Investment Advisor

CONVERSATIONS ON INVESTMENT MANAGEMENT

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

> *Investment is most intelligent when it is most businesslike.*
>
> **-- THE INTELLIGENT INVESTOR, PROFESSOR BENJAMIN GRAHAM --**

The last twenty-five years have been full of unexpected events:

- Internet bubble and "dot com" stock crash [1999-2000].
- September 11th terrorist attack [2001].
- Iraq War [2003].
- Global Financial Crisis [2008-2009].
- Covid-19 Crisis [2020-2022].
- Post Covid-19 Inflation and Interest Rate Spike [2021-2023].
- Russian Invasion of Ukraine [2022-2023].

Timeless investment principles and sound logic provide a firm foundation during difficult times. The finishing work is disciplined execution.

Discipline vs. emotion, preparation vs. reaction, confidence vs. anxiety [in the face of uncertainty]; we all choose our approach whether by action or inaction. With investing and financial decisions, it is important to control our emotions and to consider, but also question, the opinions of others [including in the media]. After all, investment and financial mistakes can be quite harmful.

We hope you enjoy this issue of *Investment Advisor*. All previous issues are available on our website [millercapital.com] under the Resources section.

Personal Reflections: Investing in a Mixed-up World

The Power of Lower Interest Rates Over the Last 40 Years. The last twenty-five years have included a variety of unexpected and consequential events. Yet there was a very powerful theme over the last twenty five years [actually over the last forty years] until last year…interest rates in the United States trended down over each decade. This trend toward much lower interest [despite a few bumps up from time to time] had a profound impact on the relative value of bonds versus cash, and the relative value of stocks, real estate, and other equity-like assets versus both bonds and cash. It was a sea change in the investment environment compared to the early 1970s through the early 1980s.

During the last twenty five to forty years, public companies were generally able to issue new debt at lower and lower interest rates. This decreased company interest expense, increased profitability, and enabled expansions, mergers and acquisitions, and stock buyback programs to be funded at a lower cost. The same benefits accrued to real estate companies and investments, and a whole host of investment opportunities that used debt financing.

Will Globalization Benefits Cease? In addition to lower interest costs, globalization has permitted the cost of goods sold and other labor costs to move lower, even when produced internationally and transported back to the U.S. or other countries. Now that labor costs are moving up globally due to shortages of labor, and due to concerns over having more of the supply chains in "friendlier countries" [reshoring], how much will automation help mitigate these higher costs?

We are investing in a mixed-up world compared to the past twenty-five to forty years, or so it seems.

Key Questions. Some key questions surface as to the future investment environment:

- Will the lower interest rate trend of the last forty years continue, or at least stay relatively low?
- Will demographic trends [an aging society with less population growth and less labor force growth] continue to result in slower economic growth and low inflation, overpowering higher labor costs and supply chain changes?
- Has the Covid-19 Crisis resulted in a profoundly new era; a return to higher inflation and interest rates?

Vast Differences Will Continue. One thing that is magnified by the Covid-19 Crisis and its aftermath is that vast differences will continue among countries, economies, and their various investment opportunities. For example, despite inflation's trend downward over the last several decades, there were sectors of the economy that experienced high inflation, with college/university education and health care being two examples. Also, certain sectors of the economy grew nicely while others suffered due to technology changes, such as newspapers and many traditional retailers.

Even in a mixed-up world, there are always opportunities. In our view, the key is to adapt, with an open mind, while holding to time tested investment principles even as rapid changes are taking place. Some of these principles include:

- Knowing what you own and why.
- Avoiding uncompensated risk.
- Knowing when to change your plans.
- Making sure the investment strategy and portfolio is tailored to each client's needs and preferences [easier said than done as the investment world tends to favor simple investment models to create economies of scale].

Our Views on the Key Questions. As to the Key Questions above, we have clear views which are incorporated into our work for clients. But we question those views as we research deeply, while pursuing sound investment logic to provide portfolios tailored to each client's needs and preferences. That's our approach to "investing in a mixed-up world".

