

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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Monthly Macro Series: The Prevailing Macro Regime In The United States

By: Thomas Petters

Introduction

To gain a comprehensive understanding of the prevailing macro regime in the United States, we have devised three indicators that shed light on the dynamics of growth, inflation and overall liquidity.

With this approach we can contextualize the bigger picture and then match our outcomes with the well tested asset allocation matrix from Bridgewater Associates "All Weather Strategy" to gain a better understanding of price movements across various asset classes. This relatively simple, but well tested systematic concept enables a deeper understanding of market behavior across different asset classes. While we do not think that direct recommendations for action can be derived from this approach, we believe that this method can be a good starting point in understanding and navigating the markets.

Methodology

The data for the three indicators primarily reflect coincidental rather than forward-looking information. However, they serve a crucial purpose in providing us with insights into the current macro environment and facilitating an understanding of prevailing price action, rather than attempting to forecast future price movements.

Growth: The indicator we use for growth is the GDPNow forecasting model developed by the Federal Reserve Bank of Atlanta, which is estimating real GDP growth in real-time prior to the official release. It utilizes a methodology similar to the U.S. Bureau of Economic Analysis for timely insights on economic activity.

Inflation: We use the US PPI producer price index for final demand (YoY change, not SA) as a proxy for inflation since producer prices offer forward-looking insights into overall price developments for goods and services in economies driven by domestic consumption.

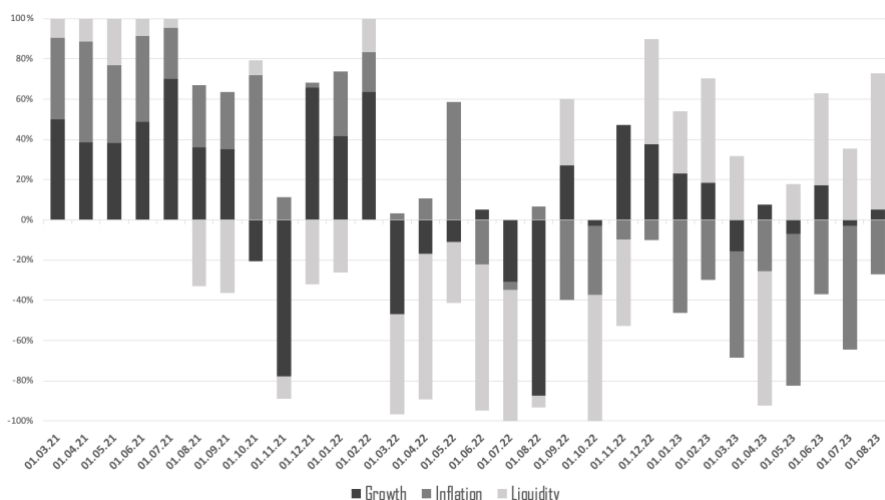
Liquidity: As a proxy for liquidity, we use the Chicago Fed's National Financial Conditions Index (NFCI), which provides a comprehensive weekly update on U.S. financial conditions in money markets, debt and equity markets and the traditional and "shadow" banking systems.

Asset Allocation

Growth rising (G +)	Growth falling (G -)
Equities Commodities Corporate Credit Emerging Market Credit	Inflation linked Bonds Nominal Bonds
Inflation rising (I +)	Inflation falling (I -)
Inflation linked Bonds Commodities Emerging Market Credit	Equities Nominal Bonds
Liquidity rising (L +)	Liquidity falling (L -)
Beneficial for risk assets	Detrimental for risk assets

Asset Allocation Strategy according to Bridgewater Associates, LP "All Weather Strategy"

Macro Regime - Growth, Inflation, Liquidity (MoM change)



US Macro Regime (MoM change)

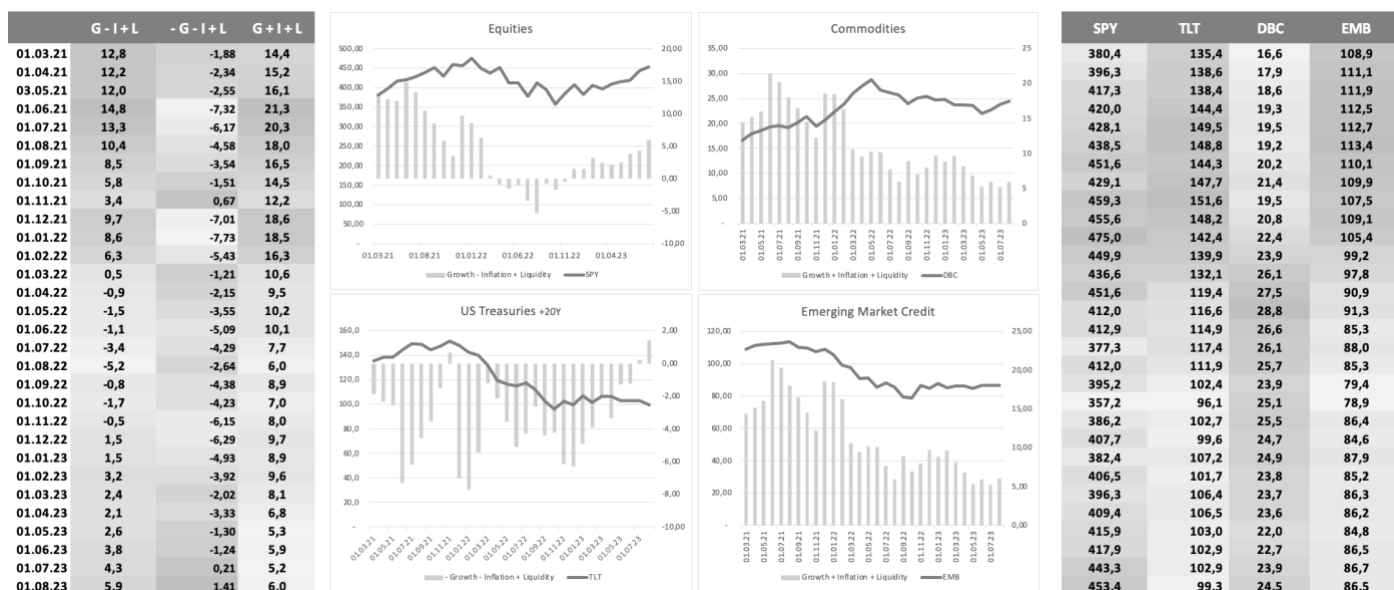
01.01.22	(G +)(I +)(L -)
01.02.22	(G +)(I +)(L +)
01.03.22	(G -)(I +)(L -)
01.04.22	(G -)(I +)(L -)
01.05.22	(G -)(I +)(L -)
01.06.22	(G +)(I -)(L -)
01.07.22	(G -)(I -)(L -)
01.08.22	(G -)(I +)(L -)
01.09.22	(G +)(I -)(L +)
01.10.22	(G -)(I -)(L -)
01.11.22	(G +)(I -)(L -)
01.12.22	(G +)(I -)(L +)
01.01.23	(G +)(I -)(L +)
01.02.23	(G +)(I -)(L +)
01.03.23	(G -)(I -)(L +)
01.04.23	(G +)(I -)(L -)
01.05.23	(G -)(I -)(L +)
01.06.23	(G +)(I -)(L +)
01.07.23	(G -)(I -)(L +)
01.08.23	(G +)(I -)(L +)

