Taxation of Digital Economy: Bitcoin

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Taxation of Digital Economy – Bitcoin

1. Introduction:

Satoshi Nakamoto (unknown individual or group of people) designed and created the Bitcoin. "Bitcoin" is a crypto currency; in simple words, it is a digital currency. The Bitcoin network does not have traditional intermediaries like banks and financial institutions. Just like any other payment app, a Bitcoin wallet would have to be downloaded by the user (on computer or phone) to make payments through Bitcoins for online transactions. The wallet so downloaded would generate a unique Bitcoin address every time for every transaction. Users can buy Bitcoins with traditional currency and use it to pay online. The payer will have a private key to authenticate the transaction in the Bitcoin network. Further, Bitcoins can be encashed into traditional currency through various Bitcoin exchanges.

2. Mechanism of the Bitcoin network:

The network has various miners. Miners are people with computer nodes on the Bitcoin network. In simple terms, these miners will validate the transaction undertaken by a payer by way of a process called mining. Mining is a distributed consensus system that is used to confirm waiting transactions by including them in a public record of Bitcoin transactions in chronological order. This record of transactions is in the form of a "blockchain". Solving complex cryptographic equations, miners will verify a payer's transaction to ensure that it is valid. There are cryptographic rules to verify that the transaction fits within the Bitcoin network. The miners compete amongst themselves and the one who solves the equation successfully in the least amount of time gets a reward in the form of Bitcoins. The miners are a replacement for intermediaries like central banks and other banks in the traditional payments system. Once the miners validate the transaction, the recipient will receive the payment. Due to the peculiarities of the process of mining, it is expected that the supply of Bitcoins will get capped after a limit. It is believed that most of the Bitcoin network nodes/ miners today are in China.

The competition amongst the miners, the fact that they can be anywhere in the world and are generally unknown to each other, ensures honesty and transparency in the Bitcoin network. However, concerns regarding money laundering and illegal activities through the Bitcoin network have also cropped up.

3. What is a blockchain technology?

A blockchain is a decentralised distributed ledger technology. A distributed ledger is a type of computer database that is shared, replicated, and synchronised among the members of a network. Blockchain is a database of groups of transactions, i.e., blocks, that are linked to the previous group of transactions, i.e., the chain, and is replicated and distributed, almost real time, to everyone who participates in the network so that all copies of the database are identical.

If a transaction is undertaken amongst two members of the network, the distributed ledger will record it. Each transaction is given a unique code called hash. A hash is a random alphanumeric combination code of a fixed length. The transaction is also time stamped.

Instead of relying on a third party, such as a financial institution to mediate transactions, member computer nodes in a blockchain network use a consensus protocol to agree on ledger content, and cryptographic hashes and digital signatures to ensure the integrity of transactions.

The blockchain records every transaction that ever happens, and no records are ever deleted. Anyone participating in a blockchain can review the entries in it, but can update the blockchain only by consensus of a majority of participants. Trust, transparency and accountability are what make the blockchain a desirable technology.

Use of blockchain technology around the world:

- Bitcoin is apparently the most famous utilisation of the blockchain technology.

- The RBI and SEBI are exploring the applicability of blockchain for their respective sectors.

- Andhra Pradesh is exploring the usage of blockchain for land registration. Countries like Sweden and Brazil are also doing the same.

- Estonia, a tiny country in Europe, touted to be the most digitally advanced country in the world, has been testing blockchain technology since 2008. Since 2012, blockchain has been in operational use in Estonia's registries, such as national health, judicial, legislative, security and commercial code systems, with plans to extend its use to other spheres such as personal medicine and cyber security.

- Dubai has come up with the Dubai blockchain strategy that intends to carry out all public services transactions on a blockchain network by 2020.

- The monetary authority of Singapore is developing a blockchain-backed settlement system that aims to streamline cross-border settlement transactions between banks.

