Davos Big Picture Macro Update:
12/7/2022

Macro & Investing Implications of ChatGPT

On November 30th 2022, OpenAI released the next groundbreaking step in AI development. The new program is called ChatGPT. ChatGPT is a language model trained by OpenAI that can assist in conversational tasks. It is based on the GPT-3 (Generative Pretrained Transformer-3) model, which uses deep learning techniques to generate text that is like human-generated text. It can understand and respond to natural language input, making it useful for a variety of applications such as customer service, virtual assistants, and chatbots. Basically, it is like having a free professional copywriter and data mining team on your browser.

People have been quick to embrace ChatGPT. In the first five days of its release, ChatGPT has already 1M active users. This is a faster adoption rate than Instagram, the iPhone, YouTube, or email at the same timeframe. There are a lot of macroeconomic, social, and cultural implications to the mass adoption of such a program.

Bottom Line/What's the Trade:

In the short term, not much. However, the long-term disruption potential for professions such as academia, contract law, back-end software development, conventional search engines, copywriting, public relations, marketing, foreign language translation, coding, and research. Any work that relies on repetitive information work or gathering existing information is at risk of replacement The learning curve of how to adapt this technology will be too slow to change business and consumer habits from existing providers of this technology for the next few years, but by the time the world grips the potential of these technologies the economic impacts of AI will be most felt.

The biggest impact will be on the future of employment versus individual stocks. One of the key economic consequences of ChatGPT would likely be the impact on the job market. ChatGPT is a language model that can generate human-like text, which means that it could potentially be used to automate many tasks that currently require human labor. For example, ChatGPT could be used to generate written content, such as articles or press releases, which could replace the need for human writers in certain industries. Similarly, ChatGPT could be used to generate customer service responses, which could potentially eliminate the need for human customer service representatives.

This could lead to job losses in several industries, which would have negative economic consequences. For example, workers who lose their jobs due to automation may have difficulty finding new employment, which could lead to an increase in unemployment and a decline in consumer spending. Additionally, the loss of jobs could lead to a decline in wages for workers who are able to find new employment, which could have a negative impact on the overall economy.

One major company that I see being possibly negatively disrupted by this is Google. The main reason for that is use of ChatGPT style AI technology reduces the time needed to spend on Google's search engine and thus less exposure to the ads of paying customers. Google however may be able to counter this through its own AI program in development called Sentient. Plenty of other business such as marketing agencies, digital marketing firms, copywriters, and written media will be at risk, but companies in these "at risk" industry are too small or privately held to capitalize on any short bets. Digital media and video games also stand to benefit because more free time (AI reducing busy work) while possibly reducing income of historically higher paid white-collar labor will allow more time for recreation and less money for more expensive physical hobbies.

Most publicly traded companies will benefit from this change. The time saved doing data gathering, editing back-end code (at the expense of coders jobs), writing sales copy, summarizing ideas into reports, drafting legal contracts, and other lower creativity knowledge work being automated will result in lower costs outsourcing professional agencies to this work and/or reducing internal headcounts with hours saved by existing workforce. In the beginning people will not notice as demographic decline (boomer retirements/deaths) will reduce labor supply proportionately with tech killing demand. However, as AI gets better and can go after more creative class work, the job losses will cascade. The next recession post-2025 will likely match 2008 in terms of the impact of unemployment even if the systemic risks are lower than back as companies will have more fat to cut than previous cycles. This will translate to higher profit margins in future business cycles and thus higher EPS and a strong headwind for future equity appreciation. Companies where tech and white-collar labor is more of a cost than a revenue center (manufacturing, natural resources, etc.) benefit the most while personal relationship businesses (healthcare and financials have the least to gain.

Consumer discretionary companies and real estate may also lose as historically higher paid white-collar jobs are most and risk of losing income (both on absolute basis and relative to blue collar industrial jobs). Real estate gets hit from lower income growth to fuel residential rents and a smaller portion of office workers needed to fill commercial buildings.