THE IMPACT OF DIGITAL CURRENCY ON CORPORATE FINANCE: INVESTIGATING HOW THE RISE OF DIGITAL CURRENCIES AND BLOCKCHAIN TECHNOLOGY IS ALTERING CORPORATE FINANCIAL STRATEGIES, INCLUDING TREASURY MANAGEMENT, INTERNATIONAL TRANSACTIONS, AND FUNDRAISING

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INTRODUCTION

The world of corporate finance is undergoing a significant change. Traditional methods, while still relevant, are facing challenges from the rise of disruptive technologies like digital currencies and blockchain. This is particularly true in a dynamic economy like India, where innovation and adaptation are crucial for success.

Online trading systems and digital currencies have increased the usage of new technologies. While new technologies have enabled payment evolution and global competition, there are still ambiguities surrounding its use.

Indian corporations have historically relied on well-established financial instruments and practices. The Indian corporate finance landscape is built on traditional pillars like bank loans and a robust stock market. Primarily, the sources of corporate funding in India can be broadly classified into:

- 1. Debt Financing: Banks have been the primary source of debt capital for Indian companies. Corporate loans, often secured by collateral, have fuelled business growth and expansion. Bonds and debentures are examples of debt financing.
- 2. Equity Financing: The Indian stock market plays a vital role in raising equity capital. Public offerings and private placements allow companies to access funds from a wide

range of investors. Common stock and preferred stocks are a few examples of equity based instruments.

In India, a wide range of financial tasks, such as cash management, risk management, investment management, and capital structure optimisation are handled by corporate treasuries. These treasuries play a vital role in managing the financial resources and also ensuring that there is necessary liquidity available to meet obligations and goals.

The RBI and the Securities and Exchange Board of India (SEBI) are the two principal regulatory and promotional entities that oversee all financial systems. SEBI and the RBI have the authority to supervise, monitor, govern, and control the financial sector.

India's financial landscape, however, is undergoing a significant shift. The emergence of digital currencies and blockchain technology is changing the traditional financial landscape by introducing new ways of executing transactions, storing data, and managing assets. Blockchain's decentralized ledger offers a highly secure and transparent method for recording transactions,

Bringing potential benefits such as increased efficiency, reduced costs, and the elimination of intermediaries.

UNDERSTANDING BITCOINS AND DIGITAL CURRENCIES:

Digital Currencies, as the name suggests, are a form of currency only available in the electronic/digital form. They lack a physical form. Typically, digital currencies do not involve a third party intermediaries and are considered one of the cheapest forms of currency.

The way that digital currencies work is through a combination of cryptography and distributed ledger technology. When a digital transaction occurs, it involves sending and receiving units of that currency between two parties. This information is broadcast to the entire network of computers participating in the currency. Miners (which are essentially powerful computer systems) then compete to validate the transactions. The first miner to validate the transaction gets the new digital currency unit.

Bitcoin, for example, is a digital currency, often referred to as a cryptocurrency. Unlike traditional currencies issued by central governments, Bitcoins function on a decentralized

network, eliminating the need for a central authority to control its issuance or transactions. They function as a medium of exchange, enabling a peer-to-peer transaction without the involvement of third parties such as banks. Bitcoins are secured through cryptography and relies on a network of computers, called miners, to validate transactions and add them to a public ledger known as a blockchain.

Digital currencies leverage blockchain technology for secure and transparent transaction recording. The blockchain acts as the public ledger that verifies and records all transactions involving the digital currency. For instance, consider a second hand car purchase transaction. Either party to the transaction may claim that the transaction was not successful. To eliminate such a situation, an intermediary may be avoided. However, this may complicate the situation. Instead, the blockchain could resolve such an issue by providing a decentralized and immutable system to record transactions. Not only are transactions on the blockchain transparent, but also easier to manage.