Our US macro regime chart reveals compelling trends over the past two and a half years. As we can see well in the middle of 2021, both growth and inflation were on an upward trajectory, coinciding with robust performances in commodities and US equities. Additionally, EM credit displayed signs of strength, aligning with the logic of our asset allocation matrix. However, as we approached the end of 2021 and

ventured into 2022, growth started to decline while inflation continued to rise until Q3 2022. During this period, US equities as well as long-dated US treasuries experienced significant declines and EM credit consolidated, whereas commodities remained relatively resilient.

Since Q4 2022 until the present, a new trend has emerged, with growth holding up stronger than many anticipated and inflation experiencing monthly declines. Bridgewater's matrix indicates that this macro environment should favour US equities, and indeed, the US equity market has reflected this trend since last fall with a very strong performance since its 2022 lows.

Throughout the timeline, our indicator suggests that liquidity conditions acted as a headwind for risk assets between mid-2021 and mid-2022 but has since improved significantly in recent months. On a side note, the current Fed Funds Target rate is the highest in 22 years (5.5%), higher than the rate in 2007 that lasted for 14 months. Rate hikes should in theory continue to bring down the inflation by slowing down economic activity, however real growth has surpassed the expectations of most market participants so far. Therefore, it remains to be seen whether past and potential future hikes will have a significant impact on curbing real growth.



Conclusion

It is crucial to emphasize that this model is not designed for forecasting future economic outcomes. Instead, it provides a snapshot of the current situation regarding growth, inflation, and financial conditions. Our main objective, through regular monitoring of these market indicators, is to gain valuable insights that allow us to draw an unbiased and well-informed overview of the overall situation.

Special Feature of the month: Thorium, The Future Of Nuclear Energy?

By: Adrian Ip

Introduction

In a bold move that could reshape the landscape of nuclear energy, China's nuclear watchdog has recently granted a permit to test operate its first thorium molten salt reactor (MSR) in Gobi Desert. This milestone marks a big leap forward to a future of safer and more sustainable nuclear power

How About Uranium?

The first thing that comes to mind when you think of nuclear reactors will likely be uranium, an element fuelling energy, medical and industrial breakthroughs, and crucial to Christopher Nolan's latest movie about the Manhattan Project.

Since its commercialisation in the mid-50s, we have seen the good, the bad and the ugly of uranium as an alternative source of energy. Aside from its contribution to the development of civilisation, there are two prime examples of nuclear accidents with catastrophic consequences that occurred in Chernobyl, which remains a 20-mile radius exclusion zone three decades later, and Fukushima, which Japan is now facing strong oppositions from its neighbours for pushing to discharge 1.3 million tons of contaminated water into the Pacific Ocean.

What Is Thorium And How Is It Better?

Thorium (Th-90), named after Thor by Swedish chemist Berzelius, is a weakly radioactive metallic chemical element with a half-life of the age of the universe ie. 14.05 billion years, and there is also an estimate of three to four times more thorium than uranium. Aside from a godly name, there are benefits of using thorium granted the test operation is a success.

Firstly, thorium MSR's do not require water as a coolant and hence can be installed in areas where water is a luxury or its temperature would limit production output (eg. France in 2022). The potential of centralizing the manufacture of small-scale modular thorium MSR's also amplifies its appeal, which opens the possibilities to transport and install MSR's in remote areas while offering seamless scalability. For many third world countries, the MSR's becomes more time and cost efficient and hence more financially viable. Finally, thorium is believed to be less prone to meltdowns.

Conclusion

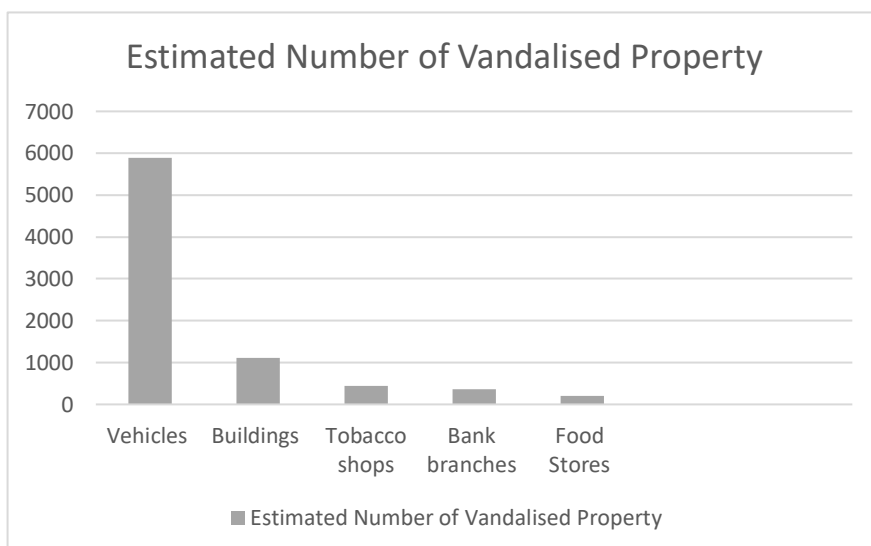
In addition to many unknown technical challenges, the verdict is still out on whether the MSR can become fully operational, nonetheless, this would popularize the use of nuclear power globally.

World Events Coverage: The French Riots.

