



EUROPEAN ARBITRATION REVIEW

The European Arbitration Review 2023 contains insight and thought leadership from 15 preeminent practitioners from the region. It provides an invaluable retrospective on what has been happening in some of Europe's more interesting seats.

This edition also contains think pieces on human rights in arbitration, the mechanism's growing use in technology disputes, damages in investment disputes and the use of statistical samples.

All articles come complete with footnotes and relevant statistics.

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Preface

Welcome to *The European Arbitration Review 2023*, one of Global Arbitration Review's annual special reports.

Global Arbitration Review, for anyone unfamiliar, is the online home for international arbitration specialists. We tell them all they need to know about everything that matters in their professional niche.

Throughout the year, GAR delivers our readers daily news, surveys and features, organises the liveliest events for them (under our GAR Live banner) and curates a series of innovative tools and know-how products.

In addition, with selected external contributors, we produce a series of regional reviews – such as this one – that go deeper into local developments than the exigencies of journalism allow. *The European Arbitration Review 2023* is part of an illustrious series.

This edition of seven chapters is part retrospective, part primer and part crystal ball, with all contributors vetted for their standing and knowledge before being invited to take part. Their brief: to capture and interpret the most important international arbitration developments, accompanied by footnotes, charts and statistics where possible (luxuries we have to forgo, mostly, in GAR's daily work).

Inside this one you'll find chapters on three of Europe's more improved seats – Belgium, Finland and Sweden – including reviews of recent cases; and several thematic overviews. They cover, among other things: what not to do when using 'sampling' techniques; how to substantiate complaints against high-powered investment managers (a form of arbitration this reader hadn't previously encountered); the arbitration of technology-related disputes; and the ways in which international arbitration and human rights intersect.

A close read of these reviews always yields many gems. On this occasion, they included that:

- tech companies are using investment arbitration – as various commentators foretold (notably in GAR);
- John Maynard Keynes, the famous economist, managed King's College Cambridge's investments on the side; and
- Belgium is a surprisingly popular place to enforce against sovereigns (thanks to the funds in the bank accounts of various EU institutions).

I hope you enjoy the review as much as I did. My sincere thanks go out to all the authors. If you have any suggestions for the next edition, or wish to participate, we'd love to hear from you. Please write to insight@globalarbitrationreview.com.

David Samuels

Publisher, Global Arbitration Review

October 2022

Art and Science Behind Damages in Investment Management Disputes

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[FTI Consulting](#)

IN SUMMARY

In this article we discuss how challenging it is to compute reliable damages figures in the context of investment management disputes. We discuss how basic investment management principles can be relied upon by experts to conduct objective computation of damages in the context of disputes and emphasise the importance of completeness in factual evidence and experts' instructions in the implementation of a model to compute damages.

DISCUSSION POINTS

- Concepts such as investment risk profile, investment mandates, investment suitability and portfolio construction
- Demystifying some beliefs regarding the performance of portfolios
- One of the best illustrations of a counterfactual investment portfolio performance is by reference to empirical evidence
- Other computational challenges when modelling damages



Introduction

Investment suitability claims usually arise when investors, typically having sustained losses on their investment portfolio, bring claims against their investment manager or adviser. The exact allegations vary between cases, but it is typically alleged that unsuitable investments exposed the investor to risks, which, for example, they had not well understood or went beyond the risks agreed in their investment management or investment advice agreement, or the investor could not afford.

To assess damages, experts are typically asked to opine on whether the investments were unsuitable given the factual evidence and how suitable alternatives would have performed. Often these cases also include wider themes, such as whether: applicable regulatory obligations were fulfilled; fraud occurred; the overall portfolio construction was suitable; and the investment manager or adviser took all necessary steps to minimise the investor's loss.

The most concrete early evidence of the first world's mutual fund – an early version of what investment management is today – dates from 1774.^{1,2} Despite its long history, and the greater availability of data and the innovation of tools to support investment managers' decisions in their responsibility to construct investment portfolios, investment management as an industry is still subject to many debates.

Research and development in macro- and micro-economics, applied statistics, financial mathematics and, most importantly, laws, regulation and competition, have fuelled significant progress in knowledge and innovation in wealth management services. Investment management requires precision in the same way some illustrative arts require scientific precision in their execution. But, more than a science, investment management (especially active management) is subject to many human inputs, which are a playground for artistry. Portfolio construction and risk management relative to returns remain subject to many academic debates. Debates are inherent to the nature of this industry and are fertile ground for innovation.

As experts advising courts and tribunals, we educate on matters that fall within our remit of expertise. To do so, we need to convey objective and accurate expert evidence. As John Megahan says, 'often science illustrators must be very precise, but sometimes too much precision can hinder communication, rather

1 A variety of investment opportunities existed as far back as roughly 4,000 years ago. Goetzmann, W. N. (2017). *Money Changes Everything: How Finance Made Civilization Possible*. United Kingdom: Princeton University Press.

2 In July 1774, Abraham van Ketwich invited investors to consider Eendragt Maakt Magt, the first closed-end investment trust. The name means 'unity creates strength'.



than help'.^{3,4} This article focuses on the important drivers of the computation of damages in the context of investment management disputes.

When disputes arise, it can be difficult for the legal community, courts and tribunals to navigate economic or technical arguments. Investment management disputes can be multidimensional, and key considerations are case-specific, such as allegations, market context, regulation, investment period, investor type and profile, technicalities regarding financial instruments and factual evidence. Adding to the technical gaps the legal community can face, we have also encountered numerous situations where experts themselves could not converge on technical investment managers' matters.

In this article, we focus on matters where investors have complained about their losses because, allegedly, their investment portfolio was unsuitable or did not match the desired risk profile, or both.⁵ Although we provide some discussion on the topic of damages in that context, we emphasise that each matter needs to be considered on a case-by-case basis.

