TAXATION OF CRYPTOCURRENCY: THE INDIAN FAUX PAS

Vedika Chawla and Vasushrava Mahipal^{1*}

ABSTRACT

The exponential growth that the cryptocurrency market has seen in the past decade has caused much discomfort among governments across the globe, owing to the unregulated nature of transactions and what some may argue is a disproportionate impact of the crypto market on domestic economies. The natural response of most jurisdictions has been to tax cryptocurrency transactions so as to discourage them while also gaining revenue out of them. However, taxation policies face complex questions of determining the true nature of crypto transactions, a question that is yet to be answered with clarity.

The knee-jerk reaction that the industry has attracted from the Indian government in particular has materialised in the form of imposition of a virtual digital assets tax on cryptocurrencies. The authors argue that this policy failed to effectively address its objective and only resulted in a sudden downfall of the crypto market in India, creating negative repercussions for the domestic economy. The authors then employ a game theoretical analysis to propose an alternative taxation framework that recognises the significance of the crypto market and better balances the need for its regulation. Further, they discuss frameworks from a range of external jurisdictions to analyse the expected implications of similar policies in the Indian economy.

Keywords: cryptocurrency, taxation, game theory, virtual digital asset

¹ The authors are Third Year BA.LLB. Students at National Law University, Delhi.

1. INTRODUCTION

Cryptocurrencies remain an enigma in many senses, particularly in how transactions are conducted, verified, and assessed. In light of the growing popularity of cryptocurrencies, this market has expanded extensively and now stands as a prominent recipient of investment from investors across the globe. However, the market is not simply a store for investment or value. It is also increasingly being recognised as a means of transaction or a 'currency.' New businesses, both small and large are dealing extensively, if not exclusively, in cryptocurrencies, largely because of the ease of international transactions.

Owing to this growth, governments all over the world have been trying to either control or regulate this market to be able to extract revenue and also disincentivise transactions operating beyond the centralised exchange systems of the countries, or at least those that may raise suspicion. The simplest way adopted by most countries, including India, for this purpose is to tax cryptocurrency.² However, this raises several complex questions regarding the nature of cryptocurrency and how exactly it can be taxed. This paper attempts to first analyse how cryptocurrencies work and how they exhibit dual characteristics, and then considers how the recently imposed Indian cryptocurrency tax regime engages with the market. The paper goes on to present a game theoretical analysis of taxation of cryptocurrencies and proposes an alternative tax system, along with discussing elements from taxation regimes from foreign jurisdictions.

Owing to the limited existing research on the taxation of cryptocurrencies, especially in the Indian context, the authors have relied on research papers, books, reports by national and international organisations as well as empirical studies. For the development of the flow and arguments presented herein, the authors first studied the nature and operation of cryptocurrencies using both descriptive and analytical research papers, and then moved on to a more targeted study of analyses of the nature of cryptocurrencies and tax treatments. The authors then used authoritative analyses of game theory and its application to tax treatments and presented the same from an original standpoint.

² The Law Library of Congress, 'Regulation of Cryptocurrency Around the World: November 2021 Update' LL File No. 2021-020594.

2. CRYPTOCURRENCY AND TAXATION: A PRIMER

Ambiguous as they may be, cryptocurrencies have become an unavoidable part of the global economy, both across sectors as well as jurisdictions. However, economic research so far has not delved sufficiently into the economic relevance of cryptocurrencies.³ This becomes a necessary endeavour largely because, by virtue of the very nature of cryptocurrencies, they have existed and operated beyond governmental control in most countries since their inception. Without understanding their mode of operation and how transactions occur, it is impossible to gauge the impact these transactions can have on the regulated facet of any economy. Cryptocurrencies also bring in several other considerations on the front of security, volatility and stability of the economy. These can be measured, either quantitatively or qualitatively only when a thorough economic analysis of the same is conducted.

Cryptocurrency is digital money that is not regulated by any central authority, and is based on a system of cryptographic security in blockchain. The FATF has defined cryptocurrency as "digital representation of value that can be traded digitally and functions as (i) a medium of exchange; (ii) a unit of account; and/or (iii) a store of value, but not having a legal tender status in any jurisdiction." Blockchain serves as a transparent, digital ledger for transactions that is accessible by authorised users. Transactions can relate to a variety of transactables such as money, property, intangible assets, etc. Digital currency usually provides for transactions in the form of strings of bits, which becomes problematic when a user copies and reuses the same string for payment, resulting in an effective counterfeit currency being developed. This is often referred to as the double-spending problem. This is conventionally addressed by the appointment of a third-party to maintain a ledger of transactions to ensure that discrepancies are addressed and resolved. In these scenarios, the third parties, such as PayPal, transfer the balances in exchange for a fee.

