

Course of SUPERVISOR CO-SUPERVISOR CANDIDATE

To my prònoia, once again.

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Introduction

"Come fill the South Sea goblet full;
The gods shall of our stock take care:
Europa pleased accepts the Bull,
And Jove with joy puts off the Bear."

(Pope, ~ 1720)

In these few verses, poet and satirist Alexander Pope perfectly captures the allegorical power and pragmatic implications of market sentiment, while foreshadowing – jinxing? – the burst of the South Sea Bubble of 1720 (see Dale, 2004; Harvard Library, accessed March 2025). Although the origin of these symbols does not reside in the pantheon of ancient mythology, they over time have come to occupy their own place in a more contemporary one, firmly embedded in the public consciousness as powerful representations of optimism, pessimism, and speculation. Yet, unlike their divine counterparts, the origins of these creatures lie not in myth but in early 18th-century England (see Borsa Italiana, accessed March 2025; Merriam-Webster, accessed March 2025; New York Federal Reserve, 2012; Kiplinger Washington Editors, Inc., 1962). In an article published in The Tatler in 1709, Richard Steele explicates the meaning of "bear" used in shorthand for "bearskin jobber" 1:

"I fear the word "bear" is hardly to be understood among the polite people; but I take the meaning to be, that one who ensures a real value upon an imaginary thing, is said to sell a "bear," and is the same thing as a promise among courtiers, or a vow between lovers."

(Steele, 1709, p. 18)

Even just from an editor's note like this one, we can already observe how the term gradually entered common jargon to denote speculative sellers – the very attitude that would lie the foundation of the aforementioned South Sea Bubble, as company stocks were sold short by speculators without ownership, leading to an artificial inflation of

¹ Title likely coming from a proverb highlighting the practice of selling the bear's skin before having caught the bear.

prices and, ultimately, to the company's collapse (see Dale, 2004; Harvard Library, accessed March 2025). The affair cemented the widespread use of the term and eventually led to the rise of the bear's counterpart: the bull. This choice likely originated from the old English sport of bear- and bull-baiting – a barbarous spectacle by today's standards, in which a bear and/or a bull would be set upon by dogs, and sometimes against each other, for the entertainment and wagers of the audience (see Brownstein, 1969, p. 237; Dawson, 1964, p. 97). Moreover, many artists took upon the theme and aided the spread of these allegories (see Nast, 1869; Beard, 1879; Bulls and Bears: The Great Wall Street Game, 1883), also showing how the fighting styles of these animals could mirror the behaviour of investors in the financial markets: just as the bear's claws swipe from the top down, a bearish market sees prices fall; just as the bull's horns strike from the bottom up, a bullish market sees prices rise. Therefore, much like ancient myths once offered frameworks to comprehend the incomprehensible, financial markets have long leaned on symbolic imagery to make sense of forces perceived as beyond full control. As Boguszewicz-Kreft et al. (2019) argue, myth and storytelling serve to organise uncertainty and provide continuity within social groups. In this way, the Bull and the Bear, though not deities in classical mythological terms, function today as essential market myths — filtering the intricate, often chaotic interplay of speculation, sentiment, and strategy into recognizable archetypes.

As if the economic landscape were not already complex enough, even the assumed homogeneity of traded goods is, more often than not, merely an academic simplification. While stocks and bonds in traditional finance maintain a degree of uniformity, the same cannot be said for other markets. In particular, the often-exclusive realm of luxury goods, art, and collectibles constitutes a compelling case study — one that challenges conventional financial models and offers insight into the interplay between value, perception, and human behaviour. Given all this, it becomes quite clear how decision making in general, and especially in terms of investing, can be quite insidious. As will be further explored in the next chapters, investors rarely act in a completely rational way and often have to face not only their own prejudice but also the irrationality of others in the market. The Market, this entity that was once considered something entirely different and almost detached from its constituents, and that is maybe finally seen once again as the breathing living organism that it is.

Images like the Bull and the Bear or Adam Smith's invisible hand (Smith, 1776/2003), therefore, try and fulfil the need to simplify economic phenomena that, at their core, are deeply human and thus inherently unpredictable. While computers and artificial intelligences can operate quickly on large number of inputs, the human brain needs ways to reduce and translate them into accessible and actionable information. Furthermore, the huge quantity of data we receive daily doesn't belong strictly to objectivity. Herbert Simon (a name that will return again and again in these pages) became one of the founding fathers of artificial intelligence, theorising an ante litteram parallelism between the symbolic processing of the human cognitive system and that of computers – different symbols, surely, but still symbols (Sillari, 2023a). However, unlike the binary code that feeds facts to such non-human brains, the data we are subject to is inevitably woven together with not only our own perceptions and emotions, but also of those that produced and shared such information. It's exactly in this context that persuasion and effective storytelling become so powerful and instrumental – a topic that will be expanded later on - as we wanted to deem ourselves perfectly informed, rational, economical creatures, and instead found ourselves "predictably irrational" (Ariely, 2008).

In the following chapters, this essay will explore investor behaviour with a particular focus on passion-led assets. After this introduction, Chapter 1 provides an overview on Behavioural Finance, Alternative Investments, and Wealth Management, highlighting their relevance in today's global economic landscape and outlining key trends and themes within these fields. Moving into the specifics of illiquid and passion-driven assets, the discussion will examine how behavioural finance principles apply uniquely to these "other" markets. Investor irrationality will be analysed not only from a theoretical perspective but also through insights from high-profile private bankers and practitioners. In Chapter 3, the focus will shift to specific cognitive biases prevalent in these markets and the role of expert curation in mitigating such distortions in investment decisionmaking. Finally, some insight is provided into ancillary topics of interest for future research, including trends toward sustainability, generational transitions, and inheritance, also thanks to the valuable contributions of experts. To gain such insights, semi-structured interviews were conducted, the questions for which can be found in the Appendix. The aggregate findings have been woven into the discussion to offer a more complete and multifaceted perspective on the topic.

This thesis does not aim to determine whether art is a "good investment" in absolute terms, nor does it seek to provide investment recommendations. Rather, it presents a theoretical and empirical framework to analyse the art market through the lens of behavioural finance, with the goal of understanding the cognitive, cultural, and structural dynamics that shape decision-making in passion-led investments.

1. Behavioural Finance

1.1 A kaleidoscope of ideas

Combining elements of psychology, sociology, and finance, Behavioural Finance goes beyond the study of individual behaviour, investigating group dynamics and exploring how individuals shape their social environments while simultaneously being shaped by collective influences. With scholars from a plethora of research backgrounds enriching the body of work, this discipline boasts a considerable multitude of viewpoints. Such diversity inevitably results in multiple interpretations and definitions of the term "Behavioural Finance", along with a wide range of applications across different fields of research. The resulting mosaic is exactly what makes this branch of economics so complex to analyse in its entirety, as it pieces together theories that sometimes converge and sometimes clash, lacking traditional axioms and mirroring the lack of absolutes in reality. Despite this variety and the confusion it can bring, the core of the matter rests: to offer an alternative reading of economic phenomena through the lens of human behaviour.

1.2 Rational individuals vs irrational humans

The themes of persuasion and influence have been prime subjects of study for the most illustrious Greek philosophers whom debated their very nature — sophistry or true rhetoric, devious manipulation or noble art: "[w]hereas the master raised many critical questions about whether sophistry (1997a, 1997b) and poetry (1997c, p. 998-1052), should produce practical effects [...], the student set himself to the task of considering how rhetoricians have persuaded their audiences into dispositions and actions." (Plato, 1997a, 1997b, 1997c, as cited in Dunne, 2018, p. 1297). In his *De Oratore*, Cicero describes the good orator and makes it clear how what is now known as the *framing effect* was already understood, studied, and exploited as early as the first century B.C., most notably in his emphasis on adapting arguments to the audience's emotions and expectations.

To understand where the concept of framing finds its roots and gains relevance, one must first introduce and understand the standard, the benchmark, the assumption on which Traditional Finance has built its models: individuals' rationality. In classic economics, rationality refers to a decision-making process that is internally coherent, utilitymaximizing, and informed by all available data, even under uncertainty (von Neumann & Morgenstern, 1944; Savage, 1954). Typical of normative theoretical systems, standards of rationality are based on several axioms, among which are completeness, transitivity, independence, and invariance (Sillari, 2023a). Only the latter will be discussed here, as the full coverage of consumer preferences and utility theory should be left to more authoritative scholars (see von Neumann & Morgenstern, 1944; Samuelson, 1948; Debreu, 1954; Jehle & Reny, 2011). The axiom of invariance postulates that the way a decision problem is posed or presented to a rational individual should not affect their choice. In other words, "invariance says that regardless of how a certain decision problem is described, whichever the framing of the decision problem, the choice of the decision maker should remain the same" (Sillari, 2023a). It is precisely in opposition to this axiom that Tversky and Kahneman, in 1974, formalized the concept of the framing effect. Drawing on Goffman's Frame Analysis: An Essay on the Organization of Experience (1974), which laid the sociological groundwork for the theory, they explored how the way information is presented – rather than its content – can significantly shape decisionmaking. Tversky and Kahneman's experiments conclude that outcomes framed in affirmative terms tend to lead to more conservative choices, whereas negatively framed outcomes prompt riskier behaviour, inducing individuals to take chances (Sillari, 2023a). In their many studies together, the two authors introduced the concept of *cognitive biases*: recurring patterns that deviate from the rational ideal, not by accident but by design (Kahneman & Tversky, 1972; Kahneman & Frederick, 2002). Biases do not occur randomly, and they do not represent simple errors. Instead, they have been the basis of decision making for millennia thanks to their most crucial characteristic: these shortcuts are not good, they are good enough (North of the Border, n.d.). Clearly, this concept is closely tied to Tversky and Kahneman's Prospect Theory – which we will explore shortly - but, circling back to the frame effect, these findings reveal the inadequacy of the individuals' rationality assumption in empirical scenarios, posing a great threat to classic utility theory.

In contrast to normative theory, descriptive theory stands in the gap between what ought to be and what actually is. In the field of behavioural analysis, the most relevant theory is undoubtedly that of Bounded Rationality, introduced by Simon in 1955 and widely

recognised in the field. As Reinhard Selten put it, "[Simon] proposed to replace the idea of utility maximization by a more realistic view of economic behavior involving satisfycing and adaptation of aspiration levels to success and failure" (Selten, 1990, p. 649). A particularly interesting point of view is offered by Esther-Mirjam Sent, who, in her 2017 paper *Rationality and Bounded Rationality: You Can't Have One Without the Other*, points out that this concept gains its very meaning from the existence of a rational benchmark: it is only in contrast to the ideal of full rationality that we can describe reallife decisions as "bounded." Hence, while the framing effect exposes the empirical shortcomings of the invariance axiom, it does not invalidate the importance of rational models altogether. But if choice is not aimed at pure optimisation, how do people form their decisions? Simon answers that such rationality – bounded by circumstances and by the human being's limited abilities – implies the need to apply rules of thumb, approximations, frameworks, and simplifications of various kinds in order to make everyday decisions. These indispensable mental shortcuts, often referred to as *heuristic rules*, allow individuals to navigate complexity without being paralysed by it.

The word "heuristic" finds its etymology in the Greek heuriskō (εὑρίσκω), meaning "to find" or "to discover", and it was firstly introduced to mathematics by medieval scholars to indicate processes of problem-solving and creative thinking. These processes did not reflect modern understanding of cognitive science – nor that of mathematics – but rather belonged to a broader and more philosophical conception of knowledge typical of the time (Hjeij & Vilks, 2023). Today, heuristics are central to behavioural sciences, though far from uncontroversial. In the 1990s, Gerd Gigerenzer led a new wave of research that offered profound insights into decision-making processes across a wide range of fields. In contrast to the perspective advanced by Tversky and Kahneman, Gigerenzer does not portray the individual as irrational, but instead advocates for a form of adaptive rationality. This reasoning process departs from formal logic or mathematical optimization yet proves highly effective in the complexities of everyday life where the lack of perfect information requires individuals to infer on a multitude of aspects (Gigerenzer et al., 1999). In his works, he introduces the notion of an "adaptive toolbox" and suggests that individuals do not rely on a single, predetermined, and absolute decision-making strategies, but rather navigate through a repertoire of heuristics shaped by experience, context, evolutionary pressures (see Gigerenzer et al., 1999; Gigerenzer &

Selten, 2001; Gigerenzer, 2008). While the end result may not be the utility maximizing one, such rules of thumb enable humans to take decisions in a feasible and overall good enough manner. These "fast and frugal" heuristics – as Gigerenzer calls them – are part of the so-called System 1 thinking, quick and automatic, but statistically imperfect and in sharp contrast to the slower, more deliberate decision-making processes associated with its counterpart, System 2 (Kahneman, 2011). It's in this duality that biases can insinuate and thrive. Despite the simplifications and the contrast between the theories, this dual system does not undermine the soundness of heuristics and instead emphasises its effectiveness in the uncertain and often ambiguous landscape of decisions human beings are called upon to make on a daily basis. (Gigerenzer, 2008).

The gap between intention and action is a widely explored topic, not only in economics but also in many other disciplines – literature foremost among them. A prime example can be found in Shakespeare's *Hamlet*: "as Hamlet struggles with the logistical difficulties and moral burdens of vengeance, wavering between whether to kill Claudius and avenge his father once and for all or whether doing so would be pointless, cruel, or even selfdestructive, William Shakespeare's unique perspective on action versus inaction becomes clear" (Tanner, 2013). In this same perspective, thanks to the monumental efforts and continuous advancements in research by economists and theorists, the foundational models of utility, consumer preferences, and micro- and macroeconomic dynamics, the so-called homo economicus can now understand better than ever what should be the rational, optimizing choice in every imaginable scenario. Yet empirical research – not to mention daily news – irrefutably demonstrates the disconnection between this rational ideal and the choices market players make every day. We cling to the hybris of believing in our own rationality, as if having modern technological tools purged us from the fundamentally human inconsistency in decision making. Circling back to Simon's work, "[t]he paradox vanishes, and the outlines of theory begin to emerge when we substitute for "economic man" [...] a choosing organism of limited knowledge and ability" (Simon, 1955, p. 114). If rationality truly reigned supreme and perfect markets were a reality, we wouldn't be seeing entire economies shaken by tweets, stocks reacting to celebrity gossip, or policy decisions like the recent sweeping tariffs announced by the US – measures that sparked global market jitters not because of economic fundamentals, but because of political theatrics and public sentiment. This not to say that such moves and

macroeconomic or geopolitical strategies are improvised and not thoroughly thought out, but rather to emphasise how they are crafted precisely upon the predictability of an emotional reaction of the market.

1.3 Brief history of Behavioural Finance

Following these same advancements in the understanding of human judgement, the field of Behavioural Finance saw its birth and development. While this science as we know it today is a relatively young field, its origins can be traced back nearly two centuries. As Ricciardi and Simon (2000) illustrate, the idea of applying group and crowd behaviour to financial markets was first hinted at by Scottish journalist Charles MacKay in his 1841 work Extraordinary Popular Delusions and the Madness of Crowds. In this study, MacKay examines and debunks various "delusions" and "manias" - ranging from fortune-telling and witch hunts to economic bubbles such as the aforementioned South Sea Bubble of 1718 and the Dutch tulip mania of 1636, a matter that cemented his work's lasting relevance. As the author himself writes, "[p]opular delusions began so early, spread so widely, and have lasted so long, that instead of two or three volumes, fifty would scarcely suffice to detail their history" (MacKay, 1841/1932, p. XX). Despite only briefly touching on the dynamics and causes of such events, MacKay's curiosity as a journalist led him to open the discourse on human behaviour and its consequences in social groups. His pioneering work sparked curiosity and paved the way for subsequent research leading to George Charles Selden finalizing this process in his 1912 book *Psychology of the Stock* Market. Clearly stating in its preface that "this book is based upon the belief that the movements of prices on the exchanges are dependent to a very large degree on the mental attitude of the investing and trading public" (Selden, 1912, p. 9), Selden explicitly applied psychology to financial markets for the first time.

In the following decades, the interest reserved for behavioural analysis of economic dynamics grew exponentially, with contributions such as the previously mentioned *A Behavioral Model of Rational Choice*, published by Simon in 1955 and still to this day one of the most influential works in the field. Just one year after Simon receives the Nobel prize in economics, in 1979, Tversky and Kahneman publish their own groundbreaking piece – *Prospect Theory: An Analysis of Decision under Risk*. Proposing an alternative theory of choice, the paper highlights the inadequacy of traditional utility theory in

correctly predicting and describing choice patterns. What Prospect Theory highlights is how final assets are not what drive decisions, but rather the prospect gains and losses. Also, what a rational individual would decide based on probabilistic considerations but on what they call "decision weights", said to "measure the impact of events on the desirability of prospects, and not merely the perceived likelihood of these events." (Kahneman & Tversky, 1979, p. 280). This point of view challenged utility and market theories, up to this point seemingly granitic, and shone a light on the need to approach Economics from a new perspective.

