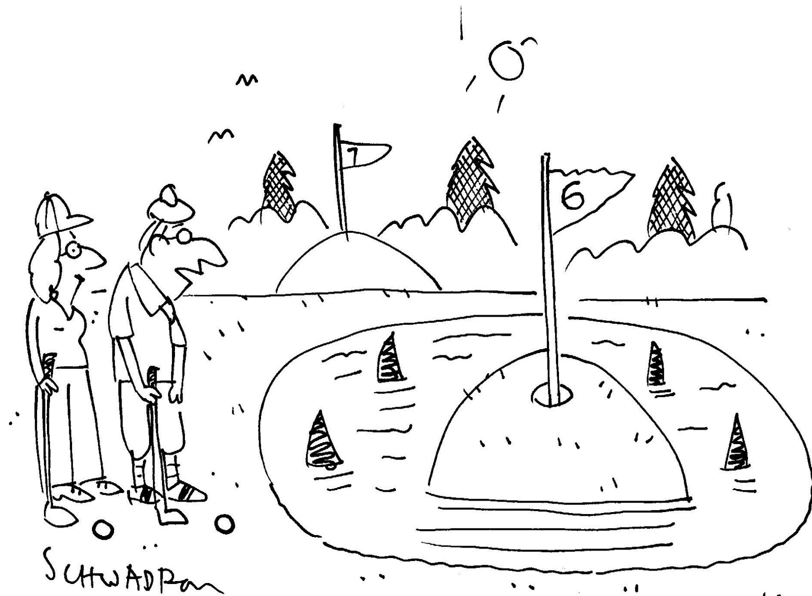
Investment Advisor

CONVERSATIONS ON INVESTMENT MANAGEMENT

FOURTH QUARTER 2023

“Investment is most intelligent when it is most businesslike.”
The Intelligent Investor, Professor Benjamin Graham



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President

Miller Capital is a Registered Investment Advisor [RIA] serving individuals, families, business entities, and trusts.

The Right Mindset

On a recent trip to a Midwest town in the corn belt, I was reminded of my days growing up on a farm and watching the corn and soybean fields ripen for harvest. Few things are as beautiful to me; maybe like Augusta National Golf Club is to many golfers.

The patience of a farmer is something to appreciate when it comes to investments, business, and important financial matters. Stressful short-term events and fluctuations can create vulnerabilities to emotional decisions. In farming, reaping the longer-term reward from the harvest requires a focus on the preparing, sowing, and maintaining of fields and crops despite periods of adverse conditions. Focus, patience and resolve are important attributes and mindsets in farming. The same is true in investing.

We hope this issue of *Investment Advisor* is helpful in thinking through issues related to investments and important financial matters.

Personal Reflections: The Last 25 Years

Over the last 25 years at Miller Capital, I've seen many days, weeks, and months where the media and general public were focused on concerns/fears that, in the end, proved to be irrelevant to a well-designed investment plan. A few factors come to mind as I reflect on some key investment issues during our last 25 years:

- Whether the proper amount was invested in appropriate equities [or assets with equity-like returns], purchased at reasonable prices, so required returns had an opportunity to be reached over the investment time horizon.

- Whether an analysis had been completed of the proper amount to be held in cash or more liquid, high quality fixed income [or similar assets] to be a "cash flow reserve", so that equities or other assets need not be sold at a low prices below their true economic value [also known as "intrinsic value"] for cash flow needs.

- Avoiding permanent losses of capital that can occur from over-paying for investments or selling investments at a low prices when they should have never been purchased in the first place, for a variety of reasons.

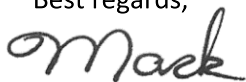
Often times the asset allocation [the amount invested in suitable equities, fixed income and cash] is the primary factor that determines the level of wealth creation over time. If an investor does not need to earn higher returns, then investing in lower return cash or fixed income may be appropriate. An investor should never be pushed to take on more risk than they are able or willing to accept. A full and fair discussion and analysis of the long-term benefits of higher returns and ways to mitigate risk [such as through a sufficient "cash flow reserve"] can lead investors to a more informed evaluation of risk and return, rather than accepting lower returns due to fear or poor analysis. The ability or willingness to take certain levels of risk should be determined after full and proper analysis. In the case of trustees managing trust assets, it is especially important they have a prudent process for analyzing risk and return, given their high fiduciary duty.

