Cornerstone
ASSET MANAGEMENT GROUP, LLC

Economic Indicators | July 2024 | By Kim W. Suchy & Brett E. Suchy

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In recent communiques from us at Cornerstone, we have discussed the timing, merits and risks of a Fed rate cut. Many investors (perhaps you are one of them) are eager for a rate cut, viewing it as a necessary catalyst for market growth. However, looking at recent events in Canada can provide valuable insights into the potential pitfalls of a rate cut; particularly a premature rate cut decision.

The Bank of Canada (BOC) cut its key policy rate at the beginning of June, responding to a steady downtrend in inflation since mid-2022 and an increase in the unemployment rate from 4.8% in July 2022 to 6.2% last month. This rate cut seemed appropriate, given that prices were under control and the labor market needed a boost.

Unfortunately, Canada's May CPI results, released this past week, showed an unexpected spike in inflation. While this did not necessarily unsettle global markets, it served as a stark reminder of the challenges central banks face in reversing policy after rate cuts. Raising rates soon after easing them can significantly damage their credibility and negatively impact markets. For instance, if the Fed decided to raise rates after its current 12-month policy pause, it could undermine its credibility and cause a significant market downturn.

Although the Canadian CPI spike does not yet indicate a sustained inflation flare-up, the BOC could face a tough situation if the next couple of months show inflation trends like those in the U.S. earlier this year. Holding rates steady might allow inflationary pressures to build if current policies are not restrictive enough. Conversely, raising rates would admit that the BOC misjudged inflation, heightening investor concerns about the reliability of rate relief.

The Fed is closely monitoring Canada's response. The Fed believes it can hold rates steady even if inflation heats up again, as the real Fed funds rate (the difference between the Fed funds rate and inflation) remains restrictive. The Fed has extended its rate pause since last July and has consistently maintained the option to raise rates again. Historically, the Fed has used the strategy of talking rates up or down to achieve economic objectives….and for the most part, it has worked.

We hope the Fed will gather critical insights from the factors behind Canada's inflation spike and its potential sustainability before making any decisions on adjusting rates in the United States. The current situation underscores the complexity of Fed policy decisions and their far-reaching implications.

As always, we remain committed to providing you with timely and insightful analysis to help you navigate these changing conditions. We will continue to keep you informed as we navigate these economic developments together.

Here is your look at developments in the global marketplace.

POSITIVE DEVELOPMENTS

- Both the headline and core Producer Price Indexes (PPI)s were below expectations in May, with goods prices falling, while services prices were unchanged. May's headline yearly inflation rate was 2.2% (vs 2.5% expected), and down from 2.3% in April, which was the highest since April 2023; it was at a recent low of 0.8% in November. Core prices also showed signs of easing, showing no change for the month, slower than both the 0.3% increase expected and April's 0.5% gain. The yearly rate was 2.3% (vs 2.4% expected) and slower than April's 2.5%—which was the highest since last August.

