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Market Update

Monthly review of market developments

1 Who we are

We are a group of part time Master's students specialised in Banking, Finance and Analytics at King's College London, with students joining from all corners of the world.

2 Why we do this

Inspired by our diverse community, we created this project in order to join our experience and knowledge and apply it to the formation of a unique perspective on markets. We do so by capturing intriguing stories and combining them with detailed market research and data analysis. In such way we support each other to develop stronger analytical skills and become better investors. We are excited to share our analysis with the Finance community, or with anyone who shares the same passion!

3 What it does for you

Our comprehensive analysis spans across multiple crucial domains including the Macro Economy, stocks, bonds, commodities, M&A, private equity, cryptocurrencies and real estate. Through the in-depth study of these sectors, we aim to offer a holistic view of the financial world which enables our readers to make informed decisions and gain a strong understanding of the complex dynamics at play.

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October - A Month of Macro Mayhem

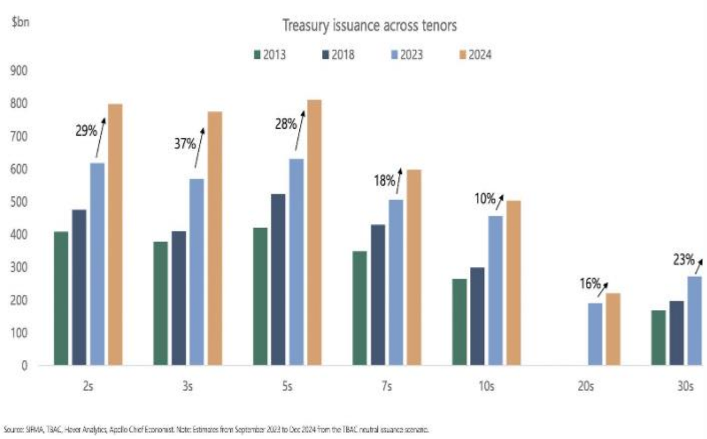
By: Chun Wang Adrian Ip, Thomas Petters

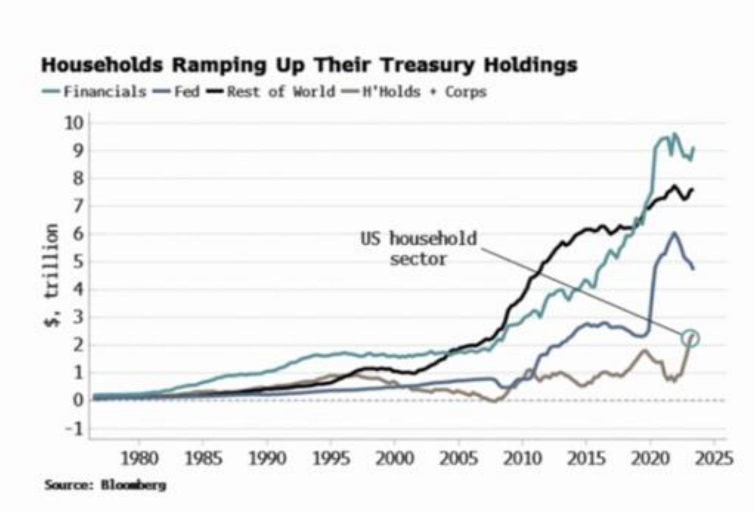
South Africa won the tenth rugby world cup with a (rather unconvincing) victory over the All Blacks marred by a controversial red card, Lebron James entered his 21st NBA season playing as if he was still 21 years old and almost 90% of parents stole their kids' hard-earned sweets knocking door to door repeating the same pitch (likely understated, as we never had any sweets left the next morning) marked the end of October. Meanwhile, it has been an eventful month in the global macro landscape.

"Trick or treat"

Investors typically prefer treats or, at the very least, limit their losses to a single trick. However, this month, the global macro outlook seemed to be playing tricks on investors across various asset classes. The month was characterized by tragic events in the Middle East, the ongoing Russia-Ukraine conflict, along with challenges faced by major Chinese real estate developers. Further, weak PMIs in Europe and the UK, volatile FX & commodity markets and rising yields in bond markets, have collectively contributed to a tightening of financial conditions among the developed economies. This convergence of factors prompts the question: are we currently facing a perfect storm in the global macro environment, or can economies, with the guidance of policymakers, effectively navigate these challenging times?

While the situation in the Middle East kept politics and financial markets on edge over the last weeks, heightened volatility across major asset classes has been observed since the end of summer. As discussed in our September article, we attribute some of this market volatility to the increase in the U.S. budget deficit and a larger issuance of longer-duration U.S. government securities. The greater supply of notes and bonds has coincidentally led to higher yields and a rise in term premia. This shift underscores that investors are now seeking a greater risk premium for longer-duration bonds after a prolonged period of lower yields at the long end. We attribute some of this shift to heightened demand from the more rate sensitive private sector, which expanded its role in the government bond market, while central banks are progressively reducing their participation due to Quantitative Tightening (QT) programs and other policy adjustments. It looks as if investors have recognized that the supply (relative to demand) of issuance matters.



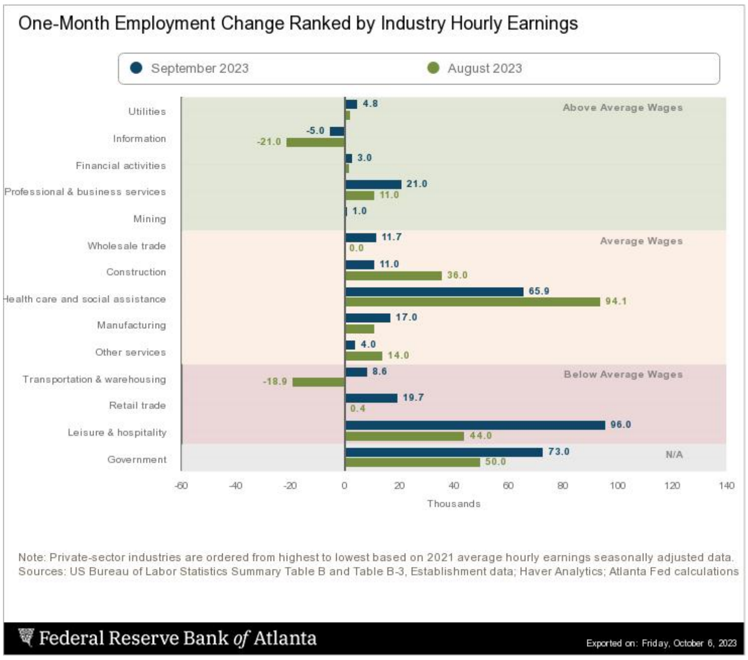


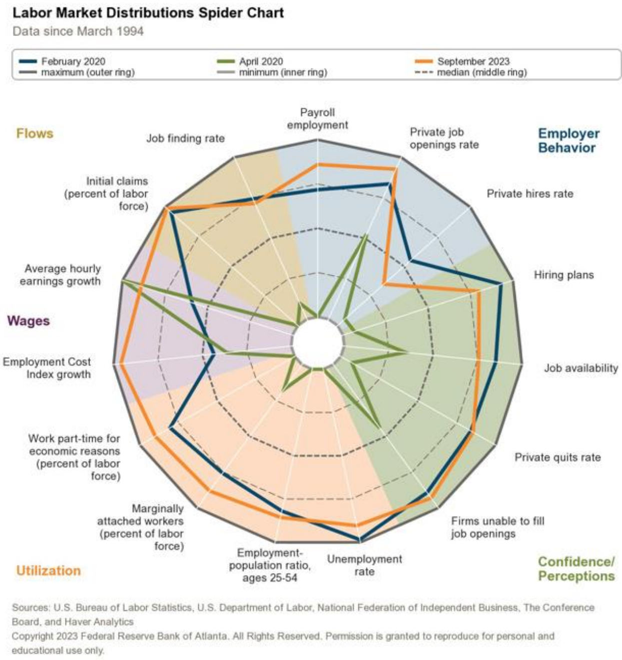
While issuance of long duration treasuries will remain high, the just-released quarterly refunding documents from TBAC (Treasury Borrowing Advisory Committee) for Q4 2023 & Q1 2024 foresee a larger than expected proportion of short dated bills. We observed that longer dated treasuries rallied significantly after the TBAC numbers were published. This happened hours before the FED delivered a relatively dovish FOMC meeting on November 1st too.

Notably, in addition to nominal yields, real yields have surged as well in recent weeks, reaching around 2.5% in mid-October. It is expected that the rapid increase in long-term interest rates will have the dual effect of tightening financial conditions and creating challenges for companies and households seeking long-term refinancing. At the same time, increasingly attractive yields on long-dated government bonds and investment-grade bonds are likely to be drawing liquidity away from riskier assets like equities.

While current GDP data show exceptionally strong U.S. economic performance (4.9 % in Q3, QoQ), early anecdotal evidence points to a slowdown in consumer spending. Numerous Q3 earnings calls featured CEOs reporting a decline in their customers' consumption. Further, a brutal business environment and rise in retail crime are major reasons that led to US major retailers such as Target and Walmart to close over 3000 stores across the country, with household names such as Footlocker closing 420 stores by 2026. As a result, there has been an increase in empty shopping malls and explains why Carl Icahn betted on the CDS of CMBX.6 index consisting mostly of US mall loans (though the outcome is a different story).

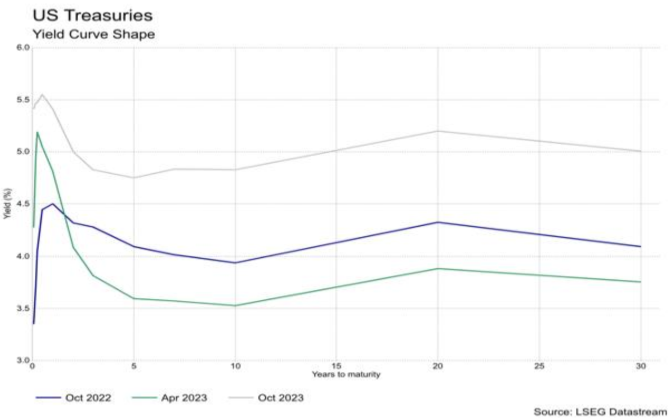
Another trend we can see is the sharp rise in the default rate on credit cards and car loans over the past few months. These are particularly noticeable in the subprime sector and among the credit card business of smaller banks in the United States. While the overall U.S. labour market data does not exhibit clear signs of decline yet, a closer analysis of the latest report reveals a cooling in private sector hiring, especially in higher paid jobs. On the contrary, the public sector and non-cyclical sectors, such as healthcare, are experiencing substantial growth.





“Long and variable legs”

Although economists worldwide had predicted a recession in western economies last year, market participants are currently anticipating a “soft” or “no landing” scenario in the U.S. economy. While many believed that an inverted yield curve serves as a dependable recession indicator, historically, recessions often begin when the yield curve steepens and turns positive again. However, with the Federal Reserve showing increased reluctance to raise rates further and the Treasury aiming to stabilize the longer end of the curve, the timeline for the yield curve turning positive may be more prolonged than initially anticipated.



In contrast to the U.S., the situation in Europe is notably distinct. There, the economy is stagnant, with the ECB's fight against inflation and the repercussions of the Russia-Ukraine conflict disproportionately affecting industry-heavy economies like Germany, which is in recessionary territory again in Q3. Despite this unfavourable environment and deflationary tendencies in some countries (e.g. Netherlands and Belgium), the ECB maintains a stringent interest rate policy and kept rates unchanged in its October meeting. Given recent observations of weak economic performance and ongoing uncertainties in the energy markets, there is a likelihood of implementing additional fiscal measures by EU member states to bolster purchasing power and industrial production. In the UK, policymakers are also grappling with inflation, but the economic data is surprisingly more favourable compared to the European average.

For other developed economies, Europe could serve as an insightful role model for the ongoing and future battle between monetary and fiscal policies that might be upon us for the years to come. While the impacts of monetary tightening measures tend to unfold gradually, fiscal policy frequently responds promptly and assertively, counteracting measures taken by monetary policymakers.

“China - overlooked and unknown”

Amidst the ongoing geopolitical and macroeconomic volatility, it's often impossible to discern the details amid the broader trends. While the Western hemisphere has become accustomed to stricter financial conditions, Chinese policymakers are vigorously injecting liquidity into their markets. The Chinese real estate sector has been grappling with issues for a while now, but in recent weeks, the deterioration has accelerated. Not only have major real estate companies seen a significant decline in sales compared to the pre-Covid-19 period, but the bond values of many of these firms have also suffered substantial losses. We've witnessed the first defaults of dollar-denominated offshore bonds, like Country Garden.

Chart 14: ...as something is brewing in HY real estate

China HY real estate total return index

Source: BofA Global Investment Strategy, Bloomberg

BofA GLOBAL RESEARCH

While the majority of investors currently do not seem to perceive systemic implications, these developments raise concerns. As per reports from FT and Bloomberg, Chinese developers have defaulted on approximately $115 billion of the $175 billion in outstanding offshore dollar bonds since 2021. An even larger sum of onshore bank loans is also at risk of restructuring or rollovers. Furthermore, the situation is exerting considerable pressure on the Chinese currency.

Anyhow, a troubling construction sector is not unique to China. The UK has witnessed over 4000 construction contractors collapsing in the first 6 months this year, an increase of 16.5% when compared to last year. Per FT's analysis, smaller contractors accounted for 60% of the insolvency, but insolvencies among larger firms had also been increasing. The business environment has been dreadful, as noted by Rebecca Larkin at the Construction Products Association, construction firms had to endure a double digit increase in material costs in the past 18 months, a 42.7% rise in construction material costs when compared to pre-pandemic levels. The cost effects are also felt by government funded projects, such as the High-Speed 2 railway terminal at Euston station in Central London and the portion connecting Crewe and Birmingham, both of which have been delayed significantly. Coupled with high interest rates, it would be difficult to justify proceeding with any construction projects in this climate.

Coming back to Asia, due to the economic slowdown in China and the worsening trade relationships with the U.S. and it's allies, the rest of Asia is also struggling under these tensions. Apart from the well-documented disparities between China and Taiwan, a new source of tension is emerging in the South China Sea, characterised by multiple reported incidents involving China and the Philippines, along with provocative statements from both sides. At the same time, the Japanese yen has been trading above the critical level of 150 yen for 1 USD, a level where Japanese policymakers had intervened heavily in the past. Just recently, the BoJ had decided to strengthen its ultra-loose monetary policy and allow interest rates on 10-year government bonds to rise up to 1 %, which caused JGB yields to rise rapidly. A development that probably not all investors will be prepared for and a big unknown for sovereign bond markets all over the world.