By: Cameron Bruce

The 2023 French Riots brought many questions about the long-term financial consequences of these events. The unfortunate recent rioting in France financially costs both businesses and individuals. So far, this summer has been one to forget for the French president Emmanuel Macron. Having lost a significant portion of tourism in the month of July to cheaper European holiday destinations, the tourism hotspot is now suffering from social instability and negative European press directed at government policy. But is it government which suffers most from rioting? Or is it local businesses and households who already lost the contest with a high cost of living?

The below chart shows the extent of the damaged property:



Estimated vandalism related damages

Vehicles: At least 5,892

Buildings: 1,105

Food Retailers: 20

Tobacco Shops: 436

Bank Branches: 370

More than 3,486 people were detained, and over 800 law enforcement officers were injured during the riots. MEDEF's President Geoffrey Roux de Bézieux told French media: "It is too early to give any precise number, but we are already at over €1 billion in damages". And those are estimated figures for the private sector only. Public sector insurance claims are reportedly over \$650 million and will continue to rise over the next month.

Conclusion

As time progresses and more financial data becomes available, a more comprehensive picture will emerge detailing the financial consequences of the riots and the ways in which the government plans to reimburse the households and local businesses. Later in September this year, France will ambitiously host the Rugby World Cup, and in the summer of 2024 the European hotspot will host the 2024 Olympic Games. For many households and local businesses these two events are a silver lining to a challenging 2023. For the government, it may be the straw that breaks the camel's back.

US Equities Market Update

By: Partha Sharma

Overview

During the past week, as anticipated, the Federal Reserve raised the federal funds target rate by 0.25%. Investor sentiment was boosted by strong corporate earnings and positive economic indicators, particularly regarding inflation. The Fed's preferred inflation gauge showed lower than expected increases. Additionally, US GDP data came in stronger than anticipated. The major US equity indices displayed positive movements, with the Dow Jones Industrial Average rising by 0.66%, the S&P 500 by 1.05%, the NASDAQ Composite by 2.09%, and the US Small Cap 2000 by 1.01%. These gains were consistent with the upward trends seen in the monthly and year-to-date performances. Over the course of the month, the indices experienced notable growth, with the S&P 500 leading the way at 4.70%, followed closely by the Dow Jones Industrial Average at 4.68% and the US Small Cap 2000 at 6.60%. The NASDAQ Composite stood out as the top performer year-to-date, surging impressively by 44.01%, signaling robust investor confidence and market optimism in the technology-driven segment.

Index	Weekly (%)	Monthly (%)	YTD (%)
Dow Jones Industrial Average	0.66	4.68	6.99
S&P 500	1.05	4.70	19.48
NASDAQ Composite	2.09	5.20	44.01
US Small Cap 2000	1.01	6.60	12.66

Market Indicators

The VIX is currently reading at 13.33. The VIX, also known as the CBOE Volatility Index, measures the market's expectation of volatility over the next 30 days and is often referred to as the "fear gauge." A higher VIX suggests that investors expect more significant market fluctuations, while a lower VIX indicates a more stable and less uncertain market environment. The current reading of 13.33 is relatively low, compared to its 52-week high of 34.88 and its 52-week low of 12.73. This implies that investors are currently anticipating relatively modest market movements over the next month.

Market Summary > VIX

13.33

-9.51 (-41.64%) ↓ past year

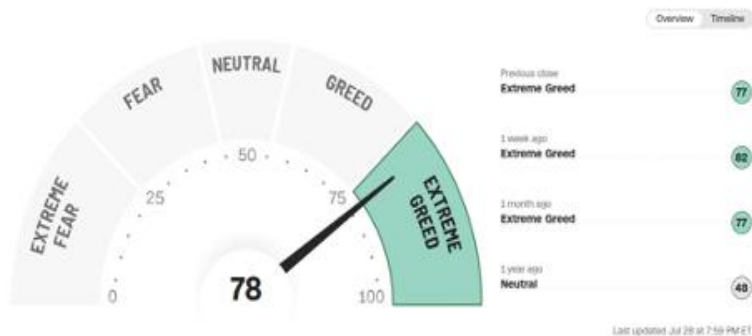
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1D | 5D | 1M | 6M | YTD | 1Y | 5Y | Max



Open	14.03	Low	13.27	52-wk high	34.88
High	14.18	Prev close	14.41	52-wk low	12.73

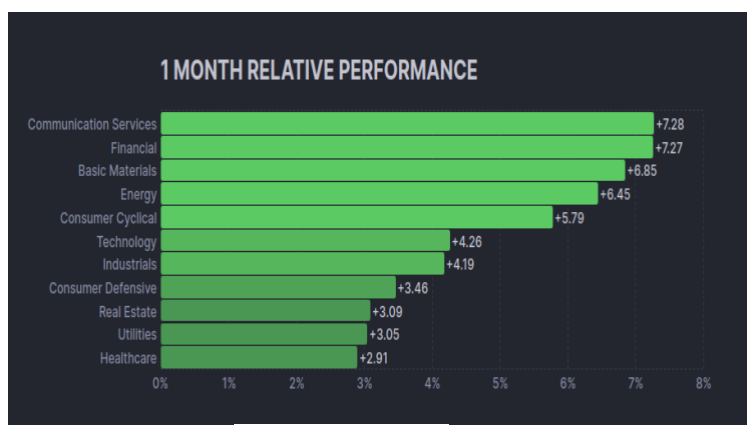
The CNN Fear & Greed Index, currently at 78, indicates that the market sentiment remains in the "Greed" zone. This level is slightly higher than the previous close of 77 and just below the reading of one week ago at 82. The index reflects a positive sentiment among investors, suggesting they are optimistic about the market's performance. These positive movements indicate a buoyant market sentiment and reflect the overall strength and resilience of the US equity market during the observed period.



Source: CNN Money

Sector Update

The top-performing sectors over the past month were Communication Services, followed by Financial, Basic Materials, and Energy. On the other hand, Healthcare showed relatively weaker performance. This performance distribution implies that investors have displayed a relatively high risk appetite during this period.



Source: Finviz.com

The outperformance of Communication Services, Financial, Basic Materials, and Energy sectors suggests that investors have been willing to take on more risk and invest in sectors that are more sensitive to economic conditions. These sectors often benefit from economic expansion and increased business activities.

Conversely, Healthcare and Utilities are considered defensive sectors, which means they tend to perform better during periods of economic uncertainty or market volatility. Their lagging performance may suggest that investors were less focused on defensive investments and more interested in seeking higher returns from riskier assets.

