## BITFINEX



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## EXECUTIVE SUMMARY

It is a conundrum for markets and economic policy makers that when the economic data is indicating a slowdown, it is taken as a positive.

Signs of <u>declining US business activity</u> and <u>declining personal consumption</u> would seem to indicate that the string of interest rates increases we have seen - and will continue to see following the FOMC meeting this week - is having the desired effect of slowing down the economy. It implies that inflationary forces are being tamed, which to the market's eye, means there won't be many more rate rises to come. Hence, Bitcoin prices and other risk assets have remained firm over the past week.

There is, of course, some need for caution. Though the rate of inflation growth is slowing, <u>prices are still rising</u> faster than worker pay. While policy makers want demand to lessen, they have to be careful what they wish for.

<u>Consumer spending is slowing</u>, but it is this that drives demand and is the main engine of the economy. With personal savings low amidst still-elevated prices, the restoration of increased spending will not return soon. This leaves weaker growth prospects for 2023.

The saving grace is that the <u>labour market remains strong</u>. For us, this is a critical determinant of monetary policy. The monthly jobless claims report is a robust leading indicator of the strength of the economy. A dip here will show that monetary tightening is having a durable impact - and it will be an important factor in future Fed policy.

Fourth quarter GDP numbers, which were also released last week, appeared to indicate that a recession had been averted and perhaps a soft landing has been achieved. However, a look at <u>final sales and net trade exports</u> show more anaemic growth.

<u>We expect interest rates to rise again</u> this week, but as discussed in last week's *Bitfinex Alpha*, any decline in the Employment Cost Index, which is also released this week, will likely presage a slowdown or even a pause in future rate increases.

Further, there is a litany of forward-looking indicators that suggest a recession is coming. The Global Credit Impulse, the Conference Board Leading Economic Index, and the Housing Market are all predicting a slowdown in corporate earnings growth and a recession in the US economy in the second or third quarter of this year.

So, where does this leave Bitcoin? Looking at BTC's forward performance after eight green candles on the daily timeframe - going as far back as 2015 - it seems that the <u>bottom might be in for BTC</u>. But while the historical technical data looks positive, BTC is more correlated to US equities than ever before.

Another positive indicator for BTC is that <u>short-term holders are selling profitably</u> into spot markets, while long-term holders are not. The Spent Output Profit Ratio for short-term holders remains above equilibrium, in contrast to the SOPR for HODLers. Indeed, the P&L for the entire market is positive for January 2023 the first time since April 2022. If this continues, it looks increasingly bullish for BTC.

Happy trading!



#### **GENERAL MARKET UPDATE** 5-15 1. Businesses Contract as Demand Continues to Weaken 6-8 \_ The Saving Grace: A still-strong labour market 9 2 US remains resilient after the challenging year, but turbulence awaits 10-11 2 Anticipated 25 Basis Point Hike in the next FOMC 12 -**Recession Check: Forward-Looking Metrics** 13-15 2. WHAT'S ON-CHAIN THIS WEEK? 16-20 Data suggests Bitcoin is in the latter stages of the bear 17-18 market Short-Term Holders Realising Profit 19-20 3. NEWS FROM THE CRYPTO-SPHERE 21-26 El Salvador paid in full \$800 million of debt plus interest 22 Former UK Chancellor calls for better and progressive Crypto Laws in The UK 23 Tesla has neither bought nor sold any digital assets in Q4 24 US first nuclear-powered Bitcoin mine opening in 2023 25

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## GENERAL MARKET UPDATE

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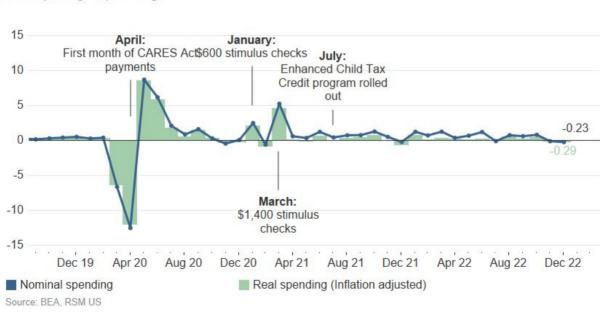
### Businesses Contract as Demand Continues to Weaken

The latest dataset for US business activity is indicating that there is a slowdown taking place in Corporate America. Taking readings from the S&P Global Survey, "flash" numbers show that while the US services sector index rose from 44.7 to 46.6 in December, and the manufacturing index slightly grew to 46.7 from 46.2 last December - these numbers are still below 50, which indicates an overall contraction in activity. The "flash" Purchasing Managers Index (PMI) due this week, is based on 85 to 90 percent of the total survey and is providing an early indication of what the final PMI report will show: slowing growth in the US business sector.