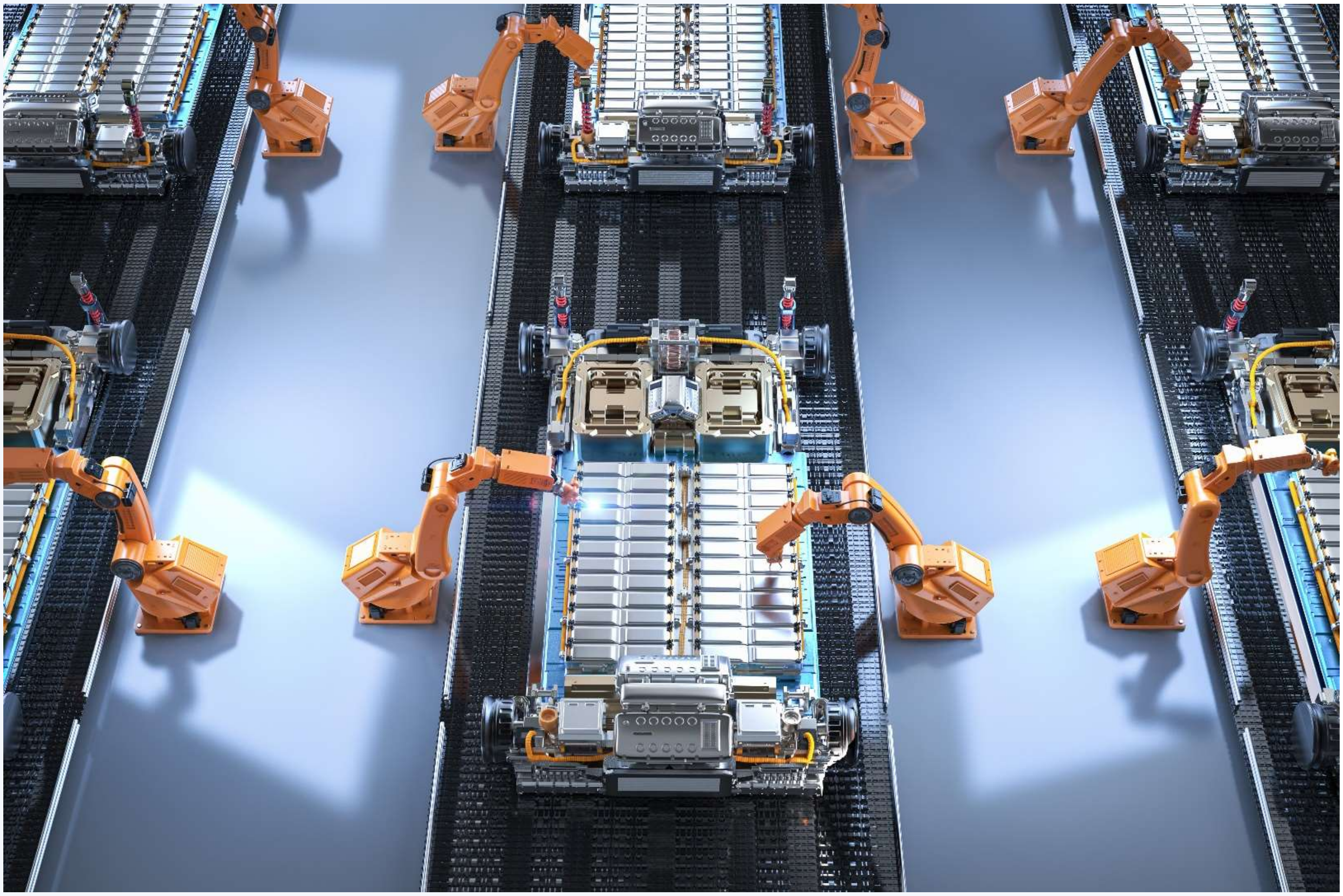
- Industrial production surged past forecasts logging its biggest monthly gain in one year. Headline production expanded 0.9% in May, three times the 0.3% expected increase, following no change in April and a 0.1% downtick in March. By industry, manufacturing also beat expectations, climbing 0.9%, also triple the expected gain, with output of both nondurable goods (1.1%) and durable goods (0.6) posting widespread gains.

NEUTRAL DEVELOPMENTS

- In May, housing starts significantly missed consensus expectations, falling to their slowest pace since the height of the COVID pandemic. Year-to-date, the total number of homes under construction has declined by 5.1%, a drop typically seen during a housing bust or recession. However, there are positive factors for the housing market. Many current homeowners are reluctant to list their homes due to fixed mortgage rates below 3%, driving prospective buyers towards new constructions. Additionally, Millennials, now the largest living generation in the US, are entering the housing market in significant numbers, creating a demographic boost for housing activity.

- Electric vehicle (EV) sales in the US have stalled in Q1 of 2024, rising only 2.6% y/y compared to the 46.4% jump in Q1-2023 and the 81.2% increase in Q1-2022 according to a report by Cox Automotive. In order to stimulate sales, EVs will need stronger, cheaper batteries. Fortunately, scientists around the world are beginning to identify a variety of new chemistries to improve batteries.