Building on this momentum, in 2004, Andrew Lo introduced his Adaptive Market Hypothesis – a theory that expands on the seminal Efficient Market Theory while integrating new insights from Behavioural Finance. Inspired by Samuelson's work (Samuelson, 1965) and finalized by Fama in 1970, EMT is to the day one of the most enduring foundational pillars of modern economics. This theory argues that, in an efficient market, prices always "fully reflect" available information (Fama, 1970, p. 383) and supports its claims through empirical research. The incipit to Professor Lo's work brilliantly exemplifies the undeniable influence of EMT, while also hinting at the at times dogmatic reliance economists have placed upon it:

"There is an old joke, widely told among economists, about an economist strolling down the street with a companion. They come upon a \$100 bill lying on the ground, and as the companion reaches down to pick it up, the economist says, "Don't bother—if it were a genuine \$100 bill, someone would have already picked it up". This humorous example of economic logic gone awry is a fairly accurate rendition of the EMH [ed. Efficient Market Hypothesis], one of the most hotly contested propositions in all the social sciences."

(Lo, 2004, p. 2)

Lo theorizes that market efficiency, unlike what previously assumed, is not static but rather varies depending on the adaptability of market players. In this context, adaptability can be defined as ability to adjust their behaviour and strategies in response to the everchanging market conditions. AMH emphasizes that being adaptable is what allows participants to navigate the market and its tides – a point of view that directly draws from the Darwinian concept of evolution and natural selection (Darwin, 1872). The

evolutionary take of Lo's research in considering markets as ecosystems perfectly embodies the dynamism that contemporary economics preach.

Thanks to these studies, Behavioural Finance has grown relevant and became what we know today. Needless to say – in academic and scientific contexts especially – many were the scholars to challenge the findings of previous research and to challenge Behavioural Finance as a whole. Some have critiqued the lack of a unified theory that could replace the current standard; others argue the actual predictive abilities of behavioural models. In a 2022 paper, Bowen looks to demonstrate how behavioural scientists are "often no better - and frequently worse - than simple models", like linear models, random chance, and others (Bowen, 2022). In general, the objections can be grouped as they mainly target the soundness of three aspects of the discipline: theoretical coherence, empirical reliability and robustness of findings, and predictive power. While these are relevant doubts to be raised, they only speak to the complexity of human behaviour of the very field at hand. In fact, unlike the elegant but often sterile and unrealistic assumptions of traditional finance, behavioural theories embrace and maybe reflect the messiness of reality. Its relevance perhaps lies in the new approach and point of view it gave to economics as a whole, providing investors and intermediaries with a toolkit to navigate and explain the inherent anomalies of the market. Regardless and in perfect alignment with the typical evolution of the scientific method – disproving and confirming and adding and deleting – new strains of thought and new theories are added to the knowledge gathered so far, enriching and unfolding the potential of all those practitioners who have asked themselves the question "Why do people make financial decisions that are not always in their best interest?"

The most recent proper breakthrough being Richard Thaler and Cass Sunstein's *Nudge*, a concept they introduced in the eponymous 2008 book, and which formed the foundation of Thaler's 2017 Nobel Prize. Drawing directly from previous theories of irrationality, dual system thinking, and cognitive biases, Nudge theory added a new and distinctive layer: libertarian paternalism. This approach seeks to gently steer individuals towards better choices without restricting their freedom to choose, acting on the decision architecture to account for human error. In this sense, nudging doesn't see irrationality like a fallacy but rather as a condition that has to be simply taken as given. To be considered as such, a nudge must not exclude any options, it must not significantly change

any individual's economic incentives, and it must be easy to avoid (Thaler & Sunstein, 2008, as cited in Pizzoni, 2023). This ensures that the "gentle push" is kept pragmatic but also ethical and non-coercive, making it an efficient and sensitive response the cognitive limits Behavioural Finance has long sought to understand.

Behavioural research was also further enriched by neuroscience, which began to be applied to previously unexplored areas, including organizational design (see Healey & Hodgkinson, 2015) and finance (see Peterson, 2005). In this regard, the work of Professor Sahi offers valuable insights into the intersection of neuroscience and financial decisionmaking (see Sahi, 2012). At the same time, the rise of Big Data and Artificial Intelligence have also affected finance and the application of behavioural theories to it. Without going into the merits of Big Data theory (see McAfee & Brynjolfsson, 2012; Einav & Levin, 2014; Varian, 2014) what is interesting to emphasise here is the opportunity provided by analysing these in the context of systemic biases. As mentioned earlier, while heuristics allow individuals to simplify complex decisions, these mental shortcuts also produce predictable errors. Such systemic biases, at scale, become measurable through large datasets. By blending experimental finance techniques with data science tools (like data mining, agent-based simulations, pattern recognition, etc.), economists are now able to monitor how a disparate set of conditions may affect the market, integrating reliable and relevant quantitative analysis to their studies. Even if the research on behavioural components in economy dynamics has been extensive both in terms of time and of depth, policy makers only recently started integrating it in their practice. In the past few years, quite some examples of nudging have emerged, even if libertarian paternalism is often still seen as too paternalistic and not enough libertarian (see Engelen, 2019; Gane, 2021). One recent application of the gentle push has been the UK's COP26 Green Nudge on pensions: sending behavioural prompts to pension scheme members, to encourage them to consider the environmental impact of their pension investments (Whincup et al., 2024).

Each and every one of these behavioural insights give a new perspective to our understanding of financial markets and may make us realize that the proverbial invisible hand does not act from above, but within the interactions of the real people that make the market.

2. Alternative investments

2.1 It's alternative what is not traditional

Among the investment decisions most exposed to risk – and hence obviously most intriguing to behavioural researchers – are those involving alternative instruments. The term "alternative investment" refers to all financial securities or investment opportunities that do not fall within the category of traditional assets, such as stocks and bonds, and are usually characterized by complexity and illiquidity. The definition of alternative investment, formulated apophatically, is therefore broad and includes a wide variety of financial instruments, not actually listed exhaustively anywhere (Landry, 2021). As of today, some of the most common alternative strategies include: private equity, alternative credit, venture capital, real estate, hedge funds, alternative risk premia, managed futures, and global macro (PIMCO, 2024). As noted by Chambers et al. (2020), these investment types trace back to the 1980s but their conceptual foundations can be found much earlier in Modern Portfolio Theory. This theory posits that investors can construct an optimal portfolio, one that maximizes expected return for a given level of risk, through diversification by combining assets with diverse correlations (Markowitz, 1952; Fabozzi et al., 2002). Mundi and Kumar's (2022) bibliometric review and analysis shows scholars have been increasingly turned to the alternative landscape and its intersections with traditional finance, highlighting how "[f]orms such hedge funds, private equity, art work and real estate of alternative investments have been the focus of existing research. Researchers recently started focusing on bitcoin, IPOs and corporate governance mechanisms of alternative investments." (Mundi & Kumar, 2022, p. 135).

In an attempt to bring some order to the subject, Yau et al. proposed a categorisation of such investments in 2007, which, however, does little more than tautologically answer the question, dividing non-traditional investments into "Traditional alternative investments" – which include real estate, private equity, and commodities-and "Modern alternative investments", such as managed futures, hedge funds, and distressed securities. Any attempt of this kind seems almost nonsensical when one looks at how alternative investment conceptually arose to broaden investment horizons. The creativity and intuition of the advisor or provider are thereby energized as they become necessary to the

success of the deal. The seemingly problematic lack of an exhaustive list of asset classes to fall under the broad concept of "alternative investments" actually brilliantly mirrors the boundless array of opportunities that these markets open up.

In the context of this discussion, the main categories of alternative investment that will be taken into account will be private equity and hedge funds. This choice stems from the relevance of these both in terms of research and of volume of capital allocated to it on the market. Clearly, each type of alternative investment presents its peculiar upsides and downsides, and the fragmentation of the topic makes it hard to conceive and present data that reflects all of the asset categories at hand. This said, despite the heterogeneity, there are several recurring, common and relevant characteristics that emerge across the board. These shared features provide a meaningful basis for analysis and comparison, and they will be explored in greater detail throughout the following sections in order to better understand the structural and behavioral dynamics underpinning this asset class.

2.1.1 Benefits

The growing appeal of alternatives lies undoubtedly in their portfolio diversification potential, especially thanks to their often low correlation with traditional assets (PIMCO, 2024). International analyses reveal that private equity buyout funds outperformed public markets, with Public Market Equivalent (PME) values ranging from 1.14 to 1.29, depending on the benchmark used (Ain Tommar et al., 2024), showing the potential for portfolio optimization. In fact, private equity in particular plays a crucial role in strategic portfolios, offering high return potential, as private companies' KPIs aren't driven by the same forces that those of public markets (Izzo, 2025). On the theme of optimization, the analyses conducted by Anđelinović and Škunca (2023) shows that "[t]he results from both optimization models during the analyzed period confirm the hypotheses, indicating that integrating alternative investments positively influences portfolio returns, risk management, and overall efficiency" (ibidem, p. 361).

Another important feature of portfolios that include alternatives is that they can be tailor-made. By broadening the range of options and transactions available to the client and the advisor, alternative investment portfolios allow the creation of investment strategies that are customised and bespoke according to the client's preferences, desired level of risk-return, and inclinations. Methling and von Nitzsch (2020) apply this tailored view to

thematic portfolios that follow the core-satellite investing strategy (see Welch, 2008). The study results show that by aligning thematic satellite funds with core portfolios, rather than treating them as independent allocations, "the inefficiency of core satellite portfolios can be reduced by an average of 11.74%" (Methling & von Nitzsch, 2020, p. 1), with only a modest increase in relative volatility. The most interesting side is that catering to investors' needs and desires that may go beyond purely financial and monetary interests is not only possible, but potentially beneficial.

It must also be noted that alternative investments allow to exploit market inefficiencies through arbitrage-like solutions, while also giving targeted risk exposure that may not be attainable in traditional markets (see Ang, 2014). Furthermore, alternatives provide access to markets and niches that aren't normally available to the general public through listed securities, along with reduced volatility and protection against some systemic risks, making them effective inflation hedges (Flynn & Amaru, 2025).

2.1.2 Perils

Needless to say, such potential in high returns brings with it an equally high level of risk. The risk-return tension is in fact largely respected, as J.P. Morgan points out in many of its articles (see J.P. Morgan, 2024a). Some specific types of ETFs, for instance, are part of the so-called Complex Registered Funds. This sub-category has several risks arising from the specific nature of its underlying but also some that are common to all alternative investments such as higher volatility, liquidity, and holding risks (see J.P. Morgan, 2024a). To this, it is interesting to juxtapose the criticism made by Michael Cembalest in 2023. According to the Chairman of Market Investment Strategy at J.P. Morgan Asset Management, one of the hidden risks of private equity and venture capital investments, in particular, is that their performance – the returns upon which the prices at which they are traded depend – is still unrealized and thus "still only on paper" (Cembalest, 2023). Many considerations can be made in this respect, leading us down a slippery line of reasoning, one that could easily end with the conclusion that nothing is truly realized until it is monetized. In reality, valuing private assets can indeed be complex, but while this constitutes an additional risk and therefore corroborates the need for caution and strong background research, it does not necessarily mean that the value is not there, just like with any future investment valuation. The issue at hand is that the true returns of private equity

funds can only be accurately assessed after all underlying investments have been exited and such process could take many years (Jenkinson, Sousa, & Stucke, 2013). Until then, performance figures are based on valuations of the unsold assets still held in the portfolio, which exposes to estimation risks and biases especially since such interim valuations are frequently used by private equity firms to promote and raise capital for their subsequent funds (ibidem). More will be said about specific issues with pricing passion-led investments and assets in the next chapters. Considering the not completely predictable cash flows and sizes requires a sophisticated set of solutions that may not be readily available to investors, creating a growing need for expert intermediation. This unpredictability and lack of complete transparency adds a layer of complexity to investing in alternatives, as these often rely on private and therefore semi-opaque information. On the matter, research shows that, while some managers try to take advantage of such asymmetry, the market ultimately punishes inflated fund returns (see Brown, Gredil, & Kaplan, 2017).

Another vulnerability of alternative investments – and probably one of the most compelling in the case of art, luxury, and collectible assets – is that including them in one's portfolio requires a high degree of analysis and expertise. Any investment opportunity clearly calls for attentive and throughout exploration, but when it comes to non-traditional assets this can become extremely research intensive. Deviating from commonly traded assets, alternatives draw their biggest strength and their most insidious peril from the same thing: the need to be observed, picked apart, dissected, understood from every point of view – because no fund, venture, REIT, or project will ever be perfectly identical to another.

2.2 Newest investment trends in times of uncertainty

Over the years, the use of alternative investments has grown enormously, with a marked shift from the public sector to private equity. The presence of a large pool of major privately-owned companies – at a ratio of almost 7:1 to their listed counterparts (Izzo, 2025) – underlines that the market understands and rewards the advantages offered by alternative investments of this type, especially in times of uncertainty. Albeit the most traditional of the non-traditional, private equity investments reflect those characteristics of greater direct control, complexity, and confidentiality that we have highlighted as the

common denominator of such instruments and the investor interest seems to continue to build. This claim is – among other things – supported by the results shown in the annual Asset Allocation Outlook edited by Preqin that reports a boost in alternative asset allocation of 8.7% between 2022 and 2023 (Preqin, 2024, as cited in J.P. Morgan, 2024b).

Recent global and macroeconomic developments have increasingly uncovered the need to look beyond traditional investment vehicles towards a strong portfolio diversification often achieved through such alternatives. As stated, the implementation of strategies that comply to diversification and low correlation allow investors to shield themselves from market failures, shocks, and systemic risks. Although not immune to fluctuations – private equity suffered severe shocks especially between 2022 and 2023 due to rapidly rising interest rates (Edlich et al., 2025) – in the long run, alternatives have proven reliable and private equity has returned more than the S&P500, rewarding investors' patience (ibidem). The same cannot be said of all alternative asset classes, of course, but the growing need to build portfolios that are resilient to market complexities and uncertainties has increasingly driven the search for assets that can stabilise volatility in difficult times. With a growing gap between better-differentiated and better-performing funds and lessdifferentiated and worse-performing funds (Edlich et al., 2025), alternative enthusiasts continue to believe and increase their exposure. At the same time, institutional investors such as endowments, foundations, and private pensions have also actively increased alternative allocations between 2020 and 2024, with a particular focus on private equity (Preqin, 2025). While uncertainty has created a more unstable and turbulent environment, alternative investments have retained their status of inflation hedge and useful diversifiers, standing their ground and weathering the storm.

Though not essential, it's entertaining to note that, in the realm of luxury spending, one of the most resilient luxury segments according to Bain & Co. is the beauty sector. The good performance of "small indulgences" (D'Arpizio et al. for Bain & Co., 2025, p. 3), although seemingly unassuming, relates back to the concept of the Lipstick Effect. Introduced in 1998 by Juliet Schor, the theory suggests that, in times of financial distress, people turn to affordable luxuries to feel comforted while avoiding or postponing other more substantial discretionary splurges (Schor, 1998, as cited in Danziger, 2024).

As of 2025, Jay Serpe for J.P. Morgan reports the following to be the key themes to new alternative investment potential. First, the renowned demand-supply mismatch in the US real estate market offers great opportunities. Then, interest rates normalising – even if at a slower than expected pace amid FED tariffs worries – means that both private equity and private credit can take a sigh of relief, with growing opportunities for M&As and asset-backed credit. Finally, AI and innovative technologies being on a roll expand the market of venture capital investments, especially due to the "infrastructure bottleneck" triggered by the growing need for data centres (Serpe, 2025).

2.3 Wealth Management

Parallel to pure investment, there is another activity that has to come to terms with investor sentiment and that is deeply influenced by the behavioural and cognitive theories described so far: wealth management. Singaporean bank DBS describes this quite wide area of advisory as "making strategic financial decisions encompassing retirement planning, tax strategies, and investment ventures" (2024). The approach taken is usually one of holistic consultancy aimed at protecting and potentially growing the client's wealth through planning and working around the client's objectives – let them be shorter-term goals like home ownership, paying off debt, or financing entrepreneurial drive, or more long-term such as philanthropic giving, tax optimization, or wealth transfers. Being so multifaceted makes wealth management profoundly different from pure investment: while the latter often relies on performance measures constructed to be as objective as possible, wealth management has to juggle the personal and social fabric of the client.

At the highest levels, philanthropic giving, patronage, and other charitable donations are extremely popular as they offer reputational as well as fiscal benefits, especially when directed toward the arts, education, or heritage institutions (Horstmann, 2020). In an article from 2024, the American journalist Felix Salmon presents his theory of "philanthropic cakeism" – a play on the saying "having your cake and eating it too" – explaining how billionaires are able to simultaneously obtain the aforementioned tax and PR benefits but retain control over the sums theoretically donated. This is made possible through vehicles such as donor-advised funds (DAFs; see National Philanthropic Trust, accessed May 2025) or private foundations (Salmon, 2024) that allow within certain limits to shield the trustor from prying eyes. The subject of donations and the controversy

surrounding their benefits is a very topical and much-discussed issue. Here, it will suffice to point out that the presence of loopholes that may advantage some – perhaps even but not necessarily to the detriment of others – does not seem to be enough of a motive to overrule the societal benefits at which the fiscal incentives aim. Similarly, legacy asset management decisions such as the sale of family property, the preservation of an art collection, or the division of assets among heirs are rarely made purely for financial reasons, tending to blend emotional and symbolic ties.