Cryptocurrency is a form of decentralized money in the sense that they eliminate the institution of the third-party and instead employ a network of validators to contribute to this ledger. The element of trust in this system is founded on the reliability of the blockchain technology, which requires every additional block in the blockchain to be verified and approved by the validators by

³ Chiu et al., *The Economics of Cryptocurrencies Bitcoin and Beyond* (2018), SSRN Journal, (accessed March 10, 2023) https://doi.org/10.34989/swp-2019-40.

⁴ Financial Action Task Force, Virtual Currencies Key Definitions and Potential AML/CFT Risks (June 2014) (accessed March 7, 2023) available at https://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf.

consensus. This consensus is achieved by requiring validators to engage in 'mining' to compete for the right to update the ledger and add a new block representing a transaction by computing a problem called 'proof-of-work' (PoW).

2.1 The Need for Regulation

With the contextual understanding of how cryptocurrency transactions take place over blockchain, it is pertinent to look at what the global response to the concept and operation of cryptocurrencies has been. The first and most prominent cryptocurrency, the Bitcoin, was developed by a person or group of persons under the pseudonym Satoshi Nakamoto in 2008-09.⁵ Following this development, the cryptocurrency market saw gradual development in terms of its size and mode of operation.

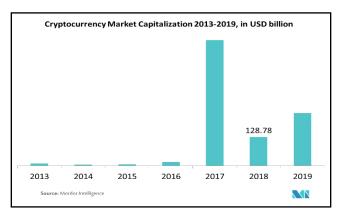


Fig. 1: Market Capitalization of the Cryptocurrency Market⁶

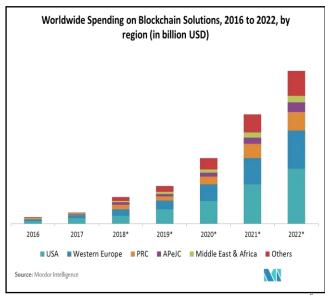
Data surveys and analyses clearly indicate that over the last decade, the market capitalization of the cryptocurrency market has shot up drastically (Fig. 1). This is attributable to the push received by the technology in its nascent stage and the fast-spreading attraction that followed. Further, by virtue of being an unregulated, free and open-source mode of transaction, it was seen as a lucrative opportunity for investors and dealers. Global spending on blockchain solutions, in general has also been rising uniformly and almost proportionately across geographical divisions (Fig. 2). Total cryptocurrency users have grown from 5 million in 2016 to over 100 million in 2020.⁷ In addition,

⁵ Satoshi Nakamoto, (2008). Bitcoin: A Peer-to-Peer Electronic Cash System; About Bitcoin.org, (accessed March 4, 2023) https://bitcoin.org/en/about-us.

⁶ Mordor Intelligence, 'Cryptocurrency Market – Growth, Trends and Forecasts (2023-2028)' (accessed March 2, 2023) https://www.mordorintelligence.com/industry-reports/cryptocurrency-market.

⁷ European Commission, 'Cryptocurrencies: An empirical view from a tax perspective,' JRC Technical Report, European Commission, JRC Working Papers on Taxation and Structural Reforms No 12/2021, https://joint-research-

this data also exhibits the volatility of the market, since statistics show that there was a gradual expansion at a high growth rate till 2017 followed by a sudden dip in the cryptocurrency market and noticeable wavering. The development of a competitive cryptocurrency market has attracted the attention of economists and there have been several models proposed to comprehend market behavioural patterns, some of which predict that the market may witness a compound annual growth rate of 60.2% between 2020 and 2025 (Fig. 3).



