Know the Flows...
EPFR Global | Company Overview

EPFR Global delivers a complete and transparent picture of institutional and individual investor flows driving global markets. Strategists, traders, and investors use EPFR flow and allocation data to gain the most current, global view of changing investor demand and manager positioning. Trading and allocation strategies leverage EPFR historical and current data to improve returns and manage risk.

• Series sourced through **direct relationships** with fund managers and administrators

• The universe covers over **$23.5 trillion** in globally domiciled funds.

• EPFR flows are available at either the asset class **aggregate**, fund group, investment manager, individual fund and share class levels to support the most **granular** and informed insights.

• **Comprehensive, transparent, and robust daily, weekly, monthly** updates available in addition to historical time series.
EPFR Global | Main Users

**Hedge Funds**
- Global Macro/EM /Credit trading
- Quantitative strategies

*Types of usage:*
- Technical signals/market timing
- Momentum strategies
- Liquidity analysis
- Country/sector selection

**Asset Managers**
- Fund Managers
- Portfolio Analysts
- Marketing and Product Development

*Types of usage:*
- Factor in investment process
- Competitive analysis, product development
- Asset allocation
- Quantitative analysis

**Banking and Brokerage**
- Strategists
- Capital Markets
- Research Analysts

*Types of usage:*
- Proprietary trading
- Directional calls for clients
- Targeting sales efforts
- Market analysis

**Government/Central Banks**
- Regulators
- Monetary Authorities

*Types of usage:*
- Cross-border flow analysis
- Flows impact on currency as well as local equity/debt markets
EPFR Global | Investment Process Uses

**Market Timing**
- Foreign investor flows can be a useful leading indicator – especially at the country level and particularly in Emerging Markets
- In many asset classes comparing Retail (vs. Institutional flows) provides additional insight ahead of market inflection points

**Momentum Indicators: Sector Selection, Country Selection**
- Global fund managers’ country or sector positioning provides additional data as a momentum signal and adds value in multi-factor equity allocation models

**Directional Signals**
- Country and sector flows can be leading indicators of broader market direction. Relative strength of flows to favored countries/sectors vs. out of favor countries/sectors helps investors decide when to get in or out

**Asset Allocation & Benchmarking**
- Allocators cross-check their own positioning with industry peers based on monthly allocations data
- Portfolio managers compare their allocations with peers for performance analysis

**Measuring Risk**
- Monitoring flows into asset classes provides a useful signal of investor risk appetite. Similarly, fund manager positioning (for example cash positions) indicates changing fund manager risk appetite
EPFR Global | Key Datasets

Core Datasets
(based on data sourced directly from managers or administrators)

- **Fund Flows**
  - The amount of cash flowing into and out of funds worldwide.

- **Fund Allocations**
  - Fund manager allocations at month-end across the countries or sectors they invest in.

Derived Datasets
(based on flows and allocations data)

- **Country & Sector Flows**
  - Distribution of fund flows by country or sector. Combines data from fund flows and fund allocations.

**Equity/Bond Fund Flows**
Intraday/Daily/Weekly/Monthly
* also includes AUM, Performance

- **Country Weightings** – Monthly
- **Sector / Industry Weightings** – Monthly

- **Country/Sector/Industry Flows**
  - Daily/Weekly/Monthly

- **Regional packages available**
  - Daily/Weekly/Monthly
**Fund Flows | Overview**
Leverage the transparency of the EPFR universe and the granular breakdown of flows by investor type.

### Asset Class Breakdown
- Geographic investment focus
- Style/sector
- Bond categories

### Investor Types Differentiation
- Institutional vs. Retail
- US Domiciled vs. Non-US Domiciled

### Fund Types Differentiation
- Dedicated Country Funds vs. Global, GEM, and Regional Mandates
- Mutual funds vs. ETFs
- Active vs. Passive

---

**What are Fund Flows?**
- Calculates “Net Flows” (investor contributions/redemptions) for individual funds and then add these up by asset class
- Net Flow calculations exclude portfolio performance and currency fluctuations
- Includes funds registered globally not just those domiciled in the US
- Updated intraday/daily/weekly/monthly
**Fund Flows | Asset class breakdown**

Highly granulated flow data for more than 100 country, regional, sector and asset class categories.
## Fund Flows | Drill down to detail view