Conclusion

In this complex macroeconomic mix, it can be very hard to distinguish the important signals from the noise. Anyhow, we think it is important to keep an eye on the big picture, stay diversified and pursue consistent risk management. From a macro perspective, there may be potential opportunities in riskier asset classes over the near term, particularly if bond yields continue their recent downward trend. At least the trend of the last few days confirms this assumption.

Macro Economic Factors and Historical US Stock Market Returns

By: Partha Sharma

Introduction

When questioned about the course of stock markets, Isaac Newton once famously responded, 'I can calculate the motions of the heavenly bodies, but not the madness of the people.' Indeed, the behavior of stocks has puzzled humanity for quite some time. According to the random walk theory, stock market prices follow a random pattern, making them seemingly unpredictable. While this notion holds true to some extent, especially in the short term, we can observe that the actions taken by central banks, such as setting interest rates and implementing quantitative easing (QE), have a profound impact on stock prices. Figure 1 illustrates the impact of the expansion of the US Federal Reserve's balance sheet (red curve) on the SPX 500 Index (blue curve).

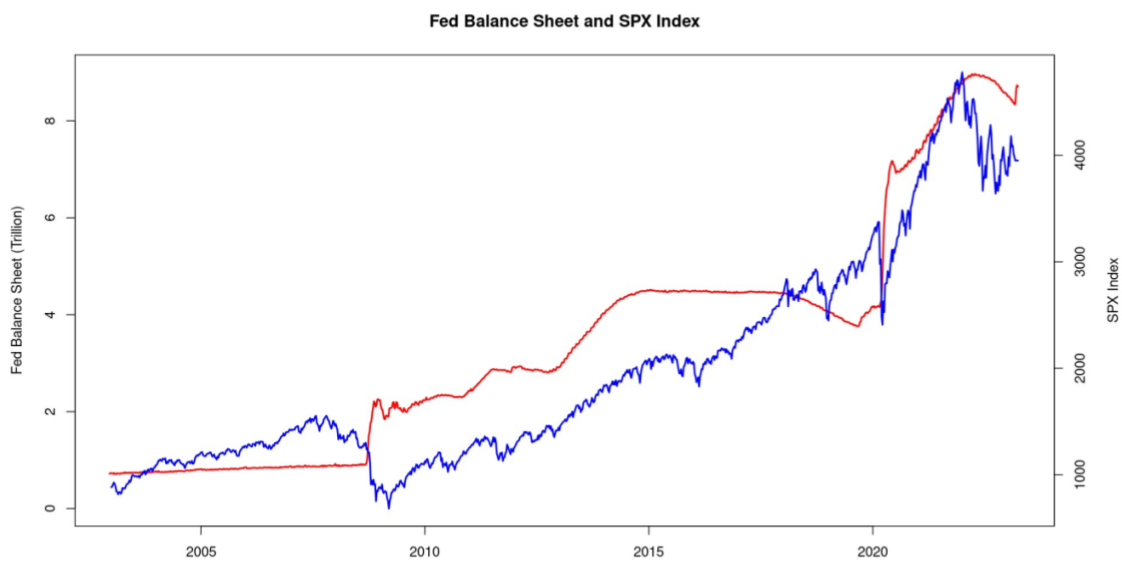


Figure 1: Central Bank Monetary Policy and Stock Market Price

The theoretical value of a stock reflects the present worth of the cash flows generated by the business over its entire lifetime. This signifies that the stock price is susceptible to the influence of the discount rate. The determination of the discount rate involves the addition of the risk-free rate, as set by central bank monetary policy, to the risk premium. Consequently, the interest rate established by the central bank exerts a notable influence on stock prices. As demonstrated by Bernanke and Kuttner in 2005, a mere one basis point increase in the federal funds rate can lead to a four basis point decline in US stock prices.

Central banks also "create money" through quantitative easing by buying securities in the open market. Quantitative easing increases the money supply by creating reserves in commercial banks, which spurs investment and lending activities. In turn, these investments and lending activities boost economic activity and the GDP (Gross Domestic Product) growth rate. An expanding economy creates new jobs, which reduces the unemployment rate. An increase in the money supply also leads to inflation. All of these factors affect stock prices.

This essay delves into the intricate relationship between macroeconomic factors and the historical returns of the US stock market. It aims to provide an in-depth analysis of how various economic variables, such as interest rates, inflation, GDP growth, and monetary policies set by central banks, have influenced the performance of the US stock market over time.

Model Description

The following equation is proposed to model the stock market return of an index over a given period. The model posits a linear relationship between the logarithmic return of the stock market index for a specific period and several economic variables: the average interest rate, the average GDP growth rate, the average inflation rate, and the change in the money supply over that same period.

$$\Delta \log(Index) = \alpha + \beta_1 \cdot X_1 + \beta_2 \cdot X_2 + \beta_3 \cdot X_3 + \beta_4 \cdot X_4 + \epsilon$$

Where:

$\Delta \log(\text{Index})$ represents the change in the logarithmic return of the stock market index.

α is the intercept term.

X_1 corresponds to the average interest rate.

X_2 corresponds to the average GDP growth rate.

X_3 corresponds to the average inflation rate.

X_4 corresponds to the change in the M2 money supply.

β_1, β_2, β_3, and β_4 are the coefficients associated with these predictor variables.

ϵ represents the regression error term, accounting for unexplained variation in the model.

The M2 money supply is a comprehensive measure that encompasses all forms of money held within an economy. It encompasses various financial instruments, such as checking accounts, savings accounts, and other short-term savings vehicles, including certificates of deposit (CDs). In essence, it accounts for all the liquid assets readily accessible to individuals and businesses, serving as a vital gauge of the money available for transactions and economic activity.

In this context, when we refer to the inflation rate, we specifically allude to the headline inflation rate. The headline inflation rate is a broader indicator that considers price changes across a wide spectrum of goods and services, including essential categories like food and energy. By incorporating these fundamental aspects of daily life, the headline inflation rate offers a more comprehensive view of the overall cost of living and reflects the impact of price fluctuations on consumers and households. This makes it a significant benchmark for assessing the purchasing power of a currency and its implications for economic stability.

Model Data

Table 1 provides a comprehensive list of the model variables, along with their reporting frequencies, the total number of observations, and the historical data symbol.

Table 1: US Economic Data (raw data)

Variable	Frequency	No Observations	Data Symbol
S&P 500 Index	Daily	5863	SPX:IND
Interest Rate	Varies	323	FDTR
GDP Growth Rate	Quarterly	92	GDP CQOQ
Inflation Rate	Monthly	278	CPI YOY
Money Supply M2	Monthly	277	UNITEDSTAMONSUPM2

As shown in Table 1, the reporting frequencies are not uniform. To conduct linear regression, high-frequency data is down-sampled by 'time-aligning' it with the lowest-frequency data, namely the quarterly GDP Growth Rate. This down-sampled data is then reported quarterly (see Table 2).

Table 2: US Economic Data (down sampled)

Variable	Frequency	No Observations	Data Symbol
S&P 500 Index	Quarterly	92	SPX:IND
Interest Rate	Quarterly	92	FDTR
GDP Growth Rate	Quarterly	92	GDP CQOQ
Inflation Rate	Quarterly	92	CPI YOY
Money Supply M2	Quarterly	92	UNITEDSTAMONSUPM2

Table 3 provides descriptive statistics for both the raw and the downsampled SPX Index time series. While downsampling does not capture the absolute minimum and maximum values, it does preserve the overall characteristics of the high-frequency daily S&P 500 Index data, as evident from the graph and the descriptive statistics.

Table 3: Descriptive Statistics of the Raw and Down Sampled SPX Index Time Series

Series	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
SPX500	676.5	1185.9	1439.0	1901.6	2425.5	4796.6
SPX500 DS	811.1	1170.0	1451.0	1880.4	2381.0	4793.1

The impact of downsampling the highest-frequency daily S&P 500 Index data to quarterly data is depicted in Figure 2.

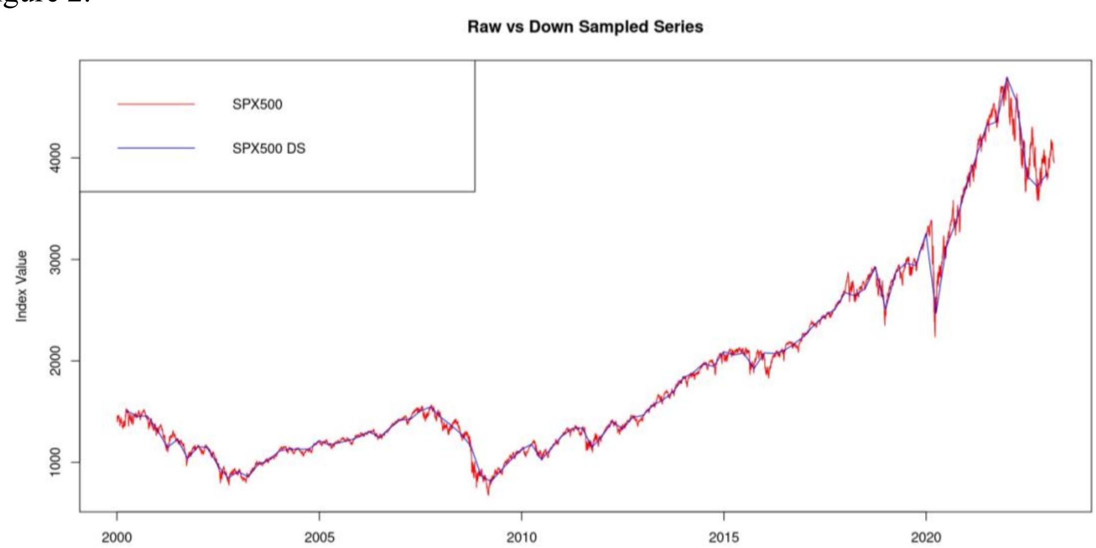


Figure 2: Raw vs Down Sampled Time Series

Results

The added-variable plot corresponding to the model depicted in Figure 3 provides valuable insights into the relationship between the predictor variables of the model and the log returns of the SPX Index.

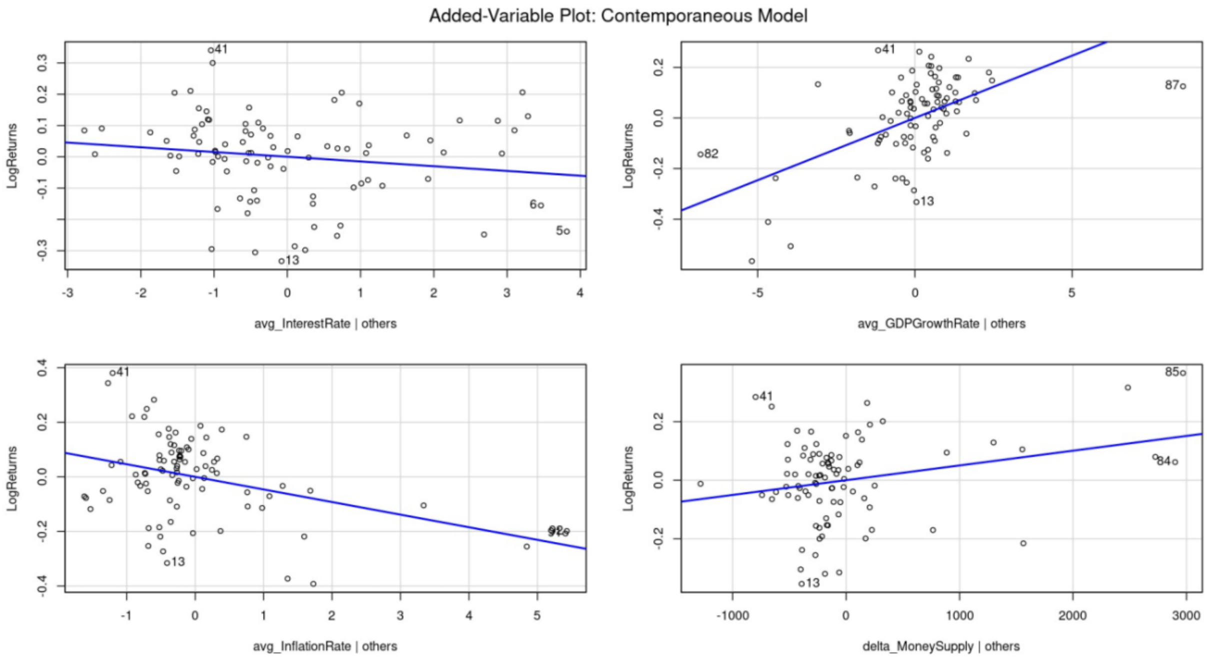


Figure 3: Added-Variable Plot: Contemporaneous Model

Relationship Between Interest Rate and SPX Index: As the average interest rate rises, the log returns of the SPX Index consistently decline. This relationship aligns seamlessly with economic principles. During periods of elevated risk-free interest rates, investors often gravitate towards more secure investment avenues, such as bonds and other interest-bearing securities found in the fixed-income market. Consequently, capital flows away from the equity market, including investments in SPX Index stocks, exerting downward pressure on stock prices and returns. This shift stems from the desire for less volatile investments, particularly during times of heightened interest rates.

Correlation Between GDP Growth and SPX Index: A robust positive correlation emerges between the average GDP growth rate and the log-returns of the SPX Index. This correlation is in harmony with economic theory, reflecting that during economic expansion phases, characterized by robust GDP growth, stock markets tend to thrive. Conversely, during periods of negative GDP growth, often associated with recessions, stock market returns tend to diminish. Investors typically exhibit heightened confidence in the outlook of companies during economic upswings, leading to increased willingness to invest in stocks and contributing to this positive correlation.

Inflation's Impact on Stock Market Returns: Inflation also exerts a discernible impact on stock market returns. As inflation rates escalate, the costs of goods and wages typically rise. This, in turn, can lead to reduced corporate earnings, as businesses grapple with higher operational expenses. Lower earnings subsequently translate into lower stock prices, yielding diminished returns for investors. The inverse relationship between inflation and stock market returns underscores the imperative of maintaining inflation at manageable levels for sustained stock market performance.

