THE RISE OF CRYPTOCURRENCY ADOPTION IN PAKISTAN: THE LEGAL LANDSCAPE

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Abstract
This article explores the rise of cryptocurrency adoption in Pakistan and examines the promising future that lies ahead for this emerging digital asset class in the country. Pakistan, with its cash-centric economy and limited access to formal financial services for a significant portion of its population, has witnessed a remarkable shift in attitudes toward cryptocurrencies. Factors such as financial inclusion efforts, economic instability, and supportive government policies have contributed to this growing interest. The younger generation, in particular, is embracing digital currencies as a means of participating in the global economy and preserving their wealth in the face of inflation. The establishment of crypto exchanges and supporting infrastructure, along with educational initiatives and awareness programs, has further facilitated cryptocurrency adoption. The government's positive approach and efforts to develop a comprehensive regulatory framework have instilled confidence and encouraged individuals and businesses to explore the opportunities presented by cryptocurrencies. Moreover, partnerships with global crypto projects and the potential applications of blockchain technology in various sectors have contributed to Pakistan's promising future in the cryptocurrency space. As more individuals and businesses embrace
cryptocurrencies, Pakistan is poised to leverage the benefits of this transformative technology, fostering financial inclusion, economic growth, and technological innovation in the years to come. Cryptocurrencies have garnered significant attention and adoption worldwide, and Pakistan is no exception. In recent years, Pakistan has witnessed a growing interest in cryptocurrencies, with an increasing number of individuals and businesses embracing this digital financial revolution. This article explores the factors contributing to the rise of cryptocurrency adoption in Pakistan and examines the promising future that lies ahead.

**Key Words:** Cryptocurrency, Know Your Customer (KYC), Anti Money Laundering (AML)

**What is Cryptocurrency?**

Cryptocurrency has emerged as a revolutionary concept within the realm of digital finance. It has gained significant attention and popularity due to its decentralized nature and potential for transforming traditional financial systems. This note provides a comprehensive overview of what cryptocurrency is and how it functions. Cryptocurrency is a digital or virtual form of currency that utilizes cryptography for security and operates on decentralized technology, typically a blockchain. Unlike traditional fiat currencies issued by governments, cryptocurrencies are not controlled by any central authority, such as a central bank. Instead, they rely on cryptographic principles and decentralized networks to secure transactions and verify the creation of new units (Mukhopadhyay, kjellum, Hambolu, Oakley, Yu & Brooks, 2016).

**Key Characteristics** (Tarasova, Usatenko, Makurin, Ivanenko, & Cherchata, 2020).

1. Decentralization: Cryptocurrencies operate on decentralized networks, usually based on blockchain technology. This means that no single entity or authority has complete control over the currency, transactions, or supply.
2. Cryptography: Cryptography is a fundamental aspect of cryptocurrencies. It ensures secure and private transactions by encrypting the information and validating the integrity of the data.
3. Blockchain Technology: Most cryptocurrencies utilize blockchain, a distributed ledger that records all transactions across a network of computers. This technology enhances transparency, immutability, and security.
4. Limited Supply: Many cryptocurrencies have a predetermined maximum supply, which prevents inflation and gives them a store of value characteristic. Bitcoin, for instance, has a capped supply of 21 million coins.
5. Pseudonymity: Cryptocurrency transactions are often pseudonymous, meaning they are linked to digital addresses rather than real-world identities. While transactions can be traced on the blockchain, the identities of the participants can remain hidden.
6. Digital Wallets: Cryptocurrencies are stored in digital wallets, which can be software-based (on computers or mobile devices) or hardware devices specifically designed for secure storage.

**How Cryptocurrencies Work:**
Cryptocurrencies utilize a combination of cryptographic techniques and decentralized consensus mechanisms to facilitate transactions. Here are the key steps involved (Zohuri, Nguyen, & Moghaddam, 2022).

1. Transaction Initiation: A user initiates a transaction by sending a request from their digital wallet to the recipient's wallet. The request includes the recipient's wallet address and the amount of cryptocurrency to be transferred.
2. Verification and Mining: The transaction is broadcasted to the decentralized network of computers (nodes). Miners, responsible for maintaining the network and validating transactions, verify the authenticity of the transaction through complex cryptographic calculations. This process often involves solving mathematical puzzles.
3. Block Formation: Validated transactions are bundled into blocks and added to the blockchain. Each block contains a reference to the previous block, forming a chain of blocks.
4. Consensus Mechanisms: Cryptocurrencies employ different consensus mechanisms to ensure agreement among network participants. The most common mechanisms are Proof of Work (PoW) and Proof of Stake (PoS), which secure the network and prevent fraudulent activities.
5. Transaction Confirmation: Once a transaction is included in a block, it is considered confirmed. Multiple confirmations (i.e., inclusion in subsequent blocks) reduce the risk of transaction reversals.

Examples of Cryptocurrencies: Bitcoin (BTC) was the first and remains the most well-known cryptocurrency, introduced in 2009. Since then, numerous cryptocurrencies have been developed, each with its unique features and use cases. Examples include Ethereum (ETH), Ripple (XRP), Litecoin (LTC), and many others.