It is easy to see why this is happening. Inflation hitting a 40-year high last year has dealt a severe blow to the economy, and now with rising interest rates, businesses are being hit with a double whammy.

The continued economic slowdown and still-elevated inflation have also contributed to declining consumer spending among Americans.

In a report from the Bureau of Economic Analysis on Friday, January 27th, consumer spending fell a seasonally adjusted 0.2 percent in December from the previous month after consecutive spending increases for several months last year.



#### Personal spending during the pandemic

Monthly change in percentage

Figure 1. Personal Spending, Monthly Change in Percentage (Source: Bureau of Economic Analysis, RSM US)

Consumers have grown more cautious and appear to be anticipating a downturn, as indicated by an uptick in savings to 3.4 percent in December from 2.9 percent in the previous month. Still, towards the end of last year, personal savings amounts dropped to their second-lowest level on record. Families are dipping into their savings to help offset the effects of high inflation.



Figure 2. Personal Savings Rate (Source: Bureau of Economic Analysis)

The slowdown in demand, accompanied by the ease in supply-chain as reported in the last <u>Bitfinex Alpha</u>, has driven a fall in prices of goods and services. The Personal Consumption Expenditures price index (PCE), which is the Fed's preferred measure for inflation, rose by 5 percent year-over-year (YoY), but for December was only up 0.1 percent month-over-month (MoM), according to a Bureau of Economic Analysis report on Thursday, January 26. The core PCE, which excludes the more volatile food and energy categories, increased only by 4.4 percent YoY, down from November's 4.7 percent. MoM core PCE is up by 0.3 percent and is now at its lowest level since October 2021.

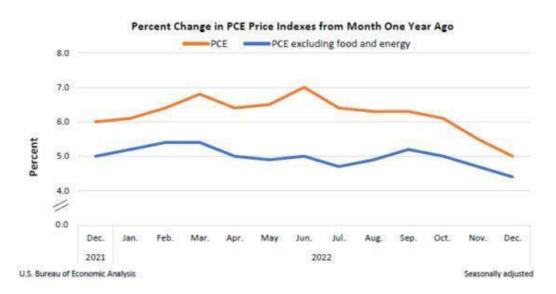


Figure 3. Percent Change in PCE price Indexes from Month One Year Ago (Source: US Bureau of Economic Analysis)

Though the rate of inflation growth is slowing, prices are still rising faster than worker pay. Personal income rose by 0.2 percent last month, the smallest increase since April 2022. Inflation remains high and continues to eat into Americans' budgets. High-interest rates also make purchasing expensive items like a new car or home more expensive.

Consumer spending drives demand and is the main engine of the economy. With personal savings low amidst still-elevated prices, the restoration of increased spending will not return soon. This leaves weaker growth prospects for 2023.

## The Saving Grace: A still-strong labour market

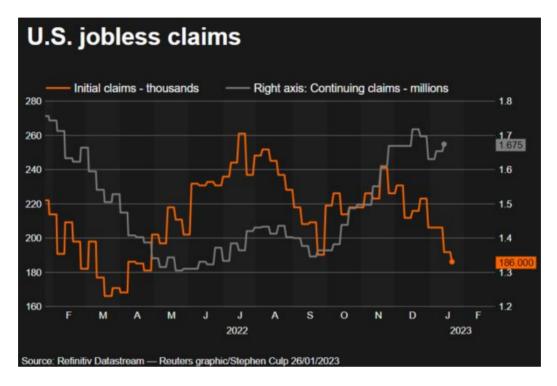


Figure 4. US Jobless claims (Source: Refinitiv Datastream)

The saving grace of weakening demand and a slowing economy from high-interest rates is a strong-ish labour market that is keeping the economy from entering a deep recession immediately.

