How influential are FinFluencers? Granger Causality between Finance Influencers and Price Movements in Cryptocurrency and Stock Markets

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Sita Kedvarin : How influential are FinFluencers? Granger Causality between Finance Influencers and Price Movements in Cryptocurrency and Stock Markets. Advisor: Assoc. Prof. Dr. KANIS SAENGCHOTE, Ph.D.

This research investigates the influence of finance influencers on stock and cryptocurrency returns by analyzing the relationship between their asset-related YouTube videos and market movements. The study was conducted in two parts: the VAR Granger causality analysis in both the cryptocurrency and stock markets, and the analysis of the behavior of the top finance influencers in the cryptocurrency market. The findings from the VAR Granger causality analysis revealed distinct patterns between the cryptocurrency and stock markets. In the cryptocurrency market, YouTube videos, particularly the number of videos published, showed a significant Granger causality effect on returns. However, the causality from returns to YouTube videos was less prominent. Conversely, in the stock market, the relationship between YouTube videos and returns was weak or non-existent. The influence of finance influencer content on stock returns appeared to be less significant compared to the cryptocurrency market. Moreover, the study analyzes the behavior of top finance influencers in the cryptocurrency market, demonstrating that their impact on returns is not as significant as previously observed in the overall market. The overall market dynamics and the presence of videos related to cryptocurrencies play a more substantial role in influencing returns. Overall, these findings indicate that while top finance influencers may attract a large number of views, their influence on price movements in cryptocurrencies is not substantial. The presence of videos related to cryptocurrencies, regardless of the creator, has a significant pronounced impact on cryptocurrency returns.

Field of Study:	Finance	Student's Signature ....
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1. INTRODUCTION

The growth of technology has revolutionized the financial market and the way in which information is shared and investments are made. With the introduction of new trading platforms and innovative methods of exchanging information, the cost of collecting and sharing financial data has declined, leading to a significant increase in the number of retail investors (Barber et al., 2022). Investors can instantly buy or sell assets using only their fingertips and have access to information on events occurring anywhere in the world. With this accessibility, investors are able to adjust and change their investing strategies in response to the most recent information. This has created new investment opportunities and has impacted investor behavior (Yang et al., 2017).

Social media platforms have become a crucial source of information for investors, providing them with up-to-date news, market trends, and investment opportunities. Financial influencers, or finfluencers, have become increasingly popular in recent years, as they offer investors a new source of information and advice in the rapidly changing financial landscape. While many financial influencers are credible and trustworthy, providing valuable insights and information, there are also some who may not have the best interests of their followers in mind. They may use their platform to manipulate their followers, sharing misleading information and making false claims to generate profits. The rise of financial influencers has created a challenge for investors, who must navigate the complex and often confusing world of financial information to make informed investment decisions. As an example, in 2021, a popular financial influencer was accused of promoting a fraudulent investment scheme, leading many of their followers to lose significant amounts of money[1]. This highlights the importance of critically evaluating the credibility and trustworthiness of financial influencers before relying on their advice.

While most social media research concentrates on the overall sentiment (Bollen et al., 2011), Some studies have explored the impact of influential people's social media

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[1] U.S. Securities and exchange commission. (2022). *SEC Charges Eight Social Media Influencers in $100 Million Stock Manipulation Scheme Promoted on Discord and Twitter*. SEC.gov. Retrieved 2 February 2023 from https://www.sec.gov/news/press-release/2022-221

posts on stock prices (e.g., Brans & Scholtens, 2020) and cryptocurrency prices (e.g., Ante, 2023).

YouTube, as the world's second-largest search engine, has over 2.6 billion monthly users (YouTube, 2021) and offers advantages that make YouTube an ideal ecosystem for cryptocurrency content creators and financial influencers to share their knowledge and experience, particularly instant tips, and speculations. Many YouTube channels have a high level of digital interaction and produce current content about digital currencies and stocks that is of interest to users.

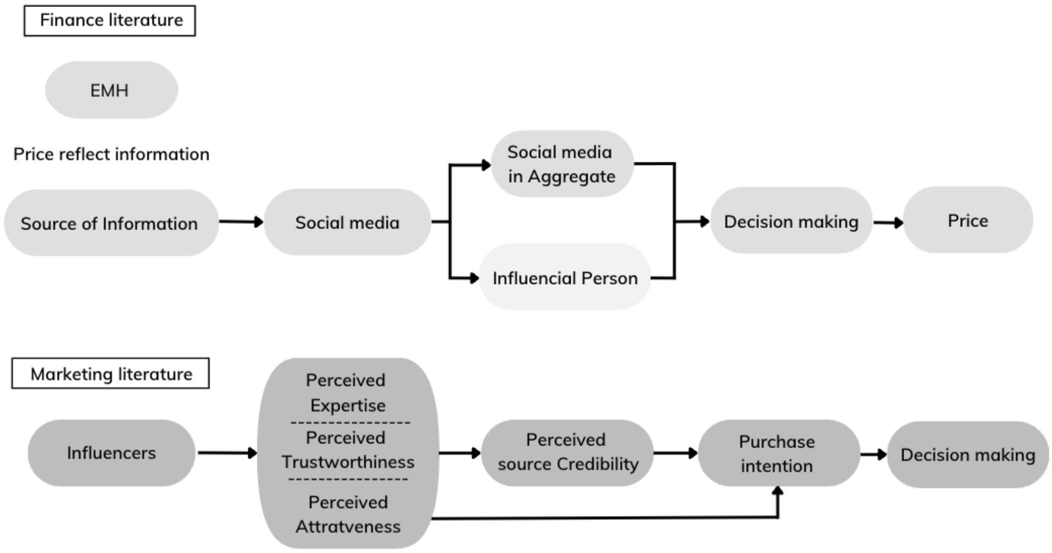
As finance influencers becomes more prevalent in the investment landscape, the need for regulation becomes more pressing. Governments around the world are looking to create regulations to protect investors from misleading information and investment risks. The potential for market manipulation by social media influencers, along with the risks associated with investing in cryptocurrencies, highlights the importance of increased disclosure and transparency requirements to protect investors. While the Advertising Regulation Department protects investors in the traditional market by ensuring broker-dealer communications are fair, balanced, not misleading, and legal. Likewise, CFA candidates and members must also follow the CFA Code and Standards. Finance Influencers who normally disclaim “This is not financial advice”, this regulation is still questionable whether it applies to them or not.

Given the increasing popularity of finance influencers, this research aims study the behavior of finance influencers and explore the impact of them on stock and cryptocurrency prices. To our knowledge, the role of finance influencer on YouTube has yet to be explored. By analyzing the relationship between the activities of finance influencers and changes in stock and cryptocurrency prices, this research will provide insights into the influence that financial influencers have on market movements. The findings will help us better understand the potential impact that financial influencers can have on investment decisions and the overall financial market. It will provide valuable insights for investors, financial institutions, and regulators as they navigate the rapidly changing financial landscape.

2. LITERATURE REVIEW

As there is no direct study that explore the relationship between finance influencers and asset prices, this study has drawn on literature from both finance and marketing fields to support the research. The figure presented below (fig.1) provides a visual overview of the literature review in this study. To support this research, literature from both finance and marketing fields has been included.

***Figure 1**: An overview of the literature review*



2.1 Information, decision-making, and financial markets

The efficient market hypothesis, as posited by Fama (1970), contends that stock prices reflect all available information, including news and articles. Hence, any changes in the market can be attributed to updated news and information. This idea is backed up by the "random walk" pattern put forward by Malkiel (1999), which argues that news and information are unpredictable when it comes to forecasting trends in the stock market. However, many have tried to challenge this widely accepted theory. In contemporary times, the vast amounts of data available on the internet, particularly via social media, pose a significant challenge for financial models and systems. Research has shown that humans are prone to making irrational decisions when faced with uncertainty and risk (Tversky & Kahneman, 1981). Investors must, therefore, be able to identify, process, and interpret information accurately to make investment decisions.

Information plays a crucial role in decision-making, particularly for investors. The rise of information technology has facilitated the production, transmission, collection, and processing of information, thereby transforming the role of information in decision-making. Nonetheless, the abundance of information poses a challenge in terms of meaningful filtration. Investors, in particular, face the dilemma of information overload and the difficulty of allocating their limited time and attention to an extensive array of information sources. Furthermore, the influx of information can result in psychological issues, shorter attention spans, and suboptimal decision-making. Consequently, devising effective strategies to filter and process information in order to support sound decision-making remains a pressing issue for investors in this age of information.

Social media platforms have emerged as a widely popular digital means for interactions, commerce, and sharing of information among users. However, one of the most significant challenges associated with these platforms is the phenomenon of information overload (Sasaki et al., 2016). Social media networks provide users with the ability to track the activities and opinions of other individuals or entities and identify experts in various fields. On platforms such as Twitter, the number of followers is often a determinant of an individual's opinion leadership status. Moreover, the feature of retweeting enables information to spread rapidly across the platform, thus making social media a potent tool for marketing and communication (Boyd & Ellison, 2007). The widespread use of social media has only intensified this issue, with users becoming increasingly vulnerable to its influence. As a result, the field of behavioral finance emerged to investigate the underlying psychological factors. Many studies found evidence to challenge the Efficient Market Hypotheses after showing that social media could predict asset returns. Consequently, social media can have a detrimental impact on the rational decision-making process of investors.

2.2 Social media and financial markets

Social media have been a subject of research, with scholars investigating the effects of news and sentiment on stocks. For example, de Jong et al. (2017) found a unidirectional intraday relationship between tweets and stock returns. In addition, they observed a bidirectional relationship between tweets and volatility, with return volatility affecting tweets and vice versa, although the effect of return volatility on tweets was more significant than the reverse. Bollen et al. (2011) found that the daily changes of the Dow Jones Industrial Average (DJIA) were forecasted with an 86.7% accuracy by Twitter public moods. Tabari et al. (2018) found a significant causality between stock prices and sentiments derived from tweets. One of the few studies that focuses on a specific firm, O'connor (2013) found a notable relationship between the number of social media followers of the top 30 most widely recognized consumer brands and the stock prices of their corresponding companies. The study revealed that this correlation was more pronounced for brands with smaller and impulsive purchasing items, as opposed to those with larger and more intricate buying processes.

In regards to cryptocurrency, the literature suggests that an increase in Bitcoin-related tweets can have a notable effect on short-term Bitcoin liquidity (Choi, 2021). Furthermore, the number of Bitcoin-related tweets has been demonstrated to predict both Bitcoin trading volume and returns (Philippas et al., 2019; Shen et al., 2019). Moreover, additional research suggests that Twitter sentiment can serve as a reliable predictor of cryptocurrency returns. Naeem et al. (2021) investigated the predictive capacity of Twitter Happiness Sentiment and found a significant nonlinear Granger causality across the entire sample. Likewise, Kraaijeveld and De Smedt (2020) used a lexicon-based sentiment analysis approach and found that Twitter sentiment is a predictor of the returns of cryptocurrencies.

Overall, the literature suggests a clear relationship between social media and stock prices/cryptocurrency returns, with social media sentiments and moods proving to be predictive indicators of these markets. These findings highlight the potential power of social media in shaping the financial market. Given the vast amount of data available on the social media, it is likely to have an increasingly significant impact on financial markets. Therefore, there is a need for further research to understand the complexities of this relationship, by investigate this important topic, researchers can help market participants, policymakers, and investors to make more informed decisions and minimize the risks associated with financial market volatility.

2.3 Role of Influential person on the financial markets

The impact of social media posts made by well-known, influential figures with strong recognition, reputation, and wealth has been a topic of great curiosity. Recent studies have explored this phenomenon, uncovering fascinating insights. Hamurcu (2022) analyzed the impact of Elon Musk's Twitter posts on cryptocurrency markets from the perspective of herd behavior bias. The findings indicate that the tweets have a greater impact on the volatility of Dogecoin as compared to Bitcoin, and elicit an impact on their prices and market transactions. The study's results conclusively demonstrate the presence of the influential person effect as a behavioral finance bias. Ante (2023) investigated the potential "Musk Effect" in cryptocurrency markets, conducting a study of 47 cryptocurrency-related Twitter events and finding that price effects were significant for Dogecoin-related tweets on average.

Recently, several studies have emerged that specifically investigate the effect of President Trump's social media on the stock and cryptocurrency markets. Born et al. (2017) found evidence of positive or negative abnormal returns of non-media firms in response to positive or negative tweets from the President. Ge et al. (2019) found that the President's tweets have a significant influence on non-media firms stock prices, volatility, trading volume, and institutional investor attention. On the opposite, Juma'h and Alnsour (2018) conducted a multivariate analysis using event-study and regression analysis and found that the President's tweets had no significant impact. Huynh (2021) also found that President Trump's sentiment can be a useful tool for predicting the Bitcoin. These studies highlight the significance of analyzing the impact of influential person tweets on the financial market.

While various theoretical and empirical studies have investigated how media reports can affect financial markets, in particular, recent studies have highlighted the relationship between influential person and their social media post for predicting market movements. It is interesting to note that sometimes even individuals with fewer followers can have a stronger impact on stock prices. Sul et al. (2017) identified the impact of tweets that were re-tweeted by users with many followers on future returns. Their research found that tweets from users with a smaller number of followers had a greater impact on stock returns compared to tweets from users with a larger number of followers.

2.4 YouTube Influencers

The rise of social media has given birth to a new breed of digital marketing, namely Influencer marketing. While celebrity endorsements have long been a staple of traditional advertising channels, influencer marketing leverages the fame and expertise of everyday individuals who have large followings on social media. The trend is gaining momentum as a more cost-effective and contemporary form of celebrity endorsement. Furthermore, when influencers promote related brands, they, at the same time, develop their reputations in specific domains. Thus, consumers are more likely to trust their opinions and recommendations. Multiple studies have demonstrated that Influencer can have a significant impact on consumers' purchasing decisions. Scheer and Stern (1992) stated that an influencer can employ their power resources to direct the behavior of their network. When an influencer's statement resonates with consumers, eliciting satisfaction and trust, it becomes a powerful tool. This leads to consumer compliance with the influencer's endorsement or recommendation. Compliance is more likely to occur when there are valid reasons for the consumer to act in a particular manner (Ruvio et al., 2013).

The findings from studies suggest that source credibility, an important factor in persuasive communication, is a complex construct consisting of three key components: perceived expertise, trustworthiness, and attractiveness. This was first discussed by Hovland et al. (1953) who noted expertise and trustworthiness as the main determinants of source credibility. Later, McGuire (1985) added attractiveness to the list. Finally, Ohanian (1991) combined these factors and proposed source credibility as a tri-component construct consisting of expertise, trustworthiness, and attractiveness. The relevance of these source models extends beyond traditional media platforms and has been applied to social media as well, with studies (e.g., Kumar, 2011; La Ferle & Choi, 2005; Wang & Scheinbaum, 2018) indicating that the presence of perceived expertise, trustworthiness, and attractiveness in a source increases the likelihood of a consumer's intention to make a purchase.

As the world of influencer marketing continues to evolve, one platform has risen to prominence as a beacon for advertisers - YouTube. As stated by Dehghani et al. (2016), for advertising to be effective, it must garner attention in a positive manner, and YouTube offers a viable means of accomplishing this objective. Google's research study in 2021 revealed that 89 percent of viewers trust the recommendations made by YouTube creators (Think With Google, 2021). As a result of the improvements in internet connectivity and lower access costs, YouTube has emerged as a major worldwide platform for marketing, communication, and advertising efforts (Chiang & Hsiao, 2015). This has further enhanced its significance in the field of influencer marketing.

Numerous studies have demonstrated that YouTube influencers and vloggers have a significant impact on consumers' purchase intentions and decisions by being perceived as credible sources of information. For instance, Rahmi et al. (2017) found that vloggers are perceived as more expert in providing product reviews and tutorials because they demonstrate their personal use of the product. This indicates that consumers view vloggers as trustworthy and knowledgeable sources of information. Similarly, Nandagiri and Philip (2018) discovered that influencers are perceived as credible by their followers and can influence their purchase intentions. Mittal and Kaur (2020) also revealed that YouTube vlogs significantly affect consumers' purchase intentions, with vloggers perceived as trustworthy, expert, and attractive.

Wang and Scheinbaum (2018) highlighted the importance of perceived attractiveness and trustworthiness of celebrity endorsers in improving brand attitude, credibility, and purchase intention. Ananda and Wandebori (2016) also discovered that consumers' positive attitudes and purchase intentions can be predicted by their perceived credibility of vloggers. Moreover, Google's research studies (Think With Google,

2016) revealed that a significant number of YouTube users watch videos to help make purchase decisions, with more than one-third of shoppers purchasing products they discovered on the platform (Think With Google, 2018). Additionally, Hill et al. (2017) reported that the popularity of vloggers, as indicated by their amount of subscribers, influences consumers' perceptions of their trustworthiness and expertise. This, in turn, affects their credibility perception and purchase intention.

In conclusion, the existing literature supports the notion that YouTube influencers have a considerable impact on consumers' purchase intentions and decisions, with credibility being a crucial factor in influencing consumer behavior.

3. RESEARCH QUESTIONS

By analyzing the relationship between the activities of financial influencers and changes in stock and cryptocurrency prices, this research will provide insights into the influence that financial influencers have on market movements. The findings will help us better understand the potential impact that financial influencers can have on investment decisions and the overall financial market. It will provide valuable insights for investors, financial institutions, and regulators as they navigate the rapidly changing financial landscape.

Furthermore, with such difference between cryptocurrency and traditional market, it is important to find some potential differences in effect of finance influencer between them. Compared to traditional asset markets, the cryptocurrency market is relatively new and underdeveloped. The structure of market investors distinguishes cryptocurrency markets from traditional stock markets. In traditional stock markets, institutional investors hold the majority of the total stock market value. Conversely, individual investors may hold the majority of the total stock market value in cryptocurrency markets. This distinction between institutions and individuals as types of investors is important to note. Compared to institutions, individual investors have less information available to them and are more susceptible to the impact of psychological biases, market sentiment, and attention-grabbing events (Barber & Odean, 2008).

This study aims to investigate the relationship between finance influencers and cryptocurrency prices, as well as stock markets (DJIA). Unlike most previous research, this paper adds to the literature by demonstrating the importance of finance influencer's role on cryptocurrency and the stock market. The objective of this study is to examine the relationship between finance influencers and asset prices. In order to establish the direction of the relationship, the Granger causality test with the VAR model will be tested on the finance influencer content and asset returns for cryptocurrencies and DJIA stocks. Moreover, for DJIA stocks that are liquid and more likely to be driven by fundamentals, it is more likely for returns to lead YouTube content, while for cryptocurrencies, it is more likely for YouTube content to lead returns.

4. DATA COLLECTION

4.1 Cryptocurrency and Traditional Stock Data

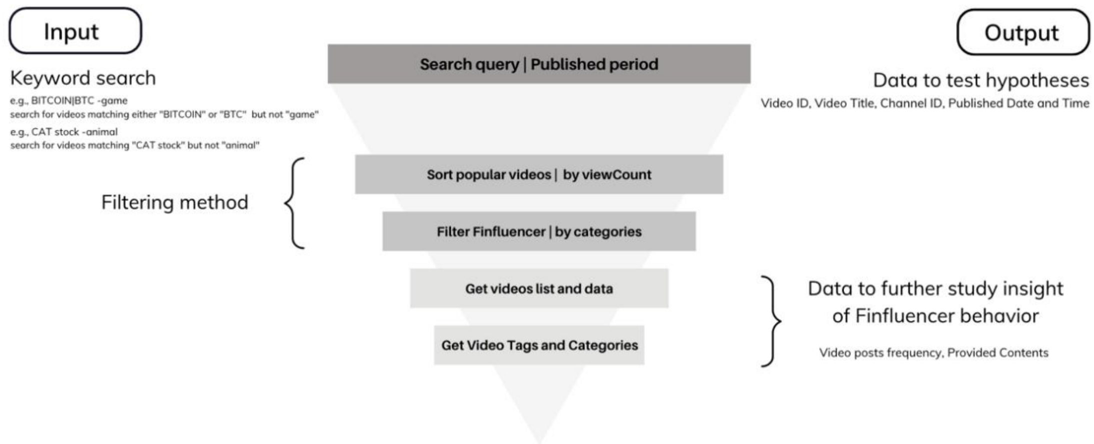
With such difference between cryptocurrency market and traditional market, it is important to find some potential differences in the Granger Causality relations between finance influencer and these two markets. The Dow Jones Industrial Average, commonly referred to as the DJIA, is a highly regarded stock index that serves as a representative for traditional asset performance. The sample consists of transaction prices from January 1, 2019 to December 31, 2021 on the 30 blue-chip stocks that are generally considered to be the leading firms in their respective industries. (Appendix A and B). The DJIA data is collected from the Bloomberg terminal, which is a leading provider of financial information and news to global financial professionals.

As for cryptocurrency, this study collect daily prices of the largest 25 cryptocurrencies according to their capitalization excluding stable coins on 31 December 2021 (Appendix D), which account for 80.26% and represents nearly the whole crypto market capitalization. I collect the cryptocurrency data from the same period, when the cryptocurrency market was at its peak, from CoinGecko.com, which provides a crypto information in aggregate[2]. The total cryptocurrency market capitalization had reached $2.23 trillion in 31 December 2021 after having been $127.86 billion in 1 January 2019, increasing for 1,647% in that period[3]. The price of Bitcoin (BTC), the leading currency, has increased in price from $3,692.53 (1 January 2019) to a peak of $67,617.02 in November 2021[4] (Appendix C).

4.2 YouTube data and Keyword selection

This research consisted of two parts of analysis. First, to investigate the relationship between YouTube variables and returns in the cryptocurrency and stock markets. Second, to further analysis of Finance Influencer Behavior and Relationship Between Their YouTube Variables and Returns. Each part focused on different aspects of the analysis. The data sets used for each part are as follows:

Figure 2: *YouTube data collection process in this study*



4.2.1 Cryptocurrency and Stock Videos

Google offers the official YouTube Data API, which enables individuals to analyze YouTube data. The API provides a resource called "Search" to retrieve search results

[2] The price is calculated using a global volume-weighted average price formula which is based on the pairings available on different exchanges of a particular crypto asset.

[3] CoinMarketCap. *Global Cryptocurrency Market Charts*. https://coinmarketcap.com/charts/

[4] CoinGecko. *Bitcoin Price: BTC Live Price Chart & News*. https://www.coingecko.com/en/coins/bitcoin

on the YouTube website. I use YouTube Data API v3 to scrape the data of these keyword-related videos by searching keywords.

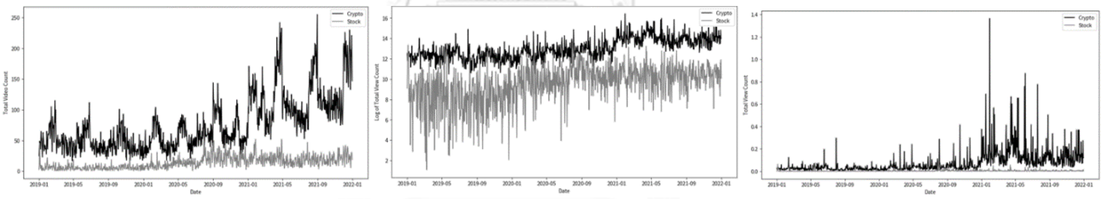
There are potential difficulty resulting from the use of a company or cryptocurrency name and ticker symbol. an individual performing a search for a company's name may be searching for information that is not applicable to investment considerations. Second, some asset names may repeat common words. To address these two issues, this procedure is followed to ensure the selection process was comprehensive and thorough. In the selection procedure, I utilize the name and symbol of Cryptocurrencies such as Bitcoin, BTC, and ETH, and for DJIA stocks, I utilize only their ticker symbols. Common words associated with Cryptocurrencies and stocks, such as Shiba Inu, are excluded from the selection process. In some cases, specific keywords are added to the selection criteria, such as "CAT stock" with related common keywords, such as "animal," being filtered out.

To ensure relevance, we filtered out any videos pertaining to products, games, movies, songs, and music. Subsequently, we performed data cleaning to remove any videos that were not directly relevant to the respective cryptocurrency or DJIA stock. The resources employed in this part include Video IDs, Video Titles, Channel IDs, View Count, and a time series of Video Publish Times, formatted in accordance with the ISO 8601 (YYYY-MMDDThh:mm:ss.sZ) standard, with duplicate videos removed using Video IDs as a filtering criteria.

During this process, it became apparent that we needed to exclude DOW from the list due to its ticker and company name being identical to its index. These graphs provide insights into the popularity and viewer interest in videos related to cryptocurrencies and stocks. They suggest that cryptocurrencies are a more popular topic, both in terms of the number of views and the number of videos posted. Given the limited availability of YouTube videos for DJIA stocks, we opted to aggregate the data on a weekly basis. As a result, we obtained a dataset comprising 25 cryptocurrencies and 29 DJIA stocks. The general statistical data derived from this dataset is presented in Table 1 and Table 2. The graphs show that videos related to cryptocurrencies had significantly more views and number of video published compared to those related to stocks (fig.3)

After collecting the data, the relationship between YouTube variables and cryptocurrency prices was analyzed, with a focus on Bitcoin (BTC) as the dominant cryptocurrency in the market. The number of video counts and logarithmic view counts of all cryptocurrency videos were plotted against the BTC price. The analysis revealed a strong positive correlation between the Crypto Video Count (the aggregate count of YouTube videos related to cryptocurrencies within the sample data and period) and BTC Price. Similarly, the Crypto View Count (the aggregate view count of YouTube videos related to cryptocurrencies within the sample data and period) showed a strong positive correlation with BTC log Price (Bitcoin price in natural logarithm), indicate a significant and robust relationship between YouTube video activity and the price of Bitcoin.

Figure 3: *Comparison of YouTube videos data between Cryptocurrency and DJIA stock.*



(a) Daily Total Video Count | (b) Log of Daily Total View Count | (c) Daily Total View Count

Black line represents Cryptocurrency's YouTube video, and grey line represents DJIA's YouTube video.

The calculated correlations indicate a significant and robust relationship between YouTube video activity and the price of Bitcoin. The Crypto Video Count exhibited a correlation coefficient of approximately 0.746 with BTC Price, while the correlation between Crypto View Count and BTC log Price was approximately 0.715. These correlation values suggest a strong positive relationship between YouTube video variables and Bitcoin prices. The findings are visually presented in Fig. 4.

Table 1: *YouTube Video Statistics for Cryptocurrencies*
(Sample Period: 01/01/2019 - 31/12/2021, Frequency: Daily)

Panel A: Cryptocurrencies			View Count (Daily)					Video Count (Daily)				
Symbol	Period	N (Daily)	Total	Min	Max	Mean	Median	Total	Min	Max	Mean	Median
BTC	01/01/2019 - 31/12/2021	1096	204,453,758	597	7,452,451	186,545	76,101	17,392	3	50	16	14
ETH	01/01/2019 - 31/12/2021	1096	145,452,194	-	4,645,949	132,712	54,070	12,538	-	52	11	10
BNB	01/01/2019 - 31/12/2021	1096	18,373,942	-	484,833	16,765	3,326	3,826	-	45	3	2
SOL	02/04/2020 - 31/12/2021	629	4,875,035	-	196,018	7,750	181	1,164	-	22	2	1
ADA	01/01/2019 - 31/12/2021	1096	66,596,785	-	1,296,964	60,763	22,986	6,478	-	30	6	5
XRP	01/01/2019 - 31/12/2021	1096	135,921,130	-	1,643,650	124,016	72,620	10,214	-	35	9	8
LUNA	09/05/2019 - 31/12/2021	968	2,886,128	-	152,173	2,982	-	764	-	17	1	-
AVAX	24/09/2020 - 31/12/2021	464	6,909,960	-	420,501	14,892	1,938	1,159	-	26	2	1
DOT	21/08/2020 - 31/12/2021	498	12,077,003	-	950,942	24,251	4,351	1,684	-	21	3	3
DOGE	01/01/2019 - 31/12/2021	1096	103,960,043	-	12,552,838	94,854	18	1,754	-	24	2	1
SHIB	03/08/2020 - 31/12/2021	516	17,209,870	-	1,267,717	33,352	-	369	-	10	1	-
MATIC	28/04/2019 - 31/12/2021	979	9,382,103	-	737,078	9,583	-	1,350	-	21	1	-
CRO	03/01/2019 - 31/12/2021	1094	17,775,936	-	709,792	16,249	-	994	-	15	1	-
UNI	19/09/2020 - 31/12/2021	469	7,031,599	-	274,331	14,993	1,340	942	-	11	2	2
ALGO	22/06/2019 - 31/12/2021	924	4,569,042	-	505,237	4,945	255	1,336	-	19	1	1
LTC	01/01/2019 - 31/12/2021	1096	20,877,216	-	1,583,388	19,049	8,494	2,756	-	15	3	2
LINK	01/01/2019 - 31/12/2021	1096	10,442,310	-	287,750	9,528	1,228	2,358	-	14	2	2
NEAR	16/10/2020 - 31/12/2021	442	1,388,273	-	117,902	3,141	-	442	-	16	1	-
BCH	01/01/2019 - 31/12/2021	1096	11,795,149	-	1,524,123	10,762	2,899	3,934	-	22	4	3
TRX	01/01/2019 - 31/12/2021	1096	21,900,346	-	1,611,103	19,982	7,628	5,773	-	27	5	4
ATOM	25/02/2019 - 31/12/2021	1041	2,024,659	-	161,205	1,945	-	833	-	13	1	-
XLM	01/01/2019 - 31/12/2021	1096	8,701,064	-	223,748	7,939	1,264	1,885	-	19	2	1
MANA	01/01/2019 - 31/12/2021	1096	3,382,476	-	245,140	3,086	-	903	-	18	1	-
FTM	01/01/2019 - 31/12/2021	1096	2,083,818	-	245,785	1,901	-	758	-	21	1	-
AXS	06/11/2020 - 31/12/2021	421	2,254,897	-	207,121	5,356	240	574	-	11	1	1
Total	1/1/2019 - 31/12/2021	1096	667,113,180	21,515	13,381,919	608,680	318,232	60,329	14	176	55	46

The view count represents the total number of views from the date of video publication until 18 May 2023, which is the date when the data was obtained.

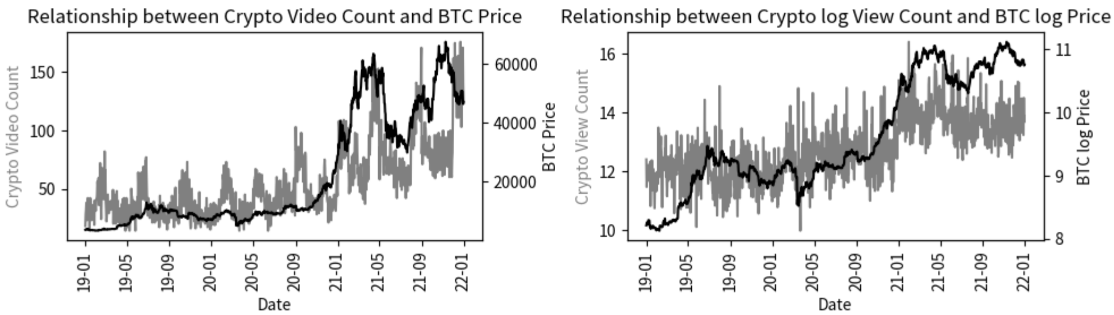
Table 2: *YouTube Video Statistics for DJIA Stocks*
(Sample Period: 01/01/2019 - 31/12/2021, Frequency: Weekly)

Panel B: DJIA Stocks			View Count (Weekly)					Video Count (Weekly)				
Symbol	Period	N (Weekly)	Total	Min	Max	Mean	Median	Total	Min	Max	Mean	Median
UNH	01/01/2019 - 31/12/2021	157	72,256	-	20,104	460	-	71	-	5	0	-
GS	01/01/2019 - 31/12/2021	157	1,670,923	-	154,241	10,643	539	472	-	14	3	2
HD	01/01/2019 - 31/12/2021	157	300,461	-	64,952	1,914	3	182	-	16	1	1
MSFT	01/01/2019 - 31/12/2021	157	3,633,960	-	531,854	23,146	7,195	1,193	-	38	8	6
MCD	01/01/2019 - 31/12/2021	157	375,765	-	73,139	2,393	231	249	-	9	2	1
CAT	01/01/2019 - 31/12/2021	157	632,057	-	488,503	4,026	20	149	-	6	1	1
AMGN	01/01/2019 - 31/12/2021	157	208,419	-	59,704	1,328	-	99	-	8	1	-
V	01/01/2019 - 31/12/2021	157	649,553	-	79,646	4,137	764	347	-	12	2	2
BA	01/01/2019 - 31/12/2021	157	1,957,898	-	175,113	12,471	2,005	961	-	33	6	5
HON	01/01/2019 - 31/12/2021	157	120,135	-	15,203	765	-	84	-	4	1	-
TRV	01/01/2019 - 31/12/2021	157	99,322	-	82,989	633	-	57	-	3	0	-
AXP	01/01/2019 - 31/12/2021	157	225,868	-	63,628	1,439	-	129	-	7	1	-
CRM	01/01/2019 - 31/12/2021	157	507,395	-	139,820	3,232	95	302	-	23	2	1
CVX	01/01/2019 - 31/12/2021	157	315,251	-	54,632	2,008	18	167	-	7	1	1
JNJ	01/01/2019 - 31/12/2021	157	287,286	-	34,714	1,830	147	275	-	18	2	1
AAPL	01/01/2019 - 31/12/2021	157	17,139,458	109	1,115,240	109,169	46,480	4,644	2	140	30	24
WMT	01/01/2019 - 31/12/2021	157	825,902	-	59,581	5,261	766	420	-	16	3	2
JPM	01/01/2019 - 31/12/2021	157	1,946,429	-	164,734	12,398	1,417	488	-	23	3	2
PG	01/01/2019 - 31/12/2021	157	208,723	-	26,639	1,329	21	219	-	18	1	1
IBM	01/01/2019 - 31/12/2021	157	587,998	-	46,786	3,745	272	348	-	22	2	1
NKE	01/01/2019 - 31/12/2021	157	856,428	-	117,976	5,455	515	483	-	25	3	2
MMM	01/01/2019 - 31/12/2021	157	394,948	-	42,014	2,516	144	214	-	6	1	1
DIS	01/01/2019 - 31/12/2021	157	4,296,147	-	291,460	27,364	7,903	1,584	-	47	10	8
MRK	01/01/2019 - 31/12/2021	157	365,770	-	59,650	2,330	45	183	-	14	1	1
KO	01/01/2019 - 31/12/2021	157	1,604,809	-	277,042	10,222	1,243	436	-	31	3	2
CSCO	01/01/2019 - 31/12/2021	157	385,189	-	43,485	2,453	98	235	-	14	1	1
VZ	01/01/2019 - 31/12/2021	157	848,778	-	239,608	5,406	120	221	-	11	1	1
WBA	01/01/2019 - 31/12/2021	157	666,704	-	154,430	4,247	44	232	-	17	1	1
INTC	01/01/2019 - 31/12/2021	157	2,801,418	-	176,315	17,843	2,774	846	-	40	5	3
Total	01/01/2019 - 31/12/2021	157	42,299,235	2,010	1,434,297	269,422	217,633	14,198	15	231	90	93

The view count represents the total number of views from the date of video publication until 18 May 2023, which is the date when the data was obtained.

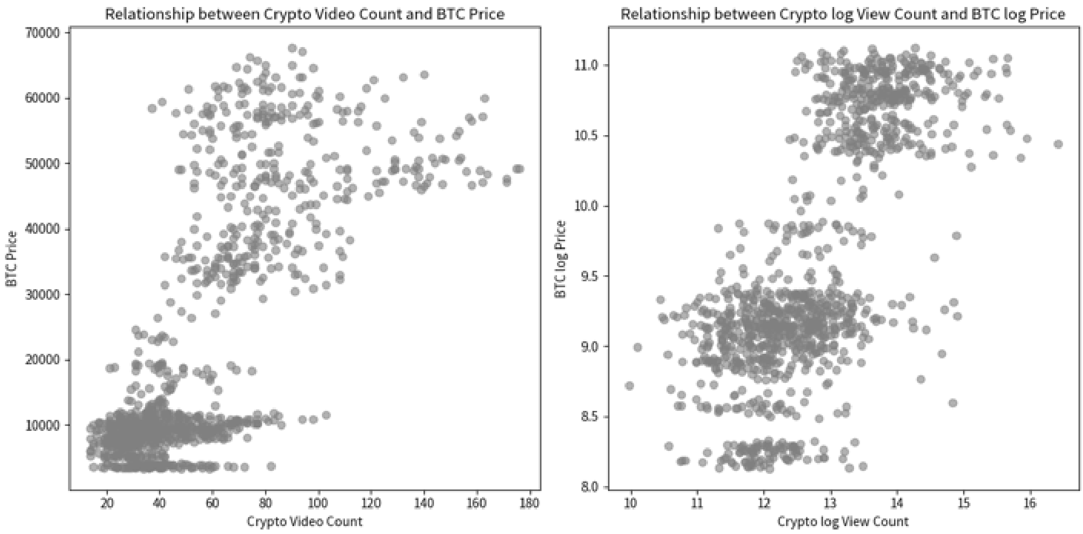
***Figure 4: The** relationship between YouTube video activity and the price of Bitcoin*

(a) Plot graph: YouTube Variables and Bitcoin Prices over time



Black line represents Bitcoin price, and grey line represents Cryptocurrency' YouTube video activities.

(b) Scatter Plot: Relationship between YouTube Variables and Bitcoin Prices



4.2.2 Top-ranked Finance Influencer Videos

To further analyze the behavior of finance influencers in the cryptocurrency market, I initially selected the top 100 videos based on their view count from the sample. Next, each channel was categorized based on the topic categories provided by YouTube[5]. However, it should be noted that the categories of News and Finance and Investment were not available in the provided options. Therefore, a manual approach was employed to accurately categorize each channel.

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[5] A list of Wikipedia URLs that describe the channel's content can be found at Google for Developers. *YouTube Data API*. https://developers.google.com/youtube/v3/docs/channels#topicDetails.topicCategories%5B%5D

The categorization process involved identifying specific characteristics of each channel. If a channel primarily featured news content from television or TV shows, it was categorized as 'News and Media'. Channels focusing on topics related to investment, cryptocurrency, money, and financial markets were categorized as 'Finance and Investment'. Additionally, if a channel focusing on these topics is an official channel associated with a company or application, it is categorized as 'Finance (Company/Application). For the remaining channels, the category was determined by selecting the topicCategory that best matched the content they offered.

The top 100 channels with the highest view count were categorized based on their content topics. The majority fell into the 'Finance and Investment' category, followed by categories ‘Entertainment', 'Technology', 'News and Media', 'Society', 'Knowledge', 'Finance (Company/Application) ', and 'Lifestyle' (Table 3).

Table 3: *Categories of top 100 channels*

Categories of Top 100	Channel	VideoCount	ViewCount
Finance and Investment	51	836	143,576,785
Entertainment	11	13	27,833,183
Technology	9	41	21,578,782
News and Media	7	32	10,763,961
Society	7	13	11,307,273
Knowledge	7	9	9,915,213
Finance (Company/Application)	4	114	6,511,777
Lifestyle_(sociology)	3	4	3,844,447

Channel represents number of channels in top 100 channel. VideoCount represent number of videos of each channel in the sample within its period. ViewCount represent the total number of view count of the videos of each channel in the sample within its period. It represents the total number of views from the date of video publication until 18 May 2023, which is the date when the data was obtained.

From the categorized channels, I further analyzed those classified under 'Finance and Investment'. This subset consisted of 51 channels that specialized in providing finance-related content to their audience. By focusing on this specific category, I aimed to gain deeper insights into the behavior and characteristics of finance influencers and their relationship with YouTube variables and returns. This categorization and subsequent analysis allowed us to specifically examine the behavior of finance influencers in the cryptocurrency market and its impact on market dynamics. By focusing on the 51 channels in the 'Finance and Investment' category, we were able to gain a more targeted understanding of their content creation patterns, video characteristics, and their relationship with YouTube variables and returns.

To conduct a comprehensive analysis of the behavior of finance influencers in the cryptocurrency market, I utilized various resources from the selected channels in the 'Finance and Investment' category. These resources included Video IDs, Video Titles, View Count, Video length, Tags, Category ID, and Video Publish Times. The data collection process involved gathering information from every video published by each channel within the specified time period of 1st January 2019 to 31st December 2021, the same period as Part one of the study. By capturing this extensive dataset, I aimed to capture the complete range of content produced by the top finance influencers during that timeframe.

4.3 limitations, potential improvements, and Implication for future research

- *Data Limitations*

One limitation of this study is the lack of access to daily view counts for the finance influencers' videos on YouTube. While data is collected on the number of new videos published daily for each asset, it is not possible to retrieve daily view counts for videos that are not associated with the channel/content owner. As a result, the analysis may not fully capture the potential impact of finance influencers' videos on asset prices over time, and the relationship between the two variables may be less precise than if daily view counts were available. Another important limitation of this research is the lack of sentiment analysis available for the finance influencer's video content. As a result of this limitation, the study may be unable to fully capture the effect of the finance influencer's content on asset prices.

- *Potential improvement*

To overcome these limitations, this study will give a weight to each video based on its rank compared to other videos, and then multiply it with the daily sentiment. To do this, data will be collected on the count of newly published videos and the cumulative number of views for each asset. Afterwards, the cumulative distribution function

(CDF) of the view count distribution for each asset will be estimated, and the percentile rank of each new video published will be determined. Videos will be assigned weights based on their percentile rank, with Weight = ((N-Rank+1)/N)*100.

To analyze the potential impact of finance influencers' content and sentiment on asset prices, daily sentiment data from Twitter will be collected from Bloomberg as a proxy for the sentiment of finance influencer content for the Dow Jones Industrial Average (DJIA). For cryptocurrencies, the Crypto Fear and Greed Index will be used as a proxy for finance influencer content sentiment. The index will be standardized from 51 to 100 (extreme greed) = 0 to 1, and from 1 to 50 (extreme fear) = -1 to 0.

By multiplying the daily weighted YouTube videos with the daily sentiment, the potential impact of both YouTube videos and sentiment on asset prices can be analyzed. Positive sentiment in finance influencers' content is expected to have a positive impact on asset prices, and vice versa. It is important to acknowledge that using a proxy for sentiment may introduce additional limitations and potential inaccuracies in the analysis, and the potential impact of varying view counts for each asset on the weighting of the videos is also a concern. Thus, the results should be interpreted with caution. Additionally, there is a question about whether Twitter and crypto fear and greed sentiment can actually represent YouTube content sentiment, which should be addressed in future research.

- *Implication for future research*

Future studies can collect daily view counts by regularly scraping YouTube for daily updated data, which would allow for a more precise analysis. Additionally, applying natural language processing (NLP) methods to extract sentiment from the finance influencer's video content could provide more accurate sentiment analysis. Further research could also explore alternative proxies for sentiment to improve the accuracy of the analysis. Overall, these potential improvements could enhance the understanding of the relationship between finance influencer content and asset prices.

4.4 Description of Variables

Due to limitations, I faced challenges in obtaining direct sentiment data for each cryptocurrency and its corresponding DJIA stocks. As an alternative, I utilized the Fear and Greed index as a sentiment indicator for cryptocurrencies, while relying on Twitter sentiment analysis for the sentiment measurement of DJIA stocks. To further analyze the relationships, I created six independent variables and two dependent variables, each carefully computed and described in detail in Table 7.

Table 7: Variable Definitions and Specifications

Types	Variables	Description	Specification
Independent Variables	W	Weight of YouTube view count	((N-Rank+1)/N)*100
	WSENT	Weight of YouTube view count mutiplied by sentiment	((N-Rank+1)/N)*100 * Sentiment
	VC	YouTube view count in natural logarithm	ln(ViewCount)
	VCSENT	YouTube view count in natural logarithm multiplied by sentiment	ln(ViewCount) * sentiment
	N	YouTube video count	VideoCount
	NSENT	YouTube video count multiplied by sentiment	VideoCount * sentiment
Dependent Variables	R	Return in natural logarithm	$\ln(\frac{P_t}{P_{t-1}})$
	ABSR	Absolute value of Return in natural logarithm	$\mid \ln(\frac{P_t}{P_{t-1}}) \mid$
Control Variables	I	Inflation rate	US' Consumer Price Index (CPI) in natural logarithm
	C	Credit spread	US' credit spread in percentage
	P	Industrial production	US' industrial production index in natural logarithm
	T	Term spread	US' 10 years treasury bond minus 1 year treasury bill in percentage

These variables will be tested and incorporated into the model.

5. METHODOLOGY

In terms of research methodology, the Granger causality test, first suggested by Granger (1969), and Vector Autoregression (VAR) models is proposed to determine whether finance influencers are significant in forecasting cryptocurrencies and DJIA prices or not. In order to facilitate comparison of results across markets, identify any potential structural changes in market-wide investment opportunities, and enhance the accuracy of model estimations, I adopt the method outlined by Tantaopas et al. (2016) which involves incorporating exogenous macroeconomic variables into the models. Moreover, I presume that for DJIA stocks, it is more likely for returns (R) to lead YouTube videos (YT), while for cryptocurrencies, it is more likely for YouTube videos (YT) to lead returns (R). Thus, Granger Causality between security returns (R) and YouTube videos (YT) with n lags will be tested for both markets.