4. Bitcoin giving rise to "arbitrage" opportunities:

The growing trend of Bitcoin transactions and future prospects of its prosperity has generated interest among all sections of the public and many players entered the market as a Bitcoin transaction platform provider. Currently, there are about 12 to 15 peer-to-peer Bitcoin transaction platforms. To name a few, it is Zebpay, Coinsecure, Koinex, Unocoin, Localbitcoins, Paxful, Etoro, Remitono, ThroughBit, Pocketbits and Bitxoxo. These platforms offer Bitcoins at differential prices. Given this difference in pricing, investors have started taking advantage of arbitrage opportunities by buying Bitcoins at a lower price and selling it at a higher price. The prices may be either determined by the exchanges or the demand supply situation prevailing.

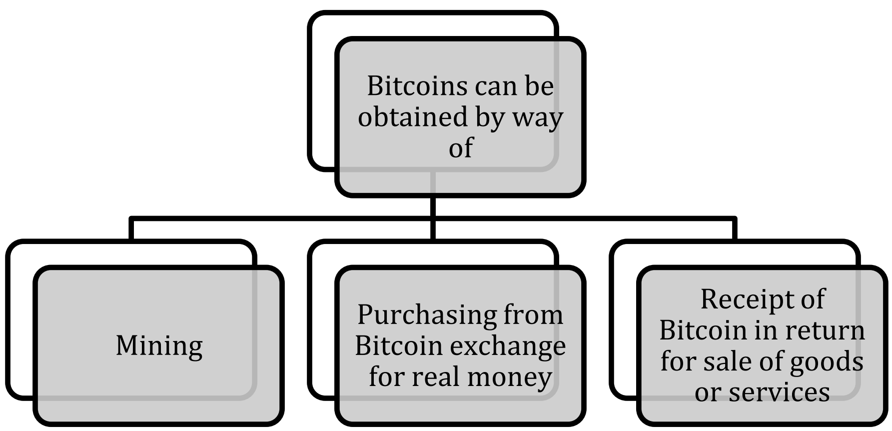
5. India position:

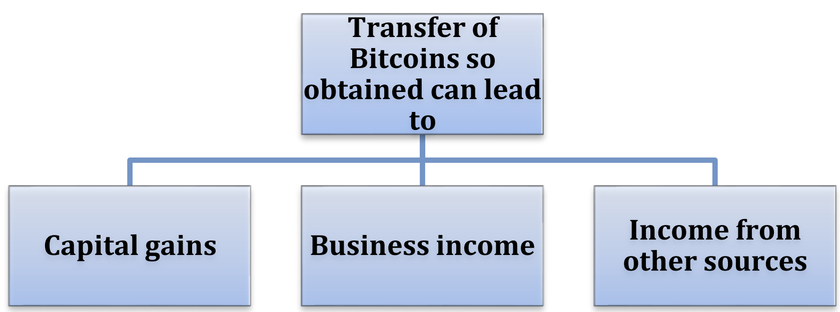
India has reiterated its position that Bitcoins are not legal tender in India and Bitcoin transactions are also not regulated. Besides India, various other countries have adopted a similar position such as Russia, China, Iceland, Bangladesh, Sweden, Thailand and Vietnam. However, the US and the UK have adopted a positive approach towards Bitcoins with several large US corporations accepting payments in Bitcoins. While cryptocurrencies have not been legalised, there are no laws against investing or dealing in them. Therefore, the fear is that the virtual currency could be used as payment for illegal activities.

6. Position of taxation in India:

The taxation of digital currencies as such has not been recognised yet in the Income-tax Act, 1961 ["the Act"]. The following discussion relates to some taxation aspects considering the provisions of the Act.

The flow of obtaining Bitcoins and transferring it in different ways is represented below:





As mentioned earlier, Indian laws do not at present recognise the Bitcoin as a "currency". Therefore, though Bitcoin can be said to be a medium of exchange, it is not currency according to Indian laws. This makes it more difficult to infer whether Bitcoin is to be treated as a "currency" or an "asset".