Over the last 25 years, the differences in wealth creation based on these three factors is significant. In my experience, risk is often viewed primarily through one lens; the amount an investment might go down in value in a shorter time period. But one of the greatest risks is not earning sufficient returns [after-taxes, inflation and investment expenses] to provide cash when it is needed for required or desired spending. There is great benefit to discussing this other view of risk; longer-term returns that are too low due to the asset allocation.

Investing can seem easy at times. But it can also seem incredibly stressful and painful at times, if a proper approach and mindset is not in place and practiced. We discussed investment mindsets in *Investment Advisor* a year ago [Fourth Quarter 2022]. The right investment mindset is what allows a prudent investment approach to have follow-through and the best opportunity to achieve well-established return objectives.

Over the last 25 years, that's the way I see it.

Best regards,



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Investment Insights

We organize our investment research into four categories:

1. Macro: Big picture economic, demographic, geopolitical, and financial issues.
2. Trends & Developments: A broad range of topics that impact investment decisions.
3. Industries: Insights within certain industries.
4. Micro: Insights from companies that are impactful as to their own securities.

Here are a few insights on the first three of these research categories:

MACRO

Did a Major, Positive Change Occur in November and December 2023?

Equity markets pushed much higher in November and December 2023, while most longer-term interest rates declined and corresponding bond prices increased. Was this caused by a major, positive change that is sustainable or was it just markets being markets – up and down? We have a strong view in this regard, on behalf of our clients. To start a discussion, we prepared two charts showing U.S. inflation and interest rates.

Chart 1 below shows various inflation rates for the last one year, and for the last six months. The key inflation numbers are the red bars [Core PCE] showing inflation excluding food and energy of 3.2% for the last one year, and 1.9% for the last six months. Core PCE is the key inflation measure used by the Federal Reserve for its 2.0% inflation target, shown by the green bars. Core PCE inflation of 1.9% for the last six months [in red, circled] being below the Fed's 2% target [in green, circled] is a key reason many believe the Fed may soon begin lowering their key interest rates. The question is if six months of low inflation is long enough for the Fed, and if inflation will trend back up.

Chart 1: Inflation Rates [November 2023 Reports]

