

---

# UNRAVELLING CRYPTOCURRENCY AND INCOME TAX IN THE AGE OF DIGITALIZATION

---

Ramachandra Subramanian, SASTRA Deemed University

## ABSTRACT

The rapid digitalization of economies and industries has brought forth transformative technological advancements, including blockchain technology, cryptocurrencies, and decentralized finance (DeFi). These innovations have reshaped traditional financial and business paradigms, leading to novel and complex challenges in the realm of taxation. This article delves into the crucial inquiry of whether the legal system has comprehensively understood and effectively responded to these technological shifts with a focus on blockchain technology and its offshoots as well as their implications for taxation.

Drawing upon an analysis of existing legislation and case law, this article seeks to evaluate the accuracy of the legal framework's understanding of these digital innovations and their associated activities and processes. By scrutinizing various aspects of direct taxation within the context of these emerging technologies, it aims to identify gaps and inconsistencies that may hinder efficient tax collection and compliance.

Through a doctrinal approach, this article explores the potential for adapting tax laws to accommodate the nuances of blockchain, cryptocurrency transactions, and DeFi protocols and provide recommendations to bridge the existing gaps in their current legal understanding. It aims to offer a roadmap for policymakers, legislators, and tax authorities to enhance their understanding and regulatory response in order to adapt to the evolving digital landscape effectively. The article sheds light on the evolving landscape of digitalization and its impact on direct taxation, urging the legal system to reevaluate its understanding and adapt to the changing dynamics of the digital era.

## 1. INTRODUCTION

Digitalization, a key limb of the Third Industrial Revolution widely known as the Digital Revolution is a key driver in what Klaus Schwab – the founder and executive chairman of the World Economic Forum – believes to be the Fourth Industrial Revolution.<sup>1</sup> Others such as Jeremy Rifkin – a renowned economist and social theorist – argue that while digitalization was undoubtedly a distinctive and defining feature of the Third Industrial Revolution, it is yet to fully mature and that its development is merely indicative of the beginning of the next stage of its evolution. But regardless of whether we are at the cusp of the next industrial revolution or at a new stage in the current one, it is evident and undeniable that technology is growing at a rapid pace. Its impact is far reaching and pervasive. Having already transformed our everyday lives, it has gone on to alter the existing economic structures and social institutions as well. It has brought about a fresh wave of globalization.

The contemporary interconnectedness of individuals, societies and economies is being increased exponentially by the merging of the physical, digital, and biological worlds through the fusion of various technologies.<sup>2</sup> These include 3-D printing, augmented reality, nanotechnology, artificial intelligence, blockchain technology, and many other such emerging breakthroughs which blur the divide between what is real and what is virtual by superimposing it all in a singular dimension. This convergence of unprecedented technological innovations has produced irreversible shifts in production, consumption, delivery, and transportation systems across all industries. They are being universally leveraged to spur innovation, overcome competition, develop new model of business, and reinvent the market landscape. An astounding fact amongst all this is that these technologies are still in their infancy and despite being so have already reached a point where they have cemented their place in our daily life. They are definitely not transient, which the COVID-19 pandemic and its ensuing aftermath have clearly accentuated.

The ways in which humans create, attribute, exchange and distribute value has forever been changed with digitalization. It is bound to bring about a profound transformation in institutions, industries, and individuals.<sup>3</sup> Cryptocurrencies, birthed by blockchain technology is a very solid harbingers of this change. Although uncertainty blankets the legitimate recognition and incorporation of these emerging technologies by governments and other international bodies

---

<sup>1</sup> Klaus Schwab, *The Fourth Industrial Revolution* (2016)

<sup>2</sup> Ibid

<sup>3</sup> Klaus Schwab, *The Fourth Industrial Revolution* (Encyclopedia Britannica, 2023)

worldwide, these advances present us with huge promise on one hand and potential peril on the other. But nevertheless, an understanding of their working and nature is essential to gauge the scope and extent of their implications which span a wide spectrum of areas. And cutting across this spectrum is the domain of taxation. It requires a comprehensive cognizance of the true essence of all activities.