Scope

The role of investment management experts is often not limited to the computation of damages. Opinions on technical aspects or investment management services industry standards can inform liability issues.⁶

In this article, we focus solely on the computation of damages and do not discuss causation issues. However, causation and damages are linked. In some cases, multiple damages scenarios may require expert input owing to the parties' legal position on causation. For convenience, we define 'damages' as the difference between the performance of a counterfactual suitable investment portfolio and the performance of the actual and allegedly unsuitable investment portfolio.

Our focus is on the performance of the counterfactual portfolio and we therefore assume that experts do not have disagreements on the disputed portfolio's actual performance subject to the dispute. However, in practice, where experts

3 John Megahan is a biological illustrator affiliated with the University of Michigan, Museum of Zoology (UMMZ).

4 ECSU, Precision Catalogue (2021) Illustrative Technique in Art and Science [WWW] <https://johnmegahan.com/>.

5 Investment management disputes can involve numerous types of allegations. We cannot cover all of the issues we have been instructed as experts to opine on in this article. For example, we do not discuss issues of trade execution which frequently arise in investment management disputes.

6 For example, experts could be asked questions on industry definitions and terminology, industry standards and information/documents relied upon for assessing investors' risk profile and investment suitability, or for executing client orders, industry practice for formulating investment recommendations, risk measures and portfolio construction, risks inherent to specific portfolio components, fees associated with various services, the role and responsibility of employees (eg, client relationship managers) or intermediaries (eg, trustees, family offices, brokerage firms); and/or mechanics of financial instruments and industry models for their valuation; etc.



are asked to forensically recompute the actual performance of an investment portfolio, experts may disagree on this component of the damages calculation. This arises when the information disclosed as part of the evidence is limited or of poor quality, or both, and constrains experts to make assumptions or rely on independently sourced data. This is not a topic we touch upon in this article, but it is an essential component of damages computation.

In this article, we first introduce concepts such as investment risk profile, investment mandates, investment suitability and portfolio construction. We then demystify some beliefs regarding the performance of portfolios with different risk profiles, strategies and investment scopes. Depending on the available factual evidence and where appropriate to the context, one way to illustrate a counterfactual investment portfolio's performance is by referencing empirical evidence: sampling the actual performance of portfolios that professional fund managers managed at the relevant time. This empirical method, if conducted objectively and independently, significantly removes the risk that an expert would rely on hindsight to substantiate expert evidence. Lastly, we briefly discuss other computational challenges when modelling damages.

Risk and return trade-off

Risk can be broadly defined as the uncertainty regarding the future performance of an investment and, therefore, the probability and magnitude of a loss or a gain. Financial theory often assumes investors to be rational and risk-averse. In other words, they prefer maximising returns while minimising risks. Therefore, the greater the risk (the probability of a loss), the greater the return an investor will ask for compensation for such risk before making an investment decision. Investors seek to optimise the risk-return trade-off they are offered, given their risk aversion and performance goals.

Expecting and being offered potentially greater returns when taking a greater risk at the outset is rational but does not always pay off. Although high-risk investments have greater upside potential, they are often riskier and, as such, have a greater probability of loss than low-risk ones.

One of the main challenges experts face when asked about the quality of an investment manager's investment decisions or when formulating a counterfactual investment portfolio is to avoid hindsight. Indeed, when constructing investment portfolios, investment managers have no choice but to make decisions based on information available to them at the time of formulating their investment rationale. We therefore believe that one of the cleanest approaches for producing a suitable counterfactual investment portfolio for computing damages is to rely on empirical evidence for comparable investment portfolios, that is portfolios that investment managers effectively managed at the relevant time (ie, constructed based on information contemporaneous to the investment



decision). If the sampling of empirical information is conducted objectively and independently, such an approach significantly reduces the risk of reliance on hindsight when opining on the performance of a suitable counterfactual portfolio. This is because empirical evidence provides information about real-world decisions made by a universe of investment managers at a particular point in time without the benefit of hindsight. We consider this information of real-world investment decisions much more reliable and valuable when opining on the performance of a counterfactual portfolio than, say, attempting to step in the shoes of an investment manager and building a theoretical portfolio (ie, a portfolio that ignores the ‘uncertainty’ an investment manager faces when making investment decisions) in retrospect.⁷

Investment managers can exhibit very different track records regarding risk and return. Because investment managers compete, portfolio composition can vary significantly even across funds with comparable investment mandates. For example, two equity growth funds with a high-risk profile and an investment strategy focusing on North American small capitalisations may invest in different stocks and perform unequally. When selecting fund managers within a comparable universe, investors effectively have the choice among a range of suitable portfolios. This investment universe offers a distribution of returns for a given level of risk over a given investment horizon. It allows investors to rank the performance of fund managers and separate those who over-perform their peer group from those who achieve an average or below-average return.^{8,9}

Because there is a range of possible outcomes for any suitable investment mandate, observing that a portfolio underperformed *ex post* should not (in principle) be sufficient to determine whether an investment was suitable for an investor at the outset. Other parameters need to be considered. Disputes usually arise when investors lose money, yet the possibility of losses is the risk all investors accept in exchange for the possibility of gains. Following this logic, a portfolio outperforming (underperforming) the reference market or benchmark portfolio could be unsuitable (suitable) for the investor if it does not comply

⁷ Our opinions typically apply where there is significant human intervention in the investment decision process, and therefore may not apply to some investment strategies. For example, if the counterfactual portfolio is a portfolio tracker, or is managed according to a formula (ie, where there is no room for human intervention, such as an automated algorithmic investment strategy with predefined parameters) then, depending on the context of the dispute, an alternative approach may need to be envisaged. Similarly, if the counterfactual portfolio is too bespoke to identify comparable investment managers, then sampling comparable investment managers would not be feasible and a different approach will have to be envisaged.

⁸ Investment managers can be ranked based on their historical returns, risks or other measures such as risk-adjusted returns. See, for example, CAIA (2007) Section 1 Quantitative Methods and Professional Standards, Topics 2 to 5.

⁹ What is observed over a given investment period may not hold true over a different period. Analysing the same peer groups of investment managers over different time frames may result in different rankings. Therefore, one cannot generalise findings resulting from analysis conducted over a given period and apply such findings to another period. For example, if high-risk funds over-performed low-risk funds over a given period, one should not automatically infer that high-risk funds should always outperform low-risk funds.