The number of people filing for initial unemployment insurance claims fell to a 10-month low last week. Initial jobless claims, a proxy for layoffs, dropped by 6000 to a seasonally adjusted 186,000 last week, according to a report by the US Labor Department. The number of claims has increased since the beginning of 2022 but is still below pre-pandemic levels.

The historically low level of jobless claims is in stark contrast to large companies making layoff announcements. Tech giants like <u>Spotify</u> and <u>IBM</u> are among a few companies that announced significant layoffs last week.

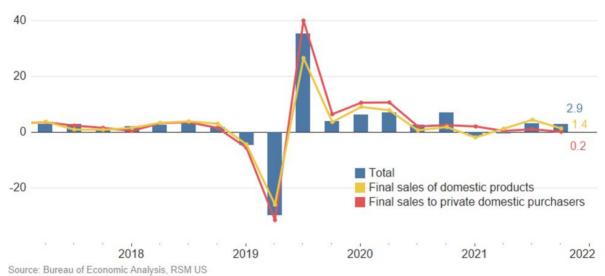
Most of the layoffs though, have come from large tech companies that were aggressively hiring during the pandemic. According to the Bureau of Labour Statistics, most middle-market and smaller companies maintain low layoff numbers. As a consequence, smaller and midsize businesses are yet to feel the full impact of rising interest rates, and the layoffs are actually providing an opportunity for smaller companies to make use of talent that would otherwise not be available.

It is essential to keep an eye on the labour market, especially the jobless claims data because it is a robust leading indicator of the strength of the labour market and hence the economy. We expect to get a better sense of the trend in layoffs after the seasonal hiring from the holidays starts to fade.

### US remains resilient after a challenging year, but turbulence awaits

Calling a recession has become trickier as various economic data continue to show mixed signals. Despite the fact that the manufacturing sector is contracting, the housing market has slumped, and consumers have become more cautious with their spending, the US economy still shows resilience. The advanced reading for the 2022 fourth-quarter Gross Domestic Product (GDP) number showed that the US economy grew at an annualised rate of 2.9 percent, leading to overall GDP growth of 2.1 percent for the year, according to the US Bureau of Economic Analysis. The consecutive positive GDP readings has moved the US farther away from the generic definition of a recession, which is defined as two consecutive quarters of negative GDP growth.

The solid growth driven by the second half of last year was influenced mainly by the expansion in Personal Consumption Expenditure or PCE (2.1 percent), demand for goods (1.1 percent) and services (2.6 percent).



#### U.S. real GDP growth

Quarter-over-quarter %, seasonally adjusted annualized rate

Figure 5. US Real GDP Growth (Source: Bureau of Economic Analysis, RSM US)

It also indicates that the economy could be in for a 'soft landing'. Resilient GDP and a normalising supply chain is encouraging. It also means that the US economy can bring down pre-pandemic inflation levels through interest rate hikes without causing a recession. However, the economy has not fully absorbed the Fed's rate hikes.

However, final sales to domestic purchases, which exclude inventories and trade, grew by only 0.8 percent in the fourth quarter. This data point is a good metric for economic growth because it excludes inventories and net exports, which can be volatile and fluctuate significantly from quarter to quarter. Final sales, which focuses on purchases of goods and services by consumers, businesses and governments, provides a more accurate picture of the underlying trends in the economy. Top-line GDP numbers can therefore be misleading in showing where the economy is going considering the lagged impact of the Fed's supersized hikes.

Net trade exports also contributed only 0.56 percent growth to GDP, which is a weaker contribution compared to previous quarters. The narrowing of the trade deficit is influenced by the reopening of the global economy, but given the strong dollar, may not be sustained. In time, contracts for American exports will be repriced higher due to a strong dollar. A strong dollar can also keep imports high as domestic goods and services become less competitive in the domestic market.

This breakdown in GDP gives us a better indication of the underlying pace of economic growth and indicates we may be in for more market turbulence this year and the possibility of a (likely moderate) recession.

# Anticipated 25 Basis Point Hike in the next FOMC



Figure 6. Target Probabilities for Feb 1 2023 FED Meeting

This week, the Federal Open Market Committee (FOMC) should feel at ease slowing its rate increases in response to a confluence of factors including fading inflationary pressures, the moderating pace of consumer spending and hiring, and moderate wage increases. Now that demand and supply are both working in the Fed's favour against inflation, we believe it is appropriate for the Fed to begin slowing its rate hikes.