Given all this, the wealth management sector may be even more exposed to biases and prejudices, not only because of the innate and inevitable fallacies that affect human beings in general, but also due to the psychological and emotional dynamics that naturally emerge when the individual is placed within a social context. Furthermore, family relationships may pose an additional layer of complexity, as wealth and heritage management usually involve a plurality of people. More research is needed to assess these claims empirically. This is coupled with the need to allocate what we will call here "passion assets" – fine art, luxury goods, and collectibles such as rare wines, watches, and classic cars. These play a key role by becoming true social signalling tools and allowing one to assert one's cultural capital rather than merely diversifying one's portfolio, balancing financial strategy and wider societal perspectives (Karpik, 2010; Deloitte, 2023).

The topical issue of inheritance, central to many asset management considerations, seems to be particularly affected by these issues. Indeed, inheritances represent a delicate moment in which financial and emotional needs clash with regulatory and legal requirements, requiring not only technical expertise but also sensitivity and mediation skills. Among the most complicated assets to undergo this process are, unquestionably, collections. Regardless of their content, collections pose a relevant challenge to wealth managers as their complexity stems not only from the illiquidity and subjective valuation of such assets - as will be further discussed in the next chapter - but also from everything that surrounds them. Deloitte's 2023 biannual Art & Finance report highlights these factors and notes how the market is already feeling the impact of what is described as "the biggest generational wealth transfer in history" (Deloitte Private & Art Tactic, 2023, p. 181), expected in the next two decades, with 2022 marking a record year for single-owner collections entering the auction market (ibidem). For wealth managers, this presents both

a challenge and an opportunity as only 24% of collectors interviewed report having a long-term estate plan in place for their art, while most recordkeeping is still manual and fragmented (ibidem, pp. 152, 204). Although this is not the place to explore such a vast and complex subject – which would undoubtedly deserve a dedicated, monographic treatment – it is important to underline its influence on the trends observed in relation to the matter at hand. When money, emotionally charged goods, and family dynamics come together, it can become recipe for a disaster, especially in the absence of professional guidance. This is why many prominent scholars and professionals preach the need for education and timely planning for such moments, therefore stressing the importance of wealth management in an often underrated context like the one discussed here.

3. Passion-led, irrationality, and illiquid, subjective markets

Among the trenches of investment opportunities that fall under the "alternative" category, many have been trying to find the right way to incorporate art, luxury and collectible goods. Ever since Midas wished for everything he touched to turn to gold, wealth and beauty have been more than just a matter of counting. The desire for objects that go beyond simple function and utilitaristic motives — an Old Master painting, a vintage Ferrari, or a rare Burgundy — has always been wrapped up with status, power, and a fair dose of folly.

The passion markets have for years been the focus of research by many institutes — academic but also and above all financial — that have attempted to describe, motivate, analyse, and predict trends. The literature on the subject is therefore vast, with the main points of reference being the periodic reports drawn up by UBS, Art Basel, and Arts Economics on the one hand, and Deloitte on the other. The niches potentially subject to concomitant collecting and investment are also many. To cite just one example from recent research focus, among them we can find — besides the more traditional watches, jewellery, vintage cars, and artworks — luxury handbags, whose market has matured with a compound annual growth rate (CAGR) of 5.6% between 2019 and the projection for 2026 (Credit Suisse Research Institute & Deloitte Luxembourg, 2020, p. 58). The purpose of this chapter, and of the thesis as a whole, is not to examine each of these categories individually, but rather to highlight the common thread that links seemingly disparate and diverse assets: they are traded in markets where biases and subjectivity are especially pronounced.

3.1 The Art market – Desires for sale

Among the many asset classes that can be subject to passion investment and extreme subjectivity, the art market offers maybe the most compelling examples. Iain Robertson opens his critical book *Understanding Art Markets* explaining how "[t]he art market specialises in selling desires to those whose senses need pricking." (2015, p. 1). With elegant simplicity, this phrase condenses the complexity of acting in such a market and

introduces the main questions we have to pose ourselves when discussing it: how can someone objectively value and price *desire*?

To fully understand the market, one must first identify the dynamics that define it, the various players that inhabit it, and the customs and conventions that govern their interactions.

3.1.1 Relevance

To give context to the relevance of the art market in the broader financial and economic landscape, this short paragraph will provide a few key figures to highlight the monetary and wealth dimensions of the art market. After a great post-pandemic expansion up until 2022, global art sales were recently estimated at \$57.5 billion, with a decline of 4% and 12% yoy in respectively 2023 and 2024 (McAndrew, 2025, p. 17). This is also shown in the "anemic 14-year annual growth rate of 0.6%, [which] has failed to outpace inflation" (Deloitte, 2023, 61), greatly surpassed by other adjacent industries such as personal luxury. In the short-term, ArtNet's Index for Fine Art (see Morgan Stanley, accessed May 2025) outperformed the S&P 500 between January 2022 and July 2023, but this same declining trend is clear in the mid- to long-term as – outside of times of uncertainty where art is still seen as a form of hedge – the S&P 500 largely surmounts art indexes (Deloitte, 2023, p. 36). Despite the decline in value, the number of global transactions increased to 39.4 million in 2023 and 40.5 million in 2024, increasing by 4% and 3% respectively yoy, largely fuelled by stronger performance in lower price tiers (McAndrew, 2025, p. 17). A sort of democratization in the making? Not really, as accessibility is still absolutely limited, with "lower price tiers" still incompatible with most people's wallets (Bain & Co., 2025). Zooming out, art is still relevant in wealth allocation, with an estimated 5% of wealth on average allocated to art and other collectibles. This percentage rises to 10.9% when considering answers given to the Art & Finance survey in 2023 (Deloitte, 2023). All in all, a shift is occurring as financial and emotional drivers slowly converge – no more excluding each other – towards a less polarized view of wealth I either direction. For what concerns wealth strategy, report results are to be interpreted. The Deloitte 2023 survey revealed 85% of wealth managers believe art and collectibles should be integrated into wealth management offerings – an increase that aligns with the rise of services tailored to passion assets, but that could be victim of sampling bias.

3.1.2 Characteristics

First and foremost, the art market is one that thrives on discretion. For all its loudness, flash, and headline appeal, the true wealth of the art world moves quietly. Just like in many other high-end settings, the true wealth of the art world lies in movements that strive to remain, as much as possible, within the drawing rooms where they unfold. Despite the efforts of several national anti-money laundering authorities (e.g. His Majesty's Revenue and Customs in the UK) and the resulting improvements in transparency, information regarding the price, availability, ownership, provenance, and location of artworks is often either undisclosed or not easily accessible (McAndrew, 2025, p. 40). Indeed, perhaps more than in any other sector, the art market is built upon the coexistence of custom and regulation, making interpersonal trust an almost indispensable prerequisite, not only among professionals within the field, but also between them and the collectors who rely on their services. This opacity remains one of the most pervasive and impactful concerns for those who would like to start investing or increase their investment in art (Deloitte, 2023), placing professionals in the sector in the challenging position of balancing confidentiality with compliance. Among other things, this lack of transparency also complicates asset valuation: the less information is available, the more speculation has a chance to take hold. One of the most interesting aspects related to this emerges in conversations with gallerists and advisors, who have made the pursuit of balance their profession, and who have learned to navigate the tensions between elitism and democratization, tradition and innovation, exclusivity and accessibility. In this context, the selection of the artwork, the artist, and the collector to whom a piece is sold becomes a focal point in the work of gallerists and art advisors, who act as mediators between the interests of artists – seeking to place works with those who will both appreciate them and contribute to the their careers, while avoiding uncritical resale (i.e. flipping) that could damage the valuation of a single work and of the artist's practice as a whole – and those of collectors, who aim to acquire valuable pieces at a fair price, enhancing the quality and prestige of their collection (Bernardini, 2023).

Another attribute that characterises the art market is the lack of homogeneity in the good exchanged and their inherent illiquidity. Although it is true that there are "families" of artworks – e.g. by medium or media type, school or artistic movement, period, and geographical segmentation – the homogeneity found in more traditional markets, or those

in which it is more traditional to invest, is absent. One of the most useful forms of categorization for a financially attuned collector, however, is that of market segments, which features prominently in the reports heavily relied upon throughout these pages. Beyond the breakdown into emerging, mid-career, established, and blue-chip artists (see Morgan-Harris, accessed May 2025), there is the classic distinction between primary and secondary markets. This is coupled with a gargantuan issue from an investor's point of view: the lack of liquidity. Certainly, the purchase and resale of an artwork, whatever it may be, is not comparable to that of a fund or a real estate asset, but it does reflect some of the logistical and reputational difficulties of swift liquidation. Indeed, as noted earlier, speculative – or simply too quick – resale is often frowned upon in the interconnected art world, even if logistically it's extremely difficult to pull off. The primary market (composed by galleries, artists, and institutions) ideally tends to nurture and sustain artists' long-term careers. The secondary market, by contrast, is driven by shortterm profit maximisation through individual transactions. These almost antithetical goals are reflected in how artworks are priced: in the primary market, prices are often understated, while in the secondary, they're often inflated. The under-pricing in the primary market stems, among other things, from the strong stigma surrounding downward price revisions. In an article by Alice Xiang, such shame shines through when she notes how "one author received responses like 'a work of art is never decreased in price, never', 'the problem is that if your prices are very high, you cannot go back anymore', and 'I have a moral responsibility to maintain the price." (Horowitz, 2011, as cited in Xiang, 2018, p. 1719). Similar concepts were discussed on multiple occasions in private conversations with the author of this dissertation, gradually reinforcing the perception of a pervasive bias in this context and ultimately inspiring the writing of this text. On the other side of the spectrum, auctioned art can often reach unbelievable prices, seeing bids that seem to defy any rationality. More about this topic will be discussed in the next chapter.

3.1.3 Pricing

Although it may seem of little relevance in the broader – and definitely less quixotic – context of traditional investment and wealth management, art plays a multifaceted, fleeting, and perhaps therefore undervalued role. These so-called passion investments defy traditional financial logic but not because they lack value. Their worth is simply

determined by something far less tangible and this alone is understandably enough to invite the stern glances of purist investors.

The discussion of the economic value of artworks lies somewhere between necessity and disapproval, perhaps because it risks compromising the aura of mysticism that surrounds what are, in every practical sense, commodities of exchange. As such, the first and most obvious rule that governs valuation is the law of supply and demand. In addition to this, there are more technical considerations – such as condition and provenance – as well as contextual factors, including the artist's milestones if still living, institutional recognition, participation in major exhibitions or biennials, and the roster of collectors who have previously acquired their work (Rabb, 2024). It is also crucial to note how, even when these objective dimensions are known, valuations of passion assets rarely follow these guidelines to the full. As one might expect, it is precisely the desire to possess the object - whether driven by passion, status, social signaling, or other motives - that drives up the prices of certain works, as has often been reported in newspapers and specialised journals (the Salvator Mundi case, already mentioned, remains a textbook example). It is worth adding that the hurdle for the general public to accurately estimate valuations has been further amplified in recent decades as the professional figure once tasked with mediating between artists and the public, the art critic, is losing its centrality. With both positive and negative but undoubtedly profound effects, the lack of a unified cultural compass in contemporary culture opens the way for both experimentation and speculation. In this context, classic pricing models from Traditional Finance, such as discounted cash flow or comparable market analysis, struggle to fully account for the unique dynamics of the art market. This is why when Behavioural Finance tries and offer to explain asset pricing by examining the heuristics, biases, and psychological factors that influence investor behaviour, it seems particularly fitting.

3.2 Other passions for sale – Luxury and collectibles

Parallel to art, luxury goods and experiences also display many of the characteristics described here. The annual Luxury Study by Bain & Company and Fondazione Altagamma considers, among these, nine categories: luxury cars, personal luxury goods, and luxury hospitality (accounting for 80% of the market), and fine wines and spirits, gourmet food and fine dining, high-end furniture and housewares, fine art, private jets

and yachts, and luxury cruises (Bain & Co., 2025, p. 5). Unlike standardized financial instruments, and similarly to art, collectibles lack a centralized pricing system and are affected by the complex mix of scarcity, provenance, aesthetic appeal, cultural relevance, and hype. More than in any other case, luxury relies heavily on narrative capital: the story behind an item or a brand shapes its desirability and price, meaning that craftmanship has to be meticulously weaved with cutting edge storytelling. This aspect is crucial to understand luxury market dynamics and will be further explored in the next chapter.

The same trends in art sales can be superimposed to these other markets – as they experienced the same moderate declines after the high of the post-pandemic – but the numbers are absolutely magnified considering an estimated aggregate market value of €1.48 trillion globally in 2024. However big the spending, personal luxury goods, considered the "core of the core" of the market, experienced their first contraction in 15 years (Bain & Co., 2025, p. 2), while experience luxuries surge as the super wealthy shift their focus from owning to showing. What's still striking is how blurred the lines have become between collecting, consuming, and investing, as value today isn't just stored or grown but lived, enjoyed, and ultimately displayed. Compared to art, though, other categories of passion assets tend to benefit from more standardized pricing, professional grading systems, and even corporate infrastructure. This relative transparency often makes them more palatable to traditional investors who seek tangible diversification without wanting to step entirely into the opaque terrain of cultural markets. Auction houses and brands in these sectors frequently collaborate to build indices and market intelligence, offering a quasi-financial language that remains elusive in the contemporary art world. Where art thrives on uniqueness and connoisseurship, these other assets offer a seductive balance between individuality and structure.

3.3 Players of the market, collectors and UHNWI

Whether it is art, leather goods, jewellery, vintage cars, or wine, there are many professionals who can boast exceptional preparation and professionalism. Even those who act as customers in these markets often possess a great deal of knowledge and experience of the goods traded. Furthermore, they often have more expertise than the average financial advisor in their niche field of interest (Deloitte, 2023, p. 292). Yet, the collector is not a client like any other. What emerges consistently in every conversation

on the subject – be it with service providers, sellers, advisors, or with buyers and investors – is the presence of something close to an obsession, a kind of addiction to the act of collecting.

The collector-merchant-speculator triad is one of difficult interpretation and discernment. As already discussed elsewhere (see Bernardini, 2023), what matters here is to highlight how the irrationality observed in traditional markets inevitably spreads like wildfire in markets where subjectivity is already the dominant force. Cook and De Feyter (for Deloitte) give insights on the different types of collectors, based on "the frequency of purchases and sales, their motivations for owning art, and their knowledge and experience of the art markets" (Deloitte, 2023, p. 271), namely the avid art collector, the occasional collector, the art investor, and the legacy collector. Parallelly, Evan Beard examines similar archetypes – that he much more poetically names the Enterprising collector, the Connoisseur, the Trophy Hunter, and the Aesthete – dividing them along two dimensions: academic and financial drive (2018).

3.3.1 The avid art collector

Driven by passion and often relatively easy access to liquidity, the avid collector – the Enterprising collector in Beard (2018) – surely sees art as an asset class, but not strictly as pure investment (Deloitte, 2023). Access to this elite is difficult as information is gatekept but, once in, this gilded community is the one that defines the market through highly curated collections that aim to disrupt and experiment. As Beard states, "[t]his is the group most tethered to the dynamism, quarrels, gossip, lawsuits, information, misinformation, fads, and rumors of the contemporary art market" (Beard, 2018).

3.3.2 The occasional collector

White-collar by day, collector by night, the Aesthete does not derive pleasure from owning or knowing, but from the visual appeal of the art piece itself (Beard, 2018). Much less subject to others' opinions, these collectors may though be the most prone to fall into internal cognitive fallacies and traps. This is because, while for them art can be an investment or a pleasure, the drive comes from a visceral space that is by nature extremely volatile.

3.3.3 The art investor

Financially savvy, the pure art investor is what Beard describes as a Trophy Hunter (ibidem). This investor benefits most from acquiring and often speculating on art – let it be through resale or status signalling – through Machiavellian financial transactions. In fact, these investors/collectors use leverage and lending to fund strategic operations, such as "a purchase at an upcoming auction, a private purchase, or even providing a third-party guarantee" (Deloitte, 2023, p. 271). Although being far less prone to react with their "guts", their main fault may be overconfidence – which, underestimated, can foster biases just as well.

3.3.4 The legacy collector

Also known as the Connoisseur (Beard, 2018), they view their collection as part of their legacy and pride themselves in knowing everything and anything there is to know (Deloitte, 2023). Their strategy is simple: buy few, methodically chosen, often blue-chip pieces that can be contemplated for decades to come. Despite their expertise, the legacy collector can still fall for biases, especially due to their heavy reliance on expert opinion.

