

GENERATIVE AI:

AN INVESTOR'S VIEW

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Generative Artificial Intelligence (AI) is a broad label used to describe any type of artificial intelligence that can be used to create new text, images, video, audio, code, or synthetic data. Al was first developed in the late 1950's but advancements in computing speed and storage fundamentally increased its potential in recent years. The release of ChatGPT in the fall of 2022 made Al widely available and highlighted its potential for individuals and businesses.

Recent predictions regarding Al's likely impact have been bold. Bill Gates commented, "The development of Al is as fundamental as the creation of the microprocessor, the personal computer, the Internet and the mobile phone." Goldman Sachs estimates that one quarter of current U.S. and European work tasks could be automated by Al. This is in line with research from the McKinsey Global Institute which estimates that by 2030, Al could contribute to the automation of up to 30 percent of hours worked in the U.S.

These powerful impacts on the way people work could have significantly disruptive effects on labour but could improve overall economic productivity and growth. At IMCO, our team is evaluating both how AI may impact our investment universe and how it can be used to enhance our operations.

PART I: INVESTMENT IMPLICATIONS

PREDICTED IMPACTS OF AI ON WORK

Al has the potential to automate many tasks performed by people today. The kinds of tasks most likely to be automated include market research, data analysis, coding, technical writing, legal research and drafting, content creation, clerical and administrative duties, and customer service. Tasks that appear least exposed to Al involve personal care, mechanics, construction, repair, or installation. It remains unclear how quickly automation will occur and the degree to which automation will displace workers and/or enhance their productivity.

IDENTIFYING LONG-TERM INVESTMENT WINNERS IS NOT EASY

Just as it is difficult to predict how quickly Al will be adopted and which jobs will be replaced as opposed to being made more productive, predicting which companies are likely to become market leaders over the long term as a result of any new technology also is not easy. There are plenty of examples of companies that looked set to be the biggest long-term beneficiaries of recent technological developments, only to fall by the wayside and disappoint investors. As a result, we are not making any "big Al bets" on the basis that companies will be the long-term beneficiaries of Al.

Internet Search Engines

Today, Google dominates the search engine space with over 90 percent of Internet query searches. But, in the early years of the Internet, Netscape was the dominant search engine. At its peak in 1995, Netscape Navigator was the most widely used web browser, at 90 percent market share. It was displaced by Internet Explorer in 1998, then sold to AOL which eventually ceased to support it in 2007.

Energy Market Fluctuations Defeat Fracking Leader

The fracking of oil and natural gas took off in the first decade of the 2000's. Chesapeake Energy was one of the earliest adopters of this technology and by 2008 was the second-largest U.S. natural gas producer. However, Chesapeake ultimately ended up filing for Chapter 11 bankruptcy protection in 2020.

Mobile Cellular Phones

Nokia once dominated the mobile cellular space. In 1998, Nokia was the world's largest mobile phone brand. However, Nokia did not keep up with touchscreen technology, and delayed their response to industry trends such as applications ("apps"). Nokia revenues fell and their mobile phone business was eventually sold to Microsoft.

These examples illustrate the difficulty of identifying which companies are likely to become market leaders over the longterm as a result of new technologies and why we are avoiding making any "big Al bets."

A LIMITED NUMBER OF AI INVESTMENTS WITHIN OUR PUBLIC **EQUITY PROGRAM**

While we are a not making any "big Al bets," we have several external public equity managers who specialize in disruptive technology. They have long and successful track records in navigating technology trends and today, a number of these managers are currently focused on Al. We believe they will be able to generate net value add within our Public

Equity program based on their successful track record of navigating such disruptive technology trends.

TAKING A "PICKS AND SHOVELS" APPROACH THOUGH OUR INFRASTRUCTURE PROGRAM

During the California goldrush of the mid-nineteenth century, sellers of picks and shovels were often the most reliably successful entrepreneurs. Rather than prospecting for gold, they sold picks and shovels to prospectors. IMCO is taking a "picks and shovels" approach to the AI trend in part of our Infrastructure program. We are investing in sectors that provide infrastructure to support the adoption and use of Al. This includes recent significant investments in digital infrastructure such as wireless, fiber, and data centres to capitalize on the requirements that broader adoption of Al will require. Our Private Equity team is also evaluating opportunities to benefit from the broad adoption of AI as a component of our technology and software sector coverage. The approach here will also be "picks and shovels", versus overweighting a single Al company.

ASSESSING AI RISKS TO MARKET SEGMENTS AND NEW DIRECT TRANSACTIONS

Just as picking long-term winners is not easy, neither is avoiding long-term losers, or companies that will experience material and negative impacts of new technologies. Consider how online shopping impacted numerous retailers and damaged retail real estate asset values, or the impact of digital photography and the advent of smartphone cameras, on traditional camera and photo printing companies. New technologies can negatively impact both individual companies and entire market segments, so this is something we are thinking about in the context of Al.

OTHER INVESTMENT CONSIDERATIONS

Al is a fast-moving technology that is likely to impact the economy broadly over the coming years. Our current World <u>View</u> reveals that the multi-decade period of lower interest rates and inflation is over, and we will see higher interest rates and more episodes of inflation going forward. We have not adjusted this perspective yet. However, it is possible that the impact of AI could moderate inflation by significantly increasing productivity.

We have not incorporated AI technology directly into any of our internal investment strategies or hired dedicated Al investment managers, but this is something we are exploring.

PART II: OPERATIONAL IMPLICATIONS

In addition to thinking about AI from an investment perspective, we are thinking about how Al could enhance our own operations.

LEVERAGING OPERATING PARTNERS

Our current operating model relies on a core set of partners who provide critical operational support including desktop and data services, HR information and services, custodial services, performance measurement, risk analytics, portfolio construction, and trading. These services are typically delivered through a software as a service (SaaS) model by large well-known organizations with technology budgets and access to data we could not replicate. Some of these companies already incorporate Al into their service offering and we are currently collaborating with these operating partners to understand the steps they are taking to leverage Al and explore how we can best access new or maturing Al functionality.

CHATGPT

ChatGPT is a large language model-based application developed by OpenAl. It is designed to generate text based on the vast information on which it is trained. The platform's strengths lie in its ability to produce human-like responses across a wide array of topics. However, some of its limitations include unpredictable inaccuracies, difficulty understanding context, and an inability to generate real-time data. IMCO is carefully looking at its potential operational benefits and has identified several use cases that we will explore while rolling out this technology securely to our employees to achieve quick-win efficiencies. Our assessment will account for the

need to ensure human intervention, challenges related to data quality, and staying ahead of likely regulations.

INTEGRATED DATA

Recognizing the importance of data in an Al world, IMCO is investing in an enhanced data platform and portfolio monitoring system. We know that AI models are only as good as the data they are trained on and embarking on generative Al projects requires careful consideration of data availability, which is vital for model learning and evaluation. We believe our ability to leverage AI technology will be enhanced by the improvements to our enterprise data capabilities.



CONCLUSION

Al is almost certain to have a powerful impact on jobs, companies, and the economy in the coming years. Predicting the timeframe for widespread adoption and the long-term investment winners and loser is not easy. But we are looking for ways to benefit from the widespread use of AI in our Infrastructure, Private Equity and Public Equity programs, considering the risk it presents to individual investment opportunities and market segments and evaluating its potential impact on our World View. At the same time, we are looking for ways to enhance our own operations by leveraging new Al tools being offered by our operating partners, exploring potential ChatGPT use cases and continuing to improve the quality of our own data.