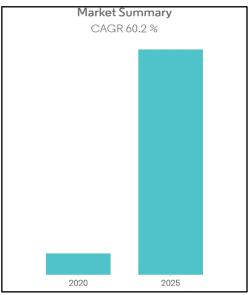


Fig. 2: Global Spending on Blockchain Solutions⁸

Fig. 3: Prediction for Cryptocurrency Market

Size9

These developments have contributed to a reasonably well-founded apprehension among governments as well as financial institutions¹⁰ regarding the unregulated flow of money into and out of the cryptocurrency market. The volatility of the market, coupled with the sudden boom it has seen puts the large sums of money invested in cryptocurrencies in direct risk. Such a risk is also a direct threat to domestic economies, especially in countries with high volumes of cryptocurrency activity. Additionally, security of transactions is a concern that emanates from the fact that the double-spending problem discussed in the previous segment is not adequately

centre.ec.europa.eu/system/files/2021-08/jrc126109.pdf (accessed March 5, 2023).

⁸ Mordor Intelligence *supra* note 5.

⁹ *Id*.

¹⁰ Financial Action Task Force, 'Updated Guidance for a Risk-Based Approach to Virtual Assets and Virtual Asset Service Providers' (2021), (accessed March 2, 2023) https://www.fatf-gafi.org/en/publications/Fatfrecommendations/Guidance-rba-virtual-assets-2021.html.

addressed in the case of cryptocurrencies. Since there exists no third-party to check discrepancies in the ledger in the case of cryptocurrencies, if a user is able to convince other validators of an altered transaction history wherein the transaction in question has not occurred, the seller could perhaps be left with no exchange but having lost their goods/services. The best way to control this is the introduction of a confirmation lag, which essentially inserts a lag of one or more blocks after the payment has been made but before the seller delivers the goods/services, to make it costly and difficult for either user to edit the transaction block and all subsequent blocks. This, however, is not always efficient and also introduces a trade-off between the settlement speed and security of cryptocurrency transactions which is undesirable and even counterproductive for cryptocurrencies. This apprehension has also been echoed by some players in the cryptocurrency market which, after avoiding centralisation and regulation for long, have finally recognised that at least some degree of regulation is, in fact, necessary to sustain the market. A case in point is the world's largest cryptocurrency exchange, Binance, which pursued decentralised headquarters for long before finally transforming into a licensed financial institution to improve ties with regulators and thus, protect itself and its business. 11

Thus, it is evident that regulation of the cryptocurrency market is a strengthening concern across jurisdictions, and understandably so. Figures 4, 5 and 6 show the distribution of density of transactions in the cryptocurrency market across political delimitations, and the data starkly highlights that India was the frontrunner in the cryptocurrency market. This makes it especially imperative for the Indian government to devise a mechanism for this purpose, firstly because the government will then be able to gain revenue from the transactions, and secondly because such a move would disincentivise unregulated transactions. Later segments of this paper discuss and analyse the steps taken in this direction by the Indian government.

¹¹ Markets Insider, 'Binance CEO says the crypto exchange needs centralized headquarters to work well with regulators', 16 September 2021, (accessed March 6, 2023) https://markets.businessinsider.com/news/currencies/binance-changpeng-zhao-cryptocurrency-regulators-warnings-bans-headquarters-2021-9

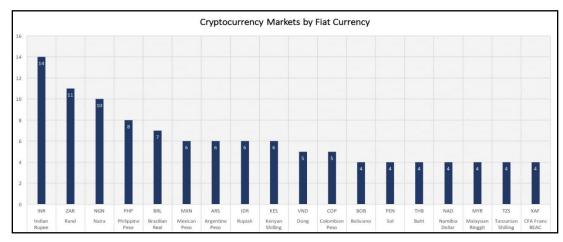


Fig. 4: Cryptocurrency Markets by Fiat Currency¹²

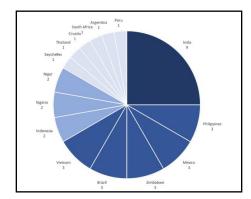


Fig. 5: Cryptocurrency Markets in Developing Countries by Number of Crypto Exchanges¹³



Fig. 6: Number of Cryptocurrency Exchanges Trading Each Country's Fiat Currency¹⁴

 $^{^{12}}$ AlliedCrowds, 'Cryptocurrency in Emerging Markets' (2018), https://www.readkong.com/page/cryptocurrency-inemerging-markets-6568120, (accessed March 7, 2023). 13 Id.

¹⁴ *Id*.