### Fund Flows Latest Week

<table>
<thead>
<tr>
<th>Date</th>
<th>Manager</th>
<th>Flow US$ mill</th>
<th>Asset Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>23/01/2013</td>
<td>State Street Global Advisors</td>
<td>263.12</td>
<td>Western Europe-Equity</td>
</tr>
<tr>
<td>12/06/2013</td>
<td>RBC Global Asset Management</td>
<td>148.32</td>
<td>Western Europe-Equity</td>
</tr>
<tr>
<td>31/01/2013</td>
<td>Allianz Global Investors</td>
<td>81.51</td>
<td>Western Europe-Equity</td>
</tr>
<tr>
<td>22/06/2013</td>
<td>ING Investment Management</td>
<td>67.70</td>
<td>Western Europe-Equity</td>
</tr>
<tr>
<td>30/06/2013</td>
<td>Threadneedle Investment Management</td>
<td>46.23</td>
<td>Western Europe-Equity</td>
</tr>
<tr>
<td>29/06/2013</td>
<td>Lyxor Asset Management</td>
<td>44.07</td>
<td>Western Europe-Equity</td>
</tr>
<tr>
<td>30/06/2013</td>
<td>Threadneedle Investment Management</td>
<td>38.84</td>
<td>Western Europe-Equity</td>
</tr>
<tr>
<td>22/06/2013</td>
<td>UBS Global Asset Management</td>
<td>36.50</td>
<td>Western Europe-Equity</td>
</tr>
<tr>
<td>30/06/2013</td>
<td>Lyxor Asset Management</td>
<td>37.18</td>
<td>Western Europe-Equity</td>
</tr>
<tr>
<td>12/01/2013</td>
<td>Cazenove Fund Management Limited</td>
<td>34.89</td>
<td>Western Europe-Equity</td>
</tr>
<tr>
<td>23/06/2013</td>
<td>JO Hambro Capital Management</td>
<td>34.56</td>
<td>Western Europe-Equity</td>
</tr>
<tr>
<td>21/06/2013</td>
<td>BlackRock Advisors, LLC</td>
<td>33.93</td>
<td>Western Europe-Equity</td>
</tr>
</tbody>
</table>

### Date | Geo Focus | Flow US$ mill | Asset Class
---|----------|---------------|----------------|
03/05/2013 | Italy | 26.01 | Western Europe-Equity |
03/05/2013 | Spain | 25.08 | Western Europe-Equity |
03/05/2013 | United Kingdom | 16.14 | Western Europe-Equity |
03/05/2013 | Sweden | 14.65 | Western Europe-Equity |
03/05/2013 | Austria | 0.21 | Western Europe-Equity |
03/05/2013 | Belgium | 0.06 | Western Europe-Equity |
03/05/2013 | Denmark | 0.03 | Western Europe-Equity |
03/05/2013 | Ireland | 0.02 | Western Europe-Equity |
03/05/2013 | Finland | 0.01 | Western Europe-Equity |
03/05/2013 | Portugal | 0.00 | Western Europe-Equity |
03/05/2013 | Greece | -0.02 | Western Europe-Equity |
03/05/2013 | Norway | -0.26 | Western Europe-Equity |
Fund Flows | Investor differentiation (retail vs. institutional, local vs. foreign)

US equity fund flows since January 2009

- Only **US institutional investors** were the main buyers ‘at the bottom’
- **US Retail investors** missed the big US Equity rally between Q2/2010 and Q1/2011. Retail investors return Jan 2011 in time for the Mar 2011 correction
- **Non-US investors** (US equity funds domiciled ex US) stayed away in Q2/Q3 2010
Country & Sector Allocations | Overview

**Momentum Indicators**
- Using overall country weights vs benchmark as a momentum signal
- Differentiating active funds weights vs passive funds weights

**Benchmarking**
- Comparing country/sector/cash positions with peer group

**Market Timing**
- Tracking the 'smart money' – which fund types get in/out at the optimal time. How are global managers positioned vs regional funds

**What are Fund Allocations?**
- Monthly data reported by managers or administrators (based on holdings, fund factsheets)
- Fund level detail includes total fund assets, % weight in cash, % weight by country
- Includes funds registered globally not just US
Country Allocations | Overview

Actual country and regional weightings (in % of AUM)
Country & Sector Flows | Overview

- Derived data based on Fund Flows and Fund Allocations
- Updated daily, weekly, monthly
- Unique high frequency view of cross border portfolio flows – driving valuations in FX, Equity, Bonds.
- Measures relative strength of flows at a Sector or Country level

What are Country Flows/Sector Flows?

- EPFR multiplies the most recently available Fund group allocations (to a country or sector) x Flows into that Fund Group - to estimate overall flows at a country or sector level.
- Allows users to analyze flows by fund group, ETF vs MF, and by domicile
- Includes funds registered globally not just those domiciled in the US
- EPFR also tracks flows to dedicated Sector Funds, as an alternative measure of demand for individual sectors
Sustained flows are observed as a bullish indicator while short term weekly fluctuations can be contrarian indicators.
EPFR Global | Product Summary

Underlying EPFR data available

Fund Flows
- Equity, Bond, Money Market, Balanced and Speciality fund groups
- Intraday/Daily/Weekly/Monthly data that track net flows (investor contributions/redemptions) for individual funds and fund groups
- Filters to separate flows by Retail vs. Institutional investor, ETF vs. MF, Active vs. Passive, and by Domicile (country of domicile), Currency (currency of fund), or Benchmark
- Net flows exclude portfolio performance and currency effect
- Equity history to Jan 1995 (Monthly), Oct 2000 (Weekly), and May 2007 (Daily)
- Bond history to Jan 2004 (Monthly), Apr 2004 (Weekly), and May 2007 (Daily)

