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## **EFFECT OF BITCOIN PRICES ON CAPITAL FLOWS IN NIGERIA**

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### **Abstract**

*The study examined the effect of bitcoin prices on capital flows in Nigeria. It employed descriptive statistics, co-integration analysis, and the ARDL bounds test to show short-run and long-run relationships among the variables. Multiple regression analysis was conducted using secondary data from the Central Bank of Nigeria bulletin. Bitcoin prices, exchange rate, gross domestic product, inflation rate, interest rate, stock index and trade balance were seen to have exerted both negative and positive effects on capital flows. The study highlighted the needs for policymakers to develop and implement targeted risk management to address the unique challenges posed by bitcoin and other crypto currencies and promote a stable and efficient financial system. Monetary authorities, in particular, are enjoined to develop strategies that will impact positively on the overall growth of the economy through the effective application of cryptocurrency policies*

**Keywords:** *Cryptocurrency, Bitcoin, capital flows, Gross Domestic Product, Nigeria*

**JEL:** G15

## 1. INTRODUCTION

Cryptocurrencies are commonly perceived as disruptive technology that raises both hopes and fears in the minds of different categories of stakeholders. With the aid of cryptocurrency, payments for goods and services can be made directly from one party to another without the involvement of financial and government institutions. Technically, cryptocurrencies are not money, but derive their value from real-world currencies, which puts them in a very precarious situation (Partanen, 2018).

Bitcoin was launched in 2008 by Satoshi Nakamoto, and has become the most popular cryptocurrency mined by computers; other cryptocurrencies include Ethereum, Ripple, Litecoin, Binance, Zcash, and Monero. Bitcoin reached its highest market capitalisation of \$1.28 trillion with a price of \$67,617.02 per bitcoin (<https://coinmarketcap.com>, 2008), which makes it the most widely known cryptocurrency. Kristoufek (2015) has shown that Bitcoin price cannot be explained by economic theories but rather by speculation; in a similar vein (Yermarck, 2015) concluded that Bitcoin resembles more of a speculative investment than a true currency.

With these, bitcoin is being used to reap gains on investment, move funds from one country to another by multinational Enterprises (MNEs), as well as an electronic payment system that reduces the cost associated with the use of physical cash. With the Nigerian economy characterised by a large informal sector, limited access to traditional financial services, and a weak national currency, great potential exists for the use of cryptocurrency. Every legitimate Bitcoin transaction is done and verified by a computer network with no central authority, thereby making it a decentralised and self-verifying means of exchange.

Ever since the introduction of Bitcoin, various conceptualisations and definitions have evolved over the years, mainly stemming into two splits: the electronic money and the virtual currency. Juels and Rahman (2017) views crypto currency as a kind of electronic money mainly because it fulfils all the signs and criteria of electronic money. Manimuthu et al (2019) define bitcoin as a cryptocurrency-based open-source technology that operates in the peer-to-peer grid as a private payment mechanism; they stressed that bitcoin works on sophisticated cryptography supported by a local community in a peer-to-peer network. For them, bitcoin seems to have faced many hurdles with many applications in day-to-day life, and also created unique challenges for the end-user community. In a related fashion, Lambert (2015) defines bitcoin as a novel and widely accepted virtual currency that is being used by businesses as a method of payment with the aim of minimising cost.

Bitcoin has also been viewed as a virtual cryptocurrency based on a peer-to-peer network, digital signatures and zero-knowledge proof that allow the users to do irreversible money transfer without any intermediary (Pakrou and Amir, 2016). Supporting this view, Meiklejohn et al. (2016) define bitcoin as a purely online

virtual currency that is not backed by either physical commodities or sovereign obligation, but relies on a combination of cryptographic protection and a peer-to-peer protocol for witnessing settlements.

## 2. CONCEPTUAL CLARIFICATIONS

The following concepts represent the major concern of this study:

### **Crypto currency**

Cryptocurrency, often referred to as digital money, is a contemporary digital medium of exchange that relies on cryptography, a vital tool for securing data in computer systems. Mandeng (2018) also describes cryptocurrency as private, digital, de-nationalised, unreserved, floating-rate, convertible monies.

### **Ethereum**

Ethereum was introduced in Buterin (2021) and addressed several limitations in the scripting language of Bitcoin. Ethereum is a peer-to-peer network that maintains a database containing the storage values of all Ethereum account transactions. A batch of new transactions, known as a "block" is processed by the network in nearly every twelve seconds. It is created to tackle the issue of stale blocks in the network. However, Bitcoin and Ethereum today seem to be the most widely known and most valuable forms of cryptocurrencies.

