APRICUS CAPITAL

2022 S&P 500 Investment Outlook

Contents

APRICUS CAPITAL

We bring apricity

- Apricus Capital provides an integrated sell-side team comprising dedicated and experienced professionals on the ground in US equities

- Apricus Capital is committed to mobilize all resources to provide insightful and alpha-creating research with comprehensive corporate finance and capital market products and services

Chu, Lap Kiu Isaac
MEng – Mechanical Engineering
Imperial College London

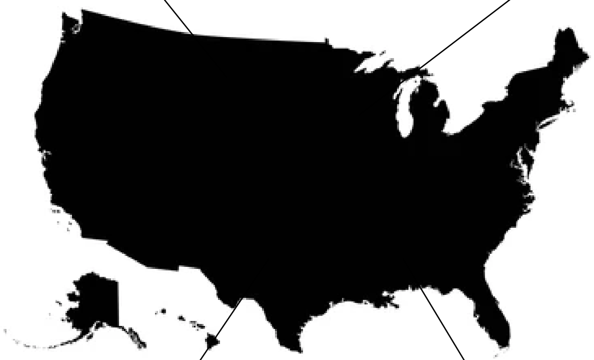
Ng, Tsun Yin Paul
MEng – Aeronautical Engineering
Imperial College London

APRICUS CAPITAL

2021 Highlights

Inflation
Inflation soared in 2021 on the back of supply and demand mismatches. Muted policy reaction of central banks are one of the major drivers.

Supply Chain
Strong good demands coupled with pandemic disruptions, i.e. closures of factories and borders, have led to a sharp increase in core goods inflation.



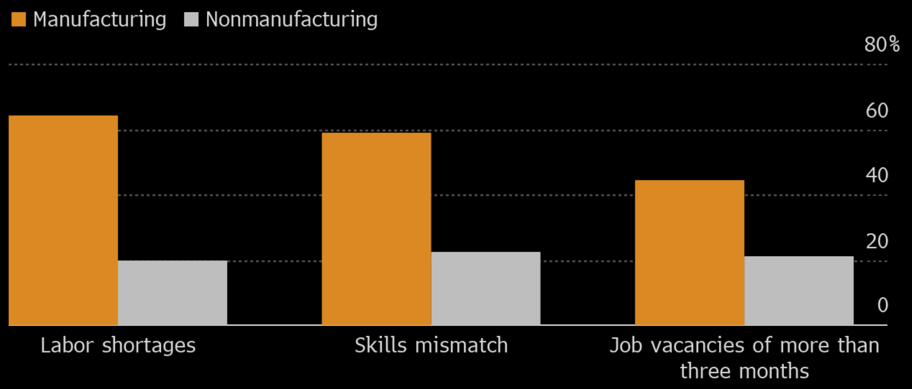
Covid
New variants of Covid strains continued to be a major sources of public fear. Policies of herd immunity had been widely adopted, whereas base effects such as inflation and supply chain issues have not been resolved.

Labor shortage
Labor shortages, in everything from bus and truck drivers to substitute teachers and restaurant workers, are causing a loss of momentum in the recovery of global economy.

U.S. and euro area inflation

Euro area inflation
U.S. core inflation

Empty Positions
Firms across industries say they're experiencing labor shortages and skills mismatch



Source: Federal Reserve Bank of Philadelphia March survey
Note: Percentage does not add to 100 because more than one choice could be selected