- According to LSEG Research, the Consumer Confidence measure pulled back in June but remained within a narrow range that's held over the past 2 years, as strength in current labor market continued to outweigh concerns about the future.



NEGATIVE DEVELOPMENTS

- The retail sales report was weaker than expected again in May as high inflation and interest rates curbed spending. Total retail sales edged up only 0.1% (vs 0.3% expected), while April sales were revised to show a 0.2% decline—first reported as unchanged.

- May's *existing* home sales report was weak, as activity fell by 0.7% in May, marking the 3rd consecutive decline. The housing market is struggling due to affordability issues. First, sales are being stifled by mortgage rates that remain above 7%. Additionally, home prices are on the rise again, reaching a new high in May, with the median price of an existing home increasing by 5.8% compared to a year ago

- *New* home sales came in weaker than expected in May, posting the largest monthly decline since 2022 following back-to-back gains. It looks like activity is stuck in low gear, with sales having normalized roughly at the same pace they were in 2019 before COVID. Stubbornly high inflation continues to be the biggest headwind to a broader recovery, delaying widely expected rate cuts from the Federal Reserve and keeping 30-year fixed mortgage rates above 7%. Assuming a 20% down payment, the rise in mortgage rates since the Federal Reserve began its current tightening cycle amounts to a 24% increase in monthly payments on a new 30-year mortgage for the median new home.

- Leading Economic Indicators (LEI) fell again in May and have not posted a gain since February 2022. February 2023's 0.2% increase was revised to flat in the current report. The LEI fell 0.5% in May, following a 0.6% decrease in April and a 0.3% setback in March. The LEI is down 14.7% from December's 2021 record high to its lowest level since April 2020.

THE MARKETS

Despite numerous headwinds in the economic arena, U.S. equities managed to log another good month as all key market indexes were higher. Tech, consumer discretionary and communications were the market leaders last month while utilities, materials and industrials lagged.

Asian markets were broadly lower as China is experiencing an economic slowdown. Japan, on the other hand, posted another healthy month. India continued its hot streak as Modi is implementing economic reforms and capitalizing on revitalized international trade programs. Europe was lower across the board.

On 6/29, the Core PCE report was released (core strips out particularly volatile items such as food and energy), rose 0.1% last month — matching the smallest increase in 7 months as the 12-month rates of inflation and core inflation also eased. This has helped bond yields compress as the 10-year Treasury closed June to yield 4.39% down from 4.5% at the close of May.

U.S Index	Last Month (% return)	YTD (%)
S&P 500	3.8	14.5
Dow Jones	1.8	3.8
NASDAQ Comp	5.2	18.1
Russell 2000	0.3	0.8

Source: https://tradingeconomics.com/stocks

Topic of the Month: AI, Data Centers and Energy Demand

By: Brett E. Suchy

Well, it seems we can't go a day without escaping the letters A and I intertwined, especially for Air traffic controllers, waiters, and Captains. But rightfully so, the acronym I am referring to, AI, or Artificial Intelligence, has undoubtedly become the most transformative technology of our era…and we are just starting to see it reshape companies, industries and drive innovation. However, with this rapid acceleration there poses challenges, particularly regarding energy demand and the rapidly expanding data center industry. This month, we delve into how AI is fueling energy demand and data center growth.

The Rising Energy Demand

AI technologies require substantial computer power, which obviously translates into a significant amount of energy consumption. AI training and especially deployment processes require extensive computational resources; such, training a single AI model can consume as much energy as hundreds of households over a year. AI queries consume about 10x as much electricity than traditional Google searches, and the creation of photos and videos require even greater power. With about 5.3 billion internet users, the instant adoption of this technology will require a significant rise in power consumption.