2.2 Asset or 'Currency'?

Before any regulatory measures or mechanisms can be devised, it is necessary to assess how the law perceives cryptocurrencies. There has been much debate on the true nature of cryptocurrencies, and how they must be treated for economic assessment purposes. However, it is well recognized that the growth of cryptocurrencies is almost always associated with macro-financial risks for any economy, in what the IMF terms 'cryptoization.' ¹⁵

A detailed study on the issue specifically discusses taxation of Bitcoin¹⁶ used correspondence analysis to study traits of Bitcoin and possible taxation treatments or schemes that may be adopted, but the same may also be considered for cryptocurrencies in general. 15 traits and 15 taxation themes were identified and the study attempted to analyse the correlation between them and conclude as far as practicable what the conclusive traits and appropriate taxation themes are.

The study argued that mining of Bitcoin must be considered the taxable event instead of the Bitcoin itself, with tax manifest on the realisation of the Bitcoin after mining. As opposed to the current policy position in the UK as well as several states in the US, the method of acquisition rather than the intention or reason behind acquisition of Bitcoin must be considered while taxing. On the issue of whether cryptocurrency is a currency in the real sense, as is the case with most other analyses, the study presents no conclusive answer. While the results show that Bitcoin is distinct from currency and instead constitutes barter transactions, it is also indicated that the regulations espoused for this governmental intervention are conceptualised as if they were regulating a currency.

It has repeatedly been recognised that a significant challenge is the classification of cryptocurrencies as currency or property.¹⁷ Thus, there still exists a lack of clarity on whether cryptocurrencies can really be termed 'currencies', and several questions remain. By virtue of its

¹⁵ International Monetary Fund, 'Global Financial Stability Report' (2021) Ch 2, The Crypto Ecosystem and Financial Stability Challenges, https://www.elibrary.imf.org/display/book/9781513595603/ch002.xml (accessed March 3, 2023).

¹⁶ Asheer Jaywant Ram, *Taxation of the Bitcoin: Initial Insights through a Correspondence* Analysis, 26 (2) MEDITARI ACCOUNTANCY RESEARCH, 214–240 (2018).

¹⁷ Scott A. Wiseman, *Property or Currency? The Tax Dilemma Behind Bitcoin*, UTAH LAW REVIEW, Vol 2 2016 (2016); Organisation for Economic Co-operation and Development, 'Taxing Virtual Currencies: An Overview of Tax Treatments and Emerging Tax Policy Issues', accessed March 7, 2023, https://www.oecd.org/tax/tax-policy/taxing-virtual-currencies-an-overview-of-tax-treatments-and-emerging-tax-policy-issues.htm.

¹⁸ Aleksandra Bal, 'How to tax bitcoin?', in HANDBOOK OF DIGITAL CURRENCY (D. Lee Kuo Chuen ed., 2020), San Diego: Academic Press, 267–282.

nature and its digital – sometimes even anonymous – existence, is it even possible to tax cryptocurrency? In light of the tremendous growth that this market has seen, would it be prudent to imagine a policy taking into account the possibility of cryptocurrencies becoming the next big mode of payments or exchange? In such a case, would they not have to be treated as currency? In any case, would taxing the ownership of cryptocurrency provide for a more economically sound model or taxing transactions in cryptocurrencies? How does the role of an economy as a member of the global system factor into its decision-making on domestic policies for cryptocurrency regulation?

3 IMPOSITION OF TAX ON PROFIT AND ITS ECONOMIC IMPACT

A tax on profit on investment, often known as capital gains tax, usually leads to an increase in price of the particular assets.¹⁹ The same can be explained through the following graph.

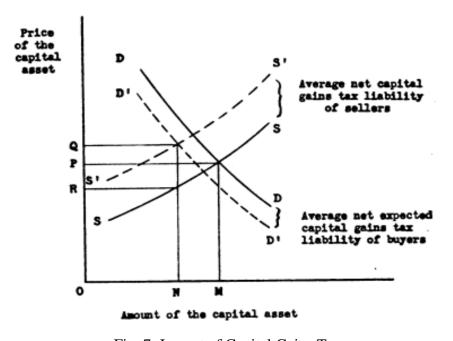


Fig. 7: Impact of Capital Gains Tax

In the absence of a capital gains tax, there will be a certain demand, DD for the asset and a certain supply, SS for the same and the price of the asset, OP. After the imposition of the tax, if all sellers

¹⁹ Harold M. Somers, *An Economic Analysis of the Capital Gains Tax*, Vol 1, N 3, NATIONAL TAX JOURNAL 226 – 232, (1948).

were selling at a profit subject to the capital gains tax, the supply curve would shift to the position S'S'. However, since not all sellers would be selling their assets at the profit being taxed, the vertical distance between SS and S'S' actually represents the weighted average of the tax paid by all sellers.

