETPs</b> | <b>1,983</b> | <b>100.0%</b> | <b>1,978</b> | <b>5</b> | <b>0.3%</b> | <b>1,971</b> | <b>12</b>   | <b>0.6%</b>  |            |  |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 39: New ETF launches

| ETFs | Europe |

| Launch/<br>cross listing<br>date | BBG<br>Ticker | Reuters<br>Code | Issuer     | ETF Name  | Asset<br>class | Invest.<br>Strategy | Focus            | Market<br>flag | Benchmark   | Long<br>/Short/<br>Leverage | TER   | Exchange Listed |
|----------------------------------|---------------|-----------------|------------|---|----------------|---------------------|------------------|----------------|---|-----------------------------|-------|-----------------|
| <b>New Launches</b>              |               |                 |            |   |                |                     |                  |                |   |                             |       |                 |
| 13-Jul-16                        | QDVR GY       | QDVR.DE         | BlackRock  | iShares Sustainable MSCI USA SRI UCITS ETF              | Equity         | Beta                | Sustainability   | DM             | MSCI USA SRI Index                                | 1L                          | 0.30% | Deutsche Borse  |
| 13-Jul-16                        | QDVS GY       | QDVS.DE         | BlackRock  | iShares Sustainable MSCI Emerging Markets SRI UCITS ETF | Equity         | Beta                | Sustainability   | EM             | MSCI EM SRI Index                                 | 1L                          | 0.35% | Deutsche Borse  |
| 14-Jul-16                        | EGRA IM       | EGRA.MI         | WisdomTree | WisdomTree Eurozone Quality Dividend Growth UCITS ETF   | Equity         | Beta                | Dividend         | DM             | WisdomTree Eurozone Quality Dividend Growth Index | 1L                          | 0.29% | Borsa Italiana  |
| 28-Jul-16                        | CHIN LN       | CSCHIN.L        | WisdomTree | ICBCCS WisdomTree S&P China 500 UCITS ETF               | Equity         | Beta                | Emerging Country | EM             | S&P China 500 Index                               | 1L                          | 0.75% | London SE       |
| 29-Jul-16                        | F750 GY       | F750.DE         | ComStage   | ComStage Alpha Dividende Plus UCITS ETF                 | Equity         | Alpha               | Quantitative     | DM             | Active  | 1L                          | 0.68% | Deutsche Borse  |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.





## Average TERs

Figure 40: ETF TERs using simple average | ETFs | Europe |

| Asset class  | Strategy    | Physical |     | Synthetic |     | Total |       |
|--------------|-------------|----------|-----|-----------|-----|-------|-------|
|              |             | TER      | Nu. | TER       | Nu. | TER   | Nu.   |
| Equity       | Alpha       | 0.40%    | 6   | 1.28%     | 4   | 0.75% | 10    |
|              | Beta        | 0.38%    | 563 | 0.41%     | 413 | 0.40% | 976   |
|              | Beta+       | 0.60%    | 1   | 0.56%     | 73  | 0.56% | 74    |
|              | Semi Active | 0.47%    | 13  | 0.53%     | 14  | 0.50% | 27    |
|              |             | 0.39%    | 583 | 0.43%     | 504 | 0.41% | 1,087 |
| Fixed Income | Alpha       | 0.59%    | 8   | 0.41%     | 2   | 0.54% | 10    |
|              | Beta        | 0.25%    | 217 | 0.20%     | 133 | 0.23% | 350   |
|              | Beta+       | NA       | NA  | 0.24%     | 22  | 0.24% | 22    |
|              |             | 0.26%    | 225 | 0.21%     | 157 | 0.24% | 382   |
| Alternative  | Alpha       | NA       | NA  | 0.71%     | 3   | 0.71% | 3     |
|              | Beta        | 0.75%    | 2   | 0.70%     | 2   | 0.73% | 4     |
|              | Beta+       | NA       | NA  | NA        | NA  | NA    | NA    |
|              | Semi Active | NA       | NA  | 0.70%     | 1   | 0.70% | 1     |
|              |             | 0.0075   | 2   | 0.71%     | 6   | 0.71% | 8     |
| Commodity    | Beta        | 0.48%    | 22  | 0.48%     | 25  | 0.48% | 47    |
|              | Beta+       | NA       | NA  | NA        | NA  | NA    | NA    |
|              | Semi Active | NA       | NA  | 0.45%     | 1   | 0.45% | 1     |
|              |             | 0.48%    | 22  | 0.48%     | 26  | 0.48% | 48    |
| Currency     | Beta        | NA       | NA  | NA        | NA  | NA    | NA    |
|              |             | NA       | NA  | NA        | NA  | NA    | NA    |
| Multi Asset  | Beta        | NA       | 1   | NA        | 1   | NA    | 2     |
|              | Alpha       | 0.46%    | 4   | 0.64%     | 2   | 0.54% | 6     |
|              |             | 0.46%    | 5   | 0.64%     | 3   | 0.54% | 8     |
| Total        |             | 0.36%    | 837 | 0.39%     | 696 | 0.38% | 1,533 |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



| Figure 41: ETC TERs using simple average |                   |          | ETCs     |     | Europe    |     |       |     |
|--|-------------------|----------|----------|-----|-----------|-----|-------|-----|
| Asset Class                              | Segment           | Strategy | Physical |     | Synthetic |     | Total |     |
|  |                   |          | TER      | Nu. | TER       | Nu. | TER   | Nu. |
| Commodity                                | Agriculture       | Beta     | NA       | NA  | 0.49%     | 37  | 0.48% | 37  |
|  |                   | Beta+    | NA       | NA  | 0.92%     | 35  | 0.92% | 35  |
|  | Energy            | Beta     | NA       | NA  | 0.47%     | 49  | 0.45% | 49  |
|  |                   | Beta+    | NA       | NA  | 0.80%     | 53  | 0.73% | 53  |
|  | Industrial Metals | Beta     | NA       | NA  | 0.49%     | 23  | 0.47% | 23  |
|  |                   | Beta+    | NA       | NA  | 0.90%     | 27  | 0.90% | 27  |
|  | Livestock         | Beta     | NA       | NA  | 0.49%     | 6   | 0.49% | 6   |
|  |                   | Beta+    | NA       | NA  | 0.98%     | 6   | 0.98% | 6   |
|  | Overall           | Beta     | NA       | NA  | 0.49%     | 9   | 0.44% | 9   |
|  |                   | Beta+    | NA       | NA  | 0.98%     | 4   | 0.98% | 4   |
|  | Precious Metals   | Beta     | 0.45%    | 31  | 0.44%     | 20  | 0.43% | 51  |
|  |                   | Beta+    | NA       | NA  | 0.76%     | 43  | 0.76% | 43  |
| <b>Commodity</b>                         |                   |          | 0.45%    | 31  | 0.67%     | 312 | 0.63% | 343 |
| Currency                                 | Currency          | Beta     | NA       | NA  | 0.41%     | 40  | 0.41% | 40  |
|  |                   | Beta+    | NA       | NA  | 0.82%     | 67  | 0.82% | 67  |
| <b>Currency</b>                          |                   |          | NA       | NA  | 0.67%     | 107 | 0.67% | 107 |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 42: ETF TERs using AUM weighted average | ETFs | Europe |

| Asset class  | Strategy    | Physical     |            | Synthetic    |            | Total        |              |
|--------------|-------------|--------------|------------|--------------|------------|--------------|--------------|
|              |             | TER          | Nu.        | TER          | Nu.        | TER          | Nu.          |
| Equity       | Alpha       | 0.55%        | 6          | 0.83%        | 4          | 0.58%        | 10           |
|              | Beta        | 0.30%        | 563        | 0.34%        | 413        | 0.31%        | 976          |
|              | Beta+       | 0.60%        | 1          | 0.49%        | 73         | 0.49%        | 74           |
|              | Semi Active | 0.53%        | 13         | 0.52%        | 14         | 0.52%        | 27           |
|              |             | 0.30%        | 583        | 0.36%        | 504        | 0.32%        | 1,087        |
| Fixed Income | Alpha       | 0.37%        | 8          | 0.39%        | 2          | 0.37%        | 10           |
|              | Beta        | 0.27%        | 217        | 0.19%        | 133        | 0.25%        | 350          |
|              | Beta+       | NA           | NA         | 0.23%        | 22         | 0.23%        | 22           |
|              |             | 0.27%        | 225        | 0.20%        | 157        | 0.26%        | 382          |
| Alternative  | Alpha       | NA           | NA         | 0.87%        | 3          | 0.87%        | 3            |
|              | Beta        | 0.75%        | 2          | 0.70%        | 2          | 0.73%        | 4            |
|              | Beta+       | NA           | NA         | NA           | NA         | NA           | NA           |
|              | Semi Active | NA           | NA         | 0.70%        | 1          | 0.70%        | 1            |
|              |             | 0.75%        | 2          | 0.79%        | 6          | 0.77%        | 8            |
| Commodity    | Beta        | 0.41%        | 22         | 0.45%        | 25         | 0.42%        | 47           |
|              | Beta+       | NA           | NA         | NA           | NA         | NA           | NA           |
|              | Semi Active | NA           | NA         | 0.45%        | 1          | 0.45%        | 1            |
|              |             | 0.41%        | 22         | 0.45%        | 26         | 0.42%        | 48           |
| Currency     | Beta        | NA           | NA         | NA           | NA         | NA           | NA           |
|              |             | NA           | NA         | NA           | -          | NA           | -            |
| Multi Asset  | Beta        | 0.40%        | 1          | 0.25%        | 1          | 0.37%        | 2            |
|              | Alpha       | 0.55%        | 4          | 0.71%        | 2          | 0.69%        | 6            |
|              |             | 0.55%        | 5          | 0.71%        | 3          | 0.69%        | 6            |
| <b>Total</b> |             | <b>0.30%</b> | <b>837</b> | <b>0.33%</b> | <b>696</b> | <b>0.31%</b> | <b>1,533</b> |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 43: ETC TERs using AUM weighted average | ETCs | Europe |

| Asset Class Segment   | Strategy | Physical     |           | Synthetic    |            | Total        |            |
|-----------------------|----------|--------------|-----------|--------------|------------|--------------|------------|
|                       |          | TER          | Nu.       | TER          | Nu.        | TER          | Nu.        |
| Commodity Agriculture | Beta     | NA           | NA        | 0.49%        | 37         | 0.49%        | 37         |
|                       | Beta+    | NA           | NA        | 0.98%        | 35         | 0.98%        | 35         |
| Energy                | Beta     | NA           | NA        | 0.48%        | 49         | 0.48%        | 49         |
|                       | Beta+    | NA           | NA        | 0.95%        | 53         | 0.95%        | 53         |
| Industrial Metals     | Beta     | NA           | NA        | 0.49%        | 23         | 0.49%        | 23         |
|                       | Beta+    | NA           | NA        | 0.97%        | 27         | 0.97%        | 27         |
| Livestock             | Beta     | NA           | NA        | 0.49%        | 6          | 0.49%        | 6          |
|                       | Beta+    | NA           | NA        | 0.98%        | 6          | 0.98%        | 6          |
| Overall               | Beta     | NA           | NA        | 0.49%        | 9          | 0.49%        | 9          |
|                       | Beta+    | NA           | NA        | 0.98%        | 4          | 0.98%        | 4          |
| Precious Metals       | Beta     | 0.37%        | 31        | 0.37%        | 20         | 0.37%        | 51         |
|                       | Beta+    | NA           | NA        | 0.95%        | 43         | 0.95%        | 43         |
| <b>Commodity</b>      |          | <b>0.37%</b> | <b>31</b> | <b>0.50%</b> | <b>312</b> | <b>0.40%</b> | <b>343</b> |
| Currency Currency     | Beta     | NA           | NA        | 0.39%        | 40         | 0.39%        | 40         |
|                       | Beta+    | NA           | NA        | 0.86%        | 67         | 0.86%        | 67         |
| <b>Currency</b>       |          | <b>NA</b>    | <b>NA</b> | <b>0.73%</b> | <b>107</b> | <b>0.73%</b> | <b>107</b> |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



## 5. Provider Rankings

### Global Provider Rankings

**Figure 44: Global Top 10 ETF Providers (\$ million)** | ETFs | Global |

| Rank                | Issuer                  | Current AUM      | Mkt. Share    | 2015 AUM         | 2015 Mkt. Share | Nu.          | Current Month CF | Current Month TO | YTD CF         |
|---------------------|-------------------------|------------------|---------------|------------------|-----------------|--------------|------------------|------------------|----------------|
| 1                   | BlackRock               | 1,172,867        | 37.6%         | 1,060,878        | 37.4%           | 661          | 25,513           | 428,083          | 61,067         |
| 2                   | Vanguard                | 589,207          | 18.9%         | 504,808          | 17.8%           | 111          | 7,038            | 79,561           | 48,330         |
| 3                   | State Street            | 453,946          | 14.6%         | 421,286          | 14.8%           | 281          | 13,826           | 534,804          | 4,866          |
| 4                   | PowerShares             | 100,310          | 3.2%          | 94,984           | 3.3%            | 148          | 4,000            | 57,922           | 1,584          |
| 5                   | Deutsche AM             | 76,586           | 2.5%          | 80,965           | 2.9%            | 254          | -1,829           | 11,621           | -4,776         |
| 6                   | Nomura Asset Management | 70,964           | 2.3%          | 63,783           | 2.2%            | 50           | -320             | 41,744           | 6,662          |
| 7                   | Lyxor                   | 51,941           | 1.7%          | 51,862           | 1.8%            | 218          | -44              | 11,222           | 239            |
| 8                   | Charles Schwab          | 51,308           | 1.6%          | 39,712           | 1.4%            | 21           | 1,539            | 6,026            | 8,335          |
| 9                   | WisdomTree              | 39,909           | 1.3%          | 52,160           | 1.8%            | 124          | -216             | 14,242           | -10,431        |
| 10                  | First Trust             | 39,068           | 1.3%          | 42,877           | 1.5%            | 112          | 169              | 6,687            | -4,422         |
| <b>Total Top 10</b> |                         | <b>2,646,106</b> | <b>84.9%</b>  | <b>2,413,315</b> | <b>85.0%</b>    | <b>1,980</b> | <b>49,676</b>    | <b>1,191,913</b> | <b>111,454</b> |
| Others              |                         | 470,446          | 15.1%         | 424,301          | 15.0%           | 2,114        | 476              | 301,584          | 27,071         |
| <b>Global Total</b> |                         | <b>3,116,553</b> | <b>100.0%</b> | <b>2,837,616</b> | <b>100.0%</b>   | <b>4,094</b> | <b>50,152</b>    | <b>1,493,497</b> | <b>138,525</b> |

Blackrock's acquisition of Credit Suisse's ETF business completed on 1-Jul-2013. We have added historical AUM of Credit Suisse ETFs to Blackrock ETFs.  
Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

**Figure 45: Global Top 10 ETC/V Providers (\$ million)** | ETCs/Vs | Global |

| Rank                | Issuer                          | Current AUM    | Mkt. Share    | 2015 AUM      | 2015 Mkt. Share | Nu.        | Current Month CF | Current Month TO | YTD CF        |
|---------------------|---------------------------------|----------------|---------------|---------------|-----------------|------------|------------------|------------------|---------------|
| 1                   | State Street                    | 41,325         | 38.9%         | 21,931        | 33.2%           | 1          | 375              | 33,339           | 12,656        |
| 2                   | ETF Securities                  | 19,927         | 18.8%         | 13,113        | 19.9%           | 332        | 1,138            | 5,646            | 3,712         |
| 3                   | BlackRock                       | 19,442         | 18.3%         | 10,702        | 16.2%           | 8          | 1,075            | 7,644            | 4,939         |
| 4                   | PowerShares                     | 5,612          | 5.3%          | 4,792         | 7.3%            | 11         | 251              | 2,189            | 659           |
| 5                   | United States Commodity Funds   | 4,557          | 4.3%          | 4,416         | 6.7%            | 11         | 126              | 6,575            | 155           |
| 6                   | Source                          | 4,100          | 3.9%          | 1,798         | 2.7%            | 4          | 173              | 855              | 1,651         |
| 7                   | ProShares                       | 3,582          | 3.4%          | 3,498         | 5.3%            | 19         | 186              | 22,533           | 1,264         |
| 8                   | Deutsche AM                     | 3,158          | 3.0%          | 1,799         | 2.7%            | 18         | 31               | 363              | 839           |
| 9                   | Deutsche Borse Commodities GmbH | 2,180          | 2.1%          | 1,715         | 2.6%            | 1          | 0                | 183              | 0             |
| 10                  | Guggenheim Investments          | 1,329          | 1.3%          | 1,192         | 1.8%            | 9          | 99               | 2,332            | 75            |
| <b>Total Top 10</b> |                                 | <b>105,211</b> | <b>99.0%</b>  | <b>64,957</b> | <b>98.5%</b>    | <b>414</b> | <b>3,454</b>     | <b>81,659</b>    | <b>25,950</b> |
| Others              |                                 | 1,012          | 1.0%          | 1,002         | 1.5%            | 111        | 94               | 1,187            | -14           |
| <b>Global Total</b> |                                 | <b>106,223</b> | <b>100.0%</b> | <b>65,960</b> | <b>100.0%</b>   | <b>525</b> | <b>3,548</b>     | <b>82,846</b>    | <b>25,935</b> |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 46: Global Top 10 ETP Providers (\$ million)

| ETPs | Global |

| Rank                | Issuer                  | Current AUM      | Mkt. Share    | 2015 AUM         | 2015 Mkt. Share | Nu.          | Current Month CF | Current Month TO | Global YTD CF  |
|---------------------|-------------------------|------------------|---------------|------------------|-----------------|--------------|------------------|------------------|----------------|
| 1                   | BlackRock               | 1,192,309        | 37.0%         | 1,071,580        | 36.9%           | 669          | 26,588           | 435,727          | 66,006         |
| 2                   | Vanguard                | 589,207          | 18.3%         | 504,808          | 17.4%           | 111          | 7,038            | 79,561           | 48,330         |
| 3                   | State Street            | 495,272          | 15.4%         | 443,216          | 15.3%           | 282          | 14,200           | 568,144          | 17,522         |
| 4                   | PowerShares             | 105,921          | 3.3%          | 99,777           | 3.4%            | 159          | 4,250            | 60,112           | 2,243          |
| 5                   | Deutsche AM             | 79,744           | 2.5%          | 82,764           | 2.9%            | 272          | -1,798           | 11,984           | -3,937         |
| 6                   | Nomura Asset Management | 70,964           | 2.2%          | 63,783           | 2.2%            | 50           | -320             | 41,744           | 6,662          |
| 7                   | Lyxor                   | 51,941           | 1.6%          | 51,862           | 1.8%            | 218          | -44              | 11,222           | 239            |
| 8                   | Charles Schwab          | 51,308           | 1.6%          | 39,712           | 1.4%            | 21           | 1,539            | 6,026            | 8,335          |
| 9                   | WisdomTree              | 40,135           | 1.2%          | 52,385           | 1.8%            | 126          | -211             | 14,262           | -10,444        |
| 10                  | First Trust             | 39,068           | 1.2%          | 42,877           | 1.5%            | 112          | 169              | 6,687            | -4,422         |
| <b>Total Top 10</b> |                         | <b>2,715,870</b> | <b>84.3%</b>  | <b>2,452,765</b> | <b>84.5%</b>    | <b>2,020</b> | <b>51,412</b>    | <b>1,235,469</b> | <b>130,533</b> |
| Others              |                         | 506,906          | 15.7%         | 450,811          | 15.5%           | 2,599        | 2,288            | 340,875          | 33,927         |
| <b>Global Total</b> |                         | <b>3,222,776</b> | <b>100.0%</b> | <b>2,903,575</b> | <b>100.0%</b>   | <b>4,619</b> | <b>53,700</b>    | <b>1,576,344</b> | <b>164,460</b> |

Blackrock's acquisition of Credit Suisse's ETF business completed on 1-Jul-2013. We have added historical AUM of Credit Suisse ETFs to Blackrock ETFs.  
Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



## European Provider Rankings – General

Figure 47: European ETF Providers (All) – Assets, Flows, Products, Turnover | ETFs | Europe |

| Issuer                            | AUM            |                |           | Cash Flow     |              |               | Turnover      |               |             | Products      |              |           |
|-----------------------------------|----------------|----------------|-----------|---------------|--------------|---------------|---------------|---------------|-------------|---------------|--------------|-----------|
|                                   | Current Month  | End of 2015    | Diff.     | Current Month | Prev. Month  | YTD           | Current Month | Prev. Month   | Diff.       | Current Month | End of 2015  | Diff.     |
| BlackRock                         | 231,739        | 214,014        | 8%        | 7,273         | 1,502        | 17,700        | 33,284        | 40,458        | -18%        | 279           | 271          | 3%        |
| Deutsche AM                       | 54,413         | 56,228         | -3%       | -950          | -89          | -1,579        | 5,760         | 7,516         | -23%        | 217           | 216          | 0%        |
| Lyxor                             | 46,449         | 47,742         | -3%       | -40           | 570          | 229           | 10,134        | 14,620        | -31%        | 218           | 244          | -11%      |
| UBS                               | 25,456         | 24,949         | 2%        | 194           | 159          | 661           | 2,584         | 2,850         | -9%         | 123           | 129          | -5%       |
| Amundi                            | 20,402         | 19,739         | 3%        | -5            | 206          | 642           | 3,454         | 4,320         | -20%        | 102           | 100          | 2%        |
| Vanguard                          | 19,484         | 17,691         | 10%       | 516           | 634          | 1,549         | 2,247         | 3,270         | -31%        | 21            | 17           | 24%       |
| Source                            | 15,383         | 16,286         | -6%       | 27            | -237         | -720          | 1,433         | 1,861         | -23%        | 78            | 77           | 1%        |
| State Street                      | 14,937         | 11,863         | 26%       | 1,019         | 214          | 2,617         | 2,241         | 2,204         | 2%          | 99            | 78           | 27%       |
| ComStage                          | 7,317          | 6,925          | 6%        | 41            | -317         | 260           | 531           | 837           | -37%        | 113           | 111          | 2%        |
| Zuercher Kantonalbank             | 7,244          | 5,400          | 34%       | 18            | 108          | 367           | 457           | 484           | -6%         | 4             | 4            | 0%        |
| Deka Investment GmbH              | 7,124          | 7,027          | 1%        | -71           | 45           | 251           | 706           | 1,307         | -46%        | 42            | 46           | -9%       |
| HSBC                              | 4,626          | 4,978          | -7%       | -249          | -23          | -421          | 799           | 674           | 19%         | 27            | 28           | -4%       |
| BNP Paribas                       | 4,190          | 4,466          | -6%       | -103          | 96           | -103          | 218           | 298           | -27%        | 32            | 29           | 10%       |
| Xact Fonder AB                    | 2,586          | 2,522          | 3%        | 57            | -17          | 184           | 941           | 1,419         | -34%        | 13            | 10           | 30%       |
| Julius Baer Inv                   | 2,237          | 1,640          | 36%       | 45            | 51           | 162           | 88            | 134           | -35%        | 4             | 4            | 0%        |
| PowerShares                       | 2,079          | 1,766          | 18%       | 237           | 48           | 300           | 288           | 294           | -2%         | 19            | 21           | -10%      |
| Ossiam                            | 2,017          | 1,707          | 18%       | 83            | 95           | 123           | 123           | 76            | 62%         | 10            | 9            | 11%       |
| ThinkCapital ETFs N.V.            | 1,657          | 1,623          | 2%        | -135          | 179          | 16            | 89            | 134           | -34%        | 14            | 13           | 8%        |
| ETF Securities                    | 1,396          | 790            | 77%       | 140           | 55           | 586           | 792           | 942           | -16%        | 28            | 30           | -7%       |
| WisdomTree                        | 455            | 477            | -5%       | 57            | 5            | 11            | 42            | 74            | -42%        | 27            | 19           | 42%       |
| Fundlogic Global Solutions plc    | 399            | 169            | 136%      | 5             | 210          | 218           | 11            | 154           | -93%        | 2             | 2            | 0%        |
| BBVA Gestion SA SGIIC             | 340            | 483            | -30%      | 0             | 5            | -103          | 38            | 61            | -38%        | 2             | 2            | 0%        |
| China Post Global                 | 321            | 331            | -3%       | -4            | -41          | -107          | 13            | 41            | -69%        | 9             | 10           | -10%      |
| Raiffeisen Schweiz Genossenschaft | 199            | 152            | 31%       | 0             | 0            | 8             | 13            | 9             | 49%         | 3             | 3            | 0%        |
| Van Eck Funds                     | 191            | 76             | 152%      | 0             | 17           | 21            | 91            | 108           | -15%        | 3             | 3            | 0%        |
| Seligson & Co Fund Man            | 180            | 178            | 1%        | -2            | 0            | -7            | 3             | 7             | -57%        | 1             | 1            | 0%        |
| BMO Global Asset Management       | 163            | 72             | 125%      | 0             | 45           | 99            | 5             | 38            | -88%        | 9             | 9            | 0%        |
| First Trust                       | 148            | 119            | 24%       | 13            | 3            | 26            | 27            | 34            | -22%        | 9             | 7            | 29%       |
| Nomura Asset Management           | 133            | 251            | -47%      | -12           | -35          | -77           | 52            | 78            | -33%        | 3             | 3            | 0%        |
| DnB Kapitalforvaltning            | 97             | 103            | -5%       | 0             | -16          | -8            | 5             | 55            | -90%        | 1             | 1            | 0%        |
| UniCredit Bank                    | 84             | 61             | 39%       | 0             | 0            | 27            | 0             | 3             | -91%        | 1             | 1            | 0%        |
| Commerzbank AG                    | 52             | 47             | 11%       | 7             | 1            | 8             | 1             | 1             | -21%        | 3             | 3            | 0%        |
| SEB Investment Management AB      | 43             | 45             | -6%       | 0             | 0            | 0             | 6             | 3             | 94%         | 3             | 3            | 0%        |
| FinEx Fund Plc                    | 30             | 33             | -10%      | -3            | -3           | -6            | 0             | 6             | -96%        | 2             | 2            | 0%        |
| Boost                             | 17             | 5              | 271%      | 3             | 5            | 15            | 51            | 40            | 29%         | 3             | 3            | 0%        |
| Sun Global Investments            | 15             | 5              | 211%      | 1             | 9            | 10            | 1             | 0             | 1237%       | 2             | 1            | 100%      |
| Fullgoal Fund Management Co       | 11             | 0              | NA        | 2             | 9            | 10            | 0             | 0             | 122%        | 1             | 0            | NA        |
| Alpha Asset Management            | 9              | 11             | -19%      | 0             | -8           | -8            | 0             | 6             | -94%        | 1             | 1            | 0%        |
| NBG Asset Management MFMC         | 4              | 4              | -5%       | 0             | 0            | 0             | 0             | 0             | -100%       | 2             | 2            | 0%        |
| Landsbankinn                      | 0              | 0              | NA        | 0             | 0            | 0             | 6             | 4             | 49%         | 1             | 1            | 0%        |
| Nordea Investment Funds           | 0              | 0              | NA        | 0             | 0            | 0             | 0             | 0             | NA          | 2             | 2            | 0%        |
| PDR Services LLC                  | 0              | 0              | NA        | 0             | 0            | 0             | 0             | 0             | 992%        | 0             | 0            | NA        |
| <b>Total</b>                      | <b>473,624</b> | <b>449,981</b> | <b>5%</b> | <b>8,163</b>  | <b>3,484</b> | <b>22,958</b> | <b>66,535</b> | <b>84,420</b> | <b>-21%</b> | <b>1533</b>   | <b>1,516</b> | <b>1%</b> |

\*China Post Global acquired ETF arm of Royal Bank of Scotland (RBS).

