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GOVERNMENTAL INFLUENCE ON CRYPTO ASSETS IN FINANCE: A CASE STUDY OF GERMAN REGULATORY INITIATIVES

Abstract

We review the case study of Germany with its regulatory initiatives regarding the possible governmental influence on crypto assets in finance. In doing so, we conclude that regulation shows adequate tendencies to foster innovation and adaption of digital assets such as crypto securities or currencies. This can mainly be referred to as creating a legal framework in favor of consumer protection, thereby reducing operational and reputational risks for financial companies which seek to engage in the digital assets business.

KEYWORDS

regulation, crypto assets, digital assets, finance, innovation

SŁOWA KLUCZOWE

regulacja, kryptowaluty, aktywa cyfrowe, finanse, innowacje

1. INTRODUCTION

Crypto assets, also referred to as cryptocurrencies or digital securities, are a type of digital asset that use cryptography to secure and verify transactions and to control the creation of new units. They are based on the distributed ledger technology, thereby using blockchains with decentralized characteristics. Decentralization implies that there is no control by any central authority through operations on a peer-to-peer network. Crypto assets are typically created through a process called mining, in which powerful computers perform complex calculations to validate transactions on the network and generate new units of the currency. Some popular examples of crypto assets include Bitcoin (BTC), Ethereum (ETH), Litecoin (LTC), and Ripple (XRP).¹

Crypto assets are often used as a means of exchange, like traditional currencies, but they can also be used for other purposes such as investments, store of value, and speculative trading. Their value is determined by supply and demand and can be highly volatile due to various factors such as market sentiment, regulatory changes, and technological advancements. Due to its novelty and the complex technology, the financial services industry is currently researching opportunities for new products and services. The future of crypto assets is still uncertain due to the literature base or expert opinions, but there are several factors that suggest that they may have a significant role to play in the financial system in the coming years.²

Firstly, crypto assets offer several advantages over traditional forms of assets, such as their decentralized nature, fast transaction times, low fees, and potential for greater privacy and security. These benefits have already attracted a large and growing user base, including individual investors, merchants, and institutional players. Secondly, the underlying blockchain technology that powers many digital assets has potential applications beyond just financial transactions, such as

¹ R. Houben, A. Snyers, *Crypto-assets. Key developments, regulatory concerns and responses*, Policy Department for Economic, Scientific and Quality of Life Policies Directorate-General for Internal Policies. PE 648.779, 2020, p. 13; H. Stix, *Ownership and purchase intention of crypto-assets: Survey results*, *Empirica*, 48 (1), 2021, pp. 65-99; D. F. Ahelegbey, P. Giudici, F. Mojta-hedi, *Tail risk measurement in Crypto-Asset Markets*, *International Review of Financial Analysis*, 2021, p. 73.

² M. T. Chimienti, U. Kochanska, A. Pinna, *Understanding the crypto-asset phenomenon, its risks and measurement issues*, *Economic Bulletin Articles*, 2019, p. 5.

in supply chain management, voting systems, and decentralized social networks. This has led to a growing interest and investment in blockchain technology by both public and private sector entities.³

However, there are also manifold challenges and risks that may affect the future of crypto assets, such as regulatory uncertainty, the potential for market manipulation, and the risk of fraud and theft. Additionally, the volatility of crypto assets and their susceptibility to speculative bubbles have raised concerns about their long-term stability and utility as a store of value. As of now, the possible chances of crypto assets depend on a range of factors and uncertainties, and their future success will depend on how effectively regulatory measures can address existing challenges.⁴

Regulation in crypto refers to the set of rules and guidelines that govern the use, trade, and issuance of cryptocurrencies and other crypto assets. As crypto assets continue to gain mainstream adoption, governments and regulatory bodies around the world are increasingly taking an interest in regulating the crypto industry to protect consumers, prevent illegal activities such as money laundering and fraud, as well as ensure market stability.⁵

Regulations can take many forms, including licensing requirements for crypto businesses, anti-money laundering and counter-terrorism financing (AML/CTF) measures, consumer protection rules, and taxation policies. Some countries have taken a more permissive approach to crypto regulation, while others have imposed strict rules and even banned certain activities related to crypto assets. General regulation in crypto is a complex and evolving area and can vary greatly from country to country. As the industry continues to grow and mature, it is likely that we will see more comprehensive and consistent regulations emerge to address the unique challenges posed by crypto assets.⁶

In this article, we review the regulatory impact on crypto for the German market, thereby stating the several significant national regulations and elaborating

³ J. G. Dumas, S. Jimenez-Garcès, F. Şoiman, *Blockchain technology and crypto-assets market analysis: vulnerabilities and risk assessment*, 12th International Conference on Complexity, Informatics and Cybernetics, Vol. 1, 2021, pp. 30-37.

⁴ J. G. Dumas, S. Jimenez-Garcès, F. Şoiman, *Blockchain technology and crypto-assets market analysis: vulnerabilities and risk assessment*, 12th International Conference on Complexity, Informatics and Cybernetics, Vol. 1, 2021, pp. 30-37; D. A. Zetzsche, F. Annunziata, D. W. Arner, R. P. Buckley, *The Markets in Crypto-Assets regulation (MiCA) and the EU digital finance strategy*, Capital Markets Law Journal, 16(2), 2021, pp. 203-225; A. Ferreira, P. Sandner, *Eu search for regulatory answers to crypto assets and their place in the financial markets' infrastructure*, Computer Law & Security Review, Vol. 43, 2021, No. 105632.