The prospect of having to pay a tax on a gain will probably dampen the demand somewhat. The prospect of profit, however, is not the only relevant factor for a buyer of these assets as considerations such as prospect of dividend (shares), interest (government bonds and debentures) or rental income (property) are sometimes more important. Thus, there is only a slight decrease, as compared to the decrease in the supply, in the demand for this asset. The new demand curve is represented by D'D'. In such a case, the price will rise from OP to OQ. Thus, a part of the burden of this tax is shifted to the buyers, represented through PQ and the rest is borne by the sellers, represented by RP. The total tax paid, on average, is represented by RQ.

Thus, the imposition of a capital gains tax leads to a rise in the price of the asset. This rise is also controlled by the losses offset. However, the tax imposed on virtual digital assets in India does not allow for losses to be offset. Further, as we will see, this principle of rise in price of assets after the imposition of tax on profits does not apply to the virtual digital asset market.

4 THE VIRTUAL DIGITAL ASSET TAX: A TALE OF SELF-DESTRUCTION

The Indian Government has levied a 30% tax on the income generated from the transfer of a "virtual digital asset" which includes cryptocurrencies, NFTs etc.²⁰ This tax is similar to the capital gains tax that is presently levied on the income generated from the transfer of capital assets in the sense that the tax amount will be calculated according to the income generated through the transfer of such assets i.e., profit. However, benefits such as offset of loss or deductions in case of long-term holdings have not been included in the virtual digital asset tax.

The Indian Crypto Market and its Downfall

It is evident that India had one of the largest and fastest-growing crypto markets in the world (Figures 4, 5 and 6). During the pandemic when the concept of cryptocurrency trading came into mainstream, the Indian crypto market expanded exponentially.

The imposition of the tax on the profits generated by transferring virtual digital assets should have,

²⁰ Finance Act, 2022 No 6 of 2022 Acts of Parliament, 2022 (India).

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according to the capital gains tax analysis, led to a rise in the price of these assets. However, the virtual digital asset market cannot be directly compared with the capital asset market. Unlike the capital asset market, the only reason why an individual may invest in a virtual digital asset is the prospect of earning profit because there is no scope of getting a rent, dividend or interest on the same. Further, any other incentives such as smoother and cheaper international exchanges that a buyer may have to buy a particular crypto asset have been completely ignored by the government in its imposition of taxes as it has not devised any mechanism to bring such transactions under its purview.

In such a scenario, the supply of the asset decreases but the decrease in demand will not be a slight decrease (as was the case with capital gains tax) but equal to or more than the decrease in supply, leading to a decrease in both price and quantity. The same can be understood through the following graph:

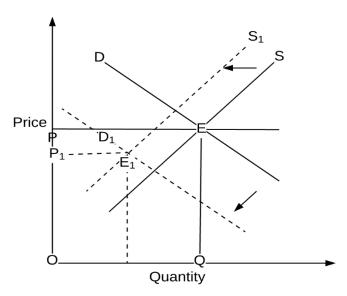


Fig. 8: Skewed impact of the Virtual Digital Assets tax

D and S represent the demand and supply of virtual assets before the introduction of the virtual digital assets tax respectively. D1 and S1 represent the demand and supply of virtual assets after the introduction of the virtual digital assets tax respectively. It can be seen that the price of the assets has reduced from OP to OP1 and the quantity has decreased from OQ to the point at which E1 coincides with OQ.

Therefore, prices of the assets go down or remain the same while the quantity demanded also

reduces, thereby decreasing the total revenue from the market. Before the implementation of this tax, the Indian crypto market was expected to grow at a very healthy rate. However, after the imposition of this tax, due to the absence of any incentive except for the prospect of profits, this market is full of uncertainties. The introduction of this tax has, in effect, slowed the growth of the crypto market in India which had the potential and was on track to becoming the crypto hub of the world (Figures 9, 10 and 11).