### **A. DIGITIZATION AND DIGITALIZATION**

It is significant to draw a distinction between digitalization and digitization to picture their respective roles in the field of taxation.

Digitization is defined to involve the generation of digital artifacts using technical methods for conversion, representation, and improvement.<sup>4</sup> The process pertains to transforming analog data or information into a form that is digital. It involves the taking of physical information or data in the form of written documents, papers, photographs, audio recordings, video footage, etc. into digital files. Primarily only concerned with the transformation of data or content from one form to another without necessarily encompassing a broader transformation of the associated processes or systems, it is very technical in nature. Scanning a physical paper document and saving it as an image or a PDF file is an example of digitization. Digitization plays a crucial role in enhancing accessibility and preservation of information. The transformation of tangible documents into digital files, it facilitates uncomplicated storage, retrieval, and dissemination of information across diverse platforms and devices. Additionally, digitization also facilitates efficient analysis as well as searching of information, leading to improved productivity and decision-making processes. Thus, digitization primarily finds use in administration.

On the other hand, digitalization is a broader concept that employs digital technologies to transform processes, activities or systems in various domains. It goes beyond mere data conversion and includes the automation of processes, the implementation of digital tools and systems, and the reimagining of workflows and business models to leverage digital capabilities. The socioeconomic environment undergoes transformation through the adoption, application, and utilization of digital artifacts, in a process defined as digitalization.<sup>5</sup> It involves the integration of digital technologies into various aspects of an

---

<sup>4</sup> Maria Gradillas and Llewellyn D. W. Thomas, *Distinguishing digitization and digitalization: A systematic review and conceptual framework* (JOURNAL OF PRODUCT INNOVATION MANAGEMENT, 2023) 17

<sup>5</sup> Ibid

organization or society to improve effectiveness, efficiency, and other capabilities. A traditional brick-and-mortar store transforming into an online e-commerce platform, incorporating digital payment systems, inventory management software, and digital marketing strategies is an example of digitalization.

The focus of this article is with regard to cryptocurrency, which is a product of digitalization.

## **B. DECENTRALISED FINANCE**

In contemporary times, the administration of various facets of banking, lending, and trading predominantly relies on centralized systems overseen by regulatory authorities and intermediaries. On an everyday basis, consumers come across numerous financial intermediaries while attempting to access a variety of services, spanning from car loans and mortgages to participating in the trading of stocks and bonds.

In the Indian context, the regulatory structure, particularly overseen by the Reserve Bank of India (RBI), establishes the rules for centralized financial institutions and brokerages. Consequently, there exist limited avenues for consumers to directly avail themselves of capital and financial services. The circumvention of intermediaries such as banks, exchanges, and lenders is not feasible, as they play a pivotal role in every financial and banking transaction, accruing a percentage of profit in the process. This regulatory framework aims to ensure the integrity and stability of the financial system in India. It also serves to protect consumers by setting standards and guidelines for financial institutions to follow. However, these regulations can sometimes limit innovation and hinder the development of alternative financial services that could benefit consumers.

Decentralized Finance (DeFi) challenges the prevailing centralized financial setup by diminishing the influence of intermediaries and gatekeepers. It empowers individuals through peer-to-peer (P2P) exchanges, thereby fostering a more inclusive and direct participation of everyday people in financial transactions. DeFi removes intermediaries by enabling individuals, merchants, and enterprises to execute financial transactions utilizing cutting-edge technology. DeFi harnesses connectivity, security protocols, and advancements in both software and hardware by leveraging P2P financial networks.<sup>6</sup> It represents an evolving financial technology grounded in secure distributed ledgers, akin to

---

<sup>6</sup> Financial Industry Regulatory Authority, Blockchain Technology

the technology employed by cryptocurrencies.<sup>7</sup> Bitcoin, being a cryptocurrency, holds a distinct status. While DeFi is crafted to incorporate cryptocurrencies within its ecosystem, it is significant to note that Bitcoin is not synonymous with DeFi but rather constitutes a component thereof.<sup>8</sup>

## 2. UNDERSTANDING THE TECHNOLOGY

The emergence of Distributed Ledger Technology (DLT) has been instrumental in revolutionizing conventional record-keeping systems. In typical market scenarios, participants rely on a centralized third party for authentication and maintenance of records related to their assets and transactions. This central authority administers and controls the information, traditionally stored in ledgers, whether physical or digital.