While these categorizations can be limiting, they are useful in understanding the *forma mentis* of the particular demographics that – although being increasingly diverse in terms of gender, ethnicity, and so on – have a quite shared way of approaching alternative investments and art specifically.

To this one must add that access to specific deals and pieces within the art market is not merely a function of capital, but of connection as off-market transactions, early access to catalogues, exclusive previews are often reserved to inner circles. Unlike public equity markets, where regulation at least attempts to level the playing field, art remains profoundly asymmetrical in its distribution of opportunities with gatekeeping being not just an occasional barrier but a defining structural feature of the market.

Moreover, in the cohort of individuals who populate this niche, one category can be chosen to represent its epitome. The acronym UHNWI – ultra high net worth individuals – in five letters encapsulates a glittering world that is difficult to imagine from the outside where worldliness and ideals merge and mingle. Although there is no single, agreed definition, an ultra high net worth individual is usually considered such when their total wealth is between USD 30 and 50 million (Credit Suisse Research Institute & Deloitte

Luxembourg, 2020, p. 12). The motive driving the choices of these individuals is as understandable as it is articulated: how to make the most of capital, between pure and speculative investments, philanthropy, and personal whim. The peculiarity lies in the fact that, for individuals with these characteristics, the boundaries between these territories are extremely blurred and overlap in the case of the capitalisation of broadly said collections and works of art. The obvious centrality to the market in terms of volumes makes this demographic extremely interesting to study. UHNWI are estimated to allocate around 25% of their wealth to their collections, further reflecting the market's inherent "top-heavy" distribution in terms of buyers (50% of auction sales for fine art were in the \$10 million+ segment), auction houses (only 3 major auction houses making up 52% of public auction sales in 2023), and artists (1% of artists generated 75% of art wealth in the same year), according to Deloitte. The concentration of transactions to a small elite indeed further reveals the entry barriers at play, but we can see how lower price ranges have started to gain momentum, surpassing the growth rate of the overall market.

Finally, to these must be added all the professionals in the field: galleries, auction houses, art advisors, critics and specialized journalists, dealers, and so on. The scaffolding on which the art system rests also includes public as well as private institutions (e.g. foundations), but also many other stakeholders, difficult to identify but still essential to the broadening of the spectrum of contingencies to be considered.

3.4 Pure Financial instruments vs Wealth Management strategies

Efforts to integrate passion assets into traditional finance have often focused on trying to make them fit existing financial models rather than doing the opposite and embrace and exploit their uniqueness.

Some of the most successful attempts to incorporate themes of passion into alternative investments are the classic market indices. Just like for many other asset classes, indices can be constructed for passion assets too. Some examples include the Artprice Global Index (Artprice, accessed May 2025), the well-known Sotheby's Mei Moses Indices (Sotheby's, accessed May 2025; see Mei & Moses, 2002), or the S&P Global Luxury Index (S&P Dow Jones Indices, accessed May 2025). Even in the industry reports – heavily drawn upon throughout these pages – art, luxury, and collectibles are presented alongside equities and bonds. This, rather than betraying the soul of one or the other

market, reveals an interest if not in understanding at least in describing a phenomenon of not inconsiderable magnitude.

Despite increasing attention, most financial institutions remain hesitant to embrace them fully – and not without a good reason. Their reluctance often stems not from ignorance but from a rational aversion to the characteristics that make these markets so intriguing to private collectors: opacity, illiquidity, and subjective valuation. With limited regulation, no clear revenue stream or cash flows, and reputational risks that are difficult to quantify, art falls outside the scope and interest of standard risk models. Moreover, the intimate scale of transactions and the deep expertise required make it a poor fit for institutional scalability. In the case of art, for example, art investment vehicles such as art funds and art exchanges attempt to mirror more conventional structures like mutual funds and stock exchange, offering investors exposure to the art market without direct or complete ownership (see Horowitz, 2011; Deloitte, 2014; Xiang, 2018). These instruments seek to financialize an asset class whose returns remain, empirically, volatile and loosely correlated to traditional benchmarks (see Goetzmann, 1993; Mei & Moses, 2002; Horowitz, 2011). So much so that William J. Baumol, in a biting 1986 paper, argues how "[ownership of artworks] may well represent a very rational choice for those who derive a high rate of return in the form of aesthetic pleasure" (1986, p. 14). Thus, despite their theoretical appeal, these instruments have struggled to gain traction under many points of view (see Horowitz, 2011; Deloitte, 2023; McAndrew, 2025). The characteristics discussed above, the absence of regular income streams, volatility, and so on often make art an inefficient standalone pure investment (Frey & Eichenberger, 1995; Renneboog & Spaenjers, 2013). Attempts to treat artworks like any other asset class in fact ignore its defining traits, as their aesthetic and symbolic value outweigh financial motives – or at least it realistically should. On the contrary, art fits much more organically within a wealth management framework, where the focus is not on short-term returns but on curating a legacy, protecting wealth across generations, and aligning financial decisions with personal values, taste, and identity holistically. As interviews with market experts suggest, successful investment strategies often blend rational analysis with instinctive appreciation, balancing "head" and "gut", as especially UHNWI continue to go back to it in order to align with long term and intergenerational goals (Deloitte, 2023). In this light, the challenge is not merely to adapt passion-led spending to finance but to

design new models that embrace a hybrid logic where aesthetic and financial value can coexist without falling for the reductionist trap of considering them superimposable.

Moreover, the question of whether art is a good investment is perhaps less intriguing than how and why people come to invest in it. The next chapter will focus not on verdicts, but on frameworks, on the heuristics, myths, and market structures that shape behaviour in these "other" markets.

4. Cognitive biases specific to passion goods

"I am in blood

Stepp'd in so far that, should I wade no more,

Returning were as tedious as go o'er"

(*Macbeth*, 3.4.1440–1442; Shakespeare, 1606)

Such a complex market – heavily dependent on the mercurial actors populating it and exchanging wildly multifaceted assets – cannot but turn into the perfect incubator of cognitive fallacies. To step into the collector's headspace is to step in a place where emotion, psychology, and capital intertwine. The luxury, art, and collectibles markets – being so fundamentally based on subjectivity and human relationships and interactions – bring to light many biases, often interlinked and overlapping. The quote above may serve both as an introduction to this chapter and as a thematic *fil rouge* that ties together key elements of behavioural finance application to passion investing: ego, regret, loss, and the real or perceived irreversibility of choices.

Of the many to be discussed, here we have chosen to delve into some, considered particularly relevant, groundbreaking when firstly introduced, or that marked important advances in the discipline; and some others, that ignited personal curiosity, especially in relation to the art market. In this chapter, the structure of the discussion will touch the three key concepts of endowment, loss aversion, and status quo, emulating the 1991 paper by Kahneman, Knetsch, and Thaler titled *Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias*.

After this overview, Chapter 5 will explore more in depth a specific phenomenon built on these concepts: herd mentality. Strongly linked to social proof, FOMO, and the status quo bias, it appears to be the perfect synthesis of how investors behave in illiquid, emotionally charged markets like the ones for art, luxury, and collectibles.

4.1 Endowment Effect and Overvaluation in art auctions

First described and named by Thaler in 1980, the endowment effect illustrates "the fact that people often demand much more to give up an object than they would be willing to pay to acquire it" (Thaler, 1980, as cited in Kahneman et al., 1991). Key to behavioural

social sciences, it implies that people assign value not on the basis of logical assumptions but on the mere ownership of the asset under valuation (Morewedge, 2009; Kogler et al., 2016). These same pieces of research underline the tight link between the endowment effect and what is known as Regret Theory, according to which it is not so much the fear of losing something that drives endowment, but the desire to avoid potential regret (see Bell, 1982; Fishburn, 1982; Loomes & Sugden, 1982). Unlike some other biases and anomalies, though, endowment is not universal but rather it depends on the individual's expertise and knowledge of the market, as Barberis and Thaler demonstrate (2003) – an aspect particularly important when the endowment effect is applied to real-life scenarios and passion-led sales. The true collector often possesses a solid knowledge about their collected assets, especially when compared to the average knowledge on the topic that non-specialised financial intermediaries may have (Deloitte, 2023). According to Barberis and Thaler (2003) the collector should therefore be less subject to the endowment effect. Yet the strongly emotional and personal nature of the collector's interest seems to outweigh this knowledge, as the effects of ownership and of the endowment effect still emerge quite clearly despite connoisseurship. Yamamoto and Navarro-Martinez present a fresh and interesting perspective on the endowment effect that may have been underestimated in past research; the authors explore the temporal dimension of this bias, highlighting how endowment effects are heightened as the duration of a transaction grows (Yamamoto & Navarro-Martinez, 2022). Such findings are especially relevant to rather illiquid investments like the ones at hand, as the lack of liquidity naturally expands duration. Another intriguing point raised by this article concerns the so-called sign effect, introduced by Frederick et al. (2002) as the steeper discounting of gains compared to losses, and later expanded by Molouki et al. (2019). The latter, in particular, move beyond the so-called "loss aversion account" and "ownership account" by assuming the subsistence of a "contemplation-emotion" account that drives endowment "according to which it is the more impactful emotional experience of waiting for the outcome in the case of losses that produces the sign effect" (Molouki et al., 2019, as cited in Yamamoto & Navarro-Martinez, 2022, p. 1009). Direct consequence of endowment, the sign effect captures our tendency to react more strongly to losses than to gains of equal magnitude. This partiality to sign is echoed in the phenomena of momentum and reversal, anomalies whereby investors overreact to

information coming into their possession, amplifying the natural positive or negative shifts in the market and leading to over or undervaluation (Ren, 2024). Although in the macro environment these phenomena eventually correct themselves, misevaluation due to behavioural and emotional factors is echoed in the micro setting and is at the foundation of some of the most typical fallacies in the case of passion investments.

The implications of the endowment effect are particularly clear in the context of art auctions, where the bid-offer disparity offers continuous examples of mismatch in perceived value (Knetsch, 1989). It goes without saying that this instance virtually applies to any sale. The seller typically sets a higher price than the buyer is willing to pay, both due to a desire for gain and the greater value ascribed to the owned good. Being tacitly aware of this – as any dealer would – auction houses leverage the market's opacity and inherent information asymmetry. Auction dynamics that favour greater irrationality on the basis of specific cognitive fallacies are exploited to achieve the highest possible price for a lot, often exceeding the valuations it might have had outside the auction context. Interestingly, in this sense, the pricing of particularly subjective goods is mainly derived from past sales history. Therefore, the interest of the whole system in maintaining biases that can drive up prices, and thus earnings, is evident. A striking example of these dynamics and their repercussions is the case of collector Dmitry Rybolovlev and the fraud lawsuit he filed against art dealer Yves Bouvier and Sotheby's. The Russian billionaire after acquiring works worth around \$2 billion including some of the most expensive works of all time such as the Salvator Mundi (attributed to Leonardo da Vinci), filed a lawsuit in 2018 for fraud and aiding and abetting. Rybolovlev claimed he received outof-market valuations for the works he bought from the Swiss dealer and accused the auction house of facilitating the alleged scam. In addition to the mark-up due to charges and surcharges allegedly imposed by Bouvier, Rybolovlev also complained about the direct loss he suffered due to the subsequent sale of some works below the estimates he had received at the time of purchase. Among them, a controversial Post-Impressionist work by Paul Gauguin caused a particular stir as the resale generated only 60% of the price the Russian collector had initially paid, according to documents filed with the New York court (Dolmetsch, 2024). Obviously, such cases are not representative of the industry's day-to-day and get highly echoed by media, also for their scandalous nature. The relevance of the episode, however, can't be ignored, especially as testimony of the psychological and apparently completely irrational dynamics at play in the arts and luxury markets.

4.2 Anchoring in price setting and negotiation

Among classic cognitive biases and general phenomena, anchoring is maybe the one that can better present to the reader the stubbornness of the human mind – an attitude that will come back again and again when looking into behaviour and heuristics. Anchoring refers to the predictable way in which people will make estimates that will never completely deviate from their initial valuation. This initial benchmark will be adjusted according to the information in one's possession, and the final answer will still reflect that original estimation. In Tversky's and Kahneman's words, "different starting points yield different estimates, which are biased toward the initial values" (1974, p. 1128). A notable application of such effect can be found in business planning, and in particular in the evaluation of compound events. Due to the aforementioned tendency to keep the initial value as a reference point for estimation, intricacy and interconnectedness in conjunctive events (e.g. deadlines are respected for each step of a project) are often overseen as the probability of success is overestimated. Specularly, underestimation of failure in such structures or systems also occurs (ibidem).

This issue is remarkably relevant when thinking of price setting and negotiation in contexts where – in addition to the typical dynamics outlined in the previous chapter – pricing issues are further complicated by this biased view. Typical auction dynamics frame price expectations are through the catalogue pre-sale estimates, set by the auction house and the seller, whose secret reserve represents the minimal threshold. It's easy to understand that the tendency to anchor value not on objective characteristics but on personal perception, or arbitrary signals from experts, amplifies the occurrence of extreme valuations. Building on the work of Strahilevitz and Lowenstein (1998), Graddy et al. conduct a rigorous statistical analysis on the anchoring bias effects specifically in art auctions. They find that not only is anchoring real and present in this context, but it is particularly strong for short holding periods, as the last realised price is more salient and therefore exhibits a stronger biasing effect (e.g., a painting bought two years ago is fresh in mind, so the seller or buyer is more likely to "anchor" to that price).

4.3 Availability Heuristics and Media Influence on market trends

In their 1974 article Tversky and Kahneman describe another key factor to human judgement – availability – and its use as basis for heuristic rules. This is, when asked about the frequency or the probability of an event, people are drawn to recall similar or applicable instances and evaluate such event based on their ease at bringing them to mind. As any other heuristic, availability does serve the purpose of reducing complexity and to a certain extent it reflects reality effectively, as more probable situations are usually easier to recall than less frequent ones. At the same time, however, it exposes individuals to the risk of predictable systematic errors. Such biases fall into different sub-categories depending on the aspect of availability they touch upon: "biases due to the retrievability of instances; biases due to the effectiveness of a search set; biases of imaginability; illusory correlation" (Tversky & Kahneman, 1974, pp. 1127-1128). Although they can be declined in slightly different ways, the leitmotif of these biases is that they pave the way for "buzz" elements that leverage this easiness to recall and move the market and its prices. In the case of art and luxury, this effect is particularly accentuated by both the aura that the media create around the gilded world of collectables and the expectations they place on performance and return. When viewed from the outside, investing in passion goods seems truly glittering and unadulterated – a romantic starry-eyed perspective that lured in many. Investors focus on spectacular headlines that report record-breaking sales and celebrity buyers, forming skewed expectations of performance and demand. This constant exposure to high-profile success stories fosters a kind of tunnel vision, where investors become fixated on the spectacular few rather than the statistical many. In the age of social media, this is further amplified as easiness to recall blends with sensationalisms that do not fully represent reality.

Closely related to these is the "confirmation bias", the tendency to seek out or give more weight to information that supports existing views. In a media-saturated landscape, investors may unconsciously select narratives that reinforce their beliefs about specific investment ventures, further distorting perception. Park et al. (2010, p. III), for example, find evidence of this bias among investors that frequently access message boards and social media. These investors also show signs of greater overconfidence, another cognitive effect related to availability heuristics and that "refers to the tendency of

investors to overestimate their knowledge, skills, and abilities when making financial decisions" (Kahneman & Riepe, 1998, as cited in Singh et al., 2025). When applied to highly subjective assets as the ones at hand, these risks are naturally even more prominent and relying on availability heuristics become less and less effective decision-making tools

4.4 Loss Aversion and the Masterpiece Effect

Closely linked to endowment and sign effect, loss aversion refers to how "(losses) loom larger than improvements or gains" (Kahneman et al., 1991, p. 199), even if they may be equivalent in magnitude. First introduced in the context of Prospect Theory (Kahneman & Tversky, 1979), it grew in significance as other studies were published and it was shown how loss aversion effects outdid those triggered by traditional risk aversion alone (Thaler et al., 1997). Although irrational by economic standards, the psychological motivations behind this predisposition are quite intuitive and reflect what has been said to be the basis of the sign effect: the disappointment of loss is not matched by the satisfaction of gain. Once again, this topic is tightly linked to that of overconfidence as collectors may overestimate their ability to time and predict the market, which can reinforce loss aversion and holding. At the same time, it entwines with regret aversion, particularly when the asset carries a long-term potential narrative. As opposed to anchoring, in the case of loss aversion research by Graddy et al. shows an opposite trend in that "loss aversion appears to have a statistically larger effect for the longer periods than for the shorter periods" (2014, p. 21). The difference between the collector and the dealer or the speculator also lies in this: while short-term actors may be more vulnerable to market trends, long-term holders may fall paralyzed by the prospect of incurring a realized loss, even if the investment underperforms.