{complies} with an investor's investment risk profile and the agreed investment mandate. Yet, investors rarely complain about their investment being unsuitable when their portfolio manager delivers outstanding performance returns.

Wealth management disputes often arise from allegations that the investment portfolio did not comply with an investor's investment risk profile (IRP). To determine whether an investment is suitable, one must make investment decisions in light of the investor's risk profile and the agreed mandate.

Assessing IRPs¹⁰ and defining the nature and composition of investment mandates

Understanding an investor's IRPs is somewhat of an art owing to the subjective nature of the IRP process. The industry has developed comprehensive ways of representing an IRP by breaking it into several components:

- investor's circumstances: personal information such as age and familial situation, level of education, nationality, country of residence (and tax implications), professional situation, other banking relationships, net wealth and liabilities, essentially any information that needs to be gathered as part of a know your customer process;
- proportion of wealth invested and purpose: needed to assess the size of the managed portfolio relative to an investor's total wealth and consider any financial or tax planning associated with the investment portfolio (eg, wealth preservation, capital growth, regular lifestyle income, retirement income and inheritance);
- investor's knowledge and experience: an investor's ability to make informed investment decisions, when advised or on their own. This is typically assessed by asking investors to answer questions such as how frequently they have invested in particular instruments, how long they have used wealth management services and how knowledgeable they self-assess themselves regarding the risks associated with particular investments or wealth management services; and
- investor's risk and return objectives: the desired level of return and appetite for downside risk, the type of return (income versus growth or combination of the two) and the investment horizon and liquidity needed over such period.¹¹

¹⁰ Depending on the nature of the relationship between a wealth manager and an investor and the jurisdiction and the regulations that apply assessing investment risk profiles or suitability may or may not be a requirement for wealth managers. The purpose of this article is not to elaborate on the regulations that apply to wealth managers. We specifically consider situations where wealth managers need to understand, as a principle, an investor's risk profile as part of their mandate.

¹¹ CFA Institute Investment Risk Profiling, a guide for financial advisors, 2020.



Although some investors will consistently express the same IRP over time and across their wealth management relationships, not all investors do. Therefore, it is usually the case that IRPs need to be reassessed regularly.

Based on their understanding of an investor's risk profile, investment managers define the portfolio mandate in agreement with the client. Although assessing IRPs may satisfy some regulatory hurdles, there are no specific guidelines for how these should align with the framework for setting up investment mandates.¹² Investment mandates usually operate under three generic relationship types:

- Execution only: the bank is only mandated to execute a transaction on behalf of and subject to specific instructions from an investor. Although the bank may provide advice on the execution, the bank does not provide any advice regarding the risks of the investments.
- Advisory: an experienced investment professional (usually a client relationship manager or investment advisor) is available to support investors when investment questions arise; however, the investors make the final investment decision.
- Discretionary: a portfolio manager is responsible for the daily management of an investor's portfolio and makes investment decisions on an investor's behalf.

The mandate choice depends largely on an investor's circumstances and preferences, their knowledge and ability to make investment decisions independently and the time available to do so. In this article, we only focus on damages in the context of discretionary portfolio mandates (ie., where it is alleged or accepted that the wealth manager made the final investment decisions).¹³

In investment management disputes, the parties often argue over the level of risk of the investment mandate. But defining an investment mandate solely by reference to its level of risk (ie, high, moderate or low) does not provide the expert with sufficient information about the counterfactual portfolio. There is no science defining how exactly the mandates composing an investment portfolio should align with a given IRP. However, mandates are usually designed according to various criteria, such as:

- investment theme: for example, investing in a specific or across various geographies, sectors, industries, market segments (eg, small, medium or large capitalisations);
- currency risk: the reporting currency of the investment mandate, the currencies allowed for underlying investments and the ability to hedge currency risk;

¹² Ibid.

¹³ Of course, the three types of mandates are not mutually exclusive choices. A combination of multiple mandates could be implemented in parallel.



- investment restrictions: defining a set of eligible investments (eg, floating rate notes only, excluding fixed coupon bonds exposed to interest rate risk) or the ability to employ leverage;
- limits: concentration (by issuer, counterparty, rating, geography, industry, currency, etc) or maximum leverage that can be employed;
- tolerance levels: when a position should be rebalanced if it exceeds a limit or if a previously eligible investment breaches an investment restriction (eg, as a result of a corporate event);
- investment strategy: generating fixed income or growth returns, favouring capital protection over capital at risk; choosing between active or passive investment;
- investment horizon: short, medium or long term; and
- performance hurdles and manager's remuneration: referring to a target return or benchmark the mandate should target or outperform, and the investment manager remuneration (management and, if applicable, performance fees).

Although experts can provide technical assistance for courts to understand the extent to which an investment portfolio complied with the agreed investment mandate and IRP, the agreed investment mandate and IRP remain largely a matter of factual evidence. Disclosure about the information a wealth manager relies on to understand an investor's IRP and the nature and composition of the investment mandate are key.

Portfolio construction and asset allocation

Traditional versus alternative investments

A portfolio is referred to as efficient if it maximises the expected return for a given level of risk.¹⁴ In modern portfolio theory, the universe of portfolios that satisfy this condition together lay on what is known as the efficient frontier.¹⁵

Historically, traditional asset classes such as stocks (equity), bonds (fixed income) and cash have been the primary tools used to build a diversified portfolio. Increasingly, alternative investments (AIs) such as hedge funds, private debt and private equity, venture capital, structured products, art and real estate have made their own space in portfolio asset allocation.¹⁶

¹⁴ The level of risk in a portfolio is usually measured by the standard deviation of returns, also called volatility. Standard deviation is the measure of investment risk as the magnitude by which returns deviate from the average return observed within the investment period.

¹⁵ Markowitz H. (1952) Portfolio selection.

¹⁶ This list is non-exhaustive.



