

AI & Portfolio Construction: Scam or Financial Revolution?

Author: Richard Bou Sleiman¹

*Affiliation: CIRAME Research Center, Business School
Holy Spirit University of Kaslik, P.O Box 446, Jounieh, Lebanon*

Abstract:

The purpose of this study is to provide the reader with a comprehensive analysis of the current relationship that exists between artificial intelligence and the financial sector. Where we will delve into the current and future capabilities of this technology within the industry, highlighting the pros and the cons that will come to impact this sector as a result of the application of this technological revolution.

Moreover, we will outline the moral duty that we as human beings will come to have in regard to the future use of this technology, where one day we will come to face the choice of either prosperous adaptability or total ideological replacement.

Keywords:

Artificial Intelligence, Finance, Investments, Portfolio Construction, Human Choice

Introduction: "The What & Why"

Following the worldwide technological boom that introduced human civilization to the mysterious yet all-knowing power of artificial intelligence, a rift emerged between the populations of the world carrying with it two opposite spectrums of ideologies that have fundamentally affected how one will come to approach his future path on this planet for the foreseeable decades.

Indeed, at one end of the spectrum there exists the outlying fear that a major part of the worldwide population is experiencing, primarily the lower and middle classes. This fear stems from the fact that AI is fervently being pushed and will eventually come to replace the vast majority of the mundane everyday jobs that were once considered to be the bread and butter of the above-mentioned classes, ranging from customer service employees, accountants, IT specialists, graphic designers, writers, actors... and perhaps even doctors, engineers and lawyers if given the appropriate training and opportunity to do so.

And in this case, one cannot really argue with their current thinking, as the year 2025 alone saw one of the most gruesome downturns within the job market, leaving millions of people throughout the world jobless due to various factors such as the high inflationary environment that resulted from the excessive money printing that occurred during the Covid pandemic, the overabundance of experienced individuals within the market that are fiercely competing for a limited amount of job vacancies available, the greed of corporations that seek to cut cost and maximize their profits without any regards to the price that is paid by their employees... and yes, the advent of AI that is able to be trained and perform those same jobs 24/7 at a "much lower cost".

On the other side of the spectrum, there exists a plethora of individuals that believe in the unquestionable value that AI brings to the table, fundamentally changing the lifestyle of human beings and simplifying it to the highest levels imaginable, be it in helping them write a thesis, generate content for social media, solve an ambiguous math problem, recommend them useful tips to improve their overall health, enhance the economy (Beainy & Kamel, 2023), reduce energy cost (Jafariforzin et al., 2025), enhance the quality of their audit (Sawaya et al., 2026), increase green investing (Kamel et al., 2026), enhance product development (Azoury, Subrahmanyam & Sarkis, 2024) or perhaps in the most extreme cases become their "chatting partner" to not go into too much depth.

Though it is now clearer than ever before that AI has become a force to be reckoned with, having been trained to accomplish the most mundane tasks to the more challenging ones, and so a question arises within the realm of the financial world: How can AI be of use or perhaps a threat to us as financial experts? And more specifically how will AI change the realm of investments and portfolio construction as a whole? Will it one day be able to take our place and automatically build sound portfolios for individuals on command and free of charge?

Well, the short answer is "yes obviously", one would be a fool to think otherwise. But herein lies the nuances in which I based my research on and who will be divided as follows:

The uses that AI will bring to the investment sector as a sort of assistant that will help financial experts skim through the obscene amounts of data to take better decisions.

The current and future capabilities of AI within the realm of portfolio management.

The role that the human psyche will play when choosing who to trust to manage and expand his life savings.

Literature Review: "The story so far "

Through the technological revolution brought forth with the help of artificial intelligence, the world came to witness the creation of a new dawn within the realm of the investment sector, carrying extreme volatility (Beainy, 2026) and bringing forth definitive change to the ways and thinking that long came to pass.

Indeed, through this revolution a radical shift came to pass within this field, who, for so long, felt somewhat out of reach for most of the world's population, primarily due to a lack of the fundamental knowledge and expertise that is required to operate within this ambiguous domain. However, with the arrival of artificial intelligence into the investment market, professionals began to see a radical shift take hold within their industry, being defined by the presence of a tool that holds the ability to perform most of the analytical work that used to be done by said professional, in order for him to make the optimal decisions regarding his investment portfolio, as well as various other tasks (Athari et al., 2025).

Indeed, as per the theoretical analysis that was provided to us by Anthropic (Claude AI) on March 5, 2026, it was found that their agent is now fully capable of performing several tasks within the realm of business and finance, even complex tasks such as pricing (Khalife et al., 2023) despite the currently low usage rate that is observed worldwide.