The RBI has issued legal tenders called "Central bank Digital Currency" CBDC. It's a digital representation of a country's currency, allowing for electronic transactions. These are issued by the Central Government. CBDCs differ from other forms of digital currencies in terms of their issuing authority, regulations and stability. For the paper of this paper, we will be referring to digital currencies that are created through the process of mining and are characterised by their immutability, stability, transparency – excluding CDBCs.

BENEFITS AND OPPORTUNITIES OF DIGITAL CURRENCIES AND BLOCKCHAIN

The implementation of Digital currencies has been scaling to fundraising for new business ventures known as "initial coin offering", global supply chain, and healthcare systems. In Singapore, the monetary authority of Singapore (MAS) adopted blockchain for interbank payments and securities settlement. This has enhanced the efficiency and security of financial transactions by utilising blockchain technology, resulting in shorter and less expensive cross-border transfers.

One of the most significant advantages of digital currencies lies in their ability to streamline transactions. Unlike traditional methods that rely on intermediaries like banks, digital currencies facilitate peer-to-peer transactions directly between users. This eliminates

processing fees associated with intermediaries, potentially leading to faster and cheaper cross-border payments. Additionally, the automation capabilities of blockchain technology, the underlying technology of many digital currencies, can further expedite transactions and reduce administrative costs. Studies have revealed that digital currency can be a feasible alternative to paper currency. Which is time-consuming and expensive for the government to issue and circulate. For example, the cost estimate for each INR 100 note is approximately 15%-17% of the total expense throughout a four-year lifecycle, which includes printing, distribution, and soilage.

Moreover, transactions can be completed almost instantly, instead of the numerous days it takes currently. The transparency and immutability offered by blockchain technologies eliminate the need for third party actors and intermediaries. Several researchers hold that individual client bank accounts and financial stability increased due to digital currency.

Digital currencies leverage blockchain technology, which acts as a public ledger that securely records all transactions. This distributed ledger system offers unparalleled transparency and immutability. Every transaction is visible to all participants on the network, making it nearly impossible to tamper with or forge records. This enhances trust and reduces the risk of fraud

compared to traditional financial systems, which can be susceptible to centralized control and manipulation.

Further, a significant portion of the global population remains unbanked, deprived of effective access to traditional financial services. Studies by the National Geographic show that over 70% of Southeast Asia's population are unbanked. Digital currencies offer a potential solution by providing a decentralized and accessible alternative. Individuals without bank accounts can use digital wallets to store and transact with digital currencies, promoting financial inclusion and empowering them to participate in the global economy.

Digital currencies empower users with greater control over their finances. Unlike traditional bank accounts, where funds can be frozen or access restricted, digital wallets allow users to manage their own finances without relying on intermediaries. This fosters a sense of financial autonomy and potentially increases user trust in the financial system. Further, the ability to trace the transaction, reduces risk. By providing a secure and transparent platform for financial

transactions, blockchain technology can build trust and improve overall confidence in the financial system.

Potential Applications in Corporate Finance:

1. Initial Public Offerings (IPOs):

Smart contracts can automate compliance checks and investor on boarding, potentially reducing the time and paperwork involved in going public. Their platforms could connect companies with a wider pool of international investors, diversifying their funding sources. Blockchain technology can also facilitate the issuance of fractional shares, making IPOs more accessible to smaller investors.

2. Equity Financing:

Companies can raise capital by issuing digital tokens representing ownership on a blockchain. This process could be faster and more transparent than traditional private placements. Blockchain platforms can create a secondary market for trading these digital tokens, allowing for increased liquidity for investors. Moreover, could enable investors to directly invest in companies, bypassing intermediaries like venture capitalists.

3. Debt Financing:

- a) Peer-to-Peer Lending: Blockchain platforms can connect companies directly with lenders, potentially offering better rates and faster approval times compared to traditional bank loans.
- b) Automated Loan Origination: Smart contracts can automate loan approvals based on predefined criteria, expediting the process and reducing manual intervention.