Relative Sector Valuation

When evaluating the relative valuation of different companies or sectors, several key financial ratios come into play: Price-to-Earnings (P/E), Price-to-Earnings Growth (PEG), Price-to-Book (P/B), and Price-to-Free Cash Flow (P/FCF). These metrics are invaluable tools for investors as they offer insights into different aspects of a company's financial health and growth prospects.

The Price-to-Earnings (P/E) ratio compares a company's stock price to its earnings per share, giving an indication of how much investors are willing to pay for each dollar of earnings. The P/E ratio can vary significantly across industries, but, in general, a P/E ratio of around 15 is considered average for the overall market. A higher P/E ratio typically suggests that investors have higher expectations for future growth. However, it's essential to consider industry averages and growth prospects to avoid overvaluation.

The Price-to-Earnings Growth (PEG) ratio takes the P/E ratio a step further by factoring in a company's earnings growth rate. A PEG ratio around 1 indicates that a company's P/E ratio is in line with its expected growth rate, making it potentially attractively valued.

The Price-to-Book (P/B) ratio compares a company's stock price to its book value per share, providing insights into how the market values the company's assets. A P/B ratio less than 1 may indicate an undervalued stock, while a ratio greater than 1 implies an overvalued stock.

Lastly, the Price-to-Free Cash Flow (P/FCF) ratio assesses a company's stock price relative to its free cash flow per share. Free cash flow represents the cash generated after accounting for operating expenses and capital expenditures. A lower P/FCF ratio may signal an undervalued stock with strong cash flow generation.

While these ratios can be valuable tools for assessing relative valuation, they should never be used in isolation. Investors must consider other fundamental factors, industry trends, and macroeconomic conditions to make well-informed investment decisions. Additionally, comparing these ratios across companies in the same industry can provide a clearer picture of their relative valuations.

Sector	PE	PEG	P/B	P/FCF
Basic Materials	12.49	2.56	1.19	38.01
Communication Services	27.12	1.60	3.31	48.16
Consumer Cyclical	28.00	2.29	4.24	56.46
Consumer Defensive	24.68	3.25	4.58	64.13
Energy	6.10	-	1.50	11.03
Financial	15.69	1.70	1.46	14.76
Healthcare	19.34	2.07	4.19	35.51
Industrials	20.98	1.86	4.15	43.23
Real Estate	31.07	3.02	2.11	90.77
Technology	37.45	2.89	7.79	49.31
Utilities	21.06	2.66	0.54	410.96

Assessment of Sector Performance

Basic Materials: This sector appears to have a reasonable valuation with a relatively low P/E ratio of 12.49 and a moderate PEG ratio of 2.56, indicating that the market has priced it fairly given its earnings growth potential. The P/B ratio of 1.19 suggests that the sector's stock prices are trading close to their book values.

Communication Services: The Communication Services sector has a relatively high P/E ratio of 27.12, implying that investors have placed a premium on its earnings. The PEG ratio of 1.60 suggests that the sector's stock prices are supported by healthy earnings growth prospects. The P/B ratio of 3.31 indicates that the sector's stocks are trading above their book values.

Consumer Cyclical: The Consumer Cyclical sector demonstrates a higher P/E ratio of 28.00, indicating that investors are willing to pay a premium for its earnings. The PEG ratio of 2.29 suggests that the sector's stock prices are supported by decent earnings growth prospects. The P/B ratio of 4.24 implies that the sector's stocks are trading significantly above their book values.

Consumer Defensive: The Consumer Defensive sector shows a higher P/E ratio of 24.68, suggesting that investors are willing to pay a premium for its stable earnings. The PEG ratio of 3.25 indicates that the sector's stock prices are supported by modest earnings growth prospects. The P/B ratio of 4.58 implies that the sector's stocks are trading above their book values.

Energy: The Energy sector stands out with a low P/E ratio of 6.10, suggesting that it is undervalued relative to its earnings. The P/B ratio of 1.50 indicates that the sector's stock prices are trading close to their book values. However, the absence of a PEG ratio could be due to missing earnings growth data.

Financial: The Financial sector also demonstrates a reasonably attractive valuation with a P/E ratio of 15.69 and a PEG ratio of 1.70, implying that investors are valuing the sector in line with its earnings growth prospects. The P/B ratio of 1.46 indicates that the sector's stocks are trading slightly above their book values.

Healthcare: The Healthcare sector has a relatively higher P/E ratio of 19.34 and a PEG ratio of 2.07, suggesting that the market has placed a premium on the sector's earnings growth potential. The P/B ratio of 4.19 indicates that the sector's stock prices are trading significantly above their book values.

Industrials: The Industrials sector has a higher P/E ratio of 20.98, implying that investors are willing to pay more for its earnings. The PEG ratio of 1.86 suggests that the sector's stock prices are supported by decent earnings growth prospects. The P/B ratio of 4.15 indicates that the sector's stocks are trading significantly above their book values.

Real Estate: The Real Estate sector has a relatively high P/E ratio of 31.07, indicating that investors are willing to pay a premium for its earnings. The PEG ratio of 3.02 suggests that the sector's stock prices are supported by modest earnings growth prospects. The P/B ratio of 2.11 implies that the sector's stocks are trading above their book values.

Technology: The Technology sector exhibits a higher P/E ratio of 37.45, which indicates that investors are willing to pay a premium for its earnings. The PEG ratio of 2.89 suggests that the sector's stock prices are supported by healthy earnings growth prospects. The high P/B ratio of 7.79 implies that the sector's stocks are trading significantly above their book values.

Utilities: The Utilities sector has a relatively high P/E ratio of 21.06, which may indicate that investors are willing to pay a premium for its stable earnings. The PEG ratio of 2.66 and the low P/B ratio of 0.54 imply that the sector's earnings growth may not be as strong, and its stock prices are trading below their book values.

Summary

The data reveals varying sector valuations in the market. Some sectors, such as Energy and Basic Materials, appear to be undervalued based on their P/E ratios, while others, such as Healthcare and Technology, have higher valuations, possibly driven by their earnings growth prospects. Investors should carefully consider these valuation metrics while making investment decisions and consider diversifying their portfolio across sectors to manage risk effectively.