\*Blackrock's acquisition of Credit Suisse's ETF business completed on 1-Jul-2013. We have added historical AUM of Credit Suisse ETFs to Blackrock ETFs.

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.





Figure 48: European ETC Providers (All) – Assets, Flows, Products, Turnover

| ETCs | Europe |

| Issuer                          | AUM           |               |            | Cash Flow     |             |              | Turnover      |              |             | Products      |             |            |
|---------------------------------|---------------|---------------|------------|---------------|-------------|--------------|---------------|--------------|-------------|---------------|-------------|------------|
|                                 | Current Month | End of 2015   | Diff.      | Current Month | Prev. Month | YTD          | Current Month | Prev. Month  | Diff.       | Current Month | End of 2015 | Diff.      |
| ETF Securities                  | 15,220        | 10,148        | 50%        | 993           | 117         | 3,178        | 4,692         | 4,818        | -3%         | 322           | 322         | 0%         |
| Source                          | 3,666         | 1,655         | 122%       | 156           | 284         | 1,489        | 772           | 1,218        | -37%        | 4             | 4           | 0%         |
| Deutsche AM                     | 2,824         | 1,656         | 71%        | 27            | 91          | 751          | 328           | 429          | -24%        | 18            | 18          | 0%         |
| Deutsche Borse Commodities GmbH | 1,949         | 1,579         | 23%        | 0             | 0           | 0            | 165           | 267          | -38%        | 1             | 1           | 0%         |
| BlackRock                       | 1,856         | 397           | 368%       | 188           | 460         | 1,294        | 470           | 1,090        | -57%        | 4             | 4           | 0%         |
| Boost                           | 253           | 235           | 8%         | 24            | 6           | 57           | 887           | 1,271        | -30%        | 30            | 30          | 0%         |
| Borse Stuttgart Securities GmbH | 201           | 109           | 84%        | 15            | 17          | 62           | 24            | 33           | -27%        | 1             | 1           | 0%         |
| Commerzbank AG                  | 101           | 73            | 39%        | 4             | -4          | 18           | 15            | 19           | -21%        | 68            | 68          | 0%         |
| Royal Bank of Scotland plc      | 0             | 205           | -100%      | 0             | 0           | -202         | 0             | 0            | NA          | -             | 5           | -100%      |
| BNP Paribas                     | 0             | 0             | NA         | 0             | 0           | 0            | 0             | 0            | -92%        | 2             | 2           | 0%         |
| <b>Total</b>                    | <b>26,072</b> | <b>16,057</b> | <b>62%</b> | <b>1,407</b>  | <b>971</b>  | <b>6,648</b> | <b>7,353</b>  | <b>9,146</b> | <b>-20%</b> | <b>450</b>    | <b>455</b>  | <b>-1%</b> |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 49: European ETP Providers (All) – Assets, Flows, Products, Turnover

| ETPs | Europe |

| Issuer                            | AUM            |                |           | Cash Flow     |              |               | Turnover      |               |             | Products      |              |           |
|-----------------------------------|----------------|----------------|-----------|---------------|--------------|---------------|---------------|---------------|-------------|---------------|--------------|-----------|
|                                   | Current Month  | End of 2015    | Diff.     | Current Month | Prev. Month  | YTD           | Current Month | Prev. Month   | Diff.       | Current Month | End of 2015  | Diff.     |
|                                   | BlackRock      | 233,596        | 214,411   | 9%            | 7,460        | 1,962         | 18,994        | 33,754        | 41,548      | -19%          | 283          | 275       |
| Deutsche AM                       | 57,237         | 57,884         | -1%       | -923          | 2            | -828          | 6,088         | 7,946         | -23%        | 235           | 234          | 0%        |
| Lyxor                             | 46,449         | 47,742         | -3%       | -40           | 570          | 229           | 10,134        | 14,620        | -31%        | 218           | 244          | -11%      |
| UBS                               | 25,456         | 24,949         | 2%        | 194           | 159          | 661           | 2,584         | 2,850         | -9%         | 123           | 129          | -5%       |
| Amundi                            | 20,402         | 19,739         | 3%        | -5            | 206          | 642           | 3,454         | 4,320         | -20%        | 102           | 100          | 2%        |
| Vanguard                          | 19,484         | 17,691         | 10%       | 516           | 634          | 1,549         | 2,247         | 3,270         | -31%        | 21            | 17           | 24%       |
| Source                            | 19,049         | 17,941         | 6%        | 183           | 47           | 769           | 2,205         | 3,079         | -28%        | 82            | 81           | 1%        |
| ETF Securities                    | 16,616         | 10,938         | 52%       | 1,132         | 173          | 3,765         | 5,483         | 5,760         | -5%         | 350           | 352          | -1%       |
| State Street                      | 14,937         | 11,863         | 26%       | 1,019         | 214          | 2,617         | 2,241         | 2,204         | 2%          | 99            | 78           | 27%       |
| ComStage                          | 7,317          | 6,925          | 6%        | 41            | -317         | 260           | 531           | 837           | -37%        | 113           | 111          | 2%        |
| Zuercher Kantonalbank             | 7,244          | 5,400          | 34%       | 18            | 108          | 367           | 457           | 484           | -6%         | 4             | 4            | 0%        |
| Deka Investment GmbH              | 7,124          | 7,027          | 1%        | -71           | 45           | 251           | 706           | 1,307         | -46%        | 42            | 46           | -9%       |
| HSBC                              | 4,626          | 4,978          | -7%       | -249          | -23          | -421          | 799           | 674           | 19%         | 27            | 28           | -4%       |
| BNP Paribas                       | 4,190          | 4,466          | -6%       | -103          | 96           | -103          | 218           | 298           | -27%        | 34            | 31           | 10%       |
| Xact Fonder AB                    | 2,586          | 2,522          | 3%        | 57            | -17          | 184           | 941           | 1,419         | -34%        | 13            | 10           | 30%       |
| Julius Baer Inv                   | 2,237          | 1,640          | 36%       | 45            | 51           | 162           | 88            | 134           | -35%        | 4             | 4            | 0%        |
| PowerShares                       | 2,079          | 1,766          | 18%       | 237           | 48           | 300           | 288           | 294           | -2%         | 19            | 21           | -10%      |
| Ossiam                            | 2,017          | 1,707          | 18%       | 83            | 95           | 123           | 123           | 76            | 62%         | 10            | 9            | 11%       |
| Deutsche Borse Commodities GmbH   | 1,949          | 1,579          | 23%       | 0             | 0            | 0             | 165           | 267           | -38%        | 1             | 1            | 0%        |
| ThinkCapital ETFs N.V.            | 1,657          | 1,623          | 2%        | -135          | 179          | 16            | 89            | 134           | -34%        | 14            | 13           | 8%        |
| WisdomTree                        | 455            | 477            | -5%       | 57            | 5            | 11            | 42            | 74            | -42%        | 27            | 19           | 42%       |
| Fundlogic Global Solutions plc    | 399            | 169            | 136%      | 5             | 210          | 218           | 11            | 154           | -93%        | 2             | 2            | 0%        |
| BBVA Gestion SA SGIC              | 340            | 483            | -30%      | 0             | 5            | -103          | 38            | 61            | -38%        | 2             | 2            | 0%        |
| China Post Global                 | 321            | 331            | -3%       | -4            | -41          | -107          | 13            | 41            | -69%        | 9             | 10           | -10%      |
| Boost                             | 270            | 240            | 13%       | 27            | 11           | 72            | 938           | 1,310         | -28%        | 33            | 33           | 0%        |
| Borse Stuttgart Securities GmbH   | 201            | 109            | 84%       | 15            | 17           | 62            | 24            | 33            | -27%        | 1             | 1            | 0%        |
| Raiffeisen Schweiz Genossenschaft | 199            | 152            | 31%       | 0             | 0            | 8             | 13            | 9             | 49%         | 3             | 3            | 0%        |
| Van Eck Funds                     | 191            | 76             | 152%      | 0             | 17           | 21            | 91            | 108           | -15%        | 3             | 3            | 0%        |
| Seligson & Co Fund Man            | 180            | 178            | 1%        | -2            | 0            | -7            | 3             | 7             | -57%        | 1             | 1            | 0%        |
| BMO Global Asset Management       | 163            | 72             | 125%      | 0             | 45           | 99            | 5             | 38            | -88%        | 9             | 9            | 0%        |
| Commerzbank AG                    | 154            | 120            | 28%       | 10            | -3           | 26            | 16            | 21            | -21%        | 71            | 71           | 0%        |
| First Trust                       | 148            | 119            | 24%       | 13            | 3            | 26            | 27            | 34            | -22%        | 9             | 7            | 29%       |
| Nomura Asset Management           | 133            | 251            | -47%      | -12           | -35          | -77           | 52            | 78            | -33%        | 3             | 3            | 0%        |
| DnB Kapitalforvaltning            | 97             | 103            | -5%       | 0             | -16          | -8            | 5             | 55            | -90%        | 1             | 1            | 0%        |
| UniCredit Bank                    | 84             | 61             | 39%       | 0             | 0            | 27            | 0             | 3             | -91%        | 1             | 1            | 0%        |
| SEB Investment Management AB      | 43             | 45             | -6%       | 0             | 0            | 0             | 6             | 3             | 94%         | 3             | 3            | 0%        |
| FinEx Fund Plc                    | 30             | 33             | -10%      | -3            | -3           | -6            | 0             | 6             | -96%        | 2             | 2            | 0%        |
| Sun Global Investments            | 15             | 5              | 211%      | 1             | 9            | 10            | 1             | 0             | 1237%       | 2             | 1            | 100%      |
| Fullgoal Fund Management Co       | 11             | 0              | NA        | 2             | 9            | 10            | 0             | 0             | 122%        | 1             | 0            | NA        |
| Alpha Asset Management            | 9              | 11             | -19%      | 0             | -8           | -8            | 0             | 6             | -94%        | 1             | 1            | 0%        |
| NBG Asset Management MFMC         | 4              | 4              | -5%       | 0             | 0            | 0             | 0             | 0             | -100%       | 2             | 2            | 0%        |
| Royal Bank of Scotland plc        | 0              | 205            | -100%     | 0             | 0            | -202          | 0             | 0             | NA          | 0             | 5            | -100%     |
| Nordea Investment Funds           | 0              | 0              | NA        | 0             | 0            | 0             | 0             | 0             | NA          | 2             | 2            | 0%        |
| Landsbankinn                      | 0              | 0              | NA        | 0             | 0            | 0             | 6             | 4             | 49%         | 1             | 1            | 0%        |
| PDR Services LLC                  | 0              | 0              | NA        | 0             | 0            | 0             | 0             | 0             | 992%        | 0             | 0            | NA        |
| <b>Total</b>                      | <b>499,696</b> | <b>466,038</b> | <b>7%</b> | <b>9,570</b>  | <b>4,455</b> | <b>29,607</b> | <b>73,889</b> | <b>93,566</b> | <b>-21%</b> | <b>1,983</b>  | <b>1,971</b> | <b>1%</b> |

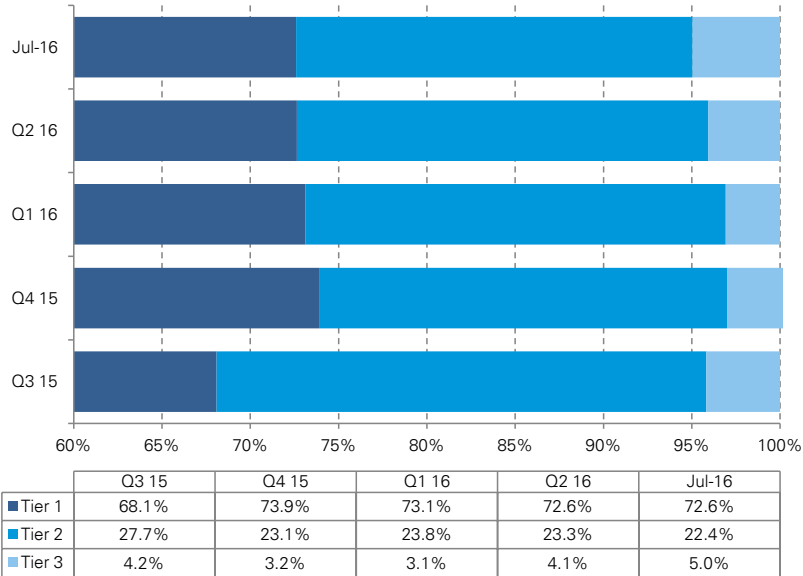
\* China Post Global acquired ETF arm of Royal Bank of Scotland (RBS).

\*Blackrock's acquisition of Credit Suisse's ETF business completed on 1-Jul-2013. We have added historical AUM of Credit Suisse ETFs to Blackrock ETFs.

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 50: European ETP Providers tier market share | ETPs | Europe |



Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



## European Provider Rankings – by Asset Class

Figure 51: European ETF Providers (All) – Assets, Flows, Products, Turnover | ETFs | Europe |

All figures in € million except products

| Issuer                            | Equity         | Fixed Income   | Commodity     | Others       | Total AUM      | Mkt Share %   | Nu.          | Current TO    | Current CF   | YTD CF        |
|-----------------------------------|----------------|----------------|---------------|--------------|----------------|---------------|--------------|---------------|--------------|---------------|
| BlackRock                         | 140,585        | 88,472         | 2,340         | 342          | 231,739        | 48.9%         | 279          | 33,284        | 7,273        | 17,700        |
| Deutsche AM                       | 39,746         | 13,557         | 442           | 668          | 54,413         | 11.5%         | 217          | 5,760         | -950         | -1,579        |
| Lyxor                             | 34,342         | 11,041         | 971           | 94           | 46,449         | 9.8%          | 218          | 10,134        | -40          | 229           |
| UBS                               | 20,829         | 2,196          | 2,372         | 59           | 25,456         | 5.4%          | 123          | 2,584         | 194          | 661           |
| Amundi                            | 15,544         | 4,858          | 0             | 0            | 20,402         | 4.3%          | 102          | 3,454         | -5           | 642           |
| Vanguard                          | 19,209         | 276            | 0             | 0            | 19,484         | 4.1%          | 21           | 2,247         | 516          | 1,549         |
| Source                            | 9,795          | 5,292          | 295           | 0            | 15,383         | 3.2%          | 78           | 1,433         | 27           | -720          |
| State Street                      | 9,253          | 5,632          | 0             | 52           | 14,937         | 3.2%          | 99           | 2,241         | 1,019        | 2,617         |
| ComStage                          | 5,325          | 1,600          | 381           | 11           | 7,317          | 1.5%          | 113          | 531           | 41           | 260           |
| Zuercher Kantonalbank             | 0              | 0              | 7,244         | 0            | 7,244          | 1.5%          | 4            | 457           | 18           | 367           |
| Deka Investment GmbH              | 4,816          | 2,308          | 0             | 0            | 7,124          | 1.5%          | 42           | 706           | -71          | 251           |
| HSBC                              | 4,626          | 0              | 0             | 0            | 4,626          | 1.0%          | 27           | 799           | -249         | -421          |
| BNP Paribas                       | 3,851          | 147            | 192           | 0            | 4,190          | 0.9%          | 32           | 218           | -103         | -103          |
| Xact Fonder AB                    | 2,433          | 43             | 109           | 0            | 2,586          | 0.5%          | 13           | 941           | 57           | 184           |
| Julius Baer Inv                   | 0              | 0              | 2,237         | 0            | 2,237          | 0.5%          | 4            | 88            | 45           | 162           |
| PowerShares                       | 2,055          | 22             | 0             | 3            | 2,079          | 0.4%          | 19           | 288           | 237          | 300           |
| Ossiam                            | 1,968          | 0              | 49            | 0            | 2,017          | 0.4%          | 10           | 123           | 83           | 123           |
| ThinkCapital ETFs N.V.            | 888            | 749            | 0             | 20           | 1,657          | 0.3%          | 14           | 89            | -135         | 16            |
| ETF Securities                    | 597            | 327            | 473           | 0            | 1,396          | 0.3%          | 28           | 792           | 140          | 586           |
| WisdomTree                        | 433            | 0              | 22            | 0            | 455            | 0.1%          | 27           | 42            | 57           | 11            |
| Fundlogic Global Solutions plc    | 399            | 0              | 0             | 0            | 399            | 0.1%          | 2            | 11            | 5            | 218           |
| BBVA Gestion SA SGIIC             | 340            | 0              | 0             | 0            | 340            | 0.1%          | 2            | 38            | 0            | -103          |
| China Post Global                 | 163            | 0              | 158           | 0            | 321            | 0.1%          | 9            | 13            | -4           | -107          |
| Raiffeisen Schweiz Genossenschaft | 0              | 0              | 199           | 0            | 199            | 0.0%          | 3            | 13            | 0            | 8             |
| Van Eck Funds                     | 191            | 0              | 0             | 0            | 191            | 0.0%          | 3            | 91            | 0            | 21            |
| Seligson & Co Fund Man            | 180            | 0              | 0             | 0            | 180            | 0.0%          | 1            | 3             | -2           | -7            |
| BMO Global Asset Management       | 89             | 74             | 0             | 0            | 163            | 0.0%          | 9            | 5             | 0            | 99            |
| First Trust                       | 148            | 0              | 0             | 0            | 148            | 0.0%          | 9            | 27            | 13           | 26            |
| Nomura Asset Management           | 133            | 0              | 0             | 0            | 133            | 0.0%          | 3            | 52            | -12          | -77           |
| DnB Kapitalforvaltning            | 97             | 0              | 0             | 0            | 97             | 0.0%          | 1            | 5             | 0            | -8            |
| UniCredit Bank                    | 0              | 84             | 0             | 0            | 84             | 0.0%          | 1            | 0             | 0            | 27            |
| Commerzbank AG                    | 18             | 34             | 0             | 0            | 52             | 0.0%          | 3            | 1             | 7            | 8             |
| SEB Investment Management AB      | 43             | 0              | 0             | 0            | 43             | 0.0%          | 3            | 6             | 0            | 0             |
| FinEx Fund Plc                    | 0              | 26             | 4             | 0            | 30             | 0.0%          | 2            | 0             | -3           | -6            |
| Boost                             | 17             | 0              | 0             | 0            | 17             | 0.0%          | 3            | 51            | 3            | 15            |
| Sun Global Investments            | 0              | 15             | 0             | 0            | 15             | 0.0%          | 2            | 1             | 1            | 10            |
| Fullgoal Fund Management Co       | 0              | 11             | 0             | 0            | 11             | 0.0%          | 1            | 0             | 2            | 10            |
| Alpha Asset Management            | 9              | 0              | 0             | 0            | 9              | 0.0%          | 1            | 0             | 0            | -8            |
| NBG Asset Management MFMC         | 4              | 0              | 0             | 0            | 4              | 0.0%          | 2            | 0             | 0            | 0             |
| Nordea Investment Funds           | 0              | 0              | 0             | 0            | 0              | 0.0%          | 2            | 0             | 0            | 0             |
| Landsbankinn                      | 0              | 0              | 0             | 0            | 0              | 0.0%          | 1            | 6             | 0            | 0             |
| Alpcot Capital Management         | 0              | 0              | 0             | 0            | 0              | 0.0%          | 0            | 0             | 0            | 0             |
| Swedbank Robur                    | 0              | 0              | 0             | 0            | 0              | 0.0%          | 0            | 0             | 0            | 0             |
| NCB Stockbrokers                  | 0              | 0              | 0             | 0            | 0              | 0.0%          | 0            | 0             | 0            | 0             |
| PDR Services LLC                  | 0              | 0              | 0             | 0            | 0              | 0.0%          | 0            | 0             | 0            | 0             |
| <b>Total</b>                      | <b>318,127</b> | <b>136,762</b> | <b>17,489</b> | <b>1,246</b> | <b>473,624</b> | <b>100.0%</b> | <b>1,533</b> | <b>66,535</b> | <b>8,163</b> | <b>22,958</b> |

\* China Post Global acquired ETF arm of Royal Bank of Scotland (RBS).

\*Blackrock's acquisition of Credit Suisse's ETF business completed on 1-Jul-2013. We have added historical AUM of Credit Suisse ETFs to Blackrock ETFs.

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 52: European ETC Providers (All) – Assets, Flows, Products, Turnover

| ETCs | Europe |

All figures in € million except products

| Issuer                          | Commodity     | Currency   | Total AUM     | Mkt           |  | Nu.        | Current TO   | Current CF   | YTD CF       |
|---------------------------------|---------------|------------|---------------|---------------|--|------------|--------------|--------------|--------------|
|                                 |               |            |               | Share %       |  |            |              |              |              |
| ETF Securities                  | 14,894        | 326        | 15,220        | 58.4%         |  | 322        | 4,692        | 993          | 3178         |
| Source                          | 3,666         | 0          | 3,666         | 14.1%         |  | 4          | 772          | 156          | 1489         |
| Deutsche AM                     | 2,824         | 0          | 2,824         | 10.8%         |  | 18         | 328          | 27           | 751          |
| Deutsche Borse Commodities GmbH | 1,949         | 0          | 1,949         | 7.5%          |  | 1          | 165          | 0            | 0            |
| BlackRock                       | 1,856         | 0          | 1,856         | 7.1%          |  | 4          | 470          | 188          | 1294         |
| Boost                           | 250           | 4          | 253           | 1.0%          |  | 30         | 887          | 24           | 57           |
| Borse Stuttgart Securities GmbH | 201           | 0          | 201           | 0.8%          |  | 1          | 24           | 15           | 62           |
| Commerzbank AG                  | 101           | 0          | 101           | 0.4%          |  | 68         | 15           | 4            | 18           |
| Royal Bank of Scotland plc      | 0             | 0          | 0             | 0.0%          |  | 0          | 0            | 0            | -202         |
| BNP Paribas                     | 0             | 0          | 0             | 0.0%          |  | 2          | 0            | 0            | 0            |
| <b>Total</b>                    | <b>25,742</b> | <b>329</b> | <b>26,072</b> | <b>100.0%</b> |  | <b>450</b> | <b>7,353</b> | <b>1,407</b> | <b>6,648</b> |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 53: European ETP Providers (All) – Assets, Flows, Products, Turnover | ETPs | Europe |

