#### What even is a "crypto hub"?

On the 4<sup>th</sup> of April 2022, <u>HM treasury</u> published a piece outlining plans of, the then Chancellor, Rishi Sunak to make the UK a "crypto hub" unshackled from the constraints of the centralised bureaucracy of the European Union. However, consistent with the broader crypto market, following the US dollar All Time High of November 2021, attention was given to "crypto", stablecoins and even the potential for the UK's Royal Mint to issue "Non-fungible tokens", the "hot topics" of the cycle. Since this time, the crypto market has experienced near capitulation, with multiple exchange, yield product and token failures, resulting in a near 80% drawdown of bitcoin from its all-time highs in November 2022. Whether resulting from broader issues, or as a result of an aggressive process of interest rate increases by central banks across the globe, crypto as an asset class has been marred by negative reporting within the mainstream media. Unfortunately, this has provided a backdrop for the introduction of a variety of legislations that may hamper wider adoption within the UK. The impact of this can be demonstrated by multiple "digital currency" related businesses withdrawing their operations from the UK, as a result of the introduction of onerous controls and regulations (Thank you Freddie).

# What the Treasuries Committee Did

In May 2023, His Majesty's Treasury Committee published minutes with a focus upon "Regulating Crypto". While cryptography may have its origins within the Cypherpunk movement of the 1990s, prioritising privacy as "necessary for an open society in the electronic ages", most people who own "cryptocurrencies" are not Cypherpunks. As a result, they accept they cannot withhold all information about digital assets they own to adhere to the laws of where they are domicile. This means that for people with a portion of their wealth held in digital assets, some form of regulatory clarity would be a positive development, by preventing the introduction of legislation that may significantly affect the value of the assets or legal status. No one wanted to be holding gold in the US in 1933 and then find themselves unable to hold or sell it following executive order 6102. In a similar vein, someone who owns bitcoin only to find they have inadvertently broken the law, be excessively taxed or as is currently the case in the UK, have to calculate capitals gains on every purchase with bitcoin, down to a cup of coffee. This would suggest that if the treasury committee was be able to provide sensible suggestions to inform policy for debate within the House of Commons, confidence within the asset class would increase, supporting more individuals to learn about the topic before "investing".

Unfortunately, the Treasury Committee appear to have taken exactly what they had learnt from the downturn, miss management and corruption of 2022 reported by the media, rather than doing their own research. Bitcoin was viewed as simply one of over 20,000 cryptocurrencies, even though, at its lowest point, represented over 34% of the entire cryptocurrency market (bitcoin dominance). Through *careful* review of a range of sources, including reference to a "crypto investment app company Luno" (that I for one, had never heard of) and a range of media, company and HM treasury documents, the committee could combine this with views of a selection of 11 members (and committee staff), to produce a *balanced approach to supporting the development of cryptoasset technologies*. While <u>Bitcoin Policy UK strongly rebutted</u> what was presented by the committee members.

Out of the 11 members, the meeting was only attended by 7 members, with some of those members not appearing to have experience that would qualify them for a role of the committee (based on their official, personal websites). While drawing from a diverse range of policy specialists, only Harriet Baldwin (the Chair) and Andrea Leadsom had professional experience in Finance and

Banking, respectively. A particularly interesting "feather in the cap" of Dame Angela Eagle was her work in the treasury on "improving excise duties and *gambling*". Also interesting was that amongst those that did not attend, there was experience in investment trusts, international trade and economic and business policy for London. One may wonder, firstly, if there was a number of absences that would mean the committee meeting did not take place? Secondly, what selection criteria there was for members to be invited to join the committee? If it was voluntary or personal interest, 45% non-attendance would suggest the meeting was not a high priority for those absent (personal reasons withstanding). Given a review of the personally presented experience (I cannot vouch for their personal knowledge), none of the members attested to having understanding, knowledge or experience in the field of "crypto". This alone raises considerable personal concerns that the people attempting to regulate, had limited understanding of the asset. This, combined with Dame Angela's experience with *gambling* illustrates those attending the committee meeting may have been looking for a way to classify crypto as *gambling* was the most relevant classification they had available to them.