### **Capital Flows**

Capital flows refer to the transfer of ownership of financial assets from one country to another (Global Economic Prospects 2014). Extending this definition, Nkoro and Furo (2012) sees capital flows as the movement of financial resources from one country to another. Such flows of capital can either be into or out of a country. For Global Economic Prospects (2014), capital inflows are changes in the foreign liabilities on a country's financial account balance, as a result of non-residents' purchase of assets in the country. Obadan (2004) also views capital inflow as cross-border capital that is usually transmitted into the domestic economy in the form of Foreign Direct Investment (FDI), Foreign Portfolio Investment (FPI), draw-down on foreign reserves, foreign loans and credits, foreign aids and foreign migrant remittance. Capital outflows imply changes in the foreign assets of a country's financial account balance, as a result of domestic investors' purchase of assets abroad (Global Economic Prospects 2014).

## 3. THEORIES OF BITCOIN

The relevant theories of Bitcoin include the Mean-Variance Portfolio model, the Capital Asset Pricing Model, and the Arbitrage pricing

### **Mean-Variance Portfolio Model**

The mean-variance model was developed by Markowitz (1959). The central message of the model revolves around the selection of a portfolio of investments

being strictly determined by the magnitude of variance of the portfolio. With the assumption that all investors are efficient, risk averters, and utility maximisers, the model predicts that investors should opt for a portfolio that will minimise the deviation from expected return.

Given the above features, investors are predicted to select the points that are located on the efficient minimum variance frontier. The selected portfolio would therefore be in relation to the investor's risk-return utility function. From this model, and in relation to cryptocurrency, Bitcoin would be seen as an investment in a portfolio if the expected return exhibits the minimum variance compared to all other identical portfolios.

### **Capital Asset Pricing Model (CAPM)**

The Capital Asset Pricing Model (CAPM) was also formulated from the composition of Markowitz's (1959) mean-variance model; it expanded substantially from the works of Sharpe (1964), Lintner (1965), and Mossin (1966), all geared towards explaining the optimal relationship between risk and returns of financial assets. The main paradigm of the model is that there exists a linear and positive relationship between systematic risks and expected returns of financial assets, while unsystematic risk can be tackled through the diversification of a portfolio.

### **Arbitrage Pricing Theory**

The Arbitrage Pricing Theory arose from the defects of the CAPM and was developed by Ross (1976). The model seeks to extend importance to other macroeconomic variables that affect the return of financial assets, in contrast to only systematic risks introduced by the CAPM. These variables include the price level, rate of interest, oil prices, exchange rate, and tax rate.

### **Product Life-Cycle Theory: Link between Bitcoin Prices and Capital Flows**

The Product Life Cycle approach to capital flows of Vernon (1966) suggests that the behaviour of multinational enterprises (MNEs) towards capital flows is determined by the fear of losing market capitalization as product matures. The Theory assumes a three-country world of Western Europe, the United States, and the less developed countries.

The products made available by the MNEs are also assumed to follow a three-stage life cycle; the first stage describes the innovation phase in which the product is being sold to local consumers in the United States, the producing nation, and directed mainly towards satisfying local demand; the second stage involves the MNEs exporting to Western European countries, while the third stage allow the competitors to start rising to the challenges of the particular product.

#### 4. REVIEW OF EMPIRICAL LITERATURE

Chemkha et al (2020) evaluated the connection between cryptocurrencies and the foreign exchange market using C-vine and D-vine copula models; the research shows that there is low significant dependency between cryptocurrencies and the exchange rate. Zheng et al (2019) examined the efficiency of the bitcoin exchange rate using the Johansen cointegration tests; the result shows that bitcoin exchange rates or the FX spot, futures and forward rates all behaved as a random walk process. Sebastiao and Godinho (2020) and Palazzi et al (2020) also examined how the exchange rate affects the prices and returns of bitcoin; they reported in their findings that the exchange rate substantially affects the prices and returns of bitcoin.

Overall, the determinants of capital flows are seen to be in two groups: internal and external. Internal factors, also known as the pull factors, refer to those that affect the capital flows from within the country, including exchange rate, financial development, price level, country's capacity, geographic proximity, interest rate, and corruption. The external factors, also called the push factors, are those that are beyond the control of the domestic country.

