

# Stock Flows

## Introduction

EPFR's Stock Flows dataset provides users with a privileged view of over 25,000 individual securities and more than \$13 trillion in AUM. Underpinned by a more intuitive user experience and improved data robustness and accuracy, which includes the number of shares held per each stock, users can run complex analyses faster and more efficiently, and customize their reports using EPFR's best-in-class filtering options to find the insights they need to beat the market and generate Alpha.

Data history goes back to 2010, allowing clients to build several predictive stock-selectors. We illustrate some that use the FloTrend function (see definition below).

**Fund-level data**  $\varphi$  = dollar flow into fund  $\alpha$  = beginning of period assets  $A$  = end of period assets

**Stock-level data**  $\omega$  = weight held by fund  $\Delta\omega$  = weight increase  $\bar{\omega}$  = average weight

- Let  $\varphi$ ,  $\alpha$  and  $A$  be respectively the dollar flow into a fund and the dollar assets of the fund at the beginning and end of each day. For a given stock, let  $\omega$  be the weight of the stock in the fund,  $\Delta\omega$  the month-over-month weight increase, and  $\bar{\omega}$  the average weight held by funds with similar mandates
- Applying the FloTrend function  $\Omega$  to the above data, we built six daily and two monthly variables
- For monthly holding periods, the table below shows the return difference between the top and bottom fifth of each universe sorted on each variable. For US universes, each fifth (or quintile) is sector-neutral. For international universes, the quintiles are neutral to region/sector

### Average return difference between the top and bottom fifth (Monthly, annualized)

	Factor Definition	Lookback	S&P	Russell		MSCI		
			500	1000	2000	EAFE	EAFE SC	EM
<b>Daily variables</b>								
FloMo	$\sum \varphi \times \omega / \sum \alpha \times \omega$	15d	+1.9	+2.6	-1.9	-1.4	-1.2	-5.2
ActWtTrend	$\sum \omega^+ \times \varphi / \sum  \omega^+ \times \varphi $	15d	+2.0	+1.3	+0.4	+1.0	+0.8	+2.4
ActWtDiff	$\sum \text{sgn}(\omega^+) \times \varphi / \sum  \varphi $	15d	+1.6	+0.6	+1.0	+0.1	+0.9	<b>+3.1</b>
ActWtDiff2	$\sum \omega^+ \times \text{sgn}(\varphi) / \sum  \omega^+ $	15d	+0.8	+0.4	-1.1	+0.5	+0.4	+1.0
FloTrend	$\sum \Delta\omega \times \varphi / \sum  \Delta\omega \times \varphi $	40d	+1.5	+0.0	<b>+4.1</b>	-1.3	-0.7	<b>+3.5</b>
FloDiff	$\sum \text{sgn}(\Delta\omega) \times \varphi / \sum  \varphi $	40d	-0.9	+0.5	<b>+3.8</b>	+0.3	-0.6	<b>+3.2</b>
FloDiff2	$\sum \Delta\omega \times \text{sgn}(\varphi) / \sum  \Delta\omega $	40d	+0.6	+0.6	+1.3	-1.0	-0.2	+0.4
<b>Monthly variables</b>								
AllocMo	$\sum \Delta\omega \times (A + \alpha) / \sum (\omega - \Delta\omega/2) \times (A + \alpha)$	11m	-0.8	+0.3	-2.1	+0.6	<b>+3.0</b>	+2.4
AllocTrend	$\sum \Delta\omega \times (A + \alpha) / \sum  \Delta\omega \times (A + \alpha) $	11m	+0.3	+1.4	+0.4	+0.7	<b>+4.4</b>	<b>+3.5</b>
AllocDiff	$\sum \text{sgn}(\Delta\omega) \times (A + \alpha) / \sum (A + \alpha)$	11m	+0.6	+1.8	+0.7	+1.0	<b>+4.8</b>	<b>+3.3</b>
AllocSkew	$\sum \text{sgn}(-\omega^+) \times A / \sum A$	11m	+1.7	+0.8	+0.0	-0.6	+1.3	-0.8
Herfindahl <sup>[1]</sup>	$1 - \sum (\omega \times A) / (\sum \omega \times A)^2$	1m	-0.7	+0.8	+2.4	+2.5	<b>+4.8</b>	+0.5
FundCt <sup>[2]</sup>	$\sum \text{sgn}(\omega)$	1m	+0.6	+2.0	+1.6	+1.5	+2.5	+1.2
<b>Multi-factor Alpha model</b>								
FloAlpha		n/a	+1.7	+2.5	<b>+3.1</b>	+2.6	<b>+5.0</b>	<b>+3.4</b>
Price Momentum		8m1g1	+0.7	+1.8	+2.1	+2.6	<b>+4.7</b>	+0.3

<sup>[1]</sup> Barabanov, S. S. (2003). The relationship between institutional ownership, concentration of ownership, bid-ask spread, and returns on NASDAQ stocks.

<sup>[2]</sup> Chen, J., Hong, H., & Stein, J. C. (2002). Breadth of ownership and stock returns. *Journal of Financial Economics*, 66(2-3), 171-205.