DLT marks a departure from this centralized setup by introducing a decentralized digital system that serves as a real-time database. It records transaction details automatically as they occur, eliminating the need for a controlling institution. DLT encompasses a specific technological infrastructure and protocols that facilitate simultaneous updating, access, and validation of records.<sup>9</sup> This technology enables synchronized data sharing across a distributed computer network with multiple participants.<sup>10</sup> Each node that is a part of the network independently verifies and processes each transaction item, generating a concurrent record in the registry throughout the entire network to prevent and resolve irregularities. Employing a P2P network substantially diminishes the risk of a single point failure, removing the involvement of a centralized third party.

Each node autonomously maintains a matching iteration of the ledger, ensuring independent processing and updating for all transactions.<sup>11</sup> A consensus algorithm is employed to prevent anomalies and ensure uniformity among the ledgers. It identifies the accurate copy of the ledger, transmitting it throughout the network to every node. This process forms an immutable registry where entries, once recorded, cannot be altered or

---

<sup>7</sup> Cornell University arXiv, CeFi vs. DeFi – Comparing Centralized to Decentralized Finance

<sup>8</sup> U.S. Securities and Exchange Commission, Funds Trading in Bitcoin Futures – Investor Bulletin

<sup>9</sup> Nick Barney, *distributed ledger technology (DLT)*, Last updated: Sep. 2023, What is distributed ledger technology (DLT)? | Definition from TechTarget

<sup>10</sup> The World Bank Group, *Distributed Ledger Technology (DLT) and Blockchain*, [https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP\\_PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=1](https://openknowledge.worldbank.org/bitstream/handle/10986/29053/WP_PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf?sequence=1), Page VIII.

<sup>11</sup> Adarsh Vijayakumaran, *Legally Blocked: The Evolution and Legality of Smart Contracts*, Raizada, S. (Ed.) *Advancement in Legal Research: Transdisciplinary Innovative Dimensions*, (Aug. 21, 2019)

erased. The data is securely stored through cryptography, and only authorized users possess access keys.

Blockchain, a well-known application of DLT, employs a specialized data structure where information is kept in discrete units called blocks. A digital chain is formed by linking these blocks together. Each transaction is registered as a block containing data, and the interconnected blocks make the blockchain secure, preventing tampering by inserting new blocks or removing existing ones.<sup>12</sup> Notably, there is no interaction among the blockchains, ensuring the integrity and security of each transaction within its designated chain.

This is the foundational technology behind the digitalization of money that has led to the creation of cryptocurrencies.

### **3. WHAT IS CRYPTOCURRENCY?**

Cryptocurrency constitutes a virtual or digital currency utilizing cryptographic techniques for secure financial transactions and managing the creation of new units. It functions on a decentralized network, often leveraging blockchain technology—a distributed ledger upheld by a network of computers referred to as nodes. Cryptocurrencies leverage cryptography as a key mechanism to guarantee the security of transactions, regulate the generation of new units, and authenticate the transfer of assets. This decentralized nature ensures that no single entity has control over the entire network, enhancing security and reducing the risk of manipulation. Bitcoin, the inaugural cryptocurrency, came into existence in 2009. Subsequently, a multitude of other cryptocurrencies has emerged, each distinguished by its distinct features and objectives. Cryptocurrencies like Ethereum and Ripple have broadened the scope of blockchain technology beyond mere financial transactions. Take Ethereum, for instance, enabling the development and execution of smart contracts—self-executing agreements with predetermined rules and conditions. This advancement has unveiled fresh opportunities for decentralized applications, drawing interest from diverse industries looking to make use of the advantages of blockchain technology in their favour.

However, what cryptocurrency is in the eyes of law is still unclear because of the absence of any specific statute or provision which sufficiently addresses this.

