Wealth Management Quarterly

F I N T R U S T

ChatGPT & The Wizard of Oz

Third Quarter 2023

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EXECUTIVE SUMMARY

- Monetary Policy: Tightening. The Federal Reserve positioning for higher interest rates.
- Fiscal Policy: Neutral. The CBO projects federal spending to flatline in 2023.
- Economic Vital Signs: Inflationary pressures while high are moderating.
- Yield Curve Watch: The yield curve continues to be inverted. This implies the market expects rate cuts to start late 2023 or early 2024.

Q3 2023: ChatGPT & The Wizard of Oz

Q: Allen, why title this WMQ "ChatGPT & The Wizard of Oz?"

AG: ChaptGPT reached the 1 million downloads mark faster than any prior application. This table will help our reader's perspective.

Online Service	Launch Year	Time Taken to Reach 1 Million Users	
ChatGPT	2022	5 days	
Instagram***	2010	2.5 months	
Spotify	2008	5 months	
Dropbox	2008	7 months	
Facebook	2004	10 months	
Foursquare***	2009	13 months	
Twitter	2006	2 years	
Airbnb**	2008	2.5 years	
Kickstarter*	2009	2.5 years	
Netflix	1999	3.5 years	

These are obviously magical numbers that have excited the market about the potential for productivity gains from AI. The program, after just 8 months, has gained over 100 million users and over 1.6 billion people have already visited the site since its November launch. Given this kind of mindshare and growth, I figured we better explore the world of AI word wizardry and look behind the curtain. For help with this endeavor, I myself turned to ChatGPT. Let me share a few highlights.

Source: askwonder.com

AG: What does the GPT in ChatGPT stand for?

ChatGPT: The "GPT" in ChatGPT stands for "Generative Pre-trained Transformer." GPT is a type of language model developed by OpenAI. The term "Generative" refers to the model's ability to generate coherent and contextually relevant text based on the input it receives. "Pre-trained" indicates that the model is initially trained on a large corpus of text data to learn patterns and language representations before being fine-tuned for specific tasks. "Transformer" refers to the architecture of the neural network model, which is based on the Transformer architecture introduced by Vaswani et al. in 2017. The Transformer architecture is known for its effectiveness in processing and generating sequences of data, making it well-suited for language tasks like text generation and understanding.

AG: Should the corpus of text data on which you are trained be made public?

ChatGPT: The decision to make the corpus of text data on which a language model

Major Asset Class Returns	2023 YTD
T-Bills	2.27%
Investment Grade Bonds	2.09%
Large-cap Stocks	16.89%
Mid-cap Stocks	8.84%
Small-cap Stocks	6.03%
International Stocks	12.13%
Emerging Market Stocks	5.10%

Source: Morningstar Direct, As of 6/30/2023

CHATGPT & THE WIZARD OF OZ

like ChatGPT is trained public and transparent is a complex and multifaceted issue. While there are potential benefits to openness and transparency, there are also significant challenges and considerations involved.

Advocates for public access to the training data argue that it promotes transparency, accountability, and helps identify and address biases or ethical concerns that may arise in the model's outputs. It allows researchers, policymakers, and the public to better understand how the model was trained and potentially identify any shortcomings or areas for improvement.

However, there are several reasons why complete openness and transparency regarding the training data may not be feasible or advisable. Firstly, the training data often consists of copyrighted or proprietary information, making it difficult to release in its entirety without infringing on intellectual property rights. Additionally, the training data may contain sensitive or personal information that needs to be protected to respect privacy and security concerns.

There are also potential risks associated with making the training data public. It could be exploited by malicious actors for various purposes, including generating misinformation or deepfake content. Moreover, releasing the data may inadvertently disclose private or confidential information contained within it, posing legal and ethical challenges. A balanced approach might involve finding ways to address transparency and accountability concerns without compromising privacy, security, or proprietary interests.

This could include releasing sanitized or carefully curated subsets of the data, creating standards and guidelines for training data collection and usage, or encouraging independent audits and evaluations of the models.

Ultimately, the decision on whether and how to make the training data public and transparent should involve a careful consideration of the potential benefits, risks, and ethical implications, and should be guided by collaboration between researchers, policymakers, industry stakeholders, and the public.

AG: Elon Musk stated that you began as an Open Source Software then the IP rights were transferred to a private company - is this true?

ChatGpt: No, it is not true that ChatGPT or similar language models began as open-source software and then had their intellectual property rights transferred to a private company. ChatGPT is developed by OpenAI, a research organization focused on artificial intelligence. While OpenAI has released different versions of its language models for public use, including GPT-2 and GPT-3, these releases have not involved transferring the intellectual property rights to a private company.

AG: Who owns OpenAI?