Before beginning to draw any conclusions about the UK journey to becoming a "crypto-hub" and blaming it upon the knowledge or experience of the membership. Members of parliament cannot be expected to be experts in all the areas they are expected to regulate, which is why committee staff are essential to providing topic specific context, knowledge and experience to discussions. Unfortunately, none of the committee staff included "crypto" within their job titles, instead being on secondment from the Bank of England, Financial Conduct Authority or His Majesty's Revenue and Customs, being a *senior* economist or simply committee staff. Instead of the committee being a balance of experts in both legacy and future system s, the committee appears to be skewed toward members with a vested interest in maintaining the existing systems. Without considering the valid critique of Bitcoin Policy UK, "regulating crypto" focuses upon controlling and limiting its growth, compared to regulatory clarity to promote adoption and growth, that my ultimately provide benefits, in the form of increased employment and tax revenues from the sector.

#### **Bitcoin Not Crypto**

This article is not the place to provide a detailed argument for why I spend my time learning about and researching bitcoin, rather than crypto generally, however, my person conviction for why this should be the case has only grown stronger the more I have learnt. The cryptoassets the "<u>Regulating</u> <u>Crypto</u>" refers to are stated as being "unbacked by any underlying asset and so have no intrinsic value" (p.5). As a side, but important note, neither the British pound (since World War 1) nor the US dollar (since 1971) are backed by an underlying asset, so to follow this argument through, the <u>Treasuries Select Committee</u> are suggesting that neither GBP nor USD have an intrinsic value. The same is true to 99.9% of the 20+ thousand cryptocurrencies, where new tokens are issued based on the number of "locked tokens" (Ethereum) or indeed the whims of the founding team. They are not backed by anything, with their value being highly volatile, that can be affected by their promotion when relatively small amounts of capital inflows (or limit orders) can greatly increase their market capitalisations.

Bitcoin is not slightly different; it is very different to crypto. The number of bitcoin in circulation is defined by the bitcoin protocol, adherence to which is validated approximately every 10 minutes by the largest network of computers in the world. As a result of this, the statement that bitcoin is not backed by anything is both wrong but also misinformed. Using the current hashrate (as of 10-01-2024 form Mempool.space 502.8 EH) and the current most efficient machine (Bitmain S21, 17.5j/terahash), the network is currently backed by (at a minimum) around 879.0 MW of energy (Cambridge's estimated lower bound is 8.19GW). The emission schedule and supply limit has been

written into code, that while the software has been updated since release in 2009, the emission schedule and supply limit have remained unaltered and are very unlikely to change. For clarity, the emission schedule and supply are not technically "backed" by this energy, instead, they are "secured" but also enforced by this amount of energy. In comparison, if a national (not fiat) currency was backed by gold, it would be necessary to audit all money in circulation to ensure that it was not more than the gold that was held by central banks (which would also need auditing). During the 20<sup>th</sup> century, this has repeatedly been found to be difficult to maintain, but then, near impossible for politicians not to change the emission schedule of their currency to cover expenses that are not matched by tax receipts (e.g. deficit spending). In this situation, while the currency could technically be "backed" by an asset, it would be difficult, it not impossible, to *enforce* that the supply of new currency units was *secured* by a physical asset in a known location.

#### Secured by Pure Energy

To address the difficulties of attempting to *back* a fiat currency that can be loaned into existence or printed at near zero cost with a physical asset, Henry Ford, in 1921 (September 20, 1921, The New <u>York Times</u>), suggested backing currency with energy, which is what confirms and validates the issuance of bitcoin. Interestingly, while the overall energy consumption of bitcoin was mentioned by the treasuries committee, citing Dr Diarmid Weir saying "[cryptocurrencies] are parasitical on the financial system, economic capacity, energy and thus the environment, and on human capacity and well-being" (p.16). On reviewing the submitted evidence from Dr Weir, no citations are included to back these comments, the reference to his own work on bitcoin is from 2017 suggesting bitcoin's fragility and one on speculation facilitated by NFTs (2022). Dr Weir (2017) states "Bitcoin has no mechanism for stability – except only in that having no intrinsic value and no underlying contract its true equilibrium value is zero". Interestingly, since the time of writing, bitcoin's value has increased significantly, as has adoption and public company investment in mining. Dr Weir then suggested that "taxes will never be payable in Bitcoin" (2017), given taxes can be paid in bitcoin in both El Salvador and a number of US states, along with the suggestion of it having zero value can be clearly rejected. A quick search for academic, peer-reviewed research by Dr Weir returned a grand total of 1 piece of research from 2013, that is yet to be cited. As a result, it would be useful to gain a better understanding on what led the treasury committee to select Dr Weir being as the expert on this matter. To brutally paraphrase Obi-Wan Kenobi, I'm not sure Dr Weir was the bitcoin expert the treasury committee was looking for.