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 just a few topics of note in the first three of these research categories:

MACRO [BIG PICTURE]

Timing the Economic Impacts from Higher Federal Reserve Interest Rates. With the Federal Reserve raising rates from .25% to 5.25% over the last 15 months, many are wondering when these increases will have a serious impact on the broad economy, beyond just the real estate market or a few large banks that have failed.

Federal Reserve: Interest Rate Increases [2022-2023]

DATE OF INCREASE	RATE CHANGE [BASIS POINTS]	FEDERAL FUNDS RATE
May 3, 2023	+25	5.00% to 5.25%
March 22, 2023	+25	4.75% to 5.00%
Feb 1, 2023	+25	4.50% to 4.75%
Dec 14, 2022	+50	4.25% to 4.50%
Nov 2, 2022	+75	3.75% to 4.00%
Sept 21, 2022	+75	3.00% to 3.25%
July 27, 2022	+75	2.25% to 2.50%
June 16, 2022	+75	1.50% to 1.75%
May 5, 2022	+50	0.75% to 1.00%
March 17, 2022	+25	0.25% to 0.50%

Per economist Alan Blinder, the rule of thumb is:

- A one year lag before higher interest rates have a major impact on real GDP [gross domestic product net of inflation].
- An additional year or so before there are major effects on inflation.
- Assuming the weighted average center of gravity of recent rate increases is September 2022, then the main impact on the economy [measured by real GDP] would be about September 2023, and the main impact on inflation [lowering it] would be about September 2024.

Economist Milton Friedman said nearly 60 years ago that the impact of interest rate increases on the economy comes with "long and variable lags". But the Covid-19 Crisis was so unique that its particulars may distort the rule of thumb, and that is why "pause and see", as to long and variable lags, was appropriate for the Federal Reserve decision not to increase interest rates in June 2023. [Source: Alan S. Blinder Op-Ed, Wall Street Journal, 6/15/2023].

According to economist Ed Hyman [ISI Evercore], Wall Street's number one ranked economist for an unrivaled forty-two years [not to suggest his forecasts should be relied upon, but only that he often provides helpful insights]:

- Money supply changes have a lagged impact on the economy for just over a year.
- Money supply is contracting for the first time in seven decades. [Source: Ed Hyman, WealthTrack 12/9/2022].

BOTTOM LINE: Past interest rate increases have severely impacted housing/commercial real estate and are just starting to have a noticeable impact on the rest of the economy, primarily due to less bank lending. Based on the rules of thumb:

- The impact from significantly higher Federal Reserve interest rates should begin to hit the broad economy soon.
- Since there is so much stimulus money still being released into the U.S. economy from various government infrastructure spending programs, and Covid-19 was an unusual event, the timing and severity of the impact is less clear…but it is likely coming.
- The key question is how soon the Federal Reserve will react to support the economy if and when economic conditions deteriorate, or if inflation will recede faster than expected allowing a sooner decline in interest rates. Since we feel much of the inflation from Covid-19 was the result of supply chain issues [and government stimulus spending], the resolving of supply chain issues could reduce inflation dramatically, even before higher interest rates start to have an impact.
- A properly diversified and tailored portfolio strategy should assume an economic slowdown is always a reasonable possibility.

Inflation Update. Inflation measured by the CPI Index has been heavily influenced recently by used car prices and real estate shelter costs [including rent], both of which are declining significantly in real time but are delayed in coming into the CPI Index. Producer prices [PPI Index] are declining [actual deflation] in many countries. China's PPI Index [factory prices] declined -4.6% in May 2023, the lowest in seven years and the eighth consecutive month of deflation. Absent a change, China will soon be a global exporter of deflation.