CHALLENGES AND RISKS FOR INDIAN CORPORATIONS

While digital currencies offer exciting possibilities for Indian corporations, significant hurdles need to be addressed. One major concern is the inherent volatility associated with some digital currencies. This volatility can introduce substantial risk into corporate treasuries, potentially impacting cash flow management and investment strategies. Careful risk management practices and a deep understanding of these markets are essential for navigating this volatility

Moreover, technological limitations and infrastructure gaps pose challenges for wider adoption. The scalability of some blockchain networks, the technology underpinning many digital currencies, might not be sufficient to handle the high transaction volume of large corporations. Additionally, the lack of robust digital infrastructure in certain regions of India, including limited access to reliable internet and digital wallets, can hinder widespread corporate use of these technologies.

The legal landscape surrounding digital assets in India remains ambiguous. The lack of clear regulations creates uncertainty for corporations considering integrating digital currencies into their financial operations. This ambiguity can make it difficult to assess compliance requirements and mitigate potential legal risks. Establishing clear and well-defined regulations will be crucial for fostering a more secure and predictable environment for corporate involvement in the digital currency space.

Furthermore, the infrastructure for widespread adoption of digital currencies within Indian corporations is still limited. The availability of user-friendly digital wallets and secure cryptocurrency exchanges needs to be expanded to facilitate seamless transactions and manage digital assets effectively. Building trust among the public regarding digital currencies is also crucial. Public education initiatives and successful use cases across various industries can help alleviate concerns and encourage broader corporate acceptance of these technologies.

By acknowledging and addressing these challenges, India can pave the way for a more integrated and efficient corporate financial landscape empowered by digital currencies.

THE EVOLVING REGULATORY LANDSCAPE IN INDIA

Blockchain technology, with its promise of secure and transparent transactions, has captured the imagination of businesses and individuals alike. While blockchain technology remains largely unregulated in India, the government acknowledges its potential for various sectors. Its decentralized and tamper-proof nature holds immense value in areas like supply chain management, record keeping, and identity verification. The government's approach seems to be one of cautious optimism, encouraging exploration of the technology's applications without committing to a specific regulatory framework.

The Reserve Bank of India (RBI), has refrained from recognizing them as legal tender.

Cryptocurrencies also lack a clear definition within Indian statutes, creating ambiguity and uncertainty for investors and businesses. The RBI has, however, issued warnings highlighting the potential risks associated with cryptocurrencies, including volatility, money laundering, and financial instability.

Despite the RBI's reservations, the Indian government has taken a more nuanced approach. The Income Tax Act of 1961 was amended to treat gains from cryptocurrency transactions as taxable income. This move suggests an attempt to integrate cryptocurrencies within the existing financial system, albeit without formally endorsing them. Interestingly, the Supreme Court overturned a previous RBI circular that discouraged banks from dealing with crypto businesses. This landmark judgment hints at a potential shift towards a more open stance on cryptocurrencies. ¹

The most significant recent development, however, is the proposed "Cryptocurrency and Regulation of Official Digital Currency Bill, 2021." This bill, yet to be passed, proposes a two-pronged approach. Firstly, it aims to establish a framework for a Central Bank Digital Currency (CBDC) issued by the RBI. This suggests the government's interest in exploring the potential benefits of digital currencies while maintaining centralized control. Secondly, the bill has raised concerns about a potential ban on private cryptocurrencies like Bitcoin. This move, if implemented, would significantly impact the Indian cryptocurrency market. The draft bill aims to outlaw cryptocurrency mining, holding, trading, selling, issuing, disposing of, or using within the nation. Any data, code, or token with a digital value representation that may be used for business purposes, stored as value, or used as an accounting unit is referred to as cryptocurrency. It has also imposed a fine or imprisonment of up to 10 years in case of violation. On a brighter note, the proposed legislation allows for the experimentation, study, and instruction of any cryptocurrency's underlying processes or technologies.

Moreover, The RBI's technology and research arm, IDRBT, has taken proactive steps to explore blockchain's potential. It has developed a technological model based on a blockchain platform to address banking demands. This indicates a willingness to explore the technology for internal applications, even as regulations for private cryptocurrencies remain undecided.