Within my journey to appreciating the merits of bitcoin over other cryptocurrencies, the energy usage represents an important feature, not a bug that needs to be minimised or removed from the system. Bitcoin is secured by electricity, which ensures only valid transactions are confirmed and the issuance does not exceed the suply cap. Bitcoin uses electricity and quite a lot of it, which is good for preventing parties that may want to attack the network, due to the barrier the energy usage creates. Compliment this barrier analogy, bitcoin mining is a ruthlessly, competitive business, with only the most efficient machines using the cheapest sources of electricity being able to operate profitably. The effect of this on bitcoin miners is that they are unable to compete against domestic consumers, willing, and able, to pay more for their comparatively small electricity needs. What bitcoin miners *are* able to do, is provide a customer for energy that would otherwise be wasted, such as energy produced when there is no consumer demand. This happens surprisingly often, even within a traditional energy grid, and why the <u>Dinorwig Hydro Electric power station</u> can afford to pump water back up hill in order for it to be released later to account for large spikes in demand.

While there are opportunities for bitcoin miners to use spare, or otherwise wasted energy to power their operations within traditional grids, the opportunities increase significantly when moving to

grids that are integrated with renewable energy sources. The marginal cost of electricity from renewables can be very low (if not zero), but when the energy is produced is completely independent from when there is demand. Where does the electricity come from on a cold, still winter's night? In combination with this problem, there are certain points within an energy cycle, such as particularly windy periods that cannot be balanced against high consumer demand. In the UK, windfarms have been paid multi millions of pounds to shut down, to prevent both overloading and account for poor connectivity between the energy resources and demand centres. The nature of bitcoin mining, while ideally running constantly to improve efficiency, can also be turned on and off quickly, to create a buffer between variations between power supply and demand. This function, known as load balancing, can stop the need to pay energy resources not to operate, provide an income (even at a low rate) to energy producers and ensure energy is delivered to the grid at a level that matches demand. As a result, while bitcoin mining does use electricity, in these situations, it can use energy that would otherwise be wasted, while also providing addition revenue to the electricity producers. Work has also been done on exploring how bitcoin mining can be used to use both flared gas and reduce methane emissions, which due to methane's potence as a greenhouse gas, can result in bitcoin mining actually being a carbon negative process.

In comparison to many other cryptoassets, such as Ethereum, that following great fanfare, moved to a less energy intensive approach to confirming transactions known as <u>"proof of stake"</u>, bitcoin uses a lot of energy. The argument is that through this change, Ethereum can do what bitcoin does, while using less energy, which may well appeal to certain subsets of the population, "*bitcoin use energy*, *bitcoin bad*". This view completely misses the feature of bitcoin, as a means of converting otherwise wasted electricity or hydrocarbons, that have no economic value, into bitcoin, which has a global and liquid market that can be converted into almost any fiat currency. Other cryptoassets either do not have this feature or for the few still using proof of work consensus mechanisms, do not have the scale to make a meaningful impact. While there are other characteristics of bitcoin that make it the asset I am interested in, its ability to make a valuable, practical, sustainable and economic contribution to the electrical grid are important reasons to give it attention compared to other cryptoassets.

#### The UK does have an advantage: If we don't, Brexit becomes a very difficult case to make

While the choice to remain or leave the EU is outside the scope of this article, it was not wholly absent from the <u>Treasuries Committee</u>, where the main talking points of some members (on their personal websites) were that they were part of the leave campaign. Recent proposals for legislation within the EU highlight some benefits the UK can realise from having separated from a system that at times requires 27 country consensus. <u>Markets in Crypto-Assets Regulation</u> (MiCA) and the <u>European Securities and Market Authorities</u> (ESMA) provide similar examples to the Treasuries Committee findings, where legislation is developed based on what appears to be flawed understanding. Of particular note is attention on "unhosted wallets" (MiCA) that are a strange combination of being near impossible to enforce while simultaneously suggesting the need to breech <u>human rights</u> related to personal privacy. The ESMA document raises similar concerns by building upon MiCA, but focusing upon the perceived negative impact of *proof of work* bitcoin mining, but drawing from a metric (water usage per <u>transaction</u>), that were <u>refuted</u> almost as soon as it was published (because bitcoin mining uses electricity, not water). <u>Responses to this document</u> highlight the serious limitation of multiple areas of ESMA.