Sector in Focus

This year, semiconductor stocks and ETFs have experienced significant growth, driven by the surge in artificial intelligence (AI) excitement. Notably, the VanEck Vectors Semiconductor ETF, iShares Semiconductor ETF, First Trust NASDAQ Semiconductor ETF, and Invesco PHLX Semiconductor ETF have all seen impressive gains over the past three months, with increases of 22.6%, 21.8%, 17.6%, and 21.9%, respectively.



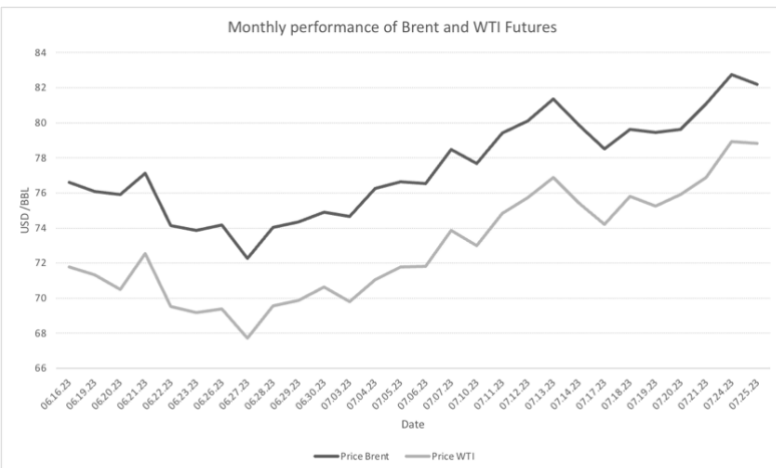
Source: Finviz.com

The positive momentum in the semiconductor sector is likely to continue as the Q2 earnings season gains momentum. Semiconductors have been instrumental in driving technology's overall growth due to their indispensable role in everyday life, from consumer electronics to transportation and defense. Increased digitization in various sectors, including healthcare, finance, agriculture, and retail, is driving demand for chips even higher. The rapid adoption of cutting-edge technologies like cloud computing, Internet of Things (IoT), autonomous vehicles, gaming, wearables, virtual reality, artificial intelligence, cryptocurrencies, and 5G networks further boosts the semiconductor industry's growth prospects. Additionally, the introduction of advanced and more expensive chips has improved the product mix for semiconductor companies.

Commodity Focus of the month: Crude Oil.

By: Evgenia Raevskaya

Short Forecast: Possible conditions of stable or increased demand, and reduced supply in the coming months. While US inflation may further decline as a result of interest rate hikes, it might not offset the upward trend in crude oil prices.



For the analysis, we evaluate multiple factors which may contribute to an increase or decrease in Brent and WTI price, based on the most recent world developments, economic data and forecasts.

Factors contributing to price increase.

For a comprehensive view on current and future crude oil demand, we report the developments of the three largest drivers of global oil demand: USA, China, and India. The U.S. Energy Information Administration (EIA) projects U.S. total petroleum consumption, will rise by 100,000 bpd to 20.4 million bpd this year. Additional forecasts reflect that The United States will use a record high amount of natural gas for electricity generation in July and August, since high temperatures will increase the need for air conditioning. The EIA expects the US to generate 4% more electricity from natural gas in July and August 2023, than was generated during the same months in 2022. From the perspective of India's demand for Crude oil, more than 85% of India's crude oil requirements are imported, and demand is only expected to rise in the coming years.



According to the latest EIA report, as of 07.11.23, India's liquid fuels consumption is forecasted to increase by an average of 0.3 million b/d in both 2023 and 2024.

The July news headlines are full of negative sentiment on Chinese GDP performance, and implication of negative impact on crude oil prices. Citing weak economic readings, slow economic recovery, and slow business activity. However, we have considered that such news requires closer examination. The prevalent opinion is based on reports from the National Bureau of Statistics of China, reflecting that the Chinese economy grew by 0.8% on a seasonally adjusted basis in the three months to June of 2023, which is a sharp slowdown from the expansion of 2.2% in the prior period.

Although it is a fourth straight quarterly expansion, the result is generally interpreted as a loss in momentum in the post Covid economic recovery of China and linked to further concerns related to a property downturn, slowing exports, disinflation prospects, and high unemployment amongst young adults. Nevertheless, if the perspective is shifted towards review of longer-term economic performance, The Chinese economy expanded by 6.3% year-on-year in Q2 2023, showing faster growth compared to the 4.5% recorded in Q1. Therefore, falling short on short term market estimates, does not necessarily indicate poor economic performance. The bottom line is, although the economic data may have not met monthly forecast expectations, the growth in GDP is evident when viewed in a Y-O-Y basis. Therefore, it is unlikely that there will be a large reduction of demand for crude oil in China, significant enough to severely impact the price of crude oil. The latest EIA report as of 07.11.23 further contributes to this view, as it forecasts that China's liquid fuels consumption will rise by 0.8 million b/d in 2023 and by 0.4 million b/d in 2024.



On the supply side, members of the OPEC and its allies are implementing 1.66 million barrels per day of voluntary production cuts until the end of 2024 in an effort to boost oil prices. In light of this, Saudi Arabia announced an extra unilateral decline of 1 million barrels per day in July and August, and Russia will reduce exports by an additional 500,000 barrels per day next month. Due to those developments, The International Energy agency (IEA) reports expectations that spot prices of Brent crude oil will average \$78 a barrel in July, reaching \$80 a barrel in the fourth quarter of 2023.

As reflected by the US dollar index, the USD has been weakening this month, which may further contribute to an increase in oil prices. The Dollar Index is equal to 99.93 as of 17.07.23, and is forecasted by the Economy Forecast Agency to drop a further -10.2% until the end of year.

Factors contributing to price decrease.

Historically interest rate hikes translate to less demand for oil, due to higher costs and slowdown in economic activity. And therefore, lead to a reduction in oil prices. Jul 25-26 Federal Reserve meeting could result in another rate hike to a to a 5.25%-5.5% range (Reuters) this means that inflation will further reduce from current 2.97%, and oil prices may decline.

Conclusion

it is evident that in the current time the factors which contribute towards an increase in oil prices outweigh factors which may contribute towards a decrease. Consequently, our forecast for oil price movement remains positive for the month of August.