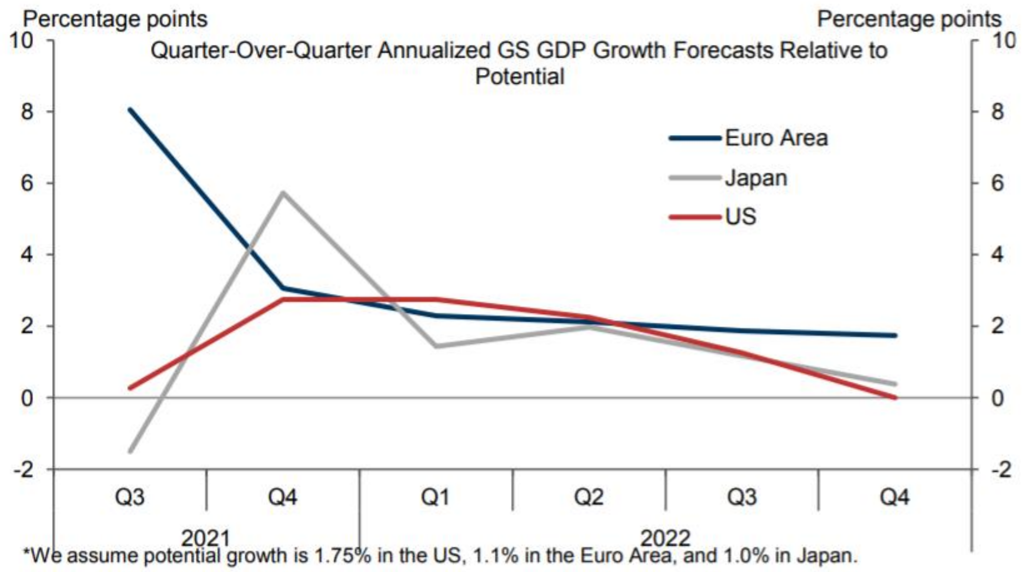
APRICUS CAPITAL


4800
4600
4400
4200
4000
3800
3600
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
2021
US presidential inauguration (20 Jan)
Joe Biden is inaugurated as the 46th president of the USA.
US Labour Market (18 Feb)
US jobless claims unexpectedly jump, pointing to an incomplete recovery of both US labour market and economy.
Rising bond yields (28 Feb)
US Treasury yields reach about 1.5%, the highest level since the start of the COVID-19 pandemic, weighing on equities
Stock market rebounds (01 March)
The S&P 500 posts its best session since June 2020, lifted by a retreat in bond yields and the ongoing economic recovery.
Economic relief bill in the USA (11 March)
US President Biden signs a USD 1.9 trillion COVID-19 relief bill
US-China talks (19 March)
The Biden administration holds its first high-level talks with China.
Vaccine rollout (07 April)
COVID-19 vaccination campaigns start to be rolled out globally amid rising cases.
US Inflation jumps (12 May)
The US consumer price index (CPI) posts its sharpest increase since 2008, rising 4.2% year-on-year.
US Federal Reserve meeting (18 June)
The US Federal Reserve (Fed) adopts a relatively hawkish tone at its meeting, commenting on potential interest rate hikes and its increase headline inflation projection.
Delta variant (19 July)
Amid concerns that the global spread of the new, more infectious Delta variant of COVid-19 would lead to slower economic growth, the S&P 500 drops more than 2%.
Tapering fears (19 Aug)
Financial markets fall due to fears of tapering as the Fed signals it could start reducing the pace of asset purchases.
Jackson Hole Symposium (27 Aug)
Financial markets perceive US Federal Reserve Chairman Jerome Powell's speech at the Jackson Hole Symposium as relatively dovish.
Market high (02 Sep)
S&P 500 reaches an all-time high of 4536.95 points.
Fed to start tapering (03 Nov)
The US Federal Reserve announces that it will tapering the pace of its asset purchases in November 2021.
APRICUS CAPITAL

Year ahead 2022

Our view is that 2022 will be the year of a full global recovery, an end of the global pandemic and a return to normal conditions we had prior to the COVID-19 outbreak. Economic growth will likely remain above trend for the first half of 2022, benefitting cyclicals, including Eurozone and Japanese equities, US mid-caps, global financials, commodities, and energy stocks.

The Major Advanced Economies Should Grow Strongly Through Midyear and Then Moderate Gradually



Source: Goldman Sachs Global Investment Research

Equities

- Looking to 2022, Apricus Capital's research team expects to see market upside, though more moderate, on better-than-expected earnings growth with supply shocks easing, China/EM backdrop improving and normalizing consumer spending habits.
- Central bank policy is set to remain broadly accommodative despite Federal Reserve (Fed) tapering, with an additional $1.1 trillion in global DM central bank balance sheet expansion through the end of 2022 and a more dovish Fed relative to current market expectations ahead of U.S. midterm elections.
- While inflation will remain a recurring theme, there is a compelling case to be made for inflation rotation rather than broad-based acceleration in prices. Record corporate liquidity and strong fundamentals should continue to drive capital investment, inventory re-stocking, shareholder return and merger and acquisition (M&A) activity.