The taxation aspects related to Bitcoin transactions are outlined below:

i. **Bitcoin mining – Taxation in the hands of miners:**

Basis of taxation:

Under the Act, residents are subject to tax on its global income whereas non-residents are subject to tax only on income which is sourced in India. Of course, where a tax treaty exists, the non-residents have the option to be governed by the provisions of the tax treaty to the extent they are more beneficial.

In the case of residents, it is clear that income from the activity of mining would be subject to the provisions of the Act. However, in the case of non-residents, it needs to be first ascertained if the mining process can be said to have taken place in India and what are the circumstances which can result in the activity being construed as sourced in India. Further, one would also look for the nexus rule, which will lead to taxation of mining activity for a non-resident miner. Generally, a non-resident undertaking a mining activity outside India should not come within the ambit of Indian taxation unless there is a specific provision to that effect.

Is mining activity a "business activity"?

A miner gets rewarded with Bitcoins when he solves a cryptographic algorithm which leads to the validation of a transaction. That miner would be the owner of Bitcoins he earns. Effectively, such Bitcoins are assets of the miner, which could be held as "stock in trade" or "investment".

In the ordinary sense, this activity of mining would mean business to the miner. Under the Act, a strong argument is possible that the definition of "business" or "profession" is very wide and hence, such an activity will fall within the meaning of "business" or "profession". Therefore, the income from mining may be taxed under the head income from business or profession.

A pertinent question arises as to at what point in time, the Bitcoins earned are taxable as business income. An argument is possible that as and when the Bitcoins are earned, the Bitcoins needs to be offered to tax under the Act. Another argument is that Bitcoins have been acquired by the miner by rendering services and they form part of the stock in trade and should be offered to tax as and when the Bitcoins are sold. Having said this, further deliberations are needed on how the value of such sale consideration would be determined, what sort of expenses would be deductible in arriving at the taxable income, etc.

Bitcoins as "capital asset":

Capital asset has been defined in section 2(14) of the Act to include property of any kind held by the assessee. The term "property" is understood in a wide manner for tax purposes. Bitcoins created by the mining process are self-generated assets to the miners and satisfy the definition of "capital asset" under section 2(14) of the Act. Therefore, the gains on the transfer of such Bitcoins are liable to tax as capital gains.

However, a position may be possible that the cost of acquisition cannot be determined, as these are self-generated assets. As per section 55 of the Act, cost of acquisition of a trade mark or brand name associated with a business or a right to manufacture, produce or process any article or thing, should be the following:

- In case of a purchase, cost of purchase from the previous owner; and
- Nil, in all other cases.

In this regard, a position may be possible that miner's case do not fall under the provisions of Section 55 of the Act. Therefore, the capital gains computation mechanism would fail and applying the Hon'ble Supreme Court's decision in the case of B. C. Srinivasa Shetty (1981 SCR (2) 938), no capital gains tax would arise on mining of Bitcoins. However, the tax department may oppose this view and bring the entire sale proceeds to tax as capital gains considering the cost of acquisition as nil.

Mining activity taxable as "income from other sources":

Mining activity performed as a hobby or incidental activity may be considered as "income from other sources". Further, given the scenario outlined above of non-taxation of capital gains, the tax department is most likely to contend that provisions of income from other sources are applicable as against capital gains.

Mining fee: Sometimes, a mining fee is also paid to the miner. As the process is completely automated without much human intervention, it is possible to take the position that the usage of such technology cannot, per se, be held as rendering of "technical services" as contemplated under the Act. However, there is a possibility of treating the mining fees as royalty after amendments made to the Act by Finance Act, 2012 (amendments discussed in section 4 of chapter 5). Further, the mining fee may also be subject to TDS provisions.

ii. Bitcoin as investment – Taxation in the hands of investors:

Bitcoins, if considered as capital assets and held as an investment, will result in capital gains on transfer. These gains would be taxable either as long-term capital gain or a short-term capital gain depending on the period the Bitcoin is held. The long-term capital gains would be taxed at a flat rate of 20 per cent while short-term gains would be taxed at the normal applicable rate. The cost of acquisition for arriving at long term capital gains will be determined after giving the benefit of indexation.