All figures in € million except products

| Issuer                            | Equity         | Fixed Income   | Commodity     | Others       | Total AUM      | Mkt Share %   | Nu.          | Current TO    | Current CF   | YTD CF        |
|-----------------------------------|----------------|----------------|---------------|--------------|----------------|---------------|--------------|---------------|--------------|---------------|
| BlackRock                         | 140,585        | 88,472         | 4,197         | 342          | 233,596        | 46.7%         | 283          | 33,754        | 7,460        | 18,994        |
| Deutsche AM                       | 39,746         | 13,557         | 3,266         | 668          | 57,237         | 11.5%         | 235          | 6,088         | -923         | -828          |
| Lyxor                             | 34,342         | 11,041         | 971           | 94           | 46,449         | 9.3%          | 218          | 10,134        | -40          | 229           |
| UBS                               | 20,829         | 2,196          | 2,372         | 59           | 25,456         | 5.1%          | 123          | 2,584         | 194          | 661           |
| Amundi                            | 15,544         | 4,858          | 0             | 0            | 20,402         | 4.1%          | 102          | 3,454         | -5           | 642           |
| Vanguard                          | 19,209         | 276            | 0             | 0            | 19,484         | 3.9%          | 21           | 2,247         | 516          | 1,549         |
| Source                            | 9,795          | 5,292          | 3,962         | 0            | 19,049         | 3.8%          | 82           | 2,205         | 183          | 769           |
| ETF Securities                    | 597            | 327            | 15,367        | 326          | 16,616         | 3.3%          | 350          | 5,483         | 1,132        | 3,765         |
| State Street                      | 9,253          | 5,632          | 0             | 52           | 14,937         | 3.0%          | 99           | 2,241         | 1,019        | 2,617         |
| ComStage                          | 5,325          | 1,600          | 381           | 11           | 7,317          | 1.5%          | 113          | 531           | 41           | 260           |
| Zuercher Kantonalbank             | 0              | 0              | 7,244         | 0            | 7,244          | 1.4%          | 4            | 457           | 18           | 367           |
| Deka Investment GmbH              | 4,816          | 2,308          | 0             | 0            | 7,124          | 1.4%          | 42           | 706           | -71          | 251           |
| HSBC                              | 4,626          | 0              | 0             | 0            | 4,626          | 0.9%          | 27           | 799           | -249         | -421          |
| BNP Paribas                       | 3,851          | 147            | 192           | 0            | 4,190          | 0.8%          | 34           | 218           | -103         | -103          |
| Xact Fonder AB                    | 2,433          | 43             | 109           | 0            | 2,586          | 0.5%          | 13           | 941           | 57           | 184           |
| Julius Baer Inv                   | 0              | 0              | 2,237         | 0            | 2,237          | 0.4%          | 4            | 88            | 45           | 162           |
| PowerShares                       | 2,055          | 22             | 0             | 3            | 2,079          | 0.4%          | 19           | 288           | 237          | 300           |
| Ossiam                            | 1,968          | 0              | 49            | 0            | 2,017          | 0.4%          | 10           | 123           | 83           | 123           |
| Deutsche Borse Commodities GmbH   | 0              | 0              | 1,949         | 0            | 1,949          | 0.4%          | 1            | 165           | 0            | 0             |
| ThinkCapital ETFs N.V.            | 888            | 749            | 0             | 20           | 1,657          | 0.3%          | 14           | 89            | -135         | 16            |
| WisdomTree                        | 433            | 0              | 22            | 0            | 455            | 0.1%          | 27           | 42            | 57           | 11            |
| Fundlogic Global Solutions plc    | 399            | 0              | 0             | 0            | 399            | 0.1%          | 2            | 11            | 5            | 218           |
| BBVA Gestion SA SGIC              | 340            | 0              | 0             | 0            | 340            | 0.1%          | 2            | 38            | 0            | -103          |
| China Post Global                 | 163            | 0              | 158           | 0            | 321            | 0.1%          | 9            | 13            | -4           | -107          |
| Boost                             | 17             | 0              | 250           | 4            | 270            | 0.1%          | 33           | 938           | 27           | 72            |
| Borse Stuttgart Securities GmbH   | 0              | 0              | 201           | 0            | 201            | 0.0%          | 1            | 24            | 15           | 62            |
| Raiffeisen Schweiz Genossenschaft | 0              | 0              | 199           | 0            | 199            | 0.0%          | 3            | 13            | 0            | 8             |
| Van Eck Funds                     | 191            | 0              | 0             | 0            | 191            | 0.0%          | 3            | 91            | 0            | 21            |
| Seligson & Co Fund Man            | 180            | 0              | 0             | 0            | 180            | 0.0%          | 1            | 3             | -2           | -7            |
| BMO Global Asset Management       | 89             | 74             | 0             | 0            | 163            | 0.0%          | 9            | 5             | 0            | 99            |
| Commerzbank AG                    | 18             | 34             | 101           | 0            | 154            | 0.0%          | 71           | 16            | 10           | 26            |
| First Trust                       | 148            | 0              | 0             | 0            | 148            | 0.0%          | 9            | 27            | 13           | 26            |
| Nomura Asset Management           | 133            | 0              | 0             | 0            | 133            | 0.0%          | 3            | 52            | -12          | -77           |
| DnB Kapitalforvaltning            | 97             | 0              | 0             | 0            | 97             | 0.0%          | 1            | 5             | 0            | -8            |
| UniCredit Bank                    | 0              | 84             | 0             | 0            | 84             | 0.0%          | 1            | 0             | 0            | 27            |
| SEB Investment Management AB      | 43             | 0              | 0             | 0            | 43             | 0.0%          | 3            | 6             | 0            | 0             |
| FinEx Fund Plc                    | 0              | 26             | 4             | 0            | 30             | 0.0%          | 2            | 0             | -3           | -6            |
| Sun Global Investments            | 0              | 15             | 0             | 0            | 15             | 0.0%          | 2            | 1             | 1            | 10            |
| Fullgoal Fund Management Co       | 0              | 11             | 0             | 0            | 11             | 0.0%          | 1            | 0             | 2            | 10            |
| Alpha Asset Management            | 9              | 0              | 0             | 0            | 9              | 0.0%          | 1            | 0             | 0            | -8            |
| NBG Asset Management MFMC         | 4              | 0              | 0             | 0            | 4              | 0.0%          | 2            | 0             | 0            | 0             |
| Royal Bank of Scotland plc        | 0              | 0              | 0             | 0            | 0              | 0.0%          | 0            | 0             | 0            | -202          |
| Nordea Investment Funds           | 0              | 0              | 0             | 0            | 0              | 0.0%          | 2            | 0             | 0            | 0             |
| Landsbankinn                      | 0              | 0              | 0             | 0            | 0              | 0.0%          | 1            | 6             | 0            | 0             |
| Alpcot Capital Management         | 0              | 0              | 0             | 0            | 0              | 0.0%          | 0            | 0             | 0            | 0             |
| Swedbank Robur                    | 0              | 0              | 0             | 0            | 0              | 0.0%          | 0            | 0             | 0            | 0             |
| NCB Stockbrokers                  | 0              | 0              | 0             | 0            | 0              | 0.0%          | 0            | 0             | 0            | 0             |
| PDR Services LLC                  | 0              | 0              | 0             | 0            | 0              | 0.0%          | 0            | 0             | 0            | 0             |
| <b>Total</b>                      | <b>318,127</b> | <b>136,762</b> | <b>43,231</b> | <b>1,576</b> | <b>499,696</b> | <b>100.0%</b> | <b>1,983</b> | <b>73,889</b> | <b>9,570</b> | <b>29,607</b> |

\*China Post Global acquired ETF arm of Royal Bank of Scotland (RBS).

\*Blackrock's acquisition of Credit Suisse's ETF business completed on 1-Jul-2013. We have added historical AUM of Credit Suisse ETFs to Blackrock ETFs.

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



## European Provider Analysis by Replication Method

Figure 54: European ETF Providers list by replication | ETFs | Europe|

All figures in € million except products

| European Providers             | Replication Method | AUM (€) ETFs   |              | AUM (€) ETFs   |            | AUM (€) ETFs  |           | AUM (€) ETFs |           | AUM (€) AUM (%) ETFs |       |              |
|--------------------------------|--------------------|----------------|--------------|----------------|------------|---------------|-----------|--------------|-----------|----------------------|-------|--------------|
|                                |                    | Equity         | Fixed Income | Commodity      | Other      | Total         | Total     | Total        | Total     | Total                | Total |              |
| BlackRock                      | Physical           | 140,437        | 184          | 88,472         | 89         | 868           | 3         | 342          | 1         | 230,119              | 99%   | 277          |
|                                | Synthetic          | 148            | 1            | -              | -          | 1,472         | 1         | -            | -         | 1,621                | 1%    | 2            |
| Deutsche AM                    | Physical           | 25,102         | 62           | 610            | 5          | -             | -         | 29           | 1         | 25,741               | 47%   | 68           |
|                                | Synthetic          | 14,644         | 73           | 12,947         | 70         | 442           | 3         | 639          | 3         | 28,672               | 53%   | 149          |
| Lyxor                          | Physical           | 970            | 14           | 5,168          | 23         | -             | -         | -            | -         | 6,138                | 13%   | 37           |
|                                | Synthetic          | 33,372         | 152          | 5,873          | 24         | 971           | 2         | 94           | 3         | 40,311               | 87%   | 181          |
| UBS                            | Physical           | 17,633         | 68           | 2,118          | 23         | 1,558         | 6         | -            | -         | 21,309               | 84%   | 97           |
|                                | Synthetic          | 3,197          | 14           | 78             | 1          | 814           | 9         | 59           | 2         | 4,147                | 16%   | 26           |
| Amundi                         | Physical           | 969            | 6            | -              | -          | -             | -         | -            | -         | 969                  | 5%    | 6            |
|                                | Synthetic          | 14,575         | 69           | 4,858          | 27         | -             | -         | -            | -         | 19,433               | 95%   | 96           |
| Vanguard                       | Physical           | 19,209         | 16           | 276            | 5          | -             | -         | -            | -         | 19,484               | 100%  | 21           |
| Source                         | Physical           | 1,885          | 15           | 5,020          | 12         | -             | -         | -            | -         | 6,905                | 45%   | 27           |
|                                | Synthetic          | 7,911          | 48           | 272            | 2          | 295           | 1         | -            | -         | 8,478                | 55%   | 51           |
| State Street                   | Physical           | 9,253          | 62           | 5,632          | 36         | -             | -         | 52           | 1         | 14,937               | 100%  | 99           |
| ComStage                       | Physical           | 250            | 6            | -              | -          | -             | -         | -            | -         | 250                  | 3%    | 6            |
|                                | Synthetic          | 5,075          | 76           | 1,600          | 28         | 381           | 2         | 11           | 1         | 7,067                | 97%   | 107          |
| Zuercher Kantonalbank          | Physical           | -              | -            | -              | -          | 7,244         | 4         | -            | -         | 7,244                | 100%  | 4            |
| Deka Investment GmbH           | Physical           | 4,801          | 25           | 2,308          | 16         | -             | -         | -            | -         | 7,109                | 100%  | 41           |
|                                | Synthetic          | 15             | 1            | -              | -          | -             | -         | -            | -         | 15                   | 0%    | 1            |
| HSBC                           | Physical           | 4,626          | 27           | -              | -          | -             | -         | -            | -         | 4,626                | 100%  | 27           |
| BNP Paribas                    | Physical           | 1,539          | 17           | -              | -          | 95            | 1         | -            | -         | 1,634                | 39%   | 18           |
|                                | Synthetic          | 2,312          | 12           | 147            | 1          | 97            | 1         | -            | -         | 2,556                | 61%   | 14           |
| Xact Fonder AB                 | Physical           | 1,947          | 4            | -              | -          | -             | -         | -            | -         | 1,947                | 75%   | 4            |
|                                | Synthetic          | 486            | 7            | 43             | 1          | 109           | 1         | -            | -         | 639                  | 25%   | 9            |
| Julius Baer Inv                | Physical           | -              | -            | -              | -          | 2,237         | 4         | -            | -         | 2,237                | 100%  | 4            |
| PowerShares                    | Physical           | 1,549          | 13           | 22             | 1          | -             | -         | 3            | 1         | 1,573                | 76%   | 15           |
|                                | Synthetic          | 506            | 4            | -              | -          | -             | -         | -            | -         | 506                  | 24%   | 4            |
| Ossiam                         | Physical           | 64             | 1            | -              | -          | -             | -         | -            | -         | 64                   | 3%    | 1            |
|                                | Synthetic          | 1,904          | 8            | -              | -          | 49            | 1         | -            | -         | 1,953                | 97%   | 9            |
| ThinkCapital ETFs N.V.         | Physical           | 888            | 8            | 749            | 3          | -             | -         | 20           | 3         | 1,657                | 100%  | 14           |
| ETF Securities                 | Synthetic          | 474            | 20           | -              | -          | 473           | 1         | -            | -         | 947                  | 100%  | 21           |
|                                | Physical           | 122            | 3            | 327            | 4          | -             | -         | -            | -         | 449                  | 100%  | 7            |
| WisdomTree                     | Physical           | 427            | 24           | -              | -          | -             | -         | -            | -         | 427                  | 100%  | 24           |
|                                | Synthetic          | 6              | 2            | -              | -          | 22            | 1         | -            | -         | 27                   | 100%  | 3            |
| Fundlogic Global Solutions plc | Synthetic          | 399            | 2            | -              | -          | -             | -         | -            | -         | 399                  | 100%  | 2            |
| BBVA Gestion SA                | Physical           | 340            | 2            | -              | -          | -             | -         | -            | -         | 340                  | 100%  | 2            |
| China Post Global              | Synthetic          | 163            | 6            | -              | -          | 158           | 3         | -            | -         | 321                  | 100%  | 9            |
| Raiffeisen Schweiz             | Physical           | -              | -            | -              | -          | 199           | 3         | -            | -         | 199                  | 100%  | 3            |
| Van Eck Funds                  | Physical           | 191            | 3            | -              | -          | -             | -         | -            | -         | 191                  | 100%  | 3            |
| Seligson & Co Fund Mgmt.       | Physical           | 180            | 1            | -              | -          | -             | -         | -            | -         | 180                  | 100%  | 1            |
| BMO Global Asset Management    | Physical           | 89             | 5            | 74             | 4          | -             | -         | -            | -         | 163                  | 100%  | 9            |
| First Trust                    | Physical           | 148            | 9            | -              | -          | -             | -         | -            | -         | 148                  | 100%  | 9            |
| Nomura Asset Management        | Physical           | 133            | 3            | -              | -          | -             | -         | -            | -         | 133                  | 100%  | 3            |
| DnB Kapitalforvaltning         | Physical           | 97             | 1            | -              | -          | -             | -         | -            | -         | 97                   | 100%  | 1            |
| UniCredit Bank                 | Synthetic          | -              | -            | 84             | 1          | -             | -         | -            | -         | 84                   | 100%  | 1            |
| Commerzbank AG                 | Synthetic          | 9              | 1            | -              | -          | -             | -         | -            | -         | 9                    | 18%   | 1            |
|                                | Physical           | 9              | 1            | 34             | 1          | -             | -         | -            | -         | 43                   | 82%   | 2            |
| SEB Investment Management AB   | Synthetic          | 43             | 3            | -              | -          | -             | -         | -            | -         | 43                   | 100%  | 3            |
| FinEx Fund Plc                 | Physical           | -              | -            | -              | -          | 4             | 1         | -            | -         | 4                    | 14%   | 1            |
|                                | Synthetic          | -              | -            | 26             | 1          | -             | -         | -            | -         | 26                   | 86%   | 1            |
| Boost                          | Synthetic          | 17             | 2            | 0              | 1          | -             | -         | -            | -         | 17                   | 100%  | 3            |
| Sun Global Investments         | Physical           | -              | -            | 15             | 2          | -             | -         | -            | -         | 15                   | 100%  | 2            |
| Fullgoal Fund Management Co    | Physical           | -              | -            | 11             | 1          | -             | -         | -            | -         | 11                   | 100%  | 1            |
| Alpha Asset Mgmt.              | Physical           | 9              | 1            | -              | -          | -             | -         | -            | -         | 9                    | 100%  | 1            |
| NBG Asset Mgmt.                | Physical           | 2              | 1            | -              | -          | -             | -         | -            | -         | 2                    | 49%   | 1            |
|                                | Synthetic          | 2              | 1            | -              | -          | -             | -         | -            | -         | 2                    | 51%   | 1            |
| Landsbankinn                   | Physical           | -              | 1            | -              | -          | -             | -         | -            | -         | -                    | NA    | 1            |
| Nordea Investment Funds        | Synthetic          | -              | 2            | -              | -          | -             | -         | -            | -         | -                    | NA    | 2            |
| <b>Total</b>                   |                    | <b>318,127</b> | <b>1,087</b> | <b>136,762</b> | <b>382</b> | <b>17,489</b> | <b>48</b> | <b>1,246</b> | <b>16</b> | <b>473,624</b>       |       | <b>1,533</b> |

\*China Post Global acquired ETF arm of Royal Bank of Scotland (RBS).

\*Blackrock's acquisition of Credit Suisse's ETF business completed on 1-Jul-2013. We have added historical AUM of Credit Suisse ETFs to Blackrock ETFs.

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



## 6. Trading Perspective

### ETP Monthly Turnover Analysis by Asset Class, by Instrument

Figure 55: Turnover by asset class and instrument (€ million) | ETPs | Europe |

| Asset Class       | Jul-16        |                |               |                             | Jun-16        |               | 2015 (Monthly Avg.) |
|-------------------|---------------|----------------|---------------|-----------------------------|---------------|---------------|---------------------|
|                   | Turnover      | Market Share % | MoM %Change   | 2015 (Monthly Avg.) %Change | Turnover      | Turnover      |                     |
| <b>ETFs</b>       |               |                |               |                             |               |               |                     |
| Equity            | 45,682        | 61.8%          | -22.8%        | -7.0%                       | 59,141        | 49,094        |                     |
| Fixed income      | 19,692        | 26.7%          | -16.1%        | 41.4%                       | 23,467        | 13,929        |                     |
| Commodity         | 1,055         | 1.4%           | -27.8%        | 43.5%                       | 1,462         | 735           |                     |
| Currency          | 0             | 0.0%           | 0.0%          | -100.0%                     | 0             | 1             |                     |
| Multi Asset       | 16            | 0.0%           | -33.0%        | -41.8%                      | 24            | 27            |                     |
| Alternative       | 91            | 0.1%           | -72.1%        | -15.8%                      | 327           | 108           |                     |
| <b>Total</b>      | <b>66,535</b> | <b>90.0%</b>   | <b>-21.2%</b> | <b>4.1%</b>                 | <b>84,420</b> | <b>63,893</b> |                     |
| <b>ETCs</b>       |               |                |               |                             |               |               |                     |
| Commodity         | 7,144         | 9.7%           | -19.4%        | 96.0%                       | 8,866         | 3,646         |                     |
| Currency          | 210           | 0.3%           | -25.2%        | -12.0%                      | 280           | 238           |                     |
| <b>Total</b>      | <b>7,353</b>  | <b>10.0%</b>   | <b>-19.6%</b> | <b>89.3%</b>                | <b>9,146</b>  | <b>3,884</b>  |                     |
| <b>Total ETPs</b> | <b>73,889</b> | <b>100.0%</b>  | <b>-21.0%</b> | <b>9.0%</b>                 | <b>93,566</b> | <b>67,777</b> |                     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

### Asset Class Analysis

Figure 56: European Equity ETF Turnover Summary (€ million) | ETFs | Europe |

| Equity Turnover       | Jul-16        |                |             |                             | Jun-16        |               | 2015 (Monthly Avg.) |
|-----------------------|---------------|----------------|-------------|-----------------------------|---------------|---------------|---------------------|
|                       | Turnover      | Market Share % | MoM %Change | 2015 (Monthly Avg.) %Change | Turnover      | Turnover      |                     |
| Developed Markets     | 26,588        | 58.2%          | -30.4%      | 82.9%                       | 38,176        | 32,083        |                     |
| Emerging Markets      | 4,617         | 10.1%          | 8.7%        | 100.2%                      | 4,248         | 4,610         |                     |
| Global Markets        | 1,080         | 2.4%           | 93.7%       | 140.7%                      | 558           | 768           |                     |
| Sector                | 3,197         | 7.0%           | -22.9%      | 107.7%                      | 4,144         | 2,968         |                     |
| Capitalization        | 644           | 1.4%           | -19.5%      | 90.8%                       | 800           | 709           |                     |
| Strategy              | 6,538         | 14.3%          | -23.6%      | 109.2%                      | 8,560         | 5,988         |                     |
| Style                 | 1,974         | 4.3%           | 3.4%        | 129.0%                      | 1,910         | 1,530         |                     |
| Thematic              | 1,044         | 2.3%           | 40.1%       | 237.4%                      | 745           | 440           |                     |
| <b>Total Equities</b> | <b>45,682</b> | <b>100%</b>    | <b>-23%</b> | <b>93.0%</b>                | <b>59,141</b> | <b>49,094</b> |                     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.





Figure 56A: European Equity ETF Turnover Summary – A (€ million) | ETFs | Europe |

| Equity Turnover        | Jul-16   |                |             |                             | Jun-16   | 2015 (Monthly Avg.) |
|------------------------|----------|----------------|-------------|-----------------------------|----------|---------------------|
|                        | Turnover | Market Share % | MoM %Change | 2015 (Monthly Avg.) %Change | Turnover | Turnover            |
| <b>Sector</b>          | 3,197    | 23.9%          | -22.9%      | 7.7%                        | 4,144    | 2,968               |
| Consumer discretionary | 166      | 1.2%           | 39.4%       | -0.3%                       | 119      | 166                 |
| Consumer staples       | 162      | 1.2%           | 21.5%       | 8.6%                        | 134      | 150                 |
| Energy                 | 301      | 2.2%           | 2.8%        | -17.1%                      | 293      | 363                 |
| Financials             | 1740     | 13.0%          | -35.7%      | 27.9%                       | 2705     | 1,360               |
| Healthcare             | 218      | 1.6%           | -2.4%       | -10.3%                      | 223      | 243                 |
| Industrials            | 76       | 0.6%           | -17.2%      | -47.8%                      | 92       | 146                 |
| Information Technology | 144      | 1.1%           | -8.4%       | -13.1%                      | 157      | 165                 |
| Materials              | 167      | 1.2%           | -13.6%      | -12.6%                      | 193      | 191                 |
| Telecommunications     | 64       | 0.5%           | -43.0%      | -32.3%                      | 112      | 95                  |
| Utilities              | 159      | 1.2%           | 35.9%       | 77.6%                       | 117      | 90                  |
| <b>Capitalization</b>  | 644      | 4.8%           | -19.5%      | -9.2%                       | 800      | 709                 |
| Large Cap              | 35       | 0.3%           | 8.0%        | -8.1%                       | 32       | 38                  |
| Mid Cap                | 209      | 1.6%           | -41.3%      | -25.8%                      | 357      | 282                 |
| Small Cap              | 400      | 3.0%           | -2.7%       | 2.7%                        | 411      | 389                 |
| <b>Strategy</b>        | 6,538    | 48.8%          | -23.6%      | 9.2%                        | 8,560    | 5,988               |
| Fundamental            | 96       | 0.7%           | 70.8%       | -4.7%                       | 56       | 101                 |
| Leveraged Long         | 1879     | 14.0%          | -24.2%      | -32.9%                      | 2479     | 2801                |
| Leveraged Short        | 1969     | 14.7%          | -33.3%      | 8.5%                        | 2951     | 1815                |
| Options Strategy       | 0        | 0.0%           | 0.0%        | 0.0%                        | 0        | 0                   |
| Quantitative           | 1831     | 13.7%          | 10.3%       | 191.5%                      | 1660     | 628                 |
| Short                  | 762      | 5.7%           | -46.1%      | 18.8%                       | 1413     | 642                 |
| <b>Style</b>           | 1,974    | 14.7%          | 3.4%        | 29.0%                       | 1,910    | 1,530               |
| Dividend               | 1,773    | 13.2%          | -1.8%       | 28.4%                       | 1,806    | 1,380               |
| Growth                 | 28       | 0.2%           | 54.9%       | -57.8%                      | 18       | 66                  |
| Value                  | 174      | 1.3%           | 101.5%      | 107.1%                      | 86       | 84                  |
| <b>Thematic</b>        | 1,044    | 7.8%           | 40.1%       | 137.4%                      | 745      | 440                 |
| Commodities            | 420      | 3.1%           | 0.6%        | 245.2%                      | 418      | 122                 |
| Cyclical               | 0        | 0.0%           | 0.0%        | 0.0%                        | 0        | -                   |
| Faith                  | 25       | 0.2%           | 10.2%       | 40.8%                       | 23       | 18                  |
| Other Theme            | 126      | 0.9%           | 60.5%       | 7.8%                        | 78       | 116                 |
| Sustainability         | 472      | 3.5%           | 109.0%      | 157.8%                      | 226      | 183                 |
| <b>Total</b>           | 13,397   | 100.0%         | -17.1%      | 15.2%                       | 16,160   | 11,634              |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 56B: European Equity ETF Turnover Summary – B (€ million) | ETFs | Europe |

| Equity Turnover          | Jul-16   |                |             |                             | Jun-16   | 2015 (Monthly Avg.) |
|--------------------------|----------|----------------|-------------|-----------------------------|----------|---------------------|
|                          | Turnover | Market Share % | MoM %Change | 2015 (Monthly Avg.) %Change | Turnover | Turnover            |
| <b>Developed Markets</b> |          |                |             |                             |          |                     |
| <b>Europe</b>            | 15,692   | 59.0%          | -38.8%      | -23.0%                      | 25,659   | 20,373              |
| Austria                  | 18       | 0.1%           | 0.6%        | 40.7%                       | 18       | 13                  |
| Belgium                  | 1        | 0.0%           | -61.8%      | -74.7%                      | 2        | 4                   |
| Finland                  | 3        | 0.0%           | -57.2%      | -73.4%                      | 7        | 11                  |
| France                   | 373      | 1.4%           | -24.3%      | -38.1%                      | 493      | 603                 |
| Germany                  | 3,316    | 12.5%          | -30.5%      | -29.6%                      | 4,769    | 4,709               |
| Greece                   | 9        | 0.0%           | -74.6%      | -84.6%                      | 37       | 61                  |
| Ireland                  | 0        | 0.0%           | -68.1%      | -81.6%                      | 2        | 3                   |
| Italy                    | 579      | 2.2%           | -29.1%      | -38.0%                      | 817      | 934                 |
| Netherlands              | 152      | 0.6%           | -37.3%      | -36.1%                      | 242      | 237                 |
| Norway                   | 6        | 0.0%           | -89.5%      | -77.4%                      | 58       | 27                  |
| Portugal                 | 2        | 0.0%           | -83.4%      | -92.2%                      | 9        | 20                  |
| Iceland                  | 6        | 0.0%           | 48.9%       | 1392.1%                     | 4        | 0                   |
| Spain                    | 126      | 0.5%           | -41.1%      | -61.5%                      | 214      | 327                 |
| Sweden                   | 270      | 1.0%           | -20.1%      | -21.5%                      | 338      | 344                 |
| Switzerland              | 830      | 3.1%           | -31.0%      | -33.1%                      | 1,203    | 1,240               |
| UK                       | 3,258    | 12.3%          | -42.4%      | 30.8%                       | 5,655    | 2,491               |
| Europe broad             | 6,742    | 25.4%          | -42.8%      | -27.9%                      | 11,791   | 9,349               |
| <b>Americas</b>          | 5,492    | 20.7%          | -25.5%      | -9.0%                       | 7,371    | 6,037               |
| US                       | 5,222    | 19.6%          | -25.1%      | -9.3%                       | 6,972    | 5,759               |
| Canada                   | 106      | 0.4%           | 27.0%       | 29.2%                       | 84       | 82                  |
| North America            | 164      | 0.6%           | -48.0%      | -16.6%                      | 315      | 196                 |
| <b>Asia</b>              | 3,287    | 12.4%          | 9.6%        | 2.4%                        | 2,999    | 3,211               |
| Australia                | 468      | 1.8%           | 533.4%      | 347.7%                      | 74       | 105                 |
| Hong Kong                | 10       | 0.0%           | -14.3%      | -81.2%                      | 12       | 54                  |
| Japan                    | 2,629    | 9.9%           | -3.0%       | -9.2%                       | 2,709    | 2,895               |
| Singapore                | 4        | 0.0%           | 151.0%      | 26.7%                       | 1        | 3                   |
| Asia Pacific broad       | 176      | 0.7%           | -12.9%      | 14.1%                       | 202      | 154                 |
| <b>EMEA</b>              | 2        | 0.0%           | -74.3%      | 0.0%                        | 9        | 0                   |
| Israel                   | 2        | 0.0%           | -74.3%      | 0.0%                        | 9        | 0                   |
| <b>Global</b>            | 2,115    | 8.0%           | -1.1%       | -14.0%                      | 2,138    | 2,461               |
| Broad indices            | 2,115    | 8.0%           | -1.1%       | -14.0%                      | 2,138    | 2,461               |
| <b>DM Total</b>          | 26,588   | 100.0%         | -30.3%      | -17.1%                      | 38,167   | 32,083              |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