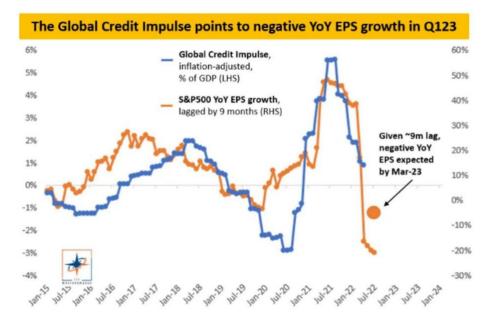
How far Fed Chair Jerome Powell goes in his forward guidance is likely to be influenced by the upcoming fourth-quarter report on the employment cost index, the Fed's preferred metric of wage growth, which is scheduled to be released on January 31st. If the employment cost index moderates like other wage data, it will further justify a slowdown in rate hikes and possibly predicate a pause.

### Recession Check: Forward-Looking Metrics

Though most analysts expect a recession this year, the question of when and how hard it will hit the US economy is of utmost importance. As tricky as it may seem to predict a recession, we can analyse leading indicators that have historically been accurate.

In the second quarter of 2022, the US reported two consecutive quarters of negative GDP growth, which met the technical definition of a recession. However, the National Bureau of Economic Research (NBER), which maintains a chronology of the beginning and end dates of US recessions, denied that the US economy is in a recession and emphasized a broader definition: a significant decline in economic activity that is spread across the economy and lasts more than a few months.

NBER's methodology is more robust as GDP numbers are a delayed metric, and can be subjected to massive revisions. The NBER also looks at a broader dataset including consumer spending, the labour market and corporate earnings.



#### **Global Credit Impulse**

#### Figure 7. Global Credit Impulse (Source:https://twitter.com/MacroAlf)

The global credit impulse measures the change in the growth of new credit being issued in the economy. When the growth rate of new credit slows down or becomes negative, it is a sign that the economy is slowing down, hence a harbinger of a recession. This is because the financial system runs on credit and thus drives economic growth.

When credit dries up, businesses and consumers are less able to spend and invest. As a result, S&P 500 EPS yearly growth tends to be lower during periods of negative global credit impulse readings. Historically, the global credit impulse has led S&P 500 earnings growth by nine months.

Given its sharp decline in 2022, it now points to negative YoY EPS growth by around March or April this year. The stock market is a forward looking indicator, its decline signals that businesses are facing challenges, leading to slower economic growth and potentially a recession.

#### Trigger: Aug-22 Trigger: negative 15 Ava lead time: 7-8 months prints for 2+ months Recession: Q2-23? 10 2020 recession 5m lead time 1990 recession 8m lead time 1980-1981 recession 8m lead time 2001 recession 15 2008 recession 5m lead time 1974 recession 15m lead time 3m lead time 20 1980-1984 1985-1989 1990-1994 1995-1999 2000-2004 2005-2009 1975-1979 2010-2014 2015-2019 2020-2024

#### **Conference Board Leading Economic Index**

#### Figure 8. Conference Board Leading Economic Index (Source:https://twitter.com/MacroAlf)

The Conference Board Leading Economic Index (LEI) is a composite index designed for a forward-looking perspective on the US economy. It comprises ten economic indicators, including stock prices, building permits, new orders for consumer goods, and interest rate spread.

A negative LEI reading signals that the economy is losing momentum and has preceded many past recessions. Looking at the average lead time of seven to eight months for a recession following a negative LEI in August 2022, a recession can be expected by the second or the third quarter of this year.

#### **The Housing Market**

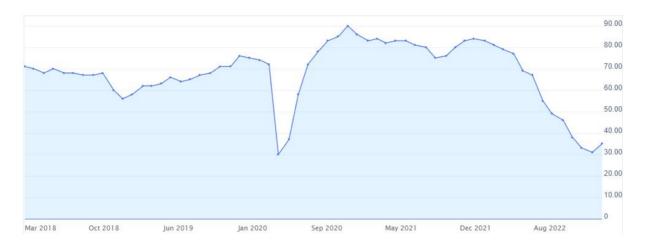


Figure 9. The NAHB Housing Market Index (Source: Investing.com)

The housing market is another leading indicator of a recession because changes in the housing market lead to dramatic changes in the broader economy. A decline in the housing market indicates that consumers are cautious about spending money.