iii. Bitcoin as stock-in-trade – Taxation in the hands of traders:

The income arising from trading in Bitcoins will give rise to income from business and accordingly, the profits arising out of such business will be subject to tax as per the normal rates applicable.

iv. Bitcoin as consideration for goods/services:

Bitcoins exchanged as a consideration for goods/services and used as a currency should not be subject to taxation as the transaction for which the Bitcoins are exchanged would already be subject to tax.

v. Indirect taxes:

Whether Bitcoins are goods or service is still not completely clear. Depending upon the characterisation, GST may be leviable on the Bitcoin transactions.

vi. Taxation issues:

Some of the other crucial issues that emerge regarding the taxation of Bitcoins are cross-border tax evasion, collection of taxes, permanent establishment rules and the enforcement of taxes on Bitcoin transactions.

7. Position of taxation of Bitcoins around the world: Synopsis:

The EU treats Bitcoin and other cryptocurrencies as a 'foreign' currency. Cryptocurrency transactions are exempt from GST. In Japan, Bitcoin is officially recognised as a payment method. The sale of Bitcoin is exempted from consumption tax as of July 1, 2017. However, the regulator follows a middle-ground approach by defining Bitcoin as an 'asset-like value.'

Taxation in the USA:
[Source: Notice 2014–21: IRS Virtual Currency Guidance]

The Internal Revenue Service issued a notice providing answers to frequently asked questions (FAQs) on virtual currencies, such as Bitcoins. These FAQs provide basic information on the US federal tax implications of transactions in, or transactions that use, virtual currency.

In some environments, virtual currency operates like a "real" currency; i.e., the coin and paper money of the United States or of any other country that is designated as legal tender, circulates, and is customarily used and accepted as a medium of exchange in the country of issuance -- but it does not have legal tender status in any jurisdiction.

The notice provides that virtual currency is treated as property for US federal tax purposes. General tax principles that apply to property transactions apply to transactions using virtual currency. Among other things, this means that:

- Wages paid to employees using virtual currency are taxable to the employee, must be reported by an employer on Form W-2, and are subject to federal withholding tax and payroll taxes.

- Payments using virtual currency made to independent contractors and other service providers are taxable and self-employment tax rules generally apply. Normally, payers must issue Form 1099.

- The character of gain or loss from the sale or exchange of virtual currency depends on whether the virtual currency is a capital asset in the hands of the taxpayer.

- A payment made using virtual currency is subject to information reporting to the same extent as any other payment made in property.

Taxation in Australia:
[Source: Guidance paper dated 21 Dec 2017 – Tax treatment of crypto-currencies in Australia, specifically Bitcoin]

The guidance paper provides an overview of the tax treatment for transactions associated with crypto currencies, specifically Bitcoins. This guidance also applies to other crypto or digital currencies that have the same characteristics as a Bitcoin:

- Usage of Bitcoins to purchase goods or services for personal use or consumption and any capital gain or loss from the disposal of the Bitcoin will be disregarded (as a personal use asset) provided the cost of the Bitcoin is Australian dollar 10,000 or less.

- Bitcoins received for goods or services as part of the business will have to be recorded in Australian dollars at its fair market value.

- Purchases of goods/services with Bitcoins are entitled to a deduction based on the arm's length value of the item acquired.

- When receiving Bitcoins in return for goods and services, a business may be charged GST on Bitcoins. If the supply of the goods and services was a taxable supply, the business will be able to claim input tax credits on the GST charged on the Bitcoin they received as payment.

- Likewise, GST is payable on the supply of Bitcoins for purchases. GST is calculated on the market value of the goods or services. This is ordinarily equal to the fair market value of the Bitcoin at the time of the transaction.

- There may also be capital gains tax consequences resulting from the disposal of Bitcoins as part of carrying on a business. However, any capital gain is reduced by the amount that is included in the assessable income as ordinary income. Bitcoins held as investment are generally taxable as capital gains.