Unlike traditional investments, AIs may come with higher minimum investment amounts and complex fee structures, which can make them less accessible to some investors. AIs may be illiquid or may not have a secondary market available, making it more challenging to estimate their value. AIs may not be as regulated and standardised as traditional investments, which can open investors to additional risks (eg, legal risks).¹⁷

On the other hand, AIs can provide exposure to sources of risk and returns that are decorrelated to traditional asset classes, giving them the potential to enhance portfolio returns. Therefore, adding AIs to a portfolio can enhance the efficient frontier relative to a portfolio composed exclusively of traditional assets.^{18,19}

AIs are – in principle – suitable investments if invested in the right proportion as part of a broader portfolio. They can suit various risk profiles, ranging from very low to very high-risk portfolios. Because of their diversification benefits, the proportion of AIs in diversified investment portfolios tends to decrease as risk increases.²⁰

Wealth and investment type

Wealth can significantly improve access to certain investments, such as AIs. According to a study from KKR, the proportion of AIs in an investment portfolio increases with wealth.²¹

This highlights the importance of considering an investor's circumstances and, how wealth broadens the investment universe and might affect the composition of an investment portfolio and the extent to which AIs should appear in a counterfactual investment portfolio.

¹⁷ This is not an exhaustive list and not all AIs meet all these criteria. Typically, AIs share the same feature, which is that AIs are investments that diversify a portfolio away from bonds, equities and cash.

¹⁸ '[B]etter risk-adjusted returns' refers to higher returns for a similar level of risk, or lower risk for a similar level of returns.

¹⁹ Baird Private Wealth Management, *The Role of Alternative Investments in a Diversified Investment Portfolio*, 2013.

²⁰ MSCI PIMFA Private Investor Index Series show a historical allocation of 7.5 to 17.5 per cent into AIs for Conservative Funds and zero to 2.5 per cent for Global Growth Funds. Under different names following organisational re-brands, MSCI PIMFA Private Investor Index Series have been in existence since 1997. In 1997 the FTSE APCIMS Private Investor Index Series was launched by FTSE with the Association of Private Client Investment Managers and Stockbrokers (APCIMS). In 2014 the index series was rebranded the FTSE WMA Private Investor Index Series, to reflect the APCIMS name change to the Wealth Management Association (WMA).

²¹ JPMorgan AM 2020 Alternatives: from optional to essential. Exhibit 7 'Where Individual Investors put their money'.



Risk versus performance

The difference between high- and low-risk investments is often misunderstood. As defined by the UK's Financial Conduct Authority:

High-risk investments may offer the chance of higher returns than other investments might produce, but they put your money at higher risk. This means that if things go well, high-risk investments can produce high returns. But if things go badly, you could lose all of the money you invested. And the chance of things going badly is higher. Unfortunately, there's not always a direct relationship between risk and reward – sometimes when you take a risk you don't get any reward for it.²²

There is clear empirical evidence that high-risk investments do not consistently perform better than low-risk investments and that the relative performance between higher and lower risk depends on the observed time frame. This is known as the concept of the 'low volatility anomaly' or the 'low-risk anomaly', which contradicts accepted capital asset pricing model or arbitrage pricing theory theories that higher risk portfolios earn higher returns.²³ Baker et al (2010) find that over the 41 years from January 1968 to December 2008, low volatility and low beta portfolios have offered an enviable combination of high average returns and small drawdowns.²⁴ The analysis tracks returns on US stocks and divides them into five clusters from lowest to highest risk, according to either (1) trailing total volatility or (2) trailing beta as risk measurement. The authors find the following:

- Low-risk stocks substantially outperform high-risk stocks in returns: 'Regardless of whether we define risk as volatility or beta, or whether we consider all stocks or only large caps, low risk consistently outperforms high risk over this period.'
- The importance of time frame when conducting such analysis: 'With the exception of the technology bubble, the return [between low and high risk] gap accelerated after 1983—a period during which institutional investment

²² <https://www.fca.org.uk/investsmart/understanding-high-risk-investments>.

²³ Proposed by economist Stephen Ross in 1976, the APT is a multi-factor model for asset pricing that is believed to be an improved alternative to its predecessor, the CAPM. The model is based on the idea that an asset's returns can be predicted using the linear relationship between the asset's expected return and several macroeconomic variables that capture systematic risk. The CAPM builds on the earlier work of Harry Markowitz on diversification and modern portfolio theory. It is a model used to determine a theoretically appropriate required rate of return of an asset and make decisions about adding assets to a diversified portfolio. The CAPM is still widely used despite its numerous limitations (eg, assumption that returns are normality distributed, that risk is measured only by the variance of returns, and the assumption of zero transaction costs). Under these conditions, CAPM shows that the cost of equity capital is determined only by beta that reflects asset-specific sensitivity to non-diversifiable (ie, market risk) (betas exceeding one signify more risk than the market, betas below one indicate less risk than market).

²⁴ Baker M., Bradley B., Wurgler J. (2010) Benchmarks as Limits to Arbitrage: Understanding the Low Volatility Anomaly.



managers have become progressively more numerous, better capitalized, and more quantitatively sophisticated.’

Jarrow et al (2021) conducted a similar analysis with more recent data.²⁵ Their paper compares the excess returns (over the risk-free rate) of high and low volatility portfolios of exchange-traded funds and stocks listed on US exchanges available in the Center for Research in Security Prices database between 2008 and 2020.²⁶ The high-volatility portfolio is constructed as an equal-weighted portfolio using the stocks with the highest 25 per cent volatilities. Similarly, a low-volatility portfolio is built from stocks with the lowest 25 per cent volatilities.

The authors found that in that period ‘the low-volatility portfolio had an excess return of 121.4 per cent, which is higher than the 62.5 per cent excess return of the high-volatility portfolio’, as shown in Figure 1 extracted from the paper. The period following summer 2015 is marked by a clear shift with the high-risk portfolio consistently underperforming the low-risk portfolio following significant market crashes such as the August 2015 global market sell-off or the March 2020 covid-19 market crash, both visible on the plot.²⁷ The observation could be very different if the data were analysed over another period (eg, from the beginning of 2008 to July 2015 or from January 2016 to February 2020).