By no longer being part of the EU, the UK can separate itself from such committees, commissions and parliaments of the EU, so develop an approach that matches their aspirations for development (becoming a "<u>Crypto Hub</u>"). Instead, all three groups (Treasuries Committee, MiCA and ESMA),

developed proposals that did not draw from relevant knowledge held by members of parliament, or draw from the range of professionals, academics, energy producers or actual, validated "experts" in the field. The Treasuries Committee did at least name the elected members of parliament, compared to the European documents that did not include names of those contributing their time, *knowledge* and credibility to the reports. Given we can identify those within the Treasuries Committee, it is possible to hold them to account, highlight the validity and quality of the work that has fed into proposed crypto regulations. We can ask, whyy bitcoin has been classed as a "<u>restricted mass</u> <u>market investment</u>" that require individuals in the UK to <u>answer questionnaires</u> before engaging in "high risk", gambling like behaviours.

By publicising the limitations of the report, but also engaging with the named participants, regulatory bodies and members of parliament that actually know something about "crypto", such as <u>Dr Lisa Cameron</u>, (chair of Crypto and Digital Assets All Party Parliamentary Group), the UK does have an advantage over its EU counterparts. We only need to persuade a single government, rather than an entire economic union, with disparate political aims. Through focused attention and educational support, possibly with the introduction of more appropriate committee staff, those members of the Treasury Select Committee can be better informed about the clear differences between cryptocurrencies, NFTs and bitcoin. These three types of crypto assets are not the same and should not all be classed a Restricted Mass Market Investments.

### The Perfect Storm of 2022

2022 was a year that will likely be looked back on as a turning point, or at least a shock that next time one comes along, we won't be quite so unprepared. As with Brexit, the Ukraine-Russia situation is beyond the scope of this work (and areas I'm willing to have an opinion on). However, Europe, particularly Germany became aware of the limitations of pursuing a low carbon, non-nuclear, *green agenda*, once it could no longer be subsidized by cheap "green", Russian gas. The result has been significant increases in consumer energy prices across Europe combined with the <u>recommissioning of coal fired power stations</u> (that even Germany can't reclassify as green energy). Unfortunately, even Brexit could not insulate the UK from shocks in global energy markets.

By continuing to draw from research that demonises bitcoin mining, attempting to link electricity usage directly with <u>carbon emissions and negative environmental consequences</u>, bitcoin mining has not been embraced in Europe. Ironically, bitcoin mining when used with renewable energy can make these resource more effective, more efficient and <u>generate more revenue</u>. Given high energy costs in the UK, bitcoin mining has also not become part of the UK grid, meaning effective integration with energy generation, whether traditional or renewable, represents a significant opportunity for development. <u>Rachel Geyer of Terahash</u> recently suggested that bitcoin mining was the best route for introducing bitcoin into Europe. If there is an economic argument for a firm to introduce bitcoin miners into their operations, market forces may be sufficient to promote and enable further adoption. Once there are clear examples of successful implementations (with associated stakeholder benefits), maybe, just maybe, politicians will start paying attention, particularly when their voters are the ones realise the benefit (whether direct employment or lower energy bills).

From a position of being able to operate free from the bureaucratic constraints of Europe, while covid-19 likely slowed progress, one would hope that the UK has been able to pursue energy infrastructure development independent of Europe since the Brexit vote. While Nimbyism and "environmental activism" may have slowed the progress for the development of new wind and solar power generation sites, opportunities to utilise existing resources more effectively have been missed. Through pursing a UK based energy development strategy, informed by understanding of bitcoin mining, the UK still has opportunities to develop economically, while simultaneously incentive the <u>development of new renewable energy infrastructure</u>. Through such as strategy, the UK can be better positioned to weather a future energy shock, through a resilient, revenue generating sector, that may reduce the need to import energy, while creating a customer of first and last resort so help reduce energy costs for the regular consumer.