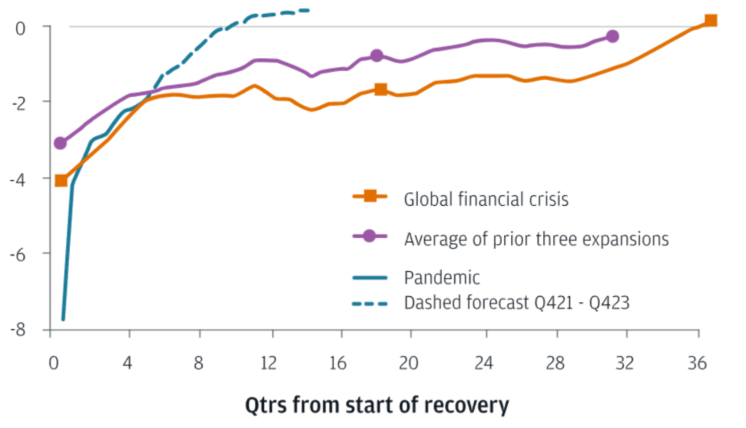
Commodities

- Commodities are set for a strong year ahead, with the energy sector stands out as the major outperformer. Supply chains have struggled to keep pace with resurgent demand, which have led to tight balances across industrial metals and agriculture.
- The price of carbon will stay a key topic, while gold may be vulnerable as policy normalization begins.

APRICUS CAPITAL

Global output gap, recovery from recessions

%, GDP relative to potential, year of trough shown



This chart shows the economic recovery from the global financial crisis and the average of three prior expansions, with recovery from the pandemic predicted to be the fastest.

Source: J.P. Morgan Global Economics

In the decade ahead, investors face a world that is experiencing increased technological disruption, aging populations, monetary and fiscal coordination, and de-globalisation, as well as stronger political calls for wealth re-distribution and environmental action. The pandemic has accelerated the advancement of many of these themes, creating uncertainty, but also compelling long-term investment opportunities.

Meanwhile, the net-zero carbon transition looks set to prove to be one of the most consequential investment trends of the coming decade. Attaining net-zero is expected to require global investment in renewables of USD 50 trillion for each decade until 2050, with 50% of emission reductions needing to come from underdeveloped technologies. This creates opportunity across greentech, clean air and carbon reduction solutions, and carbon trading strategies.

Rates and Currencies

- In 2022, Apricus Capital is expecting a continuous strong growth momentum with declining inflation pressure, causing different reactions across central banks. Increasing global access to vaccinations and booster would help break the link between mobility restrictions and the virus. Whereas the Federal Open Market Committee (FOMC) has started to lay out the path from removal of accommodation and announced the tapering of the asset purchase taper in November.

U.S. Consumers See Inflation

Median expected price gains are expected to rise sharply at both the one-year and three-year horizon

Source: Survey of Consumer Expectations, Federal Reserve Bank of New York

APRICUS CAPITAL

Asset Forecast and Scenario Analysis

Themes	Upside scenario	Central scenario	Downside scenario
S&P 500	5250	5050	4000
COVID-19	Economics restrictions broadly lifted quicker than expected.	Economy gradually reopens. Current wave of COVID-19 fades in an average pace.	Continued public fear, new invasive COVID-19 mutations, consumption does not recover.
Inflation	Inflation fears abate, or elevated inflation is balanced out with economic growth.	US inflation remains in a relative high level into early 2022 and gradually falls towards mid-year, while Fed finishes tapering.	Inflation rises vigorously. Energy price spike, and the Fed introducing more aggressive tightening policies.
Fiscal	Fiscal support to the global economy is higher than expected.	Governments take economic recovery into consideration. Fiscal impulse diminishes.	Economic weakness outbalanced by fading fiscal impulse.
Geopolitics	Existing trade tariffs eases and raises global growth.	Stable approach of trading policy taken by the US.	Worsened US-China and US-Russia relationship.