The studies of Hooper and Kim (2006) De Vita (2008), Kinda (2010), Ohno (2011), Mody and Murshid (2011), Byrne and Fiess (2011), Brafu-Insaidoo and Biekpe (2014), Ogbechie and Anetor (2016), Baek and Song (2019), and Mercado (2020), prominently reported internal factors to be the determinants of capital flows. Likewise, those of Jevcak, et al (2010) Koepke (2015), Raul and Isela-Elizabeth (2017), Cerutti, et al (2017), Belke and Volz (2018), Davis, Valente, and Wincoop (2019), Sui (2019), and Norimasa, Ueda, and Watanabe (2021) discovered that external factors were the major drivers of capital flows.

However, the empirical works of Mercado and Park (2011), Yang, Xiong, and Ze (2013), Hannan (2017), Hannan (2018), Kang and Kim (2019), Koepke (2019), and Oke et al (2020), discovered both internal and external factors as the major drivers of capital flows in a country.

From the above, existing studies have not provided sufficient empirical evidence to fully support or completely refute the existence of a causal relationship between Bitcoin prices and capital flows in Nigeria. The few studies that have investigated this relationship have also yielded mixed results; hence, there is yet no clear consensus on the direction and significance of the relationship.

#### 5. MODEL SPECIFICATION

The model established for this study predicts that the capital flow of a multinational enterprise in a developed country towards developing countries depends on the possibility of boosting competitiveness through the use of cheap factors of production. This, therefore, introduces the baseline model as:

$$CAP_L = f(PR_S) \quad (1)$$

,where,  $CAP_L$  represents capital flow of the firm, and it is the dependent variable for the study, and  $PR_S$  is the reduced production cost available in Nigeria. Since the price of bitcoin is a direct reflection of the cost of production, equation (1) is modified as equation (2)

$$CAP_L = f(BTC_R) \quad (2)$$

where  $BTC_R$  represents the prices of Bitcoin, and  $CAP_L$  represent capital flow from the rest of the world.

And by incorporating the control variables of Gross Domestic Product (GDP), exchange rate movements, interest rate, trade balance, inflation rate and stock index, equation (2) is transformed into equation (3) in its implicit form as:

$$CAP_{FL} = f(BTC_R, GDP_N, EXC_R, INT_R, TRD_L, INF_R, STK_D) \quad (3)$$

Where:

CAP = Capital Flow  
Domestic Product

BTC = Bitcoin Price

GDP = Gross

EXC = Exchange Rate

INT = Interest Rate

TRD = Trade Balance

INF = Inflation Rate

STK = Stock Market Capitalisation

Expressed in stochastic form, equation (3) becomes the empirical model of the study and is expressed as;

$$CAP_L = \alpha_0 + \beta_0 BTC_R + \beta_1 GDP_N + \beta_2 EXC_R + \beta_3 INT_R + \beta_4 TRD_L + \beta_5 INF_R + \beta_6 STK_D + \varepsilon_t \quad (4)$$

where  $\alpha_0$  gives the autonomous level of capital flows, while the propensities  $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ , represent the parameters of the identified explanatory variables and  $\varepsilon_t$  is the error term.

The main hypothesis of the study is that bitcoin prices have a strong positive and significant effect on capital flows in Nigeria.

## 6. ESTIMATION TECHNIQUES

The following techniques of estimation were employed in the assessment of the relationship between bitcoin prices and capital flows in Nigeria.

### Pairwise Causality

To capture the causal relationship between capital flows and Bitcoin, the study adopted a pairwise causality relationship, specified as:

$$\Delta CAP_t = \alpha_0 BTC_{t-1} + \alpha_1 GDP_{t-1} + \alpha_2 EXC_{t-1} + \alpha_3 TRD_{t-1} + \alpha_4 STK_{t-1} + \varepsilon_t \tag{5}$$

$$\begin{aligned} \Delta BTC_t &= \beta_1 CAP_{t-1} + \beta_1 GDP_{t-1} + \beta_2 EXC_{t-1} + \beta_3 TRD_{t-1} + \beta_4 STK_{t-1} + \varepsilon_t \end{aligned} \tag{6}$$

with all variables as defined.