In order to conduct the granger causality test, the stationary of the time series will be verified using the Augmented Dickey Fuller test. In case the time series were found to be non-stationary, they were made stationary through the process of differencing. This involves subtracting the number of YouTube videos at time t from the number of YouTube videos at time t−1, and similarly for the time series of cryptocurrency and DJIA. Once the time series were made stationary, a granger causality test could then be conducted. The model to test Granger Causality between Returns (R) and YouTube videos (YT) with n lags is tested in a specified model;

$$R_t = \delta_{01} + \delta_{11} R_{t-1} + ... + \delta_{n1} R_{t-n} + \theta_{11} YT_{t-1} + ... + \theta_{n1} YT_{t-n} + \omega_{t1} Z_{t1} + \varepsilon_t \quad (1)$$

$$YT_t = \delta_{02} + \delta_{12} R_{t-1} + ... + \delta_{n2} R_{t-n} + \theta_{12} YT_{t-1} + ... + \theta_{n2} YT_{t-n} + \omega_{t1} Z_{t1} + \varepsilon_t \quad (2)$$

Where "R" represents securities returns, "YT" represents the YouTube variables (as presented in Table 7) related to a particular keyword, "n" represents the number of optimal lags by the information criteria AIC (Akaike information criterion), and "Z" represents the vector of exogenous macroeconomic variables, namely the inflation rate (I), industrial production index (P), credit spread (C), and term spread (T). ε is the error term. The methodology involves testing two null hypotheses, (1) YT does not Granger cause R, and (2) R does not Granger cause YT, using the F test in two separate equations. The null hypotheses are tested to determine if the number of YouTube videos and securities returns have a causal relationship. I estimate model (1) for each markets and then repeat the analysis by replacing YouTube (YT) with each YouTube variables (N, NSENT, W, WSENT, VC, VCSENT). And repeat the analysis for YouTube variables without sentiment (N, W, VC) by replacing return (R) with absolute value of return (ABSR) to see impact neither it is negative nor positive return.

The second part of the study focused on analyzing the behavior of the top finance influencers in the cryptocurrency market. The process consisted of several key steps:

1. Video Categorization: Using YouTube's provided category IDs, I categorized the videos from the top finance influencers. This categorization allowed us to determine the distribution of video categories among the influencers.

2. Video Analysis: A comprehensive analysis of the collected videos was conducted to gain insights into finance influencer behavior. The analysis focused on three key aspects: (a) Video Posting Frequency (b) Video Length (c) View Count

3. Tag Analysis: I extracted the tags[6] from each video and analyzed them to gain deeper insights into the specific topics and themes covered by finance influencers. I utilized the Google Cloud Natural Language API for text classification to further categorize the tags and identify the content categories covered by the influencers. To ensure reliable and accurate categorization, I set a confidence score threshold of 0.5. This ensured that I focused on video tags that the API classified with a relatively high degree of confidence. Additionally, a word cloud was created to visually represent the most frequently used tags and provide a glimpse into the prevalent themes in finance influencer content.

4. VAR Granger Causality Test: The VAR Granger causality test was conducted to examine the causal relationships between the Top finance influencer YouTube variables and cryptocurrency returns.

Through these steps, I aimed to gain a comprehensive understanding of the behavior of finance influencers in the cryptocurrency market, including their video content, categorization, and the potential relationships between their YouTube variables and cryptocurrency returns.

[6] Video tags are a collection of keywords that are included in YouTube. The constraints placed on video titles and video descriptions mean that not all relevant keywords and phrases can be meaningfully incorporated into these video metadata. Such keywords are often reserved for video tags. (See Ruiz Segarra, A., & Suárez, J.-L. (2022). I tag, you tag: the role of tagging in the formation of topic-based communities of video game channels in YouTube (2016). *Social Network Analysis and Mining*, *12*(1), 1.)

6. EMPIRICALS RESULTS

6.1 Granger Causality for Cryptocurrency and DJIA stock

The analysis is started by validating the stationarity of the models[7]. The AIC optimal lag length is chosen for each cryptos and stocks, which is different from each to each. I present the results by separating into two panels, Panel A for Cryptocurrencies and Panel B for DJIA Stocks. The results of the VAR Granger causality test are summarized in the following table 4. The presence of symbols indicates the significance and direction of the relationship:

"+" indicates that the coefficient for the first lag of the respective YouTube variable is positive.

"-" indicates that the coefficient for the first lag of the respective YouTube variable is negative.

"*" denotes statistical significance at the 10% level.

"**" denotes statistical significance at the 5% level.

"***" denotes statistical significance at the 1% level.

Table 4: *Summary of the first lag effect of YouTube Variables and Cryptocurrencies Returns*

(a) Summary of the effect of YouTube Variables on Returns for Cryptocurrencies (First lag)

Panel A: Cryptocurrencies: Model (1)											
Symbol		W_{t-1}	$WSENT_{t-1}$	N_{t-1}	$NSENT_{t-1}$	VC_{t-1}	$VCSENT_{t-1}$		W_{t-1}	N_{t-1}	VC_{t-1}
BTC	R_t	+	+	+ **	+	+	+ *	$ABSR_t$	+ *	+ ***	+
ETH	R_t	+	+	+ ***	+ ***	+	+	$ABSR_t$	+	+ *	+
BNB	R_t	+ ***	+ *	+ ***	+ ***	+ ***	+	$ABSR_t$	+ ***	+ ***	+ *
SOL	R_t	+	+	+ ***	+	+	+	$ABSR_t$	+	+	-
ADA	R_t	+ *	-	+ ***	+	+	-	$ABSR_t$	+ ***	+ ***	+ **
XRP	R_t	+	-	+ ***	+	+	-	$ABSR_t$	+ **	+ ***	+ **
LUNA	R_t	+	+	+ ***	+	+ **	+	$ABSR_t$	+	+ **	+
AVAX	R_t	+	+	+ ***	+	+	+	$ABSR_t$	+	+ **	+ **
DOT	R_t	+ *	-	+ ***	+	+ **	+	$ABSR_t$	+	+ **	+ *
DOGE	R_t	+ ***	+ *	+ ***	+ ***	+ ***	+	$ABSR_t$	+ ***	+ ***	+ ***
SHIB	R_t	-	-	+	+	-	-	$ABSR_t$	+	+	-
MATIC	R_t	+	+	+ ***	- ***	+	+	$ABSR_t$	+ **	+ ***	+ **
CRO	R_t	+	-	+ ***	+ **	+	-	$ABSR_t$	+	+ ***	+
UNI	R_t	+	+	+ ***	+	+	-	$ABSR_t$	+	+ ***	+
ALGO	R_t	+ ***	+	+ ***	+	+ ***	+	$ABSR_t$	+ **	+ ***	+ **
LTC	R_t	+ **	+	+ ***	+	+	+ *	$ABSR_t$	+ ***	+ ***	+ ***
LINK	R_t	+ *	+	+ ***	+ **	+ ***	+	$ABSR_t$	+ **	+ **	+ **
NEAR	R_t	+ *	-	+ ***	-	+ ***	+	$ABSR_t$	+	+ ***	+
BCH	R_t	+ *	+	+	+ **	+	+ **	$ABSR_t$	+ **	+ **	+ ***
TRX	R_t	+	+	+	+	-	+	$ABSR_t$	+	+ **	+
ATOM	R_t	-	+	+ ***	+ *	+	+	$ABSR_t$	+	+ **	+
XLM	R_t	+ ***	+ **	+ ***	+ ***	+ *	+	$ABSR_t$	+	+ ***	+
MANA	R_t	+ ***	+ ***	+ ***	+ ***	+ ***	+ **	$ABSR_t$	+ ***	+ ***	+ ***
FTM	R_t	+ ***	+	+ ***	+ *	+ ***	+	$ABSR_t$	+ *	+ ***	+ **
AXS	R_t	+	-	+ ***	+ ***	+ *	-	$ABSR_t$	+	+ **	+

Estimated coefficients are signed in + if the coefficient is positive, and – if the coefficient is negative. Followed by significant level.
$*$ Significant at 10% level. $**$ Significant at 5% level. $***$ Significant at 1% level.

[7] The results of the stationary test are available upon request.

(b) Summary of the effect of Returns on YouTube Variables for Cryptocurrencies (First lag)

Panel A: Cryptocurrencies: Model (2)

Symbol		W_t	$WSENT_t$	N_t	$NSENT_t$	VC_t	$VCSENT_t$		W_t	N_t	VC_t
BTC	R_{t-1}	+	+ ***	+	+ ***	+	+ ***	$ABSR_{t-1}$	+	-	-
ETH	R_{t-1}	+ *	+ ***	+ *	+ **	+ *	+ **	$ABSR_{t-1}$	+	-	+
BNB	R_{t-1}	+ **	+ ***	+ ***	+ **	+ **	+ **	$ABSR_{t-1}$	+ *	+ **	+
SOL	R_{t-1}	+ ***	+	+	+	+ ***	+	$ABSR_{t-1}$	+	-	+
ADA	R_{t-1}	+ **	+	+ *	+	+	+ *	$ABSR_{t-1}$	+	+	+
XRP	R_{t-1}	+ **	+ **	+	+ **	+ **	+ **	$ABSR_{t-1}$	+	+	+ *
LUNA	R_{t-1}	-	+ ***	-	-	+	+	$ABSR_{t-1}$	+ ***	-	+ **
AVAX	R_{t-1}	+ **	+ ***	+ **	+ **	+ *	+ ***	$ABSR_{t-1}$	+ ***	+ ***	+ ***
DOT	R_{t-1}	+ **	+ ***	+ ***	+ ***	+	+ ***	$ABSR_{t-1}$	+ *	+	+ *
DOGE	R_{t-1}	+ ***	+ ***	+ ***	+ ***	+ **	+ ***	$ABSR_{t-1}$	+ ***	+ ***	+ ***
SHIB	R_{t-1}	+ ***	+ ***	+ ***	+ ***	+ ***	+ ***	$ABSR_{t-1}$	+ ***	+ ***	+ ***
MATIC	R_{t-1}	+	+ ***	+	+ *	+	+ ***	$ABSR_{t-1}$	+ **	-	+
CRO	R_{t-1}	-	+	-	-	+	-	$ABSR_{t-1}$	+	-	+
UNI	R_{t-1}	+	-	+	+ **	+	+	$ABSR_{t-1}$	-	-	-
ALGO	R_{t-1}	+	+	-	+	+ *	+	$ABSR_{t-1}$	+ ***	+ ***	+ ***
LTC	R_{t-1}	+ ***	+ ***	+ ***	+ ***	+	+ ***	$ABSR_{t-1}$	+	+	+
LINK	R_{t-1}	+	+ ***	+	+ **	+	+ ***	$ABSR_{t-1}$	+	+	+
NEAR	R_{t-1}	- **	+	- ***	+	- *	+	$ABSR_{t-1}$	-	- *	+
BCH	R_{t-1}	+	+ ***	+ **	+ ***	+	+ ***	$ABSR_{t-1}$	+	+	-
TRX	R_{t-1}	+	+ ***	+	+ ***	+	+ ***	$ABSR_{t-1}$	+	+	+
ATOM	R_{t-1}	+	+	-	-	+	+	$ABSR_{t-1}$	+	+	-
XLM	R_{t-1}	+ *	+ **	+	+ *	+ *	+ ***	$ABSR_{t-1}$	+	+	+
MANA	R_{t-1}	+ ***	+ **	+ **	+ **	+ ***	+ *	$ABSR_{t-1}$	+ ***	+ ***	+ **
FTM	R_{t-1}	+	+	-	+	+	+ ***	$ABSR_{t-1}$	+	-	+
AXS	R_{t-1}	+ *	+	+	+	+	+	$ABSR_{t-1}$	+	+ *	+

Estimated coefficients are signed in + if the coefficient is positive, and – if the coefficient is negative. Followed by significant level.
∗ Significant at 10% level. ∗∗ Significant at 5% level. ∗∗∗ Significant at 1% level.

The table 4 presents the results of the first lag analysis[8] of the effect of YouTube variables on returns for various cryptocurrencies, and vice versa. Each row corresponds to a specific cryptocurrency, while the columns represent different YouTube variables: W (Weight of YouTube View count), WSENT (Weight of YouTube View count multiplied by Sentiment), N (YouTube Video Count), NSENT (YouTube Video Count multiplied by Sentiment), VC (Natural Logarithm of YouTube View Count), and VCSENT (Natural Logarithm of YouTube View Count multiplied by Sentiment).

The empirical analysis revealed compelling findings regarding the relationship between YouTube video count and cryptocurrency returns. The Granger causality test indicated that for most cryptocurrencies, YouTube video count (N) exhibited a significant influence on cryptocurrency returns (R). The test was conducted to examine the relationship between the number of YouTube videos about cryptocurrencies and two different variables: (1) returns (R), and (2) absolute value of

[8] The full results are available in Appendix H.

returns (ABSR). Regarding the returns (R), the results (Table 5 and 6) indicate significant Granger causality relationships between the number of YouTube videos and the returns of the analyzed cryptocurrencies. Out of the 25 cryptocurrencies studied, 22 exhibited a statistically significant relationship at a 1% level of significance, and one cryptocurrency showed a significant relationship at a 5% level of significance. The coefficients associated with these relationships were positive, reinforcing the notion that YouTube videos about cryptocurrencies have a causal impact on the direction of the cryptocurrency returns, indicating that an increase in the number of YouTube videos about these cryptocurrencies led to a subsequent increase in their returns.

In terms of the absolute value of returns (ABSR), the results reveal significant Granger causality relationships between the number of YouTube videos and the magnitude of the analyzed cryptocurrencies' returns. Among the 25 cryptocurrencies examined, 23 demonstrated a statistically significant relationship at a 1% level of significance. Furthermore, eight cryptocurrencies exhibited a significant relationship at a 5% level of significance, and one cryptocurrency showed significance at a 10% level. All of the coefficients associated with these relationships were positive, this implies that the number of YouTube videos about these cryptocurrencies had a significant predictive power for the magnitude of their returns, irrespective of the direction.

This suggests that the content produced by finance influencers on YouTube has a significant impact on the price movements of cryptocurrencies. Conversely, the analysis also revealed that returns in the cryptocurrency market had a limited Granger causality effect on YouTube video count. In other words, cryptocurrency returns did not consistently lead to an increase in YouTube video count. This finding suggests that in the cryptocurrency market, the content produced by finance influencers on YouTube has a more pronounced impact on price movements compared to the influence of price movements on the creation of new influencer content.

Table 5: *Vector auto regression for the YouTube Video Count and Cryptocurrency return.*

Panel A: Cryptocurrencies

	BTC		ETH		BNB		SOL		ADA		XRP		LUNA		AVAX	
	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t
Intercept	-53.980	0.696	-25.840	1.113	-90.045**	1.856**	-88.485*	5.078**	-6.870	2.384***	-51.240	0.972	-132.515***	-0.818	-119.084*	1.509
	(0.030)	(0.559)	(64.375)	(0.714)	(41.304)	(0.860)	(49.260)	(2.203)	(41.866)	(0.813)	(55.322)	(0.858)	(20.393)	(1.504)	(65.090)	(2.450)
R_{t-1}	3.513	-0.063**	4.694*	-0.108***	4.221***	-0.107***	0.323	-0.109***	3.098*	-0.087***	2.090	-0.040	-0.095	-0.040	3.244**	-0.044
	4.044	0.0306754	2.775	0.0307696	1.492	0.03109	0.916	0.040962	1.582	0.0307272	1.973	0.0306104	0.443	0.0326819	1.302	0.04902
R_{t-2}	-2.808	0.024	1.866	0.042	3.926***	0.064**	1.583*	2.8E-3	1.043	0.015	-1.446	-0.024	0.038	0.050	3.484***	0.029
	(4.049)	(0.031)	(2.794)	(0.031)	(1.508)	(0.031)	(0.921)	(0.041)	(1.590)	(0.031)	(1.972)	(0.031)	(0.443)	(0.033)	(1.306)	(0.049)
R_{t-3}	5.084	-1.7E-3	0.327	-6.1E-3	2.249	-0.017	1.720*	-0.012	-1.660	-0.021	2.670	1.9E-4	0.384	-0.032	-0.039	0.090*
	(4.051)	(0.031)	(2.800)	(0.031)	(1.515)	(0.032)	(0.924)	(0.041)	(1.581)	(0.031)	(1.974)	(0.031)	(0.442)	(0.033)	(1.314)	(0.049)
N_{t-1}	1.2E-39***	5.7E-4**	0.411***	1.4E-3***	0.385***	5.7E-3***	0.309***	5.2E-3***	0.327***	3.3E-3***	0.469***	1.6E-3***	0.598***	8.8E-3***	0.402***	5.5E-3***
	(0.030)	(0.000)	(0.031)	(0.000)	(0.031)	(0.001)	(0.040)	(0.002)	(0.030)	(0.001)	(0.030)	(0.000)	(0.033)	(0.002)	(0.050)	(0.002)
N_{t-2}	0.157***	-4.5E-4*	0.109***	-8.2E-4**	0.030	-2.9E-3***	0.059	-1.3E-3	0.134***	-1.2E-3*	0.125***	-4.1E-4	0.069*	-4.1E-3	0.172***	-3.8E-3*
	(0.033)	(0.000)	(0.033)	(0.000)	(0.034)	(0.001)	(0.042)	(0.002)	(0.032)	(0.001)	(0.034)	(0.001)	(0.038)	(0.003)	(0.053)	(0.002)
N_{t-3}	0.062*	-1.2E-4	0.044	-5.5E-4	0.089***	-7.8E-4	0.232***	-1.4E-3	0.100***	2.6E-4	-0.012	-6.7E-4	-0.045	3.2E-4	5.1E-3	-5.2E-5
	(0.033)	(0.000)	(0.033)	(0.000)	(0.034)	(0.001)	(0.042)	(0.002)	(0.033)	(0.001)	(0.034)	(0.001)	(0.038)	(0.003)	(0.054)	(0.002)
I	11.349	-0.078	9.196	-0.094	14.111**	-0.275**	15.254**	-0.602**	4.721	-0.292**	11.763	-0.158	23.757***	0.283	27.578**	0.023
	(12.031)	(0.091)	(10.540)	(0.714)	(6.659)	(0.139)	(6.805)	(0.304)	(6.842)	(0.133)	(9.146)	(0.142)	(3.577)	(0.264)	(11.410)	(0.429)
C	-0.124	-4.6E-3	-0.424	-0.012*	-0.210	-9.4E-3	0.305	-0.077**	-0.411	-0.013*	-0.316	-2.1E-3	0.163	-9.7E-3	0.637	-0.065
	(0.684)	(0.005)	(0.598)	(0.007)	(0.356)	(0.007)	(0.816)	(0.037)	(0.382)	(0.007)	(0.509)	(0.008)	(0.141)	(0.010)	(1.186)	(0.045)
P	-1.362	-0.055	-4.870	-0.122**	2.741	-0.068	0.631	-0.331	-3.813	-0.160**	-2.450	-0.021	0.079	-0.160	-7.860	-0.316
	(6.160)	(0.047)	(5.392)	(0.060)	(3.212)	(0.067)	(5.200)	(0.233)	(3.445)	(0.067)	(4.573)	(0.071)	(1.322)	(0.097)	(13.530)	(0.509)
T	0.118	1.0E-3	0.082	1.4E-4	0.672**	0.010	0.164	-0.020	0.608*	6.2E-3	-0.357	7.9E-3	-0.450***	-6.0E-4	0.367	-0.028
	(0.605)	(0.005)	(0.535)	(0.006)	(0.323)	(0.007)	(0.426)	(0.019)	(0.354)	(0.007)	(0.452)	(0.007)	(0.134)	(0.010)	(0.572)	(0.022)
R^2	0.569	0.027	0.509	0.048	0.593	0.113	0.558	0.048	0.562	0.054	0.456	0.019	0.688	0.056	0.538	0.098
Adj. R^2	0.560	0.005	0.501	0.032	0.583	0.093	0.544	0.019	0.556	0.039	0.449	0.006	0.682	0.038	0.517	0.056

Panel A: Cryptocurrencies (Cont.)

	DOT		DOGE	DOGE	SHIB	SHIB	MATIC	MATIC	CRO	CRO	UNI	UNI	ALGO	ALGO	LTC	LTC
	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t
Intercept	-32.459	4.305**	-4.186	2.967**	-85.789***	1.263	-137.934**	1.514	-43.321**	0.151	9.886	4.956**	-69.634***	1.085	33.969	1.338*
	(63.922)	(1.973)	(23.909)	(1.166)	(28.509)	(7.371)	(32.145)	(1.881)	(18.271)	(0.998)	(44.536)	(2.073)	(23.264)	(1.091)	(24.630)	(0.795)
R_{t-1}	4.821***	-0.070	2.176***	-0.085***	0.558***	0.188***	0.559	-6.3E-3	-0.281	-0.050*	1.162	-0.106**	-0.314	-0.098***	2.917***	-0.059*
	1.468	0.0453242	0.665	0.032428	0.172	0.044356	0.555	0.0324603	0.556	0.0303749	1.001	0.0465911	0.709	0.03325	0.944	0.0304914
R_{t-2}	-2.160	-3.7E-3	2.495***	-0.101***	0.354**	-0.091**	0.627	0.077**	1.595***	9.0E-3	-0.748	-0.010	-0.290	-0.014	0.811	7.6E-3
	(1.481)	(0.046)	(0.673)	(0.033)	(0.171)	(0.044)	(0.555)	(0.032)	(0.557)	(0.030)	(0.994)	(0.046)	(0.711)	(0.033)	(0.946)	(0.031)
R_{t-3}	4.455***	0.081*	2.325***	0.099***	-0.039	0.059	0.573	5.8E-3	0.732	0.150***	3.450***	-0.078*	1.430**	0.037	1.293	-0.046
	(1.440)	(0.044)	(0.683)	(0.033)	(0.169)	(0.044)	(0.552)	(0.032)	(0.554)	(0.030)	(0.919)	(0.043)	(0.702)	(0.033)	(0.944)	(0.030)
N_{t-1}	0.242***	4.6E-3***	0.504***	0.017***	0.307***	0.012	0.340***	9.4E-3***	0.361***	6.2E-3***	0.208***	6.2E-3***	0.238***	6.1E-3***	0.240***	3.3E-3***
	(0.046)	(0.001)	(0.032)	(0.002)	(0.044)	(0.011)	(0.032)	(0.002)	(0.030)	(0.002)	(0.046)	(0.002)	(0.034)	(0.002)	(0.030)	(0.001)
N_{t-2}	0.090*	-2.8E-3*	-2.5E-3	-0.011***	0.144***	-9.4E-3	0.026	-6.3E-3***	0.053	-3.6E-3**	0.145***	-3.7E-3*	0.116***	-1.7E-3	0.199***	-1.1E-3
	(0.047)	(0.001)	(0.036)	(0.002)	(0.046)	(0.012)	(0.034)	(0.002)	(0.033)	(0.002)	(0.046)	(0.002)	(0.035)	(0.002)	(0.031)	(0.001)
N_{t-3}	0.171***	-5.7E-4	0.065*	-4.0E-4	0.173***	-0.024**	0.070**	-2.7E-3	0.042	-2.0E-3	0.030	7.5E-4	0.096***	-4.4E-5	8.5E-3	-6.0E-4
	(0.047)	(0.001)	(0.037)	(0.002)	(0.044)	(0.011)	(0.035)	(0.002)	(0.032)	(0.002)	(0.045)	(0.002)	(0.035)	(0.002)	(0.032)	(0.001)
I	16.742	-0.432	-1.074	-0.473**	11.988***	-1.707	24.553***	-0.183	8.028***	0.034	18.455**	-1.358***	14.928***	-6.8E-3	-6.948*	-0.192
	(10.410)	(0.321)	(3.915)	(0.191)	(4.513)	(1.167)	(5.631)	(0.329)	(3.040)	(0.166)	(7.910)	(0.368)	(4.051)	(0.190)	(4.080)	(0.132)
C	-0.830	-0.078**	0.027	-0.013	0.181	-0.064	0.091	-0.017	0.033	-5.8E-3	0.379	-0.104***	-0.294	-0.019**	-0.123	-8.4E-3
	(1.126)	(0.035)	(0.216)	(0.011)	(0.466)	(0.120)	(0.200)	(0.012)	(0.158)	(0.009)	(0.816)	(0.038)	(0.203)	(0.010)	(0.223)	(0.007)
P	-12.686	-0.366	2.176	-0.069	4.090	1.831	0.326	-0.099	-0.266	-0.070	-24.580**	0.628	-2.691	-0.219**	1.265	-0.055
	(14.079)	(0.435)	(1.942)	(0.095)	(5.868)	(1.517)	(1.853)	(0.108)	(1.428)	(0.078)	(10.122)	(0.471)	(1.941)	(0.091)	(2.001)	(0.065)
T	0.240	-0.032*	0.592***	0.022**	-0.116	0.037	-0.266	0.013	-0.114	8.4E-4	0.162	-0.028	0.202	3.9E-3	0.039	4.8E-3
	(0.588)	(0.018)	(0.215)	(0.010)	(0.241)	(0.062)	(0.190)	(0.011)	(0.141)	(0.008)	(0.403)	(0.019)	(0.183)	(0.009)	(0.198)	(0.006)
R^2	0.331	0.078	0.698	0.150	0.505	0.067	0.690	0.073	0.585	0.055	0.169	0.065	0.448	0.057	0.295	0.033
Adj. R^2	0.311	0.051	0.692	0.131	0.495	0.048	0.684	0.055	0.578	0.041	0.151	0.044	0.438	0.041	0.285	0.020

Panel A: Cryptocurrencies (Cont.)

	LINK	LINK	NEAR	NEAR	BCH	BCH	TRX	TRX	ATOM	ATOM	XLM	XLM	MANA	MANA	FTM	FTM	AXS	AXS
	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t
Intercept	-27.584	0.716	-101.511*	1.600	29.540	1.246	-50.953	1.490*	-77.605**	0.360	4.114	1.241	-36.594*	1.634	-76.597**	1.740	-152.744*	0.763
	(25.666)	(0.985)	(45.780)	(2.757)	(30.979)	(0.860)	(40.367)	(0.811)	(17.235)	(1.302)	(23.657)	(0.804)	(19.399)	(1.157)	(21.033)	(1.600)	(57.783)	(4.470)
R_{t-1}	0.857	-0.115***	-2.385***	-0.042	2.300**	-0.102***	1.377	-0.085***	-0.057	-0.181***	1.244	-0.083***	1.295**	-0.054*	-0.130	-0.056*	0.158	-0.044
	0.804	0.03086	0.816	0.049128	1.107	0.030733	1.536	0.03086	0.413	0.03122	0.915	0.03109	0.528	0.03147	0.408	0.031012	0.648	0.050104
R_{t-2}	0.819	0.014	0.783	-0.042	1.035	-3.9E-3	1.078	6.5E-3	0.042	-0.075**	0.675	-0.031	-0.841	-0.044	0.889**	0.036	1.215*	0.067
	(0.810)	(0.031)	(0.817)	(0.049)	(1.113)	(0.031)	(1.541)	(0.031)	(0.419)	(0.032)	(0.918)	(0.031)	(0.528)	(0.031)	(0.408)	(0.031)	(0.647)	(0.050)
R_{t-3}	0.293	0.028	0.471	-0.029	0.894	0.017	2.326	-0.038	0.439	-7.4E-3	2.233**	0.025	9.9E-3	-0.056*	0.477	0.037	-0.528	0.050
	(0.810)	(0.031)	(0.819)	(0.049)	(1.114)	(0.031)	(1.535)	(0.031)	(0.419)	(0.032)	(0.913)	(0.031)	(0.530)	(0.032)	(0.409)	(0.031)	(0.641)	(0.050)
N_{t-1}	0.227***	4.4E-3***	0.499***	0.011***	0.214***	1.4E-3	0.271***	9.4E-4	0.177***	7.5E-3***	0.281***	8.2E-3***	0.400***	0.014***	0.289***	0.012***	0.238***	0.012***
	(0.031)	(0.001)	(0.049)	(0.003)	(0.031)	(0.001)	(0.031)	(0.001)	(0.031)	(0.002)	(0.031)	(0.001)	(0.031)	(0.002)	(0.031)	(0.002)	(0.049)	(0.004)
N_{t-2}	0.044	-2.4E-3*	-0.037	-5.2E-3	0.102***	1.4E-4	0.191***	4.4E-4	0.137***	-3.2E-3	0.071**	-2.6E-4	0.033	-5.3E-3***	0.055*	-2.0E-3	0.144***	-7.7E-3**
	(0.032)	(0.001)	(0.055)	(0.003)	(0.031)	(0.001)	(0.032)	(0.001)	(0.032)	(0.002)	(0.033)	(0.001)	(0.034)	(0.002)	(0.032)	(0.002)	(0.050)	(0.004)
N_{t-3}	0.124***	-4.8E-4	2.2E-3	-5.3E-4	0.040	-2.8E-3***	0.069**	-9.3E-4	0.092***	-3.9E-5	0.087***	-3.8E-5	0.076**	4.1E-5	0.122***	-4.2E-3*	0.088*	-4.9E-4
	(0.032)	(0.001)	(0.056)	(0.003)	(0.031)	(0.001)	(0.032)	(0.001)	(0.032)	(0.002)	(0.033)	(0.001)	(0.034)	(0.002)	(0.032)	(0.002)	(0.050)	(0.004)
I	8.023*	-0.052	21.796***	0.036	-2.311	-0.173	7.312	-0.188	14.586***	0.107	-0.151	-0.127	6.226*	-0.165	13.140***	-0.199	21.241**	-0.014
	(4.277)	(0.164)	(8.198)	(0.494)	(5.068)	(0.141)	(6.611)	(0.133)	(3.003)	(0.227)	(3.878)	(0.132)	(3.191)	(0.190)	(3.496)	(0.266)	(9.617)	(0.744)
C	-0.018	-6.1E-3	0.307	-0.017	-0.407	-9.3E-3	0.159	-9.3E-3	-0.068	-0.018*	-0.321	-6.7E-3	-0.027	-0.019*	0.042	-0.012	1.946	0.031
	(0.236)	(0.009)	(0.886)	(0.053)	(0.288)	(0.008)	(0.369)	(0.007)	(0.137)	(0.010)	(0.218)	(0.007)	(0.166)	(0.010)	(0.166)	(0.013)	(1.238)	(0.096)
P	-3.576*	-0.088	-4.336	-0.376	-3.267	-0.057	2.272	-0.093	-0.673	-0.198**	-0.434	-0.114*	0.463	-0.146	0.788	-0.132	6.695	-0.162
	(2.149)	(0.082)	(8.491)	(0.511)	(2.568)	(0.071)	(3.335)	(0.067)	(1.271)	(0.096)	(1.970)	(0.067)	(1.495)	(0.089)	(1.507)	(0.115)	(8.457)	(0.654)
T	0.031	-4.1E-3	-0.651*	-0.025	0.695**	4.8E-3	0.353	8.1E-3	-0.133	-2.6E-3	0.357*	9.1E-4	0.091	0.011	-0.082	5.8E-3	-0.299	4.5E-3
	(0.210)	(0.008)	(0.368)	(0.022)	(0.273)	(0.008)	(0.344)	(0.007)	(0.123)	(0.009)	(0.199)	(0.007)	(0.146)	(0.009)	(0.145)	(0.011)	(0.351)	(0.027)
R^2	0.361	0.038	0.513	0.063	0.376	0.035	0.604	0.024	0.529	0.070	0.257	0.070	0.528	0.075	0.465	0.047	0.457	0.042
Adj. R^2	0.351	0.022	0.495	0.027	0.364	0.017	0.597	0.008	0.519	0.050	0.246	0.056	0.518	0.056	0.453	0.025	0.441	0.013

Estimated coefficients are followed by the standard errors in parenthesis. R represents cryptocurrency return, N represents YouTube Video Count, P represents industrial production index, C represents credit spread, T represents term spread, and t represents time unit of variables.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

Table 6: *The Effect of the number of YouTube Video and Cryptocurrencies Returns*
(a) The effect of Cryptocurrency returns on the number of YouTube Video

Panel A: Cryptocurrencies												
	BTC	ETH	BNB	SOL	ADA	XRP	LUNA	AVAX	DOT	DOGE	SHIB	MATIC
Intercept	-53.980	-25.840	-90.045**	-88.485*	-6.870	-51.240	-132.515***	-119.084*	-32.459	-4.186	-85.789***	-137.934***
	(0.030)	(64.375)	(41.304)	(49.260)	(41.866)	(55.322)	(20.393)	(65.090)	(63.922)	(23.909)	(28.509)	(32.145)
R_{t-1}	3.513	4.694*	4.221***	0.323	3.098*	2.090	-0.095	3.244**	4.821***	2.176***	0.558***	0.559
	(4.044)	(2.775)	(1.492)	(0.916)	(1.582)	(1.973)	(0.443)	(1.302)	(1.468)	(0.665)	(0.172)	(0.555)
R_{t-2}	-2.808	1.866	3.926***	1.583*	1.043	-1.446	0.038	3.484***	-2.160	2.495***	0.354**	0.627
	(4.049)	(2.794)	(1.508)	(0.921)	(1.590)	(1.972)	(0.443)	(1.306)	(1.481)	(0.673)	(0.171)	(0.555)
R_{t-3}	5.084	0.327	2.249	1.720*	-1.660	2.670	0.384	-0.039	4.455***	2.325***	-0.039	0.573
	(4.051)	(2.800)	(1.515)	(0.924)	(1.581)	(1.974)	(0.442)	(1.314)	(1.440)	(0.683)	(0.169)	(0.552)
N_{t-1}	1.2E-39***	0.411***	0.385***	0.309***	0.327***	0.469***	0.598***	0.402***	0.242***	0.504***	0.307***	0.340***
	(0.030)	(0.031)	(0.031)	(0.040)	(0.030)	(0.030)	(0.033)	(0.050)	(0.046)	(0.032)	(0.044)	(0.032)
N_{t-2}	0.157***	0.109***	0.030	0.059	0.134***	0.125***	0.069*	0.172***	0.090*	-2.5E-3	0.144***	0.026
	(0.033)	(0.033)	(0.034)	(0.042)	(0.032)	(0.034)	(0.038)	(0.053)	(0.047)	(0.036)	(0.046)	(0.034)
N_{t-3}	0.062*	0.044	0.089***	0.232***	0.100***	-0.012	-0.045	5.1E-3	0.171***	0.065*	0.173***	0.070**
	(0.033)	(0.033)	(0.034)	(0.042)	(0.033)	(0.034)	(0.038)	(0.054)	(0.047)	(0.037)	(0.044)	(0.035)
I	11.349	9.196	14.111**	15.254**	4.721	11.763	23.757***	27.578**	16.742	-1.074	11.988***	24.553***
	(12.031)	(10.540)	(6.659)	(6.805)	(6.842)	(9.146)	(3.577)	(11.410)	(10.410)	(3.915)	(4.513)	(5.631)
C	-0.124	-0.424	-0.210	0.305	-0.411	-0.316	0.163	0.637	-0.830	0.027	0.181	0.091
	(0.684)	(0.598)	(0.356)	(0.816)	(0.382)	(0.509)	(0.141)	(1.186)	(1.126)	(0.216)	(0.466)	(0.200)
P	-1.362	-4.870	2.741	0.631	-3.813	-2.450	0.079	-7.860	-12.686	2.176	4.090	0.326
	(6.160)	(5.392)	(3.212)	(5.200)	(3.445)	(4.573)	(1.322)	(13.530)	(14.079)	(1.942)	(5.868)	(1.853)
T	0.118	0.082	0.672**	0.164	0.608*	-0.357	-0.450***	0.367	0.240	0.592***	-0.116	-0.266
	(0.605)	(0.535)	(0.323)	(0.426)	(0.354)	(0.452)	(0.134)	(0.572)	(0.588)	(0.215)	(0.241)	(0.190)
R^2	0.569	0.509	0.593	0.558	0.562	0.456	0.688	0.538	0.331	0.698	0.505	0.690
Adj. R^2	0.560	0.501	0.583	0.544	0.556	0.449	0.682	0.517	0.311	0.692	0.495	0.684

Panel A: Cryptocurrencies (Cont.)

	CRO	UNI	ALGO	LTC	LINK	NEAR	BCH	TRX	ATOM	XLM	MANA	FTM	AXS
Intercept	-43.321**	9.886	-69.634***	33.969	-27.584	-101.511**	29.540	-50.953	-77.605***	4.114	-36.594*	-76.597***	-152.744***
	(18.271)	(44.536)	(23.264)	(24.630)	(25.666)	(45.780)	(30.979)	(40.367)	(17.235)	(23.657)	(19.399)	(21.033)	(57.783)
R_{t-1}	-0.281	1.162	-0.314	2.917***	0.857	-2.385***	2.300**	1.377	-0.057	1.244	1.295**	-0.130	0.158
	(0.556)	(1.001)	(0.709)	(0.944)	(0.804)	(0.816)	(1.107)	(1.536)	(0.413)	(0.915)	(0.528)	(0.408)	(0.648)
R_{t-2}	1.595***	-0.748	-0.290	0.811	0.819	0.783	1.035	1.078	0.042	0.675	-0.841	0.889**	1.215*
	(0.557)	(0.994)	(0.711)	(0.946)	(0.810)	(0.817)	(1.113)	(1.541)	(0.419)	(0.918)	(0.528)	(0.408)	(0.647)
R_{t-3}	0.732	3.450***	1.430**	1.293	0.293	0.471	0.894	2.326	0.439	2.233**	9.9E-3	0.477	-0.528
	(0.554)	(0.919)	(0.702)	(0.944)	(0.810)	(0.819)	(1.114)	(1.535)	(0.419)	(0.913)	(0.530)	(0.409)	(0.641)
N_{t-1}	0.361***	0.208***	0.238***	0.240***	0.227***	0.499***	0.214***	0.271***	0.177***	0.281***	0.400***	0.289***	0.238***
	(0.030)	(0.046)	(0.034)	(0.030)	(0.031)	(0.049)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.049)
N_{t-2}	0.053	0.145***	0.116***	0.199***	0.044	-0.037	0.102***	0.191***	0.137***	0.071**	0.033	0.055*	0.144***
	(0.033)	(0.046)	(0.035)	(0.031)	(0.032)	(0.055)	(0.031)	(0.032)	(0.032)	(0.033)	(0.034)	(0.032)	(0.050)
N_{t-3}	0.042	0.030	0.096***	8.5E-3	0.124***	2.2E-3	0.040	0.069**	0.092***	0.087***	0.076**	0.122***	0.088*
	(0.032)	(0.045)	(0.035)	(0.032)	(0.032)	(0.056)	(0.031)	(0.032)	(0.032)	(0.033)	(0.034)	(0.032)	(0.050)
I	8.028***	18.455**	14.928***	-6.948*	8.023*	21.796***	-2.311	7.312	14.586***	-0.151	6.226*	13.140***	21.241**
	(3.040)	(7.910)	(4.051)	(4.080)	(4.277)	(8.198)	(5.068)	(6.611)	(3.003)	(3.878)	(3.191)	(3.496)	(9.617)
C	0.033	0.379	-0.294	-0.123	-0.018	0.307	-0.407	0.159	-0.068	-0.321	-0.027	0.042	1.946
	(0.158)	(0.816)	(0.203)	(0.223)	(0.236)	(0.886)	(0.288)	(0.369)	(0.137)	(0.218)	(0.166)	(0.166)	(1.238)
P	-0.266	-24.580**	-2.691	1.265	-3.576*	-4.336	-3.267	2.272	-0.673	-0.434	0.463	0.788	6.695
	(1.428)	(10.122)	(1.941)	(2.001)	(2.149)	(8.491)	(2.568)	(3.335)	(1.271)	(1.970)	(1.495)	(1.507)	(8.457)
T	-0.114	0.162	0.202	0.039	0.031	-0.651*	0.695**	0.353	-0.133	0.357*	0.091	-0.082	-0.299
	(0.141)	(0.403)	(0.183)	(0.198)	(0.210)	(0.368)	(0.273)	(0.344)	(0.123)	(0.199)	(0.146)	(0.145)	(0.351)
R^2	0.585	0.169	0.448	0.295	0.361	0.513	0.376	0.604	0.529	0.257	0.528	0.465	0.457
Adj. R^2	0.578	0.151	0.438	0.285	0.351	0.495	0.364	0.597	0.519	0.246	0.518	0.453	0.441

Estimated coefficients are followed by the standard errors in parenthesis. R represents cryptocurrency return, N represents YouTube Video Count, P represents industrial production index, C represents credit spread, T represents term spread, and t represents time unit of variables.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(b) The effect of the number of YouTube Video on Cryptocurrency returns

Panel A: Cryptocurrencies												
	BTC	ETH	BNB	SOL	ADA	XRP	LUNA	AVAX	DOT	DOGE	SHIB	MATIC
Intercept	0.696	1.113	1.856**	5.078**	2.384***	0.972	-0.818	1.509	4.305**	2.967**	1.263	1.514
	(0.559)	(0.714)	(0.860)	(2.203)	(0.813)	(0.858)	(1.504)	(2.450)	(1.973)	(1.166)	(7.371)	(1.881)
R_{t-1}	-0.063**	-0.108***	-0.107***	-0.109***	-0.087***	-0.040	-0.040	-0.044	-0.070	-0.085***	0.188***	-6.3E-3
	(0.031)	(0.031)	(0.031)	(0.041)	(0.031)	(0.031)	(0.033)	(0.049)	(0.045)	(0.032)	(0.044)	(0.032)
R_{t-2}	0.024	0.042	0.064**	2.8E-3	0.015	-0.024	0.050	0.029	-3.7E-3	-0.101***	-0.091**	0.077**
	(0.031)	(0.031)	(0.031)	(0.041)	(0.031)	(0.031)	(0.033)	(0.049)	(0.046)	(0.033)	(0.044)	(0.032)
R_{t-3}	-1.7E-3	-6.1E-3	-0.017	-0.012	-0.021	1.9E-4	-0.032	0.090*	0.081*	0.099***	0.059	5.8E-3
	(0.031)	(0.031)	(0.032)	(0.041)	(0.031)	(0.031)	(0.033)	(0.049)	(0.044)	(0.033)	(0.044)	(0.032)
N_{t-1}	5.7E-4**	1.4E-3***	5.7E-3***	5.2E-3***	3.3E-3***	1.6E-3***	8.8E-3***	5.5E-3***	4.6E-3***	0.017***	0.012	9.4E-3***
	(0.000)	(0.000)	(0.001)	(0.002)	(0.001)	(0.000)	(0.002)	(0.002)	(0.001)	(0.002)	(0.011)	(0.002)
N_{t-2}	-4.5E-4*	-8.2E-4**	-2.9E-3***	-1.3E-3	-1.2E-3*	-4.1E-4	-4.1E-3	-3.8E-3*	-2.8E-3*	-0.011***	-9.4E-3	-6.3E-3***
	(0.000)	(0.000)	(0.001)	(0.002)	(0.001)	(0.001)	(0.003)	(0.002)	(0.001)	(0.002)	(0.012)	(0.002)
N_{t-3}	-1.2E-4	-5.5E-4	-7.8E-4	-1.4E-3	2.6E-4	-6.7E-4	3.2E-4	-5.2E-5	-5.7E-4	-4.0E-4	-0.024**	-2.7E-3
	(0.000)	(0.000)	(0.001)	(0.002)	(0.001)	(0.001)	(0.003)	(0.002)	(0.001)	(0.002)	(0.011)	(0.002)
I	-0.078	-0.094	-0.275**	-0.602**	-0.292**	-0.158	0.283	0.023	-0.432	-0.473**	-1.707	-0.183
	(0.091)	(0.714)	(0.139)	(0.304)	(0.133)	(0.142)	(0.264)	(0.429)	(0.321)	(0.191)	(1.167)	(0.329)
C	-4.6E-3	-0.012*	-9.4E-3	-0.077**	-0.013*	-2.1E-3	-9.7E-3	-0.065	-0.078**	-0.013	-0.064	-0.017
	(0.005)	(0.007)	(0.007)	(0.037)	(0.007)	(0.008)	(0.010)	(0.045)	(0.035)	(0.011)	(0.120)	(0.012)
P	-0.055	-0.122**	-0.068	-0.331	-0.160**	-0.021	-0.160	-0.316	-0.366	-0.069	1.831	-0.099
	(0.047)	(0.060)	(0.067)	(0.233)	(0.067)	(0.071)	(0.097)	(0.509)	(0.435)	(0.095)	(1.517)	(0.108)
T	1.0E-3	1.4E-4	0.010	-0.020	6.2E-3	7.9E-3	-6.0E-4	-0.028	-0.032*	0.022**	0.037	0.013
	(0.005)	(0.006)	(0.007)	(0.019)	(0.007)	(0.007)	(0.010)	(0.022)	(0.018)	(0.010)	(0.062)	(0.011)
R^2	0.027	0.048	0.113	0.048	0.054	0.019	0.056	0.098	0.078	0.150	0.067	0.073
Adj. R^2	0.005	0.032	0.093	0.019	0.039	0.006	0.038	0.056	0.051	0.131	0.048	0.055

Panel A: Cryptocurrencies (Cont.)