| Figure 56C: European Equity ETF Turnover Summary – C (€ million) |          |                |             |                             | ETFs   Europe |                     |
|--|----------|----------------|-------------|-----------------------------|---------------|---------------------|
| Equity Turnover  | Jul-16   |                |             |                             | Jun-16        | 2015 (Monthly Avg.) |
|  | Turnover | Market Share % | MoM %Change | 2015 (Monthly Avg.) %Change | Turnover      | Turnover            |
| <b>Emerging Markets</b>  |          |                |             |                             |               |                     |
| <b>BRIC</b>  | 762      | 16.5%          | 4.3%        | -54.2%                      | 731           | 1,664               |
| Brazil   | 169      | 3.7%           | 30.9%       | 2.2%                        | 129           | 165                 |
| Russia   | 82       | 1.8%           | -31.3%      | -65.5%                      | 119           | 238                 |
| India  | 181      | 3.9%           | -5.8%       | -49.5%                      | 192           | 358                 |
| China  | 330      | 7.1%           | 13.7%       | -63.5%                      | 290           | 903                 |
| <b>Latin America</b>   | 109      | 2.4%           | 3.6%        | -5.0%                       | 105           | 115                 |
| Chile  | 0        | 0.0%           | 0.0%        | -100.0%                     | 0             | 6                   |
| Mexico   | 31       | 0.7%           | 57.0%       | -7.2%                       | 20            | 33                  |
| LATAM broad  | 78       | 1.7%           | -8.6%       | 3.6%                        | 86            | 76                  |
| <b>Asia</b>  | 431      | 9.3%           | 13.4%       | -35.2%                      | 380           | 665                 |
| Bangladesh   | 2        | 0.0%           | 128.8%      | 118.7%                      | 1             | 1                   |
| Indonesia  | 28       | 0.6%           | 17.3%       | -18.4%                      | 24            | 34                  |
| Malaysia   | 7        | 0.2%           | -57.2%      | -65.0%                      | 17            | 21                  |
| Pakistan   | 6        | 0.1%           | 76.5%       | 134.4%                      | 3             | 2                   |
| Philippines  | 13       | 0.3%           | -6.1%       | 8.5%                        | 13            | 12                  |
| South Korea  | 80       | 1.7%           | -24.3%      | -53.4%                      | 106           | 173                 |
| Taiwan   | 94       | 2.0%           | 36.6%       | -9.9%                       | 69            | 105                 |
| Thailand   | 6        | 0.1%           | 74.1%       | -56.7%                      | 4             | 14                  |
| Vietnam  | 15       | 0.3%           | -32.2%      | -53.4%                      | 23            | 33                  |
| Asia Pacific broad   | 178      | 3.9%           | 49.2%       | -33.8%                      | 120           | 270                 |
| <b>EMEA</b>  | 234      | 5.1%           | 66.8%       | -2.7%                       | 140           | 240                 |
| Kuwait   | 0        | 0.0%           | -47.6%      | -98.9%                      | 0             | 2                   |
| Poland   | 16       | 0.3%           | 242.3%      | 31.8%                       | 5             | 12                  |
| South Africa   | 27       | 0.6%           | -0.2%       | 14.1%                       | 28            | 24                  |
| Turkey   | 67       | 1.5%           | 246.6%      | -38.0%                      | 19            | 108                 |
| Europe broad   | 116      | 2.5%           | 40.2%       | 39.9%                       | 83            | 83                  |
| Middle East & Africa   | 8        | 0.2%           | 28.8%       | -32.8%                      | 6             | 12                  |
| <b>Global Markets</b>  | 3,081    | 66.7%          | 6.6%        | 60.1%                       | 2,891         | 1,925               |
| Global   | 3,081    | 66.7%          | 6.6%        | 60.1%                       | 2,891         | 1,925               |
| <b>EM Total</b>  | 4,617    | 100.0%         | 8.7%        | 0.2%                        | 4,248         | 4,610               |
| <b>Total (EM + DM)</b>   | 31,205   | 100.0%         | -26.4%      | -15.0%                      | 42,414        | 36,692              |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 57: European Fixed Income ETF Turnover (€ million) | ETFs | Europe |

| Fixed Income Turnover     | Jul-16        |                |               |                             | Jun-16        | 2015 (Monthly Avg.) |
|---------------------------|---------------|----------------|---------------|-----------------------------|---------------|---------------------|
|                           | Turnover      | Market Share % | MoM %Change   | 2015 (Monthly Avg.) %Change | Turnover      | Turnover            |
| Overall                   | 691           | 3.5%           | 35.2%         | 65.5%                       | 511           | 417                 |
| Corporates                | 7,481         | 38.0%          | -23.1%        | 50.9%                       | 9,722         | 4,957               |
| Covered Bonds             | 148           | 0.7%           | 6.3%          | -25.4%                      | 139           | 198                 |
| Credit Exposure           | 26            | 0.1%           | -52.8%        | -24.9%                      | 55            | 34                  |
| Sovereign                 | 10,852        | 55.1%          | -10.7%        | 41.2%                       | 12,148        | 7,688               |
| Money Market              | 495           | 2.5%           | -44.4%        | -21.9%                      | 892           | 634                 |
| <b>Total Fixed Income</b> | <b>19,692</b> | <b>100.0%</b>  | <b>-16.1%</b> | <b>41.4%</b>                | <b>23,467</b> | <b>13,929</b>       |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 58: European Commodity ETP Turnover summary (€ million) | ETPs | Europe |

| Commodity Turnover         | Jul-16   |                |             |                             | Jun-16   |          | 2015 (Monthly Avg.) |
|----------------------------|----------|----------------|-------------|-----------------------------|----------|----------|---------------------|
|                            | Turnover | Market Share % | MoM %Change | 2015 (Monthly Avg.) %Change | Turnover | Turnover |                     |
| <b>Overall</b>             | 404      | 4.9%           | -25.6%      | 19.8%                       | 544      | 337      |                     |
| Overall                    | 390      | 4.8%           | -25.8%      | 23.8%                       | 525      | 315      |                     |
| Overall ex Energy          | 14       | 0.2%           | -24.0%      | -37.3%                      | 18       | 22       |                     |
| Overall Light Energy       | 0        | 0.0%           | 355.3%      | 236.9%                      | 0        | 0        |                     |
| Overall Ultra Light Energy | 0        | 0.0%           | 0.0%        | 0.0%                        | 0        | 0        |                     |
| <b>Agriculture</b>         | 284      | 3.5%           | -0.9%       | 32.7%                       | 286      | 214      |                     |
| Overall                    | 55       | 0.7%           | -0.3%       | 30.4%                       | 55       | 42       |                     |
| Cocoa                      | 6        | 0.1%           | 7.7%        | 23.6%                       | 5        | 5        |                     |
| Coffee                     | 34       | 0.4%           | -43.3%      | -33.4%                      | 60       | 51       |                     |
| Corn                       | 29       | 0.4%           | 87.6%       | 145.6%                      | 16       | 12       |                     |
| Cotton                     | 5        | 0.1%           | 46.5%       | -25.7%                      | 3        | 6        |                     |
| Grains                     | 3        | 0.0%           | 20.9%       | -34.1%                      | 3        | 5        |                     |
| Softs                      | 1        | 0.0%           | -14.5%      | -26.6%                      | 1        | 1        |                     |
| Soybean Oil                | 19       | 0.2%           | 36.6%       | 279.3%                      | 14       | 5        |                     |
| Soybeans                   | 28       | 0.3%           | 38.6%       | 432.3%                      | 20       | 5        |                     |
| Sugar                      | 21       | 0.3%           | -55.3%      | -18.3%                      | 48       | 26       |                     |
| Wheat                      | 84       | 1.0%           | 33.1%       | 48.4%                       | 63       | 56       |                     |
| <b>Energy</b>              | 1,763    | 21.5%          | -21.3%      | 7.2%                        | 2,239    | 1,644    |                     |
| Overall                    | 27       | 0.3%           | 52.5%       | -48.0%                      | 18       | 53       |                     |
| Carbon                     | 0        | 0.0%           | -90.6%      | -81.5%                      | 0        | 0        |                     |
| Crude Oil                  | 1520     | 18.5%          | -22.3%      | 14.6%                       | 1956     | 1327     |                     |
| Gasoline                   | 6        | 0.1%           | 93.1%       | -36.7%                      | 3        | 9        |                     |
| Heating Oil                | 5        | 0.1%           | 105.6%      | 34.6%                       | 2        | 3        |                     |
| Natural Gas                | 205      | 2.5%           | -20.9%      | -18.5%                      | 259      | 252      |                     |
| Electricity                | 0        | 0.0%           | 0.0%        | 0.0%                        | 0        | 0        |                     |
| Uranium                    | 0        | 0.0%           | 0.0%        | 0.0%                        | 0        | 0        |                     |
| <b>Industrial Metals</b>   | 178      | 2.2%           | 17.2%       | 3.0%                        | 152      | 172      |                     |
| Overall                    | 32       | 0.4%           | 4.8%        | -19.5%                      | 31       | 40       |                     |
| Aluminium                  | 9        | 0.1%           | 71.6%       | -62.5%                      | 5        | 24       |                     |
| Copper                     | 101      | 1.2%           | 4.0%        | 29.5%                       | 97       | 78       |                     |
| Lead                       | 0        | 0.0%           | 109.2%      | -47.8%                      | 0        | 1        |                     |
| Nickel                     | 30       | 0.4%           | 200.8%      | 27.2%                       | 10       | 23       |                     |
| Tin                        | 1        | 0.0%           | -51.1%      | -76.3%                      | 1        | 2        |                     |
| Zinc                       | 5        | 0.1%           | -31.2%      | 14.0%                       | 8        | 5        |                     |
| <b>Precious Metals</b>     | 5,567    | 67.9%          | -21.6%      | 177.3%                      | 7,105    | 2,007    |                     |
| Overall                    | 19       | 0.2%           | 23.6%       | -46.8%                      | 16       | 37       |                     |
| Gold                       | 4573     | 55.8%          | -28.9%      | 174.6%                      | 6428     | 1665     |                     |
| Palladium                  | 93       | 1.1%           | 70.4%       | 82.7%                       | 54       | 51       |                     |
| Platinum                   | 103      | 1.3%           | 79.4%       | 45.5%                       | 57       | 71       |                     |
| Rhodium                    | 1        | 0.0%           | 1266.6%     | -51.2%                      | 0        | 2        |                     |
| Silver                     | 779      | 9.5%           | 41.7%       | 327.3%                      | 550      | 182      |                     |
| <b>Livestock</b>           | 3        | 0.0%           | 18.0%       | -47.5%                      | 3        | 6        |                     |
| Overall                    | 0        | 0.0%           | 11.5%       | -57.5%                      | 0        | 1        |                     |
| Cattle                     | 1        | 0.0%           | -54.1%      | -40.9%                      | 2        | 1        |                     |
| Lean Hogs                  | 2        | 0.0%           | 162.2%      | -48.0%                      | 1        | 4        |                     |
| <b>Total</b>               | 8,198    | 100.0%         | -20.6%      | 87.2%                       | 10,328   | 4,381    |                     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



## Product Rankings

Figure 59: Top 20 Equity ETFs by Turnover (€ million)

|  |            |             |                  | ETFs   Europe    |                |          |
|--|------------|-------------|------------------|------------------|----------------|----------|
| ETF Name   | BBG Ticker | Issuer      | Invest. Strategy | Current Month TO | Prev. Month TO | YTD TO   |
| iShares Core DAX UCITS ETF DE                    | DAXEX GR   | BlackRock   | Beta             | 1,532.7          | 1,904.4        | 11,243.0 |
| iShares FTSE 100 UCITS ETF (Inc)                 | ISF LN     | BlackRock   | Beta             | 1,384.2          | 2,669.8        | 10,267.2 |
| iShares Core S&P 500 UCITS ETF                   | CSSPX SW   | BlackRock   | Beta             | 1,287.3          | 1,675.5        | 8,931.5  |
| iShares MSCI Emerging Markets UCITS ETF (Inc)    | IEEM LN    | BlackRock   | Beta             | 1,034.5          | 1,109.4        | 6,730.6  |
| Vanguard S&P 500 ETF                             | VUSA LN    | Vanguard    | Beta             | 760.4            | 1,663.2        | 7,698.1  |
| db x-trackers DAX® UCITS ETF (DR) 1C             | XDAX GR    | Deutsche AM | Beta             | 749.4            | 906.8          | 4,839.9  |
| Lyxor UCITS ETF Euro STOXX 50                    | MSE FP     | Lyxor       | Beta             | 741.1            | 1,705.8        | 7,670.8  |
| Vanguard FTSE 100 ETF                            | VUKE LN    | Vanguard    | Beta             | 654.3            | 861.2          | 3,619.8  |
| iShares Euro STOXX 50 (DE)                       | SX5EEX GR  | BlackRock   | Beta             | 610.8            | 962.8          | 5,867.5  |
| iShares EURO STOXX 50 UCITS ETF (Inc)            | EUNE SW    | BlackRock   | Beta             | 592.2            | 1,148.6        | 5,221.7  |
| iShares MSCI Europe UCITS ETF (Inc)              | IMEU LN    | BlackRock   | Beta             | 555.4            | 651.1          | 3,710.7  |
| iShares Core MSCI World UCITS ETF (Acc)          | SWDA LN    | BlackRock   | Beta             | 513.2            | 600.0          | 6,229.5  |
| Amundi ETF MSCI Emerging Markets UCITS ETF       | AEEM FP    | Amundi      | Beta             | 513.0            | 203.6          | 1,817.5  |
| iShares MSCI World UCITS ETF (Inc)               | IWRD LN    | BlackRock   | Beta             | 489.4            | 530.7          | 3,955.3  |
| db x-trackers Euro Stoxx 50® UCITS ETF (DR) - 1D | XESX GR    | Deutsche AM | Beta             | 475.9            | 880.9          | 4,408.8  |
| iShares MSCI Japan EUR Hedged UCITS ETF          | IJPE LN    | BlackRock   | Beta             | 451.7            | 509.9          | 3,568.0  |
| iShares MSCI Australia UCITS ETF                 | SAUS LN    | BlackRock   | Beta             | 447.3            | 57.3           | 829.9    |
| iShares S&P 500 UCITS ETF (Inc)                  | IUSA LN    | BlackRock   | Beta             | 442.2            | 973.0          | 5,142.9  |
| Lyxor UCITS ETF STOXX Europe 600 Banks           | BNK FP     | Lyxor       | Beta             | 439.5            | 808.6          | 2,443.2  |
| iShares STOXX 600 (DE)                           | SXXPIEX GR | BlackRock   | Beta             | 414.0            | 917.1          | 4,740.2  |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 60: Top 20 Fixed Income ETFs by Turnover (€ million)

|  |          |              |                  | ETFs   Europe    |                |         |
|--|----------|--------------|------------------|------------------|----------------|---------|
| ETF Name   | BBG Code | Issuer       | Invest. Strategy | Current Month TO | Prev. Month TO | YTD TO  |
| iShares Euro High Yield Corporate Bond UCITS ETF         | IHYG LN  | BlackRock    | Beta             | 1,196.0          | 1,149.7        | 7,648.5 |
| iShares J.P. Morgan \$ Emerging Markets Bond UCITS ETF   | SEMB LN  | BlackRock    | Beta             | 1,124.1          | 874.7          | 5,278.9 |
| iShares \$ Corporate Bond UCITS ETF                      | LODE LN  | BlackRock    | Beta             | 899.9            | 432.7          | 4,262.9 |
| iShares Emerging Markets Local Government Bond UCITS ETF | SEML LN  | BlackRock    | Beta             | 892.8            | 621.3          | 3,931.5 |
| iShares \$ Treasury Bond 7-10yr UCITS ETF                | IDTM LN  | BlackRock    | Beta             | 720.3            | 281.6          | 2,378.7 |
| iShares \$ High Yield Corporate Bond UCITS ETF           | SHYU LN  | BlackRock    | Beta             | 673.8            | 812.9          | 5,102.5 |
| iShares JP Morgan \$ EM Bond EUR Hedged UCITS ETF        | EMBE LN  | BlackRock    | Beta             | 671.5            | 57.8           | 1,021.6 |
| iShares Euro Corporate Bond UCITS ETF                    | IEBC LN  | BlackRock    | Beta             | 625.1            | 1,248.9        | 5,994.5 |
| iShares \$ Treasury Bond 1-3yr UCITS ETF                 | IBTS LN  | BlackRock    | Beta             | 617.3            | 716.6          | 3,234.2 |
| iShares \$ TIPS UCITS ETF                                | IDTP LN  | BlackRock    | Beta             | 447.0            | 558.8          | 2,871.2 |
| iShares Italy Government Bond UCITS ETF                  | SITB LN  | BlackRock    | Beta             | 420.3            | 53.8           | 883.7   |
| iShares £ Index-Linked Gilts UCITS ETF                   | INXG LN  | BlackRock    | Beta             | 386.3            | 319.9          | 1,498.7 |
| SPDR Barclays Capital Emerging Market Local Bond ETF     | SYBM GY  | State Street | Beta             | 384.2            | 280.2          | 1,606.9 |
| iShares US Aggregate Bond UCITS ETF                      | SUAG LN  | BlackRock    | Beta             | 336.0            | 169.5          | 1,040.5 |
| iShares Euro Corporate Bond Large Cap UCITS ETF          | IBCS GR  | BlackRock    | Beta             | 330.9            | 632.7          | 3,042.4 |
| iShares Euro Corporate Bond ex-Financials UCITS ETF      | EEXF LN  | BlackRock    | Beta             | 309.4            | 506.1          | 1,367.8 |
| iShares UK Gilts UCITS ETF                               | IGLT LN  | BlackRock    | Beta             | 289.1            | 697.7          | 2,339.5 |
| iShares Euro Corporate Bond 1-5yr UCITS ETF              | SE15 LN  | BlackRock    | Beta             | 204.3            | 323.5          | 1,296.5 |
| iShares Euro Ultrashort Bond UCITS ETF                   | ERNE LN  | BlackRock    | Beta             | 195.9            | 127.2          | 763.8   |
| UBS ETF - Barclays US Liquid Corporates UCITS ETF        | UEF9 GY  | UBS          | Beta             | 195.4            | 78.7           | 620.1   |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 61: Top 20 Commodity ETPs by Turnover (€ million)

| ETPs | Europe |

| ETP Name   | BBG Code | Issuer                          | Invest. Strategy | Current Month TO | Prev. Month TO | YTD TO  |
|--|----------|---------------------------------|------------------|------------------|----------------|---------|
| ETFS Physical Gold   | PHAU LN  | ETF Securities                  | Beta             | 1,497.1          | 1,217.6        | 5,881.1 |
| Gold Bullion Securities                                      | GBS LN   | ETF Securities                  | Beta             | 846.3            | 1,312.3        | 5,058.2 |
| Source Physical Gold ETC (P-ETC)                             | SGLD LN  | Source                          | Beta             | 719.0            | 1,173.6        | 6,917.7 |
| ETFS WTI Crude Oil   | CRUD LN  | ETF Securities                  | Beta             | 431.7            | 320.5          | 2,946.5 |
| iShares Physical Gold ETC                                    | SGLN LN  | Blackrock                       | Beta             | 422.9            | 1,019.4        | 2,502.3 |
| Boost Wti Oil 3X Leverage Daily ETP                          | 3OIL LN  | Boost                           | Beta+            | 378.3            | 695.7          | 3,638.1 |
| ZKB Gold ETF   | ZGLD SW  | Zuercher Kantonalbank           | Beta             | 317.6            | 404.8          | 2,166.5 |
| ETFS Physical Silver   | PHAG LN  | ETF Securities                  | Beta             | 280.9            | 280.3          | 1,220.9 |
| Boost Wti Oil 3X Short Daily ETP                             | 3OIS LN  | Boost                           | Beta+            | 222.0            | 226.2          | 1,530.9 |
| ETFS Daily Leveraged Crude Oil                               | LOIL LN  | ETF Securities                  | Beta+            | 185.4            | 199.2          | 1,728.7 |
| XETRA-Gold   | XAUER    | Deutsche Borse Commodities GmbH | Beta             | 165.4            | 267.4          | 1,488.9 |
| db Physical Gold Euro Hedged ETC                             | XAD1 GR  | Deutsche AM                     | Beta             | 121.9            | 131.2          | 707.7   |
| ZKB Silver ETF   | ZSIL SW  | Zuercher Kantonalbank           | Beta             | 120.6            | 59.7           | 362.4   |
| ETFS Daily Leveraged Silver                                  | LSIL LN  | ETF Securities                  | Beta+            | 95.8             | 27.8           | 213.6   |
| Boost Natural Gas 3X Leverage Daily ETP                      | 3NGL LN  | Boost                           | Beta+            | 92.9             | 131.3          | 695.6   |
| db x-trackers db Commodity Booster UCITS ETF 2C EUR - Hedged | XCBE GR  | Deutsche AM                     | Beta             | 89.2             | 5.6            | 111.8   |
| ETFS Copper  | COPA LN  | ETF Securities                  | Beta             | 83.9             | 75.8           | 437.1   |
| ETFS Longer Dated All Commodities GO UCITS ETF               | COMF LN  | ETF Securities                  | Beta             | 72.6             | 153.8          | 801.2   |
| Boost Silver 3X Leverage Daily ETP                           | 3SIL LN  | Boost                           | Beta+            | 65.4             | 31.7           | 177.8   |
| ETFS Brent 1mth Oil  | OILB LN  | ETF Securities                  | Beta             | 62.1             | 112.2          | 950.5   |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 62: Top 10 ETPs by Turnover (€ million) – Deutsche Borse

| ETPs | Europe |

| Equity ETFs  | BBG Ticker | Turnover | Fixed Income ETFs   | BBG Ticker | Turnover |
|--|------------|----------|---|------------|----------|
| 1 iShares Core DAX UCITS ETF DE                    | DAXEX GR   | 1,517.50 | 1 iShares Markit iBoxx Euro High Yield  | EUNW GR    | 86.45    |
| 2 db x-trackers DAX® UCITS ETF (DR) 1C             | XDAX GR    | 717.04   | 2 db X-trackers II iBoxx Sovereigns Eurozone Yield Plus 1-3 UCITS ETF         | XYP1 GY    | 70.56    |
| 3 iShares Euro STOXX 50 (DE)                       | SX5EEX GR  | 586.33   | 3 db x-trackers II EONIA TR Index UCITS ETF                                   | XEON GR    | 53.57    |
| 4 iShares STOXX 600 (DE)                           | SXXPIEX GR | 353.03   | 4 db x-trackers II iBoxx Euro Sovereigns Eurozone UCITS ETF                   | XGLE GR    | 40.19    |
| 5 iShares EURO STOXX 50 UCITS ETF (Inc)            | EUN2 GR    | 329.96   | 5 iShares JPMorgan USD Emerging Markets Bond                                  | IUS7 GR    | 36.93    |
| 6 Deka DAX UCITS ETF                               | ETFDEX GR  | 268.72   | 6 iShares Barclays Euro Corporate Bond  | EUN5 GR    | 36.59    |
| 7 iShares Euro STOXX Banks (DE)                    | SX7EEX GR  | 260.12   | 7 iShares Euro Corporate Bond Large Cap UCITS ETF                             | IBCS GR    | 35.84    |
| 8 db x-trackers Euro Stoxx 50® UCITS ETF (DR) - 1D | XESX GR    | 182.72   | 8 db x-trackers II iBoxx Euro Sovereigns Eurozone 5-7 TR Index UCITS ETF      | X57E GR    | 33.50    |
| 9 db x-trackers Euro Stoxx 50® UCITS ETF (DR) - 1C | XESC GR    | 181.31   | 9 iShares Markit iBoxx \$ High Yield Capped Bond                              | ISOR GY    | 33.05    |
| 10 iShares MSCI Europe                             | IQQY GR    | 177.57   | 10 db x-trackers II - iBoxx Global Inflation-Linked UCITS ETF 1C EUR - Hedged | XGIN GR    | 31.78    |
| Commodity ETPs                                     | BBG Ticker | Turnover | Other   | BBG Ticker | Turnover |
| 1 XETRA-Gold                                       | XAUER      | 165.44   | 1 db x-trackers LPX Major Market Private Equity UCITS ETF                     | XLPE GR    | 6.95     |
| 2 Source Physical Gold ETC (P-ETC)                 | 8PSG GY    | 51.94    | 2 db x-trackers Portfolio TR Index UCITS ETF                                  | XQUI GR    | 5.51     |
| 3 db Physical Gold Euro Hedged ETC                 | XAD1 GR    | 48.12    | 3 ETFS Short USD Long EUR   | XBJQ GR    | 2.66     |
| 4 db Physical Gold ETC (EUR)                       | XAD5 GR    | 34.73    | 4 db x-trackers - db Hedge Fund Index UCITS ETF 1C EUR - Hedged               | XHFI GR    | 2.00     |
| 5 iShares Diversified Commodity Swap UCITS ETF DE  | DJCOMEX GR | 34.56    | 5 ComStage Vermögensstrategie UCITS ETF                                       | F701 GY    | 1.45     |
| 6 ETFS Physical Gold                               | VZLD GR    | 25.09    | 6 ETFS Short JPY Long EUR   | SJPL GR    | 1.10     |
| 7 ETFS Physical Silver                             | VZLC GR    | 23.60    | 7 ETFS 5X Short USD Long EUR  | 5CH6 GY    | 0.96     |
| 8 ETFS Brent Oil                                   | OESA GR    | 16.78    | 8 UBS ETFs plc - HFRX Global Hedge Fund Index SF                              | UIQC GR    | 0.80     |
| 9 ETFS Daily Leveraged Silver                      | 4RUE GR    | 14.83    | 9 Lyxor ETF S&P 500 VIX Futures Enhanced Roll D-EUR                           | VOOL GY    | 0.62     |
| 10 db Physical Silver Euro Hedged ETC              | XAD2 GR    | 13.95    | 10 iShares S&P Listed Private Equity Fund                                     | IQQL GR    | 0.61     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