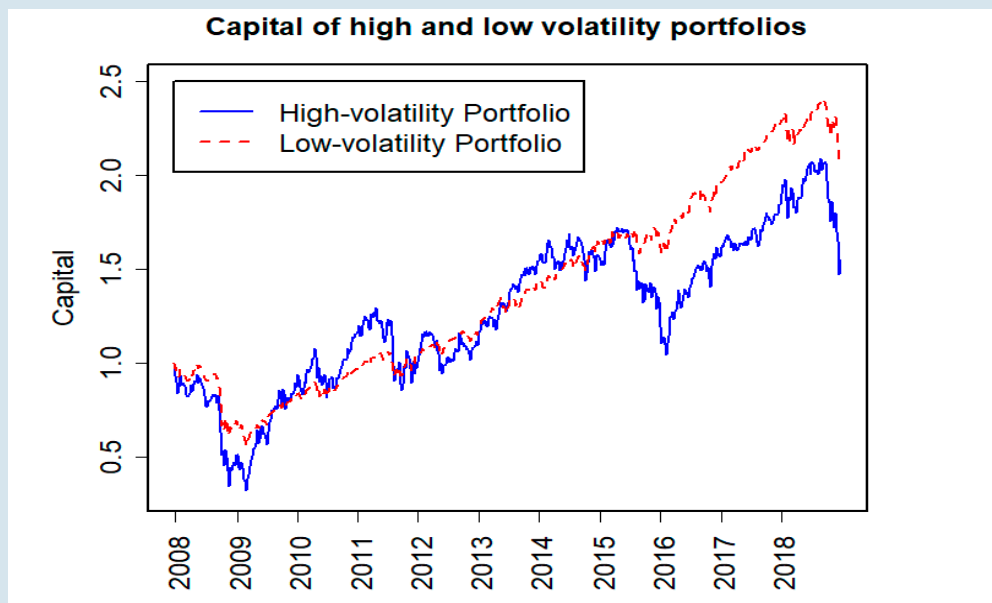
²⁵ Jarrow R.A., Murataj R., Wells M.T. and Zhu L. (2021) The Low-volatility Anomaly and the Adaptive Multi-Factor Model.

²⁶ Center for Research in Security Prices <https://www.crsp.org/about-crsp>.

²⁷ While the factors that initially caused the decline in global markets around the summer of 2015 are disputed, there is consensus that the Chinese stock market crash between June and into August 2015 was one of the triggers after the Shanghai Stock Exchange lost 43.3 per cent over the three months. The crash in Asian markets triggered similar drops in the US and across Europe, exacerbating the existing uncertainty created by the US Federal Bank to potentially increasing interest rates and the threat of Greece exiting the eurozone. The August 2015 sell-off had a long-lasting effect with global markets recovering to July 2015 levels about a year later.



Figure 1: High-volatility versus low-volatility portfolio performance



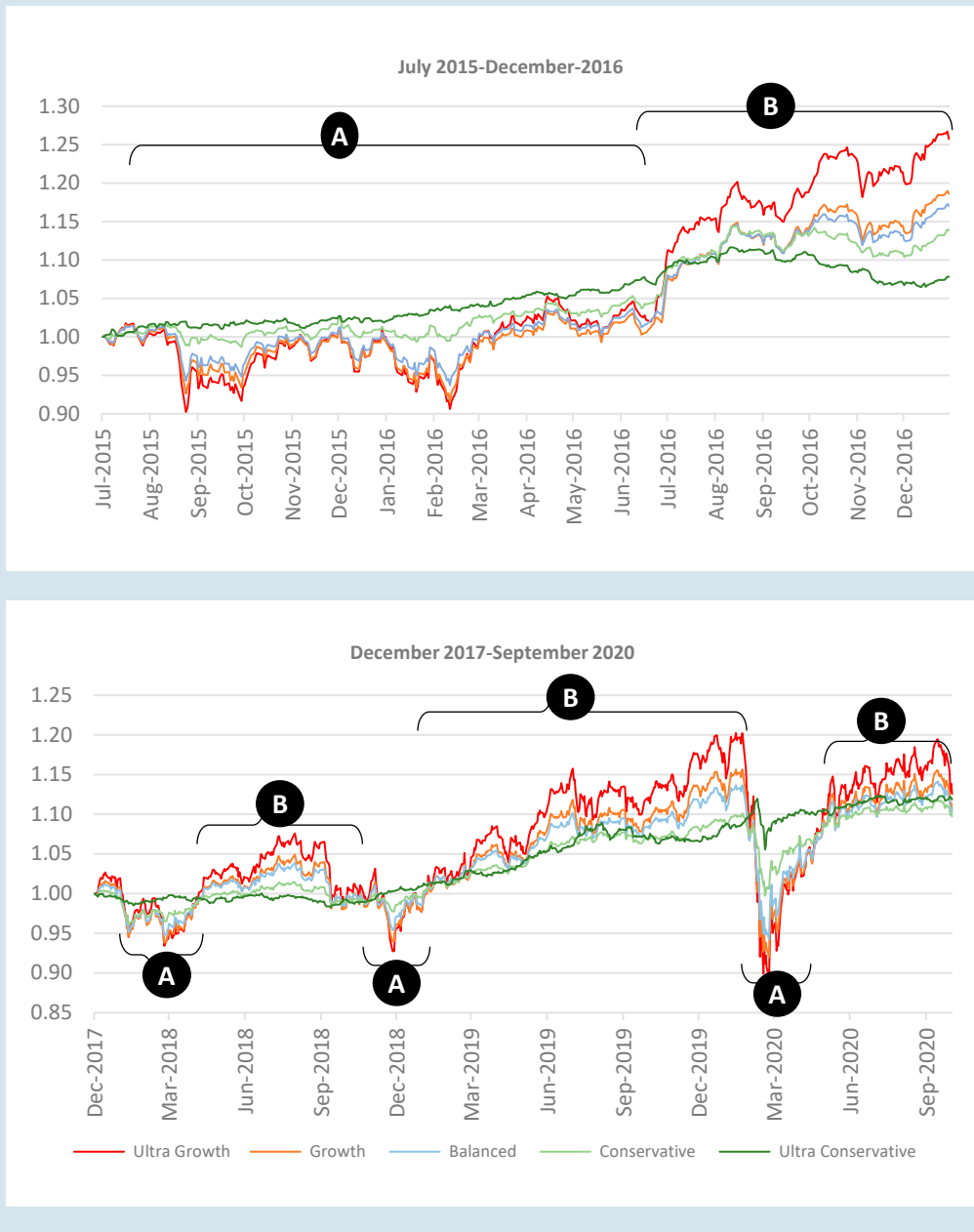
Source: Jarrow R.A., Murataj R., Wells M.T. and Zhu L. (2021) *The Low-volatility Anomaly and the Adaptive Multi-Factor Model*.