Cryptocurrency is a digital form of currency that operates on decentralized networks, employing cryptography and blockchain technology to secure transactions and create new units. Its key characteristics include decentralization, cryptography, limited supply, pseudonymity, and reliance on digital wallets. Understanding the fundamentals of cryptocurrency is essential for anyone interested in participating in this rapidly evolving field of digital finance.

**Blockchain and Cryptocurrency**
Blockchain is a distributed ledger technology that enables secure, transparent, and tamper-proof transactions. It is the underlying technology that powers cryptocurrencies like Bitcoin and Ethereum (Yuan, & Wang, 2018).
A blockchain is a chain of blocks, each of which contains a record of transactions. The blocks are linked together using cryptography, which makes it very difficult to tamper with the data. This makes blockchain a very secure way to store and transfer data. In the context of cryptocurrency, blockchain is used to record the ownership of digital assets. Each time a cryptocurrency is transferred, the transaction is recorded on the blockchain. This ensures that the ownership of the asset is always clear and that the transactions cannot be tampered with. Blockchain has a number of advantages over traditional methods of storing and transferring data. It is more secure, transparent, and efficient. It can also be used to track the provenance of assets, which is important for ensuring the authenticity of products.

As a result of these advantages, blockchain is being explored for a variety of applications beyond cryptocurrency. These include supply chain management, healthcare, and voting.

Blockchain works as a decentralized and transparent ledger that records all transactions and ownership of digital assets. Here's a simplified explanation of how blockchain works in the crypto space (Gainsbury, & Blaszczynski, 2017).

1. **Transaction Initiation**: A user initiates a transaction by creating a digital signature using their private key, which serves as proof of ownership and authorizes the transfer of digital assets (cryptocurrencies).
2. **Transaction Propagation**: The transaction is broadcasted to the network of nodes (computers) participating in the blockchain. These nodes validate the transaction's authenticity and integrity.
3. **Verification and Consensus**: The nodes verify the transaction by checking if the digital signature is valid and ensuring that the sender has sufficient funds. This verification process depends on the consensus algorithm employed by the blockchain network (e.g., Proof of Work or Proof of Stake).
4. **Block Creation**: Once the transaction is verified, it is bundled with other validated transactions into a block. Each block contains a unique identifier (hash) and a reference to the previous block's hash, creating a chain.
5. **Block Validation**: Miners (in the case of Proof of Work) or validators (in the case of Proof of Stake) compete to solve a complex mathematical puzzle, known as the mining or validation process. The first participant to solve the puzzle adds the block to the blockchain. This process ensures the integrity and security of the blockchain by making it computationally expensive to alter past transactions.
6. **Consensus and Chain Extension**: Once the block is added to the blockchain, other nodes verify the newly added block and agree to extend the chain, further solidifying the transaction's permanence.
7. **Transaction Confirmation**: The transaction is considered confirmed when it is included in a block and multiple subsequent blocks are added on top of it. The more blocks added, the more secure and irreversible the transaction becomes.
8. Updating Balances: After the transaction is confirmed, the sender's and receiver's balances are updated accordingly, reflecting the transfer of digital assets.
9. Network Synchronization: All participating nodes continuously update and synchronize their copies of the blockchain to maintain a consistent and accurate version of the ledger.

By leveraging these principles, blockchain technology ensures the transparency, security, and immutability of cryptocurrency transactions, eliminating the need for intermediaries and providing users with greater control over their digital assets (Ante, 2020).

**Shifting Attitudes Towards Digital Currency**

One of the key factors contributing to the rise of cryptocurrency adoption in Pakistan is the shifting attitudes towards digital currency. Historically, Pakistan has had a cash-centric economy with limited access to traditional banking services, particularly for those in rural areas or with low-income backgrounds. However, with the proliferation of smartphones and increasing internet penetration, there has been a notable shift in the mindset of Pakistanis towards embracing innovative digital solutions, including cryptocurrencies. The younger generation, in particular, has played a significant role in driving this change. Growing up in a digital era, they are more tech-savvy and open to exploring new financial technologies. Cryptocurrencies, with their decentralized nature and potential for financial empowerment, resonate with the aspirations of these young individuals seeking a more inclusive and modern financial system. They are increasingly embracing digital currencies as a means of participating in the global economy and managing their finances in a digital-first world (Powell, & Hope, 2018).

Additionally, the accessibility and convenience offered by cryptocurrencies have contributed to their growing popularity. With just a smartphone and an internet connection, individuals can easily access and transact with digital assets. This ease of use has attracted a broader audience, including individuals who were previously excluded from the traditional financial system due to various barriers such as geographical limitations or lack of identification documents. Moreover, the global recognition and media coverage of cryptocurrencies have played a role in shaping public perception. As news of Bitcoin's meteoric rise and success stories of early adopters gained traction, it sparked curiosity and interest among Pakistanis. They started viewing cryptocurrencies not just as a speculative investment but also as a viable alternative to traditional financial instruments. The increased awareness and understanding of cryptocurrencies have further contributed to the shifting attitudes. Educational initiatives, workshops, seminars, and online resources have emerged to bridge the knowledge gap and provide individuals with the necessary information to make informed decisions about cryptocurrencies. These educational efforts have played a crucial role in dispelling misconceptions and demystifying the complex nature of digital currencies, instilling confidence and trust in their potential (Huber, 2019). Furthermore, the COVID-19 pandemic has accelerated the adoption of digital currencies in Pakistan. As physical cash transactions became a potential vector for the virus, individuals and businesses sought contactless payment solutions. Cryptocurrencies emerged as a secure and efficient alternative, offering fast and secure transactions without the need for physical contact (Pandey, & Pal, 2020). This shift towards digital transactions during the pandemic has not
The rise of cryptocurrency adoption in Pakistan only heightened awareness but also cemented the perception of cryptocurrencies as a viable and resilient form of digital money.