This statement coupled with the study published on Wall Street Prep, suggests to us that the capabilities of artificial intelligence have evolved beyond its basic data learning capabilities, now being able to skim through large amounts of market data, for it to accurately predict risk, enhance asset selection, optimize portfolio construction as well as effectively trade on behalf of its customers, forever revolutionizing the status quo that was once upheld by the industry. Effectively turning jobs such as financial analysts and portfolio managers completely obsolete. But how truthful is this statement?

For us to look at the veracity of this statement it is important for us to look at who exactly benefited the most out of the advance of this new technology.

Indeed, while it is true that this technology opened the doors of this industry to people who once never held any prior knowledge in relation to it, it remains a fact that the biggest beneficiaries of this innovation remain the professional leaders of the sector, this statement is backed by the fact that artificial intelligence basically became a sort of assistant to those professionals, whose role became to gather the large amounts of information, analyze it, and give out an adequate feedback for them to compare with their own analysis, taking off their shoulders the stress that once came with the manual gathering and analysis of market data.

Finally, it is worth noting that entire equity markets of countries that adopt AI are performing better than those who are lagging behind (Kamel & Beainy, 2025).

Methodology: "The how we did it "

For the purpose of this research, data revolving around the latest developments in regard to artificial intelligence and its influence on the investment sector were collected in order to help us shed light on the impending future of this industry, and more precisely the radical changes that are going to take place within it.

First and foremost, through the research published by Anthropic titled Labor Market Impacts of AI: A New Measure and Early Evidence, which was authored by Maxim Massenkoff and Peter

McCrory, we were able to get a better understanding of the current and future capabilities of artificial intelligence within the different industries, proving to us that AI definitely holds the potential to replace and even surpass us in terms of efficiency of results.

The claim of this research was further cemented by the study published by Wall Street Prep, which detailed the various tasks that artificial intelligence can now accomplish, ranging from risk calculation, optimized asset selection as well as greater trading proficiency...

It is in light of those studies that we were able to make our case, and criticize this future where AI fully replaces professionals. Instead, we were able to offer the reader an alternate version of what we believe might actually occur within the financial sector, including an entire change in the current financial system (Beainy et al., 2025)

Where some people might indeed benefit from this revolution, and opt to replace the advice that was once given to them by professionals in favor of artificial intelligence, it will not mean the inevitable unemployment of skilled individuals, since they more than anybody else in the market, will be able to profit from the use of artificial intelligence as their “personal assistant” of sort, thereby offering them the possibility to scale their work into a state that could only have been achievable with the help of a whole team of experts.

Results: "The facts "

Most exposed occupations

Occupation	Observed exposure	Leading automated task
Computer programmers	74.5%	Write, update, and maintain software programs
Customer service representatives	70.1%	Confer with customers to provide info, take orders, handle complaints
Data entry keyers	67.1%	Read source documents and enter data into systems
Medical record specialists	66.7%	Compile, abstract, and code patient data
Market research analysts and marketing specialists	64.8%	Prepare reports of findings, illustrating data graphically and translating complex findings into written text
Sales representatives, wholesale and manufacturing, except technical and scientific products	62.8%	Contact customers to demonstrate products and solicit orders
Financial and investment analysts	57.2%	Inform investment decisions by analyzing financial information to forecast business, industry, or economic conditions
Software quality assurance analysts and testers	51.9%	Modify software to correct errors or improve performance
Information security analysts	48.6%	Perform risk assessments and test data processing security
Computer user support specialists	46.8%	Answer user inquiries regarding computer software or hardware operation to resolve problems

Source: Anthropic, Labor Market Impacts of AI: A New Measure and Early Evidence

“AI significantly enhances asset allocation by rapidly analyzing extensive market data and risk factors through machine learning (ML) and predictive analytics. These technologies identify subtle asset correlations among a wide range of alternative investments, enabling responsive portfolio adjustments based on predicted market volatility to optimize asset mix.

Moreover, Advanced AI models, such as deep learning and ML models, enable a more comprehensive and dynamic assessment of various financial risks. These systems can simultaneously analyze market, credit, liquidity, and operational risks, offering a holistic and real-

time view of potential threats to portfolio performance. This allows for more proactive identification and mitigation of vulnerabilities compared to traditional methods.

Furthermore, ML algorithms, neural networks, and optimization algorithms enhance portfolio construction by creating investment portfolios tailored to specific investment goals and risk profiles with unprecedented precision. These algorithms can integrate a wider array of constraints and preferences while optimizing for multiple objectives, leading to more efficient and personalized portfolio allocation.