Simply looking at the performance of various risk categories of the FTSE UK Private Investor Series for different asset allocations (from higher risk to lower risk) one can observe that the performance of high-risk asset allocation can at times underperform the performance of low-risk asset allocations. For example, under Figure 2:

- July 2015–December 2016: if an investor had invested shortly before the August 2015 market crash, then the higher-risk portfolio (FTSE Private Investor Index Ultra Growth) would have consistently underperformed the lowest-risk portfolio (FTSE Private Investor Index Ultra Conservative) until July 2016 (see period A in the first chart).
- December 2017–September 2020: the higher-risk portfolio (FTSE Private Investor Index Ultra Growth) would have underperformed the lowest-risk portfolio (FTSE Private Investor Index Ultra Conservative) over three periods (see period A in the second chart).



Figure 2: FTSE Private Investor Index Series total return



This emphasises the importance of the period analysed when comparing high- and low-risk investments. It also highlights that: high-risk investments should not always be expected to outperform low-risk investments; and the market timing of investments and divestments matters. Empirical evidence shows that it is possible and therefore plausible to observe high-risk investments underperforming less risky investments over a given period. Therefore, depending on the period over which counterfactual performance for a portfolio is being computed, there is no certainty that the damages figure obtained from a counterfactual high-risk portfolio will systematically exceed the one obtained from a counterfactual lower-risk portfolio.



Active versus passive investment

Investment portfolios are either passively or actively managed. In basic terms, defining active or passive investing is straightforward: active investors attempt to outperform the risk-adjusted returns of a specific benchmark by implementing various strategies (eg, stock picking, market timing, scalping, smart beta²⁸ and other hedge funds strategies), whereas passive investors seek to track a specific market index (see the table below).^{29,30}

	Active management	Passive management
Pros	<ul style="list-style-type: none"> • Can outperform the market • Flexible investment scope tailored to investor's objectives • Risk management is built-in through this flexibility (ability to avoid sectors, regions and styles) 	<ul style="list-style-type: none"> • Track the performance of an index • No key person risk • Lower costs equals a higher chance of performance: • Lower turnover than active funds • No performance fees
Cons	<ul style="list-style-type: none"> • Performance depends on the skill of the manager and can lead to unexpected outcomes • Key person risks • Higher cost: lower probability of outperformance • Transaction costs: can involve more turnover in the portfolio, which impairs performance • Management and performance fees 	<ul style="list-style-type: none"> • No chance of outperformance (except if use of leverage) • Not possible to benefit from concentrating on idiosyncratic investment opportunities (fundamentals, valuations or the stage of the company's growth cycle) • Risk that the index rules are overweight specific industries or geographies which have little growth potential • Asset allocation cannot be a passive component

Active or passive investment has been subject to many debates among economists.³¹ The economist John Maynard Keynes is a good example of how an investor can be active and invest in a way that differs from available indices. Keynes managed the King's College Cambridge endowment until he died in 1946. According to an analysis of available archives, Keynes believed that a carefully

²⁸ Smart beta is an alternative, index-based selection or weighting methodology that may outperform a market-cap-weighted benchmark and/or mitigate portfolio risk through active or passive vehicles. However, there is no assurance that the investment strategy will outperform or achieve its investment objective.

²⁹ As always with terminologies, the industry has had debates about how active a manager truly is and how to define and differentiate active from passive management. See for example Cremers K.J.M., Petajisto A. (2009) How Active Is Your Fund Manager? A New Measure That Predicts Performance. In this article, we do not elaborate on this technical point. Still, it is an important one to consider when seeking to opine on (or benchmark) the performance of an active or a passive investment strategy.

³⁰ In practice, the choice between active and passive management can be made harder because asset allocation between cash, bonds, shares, AIs, geographies and currencies can't be passive. Someone must decide the mix and allocation of assets and how frequently the portfolio should be rebalanced. These decisions about passive components of a portfolio are akin to active portfolio management.

³¹ Nobel Laureates Eugene Fama (the Efficient Market Hypothesis), William Sharpe (one of the originators of the CAPM and the creator of the risk-adjusted return measure called the Sharpe ratio) and Harry Markowitz have historically supported passive management.