#### **A. Cryptocurrency as Currency**

---

<sup>12</sup> IBM, *What is Blockchain Technology?*, What is Blockchain Technology? | IBM

In the comprehensive definition provided by Section 2(h) of the Foreign Exchange Management Act, 1999, currency encompasses a wide array of instruments, including currency notes, postal notes, postal orders, money orders, cheques, drafts, traveler's cheques, letters of credit, bills of exchange, and promissory notes. Additionally, it includes credit cards or any other similar instruments that are subject to regulation and notification by the RBI. The definition is not exhaustive but rather inclusive, leaving the decision to confer currency status on bitcoins in the hands of the RBI, and as of now, no such declaration has been made.

Section 2(m) of the Act provides a clear and direct definition of 'foreign currency' as any currency other than the Indian currency. This definition clarifies that any currency from a jurisdiction outside of India is considered foreign currency. However, it must be noted that cryptocurrency lacks a tangible geographical origin or jurisdiction, making it distinct from traditional foreign currencies.

### **B. Cryptocurrency as a Legal Tender**

The term 'legal tender' lacks a specific definition in Indian law, but the RBI holds the exclusive authority to issue banknotes, and these notes are deemed legal tender. Legal tender essentially denotes currency acknowledged by the country's laws as valid for settling debts, and it must be accepted for discharging obligations.<sup>13</sup> According to the RBI Act of 1934, the central bank possesses the exclusive authority to issue banknotes. The Act explicitly states that each banknote issued by the central bank shall be acknowledged as legal tender across the territory of India, deemed valid for settling the specified amount at any location within the country.<sup>14</sup> Consequently, considering these factors, it is reasonable to deduce that bitcoins do not fall within the classification of legal tender.

### **C. Cryptocurrency as Goods**

The Sale of Goods Act, 1930, incorporates an inclusive definition of 'goods,' encompassing a wide range of movable property but excluding actionable claims and money. The definition explicitly encompasses items like stock, shares, growing crops, and those integral to the land, given that their separation is agreed upon before sale or under the contract of sale. Given the intangible nature of bitcoins, this comprehensive definition offers considerable leeway for their potential classification as 'goods.' Significantly, bitcoins have actively participated in global

---

<sup>13</sup> Aarti Krishnan, 'All You Wanted to Know about Legal Tender' The Hindu Business Line India (14 November 2016)

<sup>14</sup> Ibid

financial markets, being listed and traded on various prominent stock exchanges worldwide, including Mt. Gox in Japan, BTC China, Bitcurex in Poland, Bitbox in the United States, and Bitsamp in Slovenia.

The landmark case of *Tata Consultancy Services v. State of A.P.*<sup>15</sup> elucidates that the term "goods," as interpreted in Article 366(12) of the Constitution of India and as defined in the Act, possesses a broad scope. This includes all categories of movable properties, irrespective of their tangibility. The crucial criterion for deciding whether an item qualifies as 'goods' to be included for sales tax in India hinges on its capacity for abstraction, consumption, use, and also its potential for transmission, transfer, delivery, storage, possession, and other relevant factors. Consequently, a thorough analysis of pertinent laws and Supreme Court decisions indicates a substantial probability that bitcoins fall within the expansive umbrella of goods.

Given the inherent characteristics of cryptocurrency, it is plausible to categorize it as movable property. If such a classification is adopted, transactions involving cryptocurrency could be construed as barter exchanges. But it is crucial to be aware that such barter exchanges may fall outside the limits of the Act. Section 2(10) of the same Act specifically excludes barter transactions by considering the payment of money as the appropriate consideration for the sale of goods. Therefore, this provision suggests that, despite the movable property status of cryptocurrency, transactions involving it might not align with the conventional understanding of a sale of goods under the legal framework, particularly when the form of consideration is not money.

#### **D. Cryptocurrency as securities or derivatives**

The Securities Contracts (Regulation) Act, 1956 (SCRA), oversees transactions involving various types of financial instruments. SCRA's definition of securities includes shares, scripts, stocks, bonds, debentures, debenture stock, or other marketable securities of a similar nature in a body corporate such as an incorporated company or otherwise. It also encompasses derivatives, units, or instruments issued by collective investment schemes, security receipts defined in clause (zg) of section 2 of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002. Moreover, the definition extends to units or analogous instruments offered to investors under any mutual fund scheme. The ambit of SCRA extends to government securities, as well as rights or interests in securities.