A drop in housing prices, construction activity and sales can also lead to a decline in employment in the construction and real estate industries. When home prices decline, homeowners thus see their net worth decrease, further weakening consumer spending and demand. The National Association of Home Builders (NAHB) housing index leads trends in the US unemployment rate by about a year. The real-time <u>SAHM rule</u> states that a recession starts when the 3-month moving average of the US unemployment rate rises by more than 50 basis points relative to its low during the previous 12 months. The SAHM rule tells us that a recession will happen in the second quarter of this year.





## WHAT'S ON-CHAIN THIS WEEK?

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## Data suggests Bitcoin is in the latter stages of the bear market.

Bitcoin is historically a momentum asset, and early-stage rallies often maintain positive performance over a longer period of time. However, since the asset class is currently highly correlated to the US stock market, bearish macro developments can restrict the asset from repeating past performances.

Most assets experience mean reversion on all timeframes. Bitcoin typically hasn't experienced mean reversion on the higher timeframes; in fact, most traders acknowledge that swing trading strategies implementing mean reversion have primarily failed for crypto assets.

		Streak Length	Bitcoin % Chg	Bitcoin Forward Performance (%)				
Row	Date	(Days)	During Streak	Week	Month	3 Month	6 Month	Year
1	10/30/2015	9	23.19	23.60	13.87	21.08	44.99	119.88
2	5/11/2017	13	40.42	2.15	58.85	87.70	302.93	408.49
3	10/14/2017	10	37.89	6.26	5.22	147.23	41.74	11.43
4	12/7/2017	8	81.01	14.85	22.40	-30.24	-46.13	-75.38
5	6/26/2019	8	43.32	-8.15	-15.84	-26.96	-38.24	-20.92
6	4/29/2020	8	27.92	15.38	22.05	39.79	70.00	602.70
7	12/19/2020	8	32.18	6.68	54.72	152.16	53.73	102.54
8	7/30/2021	10	41.70	2.09	22.19	51.46	-5.61	-40.55
9	3/29/2022	8	15.55	-1.01	-16.69	-55.98	-59.44	?
10	1/14/2023	8	14.58	15.06	?	?	?	?
Av		Average	6.87	18.53	42.91	40.44	138.52	
			Median	6.26	22.05	39.79	41.74	56.99
			% Positive	77.8	77.8	66.7	55.6	62.5
		All Periods Since September 2014						
			Average	1.39	6.61	24.57	63.32	188.33
			Median	0.79	2.92	8.23	31.30	87.10
			% Positive	54.5	56.0	56.5	61.4	75.2

### Figure 10. Evaluating BTC's forward performance after eight straight green candles on the daily timeframe.

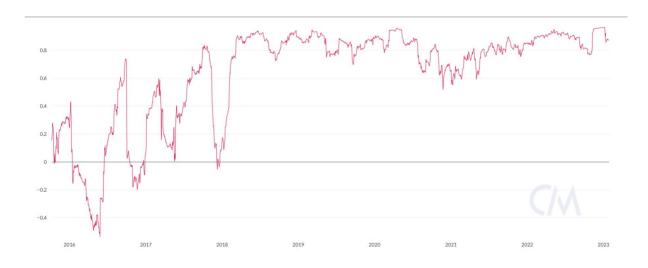
Figure 10 represents the Bitcoin forward performance after experiencing a streak of eight green days or more. Historically, the BTC price has continued to appreciate after such streaks have occurred. As indicated in the figure, the streaks in rows eight and nine resemble similar streaks during bearish conditions in rows four and five. On both occasions, we had two rallies with eight green daily candles where the net change in BTC price was negative after

the three or six-month mark. Typically, after two such rallies, one after another, the next one has gone on to provide the highest percentage of rewards in the asset's history.

We normally have two streaks of eight green daily candles in bearish conditions before the next one coming early into the bull market. This is seen in row number six in figure 10.