**Figure 63: Top 10 ETPs by Turnover (€ million) – London SE** | ETPs | Europe |

| Equity ETPs                                      |            |          | Fixed Income ETPs  |            |          |
|--|------------|----------|--|------------|----------|
| Equity ETPs                                      | BBG Ticker | Turnover | Fixed Income ETPs  | BBG Ticker | Turnover |
| 1 iShares FTSE 100 UCITS ETF (Inc)               | ISF LN     | 1,355.39 | 1 iShares Euro High Yield Corporate Bond UCITS ETF         | IHYG LN    | 1,015.65 |
| 2 iShares Core S&P 500 UCITS ETF                 | CSPX LN    | 713.42   | 2 iShares J.P. Morgan \$ Emerging Markets Bond UCITS ETF   | IEMB LN    | 837.17   |
| 3 Vanguard FTSE 100 ETF                          | VUKE LN    | 654.29   | 3 iShares \$ Corporate Bond UCITS ETF                      | LODE LN    | 780.78   |
| 4 Vanguard S&P 500 ETF                           | VUSD LN    | 472.28   | 4 iShares JP Morgan \$ EM Bond EUR Hedged UCITS ETF        | EMBE LN    | 608.43   |
| 5 iShares MSCI Australia UCITS ETF               | IAUS LN    | 392.22   | 5 iShares \$ High Yield Corporate Bond UCITS ETF           | IHYU LN    | 498.94   |
| 6 iShares MSCI Emerging Markets UCITS ETF (Inc)  | IEEM LN    | 386.45   | 6 iShares Euro Corporate Bond UCITS ETF                    | IEAC LN    | 462.55   |
| 7 iShares FTSE 250 UCITS ETF                     | MIDD LN    | 344.32   | 7 iShares Emerging Markets Local Government Bond UCITS ETF | IEML LN    | 433.06   |
| 8 iShares S&P 500 Minimum Volatility UCITS ETF   | SPMV LN    | 291.10   | 8 iShares Italy Government Bond UCITS ETF                  | IITB LN    | 396.88   |
| 9 iShares MSCI Europe ex-UK UCITS ETF            | IEUX LN    | 267.81   | 9 iShares Emerging Markets Local Government Bond UCITS ETF | SEML LN    | 388.04   |
| 10 iShares MSCI Emerging Markets UCITS ETF (Inc) | IDEM LN    | 246.31   | 10 iShares £ Index-Linked Gilts UCITS ETF                  | INXG LN    | 386.28   |

| Commodity ETPs                      |            |          | Other   |            |          |
|-------------------------------------|------------|----------|---|------------|----------|
| Commodity ETPs                      | BBG Ticker | Turnover | Other   | BBG Ticker | Turnover |
| 1 ETFS Physical Gold                | PHAU LN    | 916.48   | 1 ETFS 3x Short JPY Long USD                              | SJP3 LN    | 39.49    |
| 2 Gold Bullion Securities           | GBS LN     | 641.48   | 2 ETFS Short GBP Long USD                                 | SGBP LN    | 17.13    |
| 3 Source Physical Gold ETC (P-ETC)  | SGLD LN    | 537.02   | 3 ETFS Short USD Long GBP                                 | USGB LN    | 10.50    |
| 4 ETFS Physical Gold GBP            | PHGP LN    | 280.31   | 4 ETFS Long JPY Short GBP                                 | GBJP LN    | 8.97     |
| 5 iShares Physical Gold ETC         | IGLN LN    | 268.39   | 5 iShares Listed Private Equity UCITS ETF                 | IPRV LN    | 8.74     |
| 6 ETFS WTI Crude Oil                | CRUD LN    | 210.57   | 6 ETFS 3x Short GBP Long USD                              | SGB3 LN    | 7.93     |
| 7 iShares Physical Gold ETC         | SGLN LN    | 154.48   | 7 db x-trackers LPX Major Market Private Equity UCITS ETF | XLPE LN    | 6.40     |
| 8 ETFS Physical Silver              | PHAG LN    | 150.71   | 8 ETFS Short GBP Long USDGBP                              | USD2 LN    | 6.31     |
| 9 ETFS Copper                       | COPA LN    | 78.02    | 9 ETFS 3x Short JPY Long GBP                              | SYP3 LN    | 5.79     |
| 10 Source Physical Gold ETC (P-ETC) | SGLP LN    | 60.43    | 10 ETFS 5x Long USD Short GBP                             | USP5 LN    | 4.40     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

**Figure 64: Top 10 ETPs by Turnover (€ million) – Swiss SE** | ETPs | Europe |

| Equity ETPs   |            |          | Fixed Income ETPs   |            |          |
|---|------------|----------|---|------------|----------|
| Equity ETPs   | BBG Ticker | Turnover | Fixed Income ETPs   | BBG Ticker | Turnover |
| 1 iShares SMI CH  | CSSMI SW   | 236.85   | 1 iShares \$ Treasury Bond 7-10yr UCITS ETF                               | IBTM SW    | 324.03   |
| 2 iShares Core S&P 500 UCITS ETF                          | CSSPX SW   | 168.29   | 2 iShares \$ TIPS UCITS ETF   | ITPS SW    | 172.11   |
| 3 iShares S&P 500 UCITS ETF (Inc)                         | IUSA SW    | 115.63   | 3 Lyxor UCITS ETF EuroMTS 7-10Y IG (DR)                                   | LYMTD SW   | 124.03   |
| 4 UBS ETF - MSCI EMU 100% hedged to USD UCITS ETF A-acc   | EUUSBH SW  | 113.67   | 4 iShares CHF Corporate Bond (CH)   | CHCORP SW  | 83.21    |
| 5 UBS-ETF MSCI World                                      | WRDUSA SW  | 82.57    | 5 Lyxor UCITS ETF EuroMTS 5-7Y IG (DR)                                    | LYMTC SW   | 73.50    |
| 6 iShares SMIM CH   | CSSMIM SW  | 78.53    | 6 UBS ETF - Barclays US Liquid Corporates UCITS ETF (Hedged to CHF)       | CBUSS SW   | 58.60    |
| 7 iShares MSCI World CHF Hedged UCITS ETF                 | IWDC SW    | 77.22    | 7 UBS ETF - Barclays US Liquid Corporates UCITS ETF (hedged to EUR) A-acc | CBUSE SW   | 58.25    |
| 8 UBS ETF (CH) - SMI (CHF) A-dis                          | SMICHA SW  | 76.65    | 8 iShares J.P. Morgan \$ Emerging Markets Bond UCITS ETF                  | IEMB SW    | 49.28    |
| 9 UBS ETFs plc - MSCI Emerging Markets TRN Index SF USD-A | EGUSAS SW  | 73.25    | 9 iShares USD Government Bond 3-7 UCITS ETF                               | CSBGU7 SW  | 46.19    |
| 10 UBS-ETF MSCI Japan 'A'                                 | JPNJPA SW  | 72.34    | 10 UBS ETF - SBI Foreign AAA-BBB 5-10 UCITS ETF (CHF)                     | SF5CHA SW  | 37.88    |

| Commodity ETPs   |            |          | Other   |            |          |
|--|------------|----------|---|------------|----------|
| Commodity ETPs   | BBG Ticker | Turnover | Other   | BBG Ticker | Turnover |
| 1 ZKB Gold ETF-A USD   | ZGLDUS SW  | 122.01   | 1 iShares Listed Private Equity UCITS ETF                       | IPRV SW    | 1.21     |
| 2 ZKB Gold ETF   | ZGLD SW    | 88.99    | 2 SPDR Morningstar Multi-Asset Global Infrastructure UCITS ETF  | MAGI SW    | 0.51     |
| 3 db x-trackers db Commodity Booster UCITS ETF 4C CHF - Hedged | XCBC SW    | 88.23    | 3 db x-trackers - db Hedge Fund Index UCITS ETF 5C CHF - Hedged | XHFC SW    | 0.39     |
| 4 ZKB Silver ETF   | ZSIL SW    | 58.83    | 4 UBS ETFs plc - HFRX Global Hedge Fund Index SF (EUR) A-acc    | HFCHAS SW  | 0.33     |
| 5 ZKB Gold ETF-H (CHF)   | ZGLDHC SW  | 50.55    | 5 db x-trackers - db Hedge Fund Index UCITS ETF 2C USD - Hedged | XHFD SW    | 0.26     |
| 6 ZKB Gold ETF-H (EUR)   | ZGLDHE SW  | 29.36    | 6 UBS ETFs plc - HFRX Global Hedge Fund Index SF (USD) A-acc    | HFUSAS SW  | 0.05     |
| 7 UBS-IS Gold (CHF) Hedged ETF A                               | AUCHAH SW  | 25.97    | 7 PowerShares Global Listed Private Equity UCITS ETF            | PSP SW     | 0.01     |
| 8 ZKB Silver ETF USD   | ZSILUS SW  | 25.69    | 8 Lyxor ETF Privex  | LYPVX SW   | 0.00     |
| 9 ZKB Gold ETF-A EUR   | ZGLDEU SW  | 24.11    |   |            |          |
| 10 UBS ETF (CH) - Gold (USD) I-dis                             | AUUSI SW   | 22.80    |   |            |          |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.





Figure 65: Top 10 ETPs by Turnover (€ million) – Euronext Paris

| ETPs | Europe |

| Equity ETPs   |            |          | Fixed Income ETPs  |            |          |
|---|------------|----------|--|------------|----------|
| Equity ETPs   | BBG Ticker | Turnover | Fixed Income ETPs  | BBG Ticker | Turnover |
| 1 Lyxor UCITS ETF Euro STOXX 50                       | MSE FP     | 509.02   | 1 Amundi Govt Bond Lowest Rated EuroMTS Investment Grade UCITS ETF | X1G FP     | 138.49   |
| 2 Lyxor ETF XBear CAC 40                              | BX4 FP     | 375.89   | 2 Amundi ETF Floating Rate Euro Corporate 1-3 UCITS ETF            | AFRN FP    | 123.54   |
| 3 Lyxor ETF Leverage CAC 40                           | LVC FP     | 374.51   | 3 Lyxor ETF SGI Daily Double Short Bund ETF                        | DSB FP     | 77.83    |
| 4 Lyxor UCITS ETF STOXX Europe 600 Banks              | BNK FP     | 371.27   | 4 Amundi ETF Euro Corporate Financials iBoxx UCITS ETF             | AFIN FP    | 64.91    |
| 5 Amundi ETF MSCI Emerging Markets UCITS ETF          | AEEM FP    | 289.30   | 5 Amundi ETF Govt Bond EuroMTS Broad 10-15 UCITS ETF               | C10 FP     | 49.71    |
| 6 Lyxor ETF MSCI Emerging Markets - A                 | LEM FP     | 218.72   | 6 Amundi Euro HY Liquid Bond iBoxx UCITS ETF                       | AHYE FP    | 43.92    |
| 7 Lyxor ETF XBear Euro STOXX 50                       | BXX FP     | 202.35   | 7 Amundi ETF Floating Rate USD Corporate UCITS ETF - Hedged EUR    | AFLE FP    | 43.20    |
| 8 Lyxor UCITS ETF CAC 40 (DR) -D-EUR                  | CAC FP     | 196.67   | 8 AMUNDI ETF Floating Rate USD Corporate UCITS ETF                 | AFLT FP    | 41.28    |
| 9 Amundi ETF Japan TOPIX UCITS ETF - Daily Hedged EUR | TPXH FP    | 172.81   | 9 Amundi ETF EuroMTS Cash 3 Months UCITS ETF                       | C3M FP     | 40.82    |
| 10 Lyxor UCITS ETF MSCI Europe                        | MEU FP     | 165.21   | 10 Amundi ETF Euro Corporate Ex Financials iBoxx UCITS ETF         | AXFI FP    | 39.49    |
| Commodity ETPs  |            |          | Other  |            |          |
| Commodity ETPs  | BBG Ticker | Turnover | Other  | BBG Ticker | Turnover |
| 1 Gold Bullion Securities                             | GBS FP     | 24.56    | 1 Lyxor ETF Privex   | PVX FP     | 0.16     |
| 2 Lyxor ETF Commodities CRB                           | CRB FP     | 12.37    | 2 Lyxor ETF Unleveraged S&P 500 Vix Fut Enhanced Roll              | ULVO FP    | 0.02     |
| 3 Lyxor ETF Commodities CRB Non-Energy                | CRN FP     | 9.28     | 3 Lyxor ETF Unleveraged S&P 500 Vix Fut Enhanced Roll              | ULVX FP    | 0.01     |
| 4 ETFS WTI Crude Oil                                  | CRUDP FP   | 7.58     | 4 PowerShares Global Listed Private Equity UCITS ETF               | PSP FP     | 0.00     |
| 5 ETFS Silver   | SLVRP FP   | 7.54     |  |            |          |
| 6 ETFS Brent 1mnth Oil                                | OILBP FP   | 5.81     |  |            |          |
| 7 ETFS Natural Gas                                    | NGASP FP   | 1.19     |  |            |          |
| 8 ETFS Agriculture                                    | AIGAP FP   | 1.10     |  |            |          |
| 9 ETFS Gold   | BULLP FP   | 0.90     |  |            |          |
| 10 ETFS Wheat   | WEATP FP   | 0.72     |  |            |          |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 66: Top 10 ETPs by Turnover (€ million) – Borsa Italiana

| ETPs | Europe |

| Equity ETPs                                     |            |          | Fixed Income ETPs  |            |          |
|---|------------|----------|--|------------|----------|
| Equity ETPs                                     | BBG Ticker | Turnover | Fixed Income ETPs  | BBG Ticker | Turnover |
| 1 Lyxor ETF Leveraged FTSE/MIB                  | LEVMIB IM  | 303.84   | 1 Lyxor UCITS ETF Euro Cash                                | LEONIA IM  | 94.10    |
| 2 Lyxor ETF XBear FTSE/MIB                      | XBRMIB IM  | 287.73   | 2 iShares J.P. Morgan \$ Emerging Markets Bond UCITS ETF   | IEMB IM    | 89.06    |
| 3 Lyxor UCITS ETF FTSE MIB                      | ETFMIB IM  | 257.83   | 3 iShares Euro High Yield Corporate Bond UCITS ETF         | IHYG IM    | 88.28    |
| 4 Lyxor UCITS ETF Euro STOXX 50                 | MSE IM     | 169.94   | 4 iShares Euro Government Bond 3-5yr UCITS ETF             | IBGX IM    | 55.84    |
| 5 iShares EURO STOXX 50 UCITS ETF (Inc)         | EUE IM     | 167.59   | 5 iShares Emerging Markets Local Government Bond UCITS ETF | SEML IM    | 53.22    |
| 6 iShares MSCI Emerging Markets UCITS ETF (Inc) | IEEM IM    | 154.57   | 6 iShares Euro Corporate Bond 1-5yr UCITS ETF              | SE15 IM    | 49.37    |
| 7 iShares Core S&P 500 UCITS ETF                | CSSPX IM   | 133.94   | 7 iShares Euro Corporate Bond Large Cap UCITS ETF          | IBXC IM    | 48.59    |
| 8 iShares MSCI Europe UCITS ETF (Inc)           | IMEU IM    | 96.60    | 8 iShares JP Morgan \$ EM Bond EUR Hedged UCITS ETF        | EMBE IM    | 47.12    |
| 9 Lyxor UCITS ETF LevDAX                        | DAXLEV IM  | 96.31    | 9 iShares Euro Corporate Bond UCITS ETF                    | IEAC IM    | 46.86    |
| 10 Lyxor ETF MSCI Emerging Markets - A          | EMKT IM    | 91.40    | 10 iShares Euro Government Bond 1-3yr UCITS ETF            | IBGS IM    | 42.14    |
| Commodity ETPs                                  |            |          | Other  |            |          |
| Commodity ETPs                                  | BBG Ticker | Turnover | Other  | BBG Ticker | Turnover |
| 1 Boost Wti Oil 3X Leverage Daily ETP           | 3OIL IM    | 321.01   | 1 Lyxor ETF S&P 500 VIX Futures Enhanced Roll D-EUR        | LVO IM     | 54.44    |
| 2 ETFS Physical Gold                            | PHAU IM    | 253.86   | 2 ETFS 3X Long USD Short EUR                               | EUS3 IM    | 18.85    |
| 3 ETFS WTI Crude Oil                            | CRUD IM    | 200.09   | 3 ETFS Long CHF Short EUR                                  | EUCH IM    | 13.14    |
| 4 Boost Wti Oil 3X Short Daily ETP              | 3OIS IM    | 187.79   | 4 ETFS 3X Short USD Long EUR                               | USE3 IM    | 5.27     |
| 5 ETFS Daily Leveraged Crude Oil                | LOIL IM    | 126.12   | 5 ETFS 5X Long USD Short EUR                               | EUS5 IM    | 4.38     |
| 6 Gold Bullion Securities                       | GBS IM     | 124.65   | 6 ETFS 5X Short USD Long EUR                               | USE5 IM    | 2.45     |
| 7 Boost Natural Gas 3X Leverage Daily ETP       | 3NGL IM    | 78.83    | 7 ETFS Long USD Short EUR                                  | EUUS IM    | 2.44     |
| 8 db Physical Gold Euro Hedged ETC              | XAD1 IM    | 68.50    | 8 db x-trackers Portfolio TR Index UCITS ETF               | XQUI IM    | 1.83     |
| 9 ETFS Daily Leveraged Silver                   | LSIL IM    | 67.24    | 9 ETFS 3X Short GBP Long EUR                               | GBE3 IM    | 1.55     |
| 10 ETFS Physical Silver                         | PHAG IM    | 59.82    | 10 ETFS 5X Long GBP Short EUR                              | EGB5 IM    | 1.39     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 67: Top 10 ETPs by Turnover (€ million) – Stockholmborsen & Euronext Amsterdam | ETPs | Europe |

| Stockholmborsen   |             |          | Euronext Amsterdam  |             |          |
|---|-------------|----------|---|-------------|----------|
| Equity ETFs   | BBG Ticker  | Turnover | Fixed Income ETFs   | BBG Ticker  | Turnover |
| 1 XACT OMXS30   | XACTOMX SS  | 251.11   | 1 XACT Obligation UCITS ETF                               | XACTBOND SS | 0.11     |
| 2 XACT Bear 2   | XABEAR2 SS  | 193.23   |   |             |          |
| 3 XACT Bull 2   | XABULL2 SS  | 114.01   |   |             |          |
| 4 XACT Bear   | XACBEAR SS  | 67.70    |   |             |          |
| 5 XACT Bull   | XACBULL SS  | 28.26    |   |             |          |
| 6 XACT OMXSB  | XACTSBX SS  | 14.19    |   |             |          |
| 7 XACT Svenska Smabolag UCITS ETF                             | XACTSMAC SS | 10.99    |   |             |          |
| 8 SpotR OMXS30  | SPOTROMX SS | 5.01     |   |             |          |
| 9 db x-trackers MSCI Europe Index UCITS ETF (DR)              | XMEU SS     | 4.13     |   |             |          |
| 10 db x-trackers S&P 500 UCITS ETF 1C                         | XSPX SS     | 4.07     |   |             |          |
| 1 iShares MSCI Europe UCITS ETF (Inc)                         | IMEU NA     | 215.51   | 1 iShares Euro Corporate Bond UCITS ETF                   | IEAC NA     | 70.26    |
| 2 iShares Core MSCI World UCITS ETF (Acc)                     | IWDA NA     | 123.69   | 2 iShares Euro Aggregate Bond UCITS ETF                   | IEAG NA     | 38.44    |
| 3 iShares MSCI World UCITS ETF (Inc)                          | IWRD NA     | 98.08    | 3 iShares Euro Inflation Linked Government Bond UCITS ETF | IBCI NA     | 31.09    |
| 4 Vanguard S&P 500 ETF  | VUSA NA     | 72.88    | 4 iShares Euro Corporate Bond Large Cap UCITS ETF         | IBCX NA     | 17.75    |
| 5 iShares AEX UCITS ETF                                       | IAEX NA     | 69.96    | 5 iShares Euro Government Bond 3-5yr UCITS ETF            | IBGX NA     | 17.72    |
| 6 iShares MSCI Emerging Markets UCITS ETF (Inc)               | IEMM NA     | 69.44    | 6 iShares \$ Treasury Bond 1-3yr UCITS ETF                | IBTS NA     | 13.78    |
| 7 iShares MSCI Japan EUR Hedged UCITS ETF                     | IJPE NA     | 53.71    | 7 iShares \$ Treasury Bond 7-10yr UCITS ETF               | BTMA NA     | 13.44    |
| 8 iShares European Property Yield UCITS ETF                   | IPRP NA     | 50.94    | 8 iShares Euro Government Bond 1-3yr UCITS ETF            | IBGS NA     | 12.52    |
| 9 Think AEX Tracker   | TDI NA      | 48.60    | 9 iShares Euro Government Bond 7-10yr UCITS ETF           | IBGM NA     | 11.81    |
| 10 iShares Dow Jones Europe Sustainability Screened UCITS ETF | IESE NA     | 43.89    | 10 iShares Euro Government Bond 15-30yr UCITS ETF         | IBGL NA     | 11.78    |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



## 7. European ETF Exchanges

Figure 68: European on-exchange ETF trading ranking by exchange (€ million) | ETFs | Europe |

| Summary                | Mar-16        | Market Share % | Apr-16        | Market Share % | May-16        | Market Share % | Jun-16        | Market Share % | Jul-16        | Market Share % |
|------------------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|
| <b>Deutsche Boerse</b> |               |                |               |                |               |                |               |                |               |                |
| Deutsche Borse         | 13,722        | 20.3%          | 12,183        | 20.0%          | 10,604        | 19.2%          | 17,344        | 20.5%          | 12,490        | 18.8%          |
| <b>LSE</b>             |               |                |               |                |               |                |               |                |               |                |
| London SE              | 27,035        | 40.0%          | 25,127        | 41.2%          | 23,430        | 42.5%          | 35,997        | 42.6%          | 29,774        | 44.7%          |
| Borsa Italiana         | 6,726         | 10.0%          | 5,693         | 9.3%           | 5,672         | 10.3%          | 7,703         | 9.1%           | 6,712         | 10.1%          |
|                        | 33,761        | 50.0%          | 30,820        | 50.5%          | 29,102        | 52.8%          | 43,700        | 51.8%          | 36,486        | 54.8%          |
| <b>Euronext</b>        |               |                |               |                |               |                |               |                |               |                |
| Paris                  | 10,552        | 15.6%          | 9,249         | 15.2%          | 8,053         | 14.6%          | 12,189        | 14.4%          | 8,042         | 12.1%          |
| Amsterdam              | 2,168         | 3.2%           | 2,039         | 3.3%           | 1,594         | 2.9%           | 2,204         | 2.6%           | 1,710         | 2.6%           |
| Lisbon                 | 4             | 0.0%           | 5             | 0.0%           | 2             | 0.0%           | 5             | 0.0%           | 1             | 0.0%           |
| Brussels               | 1             | 0.0%           | 1             | 0.0%           | 1             | 0.0%           | 2             | 0.0%           | 1             | 0.0%           |
|                        | 12,726        | 18.8%          | 11,294        | 18.5%          | 9,650         | 17.5%          | 14,401        | 17.1%          | 9,753         | 14.7%          |
| Swiss SE               | 5,405         | 8.0%           | 5,043         | 8.3%           | 4,473         | 8.1%           | 6,999         | 8.3%           | 6,523         | 9.8%           |
| Stockholmborsen        | 1,174         | 1.7%           | 938           | 1.5%           | 791           | 1.4%           | 1,028         | 1.2%           | 711           | 1.1%           |
| Oslo Bors              | 341           | 0.5%           | 339           | 0.6%           | 219           | 0.4%           | 460           | 0.5%           | 257           | 0.4%           |
| BME                    | 414           | 0.6%           | 387           | 0.6%           | 291           | 0.5%           | 471           | 0.6%           | 306           | 0.5%           |
| Others                 | 10            | 0.0%           | 24            | 0.0%           | 11            | 0.0%           | 17            | 0.0%           | 9             | 0.0%           |
| <b>Total</b>           | <b>67,553</b> | <b>100.0%</b>  | <b>61,027</b> | <b>100.0%</b>  | <b>55,142</b> | <b>100.0%</b>  | <b>84,420</b> | <b>100.0%</b>  | <b>66,535</b> | <b>100.0%</b>  |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 69: European on-exchange ETC trading ranking by exchange (€ million) | ETCs | Europe |

| Summary                | Mar-16       | Market Share % | Apr-16       | Market Share % | May-16       | Market Share % | Jun-16       | Market Share % | Jul-16       | Market Share % |
|------------------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|
| <b>LSE</b>             |              |                |              |                |              |                |              |                |              |                |
| London SE              | 3,894        | 5.8%           | 3,426        | 5.6%           | 2,827        | 5.1%           | 5,976        | 7.1%           | 4,516        | 6.8%           |
| Borsa Italiana         | 1,729        | 2.6%           | 1,723        | 2.8%           | 1,913        | 3.5%           | 2,301        | 2.7%           | 2,153        | 3.2%           |
|                        | 5,623        | 8.3%           | 5,149        | 8.4%           | 4,740        | 8.6%           | 8,277        | 9.8%           | 6,669        | 10.0%          |
| <b>Deutsche Boerse</b> |              |                |              |                |              |                |              |                |              |                |
| Deutsche Borse         | 612          | 0.9%           | 507          | 0.8%           | 845          | 1.5%           | 662          | 0.8%           | 537          | 0.8%           |
| <b>Euronext</b>        |              |                |              |                |              |                |              |                |              |                |
| Amsterdam              | 27           | 0.0%           | 33           | 0.1%           | 19           | 0.0%           | 48           | 0.1%           | 36           | 0.1%           |
| Brussels               | 0            | 0.0%           | 0            | 0.0%           | 0            | 0.0%           | 0            | 0.0%           | 0            | 0.0%           |
|                        | 86           | 0.1%           | 75           | 0.1%           | 60           | 0.1%           | 131          | 0.2%           | 88           | 0.1%           |
| Others                 | 45           | 0.1%           | 61           | 0.1%           | 40           | 0.1%           | 76           | 0.1%           | 60           | 0.1%           |
| <b>Total</b>           | <b>6,366</b> | <b>9.4%</b>    | <b>5,792</b> | <b>9.5%</b>    | <b>5,684</b> | <b>10.3%</b>   | <b>9,146</b> | <b>10.8%</b>   | <b>7,353</b> | <b>11.1%</b>   |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 70: Total ETP on-exchange Turnover by asset class and by exchange