Money Supply and Stock Market Returns: The relationship between stock market returns and the growth in the money supply demonstrates a positive correlation. This observation underscores the pivotal role of central bank monetary policy. An expansionary monetary policy, characterized by an augmented money supply, holds the potential to stimulate economic activity and propel stock market returns upward. This correlation underscores how central bank actions wield significant influence over stock market dynamics, establishing monetary policy as a critical consideration for both investors and analysts.

From the results, we can observe that the model performance improves with increasing return duration. This is likely because long-term returns are more closely correlated to the independent variables selected in the study.

Return Duration	Multiple R-squared	Adjusted R-squared	F-statistic	p-value
1 Year	0.4305	0.4031	15.69	1.344E-09
3 Year	0.6059	0.5848	28.82	1.629E-14
5 Year	0.7042	0.6865	39.87	2.200E-16

The analysis results indicate that the explanatory power of the model varies depending on the time duration under consideration. Specifically, for a 1-year period, the model accounts for only 43% of the variance in the log returns of the financial asset, suggesting that a significant portion of the variability in returns during this short timeframe remains unexplained by the model. In contrast, when examining a longer time horizon of 5 years, the model demonstrates a notably higher explanatory power, explaining 70% of the variance in the log returns. This implies that the model is more effective at capturing and explaining the variation in returns over a more extended period, potentially due to a better reflection of long-term trends and factors affecting the asset's performance.

Conclusion

This study's findings shed light on the intricate relationships between macroeconomic factors and stock market returns. Firstly, we uncovered an inverse link between interest rates, particularly those influenced by central bank policies, and the returns of the S&P 500 Index. Rising interest rates led to diminishing stock returns as investors gravitated toward more stable fixed-income investments during these periods, exerting downward pressure on stock prices. Secondly, our analysis revealed a robust positive correlation between average GDP growth rates and S&P 500 Index returns, aligning with economic theory. Economic expansion coincided with thriving stock markets, while negative GDP growth, indicative of recessions, led to reduced stock returns. Inflation emerged as a significant determinant of stock market returns, with higher inflation translating into increased costs and reduced corporate earnings, ultimately diminishing investor returns. The study unveiled a positive relationship between stock market returns and the growth in the money supply, highlighting the influence of central bank monetary policies. Finally, these insights have extensive implications for investors, policymakers, and analysts alike. Understanding these complex interactions informs investment strategies, risk management decisions, and policy formulation. It empowers investors to make informed choices, guides policymakers in assessing policy impacts on financial markets, and encourages analysts to refine their models to better capture the multifaceted nature of the financial world.

As we conclude this study, it is important to acknowledge the dynamic nature of financial markets and the ever-evolving economic landscape. The relationships we have explored are subject to change over time, influenced by a multitude of external factors. As such, continued research and vigilance in monitoring economic and market conditions are paramount. Furthermore, the integration of advanced data analytics and machine learning techniques holds the promise of refining our understanding of these relationships and enhancing predictive capabilities.

Reference

Bernanke, Ben S, and Kenneth N Kuttner. 2005. “What Explains the Stock Market’s Reaction to Federal Reserve Policy?” The Journal of Finance 60(3): 1221–1257.

Bond Market Update – October 2023

By: Ali Cem Tezel

Introduction

On 19th of October Jeremy Powell made a speech at the Economic Club of New York where he mentioned that financial conditions have tightened in recent months and the longer-term bond yields have been an important driver behind this tightening. Powell also emphasized the commitment of the committee to return the inflation to 2% target level over time. In doing so, FED seems to have been stuck in between "doing too little and doing too much" most likely risking the latter for the time being. The FED had delivered 11 back-to-back rate hikes since March 2022 before pausing in September meeting. The hiking cycle resulted in the current range of 5.25%-5.50% and Federal Funds Effective Rate stands at 5.33%. According to the CME FedWatch Tool, the nearest rate cut will not take place before June, 2024.[1]

Sovereigns

The government bond yields continued their rise in October. The yield on the U.S. 10-Year Government Bonds (UST 10-Year) started the month in an increasing fashion before the tensions escalated in the Middle East which had a diminishing effect on the yields in the first place. However, the drop related to geopolitical news has not been long-lasting and following the U.S. CPI - which rose 3.7% in October on an annual basis being slightly hotter than expected - yields started increasing again, this time U.S. 10-Year yield reached 5% before heading back to 4.80% instantaneously. Whatever happens, it should be noted that the level on 23rd of October was the highest that has been recorded for this security since 2007. The daily volatility that has been observed in the U.S. treasury yields at all maturities during this month has been worrisome.

We have witnessed dis-inversion of already inverted U.S. yield curve since the beginning of the month thanks to the sell-off in longer dated treasury bonds mostly caused by the requirement for additional term-premiums. The inversion of the curve in the first place was the result of the expectations for the imminent hiking cycle whereas the recent movements in the long-end of the curve possibly indicate the realization of higher rates for a longer period in the United States.

Yield curves in the UK and in Germany also dis-inverted but the magnitude of the changes have been inferior to that in the U.S. yield curve. UK Gilt 10-Year yield rose by only 7 basis points and Germany 10-Year Bund yield experienced a decline of 3 basis points against a 30 basis points rise in the U.S. 10-Year Treasury yield in October. The recent developments pushed the United States / Germany 10-Year spread over 2 percent. The main reason behind the rising spread is because of the escalated recession worries especially in the Eurozone where Germany PPI came in as -14.7% in September over the last year pointing the worst record since the start of the statistic in 1949 and seasonally adjusted GDP fell by 0.1% in the Euro Area in the third quarter of 2023 over Q3, 2022[2]. Eurozone inflation[3] was 2.9% (2-year low) in October down from 4.3% in September according to preliminary data. The European Central Bank kept the deposit rate steady at 4%, ending a series of 10 rate hikes that ended up with the highest rate that has been observed in the area since 1999, when the Euro was launched. ECB has joined FED and BoE by means of pausing the hiking streaks and president Christine Lagarde stressed the bank is willing to keep the rates high "for a sufficiently long duration"[4] in order to pull the inflation back to two percent target.

Initially there was increase in the long-term yields in Japan as well thanks a more flexible yield curve control. In addition to that the Tokyo inflation - a leading indicator for national inflation - has beaten the expectations both in headline, core and core-core measures in October which, along with the smashed JPY

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[1] CME Group. "CME FedWatch Tool." www.cmegroup.com/markets/interest-rates/cme-fedwatch-tool.html. 31 October 2023

[2] Eurostat. https://ec.europa.eu/eurostat/documents/2995521/17766954/2-31102023-BP-EN.pdf/. 31 October 2023

[3] Eurostat. https://ec.europa.eu/eurostat/documents/2995521/17766951/2-31102023-AP-EN.pdf/. 31 October 2023

[4] The European Central Bank (ECB). "Press Conference." https://www.ecb.europa.eu/press/pressconf/. 26 October 2023

might have forced the Bank of Japan to increase the flexibility in the conduct of the Yield Curve Control in October meeting. In conjuncture, BoJ stated that it will let long-term rates to be shaped smoothly in the financial markets and will conduct YCC through large-scale JGB purchases and nimble market operations while taking the upper bound of 1% for 10-Year JGB yield as a reference in its market operations[5]. The recent adjustment on the YCC implies the loosening of the target on the yields while the bank retained its framework of low borrowing costs. Initial response was the falling JPY and acceleration of the climb in 10-Year JGB yield which reached 0.95% marking the highest since 2012. Even though the governor Kazuo Ueda does not expect the yields to rise sharply over 1%, it's likely that they are sailing there and BoJ is likely to be pushed by the markets to make further adjustments on the YCC going forward.

U.S. TIPS 10-Year offer 2.45% in real terms as of 31st of October, 2023 which reflects an increase of 22 basis points within October. As the real yields climb in the U.S., 10-Year Breakeven Inflation rate is also up from 2.35% last month reaching 2.44% as of 31st of October.

The current level of U.S. treasury real yields is definitely charming for those who wants to realize adequate returns while avoiding the downside risks that may arise in the near future. If a shock occurs within the financial system, or the macroeconomic indicators point to a soft landing hence the expectations for a rate cut are drawn to an earlier date, then it may very well be supporting the U.S. treasury market as a result of those securities' safe haven status (which may be questionable nowadays) and the relative resilience of the U.S. economy.

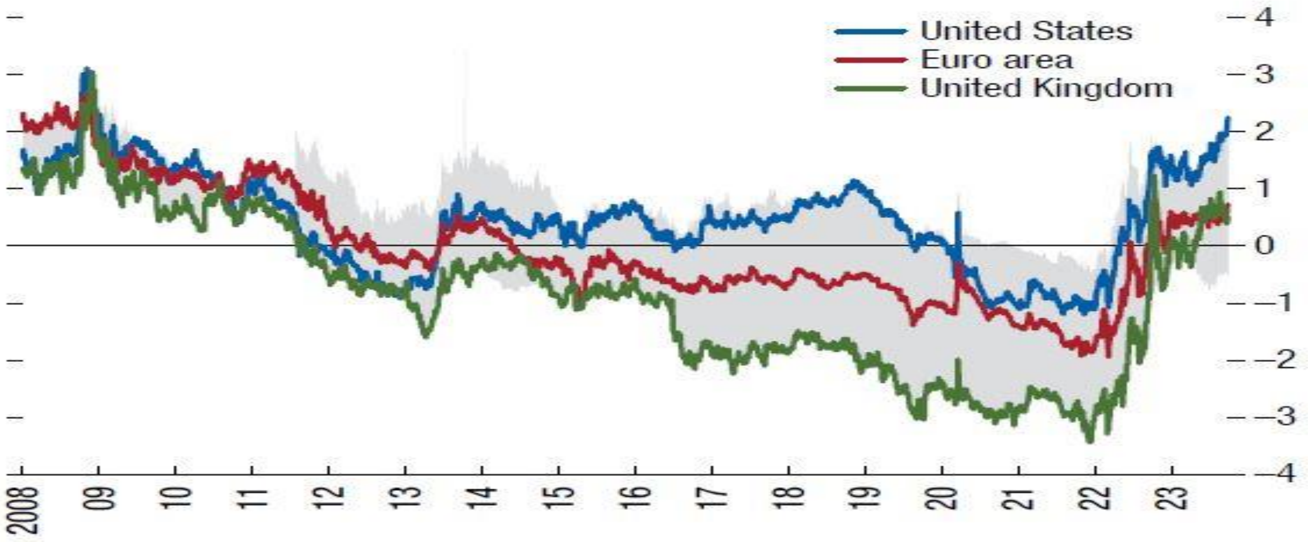


Figure 1. Source: IMF, Bloomberg - 10-Year Real Yields in Advanced Economies

Drawbacks

Across the supporting statements about the current level of yields, stands the inflation which makes it hard to justify the highest rates recorded since the GFC. Although the inflation rates have retreated reasonably in global scale in 2023, we are still witnessing rates way over targets set by the central banks and the future path of inflation is still blurry. The latest increase in oil prices and geopolitical strains pose additional upside risk on inflation. So, real rates are not easily translated into pursuit of capital gains in the treasury market.

There is also a growing polarization about the economic outlook ahead. The direction of the fixed income markets is highly dependent on whether the economies will experience a soft landing or a hard landing or any landing at all. While EU economies are experiencing a major downturn in the economic activity, the U.S. economy is still showing resiliency as nonfarm payrolls increased by 336,000 in September and a

[5] Bank of Japan (BoJ). "Statement on Monetary Policy." https://www.boj.or.jp/en/mopo/mpmdeci/mpr_2023/k231031a.pdf. 31 October 2023

robust 4.9%[6] annual GDP growth was recorded in the third quarter of 2023. Any affirmative indicator on the strength of the economy can ironically be interpreted as bad news as it will force FED to postpone potential shift in the monetary policy that is expected to take place anytime soon.

Alarming Indicators

U.S. national debt topped $33 trillion for the first time in September 2023.[7] The U.S. fiscal deficit neared $1.7 trillion which indicates a 23% jump from the previous year.[8] The loosening fiscal policy contradicts with the restrictive policies on the monetary side. Continuous treasury borrowing[9] associated with the deficits is expected to increase the supply at a time when FED, a long-time buyer in the treasury market is now selling bonds. So, supply is increasing when demand is falling short. What remains as a mystery is who will step in to compensate for the insufficient demand. Is it the U.S. Treasury itself?[10] As the growing concerns on the budget deficits foreshadows, the Treasury's upcoming quarterly refunding announcement has become one of the main focuses of the investors.

Figure 2. Source: U.S. Department of the Treasury

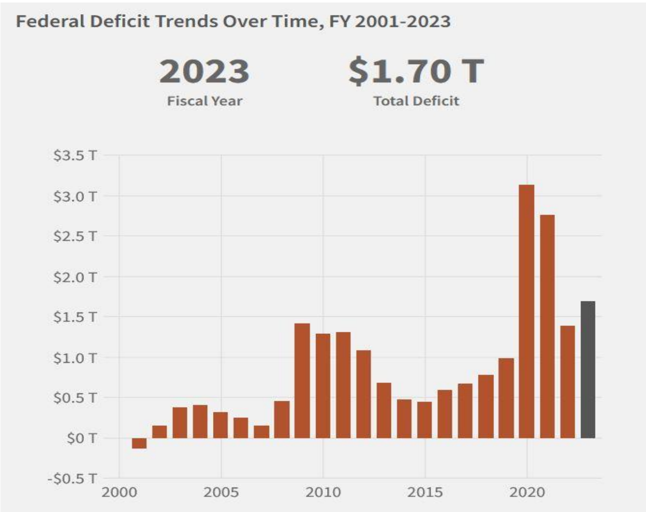
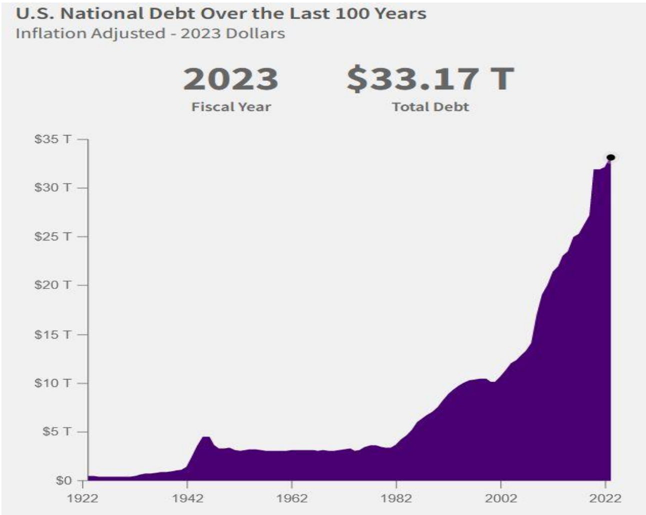


Figure 3. Source: U.S. Department of the Treasury



We have witnessed dire movements in U.S. government bonds this month as they were traded in some particular days within a range of 20 basis points. The recent volatility in one of the vital parts of the global financial system and the basis for fixed-income pricing reflects the ongoing uncertainty in the policy outlook while threatening the stability of the system.

