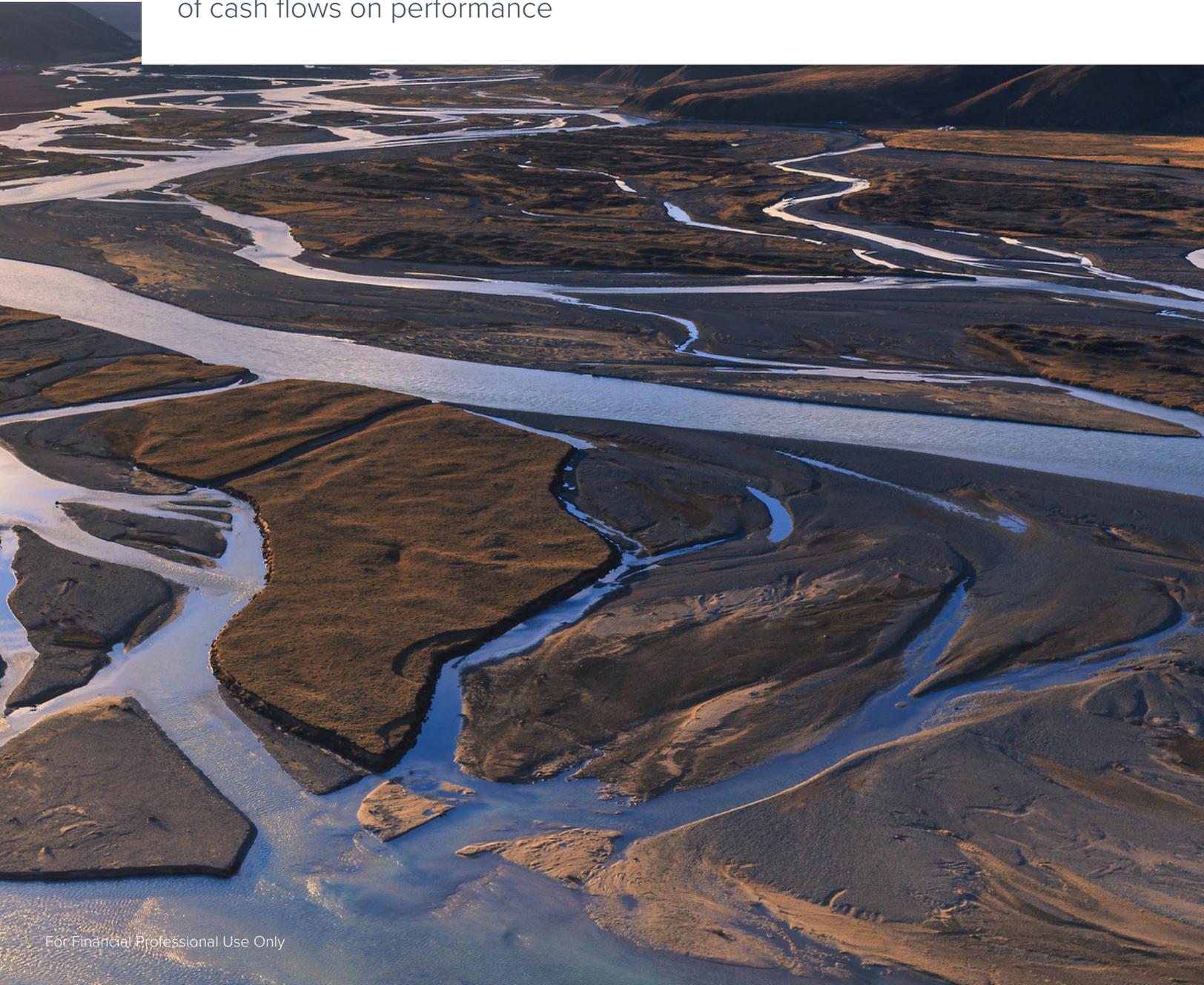


# Going With the Flow: Plain Talk About Performance

---

Understanding time-weighted return calculations and the impact of cash flows on performance



## Intorduction

The Adhesion Wealth® Platform has been constructed as a flexible performance measurement tool that permits advisors to review return data within a variety of different dimensions. Performance can be viewed organizationally – analyzing data at the firm, branch or advisor level; or alternatively, users may “drill down” to get an account or household view of performance. Within these contexts, observations can be cross-analyzed into a variety of categories, which include Asset, Asset Class, Asset Category, Asset Type, Asset, Sector, Subsector and Manager / Sleeve. We refer to these as performance dimensions.



## Time Weighted Performance

The performance standard utilized by the Adhesion Wealth Platform is called Time Weighted Return (TWR). With TWR calculations, the effect of time is considered in the representation of performance calculations, rather than the effect of contributions and withdrawals. Time Weighting is particularly useful when considering the results of an investment professional because the timing of cash inflows and outflows are neutralized. This is a very important concept when discussing performance with clients because in most cases, unfortunately, the advisor has no control over the timing of these flows. He or she should not be penalized for good performance when a client invests very little in an up market, nor conversely be credited with excess returns when given a small amount in a down market.