	CRO	UNI	ALGO	LTC	LINK	NEAR	BCH	TRX	ATOM	XLM	MANA	FTM	AXS
Intercept	0.151	4.956**	1.085	1.338*	0.716	1.600	1.246	1.490*	0.360	1.241	1.634	1.740	0.763
	(0.998)	(2.073)	(1.091)	(0.795)	(0.985)	(2.757)	(0.860)	(0.811)	(1.302)	(0.804)	(1.157)	(1.600)	(4.470)
R_{t-1}	-0.050*	-0.106**	-0.098***	-0.059*	-0.115***	-0.042	-0.102***	-0.085***	-0.181***	-0.083***	-0.054*	-0.056*	-0.044
	(0.030)	(0.047)	(0.033)	(0.030)	(0.031)	(0.049)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.050)
R_{t-2}	9.0E-3	-0.010	-0.014	7.6E-3	0.014	-0.042	-3.9E-3	6.5E-3	-0.075**	-0.031	-0.044	0.036	0.067
	(0.030)	(0.046)	(0.033)	(0.031)	(0.031)	(0.049)	(0.031)	(0.031)	(0.032)	(0.031)	(0.031)	(0.031)	(0.050)
R_{t-3}	0.150***	-0.078*	0.037	-0.046	0.028	-0.029	0.017	-0.038	-7.4E-3	0.025	-0.056*	0.037	0.050
	(0.030)	(0.043)	(0.033)	(0.030)	(0.031)	(0.049)	(0.031)	(0.031)	(0.032)	(0.031)	(0.032)	(0.031)	(0.050)
N_{t-1}	6.2E-3***	6.2E-3***	6.1E-3***	3.3E-3***	4.4E-3***	0.011***	1.4E-3	9.4E-4	7.5E-3***	8.2E-3***	0.014***	0.012***	0.012***
	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.003)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.004)
N_{t-2}	-3.6E-3**	-3.7E-3*	-1.7E-3	-1.1E-3	-2.4E-3*	-5.2E-3	1.4E-4	4.4E-4	-3.2E-3	-2.6E-4	-5.3E-3***	-2.0E-3	-7.7E-3**
	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.003)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.004)
N_{t-3}	-2.0E-3	7.5E-4	-4.4E-5	-6.0E-4	-4.8E-4	-5.3E-4	-2.8E-3***	-9.3E-4	-3.9E-5	-3.8E-5	4.1E-5	-4.2E-3*	-4.9E-4
	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.003)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.004)
I	0.034	-1.358***	-6.8E-3	-0.192	-0.052	0.036	-0.173	-0.188	0.107	-0.127	-0.165	-0.199	-0.014
	(0.166)	(0.368)	(0.190)	(0.132)	(0.164)	(0.494)	(0.141)	(0.133)	(0.227)	(0.132)	(0.190)	(0.266)	(0.744)
C	-5.8E-3	-0.104***	-0.019**	-8.4E-3	-6.1E-3	-0.017	-9.3E-3	-9.3E-3	-0.018*	-6.7E-3	-0.019*	-0.012	0.031
	(0.009)	(0.038)	(0.010)	(0.007)	(0.009)	(0.053)	(0.008)	(0.007)	(0.010)	(0.007)	(0.010)	(0.013)	(0.096)
P	-0.070	0.628	-0.219**	-0.055	-0.088	-0.376	-0.057	-0.093	-0.198**	-0.114*	-0.146	-0.132	-0.162
	(0.078)	(0.471)	(0.091)	(0.065)	(0.082)	(0.511)	(0.071)	(0.067)	(0.096)	(0.067)	(0.089)	(0.115)	(0.654)
T	8.4E-4	-0.028	3.9E-3	4.8E-3	-4.1E-3	-0.025	4.8E-3	8.1E-3	-2.6E-3	9.1E-4	0.011	5.8E-3	4.5E-3
	(0.008)	(0.019)	(0.009)	(0.006)	(0.008)	(0.022)	(0.008)	(0.007)	(0.009)	(0.007)	(0.009)	(0.011)	(0.027)
R^2	0.055	0.065	0.057	0.033	0.038	0.063	0.035	0.024	0.070	0.070	0.075	0.047	0.042
Adj. R^2	0.041	0.044	0.041	0.020	0.022	0.027	0.017	0.008	0.050	0.056	0.056	0.025	0.013

Estimated coefficients are followed by the standard errors in parenthesis. R represents cryptocurrency return, N represents YouTube Video Count, P represents industrial production index, C represents credit spread, T represents term spread, and t represents time unit of variables.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

In examining the relationship between view count (VC) and weighted view count (W) with cryptocurrency returns, we found that both variables displayed a significant bidirectional relationship with returns (R) and Absolute Returns (ABSR) of cryptocurrencies. Notably, their impact on ABSR was more pronounced compared to R. However, the significance level was smaller compared to the relationship between N (YouTube video count) and R (returns), as well as N and ABSR. This highlights the stronger relationship between the number of YouTube videos (N) and both returns and the absolute returns of cryptocurrencies. It is worth noting that the use of ABSR as the dependent variable was intended to examine the overall effect of YouTube variables on returns without considering the directionality. This approach allowed us to assess the impact of YouTube metrics on returns regardless of the sentiment conveyed in the videos, as sentiment extraction was not feasible in this context.

The analysis revealed that the incorporation of sentiment yielded noteworthy results in examining the relationship between YouTube variables and cryptocurrency returns. Specifically, when sentiment-weighted video count (NSENT) was considered, a significant Granger causality effect on cryptocurrency returns (R) was observed for certain cryptocurrencies. However, it is important to highlight that while NSENT displayed a Granger causality effect on returns (R) for the majority of cryptocurrencies, a reverse relationship was observed for a larger subset of cryptocurrencies. Similar patterns were identified for sentiment-weighted variables WSENT and VCSENT, where a smaller number of cryptocurrencies exhibited a significant Granger causality effect between YouTube metrics and returns. Notably, an increase was observed in the number of cryptocurrencies where returns had a Granger causality effect on sentiment-weighted YouTube metrics.

Furthermore, a comparison was conducted to assess the impact of YouTube variables that incorporated sentiment versus those that did not. When considering variables incorporating sentiment (WSENT, NSENT, and VCSENT), their significance in Granger causing returns (R) was found to be relatively lower compared to the non-sentiment variables. However, it was observed that returns (R) had a higher causal effect on YouTube variables that incorporated sentiment. To gain deeper insights into the possible drivers of these findings, it is crucial to consider the Fear and Greed Index (FGI), which serves as a sentiment proxy in the cryptocurrency market. The FGI encompasses various factors, including volatility and drawdowns based on Bitcoin-related metrics. These factors may play a role in establishing correlations with cryptocurrency returns.

The analysis also examines the relationship between YouTube variables and cryptocurrency returns for specific types of cryptocurrencies. For meme coins DOGE and SHIB, the returns from these coins have a significant positive Granger causality effect on all YouTube variables. However, while the number of YouTube videos related to DOGE exhibits a significant relationship with its returns, there is no significant relationship observed between the number of YouTube videos related to SHIB and its returns. For exchange coins BNB and CRO, BNB shows a bidirectional relationship, while CRO exhibits different patterns. Some YouTube variables have a significant Granger causality effect on CRO's returns, but there is no significant relationship suggesting that CRO's returns influence YouTube variables. These findings suggest that the relationship between YouTube variables and cryptocurrency returns may vary depending on the type of cryptocurrency. It emphasizes the importance of considering the unique characteristics and dynamics of each cryptocurrency when examining the influence of finance influencers and YouTube content.

To summarize for cryptocurrency market, one of the most robust findings is that an increase in the number of YouTube videos (N) tends to lead to an increase in cryptocurrency returns (R) for the majority of cryptocurrencies examined. This suggests that the production of finance influencer content on YouTube has a significant influence on the price movements of cryptocurrencies. As finance influencers create and share more videos related to specific cryptocurrencies, it potentially leading to price increases.

These findings highlight the power and influence of finance influencers, or "FinFluencers," in the cryptocurrency market. The content they create and share on YouTube plays a role in driving price movements in the market. It also suggests that investors and market participants should consider the impact of finance influencer content when making investment decisions in the cryptocurrency space.

Moving to the analysis of the DJIA stock market [9] (Table 7), I observed a notable difference in the relationship between YouTube variables and returns compared to the cryptocurrency market. The analysis of the relationship between YouTube variables and returns in the DJIA stock showed limited evidence of a significant relationship. Unlike the cryptocurrency market, where YouTube variables demonstrated a notable impact on returns, the statistical evidence for such a relationship in the stock market was weak or absent. This suggests that the influence of YouTube variables on stock returns is not as prominent or consistent as observed in the cryptocurrency market.

Table 7: *Summary of the first lag effect of YouTube Variables and DJIA stocks Returns*

(a) Summary of the effect of YouTube Variables on Returns for DJIA stocks (First lag)

Panel B: DJIA Stocks: Model (1)

Symbol		W_{t-1}	$WSENT_{t-1}$	N_{t-1}	$NSENT_{t-1}$	VC_{t-1}	$VCSENT_{t-1}$		W_{t-1}	N_{t-1}	VC_{t-1}
UNH	R_t	-	+	-	+	+	+	$ABSR_t$	+	+	+
GS	R_t	-	+	-	+	+	+ *	$ABSR_t$	+	-	+
HD	R_t	-	-	-	-	-	-	$ABSR_t$	+	- *	+
MSFT	R_t	-	+	+ ***	+ **	-	+	$ABSR_t$	+	+ *	+
MCD	R_t	-	+	-	+	-	+ *	$ABSR_t$	-	-	+
CAT	R_t	+	-	+	-	+ *	-	$ABSR_t$	+ *	+	+
AMGN	R_t	+	+	-	+	-	+	$ABSR_t$	-	-	-
V	R_t	- *	+	+	-	- *	-	$ABSR_t$	+ *	+ ***	+ **
BA	R_t	+	+	+	+	+	+	$ABSR_t$	+	-	-
HON	R_t	+	+	+	+	+	+	$ABSR_t$	-	+	+
TRV	R_t	+	-	+	-	+	-	$ABSR_t$	+	-	+
AXP	R_t	- *	+	-	-	- **	+	$ABSR_t$	+	+	-
CRM	R_t	-	-	-	-	-	+	$ABSR_t$	-	-	+
CVX	R_t	+	-	+	-	+	-	$ABSR_t$	+	+	+
JNJ	R_t	+	+	+	+	+	+	$ABSR_t$	-	-	-
AAPL	R_t	-	-	+	-	- *	-	$ABSR_t$	-	+ **	-
WMT	R_t	-	+ ***	-	+ ***	-	+ **	$ABSR_t$	+	+ **	+
JPM	R_t	+	-	-	-	+	-	$ABSR_t$	-	-	-
PG	R_t	+	-	+	-	+	-	$ABSR_t$	-	+	+
IBM	R_t	+	+	-	+	-	+	$ABSR_t$	-	-	-
NKE	R_t	+	-	+	+	+	-	$ABSR_t$	-	+	-
MMM	R_t	+	+	+	+	+	+	$ABSR_t$	+	+	+
DIS	R_t	-	-	-	-	- **	-	$ABSR_t$	+	-	-
MRK	R_t	+	-	-	-	+	-	$ABSR_t$	+	-	+
KO	R_t	-	+	-	-	-	+	$ABSR_t$	+	+	+ *
CSCO	R_t	-	-	-	-	-	-	$ABSR_t$	-	-	+
VZ	R_t	+	+	-	-	-	-	$ABSR_t$	-	-	-
WBA	R_t	+ *	+	+ *	+	+	+	$ABSR_t$	-	-	-
INTC	R_t	- *	- **	- **	+	- *	- ***	$ABSR_t$	-	-	-

Estimated coefficients are signed in + if the coefficient is positive, and – if the coefficient is negative. Followed by significant level.
∗ Significant at 10% level. ∗∗ Significant at 5% level. ∗∗∗ Significant at 1% level.

[9] The full results are available in Appendix G.

(b) Summary of the effect of Returns on YouTube Variables for DJIA stocks (First lag)

Panel B: DJIA Stocks: Model (2)

Symbol	W_t	$WSENT_t$	N_t	$NSENT_t$	VC_t	$VCSENT_t$		W_t	N_t	VC_t
UNH	+	+	+	+	+	+	$ABSR_{t-1}$	-	-	-
GS	+	-	+	-	+	-	$ABSR_{t-1}$	-	+	-
HD	-	-	+	-	-	-	$ABSR_{t-1}$	-	-	-
MSFT	-	-	+	-	-	-	$ABSR_{t-1}$	+	+	+
MCD	-	+	+	+	+	+	$ABSR_{t-1}$	+	+	+
CAT	-	+	+	-	+	-	$ABSR_{t-1}$	+	+	+
AMGN	-	-	-	+	- *	+	$ABSR_{t-1}$	-	-	-
V	- *	+ **	+	+ **	-	+ **	$ABSR_{t-1}$	+	- *	+
BA	-	+	+	-	-	+	$ABSR_{t-1}$	+ *	+ **	+
HON	+	+	+ ***	+	+	+	$ABSR_{t-1}$	+	+	+
TRV	+	+	+	-	+ *	+	$ABSR_{t-1}$	+ *	+	+
AXP	-	-	-	+	-	-	$ABSR_{t-1}$	-	-	+
CRM	-	+	-	+	-	+	$ABSR_{t-1}$	+	-	+
CVX	+	+	+	+	-	+	$ABSR_{t-1}$	-	+	+
JNJ	+ *	+	+	+	+	+	$ABSR_{t-1}$	+	-	-
AAPL	+	-	+ *	-	+	-	$ABSR_{t-1}$	+	+	+
WMT	+	+	+	+	+	-	$ABSR_{t-1}$	+	+	+
JPM	+	+	+	+	-	+	$ABSR_{t-1}$	+	+	+
PG	+	-	+	-	-	-	$ABSR_{t-1}$	-	-	-
IBM	-	+	-	+	-	+	$ABSR_{t-1}$	+	+	+
NKE	-	+	-	+	-	+	$ABSR_{t-1}$	+	+	+
MMM	-	-	+	-	-	-	$ABSR_{t-1}$	+	-	+
DIS	+	+	+ ***	+	+	+	$ABSR_{t-1}$	+ *	+	+ *
MRK	+	-	+	-	+	-	$ABSR_{t-1}$	+	+	+
KO	-	-	-	-	+	-	$ABSR_{t-1}$	+ *	+	+
CSCO	+	+	+	+	+	+	$ABSR_{t-1}$	-	+	+
VZ	-	-	-	-	-	-	$ABSR_{t-1}$	+	+	+
WBA	-	+	-	+	-	+	$ABSR_{t-1}$	-	-	+
INTC	+	+	+	+	-	+	$ABSR_{t-1}$	+	+	+

Estimated coefficients are signed in + if the coefficient is positive, and – if the coefficient is negative. Followed by significant level.
$*$ Significant at 10% level. $**$ Significant at 5% level. $***$ Significant at 1% level.

For the majority of stocks in the DJIA, the analysis did not find a significant Granger causality effect between YouTube variables and returns. This suggests that changes in YouTube variables, such as the number of videos or view count, have limited or no predictive power in explaining stock returns in the DJIA. However, there were exceptions, such as the case of INTC stock. For INTC, the analysis indicated a significant Granger causality effect from YouTube variables to returns, but in a negative direction. This means that when the number of YouTube videos or view count increased, it was associated with a tendency for INTC returns to move in the opposite direction. This suggests a counterintuitive relationship between YouTube variables and returns for this specific stock.

Overall, the analysis highlights a notable difference between the cryptocurrency market and the stock market. While the relationship between YouTube variables and cryptocurrency returns was significant and consistent for many cryptocurrencies, the same relationship was weak or non-existent for stocks in the DJIA. This suggests that the influence of finance influencer content on price movements is more pronounced in the cryptocurrency market compared to the stock market.

One possible explanation for this difference in the influence of YouTube variables on cryptocurrency and stock returns is the fundamental nature of the stock market. As hypothesized, stock returns are more likely to be driven by fundamental factors such as company performance, market trends, and economic indicators. These fundamental factors may overshadow the impact of finance influencer content on stock price movements. In contrast, the cryptocurrency market is still in its early stages and characterized by a different investor structure, with a significant presence of individual investors. This unique characteristic of the cryptocurrency market may make it more susceptible to the influence of finance influencer content shared on YouTube.

These findings highlight the importance of considering the specific characteristics and dynamics of different markets when examining the relationship between YouTube variables and financial asset returns. The differences observed between the cryptocurrency market and the stock market indicate that the impact of YouTube variables may vary depending on the market context and underlying factors influencing price movements.

6.2 Analysis of Finance Influencer Behavior in Cryptocurrency

6.2.1 Top Finfluencer behavior on YouTube

For the selected 'Finance and Investment' category channels, a total of 18,669 videos were analyzed (fig. 5). The average video post frequency was found to be 9 days, with a median of 3 days, indicating that many finance influencers in the cryptocurrency space publish videos relatively frequently. The average video length was 15 minutes, with a median of 10 minutes, suggesting that influencers tend to provide substantial content in their videos. The average view count across the analyzed videos was 147,311, with a median view count of 22,450.

Figure 5: *Process for Identifying Top Finance Influencers in the Cryptocurrency Market.*

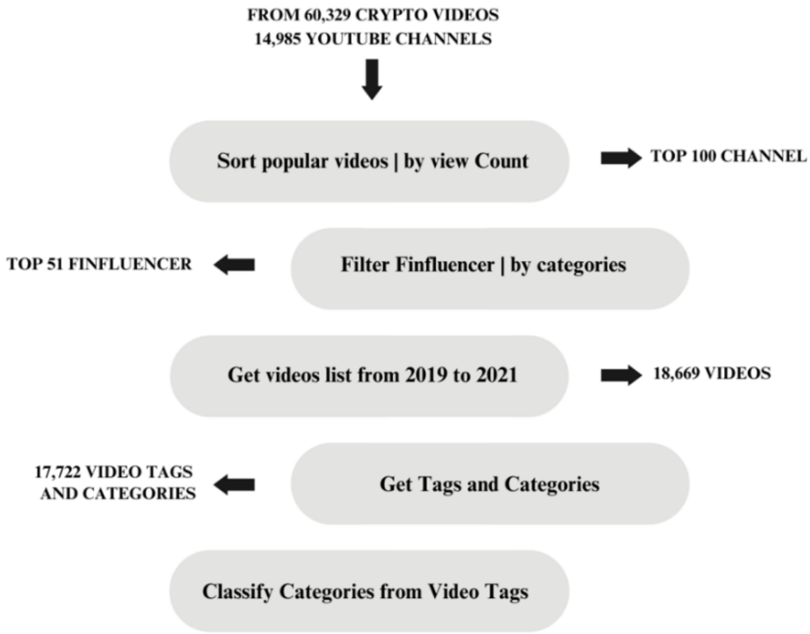


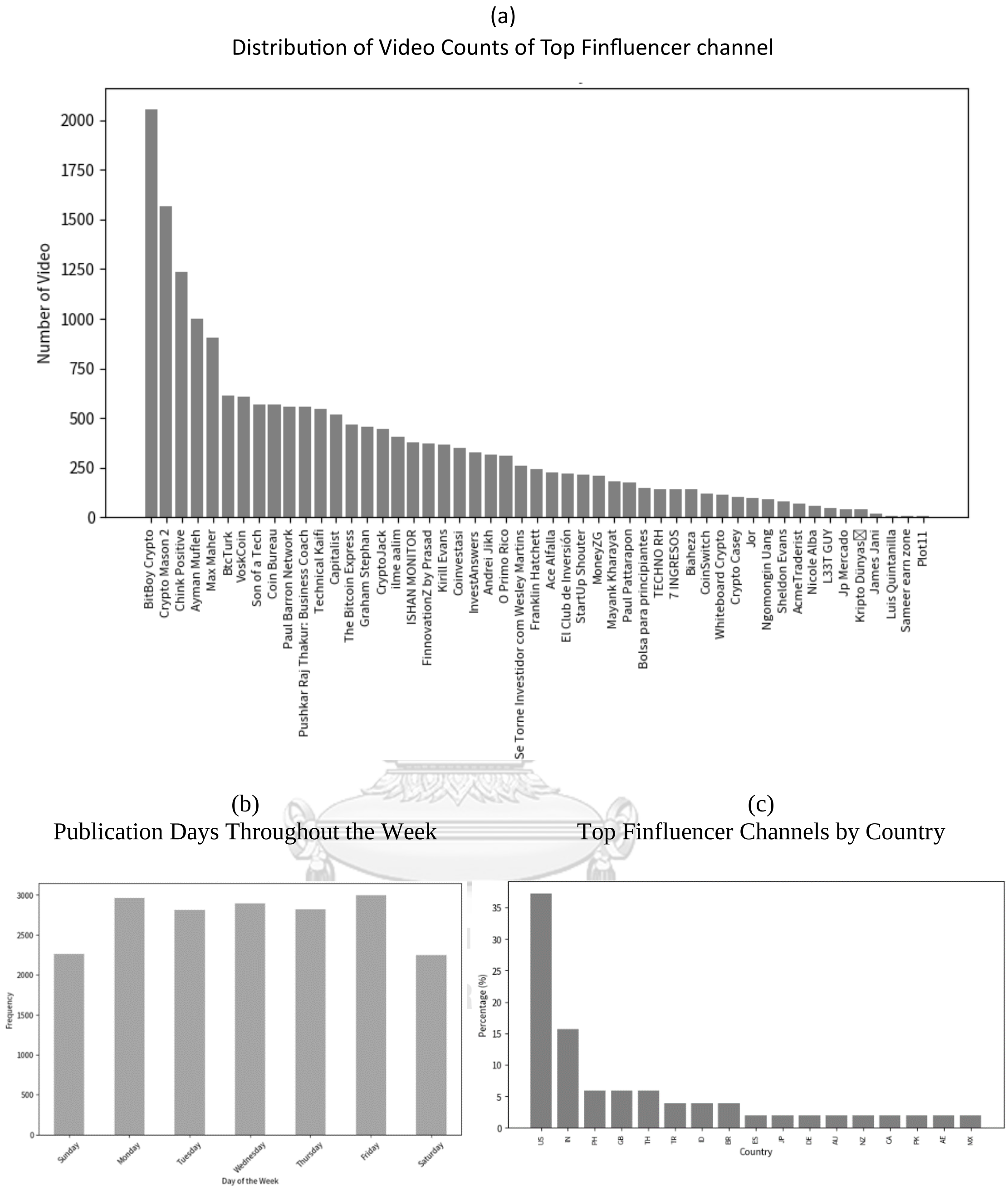
Table 8: *Top FinFluencers video statistics.*

Statistics	Video posts frequency (Day)	Video length (Minute)	View Count
Average	9	15	147,311
Median	3	10	22,450

The statistics in this table were analyzed from a total of 18,669 videos from the top finfluencers in the cryptocurrency market within the period from 2019 to 2021.

An interesting observation was made regarding video posting patterns on weekends. The analysis revealed a lower frequency of new video posts on Saturdays and Sundays. This pattern could be attributed to the fact that weekends are typically associated with lower activity levels in financial markets and among viewers. The videos were further categorized based on YouTube's provided category IDs. It was observed that the majority of videos fell under categories such as 'Education', 'Science and Technology', 'People and Blogs', and 'How-to and Style'. Fewer videos were categorized under 'Gaming,' 'Entertainment,' 'News and Politics,' and 'Film and Animation.'

Figure 6: *The statistics of Top Finfluencer YouTube videos*



However, since the category provided by YouTube does not directly describe the content related to finance, investment, or cryptocurrency, further analysis was conducted by extracting and analyzing the tags used in the videos. This approach allowed for deeper insights into the specific content categories covered by finance influencers. By examining the tags, I gained a better understanding of the behavior of finance influencers, their content focus beyond cryptocurrency, and the largest topics they cover in their videos.

Table 9: *Top FinFluencers video category provided by YouTube.*

Category Name	Frequency
Education	7783
Science&Technology	4902
People&Blogs	2489
Howto&Style	1465
Entertainment	1416
News&Politics	319
Gaming	281
Sports	10
Film&Animation	3

I utilized the Google Cloud Natural Language API[10] for text classification to analyze the behavior of finance influencers in the cryptocurrency space. Specifically, I leveraged the API's capabilities to examine the text content of video tags and categorize them based on their relevance to specific topics. The categorized results provided information on the areas of expertise and content focus of these influencers, shedding light on the specific subjects discussed in their videos.

The analysis revealed that the largest portion of their content, as indicated by the video tags, revolved around 'Currencies and Foreign Exchange', with a strong emphasis on cryptocurrency. The most frequently used tags included 'crypto', 'cryptocurrency', 'bitcoin news', and various other cryptocurrency-related terms. This highlights the focus on cryptocurrency in their videos. Additionally, finance influencers also covered topics related to 'investing', 'business and industrial', 'MLM and business opportunities', and other related subjects. However, not all of their videos were strictly limited to finance, investment, or cryptocurrency topics. Some videos touched on 'arts and entertainment', 'people and society', 'shopping', and other diverse subjects.

[10] The complete list of categories and subcategories available for classification of the Google Cloud Natural Language API can be found at Google Cloud. *Content Categories*. https://cloud.google.com/natural-language/docs/categories

***Figure* 7:** *First top 30 categories classified from Video Tags using Google Could NLP.*

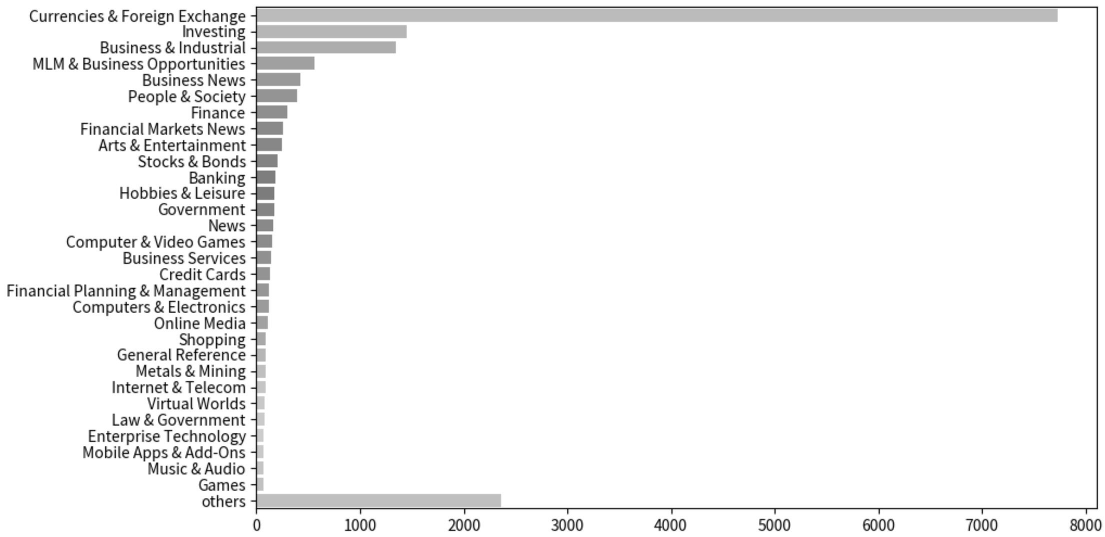
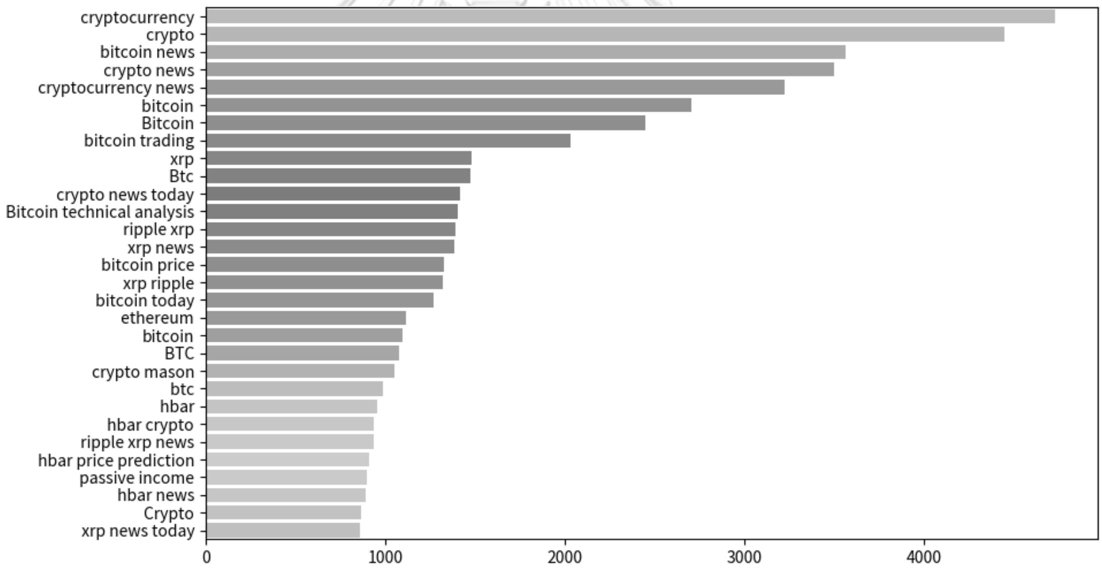
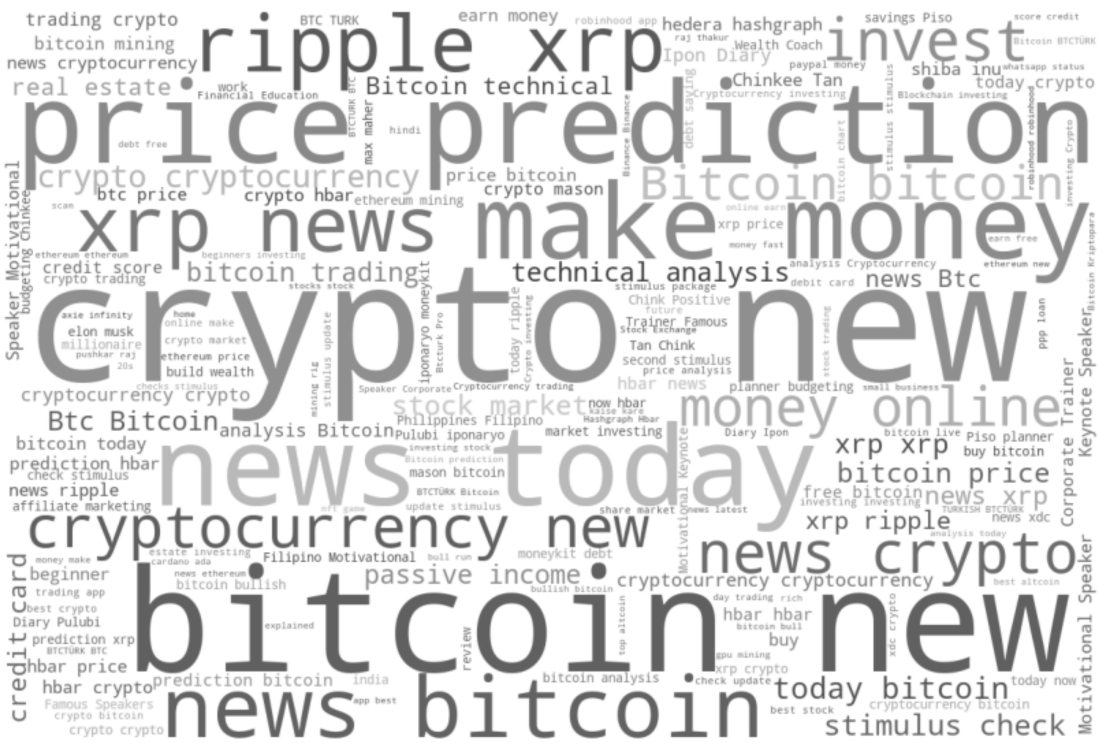


***Figure* 8:** *Top 30 Video Tags from Top Finfluencer videos.*



To provide a visual representation of the most frequently used tags, word cloud visualization was employed to provide an overview of the most frequently used tags in the videos. This visualization allowed for the identification of prominent themes and topics discussed by finance influencers in the cryptocurrency space. This visualization highlighted the prominence of cryptocurrency-related tags, reaffirming the dominant focus of finance influencers in the cryptocurrency space. Overall, the analysis demonstrates that finance influencers in the cryptocurrency space predominantly produce content related to cryptocurrency, while also touching on other subjects.

Figure 9: *Word Cloud of Video Tags from Top Finfluencer videos.*



6.2.2 Analysis of Finfluencer Impact on Returns

We conducted additional analysis to examine the Granger causality between the videos produced by top finance influencers and cryptocurrency returns. The table presents the total view count and video count for each cryptocurrency. FTM, AXS, and NEAR were excluded from the analysis due to limited data availability. Our focus was on the remaining cryptocurrencies in the sample.

After matching the channels of the top finance influencers with the videos in the sample, the VAR Granger causality test was conducted again. The results[11] (Table 15) indicated that for most YouTube variables, there was not a significant Granger

[11] The full results are available in Appendix I.

causality effect on returns (R). However, it was observed that returns had a slightly more significant Granger causality effect on YouTube variables.

Table 10: *Total View Count and Video Count for Analyzed Cryptocurrencies*

Crypto	Total View Count	Total Video Count
ETH	42,494,075	231
XRP	18,456,533	222
BTC	49,390,772	197
ADA	13,054,644	91
DOGE	20,790,605	58
CRO	3,665,053	33
XLM	981,073	33
UNI	1,340,107	30
SOL	1,545,390	25
BNB	1,493,623	23
MATIC	3,036,006	23
LTC	1,598,453	21
LINK	725,628	21
SHIB	4,384,485	15
TRX	2,537,090	15
ALGO	1,078,904	12
ATOM	626,554	12
BCH	2,207,378	9
FTM	561,590	5
AXS	300,709	4
NEAR	74,608	1
Total	143,576,785	836

FTM, AXS, and NEAR excluded due to limited data availability.

Notably, DOGE coin still exhibited a significant and bi-directional Granger causality effect between YouTube variables and returns, even when considering only the videos from the top finance influencers. This suggests that the influence of finance influencers on DOGE coin returns remains significant, with both YouTube variables and returns impacting each other.

Comparing the findings with the initial results, which included all videos in the sample, it can be interpreted that finance influencers do not have a substantial impact on returns themselves. Instead, it appears that returns have a more significant impact on the number of finance influencer YouTube videos and views. This suggests that finance influencer content is more reactive to changes in returns, rather than driving the returns directly.

Table 11: *Summary of the first lag effect of Top Finfluencer's Videos and Cryptocurrency Returns*

(a) Summary of the effect of YouTube Variables on Returns for Top Finfluencers (First lag)

Panel C: Top Finfluencer: Model (1)

Symbol		N_{t-1}	$NSENT_{t-1}$	VC_{t-1}	$VCSENT_{t-1}$		N_{t-1}	VC_{t-1}
BTC	R_t	-	-	-	-	$ABSR_t$	-	-
ETH	R_t	+	+	-	+	$ABSR_t$	+	+
BNB	R_t	+ **	+ *	- **	+	$ABSR_t$	+ ***	+ ***
SOL	R_t	-	+	+	+	$ABSR_t$	+	+
ADA	R_t	+	+ *	+	+	$ABSR_t$	+ *	+ *
XRP	R_t	+	- ***	-	- **	$ABSR_t$	+ *	+
DOGE	R_t	+ ***	+ ***	+ ***	+ ***	$ABSR_t$	+ ***	+ ***
SHIB	R_t	+	+	+	+	$ABSR_t$	+	+
MATIC	R_t	+	-	+	-	$ABSR_t$	+	-
CRO	R_t	-	-	-	-	$ABSR_t$	+	+
UNI	R_t	-	+	-	+	$ABSR_t$	-	-
ALGO	R_t	+	-	+	-	$ABSR_t$	+	+
LTC	R_t	+	+ **	+	+	$ABSR_t$	-	- *
LINK	R_t	-	+	-	+	$ABSR_t$	+	+
BCH	R_t	-	-	-	-	$ABSR_t$	+ *	+ *
TRX	R_t	+	+	+	+	$ABSR_t$	-	-
ATOM	R_t	-	-	-	-	$ABSR_t$	-	-
XLM	R_t	+	-	+	-	$ABSR_t$	-	-

Estimated coefficients are signed in + if the coefficient is positive, and – if the coefficient is negative. Followed by significant level.
∗ Significant at 10% level. ∗∗ Significant at 5% level. ∗∗∗ Significant at 1% level.

(b) Summary of the effect of Returns on YouTube Variables for Top Finfluencers (First lag)

Panel C: Top Finfluencer: Model (2)

Symbol		N_t	$NSENT_t$	VC_t	$VCSENT_t$		N_t	VC_t
BTC	R_{t-1}	+	+	-	+	$ABSR_{t-1}$	-	- *
ETH	R_{t-1}	+ **	+ *	+ **	+ **	$ABSR_{t-1}$	+	+
BNB	R_{t-1}	+	+	+	+	$ABSR_{t-1}$	-	-
SOL	R_{t-1}	+ *	-	+	-	$ABSR_{t-1}$	+	+
ADA	R_{t-1}	+	-	+	-	$ABSR_{t-1}$	+	+
XRP	R_{t-1}	+	+ *	+ *	+ ***	$ABSR_{t-1}$	-	+
DOGE	R_{t-1}	+ ***	+ ***	+ **	+ ***	$ABSR_{t-1}$	+ ***	+ ***
SHIB	R_{t-1}	-	-	-	-	$ABSR_{t-1}$	-	-
MATIC	R_{t-1}	- *	+ *	-	+	$ABSR_{t-1}$	+	-
CRO	R_{t-1}	-	+	-	+	$ABSR_{t-1}$	-	-
UNI	R_{t-1}	+	-	+	-	$ABSR_{t-1}$	+	+
ALGO	R_{t-1}	+	-	+ **	-	$ABSR_{t-1}$	+ ***	+ ***
LTC	R_{t-1}	+	+	+	+	$ABSR_{t-1}$	-	- *
LINK	R_{t-1}	-	-	-	-	$ABSR_{t-1}$	-	-
BCH	R_{t-1}	-	+	-	+	$ABSR_{t-1}$	+	+
TRX	R_{t-1}	-	+	-	+	$ABSR_{t-1}$	-	-
ATOM	R_{t-1}	-	+	-	-	$ABSR_{t-1}$	-	-
XLM	R_{t-1}	-	-	-	+	$ABSR_{t-1}$	-	-

Estimated coefficients are signed in + if the coefficient is positive, and – if the coefficient is negative. Followed by significant level.
∗ Significant at 10% level. ∗∗ Significant at 5% level. ∗∗∗ Significant at 1% level.

Considering the aggregate effect, it becomes apparent that an increase in the number of YouTube videos pertaining to a specific cryptocurrency is associated with an increase in returns, irrespective of whether those videos are from finance influencers or not. This suggests that the cumulative impact of the overall number of videos related to a cryptocurrency has a more pronounced effect on returns, rather than the influence of individual finance influencers alone.

These findings indicate that while finance influencers contribute to providing information to viewers, the broader landscape of YouTube content related to a cryptocurrency exerts a more substantial impact on its returns.

7. SUMMARY AND CONCLUSIONS

In conclusion, this research aimed to investigate the relationship between YouTube variables, finance influencers, and returns in both the cryptocurrency and stock markets. The study was conducted in two parts: the VAR Granger causality analysis and the analysis of the behavior of the top finance influencers in the cryptocurrency market.

In the first part of the study, I investigated the relationship between YouTube variables and returns in both the cryptocurrency and stock markets using the VAR Granger causality test. The findings revealed distinct patterns between the two markets. For cryptocurrencies, the analysis demonstrated that YouTube variables, particularly the number of videos, had a significant Granger causality effect on returns. This suggests that finance influencer content on YouTube influences price movements in the cryptocurrency market. However, the causality from returns to YouTube variables was less prominent, indicating that changes in returns may not strongly impact finance influencer content production.

In contrast, for the stock market (DJIA), the relationship between YouTube variables and returns was weak or non-existent. The influence of finance influencer content on stock returns appeared to be less significant compared to the cryptocurrency market.

This implies that other fundamental factors and market dynamics play a more dominant role in stock price movements.

The second part of the study focused on analyzing the behavior of the top finance influencers in the cryptocurrency market. The analysis of the top finance influencer channels in relation to cryptocurrency returns reveals that the impact of finance influencers on returns, and vice versa, is not as significant as previously observed. However, in the aggregate, an increase in the number of videos related to a cryptocurrency tends to be associated with an increase in returns.

These findings suggest that while top influencers may attract a large number of views, it does not necessarily lead to action. The overall market dynamics and collective influence of content creators, regardless of whether they are from finance influencers or not, have a more substantial impact on cryptocurrency returns. In other words, being a finfluencer does not actually influence the price of cryptocurrencies. What truly matters is the presence of videos related to cryptocurrencies, regardless of who creates them.

To elevate the significance of these findings, it can be observed that the top finfluencers do not directly cause price increases or influence cryptocurrency prices. Instead, the presence of videos related to cryptocurrencies, irrespective of the creator, plays a crucial role in generating interest and motivating purchases. The increase in the number of videos could indicate elements of herding behavior rather than direct influence. To explain this contribution, YouTube videos are considered as a proxy for investor attention that extends beyond mere observation or search, which is commonly utilized in other literature as a proxy for investor attention. Our approach involves purposefully generating content. It is possible that upon seeing a surge in the number of YouTube videos related to a specific cryptocurrency, some investors create YouTube videos about that cryptocurrency, capturing the attention of other investors. This creates a phenomenon of mass herding, leading people to buy those cryptocurrencies, resulting in price increases and subsequently grabbing the attention of more investors to produce YouTube videos again.

It is essential to conduct further in-depth analysis to confirm this interpretation. Future research could explore the underlying mechanisms driving this relationship. This may involve investigating investor sentiment and behavior in response to YouTube content, as well as employing advanced modeling techniques to quantify the impact of herding behavior and investor attention.

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APPENDIX

Appendix A: *Information and market capitalization of DJIA 30 stocks*
Information as at December 2021, total market capitalization is US $11,880,790 million. (Bloomberg)

Name	Symbol	Market cap (Million)	Percentage	GICS Sector
Unitedhealth Group Inc	UNH	$ 472,514	3.98%	Health Care
Goldman Sachs Group Inc	GS	$ 127,608	1.07%	Financials
Home Depot Inc	HD	$ 388,840	3.27%	Consumer Discretionary
Microsoft Corp	MSFT	$ 2,522,400	21.23%	Information Technology
Mcdonalds Corp	MCD	$ 199,712	1.68%	Consumer Discretionary
Caterpillar Inc	CAT	$ 110,789	0.93%	Industrials
Amgen Inc	AMGN	$ 125,601	1.06%	Health Care
Visa Inc Class A	V	$ 418,684	3.52%	Information Technology
Boeing	BA	$ 118,561	1.00%	Industrials
Honeywell International Inc	HON	$ 142,788	1.20%	Industrials
Travelers Companies Inc	TRV	$ 37,731	0.32%	Financials
American Express	AXP	$ 124,500	1.05%	Financials
Salesforce.Com Inc	CRM	$ 294,895	2.48%	Information Technology
Chevron Corp	CVX	$ 226,463	1.91%	Energy
Johnson & Johnson	JNJ	$ 422,435	3.56%	Health Care
Apple Inc	AAPL	$ 2,880,565	24.25%	Information Technology
Walmart Stores Inc	WMT	$ 415,089	3.49%	Consumer Staples
JP Morgan Chase & Co	JPM	$ 466,206	3.92%	Financials
Procter & Gamble	PG	$ 392,112	3.30%	Consumer Staples
International Business Machines Co	IBM	$ 120,036	1.01%	Information Technology
Nike Inc Class B	NKE	$ 267,907	2.25%	Consumer Discretionary
3M	MMM	$ 101,577	0.85%	Industrials
Walt Disney	DIS	$ 313,474	2.64%	Communication Services
Merck & Co Inc	MRK	$ 193,946	1.63%	Health Care
Coca-Cola	KO	$ 256,083	2.16%	Consumer Staples
Dow Inc.	DOW	$ 41,701	0.35%	Materials
Cisco Systems Inc	CSCO	$ 236,025	1.99%	Information Technology
Verizon Communications Inc	VZ	$ 215,017	1.81%	Communication Services
Walgreen Boots Alliance Inc	WBA	$ 38,700	0.33%	Consumer Staples
Intel Corporation Corp	INTC	$ 208,832	1.76%	Information Technology

Appendix B: *DJIA Sector and Industry Indices as defined by GICS.*
Market capitalization as at December 2021 (Bloomberg)

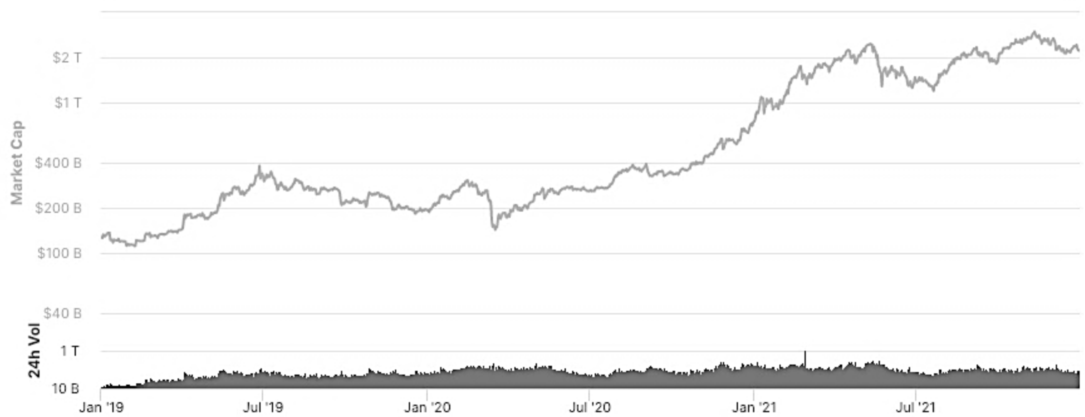
GICS Sector	Number of stocks	Market cap (million)	Percentage
Health Care	4	$ 1,214,495	10.22%
Financials	4	$ 756,045	6.36%
Consumer Discretionary	3	$ 856,459	7.21%
Information Technology	7	$ 6,681,437	56.24%
Industrials	4	$ 473,715	3.99%
Energy	1	$ 226,463	1.91%
Consumer Staples	4	$ 1,101,984	9.28%
Communication Services	2	$ 528,491	4.45%
Materials	1	$ 41,701	0.35%

Appendix C: *Top 25 cryptocurrencies based on market capitalization.*
Information as at December 2021, total market capitalization is US $2,229,171 million. (Coinmarketcap)

Rank	Cryptocurrency	Symbol	Market cap (Million)	Percentage	Accumulated
1	Bitcoin	BTC	$ 875,939	39.29%	39.29%
2	Ethereum	ETH	$ 438,128	19.65%	58.95%
3	Binance Coin	BNB	$ 85,354	3.83%	62.78%
4	Solana	SOL	$ 52,705	2.36%	65.14%
5	Cardano	ADA	$ 43,873	1.97%	67.11%
6	XRP	XRP	$ 39,510	1.77%	68.88%
7	Terra	LUNA	$ 30,922	1.39%	70.27%
8	Avalanche	AVAX	$ 26,594	1.19%	71.46%
9	Polkadot	DOT	$ 26,388	1.18%	72.65%
10	Dogecoin	DOGE	$ 22,620	1.01%	73.66%
11	Shiba Inu	SHIB	$ 18,346	0.82%	74.48%
12	Polygon	MATIC	$ 18,101	0.81%	75.30%
13	Crypto.com Coin	CRO	$ 14,084	0.63%	75.93%
14	Uniswap	UNI	$ 10,707	0.48%	76.41%
15	Algorand	ALGO	$ 10,573	0.47%	76.88%
16	Litecoin	LTC	$ 10,156	0.46%	77.34%
17	Chainlink	LINK	$ 9,150	0.41%	77.75%
18	NEAR Protocol	NEAR	$ 8,773	0.39%	78.14%
19	Bitcoin Cash	BCH	$ 8,158	0.37%	78.51%
20	TRON	TRX	$ 7,680	0.34%	78.85%
21	Cosmos	ATOM	$ 7,346	0.33%	79.18%
22	Stellar	XLM	$ 6,615	0.30%	79.48%
23	Decentraland	MANA	$ 5,967	0.27%	79.75%
24	Fantom	FTM	$ 5,739	0.26%	80.00%
25	Axie Infinity	AXS	$ 5,682	0.25%	80.26%

This table is a historical snapshot of https://coinmarketcap.com/historical/20211231 at time of 00:00:00 UTC+07:00, 31 December 2021. The capitalization is denominated in USD.