According to a report from the International Energy Agency (IEA), the global electricity consumption for AI and data centers could reach between 620 and 1,050 terawatt-hours (TWh) by 2026, comparable to the total energy consumption of countries like Sweden or Germany (Why AI and energy are the new power couple – Analysis - IEA). According to the World Economic Forum, the rapid growth in AI's computational power needs is remarkable, doubling roughly every 100 days, and to achieve tenfold improvement in efficiency, power demand could surge by 10,000x (World Economic Forum).

The primary driver of this energy surge is the exponential increase in data generation. Modern AI thrives on data, which requires extensive storage and processing capabilities. Thus, data centers, the backbone of AI infrastructure, are expanding at an unprecedented rate. These centers house a vast array of servers and networking equipment, all of which require continuous power and cooling to operate efficiently.

The Boom in Data Centers

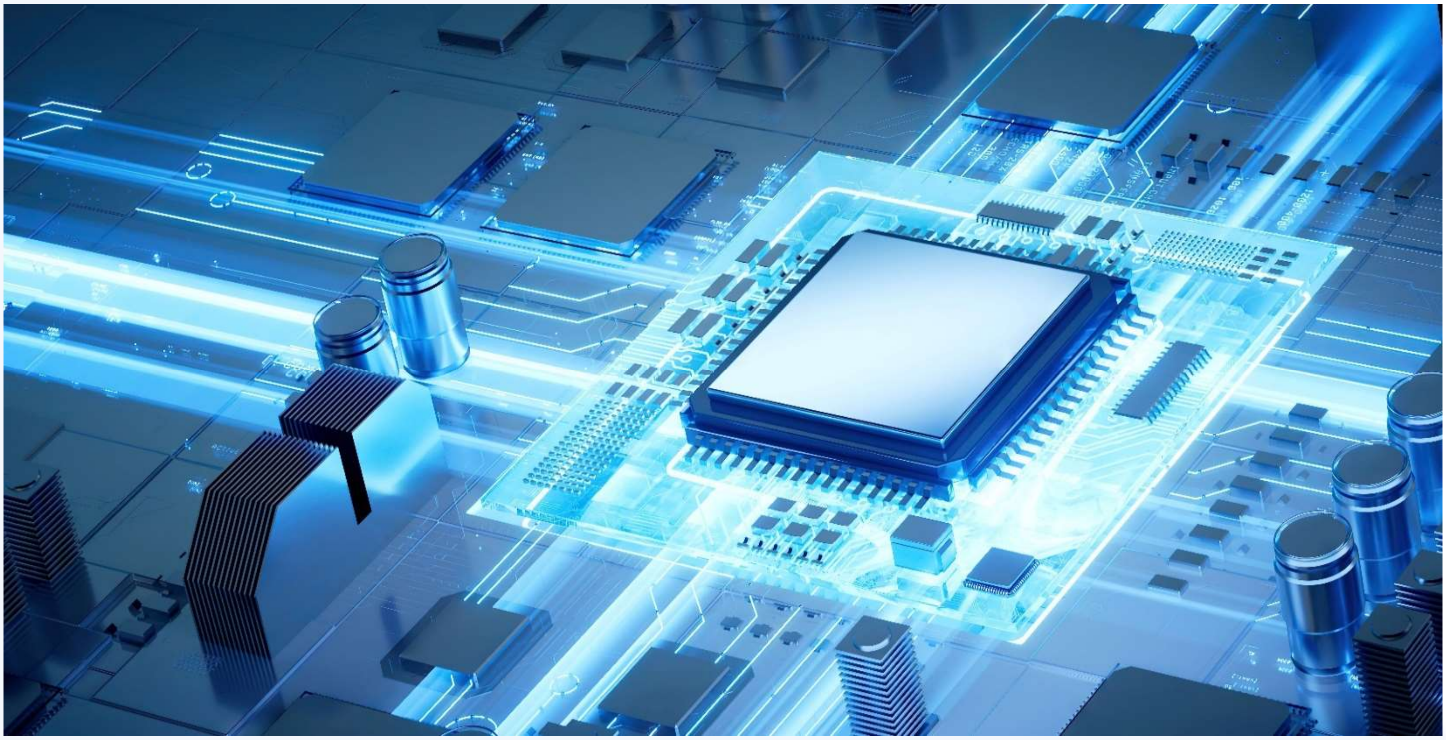
So, with the surge in AI has driven a boom in the construction and expansion of data centers worldwide. This growth is not just a response to increasing data volumes but also the need for faster & more efficient processing capabilities. They are essential in supporting AI workloads and provide the infrastructure for real-time data processing and analysis. However, this growth has sparked environmental concerns posing a challenge in balancing the expansion of data centers with sustainable energy practices.

