



Abstract

- The research investigates the effectiveness of current financial and **anti-money laundering (AML) laws** in addressing the misuse of cryptocurrencies.
- It provides key insights into the ongoing need for adaptive and robust regulatory strategies to combat financial crimes in the digital currency landscape.
- The research includes real life scenarios—companies that have been negatively impacted by these **AML laws**—to further convey the ineffectiveness of the AML laws.

Introduction

The fast-track expansion of cryptocurrency use has changed global financial systems as a whole and has introduced new obstacles for regulators seeking to limit criminal misuse of these digital assets. As decentralized currencies like Bitcoin grow in popularity, policy makers as well as enforcement agencies have expressed their concerns about their role in facilitating money laundering, fraud, sanctions evasion, and other illicit financial activities. These concerns guide the primary research question of this study: To what extent are existing financial and anti-money laundering (AML) laws effective in addressing the misuse of cryptocurrencies? Understanding the impact of these regulations is key for governments to match the speed of technological innovation while maintaining appropriate oversight.

Methods

The overall study design is a qualitative research design. I went to the FSU Library website and searched up my research question: To what extent are existing financial and anti-money laundering (AML) laws effective in addressing the misuse of cryptocurrencies? I had about 60 peer reviewed articles pop up as a result. I only used 11 sources out of those 60 articles to write my research paper and 5 sources for this poster. My evaluation criteria for the sources were to be published within 5-year recency, and to be topic specific to my research. I looked at comparative legal analysis, and targeted case examination to evaluate the effectiveness of existing financial and anti-money laundering (AML) laws in reducing crypto-currency misuse.

Participants



Institutional reports



Bodies of literature,
regulatory documents

Discussion

Current research suggests that AML laws are effective to an extent, however they are not effective enough in limiting and detecting crypto-laundering. Studies demonstrate that AML laws have improved transparency and the enhancement of detection tools in cryptocurrency markets, specifically through machine-learning systems, as well as regulatory reporting requirements. On the other hand, research finds that decentralized structures and adaptive criminal strategies allow for hackers to bypass monitoring systems in place, suggesting that current AML frameworks are not sufficient to fully limit and detect crypto-laundering crimes.

Conclusions

- The AML laws currently in place are not effective enough. They need to advance in technology at a higher rate.
- Global cooperation, adaptive legislation, and enhanced data transparency will be needed to resolve the issue of crypto-laundering.
- Through stricter implementations of Know Your Customer Regulations, regulators can actively reduce crypto-laundering.

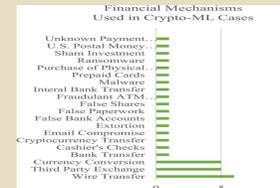
Results

Figure 1:



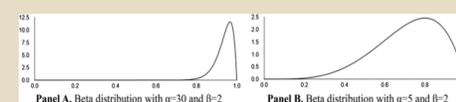
This chart analyzes platforms used for cryptocurrency. 9 out of 12 cases used Bitcoin because blockchains preserve anonymity of users. This implies that there are other options for crypto-laundering crimes.

Figure 2:



This chart shows the financial mechanisms used in crypto-money laundering cases.

Figure 3:



This model uses mathematical properties to illustrate different detection ability levels, with higher ability indicated by a larger alpha value when beta is fixed. The expected value of Pi shifts towards one as the detection ability increases, influencing beta distribution curve's weight.

References

- Kim, D., Bilgin, M. H., & Ryu, D. (2021). Are suspicious activity reporting requirements for cryptocurrency exchanges effective? *Financial Innovation*, 7(1). <http://dx.doi.org/10.1186/s40854-021-00294-6>
- Leuprecht, C., Jenkins, C., & Hamilton, R. (2023). Virtual money laundering: policy implications of the proliferation in the illicit use of cryptocurrency. *Journal of Financial Crime*, 30(4), 1036-1054. <https://doi.org/10.1108/JFC-07-2022-0161>

PLACEMENT
of illicit funds into
financial system

INTEGRATION
the now-laundered
funds are returned to
the criminal for
personal use

LAYERING
transferring funds
through the financial
system to conceal their
origins