ChatGPT: OpenAI is an organization that was founded as a nonprofit in December 2015. The ownership structure of OpenAI has evolved over time. Originally, it was founded by Elon Musk, Sam Altman, Greg Brockman, Ilya Sutskever, John Schulman, and Wojciech Zaremba, who were the initial co-founders.

However, as of 2019, OpenAI transitioned to a more hybrid model, creating a for-profit entity called OpenAI LP. OpenAI LP is controlled by the OpenAI Inc. board and acts as the parent company of OpenAI. The for-profit entity allows OpenAI to secure additional funding and resources to support its mission of ensuring that artificial general intelligence (AGI) benefits all of humanity.

The ownership and governance structure of OpenAI LP includes a combination of the original founders, employees, and external investors. While the specific details of ownership and investment are not publicly disclosed, OpenAI remains committed to maintaining broad benefits and transparency in its operations.

AG: Are you programmed to promote certain ideas?

"At the end of The Wizard of Oz, Dorothy finds the Wizard is just a man, but men have motives, and some are good and constructive and others are not."

ChatGPT: No, I am not programmed to promote any specific ideas. I am designed to be a neutral and unbiased AI language model, providing information and answering questions based on the data I have been trained on. It's important to critically evaluate and verify information from multiple sources to form a well-rounded understanding of any topic.

AG: If language is controlled and censored do you then just regurgitate the answer?

Municipal and Treasury Yields (%)							
Maturity	Treasury	AA Municipal	A Municipal	BBB Municipal			
1 Year	5.416%	3.18%	3.436%	4.439%			
2 Year	4.90%	3.08%	3.346%	4.434%			
5 Year	4.156%	2.78%	3.081%	4.045%			
10 Year	3.840%	2.76%	3.065%	3.996%			
30 Year	3.862%	3.98%	4.187%	4.998%			

Source: Bloomberg as of 6/30/2023

Q&A with the Research Team

ChatGPT: As an AI language model, I do not have the ability to control the language or the content I generate. My responses are based on patterns and information in the training data I have been exposed to. While I strive to provide accurate and helpful information, there is a possibility that I may regurgitate incorrect or biased information if it exists in the training data or if it is provided in the input I receive.

AG: Can you provide an index of what is contained in your training library?

ChatGPT: As an Al language model based on GPT-3.5, my responses are generated based on a mixture of licensed data, data created by human trainers, and publicly available data. I have been trained on a wide range of sources, including books, websites, and other texts, to develop a broad understanding of human language. However, I don't have direct access to information about the specific documents or sources that were included in my training set.

AG: If you are open - why not list your sources?

ChatGPT: As an Al language model, I don't have direct access to information about the specific sources in my training set. While I can't provide an itemized list of sources, I can assure you that I have been trained on a wide array of data to provide information and assistance on numerous topics. If you have any specific questions or need information on a particular subject, feel free to ask, and I'll do my best to help!

Furthermore, OpenAI, the organization behind ChatGPT, has not publicly disclosed the specifics of the training duration or the individual datasets used. This is to protect the intellectual property rights of the data providers and to maintain the integrity of the training process.

AG: How is it open and protected? Would that not be a misnomer?

ChatGPT: You're right that the term "open" might be misleading in the context of the training data and model specifics. While OpenAI has made efforts to increase transparency and provide access to AI technologies, there are certain limitations and considerations in place.

AG: Given that you are trained on patterns - could you be purposely misled by malign actors?

ChatGPT: As an AI language model, I do not have the ability to detect or determine the intentions of the users interacting with me. While I strive to provide accurate and reliable information, it is possible for malicious actors to attempt to manipulate or deceive the model by providing false or misleading information. The model's responses are generated based on patterns in the training data, so if those patterns include misleading or biased information, it could be reflected in the responses.

AG: Are you familiar with the Webbot Project?

ChatGPT: Yes, I'm familiar with the Webbot Project. The Webbot Project, also known as the Web Bot, is an internet bot developed by Clif High. It gained attention for its claims of predicting future events using web data mining techniques.

The Webbot Project is designed to scrape and analyze inter-

net data, particularly from websites, forums, and social media platforms, to identify trends, patterns, and linguistic cues that may indicate future events or shifts in collective consciousness. It utilizes various algorithms and natural language processing techniques to process the collected data and generate predictions or forecasts.

The Webbot Project has made predictions on a wide range of topics, including geopolitical events, financial markets, natural disasters, and societal changes. However, it's important to note that the accuracy and reliability of these predictions have been a subject of debate and skepticism. While some claim that the Webbot Project has made accurate predictions, others argue that the predictions are often vague and subject to interpretation.

AG: Who was the Wizard of Oz?