Real estate: Supply and Demand Imbalances

By: Savanna Gfeller

Real estate has long been seen as an effective asset class to hedge against inflation. Rents are often indexed to a price index such as the CPI (Consumer Price Index) allowing owners to increase rents proportionally and as consumers are faced with higher mortgage rates in times of increased inflation, some renters may choose to continue to rent until financing becomes more affordable. This only increases demand for supply that can only increase so fast. Ultimately, as demand increases, property prices move further upwards, only to further be fuelled by a slowed increase in supply given the increased construction costs caused by inflation.



As central banks around the world are continuing to raise interest rates in hopes to combat rising inflation, increased pressure is still being felt in the property market, especially in the residential sector where many homeowners with variable mortgage rates expect to face increased mortgage payments.

Although the market has shown signs of calming down, at least so the story seems to have been going for residential real estate where tenants have no other choice than to move with the market, if as a renter or homeowner, or to become homeless.

However other asset classes such as commercial real estate are seeing other effects. Here, inflation and interest rate increases are also showing effect in increased property financing, but in lower transaction volumes as demand has been decreasing across markets, as market participants become more sensitive to high property prices.

Office properties continue to struggle coming out of the pandemic, where utilisation has not returned to pre-pandemic levels, making the sub-sector less attractive to investors. According to a July 2023 McKinsey report, office attendance has stabilised at around 30% below pre-pandemic levels across multiple global metropolitan areas. Included in the study. Given the lower attendance, demand is expected to

remain low in the office sector for the coming years as work-from-home and hybrid working models become the norm. According to the report, a moderate scenario suggests the impact could cost the office property market around USD\$ 800 billion by 2030 in the nine major cities included in the study with demand even below 13% of that seen in 2019.

Major banks such as Wells Fargo and JP Morgan Chase have increased their loan-loss allowance on commercial real estate loans in 2023, given the increased pressure in the sector from low office utilisation rates and increased interest rates. Although commercial real estate revenues for these two banks grew in the past quarter, they both reported to be preparing for uncertain future developments.

Given the illiquid nature of the real estate asset class, movements following current events are often only observed after a given time. However, investor sentiments can be observed in the more liquid REITs and real estate funds. These real estate products have seen their premiums come down, especially for commercial investment vehicles.

Conclusion

The outlook on the real estate market remains difficult to foresee and a topic of much debate among industry professionals and experts, considering that real estate supply and demand is impacted by many influencing factors. Although the fear of a real estate market crash has calmed down, the supply and demand imbalances and uncertainty of interest rate movements are likely to continue to cause concern in submarkets and across regions.

The Evolution of Digital Assets: From Inception to Regulation and Market Share

By: David Peisakhov and Estella Zaengle

Introduction

Digital assets have emerged as a revolutionary force in the world of finance and technology. Their creation, early trading, and subsequent journey towards regulation have reshaped the global financial landscape. In this article, we will delve into the invention history of digital assets, the first Bitcoin cryptocurrency trade, the issues plaguing unregulated markets, the growing trend towards regulation, and the projected market share of digital assets.

The concept of digital currencies dates back to the 1980s, but it wasn't until the early 2000s that the foundations of modern cryptocurrencies were laid. In 2009, an anonymous person or group under the pseudonym "Satoshi Nakamoto" introduced Bitcoin, the first decentralized cryptocurrency. Bitcoin's invention was detailed in a whitepaper titled "Bitcoin: A Peer-to-Peer Electronic Cash System."

The first-ever Bitcoin transaction took place on January 12, 2009. Hal Finney, a cryptographic pioneer, received 10 Bitcoins from Satoshi Nakamoto in a transaction to test the network. This marked the beginning of the blockchain's revolutionary journey and the first step towards the establishment of a digital economy.

The need for regulation

In the early days of digital assets, the absence of regulations resulted in both opportunities and challenges. While it fostered innovation and freedom for users, it also exposed investors and traders to significant risks. Scams, market manipulation, and security breaches are prevalent in unregulated exchanges, leading to substantial financial losses for many individuals. As the crypto market matured, the need for regulation became evident. Regulated markets provide investors with a sense of security and legal protection. Governments and financial institutions around the world started exploring ways to integrate digital assets into existing financial frameworks without stifling innovation. This move towards regulation aimed to strike a balance between consumer protection and market growth.

Expected Market Share of Cryptocurrencies

Regulated exchanges, such as the renowned derivatives markets CME Globex in the United States and EUREX in Germany, have embraced cryptocurrencies and now offer trading of Futures and Option contracts for leading digital assets like Bitcoin and Ethereum.

During Q1 2023, the cryptocurrency market experienced a surge in volatility due to notable events impacting the crypto industry. In response to these fluctuations, clients are now seeking dependable and effective risk-management solutions, prompting a growing interest in CME Group's products. The rising demand for hedging tools resulted in record-breaking volumes and open interest for options on Cryptocurrency futures as reflected in [Figure 1](#).

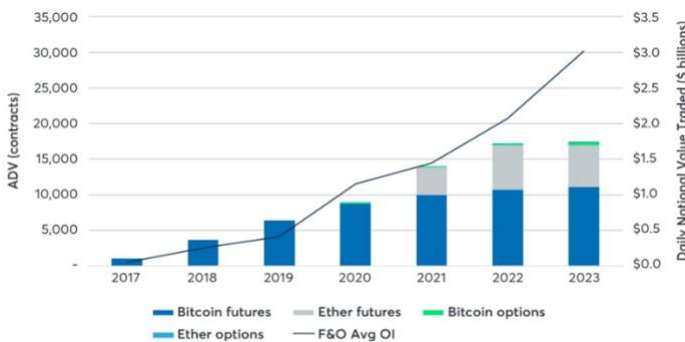


Figure 1: CME Group Bitcoin and Ether Products Annual ADV and Average Open Interest (source: cmegroup.com)

Open interest in trading Bitcoin Future and Options contracts remains stable even after recent times of unprecedented market turmoil driven by FTX collapse, while the trading volume provides a broader reflection of the overall activity across both regulated and unregulated crypto markets. The following figures ([Figure 2](#) and [Figure 3](#)) indicate that these dynamics in the last 6 weeks.

CME Globex exchange is investing in development of the offering they provide for crypto currencies. Earlier this year, CME introduced Micro Bitcoin Futures (MBT) inter-commodity spreads. On the 31st of July 2023 CME launched a new derivative contract named [Ether/Bitcoin Ratio Futures](#) to allow execution of relative value between Ether Futures (ETH) and Bitcoin Futures (BTC) contracts in a single trade.