Additionally, the consistent rise in government bond yields have continued to increase the unrealized mark-to-market losses of the banks[11] since March 2023 when the U.S. Banking Turmoil took place. There is little doubt that this may result in substantial pressure on a subset of U.S. banks that continue to face funding issues.[12]

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[6] U.S. Bureau of Economic Analysis (BEA). "Gross Domestic Product, Third Quarter 2023." https://www.bea.gov/news/2023/gross-domestic-product-third-quarter-2023-advance-estimate. 29 October 2023

[7] U.S. Department of the Treasury. https://fiscaldata.treasury.gov/americas-finance-guide/national-debt/. 26 October 2023

[8] U.S. Department of the Treasury. https://fiscaldata.treasury.gov/americas-finance-guide/national-deficit/. 26 October 2023

[9] U.S. Department of the Treasury. https://fiscaldata.treasury.gov/americas-finance-guide/national-deficit/. 26 October 2023

[10] U.S. Department of the Treasury. "Statements & Remarks - September 21, 2023" https://home.treasury.gov/news/press-releases/jy1757. 20 October 2023

[11] The Federal Deposit Insurance Corporation (FDIC.) "Press Release." https://www.fdic.gov/news/press-releases/2023/pr23072.html. 16 October 2023

[12] Federal Reserve. "Financial Stability Report October 2023." https://www.federalreserve.gov/publications/files/financial-stability-report-20231020.pdf. 28 October 2023

Corporates

During times of strong global growth, bonds of high-yield corporates are expected to outperform investment grade bonds. If the economic outlook deteriorates the opposite is usually expected as lower yield corporates are expected to provide protection against the worsening conditions in the economy while still offering higher yields than government bonds.

Although nearly all the possible scenarios point to slowdown in global economic activity for 2023 and into 2024[13], corporate spreads (especially for high-yield segment) have not widened so far this year to reflect the expectations for any deterioration in the outlook.

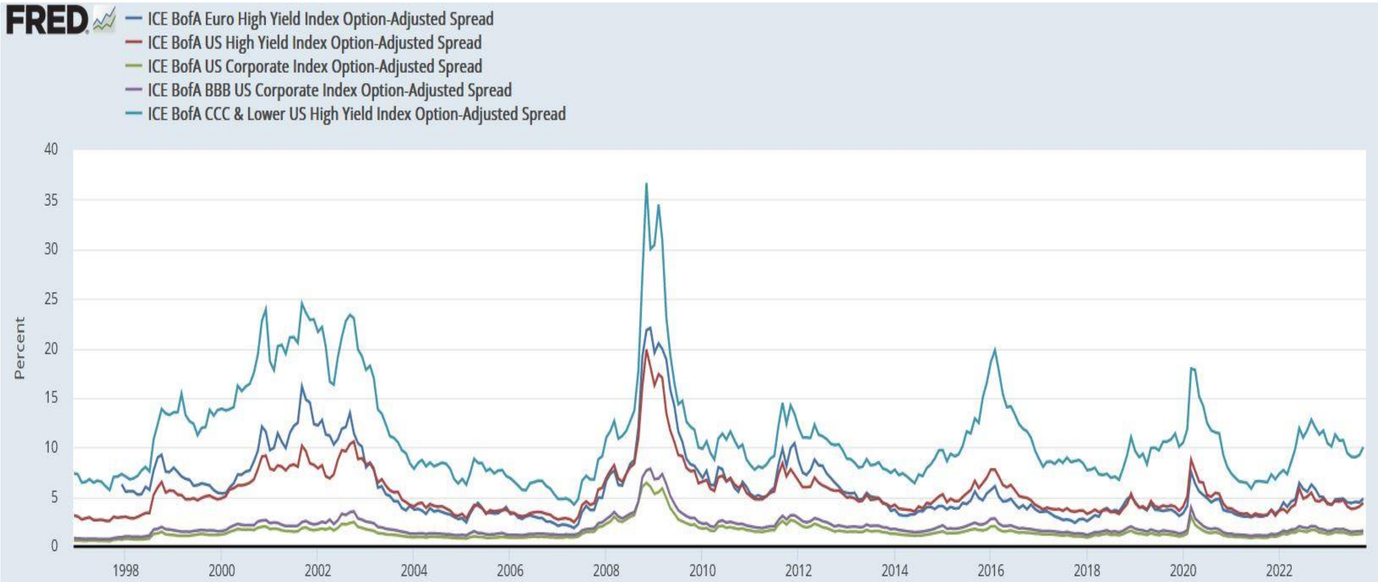


Figure 4. Source: Ice Data Indices, LLC, Federal Reserve Bank of St. Louis – Corporate Spreads

Contrarily, The S&P Global High-Yield Corporate Bond Index have realized a positive YTD return of 3.55%, whereas high yield bonds of those listed on S&P 500 returned 1.98% in the same period.

Currently the market seems to be priced for the most favorable scenario concerning the economy. Therefore, the spreads for high yields have stayed compressed within 2023 and led to high yield corporate bonds outperforming lower yield ones. However, both global and U.S. high-yield bond indexes experienced negative returns[14] in October 2023 of 1.45% and 1.33 respectively.

The return on S&P 500® Investment Grade Corporate Bond Index[15] were lower than S&P 500® high-yield bonds with a -1.79% return in October as duration of IG corporate bonds are higher than those of HY bonds. Having said that, the spreads for IG corporates has moved up less compared to HY spreads in October.

If the high policy rates are to stay longer than previously thought, this will possibly increase the refinancing risks as well as counterparty risks into 2024 weighing on the high yield corporates more than investment grade ones.

Considering the upward movement in October, we expect further loosening in spreads so that cutting exposure to high-yield bonds would be ideal for risk-averse investors. Yields on U.S. investment-grade

[13] International Monetary Fund (IMF.) "Resilient Global Economy Still Limping Along With Growing Divergences." https://www.imf.org/en/Blogs/Articles/2023/10/10/resilient-global-economy-still-limping-along-with-growing-divergences. 26 October 2023

[14] S&P Global. "S&P US Dollar Global High Yield Corporate Bond Index." https://www.spglobal.com/spdji/en/indices/fixed-income/sp-us-dollar-global-high-yield-corporate-bond-index/#overview. 31 October 2023

[15] S&P Global. "S&P 500 Investment Grade Corporate Bond Index." https://www.spglobal.com/spdji/en/indices/fixed-income/sp-500-investment-grade-corporate-bond-index/#overview. 31 October 2023

bonds are favorable and may even help realize adequate capital returns if the economic outlook deteriorates further.

Emerging Markets

Many emerging markets are longing for the statements by the FED and other central banks that would signal the peak of tightening cycles. As rates stay higher and longer, the DM[16] / EM real rate spreads are getting compressed even though the yields for EM sovereigns rise too.

EM central banks would start cutting rates following the major central banks but there are exceptions. For instance, Central Bank of Brazil have already started easing cycle as it has delivered two consecutive cuts of 50 basis points in August and September reducing the Selic policy rate to 12.75%. The Brazil / U.S. 10-Year spread has not changed month-to-date as of 31st of October.

National Bank of Poland stunned the markets by delivering a 75 bps cut in September and an additional 25 bps cut in October. The current policy rate stands at 5.75% while the inflation kept retreating but staying above the policy rate. Despite the negative real rates implied by sovereigns, the yields have decreased within the last six months at all maturities.

Chile, Peru and Uruguay are amongst those who enjoyed a series of rate cuts recently thanks to the relatively higher real rates. Out of those, Peruvian and Polish bond markets seem to be much more exposed to negative news concerning the global outlook due to lack of space in the monetary policy.

Contrarily, the Central Bank of Turkey has delivered another 500 bps hike increasing policy rate to 35% in October which was in line with the expectations. However, the CPI reading was 61.53% in September so the real rates are still in negative territory. The return to orthodox policies in 2023 along with normalization in macro prudential measures in Turkey should be noted whereas there is a long way ahead before the local fixed income market will start offering appealing opportunities.

On the other hand, many EMs seem to have reached peak in tightening cycles and may start cutting soon timing of which would be dependent on signals from FED and other major central banks. EMs face more swift decline in inflationary pressures and investors should focus on those who already offer adequate real yields and have the policy space that will pave the way to perform easing with limited or no sufferings from the spillover effects of high interest rates offered by developed economies.

Conclusion

We have witnessed divergence in sovereign bond yields and spreads in October. However, long-end of the yield curves have shifted upward in many countries as a result of requirement for additional term premiums. EU economic activity is already stagnating and the inflation has finally retreated to below three percent. This has helped the short-term rates to come down in Germany amongst expectations that the ECB is already at the peak of its tightening cycle although it was not confirmed by the bank. On the other hand, the U.S. economy seems to be stronger and Federal Reserve is believed to keep the rates high for a prolonged period. Additionally, the excessive supply associated with the budget deficits in the U.S. are causing the rates to go even higher. On the corporate side, the squeezed spreads still do not correspond to the worries about a global recession but we have seen widening of the high-yield spreads in October. Escalation of the risks necessitates reduction of exposure to high-yield segment especially for risk-averse investors. On the EM side, the path of major central banks will be decisive however there are still some opportunities.

[16] Developed Markets

US Equities Market Update

By: Partha Sharma

Overview

The recent performance of major U.S. stock market indices presents a mixed picture. In the short term, weekly performance has been marked by volatility, with the NASDAQ 100 leading the pack with a 5.76% gain. The S&P 500 also managed a substantial 4.41% increase, while the Russell 2000 and Dow Jones Industrial Average saw smaller rises of 3.49% and 3.22% respectively. Shifting our focus to monthly performance, a varied landscape emerges. The Dow Jones Industrial Average witnessed the most significant rise of 2.24%, followed by the S&P 500 at 1.44% and the NASDAQ 100 at 1.03%. Contrarily, the Russell 2000 experienced a slight decline of -0.79%, suggesting some challenges in the small-cap space.

Index	Weekly (%)	Monthly (%)	YTD (%)
S&P 500	4.41%	1.44%	12.64%
NASDAQ 100	5.76%	1.03%	36.49%
Russell 2000	3.49%	-0.79%	-2.58%
Dow Jones Industrial Average	3.22%	2.24%	2.13%

Source: Finviz.com

When considering the year-to-date (YTD) performance, a more optimistic perspective is evident. The NASDAQ 100 has been the standout performer, showcasing a robust gain of 36.49%. The S&P 500 also posted a commendable return of 12.64%. However, the Dow Jones Industrial Average has seen modest growth of 2.13%, while the Russell 2000 faced challenges, recording a -2.58% YTD return. In summation, while the past month has seen varied performances across indices, the broader market has shown resilience and growth over the year, with tech-heavy NASDAQ 100 leading the charge.

The Russell 2000 index, which predominantly tracks the performance of small-cap companies in the U.S., has recently faced challenges, as evidenced by its slight monthly decline of -0.79% and a year-to-date downturn of -2.58%. Small-cap companies often exhibit greater volatility compared to their large-cap counterparts, primarily due to their limited resources, narrower market presence, and higher susceptibility to economic shifts. The recent under-performance of the Russell 2000 may indicate that these smaller companies are grappling with challenges such as rising operational costs, increased competition, or sector-specific headwinds. Moreover, in uncertain economic environments, investors might pivot towards larger, more established firms, considering them to be safer bets, further exacerbating the challenges faced by small-cap stocks. The Russell 2000's performance can serve as a barometer for the health of the broader small-cap market, suggesting that these businesses may currently be navigating a more complex landscape.

Sector Update

Examining the monthly performance across various sectors offers insights into the current market dynamics:

Utilities saw a remarkable uptick, registering an 8.31% growth. This could suggest that investors are seeking defensive assets, typically flocking to utilities during uncertain economic times due to their stable dividends and non-cyclical nature.

Real Estate and Technology sectors followed with positive monthly gains of 3.34% and 3.09%, respectively. The real estate sector's growth could be indicative of the continuing recovery in property markets or potential interest rate expectations. Given the Federal Reserve's recent indications of pausing interest rate hikes, the growth observed in the real estate sector can be interpreted in a new light. Historically, the real estate market is sensitive to interest rate movements. When rates are low or expected to remain steady, it often leads to increased borrowing due to more affordable mortgage rates. This can boost demand for properties. Meanwhile, technology's consistent upward trajectory reflects the sector's resilience and the increasing reliance on tech solutions in various industries.

Sector	Weekly (%)	Monthly (%)	YTD (%)
Utilities	2.74	8.31	-12.77
Real Estate	4.35	3.34	-7.12
Technology	6.13	3.09	36.62
Financial	4.09	2.24	-2.51
Energy	0.98	2.11	0.10
Communication Services	5.09	1.14	38.65
Industrials	3.50	0.70	2.55
Consumer Staples	1.73	0.41	-7.89
Materials	3.45	-0.82	-0.14
Health Care	1.21	-0.92	-6.68
Consumer Discretionary	6.73	-1.43	22.33

Source: Finviz.com

Financial and Energy sectors posted modest gains of 2.24% and 2.11% respectively. The financial sector's performance might be influenced by interest rate expectations and lending margins, while the energy sector's gains can be attributed to fluctuations in global oil and energy prices.

Communication Services showcased a 1.14% monthly increase, reinforcing the continued growth in digital communication and online platforms, especially in the current era of remote work and digital entertainment.