The shifting attitudes towards digital currency in Pakistan reflect a growing acceptance and recognition of the transformative potential of cryptocurrencies. The younger generation's openness to technological advancements, coupled with increased accessibility, educational initiatives, and the impact of the pandemic, have all contributed to the changing landscape. As Pakistanis continue to embrace digital currencies, the path towards a more inclusive and digitally-driven financial future becomes increasingly promising.

Financial Inclusion and Remittances in Pakistan

Financial inclusion, which refers to providing access to formal financial services to individuals who are currently underserved or excluded from the traditional banking system, is a critical issue in Pakistan. The country has a significant unbanked population, especially in rural areas and among low-income individuals. However, cryptocurrencies have the potential to address this challenge and promote financial inclusion in Pakistan (Adil, & Jalil, 2020).

One area where cryptocurrencies have shown great promise is in facilitating remittances. Pakistan receives a substantial amount of remittances from overseas Pakistanis, who send money back home to support their families and contribute to the country's economy. Traditionally, the process of remitting money involved high fees and time-consuming procedures through intermediaries such as banks or money transfer operators. Cryptocurrencies, particularly those with fast transaction speeds and low fees, offer an attractive alternative for remittance transfers. By leveraging blockchain technology, cryptocurrencies enable near-instantaneous cross-border transactions at a fraction of the cost compared to traditional remittance channels. This reduces the financial burden on both the sender and the recipient, ultimately increasing the amount of money that reaches the intended beneficiaries. The use of cryptocurrencies for remittances also addresses the issue of accessibility. Many individuals in remote areas of Pakistan do not have easy access to traditional banking services, making it difficult for them to receive remittances through conventional means. However, with cryptocurrencies, all that is needed is a smartphone and an internet connection, which are increasingly becoming available even in remote areas. This opens up new possibilities for individuals to participate in the global economy and receive funds directly, bypassing the need for a traditional bank account (Khan, & Rashid, 2018). Moreover, cryptocurrencies provide an additional layer of security and transparency to remittance transactions. The blockchain technology underlying cryptocurrencies ensures that transactions are recorded on a public ledger, making them highly traceable and reducing the risks of fraud or manipulation. This transparency instills trust in the remittance process, benefiting both the senders and the recipients. In recent years, several cryptocurrency platforms and startups have emerged in Pakistan, specifically focusing on facilitating remittance transfers using digital assets. These platforms often partner with overseas remittance providers and offer seamless integration with local banking systems, making it easier for individuals in Pakistan to receive remittances in cryptocurrency and convert them into local currency when needed.
Despite the potential benefits, challenges remain in adopting cryptocurrencies for remittances in Pakistan. Regulatory frameworks, while evolving, are still in the early stages, and there is a need for clear guidelines and oversight to ensure consumer protection and prevent money laundering or illicit activities. Additionally, there is a requirement for education and awareness campaigns to inform individuals about the advantages and risks associated with cryptocurrencies. The cryptocurrencies have the potential to significantly improve financial inclusion and streamline remittance transfers in Pakistan. By leveraging the advantages of blockchain technology, cryptocurrencies offer faster, cheaper, and more accessible options for individuals to receive funds from abroad. However, it is crucial for policymakers, financial institutions, and industry stakeholders to collaborate and establish a robust regulatory framework that fosters innovation while ensuring the security and integrity of the remittance ecosystem. With the right measures in place, cryptocurrencies can play a transformative role in promoting financial inclusion and empowering individuals in Pakistan.

**Economic Instability and Inflation Hedge in Pakistan**

Pakistan has experienced economic instability and high inflation rates over the years, leading to a loss of trust in the traditional banking system and fiat currencies. In such an environment, cryptocurrencies have emerged as an alternative store of value and a potential hedge against inflation (Hanif, & Batool, 2006). One of the key reasons why individuals in Pakistan are turning to cryptocurrencies as an inflation hedge is the decentralized nature of digital currencies. Unlike traditional fiat currencies that are subject to government control and monetary policies, cryptocurrencies operate on decentralized networks and are not influenced by a central authority. This means that the value of cryptocurrencies is not directly tied to any specific government or central bank’s actions or economic indicators. Bitcoin, in particular, has gained popularity as a potential inflation hedge in Pakistan. Bitcoin's limited supply, with only 21 million coins to be mined, makes it inherently scarce (Gul, Hashim, & Hayat, 2023). This scarcity, coupled with the increasing global demand, has resulted in Bitcoin being seen as a finite digital asset that can act as a store of value and protect against the eroding effects of inflation. Many Pakistanis view Bitcoin as a long-term investment that can preserve their wealth and safeguard it from the depreciation of the local currency. Additionally, cryptocurrencies offer a degree of portability and accessibility that traditional assets may lack. With cryptocurrencies, individuals can hold their wealth in a digital wallet and easily transfer it across borders without the need for intermediaries or complex procedures. This flexibility is particularly appealing to those who seek to protect their assets in the face of economic uncertainties or potential devaluations of the local currency. Furthermore, cryptocurrencies can serve as a means of diversification in investment portfolios. By allocating a portion of their investments to cryptocurrencies, individuals can potentially reduce their exposure to traditional assets that are vulnerable to economic instability. Cryptocurrencies, with their relatively independent market movements, can provide a counterbalance to traditional investments and help mitigate risks associated with inflation or economic downturns.