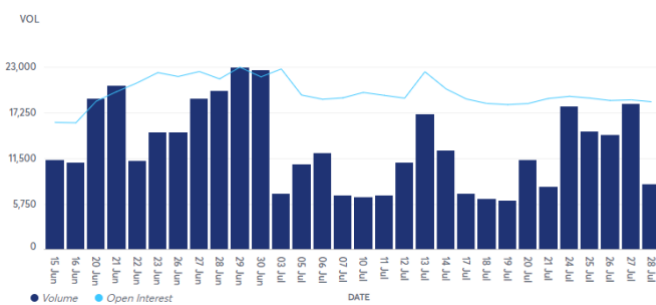


Figure 2: Bitcoin Futures Trading Volume and Open Interest on CME Globex (source: cmegroup.com)

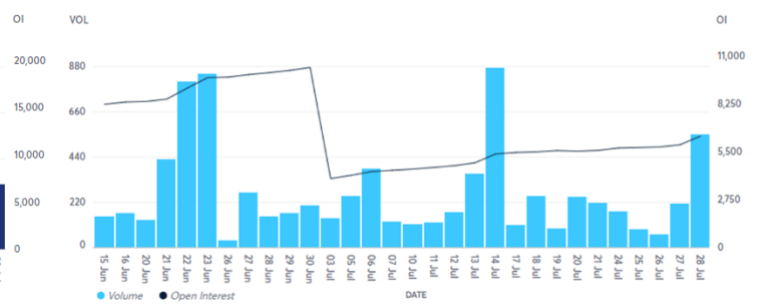


Figure 3: Bitcoin Futures Trading Volume and Open Interest on CME Globex (source: cmegroup.com)

EUREX is the first European exchange to launch Bitcoin index futures. Specification of these derivative contracts have been developed in partnership with FTSE Russell, a leading global index provider, and Digital Asset Research (DAR), its provider of institutional-grade digital asset data. Since launch of the new offering, the 17th of April 2023, EUREX lists future contracts on FTSE Bitcoin Index in EUR ([Figure 4](#)) and USD ([Figure 4](#)) and Bitcoin ETN Futures ([Figure 5](#)) with physical delivery.



Figure 4: FTSE Bitcoin EUR Futures on EUREX (source: eurex.com)



Figure 5: FTSE Bitcoin USD Futures on EUREX (source: eurex.com)

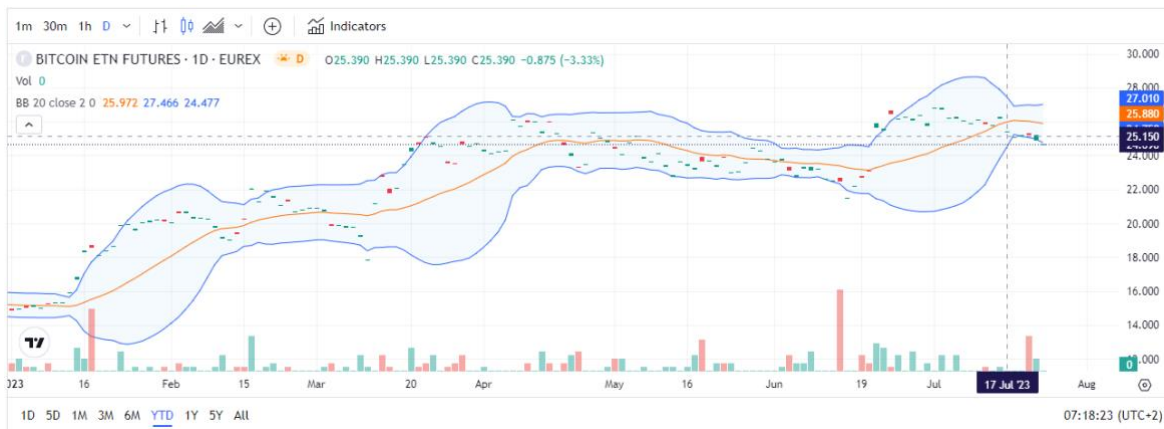


Figure 6: Bitcoin ETN Futures on EUREX (source: eurex.com)

Conclusion

The invention of Bitcoin as the first decentralized cryptocurrency and the subsequent introduction of digital assets laid the foundation for a global financial revolution. The initial lack of regulation brought both opportunities and challenges to the market, which highlighted the need for a regulated environment. Over time, the shift towards regulated markets has provided investors with increased confidence, fostering the widespread adoption of digital assets.

The market share of digital assets is expected to grow further as the technology matures and setting the scene for widespread adoption. However, as with any emerging market, investors must exercise caution and conduct thorough research before participating in the crypto space. The future of cryptocurrencies is undoubtedly promising, and with appropriate regulations and responsible investment practices, these digital assets have the potential to shape the financial landscape for generations to come.

Unveiling Web3: Revolutionizing the Financial Industry and Beyond

By: David Peisakhov and Estella Zaengle

Introduction

The internet has evolved significantly since its inception, and the emergence of Web3 represents the next phase of this technological revolution. Web3 is an upgraded version of the internet that aims to create a more decentralized, open, and user-centric digital ecosystem. It builds upon the foundation of blockchain technology and cryptocurrencies, promising significant changes in the financial industry and markets. In this article, we will explore what Web3 is, its relationship with cryptocurrencies, the transformative impact it can have, the challenges it faces, and the companies leading the charge in this innovative sector.

What is Web3?

Web3, short for Web 3.0, refers to the third generation of the internet. Unlike its predecessors, Web3 aims to move away from centralized structures and provide users with more control over their data and online experiences. It leverages blockchain technology, which is a decentralized and tamper-resistant ledger, to create trust and transparency in various digital interactions.

One of the central features of Web3 is the concept of decentralization. Instead of relying on central authorities, intermediaries, or servers, Web3 applications operate on peer-to-peer networks, empowering users with ownership and control of their data.

Web3 and Cryptocurrencies

Web3 and cryptocurrencies are intrinsically linked. Cryptocurrencies are digital assets that operate on blockchain technology, and they play a central role in Web3 applications. Crypto tokens provide the base for transferring value and incentivizing network participants in decentralized ecosystems, enable new opportunities for entrepreneurship.

Notably, the rise of Bitcoin, the pioneering cryptocurrency, sparked interest and paved the way for the development of a vast array of other cryptocurrencies, including Ethereum, which enabled the creation of decentralized applications (dApps) through its crypto assets and smart contracts functionality.