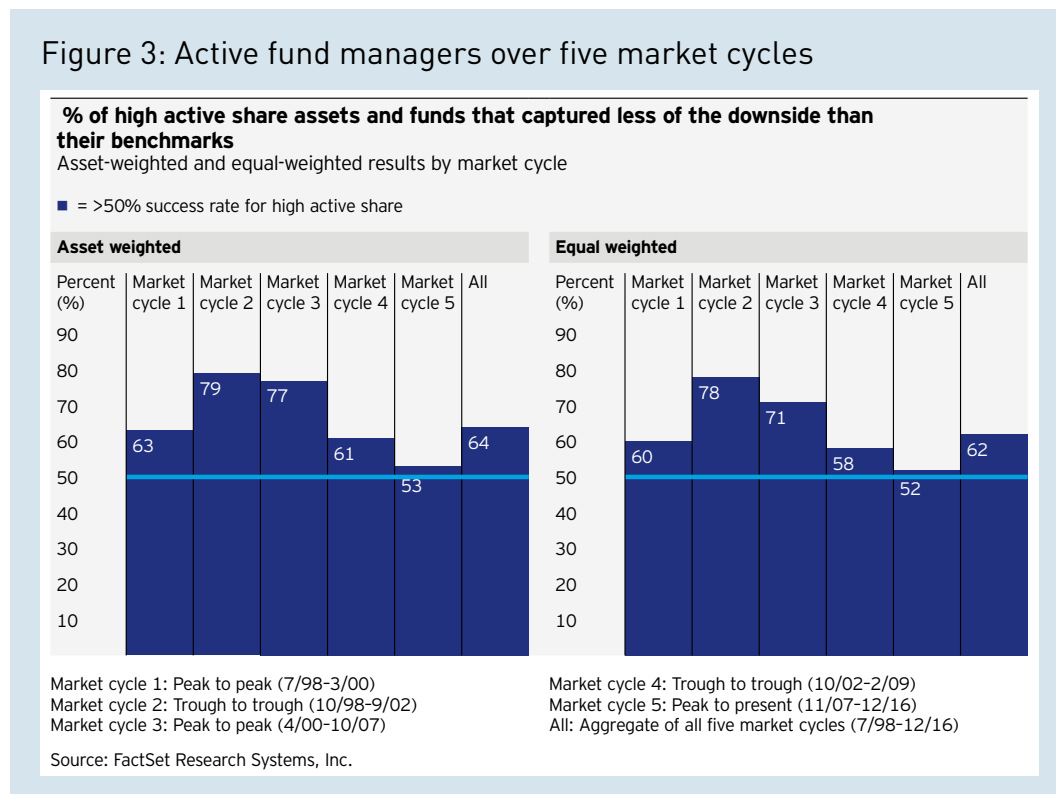


selected portfolio could generate returns over and beyond market returns, and indeed achieved annual performance exceeding the UK equity market at the time.³² In 1951, John (Jack) Bogle concluded that active fund managers could not beat the broader market and hinted at the idea of an index fund (ie, a passive portfolio) in his thesis ‘The Economic Role of the Investment Company’. Bogle launched the first indexed fund in the US in 1976 to mimic an index’s performance (Vanguard Group’s First Index Investment Trust, now Vanguard 500 Index Fund), starting with only US\$11.3 million in assets under management (AUMs) and having US\$780 billion in AUMs as of July 2022.³³

A study from Invesco (2017)³⁴ (shown in Figure 3) analysing active fund managers over five different market cycles in 20 years showed:

- excess return (also known as ‘alpha’): on an asset-weighted basis, 60 per cent of high active share fund assets beat their benchmarks (after fees) across all market cycles studied (50 per cent on an equal-weighted basis);
- downside capture: 64 per cent of high active share fund assets had a better downside capture than their benchmarks across all market cycles (62 per cent on an equal-weighted basis); and
- risk-adjusted returns: when historical returns were adjusted for risk, active funds outperformed passive benchmarks. Fifty-nine per cent of high active share fund assets had a better Sharpe ratio (a measure of return per unit of risk) than their benchmarks across all market cycles (53 per cent on an equal-weighted basis).

Figure 3: Active fund managers over five market cycles



32 <https://eic.cfainstitute.org/2014/10/20/keynes-the-investor-lessons-to-be-learned/>.

33 Rathbones - Active vs. passive investing – the great investment debate.

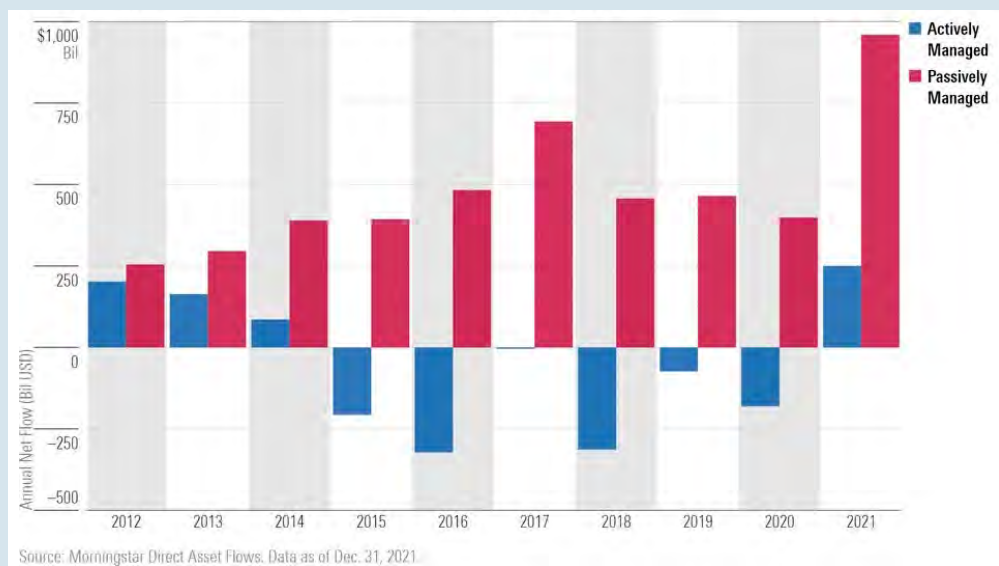
34 Invesco (2017) Think active can’t outperform? Think again.



The economic environment and economic cycles may also be more favourable to a specific type of investment strategy, for example:

- higher interest rates: will increase allocation trade-off between assets (eg, bonds versus stocks) and firms' funding costs (accentuating uncertainty and dispersion between best and worst performing stocks). This will, therefore give more opportunities for active portfolio managers to implement their strategy and differentiate between the worst and best performers; and
- lower interest rates: will favour the stock markets in general, in which case passive portfolios or trackers might outperform active portfolio managers. This has occurred in the last decade with an unprecedented bullish US stock market.³⁵ As seen in Figure 4, active funds suffered outflows nearly every year from 2015 to 2020.³⁶

Figure 4: Active fund estimated outflows



Each proponent of active investing or passive investing has plenty of evidence to cite, so active or passive investment is a consideration that investors cannot ignore when selecting an investment strategy.