**Autoregressive Distributed Lag (ARDL)**

This study used ARDL to capture the effect of Bitcoin prices on capital flows; the model was adopted due to the search for both short and long-run asymmetric relationships between Bitcoin prices and capital flow into the country. The model is efficient in jointly modelling the cointegration dynamics and asymmetries of the relationship of concern and is expressed as:

$$\begin{aligned} CAP_{FL} = \alpha_0 y_{t-1} + \sum_{j=1}^n \alpha_j BTC_{Rt-j} + \beta_1 GDP_{Nt-1} + \beta_2 EXC_{Rt-1} \\ + \beta_3 INT_{Rt-1} + \beta_4 TRD_{Lt-1} + \beta_5 INF_{Rt-1} + \beta_6 STK_{Dt-1} + \varepsilon_t \end{aligned} \tag{7}$$

**7. RESULTS AND DISCUSSION**

This study covered the period between 2011 and 2020. Quarterly data are used in the analysis.

**Descriptive Analysis**

A summary of the descriptive statistics of the variables is presented in Table 1, while the Unit Root Stationary test is shown in Table 2.

**Table 1.** Descriptive Statistics

	CAPL	BTC	EXR	GDP	INF	IR	STOCK_IN D	TB
Mean	0,33	3277,25	236,27	16611,52	11,76	1632	30581,51	5542,60
Median	-1,00	585,42	197,00	16444,46	11,30	16,60	29775,00	5447,25
Maximum	16,03	20814,93	381,00	19550,15	18,50	17,80	43059,00	7639,17
Minimum	-7,89	0,73	152,32	13450,72	7,80	11,40	20550,60	4340,94
Std. Dev,	5,45	4679,03	78,96	1562,01	2,97	1,29	6236,50	621,98
Skewness	0,66	1,68	0,27	-0,04	0,62	-2,46	0,29	0,85
Kurtosis	2,89	5,97	1,47	2,37	2,56	9,63	2,01	5,31
Jarque-Bera	2,92	33,60	4,41	0,68	2,90	113,6	2,17	13,76
Probability	0,23	0,00	0,11	0,71	0,23	0,00	0,34	0,00

Sum	13,03	131090,10	9450,94	664460,70	470,28	652,60	1223260,00	221704,10
Sum Sq, Dev	1159,22	8,54E+08	243169,30	95154758	342,97	65,23	1,52E+09	15087317
Observations	40	40	40	40	40	40	40	40

Source: Authors Computations

**Table 2.** Unit Root Test

	Augmented Dickey Fuller (ADF) Test				Remarks	Philip Perron (PP)Test			
	At Level		At First Difference			At Level		At First Difference	
	ADF statistics	Critical 5%	ADF statistics	Critical 5%		statistics	Critical 5%	Statistics	Critical 5%
BTCP	-6,99	-2,94	9,36	2,94	I(0)	6,74	2,94	9,36	2,94
EXR	-4,36	-2,94	6,30	2,95	I(1)	4,18	2,94	16,60	2,94
GDP	-1,60	-2,95	50,66	2,95	I(0)	8,97	2,94	12,80	2,94
IR	0,21	-2,95	7,17	2,95	I(0)	5,93	2,94	15,36	2,94
CAPL	5,48	-2,94	7,61	2,94	I(0)	5,47	2,94	10,76	2,94
TB	-7,80	-2,94	9,978	2,95	I(0)	12,40	2,94	30,88	2,94
INF	-3,62	-2,94	5,60	2,95	I(0)	3,62	2,94	9,68	2,94
STOCK	-3,33	-2,94	7,47	2,94	I(1)	3,34	2,94	7,73	2,94

Source: Authors Computations

Having estimated the stationary status of all the series in the models, the unit root results revealed that the series - BTCP, EXR, GDP, IR, CAPL, TB, INF and STOCK\_IND were stationary, although at different orders of integration: two of the series were stationary at levels, while the rest became stationary at first difference.

### Lag Length Selection Criteria

An appropriate lag length for the model was determined using the VAR Lag Order Selection Criteria; the result is shown in Table 3.

**Table 3.** Result of the Optimal Lag Length Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1768,64	NA	7,04	96,03	96,38	96,16
1	-1567,06	305,10	4,49	88,60	91,73*	89,70
2	-1476,88	97,49	1,83	87,18	93,10	89,27
3	-1347,12	84,17*	2,95*	83,63*	92,34	86,70*

Source: Authors Computations

\* lag order selected by the criterion

### Cointegration Test

The co-integration test was used to analyse non-stationary time series processes that have variances and means that vary over time. It estimates the long-run parameters or equilibrium in systems with unit root variables.

