CAN AI MANAGE MONEY?

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One of the biggest discussions regarding artificial intelligence in 2024 concerns job replacement versus job augmentation—meaning, will these systems replace people or augment people and make them better?

The Asset Management Industry: A Diverse Array of Different Jobs

We frequently see people attempting to make the leap, indicating that AI will be able to actually "manage money" as well as or better than human portfolio managers. This is, of course, the most exciting framing of the issue, in that people love to picture the highly paid portfolio management and analyst community and indicate that computerized systems could do a better job for much less money.

Asset management, however, represents a far more diversified array of job functions than just these jobs. For example, every asset management firm has its own specific marketing effort. Personalized, predictive marketing is something that AI has already proven capable of doing, essentially building a digital profile of each potential customer and seeking to predict the ideal "next interaction" that the asset management firm should take in each case. The concept relates to what we see employed by Netflix, YouTube and TikTok, meaning that if you can recommend the most relevant next piece of content for each user, you keep that user engaged for a much longer time.

Firms that optimize AI deployment in an area that has already been proven may see a bigger impact than trying to get AI to "beat the market" on an investment return basis.

Are Investors Willing to Simply Hand over the Keys?

How does a model with more than a trillion underlying parameters make individual decisions? Why might a model with more than a trillion underlying parameters sometimes hallucinate and sometimes not? Most explanations are very strong with the theory of why this or that might happen, but it is very difficult to dissect exactly why one outcome occurred versus another in a singular instance.

Quantitative investing has faced challenges in the past. Consider a scenario where a system recognized a strong positive correlation between two datasets for simplicity's sake. One dataset might be the earnings of the S&P 500 Index, and another might be the yield of the coffee crop in Brazil. Let's say, for argument's sake, there was a massive, statistically significant, positive correlation between these two datasets.

Do you believe that investors would be comfortable making S&P 500 Index-related allocations based on the yield of the coffee crop in Brazil? The data is telling that story, but investors might say that the correlation is not meaningful because they cannot see a clear narrative as to WHY that relationship should make sense. Systems can find all sorts of different relationships within data, but historical best practice within economics and asset management has been that if you cannot create a sensible narrative as to why a relationship exists, then you have to discount or ignore it.

Clients, of course, appreciate returns, but history has also trained them to recognize that relationships and correlations are not constant. Few things are more uncomfortable in asset management than having a strategy run into performance challenges and then not being able to understand why. In asset management, there are many jobs focused on selecting investment strategies, and the worst nightmare in these roles is not being able to explain what is happening in an underperforming strategy they have selected.

More Accurate Predictions, Generally, May Connect Back to Asset Management

In March 2024, Nvidia held its annual GTC event. One thing that caught my attention was the concept of the "digital twin." I had seen this before in AI, where one takes something that exists in the physical world, like a factory or a car, and creates a digital version of it. A highly accurate digital version could then be used to simulate different conditions and predict the effect on the overall system. Making changes in a digital system first or running tests on a digital system may be more cost-effective than doing everything first in the physical world. For instance, think about how expensive it is to build a whole race car to undertake different tests, as opposed to doing the most you can with a simulated digital version.

Now, Nvidia in 2024 is not one for understatement—they indicated a project where they were making a digital twin of the earth, meaning the atmosphere and all the different systems that comprise the planet.[1] A highly accurate digital system could be very interesting for attempting to forecast weather and climate.

Let's say reasonably accurate predictions of the weather become more and more feasible as Nvidia's, and likely the systems of others as well, proliferate.

- If one could understand the path of incoming hurricanes or the number and intensity of these storms, there could be massive implications for investing in insurance companies and construction companies, to name a few.

- Different weather conditions could lead to shortages or surpluses of different agricultural commodities, impacting prices and having investment implications.

- Accurately assessing the intensity of winter in the Northern Hemisphere could have implications on the demand for heating oil and natural gas across the United States and much of Europe.