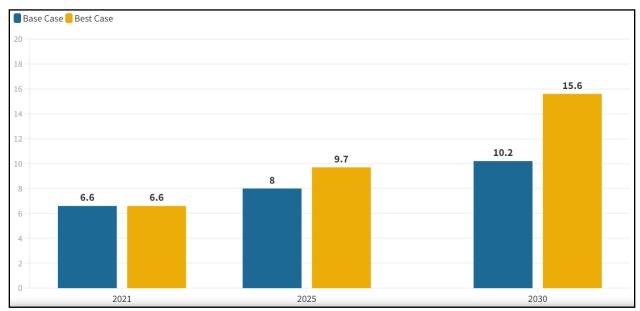


Fig. 9: Crypto Market Investments in India Predictions in US Dollars (Million) before the introduction of the Virtual Digital Asset tax (Source: NASSCOM)

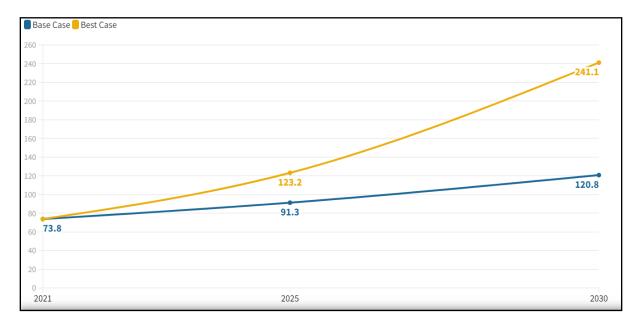


Fig. 10: Crypto Market Base in India Predictions in US Dollars (Million) before the introduction of the Virtual Digital Asset Tax (Source: NASSCOM)

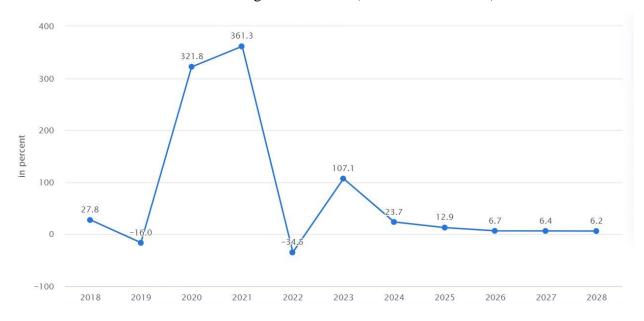


Fig 11: Year-wise percentage change in revenue in the Indian Crypto Market (Source: Statista)

5 IMAGINING AN IMPROVED TAX REGIME

5.1 Game Theoretical Analysis of the Indian Cryptocurrency Tax

If we take into account the maximisation of economic benefits for both, the government and the cryptocurrency investors, Nash Equilibrium indicates that cryptocurrencies should be taxed at a low tax rate and a high penalty in cases of non-compliance.²¹ The same can be understood through the following hypothetical example:

Assume that cryptocurrency investors earn \$20,000 from their investment, with the lesser and higher tax rates being respectively 15% and 40%. Let's say that the cryptocurrency investor will declare half of the revenue as \$10,000 if the tax penalties are insufficiently deterrent.

[Determined by Government]	Low Tax Rate (15%)	High Tax Rate (30%)
High Tax Penalty	[Case 1] Y*tr, Y*tr G = +3000, I = -3000	[Case 3] Y*tr, Y*tr G = +6000, I = -6000
Low Tax Penalty	[Case 2] X*tr, X*tr G = +1500, I = -1500	[Case 4] X*tr, X*tr G = +3000, I = -3000

Y= Fully declared income i.e., \$20,000; X= Half the income declared i.e., \$10,000; tr= Tax rate Case 1: If the government imposes a minimum tax rate of 15%, the investor in cryptocurrencies will decide to pay the whole amount of tax by declaring their entire income in the event that there are severe tax penalties. In this case, the government will gain \$3,000 and the investor will lose \$3,000.

<u>Case 2:</u> Investors in cryptocurrencies is not expected to opt to pay the entire amount of tax if the government sets a minimum tax rate of 15% if the tax penalties are not adequate to deter them. Let's imagine that the cryptocurrency investor will declare 10,000 dollars as the equivalent of half of the revenue in this situation. In this case, the government gains \$1,500 and the investor loses \$1,500.