APRICUS CAPITAL

S&P 500 products

	Futures	Options	Swaps	ETFs
Pros	• No annual management fees. • Trades nearly 24 hours, six days a week • S&P 500 futures contract far out-trade in dollar terms its ETF counterpart (2.56x in daily dollar volume with E-mini S&P/ All 6,673 ETFs globally). • Pay less taxes than with an ETF do to IRS Section 1256 treatment (60/40 blend of short and long term gains). • Effectively zero tracking error.	• Cost efficient with huge leverage power • Good hedging instrument. • Multiple strategic positions could be taken.	• Swap is cheap, with no upfront premium and it reduces transaction costs. • It is possible to be used to carry out longer time period hedge than futures and options.	• ETFs trade at a narrowest bid-offer spread, hence lower spread costs (.32 bps spreads). • High liquidity. • Costs for ETFs are more predictable and are trending downwards.
Cons	• A risk that investors can lose more than the initial margin amount since futures use leverage – gains are amplified but so too are losses. • Contracts have expiration dates as opposed to ETFs that trade in perpetuity.	• Low liquidity. • Higher commission fees than future or equities trading. • Time decay.	• Early termination before maturity may incur a breakage cost. • Low liquidity.	• Tracking error- the difference between the price of the benchmark and the price of the ETF. • Cannot be traded 24 hours a day. • ETFs have annual management fees.

Recommendations

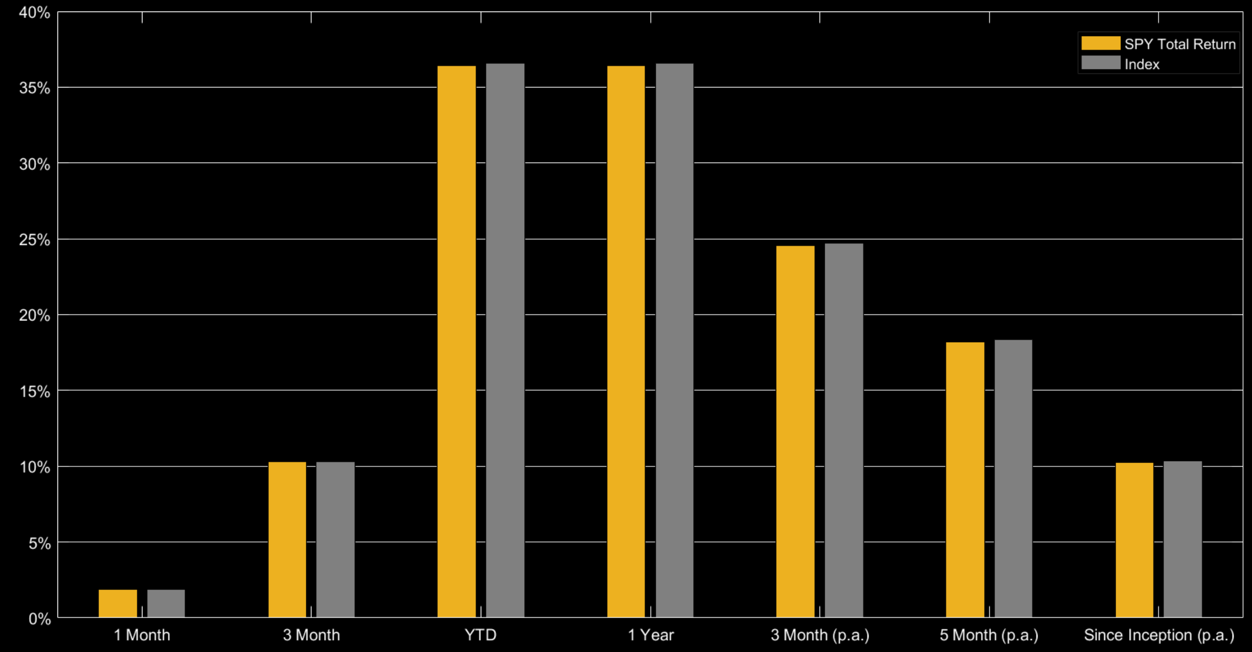
- Apricus Capital's research team recommends initiating a **long** position on SPDR S&P 500 ETF (NYSEARCA: SPY) because its growth potential is not sufficiently priced in. and its price could increase significantly in the next 6-12 months.