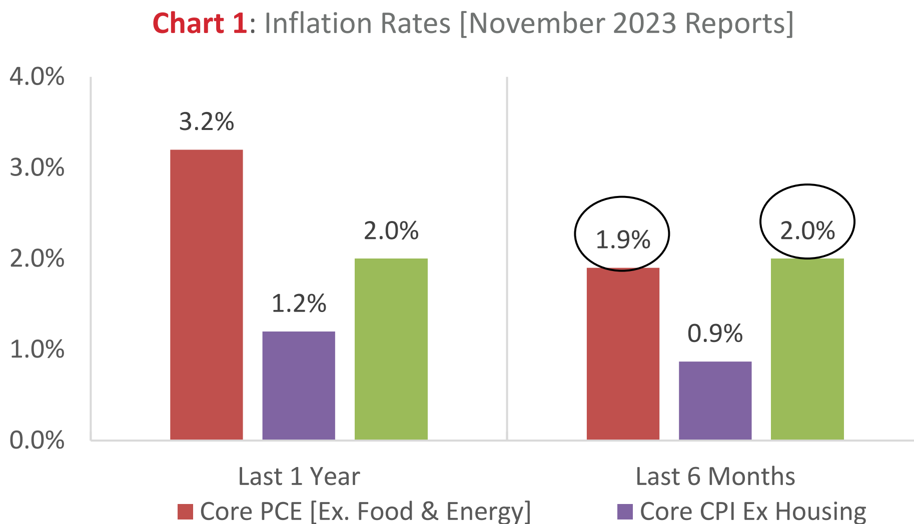


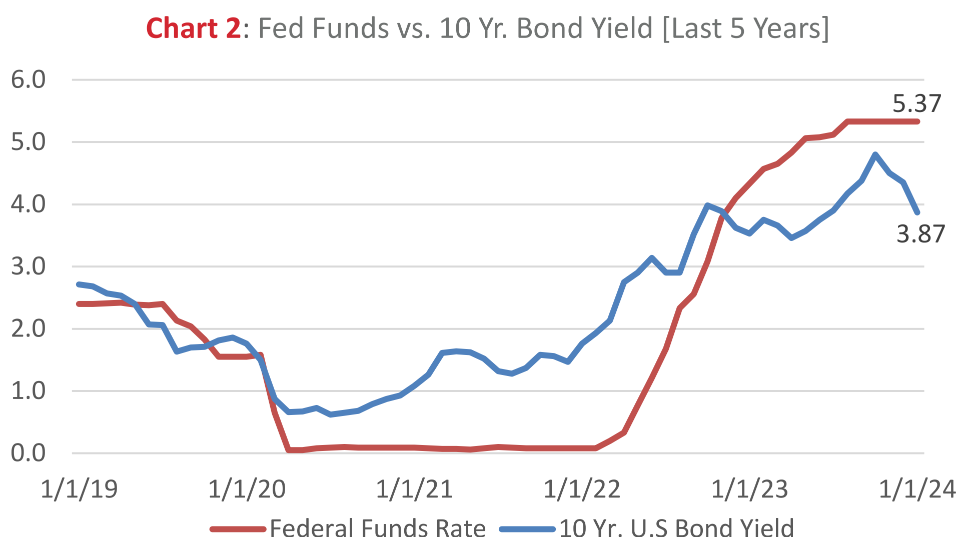
Chart 1 above also shows another measure of inflation that excludes food, energy, and housing [Core CPI Ex Housing], shown by the purple bars. At just 1.2% over the last one year and an even lower .9% annualized for the last six months, these inflation rates are about half of the Fed's 2.0% inflation target.

Why exclude food, energy and housing [actually rent] when analyzing inflation [purple bars]? It looks like cherry picking the data. The Federal Reserve excludes food and energy since they are so volatile, and including them now actually makes reported inflation numbers lower. As to housing inflation [which is rent, not house

prices], current rent inflation is zero to slightly negative using real time data. But the Federal Reserve uses rents over the past year plus, so excluding rent data is a more accurate measure of real time inflation data. The Fed's lagging housing/rent inflation data will lead to lower overall inflation soon.

As to the popular view that government inflation numbers are unreliable or poorly collected, that may be. But we also look at inflation numbers coming real-time from businesses, such as large publicly owned retailers, suppliers, auto dealers, and many other sources. These inflation numbers are reliable and real-time, or close to it, and they currently support the trends coming from government inflation numbers.

Chart 2 below shows the Federal Funds Rate [set by the Federal Reserve] currently at 5.37% [mid-way between its current range of 5.25% to 5.50%], and unchanged since July 2023. It also shows the 10 Year U.S. Bond Yield at 3.87%, as of 1/1/2024. This chart shows the dramatic increase in both of these rates since early 2022, while the 10 Year Bond yield started to decline materially starting in November 2023. This major decrease in the 10 Year U.S. Bond yield is a reflection of 1] lower inflation 2] slower job growth reported the last three months, and 3] the Federal Reserve indicating that interest rates are unlikely to move higher but are more likely to decline materially in 2024 [major changes from prior Fed policy].



There is no denying that inflation over the last two years has been significant, and these price increases are likely to stay. But investment markets look forward, and asset prices should reflect expected future inflation more than past inflation. As a result, the investment markets adjusted up in price in November and December 2023 to reflect lower future inflation expectations and lower future interest rates. Inflation expectations for the next five and ten years are nearly back to pre-Covid levels and are on the cusp of breaking below those levels. The Federal Reserve closely monitors inflation expectations. The Fed may become a bit concerned that inflation could break lower, well below their 2.0% target, which would create a whole new set of issues.

THE BOTTOM LINE: Charts 1 and 2 show the backstory to the market moves in November and December 2023. Is it a major, positive change that is sustainable or was it just markets being markets – up and down? We have a strong view while assuming a variety of outcomes. We hope the discussion is thought provoking and helpful.

Demographics: The Global Population is Aging Rapidly

The above headline has significant implications, not just in the long-term, but in the near-term. China is aging rapidly and is the second fastest aging country behind Japan. The global labor force growth is slowing significantly as birth rates are collapsing in most countries, with some having **not only a declining labor force,**

but actual population declines. A slowing or declining labor force produces lower economic growth, lower inflation, and lower interest rates, over time, based on research we feel is compelling.

The world has not seen this reality before. Yet we believe this reality has become more clear and more pronounced post-Covid. **The U.S. is a powerful and positive exception** with estimates for a growing population. Although the U.S. still faces a slowing labor force, it is not slowing nearly as much as other countries - both developed and emerging.

THE BOTTOM LINE: We believe that demographics will have a major impact on economies and investment realities over the next few decades. As to how this plays out and when, and how to invest in light of these demographic trends, we have clear views that have not changed for many years, but have grown stronger.