---

<sup>15</sup> (2005) 1 SCC 308, *Tata Consultancy Services v. State of AP*



These financial instruments can be distinctly differentiated from bitcoins. This distinction lies in the fact that the aforementioned instruments possess an underlying capital asset, such as the assets of a corporation being referred to as security. In contrast, bitcoins lack such capital assets, as they are autonomous and not issued by any authority, being acquired through the mining process.

Furthermore, the question arises as to whether bitcoins can be classified as derivatives. To address this query, a careful examination of the meaning of 'derivative' is imperative. According to the definition, a derivative encompasses a security derived from diverse sources, such as a debt instrument, share, loan, risk instrument, or contract for differences. Furthermore, it incorporates contracts that derive value from the prices or index of prices of underlying securities. Taking these characteristics into consideration, bitcoins fail to align with the criteria of a derivative, thereby placing them outside the meaning of derivatives.

This ambiguity in classification of cryptocurrency reflects the necessity for a comprehensive legislation or amendments in existing ones that sufficiently address cryptocurrencies.

#### **4. LEGALITY OF CRYPTOCURRENCY**

Indian law initially recognized cryptocurrencies via a series of circulars issued by the RBI from 2013<sup>16</sup> to 2017<sup>17</sup> that were in the character of warnings, cautioning the investors and also potential investors of the numerous hazards they may be exposed to in dealing with bitcoin. In its circular dated April 6, 2018<sup>18</sup>, the RBI endeavoured to curtail the trading activities involving virtual currencies. However, this directive was overturned by the Supreme Court (SC) in the case of *Internet and Mobile Association of India vs. Union of India*.<sup>19</sup> Subsequent to this judicial intervention, on May 31, 2021, the RBI released a fresh circular instructing financial entities and banks against reverting to the 2018 official notification while issuing warnings to their customers. This advisory was prompted by the SC's nullification of the aforementioned circular.

The court determined that although virtual currency does not attain the legal status of conventional currency, it still holds the capability to function as legitimate currency. On that

---

<sup>16</sup> Reserve Bank of India, 'RBI Cautions Users of Virtual Currencies against Risks' (24 December 2013)

<sup>17</sup> Reserve Bank of India, 'RBI Cautions Users of Virtual Currencies' (1 February 2017); Reserve Bank of India, 'Reserve Bank Cautions Regarding Risk of Virtual Currencies Including Bitcoins' (5 December 2017)

<sup>18</sup> Reserve Bank of India, 'Statement on Developmental and Regulatory Policies' (5 April 2018)

<sup>19</sup> (2020 SCC online SC 275), *Internet and Mobile Association of India vs. Union of India*

note, Article 246<sup>20</sup>, in conjunction with the Seventh Schedule outlining the permissible legislative domains for the Central Government and State Governments, warrants consideration. Specifically, Entries 36 and 46 of List I in the Seventh Schedule<sup>21</sup> lay down that the Central Government possesses the legislative authority in matters pertaining to currency, coinage, legal tender, foreign exchange, bills of exchange, cheques, promissory notes, and analogous instruments, respectively. The court ruled that the RBI has the right to wield its authority, regardless of the legal tender status of virtual currency. It noted that in various jurisdictions, virtual currency has been classified as property, funds, commodities, and currency.

The court additionally observed that the disputed circular did not categorically prohibit the utilization or exchange of virtual currency. The scope of the directive was limited to entities regulated by the RBI, instructing them to abstain from dealing with or offering services to individuals or entities engaged in virtual currency transactions. Although the court annulled the circular issued by the RBI, it abstained from making a conclusive statement on the legal or illegal status of cryptocurrencies. Hence, cryptocurrencies are neither legal, nor illegal in India.