Appendix D: *Total Cryptocurrency Market Cap*
Data from 1 January 2019 to 31 December 2021



This graph is a snapshot of https://coinmarketcap.com/charts from 1 January 2019 to 31 December 2021. The total market capitalization is denominated in USD.

Appendix E: *Sample code for YouTube API*

Sample code: Query the YouTube API to search videos by "CAT stock" keywords via Google Apps Script

```
function YoutubeScraper() {
  var spreadSheet = SpreadsheetApp.getActiveSpreadsheet()
  var activeSheet = spreadSheet.getActiveSheet()

  var search = YouTube.Search.list("snippet, id", {q: "CAT stock", maxResults: 50})

  var results = search.items.map((item) => [item.id.videoId, item.snippet.title, item.snippet.publishedAt])

  var ids = results.map((id) => id[0]).join(",")

  var stats = YouTube.Videos.list("statistics", {id: ids})

  var videoStats = stats.items.map((item) => [item.statistics.viewCount, item.statistics.likeCount])

  activeSheet.getRange(2, 1, results.length, results[0].length).setValues(results)
  activeSheet.getRange(2, 4, videoStats.length, results[0].length).setValues(videoStats)
}
```

Appendix F: *Sample results from YouTube API*

Sample Results: Output the results into into a spreadsheet for "CAT stock" keyword.

Video Id	Title	Publish At	Total View	Like Count
Xljy0TFC9lQ	Is Caterpillar Stock a Buy Now!? | Caterpillar (CAT) Stock Analysis! |	2023-01-25T14:32:42Z	4494	177
KKfKdCKkz8I	Why Caterpillar stock could take off in 2023, according to one analyst	2022-12-16T16:19:29Z	485898	6671
xTOgu4LAfSs	Why Caterpillar's Stock Is Soaring	2021-02-11T17:12:42Z	39030	1600
bbG1P9DXibc	3 stocks at 52 wk low CAT, NVDA, MU	2022-07-12T15:00:33Z	967	31
B8bc0rubkxA	Why You Should Buy Caterpillar Stock --- CAT Dividend Stock Investment Analysis	2022-09-18T14:28:11Z	277	10
xcJytdtKtTg	Should You Buy The Caterpillar (CAT) Stock? | Dividend Growth | Caterpillar Stock Analysis	2022-11-27T17:00:43Z	2583	23
UJKOlZ0NUDw	Investors are ignoring Caterpillar, stock is undervalued, says Jim Cramer	2022-12-14T15:12:13Z	2239	97
p0dRCdaHKOY	Dividend Investors LOVE this Stock! | Caterpillar (CAT) Stock Analysis! |	2022-06-03T13:01:15Z	560	16
5syaLKGnVtw	Caterpillar Stock Analysis | CAT Stock | $CAT Stock Analysis | Best Dividend Stock to Buy Now?	2022-10-10T15:00:04Z	1659	91
jBIRDyGSjyM	Is Caterpillar (CAT) Stock a BUY at $175? (FULL Analysis)	2022-07-18T11:04:06Z	584	7
zlVDjcazsTI	Caterpillar stock declines on mixed Q4 earnings	2023-01-31T15:33:00Z	715	32
njNvCWugW8I	Caterpillar STOCK Is Going To 0!	2022-11-18T00:36:08Z	278	17
Ho-Zys3ziXU	Why Caterpillar is Worth Watching | CAT Stock Review	2022-12-18T21:10:10Z	95	9
z11Gdsd2Alw	Caterpillar Stock Analysis Q4 2022 Earnings | Recession 2023	2023-02-01T09:14:05Z	180	4
QABOjOMSZEo	CAT, DE, GBX, CMI: Best Machinery & Transportation Stocks For 2023	2023-01-11T22:15:01Z	351	15
aLFNXZhgvBU	It's Time To Sell Caterpillar Stock	2022-12-07T18:00:00Z	105	3
oTw2GeAo7PA	Caterpillar CAT stock analysis Legado Global	2023-01-30T21:07:47Z	14477	523
BwQwrZtfz7Q	Which 3 Stocks Should YOU Buy? | KO vs PEP, DE vs CAT, JNJ vs MRK	2023-02-10T18:45:00Z	8991411	81319

Appendix G Vector auto regression for DJIA stock Market

(a) Vector auto regression for the weight of YouTube View Count x sentiment and DJIA stock return.

Panel B: DJIA Stocks

	UNH		GS		HD		MSFT		MCD		CAT		AMGN		V		BA	
	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t
Intercept	11.010	3.669**	-181.937	6.836***	87.442	3.306**	-5.340	3.278***	-93.357	2.470**	48.071	3.814**	34.418	0.390	60.626	4.081***	-261.551*	13.790***
	(46.060)	(1.697)	(221.442)	(1.826)	(150.292)	(1.587)	(69.072)	(1.160)	(80.680)	(1.136)	(66.188)	(1.671)	(57.740)	(1.323)	(59.367)	(1.312)	(156.079)	(3.942)
R_{t-1}	1.501	-0.298***	-3.687	-0.183**	-4.163	-0.351***	-1.125	-0.296***	3.892	-0.265***	0.233	0.082	-0.394	-0.149*	7.966**	-0.328***	0.723	-0.391***
	(2.196)	(0.081)	(10.129)	(0.084)	(7.789)	(0.082)	(5.098)	(0.086)	(6.215)	(0.088)	(3.319)	(0.084)	(3.601)	(0.082)	(3.577)	(0.079)	(3.809)	(0.096)
R_{t-2}							3.984	-0.229***			1.074	-0.038					4.428	-0.107
							(4.858)	(0.082)			(3.329)	(0.084)					(3.645)	(0.092)
$WSENT_{t-1}$	-0.060	1.0E-3	-7.1E-3	9.4E-4	-0.057	-9.5E-4	0.083	1.8E-3	-6.2E-3	1.2E-3	0.079	-1.7E-3	-6.2E-4	9.9E-4	0.083	5.7E-4	-6.3E-3	2.8E-3
	(0.083)	(3.1E-3)	(0.082)	(6.8E-4)	(0.082)	(8.6E-4)	(0.086)	(1.4E-3)	(0.088)	(1.2E-3)	(0.083)	(2.1E-3)	(0.083)	(1.9E-3)	(0.080)	(1.8E-3)	(0.087)	(2.2E-3)
$WSENT_{t-2}$							-0.078	-1.9E-3			-0.021	-1.2E-3					-0.020	-2.1E-3
							(0.086)	(1.5E-3)			(0.085)	(2.1E-3)					(0.085)	(2.1E-3)
I	-2.058	-0.227	30.590	-0.805***	-4.228	-0.051	2.061	-0.122	10.961	-0.062	-7.587	-0.495*	-5.246	0.026	-3.598	-0.360*	34.221	-1.356**
	(7.517)	(0.277)	(35.397)	(0.292)	(24.295)	(0.257)	(11.024)	(0.185)	(12.955)	(0.182)	(10.346)	(0.261)	(9.505)	(0.218)	(9.571)	(0.212)	(23.955)	(0.605)
C	-0.109	-0.053***	-1.050	-0.061***	-1.250	-0.064***	-0.294	-0.061***	0.298	-0.048***	-3.1E-3	-0.022	-0.552	-3.8E-3	-0.818	-0.049***	2.434	-0.189***
	(0.434)	(0.016)	(2.085)	(0.017)	(1.466)	(0.015)	(0.762)	(0.013)	(0.804)	(0.011)	(0.628)	(0.016)	(0.535)	(0.012)	(0.561)	(0.012)	(1.664)	(0.042)
P	0.134	-0.495***	2.989	-0.483***	-13.265	-0.622***	-1.040	-0.528***	7.027	-0.436***	-1.332	-0.222	-0.874	-0.114	-8.307	-0.425***	13.967	-1.264***
	(3.948)	(0.145)	(18.581)	(0.153)	(13.453)	(0.142)	(6.769)	(0.114)	(7.339)	(0.103)	(5.596)	(0.141)	(4.871)	(0.112)	(5.058)	(0.112)	(13.808)	(0.349)
T	0.438	-5.3E-3	0.350	0.016	0.911	-0.021	-0.741	-0.023**	-0.430	-0.015	0.704	0.018	0.202	-6.3E-3	-0.300	-8.7E-3	-0.152	-5.2E-3
	(0.380)	(0.014)	(1.742)	(0.014)	(1.244)	(0.013)	(0.590)	(9.9E-3)	(0.662)	(9.3E-3)	(0.497)	(0.013)	(0.479)	(0.011)	(0.478)	(0.011)	(1.135)	(0.029)
R^2	0.033	0.126	0.057	0.114	0.036	0.162	0.057	0.263	0.024	0.124	0.062	0.132	0.016	0.030	0.082	0.159	0.077	0.204
Adj. R^2	-(0.006)	(0.091)	(0.019)	(0.078)	-(0.003)	(0.129)	-(0.040)	(0.187)	-(0.016)	(0.089)	-(0.004)	(0.072)	-(0.024)	-(0.009)	(0.045)	(0.125)	-(0.002)	(0.135)

Panel B: DJIA Stocks (Cont.)

	HON		TRV		AXP		CRM		CVX		JNJ		AAPL		WMT		JPM	
	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t
Intercept	-60.508	5.547***	158.853	5.136***	-118.746	8.973***	15.234	2.560	46.717	5.409***	0.461	2.558**	82.343	2.068	-121.187**	0.312	11.924	8.085***
	(104.144)	(1.562)	(150.050)	(1.619)	(77.343)	(1.993)	(47.483)	(1.800)	(143.024)	(1.857)	(65.719)	(1.010)	(63.792)	(1.449)	(54.257)	(0.977)	(208.838)	(1.934)
R_{t-1}	1.869	-0.293***	5.953	-0.316***	-2.450	-0.431***	0.753	-0.104	3.514	-0.136	1.990	-0.095	-0.930	-0.116	0.621	-0.153*	2.911	-0.276***
	(5.495)	(0.082)	(8.352)	(0.090)	(2.964)	(0.076)	(2.218)	(0.084)	(6.579)	(0.085)	(5.464)	(0.084)	(3.653)	(0.083)	(4.455)	(0.080)	(9.378)	(0.087)
R_{t-2}			14.951*	-0.042							0.748	-0.194**					16.017*	-0.071
			(8.274)	(0.089)							(5.124)	(0.079)					(9.559)	(0.089)
$WSENT_{t-1}$	-0.038	1.1E-3	0.091	-6.3E-5	-0.106	1.7E-3	-0.030	-2.3E-4	-0.053	-2.7E-4	0.075	1.2E-3	0.171***	-7.7E-4	-0.043	3.9E-3***	0.019	-7.5E-4
	(0.083)	(1.2E-3)	(0.085)	(9.2E-4)	(0.082)	(2.1E-3)	(0.083)	(3.1E-3)	(0.082)	(1.1E-3)	(0.084)	(1.3E-3)	(0.053)	(1.2E-3)	(0.083)	(1.5E-3)	(0.086)	(7.9E-4)
$WSENT_{t-2}$			-0.052	3.2E-4							-0.033	-5.7E-5					0.032	2.3E-5
			(0.084)	(9.0E-4)							(0.084)	(1.3E-3)					(0.086)	(7.9E-4)
I	11.901	-0.573**	-39.717*	-0.510**	27.965**	-1.039***	-1.389	-0.245	-12.702	-0.405	-0.325	-0.170	-6.634	0.025	20.033**	-0.013	-10.947	-0.912***
	(16.710)	(0.251)	(23.924)	(0.258)	(12.594)	(0.325)	(7.759)	(0.294)	(22.880)	(0.297)	(10.429)	(0.160)	(10.475)	(0.238)	(8.944)	(0.161)	(34.380)	(0.318)
C	-0.156	-0.063***	0.623	-0.062***	-0.429	-0.095***	-0.313	-0.023	-0.044	-0.073***	0.520	-0.037***	-1.029*	-0.045***	0.532	7.6E-4	0.516	-0.094***
	(0.998)	(0.015)	(1.499)	(0.016)	(0.722)	(0.019)	(0.445)	(0.017)	(1.397)	(0.018)	(0.657)	(0.010)	(0.614)	(0.014)	(0.496)	(8.9E-3)	(2.059)	(0.019)
P	-1.020	-0.481***	13.109	-0.468***	-7.622	-0.648***	-1.461	-0.248	5.258	-0.649***	-0.033	-0.331***	-9.371*	-0.453***	1.948	-0.051	10.364	-0.608***
	(8.922)	(0.134)	(12.849)	(0.139)	(6.420)	(0.165)	(4.044)	(0.153)	(12.623)	(0.164)	(5.875)	(0.090)	(5.652)	(0.128)	(4.470)	(0.081)	(15.457)	(0.143)
T	-0.148	-2.0E-3	1.561	1.0E-3	-1.224*	0.016	0.365	3.9E-4	0.282	-4.4E-3	0.365	-8.7E-3	-0.255	-0.025**	-0.452	-4.4E-3	0.549	9.8E-3
	(0.831)	(0.012)	(1.159)	(0.012)	(0.621)	(0.016)	(0.392)	(0.015)	(1.149)	(0.015)	(0.518)	(8.0E-3)	(0.537)	(0.012)	(0.444)	(8.0E-3)	(1.504)	(0.014)
R^2	0.014	0.145	0.100	0.151	0.055	0.236	0.035	0.027	0.010	0.114	0.045	0.213	0.103	0.085	0.041	0.072	0.138	0.356
Adj. R^2	-(0.026)	(0.110)	(0.037)	(0.092)	(0.017)	(0.205)	-(0.004)	-(0.012)	-(0.029)	(0.078)	-(0.037)	(0.145)	(0.067)	(0.049)	(0.003)	(0.035)	(0.003)	(0.256)

Panel B: DJIA Stocks (Cont.)

	PG		IBM		NKE		MMM		DIS		MRK		KO		CSCO		VZ		WBA		INTC	
	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t
Intercept	-8.664	-0.172	-37.471	3.893**	-348.649*	0.898	39.743	4.898***	90.002*	4.011**	3.318	1.458	-118.964	4.298***	67.058	1.728	-7.258	0.925	85.394	2.501	119.281	2.013
	(84.574)	(0.928)	(39.204)	(1.667)	#######	(1.671)	#######	(1.382)	(45.827)	(1.736)	(29.255)	(1.241)	#######	(1.289)	(90.607)	(1.330)	(23.557)	(0.818)	(70.548)	(1.730)	(83.728)	(1.708)
R_{t-1}	-3.309	-0.252***	2.461	-0.097	1.326	-0.138	-1.689	-0.150	2.116	-0.077	-0.720	-0.199**	-5.542	-0.370***	0.227	0.032	-1.489	-0.188**	1.044	-0.232***	7.534	0.134
	(7.512)	(0.082)	(2.253)	(0.096)	(10.617)	(0.090)	(8.229)	(0.092)	(2.383)	(0.090)	(1.983)	(0.084)	(9.072)	(0.087)	(6.162)	(0.090)	(2.375)	(0.082)	(3.456)	(0.085)	(5.100)	(0.104)
R_{t-2}	4.946	-0.204**	-0.206	0.074			1.796	-0.150*	-0.541	0.021	-1.060	-0.074	-7.105	-0.308***					1.200	-0.100		
	(7.383)	(0.081)	(2.150)	(0.091)			(7.754)	(0.087)	(2.335)	(0.088)	(1.959)	(0.083)	(8.395)	(0.081)					(3.454)	(0.085)		
$WSENT_{t-1}$	-0.026	-6.9E-4	-0.120	1.7E-3	-0.163*	-5.3E-4	-0.085	1.0E-3	-0.054	-2.5E-3	-0.068	-2.3E-3	-0.209**	6.3E-4	0.026	-1.5E-3	0.030	3.2E-5	-0.046	2.0E-3	-0.117	-4.2E-3**
	(0.083)	(9.1E-4)	(0.092)	(3.9E-3)	(0.087)	(7.4E-4)	(0.090)	(1.0E-3)	(0.082)	(3.1E-3)	(0.080)	(3.4E-3)	(0.087)	(8.3E-4)	(0.090)	(1.3E-3)	(0.084)	(2.9E-3)	(0.087)	(2.1E-3)	(0.101)	(2.1E-3)
$WSENT_{t-2}$	0.239***	4.0E-4	-7.9E-3	-3.2E-3			-0.116	1.8E-3*	-0.228***	7.1E-4	-0.259***	3.6E-4	0.045	7.9E-4					-0.056	-4.0E-3*		
	(0.083)	(9.1E-4)	(0.092)	(3.9E-3)			(0.089)	(9.9E-4)	(0.082)	(3.1E-3)	(0.080)	(3.4E-3)	(0.088)	(8.5E-4)					(0.087)	(2.1E-3)		
I	-0.873	0.178	4.745	-0.360	55.823*	-0.013	-7.092	-0.590***	-17.521**	-0.374	0.641	-0.137	29.138	-0.188	-10.217	-0.245	0.646	-0.057	-17.927	-0.367	-9.459	-0.211
	(14.050)	(0.154)	(5.880)	(0.250)	(31.969)	(0.272)	(19.575)	(0.219)	(7.132)	(0.270)	(4.858)	(0.206)	(21.433)	(0.206)	(14.833)	(0.218)	(3.872)	(0.134)	(11.787)	(0.289)	(13.678)	(0.279)
C	-0.048	-0.018**	0.332	-0.051***	1.138	-0.012	0.023	-0.038***	-0.688	-0.043**	-0.258	-0.019	-0.407	-0.093***	-0.381	-7.3E-3	0.117	-0.011	-0.440	-0.023	-2.599***	-0.024
	(0.806)	(8.8E-3)	(0.415)	(0.018)	(1.843)	(0.016)	(1.122)	(0.013)	(0.444)	(0.017)	(0.271)	(0.012)	(1.491)	(0.014)	(0.841)	(0.012)	(0.219)	(7.6E-3)	(0.647)	(0.016)	(0.787)	(0.016)
P	3.058	-0.166**	2.248	-0.385***	7.994	-0.171	-0.271	-0.335***	1.847	-0.397***	-1.310	-0.142	-9.117	-0.656***	-2.018	-0.076	0.743	-0.127*	3.299	-0.092	-13.196*	-0.171
	(7.304)	(0.080)	(3.435)	(0.146)	(16.857)	(0.143)	(10.045)	(0.112)	(3.898)	(0.148)	(2.452)	(0.104)	(12.439)	(0.119)	(7.607)	(0.112)	(1.987)	(0.069)	(5.879)	(0.144)	(7.074)	(0.144)
T	-0.134	-0.017**	-0.127	-1.5E-3	-1.023	-4.6E-3	1.359	0.014	0.707**	-4.1E-3	-0.115	-1.8E-3	-1.360	-0.028***	0.425	0.014	0.133	-4.6E-3	0.735	0.020	-0.331	-2.0E-3
	(0.716)	(7.9E-3)	(0.274)	(0.012)	(1.603)	(0.014)	(0.935)	(0.010)	(0.341)	(0.013)	(0.240)	(0.010)	(1.086)	(0.010)	(0.744)	(0.011)	(0.196)	(6.8E-3)	(0.593)	(0.015)	(0.687)	(0.014)
R^2	0.072	0.106	0.023	0.148	0.049	0.032	0.068	0.123	0.113	0.076	0.139	0.101	0.068	0.284	0.006	0.032	0.018	0.053	0.028	0.103	0.095	0.042
Adj. R^2	(0.021)	(0.057)	-(0.061)	(0.075)	(0.010)	-(0.007)	(0.003)	(0.061)	(0.064)	(0.025)	(0.065)	(0.023)	-(0.012)	(0.223)	-(0.034)	-(0.007)	-(0.022)	(0.015)	-(0.025)	(0.054)	(0.059)	(0.003)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(b) Vector auto regression for the weight of YouTube View Count and DJIA stock return.

Panel B: DJIA Stocks

	UNH		GS		HD		MSFT		MCD		CAT		AMGN		V		BA	
	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t
Intercept	347.022	3.739**	-3206.369*	11.525***	367.818	3.394**	261.404	3.622***	118.577	2.461**	389.961	3.514**	-348.289	0.427	-2322.655**	3.645***	813.606	10.216***
	(552.037)	(1.705)	(1653.484)	(2.493)	(815.762)	(1.581)	(1035.308)	(1.182)	(902.445)	(1.134)	(803.877)	(1.640)	(677.689)	(1.326)	(912.691)	(1.320)	(1055.332)	(3.566)
R_{t-1}	14.098	-0.296***	4.275	-0.369***	-15.150	-0.358***	-75.363	-0.307***	-18.217	-0.258***	-18.005	0.100	-58.371	-0.144*	-99.666*	-0.338***	-33.360	-0.305***
	(25.832)	(0.080)	(61.496)	(0.093)	(42.278)	(0.082)	(75.269)	(0.086)	(68.512)	(0.086)	(40.411)	(0.082)	(41.822)	(0.082)	(54.272)	(0.078)	(25.585)	(0.086)
R_{t-2}			-13.172	-0.191**			-88.846	-0.310***			8.535	-0.044						
			(59.593)	(0.090)			(73.998)	(0.085)			(40.748)	(0.083)						
W_{t-1}	-0.039	-1.1E-4	-0.117	-1.7E-4	0.122	-2.6E-4	0.028	-5.8E-6	-0.050	-1.1E-4	0.116	1.9E-4	-0.118	5.2E-5	4.2E-3	-2.1E-4*	0.098	3.1E-4
	(0.082)	(2.5E-4)	(0.087)	(1.3E-4)	(0.082)	(1.6E-4)	(0.087)	(9.9E-5)	(0.083)	(1.0E-4)	(0.084)	(1.7E-4)	(0.080)	(1.6E-4)	(0.083)	(1.2E-4)	(0.081)	(2.7E-4)
W_{t-2}			-0.095	-2.5E-4*			0.100	6.5E-5			0.123	-3.2E-4*						
			(0.086)	(1.3E-4)			(0.082)	(9.4E-5)			(0.084)	(1.7E-4)						
I	-65.659	-0.237	872.784***	-1.165***	-36.893	-0.058	189.506	-0.178	62.589	-0.056	-32.528	-0.475*	-17.584	0.019	614.633***	-0.238	32.702	-1.050*
	(89.918)	(0.278)	(273.292)	(0.412)	(131.809)	(0.255)	(164.672)	(0.188)	(145.060)	(0.182)	(126.336)	(0.258)	(111.288)	(0.218)	(153.047)	(0.221)	(168.929)	(0.571)
C	-0.168	-0.054***	-16.515	-0.140***	-6.028	-0.066***	-20.610*	-0.052***	-0.977	-0.048***	-3.628	-0.017	7.844	-4.2E-3	0.082	-0.049***	6.627	-0.138***
	(5.193)	(0.016)	(15.485)	(0.023)	(7.974)	(0.015)	(11.223)	(0.013)	(9.000)	(0.011)	(7.636)	(0.016)	(6.285)	(0.012)	(8.420)	(0.012)	(10.489)	(0.035)
P	5.119	-0.497***	-339.387***	-1.024***	-30.629	-0.631***	-270.614***	-0.537***	-95.575	-0.440***	-42.306	-0.182	93.703	-0.113	-231.387***	-0.477***	-212.684**	-0.885***
	(47.154)	(0.146)	(123.877)	(0.187)	(72.999)	(0.141)	(102.767)	(0.117)	(82.641)	(0.104)	(67.666)	(0.138)	(57.171)	(0.112)	(78.057)	(0.113)	(95.492)	(0.323)
T	3.356	-4.5E-3	9.476	0.031*	6.366	-0.021	-12.746	1.4E-3	-7.732	-0.016*	5.120	0.019	10.574*	-6.3E-3	-15.224**	-0.012	8.006	-5.1E-3
	(4.518)	(0.014)	(10.471)	(0.016)	(6.741)	(0.013)	(10.058)	(0.011)	(7.448)	(9.4E-3)	(6.193)	(0.013)	(5.623)	(0.011)	(7.334)	(0.011)	(8.450)	(0.029)
R^2	0.008	0.127	0.394	0.307	0.058	0.170	0.401	0.308	0.028	0.125	0.074	0.151	0.076	0.029	0.269	0.175	0.236	0.120
Adj. R^2	-(0.032)	(0.091)	(0.287)	(0.185)	(0.020)	(0.137)	(0.319)	(0.212)	-(0.011)	(0.090)	(0.009)	(0.091)	(0.039)	-(0.010)	(0.239)	(0.142)	(0.205)	(0.085)

Panel B: DJIA Stocks (Cont.)

	HON		TRV		AXP		CRM		CVX		JNJ		AAPL		WMT		JPM	
	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t
Intercept	-1122.691	6.778***	285.335	5.569***	-1535.618	10.802***	1391.638	2.726	1097.835	6.850***	1482.516*	1.998*	57.045	1.898	247.085	-0.288	-2521.361	12.402***
	(775.897)	(1.670)	(428.988)	(1.620)	(955.289)	(2.467)	(881.244)	(1.811)	(857.252)	(1.967)	(791.052)	(1.026)	(568.677)	(1.506)	(1048.847)	(0.979)	(1707.034)	(2.127)
R_{t-1}	42.696	-0.347***	37.538	-0.359***	-22.638	-0.528***	-13.644	-0.102	5.847	-0.197**	117.448*	-0.101	41.182	-0.151*	125.303	-0.146*	1.431	-0.351***
	(42.514)	(0.092)	(23.195)	(0.088)	(32.597)	(0.084)	(40.441)	(0.083)	(38.407)	(0.088)	(64.447)	(0.084)	(32.939)	(0.087)	(88.229)	(0.082)	(72.709)	(0.091)
R_{t-2}	46.937	-0.141	39.832*	-0.061	32.632	-0.195**			-6.766	-0.185**			72.072**	-0.030	-14.700	-0.048	-60.998	-0.253***
	(40.590)	(0.087)	(23.328)	(0.088)	(34.168)	(0.088)			(35.578)	(0.082)			(32.369)	(0.086)	(88.719)	(0.083)	(75.904)	(0.095)
W_{t-1}	0.039	2.5E-4	0.038	1.5E-4	0.136	-4.1E-4*	0.235***	-1.1E-4	-0.067	2.4E-4	0.023	1.0E-5	0.033	-3.2E-4	0.023	-4.6E-5	0.084	3.9E-5
	(0.090)	(1.9E-4)	(0.085)	(3.2E-4)	(0.086)	(2.2E-4)	(0.080)	(1.7E-4)	(0.081)	(1.9E-4)	(0.081)	(1.1E-4)	(0.082)	(2.2E-4)	(0.082)	(7.7E-5)	(0.091)	(1.1E-4)
W_{t-2}	0.072	4.4E-4**	-0.127	2.7E-4	-0.033	3.1E-4			-0.025	1.4E-4			0.070	-2.1E-4	0.115	-1.4E-4*	-0.061	1.5E-4
	(0.091)	(2.0E-4)	(0.081)	(3.1E-4)	(0.086)	(2.2E-4)			(0.082)	(1.9E-4)			(0.084)	(2.2E-4)	(0.082)	(7.6E-5)	(0.090)	(1.1E-4)
I	152.933	-0.652**	-59.296	-0.555**	392.103**	-1.164***	-219.905	-0.276	-126.013	-0.519*	-217.174*	-0.130	31.442	0.124	77.374	0.097	624.365**	-1.895***
	(129.815)	(0.279)	(68.607)	(0.259)	(151.926)	(0.392)	(144.448)	(0.297)	(133.060)	(0.305)	(127.787)	(0.166)	(95.019)	(0.252)	(174.017)	(0.162)	(303.676)	(0.378)
C	6.551	-0.080***	3.206	-0.072***	-6.607	-0.130***	-7.195	-0.024	-15.011*	-0.094***	-5.979	-0.027***	-1.830	-0.049***	-11.530	2.6E-3	5.392	-0.118***
	(7.488)	(0.016)	(4.297)	(0.016)	(9.217)	(0.024)	(8.203)	(0.017)	(8.795)	(0.020)	(7.396)	(9.6E-3)	(5.972)	(0.016)	(9.728)	(9.1E-3)	(15.800)	(0.020)
P	58.090	-0.646***	8.415	-0.504***	-133.566*	-0.876***	-32.316	-0.247	-77.903	-0.815***	-55.715	-0.263***	-41.755	-0.522***	-136.523	-0.054	-200.963	-0.357**
	(70.286)	(0.151)	(36.267)	(0.137)	(70.401)	(0.182)	(74.446)	(0.153)	(76.745)	(0.176)	(66.933)	(0.087)	(53.923)	(0.143)	(88.761)	(0.083)	(126.462)	(0.158)
T	-0.384	-8.5E-3	2.656	1.2E-3	-13.833**	0.016	17.744**	3.3E-3	21.063***	-0.010	20.373***	-5.8E-3	5.495	-0.023	2.965	-5.0E-3	-0.075	0.012
	(5.992)	(0.013)	(3.295)	(0.012)	(6.312)	(0.016)	(7.496)	(0.015)	(6.933)	(0.016)	(6.553)	(8.5E-3)	(5.906)	(0.016)	(8.793)	(8.2E-3)	(11.371)	(0.014)
R^2	0.246	0.394	0.172	0.193	0.213	0.322	0.167	0.030	0.227	0.171	0.167	0.064	0.339	0.157	0.101	0.056	0.283	0.393
Adj. R^2	(0.098)	(0.274)	(0.101)	(0.124)	(0.146)	(0.264)	(0.134)	-(0.009)	(0.173)	(0.113)	(0.133)	(0.026)	(0.248)	(0.042)	(0.052)	(0.004)	(0.156)	(0.286)

Panel B: DJIA Stocks (Cont.)

	PG		IBM		NKE		MMM		DIS		MRK		KO		CSCO		VZ		WBA		INTC	
	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t
Intercept	-684.917	-0.141	1827.114	2.017	-1603.52	1.265	-64.833	3.411***	-997.206	3.984**	-1692.06	0.311	-901.208	3.669***	-1187.10	1.571	1283.791	0.895	-822.860	2.378	-1473.68	1.480
	#######	(0.939)	#######	(1.515)	#######	(1.667)	#######	(1.290)	#######	(1.585)	#######	(1.386)	#######	(1.279)	#######	(1.333)	#######	(0.821)	#######	(1.735)	#######	(1.745)
R_{t-1}	17.216	-0.214***	-55.275	-7.5E-3	-81.591	-0.171*	-80.123	-0.063	62.659	-0.100	10.479	-0.311***	-10.661	-0.344***	38.348	-0.021	-132.652	-0.190**	-24.620	-0.215***	3.909	-0.033
	(65.152)	(0.081)	(57.060)	(0.088)	(50.530)	(0.087)	(57.599)	(0.085)	(57.103)	(0.086)	(56.528)	(0.089)	(72.552)	(0.086)	(57.515)	(0.083)	(97.127)	(0.081)	(48.129)	(0.082)	(50.667)	(0.086)
R_{t-2}											-80.166	-0.118	-113.209*	-0.291***					43.685	-0.130		
											(56.586)	(0.090)	(67.106)	(0.079)					(47.799)	(0.082)		
W_{t-1}	0.031	7.6E-5	-0.046	5.2E-5	0.134	7.2E-5	0.098	8.9E-5	0.031	-1.9E-4	0.109	1.0E-4	0.120	-1.4E-4	0.094	-1.4E-4	0.053	2.4E-5	0.157*	2.6E-4*	0.274***	-2.3E-4*
	(0.083)	(1.0E-4)	(0.081)	(1.2E-4)	(0.083)	(1.4E-4)	(0.082)	(1.2E-4)	(0.082)	(1.2E-4)	(0.086)	(1.4E-4)	(0.085)	(1.0E-4)	(0.083)	(1.2E-4)	(0.081)	(6.8E-5)	(0.082)	(1.4E-4)	(0.082)	(1.4E-4)
W_{t-2}											0.143	-6.2E-5	0.028	-4.9E-5					0.150*	-1.6E-4		
											(0.088)	(1.4E-4)	(0.084)	(1.0E-4)					(0.084)	(1.4E-4)		
I	153.480	0.153	-84.890	-0.211	292.721*	-0.069	102.580	-0.414**	270.237	-0.342	337.195**	0.157	235.171	-0.047	215.914	-0.216	-218.517	-0.053	175.555	-0.344	295.620*	-0.093
	#######	(0.156)	#######	(0.242)	#######	(0.272)	#######	(0.208)	#######	(0.254)	#######	(0.247)	#######	(0.210)	#######	(0.218)	#######	(0.135)	#######	(0.291)	#######	(0.289)
C	-4.348	-0.014	-29.383**	-0.021	6.877	-0.014	-11.931	-0.024**	12.071	-0.041***	-0.305	-0.031***	3.384	-0.090***	2.585	-6.7E-3	-2.092	-0.011	0.626	-0.022	-1.212	-0.022
	(7.062)	(8.8E-3)	(9.619)	(0.015)	(9.150)	(0.016)	(8.134)	(0.012)	(10.032)	(0.015)	(7.477)	(0.012)	(12.013)	(0.014)	(8.509)	(0.012)	(9.140)	(7.6E-3)	(9.332)	(0.016)	(9.457)	(0.016)
P	-32.290	-0.144*	-276.084*	-0.173	-4.489	-0.184	-101.351	-0.231**	-105.727	-0.430***	-37.769	-0.239**	-85.319	-0.691***	-0.767	-0.078	-12.838	-0.125*	-31.114	-0.093	-31.802	-0.196
	(64.164)	(0.080)	(85.796)	(0.132)	(83.331)	(0.143)	(73.675)	(0.108)	(90.881)	(0.137)	(67.463)	(0.107)	#######	(0.123)	(76.945)	(0.112)	(82.915)	(0.069)	(85.150)	(0.145)	(85.878)	(0.146)
T	4.328	-0.015*	10.371	5.5E-4	3.279	-4.4E-3	5.671	0.011	9.621	-2.3E-3	0.803	-9.6E-3	11.155	-0.026**	-1.377	0.014	27.924**	-5.2E-3	1.304	0.017	13.369	8.2E-4
	(6.310)	(7.9E-3)	(7.938)	(0.012)	(7.943)	(0.014)	(7.096)	(0.010)	(8.352)	(0.013)	(6.642)	(0.011)	(8.942)	(0.011)	(7.529)	(0.011)	(8.425)	(7.0E-3)	(8.467)	(0.014)	(8.348)	(0.014)
R^2	0.130	0.068	0.183	0.022	0.159	0.030	0.171	0.061	0.221	0.083	0.422	0.263	0.251	0.278	0.057	0.032	0.179	0.054	0.142	0.100	0.418	0.034
Adj. R^2	(0.095)	(0.031)	(0.150)	-(0.018)	(0.125)	-(0.009)	(0.138)	(0.023)	(0.190)	(0.046)	(0.309)	(0.118)	(0.186)	(0.216)	(0.019)	-(0.007)	(0.146)	(0.016)	(0.095)	(0.051)	(0.394)	-(0.005)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(c) Vector auto regression for the number of YouTube Video Count and DJIA stock return.

Panel B: DJIA Stocks

	UNH		GS		HD		MSFT		MCD		CAT		AMGN		V		BA	
	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t
Intercept	17.064	3.756**	-184.602	16.124***	-26.194	3.271**	-281.554	4.209***	16.955	2.706**	-1.664	3.391**	3.436	0.254	-159.049**	4.140***	72.920	11.113***
	(28.674)	(1.709)	(147.708)	(2.350)	(73.040)	(1.597)	(240.409)	(1.142)	(67.496)	(1.130)	(50.197)	(1.655)	(39.634)	(1.351)	(70.776)	(1.336)	(196.760)	(3.823)
R_{t-1}	0.944	-0.295***	4.219	-0.425***	0.110	-0.351***	3.159	-0.363***	3.616	-0.299***	1.657	0.088	-3.743	-0.138	2.494	-0.328***	4.941	-0.369***
	(1.336)	(0.080)	(5.608)	(0.089)	(3.783)	(0.083)	(17.936)	(0.085)	(5.211)	(0.087)	(2.509)	(0.083)	(2.461)	(0.084)	(4.217)	(0.080)	(4.661)	(0.091)
R_{t-2}			0.559	-0.268***			4.752	-0.321***	-0.646	-0.064	0.915	-0.040	-0.246	0.040			2.348	-0.175*
			(5.463)	(0.087)			(17.666)	(0.084)	(4.879)	(0.082)	(2.523)	(0.083)	(2.491)	(0.085)			(4.562)	(0.089)
N_{t-1}	2.8E-3***	-2.1E-3	0.105	-7.3E-4	-0.106	-4.3E-4	0.237***	1.2E-3***	0.058	-2.4E-5	0.040	3.6E-3	0.141*	-9.7E-4	0.436***	3.9E-5	0.104	2.7E-3
	(0.080)	(4.8E-3)	(0.090)	(1.4E-3)	(0.082)	(1.8E-3)	(0.088)	(4.2E-4)	(0.084)	(1.4E-3)	(0.083)	(2.7E-3)	(0.080)	(2.7E-3)	(0.075)	(1.4E-3)	(0.084)	(1.6E-3)
N_{t-2}			0.096	-8.6E-4			0.055	2.4E-4	0.125	7.2E-4	0.022	-3.5E-3	0.057	-3.5E-3			-0.024	2.2E-3
			(0.092)	(1.5E-3)			(0.091)	(4.3E-4)	(0.085)	(1.4E-3)	(0.084)	(2.8E-3)	(0.080)	(2.7E-3)			(0.084)	(1.6E-3)
I	-1.847	-0.237	43.377*	-2.068***	7.709	-0.042	64.992*	-0.327*	-6.676	-0.024	1.690	-0.450*	-2.344	0.056	33.830***	-0.367	-5.018	-1.429**
	(4.659)	(0.278)	(23.327)	(0.371)	(11.820)	(0.258)	(38.676)	(0.184)	(10.802)	(0.181)	(7.940)	(0.262)	(6.531)	(0.223)	(11.843)	(0.224)	(30.026)	(0.583)
C	-0.038	-0.054***	-0.633	-0.149***	-0.472	-0.064***	0.101	-0.057***	0.602	-0.061***	-0.064	-0.018	0.261	-3.9E-3	0.322	-0.050***	5.233**	-0.185***
	(0.269)	(0.016)	(1.354)	(0.022)	(0.711)	(0.016)	(2.543)	(0.012)	(0.729)	(0.012)	(0.469)	(0.015)	(0.372)	(0.013)	(0.651)	(0.012)	(2.101)	(0.041)
P	-1.407	-0.501***	-11.602	-0.936***	-3.226	-0.624***	-16.935	-0.485***	4.284	-0.526***	-1.522	-0.185	1.989	-0.120	-6.211	-0.430***	-11.688	-0.608
	(2.458)	(0.146)	(10.347)	(0.165)	(6.525)	(0.143)	(22.934)	(0.109)	(6.497)	(0.109)	(4.176)	(0.138)	(3.419)	(0.117)	(6.005)	(0.113)	(20.507)	(0.398)
T	0.170	-4.3E-3	0.587	0.024*	0.711	-0.022*	-2.608	1.0E-3	0.977*	-0.020**	0.309	0.017	0.323	-6.4E-3	-0.383	-8.8E-3	2.177	2.1E-3
	(0.235)	(0.014)	(0.882)	(0.014)	(0.602)	(0.013)	(2.085)	(9.9E-3)	(0.567)	(9.5E-3)	(0.377)	(0.012)	(0.332)	(0.011)	(0.563)	(0.011)	(1.451)	(0.028)
R^2	0.089	0.127	0.423	0.337	0.108	0.156	0.408	0.372	0.085	0.236	0.080	0.145	0.195	0.050	0.435	0.158	0.384	0.237
Adj. R^2	(0.053)	(0.091)	(0.343)	(0.246)	(0.072)	(0.122)	(0.327)	(0.286)	(0.007)	(0.170)	(0.015)	(0.085)	(0.139)	-(0.016)	(0.412)	(0.124)	(0.331)	(0.172)

Panel B: DJIA Stocks (Cont.)

	HON		TRV		AXP		CRM		CVX		JNJ		AAPL		WMT		JPM	
	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t
Intercept	-94.828**	7.808***	20.792	4.849***	-71.519	10.028***	124.757	2.711	36.549	5.186***	148.804*	1.900*	-470.255	2.166	-22.023	-0.627	-135.585	10.178***
	(38.603)	(1.751)	(28.252)	(1.646)	(48.999)	(2.087)	(112.290)	(1.785)	(46.923)	(1.848)	(83.850)	(1.034)	(606.091)	(1.499)	(100.217)	(0.939)	(161.281)	(1.934)
R_{t-1}	5.287***	-0.379***	2.376	-0.362***	-2.295	-0.478***	-1.490	-0.089	1.089	-0.136	1.312	-0.099	66.859*	-0.124	11.864	-0.210**	9.529	-0.324***
	(1.918)	(0.087)	(1.477)	(0.086)	(1.939)	(0.083)	(5.220)	(0.083)	(2.153)	(0.085)	(6.753)	(0.083)	(34.661)	(0.086)	(8.806)	(0.083)	(7.476)	(0.090)
R_{t-2}	5.182***	-0.158*	0.574	-0.058	0.526	-0.127							41.239	-0.036	-3.956	-0.111	1.7E-3	-0.160*
	(1.891)	(0.086)	(1.462)	(0.085)	(1.894)	(0.081)							(33.628)	(0.083)	(8.934)	(0.084)	(7.680)	(0.092)
N_{t-1}	-0.036	3.3E-3	0.133	4.7E-3	-0.052	-4.5E-3	0.284***	-2.0E-3	0.036	4.8E-3	0.121	5.3E-4	0.309***	3.5E-5	0.136	-7.9E-4	0.191**	-5.0E-4
	(0.080)	(3.7E-3)	(0.084)	(4.9E-3)	(0.084)	(3.6E-3)	(0.079)	(1.3E-3)	(0.082)	(3.2E-3)	(0.083)	(1.0E-3)	(0.085)	(2.1E-4)	(0.087)	(8.2E-4)	(0.088)	(1.1E-3)
N_{t-2}	-0.084	4.4E-3	-0.139*	4.5E-3	-0.093	7.0E-3*							0.094	-1.7E-4	0.156*	-1.2E-3	0.012	-6.7E-7
	(0.081)	(3.7E-3)	(0.083)	(4.8E-3)	(0.083)	(3.6E-3)							(0.088)	(2.2E-4)	(0.087)	(8.1E-4)	(0.090)	(1.1E-3)
I	14.224**	-0.858***	-4.457	-0.421	15.958**	-1.137***	-17.232	-0.270	-2.561	-0.388	-21.755	-0.116	80.468	0.037	16.823	0.202	25.081	-1.337***
	(6.142)	(0.279)	(4.591)	(0.267)	(7.932)	(0.338)	(18.361)	(0.292)	(7.485)	(0.295)	(13.522)	(0.167)	(100.587)	(0.249)	(17.117)	(0.160)	(27.089)	(0.325)
C	0.650*	-0.087***	0.169	-0.069***	-0.225	-0.110***	-0.711	-0.024	-0.581	-0.070***	-0.353	-0.027***	4.777	-0.046***	-0.367	1.9E-3	0.880	-0.116***
	(0.366)	(0.017)	(0.272)	(0.016)	(0.466)	(0.020)	(1.051)	(0.017)	(0.461)	(0.018)	(0.777)	(9.6E-3)	(6.139)	(0.015)	(0.923)	(8.7E-3)	(1.624)	(0.019)
P	3.209	-0.616***	0.812	-0.511***	-3.453	-0.751***	-5.865	-0.250	-4.485	-0.624***	-5.820	-0.258***	2.909	-0.486***	-15.075*	-0.105	-1.079	-0.542***
	(3.082)	(0.140)	(2.323)	(0.135)	(4.020)	(0.171)	(9.552)	(0.152)	(4.155)	(0.164)	(7.049)	(0.087)	(55.381)	(0.137)	(8.864)	(0.083)	(12.134)	(0.145)
T	0.269	-1.6E-3	0.310	-6.5E-3	1.7E-4	0.015	1.762*	5.1E-3	1.023***	-9.4E-3	2.161***	-7.0E-3	3.113	-0.019	0.243	-0.017**	-0.148	9.5E-3
	(0.279)	(0.013)	(0.225)	(0.013)	(0.369)	(0.016)	(0.943)	(0.015)	(0.385)	(0.015)	(0.701)	(8.6E-3)	(5.749)	(0.014)	(0.882)	(8.3E-3)	(1.178)	(0.014)
R^2	0.213	0.209	0.131	0.215	0.139	0.274	0.177	0.044	0.239	0.127	0.187	0.065	0.556	0.165	0.306	0.219	0.335	0.407
Adj. R^2	(0.146)	(0.141)	(0.057)	(0.147)	(0.092)	(0.234)	(0.144)	(0.005)	(0.208)	(0.092)	(0.154)	(0.028)	(0.511)	(0.080)	(0.210)	(0.112)	(0.218)	(0.302)

Panel B: DJIA Stocks (Cont.)