Mei and Moses (2002), investigating the financial performance of fine art as an investment, describe an interesting ancillary to loss aversion in what they name the "masterpiece effect". The empirical results they present show, amongst other things, how high-priced "masterpieces" tend to underperform less expensive artworks specifically in terms of resale value. This ties closely to loss aversion as once someone has bought a high-priced artwork, they may become reluctant to sell at a loss, even in cases of underperformance, as owners tend to hold on in hopes of a rebound or to avoid realizing a financial and reputational "loss", especially in public settings such as auctions. In

exclusive circles where entry is already hard-won, reputational losses – real or perceived – can feel like jeopardizing one's permanence in the elite, causing loss aversion to skyrocket.

4.5 Disposition Effect and Mental Accounting

Especially in financial contexts, loss aversion manifests itself with particular significance in what is known as the disposition effect. As Shefrin and Statman describe (1985, as cited in Weber & Camerer, 1998), there is a distinct tendency to let go prematurely of instruments whose value is increasing, and to cling on to others that may be depreciating. The disposition effect is extremely widespread in portfolio management and can become the reason behind frictions between investors and intermediaries that try to contain their irrationality without acknowledging its psychological drivers. This effect gains even more relevance when is noted how it defies the traditional categorization of individuals as either risk-averse or risk-seeking. The divide is traditionally quite clean and only subject to changes in the very long run (e.g. over different life phases of the investor). However, if observed through the lens of the disposition effect, the same investor may have radically different attitudes toward risk solely because of perceptions that go beyond rational thinking. This tendency lies at the foundation of infamous market shocks like the 2008 financial crisis. Conversely, it underlies the very market movements considered as the standard in sectors such as that of classic cars or other collectibles, where illiquidity is expected just as much as irrational holding patterns.

The concept of mental accounting, an ancillary and consequence of the disposition effect and other effects we have discussed, was first introduced by Richard Thaler in 1999. It refers to the cognitive process by which individuals categorize and evaluate financial activities, often leading to irrational decision-making. Passion-driven investors and collectors may be particularly exposed to these effects as they may mentally segregate assets based on their purchase price, treating gains and losses differently, which in turn can cause them to sell appreciating assets too early (to "lock in gains") or to hold onto depreciating assets in hopes of a rebound. Although it might be considered a trivial example, this same mechanism can be found in the viral social media trend of "girl math". With self-mockery, many girls have tried their hand at giving examples of mental accounting, justifying purchases using flawed but emotionally satisfying logic. This

could've gone to the extent to, for example, frame refunds as "free money" or reason that buying something on sale would mean saving money rather than spending it. Although it is certainly a playful way of highlighting a common behaviour, this trend underlines how mental accounting is more widespread and intuitive than one might think, so much so that papers were written on the topic from this exact point of view (e.g. Zahrah & Soeherman, 2024). The "girl math" trend showed empirical examples of how people don't always evaluate gains and losses in absolute terms, but rather through subjective and emotionally filtered mental "ledgers". Similarly, a collector might look at purchases made at a delayed auction as "already paid for" and therefore somehow already emotionally amortised, making the dynamics of pricing and reselling more complex. These informal mental accounts create emotional compartments that distort rational portfolio management and could potentially impact the broader wealth management strategies of the investor.

4.6 Sunk Cost Fallacy in collectibles and heritage assets

Similarly, the sunk cost fallacy occurs when an individual continues undaunted along a path despite knowing deep down that it is suboptimal, purely because they feel bound by the efforts – broadly intended: mental, emotional, monetary – already invested. It was defined by Arkes and Blumer as the irrational escalation of commitment to a decision based on past, non-recoverable investments (1985). Contrary to traditional economics, under this lens, costs incurred in the past influence choices regarding the future, not merely for reasons of budget constraint, but through the influence of loss aversion and regret avoidance (Falchetta, 2015). While this same bias could just as easily apply to interpersonal relationships, it becomes particularly interesting when one considers the effects it produces on investor behaviour. Rather than somehow admitting the "defeat" of a poor initial decision, the investor may fall into the trap of continuing with unsuccessful portfolio strategies in the hope of redeeming themselves, thus justifying the capital put into, say, an underperforming stock. In a way, then, the attitude enabled by the sunk cost fallacy is that of active backward-looking: a decision-making posture where emotional loyalty to prior choices outweighs objective assessment of current options.

In the context of collectibles and cultural heritage assets, the sunk cost fallacy manifests itself particularly vividly. As we have said, these goods carry a great deal of emotional and symbolic value, making their owners feel obliged to hold or to keep investing time

and capital in them, beyond what would be rational, restoring, preserving, and defending them against obsolescence. The fallacy is even more amplified when the asset is seen as become part of the investor's self-concept; similarly to what sociologist Arjun Appadurai describes as "the social life of things" (2014), letting go of such an asset can feel like letting go of one's own story. What's particularly interesting is to think of how this applies not only to private collectors but also to corporates or institutions. Both in terms of general investing and in heritage or specific illiquid assets management, even institutions may fall prey of this trap, continuing to support foundations, estates, or restoration projects beyond reason. Thankfully, this is to some extent mitigated by the boundaries built by the context and the pressures to allocate fundings properly, making the sunk cost fallacy more prevalent in private collections.

4.7 Status Quo Bias and resistance to portfolio diversification

Maintaining the status quo has historically been one of the most powerful drivers behind wars, revolutions, but also everyday decisions. Samuelson and Zeckhauser, in 1988, carried out a series of experiments through which they concluded that "Subjects [...] adhered to status quo choices more frequently than would be predicted by the canonical model" (Samuelson & Zeckhauser, 1988, p. 8). This tendency to resist change – formally known as the status quo bias – stems from very common psychological mechanisms, rooted in the distinctly human fear of the unknown and once again profoundly linked to loss aversion. In a more recent study, El Harbi and Toumia (2020) apply empirical methodology to show the influence of status quo bias on investments on venture capital firms. Their findings support Samuelson and Zeckhauser's research and in particular provide further applied empirical evidence of their categorisation of status quo bias into three clusters: rational decision-making, cognitive misperceptions and psychological commitment (Samuelson & Zeckhauser, 1988, as cited in El Harbi & Toumia, 2020). These categorisation factors include the fear of remorse (mentioned in regret theory) and the so-called complexity trap. The latter, a frankly pervasive cognitive fallacy, plays on individuals' reluctance – and, realistically, unfeasibility – to think through all the possible implications of each one of the outcomes of their choices. This becomes exacerbated in situations of uncertainty (Tversky & Shafir, 1992) or, as Iyengar and Lepper (2000) point out, when there are too many options to choose from which leads to choice overload and

potentially to decision paralysis. And while sometimes this perceived complexity is not reflected in the reality of the problem at hand, it causes real overwhelm which may lead – and often does – to sticking to what already is. Kempf and Ruenzi grant empirical evidence in the case of investment in mutual funds, demonstrating that "[t]he greater the number of alternatives, the more pronounced the [status quo bias]" (2006, p. 212). Nevertheless, the brilliant paper from Gallagher et al. tries to shake this feeling of powerlessness, hopeful that some rationality can still be displayed in the face of it all: "[t]he universe may be inexorably tending toward greater levels of entropy, but even escalating entropy does not mean that we should throw up our hands [...]" (2012, p. 10).

The implications of the status quo bias are clear in the context of portfolio diversification, where investors may be inclined to maintain allocations to asset classes or vehicles they feel familiar with. In contrast to the sunk cost fallacy, status quo bias brings a passive attitude, one of almost forward-aversion. It's not that the biased investor wants to keep the asset allocation to that specific strategy for a reason – let it be biased or completely rational – but rather they avoid taking the decision altogether. Therefore, investors may choose not to diversify because the act of reallocation itself entails effort, uncertainty, and the fear of future regret. As Samuelson and Zeckhauser (1988) note, even when presented with new and potentially superior options, individuals disproportionately favour the status quo, simply because it is already established. This mechanism becomes even more pronounced when the investor is faced with unfamiliar investment vehicles such as the ones at hand: a plethora of opportunities that bring as much excitement as fear for their opacity. In passion-led or generally illiquid markets, each asset appears to have peculiarities that make comparative judgements impossible and that, consequently, make impossible the integration in one's portfolio of assets that even to the rational individual present complexities and risks. In this sense, status quo bias does not just manifest as inertia but as an emotional self-preservation strategy in the face of perceived complexity.

4.8 Social Proof and FOMO from contemporary art to Birkins and NFTs

"One means we use to determine what is correct is to find out what other people think is correct" (Cialdini, 1993, p. 98). It's with this statement that Cialdini begins the fourth chapter of his 1993 book on influence, opening to a simple yet pervasive concept: the rule

of social proof. Social proof is the psychological phenomenon where people, rather than basing their choices solely on objective parameters or their preferences, look at how others around them behave. The usefulness of such a mental shortcut comes from the very human desire to act in a way that doesn't jeopardise one's ties to the community, and protect the sense of belonging, acceptance, and the comfort of conformity that often come from aligning with one's peers. From this point of view, social proof is far more than a modern psychological quirk. It is an evolutionarily adaptive mechanism, dating back to early human environments, that often meant the difference between survival and exclusion for our ancestors. When uncertainty is high the pull of social proof intensifies, as people defer to the judgment of others, hoping that collective behaviour can reflect hidden knowledge (Cialdini & Goldstein, 2004). In passion-led and emotionally charged markets, the rise of digital platforms has heightened an already pervasive dynamic, offering visible, quantifiable signals of social endorsement (e.g. likes, shares, trending tags, sold-out drops) that construct desirability in real time. Passion-led assets, already heavily emotionally charged and symbolically rich, become even more desirable when perceived as endorsed by one's aspirational peer group. In this context, expert voices, influencers, and auction-house whispers don't just inform, they act as catalysts, accelerating urgency and the need for social validation. What may begin as a personal aesthetic preference can quickly become a socially conditioned pursuit of status. The result is a behavioural environment where market choices are driven as much by aesthetic cues and parasocial endorsements as by expertise.

The somewhat more inflated term "FOMO" (i.e. the fear of missing out) is based on this same idea of doing something not because of personal wants or preferences but because of the fear of being the outcast in a social setting. Przybylski et al. were the first to define and measure this phenomenon in their seminal 2013 paper, after which a plethora of studies were conducted on the topic. The interest in understanding how FOMO interacted with renowned cognitive biases in financial decision making grew in the past decade, and many studies were subsequently published. Azizah (2025), in particular, found younger generations – Generation Z and millennials – to be more prone to engage in risk-taking investment behaviours, also under the influence of social media comparison and digital hype towards new and trendy assets such as cryptocurrency (see also Gerrans et al., 2023). These inclinations can clearly only be enhanced in already emotional-charged markets.

For example, in auction settings, these phenomena intertwine with industry-specific behaviours such as performative ego bidding. Bidding at high-stakes auctions, in fact, is rarely only about acquiring an object at fair value, but rather about asserting dominance, reputation, or aesthetic leadership within the elite.

The practice of speculating on prices and value of works – particularly prominent in contemporary art and new media (see Beckert & Rössel, 2013; Velthuis, 2005) – sinks its claws into this precise flaw in the human cognitive system. Striking was the case of the Bored Ape Yacht Club's NFTs, traded for exorbitant sums in the crypto gold rush of the early 2022. When discussing the topic with experts, the general sentiment was clear: when considered as standalone digital artworks, NFTs are widely accepted as an already burst speculative bubble. Yet, the buzz around them was such that for years NFTs dominated industry magazines and global newspapers. Auction houses, platforms, artists, and dealers often understand this dynamic intimately, sometimes going as far as orchestrating sales as theatrical events that, blending ritual with psychology, become performances of their own. One of the most famous examples of this was the Banksy shredder charade. In 2018, just after the "Girl with Balloon" artwork was declared sold at the Sotheby's auction, the canvas began to self-destruct through a hidden shredder in the frame, placed by the artist. The stunt – part prank, part critique, part branding stroke of genius – made media go wild and saw the piece's value multiply (see Reyburn, 2021). Another similar myth surrounds the Hermès Birkin, the epitome of inaccessibility and a true status symbol, an icon in short, just like the woman whose name it bears. Unlike other brands, Hermès reports no official waiting lists for its Birkins and even the purchasing process is shrouded in mystery, which only adds to the speculation. The Birkin since the 1980s grows in popularity, everyone wants it, very few can have it, and so it becomes the perfect example of a Veblen good, an object whose desirability increases the more unattainable it becomes (Kapferer & Bastien, 2009). Research corroborates this behaviour, showing that scarcity can be indeed perceived as a signal of exclusivity and therefore increase the symbolic power of an object amplifying FOMO among wanna-be buyers (see Lynn, 1991; Roux, Tafani & Vigneron, 2017). In this sense, the Birkin is no longer a handbag but a physical representation of status and prestige.

5. Herd mentality vs. expert curation in investment decision-making

5.1 Herding in passion-led markets – A perfect storm

"Men, it has been well said, think in herds; it will be seen that they go mad in herds, while they only recover their senses slowly, and one by one."

(MacKay, 1841/1932, p. XX)

Going back to MacKay's work, the concept of the herd is more relevant than ever. The term herd mentality is defined in its keynote paper as "everyone doing what everyone else is doing, even when their private information suggests doing something quite different" (Banerjee, 1992, p. 798). As is common for highly regarded authors, these few words perfectly and comprehensively convey the phenomenon at hand. The tendency to mimic the actions of others – considered from the individual more authoritative because of their expertise or simply for being the majority – is backed by some of the biases discussed just above, such as anchoring, social proof, FOMO, confirmation bias just to mention some. Dang and Lin explain the application of such behaviour to the stock market, stating that "[i]n the existence of herding, a group of investors tend to trade in the same direction over a period of time, leading to observed behaviour patterns that are correlated across individuals" (Bikhchandani et al., 1998, as cited in Dang & Lin, 2016, p. 247). Moreover, this behaviour can become more powerful when diversification requires stepping away from widely accepted norms or practices, triggering the status quo bias. As Banerjee (1992) and Bikhchandani et al. (1992) observe, individuals frequently rely on the choices of others to inform their own in times of uncertainty. There have been many examples of speculative transactions in the financial market that have revealed the pervasive presence of this flawed behaviour. From the dot com bubble at the turn of the new millennium (Goodnight & Green, 2010) to the more recent frenzy for GameStop shares born out of a subreddit in 2019 (Umar et al., 2021), these mass movements of investors have made manifest the delicate balance the market needs to maintain itself. But the herd does not only call for imitation. Aligning with the majority creates a false sense of anonymity that fosters the diffusion of responsibility, much like in the case of the bystander effect firstly

theorized by Darley and Latane in 1968. In herd behaviour, this manifests in the outsourcing of the burden of judgement. The safety that comes from adhering to consensus is enticing as it creates, not only a sense of belonging, but the comfort of perceived shared accountability and therefore shared consequences. The herd offers a sort of security blanket that allows the individual to avoid taking an actual choice, hiding their liability behind the shield of the crowd. The consequences of herd mentality can be various and interconnected to produce what some describe as ripple effects. Banerjee, specifically, introduces the concept of herd externalities – an individual's decision to disregard information in their possession, preferring to follow the herd, is detrimental since the use of this information could have enriched and benefited the community, and was instead ignored and wasted (1992). Another fundamental of herd behaviour theory, introduced by these scholars and highly correlated to herd externalities, is the concept of informational cascades. These refer to the fact that the herd is not made by completely irrational, illogical agents; even completely rational people can participate in this behaviour when taking into account "spoiled" information sets, creating said cascade. In Irrational Exuberance (2000/2015), Robert Shiller describes these phenomena in detail and compiles their doctrine in a single work, providing insights on economic bubbles and investor irrationality.

Driving and further amplifying the effects of the herd is the use of a persuasive and compelling narrative that often overrides purely rational thought (Goodnight & Green, 2010). This is the context for one of the most interesting and cross-cutting branches of contemporary economics, the one that discusses narrative economics, introduced by Shiller and discussed extensively in the eponymous 2017 paper. Despite this topic would deserve its own monographic discussion, it is important to consider it in relation to herd mentality since, as mentioned, the role of narrative profoundly drives human behaviour. Indeed, storytelling has always been necessary as it shapes the way we look at the world around us, how we relate to others, and how we try to make sense of reality. Yet, not all stories are created equal and, especially when discussing matters of capital and investment choices, it's important to discern between factual reality and narrative. In literature, the concept of the unreliable narrator has been studied at length as it was and is widely used by authors to push the audience to adopt certain perspectives (see Booth, 1983; Brown, 1991). The investor can be seen through this literary lens as both author and audience. In

search of legitimisation, self-soothing, or self-exaltation, the investor rationalises and creates coherent stories *post hoc*, tailored to fit the narrative they want so desperately to believe. Shiller extensively discusses this topic and proposes to apply epidemic models² to what he calls "social epidemics", highlighting the relevance of social interactions as sources of information even in investment situations:

"Even though direct face-to-face communications of ideas is less important in modern times because of the communications media, it still remains a workable model. The core model may apply no matter how people may connect with each other. A survey of individual investors shows that on average they talked to 20 people about a typical investment, and only 23 percent did any analysis themselves (Shiller and Pound 1989)."