The Federal Reserve assumes inflation will be sticky and therefore they are talking tough…until they have confidence inflation is coming down on a sustainable basis. It is their job to control inflation so their tough view is somewhat understandable. However, if the inflation war is won, the victory in real time will come much sooner than any Federal Reserve victory announcement, as they rely on lagging data [whether using the CPI Index or their preferred PCE Index]. But investment markets will look forward and anticipate any such inflation victory, while the Federal Reserve takes a "wait and see" approach. Private research firms calculating the CPI Index and PCE Index using real time real estate metrics are showing that inflation is either near or below the Federal Reserve's long-term target of 2%.

The famous, but retired investment manager Peter Lynch once said "if you spend 14 minutes a year on economics, you've wasted 12 minutes". But there is a difference between "economic facts….and economic predictions, and economic predictions are a total waste." [Source: Peter Lynch Lecture, National Press Club, 10/8/1994]. Predicting inflation and interest rates may seem like a fool's game, but some inflation numbers are actual facts. Used car prices, real estate prices, and many other "economic facts" are somewhat relevant to the level of interest rates, but they are most helpful to other areas of analysis, particular as to company level investment decisions.

BOTTOM LINE: While inflation numbers in the U.S. should continue to decline year over year, prices are still high compared to pre-Covid prices. Regardless of inflation coming down more quickly or not, the investments in a portfolio should, as a whole, be able to perform satisfactorily in either scenario. If not, portfolio adjustments may be in order in the meantime.

Employment and Inflation. There have been some very positive employment changes [per the BLS May 2023 Employment Report] even as the Federal Reserve is trying to raise the unemployment rate in their inflation fight.

- The prime age labor force [workers age 25 to 54] is back to 2008 levels, and above pre-Covid levels, at 83.4%.
- Male prime age labor force participation is not yet back to 2008 levels, but the real story is that female prime age participation has broken out to new, all-time highs at 77.6%. [Source: BLS May 2023 Employment Report]

BOTTOM LINE: It is nice to see supply side responses to the economy in the form of more prime age people entering or returning to the labor force. Combined with improving supply chains, this greater labor supply should help inflation rates to continue to fall, year over year. Eventually, this may provide the Federal Reserve with the greater confidence they need to focus on the next challenge, which is likely to be supporting a decelerating U.S. economy.

Student Loan Repayments Set to Resume. According to the Department of Education:

> *"Student loan interest will resume starting on Sept. 1, 2023, and payments will be due starting in October. We will notify borrowers well before payments restart." [Source: www.studentaid.gov]*

According to the Federal Reserve Bank of New York:

- The total amount of outstanding student loan debt is estimated to be $1.6 Trillion.
- Average monthly payments for undergraduate debt are $278/month, and $572/month for graduate debt.
- Even before the student loan repayments begin, 30-day delinquencies [payments past due] and 90 day delinquencies [seriously past due] have begun rising noticeably for auto loans and credit cards, and to a lesser degree for mortgages and home equity loans. This is particularly true for lower income and younger people. [Source: Quarterly Report on Household Debt and Credit Q1 2023 - Federal Reserve Bank of New York].

BOTTOM LINE: As the Federal Reserve fights inflation, it must watch carefully that higher rates and reduced lending do not cause serious damage to the economy by focusing too much on lagging inflation data rather than real time data. With so much more debt in the financial system [both public and private] compared to the last 25 years, higher interest rates have a much more dramatic impact on debt service costs, forcing interest payers to reduce spending in other places. As a result, the Federal Reserve may become nimbler in the future than their public statements indicate.

As soon as the Fed can comfortably declare the inflation fight to be won, with inflation confidently heading toward their 2% long-term target [even if above that rate for the time being], the Federal Reserve would be in a position to change its focus, if necessary. Today, the focus is on inflation, but that focus could soon change to protecting the economy and lowering interest rates sooner than the Fed's recent public statements indicate. If so, the investing environment would be far different than the increasing interest rate environment in place since March 2022.