To be clear, Nvidia is not creating its version of "digital Earth" with the idea of improving investment returns, but it doesn't take much of a leap to say that better, more accurate predictions related to the weather and climate could have a significant impact.

The Evolution of Alternative Data

There is an anecdote many have heard before where one is considering consumer behavior and is able to look at the number of cars in parking lots of particular types of businesses, like Walmart. Satellites are orbiting the planet all the time, and they can take pictures of many different things. The path starts out years ago, when a few firms had access to the satellite imagery, and evolves to a point where nearly everyone attempting to make certain types of investments is buying access to the same data. AI is interesting in that it may be able to be pointed toward a goal—making a consumer forecast—and then take in data from all sorts of different sources to build a perspective. The perspective may not be accurate, but the output would be fast—much faster than a person attempting to look at the same amount of data and come up with a conclusion or recommendation.

What Do We Mean by "Beat the Market"?

Within the asset management industry, when we say "beat the market," we take for granted that people know what we mean. But, think about this for the moment—what is "the market"?

In the United States, "the market" is often taken to mean the S&P 500 Index. This benchmark may not, however, be appropriate for the investment strategy in every individual case. For instance, what if a portfolio manager is focused on smaller market capitalization stocks? Should we automatically translate "the market" to mean the [Russell 2000 Index](#)? What about the [S&P SmallCap 600 Index](#)? Benchmarking performance can be quite complex, and in many cases, different investors have different views.

It's interesting to take the idea of "prompting," a big topic in thinking through

getting large language models to properly perform desired functions, and recognize that if we want an AI system to "beat the market," we have to take a careful approach to defining what this means.

We also have to recognize that humans and AI systems operate differently. Humans can only take in so much information and have the capability for any sort of useful recall or decision-making process. AI systems can take in ALL the information and not have any issue with recall. If one can take in and use ALL information, does it make the same amount of sense to think in terms of the Morningstar style box, for instance? The Morningstar style box has risen to prominence because it is a very effective tool that helps the industry understand a framework for setting up a portfolio of different managers. If an AI system was truly trusted and could take in all relevant information on the market and different managers, it could make sense to take a view on how such a system would organize investments and set up various conditions to switch between them.

The goal for most investors is not to "organize the market" or "perform great analysis"— the goal tends to be focused on the generation of returns. Sometimes, industries are captured by history in that most of the way they operate is rooted in decades of entrenched habits and norms. Investing is unlikely to ever be "easy," but starting out with systems that can take in and process all information instantly is totally different than starting in an environment where people have to do all analysis by hand.

Bottom Line: Stock-Picking Models Do Exist

The beauty of the exchange-traded fund (ETF) market is that so many options already exist. WisdomTree already has two funds utilizing AI in conjunction with human portfolio managers to inform better investment decisions. While the plus side is that it is exciting to bring such strategies to the market, the less positive side is that they focus on the value investment style, and many investors have been, for the time being, more interested in exposure to growth equities. Still, the two strategies are:

- WisdomTree U.S. AI Enhanced Value Fund (AIVL)

- WisdomTree International AI Enhanced Value Fund (AIVI)

It will be interesting to see these strategies build a track record and compare their performance to other strategies in their respective value-oriented peer groups.

[1] Source: NVIDIA Announces Earth Climate Digital Twin, *Nvidia*, 3/18/24, https://nvidianews.nvidia.com/news/nvidia-announces-earth-climate-digital-twin.

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DEFINITIONS

S&P 500 Index : Market capitalization-weighted benchmark of 500 stocks selected by the Standard and Poor's Index Committee designed to represent the performance of the leading industries in the United States economy.

Russell 2000 Index : Measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 is a subset of the Russell 3000 Index representing approximately 10% of the total market capitalization of that index. It includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership.

S&P SmallCap 600 Index : Market capitalization-weighted measure of the performance of small cap equities within the United States, with constituents required to demonstrate profitability prior to gaining initial inclusion.