TRENDS & DEVELOPMENTS

Interest Income as a Competitive Advantage - The Costco Example

Higher interest rates are not detrimental to many cash rich, low debt public companies, but are actually very beneficial. The caveat being that higher interest rates can also slow the economy, especially at this time given how much and how fast interest rates have been increased by the Federal Reserve. Of course, a company's future prospects hinge on more than just the levels of cash, debt, and interest rates. Yet this interest rate issue is becoming material to helping cash rich/low debt companies out-compete other companies with proportionately larger debt levels, near-term debt maturities, and lower levels of cash and cash flow.

Consider the case of Costco as representative of the interest income benefit to other high quality, financially strong companies. Costco had nearly $7.3 Billion in cash at year-end 2018 which then grew to over $15.2 Billion in cash as of 9/30/2023, an increase in cash of nearly $8.0 Billion the past five years. During the same period, Costco's net cash [cash minus debt] grew from $682 Million to nearly $8.8 Billion, an increase in net cash of nearly $8.1 Billion. So if Costco pays off all its debt, it would still have nearly $8.8 Billion in cash left over, or nearly 13x more net cash than just five years ago, with its cash now earning over 5% interest.

Costco's average interest rate on its debt is just 2.00% today. It has issued debt at very low fixed rates over the last several years, as have many quality companies. Therefore, its interest expense will not go up [even if the Federal Reserve keeps interest rates high or moves them higher], unless Costco issues more debt. Costco has no need to issue new debt, as it can pay off its current debt with cash and can fund all business needs with its strong cash flow. The only reason Costco has debt is that it was issued at very low, fixed rates payable via tax-deductible interest.

Importantly, Costco's annual interest income has increased from $75 Million five years ago to over $807 Million today, an increase of $732 Million. Costco's annual interest expense has stayed flat at nearly $160 Million [Line 6] resulting in an increase in net interest income [income less expense] of over $730 Million.

THE BOTTOM LINE:

- The increase in net interest income provides many strategic options to Costco and companies in a similar situation, which can allow them to invest more in their business to further break away from competition, or increase the return of capital to shareholders via larger stock buybacks and/or higher dividends, depending on a company's assessment of the best capital allocation approach.

- Recently, several companies are issuing new debt at yields that are much higher than the debt they are retiring or that is maturing, leading to much higher interest expense. Many of these companies are not

able to pay off maturing bonds with cash; they must issue new debt. This lowers their profits, putting them at a disadvantage to compete with financially strong companies, such as a Costco or similar companies that are reaping a financial windfall from higher yields on cash.

- One of the reasons smaller company stocks have been underperforming larger cash rich/low debt company stocks until recently is the impact of higher interest rates on many smaller companies. If and when interest rates move lower, the relief of pressure on smaller company stocks is likely to be much more positive for them, depending on the amount of the decrease in rates and whether the decrease in rates is due to an economic downturn.

Caution on Costco Comments**:** The comments on Costco or any other company in this issue of *Investment Advisor* are not a recommendation or investment advice. Our comments on Costco, for example, are limited to the impact of interest rates on its balance sheet [which can change quickly] and other companies could have been used to make a similar point. Consult your own investment advisor for specific investment advice relevant to your personal situation and please note our **Cautionary Disclosure** and **Disclaimer on Companies Mentioned**, on the last page.

INDUSTRIES

Artificial Intelligence [“ai”] and the Nvidia Impact

An Apple “iPhone moment”, is how the ai revolution was described in May 2023 by Jensen Huang, the CEO of Nvidia, which is now the largest semiconductor chip company in the world, by far, when ranked by market value. When ChatGPT [from OpenAI] was made available to the public, it released a tsunami of interest and orders for the goods and services that can enable such tools.

> “When the ChatGPT moment came…it helped everybody crystallize how to transition from the technology of large language models to a product and service based on a chatbot...all of that came together in a really wonderful way and it's the reason why I call it the iPhone moment, all the technology came together and helped everybody realize what an amazing product that can be and what capabilities it can have.” [*Source: CEO Jensen Huang, Nvidia Corp. Earnings Call 5/24/2023]*

The move from CPUs [think traditional Intel chips that generally process one operation after another, sequentially] to multiple GPUs [think Nvidia chips all connected to each other with software delegating different computing tasks to be simultaneously processed, and then putting the answers back together faster than a CPU] is a better approach to ai/advanced computing. An analogy would be one lawyer solely handling an entire, large scale merger and acquisition deal [like a CPU] versus a lead lawyer delegating and coordinating all the various aspects to specialized lawyers [labor, tax, environmental, securities etc..], in essence being the software or brains behind the delegation and coordination [like a GPU]. The more complex the issue, the faster/better it is to have more specialized resources working simultaneously and seamlessly coordinated.