(Shiller, 2017, p. 975)

While less effective in accurately depicting the spread of ideas, epidemic models are still useful as they provide a reference framework within which to interpret contagious social dynamics rooted in herd behaviour – above all, market bubbles. It is once again Shiller who offers a somewhat canonically accepted definition of a speculative bubble as "a situation in which news of price increases spurs investor enthusiasm, which spreads by psychological contagion from person to person, in the process amplifying stories that might justify the price increases and bringing in a larger and larger class of investors [...] despite doubts about the real value of an investment" (Shiller, 2000/2015, p. 64). From this starting point, Wiggins (2024) defines the features of the asset class with what he describes as the "best bubble potential". The author finds narratives to be the first and most critical theme among them, especially in the case of true, simple, and transformative ones portraying disruptive and potentially underestimated industries (Wiggins, 2024). The second macro-theme identified is that of uncertainty, either of scale of impact, or of value. Indeed, as he states, "big bubbles need a big story" (ibidem). Difficulty of valuation adds a layer of ambiguity that can lead to hopeful expectations and frenzy, probably two of the most insidious and powerful drivers of behaviour.

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² Namely the SIR model theorised by Kermack and McKendrick in 1927 that "implies that from a small number of initial infectives, the number infected and contagious itself follows a bell-shaped curve, rising at first, then falling" (Kermack & McKendrick, 1927, as cited in Shiller, 2017, p. 976).

Given all this, it becomes clear – and, frankly, almost peaceful – to say that art, luxury, and collectibles, as passion-driven goods, check all these boxes, creating what can only be described as the perfect storm. Obviously, this market is not only subject to such movements, but its very characteristics act as catalysts for their repercussions. The case of digital art and blockchain is particularly striking, but the problem of blindly following the crowd applies with different magnitudes to this whole system.

5.2 Curating the crowd

An often-underrated aspect that plays a great role in herd and persuasion phenomena is authority. Especially in "ambivalent or ambiguous" situations (Cialdini & Goldstein, 2002, p. 49) individuals tend to defer their decisions to others they see as more knowledgeable on the matter at hand. The effect of following these authority figures can too be ambivalent or ambiguous: arbitrarily giving others power to steer our decisions can lead them on a righteous path but potentially also away from it. Conspiracism aside, it's evident that, in a world as complex as today's, it would be impossible to gather all the knowledge needed to always take informed decisions with enough confidence. In popular culture this complexity is beautifully depicted by the consequentialist moral dilemmas presented, for example, in *The Good Place*. In this TV series, one of the characters argues precisely that modern life is so interconnected that seemingly simple actions have unintended consequences and unavoidable have ripple effects (Schur, 2016–2020).

In the context of investment decisions, especially when talking about private markets, external expertise is often required and guidance essential to navigate the wide variance of options available. Private equity and alternative investment vehicles involve operational challenges that go beyond illiquidity *per se* and can only be tackled appropriately by professionals. Monitoring capital calls, planning for distributions, and maintaining desired exposure levels in investors' portfolios, experts curate individual investments to ensure the optimal risk-return ratio (Izzo, 2025). Such curation becomes more and more important the more complex the investment at hand, therefore relying on experts "with highly specialized knowledge in their fields is often an essential part of smart decision making" (Cialdini & Goldstein, 2002, p. 49). The advisor's role has been shaped through the decades to become one of not only giving advice on what to invest in, but of helping slow down decision-making processes, injecting due diligence, and acting

as a sort of behavioural buffer that can effectively mitigate herding and biased behaviour. On top of their knowledge and industry expertise, another fundamental asset provided by advisors is their network and the access this may grant to off-market deals and information. In the recent frenzy caused by international tariffs, many advisors found themselves in the position of having to shy clients away from following biased and incautious investment strategies. At the same time, interviewees report their daily efforts to maximise clients' portfolio returns while minimizing their scepticism and tending to their needs – surely financial, but also emotional. Expert curators, thus, act as filters between the investor and the plethora of options, information, and rumours they may have been exposed to. In 2015, Gennaioli et al. propose the concept of private advisors as "money doctors", a fitting metaphor that highlights this multifaceted role. Just like patients do not have the degree of expertise they would need to cure themselves, investors rely on advisors to manage their investments. This paper then proceeds to discuss how generalized and "occasionally self-serving" (Gennaioli, 2015, p. 92) the advice may in both cases be, criticizing the blind trust placed upon expert curators. While it will be left to more authoritative sources to confirm or deny this claim, it's safe to say that these figures are not from another planet, they are humans subject to the same biases as anyone else. Their knowledge and experience definitely allow them to have better discernment, and their intercession means that investors can't create post hoc narratives to justify their choices, or at least not as easily. At the same time, even the most eminent institutions may fall prey of the herd, following fads under pressure from the market or other players, with time constraints and uncertainty increasing these risks (see Wang, 2023).

Whether because of actual authority, perceived authority, or simply to follow the majority, people tend to take choices that stray from what the proverbial rational individual would choose. This goes to the extent of ignoring individually available information that would cue a different response, and even of suppressing personal opinions to avoid feeling like an outsider.

5.3 Correcting the Irrational

Over the years, many academics and non-academics have attempted to come up with solutions to mitigate the effects of cognitive fallacies. In the case of status quo bias and the complexity trap, for instance, Gallagher et al. (2012) propose countermeasures to what

they call the 'worshipping of complexity'. Their suggestions begin with prioritisation as a way to cut through the inertia that complexity often creates, and go on to include the devolution of power and authority, particularly in response to increasingly fragmented decision-making structures like nowadays'. Finally, the authors recommend embracing the possibilities offered by new technologies to enable coordination and action across actors who would otherwise remain disconnected. Although the paper describes such applications to the field of military strategy and national security, these mechanisms can just as easily be observed in more ordinary settings, where complexity becomes a reason to postpone decisions or stick to familiar paths. It goes without saying that another fundamental tool to fight biases and irrationality in financial markets is literacy. Many studies and countless surveys are published periodically highlighting the importance of financial education; according to the OECD's 2023 international survey, for example, the average adult financial literacy score across 26 countries was just around 60%, with notably lower results among younger generations and women (OECD, 2023). Lusardi and Mitchell (2014) compile a review on the research on the topic until that point and go on to show that individuals with higher levels of financial literacy are more likely to avoid high-cost debt and plan for long-term goals, highlighting how financial knowledge can be seen as a form of investment on human capital. Even some financial institutions have taken it upon themselves to raise awareness and educate their client base. UBS, for instance, has published a series of articles on the subject, also offering intuitive tips on how avoid falling these to into cognitive traps. In the field of public policy, measures close to nudging have begun to be introduced. For example, choice architecture rather than traditional awareness campaigns has been used to counteract the low number of organ donors in many countries: by switching from an "opt-in" to an "opt-out" system where individuals are presumed donors unless they actively refuse, donor rates have risen significantly, demonstrating both the effectiveness of framing and the inertia of status quo bias (Beraldo & Karpus, 2021).

These, among many others, have been the proposals aimed at correcting the cognitive biases discussed at length. The point of view from which many of them stem is the same that Kahneman and Tversky adopted in formulating their theories: heuristics and biases are flaws of the mind, and as such they must be fixed in order to reach rationality. However, this approach is not shared by everyone. Gigerenzer's viewpoint, for example,

has traditionally been seen in clear opposition to that of the latter mentioned, particularly because he "sees the glass half full, not half empty" (personal communication, 2025). In this sense, the same heuristics often labelled as biases when compared to normative models of rationality, can also be seen as tools in the "adaptive toolbox" framework. Gigerenzer and Gaissmaier (2011) suggest that many of the so-called biases are evolved shortcuts, tools that perform well in a world where time, information, or cognitive energy are limited. Looking at the problem from this perspective, the fear of regret or loss aversion or any of the other so-called "fallacies" described in the literature are not to be corrected but rather understood and used as design inputs for structuring decision environments.

These same structures and solutions can be applied also to the case at hand, at least to some extent and even if it remains far more complex. It almost seems as though the illiquid market of passion assets is inextricably tied to – and perhaps even constituted by – the very deviations of its players from the traditionally said rationality. In conversations with some of the interviewed experts, certain measures have been deemed useful to limit the externalities of these biases, but they are also recognized as being so heavily leveraged and so deeply embedded in the market's dynamics that any shift in the structure is perceived as a lethal threat to its very survival. The disruptiveness of any systemic change is indeed considerable, but there are also those who believe it's necessary, in order to foster a better environment for collectors and artists.

6. What's next?

Thanks to some inspiring conversations with experts in the field, I was able to gather valuable insights on where these trends might lead both investors and the market itself. First and foremost, it was highlighted how generational turnover may impact the art market more significantly than previously imagined. Indeed, new generations of collectors seem to be reinterpreting the concept of ownership, extending to passion assets the broader trend toward the digitisation and dematerialisation of consumption seen in recent years (Morhart et al., 2020, as cited in Hübscher, 2022). In an age when everything is shared and exclusive ownership is increasingly rare in the so-called sharing economy (see Belk, 2014; Hamari et al., 2016), "renting or leasing expensive, high-status items may be a way to leverage individuals' lifestyles" (Hübscher, 2022), making luxury accessible even to those who might not otherwise be able to afford it. In this context, models like fractional ownership or community-based art funds are not only financial innovations, but also cultural ones. They respond to a desire for inclusion, albeit perhaps more façade than fact, similarly to the apparent democratisation mentioned above. We will not go here into the discussion of the socio-cultural motivations and repercussions of desiring status and social signalling, to the extent of accepting not having full ownership, if it means still being able to shine in the reflected light. However, it is clear that a shift is happening, one rooted in the emotional and cognitive mechanisms that we explored in previous chapters. Appearing to belong to the elite is more and more important than actually being part of it.

Another interesting insight to be applied to the generational turnover in the making is that Generation Z appears to hold a set of priorities and interests unlike any before. In an age where precariousness and uncertainty run rampant, variables like social impact and sustainability are no longer seen only as *desiderata* but as fundamentally expected features, even when it comes to investments. Without intergenerational communication and customized estate planning techniques, in the private sector these changes run the risk of turning into hot spots for disputes. Therefore, wealth managers are more than ever asked not just to advise on asset preservation, but to mediate family dynamics, digitize and consolidate collection data, and ensure the continuity of cultural and financial legacies (Deloitte, 2023, pp. 184–204). One of the experts interviewed noted how this

change could also influence the way we approach the funding of culture, through hypotheses such as the integration of hybrid structures combining social impact investment with forms of collective ownership of cultural heritage. Such a model would make it possible to align emotional return, social value and cultural preservation, reinforcing a form of 'return' that goes beyond mere economic appreciation. Moreover, models of this kind could help counter some of the side issues of traditional public donation or subsidy. Think, for instance, of a museum like the Uffizi launching a campaign to acquire a €20 million work through a co-ownership model: individual citizens could participate as micro-investors, getting not only a symbolic share of the acquisition, but also concrete benefits - exclusive visits, priority access, or even the possibility to pass on their participation to subsequent generations. Still embryonic and certainly in need of fine-tuning, these formulas could represent an interesting opportunity for an intermediate path between patronage and speculation, especially suitable for a generation that seeks meaning as much as status.

For what concerns the integration of AI, blockchain, and other innovative technologies, the tone adopted by the experts reflected a cautious pragmatism. If on one side there is curiosity and intrigue for the potential, on the other there is a clear-eyed awareness of the structural and ethical challenges these innovations pose. The topic of fractionalisation emerged frequently once again, especially in relation to tokenization as the idea of lowerbarrier access to collectible assets was seen as appealing, even though experts acknowledged that financial institutions often lack the in-house expertise to develop such products, and that the art market remains largely unregulated, creating compliance headaches. As one interviewee had remarked during my interviews in 2023, even if institutions were to adopt third-party solutions, the key question remains: "What's in it for us in terms of revenue?". Clearer incentives and reduced legal risk are also needed to unlock large-scale adoption, which may otherwise remain limited. With further technological refinement such as better governance, lower energy costs, and stronger legal infrastructure, these innovations could in the long run reduce friction and enhance transparency across the passion economy. This said, it is clear that technology alone is not enough to revolutionize such a long-standing market, nor it probably should. Rather, what would be valuable about it is its potential, in tandem with human expertise, to help rebuild some of the trust eroded by the recent speculative acceleration. As previously

discussed, blockchain in particular offers the opportunity to develop a new provenance record infrastructure, aided by blockchain being virtually immutable. On the other hand, concerns remain about the inherent environmental unsustainability of these technologies and the infrastructural dilemmas of how to create a unified platform while avoiding overcentralisation. Another interesting application cited multiple times by interviewees was the use of this technology to reinforce authenticity processes, especially through stronger protection for certificates issued by archives, historians, and foundations, which remain vulnerable to forgery. Similarly, blockchain could support the correct implementation of artists' resale rights, though all these applications are still largely theoretical.

Conclusions

Investing in art, luxury, and collectibles or related instruments is undoubtably tough. It's an unregulated, murky market, reliant on individuals to an almost impossible degree. At the same time, its attractiveness relies precisely on its unique smudged edges. Between cold, quantitative finance and the messy, emotional reality of humanness lies that interspace where value is created. Without the human capacity to assign added value to beauty, to emotion, to irrationality, a painting would be nothing more than pigment on canvas, a sculpture just stone, a watch merely metal, a dress simply fabric. It is in flair, and in the ability to see beyond the material and its function, that the elusive essence of the human mind takes shape. With its flaws, of course, but also its insights and the genius that each of us can enjoy today.

In the end, is art a good investment in the purest sense – aseptically and rationally better than many others, even other alternative ones? In all likelihood, no. But that won't stop anyone from buying it. Just like all other collectibles. That is why, in accepting the need not to own solely for financial gain but also for emotional fulfilment, it becomes important to understand the role art plays within collections and broader wealth portfolios, so that we may better balance those drivers of return and hedonism we have so thoroughly discussed. While these themes undoubtedly deserve deeper research and more targeted empirical inquiry, it is hoped that the reflections offered here may serve, if not as inspiration, then at least as a stimulus for further exploration into the intricate psychology of investing in passion-led markets. In this sense, the research presented here brings together the perspectives of experts and scholars, linking them to arrive at one of its own: original, balanced, and mindful of cognitive fallacies, so as to face reality not as we wish it were, but as it is.

References

Ain Tommar, S., Darolles, S., & Jurczenko, E. (2024). Private Equity Performance around the World. Financial Analysts Journal, 80(2), 99–121. https://doi.org/10.1080/0015198X.2023.2292545

Anđelinović, M., & Škunca, F. (2023). Optimizing insurers' investment portfolios: incorporating alternative investments. Zbornik radova Ekonomskog fakulteta u Rijeci: časopis za ekonomsku teoriju i praksu, 41(2), 361-389.

Ang, A. (2014). Asset management: A systematic approach to factor investing. Financial Management Association Survey and Synthesis Series. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199959327.001.0001

Appadurai, A. (Ed.). (1986). The Social Life of Things: Commodities in Cultural Perspective. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511819582

Ariely, D. (2008). Predictably irrational: The hidden forces that shape our decisions. HarperCollins.

Arkes, H. R., & Blumer, C. (1985). The psychology of sunk cost. Organizational Behavior and Human Decision Processes, 35(1), 124–140. https://doi.org/10.1016/0749-5978(85)90049-4

Artprice. (n.d.). Artprice art investment indices. Retrieved May 16, 2025, from https://www.artprice.com/indexes/artinvestment

Atelier Montez. (2025, March 5). Art coefficient. https://montez.it/contemporary-art-factory-in/artup-company/art-coefficient/

Azizah, A. N. (2025). The impact of FOMO (fear of missing out) on investment decisions in the millennial generation. SSRN. https://doi.org/10.2139/ssrn.5127021

Bain & Company. (2025). Luxury in transition: Securing future growth. https://www.bain.com/globalassets/noindex/2025/bain_report_luxury_in_transition_sec uring_future_growth.pdf

Baker, H. K., & Nofsinger, J. R. (Eds.). (2010). Behavioral finance: Investors, corporations, and markets. John Wiley & Sons. https://doi.org/10.1002/9781118258415

Banerjee, A. V. (1992). A Simple Model of Herd Behavior. The Quarterly Journal of Economics, 107(3), 797–817. https://doi.org/10.2307/2118364

Barberis, N., & Thaler, R. H. (2003). A survey of behavioral finance. Handbook of the Economics of Finance, 1, 1053-1128.

Baumol, W. J. (1986). Unnatural Value: Or Art Investment as Floating Crap Game. The American Economic Review, 76(2), 10–14. http://www.jstor.org/stable/1818726

Beard, E. (2018, January 22). The four types of art collectors. Artsy. https://www.artsy.net/article/evan-beard-four-tribes-art-collectors

Beard, W. H. (1879). The Bulls and Bears in the Market. Google Arts & Culture. https://artsandculture.google.com/asset/the-bulls-and-bears-in-the-market-william-holbrook-beard/yAEW2N1zkOAoqA?hl=en

Beckert, J., & Rössel, J. (2013). The price of art: Uncertainty and reputation in the art field. European Societies, 15(2), 178–195. https://doi.org/10.1080/14616696.2013.767923

Belk, R.W. (2014). You are what you can access: Sharing and collaborative consumption online. Journal of Business Research, 67, 1595-1600.