	PG		IBM		NKE		MMM		DIS		MRK		KO		CSCO		VZ		WBA		INTC	
	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t
Intercept	-116.468*	-0.110	114.836	4.029**	-134.340	1.357	-44.912	3.414***	-140.034	4.575**	-76.911	1.916	-181.386	3.556***	-50.128	1.663	107.146*	0.941	32.289	2.342	1.316	2.162
	(68.551)	(0.930)	#######	(1.666)	#######	(1.675)	(45.863)	(1.289)	#######	(1.856)	(62.856)	(1.252)	#######	(1.303)	(81.955)	(1.335)	(59.150)	(0.824)	(82.190)	(1.723)	#######	(1.736)
R_{t-1}	4.124	-0.222***	-3.405	-0.142	-9.724	-0.177**	0.644	-0.057	43.164**	-0.038	2.699	-0.207**	-1.629	-0.354***	5.766	-0.014	-7.844	-0.187**	-0.651	-0.239***	4.387	-0.022
	(6.232)	(0.085)	(7.086)	(0.095)	(6.744)	(0.088)	(3.034)	(0.085)	(16.352)	(0.090)	(4.106)	(0.082)	(7.818)	(0.086)	(5.150)	(0.084)	(5.799)	(0.081)	(3.956)	(0.083)	(10.571)	(0.085)
R_{t-2}	5.245	-0.162*	7.239	4.0E-3					1.217	0.038	-6.761	-0.072	2.854	-0.288***					-5.515	-0.126	6.792	-9.8E-3
	(6.181)	(0.084)	(6.847)	(0.092)					(16.535)	(0.091)	(4.148)	(0.083)	(7.231)	(0.079)					(3.961)	(0.083)	(10.608)	(0.085)
N_{t-1}	0.302***	2.4E-4	0.043	-1.0E-3	0.159*	7.7E-4	0.103	2.0E-3	0.039	-6.7E-4	0.321***	-7.1E-4	-0.107	-9.4E-4	0.220***	-6.1E-4	0.077	-1.8E-4	0.251***	3.1E-3*	0.439***	-1.4E-3**
	(0.105)	(1.4E-3)	(0.086)	(1.2E-3)	(0.084)	(1.1E-3)	(0.084)	(2.4E-3)	(0.085)	(4.7E-4)	(0.083)	(1.6E-3)	(0.084)	(9.3E-4)	(0.081)	(1.3E-3)	(0.081)	(1.1E-3)	(0.084)	(1.8E-3)	(0.084)	(6.7E-4)
N_{t-2}	-0.133	-1.8E-4	0.208**	5.7E-4					-0.091	2.7E-4	-0.026	1.1E-3	-0.191**	-1.0E-3					0.086	-2.8E-3	-0.129	1.7E-3**
	(0.107)	(1.5E-3)	(0.087)	(1.2E-3)					(0.084)	(4.6E-4)	(0.087)	(1.7E-3)	(0.084)	(9.2E-4)					(0.084)	(1.8E-3)	(0.085)	(6.8E-4)
I	22.874**	0.146	-14.757	-0.410	31.264	-0.085	8.172	-0.414**	68.040	-0.405	17.539*	-0.210	57.304**	-0.027	10.984	-0.229	-15.356	-0.059	-6.314	-0.326	-0.317	-0.223
	(11.542)	(0.157)	(19.296)	(0.259)	(21.053)	(0.274)	(7.410)	(0.208)	(52.582)	(0.289)	(10.493)	(0.209)	(19.690)	(0.216)	(13.441)	(0.219)	(9.700)	(0.135)	(13.630)	(0.286)	(35.187)	(0.283)
C	0.012	-0.014	-0.841	-0.050***	-0.098	-0.014	-0.128	-0.024**	2.809	-0.048***	-0.310	-0.019*	-1.698	-0.092***	0.285	-7.1E-3	-0.695	-0.011	0.044	-0.023	-0.542	-0.022
	(0.670)	(9.1E-3)	(1.301)	(0.017)	(1.206)	(0.016)	(0.424)	(0.012)	(3.322)	(0.018)	(0.569)	(0.011)	(1.310)	(0.014)	(0.761)	(0.012)	(0.549)	(7.6E-3)	(0.757)	(0.016)	(2.039)	(0.016)
P	-2.227	-0.143*	-6.492	-0.355**	-8.167	-0.184	0.039	-0.232**	-50.964*	-0.478***	-4.203	-0.154	-28.381**	-0.690***	-2.273	-0.083	-4.369	-0.128*	0.652	-0.107	0.619	-0.189
	(6.053)	(0.082)	(11.151)	(0.150)	(11.001)	(0.143)	(3.844)	(0.108)	(28.403)	(0.156)	(5.141)	(0.102)	(11.339)	(0.125)	(6.904)	(0.112)	(4.967)	(0.069)	(6.863)	(0.144)	(18.229)	(0.146)
T	-0.057	-0.016*	2.313**	-3.7E-4	1.004	-4.9E-3	1.160***	9.4E-3	4.721*	-2.3E-4	0.257	-3.3E-3	1.169	-0.026**	-0.118	0.014	2.021***	-4.3E-3	1.148	0.017	3.986**	-3.3E-3
	(0.612)	(8.3E-3)	(0.982)	(0.013)	(1.052)	(0.014)	(0.388)	(0.011)	(2.463)	(0.014)	(0.509)	(0.010)	(0.972)	(0.011)	(0.673)	(0.011)	(0.515)	(7.2E-3)	(0.698)	(0.015)	(1.796)	(0.014)
R^2	0.336	0.126	0.217	0.156	0.228	0.031	0.405	0.062	0.302	0.172	0.345	0.103	0.308	0.271	0.073	0.026	0.298	0.053	0.164	0.102	0.352	0.068
Adj. R^2	(0.289)	(0.064)	(0.123)	(0.056)	(0.197)	-(0.008)	(0.381)	(0.024)	(0.230)	(0.087)	(0.299)	(0.040)	(0.249)	(0.209)	(0.036)	-(0.014)	(0.270)	(0.015)	(0.119)	(0.053)	(0.317)	(0.016)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(d) Vector auto regression for the log YouTube View Count and DJIA stock return.

Panel B: DJIA Stocks

	UNH		GS		HD		MSFT		MCD		CAT		AMGN		V		BA	
	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t
Intercept	155.205	3.653**	-194.514	8.540***	1.708	3.305**	8.164	3.158***	-107.115	2.333**	59.981	3.377**	-130.030	0.325	-164.993	3.937***	19.555	10.333***
	(111.190)	(1.726)	(140.216)	(1.930)	(126.440)	(1.588)	(98.261)	(1.197)	(128.755)	(1.128)	(132.060)	(1.629)	(111.215)	(1.336)	(116.243)	(1.297)	(102.259)	(3.569)
R_{t-1}	1.391	-0.293***	7.806	-0.234***	-0.531	-0.351***	-10.099	-0.277***	2.211	-0.260***	0.164	0.103	-12.136*	-0.139*	-6.018	-0.344***	-3.728	-0.301***
	(5.154)	(0.080)	(5.944)	(0.082)	(6.552)	(0.082)	(7.092)	(0.086)	(9.787)	(0.086)	(6.709)	(0.083)	(6.798)	(0.082)	(7.075)	(0.079)	(2.479)	(0.087)
R_{t-2}			3.950	-0.127			-10.572	-0.270***			1.808	-0.045						
			(5.900)	(0.081)			(6.920)	(0.084)			(6.715)	(0.083)						
VC_{t-1}	0.907	5.6E-5	4.4E-3	2.0E-4	0.089	-1.1E-3	-0.051	-3.3E-4	-0.019	-9.9E-4	0.092	1.8E-3*	-0.113	-3.8E-4	0.119	-1.5E-3*	0.040	3.2E-3
	(0.083)	(1.3E-3)	(0.084)	(1.2E-3)	(0.082)	(1.0E-3)	(0.082)	(1.0E-3)	(0.083)	(7.3E-4)	(0.084)	(1.0E-3)	(0.080)	(9.6E-4)	(0.082)	(9.1E-4)	(0.081)	(2.8E-3)
VC_{t-2}			-0.015	-2.0E-3*			0.323***	3.4E-4			0.141*	-1.9E-3*						
			(0.085)	(1.2E-3)			(0.081)	(9.9E-4)			(0.085)	(1.0E-3)						
I	-21.361	-0.227	56.137**	-0.839***	4.437	-0.037	21.103	-0.111	21.237	-0.037	-3.289	-0.451*	4.586	0.029	51.881***	-0.286	16.579	-1.075*
	(18.005)	(0.279)	(22.412)	(0.309)	(20.452)	(0.257)	(15.582)	(0.190)	(20.830)	(0.182)	(20.846)	(0.257)	(18.183)	(0.218)	(19.227)	(0.214)	(16.445)	(0.574)
C	-0.811	-0.053***	-1.008	-0.099***	-0.435	-0.065***	-1.767	-0.052***	1.296	-0.047***	-0.275	-0.017	1.823*	-3.2E-3	0.494	-0.050***	0.566	-0.137***
	(1.044)	(0.016)	(1.397)	(0.019)	(1.238)	(0.016)	(1.074)	(0.013)	(1.282)	(0.011)	(1.245)	(0.015)	(1.030)	(0.012)	(1.092)	(0.012)	(1.015)	(0.035)
P	-7.215	-0.492***	-24.002*	-0.790***	-5.095	-0.636***	-25.658**	-0.516***	-1.991	-0.436***	-8.544	-0.182	22.099**	-0.103	-26.135**	-0.481***	-23.232**	-0.883***
	(9.474)	(0.147)	(12.211)	(0.168)	(11.360)	(0.143)	(9.902)	(0.121)	(11.693)	(0.102)	(11.071)	(0.137)	(9.380)	(0.113)	(10.220)	(0.114)	(9.268)	(0.323)
T	0.879	-4.9E-3	0.716	0.020	1.362	-0.021	-1.044	-8.0E-3	-0.528	-0.016*	1.001	0.017	1.933**	-5.6E-3	-0.337	-9.2E-3	0.725	-5.5E-3
	(0.901)	(0.014)	(1.006)	(0.014)	(1.044)	(0.013)	(0.895)	(0.011)	(1.064)	(9.3E-3)	(1.009)	(0.012)	(0.916)	(0.011)	(0.939)	(0.010)	(0.818)	(0.029)
R^2	0.019	0.125	0.349	0.214	0.101	0.161	0.453	0.256	0.025	0.129	0.101	0.160	0.115	0.029	0.306	0.173	0.262	0.120
Adj. R^2	-(0.020)	(0.090)	(0.303)	(0.160)	(0.065)	(0.128)	(0.388)	(0.167)	-(0.014)	(0.094)	(0.038)	(0.102)	(0.079)	-(0.010)	(0.278)	(0.140)	(0.232)	(0.085)

Panel B: DJIA Stocks (Cont.)

	HON		TRV		AXP		CRM		CVX		JNJ		AAPL		WMT		JPM	
	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t
Intercept	-234.621*	7.149***	81.805	5.070***	-307.390**	9.365***	126.548	2.645	91.442	5.169***	76.156	3.914***	17.688	2.066	-42.814	-0.303	-159.586	11.813***
	(131.501)	(1.762)	(91.490)	(1.632)	(128.040)	(2.109)	(119.213)	(1.803)	(118.749)	(1.856)	(129.088)	(1.072)	(50.460)	(1.434)	(124.812)	(0.987)	(176.293)	(2.058)
R_{t-1}	10.403	-0.399***	8.893*	-0.368***	-5.374	-0.487***	-2.383	-0.103	-0.209	-0.130	9.569	-0.201**	1.411	-0.128	7.071	-0.137	-1.626	-0.331***
	(6.560)	(0.088)	(4.874)	(0.087)	(5.025)	(0.083)	(5.495)	(0.083)	(5.447)	(0.085)	(10.308)	(0.086)	(2.851)	(0.081)	(10.538)	(0.083)	(7.693)	(0.090)
R_{t-2}	12.516*	-0.149*	5.535	-0.070	6.825	-0.137*					0.839	-0.252***			-12.456	-0.053	-7.301	-0.259***
	(6.426)	(0.086)	(4.843)	(0.086)	(4.887)	(0.080)					(9.817)	(0.082)			(10.558)	(0.083)	(8.168)	(0.095)
VC_{t-1}	-0.016	1.1E-3	0.063	1.9E-3	0.105	-3.1E-3**	0.192**	-6.5E-4	-0.065	1.5E-3	0.078	1.6E-4	0.271***	-4.0E-3*	0.036	-1.1E-4	0.063	2.8E-4
	(0.088)	(1.2E-3)	(0.083)	(1.5E-3)	(0.083)	(1.4E-3)	(0.081)	(1.2E-3)	(0.081)	(1.3E-3)	(0.089)	(7.4E-4)	(0.077)	(2.2E-3)	(0.082)	(6.5E-4)	(0.091)	(1.1E-3)
VC_{t-2}	4.0E-3	2.4E-3**	-0.146*	1.0E-3	-0.175**	1.8E-3					0.135	-5.1E-4			0.138*	-9.0E-4	-0.026	1.0E-3
	(0.087)	(1.2E-3)	(0.081)	(1.4E-3)	(0.082)	(1.4E-3)					(0.088)	(7.3E-4)			(0.081)	(6.4E-4)	(0.089)	(1.0E-3)
I	37.364*	-0.683**	-19.407	-0.446*	70.986***	-0.976***	-13.643	-0.258	-2.585	-0.383	-7.295	-0.282*	1.711	0.022	23.306	0.105	44.560	-1.859***
	(21.663)	(0.290)	(14.878)	(0.265)	(21.066)	(0.347)	(19.486)	(0.295)	(18.920)	(0.296)	(20.112)	(0.167)	(8.280)	(0.235)	(20.841)	(0.165)	(32.074)	(0.374)
C	0.998	-0.084***	0.737	-0.071***	-0.069	-0.112***	-1.403	-0.024	-1.834	-0.070***	0.160	-0.055***	-0.225	-0.043***	-0.420	3.2E-3	0.589	-0.119***
	(1.223)	(0.016)	(0.897)	(0.016)	(1.204)	(0.020)	(1.117)	(0.017)	(1.168)	(0.018)	(1.279)	(0.011)	(0.482)	(0.014)	(1.154)	(9.1E-3)	(1.692)	(0.020)
P	5.839	-0.688***	5.421	-0.527***	-18.174*	-0.799***	-9.945	-0.250	-15.468	-0.626***	-7.407	-0.482***	-4.193	-0.440***	-17.751*	-0.060	-18.525	-0.277*
	(10.735)	(0.144)	(7.674)	(0.137)	(10.501)	(0.173)	(10.121)	(0.153)	(10.505)	(0.164)	(11.359)	(0.094)	(4.408)	(0.125)	(10.625)	(0.084)	(14.304)	(0.167)
T	0.227	-0.010	1.153	-4.9E-3	-1.891*	9.8E-3	2.383**	2.6E-3	2.743***	-8.7E-3	1.786	-0.011	0.482	-0.021*	0.292	-5.8E-3	0.450	5.0E-3
	(0.971)	(0.013)	(0.724)	(0.013)	(0.972)	(0.016)	(1.021)	(0.015)	(0.976)	(0.015)	(1.126)	(9.4E-3)	(0.429)	(0.012)	(1.043)	(8.2E-3)	(1.239)	(0.014)
R^2	0.250	0.325	0.135	0.208	0.193	0.278	0.238	0.029	0.258	0.122	0.279	0.268	0.189	0.104	0.172	0.044	0.329	0.392
Adj. R^2	(0.133)	(0.219)	(0.061)	(0.140)	(0.148)	(0.238)	(0.207)	-(0.010)	(0.228)	(0.087)	(0.180)	(0.168)	(0.157)	(0.067)	(0.126)	-(0.008)	(0.211)	(0.284)

Panel B: DJIA Stocks (Cont.)

	PG		IBM		NKE		MMM		DIS		MRK		KO		CSCO		VZ		WBA		INTC	
	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t
Intercept	-42.510	-0.173	163.967	2.108	-102.668	1.224	-71.361	3.487***	-71.598	3.955**	-125.051	1.709	-77.715	3.723***	-157.414	1.490	138.241	0.935	-82.299	2.377	-59.993	2.256
	#######	(0.937)	#######	(1.517)	#######	(1.652)	#######	(1.339)	(79.399)	(1.576)	#######	(1.306)	#######	(1.283)	#######	(1.333)	#######	(0.820)	#######	(1.744)	#######	(1.771)
R_{t-1}	-3.404	-0.214***	-0.884	-0.012	-6.183	-0.171**	-2.867	-0.043	4.676	-0.109	0.494	-0.202**	2.173	-0.341***	5.229	-0.027	-20.271	-0.187**	-4.261	-0.222***	-2.084	-0.011
	(9.742)	(0.081)	(6.753)	(0.087)	(5.564)	(0.086)	(8.107)	(0.086)	(4.332)	(0.086)	(7.398)	(0.083)	(8.402)	(0.085)	(8.135)	(0.084)	(12.660)	(0.081)	(6.199)	(0.082)	(5.601)	(0.084)
R_{t-2}							-14.116*	-0.087			-17.158**	-0.074	-11.156	-0.285***					4.853	-0.134	1.078	-0.047
							(7.761)	(0.083)			(7.472)	(0.084)	(7.782)	(0.079)					(6.215)	(0.083)	(5.586)	(0.084)
VC_{t-1}	0.032	4.0E-4	0.049	-7.3E-5	0.152*	7.3E-4	0.055	1.3E-3	0.049	-3.1E-3**	0.029	7.0E-4	0.056	-8.5E-4	0.172**	-1.2E-3	0.045	-7.2E-5	0.216***	9.5E-4	0.224***	-2.3E-3*
	(0.082)	(6.8E-4)	(0.082)	(1.1E-3)	(0.082)	(1.3E-3)	(0.083)	(8.8E-4)	(0.080)	(1.6E-3)	(0.083)	(9.3E-4)	(0.085)	(8.6E-4)	(0.082)	(8.4E-4)	(0.082)	(5.2E-4)	(0.082)	(1.1E-3)	(0.082)	(1.2E-3)
VC_{t-2}							-0.133	-9.8E-4			-0.045	-2.5E-4	0.061	-3.7E-4					0.165**	-6.2E-4	0.145*	1.9E-3
							(0.084)	(8.9E-4)			(0.083)	(9.3E-4)	(0.082)	(8.3E-4)					(0.083)	(1.1E-3)	(0.082)	(1.2E-3)
I	21.742	0.157	1.127	-0.214	23.746	-0.066	24.374	-0.419*	19.637	-0.322	32.487*	-0.163	28.450	-0.054	29.793	-0.201	-12.350	-0.057	20.225	-0.340	8.698	-0.230
	(18.633)	(0.155)	(18.765)	(0.242)	(17.424)	(0.271)	(20.267)	(0.216)	(12.765)	(0.253)	(19.550)	(0.219)	(20.538)	(0.209)	(21.268)	(0.218)	(21.058)	(0.134)	(21.973)	(0.292)	(19.265)	(0.290)
C	-1.696	-0.014	-2.922**	-0.023	0.548	-0.014	-0.811	-0.025**	0.982	-0.041***	-0.187	-0.020*	0.176	-0.090***	0.438	-6.1E-3	-0.574	-0.011	0.022	-0.022	0.300	-0.024
	(1.059)	(8.8E-3)	(1.160)	(0.015)	(1.011)	(0.016)	(1.142)	(0.012)	(0.757)	(0.015)	(1.041)	(0.012)	(1.401)	(0.014)	(1.201)	(0.012)	(1.193)	(7.6E-3)	(1.218)	(0.016)	(1.087)	(0.016)
P	-15.700	-0.143*	-34.722**	-0.188	-5.828	-0.179	-12.909	-0.241**	-7.045	-0.443***	-11.498	-0.164	-16.568	-0.694***	-1.349	-0.078	-14.412	-0.128*	-6.178	-0.097	2.978	-0.199
	(9.617)	(0.080)	(10.516)	(0.136)	(9.215)	(0.143)	(10.337)	(0.110)	(6.890)	(0.137)	(9.293)	(0.104)	(12.226)	(0.124)	(10.847)	(0.111)	(10.936)	(0.070)	(11.150)	(0.148)	(9.778)	(0.147)
T	1.223	-0.016**	1.135	1.2E-3	1.192	-5.2E-3	1.927*	0.012	0.822	-1.9E-3	2.003**	-2.4E-3	1.966*	-0.025**	0.101	0.015	3.266***	-4.4E-3	0.581	0.018	2.335**	-4.9E-4
	(0.948)	(7.9E-3)	(0.942)	(0.012)	(0.887)	(0.014)	(1.012)	(0.011)	(0.631)	(0.013)	(0.936)	(0.010)	(1.057)	(0.011)	(1.062)	(0.011)	(1.090)	(7.0E-3)	(1.102)	(0.015)	(0.966)	(0.015)
R^2	0.250	0.067	0.246	0.021	0.234	0.030	0.263	0.084	0.230	0.093	0.343	0.082	0.307	0.275	0.102	0.038	0.245	0.053	0.229	0.080	0.407	0.050
Adj. R^2	(0.219)	(0.030)	(0.216)	-(0.019)	(0.203)	-(0.009)	(0.223)	(0.033)	(0.199)	(0.057)	(0.297)	(0.018)	(0.248)	(0.213)	(0.066)	-(0.001)	(0.215)	(0.015)	(0.187)	(0.029)	(0.374)	-(0.002)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(e) Vector auto regression for the log YouTube View Count and absolute value of DJIA stock return.

Panel B: DJIA Stocks

	UNH		GS		HD		MSFT		MCD		CAT		AMGN		V		BA	
	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$
Intercept	137.134	-3.913***	-141.116	-2.111**	-26.779	-5.024***	-21.139	-2.189***	-83.243	-2.873***	52.149	-1.241	-151.347	-0.484	-167.567	-1.874**	7.056	-9.288***
	(110.644)	(1.117)	(116.914)	(1.048)	(130.453)	(0.853)	(94.414)	(0.707)	(129.151)	(0.711)	(117.488)	(0.918)	(111.672)	(0.805)	(116.384)	(0.828)	(101.969)	(1.866)
$ABSR_{t-1}$	-9.105	0.021	-5.163	-0.055	-5.984	2.9E-3	10.999	0.079	8.357	-0.117	10.433	-0.111	-6.614	-0.025	0.455	-0.036	4.415	0.127*
	(7.528)	(0.076)	(8.472)	(0.076)	(10.644)	(0.070)	(11.028)	(0.083)	(13.966)	(0.077)	(10.955)	(0.086)	(11.498)	(0.083)	(10.330)	(0.074)	(3.799)	(0.070)
$ABSR_{t-2}$					2.792	-5.9E-3	-2.317	-0.074							5.190	0.024		
					(10.036)	(0.066)	(10.329)	(0.077)							(10.378)	(0.074)		
VC_{t-1}	0.759	1.1E-3	4.8E-4	3.2E-4	0.112	1.4E-4	-0.056	1.8E-4	-0.023	9.1E-5	0.089	8.2E-4	-0.115	-7.5E-4	0.106	1.2E-3**	0.027	-1.5E-4
	(0.084)	(8.4E-4)	(0.083)	(7.4E-4)	(0.084)	(5.5E-4)	(0.083)	(6.2E-4)	(0.082)	(4.5E-4)	(0.084)	(6.6E-4)	(0.082)	(5.9E-4)	(0.083)	(5.9E-4)	(0.083)	(1.5E-3)
VC_{t-2}					0.017	-4.4E-4	0.324***	1.6E-4							0.075	2.5E-4		
					(0.084)	(5.5E-4)	(0.082)	(6.1E-4)							(0.084)	(6.0E-4)		
I	-19.550	0.255	50.021**	0.053	7.009	0.198	20.899	0.194	19.307	0.216*	0.300	0.108	6.588	7.9E-3	45.769**	0.042	16.931	0.522*
	(17.963)	(0.181)	(19.675)	(0.176)	(21.128)	(0.138)	(15.908)	(0.119)	(21.021)	(0.116)	(19.329)	(0.151)	(18.334)	(0.132)	(20.393)	(0.145)	(16.528)	(0.302)
C	-0.353	0.082***	-1.320	0.081***	-0.118	0.106***	-0.846	0.039***	0.756	0.067***	-0.606	0.043***	2.097**	0.021***	0.353	0.050***	0.381	0.231***
	(1.096)	(0.011)	(1.195)	(0.011)	(1.414)	(9.2E-3)	(0.931)	(7.0E-3)	(1.360)	(7.5E-3)	(1.163)	(9.1E-3)	(1.043)	(7.5E-3)	(1.134)	(8.1E-3)	(1.177)	(0.022)
P	-5.648	0.507***	-28.060***	0.359***	-2.134	0.801***	-19.605**	0.225***	-4.597	0.333***	-11.014	0.125	24.215**	0.092	-18.368*	0.333***	-20.874**	1.276***
	(9.276)	(0.094)	(10.281)	(0.092)	(12.425)	(0.081)	(8.439)	(0.063)	(10.854)	(0.060)	(9.887)	(0.077)	(9.386)	(0.068)	(10.678)	(0.076)	(8.957)	(0.164)
T	0.900	0.013	0.769	0.023***	1.590	0.034***	-0.755	1.5E-3	-0.615	0.013**	1.058	-2.0E-5	1.942**	2.2E-3	-0.407	0.016**	0.720	0.060***
	(0.897)	(9.1E-3)	(0.979)	(8.8E-3)	(1.091)	(7.1E-3)	(0.885)	(6.6E-3)	(1.049)	(5.8E-3)	(0.977)	(7.6E-3)	(0.926)	(6.7E-3)	(0.955)	(6.8E-3)	(0.825)	(0.015)
R^2	0.028	0.330	0.347	0.377	0.138	0.641	0.454	0.399	0.027	0.430	0.094	0.218	0.098	0.095	0.329	0.392	0.258	0.655
Adj. R^2	-(0.011)	(0.303)	(0.321)	(0.352)	(0.064)	(0.610)	(0.389)	(0.327)	-(0.012)	(0.407)	(0.057)	(0.186)	(0.062)	(0.058)	(0.282)	(0.350)	(0.228)	(0.641)

Panel B: DJIA Stocks (Cont.)

	HON		TRV		AXP		CRM		CVX		JNJ		AAPL		WMT		JPM	
	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$
Intercept	-104.297	-3.180***	134.523	-1.812*	-250.788*	-4.612***	122.711	-0.887	104.639	-4.162***	115.359	-1.061*	21.459	-2.696***	-60.361	-0.740	-181.038	-1.444
	(117.932)	(0.852)	(90.292)	(0.960)	(131.449)	(1.414)	(118.498)	(1.225)	(116.511)	(1.028)	(113.632)	(0.605)	(51.926)	(0.973)	(125.041)	(0.668)	(121.384)	(0.991)
$ABSR_{t-1}$	12.580	0.081	7.198	0.033	2.108	0.101	2.722	0.048	5.034	-0.169**	-3.927	-0.054	4.816	0.016	23.373	0.033	0.990	0.055
	(10.398)	(0.075)	(8.050)	(0.086)	(7.069)	(0.076)	(8.230)	(0.085)	(8.235)	(0.073)	(15.205)	(0.081)	(4.426)	(0.083)	(15.511)	(0.083)	(9.608)	(0.078)
$ABSR_{t-2}$	5.852	-0.274***	0.898	0.092	-9.301	0.059							-5.649	-0.149*				
	(10.375)	(0.075)	(7.749)	(0.082)	(7.233)	(0.078)							(4.396)	(0.082)				
VC_{t-1}	-0.030	3.6E-4	0.085	9.1E-4	0.094	-2.6E-5	0.184**	2.6E-4	-0.072	2.4E-5	0.055	-3.0E-4	0.205**	-6.2E-4	0.029	5.5E-4	0.064	-2.0E-4
	(0.088)	(6.3E-4)	(0.085)	(9.0E-4)	(0.085)	(9.1E-4)	(0.084)	(8.7E-4)	(0.081)	(7.2E-4)	(0.082)	(4.4E-4)	(0.085)	(1.6E-3)	(0.081)	(4.3E-4)	(0.083)	(6.8E-4)
VC_{t-2}	5.4E-3	-1.4E-3**	-0.128	-7.2E-5	-0.124	-1.2E-3							0.097	1.2E-4				
	(0.089)	(6.4E-4)	(0.084)	(8.9E-4)	(0.084)	(9.1E-4)							(0.086)	(1.6E-3)				
I	16.751	0.325**	-29.474*	0.264	62.055***	0.527**	-13.760	0.153	-3.498	0.173	-6.788	0.106	3.037	0.275*	27.201	0.159	44.179**	0.154
	(19.935)	(0.144)	(15.993)	(0.170)	(23.287)	(0.250)	(19.544)	(0.202)	(18.851)	(0.166)	(18.600)	(0.099)	(8.582)	(0.161)	(20.791)	(0.111)	(20.120)	(0.164)
C	-1.472	0.090***	-0.325	0.062***	-0.812	0.097***	-1.395	0.028**	-2.244*	0.120***	-0.216	0.033***	-0.423	0.047***	-0.604	0.010*	0.947	0.054***
	(1.243)	(9.0E-3)	(0.944)	(0.010)	(1.231)	(0.013)	(1.128)	(0.012)	(1.274)	(0.011)	(1.131)	(6.0E-3)	(0.549)	(0.010)	(1.166)	(6.2E-3)	(1.185)	(9.7E-3)
P	3.375	0.262***	6.553	0.050	-19.450*	0.323***	-8.995	5.0E-4	-17.047*	0.640***	-16.201*	0.091*	-6.791	0.232***	-18.508*	-0.033	-13.474	0.107
	(13.737)	(0.099)	(8.859)	(0.094)	(11.377)	(0.122)	(9.861)	(0.102)	(10.000)	(0.088)	(9.615)	(0.051)	(4.335)	(0.081)	(10.607)	(0.057)	(10.080)	(0.082)
T	0.284	0.016**	1.300*	6.7E-3	-1.994**	0.016	2.433**	-6.7E-4	2.651***	0.039***	2.211**	3.5E-3	0.196	-1.7E-3	0.424	-5.6E-3	1.020	7.6E-3
	(1.028)	(7.4E-3)	(0.769)	(8.2E-3)	(0.990)	(0.011)	(1.021)	(0.011)	(0.985)	(8.7E-3)	(0.958)	(5.1E-3)	(0.442)	(8.3E-3)	(1.041)	(5.6E-3)	(1.012)	(8.3E-3)
R^2	0.189	0.650	0.141	0.498	0.230	0.511	0.238	0.116	0.260	0.519	0.196	0.272	0.222	0.269	0.160	0.096	0.271	0.353
Adj. R^2	(0.062)	(0.595)	(0.053)	(0.447)	(0.164)	(0.469)	(0.207)	(0.080)	(0.230)	(0.499)	(0.164)	(0.242)	(0.167)	(0.218)	(0.126)	(0.059)	(0.241)	(0.327)

Panel B: DJIA Stocks (Cont.)

	PG		IBM		NKE		MMM		DIS		MRK		KO		CSCO		VZ		WBA		INTC	
	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$
Intercept	-57.670	-1.397**	251.467**	-3.133***	-107.950	-3.809***	-89.189	-1.321	-31.950	-2.334**	-118.461	-1.316*	-4.898	-3.298***	-144.659	-1.039	75.974	-0.324	-113.207	0.507	-98.731	-0.442
	#######	(0.601)	#######	(0.980)	#######	(0.987)	#######	(0.800)	(75.897)	(1.015)	#######	(0.778)	#######	(0.790)	#######	(0.877)	#######	(0.534)	#######	(1.159)	#######	(1.192)
$ABSR_{t-1}$	-10.318	0.133	9.194	-0.204**	4.827	-0.099	18.894	-0.069	10.346*	-0.041	4.651	0.089	16.603	-0.087	2.503	-0.163**	27.367	0.070	4.540	0.133	0.937	0.081
	(15.799)	(0.083)	(10.227)	(0.083)	(8.647)	(0.079)	(12.083)	(0.082)	(6.097)	(0.082)	(12.319)	(0.084)	(11.765)	(0.077)	(11.841)	(0.081)	(19.666)	(0.083)	(9.233)	(0.085)	(7.994)	(0.083)
$ABSR_{t-2}$			21.382**	0.171**									5.429	-0.130*			-61.296**	0.068	-10.076	0.116		
			(9.939)	(0.080)									(11.139)	(0.073)			(20.042)	(0.085)	(9.392)	(0.086)		
VC_{t-1}	0.027	1.7E-4	0.034	-1.0E-4	0.132	-3.4E-4	0.031	4.4E-4	0.016	-9.0E-5	0.044	2.5E-4	0.015	9.1E-4*	0.160*	1.8E-4	0.062	-4.5E-4	0.147*	-2.4E-4	0.275***	-5.4E-4
	(0.082)	(4.3E-4)	(0.084)	(6.8E-4)	(0.081)	(7.4E-4)	(0.084)	(5.7E-4)	(0.080)	(1.1E-3)	(0.085)	(5.8E-4)	(0.081)	(5.3E-4)	(0.082)	(5.6E-4)	(0.080)	(3.4E-4)	(0.082)	(7.5E-4)	(0.081)	(8.5E-4)
VC_{t-2}			-9.3E-3	3.2E-4									0.069	-2.0E-5			0.026	-1.6E-4	0.154*	-1.4E-4		
			(0.082)	(6.6E-4)									(0.080)	(5.2E-4)			(0.080)	(3.4E-4)	(0.083)	(7.6E-4)		
I	22.589	0.107	-9.540	0.223	22.679	0.362**	26.803	0.103	16.447	0.168	30.285	0.254**	23.374	0.190	28.610	0.055	-4.644	0.047	20.621	-0.045	16.306	-0.124
	(18.677)	(0.098)	(19.439)	(0.157)	(17.773)	(0.162)	(19.331)	(0.132)	(12.567)	(0.168)	(18.872)	(0.128)	(19.946)	(0.131)	(21.217)	(0.145)	(20.607)	(0.087)	(21.306)	(0.195)	(18.954)	(0.197)
C	-1.265	0.032***	-4.370***	0.062***	0.613	0.073***	-1.041	0.037***	0.239	0.059***	-0.057	0.013*	-0.434	0.085***	0.276	0.026***	0.330	0.010*	-0.112	6.0E-3	0.354	0.037***
	(1.180)	(6.2E-3)	(1.402)	(0.011)	(1.069)	(9.8E-3)	(1.133)	(7.7E-3)	(0.748)	(0.010)	(1.062)	(7.2E-3)	(1.422)	(9.3E-3)	(1.196)	(8.2E-3)	(1.263)	(5.4E-3)	(1.226)	(0.011)	(1.051)	(0.011)
P	-13.617	0.161***	-40.146**	0.385***	-3.457	0.360***	-11.993	0.149**	-11.429*	0.280***	-10.427	-0.022	-25.887**	0.448***	-2.620	0.153**	-10.550	0.012	-0.162	-0.053	2.273	0.233**
	(9.664)	(0.051)	(10.774)	(0.087)	(8.909)	(0.081)	(9.819)	(0.067)	(6.398)	(0.086)	(9.281)	(0.063)	(10.771)	(0.071)	(10.709)	(0.073)	(10.862)	(0.046)	(11.021)	(0.101)	(9.448)	(0.098)
T	1.344	4.3E-3	1.489	0.012	1.346	0.010	1.490	-1.0E-3	0.740	0.012	1.677*	-8.3E-3	1.742*	0.017**	0.152	1.6E-4	3.118***	-9.3E-5	0.494	-1.2E-3	2.434**	0.015
	(0.942)	(5.0E-3)	(0.953)	(7.7E-3)	(0.880)	(8.0E-3)	(0.987)	(6.7E-3)	(0.627)	(8.4E-3)	(0.935)	(6.4E-3)	(1.002)	(6.6E-3)	(1.062)	(7.2E-3)	(1.101)	(4.7E-3)	(1.082)	(9.9E-3)	(0.957)	(1.0E-2)
R^2	0.251	0.283	0.276	0.336	0.229	0.309	0.254	0.197	0.239	0.239	0.295	0.096	0.320	0.512	0.100	0.101	0.296	0.115	0.306	0.103	0.400	0.123
Adj. R^2	(0.221)	(0.254)	(0.226)	(0.289)	(0.198)	(0.281)	(0.224)	(0.164)	(0.208)	(0.209)	(0.266)	(0.059)	(0.273)	(0.477)	(0.064)	(0.064)	(0.258)	(0.067)	(0.247)	(0.026)	(0.376)	(0.088)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(f) Vector auto regression for the log YouTube View Count x sentiment and DJIA stock return.

Panel B: DJIA Stocks

	UNH		GS		HD		MSFT		MCD	
	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t
Intercept	-10.565	3.726**	13.316	11.863***	20.402	3.332**	-1.321	3.231***	-15.820	2.658**
	(12.326)	(1.703)	(40.786)	(2.165)	(29.814)	(1.591)	(9.264)	(1.158)	(17.448)	(1.113)
R_{t-1}	0.644	-0.301***	-0.500	-0.362***	-0.049	-0.351***	-0.143	-0.292***	0.763	-0.321***
	(0.590)	(0.081)	(1.700)	(0.090)	(1.544)	(0.082)	(0.683)	(0.085)	(1.384)	(0.088)
R_{t-2}			-0.566	-0.196**			0.583	-0.230***	0.753	-0.059
			(1.646)	(0.087)			(0.651)	(0.081)	(1.304)	(0.083)
$VCSENT_{t-1}$	-0.115	4.9E-3	-0.081	8.2E-3*	-0.144*	-3.5E-3	0.074	0.014	0.028	0.010*
	(0.083)	(0.012)	(0.084)	(4.5E-3)	(0.081)	(4.3E-3)	(0.086)	(0.011)	(0.090)	(5.8E-3)
$VCSENT_{t-2}$			-0.036	-1.3E-3			-0.070	-0.016	-0.014	-6.1E-3
			(0.084)	(4.4E-3)			(0.087)	(0.011)	(0.091)	(5.8E-3)
I	1.679	-0.236	-1.973	-1.330***	-1.599	-0.056	0.344	-0.113	1.768	-0.017
	(2.009)	(0.278)	(6.320)	(0.335)	(4.821)	(0.257)	(1.480)	(0.185)	(2.782)	(0.178)
C	0.014	-0.053***	-0.421	-0.133***	-0.242	-0.064***	-0.038	-0.062***	0.060	-0.060***
	(0.116)	(0.016)	(0.406)	(0.022)	(0.291)	(0.016)	(0.102)	(0.013)	(0.191)	(0.012)
P	0.269	-0.496***	-0.328	-0.905***	-2.383	-0.621***	-0.088	-0.528***	1.298	-0.524***
	(1.053)	(0.146)	(3.158)	(0.168)	(2.668)	(0.142)	(0.908)	(0.114)	(1.740)	(0.111)
T	0.028	-5.0E-3	0.233	0.025*	0.169	-0.021	-0.107	-0.024**	-0.057	-0.021**
	(0.101)	(0.014)	(0.272)	(0.014)	(0.247)	(0.013)	(0.080)	(1.0E-2)	(0.144)	(9.2E-3)
R^2	0.042	0.126	0.190	0.296	0.041	0.159	0.057	0.265	0.037	0.252
Adj. R^2	(0.004)	(0.091)	(0.079)	(0.200)	(0.002)	(0.125)	-(0.039)	(0.190)	-(0.045)	(0.188)

	CAT		AMGN		V		BA	
	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t
Intercept	29.534	4.514***	1.381	0.400	8.850	4.210***	-46.323*	13.828***
	(21.492)	(1.699)	(11.783)	(1.324)	(10.801)	(1.310)	(26.218)	(3.958)
R_{t-1}	-0.209	0.060	0.331	-0.143*	1.543**	-0.327***	0.280	-0.388***
	(1.066)	(0.084)	(0.746)	(0.084)	(0.652)	(0.079)	(0.636)	(0.096)
R_{t-2}	0.993	-0.031					0.913	-0.120
	(1.060)	(0.084)					(0.608)	(0.092)
$VCSENT_{t-1}$	0.078	-4.8E-3	6.2E-3	5.6E-4	0.247***	-5.1E-3	0.022	0.019
	(0.086)	(6.8E-3)	(0.084)	(9.5E-3)	(0.077)	(9.3E-3)	(0.086)	(0.013)
$VCSENT_{t-2}$	-0.046	-0.011					-0.049	-0.011
	(0.087)	(6.9E-3)					(0.084)	(0.013)
I	-4.005	-0.567**	0.027	0.022	-0.447	-0.371*	6.468	-1.371**
	(3.312)	(0.262)	(1.938)	(0.218)	(1.742)	(0.211)	(4.021)	(0.607)
C	-0.182	-0.030*	-0.071	-3.9E-3	-0.154	-0.051***	0.416	-0.189***
	(0.206)	(0.016)	(0.109)	(0.012)	(0.103)	(0.012)	(0.280)	(0.042)
P	-1.498	-0.282*	-0.291	-0.110	-1.289	-0.439***	1.999	-1.254***
	(1.815)	(0.144)	(0.995)	(0.112)	(0.921)	(0.112)	(2.317)	(0.350)
T	0.200	0.019	-0.010	-6.0E-3	-0.051	-9.0E-3	-0.074	-4.2E-3
	(0.157)	(0.012)	(0.098)	(0.011)	(0.087)	(0.011)	(0.190)	(0.029)
R^2	0.068	0.151	0.007	0.028	0.146	0.160	0.073	0.202
Adj. R^2	(0.003)	(0.092)	-(0.033)	-(0.011)	(0.111)	(0.126)	-(0.007)	(0.134)

Panel B: DJIA Stocks (Cont.)