But for transactions involving cryptocurrencies to be valid in law, they must qualify as lawful and valid consideration so as to make transactions legally binding and enforceable. When, at the behest of the promisor, the promisee, or any other individual, has performed, refrained from performing, engages in, or refrains from engaging in a particular act, or promises to do so, such act, abstinence, or promise constitutes consideration for the promise. The definition of 'consideration'<sup>22</sup> as stipulated in the Indian Contracts Act, 1872 does not impose a mandatory requirement for it to be in monetary terms. Additionally, the mode through which such consideration is intended to be given by one party to another remains unspecified. Consequently, the legislative framework provides a broad scope wherein bitcoins can be deemed a legally valid form of consideration.

## 5. TAXATION OF CRYPTOCURRENCY

The scope of this article is limited to direct taxation. With respect to direct taxation, the regulatory framework governing the treatment of digital currencies, specifically cryptocurrencies, is primarily administered by the Income Tax Act of 1961 (IT Act) in India.

---

<sup>20</sup> The Constitution of India, Article 246

<sup>21</sup> The Constitution of India, Entries 36 & 46, Seventh Schedule, Part XXII.

<sup>22</sup> The Indian Contracts Act, 1872, Section 2(d)

Presently, the legal landscape lacks definitive clarity on the tax implications associated with digital currencies, and there exists no mandatory disclosure requirement for income derived through such means, as mandated by the income tax authority.

In the event that digital currency acquires the status of 'currency,' it enjoys exemption from taxation under the provisions of the IT Act. The Act's definition of 'income' is inclusive in nature, encompassing not only the natural meaning but also the other forms as mentioned in Section 2(24). However, it is noteworthy that neither the conventional interpretation of 'income' nor Section 2(24) of the IT Act explicitly categorizes 'currency' or 'money' as income, despite including the term 'monetary payment'. Moreover, the incidence of taxation would be on the transaction itself rather than the currency per se, given that it would constitute a form of consideration.

Conversely, if cryptocurrency were to be recognized as a commodity or property, it would unmistakably fall within the purview of the charging provisions for 'Profit and Gains from Business and Profession'<sup>23</sup> or 'Income from Capital Gains,'<sup>24</sup> contingent on its utilization for business or professional purposes. It is pertinent to emphasize that the scope of the term 'income' is not confined solely to the terms 'profits' and 'gains.' Anything that appropriately falls within the expansive definition of 'income' is liable to taxation under the IT Act unless it is exempted expressly.<sup>25</sup>

#### **A. Tax treatment under the head 'Business Income'**

Under Section 2(13) of the IT Act, the definition of 'business' is inclusive and refers to trade, commerce, or manufacture or any adventure or concern of such nature. Undoubtedly, any ongoing trading activity involving cryptocurrencies falls within this comprehensive definition, rendering the profits generated taxable under Section 28 of the IT Act. These profits, even if not realized in currency but 'in kind,' are subject to taxation. Furthermore, expenses undertaken for such purposes, like the acquisition of computing power as a capital asset, should qualify for deduction as outlined in the provisions specified in Sections 30 to 43D of the IT Act.

The act of mining bitcoins could be deemed a taxable event under income tax laws, and the fair market value of bitcoins may be considered as taxable income. However, there exists some

---

<sup>23</sup> The Income Tax Act, 1961, Section 28

<sup>24</sup> The Income Tax Act, 1961, Section 45(1)

<sup>25</sup> (1935) 3 ITR 237 (Bom.), Maharajkumar Gopal Saran Narain Singh v. CIT

ambiguity concerning the valuation of income at the time of mining, and compliance with disclosure requirements is acknowledged as a significant challenge.

Notably, the government has not issued a definitive ruling on the legality of bitcoins in India. Nevertheless, the legality of bitcoins does not impact their taxability. Income tax regulations make no distinction between income deemed illegal or legal. Consequently, even if cryptocurrencies are declared illegal, they would still be subject to taxation under the ITA, despite potential prosecution under the relevant laws for illicit activities.

## **B. Tax treatment under the head 'Capital Gains'**

Section 2(14) of the Income Tax Act provides an expansive definition of a capital asset as "property of any nature held by the assessee, irrespective of its association with the individual's business or profession." This inclusive characterization of a 'capital asset' encompasses a diverse range of properties, with exemptions explicitly outlined under the Act. Consequently, profits derived from the disposition of cryptocurrency are classified as capital gains, dependent upon the cryptocurrency being held for the purpose of investment.