Case 3: If the government imposes a maximum tax rate of 40%, the investor in cryptocurrencies

²¹ Gamze Öz Yalaman and Hakan Yıldırım, *Blockchain Economics and Financial Market Innovation: Financial Innovations in the Digital Age*, CONTRIBUTIONS TO ECONOMICS, Springer International Publishing, 407-414 (2019).

is expected to decide to pay the full amount of tax by declaring all of their income if the tax penalties are sufficiently deterrent. In this case, the government gains \$8,000 and the investor loses \$8,000.

<u>Case 4:</u> The rational cryptocurrency investor is not expected to opt to pay the full amount of tax where the tax penalties are insufficiently deterrent if the government implements a maximum tax rate of 40%. We may imagine that the cryptocurrency investor will declare \$10,000 as the equivalent of half of the revenue in this situation. In this case, the government gains \$4,000 and the investor loses \$4,000.

A game theory analysis operates on the assumption that the government and the investors will determine their strategies to maximise their own benefits. In case of a policy decision, the first determinant is the government's selection of the policy. A bare perusal of the matrix shows that in case of either column, the first row (high tax penalty) yields more gains for the government, making it the preferred policy choice for the government. When the government selects the first line of the matrix, the taxpayer is left with a choice between the payment of \$3000 and \$8000 as tax and choose the first column (Case 1), namely the payment of \$3000 (low tax rate, high tax penalty). When the taxpayer chooses the first column (low tax rate =15%), the government will decide between getting payment of \$3000 and \$1500 as tax income and prefer \$3000 tax income (Case 1). As a result, the Nash Equilibrium occurs in only Case 1 with low tax rate and high penalty rate. In other cases, for both sides, the maximisation of benefits is not realised at the same point and therefore, Nash equilibrium does not occur.

5.2 Inspiration from Foreign Models

In addition to considering how a balance may be struck between the tax rate and the tax penalty, there are several other considerations that have been employed, either in theory or in practice, by actors around the world. This section discusses certain taxation treatments adopted or proposed in other parts of the world and analyses whether inspiration can be taken from them for preparing an improved model in India.

5.2.1 OECD Countries

The European Commission $(EC)^{22}$ and the $OECD^{23}$ have recognized that there still exists a lack of harmonization and structure in the taxation regime followed across the OECD countries, which tends to have a negative impact on tax compliance.

The working paper by the EC, however, simulates two instances: first, the application of a uniform tax rate of 25% on realised capital gains, and second, the application of a shares-based tax rate on capital gains. It concludes that while a uniform tax rate would benefit from the first scenario, the second scenario would produce mixed results varying across jurisdictions (Fig. 10). Under the former, total Bitcoin CGT revenue in the EU amounts to 0.31% of total property tax revenue, and under the latter, to 0.29%. However, this ratio varies by large margins across countries. When applying a uniform rate of 25%, CGT revenue relative to the one from property taxes ranges between 0.12% in France and 10.7% in Estonia. Under the second scenario, it ranges between 0.14% in France and 8.5% in Estonia.

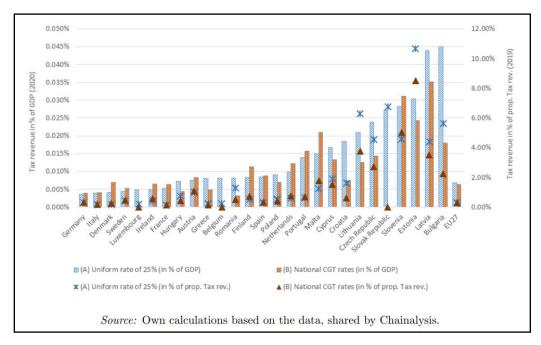


Fig. 10: Comparison of Uniform Tax Rate and Shares-based Tax Rate in OECD Countries²⁴

For the purposes of this paper, it must also be assessed whether these results can be reasonably

²² European Commission, *supra* note 6.

²³ OECD *supra* note 16.

²⁴ European Commission *supra* note 6.

placed in the Indian context. If the countries analysed in this report are categorised solely on the basis of gross income level,²⁵ India may be expected to present a mixture of economic behaviour observed in different countries.

Thus, while the shares-based tax may be expected to generate generally higher revenue, the degree of the same is difficult to determine. What must be considered is that this research has also assumed full tax compliance, which in the highest probability, will not be achieved in reality, meaning that a real expectation would be for lower revenue outcomes than anticipated herein.