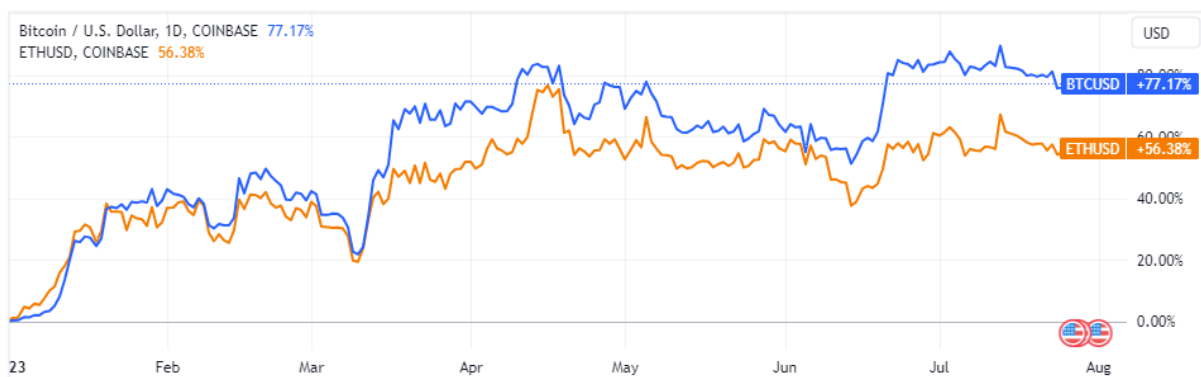


Figure 1: Year to Date change of Bitcoin vs Ethereum price on Coinbase Exchange (source: coinmarketcap.com)

Revolutionary Changes and Prominent Companies in Web3

Potential of Web3 technology stack promotes revolutionary changes in diverse areas:

Web3 and the Financial Industry

Web3 has the potential to revolutionize the financial industry in several ways:

- **Decentralized Finance (DeFi):** DeFi platforms leverage blockchain technology to provide financial services without traditional intermediaries. Users can access lending, borrowing, trading, and other financial instruments directly through smart contracts. This opens up opportunities for individuals who lack access to traditional banking services and reduces the reliance on traditional financial institutions.
- **Tokenization:** Web3 enables the tokenization of assets, where physical or digital assets are represented as cryptographic tokens on a blockchain. This facilitates fractional ownership, liquidity, and borderless transfer of assets, revolutionizing how investments are made, managed, and traded.
- **Cross-Border Transactions:** With Web3 and cryptocurrencies, cross-border transactions become faster, cheaper, and more accessible. Traditional remittance services may become obsolete as individuals can directly transfer cryptocurrencies without the need for intermediaries, although now such transactions involve high risks and are less secured than traditional bank transfers.

- **Governance in Web3:** Web3 introduces novel governance models that allow decentralized decision-making within communities. Decentralized Autonomous Organizations (DAOs) are at the forefront of this movement. DAOs enable stakeholders to participate in decision-making processes through voting on proposals. This new approach to governance empowers users and eliminates the need for traditional hierarchical structures.
- **Web3 and Privacy:** Privacy is a significant concern in the digital age, and Web3 aims to address this by giving users more control over their personal data. Zero-knowledge proofs and other privacy-preserving technologies enable transactions and interactions without revealing sensitive information. Web3's focus on privacy ensures that individuals can engage in online activities with greater security and autonomy.
- **Web3 and Energy Efficiency:** The traditional internet infrastructure consumes substantial energy, raising concerns about its environmental impact. The first-generation digital assets depend on blockchains generated by cryptography algorithms which are not energy efficient too. Web3, particularly Proof of Stake (PoS) blockchains, offers a more energy-efficient alternative to traditional Proof of Work (PoW) systems. PoS blockchains use less energy, making Web3 applications more sustainable and environmentally friendly.
- **Challenges and Scalability:** While Web3 holds immense promise, it faces challenges related to scalability, transaction speed, and user experience. As the user base grows, blockchain networks may experience congestion, leading to higher transaction fees and slower processing times. Various projects are actively working on solutions like layer-two scaling solutions (e.g., Lightning Network, Polygon) to address these issues.



Figure 2: Price of Polygon Coin in USD on Coinbase Exchange (source: coinmarketcap.com)

- **Web3 in Social Impact:** Web3 technologies are not limited to the financial sector; they also have significant potential in driving social impact. From aiding humanitarian efforts through transparent and accountable donations to providing digital identity to the unbanked, Web3 applications can empower underprivileged communities worldwide.
- **Web3 Adoption and Education:** Mass adoption of Web3 technologies depends on raising awareness and providing user-friendly experiences. Educational initiatives play a crucial role in introducing individuals to cryptocurrencies, blockchain, and decentralized applications. Efforts to simplify user interfaces and increase accessibility will be vital in driving Web3 adoption.
- **Web3 and Interoperability:** With numerous blockchains and protocols in the Web3 space, achieving interoperability becomes crucial for a seamless user experience. Cross-chain bridges and interoperability protocols, such as Polkadot and Cosmos, enable the exchange of assets and data between different blockchain networks.



Figure 3: Price of Polkadot in USD on Coinbase Exchange (source: coinmarketcap.com)



Figure 4: Price of Cosmos in USD on Coinbase Exchange (source: coinmarketcap.com)

- Future Trends and Speculations:** Web3 technology has a lot of potential and is under intense development. This provides grounds for speculation potential and future impact of Web3 technology to a diverse range of industries. How might it impact healthcare, education, or entertainment? There are endless use cases that might emerge as Web3 technology evolves.

Conclusion

Web3 represents a fundamental shift in how we interact with the digital world, promoting decentralization, transparency, and user ownership. Its implications extend far beyond the financial sector, impacting diverse industries and societal domains. While challenges such as scalability, security and education need to be addressed, the ongoing development of innovative solutions continues to drive the growth of the Web3 ecosystem.

As Web3 continues to unfold, it is essential to recognize its potential to shape a more inclusive, secure, and equitable future for individuals worldwide. Embracing the principles of decentralization, privacy, and sustainability, Web3 embodies the spirit of a technological revolution that empowers users and fosters a new era of digital freedom. With visionary companies leading the charge in the Web3 sector, we can expect transformative changes that will redefine the way we interact with technology, conduct business, and engage with one another in the digital age.

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