During the transfer of cryptocurrencies, if the holding period exceeds thirty-six months, it qualifies as a long-term capital asset, subject to taxation as per the prescribed rates under the IT Act on such long-term capital gains (LTCGs). Alternatively, in cases with a holding period of thirty-six months or less, tax liability is determined in accordance with the provisions related to short-term capital gains (STCGs). In such instances, the cost of acquisition is the market value prevailing at the time of the creation or purchase of bitcoins, and any surplus from the sale consideration beyond the cost of acquisition is taxable under Section 45 of the IT Act.

Treating cryptocurrency as capital assets introduces a challenge in determining the 'cost of acquisition' during mining activities. Since cryptocurrency is a 'self-generated asset' produced as a reward for transaction verification, the cost of acquisition (COA) is technically indeterminable, given that the miner's sole input is the computer capacity under the system. In the case of *CIT v. B.C. Srinivasa Setty*<sup>26</sup>, the SC established that when the COA is indeterminable, no capital gains would be chargeable on such costs. Under this circumstance, there exists the possibility that gains from the sale of such bitcoins may be exempt from tax.

While the aforementioned perspectives may initially suggest that intangible capital assets with

---

<sup>26</sup> 1981 AIR 972, Commissioner of Income Tax v B.C. Srinivasa Setty

undeterminable values fall outside the scope of the IT Act, particularly considering the significant gains from mining, it is challenging to assert that such gains will remain tax-free in the long run. A potential avenue for addressing this challenge lies in making a reference to a valuation officer under Section 55A of the Act. This step aims to ascertain the fair market value at the time of creating cryptocurrencies, thereby constituting the COA for the capital asset.

These are possible ways to bring cryptocurrency within the existing framework of direct tax. However, from 2022, cryptocurrencies are taxed as virtual digital assets in India.

### C. Tax Treatment as Virtual Digital Asset

In line with section 2(47A) of the IT Act, a virtual digital asset (VDA) is:

- i. Any information, code, number, or token (except Indian money or foreign currency) produced using cryptographic techniques or otherwise, capable of expressing digital value, traded with or without compensation, with the promise or representation of inherent worth. It operates as a store of value or a unit of account, including its usage in any financial transaction or investment programme. It may be shared, stored, or exchanged electronically.
- ii. A non-fungible token or any other token of a comparable sort, independent of nomenclature.
- iii. Any other digital asset, as defined by the Central Government by announcement in the Official Gazette.

In simple terms, VDAs contain information, code, tokens, or numbers having digital representation value that may be digitally exchanged or transferred. They are electronically marketable, transportable, or storable and work via cryptographic mechanisms or other ways. Examples of virtual digital assets include music, videos, cryptocurrency, non-fungible tokens, among others. And although digital assets are typically linked with cryptocurrencies, the concept goes beyond cryptocurrencies to cover digital tokens, non-fungible assets, and more.

Section 115BBH5 of the IT Act specifies that income from the transfer or sale of VDA is taxed at 30%, with no deductions other than the Cost of Acquisition. Losses from other sources of income cannot be adjusted from VDA earnings, and losses from VDA cannot be set off or adjusted from other income. Any revenue deriving from the sale of VDA will be taxed.

Section 56(2)(x) of the IT Act stipulates that when virtual digital assets are transferred for no

consideration or inadequate consideration compared to the fair market value (FMV), it is regarded as the gifting of virtual digital assets. In such instances, the disparity between the FMV and consideration exceeding INR 50,000 is treated as income. This income becomes taxable for the recipient and is categorized under the head of "Other Sources," subject to a tax rate of 30%.

Individuals liable to make payments to a resident of India for the transfer of virtual digital assets must deduct a 1% tax in accordance with Section 194S of the IT Act. When the deduction is made under section 194S, no tax or additional amount is collected under section 194O. But Tax Deduction at Source (TDS) is not mandatory for payments below INR 10,000, and for 'specified persons,' the threshold limit is set at INR 50,000.