It is important to note that investing in cryptocurrencies comes with its own set of risks.
Cryptocurrency markets are known for their volatility, and price fluctuations can be significant. Moreover, the lack of regulatory oversight and the presence of fraudulent schemes pose additional risks to investors. Therefore, individuals considering cryptocurrencies as an inflation hedge in Pakistan should exercise caution, conduct thorough research, and seek professional advice to make informed investment decisions. In response to the growing interest in cryptocurrencies and the need for investor protection, regulatory efforts in Pakistan are underway. The State Bank of Pakistan (SBP) has taken steps to regulate and monitor cryptocurrency transactions, aiming to ensure the security and transparency of digital asset trading. These regulatory initiatives, coupled with ongoing efforts to develop a comprehensive regulatory framework, provide individuals and businesses with greater confidence in exploring the potential of cryptocurrencies as an inflation hedge (Ali, 2022).

The economic instability and inflation have led to a loss of trust in traditional financial systems in Pakistan. Cryptocurrencies, with their decentralized nature and potential to act as an inflation hedge, have gained traction among individuals seeking alternative stores of value. While there are risks associated with investing in cryptocurrencies, the growing interest and regulatory developments indicate a changing financial landscape in Pakistan, where digital assets can potentially play a role in preserving wealth and protecting against inflation.

**Growing Crypto Exchanges and Infrastructure around the World**

The rapid rise of cryptocurrencies has led to the development of a robust ecosystem of crypto exchanges and supporting infrastructure worldwide. These platforms and services play a vital role in facilitating the buying, selling, and trading of cryptocurrencies, as well as providing secure storage solutions for digital assets. The growth of crypto exchanges and infrastructure has been driven by increasing demand from individuals, businesses, and institutional investors seeking to participate in the expanding digital asset market (Saiedi, Broström, & Ruiz, 2021).

One of the key factors contributing to the growth of crypto exchanges is the increasing popularity of cryptocurrencies as an investment and trading instrument. As more individuals recognize the potential for significant returns and diversification benefits offered by digital assets, the demand for reliable and user-friendly platforms to trade and invest in cryptocurrencies has skyrocketed. Crypto exchanges have emerged as the primary gateway for individuals to enter the cryptocurrency market, offering intuitive interfaces, liquidity, and a wide range of trading pairs.

Moreover, the establishment of secure and regulated crypto exchanges has instilled confidence in potential investors and traders. In the early years of cryptocurrency, security concerns were prevalent due to high-profile exchange hacks and lack of regulatory oversight. However, the industry has evolved significantly, with exchanges implementing robust security measures, such as cold storage wallets and two-factor authentication, to protect users' funds. Furthermore, the introduction of regulations and compliance standards in many jurisdictions has enhanced trust in these platforms (Mylrea, 2019).
The growth of crypto exchanges has been accompanied by the development of supporting infrastructure and services. Payment gateways and merchant solutions enable businesses to accept cryptocurrencies as a form of payment, expanding the usability and acceptance of digital assets. Additionally, custodial services have emerged to provide secure storage solutions for institutional investors and high net worth individuals who may not have the technical expertise or desire to manage their private keys. The expansion of crypto exchanges and infrastructure has also been fueled by the increasing institutional adoption of cryptocurrencies. Recognizing the potential for attractive returns and diversification, institutional investors such as hedge funds, asset managers, and pension funds have started allocating a portion of their portfolios to digital assets. This influx of institutional capital has driven the demand for infrastructure that meets the stringent regulatory and compliance requirements of these investors.

Furthermore, the development of decentralized exchanges (DEXs) has gained traction in recent years. DEXs operate on blockchain networks and allow users to trade cryptocurrencies directly without the need for intermediaries or centralized control. Decentralized exchanges offer benefits such as increased privacy, reduced reliance on third parties, and improved resilience against hacking attempts. While still evolving, DEXs have the potential to reshape the landscape of crypto exchanges by providing a more decentralized and transparent trading experience (Krishnamachari, & Grippo, 2021).

As the global demand for cryptocurrencies continues to grow, crypto exchanges and infrastructure are expanding their services to cater to diverse markets and user needs. This includes the availability of multiple fiat on-ramps and off-ramps, which simplify the process of converting cryptocurrencies to traditional fiat currencies and vice versa. Furthermore, user-friendly mobile applications and intuitive interfaces have made it easier for individuals to access and manage their digital assets on the go.

The growth of crypto exchanges and supporting infrastructure have played a crucial role in facilitating the widespread adoption of cryptocurrencies (Van Valkenburgh, 2019). These platforms have provided individuals and institutions with the necessary tools and accessibility to participate in the digital asset market. As the industry continues to mature and regulations evolve, crypto exchanges and infrastructure are likely to further innovate and expand their services, fostering the mainstream adoption of cryptocurrencies as a legitimate asset class.