| ETPs | Europe |

|                     | Deutsche Borse             | London SE      | Euronext Paris | Borsa Italiana | Euronext Amsterdam | Swiss SE      | Stockholm Borsen | Total            |              |
|---------------------|----------------------------|----------------|----------------|----------------|--------------------|---------------|------------------|------------------|--------------|
|                     | Total Turnover (€ million) |                |                |                |                    |               |                  | Turnover*        | Mkt Share %  |
| <b>Equity</b>       |                            |                |                |                |                    |               |                  |                  |              |
| Developed Markets   | 59,609.2                   | 72,903.7       | 24,987.0       | 20,701.9       | 9,619.7            | 23,185.2      | 2,510.4          | 213,517.1        | 40.8%        |
| Emerging Markets    | 5,141.9                    | 12,881.9       | 5,679.0        | 2,783.8        | 1,226.3            | 2,355.1       | 30.1             | 30,098.0         | 5.7%         |
| Global Markets      | 472.6                      | 2,856.0        | 468.6          | 124.9          | 294.4              | 477.2         | 0.8              | 4,694.6          | 0.9%         |
| Sector              | 8,822.7                    | 4,938.7        | 5,520.3        | 1,500.8        | 454.9              | 949.9         | 4.3              | 22,191.5         | 4.2%         |
| Capitalization      | 1,244.2                    | 1,858.6        | 553.6          | 192.6          | 159.4              | 736.5         | 138.6            | 4,883.6          | 0.9%         |
| Style               | 2,473.7                    | 5,073.6        | 658.0          | 688.2          | 478.8              | 687.7         | 0.0              | 10,060.0         | 1.9%         |
| Strategy            | 7,848.6                    | 10,032.6       | 11,358.0       | 10,599.7       | 10.0               | 665.7         | 4,689.6          | 45,204.1         | 8.6%         |
| Thematic            | 1,254.9                    | 1,811.9        | 439.2          | 279.3          | 212.6              | 700.1         | 0.0              | 4,698.0          | 0.9%         |
| <b>Total</b>        | <b>86,868</b>              | <b>112,357</b> | <b>49,664</b>  | <b>36,871</b>  | <b>12,456</b>      | <b>29,757</b> | <b>7,374</b>     | <b>335,346.9</b> | <b>64.1%</b> |
| <b>Fixed Income</b> |                            |                |                |                |                    |               |                  |                  |              |
| Overall             | 540.6                      | 2,197.2        | 12.8           | 159.7          | 285.1              | 258.6         | 29.7             | 3,483.7          | 0.7%         |
| Corporates          | 3,292.1                    | 36,451.2       | 6,367.5        | 3,952.3        | 1,335.1            | 1,640.1       | 0.0              | 53,038.3         | 10.1%        |
| Covered Bonds       | 442.8                      | 307.6          | 87.8           | 99.8           | 25.5               | 25.1          | 0.0              | 988.6            | 0.2%         |
| Credit Exposure     | 214.8                      | 0.0            | 0.0            | 46.7           | 0.0                | 1.5           | 0.0              | 263.0            | 0.1%         |
| Sovereign           | 6,578.0                    | 38,490.4       | 15,380.9       | 6,190.7        | 1,119.2            | 3,693.7       | 0.0              | 71,453.0         | 13.7%        |
| Money Market        | 797.4                      | 1,763.9        | 702.2          | 1,260.6        | 0.0                | 22.2          | 0.0              | 4,546.4          | 0.9%         |
| <b>Total</b>        | <b>11,866</b>              | <b>79,210</b>  | <b>22,551</b>  | <b>11,710</b>  | <b>2,765</b>       | <b>5,641</b>  | <b>30</b>        | <b>133,773.0</b> | <b>25.6%</b> |
| <b>Commodity</b>    |                            |                |                |                |                    |               |                  |                  |              |
| Overall             | 472.2                      | 1,294.1        | 172.4          | 221.6          | 25.9               | 606.1         | 134.8            | 2,927.1          | 0.6%         |
| Agriculture         | 106.7                      | 537.5          | 6.1            | 551.8          | 0.3                | 20.0          | 0.0              | 1,222.5          | 0.2%         |
| Energy              | 1,044.0                    | 5,573.7        | 172.7          | 8,176.6        | 0.0                | 114.0         | 0.0              | 15,081.0         | 2.9%         |
| Industrial Metals   | 50.8                       | 710.5          | 12.2           | 185.7          | 0.0                | 4.1           | 0.0              | 963.3            | 0.2%         |
| Precious Metals     | 3,067.1                    | 20,436.9       | 200.8          | 3,125.0        | 201.6              | 4,527.2       | 0.0              | 31,558.7         | 6.0%         |
| Livestock           | 2.9                        | 11.5           | 0.0            | 6.2            | 0.0                | 0.0           | 0.0              | 20.6             | 0.0%         |
| <b>Total</b>        | <b>4,744</b>               | <b>28,564</b>  | <b>564</b>     | <b>12,267</b>  | <b>228</b>         | <b>5,272</b>  | <b>135</b>       | <b>51,773.3</b>  | <b>9.9%</b>  |
| <b>Other</b>        |                            |                |                |                |                    |               |                  |                  |              |
| Alternative         | 134.6                      | 512.5          | 4.0            | 152.5          | 27.6               | 50.7          | 0.0              | 882.0            | 0.2%         |
| Currency            | 42.7                       | 741.7          | 0.0            | 743.0          | 5.2                | 0.0           | 0.0              | 1,532.6          | 0.3%         |
| Multi Asset         | 60.6                       | 31.2           | 0.0            | 27.1           | 17.5               | 1.6           | 0.0              | 138.0            | 0.0%         |
| <b>Total</b>        | <b>238</b>                 | <b>1,285</b>   | <b>4</b>       | <b>923</b>     | <b>50</b>          | <b>52</b>     | <b>-</b>         | <b>2,552.6</b>   | <b>0.5%</b>  |
| <b>Grand Total</b>  | <b>103,715</b>             | <b>221,417</b> | <b>72,783</b>  | <b>61,771</b>  | <b>15,499</b>      | <b>40,722</b> | <b>7,538</b>     | <b>523,446</b>   | <b>100%</b>  |

\* Total turnover year to date (not daily average)

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



## 8. Assets

### ETP Monthly AUM Analysis by Asset Class

Figure 71: AUM by asset class and instrument (€ million) | ETPs | Europe |

| Asset Class       | Jul-16         |                |             |              | Jun-16         | End of 2015    |
|-------------------|----------------|----------------|-------------|--------------|----------------|----------------|
|                   | AUM            | Market Share % | MoM %change | YTD %change  | AUM            | AUM            |
| <b>ETFs</b>       |                |                |             |              |                |                |
| Equity            | 318,127        | 63.7%          | 4.2%        | -1.8%        | 305,179        | 323,858        |
| Fixed income      | 136,762        | 27.4%          | 4.3%        | 21.6%        | 131,182        | 112,427        |
| Commodity         | 17,489         | 3.5%           | 7.1%        | 42.2%        | 16,327         | 12,298         |
| Currency          | 0              | 0.0%           | 0.0%        | 0.0%         | 0              | 0              |
| Multi Asset       | 411            | 0.1%           | -3.4%       | -3.0%        | 425            | 423            |
| Alternative       | 836            | 0.2%           | 6.7%        | -14.3%       | 783            | 975            |
| <b>Total</b>      | <b>473,624</b> | <b>94.8%</b>   | <b>4.3%</b> | <b>5.3%</b>  | <b>453,896</b> | <b>449,981</b> |
| <b>ETCs</b>       |                |                |             |              |                |                |
| Commodity         | 25,742         | 5.2%           | 5.6%        | 63.9%        | 24,368         | 15,709         |
| Currency          | 329            | 0.1%           | 0.5%        | -5.1%        | 328            | 347            |
| <b>Total</b>      | <b>26,072</b>  | <b>5.2%</b>    | <b>5.6%</b> | <b>62.4%</b> | <b>24,696</b>  | <b>16,057</b>  |
| <b>Total ETPs</b> | <b>499,696</b> | <b>100.0%</b>  | <b>4.4%</b> | <b>7.2%</b>  | <b>478,592</b> | <b>466,038</b> |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

### Asset Class Analysis

Figure 72: European Equity ETF AUM summary (€ million) | ETFs | Europe |

| Equity AUM            | Jul-16         |                |             |              | Jun-16         | End of 2015    |
|-----------------------|----------------|----------------|-------------|--------------|----------------|----------------|
|                       | AUM            | Market Share % | MoM %change | YTD %change  | AUM            | AUM            |
| Developed Markets     | 218,773        | 68.8%          | 3.3%        | -7.4%        | 211,816        | 236,223        |
| Emerging Markets      | 27,382         | 8.6%           | 9.6%        | 22.7%        | 24,983         | 22,316         |
| Global Markets        | 5,220          | 1.6%           | 6.5%        | 6.2%         | 4,900          | 4,913          |
| Sector                | 18,590         | 5.8%           | 3.0%        | -5.0%        | 18,048         | 19,569         |
| Capitalization        | 5,841          | 1.8%           | 1.0%        | -18.1%       | 5,782          | 7,137          |
| Strategy              | 19,585         | 6.2%           | 8.1%        | 47.6%        | 18,111         | 13,265         |
| Style                 | 17,800         | 5.6%           | 6.4%        | 7.6%         | 16,732         | 16,546         |
| Thematic              | 4,935          | 1.6%           | 2.7%        | 26.9%        | 4,806          | 3,890          |
| <b>Total Equities</b> | <b>318,127</b> | <b>100.0%</b>  | <b>4.2%</b> | <b>-1.8%</b> | <b>305,179</b> | <b>323,858</b> |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 72A: European Equity ETF AUM summary - A (€ million) | ETFs | Europe |

| Equity AUM             | Jul-16 |                |             |             | Jun-16 | End of 2015 |
|------------------------|--------|----------------|-------------|-------------|--------|-------------|
|                        | AUM    | Market Share % | MoM %change | YTD %change | AUM    | AUM         |
| <b>Sector</b>          | 18,590 | 27.8%          | 3.0%        | -5.0%       | 18,048 | 19,569      |
| Consumer discretionary | 802    | 1.2%           | -3.6%       | -9.9%       | 832    | 890         |
| Consumer staples       | 912    | 1.4%           | 6.6%        | -7.4%       | 856    | 986         |
| Energy                 | 1,717  | 2.6%           | -0.2%       | 12.8%       | 1,720  | 1,522       |
| Financials             | 9,055  | 13.6%          | 3.0%        | -12.1%      | 8,795  | 10,303      |
| Healthcare             | 2,078  | 3.1%           | 1.3%        | 2.9%        | 2,051  | 2,020       |
| Industrials            | 529    | 0.8%           | -2.3%       | -0.9%       | 541    | 534         |
| Information Technology | 1,397  | 2.1%           | 9.4%        | -0.9%       | 1,278  | 1,410       |
| Materials              | 840    | 1.3%           | 4.9%        | 25.6%       | 800    | 669         |
| Telecommunications     | 737    | 1.1%           | 4.1%        | -6.3%       | 708    | 787         |
| Utilities              | 522    | 0.8%           | 12.0%       | 16.6%       | 466    | 448         |
| <b>Capitalization</b>  | 5,841  | 8.8%           | 1.0%        | -18.1%      | 5,782  | 7,137       |
| Large Cap              | 359    | 0.5%           | 4.6%        | -5.5%       | 343    | 379         |
| Mid Cap                | 1,667  | 2.5%           | -4.5%       | -29.9%      | 1,745  | 2,376       |
| Small Cap              | 3,816  | 5.7%           | 3.3%        | -12.9%      | 3,695  | 4,381       |
| <b>Strategy</b>        | 19,585 | 29.3%          | 8.1%        | 47.6%       | 18,111 | 13,265      |
| Fundamental            | 1,369  | 2.1%           | -7.5%       | -11.1%      | 1,480  | 1,541       |
| Leveraged Long         | 1,861  | 2.8%           | 9.6%        | -14.7%      | 1,699  | 2,183       |
| Leveraged Short        | 1,030  | 1.5%           | -10.3%      | 28.9%       | 1,148  | 799         |
| Options Strategy       | 0      | 0.0%           | 0.0%        | 0.0%        | 0      | 0           |
| Quantitative           | 13,712 | 20.5%          | 14.3%       | 87.1%       | 11,996 | 7,330       |
| Short                  | 1,613  | 2.4%           | -9.8%       | 14.2%       | 1,788  | 1,412       |
| <b>Style</b>           | 17,800 | 26.7%          | 6.4%        | 7.6%        | 16,732 | 16,546      |
| Dividend               | 16,471 | 24.7%          | 8.0%        | 10.6%       | 15,248 | 14,893      |
| Growth                 | 197    | 0.3%           | 7.5%        | -34.5%      | 183    | 300         |
| Value                  | 1,132  | 1.7%           | -12.9%      | -16.3%      | 1,301  | 1,353       |
| <b>Thematic</b>        | 4,935  | 7.4%           | 2.7%        | 26.9%       | 4,806  | 3,890       |
| Commodities            | 1,313  | 2.0%           | 5.9%        | 94.5%       | 1,240  | 675         |
| Cyclical               | 0      | 0.0%           | 0.0%        | 0.0%        | 0      | 0           |
| Faith                  | 214    | 0.3%           | 7.7%        | 13.6%       | 199    | 189         |
| Other Theme            | 1,054  | 1.6%           | 11.9%       | 21.6%       | 942    | 867         |
| Sustainability         | 2,353  | 3.5%           | -3.0%       | 9.0%        | 2,426  | 2,159       |
| <b>Total</b>           | 66,751 | 100.0%         | 5.2%        | 10.5%       | 63,480 | 60,406      |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 72B: European Equity ETF AUM summary - B (€ million) | ETFs | Europe |

| Equity AUM               | Jul-16  |                |             |             | Jun-16  | End of 2015 |
|--------------------------|---------|----------------|-------------|-------------|---------|-------------|
|                          | AUM     | Market Share % | MoM %change | YTD %change | AUM     | AUM         |
| <b>Developed Markets</b> |         |                |             |             |         |             |
| <b>Europe</b>            | 113,035 | 51.7%          | 1.3%        | -14.9%      | 111,635 | 132,765     |
| Austria                  | 230     | 0.1%           | 7.8%        | -42.0%      | 214     | 397         |
| Belgium                  | 41      | 0.0%           | -8.2%       | -6.3%       | 44      | 43          |
| Finland                  | 180     | 0.1%           | 4.8%        | 0.6%        | 171     | 178         |
| France                   | 4,519   | 2.1%           | 1.1%        | -10.3%      | 4,471   | 5,037       |
| Germany                  | 18,727  | 8.6%           | 4.3%        | -13.1%      | 17,948  | 21,561      |
| Greece                   | 150     | 0.1%           | 5.0%        | -23.8%      | 143     | 197         |
| Ireland                  | 27      | 0.0%           | 3.9%        | -14.1%      | 26      | 31          |
| Italy                    | 1,697   | 0.8%           | -6.7%       | -42.7%      | 1,818   | 2,964       |
| Netherlands              | 574     | 0.3%           | -2.6%       | -11.5%      | 590     | 649         |
| Norway                   | 234     | 0.1%           | -0.5%       | 5.5%        | 236     | 222         |
| Portugal                 | 48      | 0.0%           | -25.4%      | -36.4%      | 65      | 76          |
| Spain                    | 1,149   | 0.5%           | -4.7%       | -32.2%      | 1,205   | 1,696       |
| Sweden                   | 1,162   | 0.5%           | 9.8%        | -17.3%      | 1,058   | 1,405       |
| Switzerland              | 9,535   | 4.4%           | -0.5%       | -7.4%       | 9,583   | 10,297      |
| UK                       | 13,879  | 6.3%           | 1.8%        | 5.7%        | 13,638  | 13,129      |
| Europe broad             | 60,881  | 27.8%          | 0.8%        | -18.7%      | 60,425  | 74,881      |
| <b>Americas</b>          | 66,269  | 30.3%          | 4.4%        | 7.9%        | 63,446  | 61,439      |
| US                       | 63,170  | 28.9%          | 4.4%        | 7.7%        | 60,499  | 58,651      |
| Canada                   | 1,106   | 0.5%           | 6.9%        | 43.2%       | 1,034   | 772         |
| North America            | 1,993   | 0.9%           | 4.2%        | -1.1%       | 1,913   | 2,016       |
| <b>Asia</b>              | 18,192  | 8.3%           | 9.3%        | -20.2%      | 16,640  | 22,794      |
| Australia                | 1,131   | 0.5%           | 66.1%       | 42.2%       | 680     | 795         |
| Hong Kong                | 168     | 0.1%           | 8.8%        | -35.8%      | 155     | 262         |
| Japan                    | 15,034  | 6.9%           | 6.3%        | -25.7%      | 14,146  | 20,233      |
| Singapore                | 43      | 0.0%           | 4.3%        | -31.3%      | 41      | 63          |
| Asia Pacific broad       | 1,816   | 0.8%           | 12.3%       | 25.9%       | 1,617   | 1,442       |
| <b>EMEA</b>              | 5       | 0.0%           | 4.5%        | 0.0%        | 4       | 0           |
| Israel                   | 5       | 0.0%           | 4.5%        | 0.0%        | 4       | 0           |
| <b>Global</b>            | 21,273  | 9.7%           | 5.9%        | 10.7%       | 20,091  | 19,225      |
| Broad indices            | 21,273  | 9.7%           | 5.9%        | 10.7%       | 20,091  | 19,225      |
| <b>DM Total</b>          | 218,773 | 100.0%         | 3.3%        | -7.4%       | 211,812 | 236,223     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.





Figure 72C: European Equity ETF AUM summary - C (€ million) | ETFs | Europe |

| Equity AUM              | Jul-16  |                |             |             | Jun-16  | End of 2015 |
|-------------------------|---------|----------------|-------------|-------------|---------|-------------|
|                         | AUM     | Market Share % | MoM %change | YTD %change | AUM     | AUM         |
| <b>Emerging Markets</b> |         |                |             |             |         |             |
| <b>BRIC</b>             | 5,421   | 2.2%           | 2.9%        | -8.9%       | 5,266   | 5,953       |
| Brazil                  | 712     | 0.3%           | 10.1%       | 35.8%       | 647     | 524         |
| Russia                  | 730     | 0.3%           | 0.2%        | 7.2%        | 728     | 680         |
| India                   | 1,727   | 0.7%           | 4.5%        | -4.4%       | 1,652   | 1,807       |
| China                   | 2,252   | 0.9%           | 0.5%        | -23.4%      | 2,240   | 2,941       |
| <b>Latin America</b>    | 808     | 0.3%           | 14.3%       | 51.9%       | 707     | 532         |
| Chile                   | 0       | 0.0%           | 0.0%        | 0.0%        | 0       | 0           |
| Mexico                  | 139     | 0.1%           | 0.5%        | -8.3%       | 138     | 151         |
| LATAM broad             | 669     | 0.3%           | 17.7%       | 75.8%       | 569     | 381         |
| <b>Asia</b>             | 3,727   | 1.5%           | 7.8%        | 10.5%       | 3,457   | 3,373       |
| Bangladesh              | 20      | 0.0%           | 6.2%        | 0.8%        | 19      | 20          |
| Indonesia               | 166     | 0.1%           | 21.9%       | 39.9%       | 136     | 119         |
| Malaysia                | 47      | 0.0%           | -5.4%       | -5.6%       | 49      | 50          |
| Pakistan                | 31      | 0.0%           | 34.5%       | 48.6%       | 23      | 21          |
| Philippines             | 62      | 0.0%           | 1.1%        | 56.2%       | 61      | 39          |
| South Korea             | 725     | 0.3%           | 6.9%        | -11.1%      | 678     | 815         |
| Taiwan                  | 481     | 0.2%           | 10.3%       | -14.6%      | 436     | 563         |
| Thailand                | 45      | 0.0%           | 9.8%        | 55.5%       | 41      | 29          |
| Vietnam                 | 311     | 0.1%           | 1.4%        | -4.4%       | 307     | 325         |
| Asia Pacific broad      | 1,839   | 0.7%           | 7.8%        | 32.2%       | 1,706   | 1,392       |
| <b>EMEA</b>             | 903     | 0.4%           | 6.0%        | 3.2%        | 852     | 875         |
| Kuwait                  | 5       | 0.0%           | -0.2%       | -30.2%      | 5       | 7           |
| Poland                  | 58      | 0.0%           | 20.9%       | -8.1%       | 48      | 64          |
| South Africa            | 101     | 0.0%           | 13.5%       | 47.3%       | 89      | 69          |
| Turkey                  | 220     | 0.1%           | -4.6%       | -22.4%      | 231     | 284         |
| Europe broad            | 356     | 0.1%           | 9.5%        | 11.5%       | 325     | 319         |
| Middle East & Africa    | 162     | 0.1%           | 5.5%        | 22.5%       | 154     | 133         |
| <b>Global Markets</b>   | 16,524  | 6.7%           | 12.4%       | 42.7%       | 14,702  | 11,583      |
| Global                  | 16,524  | 6.7%           | 12.4%       | 42.7%       | 14,702  | 11,583      |
| <b>EM Total</b>         | 27,382  | 11.1%          | 9.6%        | 22.7%       | 24,983  | 22,316      |
| <b>Total (EM + DM)</b>  | 246,156 | 100.0%         | 4.0%        | -4.8%       | 236,795 | 258,539     |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 73: European Fixed Income ETF AUM summary (€ million) | ETFs | Europe |

| Fixed Income AUM          | Jul-16         |                |             |              | Jun-16         | End of 2015    |
|---------------------------|----------------|----------------|-------------|--------------|----------------|----------------|
|                           | AUM            | Market Share % | MoM %change | YTD %change  | AUM            | AUM            |
| Overall                   | 9,443          | 6.9%           | 2.3%        | 18.3%        | 9,231          | 7,984          |
| Corporates                | 57,486         | 42.0%          | 5.9%        | 32.7%        | 54,284         | 43,316         |
| Covered Bonds             | 3,466          | 2.5%           | 2.4%        | 13.7%        | 3,384          | 3,050          |
| Credit Exposure           | 334            | 0.2%           | -25.5%      | 18.6%        | 448            | 282            |
| Sovereign                 | 63,409         | 46.4%          | 3.8%        | 15.6%        | 61,113         | 54,854         |
| Money Market              | 2,624          | 1.9%           | -3.5%       | -10.8%       | 2,721          | 2,941          |
| <b>Total Fixed Income</b> | <b>136,762</b> | <b>100.0%</b>  | <b>4.3%</b> | <b>21.6%</b> | <b>131,182</b> | <b>112,427</b> |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 74: European Commodity ETP AUM summary (€ million) | ETPs | Europe |

| Commodity AUM              | Jul-16 |                |             |             | Jun-16 | End of 2015 |
|----------------------------|--------|----------------|-------------|-------------|--------|-------------|
|                            | AUM    | Market Share % | MoM %change | YTD %change | AUM    | AUM         |
| <b>Overall</b>             | 5,542  | 12.8%          | 13.0%       | 51.1%       | 4,906  | 3,668       |
| Overall                    | 5319   | 12.3%          | 13.0%       | 54.3%       | 4705   | 3446        |
| Overall ex Energy          | 217    | 0.5%           | 11.7%       | 1.1%        | 195    | 215         |
| Overall Light Energy       | 6      | 0.0%           | -7.0%       | -10.6%      | 6      | 6           |
| Overall Ultra Light Energy | 0      | 0.0%           | 0.0%        | 0.0%        | 0      | 0           |
| <b>Agriculture</b>         | 702    | 1.6%           | -2.1%       | -10.7%      | 717    | 787         |
| Overall                    | 370    | 0.9%           | -7.8%       | -15.4%      | 401    | 437         |
| Cocoa                      | 14     | 0.0%           | 7.3%        | 7.8%        | 13     | 13          |
| Coffee                     | 74     | 0.2%           | -8.8%       | -10.8%      | 81     | 83          |
| Corn                       | 39     | 0.1%           | 21.1%       | 10.9%       | 33     | 36          |
| Cotton                     | 11     | 0.0%           | 7.1%        | -65.0%      | 10     | 31          |
| Grains                     | 32     | 0.1%           | 8.6%        | 1.1%        | 29     | 32          |
| Softs                      | 5      | 0.0%           | 7.4%        | -7.1%       | 4      | 5           |
| Soybean Oil                | 3      | 0.0%           | 1.4%        | 11.9%       | 3      | 3           |
| Soybeans                   | 10     | 0.0%           | -0.6%       | 0.4%        | 10     | 10          |
| Sugar                      | 36     | 0.1%           | -9.3%       | -22.1%      | 40     | 47          |
| Wheat                      | 108    | 0.2%           | 17.2%       | 19.3%       | 92     | 91          |
| <b>Energy</b>              | 2,162  | 5.0%           | -15.0%      | -2.3%       | 2,544  | 2,213       |
| Overall                    | 152    | 0.4%           | -25.9%      | -8.9%       | 205    | 166         |
| Carbon                     | 1      | 0.0%           | 9.5%        | -39.2%      | 1      | 1           |
| Crude Oil                  | 1863   | 4.3%           | -14.7%      | -1.1%       | 2184   | 1883        |
| Gasoline                   | 6      | 0.0%           | -18.8%      | -47.5%      | 7      | 11          |
| Heating Oil                | 4      | 0.0%           | -15.9%      | -10.5%      | 5      | 5           |
| Natural Gas                | 136    | 0.3%           | -4.9%       | -6.5%       | 143    | 145         |
| Electricity                | 0      | 0.0%           | 0.0%        | 0.0%        | 0      | 0           |
| Uranium                    | 0      | 0.0%           | 0.0%        | 0.0%        | 0      | 0           |
| <b>Industrial Metals</b>   | 622    | 1.4%           | 26.0%       | 33.2%       | 494    | 467         |
| Overall                    | 213    | 0.5%           | 29.4%       | 36.6%       | 164    | 156         |
| Aluminium                  | 84     | 0.2%           | 31.9%       | 0.5%        | 63     | 83          |
| Copper                     | 191    | 0.4%           | 32.2%       | 62.3%       | 144    | 118         |
| Lead                       | 2      | 0.0%           | 4.4%        | -13.4%      | 2      | 2           |
| Nickel                     | 113    | 0.3%           | 12.8%       | 25.5%       | 100    | 90          |
| Tin                        | 4      | 0.0%           | -11.9%      | 14.4%       | 4      | 3           |
| Zinc                       | 17     | 0.0%           | 7.4%        | 10.6%       | 15     | 15          |
| <b>Precious Metals</b>     | 34,194 | 79.1%          | 6.8%        | 63.9%       | 32,024 | 20,859      |
| Overall                    | 177    | 0.4%           | 8.7%        | 55.1%       | 163    | 114         |
| Gold                       | 29513  | 68.3%          | 6.7%        | 67.7%       | 27651  | 17603       |
| Palladium                  | 606    | 1.4%           | 21.2%       | 24.0%       | 500    | 489         |
| Platinum                   | 904    | 2.1%           | 7.7%        | 28.2%       | 839    | 705         |
| Rhodium                    | 31     | 0.1%           | -4.4%       | -44.4%      | 33     | 56          |
| Silver                     | 2963   | 6.9%           | 4.3%        | 56.6%       | 2840   | 1892        |
| <b>Livestock</b>           | 9      | 0.0%           | -5.5%       | -32.5%      | 10     | 14          |
| Overall                    | 3      | 0.0%           | -8.7%       | -48.4%      | 3      | 6           |
| Cattle                     | 2      | 0.0%           | 0.6%        | 12.6%       | 2      | 2           |
| Lean Hogs                  | 4      | 0.0%           | -6.1%       | -31.8%      | 4      | 6           |
| <b>Total</b>               | 43,231 | 100.0%         | 6.2%        | 54.4%       | 40,695 | 28,007      |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