Trends & Developments

Year to Date S&P 500 Index Returns Have Been Strong. The -10.3% spread between the S&P 500 Equal Weight index return [-.6% year to date return] and the S&P 500 index returns [+9.6% year to date return] is the widest spread for any five-month interval this century [year to date through 5/31/2023]. In other words, this year the capitalization weighted S&P 500 Index has substantially out-performed the equal weighted S&P 500 Index [roughly .20% invested in each of the S&P 500 Index stocks]. Here is a list of the Top 10 Stocks in the S&P 500 Index [weighted by market capitalization].

Ten Largest Stock Weights in the S&P 500 Index [as of 5/31/2023]

COMPANY	WEIGHT %	COMPANY	WEIGHT %
Apple	7.52%	Alphabet Class B	1.83%
Microsoft	6.97%	Meta Platforms Class A	1.68%
Amazon	3.06%	Berkshire Hathaway Class B	1.65%
Nvidia	2.65%	Tesla	1.56%
Alphabet Class A	2.09%	UnitedHealth Group	1.30%

- The top five stocks equal 22.3% of the S&P 500 Index vs. nearly 1.0% in the Equal Weighted Index.
- The top two stocks [Apple and Microsoft] equal 14.5% of the S&P 500 Index.
- Over the last fifteen years [ending 5/31/2023], the annual return on the cap weighted S&P 500 Index, and the equal weighted S&P 500 Index, are nearly identical at 9.7% and 9.8% respectively.

Demographics and Employment-Inflation. In our last issue of Investment Advisor [Q4 2022], we discussed the demographic challenges faced by Japan and many other countries in contrast to the United States. Many countries are experiencing a declining labor force population, and now an overall decline in population, due to the declining birth rate.

- Japan reported annual births in 2022 below 800,000 [799,728], or nearly 1/2 the 1982 level of 1.5 Million.
- It reported record high deaths of 1.58 Million; a net difference [birth less death] of nearly 800,000.
- Japan's birth rate is far below the level required for a stable population [excluding immigration].
- Japan's Prime Minister says the country is "on the brink of not being able to maintain social functions".
- This demographic trend is similar in most of Asia and the developed world, with South Korea having the lowest birth rate and China's population declining and set to lose the title of most populous country to India. [Source: Japan Population Crisis Deepens CNN 3/1/2023]

This decline in the labor force population around the world tends to lower economic growth. While the U.S. has a far better demographic situation, with a slow but still growing labor force and population [largely due to immigration], the U.S. worker shortage continues, particularly with increased reshoring of manufacturing and large infrastructure programs.

The Federal Reserve cannot help create workers, and in fact it is doing the opposite by trying to reduce employment to lower wage growth and inflation. [Source: US Can't Find Workers – Greg Valliere, AGF, 2/28/2023].

BOTTOM LINE: Worker shortages are increasing in many countries due to low birth rates and an aging society. As a result, we anticipate a substantial increase in automation spending to fill the gap of unavailable workers, and to reduce labor costs. This will have substantial benefits to companies that can provide automation solutions to the labor force shortage.

Industries

Aerospace: Airbus CEO Guillaume Faury speaking at the Paris Air Show says "We cannot make planes fast enough to satisfy the demand." An airplane order is "a reservation of slots in the backlog, indeed for a resource that is scarce." Boeing CEO Dave Calhoun agreed with the supply constraints saying "Why are people ordering airplanes out in the 2030s now? Because they see the same thing." [Source: Jet Makers Swamped with Orders Wall Street Journal 6/24/2023].

- This has implications for many suppliers to the aerospace industry.
- Few industries have such an imbalance of estimated short and long-term demand versus available supply, due to supply chain constraints from Covid-19 and the temporary halt of certain Boeing production over safety issues.