According to the IEA, data centers are the primary factor driving regional electricity demand growth. Currently, 33% of the world's 8,000 data centers are in the US. They consumed 200 TWh of electricity in 2022, which accounted for 4% of the country's electricity demand. The IEA projects that by 2026, this consumption will rise to 260 TWh, representing 6% of the nation's total energy usage (IEA). Additionally, David Porter, a vice president at the Electric Power Research Institute, said that while 10-20% of data center energy in the U.S. is currently consumed by AI, that percentage will likely "increase significantly" going forward (Time).

Alongside extensive energy consumption, data centers also consume a lot of water. Water is essential for heat dissipation & water-cooled systems to maintain temperatures amongst thousands of servers and networking equipment. To illustrate, Microsoft's data center in Goodyear, Arizona, is about to complete their third building on a 279-acre campus. Upon completion, it is estimated the data center will consume 56 million gallons of water annually, or as much as 670 families need for a year (MSN- Microsoft Plant). And this rather large consumer is in an area that is already desperate for water.

Conclusion

The surge in AI technology has certainly driven a boom in data center construction and energy consumption. With projections showing a substantial rise in power demand, it is essential to integrate sustainable practices into data center management. Implementing renewable energy solutions and enhancing the efficiency of semiconductors can help address the environmental concerns associated with this growth. However, achieving a balance between innovation and its energy impact always requires a combined effort from all stakeholders.



NEWS YOU CAN USE

On June 5th, Butch Wilmore and Suni Williams, two NASA astronaut veterans, took a test drive of Boeing's new Starliner capsule to the International Space Station, marking Boeing's first astronaut mission. With the expectation of a one-week stay, the astronauts are now in their fourth week as NASA and Boeing troubleshoot equipment problems that surfaced on their journey. The return flight has been delayed now three times. We assume Wilmore and Williams aren't minding a few more weeks enjoying the view and zero gravity.

https://www.nbcnews.com/science/space/nasa-astronauts-return-boeing-starliner-spaceship-delayed-rcna158577

This month, a shiny 6'4" metal monolith was found in a mountain range near Las Vegas, though it was eventually removed by authorities. There is no answer to how such a large object got to such a remote location, which is typically inhabited by just bighorn sheep and desert tortoises. The discovery brings back to light a series of mysterious monoliths that quickly appeared and vanished during the COVID pandemic in Utah, New Mexico and Romania. Little is known of these objects, but perhaps further details may emerge regarding this latest monolith, which has been taken to an undisclosed location for examination.

https://www.bbc.com/news/articles/cekk7gm97j4o

https://www.vox.com/culture/22062796/monoliths-utah-california-romania

During a revitalization project at George Washington's Mount Vernon, in preparation for the United States 250th birthday in 2026, an unexpected discovery of fruit has scientists baffled. 29 intact bottles of cherries and berries were found in storage pits uncovered from Washington's mansion cellar. Experts describe the finding of essentially fresh fruit, perfectly preserved for over 250 years, as unprecedented. Chemical and biological studies are being conducted to understand the preservation method, and to see if the fruit seeds are capable of germinating.

https://www.npr.org/2024/06/20/nx-s1-5009924/mount-vernon-cherries-george-washington

As always, if we can be of additional guidance, please feel free to call us at 312.485.6847.

Best regards,

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