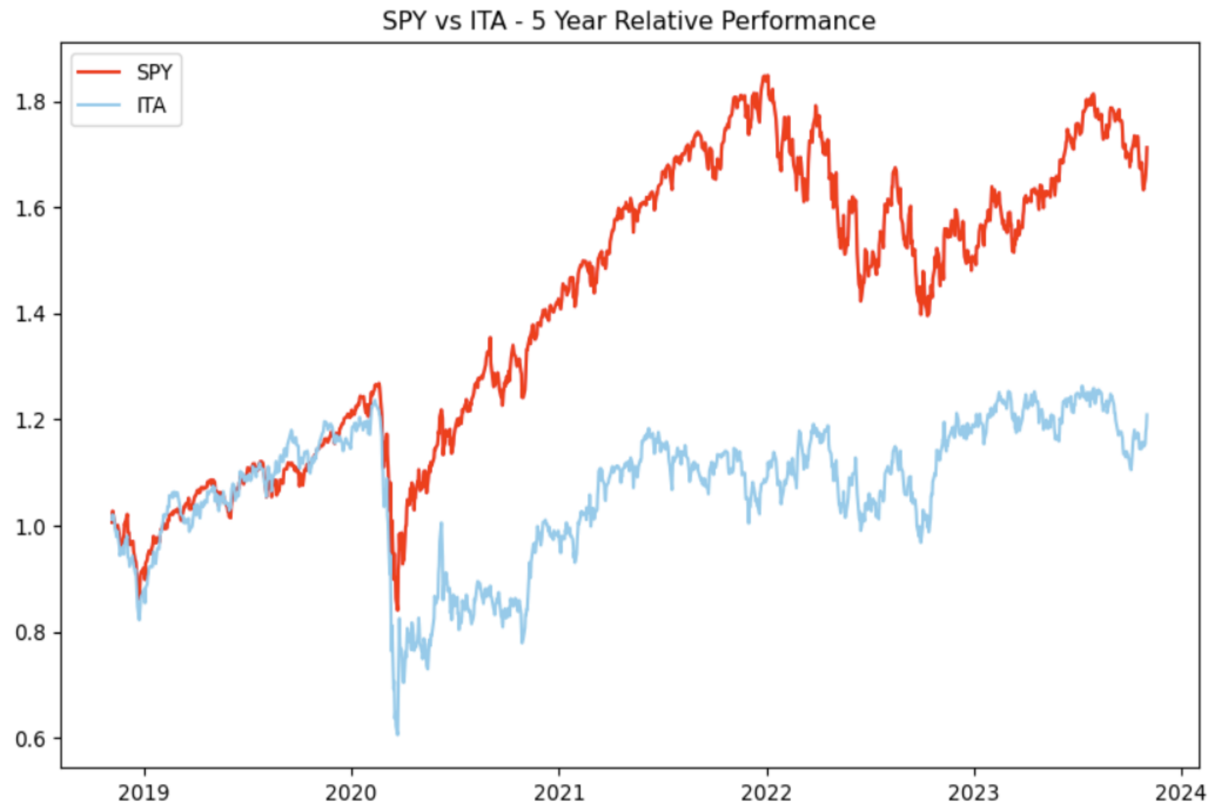
Industrials and Consumer Staples recorded marginal monthly gains of 0.70% and 0.41%, respectively. These numbers suggest steady, albeit slow, growth in these sectors.

On the flip side, **Materials**, **Health Care**, and **Consumer Discretionary** sectors faced headwinds, with monthly declines of -0.82%, -0.92%, and -1.43%, respectively. These declines might highlight sector-specific challenges or market sentiments around global trade for materials, regulatory and policy uncertainties for health care, and potentially evolving consumer spending habits for the consumer discretionary sector.

Overall, the mixed sectoral performance indicates a market navigating through varied challenges and opportunities, with some sectors naturally faring better than others based on prevailing macroeconomic conditions and industry-specific factors.

Sector in Focus: Aerospace & Defense

This month, we turn our attention to US defense stocks. A prominent player in this realm is the iShares U.S. Aerospace & Defense ETF, commonly identified by its ticker symbol, **ITA**. This exchange-traded fund (ETF) is designed to track the performance of the Dow Jones U.S. Select Aerospace & Defense Index, which encompasses U.S. equities within the aerospace and defense sector. ITA grants investors diversified exposure to a spectrum of companies in this sector, ranging from formidable multinational corporations to emerging niche entities.



Source Finviz.com

The chart above provides a comparative insight into the relative performance of the iShares U.S. Aerospace & Defense ETF (ITA) against the SPDR S&P 500 ETF Trust (SPY) over a span of five years. A few key observations:

1. Pre-COVID Performance: Leading up to the early months of 2020, both ITA and SPY exhibited a generally synchronized movement, albeit with ITA tending to operate at a modestly lower relative performance level than SPY.

2. COVID-19 Impact: The onset of the COVID-19 pandemic in early 2020 delineated a marked divergence in their trajectories. Like many sector-specific ETFs, ITA faced a pronounced slump during this period, underscoring the vulnerability of the aerospace and defense sectors to global disruptions. In contrast, SPY, representing a broader market index, showcased a more resilient performance, rebounding relatively faster post the initial downturn.

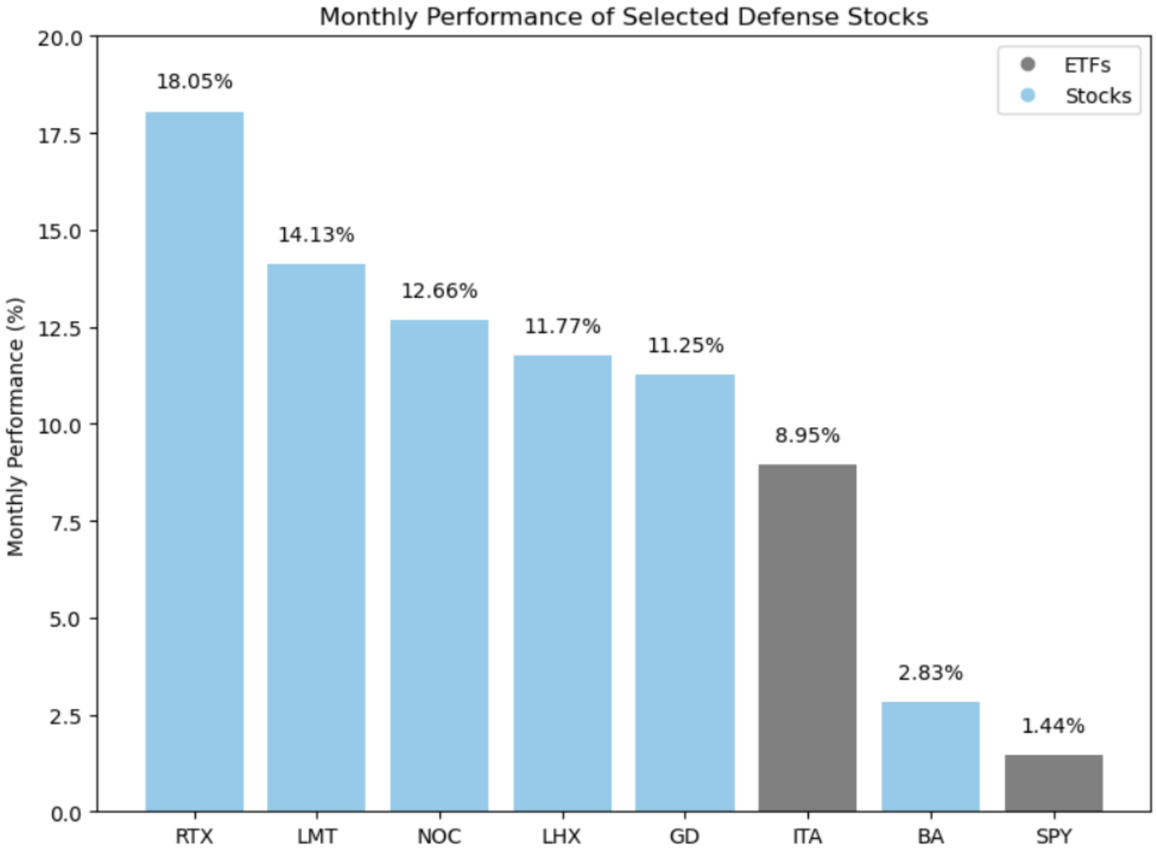
3. Recent Performance: A noteworthy aspect is the recent performance in the last month where ITA yielded an impressive return of 8.95%. This is significantly higher than SPY's modest return of 1.44%. Such a substantial outperformance might be indicative of a renewed investor confidence in the aerospace and defense sector due to increased geopolitical tensions around the globe.

4. Broader Perspective: Despite the recent uptick, ITA has largely trailed SPY in terms of relative performance for the majority of the period under review. However, it's essential to contextualize this in light of the specific challenges and dynamics of the aerospace and defense sectors, especially during the unprecedented times of the pandemic.

It will be intriguing to monitor if ITA can sustain this momentum and gradually narrow its performance gap with SPY in the forthcoming months. As always, past performance is not indicative of future results, and investors should engage in thorough research before making investment decisions. viable hedge during periods of economic ambiguity. Nonetheless, it's of paramount importance to grasp the specific risks associated with such a strategy.

Stocks to Watch: Aerospace and Defence

The monthly performance chart showcases the momentum witnessed in the defense sector, particularly among the prominent stocks that comprise the iShares U.S. Aerospace & Defense ETF (ITA).



Source Finviz.com

RTX Corp (RTX) led the pack with an impressive 18.05% gain, followed closely by Lockheed Martin Corp. (LMT) at 14.13%. Other significant contributors to the sector's strength included Northrop Grumman Corp. (NOC) and L3Harris Technologies Inc (LHX) with returns of 12.66% and 11.77%, respectively. General Dynamics Corp. (GD) and Boeing Co. (BA) also had commendable performances, though they trailed behind their peers.

Interestingly, when we compare the cumulative performance of these stocks against the ITA ETF itself, the ETF recorded a return of 8.95%. This indicates that while some individual defense stocks experienced notable upticks, the collective momentum of the sector was more tempered. For broader market context, the SPDR S&P 500 ETF Trust (SPY) depicted in grey, yielded a modest 1.44% return. This comparative analysis underlines the strength of the defense sector in the past month, outpacing the broader market by a significant margin.

While analyzing the monthly performance of these defense-oriented stocks, it's crucial to note the unique position of Boeing Co. (BA). Unlike the other companies listed, Boeing has a substantial commercial division, primarily its commercial aviation segment. This division's performance is closely tied to the broader economy and the health of the airline industry. As such, Boeing isn't a pure-play defense company. This dual exposure could potentially explain why Boeing's performance lags behind other more defense-centric stocks in the ITA ETF. It's essential to factor in this economic tie when evaluating Boeing's monthly performance relative to its peers.

Technical Analysis : Lockheed Martin Corp. (LMT)

Based on the provided chart and data for Lockheed Martin Corp. (LMT), here is a technical analysis:

1.

Price Movement & Trendlines: LMT's recent price movement shows an upward momentum, especially in October, where the stock has made a significant bullish move. This comes after a downward trend that began in June, hitting its low in early October.

2. Moving Averages: The stock is currently trading above its 20-day (SMA20), 50-day (SMA50), and 200-day (SMA200) simple moving averages, which is a bullish sign. Specifically, the recent bullish crossover of the SMA50 over the SMA200 indicates a potential "Golden Cross," which is a bullish signal.

3. RSI (Relative Strength Index): The RSI is currently at 66.43, approaching the overbought territory (above 70). This suggests that the stock might be getting overbought, but it is not there yet. Given that the RSI is approaching the overbought territory, it's worth noting that a gap up could push it into overbought conditions. While this doesn't immediately imply a reversal, it suggests that the stock might be getting overextended in the short term.

4. Volume: The average volume is 1.24M, and the relative volume is 1.00, indicating that trading activity is in line with the average.

5. Candlestick Pattern: The most recent candlestick is a "Marubozu White," which indicates a day where buyers controlled the price from the open to close, a strong bullish sign.

6. Gap up: The gap up in LMT's price is a bullish sign, especially since it is accompanied by high volume and positive news catalysts. However, investors should be cautious and monitor subsequent price actions and other technical indicators to determine if this bullish momentum is likely to continue.

Gaps usually don't occur without a reason. It's essential to understand what caused this gap up. Was there any company-specific news, earnings release, or industry-related developments? For defense contractors like LMT, significant government contracts, geopolitical events, or other sector-specific news can cause such gaps.

7. 52-Week Range: The stock is currently trading closer to its 52-week high (508.10) than its low (393.77), showing recent strength. However, it's still about 9.85% below its 52-week high.

8. Performance Metrics: Over the past month, LMT has seen a strong performance with a 14.13% gain, contrasting its YTD performance of -5.85%. The recent upward momentum might indicate a change in trend.

9. Volatility: The stock has a weekly volatility of 1.52% and a monthly volatility of 1.95%, which is moderate. The Average True Range (ATR) stands at 8.09, indicating the average price movement over the last 14 days.

10. Short Interest: The short float is relatively low at 0.76%, suggesting there isn't a large amount of negative sentiment or potential for a significant short squeeze.

11. Sector Context: Given the Aerospace & Defense sector, any geopolitical tension or government defense contracts can significantly influence the stock price.

LMT appears to be in a bullish phase currently, with positive indicators like trading above key moving averages, a potential "Golden Cross" formation, and a strong Marubozu White candlestick. However, as always, it's essential to consider other fundamental factors, sector news, and macroeconomic indicators before making investment decisions.

Conclusion

The U.S. stock market has shown a varied performance spectrum, with short-term volatility evident in the recent weekly performances. However, on a year-to-date basis, the broader market, particularly the tech-dominant NASDAQ 100, has demonstrated significant resilience and growth, reflecting the adaptability of major sectors amidst global challenges.

The Russell 2000's underperformance, both on a monthly and year-to-date basis, underscores the broader uncertainty looming over the market. The struggles faced by small-cap companies, as highlighted by this index, shed light on potential vulnerabilities within the U.S. economy, especially given the inherent volatilities associated with these entities. Their lackluster performance could be symptomatic of the challenges these companies confront, from rising operational costs to broader economic headwinds, emphasizing the need for caution and more in-depth analysis in this segment of the market.

The pronounced outperformance of the defense sector, as seen through the recent surge in ITA's returns, cannot be overlooked. This surge is particularly striking given the broader market dynamics and speaks to the pivotal role geopolitical tensions play in shaping investor sentiment. The significant uptick in the aerospace and defense sector suggests that investors might be seeking refuge in industries perceived as more resilient or even beneficiaries amidst escalating global tensions.

In sum, while there are bright spots in the U.S. stock market's recent performance, particularly in the tech and defense sectors, the Russell 2000's struggles underscore a broader sense of uncertainty. This dichotomy emphasizes the importance of being nimble and well-informed in today's complex investment landscape, especially in light of growing geopolitical tensions globally.