5.2.2 South Africa

The legal position in South Africa is that cryptocurrency is an asset and not a currency, making all cryptocurrency transactions barter exchanges. ²⁶ The question then arises whether this is to be taxed as a trading stock and on the revenue account, or as a capital asset and on the capital account. Given its use as both a method of payment and a speculative investment, a taxpayer may have multiple intentions while acquiring cryptocurrency. Determining whether a gain resulting from cryptocurrency price fluctuations was merely incidental or a secondary intention of the taxpayer may prove to be challenging. It is also pertinent to address the issue of allocating the cost price of cryptocurrency when acquired through direct mining as opposed to purchasing, since the mining process cannot directly be quantified in terms of cost.

Thus, it is evident that a model that adopts the asset nature of cryptocurrency may not, at least without sufficient modification, be suitable for India, since South Africa, which is a reasonably comparable market to India, has indeed been facing a multitude of issues with the same. This, of course, does not imply that the currency route will be without its own set of problems.

5.2.3 United States of America

In the United States of America, much like in India, income from the transfer of cryptocurrency assets is taxed.²⁷ However, unlike in India, the American law does not create a distinction between 'capital assets' and 'virtual digital assets.' While the non-distinction of such assets may be

²⁵ 'The 2020 Geography of Cryptocurrency Report - Analysis of Geographic Trends in Cryptocurrency Adoption, Usage, and Regulation' CHAINALYSIS, (accessed March 3, 2023) https://go.chainalysis.com/2021-geography-of-crypto.html.

²⁶ Remerta Basson, *An analysis of issues relating to the taxation of cryptocurrencies as financial instruments*, 13.1, JOURNAL OF ECONOMIC AND FINANCIAL SCIENCES (2020).

²⁷ The Internal Revenue Code, 2010 (Y 1.2/5).

theoretically problematic, it ensures that the benefits provided under the taxation laws in the case of capital assets are granted even in the case of cryptocurrencies. In India, losses can be offset in case of capital gains tax but not in case of virtual digital assets whereas in the US, the same can be done in both cases. Further, in the US, there are deductions in tax rates if a person holds the particular asset for a long period of time (more than one year). The same is the case in India when it comes to capital assets but not in cases of 'virtual digital assets.'

In order to ensure the functioning of the crypto market, it is essential to increase the revenue generated from this market. The simplest way to do this is by promoting long-term holdings of virtual digital assets by allowing deductions and offsetting losses. Thus, even if the legislature is averse to treating these virtual digital assets as capital assets, it should promote long-term holding of these assets by providing the same benefits as provided in case of capital gains tax.

6 CONCLUSION

While the introduction of the virtual digital assets tax may seem like a step in the positive direction towards the legal recognition of cryptocurrencies in India, the specifics of this new tax have (and continue to do so) essentially crippled the growing crypto market in the country.

The introduction of this tax may also have an indirect impact on the economy as it may deincentivize young foreign businesses, which are increasingly shifting to cryptocurrencies for various purposes, from coming to India as the imposition of such heavy taxes on income from investments made in virtual digital assets may be seen as a stepping stone towards taxing or imposing stricter regulations on crypto transactions.

This paper suggests that the virtual digital asset tax should follow the economic idea of Nash Equilibrium and accordingly, the tax rates should be reduced along with strict imposition of penalties for the defaulters. This will ensure that the government reaps the benefits of tax revenue efficiently without affecting the market substantially.

Lastly, it is also suggested that the government takes inspiration from foreign jurisdictions and its simplistic view of cryptocurrencies as 'virtual digital assets' is questionable. Even so, the government's differentiation between the tax benefits provided for under the capital gains tax and the virtual digital assets tax seems largely unreasonable and against the very objectives of the taxation policy of the government. If such benefits are provided for under the virtual digital assets

tax, it will promote long-term holdings of cryptocurrency assets and ensure stability in the market. If urgent measures are not taken to rectify the current situation, India will fail to harness the potential of the crypto industry as one of its major economic prospects. Being one of the fastest growing economies of the world with a young population, India has enormous capability to become the global crypto hub. However, the imposition of this tax, as the economic analysis in this paper has shown, has led to a substantial decline in the revenue that this market generates which is not a good sign for the growth of this market.