### The UK as a Commodities Hub

The <u>Treasuries Committee</u> minutes leave any aspirations of the UK becoming a "crypto hub" in an embarrassing position, where one route to achieve the goal would be for the UK to effectively become a "gambling hub"! However, bitcoin is not crypto, so not becoming a "crypto hub" would be preferable. As a fascinating side note, The Week Magazine on the 6<sup>th</sup> of January reflected on the FTSE 100 share index celebrating its 40<sup>th</sup> birthday. Described as a "very British disappointment", where even British pension funds opt for US indexes' greater tech focus and avoiding "heavy weighting in internal mining groups" of the FTSE, where low commodity prices have created "drags on the index". This need not be the case; by providing regulatory clarity surrounding bitcoin, combined with education and research funding oriented towards the integration of bitcoin into energy infrastructure, the FTSE 100 could begin to focus more upon energy-based commodities, rather than physical commodities.

This leads us into an interest spot, where we reflect on other key characteristics of bitcoin, its issuance is set by the protocol, new units are released following the expenditure of energy, which is not determined by a centralised authority or company. Following broader definitions and the <u>Securities and Exchange Commission of the United States</u>, bitcoin can in fact be classified as a commodity. Supporting the development of modern energy infrastructure (renewable or otherwise), augmented by demand response data centres (bitcoin mining facilities), with the associated publicly traded companies, the FTSE 100 could begin repositioning itself. The question then arises of how to start making progress towards bitcoin playing a bigger role in our energy, national share indexes and lives in the UK?

The opportunity for the development of bitcoin mining, simply for the monetisation of otherwise wasted renewable energy in the UK is significant. Existing opportunities alone provide existing energy companies and focused bitcoin mining companies alike, opportunities to invest in revenue generating infrastructure that both strengthen the <u>business case for renewables</u> and increase revenue from traditional power generation facilities. Such long-term, growth-oriented developments for businesses within the FTSE 100 may help persuade large institutional investors that the UK warrants their attention. The introduction of UK listed energy businesses that give attention to the mining of bitcoin may then garner sufficient attention from those in the government to begin viewing bitcoin as something other than a "Restricted Mass Market Investment" and instead as a mission critical, energy-based, monetary commodity.

# Less "Solutions", more Options

While I'm amazed how often, even in my least flippant moments, I can honestly say "bitcoin fixes this", there appear to be lessons that can be learn from the <u>Treasuries Committee</u> and EU consultations, where bitcoin may have an important role to play. Politicians and faceless European committee members appear to be basing their views on a combination of limited understanding, questionable "experts" and research undergraduates would be ashamed of. While this is an embarrassing state of affairs, more worryingly, is they are using such work to inform and guide policies that are directly impacting UK residents' ability to purchase bitcoin (and other

cryptocurrencies) (<u>Thanks you Freddie</u>). <u>Dennis Porter</u> and the Satoshi Action Fund provide a framework that while needing refinement for use within the UK, provides inspiration for a route forward, where they began lobbying for bitcoin at a state level, to protect individual rights for self-custody, companies' rights to mine bitcoin and exemption from capital gains on small transactions. While not directly transferable to the UK, there appear to be opportunities for pilot projects sufficient to provide "proof of concepts" for companies to begin lobbying for more favourable bitcoin mining related legislation.

From a purely engineering or operations management perspective (my educational and professional background), there are two clear problems, that if they can be reconciled, could support the introduction of mining into the UK's existing energy infrastructure. Firstly, British bitcoiners would likely invest in a UK based bitcoin mining operations, due to helping promote decentralisation of the network away from the US, that has seen a dramatic increase, since the <u>China mining ban of 2021</u>. However, organisations looking to pursue mining will likely have difficulty in securing either public or private investment to purchase facilities and mining equipment, unless they can evidence they have access to sufficient electricity at an appropriate price. Given I currently pay nearly 30p per KWh for domestic electricity and breakeven cost (at current price and difficulty) is less than 10p, bitcoin mining cannot be done "at home" (unless it is used for heating). This suggests that alternate sources of power, or more precisely, alternate power contracts are needed, <u>such as being paid to shutdown to release energy at times of peak demand, or using otherwise wasted energy</u>.

