ALEX HART, EXECUTIVE MANAGING DIRECTOR

As a wealth management and investment advisory firm, we at Pathstone are often asked about the latest developments in technology. Investors, particularly entrepreneurs, are often interested in "hot" trends. It is part of our ongoing investment research efforts to stay abreast of market-moving developments, and more important, to help ensure clients approach new opportunities with clarity.

Artificial intelligence (AI) is a case in point. In looking at the drivers of U.S. stock market returns in 2023, we see that much of this performance has been driven by excitement around the potential for advancements in artificial intelligence (AI) technology. Seven technology- and AI-related stocks drove all of the S&P 500's rally this year through May, with the rest of the index averaging a negative return.

Are the advancements in AI the catalyst for a new bull market or is the excitement overdone? We believe investors would be wise to remember lessons from past technology cycles, and rather than chase speculation, invest with a long-term mindset, partnering with managers that have a strong technical understanding of these advancements and their implications.

The advancements in AI released this year have created a high level of excitement around the possibilities of this technology. The sudden ability for everyone with an internet connection to access an AI-based tool, such as ChatGPT from OpenAI or Bard from Google, has significant implications. Tasks that were historically cumbersome or slow may become automated and efficient, driving productivity gains and profit margins. Tasks that were previously impossible may become possible as advancements in AI are applied to more technical problems within the life sciences, materials, and technology sectors, spurring a wave of innovation and new growth opportunities.

Despite these possibilities we are reminded that expectations for leaps in technology are often misunderstood due to their complexity. This leaves the door open for short-term irrational exuberance that doesn't always translate into long-term success.

The saga of blockchain offers a cautionary tale. In fall 2017, the rally in the price of Bitcoin from under $5,000 to nearly $20k by year-end caught mainstream media attention and created a wave of excitement around the opportunity for blockchain technology to transform many industries. Companies referencing the use of blockchain technology in their earnings releases and news announcements saw their stock prices temporarily soar alongside Bitcoin, but many failed to execute on any long-term plans. Six years later, adoption of blockchain technology has failed to meet expectations, fraudulent parties that sought to take advantage of exuberance have been exposed, and regulations enforced. Along the way there was both economic and investment opportunity created, but many investors who jumped on the trend without careful diligence, lost money.

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Another example: In 2020 amid the first modern global pandemic lockdown, companies that sold services into remote work, gaming, and home improvement saw their stock prices climb as more people spent time in their homes and deployed their discretionary spending into these segments. While this time the market rally was driven by real growth in revenues, investors quickly assumed this was the "new normal" and raised their expectations for the future seemingly indefinitely. The ultimate shift of consumer spending back to more normal trends, together with rising interest rates, caused many of those companies' stock prices to quickly fall back to pre-pandemic levels in 2022. As we noted in our most recent Tactical Allocation Viewpoints, the aftershocks of the pandemic are still being felt, particularly in the real estate markets, where opportunities for lenders and investors with fresh capital to replace slowing bank lending could drive returns for investors.

In the first months of 2023, references to "AI" in company conference calls increased to more than triple the 10-year average, according to Factset data. AI Computing firm NVIDIA's stock has risen by over 280% from 12-month lows in October. A new ETF called "CHAT" was launched to give retail investors exposure to AI technologies. These events have hallmarks of prior periods of investor exuberance.

With this caution in mind, the potential for these technologies should not be ignored.

Those who have been following closely know these trends are secular in nature and are not new in 2023. What was previously referred to commonly as "Machine Learning" technologies have been utilized across industries for more almost a decade and are responsible for significant innovations during this period. As part of Pathstone's investment approach for clients, we have partnered with managers who invest in secular growth spaces, such as drug discovery, digital infrastructure, cybersecurity, financial technology, and semiconductors, among others that will be poised to benefit from future innovation. We have seen these managers continue to execute on investments in this space over the past year and we expect to source new investment opportunities proactively. On the macro side, we are watching impacts on employment closely, leveraging our Market Cycle Dashboard tool, as questions about how AI will impact jobs and productivity are in focus.

Innovation and change are exciting for investors and consumers alike. Leveraged the right way, this excitement can drive positive change and spur additional capital investment for growth. We expect that this cycle of innovation will contain both winners and losers but are optimistic for the benefits these technologies can bring if implemented with proper governance. Beyond investments, our Pathstone team is carefully investigating some of these new tools to determine if they create opportunities to better serve our clients.

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