	HON		TRV		AXP		CRM		CVX		JNJ		AAPL		WMT		JPM	
	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t
Intercept	-10.337	5.538***	44.531	5.683***	-27.142	8.968***	3.271	2.585	-0.952	5.373***	-4.307	2.513**	10.954	2.062	-18.693**	0.248	-3.874	8.432***
	(16.118)	(1.562)	(32.476)	(1.638)	(16.686)	(1.990)	(7.417)	(1.798)	(22.986)	(1.855)	(10.860)	(0.998)	(8.195)	(1.449)	(8.693)	(0.982)	(30.014)	(1.952)
R_{t-1}	0.300	-0.291***	0.064	-0.333***	-0.219	-0.432***	0.173	-0.110	0.750	-0.131	0.434	-0.098	-0.156	-0.116	-0.201	-0.142*	0.864	-0.282***
	(0.854)	(0.083)	(1.761)	(0.089)	(0.642)	(0.077)	(0.349)	(0.085)	(1.064)	(0.086)	(0.913)	(0.084)	(0.469)	(0.083)	(0.711)	(0.080)	(1.339)	(0.087)
R_{t-2}			2.685	-0.047							0.273	-0.183**					2.085	-0.094
			(1.729)	(0.087)							(0.849)	(0.078)					(1.370)	(0.089)
$VCSENT_{t-1}$	-0.029	7.0E-3	0.124	-8.3E-4	-0.075	8.2E-3	-0.010	7.3E-3	-0.058	-3.8E-3	0.108	7.3E-3	0.164***	-5.2E-3	-0.036	0.022**	0.064	-2.7E-3
	(0.083)	(8.0E-3)	(0.086)	(4.3E-3)	(0.083)	(9.9E-3)	(0.084)	(0.020)	(0.082)	(6.6E-3)	(0.085)	(7.8E-3)	(0.050)	(8.9E-3)	(0.082)	(9.3E-3)	(0.085)	(5.6E-3)
$VCSENT_{t-2}$			-0.062	3.2E-3							-0.088	-3.5E-4					0.016	3.8E-3
			(0.085)	(4.3E-3)							(0.084)	(7.7E-3)					(0.085)	(5.5E-3)
I	1.975	-0.572**	-10.555**	-0.583**	5.839**	-1.040***	-0.345	-0.246	-1.190	-0.405	0.156	-0.175	-0.857	0.025	3.007**	-1.8E-3	0.710	-0.962***
	(2.586)	(0.251)	(5.252)	(0.265)	(2.719)	(0.324)	(1.212)	(0.294)	(3.675)	(0.297)	(1.723)	(0.158)	(1.346)	(0.238)	(1.432)	(0.162)	(4.932)	(0.321)
C	-0.029	-0.062***	0.053	-0.069***	-0.080	-0.095***	-0.056	-0.023	0.034	-0.073***	0.192*	-0.037***	-0.139*	-0.045***	0.073	1.3E-3	0.098	-0.098***
	(0.155)	(0.015)	(0.321)	(0.016)	(0.156)	(0.019)	(0.070)	(0.017)	(0.225)	(0.018)	(0.109)	(0.010)	(0.079)	(0.014)	(0.079)	(9.0E-3)	(0.297)	(0.019)
P	-0.106	-0.480***	3.030	-0.497***	-1.077	-0.646***	-0.260	-0.252	1.624	-0.642***	0.632	-0.315***	-1.277*	-0.451***	0.407	-0.051	-0.051	-0.621***
	(1.382)	(0.134)	(2.756)	(0.139)	(1.388)	(0.166)	(0.632)	(0.153)	(2.036)	(0.164)	(0.980)	(0.090)	(0.726)	(0.128)	(0.717)	(0.081)	(2.224)	(0.145)
T	-2.8E-3	-2.1E-3	0.441*	2.6E-3	-0.283**	0.017	0.040	-1.1E-4	0.065	-4.2E-3	0.120	-8.8E-3	-0.029	-0.025**	-0.076	-4.4E-3	-0.075	0.011
	(0.129)	(0.012)	(0.251)	(0.013)	(0.135)	(0.016)	(0.061)	(0.015)	(0.185)	(0.015)	(0.086)	(7.9E-3)	(0.069)	(0.012)	(0.071)	(8.1E-3)	(0.216)	(0.014)
R^2	0.022	0.145	0.096	0.185	0.043	0.236	0.022	0.028	0.013	0.115	0.118	0.232	0.105	0.085	0.036	0.062	0.124	0.345
Adj. R^2	-(0.017)	(0.110)	(0.018)	(0.115)	(0.004)	(0.206)	-(0.017)	-(0.011)	-(0.027)	(0.080)	(0.042)	(0.166)	(0.069)	(0.048)	-(0.002)	(0.024)	-(0.012)	(0.243)

Panel B: DJIA Stocks (Cont.)

	PG		IBM		NKE		MMM		DIS		MRK		KO		CSCO		VZ		WBA		INTC	
	VCSENT	R_t	VCSENT	R_t	VCSENT	R_t	VCSENT	R_t	VCSENT	R_t	VCSENT	R_t	VCSENT	R_t	VCSENT	R_t	VCSENT	R_t	VCSENT	R_t	VCSENT	R_t
Intercept	1.286	-0.187	-8.740	3.628**	-25.736	1.072	19.069	4.652***	7.168	4.291***	6.118	1.294	-24.536	4.495***	13.155	1.751	-2.994	0.893	13.245	2.428	29.776**	2.362
	(13.540)	(0.929)	(5.323)	(1.685)	(26.767)	(1.652)	(18.168)	(1.395)	(5.627)	(1.592)	(6.736)	(1.215)	(24.794)	(1.308)	(15.300)	(1.332)	(4.550)	(0.820)	(12.929)	(1.738)	(12.907)	(1.678)
R_{t-1}	-0.820	-0.251***	0.499*	-0.080	0.967	-0.152*	-1.443	-0.122	0.470	-0.075	-0.134	-0.182**	-1.617	-0.380***	0.524	0.026	-0.179	-0.180**	0.382	-0.238***	1.094	0.200**
	(1.206)	(0.083)	(0.302)	(0.096)	(1.462)	(0.090)	(1.214)	(0.093)	(0.309)	(0.087)	(0.452)	(0.082)	(1.670)	(0.088)	(1.026)	(0.089)	(0.458)	(0.082)	(0.636)	(0.085)	(0.778)	(0.101)
R_{t-2}	0.469	-0.205**	0.094	0.085			-0.624	-0.136					-1.389	-0.312***					0.381	-0.117		
	(1.186)	(0.081)	(0.287)	(0.091)			(1.147)	(0.088)					(1.524)	(0.080)					(0.635)	(0.085)		
$VCSENT_{t-}$	-0.041	-2.9E-3	-0.168*	6.1E-3	-0.179**	-1.6E-3	-0.062	3.3E-3	-0.075	-0.025	-0.011	-6.8E-3	-0.121	7.6E-4	-0.040	-7.9E-3	0.029	-6.2E-3	-0.063	0.012	-0.189*	-0.041***
	(0.083)	(5.7E-3)	(0.091)	(0.029)	(0.086)	(5.3E-3)	(0.089)	(6.8E-3)	(0.082)	(0.023)	(0.082)	(0.015)	(0.085)	(4.5E-3)	(0.089)	(7.7E-3)	(0.084)	(0.015)	(0.086)	(0.012)	(0.099)	(0.013)
$VCSENT_{t-}$	0.192**	2.7E-3	-0.037	-0.029			-0.071	9.8E-3					0.025	1.5E-3					-0.136	-0.015		
	(0.083)	(5.7E-3)	(0.091)	(0.029)			(0.088)	(6.7E-3)					(0.085)	(4.5E-3)					(0.086)	(0.012)		
I	-0.160	0.181	1.004	-0.334	3.528	-0.039	-3.293	-0.550**	-1.634*	-0.427*	-0.400	-0.098	5.447	-0.210	-2.230	-0.250	0.737	-0.051	-2.785	-0.350	-1.625	-0.218
	(2.249)	(0.154)	(0.797)	(0.252)	(4.368)	(0.270)	(2.864)	(0.220)	(0.901)	(0.255)	(1.108)	(0.200)	(3.975)	(0.210)	(2.506)	(0.218)	(0.750)	(0.135)	(2.157)	(0.290)	(2.104)	(0.274)
C	-0.045	-0.017**	0.079	-0.047***	0.098	-0.013	-0.097	-0.036***	-0.046	-0.044***	-0.122*	-0.017	-0.123	-0.095***	-0.067	-7.4E-3	0.011	-0.010	-0.080	-0.022	-0.655***	-0.034**
	(0.129)	(8.8E-3)	(0.056)	(0.018)	(0.254)	(0.016)	(0.165)	(0.013)	(0.054)	(0.015)	(0.063)	(0.011)	(0.272)	(0.014)	(0.142)	(0.012)	(0.042)	(7.6E-3)	(0.119)	(0.016)	(0.124)	(0.016)
P	-0.040	-0.166**	0.648	-0.361**	1.316	-0.177	-0.153	-0.331***	0.427	-0.394***	-0.771	-0.154	-1.169	-0.672***	-0.123	-0.076	-0.238	-0.127*	0.513	-0.097	-4.167***	-0.233
	(1.170)	(0.080)	(0.463)	(0.147)	(2.323)	(0.143)	(1.499)	(0.115)	(0.484)	(0.137)	(0.565)	(0.102)	(2.279)	(0.120)	(1.284)	(0.112)	(0.382)	(0.069)	(1.078)	(0.145)	(1.098)	(0.143)
T	-0.054	-0.017**	-0.014	-1.7E-3	-0.026	-4.2E-3	0.289**	0.013	0.081*	-2.5E-3	-0.027	-2.5E-3	-0.290	-0.027**	0.098	0.015	-0.030	-4.8E-3	0.167	0.019	-0.163	-5.2E-3
	(0.115)	(7.9E-3)	(0.037)	(0.012)	(0.221)	(0.014)	(0.138)	(0.011)	(0.045)	(0.013)	(0.056)	(0.010)	(0.199)	(0.011)	(0.126)	(0.011)	(0.038)	(6.8E-3)	(0.109)	(0.015)	(0.106)	(0.014)
R^2	0.055	0.104	0.042	0.144	0.036	0.029	0.114	0.107	0.069	0.077	0.026	0.047	0.065	0.300	0.009	0.031	0.015	0.054	0.043	0.092	0.173	0.079
Adj. R^2	(0.003)	(0.055)	-(0.040)	(0.070)	-(0.003)	-(0.010)	(0.052)	(0.045)	(0.031)	(0.039)	-(0.014)	(0.009)	-(0.031)	(0.229)	-(0.031)	-(0.008)	-(0.024)	(0.016)	-(0.009)	(0.042)	(0.140)	(0.042)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(g) Vector auto regression for the weight of YouTube View Count and absolute value of DJIA stock return.

Panel B: DJIA Stocks	UNH		GS		HD		MSFT		MCD		CAT		AMGN		V		BA	
	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$
Intercept	231.293	-3.576***	-1924.654*	-2.067*	-82.885	-4.986***	35.999	-2.253***	207.546	-2.857***	182.210	-1.316	-456.413	-0.391	-1872.714*	-1.668*	911.722	-9.349***
	(558.062)	(1.084)	(1105.186)	(1.053)	(842.476)	(0.852)	(980.184)	(0.709)	(902.831)	(0.711)	(717.571)	(0.913)	(677.656)	(0.802)	(950.284)	(0.891)	(1046.763)	(1.865)
$ABSR_{t-1}$	-31.382	0.017	-1.414	-0.055	-78.239	3.5E-3	109.052	0.074	66.689	-0.116	2.198	-0.132	-52.301	-0.033	82.824	-0.031	67.016*	0.117*
	(38.038)	(0.074)	(79.470)	(0.076)	(68.689)	(0.069)	(114.273)	(0.083)	(97.528)	(0.077)	(67.784)	(0.086)	(69.929)	(0.083)	(78.830)	(0.074)	(39.108)	(0.070)
$ABSR_{t-2}$	-28.452	-7.7E-3			10.908	-2.1E-3	7.844	-0.071							56.272	9.8E-3		
	(38.395)	(0.075)			(64.999)	(0.066)	(106.859)	(0.077)							(79.330)	(0.074)		
W_{t-1}	-0.039	2.2E-4	-0.022	4.5E-5	0.135	6.3E-5	0.032	2.4E-6	-0.048	-3.6E-5	0.125	2.0E-4*	-0.119	-8.7E-5	-0.021	1.5E-4*	0.070	9.8E-5
	(0.083)	(1.6E-4)	(0.083)	(7.9E-5)	(0.084)	(8.5E-5)	(0.082)	(5.9E-5)	(0.082)	(6.5E-5)	(0.085)	(1.1E-4)	(0.081)	(9.6E-5)	(0.083)	(7.8E-5)	(0.082)	(1.5E-4)
W_{t-2}	-0.041	6.5E-5			0.065	-4.1E-5	0.103	2.9E-5							0.149*	1.7E-5		
	(0.083)	(1.6E-4)			(0.084)	(8.5E-5)	(0.081)	(5.9E-5)							(0.083)	(7.8E-5)		
I	-43.658	0.202	517.256***	0.046	-11.437	0.185	180.923	0.208*	49.263	0.218*	-3.412	0.120	-6.868	-2.4E-3	442.256**	2.5E-3	19.379	0.502*
	(92.867)	(0.180)	(185.945)	(0.177)	(136.142)	(0.138)	(164.737)	(0.119)	(146.360)	(0.115)	(117.929)	(0.150)	(111.727)	(0.132)	(170.591)	(0.160)	(168.617)	(0.300)
C	2.479	0.071***	-11.317	0.081***	1.706	0.107***	-12.992	0.039***	-3.325	0.067***	-1.953	0.044***	9.433	0.020***	-3.666	0.050***	-0.373	0.232***
	(5.724)	(0.011)	(11.113)	(0.011)	(9.138)	(9.2E-3)	(9.622)	(7.0E-3)	(9.507)	(7.5E-3)	(7.132)	(9.1E-3)	(6.345)	(7.5E-3)	(8.697)	(8.2E-3)	(12.080)	(0.022)
P	2.904	0.501***	-195.065**	0.358***	32.744	0.808***	-215.636**	0.222***	-97.931	0.327***	-33.109	0.126	103.775*	0.084	-122.028	0.336***	-214.753**	1.311***
	(47.128)	(0.092)	(94.688)	(0.090)	(80.838)	(0.082)	(86.730)	(0.063)	(76.429)	(0.060)	(60.156)	(0.077)	(56.930)	(0.067)	(80.221)	(0.075)	(92.134)	(0.164)
T	2.442	0.014	2.627	0.023***	9.234	0.034***	-8.298	3.2E-5	-7.729	0.012**	4.889	-4.4E-4	10.526*	1.9E-3	-11.642	0.018**	7.038	0.060***
	(4.645)	(9.0E-3)	(9.203)	(8.8E-3)	(7.103)	(7.2E-3)	(9.475)	(6.9E-3)	(7.334)	(5.8E-3)	(5.955)	(7.6E-3)	(5.659)	(6.7E-3)	(7.569)	(7.1E-3)	(8.461)	(0.015)
R^2	0.048	0.391	0.288	0.378	0.094	0.642	0.409	0.402	0.031	0.431	0.053	0.227	0.067	0.090	0.299	0.384	0.242	0.656
Adj. R^2	-(0.019)	(0.349)	(0.260)	(0.353)	(0.016)	(0.611)	(0.339)	(0.330)	-(0.008)	(0.408)	(0.015)	(0.196)	(0.030)	(0.053)	(0.250)	(0.341)	(0.212)	(0.642)

Panel B: DJIA Stocks (Cont.)

	HON		TRV		AXP		CRM		CVX		JNJ		AAPL		WMT		JPM	
	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$
Intercept	-852.694	-3.103***	419.814	-1.711*	-1819.413**	-4.633***	981.006	-0.665	620.898	-4.222***	1818.742**	-1.075*	247.733	-2.348**	199.577	-0.774	-3419.958**	-0.828
	(717.965)	(0.844)	(386.843)	(0.942)	(862.451)	(1.432)	(902.465)	(1.269)	(798.808)	(1.028)	(783.358)	(0.609)	(626.901)	(1.025)	(1045.877)	(0.669)	(1295.826)	(1.103)
$ABSR_{t-1}$	21.747	0.071	68.318*	0.054	-12.541	0.097	84.169	0.073	-7.545	-0.174**	26.945	-0.057	43.400	8.5E-3	172.084	0.032	5.399	0.078
	(63.617)	(0.075)	(38.028)	(0.093)	(46.066)	(0.076)	(63.677)	(0.090)	(56.523)	(0.073)	(104.132)	(0.081)	(54.323)	(0.089)	(130.059)	(0.083)	(97.724)	(0.083)
$ABSR_{t-2}$	4.058	-0.293***	18.591	0.095	5.199	0.055	-50.703	-0.082					-92.726*	-0.146			161.391	-0.062
	(63.354)	(0.075)	(38.045)	(0.093)	(47.111)	(0.078)	(61.308)	(0.086)					(54.674)	(0.089)			(104.615)	(0.089)
W_{t-1}	-6.3E-4	-2.8E-5	4.5E-3	3.3E-4	0.106	2.8E-5	0.194**	-6.8E-5	-0.058	5.4E-5	7.1E-3	-2.2E-5	0.055	-1.1E-4	5.2E-3	4.2E-5	0.088	-1.9E-5
	(0.088)	(1.0E-4)	(0.086)	(2.1E-4)	(0.085)	(1.4E-4)	(0.088)	(1.2E-4)	(0.081)	(1.0E-4)	(0.082)	(6.4E-5)	(0.084)	(1.4E-4)	(0.082)	(5.2E-5)	(0.089)	(7.5E-5)
W_{t-2}	0.024	-2.5E-4**	-0.153*	-1.1E-4	-0.013	-2.6E-4*	0.023	7.6E-5					0.131	4.5E-5			-0.074	-5.6E-5
	(0.090)	(1.1E-4)	(0.082)	(2.0E-4)	(0.085)	(1.4E-4)	(0.090)	(1.3E-4)					(0.085)	(1.4E-4)			(0.084)	(7.1E-5)
I	168.879	0.355**	-110.374	0.217	403.992***	0.518**	-158.786	0.144	-63.265	0.180	-245.526*	0.105	56.877	0.241	85.409	0.169	530.569**	0.211
	(123.089)	(0.145)	(69.019)	(0.168)	(150.031)	(0.249)	(153.789)	(0.216)	(129.362)	(0.167)	(128.466)	(0.100)	(101.039)	(0.165)	(173.297)	(0.111)	(205.563)	(0.175)
C	-2.848	0.091***	-6.136	0.061***	-4.399	0.097***	-7.543	0.030**	-8.699	0.121***	-10.622	0.033***	-7.076	0.045***	-13.284	0.011*	7.697	0.052***
	(7.571)	(8.9E-3)	(4.327)	(0.011)	(8.238)	(0.014)	(8.557)	(0.012)	(8.713)	(0.011)	(7.761)	(6.0E-3)	(6.347)	(0.010)	(9.792)	(6.3E-3)	(11.901)	(0.010)
P	-15.666	0.209**	44.245	0.085	-87.737	0.337***	-17.761	-0.036	-53.197	0.644***	-92.196	0.095*	-111.038**	0.193**	-134.945	-0.038	102.675	-0.091
	(85.726)	(0.101)	(50.004)	(0.122)	(72.521)	(0.120)	(73.929)	(0.104)	(68.190)	(0.088)	(65.278)	(0.051)	(55.954)	(0.092)	(88.415)	(0.057)	(163.250)	(0.139)
T	-4.427	0.012*	2.666	8.6E-3	-13.421**	0.016	12.146	3.3E-3	17.655***	0.038***	20.059***	3.2E-3	-1.122	-0.010	3.728	-5.4E-3	9.774	5.7E-3
	(6.118)	(7.2E-3)	(3.214)	(7.8E-3)	(6.383)	(0.011)	(8.257)	(0.012)	(6.709)	(8.6E-3)	(6.638)	(5.2E-3)	(5.797)	(9.5E-3)	(8.715)	(5.6E-3)	(9.751)	(8.3E-3)
R^2	0.132	0.656	0.285	0.533	0.187	0.515	0.226	0.184	0.178	0.520	0.148	0.270	0.305	0.329	0.091	0.090	0.328	0.493
Adj. R^2	-(0.004)	(0.602)	(0.174)	(0.460)	(0.117)	(0.473)	(0.160)	(0.114)	(0.145)	(0.500)	(0.114)	(0.241)	(0.210)	(0.236)	(0.055)	(0.053)	(0.223)	(0.414)

Panel B: DJIA Stocks (Cont.)

	PG		IBM		NKE		MMM		DIS		MRK		KO		CSCO		VZ		WBA		INTC	
	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$
Intercept	-684.261	-1.430**	2104.162	-3.254***	-1834.26	-3.812***	-285.457	-1.320*	-455.783	-2.325**	-1165.21	-1.161	-473.635	-3.287***	-1101.04	-1.103	1211.986	-0.381	-664.036	0.678	-1553.25	-0.566
	#######	(0.604)	#######	(0.956)	#######	(0.991)	#######	(0.798)	#######	(1.015)	#######	(0.778)	#######	(0.797)	#######	(0.874)	#######	(0.529)	#######	(1.190)	#######	(1.210)
$ABSR_{t-1}$	-2.924	0.128	46.398	-0.188**	15.524	-0.097	119.885	-0.070	139.039*	-0.043	8.118	0.081	195.225*	-0.087	-42.461	-0.151*	102.328	0.073	-35.810	0.140	55.032	0.085
	#######	(0.083)	(85.898)	(0.081)	(78.956)	(0.079)	(87.078)	(0.082)	(80.281)	(0.081)	(85.901)	(0.083)	(99.163)	(0.077)	(84.944)	(0.082)	#######	(0.082)	(72.576)	(0.087)	(70.230)	(0.083)
$ABSR_{t-2}$			159.533*	0.170**									29.320	-0.127*					-18.416	0.099		
			(83.550)	(0.079)									(95.064)	(0.074)					(72.857)	(0.087)		
W_{t-1}	0.030	-1.2E-5	-0.045	-2.5E-6	0.103	-2.6E-5	0.089	7.7E-5	3.5E-3	2.3E-6	0.113	1.1E-4	0.082	5.0E-5	0.096	-3.0E-5	0.044	-3.4E-5	0.140	-7.1E-5	0.255***	-8.2E-5
	(0.084)	(6.6E-5)	(0.083)	(7.8E-5)	(0.082)	(8.2E-5)	(0.083)	(7.8E-5)	(0.082)	(8.3E-5)	(0.084)	(8.1E-5)	(0.081)	(6.3E-5)	(0.084)	(8.1E-5)	(0.082)	(4.4E-5)	(0.085)	(1.0E-4)	(0.082)	(9.6E-5)
W_{t-2}			-0.034	-6.4E-5									0.058	6.5E-6					0.111	2.8E-5		
			(0.082)	(7.7E-5)									(0.081)	(6.3E-5)					(0.083)	(1.0E-4)		
I	155.925	0.114	-135.667	0.273*	300.331*	0.361**	127.453	0.103	224.566	0.165	228.663*	0.231*	221.275	0.202	206.938	0.065	-212.518	0.042	144.716	-0.081	311.982*	-0.099
	#######	(0.099)	#######	(0.153)	#######	(0.163)	#######	(0.131)	#######	(0.168)	#######	(0.128)	#######	(0.132)	#######	(0.144)	#######	(0.087)	#######	(0.200)	#######	(0.202)
C	-4.580	0.032***	-35.541**	0.062***	10.273	0.073***	-12.438	0.037***	2.005	0.059***	0.283	0.012*	-0.746	0.084***	2.178	0.027***	-2.227	0.012**	-2.933	6.1E-3	-2.253	0.037***
	(7.903)	(6.2E-3)	(11.156)	(0.011)	(9.706)	(9.8E-3)	(8.250)	(7.7E-3)	(9.901)	(0.010)	(7.457)	(7.2E-3)	(11.992)	(9.3E-3)	(8.465)	(8.1E-3)	(9.460)	(5.1E-3)	(9.371)	(0.011)	(9.290)	(0.011)
P	-35.220	0.160***	-272.988*	0.351***	34.556	0.363***	-83.765	0.149**	-163.547*	0.281***	-21.714	-0.028	-158.808*	0.432***	-8.191	0.154**	-4.809	0.030	-28.058	-0.047	-33.993	0.230**
	(64.643)	(0.051)	(85.690)	(0.081)	(80.697)	(0.081)	(71.277)	(0.067)	(84.472)	(0.085)	(65.327)	(0.063)	(89.761)	(0.070)	(75.904)	(0.073)	(83.267)	(0.045)	(85.892)	(0.103)	(83.546)	(0.098)
T	4.083	4.6E-3	11.660	0.012	5.030	1.0E-2	5.336	-8.3E-4	8.465	0.012	6.470	-8.8E-3	9.591	0.018***	-1.219	3.4E-4	28.498**	-7.3E-4	-1.817	1.4E-3	13.407	0.015
	(6.265)	(4.9E-3)	(8.022)	(7.6E-3)	(7.938)	(8.0E-3)	(7.083)	(6.6E-3)	(8.301)	(8.4E-3)	(6.504)	(6.3E-3)	(8.408)	(6.5E-3)	(7.526)	(7.2E-3)	(8.453)	(4.5E-3)	(8.353)	(1.0E-2)	(8.332)	(9.8E-3)
R^2	0.130	0.282	0.195	0.325	0.144	0.309	0.171	0.199	0.230	0.239	0.226	0.106	0.285	0.505	0.056	0.101	0.171	0.105	0.248	0.106	0.420	0.125
Adj. R^2	(0.095)	(0.253)	(0.151)	(0.288)	(0.110)	(0.281)	(0.138)	(0.166)	(0.199)	(0.209)	(0.195)	(0.070)	(0.235)	(0.471)	(0.018)	(0.065)	(0.137)	(0.069)	(0.171)	(0.015)	(0.397)	(0.090)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(h) Vector auto regression for the number of YouTube Video Count and absolute value of DJIA stock return.

Panel B: DJIA Stocks	UNH		GS		HD		MSFT		MCD		CAT		AMGN		V		BA	
	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$
Intercept	20.392	-3.669***	-177.163*	-2.370**	-19.764	-4.949***	-162.372	-2.065***	17.298	-2.729***	20.097	-1.201	-14.345	-0.316	-139.025**	-1.691**	209.311	-10.107***
	(29.354)	(1.075)	(98.166)	(1.046)	(75.976)	(0.857)	(225.846)	(0.700)	(65.948)	(0.709)	(44.339)	(0.922)	(39.330)	(0.820)	(68.897)	(0.840)	(197.221)	(1.950)
$ABSR_{t-1}$	-1.495	0.033	4.715	-0.063	-0.013	0.086	10.496	0.045	1.915	-0.126*	2.317	-0.086	-2.000	-0.040	-11.107*	-0.073	19.046**	0.050
	(1.980)	(0.073)	(7.036)	(0.075)	(6.122)	(0.069)	(25.061)	(0.078)	(7.084)	(0.076)	(4.104)	(0.085)	(4.028)	(0.084)	(6.226)	(0.076)	(7.838)	(0.077)
$ABSR_{t-2}$	0.330	-9.5E-3			2.070	-0.069	-1.552	-0.056	-1.269	0.026			-6.443	-0.035	3.534	0.053	-3.706	0.103
	(2.003)	(0.073)			(6.048)	(0.068)	(24.971)	(0.077)	(6.840)	(0.074)			(4.072)	(0.085)	(6.273)	(0.076)	(7.802)	(0.077)
N_{t-1}	0.240***	3.9E-4	0.108	-1.5E-3	-0.106	-1.6E-3*	0.277***	4.8E-4*	0.045	-5.2E-4	0.043	9.0E-5	0.119	-1.2E-3	0.362***	2.7E-3***	0.082	-1.2E-3
	(0.084)	(3.1E-3)	(0.083)	(8.9E-4)	(0.085)	(9.6E-4)	(0.087)	(2.7E-4)	(0.082)	(8.8E-4)	(0.084)	(1.7E-3)	(0.080)	(1.7E-3)	(0.086)	(1.0E-3)	(0.090)	(8.9E-4)
N_{t-2}	0.030	9.5E-4			-0.046	3.0E-4	0.093	-2.5E-4	0.128	-2.1E-3**			0.089	-5.9E-4	0.164*	-6.2E-4	0.024	2.8E-4
	(0.086)	(3.2E-3)			(0.087)	(9.8E-4)	(0.090)	(2.8E-4)	(0.082)	(8.9E-4)			(0.080)	(1.7E-3)	(0.090)	(1.1E-3)	(0.090)	(8.9E-4)
I	-2.508	0.222	43.783***	0.130	7.193	0.251*	44.256	0.182	-3.966	0.194*	0.093	0.109	-0.748	-0.023	26.720**	0.017	-21.116	0.452
	(4.841)	(0.177)	(16.415)	(0.175)	(12.458)	(0.141)	(38.360)	(0.119)	(10.755)	(0.116)	(7.303)	(0.152)	(6.541)	(0.136)	(11.997)	(0.146)	(29.448)	(0.291)
C	9.6E-4	0.070***	-0.977	0.079***	-0.503	0.101***	-0.238	0.042***	0.268	0.067***	-0.426	0.041***	0.635	0.021***	0.500	0.049***	1.217	0.259***
	(0.301)	(0.011)	(0.973)	(0.010)	(0.813)	(9.2E-3)	(2.164)	(6.7E-3)	(0.728)	(7.8E-3)	(0.441)	(9.2E-3)	(0.387)	(8.1E-3)	(0.662)	(8.1E-3)	(2.173)	(0.021)
P	-1.340	0.498***	-13.533	0.325***	-3.985	0.724***	-17.518	0.212***	1.097	0.329***	-4.140	0.115	3.813	0.093	-2.130	0.324***	-20.028	1.527***
	(2.487)	(0.091)	(8.293)	(0.088)	(6.748)	(0.076)	(19.821)	(0.061)	(5.523)	(0.059)	(3.733)	(0.078)	(3.335)	(0.070)	(5.974)	(0.073)	(28.034)	(0.277)
T	0.216	0.011	0.516	0.024***	0.666	0.032***	-1.099	4.9E-3	0.691	0.015**	0.332	9.3E-4	0.329	2.7E-3	-0.268	0.018**	1.743	0.077***
	(0.244)	(8.9E-3)	(0.819)	(8.7E-3)	(0.619)	(7.0E-3)	(2.007)	(6.2E-3)	(0.539)	(5.8E-3)	(0.367)	(7.6E-3)	(0.332)	(6.9E-3)	(0.559)	(6.8E-3)	(1.537)	(0.015)
R^2	0.095	0.399	0.357	0.388	0.115	0.626	0.375	0.392	0.055	0.453	0.067	0.209	0.192	0.096	0.480	0.399	0.477	0.769
Adj. R^2	(0.031)	(0.357)	(0.332)	(0.363)	(0.054)	(0.600)	(0.312)	(0.330)	(0.003)	(0.424)	(0.030)	(0.178)	(0.135)	(0.033)	(0.444)	(0.357)	(0.374)	(0.724)

Panel B: DJIA Stocks (Cont.)

	HON		TRV		AXP		CRM		CVX		JNJ		AAPL		WMT		JPM	
	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$
Intercept	-19.843	-3.514***	37.907	-1.201	-105.053**	-3.436**	119.359	-0.834	44.774	-4.307***	149.400*	-1.089*	-81.989	-2.377**	-48.326	-0.731	-64.722	-1.414
	(35.210)	(0.874)	(27.677)	(0.953)	(49.952)	(1.352)	(111.987)	(1.226)	(46.157)	(1.019)	(82.244)	(0.615)	(630.451)	(0.976)	(99.114)	(0.660)	(118.030)	(0.980)
$ABSR_{t-1}$	1.982	0.102	3.038	0.032	-2.512	0.087	-0.543	0.059	0.662	-0.181**	-3.900	-0.057	58.864	5.6E-3	17.846	0.024	2.464	0.054
	(2.908)	(0.072)	(2.422)	(0.083)	(2.916)	(0.079)	(8.682)	(0.095)	(3.254)	(0.072)	(10.832)	(0.081)	(55.194)	(0.085)	(12.319)	(0.082)	(9.457)	(0.079)
$ABSR_{t-2}$	-1.075	-0.220***	-0.792	0.092	-2.681	0.096							-57.770	-0.144*				
	(2.872)	(0.071)	(2.334)	(0.080)	(2.866)	(0.078)							(54.790)	(0.085)				
N_{t-1}	0.019	5.4E-4	0.149*	-3.7E-4	-0.058	1.6E-3	0.284***	-8.9E-5	0.034	2.7E-3	0.121	-8.7E-5	0.368***	2.9E-4**	0.180**	1.2E-3**	0.255***	-2.8E-4
	(0.082)	(2.0E-3)	(0.085)	(2.9E-3)	(0.089)	(2.4E-3)	(0.091)	(9.9E-4)	(0.083)	(1.8E-3)	(0.083)	(6.2E-4)	(0.086)	(1.3E-4)	(0.080)	(5.3E-4)	(0.080)	(6.6E-4)
N_{t-2}	-0.049	-3.3E-3	-0.133	1.3E-3	-0.076	-2.2E-3							0.138	-2.2E-4				
	(0.083)	(2.1E-3)	(0.085)	(2.9E-3)	(0.086)	(2.3E-3)							(0.092)	(1.4E-4)				
I	5.529	0.300**	-6.855	0.142	22.913***	0.353	-16.815	0.145	-3.094	0.182	-21.790	0.107	63.735	0.222	20.962	0.146	17.393	0.150
	(5.916)	(0.147)	(4.823)	(0.166)	(8.827)	(0.239)	(18.463)	(0.202)	(7.473)	(0.165)	(13.452)	(0.101)	(105.151)	(0.163)	(16.501)	(0.110)	(19.516)	(0.162)
C	-0.125	0.088***	-0.149	0.060***	0.175	0.089***	-0.630	0.028**	-0.732	0.122***	-0.284	0.033***	-6.140	0.052***	-0.183	0.011*	0.260	0.054***
	(0.369)	(9.2E-3)	(0.284)	(9.8E-3)	(0.450)	(0.012)	(1.071)	(0.012)	(0.504)	(0.011)	(0.808)	(6.0E-3)	(6.630)	(0.010)	(0.925)	(6.2E-3)	(1.151)	(9.6E-3)
P	-2.190	0.363***	0.131	0.065	-4.720	0.280**	-5.235	-7.6E-4	-5.555	0.658***	-5.926	0.096*	-55.450	0.229***	-14.433*	-0.019	-6.765	0.105
	(3.288)	(0.082)	(2.622)	(0.090)	(4.736)	(0.128)	(9.312)	(0.102)	(3.970)	(0.088)	(6.806)	(0.051)	(53.888)	(0.083)	(8.478)	(0.056)	(9.926)	(0.082)
T	0.265	0.015**	0.309	0.013	-0.121	0.018*	1.778*	4.5E-4	0.996**	0.036***	2.172***	3.0E-3	-1.074	2.4E-3	0.304	-5.8E-3	0.923	7.7E-3
	(0.296)	(7.3E-3)	(0.238)	(8.2E-3)	(0.377)	(0.010)	(0.945)	(0.010)	(0.390)	(8.6E-3)	(0.701)	(5.2E-3)	(5.721)	(8.9E-3)	(0.825)	(5.5E-3)	(0.991)	(8.2E-3)
R^2	0.145	0.575	0.137	0.511	0.196	0.544	0.176	0.115	0.237	0.526	0.187	0.270	0.535	0.322	0.220	0.116	0.204	0.353
Adj. R^2	(0.072)	(0.539)	(0.049)	(0.461)	(0.113)	(0.497)	(0.143)	(0.080)	(0.207)	(0.507)	(0.155)	(0.240)	(0.487)	(0.253)	(0.188)	(0.081)	(0.172)	(0.327)

Panel B: DJIA Stocks (Cont.)

	PG		IBM		NKE		MMM		DIS		MRK		KO		CSCO		VZ		WBA		INTC	
	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$
Intercept	-132.080*	-1.410**	122.076	-3.129***	-183.063	-3.628***	-43.449	-1.355*	314.038	-2.263**	-79.554	-1.496*	-182.206	-3.093***	-34.857	-1.091	105.302*	-0.385	28.456	0.441	31.196	-0.372
	(71.255)	(0.599)	#######	(0.960)	#######	(0.978)	(44.433)	(0.801)	#######	(1.019)	(62.522)	(0.770)	#######	(0.829)	(81.248)	(0.871)	(59.286)	(0.532)	(80.855)	(1.138)	#######	(1.176)
$ABSR_{t-1}$	-1.751	0.129	0.225	-0.171**	1.224	-0.097	-1.325	-0.058	34.890	-0.026	2.962	0.122	7.631	-0.085	2.422	-0.149*	9.435	0.079	-7.627	0.153*	24.149	0.090
	(9.828)	(0.083)	(10.047)	(0.085)	(10.880)	(0.081)	(4.572)	(0.082)	(24.245)	(0.086)	(6.888)	(0.085)	(11.338)	(0.080)	(7.686)	(0.082)	(9.294)	(0.083)	(5.941)	(0.084)	(14.968)	(0.085)
$ABSR_{t-2}$			4.917	0.177**	-10.943	0.156**							-13.530	-0.108								
			(9.676)	(0.081)	(10.648)	(0.079)							(10.465)	(0.074)								
N_{t-1}	0.255**	5.5E-4	0.052	-5.0E-4	0.129	2.3E-4	0.105	3.2E-4	0.043	-1.6E-4	0.304***	-1.3E-3	-0.111	1.0E-4	0.200**	-3.9E-4	0.057	-4.0E-4	0.287***	-9.6E-5	0.335***	-3.8E-4
	(0.104)	(8.7E-4)	(0.087)	(7.3E-4)	(0.086)	(6.4E-4)	(0.085)	(1.5E-3)	(0.087)	(3.1E-4)	(0.081)	(1.0E-3)	(0.084)	(6.0E-4)	(0.083)	(8.9E-4)	(0.082)	(7.4E-4)	(0.081)	(1.1E-3)	(0.079)	(4.5E-4)
N_{t-2}			0.162*	-4.7E-4	1.4E-3	-1.9E-3***							-0.169**	-5.9E-4								
			(0.086)	(7.3E-4)	(0.091)	(6.7E-4)							(0.082)	(5.8E-4)								
I	26.707**	0.108	-14.010	0.258*	35.811	0.337**	8.002	0.111	-2.935	0.164	17.576*	0.287**	59.670**	0.177	9.577	0.066	-15.149	0.043	-4.790	-0.030	-2.971	-0.136
	(11.627)	(0.098)	(18.265)	(0.154)	(21.911)	(0.162)	(7.312)	(0.132)	(46.637)	(0.166)	(10.323)	(0.127)	(19.671)	(0.140)	(13.435)	(0.144)	(9.723)	(0.087)	(13.328)	(0.188)	(34.324)	(0.194)
C	-0.157	0.033***	-1.097	0.061***	0.728	0.066***	-0.113	0.037***	-3.037	0.058***	-0.201	0.012*	-1.428	0.083***	0.099	0.026***	-0.771	0.012**	0.154	7.6E-3	-1.376	0.036***
	(0.741)	(6.2E-3)	(1.251)	(0.011)	(1.366)	(0.010)	(0.430)	(7.7E-3)	(2.840)	(0.010)	(0.582)	(7.2E-3)	(1.339)	(9.5E-3)	(0.759)	(8.1E-3)	(0.570)	(5.1E-3)	(0.752)	(0.011)	(1.939)	(0.011)
P	-3.316	0.162***	-8.909	0.343***	-3.434	0.354***	-0.074	0.148**	-61.875**	0.271***	-3.749	-0.023	-31.112**	0.421***	-3.810	0.151**	-4.216	0.030	-0.336	-0.057	-2.425	0.233**
	(6.059)	(0.051)	(9.548)	(0.080)	(10.852)	(0.080)	(3.719)	(0.067)	(24.436)	(0.087)	(5.102)	(0.063)	(10.904)	(0.077)	(6.825)	(0.073)	(4.990)	(0.045)	(6.762)	(0.095)	(17.379)	(0.098)
T	0.116	4.0E-3	1.522*	0.012	1.191	0.013	1.159***	-4.9E-4	3.348	0.013	0.184	-6.9E-3	1.076	0.019***	-0.075	1.7E-4	2.072***	-8.2E-4	1.125	1.3E-3	3.833**	0.015
	(0.597)	(5.0E-3)	(0.905)	(7.6E-3)	(1.064)	(7.9E-3)	(0.387)	(7.0E-3)	(2.369)	(8.4E-3)	(0.509)	(6.3E-3)	(0.945)	(6.7E-3)	(0.675)	(7.2E-3)	(0.514)	(4.6E-3)	(0.682)	(9.6E-3)	(1.760)	(1.0E-2)
R^2	0.268	0.284	0.141	0.326	0.221	0.353	0.405	0.194	0.198	0.241	0.305	0.104	0.333	0.515	0.066	0.101	0.294	0.103	0.161	0.070	0.350	0.125
Adj. R^2	(0.239)	(0.255)	(0.094)	(0.290)	(0.178)	(0.317)	(0.382)	(0.161)	(0.166)	(0.210)	(0.277)	(0.068)	(0.275)	(0.473)	(0.029)	(0.065)	(0.266)	(0.067)	(0.127)	(0.033)	(0.324)	(0.090)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(i) Vector auto regression for the number of YouTube Video Count x sentiment and DJIA stock return.

Panel B: DJIA Stocks

	UNH		GS		HD		MSFT		MCD		CAT		AMGN		V		BA	
	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t
Intercept	-2.865	3.710**	-10.809	10.105***	6.754	3.282**	-3.882	3.146***	-2.497	2.664**	10.861	4.081**	-0.235	0.398	2.273	4.186***	-33.671	12.825***
	(4.387)	(1.699)	(15.180)	(2.108)	(17.689)	(1.593)	(9.907)	(1.140)	(7.219)	(1.125)	(7.568)	(1.679)	(3.839)	(1.324)	(5.845)	(1.307)	(23.845)	(3.957)
R_{t-1}	0.225	-0.300***	-0.094	-0.286***	-0.158	-0.351***	-0.375	-0.280***	0.132	-0.316***	-0.201	0.068	0.154	-0.142*	0.869**	-0.326***	-0.529	-0.383***
	(0.208)	(0.080)	(0.633)	(0.088)	(0.918)	(0.083)	(0.741)	(0.085)	(0.567)	(0.088)	(0.372)	(0.083)	(0.240)	(0.083)	(0.354)	(0.079)	(0.587)	(0.097)
R_{t-2}			-0.728	-0.136*			0.425	-0.227***	-0.071	-0.068	-0.092	-0.039					0.053	-0.077
			(0.590)	(0.082)			(0.697)	(0.080)	(0.532)	(0.083)	(0.375)	(0.083)					(0.562)	(0.093)
$NSENT_{t-1}$	-0.072	0.017	3.5E-3	0.019	-0.222***	-2.6E-3	0.202**	0.020**	-4.3E-3	0.015	9.0E-5	-3.0E-3	-0.017	5.9E-4	0.274***	-8.0E-3	-0.093	0.010
	(0.082)	(0.032)	(0.084)	(0.012)	(0.080)	(7.2E-3)	(0.085)	(9.7E-3)	(0.088)	(0.014)	(0.084)	(0.019)	(0.083)	(0.029)	(0.077)	(0.017)	(0.088)	(0.015)
$NSENT_{t-2}$			-0.064	-9.8E-3			-0.104	-0.018*	0.072	-7.8E-3	-0.055	-0.019					-0.011	-0.023
			(0.085)	(0.012)			(0.087)	(0.010)	(0.087)	(0.014)	(0.084)	(0.019)					(0.087)	(0.014)
I	0.390	-0.233	2.570	-1.113***	-0.160	-0.047	0.817	-0.112	0.056	-0.015	-1.548	-0.530**	0.112	0.022	-0.150	-0.370*	6.290*	-1.216**
	(0.715)	(0.277)	(2.340)	(0.325)	(2.858)	(0.257)	(1.584)	(0.182)	(1.151)	(0.179)	(1.178)	(0.261)	(0.632)	(0.218)	(0.944)	(0.211)	(3.694)	(0.613)
C	0.013	-0.053***	-0.167	-0.107***	-0.123	-0.064***	-0.018	-0.059***	0.015	-0.061***	-0.089	-0.026	-0.013	-3.9E-3	-0.028	-0.050***	0.067	-0.181***
	(0.041)	(0.016)	(0.144)	(0.020)	(0.173)	(0.016)	(0.109)	(0.013)	(0.079)	(0.012)	(0.073)	(0.016)	(0.036)	(0.012)	(0.055)	(0.012)	(0.251)	(0.042)
P	0.146	-0.497***	-0.671	-0.798***	-1.214	-0.621***	-0.117	-0.513***	0.468	-0.528***	-0.448	-0.235*	-0.076	-0.110	-0.296	-0.435***	-0.338	-1.228***
	(0.376)	(0.145)	(1.177)	(0.163)	(1.585)	(0.143)	(0.971)	(0.112)	(0.716)	(0.111)	(0.634)	(0.141)	(0.323)	(0.111)	(0.497)	(0.111)	(2.089)	(0.347)
T	0.023	-5.3E-3	-3.3E-3	0.018	0.133	-0.022*	-0.100	-0.021**	0.048	-0.021**	0.085	0.019	-7.0E-3	-6.0E-3	4.2E-3	-8.7E-3	-0.253	-7.5E-3
	(0.036)	(0.014)	(0.100)	(0.014)	(0.146)	(0.013)	(0.084)	(9.7E-3)	(0.060)	(9.4E-3)	(0.056)	(0.012)	(0.032)	(0.011)	(0.047)	(0.011)	(0.176)	(0.029)
R^2	0.036	0.127	0.164	0.235	0.079	0.156	0.093	0.289	0.053	0.237	0.060	0.144	0.005	0.028	0.136	0.159	0.081	0.206
Adj. R^2	-(0.003)	(0.092)	(0.093)	(0.170)	(0.042)	(0.122)	(0.001)	(0.216)	-(0.029)	(0.172)	-(0.006)	(0.084)	-(0.035)	-(0.011)	(0.102)	(0.126)	(0.002)	(0.138)

Panel B: DJIA Stocks (Cont.)