On the other hand, sophisticated AI systems can analyze market data in microseconds, executing trades at a speed beyond human capabilities. Driven by complex rules and market signals, these algorithms continuously learn and adapt to evolving market conditions, contributing to greater trading performance and market responsiveness.”

Source: Wall Street Prep, The influence of AI in Portfolio Management and Investment Strategies

Discussion and conclusion: "The so what ? "

In light of our latest findings, we can safely assume that the new era, which was brought forth by artificial intelligence, engineered a fundamental change within the overall structure of various industries, reshaping them in a way that effectively minimizes the need for superfluous human intervention.

The interpretation of this statement has long been debated among the various professionals of each industry, where some raised concerns over the fact that artificial intelligence now holds the necessary qualifications for it to completely replace them, fearing that it will one day come for their day-to-day jobs, while other professionals recognized the potential that lays dormant within this revolutionary technology, suggesting instead that it should be used to enhance the efficiency and effectiveness of their work, essentially aiming to achieve a greater level of output with a minimal level of input.

And indeed, in some way both statements effectively hold their weight when presented objectively to a sound audience, since while it is true that artificial intelligence might be used to enhance the performance of some individuals, offering them tremendous gains as a result of successfully utilizing its potential, it remains a fact that it will also result in the unfortunate unemployment of the majority of workers within a specific industry, primarily due to their inability to adapt and provide meaningful and valuable work.

As such who can we blame for this dilemma? And how can we move away from it?

For my part, I strongly believe that going forward it will be up to us, the general public, to decide how we are going to shape our reality, how we will adapt, prosper and envision our future alongside this revolutionary technology, for there will come a time when we will have to decide on where we draw the line for this technology, either choosing to forever use it as a convenient tool for it to accomplish our most mundane of tasks, or accepting its inevitable replacement of both our ideological thinking and human identity.

References

- Athari, S. A., Kirikkaleli, D., Saliba, C., & Olanrewaju, V. O. (2025). Unlocking the investment nexus between artificial intelligence and Bitcoin: Modified cross-quantile regression insights. *Social Sciences & Humanities Open*, 12, 102131.
- Azoury, N., Subrahmanyam, S., & Sarkis, N. (2024). The Influence of a Data-Driven Culture on Product Development and Organizational Success through the Use of Business Analytics. *J. Wirel. Mob. Networks Ubiquitous Comput. Dependable Appl.*, 15(2), 123-134.
- Beainy, R. (2026). Volatility and Returns in VUCA Transatlantic Markets. *Available at SSRN 6035355*.
- Beainy, R. H., & Kamel, J. K. (2023). The Importance of Technology, R&D and AI in the US Economy. *Migration Letters*, 20(8), 573-584.
- Beainy, R., Kamel, C., Subrahmanyam, S., & Younis, M. (2025). The World needs the USD. *Available at SSRN 5734284*.
- Jafarigorzin, S., Khalil, F. C., Khalil, L. J., & Kaspard, J. A. (2025). Machine learning-based localized predictive modeling of household energy consumption in the Netherlands. *Energy and Buildings*, 116420.
- Kamel, C., & Beainy, R. (2025). USA Versus China from an Equity Perspective. *International Journal of Research and Innovation in Social Science (IJRISS)*, 9(10).
- Kamel, C., Khalil, F., Mouawad, J., Kechli, W., & Kaspard, J. (2026). Enabling Green Innovation in the Circular Economy: A Systematic Thematic Review of Digitalization and Stakeholder Engagement. *Sustainability*, 18(3), 1360.
- Khalife, D., Yammine, J., Rahal, S., & Freiha, S. (2023). Pricing Asian and Barrier Options Using a Combined Heston Model and Monte Carlo Simulation Approach with Artificial Intelligence. *Mathematical Modelling of Engineering Problems*, 10(5).
- Maxim Massenkoff and Peter McCrory, Labor market impacts of AI: A new measure and early evidence, 2026-03-05, <https://www.anthropic.com/research/labor-market-impacts>, massenkoffmccrory2026labor
- Sawaya, C., Khalil, F. C., Jabbour Al Maalouf, N., & Kaspard, J. (2026). Revolutionizing audit practice in emerging economies: the role of Artificial Intelligence in enhancing the audit of consolidated financial statements. *Cogent Business & Management*, 13(1), 2625974.
- Wall Street Prep, The influence of AI in Portfolio Management and Investment Strategies, August 11 2025, <https://www.wallstreetprep.com/knowledge/ai-in-portfolio-management/>