## **6. ISSUES AND CHALLENGES**

The prominent issues at hand revolves around the absence of specific legislations or provisions governing cryptocurrencies. Although the SC has nullified a circular from the RBI that imposed a ban on transacting with cryptocurrencies, citing a violation of the right to trade guaranteed under the Constitution, it has not explicitly addressed their legality. Moreover, the ambiguity in their nature and classification requires legal clarification. A broad interpretation of the existing law allows for the extension of certain existing legal provisions to encompass cryptocurrencies. However, these provisions may not inherently address or aptly reflect the intricacies that characterize cryptocurrencies and their transactions. Their unique nature presents complexities which may not be fully encompassed by the current legal framework.

A significant challenge in implementing TDS arises from the anonymity of the buyer and seller who engage in the trading of VDA exclusively on exchanges. The lack of awareness regarding each other's identity makes it a challenge to ascertain the person responsible for paying the consideration. This anonymity poses a potential obstacle in the deduction of TDS, raising questions about the practicality and effectiveness of enforcing tax obligations in such transactions.

A flat rate of 30% tax applies to the income earned from VDAs, and no deductions for expenditures or losses are permitted, except for the COA. However, the method for determining the acquisition cost of VDAs remains unclear, introducing ambiguity and potential difficulties in the computation of taxable income in this context.

At present, transactions conducted with cryptocurrencies are shielded, ensuring that authorities

cannot trace the payer, payee, source, or purpose of the transaction. This characteristic has made cryptocurrencies an attractive tool for organized crime syndicates and individuals hoarding black money to launder their illicit gains without the danger of detection. Consequently, cryptocurrencies possess the capability to establish an undetected and untraced parallel economy, evading scrutiny by investigating authorities. Effectively, it would be a challenging endeavour for agencies like the Enforcement Directorate to trace the proceeds of crime laundered through cryptocurrencies and bring the perpetrators within the purview of the Prevention of Money Laundering Act (PMLA), unless these illicit gains have been generated and converted into cryptocurrencies within the jurisdiction of India. The challenge arises from the anonymity surrounding transaction information and the source of funds, rendering it nearly impossible to subject them to the ambit of the PMLA. This challenge persists, notwithstanding the explicit mandate in Section 12 of the PMLA, which imposes the responsibility on banking companies, financial institutions, and intermediaries to record and uphold transaction details. The combination of anonymity and accessibility makes cryptocurrencies a favoured sanctuary for criminal activities, particularly money laundering.

## **7. CONCLUSION**

The transformative impact of digitalization on decentralized finance is undeniably reshaping the landscape of traditional financial systems. Blockchain technology has provided individuals with unprecedented opportunities to engage in decentralized financial activities, disrupting conventional norms and empowering users globally. It has introduced a paradigm shift, allowing for P2P transactions, lending, borrowing, and other financial activities without the need for intermediaries. DeFi platforms' potential to enhance financial inclusion and democratize access to financial services, especially in areas with restricted traditional banking infrastructure, lies in the efficiency, transparency, and accessibility they provide.

This rapid growth of DeFi raises important considerations, especially in the sphere of income tax implications. As users engage in decentralized financial activities, tax authorities are faced with the challenge of adapting existing tax frameworks to this innovative landscape. The decentralized nature of many transactions complicates the work of tracking and regulating taxable events.

Governments around the world are grappling with the need to establish clear and comprehensive tax policies for cryptocurrencies. The absence of a centralized authority overseeing these activities poses challenges in enforcing tax compliance and monitoring

income generated within decentralized platforms. As DeFi continues to evolve, policymakers must work collaboratively with blockchain experts, tax professionals, and industry stakeholders to develop a cohesive and adaptable framework that ensures fair taxation while fostering innovation.

Furthermore, users engaging in DeFi activities such as cryptocurrency trading must be aware of their tax obligations and liabilities. The decentralized nature of these platforms does not absolve individuals from fulfilling their tax responsibilities. Achieving the full potential of DeFi while ensuring a fair and transparent taxation framework for all participants will hinge on striking a delicate balance between encouraging innovation and upholding regulatory oversight. As the landscape continues to evolve, collaboration between governments, industry stakeholders, and the broader community will be essential in navigating the intricate intersection of digitalization, decentralized finance, and income tax implications.