On the basis of this data alone, the BTC bottom might already be in. However, we are not out of treacherous waters yet, as we have not seen a full year pass since the 2022 bear market rally. The trend tells us that the net change post one year of the second rally was negative. Thus, traders and investors need to be careful before that time period is over. Early 2020, before the third BTC rally of eight green candles, was a time of massive volatility amongst bearish macro conditions; this might be what we experience now in the first and second quarters of 2023.

Moreover, Bitcoin and crypto assets, in general, are now highly correlated to the US stock market.



#### Figure 11. BTC/SPX correlation index. (source: coin metrics)

The correlation index was near zero in 2017 when we saw a decoupling in the asset classes. However, the index has been near all-time highs recently, with a slight decoupling effect since the beginning of 2023. This index is also one to keep an eye on as we move into a year of reduced rate hikes and possibly bullish developments this year.

### **Short-Term Holders Realising Profit**

Another argument supporting the claim that we are deep into the bear market is that short-term holders (STH) are not being greedy but are moving supply profitably. Most of this movement is short-term holders selling their spot BTC at a profit, in addition to moving coins within different wallets.

Long-term holders (LTH) in contrast do not sell their BTC even after a 30-50 percent appreciation from their realised price. We do not expect to see selling pressure from them before BTC reaches two or three times their realised price (currently at around \$21-23k) which would mean close to the previous cycle's top.

Market bottoms and the continuation of bullish momentum are often followed by STHs realising a profit earlier into the move and then FOMOing into positions later.

Data suggests that with STHs selling now - as per past behaviour - we can expect them to FOMO in later and much higher while LTHs continue to hold massive spot positions even if the price decreases from here.



Bitcoin: Short Term Holder SOPR (7d Moving Average)

Figure 12. Short-term holder (STH) SOPR (source: glassnode)

The STH Spent Output Profit Ratio (SOPR) being above equilibrium (the black line, or Zero line) suggests that short-term holders have recently moved coins (a majority of which would be sold on spot markets) at a profit.



Figure 13. BTC price and the HODLer SOPR (source: Whalemaps)

The SOPR for HODLers remain negative and under the equilibrium, by contrast. While the net selling compared to their size remains negative, any coins moved by HODLers remain at a net loss.

The realised P&L for the entire market has been recorded as positive in January 2023 for the first time since April 2022. A continuation of this trend would signal the final stages of a bear market.

The above data allows us to conclude that most of this realised profit has been from short-term holders. In a nutshell, STHs are selling at a profit on relatively smaller moves up while the LTHs are not contributing to the selling pressure; this also includes miners, as mentioned in the last edition of the *Bitfinex Alpha*. This is healthy for the market as most extended bull rallies originate in this manner and end with STHs and retail investors FOMOing in later.



## NEWS FROM THE CRYPTO-SPHERE



### El Salvador paid in full \$800 million of debt plus interest



Figure 14. President Nayib Bukele of El Salvador President Nayib Bukele of El Salvador

On January 24th, El Salvador's president Nayib Bukele <u>announced</u> that the Central American country repaid in full an \$800 million bond that was set to mature on January 24th.

President Bukele's tweet criticised some media articles sharing that El Salvador was expected to default on its debts as Bitcoin plummets. The president said: "In the past year, almost every legacy international news outlet said that because of our 'Bitcoin bet', El Salvador was going to default on its debt by January 2023 (since we had an 800 million dollar bond maturing today)."

President Bukele said that although hundreds of articles were written by international media claiming that El Salvador was broke and is expected to default on its debts, no media was covering the news of El Salvador paying its \$800 million debt in full, apart from one article from a Colombian newspaper. "Well, we just paid in full 800 million dollars plus interest. But, of course, almost nobody is covering the story. I just found one, yes ONE, in Spanish, from Colombia. They lie and lie and lie, and when their lies are exposed, they go on silence mode," said president Bukele.

President Bukele also <u>referred</u> to an old tweet where he called out an article published by *The New York Times* in July 2022, stating that "El Salvador's big bet on Bitcoin isn't paying off". As a response to that article, president Bukele <u>said</u>: "Since when the NY Times has devoted so much time and space to El Salvador's economic initiatives?", "By the way, they say we're heading to default. Will they publish an apology once we pay everything on time?" President Bukele added.