Infrastructure: During 2021 and 2022, nearly $4.3 Trillion in federal funding was provided in four special spending programs, of which nearly $3.6 Trillion was new spending. A substantial amount of the last three spending programs [see next table] was for infrastructure, clean/alternative energy, and semiconductor plant construction/expansion. These amounts compare to $1.6 Trillion of outstanding student loan debt [discussed previously in "Student Loan Repayments Set to Resume"], in terms of measuring the potential impact on the economy. According to various sources and company comments, a substantial amount of the last three infrastructure focused programs is still in the process of being spent.

Special Federal Spending Programs [2021-2022]

SPENDING PROGRAM	EFFECTIVE DATE	AMOUNT
American Rescue Plan	3/11/2021	$1.90 Trillion
Infrastructure Investment and Jobs Act	11/15/2021	* 1.20 Trillion
CHIPS & Science Act	8/9/2022	.28 Trillion
Inflation Reduction Act	8/16/2022	.89 Trillion
Total		**$4.27 Trillion**

** $650 Billion was previously authorized spending and $550 Billion was new spending.*

Several of the largest aggregate, cement/concrete and asphalt suppliers in the U.S,, at the heart of infrastructure spending, have cited the above spending programs as creating multi-year demand for their products, primarily in nonresidential construction sectors. The value of state and local governments highway, bridge and tunnel contract awards, a leading indicator of future demand, grew nearly 25% to a record $102 Billion in 2022. [Source: Martin Marietta Materials, Q4 2022 Earnings Conference Call 2/15/2023]. In addition, the recent Cornyn-Padilla amendment is allowing states and local municipalities to use unused COVID-19 relief dollars for infrastructure projects. As a result, after having gone some 15 years without a major federal infrastructure or highway transportation spending program, some states are now concerned about aggregate and cement/concrete shortages.

Despite uncertainty about inflation and interest rate levels, and whether a significant recession is on the horizon, there will be industries, sub-sectors, and specific investments that will have tailwinds rather than headwinds. This is always the case, but goes against broad, sweeping statements about "the economy", as though it is not made up of unique sub-parts.

Semiconductors: The longer-term acceleration in demand growth for semiconductor chips continues, despite near-term demand weakness in a few areas, such as consumer electronics that experienced a Covid-19 boost. For example:

- Electrified vehicles [EVs] will use more than double the semiconductor chips as a combustion engine, at some $1,500 to $2,000 per vehicle presently.
- More advanced, "leading edge" chips require far more of the less sophisticated "trailing edge" or "mature" chips in a support role.
- The three largest semiconductor producers have announced $325 Billion in new fabs or factories, some of which related to artificial intelligence demand.

As a result, any short-term weakness in the industry is likely minor compared to the required doubling of spending and capacity that is needed every 8 to 10 years. So investment must continue regardless of any temporary weakness in certain sectors of the industry. [Source: ASML Earnings Call 1/25/2023].

Leading Edge vs. Trailing Edge Semiconductor Chips. Although there is much talk about artificial intelligence and the sophisticated "leading edge" semiconductor chips they require, the demand for less powerful "mature" or "trailing edge" chips will be stronger than anyone expects. These mature chips are used extensively in high growth, mega-trend sectors like electric vehicles, alternative energy products, and sensing [for auto and industrial], among other applications. New semiconductor fabs [factories], especially those needed for advanced trailing edge, will require substantial capacity additions. [Source: ASML Earnings Call 4/20/2023].

Cycles Still Exist But Greater Order Predictability is Coming. In a major change from the past, semiconductor chip purchasers are looking for supply certainty for the next two to five years and even ten years, rather than for just the next few quarters. This is a new reality and leads to longer-term supply commitments from purchasers [some non-refundable] so that semiconductor manufacturers can invest in their own supply chains and commit to their own suppliers. This is a major change, and provides more consistency to this industry, although it still has cycles. [Source: Microchip Technology Earnings Call 2/2/2023].

WORKING WITH MILLER CAPITAL

One advantage to working with Miller Capital is the access to a wide range of third party research and views 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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- 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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