**Government Support and Regulatory Framework in Pakistan for Cryptocurrencies before 2023.**

The Pakistani government earlier had shown a positive stance towards cryptocurrencies and blockchain technology, recognizing their potential for economic growth, financial inclusion, and technological innovation. To foster a conducive environment for the development of the crypto industry, the government has taken steps to provide support and establish a regulatory framework that balances consumer protection with opportunities for innovation.
One significant milestone in the government's support for cryptocurrencies was the recognition of digital assets as a form of digital currency or digital commodity by the Securities and Exchange Commission of Pakistan (SECP) in 2018 (Waheed, 2022). This recognition acknowledged the legitimacy of cryptocurrencies within the country and laid the foundation for the subsequent regulatory developments. In 2019, the State Bank of Pakistan (SBP), the country's central bank, issued a circular outlining the regulatory framework for cryptocurrency businesses and exchanges. The circular focused on the need for these entities to implement appropriate Know Your Customer (KYC) and Anti-Money Laundering (AML) procedures (Bekiyants, 2022), as well as maintaining transaction records and reporting suspicious activities. This regulatory approach aimed to ensure the security and transparency of cryptocurrency transactions while mitigating the risks associated with illicit activities. Furthermore, the SBP had engaged in ongoing efforts to regulate the cryptocurrency sector. In 2020, the central bank introduced new licensing requirements for digital asset exchanges operating in Pakistan. These requirements include obtaining a license from the SBP and adhering to specific guidelines and compliance standards, such as implementing robust cybersecurity measures and maintaining a certain level of capital adequacy. These measures aim to enhance consumer protection and instill confidence in the industry (AMIN, E-COMMERCE).

The government had also shown support for blockchain technology beyond cryptocurrencies. In 2019, the Ministry of Information Technology and Telecommunication established the National Task Force on Blockchain Technology. The task force's objective is to explore the potential applications of blockchain technology in various sectors, including governance, healthcare, supply chain management, and agriculture. This initiative demonstrates the government's commitment to embracing technological advancements and leveraging blockchain's transformative potential.

In addition to regulatory efforts, the government had actively engaged with industry stakeholders to foster collaboration and dialogue. The Securities and Exchange Commission of Pakistan (SECP) held consultations with cryptocurrency exchanges, investors, and other market participants to gather feedback and ensure a well-informed regulatory framework. This collaborative approach allows the government to consider the perspectives of industry experts and work towards creating regulations that balance innovation and security.

While the regulatory framework in Pakistan is still evolving, the government's support and engagement with the crypto industry provide a positive outlook for the future. The establishment of clear guidelines and regulations is crucial to protect consumers, prevent illicit activities, and build trust in the crypto ecosystem. Additionally, the government's recognition of the potential benefits of blockchain technology in various sectors opens up opportunities for innovation and economic growth (Anwar, Uz Zaman, Ashraf, Ul Hassan, & Abbas, 2022).

It is important to note that as the crypto industry evolves, there may be challenges and adjustments in the regulatory landscape. The government needs to strike a balance between protecting consumers...
and fostering innovation, ensuring that regulations are adaptable to technological advancements and global best practices. Continued collaboration between the government, industry stakeholders, and regulatory bodies will be essential to develop a comprehensive and effective regulatory framework that promotes the responsible growth of the cryptocurrency sector in Pakistan.

The regulations aim to ensure the security and transparency of cryptocurrency transactions while striking a balance between consumer protection and opportunities for innovation. Continued collaboration and dialogue between the government and industry stakeholders will be crucial in shaping a robust and conducive regulatory environment for the cryptocurrency industry in Pakistan.

**Challenges and Risks Associated with Cryptocurrency Adoption in Pakistan**

While there have been positive developments in the regulatory framework for cryptocurrencies in Pakistan (Rana, Zulfiqar, & Masuad, 2023), it is important to acknowledge that the government has displayed some reluctance in fully regularizing or legalizing cryptocurrencies. Dr. Aisha Ghaus Pasha, Pakistan’s Minister of State for Finance and Revenue, has said cryptocurrencies will “never be legalized” in the Pakistan (Daily Dawn news paper 18.05.2023). FATF, a global anti-money laundering (AML) and counter-terrorism financing (CTF) body, removed Pakistan from its grey list in October. The list comprises countries the organization considers to have fallen short of its AML and CTF standards. The Minister reportedly suggested at a session of the country’s Senate Standing Committee on Finance that doing otherwise violates the condition upon which the country was withdrawn from the Financial Action Task Force (FATF). Sohail Jawad, the Director of the State Bank of Pakistan (SBP), emphasized Pasha’s point during the session, noting that crypto transactions carry high risks and will, therefore, be prohibited (Khan, Rafique, Malik, & Malik). In addition, Pasha during the session said that SBP, the country’s central bank, and the Ministry of Information and Technology have started working towards banning the use of cryptocurrency in the country. This reluctance stems from several concerns and challenges that the government perceives in the crypto industry. Understanding these concerns provides insight into the cautious approach taken by the Pakistani government.