Currently, most large data centers that do heavy data processing are based on CPUs. But Nvidia feels the CPU preference is changing, enabled by their multiple decade investment in GPU hardware and software, with ChatGPT mostly powered by Nvidia GPUs. Nvidia’s CEO went on to describe the massive shift from CPUs to GPUs in the same earnings call:

> “when generative AI came along, it triggered a killer app for this computing platform that's been in preparation for some time. And so, now we see ourselves in two simultaneous transitions. The world's $1 trillion data center **is nearly populated entirely by CPUs today**… **And so I think**

you're starting -- you're seeing the beginning of…call it a 10-year transition to basically recycle or reclaim the world's data centers and build it out as accelerated computing. You'll have a pretty **dramatic shift in the spend of the data center from traditional computing, and to accelerated computing** with smart NICs, smart switches, of course, **GPUs, and the workload is going to be predominantly generative AI**."

THE BOTTOM LINE: The impact and implications for the computing/semiconductor industry is significant, let alone for the entire business world.

Impact of Artificial Intelligence [ai] and Advanced GPU Computing on Other Industries

The term "ai" is now popular, but it has been a key strategy for some companies for many years. One example is Deere. But the list is long and varied, from Deere to Caterpillar, McDonalds to Starbucks, Amazon to Wal-Mart, and many others.

Deere has utilized GPU/ai technology in its sprayers and planters for years, providing immense cost savings and productivity enhancements to its farm customers. Deere's See and Spray is a precision farming technology with cameras and sensors on the sprayer that identify and spray just the weeds, precisely, without hitting crops and minimizing herbicide use. This greatly reduces herbicide cost to the farmer and improves crop yields and soil/food quality. As a result of these cost savings, Deere is able to charge more for its See and Spray equipment and provide software subscriptions, improving its own profitability.

Not all Deere competitors have kept up with Deere's investment in technology, or perhaps were unable to fund the investments at the same levels. Beyond See and Spray, there are similar applications for precision planting of crops [at the right depth depending on the soil], harvesting, and driverless systems, responding to the difficulty in finding cost-effective labor on the farm and improving efficiency and profitability.

Retailers have utilized GPU/ai technology in many ways, with Amazon's robotic warehouses receiving a large amount of media attention. But retailers are now able to use GPUs in stores to perform checkout without scanning. As retailers look to reduce theft or inadvertent non-payment at self-checkouts, GPU enabled systems are able to identify goods that are not paid for, immediately, alerting store attendants prior to unpaid goods leaving the store. Future advancements will be adopted to reduce theft. Reducing retail "shrinkage", or loss due to unpaid items, is a huge expense to retailers which will justify large spending on GPU/ai systems. In addition, the ability to reduce reliance and hard to find/more costly labor, lends itself to GPU/ai systems.

As with Deere, the difference in adoption by competitors is likely to result in notable differences in profitability, with certain companies breaking away competitively. In many cases, this breaking away is not just due to company foresight, but the ability to spend large amounts on technology. Thus the "strong get stronger" is a real possibility, although the smart, nimble competitor is not to be underestimated.

THE BOTTOM LINE:

- In a world with less available labor due to aging demographics globally, keeping costs down and improving productivity will be greatly enhanced through robots, automation, and the benefits provided by GPU/ai technology. The impact will be broad based by industries, but requires foresight and adequate technology spending by companies to produce results and competitive advantages.
- The impact on companies has already been seen at Deere, as one example. In many cases, it is not just which companies will benefit but which will extend their current leads [i.e. breaking away further].

ABOUT MILLER CAPITAL

- Miller Capital was established in 1999 and is independently owned and operated.
- We are a Registered Investment Advisor.
- We offer both investment management and investment consulting services.
- We represent individuals, businesses, investment partnerships/companies, and private trusts [serving individual and corporate trustees].

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One advantage to working with Miller Capital is our access to a wide range of third party research that we organize, evaluate and summarize, in addition to our own research and views. To be confident, clients need to be informed, but not overwhelmed. Clients deserve clear, concise guidance backed by thorough research and sound logic.

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