Bell, D. E. (1982). Regret in decision making under uncertainty. Operations Research, 30(5), 961–981. https://doi.org/10.1287/opre.30.5.961

Beraldo, S., & Karpus, J. (2021). Nudging to donate organs: do what you like or like what we do?. Medicine, health care, and philosophy, 24(3), 329–340. https://doi.org/10.1007/s11019-021-10007-6

Bernardini, C. (2023). L'arte come asset di investimento - Analisi, regolazione e prospettive dei fondi comuni di investimento in arte. (Bachelor's thesis). Luiss Guido Carli. https://tesi.luiss.it/36588/

Bikhchandani, S., Hirshleifer, D., & Welch, I. (1998). Learning from the Behavior of Others: Conformity, Fads, and Informational Cascades. The Journal of Economic Perspectives, 12(3), 151–170. http://www.jstor.org/stable/2647037

Boguszewicz-Kreft, M., Kreft, J., & Zurek, P. (2019). Myth and storytelling. In J. Kreft, S. Kuczamer-Kłopotowska, & A. Kalinowska-Żeleźnik (Eds.), Myth in modern media management and marketing (p. 23). IGI Global.

Booth, W. C. (1983). The rhetoric of fiction (2nd ed.). University of Chicago Press. https://dl1.cuni.cz/pluginfile.php/1083046/mod_resource/content/1/Booth-Rhetoric%20of%20fiction.pdf

Borsa Italiana. (n.d.). Toro e orso: Il simbolismo dei mercati finanziari. Borsa Italiana. Retrieved March 24, 2025, from https://www.borsaitaliana.it/notizie/sotto-la-lente/orsoetoro-

260.htm#:~:text=Toro% 20e% 20Orso% 20rappresentano% 20delle,e% 20gli% 20atteggia menti% 20degli% 20investitori.

Bowen, D. (2022). Simple models predict behavior at least as well as behavioral scientists. https://arxiv.org/abs/2208.01167

Brown, Donald. (1991). Human Universals. Philadelphia, PA: Temple UP, New York: McGraw-Hill.

Brown, G. W., Gredil, O., & Kaplan, S. N. (2017, April 30). Do private equity funds manipulate reported returns? Journal of Financial Economics (forthcoming). Fama-Miller Working Paper. https://doi.org/10.2139/ssrn.2271690

Brownstein, O. (1969). The Popularity of Baiting in England before 1600: A Study in Social and Theatrical History. Educational Theatre Journal, 21(3), 237–250. https://doi.org/10.2307/3205465

Bulls and Bears: The Great Wall Street Game (1883). McLoughlin Brothers. Google Arts & Culture. https://artsandculture.google.com/asset/bulls-and-bears-the-great-wall-street-game-mcloughlin-brothers/rAGrc9Nywo-Euw?hl=en

Cembalest, M. (2023, December 5). It's mostly a paper moon: Alternative investments review. J.P. Morgan Private Bank. https://privatebank.jpmorgan.com/eur/en/insights/latest-and-featured/eotm/paper-moon-alts-review

Chambers, D. R., Black, K. H., & Lacey, N. J. (2018). Alternative Investments: A Primer for Investment Professionals. CFA Institute Research Foundation. https://rpc.cfainstitute.org/research/foundation/2018/alternative-investments-a-primer-for-investment-professionals

Chambers, D., Dimson, E., & Kaffe, C. (2020). Seventy-five years of investing for future generations. Financial Analysts Journal, 76(4), 5–21. https://doi.org/10.1080/0015198X.2020.1779498

Cialdini, R. B. (1993). Influence: Science and practice (3rd ed.). HarperCollins College Publishers.

Cialdini, R. B., & Goldstein, N. J. (2002). The Science and Practice of Persuasion. Cornell Hotel and Restaurant Administration Quarterly, 43(2), 40-50. https://doi.org/10.1177/001088040204300204

Cicerone. (2017). De oratore ([edition unavailable]). UTET. https://www.perlego.com/book/4217913/de-oratore-pdf (Original work published 55 BCE)

Credit Suisse Research Institute & Deloitte Luxembourg. (2020). Collectibles: An integral part of wealth. https://www2.deloitte.com/cn/en/pages/deloitte-private/articles/collectibles-integral-part-wealth.html

D'Arpizio, C., Levato, F., Steiner, A., & de Montgolfier, J. (2025). Luxury in transition: Securing future growth. Bain & Company.

https://www.bain.com/globalassets/noindex/2025/bain_report_luxury_in_transition_sec uring_future_growth.pdf

Dale, R. (2004). The First Crash: Lessons from the South Sea Bubble. Princeton University Press.

Dang, H. V., & Lin, M. (2016). Herd mentality in the stock market: On the role of idiosyncratic participants with heterogeneous information. International Review of Financial Analysis, 48, 247–260. https://doi.org/10.1016/j.irfa.2016.10.005

Danziger, P. N. (2024, June 3). With recession threatening, the lipstick effect kicks in and Lipstick Sales Rise. Forbes. https://www.forbes.com/sites/pamdanziger/2022/06/01/with-inflation-rising-the-

lipstick-effect-kicks-in-and-lipstick-sales-rise/

Darley, J. M., & Latane, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. Journal of Personality and Social Psychology, 8(4, Pt.1), 377–383. https://doi.org/10.1037/h0025589

Darwin, C. (1872). The origin of species by means of natural selection, or, The preservation of favoured races in the struggle for life (6th edition., with additions and corrections). John Murray.

Dawson, G. E. (1964). London's Bull-Baiting and Bear-Baiting Arena in 1562. Shakespeare Quarterly, 15(1), 97–101. https://doi.org/10.2307/2867963

DBS Bank. (2024, October 31). What is wealth management? Here's all you need to know. https://www.dbs.com/in/treasures/articles/nri-hub/live-enriched/what-is-wealth-management

Deloitte & ArtTactic. (2014). Art & finance report 2014. Deloitte Luxembourg. https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/financial-services/artandfinance/lu-en-artandfinancereport-08092014.pdf

Deloitte Private & ArtTactic. (2023). Art & finance report 2023 (8th ed.). Deloitte. https://www2.deloitte.com/lu/en/services/financial-advisory/research/art-finance-report.html

Dolmetsch, C. (2024, January 30). Sotheby's Wins Suit by Russian Billionaire Over Art Fraud. Bloomberg. https://www.bloomberg.com/news/articles/2024-01-30/sotheby-s-wins-suit-filed-by-russian-billionaire-over-art-fraud

Dunne, S. (2018). "Murketing" and the rhetoric of the new sincerity. Journal of Marketing Management, 34(15-16), 1296-1318. https://doi.org/10.1080/0267257X.2018.1484791

Edlich, A., Croke, C., Dahlqvist, F., & Teichner, W. (2025, February). Global private markets report 2025: Private equity emerging from the fog. McKinsey & Company.

https://www.mckinsey.com/industries/private-capital/our-insights/global-private-markets-report

Einav, L., & Levin, J. (2014). The data revolution and economic analysis. Innovation Policy and the Economy, 14(1), 1–24. https://doi.org/10.1086/674019

EL Harbi, S. and Toumia, O. (2020), "The status quo and the investment decisions", Managerial Finance, Vol. 46 No. 9, pp. 1183-1197. https://doi.org/10.1108/MF-11-2019-0571

Engelen, B. (2019). Nudging and rationality: What is there to worry? Rationality and Society, 31(2), 204-232. https://doi.org/10.1177/1043463119846743

Fabozzi, F. J., Gupta, F., & Markowitz, H. M. (2002). The legacy of modern portfolio theory. The Journal of Investing, 11(3), 7–22. https://doi.org/10.3905/joi.2002.319510

Falchetta, G. (2015). The sunk cost fallacy: A literature review and an empirical test (Bachelor's thesis, University of Bolzano). https://doi.org/10.13140/RG.2.2.25171.12322

Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. Journal of Finance, 25(2), 383–417. https://doi.org/10.2307/2325486

Fishburn, P. C. (1982). The foundations of expected utility. Theory & Decision Library. Springer. https://doi.org/10.1007/978-94-015-7744-1

Flynn, S., Amaru, V. (2025, March 21). The potential benefits of alternative investments. J.P. Morgan. https://www.jpmorgan.com/insights/investing/investment-strategy/the-case-for-alternative-investments

Frederick, S., Loewenstein, G., & O'Donoghue, T. (2002). Time discounting and time preference: A critical review. Journal of Economic Literature, 40(2), 351–401. https://www.aeaweb.org/articles?id=10.1257/002205102320161311

Frey, B. S., & Eichenberger, R. (1995). On the return of art investment return analyses. Journal of Cultural Economics, 19(3), 207–220. https://doi.org/10.1007/BF01074050

Gallagher, M. J., Geltzer, J. A., & Gorka, S. L. v. (2012). The complexity trap. Parameters, 42(1), 17–28. https://doi.org/10.55540/0031-1723.2623

Gane, N. (2021). Nudge economics as libertarian paternalism. Theory, Culture & Society, 38(6), 119-142. https://doi.org/10.1177/0263276421999447

Gennaioli, N., Shleifer, A., & Vishny, R. (2015). Money doctors. The Journal of Finance, 70(1), 91–114. https://doi.org/10.1111/jofi.12144

Gerrans, P., Abisekaraj, S. B., & Liu, Z. (Frank). (2023). The fear of missing out on cryptocurrency and stock investments: Direct and indirect effects of financial literacy and

risk tolerance. Journal of Financial Literacy and Wellbeing, 1(1), 103–137. doi:10.1017/flw.2023.6

Gigerenzer, G. (2008). Rationality for mortals: How people cope with uncertainty. Oxford University Press.

Gigerenzer, G., & Selten, R. (Eds.). (2001). Bounded rationality: The adaptive toolbox. The MIT Press. https://doi.org/10.7551/mitpress/1654.001.0001

Gigerenzer, G., Todd, P. M., & ABC Research Group. (1999). Simple heuristics that make us smart. Oxford University Press.

Goetzmann, W. N. (1993). Accounting for Taste: Art and the Financial Markets Over Three Centuries. The American Economic Review, 83(5), 1370–1376. http://www.jstor.org/stable/2117568

Goffman, E. (1974). Frame analysis: An essay on the organization of experience. Harvard University Press.

Goodnight, G. T., & Green, S. (2010). Rhetoric, risk, and markets: The dot-com bubble. Quarterly Journal of Speech, 96(2), 115–140. https://doi.org/10.1080/00335631003796669

Graddy, K., Loewenstein, L., Mei, J., Moses, M., & Pownall, R. A. (2014). Anchoring or loss aversion? Empirical evidence from art auctions. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2501520

Grinblatt, M., & Han, B. (2005). Prospect theory, mental accounting, and momentum. Journal of Financial Economics, 78(2), 311–339. https://doi.org/10.1016/j.jfineco.2004.10.006

Hamari, J., Sjöklint, M., & Ukkonen, A. (2016). The sharing economy: Why people participate in collaborative consumption. Journal of the Association for Information Science and Technology, 67.

Harvard Library, The South Sea Bubble, 1720: Narratives of the First International Crash, accessed March 24, 2025, https://library.harvard.edu/exhibits/south-sea-bubble-1720-narratives-first-international-crash

Healey, M. P., & Hodgkinson, G. P. (2015). Toward a theoretical framework for organizational neuroscience. In D. A. Waldman & P. L. Balthazard (Eds.), Organizational Neuroscience (Monographs in Leadership and Management, Vol. 7, pp. 51–81). Emerald Group Publishing Limited. https://doi.org/10.1108/S1479-357120150000007002

Hjeij, M., & Vilks, A. (2023). A brief history of heuristics: How did research on heuristics evolve? Humanities and Social Sciences Communications, 10(1), 64. https://doi.org/10.1057/s41599-023-01542-z

- Horowitz, N. (2011). Art of the Deal: Contemporary Art in a Global Financial Market (REV-Revised). Princeton University Press. https://doi.org/10.2307/j.ctvx078bv
- Hübscher, I. (2022, January 20). The changing notions of materialism and status in an increasingly dematerialised world. Luxury Tribune. https://www.luxurytribune.com/en/the-changing-notions-of-materialism-and-status-in-an-increasingly-dematerialised-world
- Iyengar, S. S., & Lepper, M. R. (2000). When choice is demotivating: Can one desire too much of a good thing? Journal of Personality and Social Psychology, 79(6), 995–1006. https://doi.org/10.1037/0022-3514.79.6.995
- Izzo, R. (2025, 30 gennaio). Salotto finanziario Scenario dei mercati e opportunità in ambito Private Credit e Private Equity [Presentation slides]. Banca Profilo. Unpublished material.
- J.P. Morgan. (2024a). Risks of Complex Registered Funds. https://www.jpmorgan.com/content/dam/jpm/securities/documents/investing-in-non-traditional-funds.pdf
- J.P. Morgan. (2024b). Asset owners in alternative investments: Alts-enthused asset owners seek operational efficiency. J.P. Morgan. https://www.jpmorgan.com/content/dam/jpm/cib/complex/content/securities-services/fund-services/asset-owners-in-alternative-investments.pdf
- Jehle, G. A., & Reny, P. J. (2011). Advanced microeconomic theory (3rd ed., pp. 13–16). Prentice Hall Financial Times. ISBN 978-0-273-73191-7
- Jenkinson, T., Sousa, M., & Stucke, R. (2013, February 27). How fair are the valuations of private equity funds? SSRN. https://doi.org/10.2139/ssrn.2229547
- Kahneman, D. (2011). Thinking, fast and slow. Macmillan. ISBN 978-1-4299-6935-2.
- Kahneman, D., & Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. W. Griffin, & D. Kahneman (Eds.), Heuristics and biases: The psychology of intuitive judgment (pp. 49–81). Cambridge University Press.
- Kahneman, D., & Riepe, M. W. (1998). Aspects of investor psychology. The Journal of Portfolio Management, 24(4), 52–65. https://doi.org/10.3905/jpm.1998.409643
- Kahneman, D., & Tversky, A. (1972). Subjective probability: A judgment of representativeness. Cognitive Psychology, 3(3), 430–454. https://doi.org/10.1016/0010-0285(72)90016-3
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1991). Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias. The Journal of Economic Perspectives, 5(1), 193–206. http://www.jstor.org/stable/1942711

Kahneman, D., Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. Econometrica, Journal of the Econometric Society. https://www.jstor.org/stable/1914185

Kapferer, J.-N., & Bastien, V. (2009). The specificity of luxury management: Turning marketing upside down. Journal of Brand Management, 16(5), 311–322. https://doi.org/10.1057/bm.2008.51

Karpik, L. (2010). Valuing the unique: The economics of singularities. (N. Scott, Trans.). Princeton University Press.

Kempf, A., & Ruenzi, S. (2006). Status Quo Bias and the Number of Alternatives: An Empirical Illustration from the Mutual Fund Industry. Journal of Behavioral Finance, 7(4), 204–213. https://doi.org/10.1207/s15427579jpfm0704_3

Kermack, W. O., & McKendrick, A. G. (1927). A Contribution to the Mathematical Theory of Epidemics. Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character, 115(772), 700–721. http://www.jstor.org/stable/94815

Kiplinger Washington Editors, Inc. (1962, December). Kiplinger's personal finance (Vol. 16, No. 12). Kiplinger Washington Editors, Inc. https://books.google.it/books?id=ggMEAAAAMBAJ&redir_esc=y

Knetsch, J. L. (1989). The endowment effect and evidence of nonreversible indifference curves. The American Economic Review, 79(5), 1277–1284. https://www.jstor.org/stable/1831454.

Kogler, C., Kuhbandner, C., & Agthe, M. (2016). Does Ownership Implied by 'Self' Reference Influence Choice? It Depends on Decision Framing. PLOS ONE, 11(9), e0162091.

Landry, L. (2021, July 8). What are alternative investments? Harvard Business School Online. https://online.hbs.edu/blog/post/what-are-alternative-investments

Loomes, G., & Sugden, R. (1982). Regret Theory: An Alternative Theory of Rational Choice Under Uncertainty. The Economic Journal, 92(368), 805–824. https://doi.org/10.2307/2232669

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. Journal of Economic Literature, 52(1), 5–44. https://doi.org/10.1257/jel.52.1.5

Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. Psychology & Marketing, 8(1), 43–57. https://doi.org/10.1002/mar.4220080105

Mackay, C. (1841/1932). Extraordinary popular delusions and the madness of crowds (L.C. Page & Co., Ed.). Boston, MA: L.C. Page & Company.

Markowitz, H. (1952). Portfolio Selection. The Journal of Finance, 7(1), 77–91. https://doi.org/10.2307/2975974

McAfee, A., & Brynjolfsson, E. (2012, October). Big data: The management revolution. Harvard Business Review, 90(10), 60–66, 68, 128.