As experts, we need to ensure that the counterfactual portfolio is consistent with the counterfactual mandate we are instructed to benchmark for the purpose of damages. Stating the obvious, it would not be appropriate to use a passive (active) investment counterfactual to benchmark active (passive) portfolio mandate. As such, the question of active portfolio versus passive portfolio investment mandate is central for experts to consider prior to opining on a suitable counterfactual investment portfolio for computing damages.

³⁵ <https://www.hl.co.uk/news/articles/how-rising-interest-rates-can-impact-the-stock-market>.

³⁶ U.S. Fund Flows Smashed Records in 2021 – Morningstar.



High-level approach for identifying a suitable counterfactual portfolio

As explained in the previous section, to identify a suitable counterfactual investment portfolio for computing damages, it is crucial for experts to be provided with detailed information regarding the IRP of an investor and the nature and composition of the agreed investment mandate.

There may be other relevant considerations depending on the case considered. For example, if the dispute focuses on a particular type of investor category or in a specific geography for the domiciliation of the investment manager, then additional criteria may need to be considered.

Depending on the mandate for the counterfactual portfolio, and to eliminate the risk of hindsight when identifying a suitable counterfactual portfolio, one approach involves identifying comparable investment managers that were available and opened for investment in the relevant period.³⁷

As with any sampling, exercise outliers may need to be excluded from the database. However, an important consideration when sampling investment managers' returns is survivorship bias. Technically we consider that all funds available for investment should be retained in the sampling, even the funds that failed to survive the entire investment period considered for computing damages. Some funds are unsuccessful and may close because of poor performance relative to their peers. So long as investment managers managing such funds complied with their investment mandate, we believe their returns should be included. Finally, minimising (ideally, avoiding) sampling bias, namely the risk that non-objective criteria influence the selection process, is essential to the representativeness and, therefore, the objectivity and reliability of the empirical exercise.

The sampling exercise will result in a distribution of outcomes for the counterfactual performance. Depending on the counterfactual portfolio, the suggested approach can require extensive data sampling and modelling. Where it can be implemented and is context appropriate, we consider this approach robust and fair as it does not take away the market realities and uncertainties investment managers face when formulating investment decisions. Also, because it gives a range of outcomes, it is possible to draw a distribution and attribute a probability to such outcomes, therefore assisting the court with selecting the most probable outcome for awarding damages.

³⁷ If the criteria are too restrictive and known, a counterfactual scenario may only be a weighted sum of specific benchmark indexes.



Conclusion and other considerations

Computing damages in the context of investment management disputes is an exercise that requires significant knowledge of industry practices when constructing investment portfolios.

Estimating damages may be computationally challenging as the counterfactual investment portfolio may trigger investment decisions and rebalancing over time for the counterfactual portfolio to remain compliant with the alleged IRP and investment mandate. For example:

- cash inflow and outflow: withdrawals may not occur if an investor is satisfied with the performance or a different amount may be withdrawn, etc;
- leverage: the use of leverage may trigger margin calls at different points in time between the actual and counterfactual scenarios, therefore affecting the timing and occurrence of reinvestment decisions in the counterfactual scenario versus actual scenario;
- rebalancing: the counterfactual portfolio may need to be rebalanced regularly to ensure it meets the investor's IRP and investment mandate. Such constraints need to be implemented in the counterfactual case. The method selected by the expert is, therefore, a function of how the mandate for the counterfactual portfolio is defined; and
- distribution of counterfactual returns: where an empirical approach is used to sample counterfactual portfolios, it is important to illustrate such distribution by showing the maximum, minimum, average and medial returns. Debates can emanate regarding the methodology used to compute the average return: for example, using an arithmetic average or an average weighted by some criteria (eg, fund's assets under management and fund's rating). Where no specific instruction or evidence is given to the expert regarding weightings criteria, the arithmetic average could be used as a criteria-agnostic measure of the central tendency.

Estimating of damages could also become computationally expensive owing to data limitations or if multiple scenarios are generated, or both. For example:

- Investment period: disputes over factual and legal grounds for the start and end dates may require the production of several damages scenarios to assist the court, which in turn may drive significant differences in the damages figures.
- Treatment of dividends and various costs: the computation of management and incentive fee accruals and disbursements; interest paid on deposits and margin accounts, etc; transaction costs; and the decisions to reinvest dividends and coupons can lead to material differences in damages.
- Non-modellable portfolio components: owing to lack of information, some parts of portfolios might not be modelled in a computationally efficient way (ie, at a cost acceptable for litigation). Some assumptions may need to be



- made, resulting in the damages model not always reconciling perfectly to the actual data.
- Frequency of actual versus counterfactual performance and availability of information: depending on the complexity of the relationship, the computation of damages may require frequent modelling (eg, daily versus quarterly rebalancing) over the investment period. The availability of historical information for some investments (eg, private equity, hedge funds, derivatives and structured products) might not be disclosed to experts, in which case experts may need to enrich (or reconstruct) the data provided by using independent sources of information or making assumptions between different rebalancing dates.
 - Interest or return between valuation date and award date: damages are typically calculated as at a valuation date set before the trial. If the claim is successful, damages are typically awarded as of the date of the judgment. Therefore, the damages as of the valuation date need to be brought forward to the date of the judgment. In cases involving lost profits, interest is typically awarded between the valuation date and the judgment date at the relevant borrowing rate.

The mechanics and assumptions relied upon for modelling damages can be subject to disagreements between experts, which in turn may drive differences in damages figures. Although some aspects of modelling damages can be agreed upon between experts, the predominant driver remains the selected counterfactual investment portfolio. It is, therefore, of utmost importance that experts converge as best as they can on the choice of a counterfactual investment portfolio. The more precise the contemporaneous information about an investor IRP and the agreed investment mandate is, the more accurate the benchmarking of a suitable counterfactual investment portfolio can be.

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