	HON		TRV		AXP		CRM		CVX		JNJ		AAPL		WMT		JPM	
	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t
Intercept	-13.240**	6.743***	14.151	4.801***	-10.709	8.685***	1.404	2.553	2.982	5.397***	-2.481	2.057**	44.762	2.033	-19.351**	0.390	0.385	8.944***
	(5.557)	(1.817)	(9.546)	(1.524)	(7.576)	(1.993)	(7.020)	(1.803)	(10.638)	(1.855)	(2.562)	(1.016)	(29.522)	(1.450)	(8.876)	(0.968)	(16.773)	(1.822)
R_{t-1}	0.190	-0.361***	-0.243	-0.312***	0.013	-0.425***	0.195	-0.103	0.225	-0.133	0.208	-0.109	-1.955	-0.120	0.023	-0.149*	0.871	-0.288***
	(0.290)	(0.095)	(0.519)	(0.083)	(0.292)	(0.077)	(0.331)	(0.085)	(0.491)	(0.086)	(0.214)	(0.085)	(1.696)	(0.083)	(0.727)	(0.079)	(0.786)	(0.085)
R_{t-2}	0.215	-0.110															1.109	-0.093
	(0.274)	(0.090)															(0.775)	(0.084)
$NSENT_{t-1}$	-0.237***	0.028	0.095	-6.0E-4	-0.092	-1.4E-4	-0.041	-2.3E-3	-0.035	-7.4E-3	0.079	0.013	0.074**	-4.4E-4	-0.040	0.028***	0.065	-8.0E-3
	(0.088)	(0.029)	(0.083)	(0.013)	(0.083)	(0.022)	(0.084)	(0.022)	(0.082)	(0.014)	(0.083)	(0.033)	(0.034)	(1.7E-3)	(0.082)	(9.0E-3)	(0.085)	(9.2E-3)
$NSENT_{t-2}$	-0.283***	0.057**															0.098	-2.9E-3
	(0.087)	(0.029)															(0.085)	(9.2E-3)
I	2.019**	-0.623**	-3.098**	-0.490**	2.020	-0.982***	-0.058	-0.244	-0.897	-0.407	0.414	-0.139	-4.435	0.022	3.210**	-0.027	-0.431	-1.066***
	(0.948)	(0.310)	(1.550)	(0.248)	(1.229)	(0.323)	(1.147)	(0.294)	(1.702)	(0.297)	(0.416)	(0.165)	(4.855)	(0.239)	(1.464)	(0.160)	(2.597)	(0.282)
C	0.030	-0.080***	-3.0E-3	-0.055***	-0.031	-0.095***	-0.038	-0.023	-0.012	-0.073***	0.050**	-0.028***	-0.439	-0.044***	0.085	4.9E-4	0.070	-0.102***
	(0.052)	(0.017)	(0.091)	(0.014)	(0.071)	(0.019)	(0.066)	(0.017)	(0.104)	(0.018)	(0.024)	(9.7E-3)	(0.282)	(0.014)	(0.081)	(8.8E-3)	(0.171)	(0.019)
P	0.431	-0.672***	0.663	-0.423***	-0.084	-0.654***	-0.215	-0.248	0.442	-0.645***	0.011	-0.264***	-4.140	-0.442***	0.302	-0.051	0.406	-0.606***
	(0.491)	(0.161)	(0.814)	(0.130)	(0.629)	(0.166)	(0.597)	(0.153)	(0.941)	(0.164)	(0.218)	(0.086)	(2.592)	(0.127)	(0.731)	(0.080)	(1.324)	(0.144)
T	0.108**	-0.010	0.135*	2.1E-3	-0.085	0.014	0.051	4.2E-4	0.030	-4.2E-3	0.010	-5.7E-3	-0.100	-0.024**	-0.112	-2.9E-3	0.065	0.015
	(0.042)	(0.014)	(0.077)	(0.012)	(0.061)	(0.016)	(0.058)	(0.015)	(0.086)	(0.015)	(0.021)	(8.2E-3)	(0.248)	(0.012)	(0.073)	(8.0E-3)	(0.117)	(0.013)
R^2	0.294	0.325	0.047	0.133	0.037	0.233	0.036	0.027	0.009	0.115	0.105	0.065	0.059	0.083	0.032	0.089	0.062	0.248
Adj. R^2	(0.155)	(0.192)	(0.008)	(0.098)	-(0.002)	(0.202)	-(0.003)	-(0.012)	-(0.031)	(0.080)	(0.069)	(0.027)	(0.022)	(0.046)	-(0.007)	(0.052)	-(0.019)	(0.183)

Panel B: DJIA Stocks (Cont.)

	PG		IBM		NKE		MMM		DIS		MRK		KO		CSCO		VZ		WBA		INTC	
	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t
Intercept	-7.088	-0.162	-4.092	2.163	-18.361	1.234	2.468	3.451***	8.348	4.207***	4.562	1.327	-7.462	4.211***	1.563	1.669	-2.143	0.895	5.887	2.425	5.648	2.071
	(6.765)	(0.936)	(4.492)	(1.520)	(34.858)	(1.651)	(4.356)	(1.303)	(8.436)	(1.594)	(3.662)	(1.217)	(8.221)	(1.284)	(10.824)	(1.333)	(1.968)	(0.821)	(9.159)	(1.717)	(13.520)	(1.734)
R_{t-1}	-0.420	-0.217***	0.122	-0.021	0.734	-0.184**	-0.185	-0.084	0.712	-0.078	-0.223	-0.189**	-0.295	-0.361***	0.365	0.015	-0.127	-0.183**	0.207	-0.233***	0.654	-0.016
	(0.587)	(0.081)	(0.272)	(0.092)	(1.942)	(0.092)	(0.299)	(0.089)	(0.473)	(0.089)	(0.243)	(0.081)	(0.550)	(0.086)	(0.734)	(0.090)	(0.196)	(0.082)	(0.447)	(0.084)	(0.773)	(0.099)
R_{t-2}													-0.301	-0.301***					-4.1E-3	-0.110		
													(0.508)	(0.079)					(0.447)	(0.084)		
$NSENT_{t-1}$	-0.081	-0.012	-0.073	8.8E-3	-0.120	2.7E-3	0.014	0.012	-0.038	-8.5E-3	-0.011	-0.015	-0.047	-7.8E-4	2.6E-3	-7.1E-3	0.019	-0.012	-0.038	0.021	-3.3E-5	5.0E-3
	(0.115)	(0.016)	(0.086)	(0.029)	(0.089)	(4.2E-3)	(0.088)	(0.026)	(0.084)	(0.016)	(0.081)	(0.027)	(0.086)	(0.013)	(0.089)	(0.011)	(0.083)	(0.035)	(0.086)	(0.016)	(0.097)	(0.012)
$NSENT_{t-2}$													4.1E-3	0.011					-0.028	-0.030*		
													(0.085)	(0.013)					(0.086)	(0.016)		
I	1.458	0.160	0.680	-0.223	1.982	-0.057	-0.530	-0.411*	-1.889	-0.408	-0.513	-0.103	1.633	-0.163	-0.227	-0.236	0.425	-0.051	-1.272	-0.348	-0.162	-0.217
	(1.118)	(0.155)	(0.720)	(0.244)	(5.675)	(0.269)	(0.698)	(0.209)	(1.350)	(0.255)	(0.602)	(0.200)	(1.309)	(0.205)	(1.771)	(0.218)	(0.324)	(0.135)	(1.523)	(0.286)	(2.206)	(0.283)
C	-0.019	-0.015*	0.029	-0.023	0.105	-0.014	-6.4E-3	-0.025**	-0.059	-0.043***	-0.042	-0.017	-0.022	-0.093***	4.3E-3	-6.8E-3	6.1E-3	-0.011	-5.4E-3	-0.022	-0.200	-0.021
	(0.064)	(8.8E-3)	(0.043)	(0.015)	(0.331)	(0.016)	(0.040)	(0.012)	(0.080)	(0.015)	(0.034)	(0.011)	(0.091)	(0.014)	(0.101)	(0.012)	(0.018)	(7.6E-3)	(0.084)	(0.016)	(0.126)	(0.016)
P	-0.200	-0.148*	0.056	-0.189	1.545	-0.191	0.100	-0.243**	0.486	-0.398***	-0.348	-0.155	-0.337	-0.669***	-0.063	-0.076	-0.048	-0.127*	0.256	-0.098	-0.933	-0.177
	(0.577)	(0.080)	(0.383)	(0.130)	(3.040)	(0.144)	(0.368)	(0.110)	(0.727)	(0.137)	(0.307)	(0.102)	(0.766)	(0.120)	(0.910)	(0.112)	(0.165)	(0.069)	(0.764)	(0.143)	(1.142)	(0.146)
T	-0.049	-0.015*	-0.034	1.3E-3	0.104	-4.4E-3	0.071**	0.012	0.102	-3.2E-3	-1.2E-4	-2.4E-3	-0.077	-0.029***	0.016	0.014	-0.013	-4.7E-3	0.093	0.019	-0.057	-1.7E-3
	(0.057)	(7.9E-3)	(0.036)	(0.012)	(0.288)	(0.014)	(0.035)	(0.010)	(0.067)	(0.013)	(0.030)	(0.010)	(0.067)	(0.010)	(0.089)	(0.011)	(0.016)	(6.8E-3)	(0.077)	(0.014)	(0.111)	(0.014)
R^2	0.026	0.068	0.014	0.021	0.020	0.031	0.061	0.059	0.054	0.071	0.018	0.048	0.021	0.286	0.003	0.027	0.019	0.054	0.014	0.109	0.034	0.017
Adj. R^2	-(0.013)	(0.031)	-(0.026)	-(0.018)	-(0.019)	-(0.008)	(0.023)	(0.021)	(0.016)	(0.034)	-(0.021)	(0.009)	-(0.063)	(0.224)	-(0.037)	-(0.012)	-(0.021)	(0.016)	-(0.040)	(0.060)	-(0.005)	-(0.023)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

Appendix H: *Vector auto regression for Cryptocurrency Market*

(a) Vector auto regression for the weight of YouTube View Count x sentiment and Cryptocurrency return.

Panel A: Cryptocurrencies

	BTC		ETH		BNB		SOL		ADA		XRP		LUNA		AVAX	
	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t
Intercept	384.058*	0.440	291.876	0.678	147.133	1.758**	246.653	3.415	181.827	1.778**	344.432*	0.701	243.865**	-0.164	567.807	2.960
	(203.525)	(0.590)	(205.326)	(0.764)	(178.129)	(0.764)	(247.478)	(2.080)	(214.904)	(0.858)	(202.716)	(0.907)	(103.774)	(1.220)	(394.551)	(2.560)
R_{t-1}	60.335***	-0.085**	40.424***	-0.107***	20.545***	-0.087***	6.123	-0.111***	12.370	-0.070**	17.430**	-0.026	8.793***	-6.8E-3	22.196***	-0.015
	(12.536)	(0.036)	(9.008)	(0.034)	(6.549)	(0.034)	(4.812)	(0.040)	(7.825)	(0.031)	(7.243)	(0.032)	(2.766)	(0.033)	(7.549)	(0.049)
R_{t-2}	48.368***	0.022	32.426***	0.029	24.546***	0.075**	4.565	-0.016	16.909**	0.038	-0.026	-0.029	0.192	0.048	11.298	0.040
	(12.782)	(0.037)	(9.149)	(0.034)	(6.614)	(0.034)	(4.842)	(0.041)	(7.845)	(0.031)	(7.237)	(0.032)	(2.780)	(0.033)	(7.615)	(0.049)
R_{t-3}	15.465	-0.030	10.436	-0.042	15.004**	-0.015	-0.738	-9.4E-3	12.287	-9.3E-3	4.121	-3.7E-3	-4.320	-0.025	17.593**	0.086*
	(12.505)	(0.036)	(9.130)	(0.034)	(6.639)	(0.034)	(4.852)	(0.041)	(7.823)	(0.031)	(6.873)	(0.031)	(2.775)	(0.033)	(7.462)	(0.048)
$WSENT_{t-1}$	0.519***	1.1E-4	0.515***	1.2E-4	0.277***	2.9E-4*	0.284***	2.5E-4	0.411***	-2.6E-5	0.604***	-2.0E-5	0.150***	3.2E-4	0.243***	3.6E-4
	(0.036)	(1.0E-4)	(0.033)	(1.2E-4)	(0.032)	(1.2E-4)	(0.040)	(3.4E-4)	(0.031)	(1.2E-4)	(0.032)	(1.4E-4)	(0.033)	(3.8E-4)	(0.049)	(3.2E-4)
$WSENT_{t-2}$	0.144***	-1.2E-4	0.172***	-1.4E-5	0.190***	-1.2E-4	0.246***	1.9E-5	0.222***	-1.1E-4	0.240***	1.3E-4	0.152***	-4.7E-4	0.181***	-3.5E-4
	(0.040)	(1.2E-4)	(0.037)	(1.4E-4)	(0.032)	(1.4E-4)	(0.042)	(3.5E-4)	(0.033)	(1.3E-4)	(0.037)	(1.7E-4)	(0.033)	(3.9E-4)	(0.049)	(3.2E-4)
$WSENT_{t-3}$	0.162***	1.2E-4	0.113***	9.1E-5	0.112***	-1.3E-4	0.057	2.0E-4	0.119***	-8.7E-5	0.094***	-7.5E-5	0.130***	1.2E-3***	0.199***	4.7E-4
	(0.040)	(1.2E-4)	(0.038)	(1.4E-4)	(0.033)	(1.4E-4)	(0.042)	(3.5E-4)	(0.033)	(1.3E-4)	(0.032)	(1.4E-4)	(0.033)	(3.9E-4)	(0.049)	(3.2E-4)
I	-54.075	-0.041	-46.477	-0.020	-25.938	-0.241*	-31.576	-0.372	-26.787	-0.193	-48.128	-0.097	-47.577***	0.159	-38.838	-0.340
	(33.290)	(0.096)	(33.735)	(0.126)	(29.301)	(0.126)	(31.727)	(0.267)	(35.164)	(0.140)	(33.164)	(0.148)	(17.944)	(0.211)	(61.598)	(0.400)
C	-2.890	-2.4E-3	-1.619	-9.3E-3	-0.484	-0.011	-3.083	-0.059	-1.290	-0.011	-2.527	-2.7E-3	-0.178	-8.9E-3	-4.101	-0.080*
	(1.818)	(5.3E-3)	(1.827)	(6.8E-3)	(1.572)	(6.8E-3)	(4.341)	(0.036)	(1.901)	(7.6E-3)	(1.819)	(8.1E-3)	(0.886)	(0.010)	(6.878)	(0.045)
P	-16.910	-0.045	-6.630	-0.117**	-0.503	-0.086	-13.759	-0.257	-6.555	-0.148**	-15.564	-0.034	4.431	-0.152	-74.696	-0.184
	(15.783)	(0.046)	(16.034)	(0.060)	(13.992)	(0.060)	(27.174)	(0.228)	(16.796)	(0.067)	(15.898)	(0.071)	(8.329)	(0.098)	(82.390)	(0.535)
T	1.853	-6.1E-4	1.606	-2.1E-3	1.075	8.4E-3	-0.149	-0.016	0.805	4.9E-3	1.483	5.7E-3	1.569*	-4.9E-4	1.192	-0.038*
	(1.632)	(4.7E-3)	(1.660)	(6.2E-3)	(1.451)	(6.2E-3)	(2.263)	(0.019)	(1.726)	(6.9E-3)	(1.631)	(7.3E-3)	(0.833)	(9.8E-3)	(3.308)	(0.021)
R^2	0.867	0.015	0.850	0.031	0.599	0.036	0.369	0.032	0.755	0.028	0.864	0.004	0.317	0.047	0.526	0.036
Adj. R^2	0.866	0.004	0.848	0.018	0.593	0.021	0.357	0.013	0.752	0.018	0.862	-0.005	0.303	0.029	0.513	0.010

Panel A: Cryptocurrencies (Cont.)

	DOT		DOGE		SHIB		MATIC		CRO		UNI		ALGO		LTC	
	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t
Intercept	1082.279**	2.445	122.999	2.924**	213.052	5.742	66.150	2.448*	492.406***	0.173	1219.773**	2.442	332.072**	0.422	218.160	1.349
	(449.822)	(2.189)	(203.323)	(1.280)	(374.241)	(7.101)	(135.551)	(1.324)	(190.364)	(1.064)	(512.657)	(2.609)	(134.978)	(1.169)	(190.337)	(0.826)
R_{t-1}	30.188***	-0.055	21.305***	-4.8E-3	11.246***	0.199***	10.148***	1.5E-3	0.393	-0.045	-2.611	-0.114**	1.500	-0.090***	32.404***	-0.064**
	(9.434)	(0.046)	(4.976)	(0.031)	(2.379)	(0.045)	(3.310)	(0.032)	(5.461)	(0.031)	(9.138)	(0.046)	(3.849)	(0.033)	(7.489)	(0.033)
R_{t-2}	12.341	-0.012	19.678***	-0.101***	-0.477	-0.076	0.741	0.076**	13.197**	-7.0E-3	16.138*	-0.032	3.207	-0.014	26.172***	-0.012
	(9.551)	(0.046)	(5.015)	(0.032)	(2.460)	(0.047)	(3.297)	(0.032)	(5.420)	(0.030)	(9.116)	(0.046)	(3.861)	(0.033)	(7.501)	(0.033)
R_{t-3}	11.761	0.036	9.913*	0.086***	1.094	0.062	0.751	2.7E-3	8.856*	0.144***	4.444	-0.063	3.391	0.029	6.584	-0.058*
	(9.302)	(0.045)	(5.077)	(0.032)	(2.445)	(0.046)	(3.288)	(0.032)	(5.384)	(0.030)	(9.088)	(0.046)	(3.816)	(0.033)	(7.522)	(0.033)
$WSENT_{t-1}$	0.223***	-6.6E-5	0.281***	3.2E-4*	0.236***	-1.5E-5	0.184***	1.7E-6	0.195***	-8.8E-5	0.140***	1.3E-5	0.288***	3.6E-4	0.290***	9.4E-5
	(0.047)	(2.3E-4)	(0.031)	(2.0E-4)	(0.045)	(8.5E-4)	(0.032)	(3.1E-4)	(0.030)	(1.7E-4)	(0.047)	(2.4E-4)	(0.033)	(2.9E-4)	(0.032)	(1.4E-4)
$WSENT_{t-2}$	0.160***	4.4E-4*	0.258***	1.4E-4	0.214***	7.6E-4	0.212***	-2.7E-4	0.165***	-8.2E-5	0.176***	2.1E-4	0.145***	6.4E-5	0.154***	2.7E-4*
	(0.047)	(2.3E-4)	(0.032)	(2.0E-4)	(0.046)	(8.7E-4)	(0.033)	(3.2E-4)	(0.031)	(1.7E-4)	(0.047)	(2.4E-4)	(0.034)	(3.0E-4)	(0.033)	(1.5E-4)
$WSENT_{t-3}$	0.130***	1.4E-6	0.151***	3.5E-4*	0.095**	-6.0E-4	0.168***	3.9E-5	0.173***	1.9E-4	2.2E-3	-2.5E-5	0.104***	8.4E-5	0.197***	-6.3E-5
	(0.047)	(2.3E-4)	(0.033)	(2.1E-4)	(0.047)	(9.0E-4)	(0.033)	(3.3E-4)	(0.031)	(1.7E-4)	(0.048)	(2.4E-4)	(0.035)	(3.0E-4)	(0.034)	(1.5E-4)
I	-174.661**	-0.169	-12.591	-0.464**	-10.932	-2.414**	-10.853	-0.353	-84.915***	0.016	-166.511**	-0.898**	-61.301***	0.112	-29.417	-0.182
	(69.855)	(0.340)	(33.414)	(0.210)	(57.733)	(1.095)	(23.141)	(0.226)	(31.599)	(0.177)	(76.092)	(0.387)	(23.208)	(0.201)	(31.197)	(0.135)
C	-13.926*	-0.055	-1.319	-0.013	-3.781	-0.053	-0.139	-0.017	-1.139	-4.4E-3	-12.952	-0.065	-0.669	-0.016*	-2.068	-9.6E-3
	(7.490)	(0.036)	(1.769)	(0.011)	(6.480)	(0.123)	(1.209)	(0.012)	(1.581)	(8.8E-3)	(8.380)	(0.043)	(1.120)	(9.7E-3)	(1.716)	(7.4E-3)
P	-16.106	-0.293	-10.806	-0.070	-30.924	1.701	-1.209	-0.097	-4.120	-0.054	-56.099	0.598	2.073	-0.219**	-10.908	-0.068
	(89.606)	(0.436)	(15.735)	(0.099)	(81.755)	(1.551)	(11.250)	(0.110)	(14.084)	(0.079)	(92.935)	(0.473)	(10.571)	(0.092)	(14.993)	(0.065)
T	-1.007	-0.032*	-0.429	0.022**	-2.090	0.070	-0.039	0.015	3.591**	-8.3E-4	-1.406	-0.026	2.405**	-4.4E-3	1.154	3.9E-3
	(3.739)	(0.018)	(1.629)	(0.010)	(3.348)	(0.064)	(1.097)	(0.011)	(1.547)	(8.6E-3)	(3.714)	(0.019)	(1.075)	(9.3E-3)	(1.548)	(6.7E-3)
R^2	0.486	0.065	0.654	0.052	0.424	0.067	0.480	0.042	0.453	0.044	0.296	0.065	0.378	0.039	0.601	0.035
Adj. R^2	0.471	0.038	0.647	0.032	0.406	0.037	0.471	0.026	0.446	0.031	0.274	0.036	0.367	0.022	0.593	0.017

Panel A: Cryptocurrencies (Cont.)

	LINK		NEAR		BCH		TRX		ATOM		XLM		MANA		FTM		AXS	
	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t	$WSENT_t$	R_t
Intercept	340.973**	0.372	150.210	-0.158	210.235	0.938	359.688*	0.981	142.557	0.656	249.355	0.958	326.244**	0.056	64.505	1.249	161.500	-1.750
	(172.991)	(1.061)	(224.032)	(2.768)	(156.960)	(0.912)	(191.948)	(0.856)	(91.854)	(1.190)	(158.057)	(0.873)	(104.017)	(1.257)	(68.037)	(1.369)	(384.817)	(4.017)
R_{t-1}	13.592***	-0.109***	3.765	-0.014	23.964***	-0.110***	23.088***	-0.082***	1.177	-0.181***	14.553***	-0.038	5.292**	-0.020	1.600	-0.038	1.344	-0.023
	(5.027)	(0.031)	(3.939)	(0.049)	(5.430)	(0.032)	(6.936)	(0.031)	(2.415)	(0.031)	(5.656)	(0.031)	(2.561)	(0.031)	(1.523)	(0.031)	(4.731)	(0.049)
R_{t-2}	7.399	5.1E-3	16.405***	-0.065	26.245***	-0.012	22.211***	0.012	-3.090	-0.074**	10.917*	-0.014	-2.174	-0.038	2.048	0.031	-0.134	0.061
	(5.080)	(0.031)	(3.917)	(0.048)	(5.521)	(0.032)	(6.996)	(0.031)	(2.451)	(0.032)	(5.670)	(0.031)	(2.559)	(0.031)	(1.524)	(0.031)	(4.723)	(0.049)
R_{t-3}	4.613	0.029	1.165	-0.026	9.856*	-4.5E-3	14.703**	-0.048	0.562	3.0E-3	10.414*	0.017	7.393***	-0.067**	1.914	0.032		
	(5.088)	(0.031)	(3.979)	(0.049)	(5.571)	(0.032)	(7.009)	(0.031)	(2.453)	(0.032)	(5.684)	(0.031)	(2.564)	(0.031)	(1.526)	(0.031)		
$WSENT_{t-1}$	0.203***	2.8E-4	0.111**	-4.2E-4	0.173***	2.6E-4	0.284***	8.3E-5	0.162***	4.5E-4	0.277***	3.5E-4**	0.187***	1.3E-3***	0.187***	2.4E-4	0.261***	-5.2E-4
	(0.031)	(1.9E-4)	(0.048)	(5.9E-4)	(0.031)	(1.8E-4)	(0.031)	(1.4E-4)	(0.031)	(4.1E-4)	(0.031)	(1.7E-4)	(0.031)	(3.7E-4)	(0.031)	(6.2E-4)	(0.048)	(5.0E-4)
$WSENT_{t-2}$	0.135***	6.7E-5	0.136***	5.2E-4	0.140***	-5.5E-5	0.204***	4.1E-6	0.051	3.1E-4	0.179***	1.2E-4	0.157***	4.0E-4	0.156***	5.3E-4	0.237***	-3.9E-5
	(0.031)	(1.9E-4)	(0.049)	(6.0E-4)	(0.032)	(1.8E-4)	(0.032)	(1.4E-4)	(0.032)	(4.1E-4)	(0.032)	(1.8E-4)	(0.032)	(3.8E-4)	(0.031)	(6.3E-4)	(0.048)	(5.0E-4)
$WSENT_{t-3}$	0.129***	-1.9E-4	0.107**	9.0E-4	0.154***	1.0E-4	0.088***	8.3E-5	0.032	-2.7E-4	0.088***	5.4E-5	0.071**	-2.3E-5	0.154***	7.3E-4		
	(0.031)	(1.9E-4)	(0.049)	(6.1E-4)	(0.032)	(1.8E-4)	(0.032)	(1.4E-4)	(0.032)	(4.1E-4)	(0.033)	(1.8E-4)	(0.032)	(3.8E-4)	(0.032)	(6.4E-4)		
I	-51.066*	3.0E-3	-50.700	0.363	-34.014	-0.120	-53.579*	-0.113	-26.862*	0.049	-49.338*	-0.072	-59.263**	0.118	-12.875	-0.079	-65.939	0.336
	(28.966)	(0.178)	(38.523)	(0.476)	(26.016)	(0.151)	(31.521)	(0.141)	(15.591)	(0.202)	(26.226)	(0.145)	(17.622)	(0.213)	(11.202)	(0.225)	(66.667)	(0.696)
C	-2.552*	-4.1E-3	-0.926	-6.5E-4	-1.583	-7.5E-3	-2.508	-5.5E-3	-0.378	-0.016	-0.734	-7.3E-3	-0.604	-0.014	-0.122	-0.015	3.979	0.092
	(1.524)	(9.3E-3)	(4.517)	(0.056)	(1.394)	(8.1E-3)	(1.702)	(7.6E-3)	(0.811)	(0.011)	(1.393)	(7.7E-3)	(0.839)	(0.010)	(0.627)	(0.013)	(8.750)	(0.091)
P	-11.281	-0.081	28.908	-0.398	-3.880	-0.055	-12.342	-0.075	1.579	-0.194**	5.626	-0.118*	0.760	-0.147	1.535	-0.168	42.786	-0.067
	(13.434)	(0.082)	(41.675)	(0.515)	(12.211)	(0.071)	(14.952)	(0.067)	(7.465)	(0.097)	(12.522)	(0.069)	(7.482)	(0.090)	(5.668)	(0.114)	(63.172)	(0.659)
T	1.871	-8.0E-3	1.872	-0.030	1.433	1.1E-3	1.883	4.2E-3	1.226	-6.2E-3	2.325*	7.1E-4	2.546***	-3.9E-3	0.724	1.5E-3	3.100	5.9E-3
	(1.454)	(8.9E-3)	(1.739)	(0.021)	(1.297)	(7.5E-3)	(1.557)	(6.9E-3)	(0.754)	(9.8E-3)	(1.300)	(7.2E-3)	(0.859)	(0.010)	(0.564)	(0.011)	(2.617)	(0.027)
R^2	0.453	0.026	0.316	0.039	0.497	0.028	0.613	0.018	0.209	0.053	0.421	0.026	0.333	0.042	0.303	0.016	0.214	0.014
Adj. R^2	0.443	0.008	0.290	0.002	0.488	0.009	0.608	0.005	0.192	0.032	0.410	0.008	0.319	0.023	0.292	0.000	0.198	-0.005

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(b) Vector auto regression for the weight of YouTube View Count and Cryptocurrency return.

Panel A: Cryptocurrencies

	BTC		ETH		BNB		SOL		ADA		XRP		LUNA		AVAX	
	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t
Intercept	15.497	0.754	62.103	1.118	-409.448	2.332***	-843.503*	4.568**	217.619	2.341***	-67.184	0.811	-1227.730**	-1.116	312.247	3.373
	(227.482)	(0.556)	(273.380)	(0.725)	(297.300)	(0.725)	(442.238)	(2.140)	(321.821)	(0.820)	(222.139)	(0.859)	(218.648)	(1.346)	(635.417)	(2.354)
R_{t-1}	19.819	-0.070**	19.364*	-0.093***	26.217**	-0.080***	32.241***	-0.103**	24.469**	-0.076**	17.156**	-0.030	-8.082	-0.027	31.122**	-0.013
	(12.524)	(0.031)	(11.541)	(0.031)	(11.031)	(0.031)	(8.410)	(0.041)	(12.013)	(0.031)	(7.889)	(0.031)	(5.305)	(0.033)	(13.142)	(0.049)
R_{t-2}	5.892	0.016	10.040	0.040	36.753***	0.073**	9.117	-0.013	2.341	0.024	5.503	-0.021	2.549	0.058*	25.697**	0.041
	(12.530)	(0.031)	(11.594)	(0.031)	(11.095)	(0.031)	(8.506)	(0.041)	(12.063)	(0.031)	(7.889)	(0.031)	(5.310)	(0.033)	(13.066)	(0.048)
R_{t-3}	10.952	-8.9E-3	6.008	-0.024	28.333**	-0.026	5.455	1.4E-3	4.811	-0.025	2.827	-2.2E-3	0.716	-0.037	14.500	0.094*
	(12.539)	(0.031)	(11.582)	(0.031)	(11.154)	(0.031)	(8.516)	(0.041)	(12.049)	(0.031)	(7.899)	(0.031)	(5.289)	(0.033)	(13.096)	(0.049)
W_{t-1}	0.153***	9.8E-5	0.103***	1.2E-4	0.115***	3.3E-4***	0.122***	1.9E-4	0.083***	1.4E-4*	0.159***	7.0E-5	0.145***	3.3E-4	0.155***	1.8E-4
	(0.031)	(7.5E-5)	(0.031)	(8.1E-5)	(0.030)	(8.1E-5)	(0.040)	(2.0E-4)	(0.030)	(7.8E-5)	(0.030)	(1.2E-4)	(0.033)	(2.0E-4)	(0.049)	(1.8E-4)
W_{t-2}	0.070**	4.2E-5	0.022	2.5E-5	0.080***	-6.7E-5	0.152***	1.6E-5	0.081***	1.1E-5	0.140***	1.1E-4	0.136***	-2.2E-4	0.038	-2.2E-4
	(0.031)	(7.6E-5)	(0.031)	(8.2E-5)	(0.031)	(8.2E-5)	(0.040)	(2.0E-4)	(0.031)	(7.8E-5)	(0.031)	(1.2E-4)	(0.033)	(2.0E-4)	(0.048)	(1.8E-4)
W_{t-3}	0.119***	3.2E-5	0.015	8.6E-5	0.032	-7.8E-5	0.069*	-4.5E-5	0.085***	1.2E-4	0.029	-1.7E-5	0.075**	5.7E-5	0.138***	2.1E-4
	(0.031)	(7.5E-5)	(0.031)	(8.2E-5)	(0.031)	(8.2E-5)	(0.041)	(2.0E-4)	(0.030)	(7.8E-5)	(0.031)	(1.2E-4)	(0.034)	(2.1E-4)	(0.048)	(1.8E-4)
I	0.431	-0.084	23.200	-0.094	62.265	-0.338**	169.603***	-0.501*	16.867	-0.297**	52.926	-0.119	220.088***	0.336	117.043	-0.284
	(37.226)	(0.091)	(44.409)	(0.118)	(48.637)	(0.118)	(60.278)	(0.292)	(52.691)	(0.134)	(36.842)	(0.142)	(38.177)	(0.235)	(108.425)	(0.402)
C	-1.345	-5.2E-3	-3.506	-0.012*	-5.656**	-0.010	1.012	-0.077**	-4.534	-0.013*	-4.676**	-3.3E-3	0.895	-0.010	1.750	-0.084*
	(2.110)	(5.2E-3)	(2.587)	(6.9E-3)	(2.733)	(6.9E-3)	(7.550)	(0.037)	(2.944)	(7.5E-3)	(2.084)	(8.1E-3)	(1.686)	(0.010)	(11.838)	(0.044)
P	2.952	-0.059	-34.018	-0.123**	18.184	-0.094	-22.859	-0.343	-62.078**	-0.146**	-39.049**	-0.031	1.012	-0.159	-214.068	-0.341
	(18.907)	(0.046)	(23.230)	(0.062)	(24.162)	(0.062)	(47.952)	(0.232)	(26.882)	(0.069)	(18.719)	(0.072)	(15.914)	(0.098)	(141.330)	(0.524)
T	5.359***	1.3E-3	8.859***	1.2E-3	11.343***	7.5E-3	4.549	-0.019	12.307***	1.8E-3	3.214*	6.8E-3	-1.954	1.0E-3	20.269***	-0.025
	(1.997)	(4.9E-3)	(2.656)	(7.0E-3)	(2.583)	(7.0E-3)	(3.975)	(0.019)	(2.946)	(7.5E-3)	(1.842)	(7.1E-3)	(1.530)	(9.4E-3)	(6.596)	(0.024)
R^2	0.272	0.020	0.385	0.049	0.418	0.041	0.417	0.027	0.445	0.031	0.283	0.009	0.370	0.046	0.323	0.047
Adj. R^2	0.258	0.002	0.371	0.027	0.410	0.028	0.404	0.005	0.437	0.016	0.273	-0.004	0.358	0.027	0.301	0.017

Panel A: Cryptocurrencies (Cont.)

	DOT		DOGE		SHIB		MATIC		CRO		UNI		ALGO		LTC	
	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t
Intercept	-104.683	4.416**	16.573	3.063**	-2653.274*	-0.171	-1783.794*	0.723	-450.306	0.077	666.414	4.577**	-197.503	1.289	520.886	1.157
	(722.438)	(1.992)	(338.372)	(1.207)	(727.734)	(7.269)	(312.231)	(1.667)	(305.470)	(0.975)	(742.771)	(2.095)	(232.977)	(1.039)	(324.918)	(0.801)
R_{t-1}	38.592**	-0.063	25.978***	-0.010	11.755***	0.189***	2.002	-2.5E-3	-10.815	-0.049	8.304	-0.119***	11.043	-0.087***	38.531***	-0.050
	(16.301)	(0.045)	(8.635)	(0.031)	(4.431)	(0.044)	(6.060)	(0.032)	(9.600)	(0.031)	(16.397)	(0.046)	(7.449)	(0.033)	(12.395)	(0.031)
R_{t-2}	-34.990**	2.8E-3	20.398**	-0.101***	3.896	-0.090**	11.540*	0.073**	17.813*	5.8E-3	25.899	-0.033	7.503	-0.015	5.101	0.014
	(16.377)	(0.045)	(8.651)	(0.031)	(4.414)	(0.044)	(6.001)	(0.032)	(9.605)	(0.031)	(16.367)	(0.046)	(7.478)	(0.033)	(12.443)	(0.031)
R_{t-3}	46.313***	0.066	15.400*	0.107***	-1.572	0.065	13.280**	-3.5E-3	10.918	0.148***	31.572*	-0.064	-1.421	0.033	11.290	-0.045
	(15.990)	(0.044)	(8.730)	(0.031)	(4.341)	(0.043)	(5.987)	(0.032)	(9.573)	(0.031)	(16.305)	(0.046)	(7.383)	(0.033)	(12.398)	(0.031)
W_{t-1}	0.118***	2.4E-4*	0.140***	5.4E-4***	0.181***	-1.2E-4	0.053*	1.6E-4	0.130***	6.2E-5	0.129***	7.4E-5	0.150***	5.6E-4***	0.127***	1.5E-4**
	(0.046)	(1.3E-4)	(0.031)	(1.1E-4)	(0.045)	(4.5E-4)	(0.032)	(1.7E-4)	(0.031)	(9.8E-5)	(0.047)	(1.3E-4)	(0.033)	(1.5E-4)	(0.030)	(7.5E-5)
W_{t-2}	0.120***	2.1E-5	0.118***	3.3E-5	0.152***	-1.9E-4	0.124***	-1.7E-4	0.053*	-5.8E-5	0.030	3.6E-5	0.090***	-1.4E-4	0.136***	-1.1E-4
	(0.046)	(1.3E-4)	(0.031)	(1.1E-4)	(0.045)	(4.5E-4)	(0.032)	(1.7E-4)	(0.031)	(9.8E-5)	(0.047)	(1.3E-4)	(0.034)	(1.5E-4)	(0.031)	(7.5E-5)
W_{t-3}	0.107**	-8.7E-5	0.059*	-1.0E-5	0.064	-1.2E-3***	0.075**	2.1E-6	0.134***	-1.7E-5	0.015	1.0E-4	0.012	-8.8E-5	0.112***	7.0E-5
	(0.046)	(1.3E-4)	(0.031)	(1.1E-4)	(0.045)	(4.5E-4)	(0.032)	(1.7E-4)	(0.031)	(9.8E-5)	(0.046)	(1.3E-4)	(0.034)	(1.5E-4)	(0.031)	(7.6E-5)
I	97.043	-0.461	-14.738	-0.483**	411.293***	-1.374	312.722***	-0.049	88.090*	0.038	65.328	-1.295***	55.191	-0.052	-95.049*	-0.157
	(115.328)	(0.318)	(55.431)	(0.198)	(116.784)	(1.167)	(53.862)	(0.287)	(50.430)	(0.161)	(125.983)	(0.355)	(39.900)	(0.178)	(53.665)	(0.132)
C	-0.720	-0.077**	-1.626	-0.015	5.611	-0.063	0.610	-0.017	-0.897	-5.7E-3	4.614	-0.104***	-2.516	-0.018*	-2.292	-7.9E-3
	(12.698)	(0.035)	(3.104)	(0.011)	(12.033)	(0.120)	(2.206)	(0.012)	(2.735)	(8.7E-3)	(13.487)	(0.038)	(2.139)	(9.5E-3)	(2.936)	(7.2E-3)
P	-92.538	-0.356	15.039	-0.076	76.766	1.739	10.339	-0.089	-7.724	-0.060	-225.694	0.634	-21.898	-0.210**	6.258	-0.059
	(157.872)	(0.435)	(27.524)	(0.098)	(151.435)	(1.513)	(20.564)	(0.110)	(24.768)	(0.079)	(163.572)	(0.461)	(20.441)	(0.091)	(26.304)	(0.065)
T	3.533	-0.033*	12.451***	0.024**	0.221	0.044	-0.489	0.015	3.206	5.2E-3	8.430	-0.036*	4.441**	1.6E-3	1.520	4.0E-3
	(6.656)	(0.018)	(3.272)	(0.012)	(6.210)	(0.062)	(1.999)	(0.011)	(2.552)	(8.1E-3)	(6.671)	(0.019)	(1.967)	(8.8E-3)	(2.612)	(6.4E-3)
R^2	0.162	0.061	0.566	0.068	0.354	0.070	0.469	0.047	0.480	0.044	0.101	0.073	0.215	0.051	0.143	0.028
Adj. R^2	0.137	0.033	0.557	0.049	0.341	0.052	0.460	0.031	0.470	0.026	0.073	0.044	0.201	0.035	0.130	0.013

Panel A: Cryptocurrencies (Cont.)

	LINK		NEAR		BCH		TRX		ATOM	
	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t
Intercept	289.067	0.983	-970.075*	2.314	879.861**	1.085	-180.691	1.436*	-631.941*	0.982
	(313.637)	(0.989)	(466.679)	(2.628)	(294.694)	(0.854)	(325.493)	(0.807)	(177.732)	(1.186)
R_{t-1}	8.406	-0.109***	-16.938**	-0.023	5.308	-0.107***	15.207	-0.076**	5.900	-0.173***
	(9.740)	(0.031)	(8.401)	(0.047)	(10.416)	(0.030)	(12.324)	(0.031)	(4.669)	(0.031)
R_{t-2}	11.865	0.016	0.530	-0.080*			11.170	0.015	9.214*	-0.071**
	(9.794)	(0.031)	(8.410)	(0.047)			(12.365)	(0.031)	(4.738)	(0.032)
R_{t-3}	16.023	0.028					0.482	-0.039	7.317	-3.6E-3
	(9.787)	(0.031)					(12.344)	(0.031)	(4.729)	(0.032)
W_{t-1}	0.142***	1.6E-4*	0.067	4.6E-4*	0.054*	1.5E-4*	0.113***	1.1E-5	0.087***	-8.1E-5
	(0.031)	(9.7E-5)	(0.048)	(2.7E-4)	(0.030)	(8.8E-5)	(0.030)	(7.6E-5)	(0.031)	(2.1E-4)
W_{t-2}	0.036	-1.4E-4	0.130***	2.6E-4			0.064**	-4.2E-5	-0.012	-5.7E-5
	(0.031)	(9.8E-5)	(0.048)	(2.7E-4)			(0.031)	(7.6E-5)	(0.031)	(2.1E-4)
W_{t-3}	0.059*	-9.8E-5					0.071**	-4.1E-6	-0.012	3.2E-5
	(0.031)	(9.8E-5)					(0.031)	(7.6E-5)	(0.031)	(2.1E-4)
I	0.176	-0.074	277.296**	-0.173	-106.144*	-0.158	23.034	-0.181	122.675**	-0.039
	(50.964)	(0.161)	(81.593)	(0.459)	(48.307)	(0.140)	(53.374)	(0.132)	(30.514)	(0.204)
C	0.964	-6.3E-3	-6.210	-0.031	-7.930***	-7.3E-3	0.623	-8.6E-3	-1.838	-0.015
	(2.873)	(9.1E-3)	(9.181)	(0.052)	(2.704)	(7.8E-3)	(2.987)	(7.4E-3)	(1.573)	(0.010)
P	-61.901**	-0.119	-120.164	-0.273	-54.981**	-0.042	13.655	-0.090	-9.213	-0.158
	(26.892)	(0.085)	(91.706)	(0.516)	(24.231)	(0.070)	(26.931)	(0.067)	(14.554)	(0.097)
T	3.549	-2.5E-3	-8.097**	-0.024	5.315**	3.2E-3	5.914**	5.6E-3	0.346	-1.6E-3
	(2.594)	(8.2E-3)	(3.815)	(0.021)	(2.409)	(7.0E-3)	(2.774)	(6.9E-3)	(1.419)	(9.5E-3)
R^2	0.170	0.029	0.184	0.021	0.025	0.015	0.194	0.026	0.162	0.039
Adj. R^2	0.156	0.013	0.168	0.003	0.019	0.009	0.180	0.009	0.153	0.027

	XLM		MANA		FTM		AXS	
	W_t	R_t	W_t	R_t	W_t	R_t	W_t	R_t
Intercept	273.448	1.128	-297.086	1.304	-443.380*	0.507	-1996.127	-1.894
	(299.561)	(0.820)	(189.797)	(1.131)	(158.881)	(1.466)	(724.676)	(4.074)
R_{t-1}	19.456*	-0.041	14.700***	-0.019	1.417	-0.041	15.368*	-0.032
	(11.141)	(0.030)	(5.238)	(0.031)	(3.342)	(0.031)	(8.896)	(0.050)
R_{t-2}	21.559*	-8.1E-3	-0.413	-0.033	11.628***	0.043	9.457	0.061
	(11.147)	(0.031)	(5.214)	(0.031)	(3.346)	(0.031)	(8.923)	(0.050)
R_{t-3}	24.738**	0.026	-3.580	-0.064**	4.844	0.038		
	(11.174)	(0.031)	(5.221)	(0.031)	(3.362)	(0.031)		
W_{t-1}	0.130***	2.5E-4***	0.112***	8.0E-4***	0.038	7.8E-4***	0.106**	3.9E-4
	(0.031)	(8.4E-5)	(0.031)	(1.9E-4)	(0.031)	(2.8E-4)	(0.050)	(2.8E-4)
W_{t-2}	0.083***	1.2E-4	0.069**	-4.8E-5	0.079**	-3.4E-4	0.111**	-2.8E-4
	(0.031)	(8.4E-5)	(0.031)	(1.9E-4)	(0.031)	(2.9E-4)	(0.050)	(2.8E-4)
W_{t-3}	0.061**	-1.2E-4	0.095***	-1.8E-4	0.020	-6.9E-4**		
	(0.031)	(8.4E-5)	(0.031)	(1.9E-4)	(0.031)	(2.9E-4)		
I	-40.695	-0.115	42.514	-0.123	68.706***	8.9E-3	253.331**	0.389
	(49.152)	(0.135)	(31.048)	(0.185)	(26.003)	(0.240)	(123.983)	(0.697)
C	-3.911	-7.0E-3	7.7E-3	-0.017*	0.379	-0.012	27.895*	0.090
	(2.757)	(7.5E-3)	(1.688)	(0.010)	(1.376)	(0.013)	(16.317)	(0.092)
P	-6.349	-0.103	13.281	-0.126	13.327	-0.114	115.158	-0.098
	(24.768)	(0.068)	(15.250)	(0.091)	(12.526)	(0.116)	(117.378)	(0.660)
T	6.695***	2.5E-3	2.592*	0.013	1.481	7.0E-3	2.465	3.4E-3
	(2.493)	(6.8E-3)	(1.518)	(9.0E-3)	(1.218)	(0.011)	(4.840)	(0.027)
R^2	0.112	0.024	0.337	0.049	0.328	0.036	0.092	0.018
Adj. R^2	0.102	0.013	0.322	0.028	0.312	0.015	0.074	-0.001

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(c) Vector auto regression for the number of YouTube Video Count and Cryptocurrency return.