Country Allocations
- Equity and Bond fund groups
- Monthly data tracking the aggregate country and regional weightings, in % terms, of fund groups such as Global, GEM etc., as well as of individual asset managers and funds
- Equity history to Jan 1995 (GEM funds) and Jan 2001 (Global funds)
- Bond history to Nov 2001 (GEM funds) and Jul 2005 (Global funds)

Sector/Industry Allocations
- Equity fund groups
- Monthly data that track the aggregate sector/industry (GICS I/II) weightings, in % terms, of fund groups such as Global, GEM etc., as well as of individual asset managers and funds
- History to 2006

Country Flows
- Equity and Bond fund groups
- Daily/Weekly/Monthly data that track the flow of money into (and out of) individual countries and regions
- Bond history to Jan 2004 (Monthly), Apr 2004 (Weekly), May 2007 (Daily)

Sector/Industry Flows
- Equity fund groups
- Daily/Weekly/Monthly data that track the flow of money in/out of individual sectors/industries (GICS I/II)

Investment Models / Strategies

EPFR offers back-tested trading strategies combining flows, allocations and valuation data + EPFR Analyst support as needed
- Sector rotation strategies
- Country selection (EM, also Global country selection)
- Equity Regional trading
- FX signals

Research offering

EPFR Chartbook: Regular research report highlighting recent global trends from a flow and allocation perspective

Delivery options

- Interactive access to all EPFR datasets described above, via web-based user interface
- FTP delivery
- Haver Analytics delivery
- Email/web delivery of EPFR Chartbook

Premium Services:
- Personalized daily/weekly/monthly charts and Excel reports delivered by email – e.g. flows by country, sector, or asset class
- Ad-hoc email delivery of EPFR research notes
- Calls with EPFR macro and quant analysts

Third Party Whitepapers

- Journal of Finance (American Finance Association) December 2012 “Asset fire sales and the transmission of funding shocks”
- Institute of International Finance December 2013 ‘Fed policy and EM Capital flows”
- HSBC, “Sector allocations data and predictive power”
- Deutsche Bank, “Predictive Power of Weekly fund flows”
## EPFR Global | Company History

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>• EPFR Global founded Cambridge, Massachusetts USA</td>
</tr>
<tr>
<td>1995-1999</td>
<td>• EPFR Global launches Russia Portfolio, Central Europe Portfolio and Brazil Portfolio: publications serving more than 600 institutional investor clients worldwide</td>
</tr>
<tr>
<td>2000</td>
<td>• EPFR Global launches Research and Analysis Services, providing independent research services for investment management firms</td>
</tr>
<tr>
<td>2001-2007</td>
<td>• EPFR Global’s client base expanded by nearly 10-fold and includes leading institutional investors, global equity and fixed income analysts, strategists, investment managers, hedge funds, central bankers</td>
</tr>
<tr>
<td>2008</td>
<td>• EPFR Global launches new Web Interface, new Country/Sector flows datasets, and automated data options including delivery via Haver Analytics (2009)</td>
</tr>
<tr>
<td>2010</td>
<td>• EPFR Global acquired by Informa PLC</td>
</tr>
<tr>
<td>2012</td>
<td>• EPFR Global launches new asset allocation models and investment strategy research</td>
</tr>
<tr>
<td>2013</td>
<td>• EPFR Global continues to expand global fund data coverage, add local support staff, and enhance delivery options</td>
</tr>
<tr>
<td>Name</td>
<td>Title</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Dwight Ingalsbe</td>
<td>Managing Director</td>
</tr>
<tr>
<td>Ian Wilson</td>
<td>Managing Director, Fund Data</td>
</tr>
<tr>
<td>Simon Ringrose</td>
<td>Managing Director, Sales</td>
</tr>
<tr>
<td>Cameron Brandt</td>
<td>Director, Research</td>
</tr>
<tr>
<td>Adam Longenecker</td>
<td>Quantitative Analyst</td>
</tr>
<tr>
<td>Todd Willits</td>
<td>Manager, Client Services</td>
</tr>
<tr>
<td>Patrick Paradiso</td>
<td>Manager, Global Accounts</td>
</tr>
<tr>
<td>Jean-Claude Moos</td>
<td>Sales Director (US)</td>
</tr>
<tr>
<td>Ana-Belen Escobar F.</td>
<td>Sales Associate (Americas)</td>
</tr>
<tr>
<td>Rikolv Hatlehol-Desai</td>
<td>Sales Director (EMEA)</td>
</tr>
<tr>
<td>Calum Byrne</td>
<td>Business Development Manager (EMEA)</td>
</tr>
<tr>
<td>Elizabeth Badolato</td>
<td>Sales Director (Hong Kong)</td>
</tr>
<tr>
<td>Robert Sheridan</td>
<td>Sales Director (Asia/Pacific)</td>
</tr>
<tr>
<td>Young-il Sunwoo</td>
<td>Sales (Korea)</td>
</tr>
<tr>
<td>Bin Peng</td>
<td>Sales Director (China/Taiwan)</td>
</tr>
</tbody>
</table>