Since the dollar flows are neutralized in the return computation, the only element being displayed is the pure investment return of the strategy.

## Time Weighted Returns in Action

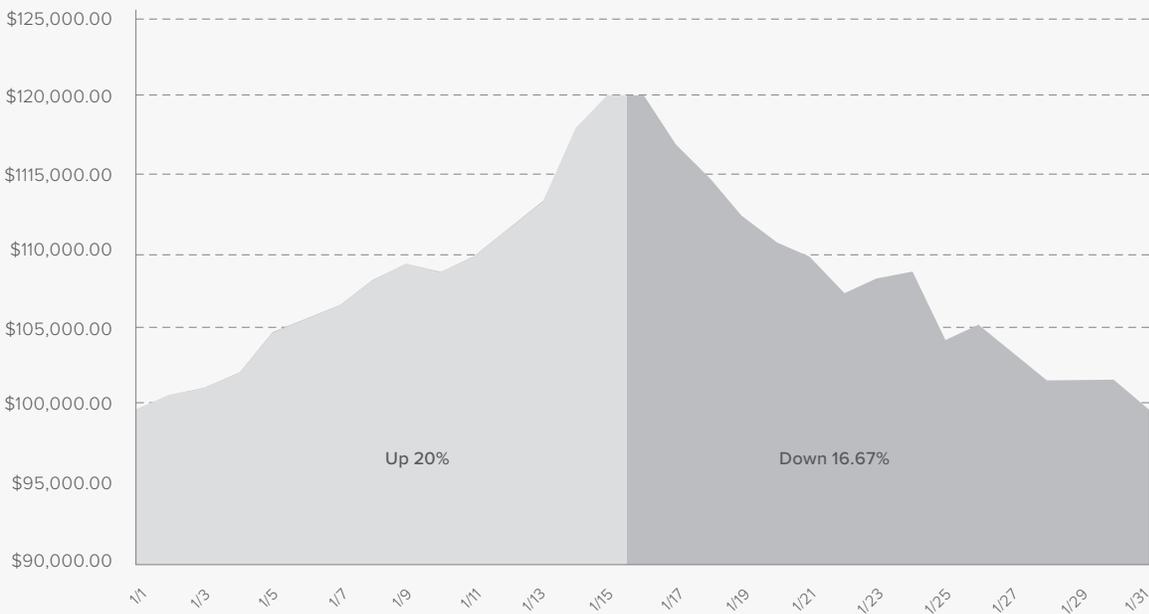
### A Simple Case

Looking at a very straight-forward example of performance, consider a new client who invests \$100,000 with you on Jan 1. For the first half of the month the portfolio appreciated by 20%, valuing at \$120,000 on Jan 15th. The second half of the month wasn't very kind and the investment strategy gave back nearly 17%, bringing the portfolio back to its original

valuation of \$100,000. Since there were no contributions or distributions to this portfolio, all widely accepted performance methodologies will yield the same results: a 0% return over the month. Regardless of the volatile swings of the portfolio returns intra-month, the account is worth exactly the same as when it was initially handed over to the advisor.

---

## Time Weighted Returns



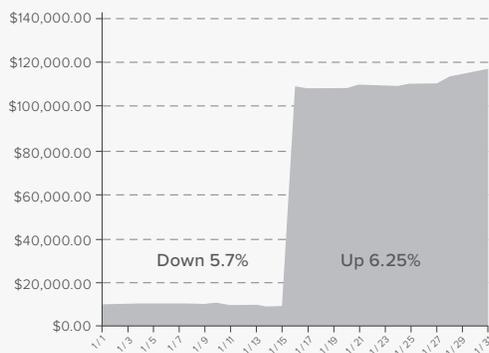
Computing returns without any flows is relatively simple so let's consider a more likely scenario.

## Bull-Loaded Flows

On January 1, a new client decides to sample your investment services and commits \$10,000 to your program. For the first half of the month, the markets do not perform well and the strategy declines 5.75%, turning the \$10,000 into \$9,425. Nevertheless, you outperformed the agreed-upon benchmark and are being rewarded with another \$100,000 account to manage.

The back half of the month is much better, and the portfolio appreciates 6.25%, growing the investment to \$117,120.

### Bull-Loaded Flows Example



For the month, counteracting the effect of cash flows, the investment strategy had a time weighted return of .144%. In other words, had the whole \$110,000 been invested on day-one, the portfolio would have earned \$158. As a manager, the investments you selected produced what is effectively a break-even return. However, because of the timing of the cash flows (which was outside of the control of the advisor), the cash invested in the back half of the month was exposed to a greater return period and thus the client earned \$7,120 over the period.

## Bear-Loaded Flows

The inverse condition often occurs and is usually a more difficult conversation to field: When an advisor reports a positive return, however the portfolio is worth less than the net of all the contributions. Obviously, this occurs when a small value is managed during an up market, and a significantly larger amount is managed during a down market.

**As an example, consider the following scenario:**

On January 1 another client deposits \$1 million with your firm. The market then proceeds to correct immediately following the large deposit and within a few weeks the portfolio has declined by 5.75%, reducing the portfolio to \$942,500. The client then withdraws \$850,000, so on the 16th, the portfolio is now valued at \$92,500. The market stages a considerable recovery during the back half of the month and generates a 6.16% return, resulting in a portfolio value of \$98,200.