CityScape Global 2023: A Catalyst for Economic Diversification and Sustainability in Saudi Arabia

By: Awad Bajsair

CityScape Global 2023, which took place from September 130 to 13 at the Exhibition and Convention Center in Malham, Riyadh, Saudi Arabia, was a significant event for the country's economy and commitment to decarbonization. The annual exhibition showcased real estate projects from international developers from over 20 countries that align with Saudi Vision 2030, a comprehensive plan to reduce the nation's dependence on oil exports and transition to a sustainable and cleaner economic future. CityScape Global plays a crucial role in promoting innovation and sustainability, facilitating international collaboration, and reflecting Saudi Arabia's unique position in pursuing success while engaging with international stakeholders.

Source: CityScape Global

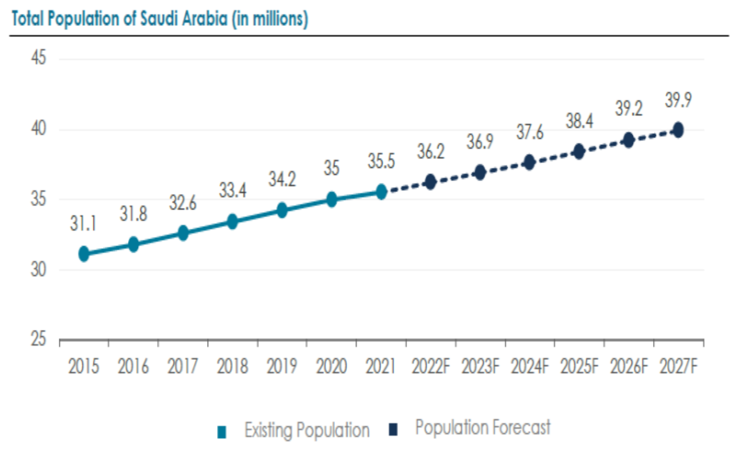
The Deloitte Real Estate Predictions 2023 report states that Saudi Arabia's GDP showed remarkable growth in Q3 2022 and is expected to continue to grow in Q4 2022. Sales prices for villas and apartments also increased during the first nine months of 2022 compared to the previous year, indicating sustained demand from Saudi nationals. KPMG Head of Real Estate Advisory, Rani Majzoub, noted that the ongoing economic recovery and improving demand drivers in various sectors are expected to have a positive impact on the overall real estate market in the capital city. Prominent economic diversification initiatives in Saudi Arabia include projects like NEOM, The Red Sea Project, and the HRH Mohammed Bin Salman Nonprofit City. CityScape Global saw the unveiling of real estate deals worth $17.3 billion on its first day to attract foreign investments in non-oil sectors.

The National Housing Company's initiative, which aims to develop new real estate valued at SAR 42 billion ($11.2 billion) in suburban and community areas, was also announced during the event. Additionally, the Royal Commission for the Holy City of Mecca and the Holy Sites signed an agreement to launch a real estate fund worth SAR 11 billion to develop the Al-Kidwa area, located south of the Grand Mosque in Mecca. Furthermore, plans for a business center and the Khuzam sports city in Khuzam Suburb were revealed.

CityScape Global emphasizes sustainability, with every project considering environmental factors and the future of sustainable living. The event attracted more than 2,000 international investors, including 93 institutional investors who collectively manage trillions of dollars. Private conferences and boardrooms facilitated connections between these investors, government entities, and developers, allowing them to witness firsthand the developments in Riyadh.
Decarbonization is a central theme of Saudi Vision 2030, and the Kingdom is actively investing in clean energy, renewable energy, green technologies, and energy efficiency, positioning itself as a global leader in the transition to a low-carbon future. CityScape Global 2023 garnered overwhelming interest, with over a quarter of a million registrations, including more than 12% international visitors, highlighting their eagerness to learn, explore, and invest.

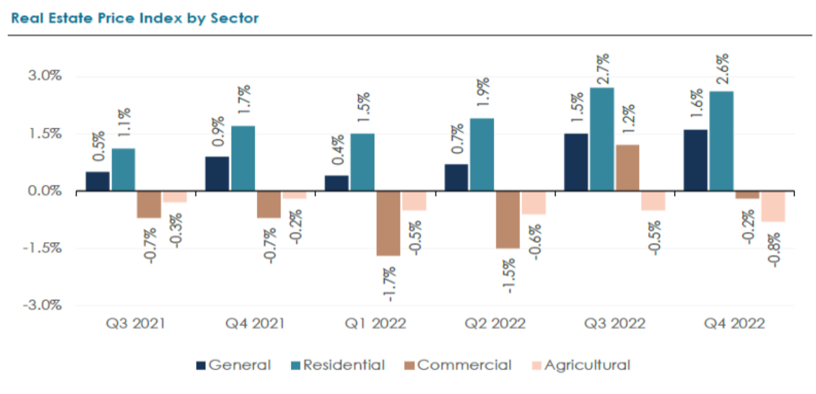
The positive demographic trends in Saudi Arabia suggest that there will be a strong demand for housing in the long term. With almost 60% of the population below the age of 30, there is a growing preference for modern and independent living spaces, particularly apartments. To meet this demand, the government has implemented several large-scale projects and reforms aimed at ensuring an adequate supply of residential units. Given the healthy balance between supply and demand, the housing sector is expected to experience significant growth, making it an attractive investment opportunity for those looking to benefit from the ongoing socioeconomic transformation in the country.The Kingdom of Saudi Arabia is home to more than 50% of the total population of the GCC and is the most populous country in the region. According to IMF forecasts, the Kingdom's population is expected to grow at a Compound Annual Growth Rate (CAGR) of approximately 2.0% from 2020 to 2027, reaching around 40 million. This significant increase in population will lead to a rise in the number of households and a surge in demand for housing units.

Chart 1: Population growth in Saudi Arabia



Source: IMF

Chart 2: Real Estate prices by sector



Source: GASTAT

Based on the aforementioned data from the General Authority for Statistics (GASTAT), the residential real estate price index saw a YoY increase of 2.6% in Q4 2022, while the commercial and agricultural sector indices declined by 0.2% and 0.8%, respectively. During 2022, the average prices in the residential sector increased by 2.1% YoY, while the commercial and agricultural sectors declined by 0.9% and 0.6%, respectively. The residential real estate price index experienced particularly high growth rates in the second half of 2022, with an increase of 2.74% in Q3 and 2.63% in Q4. Among residential property types, plots saw the highest growth rate of 2.67%, followed by apartments, villas, buildings, and houses, which grew by 2.21%, 1.70%, 0.05%, and -0.43%, respectively.

Table 1 outlines the key summary for the ongoing projects with their values in U.S. Dollars.In line with the objectives of Vision 2030, the nation aims to diversify its economic landscape and stimulate growth in non-oil sectors, while attracting foreign investments and maintaining outbound investment activities. The plan is anchored in three key pillars: Society, Economy, and an ambitious vision of connecting Asia, Europe, and Africa. The progress made so far underscores the success of these diversification initiatives and the country's commitment to transforming into a global economic powerhouse with a diversified and resilient economy.

Table 1: Key Housing projects in Jeddah

Key Mega & National Housing Company Projects for Jeddah

	Value (US$ billion)	Units to be Delivered.	Expected Completion
MEGA PROJECTS			
Salman Bay	2.4	25,000+	2027
Roshn-Al Arous	1	18,000+	2024
Jeddah Central	20	17,000+	2030
Shams Al Arous Project	2	10,000+	2025
Raidah Project	15	7,350+	2024
Alma Mixed-Use Development	-	2000+	-
NATIONAL HOUSING COMPANY PROJECTS			
Al-Mayar Suburb	13	17,900+	2025
Al-Jawhara Suburb	7	6980+	2025
Al-Khayala Suburb	0.45	3400+	2026

Other Major Infrastructural Projects includes Saudi Land Bridge Project & Jeddah Islamic Port Expansion

Source: Sidra Capital

Future Investment Initiative (FII): Saudi Arabia 2023

The Future Investment Initiative (FII) is an annual event organized by Saudi Arabia, held in its capital city, Riyadh, and the auguration started with the presence of HRH Crown Prince and Prime Minister Mohammed Bin Salman. Also, the event brought together investors, policymakers, government officials, and international private-sector leaders. This year, the conference primarily focused on topics that included artificial intelligence, robotics, education, healthcare, and sustainability. Notable speakers, as in the provided picture of panelists:
- H.E. Yasir Al-Rumayyan, Governor, Public Investment Fund, Chairman of Aramco
-Laurence D. Fink, Chairman & CEO, BlackRock
-Jamie Dimon, Chairman & CEO, JPMorgan Chase & Co.
-Stephen A. Schwarzman, Co-Founder, Chairman & CEO, The Blackstone Group
-David Solomon, Chairman & CEO, Goldman Sachs
-Jane Fraser, CEO, Citi
-Dr. Patrice Motsepe, Executive Chairman, African Rainbow Minerals Limited
-Ray Dalio, Founder, CIO Mentor & Member of the Board, Bridgewater Associates, LP
-Noel Quinn, Group CEO, HSBC Holdings
-Neil Shen, Founding Managing Partner, Hongshan/Sequoia China
-Shemara Wikramanayake, Managing Director & CEO, Macquarie Group.

Source: FII Institute

The seventh edition of the event, which hosted various policymakers, CEOs, and heads of multilateral institutions, featured over 5,000 attendees and 500 speakers. Discussions revolved around the latest developments and concerns of the 21st century.

The event is often referred to as 'Davos in the desert' and featured high-profile speakers such as IMF Managing Director Kristalina Georgieva, World Bank President Ajay Singh, and FIFA Chief Gianni Infantino. The conference is part of Saudi Arabia's efforts to diversify its oil-dependent economy by engaging change-makers and facilitating discussions on partnerships and policies in a rapidly changing landscape. The latest edition was themed "The New Compass," reflecting the essence of a global world rediscovering its bearings in the investment realm and prioritizing citizens' concerns. The FII serves as a significant platform for global discussions on investment, economic growth, and emerging challenges. At this critical time in history, the topics on the agenda will play a pivotal role in shaping the future of humanity.

Survival of the fittest

By Savanna Gfeller

Introduction

The commercial real estate (CRE) space has been under pressure ever since the pandemic has changed the way and the where of work. This has brought about a shift in the frequency and the way in which office space is being used. As demand for more modern and high-quality office space is on the rise, landlords, owners, and investors will need to respond to those the needs quickly to remain competitive.

Utilization

Globally, utilization of office space has not returned to pre-pandemic levels, although there are differences to be seen in varying locations as seen in CBRE's 2023 Office Occupier Sentiment Survey[1]. The survey reported higher utilization in Asia-Pacific as compared to the U.S. and Europe. With many office spaces still echoing the sounds of crickets, the market is faced with the increasing evidence that some of these vacancies may be here for good, indicating a structural change to the market as opposed to a cyclical dip that many hoped may pass on eventually. Some hope may still be around, with some occupiers hoping for increased office attendance toward the end of the year.[2]

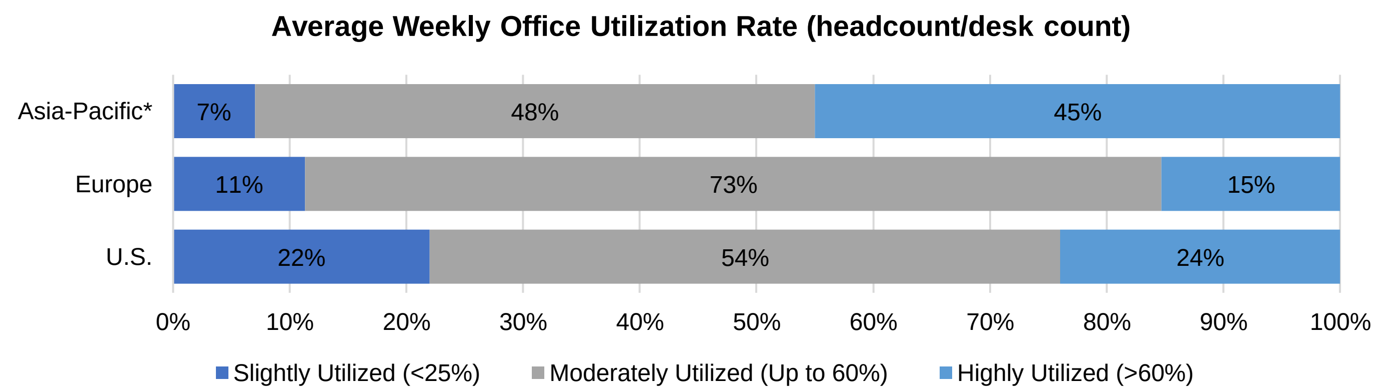


Figure 1 CBRE Research, April 2023
** Asia-Pacific: "Moderately Utilized " includes up to 70%; "Highly Utilized" is >70%*

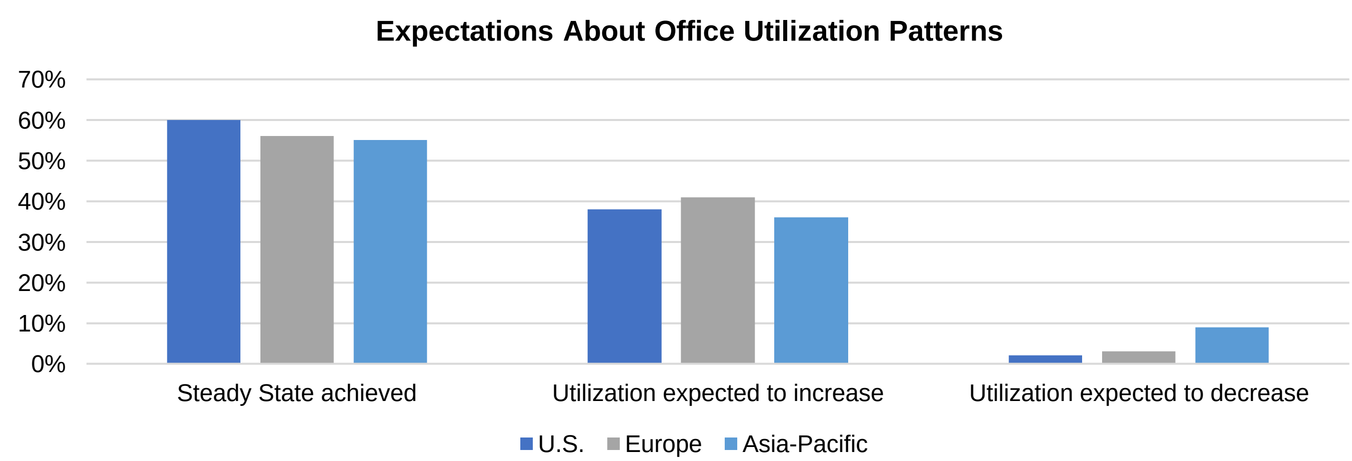


Figure 2 Source: CBRE Research, April 2023

[1] [2] 2023 Office Occupier Sentiment Survey, CBRE April 2023

Strategic Drivers

Time will tell once leases run out if occupiers will be willing to renew their leases or let them expire. This will challenge owners and landlords to strive to offer a strong case for their space which may require more responsiveness to the needs and wants of tenants. As with utilization, the strategic drivers behind the demand for CRE differ according to regions. With real estate being one of the leading costs for many occupier companies, naturally, given the increased pressures in global markets, many are moving their attention to their spending and ensuring they are making ideal choices. Cushman & Wakefield reported cost pressures to be the leading strategic indicator globally for occupiers when making decisions such as signing new leases, followed by talent sourcing and retention. However, a growing strategic indicator on the rise has been environmental, social and governance (ESG), which compared to the previous survey has moved up from 8th to 5th rank in importance. The survey also found that buildings which meet exceptional sustainability standards may ask for a 22% premium from occupiers.[3] With many companies adding sustainability goals to their strategy and setting net zero commitments, it seems that ESG will continue to rise in importance in the coming years, which may cause occupiers to demand discounts for properties that do not meet top sustainability requirements.