### Autoregressive Distributed Lag

The table below shows the result of the autoregressive distributed lag model

**Table 4.** Results of Estimated Long-Run Coefficient

Variable	Coefficient	t-Statistic	Prob, *
CAPL (-1)	-0,52	-2,00	0,10
CAPL (-2)	0,029	0,10	0,92
CAPL (-3)	-0,02	-0,09	0,93
BTCP	-0,00	-0,20	0,85
BTCP(-1)	0,00	0,16	0,88
BTCP(-2)	-0,00	-0,70	0,51
BTCP(-3)	0,00	0,47	0,65
EXR	0,20	0,94	0,39
EXR(-1)	-0,61	-1,81	0,13
EXR(-2)	0,33	1,57	0,18
EXR(-3)	-0,07	-0,49	0,65
INF	2,30	1,55	0,18
INF(-1)	1,77	0,79	0,46
INF(-2)	-0,90	-0,49	0,64
INF(-3)	1,41	1,00	0,36
IR	0,99	0,31	0,77
IR(-1)	0,80	0,17	0,87
IR(-2)	-14,17	-1,75	0,14
IR(-3)	-1,22	-0,18	0,87
STOCK_IND	-0,00	-0,45	0,67
STOCK_IND(-1)	0,00	1,18	0,29
STOCK_IND(-2)	0,00	1,64	0,16
STOCK_IND(-3)	-0,00	-1,16	0,30

TB	0,01	0,96	0,38
TB(-1)	-0,00	-0,57	0,60
TB(-2)	-0,00	-0,54	0,61
TB(-3)	0,02	2,25	0,07
GDP	0,00	0,45	0,67
GDP(-1)	-0,00	-0,68	0,53
GDP(-2)	0,01	1,36	0,23
GDP(-3)	-0,00	-0,19	0,86
C	29,80	0,34	0,75
R-square		0,95	
Adjusted R-square		0,86	
Durbin-Watson stat		1,89	
F-statistic		1,60	

**Dependent Variable:** CAPL

**Level of Significance:** 5%

*Source: Authors Computations*

Thus, the ARDL long-run estimation becomes:

$CAPL = \beta_0 + \beta_1 BTCP_{it} + \beta_2 EXR_{it} + \beta_3 INF_{it} + \beta_4 STOCK\_IND_{it} + \beta_5 TB_{it} + \beta_6 GDP_{it} + \mu_{it}$  which yields

$CAPL = 29.80 - 0.00BTCP_{it} + 0.20EXR_{it} + 2.30INF_{it} + 0.99IR_{it} - 0.00STOCK\_IND_{it} + 0.01TB_{it} + 0.00GDP_{it}$

The result of the ARDL long-run analysis for capital flows in Table 4 shows that bitcoin has a strong positive and significant effect on capital flows in Nigeria. The result reveals that EXR, INF, IR, TB and GDP all have a positive effect on capital flow in Nigeria, while BTCP and STOCK\_IND have a negative effect on capital flow.

**Table 5.** Results of Estimated Short-Run Coefficient

Variable	Coefficient	t-Statistic	Prob,
D(CAPL(-1))	1,00	-0,06	0,96
D(BTCP(-1))	0,00	1,42	0,21
D(BTCP(-2))	-0,00	-1,53	0,19
D(EXR(-1))	-0,26	-3,44	0,02
D(EXR(-2))	0,07	1,64	0,16
D(GDP(-1))	-0,01	-5,19	0,00
D(GDP(-2))	0,00	0,48	0,65
D(INF(-1))	-0,50	-0,83	0,44
D(INF(-2))	-1,41	-2,54	0,05
D(IR(-1))	15,39	7,69	0,00
D(IR(-2))	1,22	0,51	0,63
D(STOCK IND(-1))	-0,00	-1,49	0,20
D(STOCK IND(-2))	0,00	2,51	0,05
D(TB(-1))	-0,01	-4,84	0,00
D(TB(-2))	-0,02	-5,77	0,00

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CointEq(-1)*	-0,51	-8,73	0,00
R-square	0,95		
Adjusted R-square	0,86		
Durbin-Watson stat	1,89		

Source: Authors Computations

**Pairwise Causality Test**

The Granger causality test results indicated that there is no significant predictive relationship among most of the pairs of variables. The p-values for the majority of the pairs were also above the threshold level of 0.05, showing that the p-value of one variable does not provide statistically significant information to predict future values of the other variable.