- Duration: **6 -12** moths

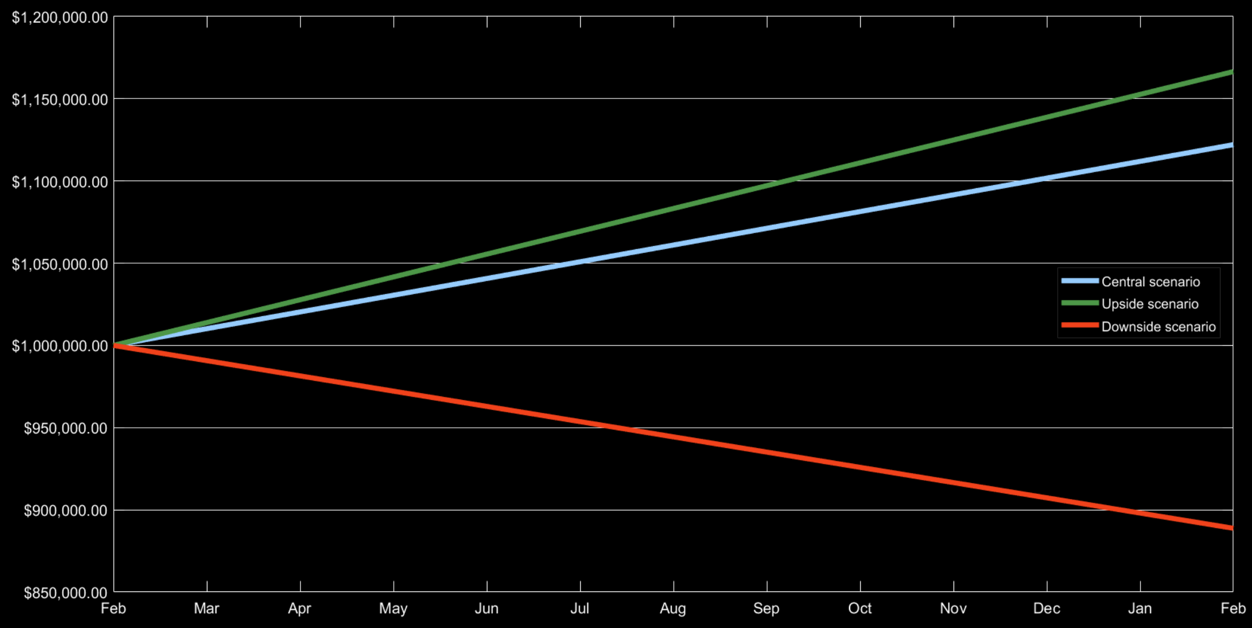
- To achieve a **low** risk tolerance level specified by the client, we do not recommend futures in order to avoid amplified losses. Options offer a relatively low liquidity, and therefore would be more efficient to act as a hedging solution. The same also applies to swaps. ETFs are chosen to produce a predictable and reliable profit.

- SPY has both the largest assets under management and highest trading volumes of all S&P 500 ETFs. SPY is not the cheapest option among the S&P 500 ETFs, however, it's liquidity, size and long tenure all offer value of their own.

SPY ETF Performance



1 year performance of a $1M portfolio under different scenarios



Key Risk Factors

- **COVID-19:** There have been sporadic setbacks with COVID-19 variants, this needs to be seen in the context of higher immunity rates, significantly lower mortality and new antiviral treatments. With this in mind, the key risk to is a hawkish shift in central bank policy - especially if post-pandemic dislocations persist, such as further delay in China reopening or continued supply chain issues. One of the most important factor is probably a reduction in fear among most of the population that is either already vaccinated or has no desire to get vaccinated under any circumstances, and consequently higher economic activity even when there is an outbreak.