## Former UK Chancellor calls for better and progressive Crypto Laws in The UK



Figure 15. Former UK Chancellor Philip Hammond

Former UK Chancellor Philip Hammond, who has held a senior adviser role at the firm Copper since 2021, stepped into the new post of Chairman of the company on January 26th.

In an <u>interview</u> with *Financial Times*, Hammond stated that the UK needs to move faster on creating an effective digital assets regulatory framework to compete with other countries that are already ahead. "The UK needs to be leading in this area post-Brexit," "It's allowed itself to slip behind," he continued, "Switzerland is further ahead. The EU is also moving faster. There has to be an appetite to take some measured risk." Hammond said.

It's worth adding that the firm Copper, the digital asset technology company which allows investors to acquire, trade and store crypto assets, was forced to register in Switzerland after failing to get the UK Financial Conduct Authority (FCA) authorisation.

Hammond said: "The UK authorisation will be forthcoming in the future, we are very much hoping to migrate back to London," "Post-Brexit, the UK needs a strong financial services sector. We need to work out how to become the location of choice for trading in new asset classes." He added.

Finally, Hammond mentioned in the interview that Copper continued adding new clients despite the current market. "We have managed to grow in a market that has shrunk 70 percent," he said.

## Tesla has neither bought nor sold any digital assets in Q4



Figure 16. Tesla CEO Elon Musk at a presentation of Tesla cars.

On Wednesday, January 25th, Tesla shared its <u>earnings report</u> for the fourth quarter of 2022, showing that the company had neither bought nor sold any digital assets for the fourth quarter of 2022.

Tesla's digital assets at the end of the fourth quarter are valued at \$184 million, down from \$218 million at the end of the third quarter. The decline in the value of its digital assets is said to be due to Bitcoin's decline in price since the company's financial statements show that Tesla has neither purchased or sold any of its digital assets.

Similar to quarter four, the third quarter showed no changes in Tesla's digital assets, unlike the second quarter of 2022, which had seen the selling of \$936 million worth of the company's digital assets.

Finally, the company summarised its overall look at the fourth quarter, stating that in this quarter, they "achieved the highest-ever quarterly revenue, operating income and net income" in their history.

## US first nuclear-powered Bitcoin mine opening in 2023



Figure 17. The data centre campus next to the Susquehanna nuclear power station in Pennsylvania

According to a *World Nuclear News* <u>report</u>, Cumulus Data, a subsidiary of power producer Talen Energy and developer of carbon-free data centres, built a data centre connected to Pennsylvania's Susquehanna nuclear power station, in order to begin hosting the space for Bitcoin mining company TeraWulf in the first quarter of 2023.

Cumulus Data <u>shared</u> on its official website that "The 1,200-acre campus, a first of its kind in the U.S., will provide zero-carbon, low-cost, reliable energy generated by Talen Energy's Susquehanna nuclear power generation facility."

CEO of Cumulus Data, Alex Hernandez, <u>commented</u> on the matter: "Our flagship Cumulus Susquehanna data centre campus is positioned to welcome its first tenant and commence commercial operations this year," "We look forward to advancing our mission to solve the energy 'trilemma' which we define as the rapidly increasing consumer demand for zero-carbon, low-cost, and reliable electricity by data centre customers, beginning with our first Cumulus Susquehanna data centre campus." Hernandez added.

# Dutch central bank imposes a 3.3 million euros fine on Coinbase



Figure 18. Brian Armstrong CEO of Coinbase at a conference

On January 26th, the Dutch central bank (DNB) <u>reported</u> that it imposed an administrative fine of 3.3 million euros on Coinbase claiming that the exchange provided crypto services in the Netherlands without registration with the central bank.

According to DNB, all companies wishing to provide crypto services in the Netherlands are required to register with DNB under the Dutch Anti-Money Laundering and Anti-Terrorist Financing Act.

The bank stated that Coinbase's non-compliance with the guidelines is punishable by a category 3 fine, adding that "the base amount has been increased due to the severity and degree of culpability of the non-compliance."

The DNB also mentioned that a further important reason for the increased fine is that the non-compliance persisted over a prolonged period of time: from November 15th, 2020 until at least August 24th, 2022 (the end date of DNB's examination).

At the end of the statement, the bank noted that Coinbase has until March 2nd 2023, to object to the fine.



## BITFINEX Alpha