Over the course of the entire month the advisor managed this portfolio, the recommended investment strategy effectively yielded a 'break-even' return (+.058%). Nevertheless, it's challenging to explain this to a client with a net contribution of \$150,000 (\$1,000,000 - \$850,000) and a current portfolio value of \$98,200.

### Bear-Loaded Flows Example



## “True” Time Weighting

Explaining these results requires one look under the hood of the computations to understand what makes them tick.

The Adhesion Wealth Platform is considered a “true” time weighted performance system. That is, every single day, a return computation is generated for each and every performance dimension. Cash flows, which are effectively transactional activity that should not count towards performance (such as deposits, withdraws, etc). are

backed out to compare daily market values on an apples-to-apples basis. In addition, the Adhesion Wealth Platform goes a step further to identify inflows vs. outflows and provide each with a distinct daily observation. Inflows are treated as beginning-of-day flows and outflows are treated as end-of-day flows.

### A daily performance observation for a net outflow would be expressed as:

Each sub-period (i) represents a single day and all market values are inclusive of any accrued income. This assumes all gains (or losses) that day are based on the total assets present in the account at the beginning of the day, prior to the outflow.

$$R_i = \frac{(EMV_i - CF_i) - BMV_i}{BMV_i}$$

### A daily performance observation for a net inflow would be expressed as:

Each sub-period (i) represents a single day and all market values are inclusive of any accrued income. This assumes all gains (or losses) that day are based on the assets present in the account at the beginning of the day, along with the inflow.

$$R_i = \frac{(EMV_i - CF_i) - BMV_i}{(BMV_i + CF_i)}$$

Return observations for each daily dimension are then generated and geometrically chain-linked together for any range of dates requested by the user.

### This linking formula is expressed as:

R<sub>TR</sub> is the requested period’s total return and R<sub>1</sub>, R<sub>2</sub>... R<sub>n</sub> are the sub-period (aka daily) returns for periods 1 through n, respectively.

$$R_{TR} = \left( (1 + R_1) \times (1 + R_2) \dots (1 + R_n) \right) - 1$$



## In Summary

It is important to consider the significance of time weighted returns and the role it plays when communicating performance to your clients. The methodology is designed to demonstrate the skill of the investment professional and/or the selected investment strategy, while stripping away the distortions associated with cash flows. It also forces advisors and their clients to focus on the only controllable part of the portfolio: the investments you manage. In addition, the process of counteracting the cash flows is a critical component of time weighted returns computations and is predicated on the notion that the advisor has no control over the timing of said flows, and therefore should neither be credited nor penalized for their associated impact.

The Adhesion Wealth Platform utilizes a constantly-updated “true” time weighted return system to provide your clients with the most precise and up-to-date representation of their investment return.

---

## To Learn More About Adhesion Wealth:

Call 888-295-8351, email [sales@adhesionwealth.com](mailto:sales@adhesionwealth.com), or visit [www.adhesionwealth.com](http://www.adhesionwealth.com).



Adhesion Wealth is a leading provider of outsourced managed accounts, including sophisticated and customized investment solutions, integrated with practice management tools and outsourced back- and middle-office, to wealth advisory firms. These solutions enable advisors to easily provide separately managed account (SMA) and unified managed account (UMA) portfolios and create personalized solutions for investors. Its platform empowers advisors with highly scalable, flexible, and customized portfolio solutions, enabling them to deliver better investor outcomes. Adhesion Wealth is a wholly-owned subsidiary of Vestmark, Inc. Vestmark enables financial institutions and advisors to efficiently manage and trade their clients' portfolios through an innovative software-as-a-service (SaaS) platform, VestmarkONE®.

## Adhesion Wealth

Headquarters | 5925 Carnegie Blvd, Suite 500 | Charlotte, NC 28209



1.888.295.8351

[www.adhesionwealth.com](http://www.adhesionwealth.com)

FOR FINANCIAL PROFESSIONAL USE ONLY. Adhesion Wealth Advisor Solutions, Inc. ("Adhesion Wealth") is an investment adviser registered with the U.S. Securities and Exchange Commission. Registration does not imply a certain level of training or skill. Investing in securities is subject to inherent investment risks, including the potential loss of principal. Adhesion Wealth does not provide personalized investment or tax advice. Where information or data is presented that has been prepared by third parties, the source of such information will be cited, and these sources have been deemed to be reliable; however, Adhesion Wealth does not warrant or independently verify the accuracy of this information. Adhesion Wealth and any such third parties are separate and unaffiliated and are not responsible for each other's policies, products or services. Reproduction in whole or in part in any form or medium without express written permission is prohibited. "Adhesion Wealth" and the Adhesion Wealth logo are registered trademarks. Other trademarks contained herein are the property of their respective owners. Adhesion Wealth believes that the information in this publication is accurate as of its publication date; however, such information is subject to change without notice. © 2020 Adhesion Wealth Advisor Solutions, Inc. All rights reserved.