## Product Rankings

Figure 75: Top 20 Products by AUM – Equity ETFs (€ million)

| ETF Name   | BBG Ticker | Issuer      | Invest. Strategy | ETFs   Europe     |                 |          |
|--|------------|-------------|------------------|-------------------|-----------------|----------|
|  |            |             |                  | Current Month AUM | Prev. Month AUM | 2015 AUM |
| iShares Core S&P 500 UCITS ETF                     | CSSPX SW   | BlackRock   | Beta             | 14,125.7          | 13,515.9        | 11,936.4 |
| Vanguard S&P 500 ETF                               | VUSA LN    | Vanguard    | Beta             | 12,796.6          | 12,033.2        | 11,503.5 |
| iShares Core DAX UCITS ETF DE                      | DAXEX GR   | BlackRock   | Beta             | 8,165.8           | 7,702.0         | 9,433.1  |
| iShares S&P 500 UCITS ETF (Inc)                    | IUSA LN    | BlackRock   | Beta             | 7,670.7           | 7,520.8         | 8,688.2  |
| Lyxor UCITS ETF Euro STOXX 50                      | MSE FP     | Lyxor       | Beta             | 6,674.1           | 6,790.1         | 7,522.2  |
| iShares Core MSCI World UCITS ETF (Acc)            | SWDA LN    | BlackRock   | Beta             | 6,318.3           | 5,826.8         | 4,832.1  |
| iShares Euro STOXX 50 (DE)                         | SX5EEX GR  | BlackRock   | Beta             | 6,178.7           | 5,770.0         | 7,872.2  |
| iShares MSCI Europe UCITS ETF (Inc)                | IMEU LN    | BlackRock   | Beta             | 5,209.5           | 5,059.0         | 5,957.6  |
| iShares EURO STOXX 50 UCITS ETF (Inc)              | EUNE SW    | BlackRock   | Beta             | 5,115.4           | 5,124.5         | 6,258.4  |
| iShares MSCI World UCITS ETF (Inc)                 | IWRD LN    | BlackRock   | Beta             | 4,974.8           | 5,019.1         | 5,517.9  |
| iShares STOXX 600 (DE)                             | SXXPIX GR  | BlackRock   | Beta             | 4,864.2           | 4,930.4         | 6,193.4  |
| iShares FTSE 100 UCITS ETF (Inc)                   | ISF LN     | BlackRock   | Beta             | 4,819.5           | 4,722.5         | 4,986.1  |
| db x-trackers Euro Stoxx 50® UCITS ETF (DR) - 1D   | XESX GR    | Deutsche AM | Beta             | 4,807.5           | 4,830.9         | 5,536.2  |
| iShares MSCI Emerging Markets UCITS ETF (Inc)      | IEEM LN    | BlackRock   | Beta             | 4,106.3           | 3,610.7         | 3,324.6  |
| db x-trackers DAX® UCITS ETF (DR) 1C               | XDAX GR    | Deutsche AM | Beta             | 3,976.3           | 3,896.7         | 5,275.4  |
| Lyxor UCITS ETF CAC 40 (DR) -D-EUR                 | CAC FP     | Lyxor       | Beta             | 3,543.9           | 3,494.6         | 4,009.1  |
| iShares MSCI Emerging Markets IMI UCITS ETF        | EMIM NA    | BlackRock   | Beta             | 2,856.9           | 2,428.1         | 1,345.1  |
| db x-trackers S&P 500 UCITS ETF 1C                 | D5BM GR    | Deutsche AM | Beta             | 2,832.7           | 2,791.0         | 2,040.5  |
| iShares Developed Markets Property Yield UCITS ETF | IWDP LN    | BlackRock   | Beta             | 2,820.2           | 2,693.8         | 2,837.9  |
| db x-trackers MSCI Europe Index UCITS ETF (DR)     | XMEU GR    | Deutsche AM | Beta             | 2,685.8           | 2,791.4         | 3,017.9  |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

Figure 76: Top 20 Products by AUM – Fixed Income ETFs (€ million)

| ETF Name   | BBG Ticker | Issuer      | Invest. Strategy | ETFs   Europe     |                 |          |
|--|------------|-------------|------------------|-------------------|-----------------|----------|
|  |            |             |                  | Current Month AUM | Prev. Month AUM | 2015 AUM |
| iShares Euro Corporate Bond UCITS ETF                                      | IEBC LN    | BlackRock   | Beta             | 7,495.8           | 7,129.2         | 6,385.3  |
| iShares Euro High Yield Corporate Bond UCITS ETF                           | IHYG LN    | BlackRock   | Beta             | 5,676.2           | 5,237.3         | 4,026.4  |
| iShares Euro Corporate Bond Large Cap UCITS ETF                            | IBCS GR    | BlackRock   | Beta             | 5,670.5           | 5,561.7         | 4,002.7  |
| iShares J.P. Morgan \$ Emerging Markets Bond UCITS ETF                     | SEMB LN    | BlackRock   | Beta             | 5,305.1           | 4,801.0         | 3,758.0  |
| iShares \$ Corporate Bond UCITS ETF  | LQDE LN    | BlackRock   | Beta             | 5,130.4           | 4,763.9         | 3,449.8  |
| iShares \$ High Yield Corporate Bond UCITS ETF                             | SHYU LN    | BlackRock   | Beta             | 3,186.5           | 3,010.8         | 2,689.8  |
| iShares Emerging Markets Local Government Bond UCITS ETF                   | SEML LN    | BlackRock   | Beta             | 3,146.3           | 2,598.3         | 1,701.7  |
| iShares Euro Corporate Bond 1-5yr UCITS ETF                                | SE15 LN    | BlackRock   | Beta             | 3,009.0           | 2,853.3         | 2,329.8  |
| iShares \$ TIPS UCITS ETF  | IDTP LN    | BlackRock   | Beta             | 2,534.3           | 2,482.5         | 1,630.5  |
| iShares \$ Treasury Bond 7-10yr UCITS ETF                                  | IDTM LN    | BlackRock   | Beta             | 2,417.4           | 2,036.6         | 1,725.7  |
| iShares Euro Corporate Bond ex-Financials UCITS ETF                        | EEXF LN    | BlackRock   | Beta             | 2,316.5           | 2,082.7         | 1,734.9  |
| iShares \$ Treasury Bond 1-3yr UCITS ETF                                   | IBTS LN    | BlackRock   | Beta             | 2,237.2           | 2,315.9         | 1,627.2  |
| PIMCO Euro Short Maturity Source UCITS ETF                                 | PJS1 GR    | Source      | Alpha            | 2,227.5           | 2,269.3         | 2,456.8  |
| iShares Euro Aggregate Bond UCITS ETF                                      | SEAG LN    | BlackRock   | Beta             | 2,132.4           | 2,107.8         | 1,952.5  |
| iShares UK Gilts UCITS ETF   | IGLT LN    | BlackRock   | Beta             | 1,967.4           | 1,849.6         | 1,779.5  |
| iShares £ Corporate Bond UCITS ETF   | SLXX LN    | BlackRock   | Beta             | 1,873.4           | 1,765.8         | 1,982.0  |
| iShares Euro Corporate Bond ex-Financials 1-5yr UCITS ETF                  | EEX5 LN    | BlackRock   | Beta             | 1,782.9           | 1,690.0         | 1,391.6  |
| db x-trackers II iBoxx Euro Sovereigns Eurozone Yield Plus Index UCITS ETF | XY4P GR    | Deutsche AM | Beta             | 1,761.3           | 1,728.0         | 2,308.4  |
| iShares Euro Government Bond 3-5yr UCITS ETF                               | IEGX LN    | BlackRock   | Beta             | 1,720.8           | 1,708.6         | 1,371.1  |
| db x-trackers II iBoxx Euro Sovereigns Eurozone UCITS ETF                  | XGLE GR    | Deutsche AM | Beta             | 1,659.3           | 1,651.0         | 1,407.8  |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.



Figure 77: Top 20 Products by AUM – Commodity ETPs (€ million)

| ETP Name   | BBG Ticker | Issuer                          | Invest. Strategy | ETPs   Europe     |                 | 2015 AUM |
|--|------------|---------------------------------|------------------|-------------------|-----------------|----------|
|  |            |                                 |                  | Current Month AUM | Prev. Month AUM |          |
| ETFS Physical Gold                                     | PHAU LN    | ETF Securities                  | Beta             | 5,589.1           | 4,849.7         | 3,232.5  |
| ZKB Gold ETF   | ZGLD SW    | Zuercher Kantonalbank           | Beta             | 5,527.8           | 5,428.1         | 4,148.5  |
| Gold Bullion Securities                                | GBS LN     | ETF Securities                  | Beta             | 3,900.9           | 3,641.7         | 2,150.5  |
| Source Physical Gold ETC (P-ETC)                       | SGLD LN    | Source                          | Beta             | 3,427.8           | 3,247.8         | 1,508.2  |
| XETRA-Gold   | XAUEUR     | Deutsche Borse Commodities GmbH | Beta             | 1,949.3           | 1,920.2         | 1,578.8  |
| Julius Baer Physical Gold Fund - A (USD listing)       | JBGOUA SW  | Julius Baer Inv                 | Beta             | 1,822.9           | 1,761.7         | 1,347.2  |
| iShares Physical Gold ETC                              | SGLN LN    | Blackrock                       | Beta             | 1,774.9           | 1,581.8         | 374.4    |
| iShares Diversified Commodity Swap UCITS ETF DE        | DJCOMEX GR | BlackRock                       | Beta             | 1,472.1           | 838.7           | 622.8    |
| ZKB Silver ETF   | ZSIL SW    | Zuercher Kantonalbank           | Beta             | 1,299.5           | 1,201.6         | 913.9    |
| db Physical Gold Euro Hedged ETC                       | XAD1 GR    | Deutsche AM                     | Beta             | 887.1             | 889.3           | 388.4    |
| UBS-IS Gold (CHF) Hedged ETF A                         | AUCHAR SW  | UBS                             | Beta             | 884.2             | 859.2           | 491.0    |
| ETFS Physical Silver                                   | PHAG LN    | ETF Securities                  | Beta             | 809.9             | 806.0           | 505.9    |
| Lyxor ETF Commodities CRB                              | CRB FP     | Lyxor                           | Beta             | 754.7             | 807.5           | 713.2    |
| db Physical Gold ETC                                   | XGLD LN    | Deutsche AM                     | Beta             | 640.0             | 610.8           | 431.0    |
| db Physical Gold ETC (EUR)                             | XAD5 GR    | Deutsche AM                     | Beta             | 616.8             | 523.5           | 357.1    |
| UBS ETFs plc – CMCi Composite SF UCITS ETF (USD) A-acc | CCUSAS SW  | UBS                             | Beta             | 569.3             | 598.8           | 423.7    |
| ETFS WTI Crude Oil                                     | CRUD LN    | ETF Securities                  | Beta             | 557.4             | 640.3           | 594.8    |
| ETFS Longer Dated All Commodities GO UCITS ETF         | COMF LN    | ETF Securities                  | Beta             | 472.7             | 459.5           | 219.7    |
| iShares Gold CHF Hedged CH                             | CSGLDC SW  | BlackRock                       | Beta             | 443.5             | 337.6           | 272.2    |
| ETFS Physical Swiss Gold                               | SGBS LN    | ETF Securities                  | Beta             | 422.8             | 415.4           | 245.2    |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

# 9. ETF Broker rankings

## US ETP Broker Rankings

Figure 78: Top 20 US ETF Brokers

| ETFs | US |

| Value Trade Summary |                                     |                               |              |                   |                               |              |                   | Volume Trade Summary                |                             |              |                   |                             |              |                   |  |
|---------------------|-------------------------------------|-------------------------------|--------------|-------------------|-------------------------------|--------------|-------------------|-------------------------------------|-----------------------------|--------------|-------------------|-----------------------------|--------------|-------------------|--|
| Rank                | Broker                              | Jul-16                        |              |                   | YTD                           |              |                   | Broker                              | Jul-16                      |              |                   | YTD                         |              |                   |  |
|                     |                                     | Advertised value (\$ million) | Market Share | Advertised Trades | Advertised value (\$ million) | Market Share | Advertised Trades |                                     | Advertised volume (million) | Market Share | Advertised Trades | Advertised volume (million) | Market Share | Advertised Trades |  |
| 1                   | (KCG) KCG HOLDINGS, INC.            | 146,999                       | 18.60%       | 168,784           | 1,228,830                     | 18.84%       | 1,288,334         | (KCG) KCG HOLDINGS, INC.            | 2,717                       | 20.13%       | 168,784           | 23,130                      | 20.12%       | 1,288,340         |  |
| 2                   | (CSFB) CREDIT SUISSE                | 86,942                        | 11.00%       | 21,177            | 691,929                       | 10.61%       | 146,477           | (UBS) UBS INVESTMENT BANK           | 1,457                       | 10.79%       | 39,470            | 13,511                      | 11.75%       | 287,923           |  |
| 3                   | (UBS) UBS INVESTMENT BANK           | 77,496                        | 9.81%        | 39,470            | 702,679                       | 10.78%       | 287,918           | (CSFB) CREDIT SUISSE                | 1,298                       | 9.62%        | 21,203            | 11,055                      | 9.62%        | 146,754           |  |
| 4                   | (DBAB) DEUTSCHE BANK SECURITIES INC | 60,161                        | 7.61%        | 23,064            | 360,690                       | 5.53%        | 162,630           | (MLCO) MERRILL LYNCH                | 1,073                       | 7.95%        | 37,500            | 8,270                       | 7.19%        | 274,372           |  |
| 5                   | (MLCO) MERRILL LYNCH                | 59,668                        | 7.55%        | 37,495            | 452,501                       | 6.94%        | 274,316           | (DBAB) DEUTSCHE BANK SECURITIES INC | 1,063                       | 7.87%        | 23,064            | 7,005                       | 6.09%        | 162,630           |  |
| 6                   | (GS ) GOLDMAN SACHS & CO.           | 57,053                        | 7.22%        | 137,287           | 456,845                       | 7.01%        | 1,089,950         | (GS ) GOLDMAN SACHS & CO.           | 892                         | 6.61%        | 137,294           | 7,903                       | 6.87%        | 1,089,957         |  |
| 7                   | (CITI) CITIGROUP GLOBAL MARKETS     | 48,274                        | 6.11%        | 10,027            | 383,640                       | 5.88%        | 109,454           | (CITI) CITIGROUP GLOBAL MARKETS     | 862                         | 6.39%        | 10,027            | 6,997                       | 6.09%        | 109,454           |  |
| 8                   | (JPM) JP MORGAN                     | 46,845                        | 5.93%        | 97,602            | 456,857                       | 7.01%        | 718,131           | (JPM) JP MORGAN                     | 715                         | 5.30%        | 97,602            | 6,803                       | 5.92%        | 718,131           |  |
| 9                   | (BCAP) BARCLAYS CAPITAL             | 37,026                        | 4.69%        | 53,126            | 314,527                       | 4.82%        | 426,723           | (FCM) FIDELITY CAPITAL MARKETS      | 686                         | 5.08%        | 43,760            | 5,726                       | 4.98%        | 339,971           |  |
| 10                  | (FCM) FIDELITY CAPITAL MARKETS      | 36,124                        | 4.57%        | 43,760            | 289,887                       | 4.45%        | 339,971           | (BCAP) BARCLAYS CAPITAL             | 610                         | 4.52%        | 53,126            | 5,258                       | 4.57%        | 426,724           |  |
| 11                  | (MSCO) MORGAN STANLEY               | 31,837                        | 4.03%        | 13,482            | 283,144                       | 4.34%        | 102,701           | (MSCO) MORGAN STANLEY               | 508                         | 3.76%        | 13,482            | 4,468                       | 3.89%        | 102,701           |  |
| 12                  | (RBC) ROYAL BANK OF CANADA          | 17,270                        | 2.19%        | 34,786            | 121,446                       | 1.86%        | 284,033           | (RBC) ROYAL BANK OF CANADA          | 276                         | 2.05%        | 34,787            | 2,219                       | 1.93%        | 284,034           |  |
| 13                  | (CVGX) CONVERGEX                    | 12,366                        | 1.56%        | 18,128            | 120,879                       | 1.85%        | 159,465           | (CVGX) CONVERGEX                    | 220                         | 1.63%        | 18,128            | 2,339                       | 2.03%        | 159,465           |  |
| 14                  | (JEFF) JEFFERIES & CO., INC.        | 10,103                        | 1.28%        | 6,165             | 98,871                        | 1.52%        | 74,906            | (JEFF) JEFFERIES & CO., INC.        | 127                         | 0.94%        | 6,165             | 1,279                       | 1.11%        | 74,906            |  |
| 15                  | (INCA) INSTINET                     | 9,829                         | 1.24%        | 6,687             | 114,391                       | 1.75%        | 60,107            | (INCA) INSTINET                     | 114                         | 0.84%        | 6,687             | 1,231                       | 1.07%        | 60,107            |  |
| 16                  | (BNYM) BANK OF NEW YORK, THE        | 7,498                         | 0.95%        | 11,099            | 44,151                        | 0.68%        | 60,470            | (BNYM) BANK OF NEW YORK, THE        | 113                         | 0.83%        | 11,099            | 789                         | 0.69%        | 60,470            |  |
| 17                  | (WELS) WELLS FARGO SECURITIES       | 3,618                         | 0.46%        | 2,950             | 24,026                        | 0.37%        | 18,470            | (WBET) WALLACHBETH CAPITAL LLC      | 72                          | 0.54%        | 227               | 757                         | 0.66%        | 2,178             |  |
| 18                  | (WBET) WALLACHBETH CAPITAL LLC      | 3,392                         | 0.43%        | 227               | 39,652                        | 0.61%        | 2,177             | (BNPP) BNP PARIBAS                  | 67                          | 0.50%        | 7,218             | 349                         | 0.30%        | 14,782            |  |
| 19                  | (RAJA) RAYMOND JAMES & ASSOCIATES   | 3,294                         | 0.42%        | 28,670            | 20,500                        | 0.31%        | 165,173           | (RAJA) RAYMOND JAMES & ASSOCIATES   | 56                          | 0.42%        | 28,674            | 368                         | 0.32%        | 165,196           |  |
| 20                  | (BNPP) BNP PARIBAS                  | 3,213                         | 0.41%        | 7,218             | 16,645                        | 0.26%        | 14,782            | (WELS) WELLS FARGO SECURITIES       | 44                          | 0.32%        | 2,972             | 351                         | 0.31%        | 18,566            |  |
|                     | Other                               | 31,150                        | 3.94%        | 79,954            | 298,672                       | 4.58%        | 708,223           | Other                               | 527                         | 3.91%        | 79,959            | 5,148                       | 4.48%        | 708,255           |  |
|                     | Total                               | 790,156                       | 100.00%      | 841,158           | 6,520,762                     | 100.00%      | 6,494,411         | Total                               | 13,499                      | 100.00%      | 841,228           | 114,954                     | 100.00%      | 6,494,916         |  |

Note: ETF broker statistics represent advertised volume as reported by brokers to Bloomberg. These numbers may be different from actual volume traded.

Source: Deutsche Bank, Bloomberg Finance LP



Figure 79: Top 20 US ETV Brokers

| ETVs | US |

| Rank | Broker                              | Value Trade Summary           |              |                   |                               |              |                   | Broker                              | Volume Trade Summary        |              |                   |                             |              |                   |
|------|-------------------------------------|-------------------------------|--------------|-------------------|-------------------------------|--------------|-------------------|-------------------------------------|-----------------------------|--------------|-------------------|-----------------------------|--------------|-------------------|
|      |                                     | Jul-16                        |              |                   | YTD                           |              |                   |                                     | Jul-16                      |              |                   | YTD                         |              |                   |
|      |                                     | Advertised value (\$ million) | Market Share | Advertised Trades | Advertised value (\$ million) | Market Share | Advertised Trades |                                     | Advertised volume (million) | Market Share | Advertised Trades | Advertised volume (million) | Market Share | Advertised Trades |
| 1    | (KCG) KCG HOLDINGS, INC.            | 10,811                        | 24.83%       | 16,336            | 79,954                        | 25.94%       | 115,382           | (KCG) KCG HOLDINGS, INC.            | 481                         | 30.52%       | 16,336            | 3,349                       | 27.35%       | 115,382           |
| 2    | (CSFB) CREDIT SUISSE                | 6,268                         | 14.40%       | 1,075             | 30,152                        | 9.78%        | 7,576             | (UBS) UBS INVESTMENT BANK           | 223                         | 14.14%       | 2,215             | 2,089                       | 17.06%       | 15,653            |
| 3    | (UBS) UBS INVESTMENT BANK           | 5,496                         | 12.62%       | 2,215             | 47,959                        | 15.56%       | 15,653            | (FCM) FIDELITY CAPITAL MARKETS      | 159                         | 10.11%       | 5,253             | 1,009                       | 8.24%        | 37,118            |
| 4    | (CITI) CITIGROUP GLOBAL MARKETS     | 3,414                         | 7.84%        | 883               | 26,652                        | 8.65%        | 6,706             | (CSFB) CREDIT SUISSE                | 141                         | 8.97%        | 1,075             | 940                         | 7.68%        | 7,584             |
| 5    | (JPM) JP MORGAN                     | 2,890                         | 6.64%        | 6,461             | 17,023                        | 5.52%        | 44,824            | (DBAB) DEUTSCHE BANK SECURITIES INC | 90                          | 5.73%        | 1,264             | 434                         | 3.54%        | 7,736             |
| 6    | (FCM) FIDELITY CAPITAL MARKETS      | 2,600                         | 5.97%        | 5,253             | 19,893                        | 6.45%        | 37,118            | (CITI) CITIGROUP GLOBAL MARKETS     | 77                          | 4.90%        | 883               | 874                         | 7.14%        | 6,706             |
| 7    | (DBAB) DEUTSCHE BANK SECURITIES INC | 2,391                         | 5.49%        | 1,264             | 11,347                        | 3.68%        | 7,736             | (MLCO) MERRILL LYNCH                | 70                          | 4.45%        | 1,819             | 548                         | 4.48%        | 12,725            |
| 8    | (MLCO) MERRILL LYNCH                | 2,162                         | 4.96%        | 1,819             | 13,821                        | 4.48%        | 12,723            | (JPM) JP MORGAN                     | 68                          | 4.32%        | 6,461             | 510                         | 4.16%        | 44,824            |
| 9    | (GS ) GOLDMAN SACHS & CO.           | 1,797                         | 4.13%        | 9,883             | 13,798                        | 4.48%        | 81,022            | (BCAP) BARCLAYS CAPITAL             | 52                          | 3.32%        | 4,535             | 413                         | 3.37%        | 34,529            |
| 10   | (BCAP) BARCLAYS CAPITAL             | 1,316                         | 3.02%        | 4,535             | 9,572                         | 3.11%        | 34,529            | (GS ) GOLDMAN SACHS & CO.           | 44                          | 2.80%        | 9,883             | 447                         | 3.65%        | 81,022            |
| 11   | (MSCO) MORGAN STANLEY               | 865                           | 1.99%        | 665               | 7,213                         | 2.34%        | 5,224             | (MSCO) MORGAN STANLEY               | 37                          | 2.37%        | 665               | 349                         | 2.85%        | 5,224             |
| 12   | (CVGX) CONVERGEX                    | 671                           | 1.54%        | 1,186             | 6,266                         | 2.03%        | 9,215             | (CVGX) CONVERGEX                    | 29                          | 1.82%        | 1,186             | 266                         | 2.17%        | 9,215             |
| 13   | (RBC) ROYAL BANK OF CANADA          | 618                           | 1.42%        | 2,373             | 5,302                         | 1.72%        | 18,743            | (RBC) ROYAL BANK OF CANADA          | 25                          | 1.56%        | 2,373             | 289                         | 2.36%        | 18,743            |
| 14   | (JEFF) JEFFERIES & CO., INC.        | 337                           | 0.77%        | 252               | 1,989                         | 0.65%        | 2,413             | (ITGI) INVESTMENT TECHNOLOGY GROUP  | 12                          | 0.77%        | 567               | 111                         | 0.91%        | 9,741             |
| 15   | (INCA) INSTINET                     | 191                           | 0.44%        | 234               | 2,113                         | 0.69%        | 2,718             | (RAJA) RAYMOND JAMES & ASSOCIATES   | 7                           | 0.46%        | 1,590             | 28                          | 0.23%        | 7,209             |
| 16   | (RAJA) RAYMOND JAMES & ASSOCIATES   | 186                           | 0.43%        | 1,590             | 791                           | 0.26%        | 7,209             | (JEFF) JEFFERIES & CO., INC.        | 6                           | 0.38%        | 252               | 45                          | 0.36%        | 2,413             |
| 17   | (HSBC) HSBC GROUP PLC               | 145                           | 0.33%        | 308               | 719                           | 0.23%        | 2,022             | (BNYM) BANK OF NEW YORK, THE        | 6                           | 0.36%        | 428               | 114                         | 0.93%        | 3,045             |
| 18   | (GFIG) GFI GROUP INC.               | 137                           | 0.31%        | 97                | 386                           | 0.13%        | 420               | (BMOC) BMO CAPITAL MARKETS          | 6                           | 0.36%        | 145               | 45                          | 0.37%        | 1,392             |
| 19   | (ITGI) INVESTMENT TECHNOLOGY GROUP  | 135                           | 0.31%        | 567               | 2,675                         | 0.87%        | 9,741             | (INCA) INSTINET                     | 5                           | 0.33%        | 234               | 83                          | 0.67%        | 2,718             |
| 20   | (SCMC) SCOTIA CAPITAL               | 99                            | 0.23%        | 29                | 348                           | 0.11%        | 204               | (HSBC) HSBC GROUP PLC               | 4                           | 0.27%        | 308               | 29                          | 0.24%        | 2,022             |
|      | Other                               | 1,008                         | 2.31%        | 4,603             | 10,274                        | 3.33%        | 33,412            | Other                               | 32                          | 2.05%        | 4,157             | 274                         | 2.24%        | 29,603            |
|      | Total                               | 43,536                        | 100.00%      | 61,628            | 308,248                       | 100.00%      | 454,590           | Total                               | 1,575                       | 100.00%      | 61,629            | 12,244                      | 100.00%      | 454,604           |

Note: ETV broker statistics represent advertised volume as reported by brokers to Bloomberg. These numbers may be different from actual volume traded.