This leads me into the second problems faced by bitcoin miners in the UK; the utilities companies are very traditional, even if they have been supported/nudged/forced to embrace renewables, they do not appear to have fully understood how to manage these new sources of power. This has meant that renewable infrastructure (that is both expensive and can be viewed as blighting the countryside) sits idle on the sunniest and windiest days. The problem in this situation is that those managing power utilities focus on the development and reliability of their facilities. Black and brown outs are not something consumers will endure, which results in a system of over production of electricity. Measures of system efficiency, system revenue or even system wide carbon emissions are not the metrics that are of <u>primary importance</u>. This leads to those managing and developing power infrastructure potentially having limited interest in new technologies, such as bitcoin mining, particularly when compared with more dynamic markets, such as <u>ERCOT</u> in the US, where prices move continually to reflect supply and demand dynamics.



The bitcoin miner, lacking cheap electricity and investment.

Image 1: Bitcoin Miners (https://www.istockphoto.com/photos/bitcoin-mining)

The power grid, burning fossil fuels without someone to buy their spare electricity when matching relatively fixed supply and variable demand.



Image 2: Ratcliffe-on-Soar Power Station (11-01-2024)

If only there was a way of matching a consumer looking for cheap electricity, willing to accept even intermittent power, with a supplier with excess energy that at times is wasted? With current mining equipment, bitcoin can be mined profitability (including overheads, machine costs and power) for less than 10p per KWh (figures from <u>Blockware Solutions</u>). With that in mind, this would suggest that at lower electricity prices, machines could be operated profitably, even if they were not run for a significant portion of the time. From examples <u>currently operating in the US</u>, miners are provided more favourable energy contracts if they are willing to have their machines "curtailed" when demand increases, which effectively releases energy to match demand. In comparison to paying energy producers to shut down (<u>constraint payments</u>), money is both saved, while simultaneously generating revenue from the miners, who themselves generate bitcoin (win, win, win). I personally have no interest in the <u>UK becoming a "hub" of crypto</u> of gambling debauchery, I would love to be part of a UK that promotes enterprises who generate value and wealth from otherwise wasted resources across the UK. Interestingly, the properties of bitcoin, the monetary asset has not even been mentioned, which can be the subject of another piece.

In addition to providing examples of successful lobbying initiative to protect <u>individual states right to</u> <u>mine</u>, the US also provides examples for the UK to draw from. Bitcoin miners in the US are not limited to developing mutually beneficial power agreements with energy companies, there are also examples where bitcoin miners commission their own energy infrastructure with the <u>primary</u> <u>purpose of mining bitcoin</u>. However, within the UK, the time, investment and bureaucratic burden may be significant to build new power generating resources. A much quicker approach may be to explore opportunities for those familiar with energy contracts to begin drafting agreements with which to approach utilities companies. Entering into legally binding agreements with energy producers to purchase otherwise wasted energy at a price that makes bitcoin mining profitable may provide a foundation on which individuals can secure investment to start mining in the UK, and help firms establish their legal right to mine.

# **Rules, Law or Simply Equitable Classification?**

Building upon the ability of bitcoin to provide motivation and incentives to drive the effective modernisation of the FTSE100, there remains an issue of how bitcoin is used once it is mined through the utlisation of otherwise wasted electricity. If a British firm mine bitcoin, what do they do

with it, when it is defined as a <u>restricted mass market investment</u>? By establishing relationships between their banks and exchanges, these organisations could liquidate their mined bitcoin on a regulation basis. The impact of this would be that irrespectively of changes in the dollar (or GBP) value of the asset, bitcoin could be sold at roughly the price at which they were mined, helping reduce downside loss, while also minimising upside capital gains tax implications. However, this misses a key characteristic of bitcoin that has been an important factor in its success, its ability to dramatically outperform in dollar (or GBP) terms, other assets one could hold.

From this position, for a business looking to develop its core business processes and build product offerings to delight future customers, regularly offloading assets that are likely to accrue value in the medium to long term makes limited sense. Why would a company divest an asset that is likely able to purchase more in the future, for one that is effectively designed and managed in a way that loses value of time (fiat currencies). Recent developments in <u>US accounting rules</u> will change how bitcoin is considered when companies hold it on their balance sheet from an intangible asset when firms must mark its lowest price in a given period, to one marked at fair value. Moving forward, this would suggest that Michael Saylor's "<u>Microstrategy</u>" is unlikely to remain the only publicly trades company with bitcoin not only being held on the balance sheet but also playing a central role in their treasury strategy. If something similar was to take place within the UK, British companies would have additional reasons to begin investigating the role of bitcoin within their business and potentially start lobbying politicians to reconsider how bitcoin is classified. While Microstrategy's play was, at the time, considered as a bit of a gamble by Wall Street, based on Michael Saylor's experience in business and understanding of bitcoin, it is unlikely Mr Saylor views his actions as a gamble.