⁵ A. Ferreira, P. Sandner, *Eu search for regulatory answers to crypto assets and their place in the financial markets' infrastructure*, Computer Law & Security Review, Vol. 43, 2021, No.105632.

⁶ A. Ferreira, P. Sandner, *Eu search for regulatory answers to crypto assets and their place in the financial markets' infrastructure*, Computer Law & Security Review, Vol. 43, 2021, No. 105632; S. S. Huang, *Crypto assets regulation in the UK: an assessment of the regulatory effectiveness and consistency*, Journal of Financial Regulation and Compliance, 29(3), 2021, pp. 336-351.

specifically on the German Securities Act. Finally, a conclusion on the governmental influence as well as an outlook on the crypto adoption will be provided for the German market.

2. LITERATURE REVIEW ON CRYPTO REGULATION

A literature review is a critical and systematic analysis of the existing literature (books, articles, dissertations, conference proceedings, etc.) on a specific research topic or question. It involves identifying, evaluating, and synthesizing the relevant literature to provide a comprehensive understanding of the topic and to identify gaps, inconsistencies, and areas for further research. The identified sources are then screened and evaluated based on their relevance, quality, and validity. Once the relevant literature has been identified, the next step is to critically analyze and synthesize the information. This involves identifying common themes, patterns, and trends across the literature and assessing the strengths as well as weaknesses of the studies and arguments presented. The final product of a literature review is a comprehensive and well-organized summary of the existing knowledge on the research topic, which can serve as a foundation for further research and as a valuable resource for researchers and practitioners in the field.

In doing so, it can be stated that crypto regulation is still a novelty in the current literature debate. This becomes evident when searching on well-known platforms with keywords such as ‘crypto regulation’ or ‘regulating digital assets’. Most publications focus on international markets other than Germany (e.g., the United States) and will be briefly presented as a summary below.

Bonaparte and Bernile (2023) analyze the prospect of cryptocurrency regulation and how it affects cryptocurrency prices, volatility, and trading, thereby using the Google Trend technique in order to create the Crypto Regulation Sentiment Index (CRSX). The CRSX shall reflect the investors’ attitude towards crypto regulation. Their analysis encompasses over 75% of the crypto market’s daily activity and they conclude that the CRSX has no statistically significant long-term impact on cryptocurrency prices. Moreover, according to the authors, the effects of CRSX on crypto markets largely depend on the coin’s key blockchain characteristics.⁷

Griffith and Clancey-Shang (2023) examine the effects of the 2021 Chinese cryptocurrency ban on several aspects of crypto market quality, namely prices, volatility, and liquidity. The study is of high relevance to assessing the potential impact of governmental influence on crypto adoption, in this case, on cryp-

⁷ Y. Bonaparte, G. Bernile, *A new ‘Wall Street Darling?’ effects of regulation sentiment in cryptocurrency markets*, Finance Research Letters, Vol. 52, 2023, No. 103376.

tocurrencies. The authors find that average crypto prices plunge and liquidity deteriorates, while volatility spikes in response to the announcement of the ban. Moreover, the volatility surge is short-lived, while the fall in crypto values and liquidity persist. According to the authors' research findings, the results are robust across dollar trading volume sorts and remain significant after considering the interconnectedness between the market quality measures in the vector autoregressive framework.⁸

Copestake et al. (2022) constructed daily databases of crypto bans as well as policy statements with regard to the central bank digital currencies (CBDCs) to estimate their effect on crypto trading volumes for an unbalanced panel of 116 countries from November 2016 to December 2021. CBDCs can be regarded as part of digital assets due to the use of DLT. However, based on centralistic aspects of the design of CBDCs, it is currently experiencing a constructive debate on its possible success. The authors find that trading volume falls by up to 55% in the week after the announcement of a ban and by up to 25% after a CBDC-supportive speech by senior central bank officials. For the strictest bans, this reduction persists over the subsequent quarter, driven by a reduction in trading by institutional investors. The results suggest that crypto market participants pay significant attention to government policy on digital assets. The research compares several jurisdictions to draw conclusions. In Germany or Europe, the European Central Bank (ECB) is currently investigating a possible introduction of its digital euro as its very own form of a retail or wholesale CBDC. However, there is no final decision yet which academics could utilize in their current research works.⁹

In contrast to the previous research works, *Ungson and Soorapanth* (2022) examine blockchain technology in ASEAN (Association of Southeast Asian Nations). They discuss the preconditions for blockchain adoption, thereby enabling factors relating to regulatory policies and illustrative cases depicting new blockchain solutions or improvements over current practices. Based on these narratives, the authors present a six-step roadmap, which delineates the need for regulatory clarity, the balance between public versus private policies, and pathways for securing competitive strategies and organizational advantages. Their research underlines the necessity and relevance of regulation for the Asian crypto market.¹⁰

One research focusing on the German regulation is conducted by *Winnowicz et al.* (2022). The research aim of their work was to review current regulatory guidelines for cryptocurrencies in the European area. In doing so, measures were highlighted that identify the illegal use of the new currency. One of the

⁸ T. Griffith, D. Clancey-Shang, *Cryptocurrency regulation and market quality*, Journal of International Financial Markets, Institutions and Money, Vol. 84, 2023, No. 101744.

⁹ A. Copestake, D. Furceri, P. Gonzalez-Dominguez, *Crypto market responses to digital asset policies*, Economics Letters, Vol. 222, 2023, No. 110949.

¹⁰ G. R. Ungson, S. Soorapanth, *The ASEAN blockchain roadmap*, Asia and the Global Economy, Vol. 2(3), 2022, No. 100047.