Source: Deutsche Bank, Bloomberg Finance LP



## European ETP Broker Rankings

Figure 80: Top 20 European ETF brokers

| ETFs | Europe |

| Rank | Broker                              | Value Trade Summary          |              |                   |                              |              |                   | Volume Trade Summary                |              |                   |                             |              |                   |         |
|------|-------------------------------------|------------------------------|--------------|-------------------|------------------------------|--------------|-------------------|-------------------------------------|--------------|-------------------|-----------------------------|--------------|-------------------|---------|
|      |                                     | Jul-16                       |              |                   | YTD                          |              |                   | Jul-16                              |              |                   | YTD                         |              |                   |         |
|      |                                     | Advertised value (€ million) | Market Share | Advertised Trades | Advertised value (€ million) | Market Share | Advertised Trades | Advertised volume (million)         | Market Share | Advertised Trades | Advertised volume (million) | Market Share | Advertised Trades |         |
| 1    | (CBK) COMMERZBANK                   | 10,795                       | 11.06%       | 21,314            | 68,658                       | 10.70%       | 132,307           | (OPTV) OPTIVER VOF                  | 355          | 10.46%            | 9,132                       | 695          | 3.27%             | 13,918  |
| 2    | (FLOW) FLOW TRADERS                 | 8,679                        | 8.89%        | 5,540             | 50,922                       | 7.93%        | 31,695            | (CSFB) CREDIT SUISE                 | 336          | 9.88%             | 3,394                       | 1,322        | 6.22%             | 22,883  |
| 3    | (BNPP) BNP PARIBAS                  | 8,529                        | 8.73%        | 10,871            | 67,274                       | 10.48%       | 69,833            | (FLOW) FLOW TRADERS                 | 327          | 9.62%             | 5,795                       | 1,739        | 8.19%             | 33,092  |
| 4    | (OPTV) OPTIVER VOF                  | 7,903                        | 8.09%        | 9,132             | 15,717                       | 2.45%        | 13,918            | (CBK) COMMERZBANK                   | 297          | 8.75%             | 21,317                      | 1,874        | 8.82%             | 132,588 |
| 5    | (CSFB) CREDIT SUISE                 | 7,530                        | 7.71%        | 3,352             | 36,824                       | 5.74%        | 22,575            | (BNPP) BNP PARIBAS                  | 288          | 8.48%             | 10,904                      | 2,045        | 9.63%             | 70,088  |
| 6    | (SIS) SUSQUEHANNA INTERNATIONAL GRP | 6,829                        | 6.99%        | 3,163             | 55,566                       | 8.66%        | 25,827            | (SIS) SUSQUEHANNA INTERNATIONAL GRP | 248          | 7.30%             | 3,170                       | 2,125        | 10.00%            | 25,887  |
| 7    | (CITI) CITIGROUP GLOBAL MARKETS     | 6,193                        | 6.34%        | 4,218             | 45,916                       | 7.15%        | 24,749            | (CITI) CITIGROUP GLOBAL MARKETS     | 154          | 4.53%             | 4,218                       | 1,025        | 4.82%             | 24,751  |
| 8    | (DBK) DEUTSCHE BANK AG              | 3,929                        | 4.02%        | 4,395             | 28,996                       | 4.52%        | 30,783            | (WINS) WINTERFLOOD SECURITIES       | 119          | 3.50%             | 7,257                       | 742          | 3.49%             | 47,789  |
| 9    | (JPMS) JP MORGAN                    | 3,106                        | 3.18%        | 2,454             | 21,442                       | 3.34%        | 17,647            | (SG ) SG SECURITIES                 | 112          | 3.29%             | 3,946                       | 850          | 4.00%             | 29,369  |
| 10   | (UNIC) UNICREDIT                    | 3,083                        | 3.16%        | 750               | 15,970                       | 2.49%        | 4,579             | (UBS) UBS INVESTMENT BANK           | 110          | 3.23%             | 415                         | 597          | 2.81%             | 2,812   |
| 11   | (SG ) SG SECURITIES                 | 3,029                        | 3.10%        | 3,946             | 24,551                       | 3.82%        | 29,367            | (KCG) KCG HOLDINGS, INC.            | 104          | 3.05%             | 6,378                       | 884          | 4.16%             | 44,252  |
| 12   | (WINS) WINTERFLOOD SECURITIES       | 2,459                        | 2.52%        | 7,257             | 15,509                       | 2.42%        | 47,787            | (DBK ) DEUTSCHE BANK AG             | 99           | 2.93%             | 4,397                       | 833          | 3.92%             | 30,809  |
| 13   | (UBS) UBS INVESTMENT BANK           | 2,376                        | 2.43%        | 415               | 15,088                       | 2.35%        | 2,812             | (HSBC) HSBC GROUP PLC               | 86           | 2.54%             | 2,430                       | 532          | 2.50%             | 15,028  |
| 14   | (HSBC) HSBC GROUP PLC               | 2,317                        | 2.37%        | 2,428             | 15,219                       | 2.37%        | 15,017            | (UNIC) UNICREDIT                    | 78           | 2.31%             | 752                         | 450          | 2.12%             | 4,587   |
| 15   | (MSCO) MORGAN STANLEY               | 2,146                        | 2.20%        | 1,816             | 14,931                       | 2.33%        | 11,477            | (BCAP) BARCLAYS CAPITAL             | 74           | 2.18%             | 2,979                       | 667          | 3.14%             | 22,773  |
| 16   | (KCG) KCG HOLDINGS, INC.            | 2,076                        | 2.13%        | 6,378             | 15,972                       | 2.49%        | 44,250            | (MLCO) MERRILL LYNCH                | 64           | 1.90%             | 2,870                       | 619          | 2.91%             | 20,960  |
| 17   | (BCAP) BARCLAYS CAPITAL             | 2,057                        | 2.11%        | 2,978             | 21,092                       | 3.29%        | 22,762            | (KEPL) KEPLER CAPITAL MARKETS       | 58           | 1.72%             | 2,575                       | 471          | 2.22%             | 18,045  |
| 18   | (BFIN) BLUEFIN EUROPE LLP           | 1,944                        | 1.99%        | 253               | 13,989                       | 2.18%        | 2,117             | (JPMS) JP MORGAN                    | 54           | 1.59%             | 2,454                       | 456          | 2.15%             | 17,679  |
| 19   | (KEPL) KEPLER CAPITAL MARKETS       | 1,767                        | 1.81%        | 2,575             | 16,292                       | 2.54%        | 18,038            | (MSCO) MORGAN STANLEY               | 50           | 1.47%             | 1,816                       | 421          | 1.98%             | 11,480  |
| 20   | (MLCO) MERRILL LYNCH                | 1,578                        | 1.62%        | 2,870             | 13,042                       | 2.03%        | 20,899            | (MACQ) MACQUARIE SECURITIES         | 39           | 1.15%             | 1,048                       | 151          | 0.71%             | 4,680   |
|      | Other                               | 9,319                        | 9.54%        | 23,595            | 68,915                       | 10.74%       | 168,723           | Other                               | 344          | 10.13%            | 22,801                      | 2,745        | 12.92%            | 166,765 |
|      | Total                               | 97,644                       | 100.00%      | 119,700           | 641,886                      | 100.00%      | 757,162           | Total                               | 3,398        | 100.00%           | 120,048                     | 21,245       | 100.00%           | 760,235 |

Note: ETF broker statistics represent advertised volume as reported by brokers to Bloomberg. These numbers may be different from actual volume traded.

Source: Deutsche Bank, Bloomberg Finance LP





Figure 81: Top 20 European ETC brokers

| ETCs | Europe |

| Rank | Broker                              | Value Trade Summary          |              |                   |                              |              |                   | Volume Trade Summary                |              |                   |                             |              |                   |        |
|------|-------------------------------------|------------------------------|--------------|-------------------|------------------------------|--------------|-------------------|-------------------------------------|--------------|-------------------|-----------------------------|--------------|-------------------|--------|
|      |                                     | Jul-16                       |              |                   | YTD                          |              |                   | Jul-16                              |              |                   | YTD                         |              |                   |        |
|      |                                     | Advertised value (€ million) | Market Share | Advertised Trades | Advertised value (€ million) | Market Share | Advertised Trades | Advertised volume (million)         | Market Share | Advertised Trades | Advertised volume (million) | Market Share | Advertised Trades |        |
| 1    | (OPTV) OPTIVER VOF                  | 1,127                        | 17.53%       | 1,797             | 1,846                        | 5.53%        | 2,546             | (OPTV) OPTIVER VOF                  | 195          | 33.60%            | 1,797                       | 311          | 5.42%             | 2,546  |
| 2    | (WINS) WINTERFLOOD SECURITIES       | 597                          | 9.29%        | 2,452             | 2,923                        | 8.76%        | 15,033            | (BNPP) BNP PARIBAS                  | 92           | 15.76%            | 197                         | 725          | 12.65%            | 1,448  |
| 3    | (FLOW) FLOW TRADERS                 | 551                          | 8.58%        | 401               | 2,388                        | 7.16%        | 2,219             | (WINS) WINTERFLOOD SECURITIES       | 56           | 9.64%             | 2,452                       | 1,551        | 27.06%            | 15,033 |
| 4    | (HSBC) HSBC GROUP PLC               | 447                          | 6.96%        | 175               | 2,302                        | 6.90%        | 905               | (CITI) CITIGROUP GLOBAL MARKETS     | 35           | 5.94%             | 552                         | 295          | 5.15%             | 3,207  |
| 5    | (CSFB) CREDIT SUISSE                | 392                          | 6.10%        | 200               | 2,037                        | 6.11%        | 1,241             | (FLOW) FLOW TRADERS                 | 32           | 5.58%             | 420                         | 232          | 4.04%             | 2,316  |
| 6    | (CBK) COMMERZBANK                   | 361                          | 5.61%        | 743               | 1,997                        | 5.99%        | 4,293             | (ITGE) ITG EUROPE                   | 27           | 4.63%             | 29                          | 66           | 1.14%             | 111    |
| 7    | (CITI) CITIGROUP GLOBAL MARKETS     | 321                          | 4.99%        | 552               | 2,236                        | 6.70%        | 3,207             | (DBK ) DEUTSCHE BANK AG             | 16           | 2.67%             | 504                         | 336          | 5.85%             | 3,322  |
| 8    | (DBK ) DEUTSCHE BANK AG             | 271                          | 4.21%        | 504               | 981                          | 2.94%        | 3,321             | (SG ) SG SECURITIES                 | 14           | 2.37%             | 160                         | 72           | 1.26%             | 987    |
| 9    | (BNPP) BNP PARIBAS                  | 262                          | 4.08%        | 197               | 1,588                        | 4.76%        | 1,415             | (KCG) KCG HOLDINGS, INC.            | 14           | 2.36%             | 605                         | 323          | 5.63%             | 3,984  |
| 10   | (SG ) SG SECURITIES                 | 261                          | 4.07%        | 160               | 1,063                        | 3.19%        | 986               | (BFIN) BLUEFIN EUROPE LLP           | 9            | 1.47%             | 52                          | 135          | 2.36%             | 360    |
| 11   | (SIS) SUSQUEHANNA INTERNATIONAL GRP | 192                          | 2.98%        | 45                | 1,067                        | 3.20%        | 251               | (CSFB) CREDIT SUISSE                | 8            | 1.36%             | 200                         | 76           | 1.33%             | 1,245  |
| 12   | (UBS) UBS INVESTMENT BANK           | 190                          | 2.96%        | 65                | 628                          | 1.88%        | 413               | (UBS) UBS INVESTMENT BANK           | 8            | 1.34%             | 65                          | 69           | 1.20%             | 413    |
| 13   | (KEPL) KEPLER CAPITAL MARKETS       | 170                          | 2.64%        | 221               | 1,283                        | 3.85%        | 1,746             | (SIS) SUSQUEHANNA INTERNATIONAL GRP | 6            | 1.09%             | 45                          | 117          | 2.04%             | 251    |
| 14   | (JPMS) JP MORGAN                    | 133                          | 2.07%        | 205               | 713                          | 2.14%        | 1,270             | (HSBC) HSBC GROUP PLC               | 6            | 1.03%             | 175                         | 54           | 0.94%             | 905    |
| 15   | (MACQ) MACQUARIE SECURITIES         | 131                          | 2.04%        | 68                | 1,576                        | 4.73%        | 540               | (KEPL) KEPLER CAPITAL MARKETS       | 6            | 1.01%             | 221                         | 86           | 1.51%             | 1,747  |
| 16   | (MSCO) MORGAN STANLEY               | 98                           | 1.53%        | 161               | 999                          | 3.00%        | 1,595             | (CBK) COMMERZBANK                   | 6            | 0.99%             | 743                         | 59           | 1.03%             | 4,293  |
| 17   | (MAKO) MAKO FINANCIAL MARKETS       | 85                           | 1.33%        | 39                | 484                          | 1.45%        | 324               | (MACQ) MACQUARIE SECURITIES         | 5            | 0.93%             | 68                          | 52           | 0.91%             | 540    |
| 18   | (MLCO) MERRILL LYNCH                | 85                           | 1.32%        | 225               | 734                          | 2.20%        | 2,066             | (MED) MEDIOBANCA SPA                | 5            | 0.86%             | 1,010                       | 47           | 0.83%             | 7,411  |
| 19   | (KCG) KCG HOLDINGS, INC.            | 83                           | 1.30%        | 605               | 907                          | 2.72%        | 3,984             | (JPMS) JP MORGAN                    | 5            | 0.81%             | 205                         | 21           | 0.36%             | 1,270  |
| 20   | (BFIN) BLUEFIN EUROPE LLP           | 72                           | 1.12%        | 52                | 668                          | 2.00%        | 360               | (PEEL) PEEL HUNT LLP                | 4            | 0.75%             | 540                         | 320          | 5.58%             | 3,345  |
|      | Other                               | 598                          | 9.30%        | 3,110             | 4,935                        | 14.80%       | 21,968            | Other                               | 34           | 5.80%             | 1,956                       | 787          | 13.72%            | 15,136 |
|      | Total                               | 6,429                        | 100.00%      | 11,977            | 33,355                       | 100.00%      | 69,683            | Total                               | 582          | 100.00%           | 11,996                      | 5,733        | 100.00%           | 69,870 |

Note: ETC broker statistics represent advertised volume as reported by brokers to Bloomberg. These numbers may be different from actual volume traded.

Source: Deutsche Bank, Bloomberg Finance LP





# Appendix A: How we define ETPs

## Exchange-Traded Products (ETPs)

We define an exchange-traded product (ETP) as a secure (funded or collateralized) open-ended delta-one exchange-traded equity or debt instrument with no embedded optionality and market-wide appeal to investors. This includes exchange traded funds, exchange-traded commodities (Europe) and exchange-traded vehicles (US).

Figure below gives a summary of our current coverage universe by region and structure type as on 31 December 2015. The vast majority of instruments are ETFs (97.7%, 4,396 products, \$2,879bn) with the remainder being ETCs (0.6%, 455 products, \$17.4bn) in Europe and ETVs (1.6%, 67 products, \$48.2bn) in the US.

Figure 82: ETP Coverage Universe Summary

| Region       | ETPs     |           |        | ETFs     |           |       | ETC/Vs   |           |      |
|--------------|----------|-----------|--------|----------|-----------|-------|----------|-----------|------|
|              | Products | US\$ Mil. | %      | Products | US\$ Mil. | %     | Products | US\$ Mil. | %    |
| US           | 1,644    | 2,113,454 | 71.7%  | 1,577    | 2,065,258 | 70.1% | 67       | 48,195    | 1.6% |
| Europe       | 1,982    | 507,450   | 17.2%  | 1,527    | 490,095   | 16.6% | 455      | 17,354    | 0.6% |
| Asia Pacific | 810      | 250,247   | 8.5%   | 794      | 249,926   | 8.5%  | 16       | 321       | 0.0% |
| RoW          | 499      | 74,661    | 2.5%   | 498      | 73,650    | 2.5%  | 1        | 1,011     | 0.0% |
| Global       | 4,935    | 2,945,811 | 100.0% | 4,396    | 2,878,930 | 97.7% | 539      | 66,881    | 2.3% |

Source: Deutsche Bank, Bloomberg Finance LP, Reuters.

## Exchange-Traded Funds (ETFs, 97.7%)

**US (70.1%):** Fund structures that issue shares that are traded on an exchange much the same way as equities. ETFs indexed to equity and fixed income benchmarks are registered under the investment company act of 1940. Only physical index replication techniques are permissible by this legislation while synthetic replication is not allowed.

**Europe (16.6%):** Fund structures that issue units or shares that are traded on an exchange much the same way as equities. The vast majorities of European ETFs are UCITS III compliant and are primarily domiciled in Dublin and Luxemburg. The Undertakings for Collective Investment in Transferable Securities (UCITS) are a set of European Union directives that aim to allow collective investment schemes to operate freely throughout the EU on the basis of a single authorization from one member state. Both physical and synthetic index replication is permissible by UCITS and funds are allowed to track equity, fixed income as well as diversified commodity indices.

**Asia (8.5%):** Both European and US ETFs are cross sold into the Asian market.

## Exchange-Traded Collateralized Instruments (2.3%)

### Exchange-Traded Commodities (ETCs, 0.6%)

In Europe as UCITS III does not permit the creation of funds tracking non diversified commodity indices (for example wheat or oil), exchange-traded products that track single commodity profiles are issued under the EU Prospectus Directive in two structures that have become widely known as exchange-traded commodities (ETCs). ETCs can either be physically backed or they can be issued through a bankruptcy remote special purpose vehicle (SPV). Both forms utilize offshore domiciles, such as Jersey, and are classed as debt instruments. Physically-backed ETCs are fully backed with securities that closely resemble the composition of a product's benchmark index. SPV structures are collateralized by assets which could bear no resemblance to those of their respective benchmark index and ensure replication of their index return through a total return swap structure or by holding other derivative instruments such as futures. In the vast majority of cases, both types of ETCs are fully collateralized with secure assets such as money market instruments, government bonds and gold. For more information, please refer to our research report issued on March 11 2010 titled 'The race for assets in the European Exchange-Traded Products Market'.

### Exchange-traded vehicles (ETVs, 1.6%)

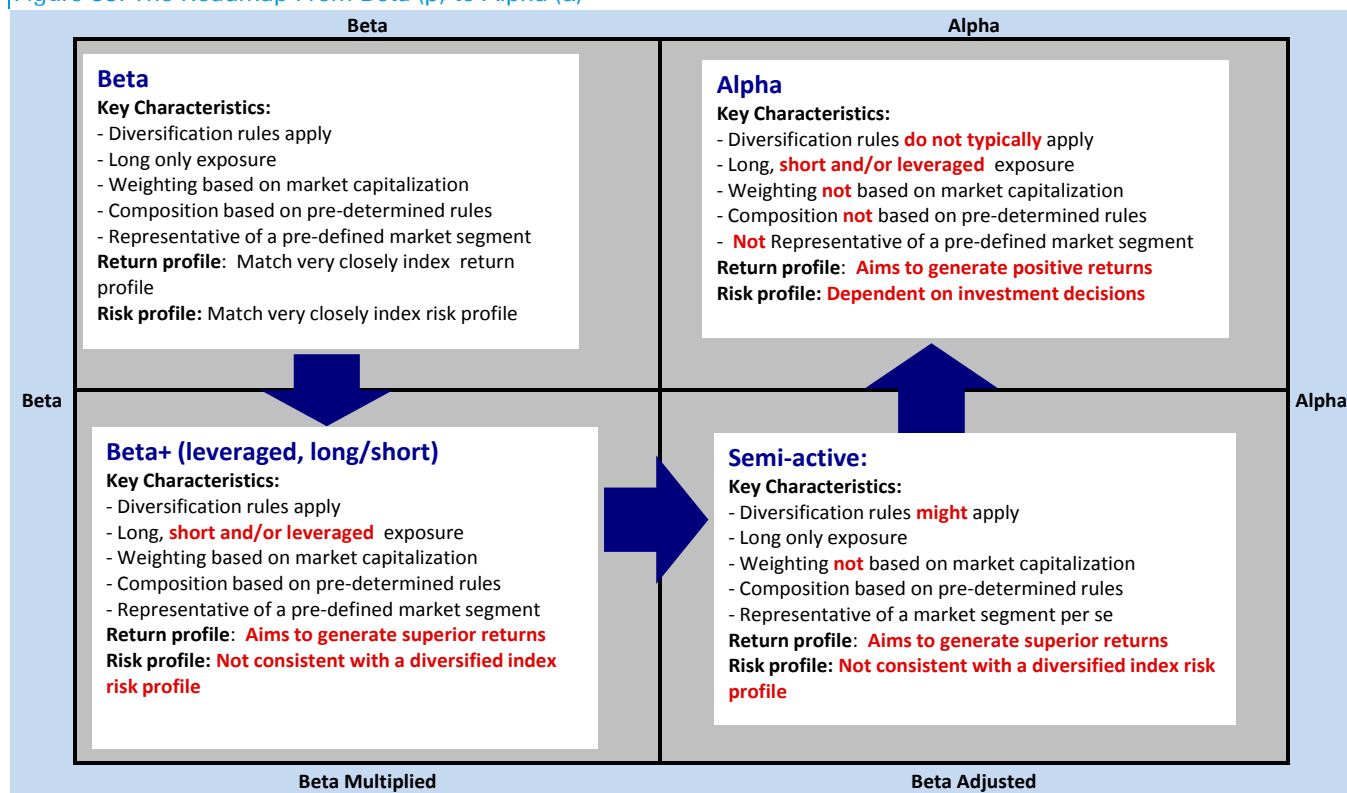
This terminology typically refers to grantor trusts that exist in the US market. These instruments track primarily commodity benchmarks. They differ from ETFs in that they are registered under the Securities Act of 1933 and not the investment Company Act of 1940, hence they are not classed as funds. Vehicles that replicate commodity benchmarks, more often known as pools, and funds targeting alternative index returns are formed under the Commodities Exchange Act and are listed under the 33 Securities Act, and report under 34 Corporate Act.



# Appendix B: The road from beta to alpha

The figure below illustrates the road from beta (diversified rule based market access) to alpha (discretionary market access). Moving counter-clockwise from beta, the potential for return increases, together with the potential risk.

Figure 83: The Roadmap From Beta ( $\beta$ ) to Alpha ( $\alpha$ )



Source: Deutsche Bank

The performance of beta products is measured against an index; a manager is most successful when they manage to match the return of a product to its stated benchmark. The performance of alpha products, or rather the performance of an alpha product's manager, is measured by the risk adjusted return it generates. The highest the return and the lowest the risk [typically measured by the standard deviation of a product's returns] the more successful a product is deemed to be.

There is however a whole host of products that fall between beta and alpha, we have sought to create a classification system that classifies these products, taking into consideration a number of variables, ranging from diversification to what constitutes a market segment.



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# Appendix 1

## Important Disclosures

\*Prices are current as of the end of the previous trading session unless otherwise indicated and are sourced from local exchanges via Reuters, Bloomberg and other vendors . Other information is sourced from Deutsche Bank, subject companies, and other sources. For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at <http://gm.db.com/ger/disclosure/DisclosureDirectory.eqsr>

## Analyst Certification

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst(s). In addition, the undersigned lead analyst(s) has not and will not receive any compensation for providing a specific recommendation or view in this report. Ari Rajendra

### Equity rating key

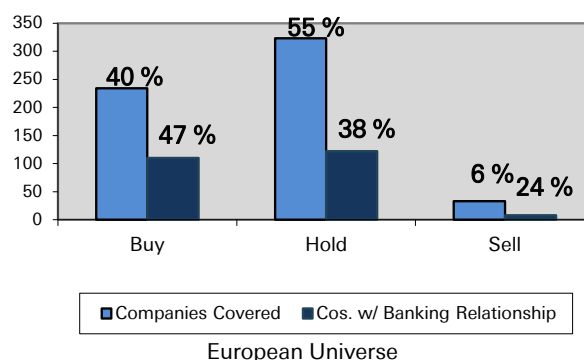
**Buy:** Based on a current 12- month view of total share-holder return (TSR = percentage change in share price from current price to projected target price plus projected dividend yield ) , we recommend that investors buy the stock.

**Sell:** Based on a current 12-month view of total share-holder return, we recommend that investors sell the stock

**Hold:** We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.

Newly issued research recommendations and target prices supersede previously published research.

### Equity rating dispersion and banking relationships





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