- **Geopolitics:** There are uncertainties in US-Russia and US-China relations. Troops increase from US and Russia have been destructive around the border of Ukraine and may add fluctuations in the US market if war outbreaks. Tensions between US and China are likely to increase, starting with the US boycott using the games in 2022, with Taiwan and Hong Kong conflicts remain un-resolved. Aggressive trading policies might be taken by the US.

- **Inflation:** It is likely that the global economy gradually transitions from a highly unusual pandemic recovery to a more normal expansion starting in 2022. During this transition, demand slows while supply rises, growth shifts from very rapid to merely solid, activity rebalances from goods to services, and inflation moderates. Currently, the stress on supply chains is substantial and inventories in semiconductors, durable goods, and energy markets are very low. In such an environment, even a moderate production outage resulting from covid outbreaks in China, an energy demand spike related to a cold winter, or other short-term disruptions could have sizable economic effects.

The Fed's New Dot Plot

Source: Bloomberg

Bloomberg

APRICUS CAPITAL

Hedge consideration

SPY230317P00360000	2022-02-04 3:38PM EST	360.00	15.21	14.40	17.97	-0.70	-4.40%	85	460
SPY230317P00365000	2022-01-28 11:57AM EST	365.00	19.94	15.24	19.00	0.00	-	1	733
SPY230317P00370000	2022-01-28 3:48PM EST	370.00	20.50	16.21	19.99	0.00	-	2	755
SPY230317P00375000	2022-02-03 3:27PM EST	375.00	18.96	17.24	21.01	0.00	-	3	327
SPY230317P00380000	2022-02-03 2:38PM EST	380.00	19.63	19.00	22.07	0.00	-	4	1,222
SPY230317P00385000	2022-01-28 3:24PM EST	385.00	24.65	19.40	23.18	0.00	-	11	491
SPY230317P00390000	2022-02-03 11:28AM EST	390.00	20.00	20.64	24.33	0.00	-	7	1,025
SPY230317P00395000	2022-02-02 3:32PM EST	395.00	20.65	21.77	25.54	0.00	-	2	449
SPY230317P00400000	2022-02-04 3:33PM EST	400.00	23.25	23.03	26.80	-1.69	-6.78%	4	3,202
SPY230317P00405000	2022-02-03 3:20PM EST	405.00	24.89	24.35	28.12	0.00	-	16	579
SPY230317P00410000	2022-02-02 3:20PM EST	410.00	22.51	25.74	29.51	0.00	-	15	342
SPY230317P00415000	2022-02-01 12:42PM EST	415.00	27.00	27.18	30.95	0.00	-	12	131
SPY230317P00420000	2022-02-04 4:03PM EST	420.00	30.39	28.80	32.40	+0.05	+0.16%	2	1,275
SPY230317P00425000	2022-02-04 3:33PM EST	425.00	30.18	30.25	33.96	-1.88	-5.86%	37	425
SPY230317P00430000	2022-02-04 3:38PM EST	430.00	32.00	31.88	35.59	-1.28	-3.85%	61	941
SPY230317P00435000	2022-02-03 4:04PM EST	435.00	35.00	33.70	37.29	0.00	-	3	1,082
SPY230317P00440000	2022-02-04 10:07AM EST	440.00	37.50	35.48	39.07	+1.80	+5.04%	1	1,764
SPY230317P00445000	2022-02-04 10:29AM EST	445.00	40.00	37.18	40.92	+0.70	+1.78%	2	1,462
SPY230317P00450000	2022-02-04 3:19PM EST	450.00	39.32	39.28	42.85	-2.18	-5.25%	186	4,871

- In order to hedge the downside to the S&P 500, the management team recommends on utilizing the married put options strategy, buying put options on the SPDR S&P 500 ETF (NYSEARCA: SPY), the most liquid options market of a S&P 500 ETF.
- A put option allows investors to profit directly from a drop in the S&P 500.
- Buying SPY230317P00400000 with a strike price of $400 and an expiration date of 17 March 2023.
- The price of this option is $23.25 per contract at the time of market close on 04/02/2022
- Advantages of S&P 500 put options as a hedge includes:
  - Favorable tax treatment
  - Cash settlement – easier to manage around expiration.
  - Leverage -$SPY options have a 100 multiplier, which provides the potential to offset a substantial decline for a relatively small upfront cost.