¹ Internet and Mobile Association of India v. Reserve Bank of India, AIR 2021 SC 2720.

The current regulatory landscape for digital currencies and blockchain technology in India is complex. The lack of a clear legal framework creates uncertainty for businesses and individuals, hindering widespread adoption. However, the government's willingness to adapt existing tax laws and the proposed CBDC framework indicate a pragmatic approach. The future of private cryptocurrencies remains uncertain, with the proposed bill hanging in the balance. It is evident that the Indian government is carefully evaluating the potential benefits and risks associated with these technologies before committing to a definitive regulatory stance.

ANALYSIS OF KEY AREAS IN CORPORATE FINANCE:

The emergence of digital currencies has sent ripples through the world of corporate finance, prompting corporations to re-evaluate their traditional financial strategies. Two key areas – treasury management and international transactions – have been particularly impacted by this innovative technology.

For decades, corporations have relied on a set of well-established instruments for managing their treasury reserves. However, the advent of digital currencies has opened doors to new possibilities. The decentralized nature of digital currencies, free from centralized control by governments or banks, offers a level of autonomy and flexibility not found in traditional assets. This has increased the interest of corporations, who are increasingly exploring the potential of holding digital currencies as part of their reserve portfolio. Digital currencies also introduce new asset classes, allowing companies to diversify their investment portfolios. As central banks explore official digital currencies, investment prospects expand.

Corporations are increasingly exploring the potential of digital currencies as part of their treasury reserve assets.² The decentralized nature of digital currencies, coupled with their potential for higher returns and diversification, has prompted corporations to reconsider their traditional approach to managing liquidity. Moreover, the rise of digital currencies has facilitated smoother and more efficient international transactions. The potential benefits are multifaceted. Firstly, digital currencies offer the possibility of higher returns compared to conventional reserve assets like government bonds. With traditional interest rates hovering at low levels, digital currencies, with their inherent volatility, could provide a path to higher

² Blockchain and the Corporate Treasurer, Treasury Management, (last visited Apr. 13, 2024), https://treasury-management.com/articles/blockchain-and-the-corporate-treasurer/.

yields. Secondly, digital currencies offer diversification benefits. Their price movements often have a low correlation with traditional assets, potentially reducing the overall risk profile of a corporation's treasury portfolio.

However, incorporating digital currencies into treasury management strategies requires careful consideration. The volatility associated with these assets can lead to significant fluctuations in their value. The main issue with managing the treasury is that digital currencies are not stable currencies. The paper currencies hold their value from the reserves of the government. Digital currencies not only increase efficiency and transparency but can also expedite cross-border payments by eliminating intermediaries and facilitating faster settlement times. This improves transparency and allows for better cash flow forecasting and management.

Furthermore, digital currencies have also revolutionized fundraising for corporations. Initial Coin Offerings (ICOs) and Security Token Offerings (STOs) have emerged as viable alternatives to traditional fundraising methods like Initial Public Offerings (IPOs) and venture capital financing. These decentralized fundraising mechanisms enable corporations to access a broader pool of investors globally, bypassing traditional regulatory hurdles and reducing issuance costs.

The rise of digital currencies has also significantly impacted international transactions. Blockchain technology, the backbone of most digital currencies, offers a secure and transparent platform for facilitating cross-border payments. Traditional international transactions often involve a network of intermediaries, leading to delays, high fees, and a lack of transparency. Blockchain technology eliminates the need for these intermediaries, streamlining the process and reducing costs. Transactions are recorded on a distributed ledger, accessible to all participants, ensuring greater transparency and reducing the risk of fraud.

The low transaction costs, ease of automation, and integration into existing digital services enhance trade and financial interconnectedness. This can lead to higher economic activity and global collaboration.³This enhanced efficiency translates into several advantages for corporations engaged in international trade. Faster settlement times allow for quicker access to

³ Seunghwan Kim et. al., Digital Money Cross Border Payments International Reserves and the Global Financial Safety Net: Preliminary Considerations, IMF eLIBRARY, (Jan. 04, 2024), https://www.elibrary.imf.org/view/journals/068/2024/001/article-A001-en.xml.

funds, improving overall cash flow management. Additionally, reduced transaction costs associated with blockchain-based payments can lead to significant cost savings.