Strategic drivers that inform key office real estate decisions such as signing new leases, new locations, etc. (by region):

	Americas	EMEA	Asia Pacific	Global	*Previous Global Ranking*
1	Talent Sourcing & Retention	Cost Pressure	Operational Excellence	Cost Pressure	*Talent Sourcing & Retention*
2	Cost Pressure	Talent Sourcing & Retention	Customer Relations	Talent Sourcing & Retention	*Cost Pressure*
3	Operational Excellence	ESG	Cost Pressure	Operational Excellence	*Operational Excellence*
4	Customer Relations	Operational Excellence	Corporate Brand	Customer Relations	*Corporate Brand*
5	Corporate Brand	Customer Relations	ESG	ESG	*Customer Relations*

Source: Cushman & Wakefield, What Occupiers Want 2023

A key requirement for occupiers is a central location, which is why office spaces in central business districts (CBD) remain in high demand, even though many companies now also recruit talent beyond their direct office locations. However, for those attending the office, communal space has grown strongly in importance by doubling from its pre-pandemic levels (40-50% vs 20-30%) and indicating a change in the way office space is being used. 89% of occupiers see the office as a meeting point where creativity and innovation can come to fruition.[4]

Rank	2023	Location
1st	57%	Central Business Districts
2nd	16%	Suburban Business Park
3rd	12%	Creative Urban Areas
4th	10%	Regional Cities
5th	5%	Residential Area

Source: Cushman & Wakefield, What Occupiers Want 2023

Investment

Although most real estate asset classes have seen a decrease in investment volumes, according to the Q3 preliminary results on European Investment released by Savills, the office sector has seen the most substantial plunge.[5] Overall, investors are retreading into known territory as European cross-border investors have been

[3] [4] What Occupiers Want: 2023 Survey Results, Cushman & Wakefield 2023

[5] European Investment: Q3 Preliminary Results, European Commercial, Savills October 2023

less active, leaving activity mostly to domestic investors. Also, with financial institutions becoming more risk-averse, smaller deals with less debt requirements have received a bump, while the cost of borrowing for high leverage investment remains unattractive in the current environment.
Going forward, Savills suggests that investment activity will be led by opportunistic investors buying the dip with the prospect of future price adjustments whose focus will be on premium sustainable spaces within the market. Returns will mainly be driven by income returns instead of capital appreciation due to the decline in capital values which will shift attention to resilient occupier markets. Here, high rental growth and the emphasis on ESG will take center stage.

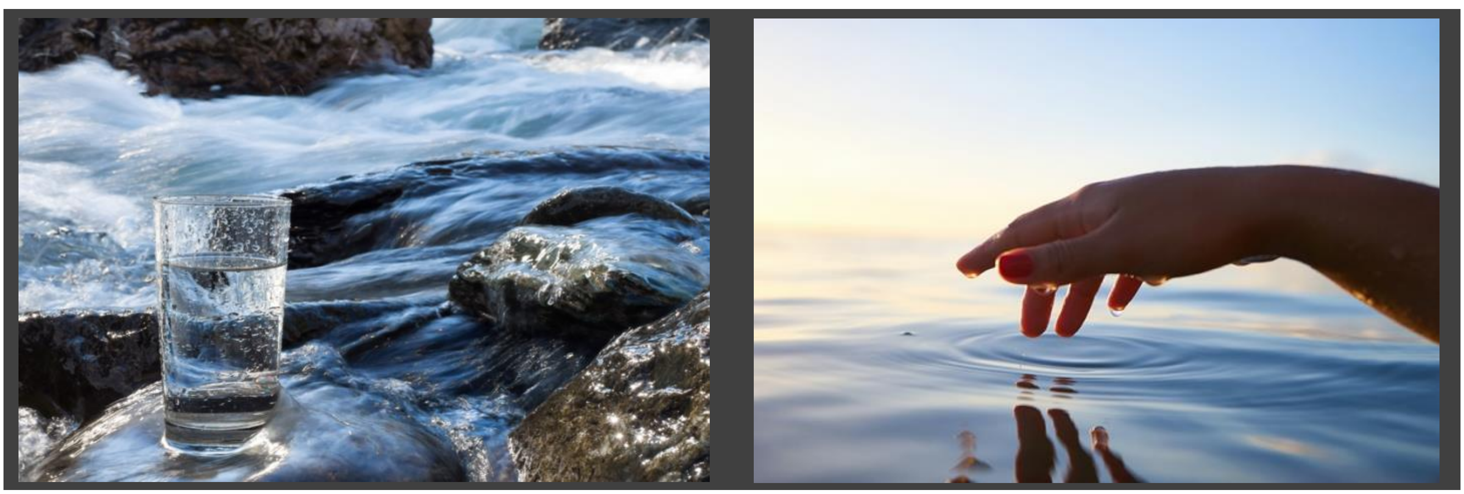
Realizing ideal yields has become more challenging given the high cost of debt in the current environment. Downward pressure on prices is being fueled by the lack of liquidity in the office sector with European prime CBD yields recording around 4.65% in Q3 2023 according to Savills, which is up from 3.83% in Q3 2022. Savills expects yields to further increase to around 4.75% by the end of 2023, mainly due to low transaction volumes. However, from an internal survey conducted by Savills, they believe prime CBD yields to soften somewhat over the next half year. Average prime yields in non-CBD locations amounted to 5.55% in Q3 2023 (vs 4.89% in Q3 2022) and are expected to increase to around 5.8% towards year end.

Summary

Research shows that landlords, owners, and investors will need to adapt to the new ways that occupiers use their office spaces to stand a chance against the developments in the market. The quality of office space, its adherence to ESG standards and ideal locations will remain of utmost importance for CRE participants willing to maintain a competitive edge and ensure resilient cash flows.

Water, The Source of Life

By: Ali Cem Tezel and Evgenia Raevskaya



Water exists in three states, may possess memory,[6] react to speech,[7] and makes up 70-74% of the human body,[8] and 78% of the human brain.[9] It covers 71% of the earth's surface.[10] Besides this, water is critical to agriculture, production and manufacturing, energy generation, and transportation. Industries which require pure water to function include (and are not limited to) the pharmaceutical industry, the food and beverage industry, the power generation industry, the oil and gas industry, and the microelectronics manufacturing industry. Water

[6] Stagnaro, S. and Caramel, S. (2011). A New Way of Therapy based on Water Memory-Information: the Quantum Biophysical Approach.
[7] Emoto, Masaru. *The Hidden Messages in Water*. New York, Atria Books, 2005.
[8] Watson, P.E., Watson, I.D. and Batt, R.D. (1980). Total body water volumes for adult males and females estimated from simple anthropometric measurements. *The American Journal of Clinical Nutrition*, 33(1), pp.27–39.
[9] McIlwain, H. and Bachelard, H.S., *Biochemistry and the Central Nervous System*, Edinburgh: Churchill Livingstone, 1985)
[10] Bureau of Reclamation (2020). *Water facts- worldwide water supply*. Available at: https://www.usbr.gov/mp/arwec/water-facts-ww-water-sup.html.

is considered a commodity similarly to oil and gold. However, being a key input in all aspects of life, it cannot be replaced by any other commodity and therefore has inelastic demand. Consequentially, sustained demand will prevail regardless of water price in the future.

There are 326,000,000 cubic miles of water available on earth. It is mostly ocean water, which is not suitable for drinking or production purposes due to the high concentration of salt. 3% of the total water composition is fresh water, 2.5% of which is unavailable due to extraction impediments and pollution.[11] This means that 0.5% of the earth's fresh water is accessible and may be used, which equates to 1,630,000 cubic miles. While this amount is substantial, it is not equally distributed throughout all regions of the earth. Therefore, some regions experience water stress, which means the unavailability of fresh ground and rainwater due to terrain specific factors, the unavailability of fresh water due to inadequate or outdated water extraction and treatment facilities, or both. The effects of water stress become magnified due to increasing population in the naturally dry regions, as well as due to climatic fluctuations such as droughts in fertile regions. It means that water stressed areas may become further reliant on imports of drinking water, on imports of water-intensive commodities, on water desalination for energy and production uses, and on water treatment technologies. These factors signal strong potential for future growth in the respective markets. This called for investigation into investment opportunities related to the key components of the water value chain. First, we reviewed existing water indices which were created to determine a unified benchmark price for water. We also evaluated the developments in the recently created futures market for water. Next, we looked at water-themed ETFs, which offer good diversification as they hold shares of companies operating in multiple water-related segments. ETF investments include (among others) shares in sewerage management companies, as well as shares in manufacturers of technologies and equipment for water disinfection, purification and desalination. As for investment into individual stocks, we considered two specific business themes; suppliers of bottled water, and suppliers of irrigation equipment, which we believe will particularly benefit from future market growth. We identified the key (publicly traded) players in both markets. Further we studied financial reports to find information about mineral water sales performance. We are yet to answer the question regarding which of the identified companies shows the strongest over-all performance, to which we dedicate our future publication.

Water Indices and futures. An approach to trading water as a commodity

S&P Global Water Index

The S&P Global Water Index was created on February 22, 2007 to measure 100 companies with a minimum total market cap of $300 million whose stocks are listed on a developed market exchange and who deals with water-related businesses. The CGW ETF tracks this index. Currently the index consists of 43 constituents. Constituents' weights are determined with respect to the product of their float market cap and an exposure score that is assigned relative to their affiliation with the related sectors. Those companies are equally distributed in Water Utilities &

Chart 1: The S&P Global Water index VS S&P 500.

Source: S&P Global

[11] Bureau of Reclamation (2020). *Water facts- worldwide water supply*.

Infrastructure and Water Equipment & Materials sectors in order to provide diversification across the global water market.

Considering the price return, S&P Global Water Index returned 6.88% over the last 5 years. The index has gained %102 in value (from 3,392.42 to 6,843.73) between December 24, 2018 and December 31, 2021. Most of the cumulative increase in that period reflects the upward movements in 2020 and 2021 and is coherent with the extremely dry weather conditions seen in 2020 and 2021. The index started falling by the end of 2021 and maintained the downtrend throughout 2022. YTD return on the index is negative and stands at -5.63% mostly owing to the recent price movements which downed the index by 4.23% MTD as of 26th of October 2023.

In terms of net total return the index value is around 7,800 and YTD figure stands at -4.65% as of 26th of October 2023. The highest value reached by the index was 10,427.53 which was recorded on 29th of December, 2021. The S&P Global Water Index has returned 8.75% on an annual basis when the net total returns are taken into account against 10.47% annualized return that was recorded for the S&P 500 in the same time period. However, as is the case for price returns as well, S&P Global Water Index has outperformed S&P 500 between December 24, 2018 and December 31, 2021 by means of net total return criteria.

Nasdaq Veles California Water Index and Futures

In October 2018, the Chicago Mercantile Exchange (CME) launched the first water Index, called the Nasdaq Veles California Water Index, followed by the creation of a futures market based on the index in 2020. NQH20 tracks the spot price of water based on transaction-level data in the California water market. Meaning that the Index price constitutes a volume weighted average of the transactions of water rights. Such as the rights to divert or pump water from rivers, streams, and groundwater basins as well as the shares in groundwater banks, surface reservoir storage rights, and entitlements to treated wastewater. This ties the water price metric to transactions between market participants based on demand-supply dynamics. It allows for price visibility, and the trade of water as a commodity on the stock market.

Chart 2 shows NQH20 price movements since inception. As of the 1st of March 2019, the price of the index was 243.3 USD. The price since then increased to reach 1242.79 USD by the 1st September 2022, which is a 411% appreciation. Although the price had fallen sharply to 194.71 by the 18th October 2023, the earlier 411% increase reflects the heights to which water price may reach in the future. How certain can we be of this, and what had influenced such price movements? The answer lies in meteorological observations.

Chart 3 reflects the prices for Spot market transfers in California, where dry and critically dry years are shown as the striped bars. Based on this data we may observe that meteorological conditions

Chart 2: The Veles California Water Index.

Source: TradingView.com

influence the price of water, which is tied to the fact that water is required for production and agricultural activity.

Chart 3: Annual Prices for Spot Market Transfers

Source: WestWater Research Waterlitix™

We have further studied meteorological news and found that the California region experienced draught conditions from 2020- 2023. The draught onset had occurred towards Autumn of 2020, with Western states experiencing the worst draught conditions in 7 years and elevated risk of wildfires. Conditions worsened in 2021, expanding throughout the state of California and to Neighboring Nevada. In July 2021, the exceptionally low water levels of Lake Powell and Lake Mead were expected to trigger federally mandated cuts to water supply.

The first quarter of 2022 turned out to be the driest on record. In December 2022, Southern California was put in a drought emergency, allowing for implementation of water restrictions. Floods began in late 2022, resulting in improvement of draught conditions by January 2023. By Mid-March 2023, the draught was over. In mid-April, California was expected to meet 100% of requested water allocations. The NQH20 price increase, and subsequent fall align with those events.

Returning to the subject pertaining the certainty of future price appreciation, we may keep in mind that the California region is prone to droughts, with periodic droughts experienced in 1841, 1864, 1924, 1928–1935, 1947–1950, 1959–1960, 1976–1977, 1986–1992, 2006–2010, and 2011–2017, and 2020–2022.