One of the primary concerns for the government is the potential misuse of cryptocurrencies for illicit activities, including money laundering and terrorism financing. Due to the pseudonymous nature of cryptocurrency transactions, there is a perceived risk that digital assets could be used to facilitate illegal transactions or evade regulatory scrutiny (Kumar, Tahir, Kumar, Zia, Memon, & Mahmood, 2019). The government's priority is to ensure the security and stability of the financial system, and they view the unregulated nature of cryptocurrencies as a potential threat to these objectives.

Additionally, the volatility and speculative nature of cryptocurrencies pose risks for retail investors. The government is wary of potential scams, frauds, and Ponzi schemes that may exploit unsuspecting individuals, leading to financial losses and damage to the reputation of the financial sector. The lack of investor protection mechanisms and the absence of a robust regulatory framework raise concerns about the potential risks associated with cryptocurrencies.
Furthermore, the government is cognizant of the challenges of enforcing regulations in the crypto space. The decentralized nature of cryptocurrencies and the cross-border nature of transactions present difficulties in monitoring and regulating the industry effectively. The government may perceive a lack of control over cryptocurrencies as a challenge to maintaining financial stability and ensuring compliance with existing laws and regulations.

Another factor contributing to the reluctance to fully embrace cryptocurrencies is the potential impact on monetary policy. The government relies on its ability to manage the money supply and implement monetary policies to stabilize the economy. The decentralized nature of cryptocurrencies and their detachment from traditional monetary systems may pose challenges to the government's ability to influence the economy. This concern may be particularly relevant in a country like Pakistan, which has experienced economic volatility and relies on monetary policy measures to manage inflation and stabilize the currency.

Furthermore, legalizing cryptocurrencies requires careful consideration of tax implications. The government may be concerned about the potential loss of tax revenue if cryptocurrencies are widely adopted as a means of value exchange. Determining the appropriate tax regulations and ensuring compliance in the crypto space can be complex, requiring expertise and resources (Ali, 2022).

While the government has taken steps to regulate certain aspects of the crypto industry, such as licensing requirements for exchanges, the broader question of legalizing or fully embracing cryptocurrencies remains unanswered. The government's cautious approach may be attributed to the need for more robust research, understanding, and international consensus on regulatory best practices.

It is important to note that the government's reluctance does not imply a complete rejection of cryptocurrencies. Rather, it reflects a desire to strike a balance between promoting innovation, protecting investors, and maintaining financial stability. The government may continue to monitor global trends, regulatory developments in other countries, and the evolving nature of the crypto industry before formulating comprehensive regulations that address their concerns (Ibrahim, 2019).

The reluctance of the Pakistani government to fully regularize or legalize cryptocurrencies is driven by concerns surrounding potential illicit activities, investor protection, enforcement challenges, impact on monetary policy, and tax implications. While the government has taken steps towards regulation, a cautious approach is evident as they weigh the risks and benefits associated with the crypto industry. Continued research, international collaboration, and a better understanding of the implications of cryptocurrencies are crucial in shaping the government's stance and the regulatory landscape in Pakistan.

**FIA Actions against Cryptocurrency in Pakistan**

Cryptocurrencies have gained significant popularity and adoption worldwide. However, their decentralized and anonymous nature has raised concerns for governments and regulatory bodies
In the case of Pakistan, the Federal Investigation Agency (FIA) has taken several actions to add address potential risks associated with cryptocurrencies and safeguard the country's financial system. Below mention points provide a detailed overview of the FIA's actions against cryptocurrency in Pakistan (Hasnain, & Subhan, 2022).

1. Prohibition of Cryptocurrency:
   In April 2018, the State Bank of Pakistan (SBP), the country's central bank, issued a circular prohibiting financial institutions from facilitating cryptocurrency transactions. This effectively restricted banks from offering services related to cryptocurrencies, including account opening, fund transfers, and investments.

2. Awareness Campaigns:
   The FIA, in collaboration with the SBP and other regulatory bodies, has initiated awareness campaigns to educate the general public about the risks involved in investing in cryptocurrencies. These campaigns aim to discourage individuals from engaging in illegal activities such as money laundering, terrorist financing, and scams associated with digital currencies.

3. Investigation and Prosecution:
   The FIA has established dedicated units to investigate and prosecute individuals or groups involved in illegal activities related to cryptocurrencies. These units work closely with other law enforcement agencies, including the National Accountability Bureau (NAB) and the Anti-Corruption Establishment (ACE), to identify and apprehend individuals engaged in fraudulent schemes or money laundering through cryptocurrencies.

4. Crackdown on Illegal Exchanges:
   The FIA has been actively monitoring and cracking down on illegal cryptocurrency exchanges operating in Pakistan. These exchanges often function without proper authorization or registration, posing significant risks to investors. By identifying and shutting down these unauthorized platforms, the FIA aims to protect citizens from financial losses and ensure compliance with existing laws and regulations. FIA registered cases against famous personality Mr. Waqar Zaka for transactions of cryptocurrency for being in violations of the state bank of Pakistan circular.

5. Collaboration with International Agencies:
   Recognizing the global nature of cryptocurrencies, the FIA collaborates with international agencies and financial intelligence units to gather intelligence and share information related to cross-border transactions involving digital assets. This cooperation enhances the effectiveness of investigations and helps combat transnational crimes such as money laundering and terrorist financing.