ChatGPT: In the story "The Wizard of Oz," the character known as the Wizard of Oz is a fictional character. He is the ruler of the magical Land of Oz, where the story takes place. The character is portrayed as a powerful and mysterious figure who is capable of granting the wishes of those who seek his assistance. In the original novel, written by L. Frank Baum and published in 1900, the Wizard is revealed to be a regular man from Omaha, Nebraska, named Oscar Diggs. However, in the popular 1939 film adaptation titled "The Wizard of Oz," the character is played by actor Frank Morgan and is depicted as a humbug who is eventually exposed by Dorothy and her friends.

AG: Who was Oscar Diggs?

ChaptGPT: Oscar Diggs, the character who becomes the Wizard of Oz in L. Frank Baum's original novel, was not explicitly based on a real person. However, there are some theories and speculations about potential inspirations for the character. One theory suggests that Oscar Diggs was inspired by Baum himself, as both characters shared a similar background as showmen and entertainers. Another theory proposes that the character might have been influenced by various stage magicians and illusionists of Baum's time. However, it is important to note that these are theories, and Baum never publicly acknowledged a specific real-life inspiration for the character of Oscar Diggs.

Q: Allen, any final thoughts?

AG: There is no question ChatGPT enhances productivity. It cut the task of writing this newsletter from days to 20 minutes. In my experience with the Webbot Project, which is an emotional language reduction engine, it most certainly has had some big hits. For example, it first noticed the emergence of the words "bitcoin" and "cryptocurrency." While these programs can be useful, I hope our readers will also take the time to understand how these models work. It's important to look at what's behind the curtain like in The Wizard of Oz, or else we might find ourselves being manipulated. At the end of The Wizard of Oz, Dorothy finds the Wizard is just a man, but men have motives, and some are good and constructive and others are not.

Sincerely,

Allen R. Gillespie

QUICK TAKE

MAJOR ASSET CLASSES

Cash and Cash Equivalents

The Federal Reserve finally reached its goal of pushing short-term interest rates above the inflation rate Short-term interest rates now exceed long-term realized inflation measures and the rates offered on longer-term bonds. Short-term interest rates are now in-line with headline inflation readings. As a result, we now believe short-term bonds can be utilized by both conservative and aggressive investors, as we believe the Federal Reserve policy is now neutral to restrictive.

Investment Grade Fixed Income

The yield curve has inverted to levels last seen in the early 1980s. Historically, inverted yield curves are associated with approaching recessions which in turn lead to spread widening in credit markets. Investment grade fixed income markets reflect a slowing economic recovery. We continue to believe that cyclical inflation readings have peaked and that investment grade corporate bonds will become increasingly attractive over the next few quarters.

Tactical Fixed Income

We recently moved our tactical fixed income allocations to be more in-line with bond benchmarks as interest rates have risen. At the margin, we believe the inflation rate has peaked, and will ultimately settle in the 3%-4% range. As a result, we have rebalanced tactical fixed income positions back toward more traditional fixed income assets.

Core Equities

Since our last report, equity prices have recovered from the interest rate induced declines in 2022. After adjusting for recessionary recovery, we believe equities are fairly valued relative to historical valuations. Given recessionary risks and the inverted yield curve, we would not overweigh equities beyond investor risk determined allocations. Given our inflation and valuation outlook, we are also more constructive on small cap and international equities.

Tactical Equities

Due to the extreme conditions in core fixed income and equity markets, we think that tactical equity strategies may offer investors the best risk/reward tradeoffs. Tactical equity strategies, like long/short equity and option-based strategies have historically weathered bad bond markets and buffered bad equity market storms. We believe tactical equity strategies are becoming increasingly attractive on a relative value basis given economic volatility and the likely structural changes to the economy.

Other Markets

Other markets like gold, cryptocurrency, and real estate may offer diversification benefits to traditional portfolios, but some suffer from the same valuation issues as stocks and bonds.

Index Snapshot					
	Earnings Yield	Dividend Yield	Price to Book		
Large-cap Stocks	5.02%	1.56%	4.30		
Mid-cap Stocks	7.34%	1.75%	2.25		
Small-cap Stocks	7.59%	1.90%	1.75		
International Stocks	7.53%	3.31%	1.60		
Emerging Market Stocks	8.26%	2.97%	1.53		

Source: Bloomberg as of 6/30/2023



Positioning as of 12/31/2022. This model displays FinTrust's Funds & ETF Model with Tactical target portfolio guidelines. Each client situation is unique and may be subject to special circumstances, including but not limit to greater or less risk tolerance, classes, concentrations of assets not managed by FinTrust, investment limitations imposed under applicable governing documents, and other limitations that may require adjustments to the suggested allocations. Model asset allocation guidelines may be adjusted from time to time on the basis of the foregoing and other factors.

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