Chart 4 shows the futures market price movements from 2021 to date. The low trading volumes stand out particularly, raising questions regarding market liquidity. While the demand for water is likely to be sustained at all costs, water price fluctuations will impact users who require water for various purposes. Trading water in futures market offers the chance of managing price risks which are associated with scarcity of water in the U.S. market. Therefore, if worries for water scarcity increase in the future, we can expect the volumes to increase due to risk management purposes.

Chart 4: The Veles California Water Index Futures

Source: TradingView.com

Water ETFs

Water ETFs asset allocation consists of investment into companies that work in different parts of the clean water production chain. This includes companies that treat water, distribute water, collect wastewater, and treat wastewater. The water is supplied for commercial and household needs. This strategy creates a broad exposure to the industry and reduces investor risk in comparison to investing into shares of an individual business (although the individual stocks in this field are also well worth observing, particularly for investors pursuing long-term investment strategies, given that company-specific intrinsic valuation is conducted). The five largest water ETFs by AUM are Invesco Water Resources ETF (NASDAQ: PHO), First Trust Water ETF (NYSEMKT: FIW), Invesco S&P Global Water Index ETF (NYSEMKT: CGW), Invesco Global Water ETF (NASDAQ: PIO), and Ecofin Global Water ETF (NYSEMKT: EBLU).

For further discussion we address multiple important questions. Particularly, how good these ETFs are as an investment, which ETFs provide higher returns, is it worth to include water-focused ETFs in the portfolio at the present time, and what is the future outlook for such investments. In order to provide better understanding, we calculated the levered beta and the alpha for each fund. The levered beta represents the volatility of fund returns, and the alpha indicates whether the fund outperforms the market. For the calculations we used the Five-year daily returns data for each of the funds, and for the S&P 500. The returns of the S&P 500 were used as a proxy for market return. The daily equivalent of the prevailing annualized 10-year Treasury Bond rate of 4.91% was used as the risk-free rate. The results are displayed in the table below:

Table 1: Levered Beta and Alpha by fund

ETF Ticker	**Levered Beta**	**Alpha (Annualized)**
PHO	0.963	0.054
FIW	0.978	0.048
CGW	0.874	0.003
PIO	0.858	-0.009
EBLU	0.837	0.003

Source: Author calculations

Returning to answer the earlier questions, based on our studied sample water ETFs appear to be a good investment. Four of the five funds generate a positive alpha, meaning that they have outperformed the market over the past 5 years. The larger funds PHO and FIW return the highest alpha, while being less volatile than the market. In fact, all of the observed funds are less volatile than the market, as their levered beta values are lower than 1. At the present time, economic conditions are uncertain with risk of increased market volatility. In such circumstances, investments on the defensive side which are less volatile than the S&P are worth taking into consideration. In terms of the future, increased investment into water infrastructure is supported by legislation.[12] This is indicative of sector development, and therefore the water ETFs present great future potential.

Agricultural irrigation equipment

Demand for water-intensive agricultural products like crops, meat, and dairy, is increasing due to growing world population, alongside a quickly rising middle class in emerging markets. Furthermore, the earlier mentioned growing population in water stressed regions also means a larger requirement for imports of these products, and therefore present a driving force for intensified agricultural industry development in exporter countries. According to reports by OECD, global demand for agricultural products is projected to grow by 15% over the

[12] The Bipartisan Infrastructure Law (2021).

coming decade, while agricultural productivity growth is expected to increase slightly faster[13]. This directly implies an increased requirement for water irrigation systems in the future, in order to facilitate increased production. The Irrigation Equipment Market is expected to register a CAGR of 9.7% from 2022–2029 to reach $10.01 Billion by 2029[14]. Considering the key players operating in this market the following companies are publicly listed, and present investment opportunities. Jain Irrigation systems Ltd, Valmont Industries Inc, Lindsay Corporation, and the The Toro Company.

Drinking water

The global bottled water market had increased by 7.2% from 2022 to 2023, reaching USD 325.83 billion in 2023. The market is further expected to grow at a CAGR of 5.9% from 2023 to 2030.[15] Increasing demand from water stressed regions is not the only component contributing to the growth in this market. Consumers are concerned for the safety of tap water. The concerns are related to health risks associated with microbial contamination, chemical contamination, as well as contamination by endocrine disrupting compounds (EDCs) which were detected in global drinking water.[16] Furthermore, consumers opt for bottled water due to the convenience of its accessibility, and show increasing preference for nutrient-added water, which producers of bottled water promise to deliver. There doesn't seem to be many publicly traded companies with operations in the bottled water market. Many brands are owned by private corporations, examples include Fiji owned by The Wonderful Company, Voss owned by the Reignwood group, Poland Spring, Deer Park, Ozarka, (and more) owned by Blue Triton Brands. Nevertheless, the few public companies which operate in this space own a portfolio of different water brands, therefore by reviewing company interim reports we are able to understand details about the recent performance of water sales, as well as the over-all performance of each company compared to market performance. We have identified four publicly traded companies, Danone, Nestle, Coca Cola and PepsiCo. PepsiCo owns brands Aquafina and lifewtr, however the financial statements did not include sufficient information related to water sales for us to include PepsiCo in the current review.

Danone. Water brands: Evian, Volvic.

Taken from Danone half year results report issue of July 2023. Water sales in Q2 2023 are up by 6.6% from Q2 2022. Water sales have increased by 9.6% on a like-for-like basis, which constitute the highest sales growth from all available product categories at Danone. Highest water sales by region were observed in North America, +22.3%, followed by China/North Asia/Oceania, +15.1%, followed by Europe, +12.4%.

Nestle. Water brands: Nestle Pure life, Acqua Panna, San Pellegrino, Perrier, la Vie, Levissima, Vittel, Erikli, Contrex, Buxton.

In their interim report, Nestle had reported a 4.8% decline in water sales in the first half of 2023 (CHF 1706 million) in comparison to the same period in 2022 (CHF 1792 million). The report explains this decrease in sales as being due to temporary capacity constraints for Perrier, which outweighed strong growth in sales of Acqua Panna in the company's portfolio. The reason behind the capacity constraints may have been the draught which affected France since the spring of 2023, in turn affecting the availability of Perrier as well as San Pellegrino , which are both part of the Nestle water portfolio. This circumstance is an example of how easily environmental conditions may affect water availability in the market.

Coca Cola company. Water Brands: Dasani, Glaceau smart water.

[13] OECD and Food and Agriculture Organization of the United Nations. "OECD-FAO Agricultural Outlook 2019-2028 - OECD." 8 June 2019, www.oecd.org/agriculture/oecd-fao-agricultural-outlook-2019/.

[14] Irrigation Equipment Market by Type (Drip Irrigation, Sprinkler Irrigation, Pivot Irrigation), Product (Drip Emitter/Drippers, Tubing, Irrigation Valve, Filters, Sprinklers, Controllers), Application (Agricultural, Non-agricultural) - Global Forecast to 2029

[15] Bottled Water Market Size, Share & Trends Analysis Report By Product (Still Water, Sparkling Water, Functional Water), By Packaging (PET, Cans), By Distribution Channel (On-trade, Off-trade), By Region, And Segment Forecasts, 2023 – 2030.

[16] Wee, Sze Yee, et al. "Drinking Water Consumption and Association between Actual and Perceived Risks of Endocrine Disrupting Compounds." *Npj Clean Water*, vol. 5, no. 1, 4 July 2022.

Coca Cola reports water unit sales as part of a segment called water, sports, coffee and tea[17]. The unit case volume growth for the three months ended September 29th 2023 versus September 30th 2022 of the water, sports, coffee and tea segment shows the year-on-year basis sales volume growth per region. The table below shows a summary of the reported values, according to which the total Y-O-Y change in sales volume of the water, sports, coffee and tea category is +9%

.

Table 2: Change in category volume by region.

Region	**Y-O-Y% Change in volume of water, sports, coffee & tea category.**
Europe, Middle East and Africa	3%
Latin America	10%
North America	- 4%
Asia Pacific	- 4%
Global Ventures	4%
Total change	9%

Source: Author interpretation of financial reports

To be continued

Water is an essential commodity, particularly fresh water which is the source of our lives and the key input in many industries. It is believed to be scarce in the future due to changes in climate, increase in population and it's unavailability in certain regions. This means fresh water will become even more important in the future, especially in water stressed areas. Accordingly, through observations of the price movements of water indices, we have found that the price of the water is likely to rise dramatically during times of unfavorable weather conditions such as droughts. Therefore, as well as the extractable freshwater, alternative technologies which will ensure the convertibility of Earth's water sources into fresh water are becoming crucial. Consequentially, the number of companies that execute water related operations is increasing which provides more opportunities for indirect investment into the commodity. Apart from investing in shares of companies that deal with water related businesses, alternative investment options via ETFs and futures market are available. We have found that the prominent water ETFs possess positive alphas and come with relatively lower risks therefore offer investors the chance to diversify their portfolios. On the other hand, there is a lack of liquidity and volume in the futures market which may change depending on the supply conditions in the future. Companies which include mineral water supplies as part of their operations are of particular interest, and we have found that bottled water sales are growing for all companies which published product specific sales information. Companies which specialise in irrigation equipment are also expected to perform well in the future, with high projected market CAGR. We have identified a total of 7 companies operating in these markets investment into which is possible (the rest are privately owned). We will conduct multiples valuation in the next part of our research, with which we aim to highlight the top performing businesses from our selection.

[17] Information obtained from Coca Cola 10Q report 2023.

Mergers & Acquisitions (M&A) Developments in Q3
By: Hamad Al Harthy

Around the globe, M&A activity has seen its lowest point in over 10 years. While the third quarter of 2023 has shown a slight increase of 3.5% in deals compared to the previous quarter, deal value has fallen by over 40% compared to the same period last year.

The interest environment has been the key driver that limited M&A transactions. As cost of funding reached a 22-year high, investors found it challenging and expensive to complete acquisitions. This is especially the case for private equity investors that fund acquisitions using high leverage. Uncertainty around future hikes and high rates have caused a valuation gap, where pricing expectations between buyers and sellers diverged – sellers have high, entry-based valuations which have not been adjusted for current market conditions, while buyers reduced valuations due to cost of capital. Fundraising has also been a challenge for private equity funds, as investors preferred deploying capital in bonds while coupons offered are high.

As rates remained high and access to capital fell, appetite for alternative funding sources grew, such as credit funds. Debt restructuring was a leading stream for credit investors, while private equity funds geared up on the acquisition of distressed assets. Taking advantage of the situation, asset management firm TPG announced in November the acquisition of Angelo Gordon, a US$ 73 billion credit fund manager.

In Q3, PE fund manager Apollo acquired Univar Solutions, a specialty chemical and ingredient distributor, for US$ 8 billion. Roark Capital, a franchise-focused private equity firm, recently announced the acquisition of Subway. They previously acquired Dunkin Brands of Dunkin Donuts and Baskin Robins. Ultimate Fighting Championship (UFC) and World Wrestling Entertainment (WWE) completed a merger of US$21 billion, forming a newly listed company, TKO Holdings. Technology remained the leading sector globally for transactions in the third quarter.

The outlook for M&A deals in Q4 is positive. Market conditions are expected to stabilise, financial markets to rebound, and inflation to decelerate. Interest rates are predicted to stabilise, or even decrease, allowing for cheaper capital. In all cases, private equity funds, VC investors and other institutional investors have abundant capital which would commence deployment as certainty increases. With over US$ 1 trillion of dry powder, private equity funds would be the main driver for future deals. However, recently introduced merger guidelines in the US would be a challenge for investors as scrutiny on M&A would increase.

Investing 101: S&P 500 Index
By: Cameron Bruce

To start, I want to point out that investing is for all people and should be a tool in everyone's tool kit. Investing strategies are vast, the method I show today takes less than 30 minutes and takes care of your monthly spare income. This month's contribution is for those of you who are unsure how to start investing in financial products. Like this article, investing can be quick, easy and simple. The article points out one good start point for those of you wanting to do more with your money.

What is a financial Product?
Financial products like stocks and bonds are assets that have the potential to provide you a financial return. They are accessible to all and should become part of your monthly spending budget. In fact, if you earn a monthly wage, your pension contribution is being invested into financial products by a pension fund that will earn a return for you and itself! This month I explore stocks, specifically investing in the stock index named the S&P 500 index.

What is a stock?
Owning a stock is purchasing a fraction of a company. In most cases, a very small fraction. You purchase a company's stock with the expectation of the stock price increasing. When the stock price rises higher than your purchase price, selling the stock will earn you a profit. Meanwhile, the company might decide to pay a dividend on your owned stock, earning you a small return without selling the stock. Purchasing a stock takes 10 minutes; all you need is access to the internet and a stock trading website like Fidelity investments.

One reason to invest in the S&P stock index

The S&P stock index is a pool of the 500 best performing U.S public companies. When investing in the index, your investment is divided into each company proportionally. Based on historical data, the S&P 500 stock index has proven to generate a much better return than your bank's savings account! The largest return you can get from a saving account is around 5%. Most traditional banks will provide a return between one and two percent only. Whereas, this year the S&P 500 index is providing a return above ten percent and growing, substantially outperforming your savings account. The last twenty years shows a return of nearly 200%, proving reliable and resilient in time periods of economic recessions and shocks.

One Investing Method

Using an investment firm like Vanguard allows you to safely invest in the S&P 500 stock index. By creating an account on the vanguard website you are able to invest online. Some investment firms require a minimum starting value, in vanguard's case it is £500. Vanguard also requires a monthly payment of £100. This is where you start to build your monthly budget more effectively. If that is outside your budget you can use a different investment firm that requires a smaller starting figure. Build your confidence by starting with small sums. To help find the appropriate investment firm you can perform a simple online search for a review of the best investment firms. The transaction cost charged on each investment differs from Investment firm to investment firm. Vanguard's transaction cost is very low at 0.07%.

The last very important point to make is planning your exit. Once your investment firm and index have been chosen. Next, start planning your exit. How long do you wish to stay invested before wanting to cash out? How much profit is satisfactory to you? You should have a time period of how long you wish to stay invested in the index before selling your stocks. This is a personal decision and should incorporate your current and future financial and wider objectives. Every investment decision you make should be analysed in terms of your current and prospected circumstances. Factors to consider include risk appetite, inflation, financial commitments, family and personal relationships, investment experience, job security, and of course the S&P 500 index's performance.

This article provides a great starting point for your investment journey. Next month's Investment 101 edition explores the factors you should consider when making an investment decision.

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