However, the adoption of digital currencies for international transactions is not without its challenges. The lack of universal acceptance of digital currencies will be a potential problem in its effective growth and development. Until a larger number of countries and businesses embrace the technology, its full potential for streamlining international trade cannot be realized. Moreover, scalability remains an ongoing concern for blockchain technology.

In aspects of Foreign Exchange (Forex), digital currencies introduce new asset classes that treasury departments can explore for diversification or potentially higher returns. However, since the inherent volatility of digital currencies may pose new challenges for managing foreign exchange risk? Treasury departments will need to develop strategies to mitigate this volatility.

Similarly, storing and managing digital currency investments presents unique security challenges. Treasury departments will need to implement robust cyber security measures to protect these assets.

CONCLUSION:

In the ever evolving landscape of corporate finance, the emergence of digital currencies and blockchain technology has proposed a significant transformation. These innovations have challenged the traditional standards of financial operations, offering corporations new opportunities. The decentralized nature of digital currencies provides an unprecedented level of autonomy, enabling direct peer-to-peer transactions and reducing reliance on intermediaries. This shift not only promises enhanced efficiency and reduced costs but also introduces a novel asset class to diversify corporate treasuries. As digital currencies evolve and gain acceptance, their impact on treasury management, streamlining cross-border transactions, and potentially even becoming a store of value for corporations, will be areas to watch with keen interest.

However, the journey towards this new technological integration is not without its challenges. The volatility of digital currencies poses significant risks, necessitating sophisticated risk management strategies. The current regulatory landscape, characterized by ambiguity, calls for a concerted effort from authorities to establish clear guidelines. These guidelines should balance innovation with stability and security.

As we stand at this new possibility, regulatory bodies need to provide a framework that fosters the growth of digital currencies while ensuring consumer protection and market integrity. The development of a robust digital infrastructure, coupled with corporate education initiatives, can increase the widespread adoption of these technologies. Moreover, international collaboration is necessary in harmonizing regulatory standards and facilitating global acceptance of digital currencies.

In conclusion, digital currencies and blockchain technology present a myriad of opportunities and challenges. The path forward requires a collaborative approach, where innovation is nurtured within a framework of effective regulation and risk management. By embracing these new technologies, corporations can explore increased growth and efficiency, furthering them into a future where finance extends beyond physical boundaries and becomes a truly global and inclusive endeavour.

RECOMMENDATIONS FOR REGULATORY AUTHORITIES:

- 1. Establish Clear Regulations: We need a comprehensive legal framework that decodes digital currencies and blockchain technology, providing clarity and certainty for corporations and investors alike. This regulation needs to balance new technologies and increased opportunities with transparency, risk management and efficiency.
- 2. Promote Risk Management: Advocate for robust risk management practices that address the unique challenges posed by the volatility and security concerns of digital assets.
- 3. Invest in Digital Infrastructure: Facilitate the development of a secure and reliable digital infrastructure that supports the seamless operation of digital currencies.
- 4. Foster International Cooperation: Encourage international regulatory cooperation to ensure a cohesive approach to digital currency governance, fostering a conducive environment for cross-border transactions.
- 5. Education and Awareness: Launch educational campaigns to raise awareness about digital currencies and blockchain technology, thereby building trust among corporations and the public. These educational programs need to address not only the

possibilities and potential benefits of incorporating digital currency in corporate finance but also potential challenges.

6. Support Technological Innovation: Provide a supportive ecosystem for technological innovation, allowing for experimentation and research that can lead to more efficient and environmentally sustainable blockchain solutions.

By adhering to these recommendations, regulatory authorities can pave the way for a future where digital currencies are integrated into the corporate finance fabric, driving innovation, efficiency, and inclusivity in the global financial landscape.