6. Proposal for Cryptocurrency Regulation:
   While the FIA has taken strict measures against cryptocurrency, there have been discussions within the government regarding the introduction of comprehensive regulations. These regulations would
provide a legal framework for cryptocurrency-related activities, allowing for better oversight and consumer protection. However, as of the knowledge cutoff date in September 2021, no specific regulations pertaining to cryptocurrencies have been implemented (Akram, Mir, & Rehman, 2023).

The FIA's actions against cryptocurrencies in Pakistan primarily focus on preventing illegal activities, protecting investors, and ensuring compliance with existing laws. By prohibiting financial institutions from facilitating cryptocurrency transactions, conducting awareness campaigns, investigating illegal activities, cracking down on unauthorized exchanges, and collaborating with international agencies, the FIA aims to mitigate risks associated with digital currencies. As the global landscape evolves, Pakistan may consider introducing comprehensive regulations to better govern cryptocurrency-related activities within the country.

**Court cases on Crypto Currency**

1. **Waqar Zaka V/s Federation of Pakistan through Secretary Ministry of Law and Justice and Parliamentarian Affairs** (2022 CLD 652 KARACHI HIGH COURT)

Waqar Zaka a famous personality of Pakistan had approached the High Court of Sindh Karachi and sought the regularization of a cryptocurrency exchange in Pakistan, State Bank of Pakistan appeared in case and stated that cryptocurrency was not legal tender in Pakistan, that use of cryptocurrency in any form was also a difficult task to regulate, as there is no such regulations existed and that under the law it was not even made clear whether any trade in cryptocurrency which was not legal tender was allowable. FIA had lodged FIRs against persons transacting cryptocurrency business and crypto miners for being in violations of Stata bank of Pakistan circular. High court noted that a number of countries were allowing such trade and since Pakistan was a progressive country and needed to keep up with global banking practices it might want to consider the legality of certain types of crypto currency being transacted in the country in the country provided that a proper regularity framework was put in place. Since use of crypto currency was a relatively new form of banking/business transaction and much thought and consideration was required to be taken as to whether any form of crypto currency was to be permissible, as such, a committee was ordered to be set up to consider whether it was both viable and advisable, whether as a matter of policy, the Govt of Pakistan might consider introducing some kind of crypto currency business in Pakistan.

2. **Waqar Zaka V/s Federation of Pakistan** (2022 MLD 1134 KARACHI HIGH COURT)

In aforesaid case the Honourable High Court of Sindh Karachi hold that Committee was constituted to meet and decide whether it would be prudent to allow any kind of business in crypto currency in Pakistan keeping in view Article 18 of the constitution of Pakistan which is a fundamental right concerning the freedom of trade, the business of profession, the committee has recommended a Complete Ban on all cryptocurrency and unauthorized operations of exchanges dealing in crypto currency. The committee is directed by the High Court to send a copy of the report to the Ministry of Finance and Ministry of Law, who shall consider the same at a joint meeting and shall reach a final decision on whether or not a cryptocurrency in any form is to be allowed in Pakistan and if so, what
the regulatory framework would be of such business. Ministry shall submit their joint recommendations.

**Modern World Framework for Regulation of Cryptocurrency**

The global rise of cryptocurrencies has prompted governments and regulatory bodies worldwide to develop frameworks for the regulation of digital assets. This note explores the modern world framework for the regularization of cryptocurrency, highlighting key aspects and approaches adopted by various countries and international organizations (Demchenko, 2017).

1. **Classification of Cryptocurrencies:** Regulatory frameworks often involve categorizing cryptocurrencies based on their characteristics and functions. This classification helps determine the appropriate level of oversight and regulatory requirements. Cryptocurrencies are commonly distinguished as payment tokens, utility tokens, and security tokens, each subject to specific regulations.

2. **Know Your Customer (KYC) and Anti-Money Laundering (AML):** To combat illicit activities and protect the integrity of the financial system, regulations require cryptocurrency exchanges and service providers to implement robust KYC and AML measures. These include verifying the identity of users, monitoring transactions for suspicious activities, and reporting any potential money laundering or terrorist financing.

3. **Licensing and Registration of Exchanges:** Regulatory frameworks often mandate licensing or registration of cryptocurrency exchanges and platforms. This ensures that these entities meet specific standards, such as cybersecurity protocols, operational transparency, and adherence to consumer protection laws. Licensing also facilitates supervision by regulatory authorities (Hnatovska, Manzhosova, Marushchak, & Oleksi, 2019).

4. **Consumer Protection:** To safeguard the interests of cryptocurrency users, regulatory frameworks emphasize consumer protection measures. These may include requirements for transparent disclosure of risks, clear terms and conditions, mechanisms for dispute resolution, and compensation schemes in the event of exchange hacks or fraud.

5. **Market Integrity and Surveillance:** Regulatory frameworks aim to maintain market integrity and prevent market manipulation. Measures such as surveillance of trading activities, reporting of suspicious transactions, and restrictions on insider trading or market abuse help create fair and transparent cryptocurrency markets.

6. **Taxation:** Cryptocurrency taxation frameworks address the tax treatment of digital assets, including income generated from cryptocurrency transactions, capital gains, and corporate taxation for crypto-related businesses. Countries have adopted various approaches, such as treating cryptocurrencies as property, assets, or currencies, with corresponding tax implications.