McAndrew, C. (2025). The Art Basel and UBS art market report 2025. Art Basel & UBS. https://theartmarket.artbasel.com/download/The-Art-Basel-and-UBS-Art-Market-Report-2025.pdf

Mei, J., & Moses, M. (2002). Art as an investment and the underperformance of masterpieces. The American Economic Review, 92(5), 1656–1668. https://www.jstor.org/stable/3083271

Merriam-Webster. (n.d.). The origins of the bear and bull in the stock market. Merriam-Webster. Retrieved March 24, 2025, from https://www.merriam-webster.com/wordplay/the-origins-of-the-bear-and-bull-in-the-stock-market

Methling, F., & von Nitzsch, R. (2020). Tailor-made thematic portfolios: a core satellite optimization. Journal of global optimization, 76(2), 317-331.

Molouki, S., Hardisty, D. J., & Caruso, E. M. (2019). The sign effect in past and future discounting. Psychological Science, 30(12), 1674–1695. https://doi.org/10.1177/0956797619876982.

Morewedge, C. K., Shu, L. L., Gilbert, D. T., & Wilson, T. D. (2009). Bad riddance or good rubbish? Ownership and not loss aversion causes the endowment effect. Journal of Experimental Social Psychology, 45(4), 947-951.

Morgan Stanley. (n.d.). Art market indexes. Retrieved May 16, 2025, from https://www.morganstanley.com/articles/art-market-indexes

Morgan-Harris, H. (n.d.). Understanding the career stages of artists: A smart investor's guide. Bison Art. Retrieved May 16, 2025, from https://bisonart.com.au/blogs/news/understanding-the-career-stages-of-artists-a-smart-investors-guide

Morhart, F., Wilcox, K., & Czellar, S. (Eds.). (2020). Research handbook on luxury branding. Edward Elgar Publishing.

Mundi, H. S., & Kumar, D. (2022). The potential of alternative investments as an asset class: A thematic and bibliometric review. Qualitative Research in Financial Markets, 15(1), 119–141. https://doi.org/10.1108/QRFM-06-2021-0101

Nast, T. (1869). What a fall was there, my countrymen! [Cartoon]. Alamy https://www.alamy.com/what-a-fall-was-there-my-countrymen!-by-thomas-nast-1840-1902-artist-image68553072.html?imageid=D17B42A6-C95D-4658-883A-B31E0922C716&p=75935&pn=1&searchId=0a2255d4bdf333b5eafedc96708e17e1&se

B31E0922C716&p=75935&pn=1&searchId=0a2255d4bdf333b5eafedc96708e17e1&searchtype=0

National Philanthropic Trust. (n.d.). What is a donor-advised fund? Retrieved May 12, 2025, from https://www.nptrust.org/what-is-a-donor-advised-fund/

New York Federal Reserve. (2012, June 25). Historical echoes: The symbolism of the bull and the bear. Liberty Street Economics. https://libertystreeteconomics.newyorkfed.org/2012/06/historical-echoes-the-symbolism-of-the-bull-and-the-bear/

North of the Border. (n.d.). YouTube Channel. YouTube. https://www.youtube.com/@NorthoftheBorder

OECD. (2023). OECD/INFE 2023 international survey of adult financial literacy (OECD Business and Finance Policy Papers No. 39). OECD Publishing. https://doi.org/10.1787/56003a32-en

Park, J., Konana, P., Gu, B., Kumar, A., & Raghunathan, R. (2010). Confirmation bias, overconfidence, and investment performance: Evidence from stock message boards (McCombs Research Paper Series No. IROM-07-10). SSRN. https://doi.org/10.2139/ssrn.1639470

Peterson, R. L. (2005). The neuroscience of investing: fMRI of the reward system. Brain Research Bulletin, 67(5), 391–397. https://doi.org/10.1016/j.brainresbull.2005.06.015

PIMCO. (2024). Understanding the potential benefits of alternative investments. https://www.pimco.com/eu/en/resources/education/understanding-the-potential-benefits-of-alternative-investments

Pizzoni, M. (2023). Nudging to innovate: Il nudging come strumento per incentivare l'innovazione che nasce dalle imprese (Bachelor's thesis). Luiss Guido Carli. https://tesi.luiss.it/36945/

Plato. (1997a). Protagoras. In J. M. Cooper (Ed.), Plato: Complete works. Hackett Publishing.

Plato. (1997b). Gorgias. In J. M. Cooper (Ed.), Plato: Complete works. Hackett Publishing.

Plato. (1997c). Republic. In J. M. Cooper (Ed.), Plato: Complete works. Hackett Publishing.

Pope, A. (~ 1720). An inscription upon a punch-bowl. In H. W. Boynton (Ed.), The complete poetical works of Alexander Pope (1903, p. 201). Houghton, Mifflin and Co. http://files.libertyfund.org/files/2278/Pope_1497_EBk_v6.0.pdf

Preqin. (2024). Asset allocation: Outlook 2024. Preqin. https://www.preqin.com/insights/research/reports/asset-allocation-outlook-2024

Preqin. (2025). Institutional Allocation Study 2025. Preqin. https://www.preqin.com/insights/research/reports/institutional-allocation-study-2025

Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. Computers in Human Behavior, 29(4), 1841–1848. https://doi.org/10.1016/j.chb.2013.02.014

Rabb, M. (2024, November 13). What determines the price of an artwork? | artsy. Artsy. https://www.artsy.net/article/artsy-editorial-determines-price-artwork

Ren, F. (2024). A Comprehensive Analysis of Behavioral Finance and its Impact on Investment Decisions. Highlights in Business, Economics and Management, 32, 72-77. https://doi.org/10.54097/jda3dq67

Renneboog, L., & Spaenjers, C. (2013). Buying beauty: On prices and returns in the art market. Management Science, 59(1), 36–53. https://doi.org/10.2139/ssrn.1352363

Reyburn, S. (2021, October 14). Banksy's shredding artwork is auctioned for \$25.4 million at Sotheby's. The New York Times. https://www.nytimes.com/2021/10/14/arts/design/banksy-shredded-painting-auction.html

Ricciardi, V., & Simon, H. K. (2000). What is behavioral finance? Business, Education & Technology Journal, 2(2), 1–9. Available at SSRN: https://ssrn.com/abstract=256754

Robertson, I. (2015). Understanding art markets: Inside the world of art and business (1st ed.). Routledge. https://doi.org/10.4324/9780203070598

Roux, E., Tafani, E., & Vigneron, F. (2017). Values associated with luxury brand consumption and the role of gender. Journal of Business Research, 71, 102–113. https://doi.org/10.1016/j.jbusres.2016.10.012

S&P Dow Jones Indices. (n.d.). S&P Global Luxury Index. Retrieved May 16, 2025, from https://www.spglobal.com/spdji/en/indices/equity/sp-global-luxury-index/

Sahi, S. K. (2012). Neurofinance and investment behaviour. Studies in Economics and Finance, 29(4), 246–267. https://doi.org/10.1108/10867371211266900

Salmon, F. (2024, December 16). "Philanthropic cakeism" is changing how the wealthy give. Axios. https://www.axios.com/2024/12/16/philanthropy-billionaires-musk-trump

Samuelson, P. A. (1948). Consumption theory in terms of revealed preference. Economica, 15(60), 243–253. https://doi.org/10.2307/2549561

Samuelson, P. A. (1965). Proof that properly anticipated prices fluctuate randomly. Industrial Management Review, 6(2), 41–49. https://doi.org/10.1142/9789814566926_0002

Samuelson, W., & Zeckhauser, R. (1988). Status quo bias in decision making. Journal of Risk and Uncertainty, 1(1), 7–59. https://www.jstor.org/stable/41760530

Savage, L. J. (1954). The foundations of statistics. John Wiley & Sons.

Schor, J. B. (1998). The overspent American: Upscaling, downshifting and the new consumer. Basic Books.

Schur, M. (Creator). (2016–2020). The Good Place [TV series]. Fremulon, 3 Arts Entertainment, & Universal Television.

Selden, G. C. (1912) Psychology of the Stock Market . New York: Ticker. https://www.loc.gov/item/12018135/.

Selten, R. (1990). Bounded Rationality. Journal of Institutional and Theoretical Economics (JITE) / Zeitschrift Für Die Gesamte Staatswissenschaft, 146(4), 649–658. http://www.jstor.org/stable/40751353

Sent, E. M. (2018). Rationality and bounded rationality: you can't have one without the other. The European Journal of the History of Economic Thought, 25(6), 1370–1386. https://doi.org/10.1080/09672567.2018.1523206

Serpe, J. (2025, March 18). Alternative Investments in 2025: Our top five themes to watch. J.P. Morgan. https://www.jpmorgan.com/insights/investing/investment-strategy/alternative-investments-in-2025-our-top-five-themes-to-watch#section-header#4

Shakespeare, W. (1606). Macbeth. Open Source Shakespeare. https://www.opensourceshakespeare.org/views/plays/play_view.php?WorkID=macbeth &Act=3&Scene=4&Scope=scene

Shiller, R. J. (2000/2015). Irrational exuberance (3rd ed.). Princeton University Press.

Shiller, R. J. (2017). Narrative economics (Cowles Foundation Discussion Paper No. 2069). Cowles Foundation for Research in Economics, Yale University. https://doi.org/10.2139/ssrn.2895811

Shiller, R. J., & Pound, J. (1989). Survey evidence on diffusion of interest and information among investors. Journal of Economic Behavior & Organization, 12(1), 47–66. https://doi.org/10.1016/0167-2681(89)90076-0

Sillari, G. (2023a). Expected utility theory [Lecture notes]. Nudging: Behaviour and Public Policies. LUISS.

Sillari, G. (2023b). Heuristics and Bias [Lecture notes]. Nudging: Behaviour and Public Policies, LUISS.

Simon, H. A. (1955). A Behavioral Model of Rational Choice. The Quarterly Journal of Economics, 69(1), 99–118. https://doi.org/10.2307/1884852

Singh, D., Malik, G., Jain, P., & Abouraia, M. (2024). A systematic review and research agenda on the causes and consequences of financial overconfidence. Cogent Economics & Finance, 12(1). https://doi.org/10.1080/23322039.2024.2348543

Smith, A. (2003). The wealth of nations (Edited with an introduction by A. Skinner). Penguin Books. (Original work published 1776)

Sotheby's. (n.d.). The Sotheby's Mei Moses indices. Retrieved May 16, 2025, from https://www.sothebys.com/en/the-sothebys-mei-moses-indices

Steele, R. (1709). On duelling – whisperers without business – characters: Addison – continental intelligence. The Tatler, Vol. 2, No. 38, Thursday, July 7, 1709. https://ia801405.us.archive.org/23/items/in.ernet.dli.2015.92929/2015.92929.The-Tatler--Vol-2.pdf.

Strahilevitz, M. A., & Loewenstein, G. (1998). The Effect of Ownership History on the Valuation of Objects. Journal of Consumer Research, 25(3), 276–289. https://doi.org/10.1086/209539Tanner, A. (2013). Hamlet themes: Action and inaction. LitCharts LLC. https://www.litcharts.com/lit/hamlet/themes/action-and-inaction.

Thaler, R. H. (1999). Mental Accounting Matters. Journal of Behavioral Decision Making, 12(3), 183–206. https://doi.org/10.1002/(SICI)1099-0771(199909)12:3<183::AID-BDM318>3.0.CO;2-F

Thaler, R. H., & Sunstein, C. R. (2008). Nudge: Improving decisions about health, wealth, and happiness. Yale University Press. https://www.researchgate.net/file.PostFileLoader.html?id=53abe564cf57d7df1e8b45f4 &assetKey=AS%3A273548994646025%401442230571326

Thaler, R. H., Tversky, A., Kahneman, D., & Schwartz, A. (1997). The Effect of Myopia and Loss Aversion on Risk Taking: An Experimental Test. The Quarterly Journal of Economics, 112(2), 647–661. http://www.jstor.org/stable/2951249

Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. Science, 185(4157), 1124–1131. http://www.jstor.org/stable/1738360

Tversky, A., & Kahneman, D. (1981). The Framing of Decisions and the Psychology of Choice. Science, 211(4481), 453–458. http://www.jstor.org/stable/1685855

Tversky, A., & Kahneman, D. (1983). Extensional versus intuitive reasoning: The conjunction fallacy in probability judgement. Psychological Review, 90(4), 293–315. https://doi.org/10.1037/0033-295X.90.4.293

Tversky, A., & Shafir, E. (1992). The Disjunction Effect in Choice under Uncertainty. Psychological Science, 3(5), 305–309. http://www.jstor.org/stable/40062861

UBS. (2022, April 6). Mind or feeling? UBS Women's Wealth Magazine. https://www.ubs.com/ch/en/wealth-management/womens-wealth/magazine/articles/mind-or-feeling.html

Umar, Z., Gubareva, M., Yousaf, I., & Ali, S. (2021). A tale of company fundamentals vs sentiment driven pricing: The case of GameStop. Journal of Behavioral and Experimental Finance, 30, 100501. https://doi.org/10.1016/j.jbef.2021.100501

Varian, H. R. (2014). Big data: New tricks for econometrics. Journal of Economic Perspectives, 28(2), 3–27. https://doi.org/10.1257/jep.28.2.3

Velthuis, O. (2005). Talking prices: Symbolic meanings of prices on the market for contemporary art. Princeton University Press. https://doi.org/10.2307/j.ctt4cgd14

von Neumann, J., & Morgenstern, O. (1944). Theory of games and economic behavior (3rd ed.). Princeton University Press.

Wang, Q. (2023). Herding behavior and the dynamics of ESG performance in the European banking industry. Finance Research Letters, 58, 104640. https://doi.org/10.1016/j.frl.2023.104640

Welch, S. (2008). The Hitchhiker's guide to core/satellite investing. The Journal of Wealth Management, 11(3), 97–111.

Whincup, E., Costa, E., Lugt, E., Bremner, G., Lohmann, J., Adcock, O., & Hardy, T. (2024). Applying behavioural insights to green pensions. Behavioural Insights Team & Department for Work and Pensions. https://www.gov.uk/government/publications/applying-behavioural-insights-to-green-pensions

Wiggins, J. (2024, November 19). Which asset has the best bubble potential? Behavioural Investment. https://behaviouralinvestment.com/2024/11/19/which-asset-has-the-best-bubble-potential/

Xiang, A. (2018). Unlocking the Potential of Art Investment Vehicles. The Yale Law Journal, 127(6), 1698–1741. http://www.jstor.org/stable/45222581

Yamamoto, Y., & Navarro-Martinez, D. (2022). The endowment effect in the future: How time shapes buying and selling prices. Management Science, 68(3), 1857–1871. https://doi.org/10.1287/mnsc.2021.3998

Yau, J. K., Schneeweis, T., Robinson, T. R., & Weiss, L. R. (2007). Alternative investments portfolio management. In J. L. Maginn, D. L. Tuttle, D. W. McLeavey, & J. E. Pinto (Eds.), Managing investment portfolios: A dynamic process (3rd ed., pp. 147–168). John Wiley & Sons, Inc. https://catalogimages.wiley.com/images/db/pdf/9781942471134.excerpt.pdf

Zahrah, N., & Soeherman, B. (2024). Minor Truth Of Girl Math On Mental Accounting Perspective. Assets: Jurnal Akuntansi dan Pendidikan, 13(3), 202-218. https://doi.org/10.25273/jap.v13i3.20991

Appendix

Semi-Structured Interview Questions

- 1. Regarding so-called passion-led investments, what do you think are the main differences compared to more traditional investments and markets? Conversely, are there elements that you consider universal and applicable across all types of investments?
- 2. Traditional finance relies on pricing, forecasting, and analytical methods that may not be entirely suitable for passion-led investments. What are your thoughts on this? How can the inherently irrational nature of these markets be reconciled with the need for objective and monetary valuation?
- 3. What characteristics of passion assets (art, luxury goods, collectibles, etc.) do you consider particularly beneficial for investment purposes? Which, on the other hand, do you find most challenging?
- 4. In today's macroeconomic context of highly unstable markets, how do you think alternative investments are positioned? And in particular, passion-led investments?
- 5. What trends have you observed in these markets? Has anything particularly stood out to you in recent years of research?
- 6. Based on your experience, how much do the emotional and psychological dimensions of the parties involved (e.g., buyer/collector, seller, intermediaries) influence the buying and selling of passion assets? Do you notice any significant differences compared to more traditional markets?
- 7. How familiar are you with Behavioural Finance, and to what extent has it been relevant in your work?
- 8. In markets with limited liquidity, how does investor irrationality manifest? Do you believe emotions play a more pronounced role in these contexts compared to more liquid markets?
- 9. Can you think of any cognitive biases that frequently arise in relation to these markets?
- 10. What do you know about herd mentality in investment decisions related to alternative assets? Have you encountered any examples of this cognitive bias in your work?
- 11. To what extent do you think specialized advisory services can help mitigate biases and distortions in the market? Conversely, do you believe that expert guidance takes away part of the appeal of these investments by reducing the subjective enjoyment of the asset?

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