Those deep down the bitcoin, and possibly the libertarian "Rabbit Hole" may feel the need to crow about how nation states should work towards reducing spending, cut income tax and remove capital gains tax from the sale of bitcoin, a little British reserve may be warranted. Even the most informed, tech forward students of bitcoin accept that bitcoin in its current form is not ready to be elevated to legal tender levels of transaction volume. Working in "bitcoin as a treasury asset's", favour, would be that this route would focus on the store of value, rather than medium of exchange characteristics of money, so would not necessarily add significantly to transaction volumes on the base chain. What would be useful for companies looking to save business revenues in bitcoin is greater clarity in its legal classification. When a business chooses to make an investment from their bitcoin treasury for the purposes of the business, if this did not incur significant capital gains tax, there would be greater incentives to pursue such a strategy.

While the above does not require dramatic changes to current laws, by taking a small step back and considering other commodities, particularly those with money like properties, there may actually be British precedence to remove capital gains tax on bitcoin. While historians and economists a like may reflect on the renaissance or even the US in the late 19<sup>th</sup> century as golden ages, where low time preference behaviours were enabled by the gold standard, we may not need to look back at all. Some vestiges of this are still present today. In the UK, gold coins issued by the Royal mint (specifically Britannias and Sovereigns), are exempt from both VAT and capital gains tax. In combination with this, bitcoin having money like properties, being defined as a commodity by the <u>SEC</u> and being a sovereign currency in El Salvador, there are cases for bitcoin to already be exempt from capital gains tax, even within the current legal framework. Clarification on such matters would then promote the adopt of bitcoin by British businesses as well as creating a fertile environment for development and innovation as international bitcoin focused businesses return to the UK and begin investing capital into a "Bitcoin hub".

Committee Members, not actually referenced, but was an interesting topic to look into.

Harriet Baldwin (Chair)(conservative): Commissioner to HM Treasury, 20 year career in **finance**, specialising in currency markets for pension funds. <u>https://www.harriettbaldwin.com/about</u>

Dame Angela Eagle (Labour): Member of the treasury select committee for 5 years from 2002, then exchequer secretary to the treasury, responsible for "improving excise duties and **gambling**" up to 2009. Currently on the treasury select committee. <u>https://www.angelaeagle.co.uk/</u>

Emma Hardy (Labour): since 2017 has pursued her "passion for a stronger, better-funded education system" and Chair for the All-Party Parliamentary Group for Oracy. <u>https://www.emmahardy.org.uk/</u>

Danny Kruger (conservative): Political Secretary to Boris Johnson, voted leave in 2016. https://www.dannykruger.org.uk/

Andrea Leadsom (conservative): Began her career in the banking and finance industry working in US stocks and commodity futures before moving into **banking**. In 2010 she became a member of parliament and joined the treasury select committee and later Economic Secretary to the Treasury (campaigned for leave). <u>https://www.andrealeadsom.com/</u>

Anne Marie Morris (Conservative): Focuses upon issues related to health and social care, **small business** and the UK's future outside the EU. Has been a member of the Public Accounts Committee, Has had a career as a corporate lawyer. <u>https://www.annemariemorris.co.uk</u>

None attending members:

Rushanara Ali (Labour): Treasury Select Committee and UK trade envoy to Bangladesh. <u>https://www.rushanaraali.org</u>

John Baron (Conservative): Experience in managing "investment trusts". Shadow health secretary. https://www.johnbaron.co.uk

Anthony Browne (Conservative): Career in journalism and world business, took charge of economic and business policy in London for Boris Johnson as Mayer before becoming CEO of the British Bankers' Association. Since joining parliament, part of the treasury select committee and Conservative Backbench Treasury Committee. <u>https://www.anthonybrowne.org</u>

Douglas Chapman (SNP): Since 1990 was a councillor in the Fife Council. SNP national treasurer <u>https://douglaschapman.scot</u> no information on personal website.

Siobhain McDonagh (Labour): Promotes social mobility and affordable housing. <a href="http://www.siobhainmcdonagh.org.uk/">http://www.siobhainmcdonagh.org.uk/</a>