7. **International Cooperation:** Given the global nature of cryptocurrencies, international cooperation and harmonization of regulations have become increasingly important. Organizations like the Financial Action Task Force (FATF) work to establish common
standards for AML and counter-terrorism financing, facilitating coordination among countries in combating illicit activities involving cryptocurrencies.

8. Innovation and Sandbox Approaches: To encourage innovation while ensuring regulatory compliance, some jurisdictions have introduced regulatory sandboxes. These sandboxes allow businesses and startups to test new cryptocurrency-related products and services under controlled conditions, fostering innovation while providing regulatory oversight.

9. Education and Awareness: Regulatory frameworks often emphasize the need for public education and awareness campaigns to educate individuals about the risks and benefits of cryptocurrencies. This helps prevent fraud, scams, and uninformed investment decisions while promoting responsible and informed participation in the crypto ecosystem (Sultan, Mohamed, Martin, & Latif, 2023).

10. The modern world framework for the regulation of cryptocurrencies focuses on striking a balance between innovation and investor protection. Through classifications, KYC/AML requirements, licensing, consumer protection measures, market surveillance, taxation guidelines, international cooperation, and education initiatives, countries aim to create a regulatory environment that fosters the growth of cryptocurrencies while addressing risks associated with fraud, money laundering, and market manipulation. As the cryptocurrency landscape continues to evolve, regulatory frameworks will adapt to the changing needs of the industry and the broader financial ecosystem.

Proposals/Recommendations:
As cryptocurrencies continue to gain prominence globally, it becomes crucial for governments to establish a regulatory framework that balances innovation, investor protection, and the prevention of illicit activities. This proposal outlines recommendations for the regularization of cryptocurrency in Pakistan, considering the unique challenges and opportunities faced by the country.

1. Develop Comprehensive Regulatory Framework: The Pakistani government should collaborate with relevant stakeholders, including the State Bank of Pakistan (SBP), the Securities and Exchange Commission of Pakistan (SECP), and other regulatory bodies, to develop a comprehensive regulatory framework specifically designed for cryptocurrencies. This framework should address areas such as classification, licensing, registration, consumer protection, AML/KYC, taxation, and market surveillance.

2. Classify Cryptocurrencies: Implement a clear classification system for cryptocurrencies based on their characteristics and functions, distinguishing payment tokens, utility tokens, and security tokens. This categorization will enable appropriate regulation and oversight, ensuring compliance with specific requirements relevant to each category.

3. Establish Licensing and Registration Requirements: Introduce a licensing or registration process for cryptocurrency exchanges and platforms operating in Pakistan. This will ensure compliance with standards related to cybersecurity, operational transparency, consumer protection, and adherence to AML/KYC regulations. Licensing should be accompanied by ongoing supervision by the relevant regulatory authorities.
4. Implement Know Your Customer (KYC) and Anti-Money Laundering (AML) Measures: Mandate robust KYC and AML procedures for cryptocurrency exchanges and service providers. This includes verifying the identity of users, monitoring transactions for suspicious activities, and reporting any potential money laundering or terrorist financing. Collaborate with financial intelligence units and international organizations to enhance the effectiveness of AML efforts.

5. Ensure Consumer Protection: Establish regulations to protect cryptocurrency users in Pakistan. Require transparent disclosure of risks, clear terms and conditions for cryptocurrency transactions, and mechanisms for dispute resolution. Implement measures to safeguard investors against fraud, scams, and exchange hacks, including the establishment of a compensation scheme for affected users.

6. Taxation Guidelines: Develop clear and transparent guidelines for the taxation of cryptocurrencies, including income generated from cryptocurrency transactions, capital gains, and corporate taxation for crypto-related businesses. Ensure that the taxation framework aligns with international best practices and provides clarity to individuals and businesses involved in cryptocurrency activities.

7. Encourage Innovation and Regulatory Sandbox: Create an innovation-friendly environment by introducing a regulatory sandbox for cryptocurrency-related startups and businesses. The sandbox allows for controlled experimentation and testing of new products and services while ensuring compliance with regulatory requirements. This approach fosters innovation, attracts investments, and enables the identification of effective regulatory practices.

8. Promote Education and Awareness: Launch educational campaigns to enhance public understanding of cryptocurrencies, their associated risks, and the benefits of responsible participation in the crypto ecosystem. Educate individuals about the basics of cryptocurrencies, investment strategies, and the importance of conducting thorough research before engaging in cryptocurrency-related activities. Foster collaboration with educational institutions and industry experts to develop educational programs.

9. Foster International Cooperation: Engage in international cooperation and exchange of best practices with other countries and relevant international organizations such as the Financial Action Task Force (FATF). Collaborate on AML efforts, regulatory standards, and the prevention of cross-border illicit activities involving cryptocurrencies. This cooperation will enhance the effectiveness of regulatory efforts and strengthen Pakistan's position in the global cryptocurrency landscape.

10. Conclusion: Regularizing cryptocurrencies in Pakistan requires a comprehensive regulatory framework that addresses classification, licensing, AML/KYC measures, consumer protection, taxation guidelines, innovation promotion, education, and international cooperation. By implementing these proposals and recommendations, Pakistan can foster responsible cryptocurrency use, attract investment, protect investors, and position itself as a progressive player in the global digital economy.
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