- Where an employee has a valid salary sacrifice arrangement with their employer to receive Bitcoins as remuneration instead of Australian dollars, the payment of the Bitcoins is a fringe benefit and the employer is subject to the provisions of the Fringe Benefits Tax Assessment Act. In the absence of a valid salary sacrifice agreement, the remuneration is treated as normal salary or wages and the employer will need to meet their pay as you go obligations as usual.

- In the business of mining Bitcoins, any income derived from the transfer of the mined Bitcoin to a third party will be included in assessable income. Any expenses incurred in respect to the mining activity will be allowed as a deduction. Losses from the mining activity may also be subject to non-commercial loss provisions.

- Bitcoins held by a taxpayer carrying on the business of mining and selling Bitcoins will be considered to be trading stock

- GST is payable on the supply of Bitcoins made in the course or furtherance of the Bitcoin mining enterprise. Input tax credits may be available for acquisitions made in carrying on the Bitcoin mining enterprise.

Taxation in the UK:
[Source: Revenue and Customs Brief 9 (2014): Bitcoin and other cryptocurrencies published on 3 March 2014]

VAT:

- Income received from Bitcoin mining activities will generally be outside the scope of VAT based on the fact the activity does not constitute an economic activity for VAT purposes because there is insufficient link between any services provided and any consideration received

- Income received by miners for other activities, such as for the provision of services in connection with the verification of specific transactions for which specific charges are made, will be exempt from VAT.

- When Bitcoin is exchanged for sterling or for foreign currencies, such as euros or dollars, no VAT will be due on the value of the Bitcoins themselves

- Charges (in whatever form) made over and above the value of the Bitcoin for arranging or carrying out any transactions in Bitcoins will be exempt from VAT

- However, in all instances, VAT will be due in the normal way from suppliers of any goods or services sold in exchange for Bitcoins or other similar cryptocurrency. The value of the supply of goods or services on which VAT is due will be the sterling value of the cryptocurrency at the point the transaction takes place

Income-tax:

- Whether any profit or gain is chargeable or any loss is allowable will be looked at on a case-by-case basis taking into account the specific facts.

- The profits or losses on exchange movements between currencies are taxable. For the tax treatment of virtual currencies, the general rules on foreign exchange and loan relationships apply. The profits and losses of a company entering into transactions involving Bitcoins will be reflected in accounts and will be taxable under normal tax rules.

- If a profit or loss on a currency contract is not within trading profits or otherwise within the loan relationship rules, it would normally be taxable as a chargeable gain or allowable as a loss for company tax (if it accrues to a company) or capital gain tax (if accrues to capital gains) purposes.

Taxation in South Africa:

[Source: Mini Dissertation (LLM) – University of Pretoria, October, 2016 – The tax implications of Bitcoin in South Africa]

South African Revenue Service ("SARS") has not issued any guidance paper on the tax treatment of virtual currency exchange transactions. However, SARS, together with the Financial Services Board and the Financial Intelligence Centre, issued a user alert to the South African public. In essence, no legal protection or recourse will be afforded to users of virtual currencies in terms of the alert.

SARS is considering addressing concerns regarding the taxation of virtual currencies relating, inter alia, to the characterisation of it as an asset, a currency, or legal tender with regards to the South African Income Tax Act.

8. The OECD View:

The OECD issued the BEPS Action Plan, which dealt with the taxation of virtual currencies. It established that the main policy issue countries need to address is the tax treatment of capital gains on bitcoins, as well as tax evasion through the anonymity of Bitcoin transactions.

The inquiry into the OECD Action Plan indicated that the place of supply for digital business to consumer services should the follow the destination principle. Alternatively, the concept of "virtual PE" could be created and defined in order to create a connection that would apply to electronic commerce operations.

9. Conclusion:

Bitcoins are gaining momentum in the digital space. Its taxation aspects are critical for any country. Various countries have laid down guidelines and many other are in the process of initiating/finalising taxation, India being one among them.