**Table 6.** Result of the Pairwise Granger causality test

Null Hypothesis:	Obs	F-Statistic	Prob.
BTC does not Granger Cause CAPL	38	0.75964	0.4758
CAPL does not Granger Cause BTC		0.05336	0.9481
TRADE_BALANCE does not Granger Cause CAPL	38	2.65345	0.0854
CAPL does not Granger Cause TRADE_BALANCE		0.16398	0.8494
STD does not Granger Cause CAPL	38	0.07461	0.9283
CAPL does not Granger Cause STD		0.83918	0.4411
INT does not Granger Cause CAPL	38	4.00758	0.0277
CAPL does not Granger Cause INT		0.37664	0.6891
INF does not Granger Cause CAPL	38	1.44436	0.2504
CAPL does not Granger Cause INF		0.42391	0.6580
TRADE_BALANCE does not Granger Cause BTC	38	1.25817	0.2975
BTC does not Granger Cause TRADE_BALANCE		1.08549	0.3495
STD does not Granger Cause BTC	38	5.89520	0.0065
BTC does not Granger Cause STD		0.09356	0.9109
INT does not Granger Cause BTC	38	3.02198	0.0624
BTC does not Granger Cause INT		1.54410	0.2285
INF does not Granger Cause BTC	38	0.79546	0.4598
BTC does not Granger Cause INF		0.16751	0.8465
STD does not Granger Cause TRADE_BALANCE	38	1.59160	0.2188
TRADE_BALANCE does not Granger Cause STD		0.19495	0.8238
INT does not Granger Cause TRADE_BALANCE	38	1.75614	0.1885
TRADE_BALANCE does not Granger Cause INT		1.02910	0.3685
INF does not Granger Cause TRADE_BALANCE	38	0.16088	0.8521
TRADE_BALANCE does not Granger Cause INF		0.44870	0.6423
INT does not Granger Cause STD	38	0.61804	0.5451
STD does not Granger Cause INT		2.01425	0.1495
INF does not Granger Cause STD	38	6.95586	0.0030
STD does not Granger Cause INF		0.24383	0.7850
INF does not Granger Cause INT	38	1.24120	0.3022
INT does not Granger Cause INF		0.35650	0.7028

Source: Authors Computations

## 8. SUMMARY OF FINDINGS AND CONCLUSION

The study revealed that the volatility of Bitcoin was found to have a significant and positive impact on the performance of stocks. Also, the conditional volatility of bitcoin and stock performance was influenced by their individual past shocks, as well as their respective past performance. This shows that, in line with the study of Karim *et. al.* (2021), financial markets have a significant relationship with the crypto market.

The crypto market is currently highly speculative, volatile and vulnerable to speculative bubbles that could affect the exchange rate of domestic currency. This finding corroborates those of Mohammed *et. al.* (2022) that bitcoin prices significantly affect capital flow in the long run, and that higher bitcoin price volatility implies higher risk on the economy.

The study also showed that bitcoin prices had a significant effect on capital flows; a position that aligns with Sodiq and Oluwasegun (2020), who observed a substantial relationship between the volatility of bitcoin and stock prices in Nigeria.

In conclusion, this study provides insights into the interconnectedness of cryptocurrency markets and financial systems. The evidence suggests that Bitcoin price volatility has a measurable effect on capital movements, with broader implications for economic policy and financial stability. Therefore, policymakers may have to consider these dynamics in their efforts towards creating a stable and conducive environment for investment and economic growth.

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## UTJECAJ CIJENA BITCOINA NA TOKOVE KAPITALA U NIGERIJII

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### Sažetak

*Studija ispituje utjecaj cijena bitcoina na tokove kapitala u Nigeriji. Korištena je deskriptivna statistika, analiza kointegracije i ARDL test granica kako bi se pokazali kratkoročni i dugoročni odnosi među varijablama. Višestruka regresijska analiza provedena je korištenjem sekundarnih podataka iz biltena Središnje banke Nigerije. Utvrđeno je kako cijene bitcoina, devizni tečaj, bruto domaći proizvod, stopa inflacije, kamatna stopa, burzovni indeks i trgovinska bilanca imaju i negativne i pozitivne učinke na tokove kapitala. Studija je istaknula potrebu da kreatori politika razviju i provedu ciljano upravljanje rizicima kako bi se riješili jedinstveni izazovi koje predstavljaju bitcoin i druge kriptovalute te promovirao stabilan i učinkovit financijski sustav. Monetarne vlasti posebno su zadužene za razvoj strategija koje će pozitivno utjecati na ukupni rast gospodarstva učinkovitom primjenom politika kriptovaluta.*

**Keywords:** *Kriptovaluta, bitcoin, tokovi kapitala, bruto domaći proizvod, Nigerija*

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