APRICUS CAPITAL

Appendix

Contract	Implied Volatility	Delta	Gamma	Theta	Vega
SPY230317P00400000	23.9032	-0.3014	0.0031	-0.0525	1.6285

Put option contract details

Top 10 holdings of the S&P 500 (27.34% of total assets)

Name	Symbol	%assets
Apple Inc	$AAPL	5.90%
Microsoft Corp	$MSFT	5.60%
Amazon.com Inc	$AMZN	4.05%
Meta Platforms Inc	$FB	2.29%
Alphabet Inc A	$GOOGL	2.02%
Alphabet Inc Class C	$GOOG	1.96%
Berkshire Hathaway Inc Class B	$BRK.B	1.45%
Tesla Inc	$TSLA	1.44%
NVIDIA Corp	$NVDA	1.37%
JPMorgan Chase & Co	$JPM	1.29%

References

1. BlackRock. 2021. *2022 Global Outlook*. [online] Available at: <https://www.blackrock.com/corporate/literature/whitepaper/bii-2022-global-outlook.pdf> [Accessed 5 February 2022].
2. Bloomberg. 2021. *Job Paradox' Baffles Economists as U.S. Employers See Shortage*. [online] Available at: <https://www.bloomberg.com/news/articles/2021-05-06/companies-warn-of-u-s-labor-shortages-economists-call-temporary> [Accessed 5 February 2022].
3. Credit Suisse. 2021. *Investment Outlook 2022*. [online] Available at: <https://www.credit-suisse.com/uk/en/private-banking/investment-management/investment-outlook.html> [Accessed 5 February 2022].
4. Goldman Sachs. 2021. *Global Economics Analyst GS Macro Outlook2022 The Long Road to Higher Rates*. [online] Available at: <https://www.goldmansachs.com/insights/pages/gs-research/gs-macro-outlook-2022/gs-macro-outlook-2022-the-long-road-to-higher-rates.pdf> [Accessed 5 February 2022].
5. J.P. Morgan. 2021. *2022 Market Outlook*. [online] Available at: <https://www.jpmorgan.com/insights/research/market-outlook-2022#:~:text=We%20expect%2010%2Dyear%20yields,the%20USD%20index%20in%202022.> [Accessed 5 February 2022].
6. UBS. 2022. *UBS Year Ahead 2022: A year of discovery*. [online] Available at: <https://www.ubs.com/global/en/media/display-page-ndp/en-20211118-ubs-year-ahead-2022.html> [Accessed 5 February 2022].
7. CME Group. n.d. *Why Trade Futures Instead of ETFs?*. [online] Available at: <https://www.cmegroup.com/education/courses/futures-vs-etfs/why-trade-futures-instead-of-etfs.html> [Accessed 5 February 2022].
8. Invesco. 2018. *ETFs or futures? A costly quarter for futures investors*. [online] Available at: <https://etf.invesco.com/sites/default/files/documents/IVZPS_BROCHURE_ETFs%20or%20FUTURES_JUL18_3.0.pdf> [Accessed 5 February 2022].
9. Investopedia. 2022. *Options Definition*. [online] Available at: <https://www.investopedia.com/terms/o/option.asp> [Accessed 5 February 2022].
10. Investopedia. 2021. *An Introduction to Swaps*. [online] Available at: <https://www.investopedia.com/articles/optioninvestor/07/swaps.asp> [Accessed 5 February 2022].
11. State Street Global Advisors. 2022. *SPY: SPDR S&P 500 ETF | State Street ETFs*. [online] Available at: <https://www.ssga.com/au/en_gb/institutional/etfs/funds/spdr-sp-500-etf-trust-spy> [Accessed 5 February 2022].