Panel A: Cryptocurrencies

	BTC		ETH		BNB		SOL		ADA		XRP		LUNA		AVAX	
	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t
Intercept	-53.980	0.696	-25.840	1.113	-90.045**	1.856**	-88.485*	5.078**	-6.870	2.384***	-51.240	0.972	-132.515***	-0.818	-119.084*	1.509
	(0.030)	(0.559)	(64.375)	(0.714)	(41.304)	(0.860)	(49.260)	(2.203)	(41.866)	(0.813)	(55.322)	(0.858)	(20.393)	(1.504)	(65.090)	(2.450)
R_{t-1}	3.513	-0.063**	4.694*	-0.108***	4.221***	-0.107***	0.323	-0.109***	3.098*	-0.087***	2.090	-0.040	-0.095	-0.040	3.244**	-0.044
	(4.044)	(0.031)	(2.775)	(0.031)	(1.492)	(0.031)	(0.916)	(0.041)	(1.582)	(0.031)	(1.973)	(0.031)	(0.443)	(0.033)	(1.302)	(0.049)
R_{t-2}	-2.808	0.024	1.866	0.042	3.926***	0.064**	1.583*	2.8E-3	1.043	0.015	-1.446	-0.024	0.038	0.050	3.484***	0.029
	(4.049)	(0.031)	(2.794)	(0.031)	(1.508)	(0.031)	(0.921)	(0.041)	(1.590)	(0.031)	(1.972)	(0.031)	(0.443)	(0.033)	(1.306)	(0.049)
R_{t-3}	5.084	-1.7E-3	0.327	-6.1E-3	2.249	-0.017	1.720*	-0.012	-1.660	-0.021	2.670	1.9E-4	0.384	-0.032	-0.039	0.090*
	(4.051)	(0.031)	(2.800)	(0.031)	(1.515)	(0.032)	(0.924)	(0.041)	(1.581)	(0.031)	(1.974)	(0.031)	(0.442)	(0.033)	(1.314)	(0.049)
N_{t-1}	1.2E-39***	5.7E-4**	0.411***	1.4E-3***	0.385***	5.7E-3***	0.309***	5.2E-3***	0.327***	3.3E-3***	0.469***	1.6E-3***	0.598***	8.8E-3***	0.402***	5.5E-3***
	(0.030)	(0.000)	(0.031)	(0.000)	(0.031)	(0.001)	(0.040)	(0.002)	(0.030)	(0.001)	(0.030)	(0.000)	(0.033)	(0.002)	(0.050)	(0.002)
N_{t-2}	0.157***	-4.5E-4*	0.109***	-8.2E-4**	0.030	-2.9E-3***	0.059	-1.3E-3	0.134***	-1.2E-3*	0.125***	-4.1E-4	0.069*	-4.1E-3	0.172***	-3.8E-3*
	(0.033)	(0.000)	(0.033)	(0.000)	(0.034)	(0.001)	(0.042)	(0.002)	(0.032)	(0.001)	(0.034)	(0.001)	(0.038)	(0.003)	(0.053)	(0.002)
N_{t-3}	0.062*	-1.2E-4	0.044	-5.5E-4	0.089***	-7.8E-4	0.232***	-1.4E-3	0.100***	2.6E-4	-0.012	-6.7E-4	-0.045	3.2E-4	5.1E-3	-5.2E-5
	(0.033)	(0.000)	(0.033)	(0.000)	(0.034)	(0.001)	(0.042)	(0.002)	(0.033)	(0.001)	(0.034)	(0.001)	(0.038)	(0.003)	(0.054)	(0.002)
I	11.349	-0.078	9.196	-0.094	14.111**	-0.275**	15.254**	-0.602**	4.721	-0.292**	11.763	-0.158	23.757***	0.283	27.578**	0.023
	(12.031)	(0.091)	(10.540)	(0.714)	(6.659)	(0.139)	(6.805)	(0.304)	(6.842)	(0.133)	(9.146)	(0.142)	(3.577)	(0.264)	(11.410)	(0.429)
C	-0.124	-4.6E-3	-0.424	-0.012*	-0.210	-9.4E-3	0.305	-0.077**	-0.411	-0.013*	-0.316	-2.1E-3	0.163	-9.7E-3	0.637	-0.065
	(0.684)	(0.005)	(0.598)	(0.007)	(0.356)	(0.007)	(0.816)	(0.037)	(0.382)	(0.007)	(0.509)	(0.008)	(0.141)	(0.010)	(1.186)	(0.045)
P	-1.362	-0.055	-4.870	-0.122**	2.741	-0.068	0.631	-0.331	-3.813	-0.160**	-2.450	-0.021	0.079	-0.160	-7.860	-0.316
	(6.160)	(0.047)	(5.392)	(0.060)	(3.212)	(0.067)	(5.200)	(0.233)	(3.445)	(0.067)	(4.573)	(0.071)	(1.322)	(0.097)	(13.530)	(0.509)
T	0.118	1.0E-3	0.082	1.4E-4	0.672**	0.010	0.164	-0.020	0.608*	6.2E-3	-0.357	7.9E-3	-0.450***	-6.0E-4	0.367	-0.028
	(0.605)	(0.005)	(0.535)	(0.006)	(0.323)	(0.007)	(0.426)	(0.019)	(0.354)	(0.007)	(0.452)	(0.007)	(0.134)	(0.010)	(0.572)	(0.022)
R^2	0.569	0.027	0.509	0.048	0.593	0.113	0.558	0.048	0.562	0.054	0.456	0.019	0.688	0.056	0.538	0.098
Adj. R^2	0.560	0.005	0.501	0.032	0.583	0.093	0.544	0.019	0.556	0.039	0.449	0.006	0.682	0.038	0.517	0.056

Panel A: Cryptocurrencies (Cont.)

	DOT		DOGE		SHIB		MATIC		CRO		UNI		ALGO		LTC	
	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t
Intercept	-32.459	4.305**	-4.186	2.967**	-85.789***	1.263	-137.934***	1.514	-43.321**	0.151	9.886	4.956**	-69.634***	1.085	33.969	1.338*
	(63.922)	(1.973)	(23.909)	(1.166)	(28.509)	(7.371)	(32.145)	(1.881)	(18.271)	(0.998)	(44.536)	(2.073)	(23.264)	(1.091)	(24.630)	(0.795)
R_{t-1}	4.821***	-0.070	2.176***	-0.085***	0.558***	0.188***	0.559	-6.3E-3	-0.281	-0.050*	1.162	-0.106**	-0.314	-0.098***	2.917***	-0.059*
	(1.468)	(0.045)	(0.665)	(0.032)	(0.172)	(0.044)	(0.555)	(0.032)	(0.556)	(0.030)	(1.001)	(0.047)	(0.709)	(0.033)	(0.944)	(0.030)
R_{t-2}	-2.160	-3.7E-3	2.495***	-0.101***	0.354**	-0.091**	0.627	0.077**	1.595***	9.0E-3	-0.748	-0.010	-0.290	-0.014	0.811	7.6E-3
	(1.481)	(0.046)	(0.673)	(0.033)	(0.171)	(0.044)	(0.555)	(0.032)	(0.557)	(0.030)	(0.994)	(0.046)	(0.711)	(0.033)	(0.946)	(0.031)
R_{t-3}	4.455***	0.081*	2.325***	0.099***	-0.039	0.059	0.573	5.8E-3	0.732	0.150***	3.450***	-0.078*	1.430**	0.037	1.293	-0.046
	(1.440)	(0.044)	(0.683)	(0.033)	(0.169)	(0.044)	(0.552)	(0.032)	(0.554)	(0.030)	(0.919)	(0.043)	(0.702)	(0.033)	(0.944)	(0.030)
N_{t-1}	0.242***	4.6E-3***	0.504***	0.017***	0.307***	0.012	0.340***	9.4E-3***	0.361***	6.2E-3***	0.208***	6.2E-3***	0.238***	6.1E-3***	0.240***	3.3E-3***
	(0.046)	(0.001)	(0.032)	(0.002)	(0.044)	(0.011)	(0.032)	(0.002)	(0.030)	(0.002)	(0.046)	(0.002)	(0.034)	(0.002)	(0.030)	(0.001)
N_{t-2}	0.090*	-2.8E-3*	-2.5E-3	-0.011***	0.144***	-9.4E-3	0.026	-6.3E-3***	0.053	-3.6E-3**	0.145***	-3.7E-3*	0.116***	-1.7E-3	0.199***	-1.1E-3
	(0.047)	(0.001)	(0.036)	(0.002)	(0.046)	(0.012)	(0.034)	(0.002)	(0.033)	(0.002)	(0.046)	(0.002)	(0.035)	(0.002)	(0.031)	(0.001)
N_{t-3}	0.171***	-5.7E-4	0.065*	-4.0E-4	0.173***	-0.024**	0.070**	-2.7E-3	0.042	-2.0E-3	0.030	7.5E-4	0.096***	-4.4E-5	8.5E-3	-6.0E-4
	(0.047)	(0.001)	(0.037)	(0.002)	(0.044)	(0.011)	(0.035)	(0.002)	(0.032)	(0.002)	(0.045)	(0.002)	(0.035)	(0.002)	(0.032)	(0.001)
I	16.742	-0.432	-1.074	-0.473**	11.988***	-1.707	24.553***	-0.183	8.028***	0.034	18.455**	-1.358***	14.928***	-6.8E-3	-6.948*	-0.192
	(10.410)	(0.321)	(3.915)	(0.191)	(4.513)	(1.167)	(5.631)	(0.329)	(3.040)	(0.166)	(7.910)	(0.368)	(4.051)	(0.190)	(4.080)	(0.132)
C	-0.830	-0.078**	0.027	-0.013	0.181	-0.064	0.091	-0.017	0.033	-5.8E-3	0.379	-0.104***	-0.294	-0.019**	-0.123	-8.4E-3
	(1.126)	(0.035)	(0.216)	(0.011)	(0.466)	(0.120)	(0.200)	(0.012)	(0.158)	(0.009)	(0.816)	(0.038)	(0.203)	(0.010)	(0.223)	(0.007)
P	-12.686	-0.366	2.176	-0.069	4.090	1.831	0.326	-0.099	-0.266	-0.070	-24.580**	0.628	-2.691	-0.219**	1.265	-0.055
	(14.079)	(0.435)	(1.942)	(0.095)	(5.868)	(1.517)	(1.853)	(0.108)	(1.428)	(0.078)	(10.122)	(0.471)	(1.941)	(0.091)	(2.001)	(0.065)
T	0.240	-0.032*	0.592***	0.022**	-0.116	0.037	-0.266	0.013	-0.114	8.4E-4	0.162	-0.028	0.202	3.9E-3	0.039	4.8E-3
	(0.588)	(0.018)	(0.215)	(0.010)	(0.241)	(0.062)	(0.190)	(0.011)	(0.141)	(0.008)	(0.403)	(0.019)	(0.183)	(0.009)	(0.198)	(0.006)
R^2	0.331	0.078	0.698	0.150	0.505	0.067	0.690	0.073	0.585	0.055	0.169	0.065	0.448	0.057	0.295	0.033
Adj. R^2	0.311	0.051	0.692	0.131	0.495	0.048	0.684	0.055	0.578	0.041	0.151	0.044	0.438	0.041	0.285	0.020

Panel A: Cryptocurrencies (Cont.)

	LINK		NEAR		BCH		TRX		ATOM		XLM		MANA		FTM		AXS	
	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t
Intercept	-27.584	0.716	-101.511*	1.600	29.540	1.246	-50.953	1.490*	-77.605**	0.360	4.114	1.241	-36.594*	1.634	-76.597**	1.740	-152.744*	0.763
	(25.666)	(0.985)	(45.780)	(2.757)	(30.979)	(0.860)	(40.367)	(0.811)	(17.235)	(1.302)	(23.657)	(0.804)	(19.399)	(1.157)	(21.033)	(1.600)	(57.783)	(4.470)
R_{t-1}	0.857	-0.115***	-2.385***	-0.042	2.300**	-0.102***	1.377	-0.085***	-0.057	-0.181***	1.244	-0.083***	1.295**	-0.054*	-0.130	-0.056*	0.158	-0.044
	(0.804)	(0.031)	(0.816)	(0.049)	(1.107)	(0.031)	(1.536)	(0.031)	(0.413)	(0.031)	(0.915)	(0.031)	(0.528)	(0.031)	(0.408)	(0.031)	(0.648)	(0.050)
R_{t-2}	0.819	0.014	0.783	-0.042	1.035	-3.9E-3	1.078	6.5E-3	0.042	-0.075**	0.675	-0.031	-0.841	-0.044	0.889**	0.036	1.215*	0.067
	(0.810)	(0.031)	(0.817)	(0.049)	(1.113)	(0.031)	(1.541)	(0.031)	(0.419)	(0.032)	(0.918)	(0.031)	(0.528)	(0.031)	(0.408)	(0.031)	(0.647)	(0.050)
R_{t-3}	0.293	0.028	0.471	-0.029	0.894	0.017	2.326	-0.038	0.439	-7.4E-3	2.233**	0.025	9.9E-3	-0.056*	0.477	0.037	-0.528	0.050
	(0.810)	(0.031)	(0.819)	(0.049)	(1.114)	(0.031)	(1.535)	(0.031)	(0.419)	(0.032)	(0.913)	(0.031)	(0.530)	(0.032)	(0.409)	(0.031)	(0.641)	(0.050)
N_{t-1}	0.227***	4.4E-3***	0.499***	0.011***	0.214***	1.4E-3	0.271***	9.4E-4	0.177***	7.5E-3***	0.281***	8.2E-3***	0.400***	0.014***	0.289***	0.012***	0.238***	0.012***
	(0.031)	(0.001)	(0.049)	(0.003)	(0.031)	(0.001)	(0.031)	(0.001)	(0.031)	(0.002)	(0.031)	(0.001)	(0.031)	(0.002)	(0.031)	(0.002)	(0.049)	(0.004)
N_{t-2}	0.044	-2.4E-3*	-0.037	-5.2E-3	0.102***	1.4E-4	0.191***	4.4E-4	0.137***	-3.2E-3	0.071**	-2.6E-4	0.033	-5.3E-3***	0.055*	-2.0E-3	0.144***	-7.7E-3**
	(0.032)	(0.001)	(0.055)	(0.003)	(0.031)	(0.001)	(0.032)	(0.001)	(0.032)	(0.002)	(0.033)	(0.001)	(0.034)	(0.002)	(0.032)	(0.002)	(0.050)	(0.004)
N_{t-3}	0.124***	-4.8E-4	2.2E-3	-5.3E-4	0.040	-2.8E-3***	0.069**	-9.3E-4	0.092***	-3.9E-5	0.087***	-3.8E-5	0.076**	4.1E-5	0.122***	-4.2E-3*	0.088*	-4.9E-4
	(0.032)	(0.001)	(0.056)	(0.003)	(0.031)	(0.001)	(0.032)	(0.001)	(0.032)	(0.002)	(0.033)	(0.001)	(0.034)	(0.002)	(0.032)	(0.002)	(0.050)	(0.004)
I	8.023*	-0.052	21.796***	0.036	-2.311	-0.173	7.312	-0.188	14.586***	0.107	-0.151	-0.127	6.226*	-0.165	13.140***	-0.199	21.241**	-0.014
	(4.277)	(0.164)	(8.198)	(0.494)	(5.068)	(0.141)	(6.611)	(0.133)	(3.003)	(0.227)	(3.878)	(0.132)	(3.191)	(0.190)	(3.496)	(0.266)	(9.617)	(0.744)
C	-0.018	-6.1E-3	0.307	-0.017	-0.407	-9.3E-3	0.159	-9.3E-3	-0.068	-0.018*	-0.321	-6.7E-3	-0.027	-0.019*	0.042	-0.012	1.946	0.031
	(0.236)	(0.009)	(0.886)	(0.053)	(0.288)	(0.008)	(0.369)	(0.007)	(0.137)	(0.010)	(0.218)	(0.007)	(0.166)	(0.010)	(0.166)	(0.013)	(1.238)	(0.096)
P	-3.576*	-0.088	-4.336	-0.376	-3.267	-0.057	2.272	-0.093	-0.673	-0.198**	-0.434	-0.114*	0.463	-0.146	0.788	-0.132	6.695	-0.162
	(2.149)	(0.082)	(8.491)	(0.511)	(2.568)	(0.071)	(3.335)	(0.067)	(1.271)	(0.096)	(1.970)	(0.067)	(1.495)	(0.089)	(1.507)	(0.115)	(8.457)	(0.654)
T	0.031	-4.1E-3	-0.651*	-0.025	0.695**	4.8E-3	0.353	8.1E-3	-0.133	-2.6E-3	0.357*	9.1E-4	0.091	0.011	-0.082	5.8E-3	-0.299	4.5E-3
	(0.210)	(0.008)	(0.368)	(0.022)	(0.273)	(0.008)	(0.344)	(0.007)	(0.123)	(0.009)	(0.199)	(0.007)	(0.146)	(0.009)	(0.145)	(0.011)	(0.351)	(0.027)
R^2	0.361	0.038	0.513	0.063	0.376	0.035	0.604	0.024	0.529	0.070	0.257	0.070	0.528	0.075	0.465	0.047	0.457	0.042
Adj. R^2	0.351	0.022	0.495	0.027	0.364	0.017	0.597	0.008	0.519	0.050	0.246	0.056	0.518	0.056	0.453	0.025	0.441	0.013

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(d) Vector auto regression for the log YouTube View Count and Cryptocurrency return.

Panel A: Cryptocurrencies	BTC		ETH		BNB		SOL		ADA		XRP		LUNA		AVAX	
	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t
Intercept	8.128	0.654	10.614	1.102	-59.973	2.306***	-276.272***	3.423	35.852	2.115**	-1.061	0.804	-296.415***	-2.653*	4.326	2.938
	(15.512)	(0.556)	(17.830)	(0.727)	(45.943)	(0.727)	(76.441)	(2.214)	(28.221)	(0.841)	(15.609)	(0.859)	(44.741)	(1.533)	(91.339)	(2.341)
R_{t-1}	1.176	-0.066**	1.380*	-0.092***	3.574**	-0.074**	3.605***	-0.102**	0.889	-0.076**	1.236**	-0.030	0.701	-0.031	3.624*	-0.018
	(0.852)	(0.031)	(0.751)	(0.031)	(1.682)	(0.031)	(1.390)	(0.040)	(1.034)	(0.031)	(0.555)	(0.031)	(0.952)	(0.033)	(1.854)	(0.048)
R_{t-2}	0.352	0.019	0.965	0.042	5.510***	0.072**	0.640	-3.0E-3	0.491	0.029	0.287	-0.021	-0.417	0.055*	2.237	0.037
	(0.854)	(0.031)	(0.754)	(0.031)	(1.691)	(0.031)	(1.402)	(0.041)	(1.037)	(0.031)	(0.555)	(0.031)	(0.952)	(0.033)	(1.854)	(0.048)
R_{t-3}	0.535	-0.011	0.097	-0.025	1.753	-0.024	1.657	0.013	1.178	-0.021	0.631	-1.5E-3	-0.103	-0.028	1.822	0.104**
	(0.854)	(0.031)	(0.753)	(0.031)	(1.702)	(0.031)	(1.398)	(0.040)	(1.036)	(0.031)	(0.556)	(0.031)	(0.951)	(0.033)	(1.841)	(0.047)
VC_{t-1}	6.5E-6***	9.3E-4	0.096***	1.9E-3	0.099***	1.7E-3***	0.160***	1.8E-3	0.082***	1.4E-3	0.145***	7.6E-4	0.205***	2.9E-3**	0.248***	1.3E-3
	(0.030)	(1.1E-3)	(0.031)	(1.3E-3)	(0.030)	(1.3E-3)	(0.040)	(1.2E-3)	(0.031)	(9.2E-4)	(0.030)	(1.7E-3)	(0.033)	(1.1E-3)	(0.048)	(1.2E-3)
VC_{t-2}	0.093***	1.3E-3	0.034	7.3E-5	0.086***	-3.7E-5	0.086**	-2.5E-3**	0.052*	1.6E-4	0.125***	1.8E-3	0.059*	-2.6E-3**	0.031	-1.0E-3
	(0.031)	(1.1E-3)	(0.031)	(1.3E-3)	(0.031)	(1.3E-3)	(0.040)	(1.2E-3)	(0.031)	(9.2E-4)	(0.031)	(1.7E-3)	(0.033)	(1.1E-3)	(0.049)	(1.2E-3)
VC_{t-3}	0.092***	1.2E-5	0.029	1.3E-3	0.025	-1.8E-4	0.062	-1.0E-3	0.036	1.2E-3	0.033	-7.6E-4	0.070**	-8.4E-4	0.162***	3.3E-4
	(0.031)	(1.1E-3)	(0.031)	(1.3E-3)	(0.031)	(1.3E-3)	(0.041)	(1.2E-3)	(0.031)	(9.2E-4)	(0.031)	(1.7E-3)	(0.033)	(1.1E-3)	(0.048)	(1.2E-3)
I	-0.683	-0.078	0.257	-0.091	13.435*	-0.337**	54.369***	-0.313	0.674	-0.261*	3.364	-0.114	53.732***	0.618**	23.828	-0.207
	(2.536)	(0.091)	(2.891)	(0.118)	(7.527)	(0.118)	(10.812)	(0.313)	(4.539)	(0.135)	(2.587)	(0.142)	(7.923)	(0.271)	(15.824)	(0.406)
C	-0.099	-3.7E-3	-0.182	-0.012*	-1.343***	-0.011	0.264	-0.070*	-0.705***	-0.011	-0.324**	-3.6E-3	-0.063	-0.011	-0.333	-0.080*
	(0.143)	(5.1E-3)	(0.167)	(6.8E-3)	(0.434)	(6.8E-3)	(1.247)	(0.036)	(0.263)	(7.8E-3)	(0.146)	(8.0E-3)	(0.301)	(0.010)	(1.693)	(0.043)
P	0.272	-0.047	-1.465	-0.123**	-1.840	-0.090	-5.895	-0.325	-7.312***	-0.143**	-2.379*	-0.034	-0.365	-0.164*	-30.052	-0.342
	(1.280)	(0.046)	(1.501)	(0.061)	(3.724)	(0.061)	(7.884)	(0.228)	(2.386)	(0.071)	(1.308)	(0.072)	(2.843)	(0.097)	(20.306)	(0.520)
T	0.478***	4.7E-4	0.669***	7.8E-4	0.809**	0.011	1.636**	-0.013	0.800***	3.9E-3	0.257**	7.1E-3	0.117	3.6E-3	3.347***	-0.021
	(0.136)	(4.9E-3)	(0.179)	(7.3E-3)	(0.384)	(7.3E-3)	(0.672)	(0.019)	(0.250)	(7.4E-3)	(0.130)	(7.1E-3)	(0.272)	(9.3E-3)	(0.969)	(0.025)
R^2	0.253	0.015	0.380	0.050	0.344	0.042	0.529	0.034	0.360	0.032	0.260	0.009	0.609	0.059	0.421	0.041
Adj. R^2	0.242	0.001	0.366	0.029	0.333	0.026	0.520	0.015	0.347	0.012	0.251	-0.003	0.601	0.041	0.406	0.016

Panel A: Cryptocurrencies (Cont.)

	DOT		DOGE		SHIB		MATIC		CRO		UNI		ALGO		LTC	
	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t
Intercept	-70.968	4.575**	-40.037	2.976**	-460.885***	-3.370	-268.799***	-0.749	-41.860	0.238	30.107	4.939**	-19.525	1.133	73.032	1.274
	(81.881)	(2.010)	(53.461)	(1.200)	(103.648)	(7.598)	(59.589)	(2.011)	(47.006)	(0.957)	(103.806)	(2.089)	(45.770)	(1.040)	(45.406)	(0.796)
R_{t-1}	2.889	-0.061	3.069**	-1.6E-4	1.856***	0.190***	0.215	-3.9E-3	1.271	-0.048	1.142	-0.118**	2.785*	-0.084**	2.655	-0.049
	(1.829)	(0.045)	(1.359)	(0.030)	(0.602)	(0.044)	(0.961)	(0.032)	(1.507)	(0.031)	(2.306)	(0.046)	(1.460)	(0.033)	(1.740)	(0.031)
R_{t-2}	-2.807	0.012	2.175	-0.088***	0.417	-0.092**	2.789***	0.068**	2.591*	1.6E-3	1.229	-0.035	1.196	-0.022	0.130	0.019
	(1.832)	(0.045)	(1.360)	(0.031)	(0.601)	(0.044)	(0.960)	(0.032)	(1.507)	(0.031)	(2.303)	(0.046)	(1.467)	(0.033)	(1.741)	(0.031)
R_{t-3}	5.465***	0.066	1.940	0.120***	0.017	0.065	1.798*	-7.7E-3	-0.298	0.155***	4.484*	-0.066	2.604*	0.037	2.547	-0.045
	(1.786)	(0.044)	(1.358)	(0.030)	(0.590)	(0.043)	(0.965)	(0.033)	(1.509)	(0.031)	(2.287)	(0.046)	(1.445)	(0.033)	(1.735)	(0.030)
VC_{t-1}	0.149***	2.7E-3**	0.124***	1.9E-3***	0.189***	-2.0E-3	0.015	8.1E-4	0.164***	4.4E-4	0.112**	1.4E-3	0.106***	2.3E-3***	0.108***	2.7E-4
	(0.045)	(1.1E-3)	(0.030)	(6.8E-4)	(0.044)	(3.3E-3)	(0.032)	(1.1E-3)	(0.031)	(6.2E-4)	(0.047)	(9.4E-4)	(0.033)	(7.5E-4)	(0.030)	(5.3E-4)
VC_{t-2}	0.159***	-9.9E-4	0.110***	4.1E-5	0.107**	7.8E-6	0.119***	-5.2E-4	0.052*	-5.8E-5	0.048	-4.7E-6	0.128***	-6.9E-4	0.145***	-5.8E-4
	(0.046)	(1.1E-3)	(0.031)	(6.9E-4)	(0.045)	(3.3E-3)	(0.032)	(1.1E-3)	(0.031)	(6.3E-4)	(0.047)	(9.5E-4)	(0.033)	(7.6E-4)	(0.031)	(5.4E-4)
VC_{t-3}	0.082*	-1.5E-3	0.069**	-5.9E-4	0.158***	-0.010***	0.065**	5.8E-4	0.171***	-5.1E-4	0.017	9.8E-4	0.043	-1.5E-4	0.081***	4.9E-4
	(0.046)	(1.1E-3)	(0.031)	(6.9E-4)	(0.044)	(3.2E-3)	(0.032)	(1.1E-3)	(0.031)	(6.3E-4)	(0.047)	(9.5E-4)	(0.034)	(7.6E-4)	(0.031)	(5.4E-4)
I	24.945*	-0.497	6.404	-0.467**	69.193***	-0.843	46.988***	0.221	9.422	4.7E-3	29.095	-1.380***	11.102	-0.022	-13.303*	-0.179
	(13.567)	(0.333)	(8.790)	(0.197)	(16.668)	(1.222)	(10.387)	(0.351)	(7.761)	(0.158)	(18.097)	(0.364)	(7.860)	(0.179)	(7.510)	(0.132)
C	0.655	-0.080**	-0.519	-0.014	0.998	-0.063	0.089	-0.019	-0.158	-5.2E-3	1.465	-0.108***	-1.055**	-0.018*	-0.298	-8.4E-3
	(1.433)	(0.035)	(0.490)	(0.011)	(1.635)	(0.120)	(0.351)	(0.012)	(0.430)	(8.7E-3)	(1.904)	(0.038)	(0.423)	(9.6E-3)	(0.412)	(7.2E-3)
P	-14.794	-0.346	1.377	-0.077	16.094	1.793	1.750	-0.093	-2.146	-0.054	-41.871*	0.658	-8.414**	-0.211**	1.386	-0.057
	(17.752)	(0.436)	(4.367)	(0.098)	(20.577)	(1.509)	(3.264)	(0.110)	(3.891)	(0.079)	(23.182)	(0.467)	(4.024)	(0.091)	(3.714)	(0.065)
T	1.141	-0.035*	2.904***	0.023**	-0.189	0.037	-0.099	0.013	0.421	6.2E-3	0.805	-0.035*	1.742***	6.4E-3	-0.085	4.4E-3
	(0.764)	(0.019)	(0.502)	(0.011)	(0.845)	(0.062)	(0.319)	(0.011)	(0.409)	(8.3E-3)	(0.933)	(0.019)	(0.420)	(9.6E-3)	(0.366)	(6.4E-3)
R^2	0.273	0.071	0.492	0.045	0.487	0.076	0.632	0.052	0.532	0.044	0.077	0.071	0.397	0.053	0.109	0.025
Adj. R^2	0.251	0.044	0.485	0.033	0.477	0.057	0.624	0.032	0.522	0.024	0.048	0.042	0.386	0.036	0.096	0.010

Panel A: Cryptocurrencies (Cont.)

	LINK		NEAR		BCH		TRX		ATOM		XLM		MANA		FTM		AXS	
	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t
Intercept	-11.085	0.705	-215.499*	0.579	30.637	1.213	-10.902	1.299	-178.640*	1.328	36.160	1.129	-67.290*	1.487	-206.432*	1.340	-250.043*	1.089
	(48.112)	(0.981)	(102.292)	(2.710)	(36.539)	(0.853)	(36.942)	(0.806)	(42.984)	(1.215)	(51.599)	(0.823)	(40.235)	(1.127)	(38.221)	(1.464)	(144.426)	(4.286)
R_{t-1}	2.179	-0.112***	-3.383*	-0.031	2.044	-0.103***	0.887	-0.074**	1.568	-0.172***	3.570*	-0.034	3.093***	-7.6E-3	0.325	-0.043	0.946	-0.031
	(1.511)	(0.031)	(1.820)	(0.048)	(1.299)	(0.030)	(1.400)	(0.031)	(1.102)	(0.031)	(1.911)	(0.030)	(1.106)	(0.031)	(0.797)	(0.031)	(1.682)	(0.050)
R_{t-2}	1.702	6.4E-3	0.373	-0.072	1.099	-1.1E-3	1.157	0.016	2.061*	-0.071**	2.775	-7.3E-3	0.097	-0.029	1.594**	0.041	3.409**	0.053
	(1.522)	(0.031)	(1.819)	(0.048)	(1.307)	(0.031)	(1.400)	(0.031)	(1.118)	(0.032)	(1.913)	(0.031)	(1.105)	(0.031)	(0.796)	(0.031)	(1.683)	(0.050)
R_{t-3}	2.311	0.028	0.881	-0.013	1.689	7.8E-3	0.048	-0.037	0.437	-6.4E-3	4.659**	0.025	1.733	-0.062**	1.164	0.037	2.498	0.031
	(1.523)	(0.031)	(1.819)	(0.048)	(1.305)	(0.030)	(1.397)	(0.031)	(1.116)	(0.032)	(1.916)	(0.031)	(1.106)	(0.031)	(0.797)	(0.031)	(1.674)	(0.050)
VC_{t-1}	0.119***	1.6E-3***	0.076	3.4E-3***	0.082***	2.9E-4	0.097***	-8.9E-6	0.096***	7.0E-4	0.138***	9.3E-4*	0.109***	2.5E-3***	0.123***	3.5E-3***	0.112**	2.7E-3*
	(0.031)	(6.3E-4)	(0.049)	(1.3E-3)	(0.031)	(7.1E-4)	(0.030)	(6.6E-4)	(0.031)	(8.8E-4)	(0.031)	(4.9E-4)	(0.031)	(8.6E-4)	(0.030)	(1.2E-3)	(0.050)	(1.5E-3)
VC_{t-2}	0.037	-8.1E-4	0.150***	1.4E-3	0.064**	-1.1E-3	0.087***	-4.5E-4	0.063**	-4.2E-4	0.054*	5.1E-4	0.054*	8.5E-5	0.187***	-3.6E-4	0.134***	-1.9E-3
	(0.031)	(6.3E-4)	(0.049)	(1.3E-3)	(0.031)	(7.1E-4)	(0.031)	(6.7E-4)	(0.031)	(8.8E-4)	(0.030)	(4.9E-4)	(0.031)	(8.7E-4)	(0.030)	(1.2E-3)	(0.049)	(1.5E-3)
VC_{t-3}	0.047	-4.6E-4	0.061	-8.5E-4	0.061**	-5.5E-4	0.073**	-7.5E-4	0.063**	-5.1E-4	0.120***	-4.7E-4	0.089***	-5.5E-4	0.083***	-3.2E-3***	0.072	5.7E-4
	(0.031)	(6.3E-4)	(0.049)	(1.3E-3)	(0.031)	(7.1E-4)	(0.030)	(6.6E-4)	(0.031)	(8.8E-4)	(0.030)	(4.9E-4)	(0.031)	(8.6E-4)	(0.030)	(1.2E-3)	(0.050)	(1.5E-3)
I	9.223	-0.012	52.857***	0.223	-0.196	-0.161	0.953	-0.167	34.321***	-0.106	-4.574	-0.115	9.955	-0.155	34.976***	-0.107	37.614	-0.183
	(7.969)	(0.162)	(18.036)	(0.478)	(5.990)	(0.140)	(6.056)	(0.132)	(7.406)	(0.209)	(8.462)	(0.135)	(6.601)	(0.185)	(6.295)	(0.241)	(24.366)	(0.723)
C	0.128	-4.4E-3	-1.950	-0.023	-0.354	-9.1E-3	0.104	-7.2E-3	-0.738**	-0.013	-0.876*	-7.2E-3	-0.039	-0.018*	-0.264	-0.014	1.641	-0.018
	(0.450)	(9.2E-3)	(2.007)	(0.053)	(0.336)	(7.8E-3)	(0.339)	(7.4E-3)	(0.373)	(0.011)	(0.478)	(7.6E-3)	(0.362)	(0.010)	(0.324)	(0.012)	(3.246)	(0.096)
P	-8.408**	-0.133	-15.827	-0.376	-5.123*	-0.062	1.901	-0.079	-2.071	-0.154	-1.245	-0.104	2.659	-0.127	2.860	-0.154	8.502	-3.4E-3
	(4.185)	(0.085)	(19.238)	(0.510)	(3.032)	(0.071)	(3.048)	(0.067)	(3.428)	(0.097)	(4.267)	(0.068)	(3.258)	(0.091)	(2.918)	(0.112)	(21.977)	(0.652)
T	0.496	-3.7E-4	-1.399*	-0.032	0.634**	5.1E-3	0.826***	5.4E-3	0.885***	-3.0E-3	1.179***	2.7E-3	0.862**	0.015	0.692**	4.8E-3	-0.894	-4.5E-4
	(0.407)	(8.3E-3)	(0.820)	(0.022)	(0.301)	(7.0E-3)	(0.316)	(6.9E-3)	(0.339)	(9.6E-3)	(0.431)	(6.9E-3)	(0.345)	(9.7E-3)	(0.291)	(0.011)	(0.912)	(0.027)
R^2	0.276	0.036	0.330	0.063	0.074	0.024	0.191	0.026	0.390	0.042	0.152	0.015	0.447	0.037	0.492	0.020	0.265	0.036
Adj. R^2	0.262	0.016	0.308	0.032	0.064	0.013	0.179	0.011	0.383	0.031	0.143	0.005	0.434	0.015	0.487	0.010	0.232	-0.007

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(e) Vector auto regression for the log YouTube View Count and absolute value of Cryptocurrency return.

Panel A: Cryptocurrencies

	BTC		ETH		BNB		SOL		ADA		XRP		LUNA		AVAX	
	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$
Intercept	8.241	-0.400	21.794	-0.138	-34.452	1.204**	-289.737**	1.886	51.066*	0.515	-10.516	1.470**	-309.554**	-0.108	-46.779	2.631
	(15.521)	(0.407)	(17.783)	(0.522)	(45.887)	(0.522)	(77.494)	(1.528)	(27.535)	(0.572)	(15.853)	(0.643)	(45.259)	(1.141)	(90.297)	(1.642)
$ABSR_{t-1}$	-0.105	0.036	1.052	0.057*	2.392	0.161***	2.355	0.116***	0.602	0.141***	1.281*	0.170***	2.685**	0.158***	9.810***	0.043
	(1.165)	(0.031)	(1.042)	(0.031)	(2.353)	(0.031)	(2.044)	(0.040)	(1.474)	(0.031)	(0.754)	(0.031)	(1.290)	(0.033)	(2.588)	(0.047)
$ABSR_{t-2}$	-1.730	0.043	1.005	0.044	0.517	0.146***	2.989	0.078*	0.400	0.026	0.732	0.155***	-1.093	0.077**	3.903	0.074
	(1.164)	(0.030)	(1.038)	(0.030)	(2.371)	(0.030)	(2.053)	(0.040)	(1.479)	(0.031)	(0.757)	(0.031)	(1.307)	(0.033)	(2.594)	(0.047)
$ABSR_{t-3}$	2.204*	-4.2E-3	1.951*	0.029	2.511	-1.4E-3	0.130	0.083**	2.396	0.014	1.861**	0.044	-0.222	-8.0E-3	4.101	0.142***
	(1.166)	(0.031)	(1.039)	(0.030)	(2.391)	(0.030)	(2.055)	(0.041)	(1.479)	(0.031)	(0.755)	(0.031)	(1.309)	(0.033)	(2.508)	(0.046)
VC_{t-1}	1.1E-5***	7.6E-4	0.105***	1.0E-3	0.111***	7.7E-4*	0.158***	-1.5E-4	0.088***	1.3E-3**	0.142***	3.0E-3**	0.192***	1.2E-3	0.234***	1.8E-3**
	(0.031)	(8.0E-4)	(0.031)	(9.0E-4)	(0.030)	(9.0E-4)	(0.040)	(7.9E-4)	(0.030)	(6.3E-4)	(0.030)	(1.2E-3)	(0.033)	(8.2E-4)	(0.047)	(8.5E-4)
VC_{t-2}	0.106***	9.9E-4	0.047	-9.9E-5	0.100***	-1.9E-4	0.085**	-9.8E-4	0.055*	8.6E-5	0.127***	4.6E-4	0.061*	-1.6E-3*	0.014	2.2E-5
	(0.031)	(8.1E-4)	(0.031)	(9.0E-4)	(0.031)	(9.0E-4)	(0.041)	(8.0E-4)	(0.031)	(6.3E-4)	(0.031)	(1.2E-3)	(0.033)	(8.4E-4)	(0.048)	(8.7E-4)
VC_{t-3}	0.088***	3.3E-4	0.041	1.5E-4	0.037	3.1E-4	0.057	9.8E-5	0.038	4.9E-5	0.040	-3.1E-5	0.068**	1.9E-3**	0.156***	2.8E-4
	(0.031)	(8.1E-4)	(0.031)	(9.0E-4)	(0.031)	(9.0E-4)	(0.041)	(8.0E-4)	(0.031)	(6.3E-4)	(0.030)	(1.2E-3)	(0.033)	(8.4E-4)	(0.046)	(8.3E-4)
I	-0.890	1.1E-3	-0.149	-0.067	12.413	-0.289***	58.047***	-0.365*	-0.671	-0.172*	6.122**	-0.339***	57.217***	-0.019	26.680*	-0.123
	(2.531)	(0.066)	(2.909)	(0.085)	(7.817)	(0.085)	(11.134)	(0.219)	(4.567)	(0.095)	(2.656)	(0.108)	(8.077)	(0.204)	(15.355)	(0.279)
C	-0.071	9.2E-3**	-0.393**	0.011**	-1.712***	6.7E-3	0.076	-0.014	-0.873***	8.8E-3	-0.392***	9.5E-4	-0.129	-1.5E-3	-0.175	-0.031
	(0.149)	(3.9E-3)	(0.175)	(5.1E-3)	(0.448)	(5.1E-3)	(1.237)	(0.024)	(0.270)	(5.6E-3)	(0.146)	(5.9E-3)	(0.299)	(7.5E-3)	(1.635)	(0.030)
P	0.374	0.077**	-3.350**	0.098**	-6.056	0.086*	-7.423	0.049	-8.970***	0.090*	-3.308**	0.083	-1.726	0.051	-22.578	-0.401
	(1.324)	(0.035)	(1.552)	(0.046)	(3.826)	(0.046)	(7.860)	(0.155)	(2.465)	(0.051)	(1.309)	(0.053)	(2.817)	(0.071)	(20.080)	(0.365)
T	0.456***	4.5E-3	0.557***	5.0E-3	0.482	0.019***	1.554**	2.1E-3	0.725***	1.0E-2*	0.154	0.026***	-0.024	0.014*	3.389***	-6.6E-3
	(0.139)	(3.6E-3)	(0.177)	(5.2E-3)	(0.418)	(5.2E-3)	(0.670)	(0.013)	(0.259)	(5.4E-3)	(0.136)	(5.5E-3)	(0.280)	(7.1E-3)	(0.908)	(0.017)
R^2	0.272	0.020	0.385	0.049	0.418	0.041	0.417	0.027	0.445	0.031	0.283	0.009	0.370	0.046	0.323	0.047
Adj. R^2	0.258	0.002	0.371	0.027	0.410	0.028	0.404	0.005	0.437	0.016	0.273	-0.004	0.358	0.027	0.301	0.017

Panel A: Cryptocurrencies (Cont.)

	DOT		DOGE		SHIB		MATIC		CRO		UNI		ALGO		LTC	
	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$
Intercept	-33.115	1.532	-68.991	1.973**	-502.228***	1.166	-299.028***	2.106	-43.105	-0.300	87.591	1.786	-19.222	0.203	67.514	0.132
	(82.019)	(1.375)	(54.226)	(0.971)	(105.921)	(6.728)	(63.841)	(1.565)	(46.895)	(0.731)	(103.274)	(1.411)	(45.439)	(0.741)	(45.181)	(0.573)
$ABSR_{t-1}$	4.597*	0.084*	6.286***	0.273***	3.009***	0.316***	2.118	0.116***	2.249	0.120***	-0.198	0.022	5.969***	0.079**	0.127	0.085***
	(2.728)	(0.046)	(1.709)	(0.031)	(0.708)	(0.045)	(1.331)	(0.033)	(1.964)	(0.031)	(3.409)	(0.047)	(2.005)	(0.033)	(2.422)	(0.031)
$ABSR_{t-2}$	1.830	0.155***	0.448	0.153***	-0.301	0.151***	1.093	0.126***	1.121	0.033	-3.060	0.088*	3.485*	0.061*	-0.048	0.034
	(2.744)	(0.046)	(1.776)	(0.032)	(0.725)	(0.046)	(1.341)	(0.033)	(1.977)	(0.031)	(3.385)	(0.046)	(2.018)	(0.033)	(2.431)	(0.031)
$ABSR_{t-3}$	-3.345	0.089**	1.287	0.062*	0.051	-0.016	3.190**	0.086***	3.695*	0.114***	0.361	0.052	-0.354	-0.034	3.487	0.028
	(2.624)	(0.044)	(1.794)	(0.032)	(0.704)	(0.045)	(1.344)	(0.033)	(1.977)	(0.031)	(3.370)	(0.046)	(1.996)	(0.033)	(2.423)	(0.031)
VC_{t-1}	0.165***	1.5E-3*	0.106***	1.7E-3***	0.182***	-1.3E-3	5.8E-3	1.9E-3**	0.165***	4.0E-4	0.113**	3.7E-4	0.095***	1.3E-3**	0.097***	1.2E-3***
	(0.046)	(7.6E-4)	(0.031)	(5.5E-4)	(0.044)	(2.8E-3)	(0.032)	(8.0E-4)	(0.030)	(4.7E-4)	(0.047)	(6.4E-4)	(0.033)	(5.4E-4)	(0.031)	(3.9E-4)
VC_{t-2}	0.156***	-1.0E-3	0.090***	-4.1E-4	0.099**	-8.4E-4	0.106***	-1.1E-3	0.055*	4.8E-4	0.061	-4.6E-4	0.131***	3.4E-4	0.141***	4.3E-4
	(0.046)	(7.7E-4)	(0.031)	(5.5E-4)	(0.045)	(2.9E-3)	(0.032)	(8.0E-4)	(0.031)	(4.8E-4)	(0.047)	(6.4E-4)	(0.033)	(5.4E-4)	(0.031)	(3.9E-4)
VC_{t-3}	0.085*	6.8E-4	0.061**	-2.4E-4	0.153***	-1.3E-3	0.048	-9.2E-5	0.172***	-7.7E-4	0.022	-7.9E-4	0.038	3.7E-4	0.073**	1.3E-4
	(0.046)	(7.8E-4)	(0.031)	(5.5E-4)	(0.044)	(2.8E-3)	(0.033)	(8.0E-4)	(0.031)	(4.8E-4)	(0.047)	(6.5E-4)	(0.033)	(5.4E-4)	(0.031)	(4.0E-4)
I	21.754	-0.328	12.125	-0.375**	66.712***	-0.713	55.400***	-0.486*	9.517	-0.044	17.645	-0.562**	13.985*	-0.140	-14.033*	-0.107
	(13.873)	(0.233)	(9.014)	(0.161)	(16.513)	(1.049)	(11.534)	(0.283)	(7.768)	(0.121)	(17.678)	(0.241)	(7.899)	(0.129)	(7.590)	(0.096)
C	8.4E-5	-0.023	-0.461	-4.7E-3	0.796	0.061	-0.167	1.4E-3	-0.134	6.9E-3	0.262	-0.020	-1.351***	9.0E-3	-0.104	6.4E-3
	(1.431)	(0.024)	(0.488)	(8.7E-3)	(1.618)	(0.103)	(0.349)	(8.5E-3)	(0.430)	(6.7E-3)	(1.860)	(0.025)	(0.420)	(6.9E-3)	(0.424)	(5.4E-3)
P	-18.825	0.082	0.702	0.027	28.259	0.576	-1.765	0.132	-2.004	0.118*	-39.869*	0.313	-11.891***	0.127*	3.254	0.098**
	(18.001)	(0.302)	(4.336)	(0.078)	(21.252)	(1.350)	(3.393)	(0.083)	(3.961)	(0.062)	(23.293)	(0.318)	(4.015)	(0.065)	(3.934)	(0.050)
T	0.659	-5.2E-4	2.423***	0.021**	-0.520	0.100*	-0.347	0.019**	0.441	0.011	0.514	-3.6E-3	1.861***	1.2E-3	0.234	0.015***
	(0.758)	(0.013)	(0.513)	(9.2E-3)	(0.848)	(0.054)	(0.344)	(8.4E-3)	(0.415)	(6.5E-3)	(0.930)	(0.013)	(0.405)	(6.6E-3)	(0.399)	(5.1E-3)
R^2	0.162	0.061	0.566	0.068	0.354	0.070	0.469	0.047	0.480	0.044	0.272	0.020	0.385	0.049	0.418	0.041
Adj. R^2	0.137	0.033	0.557	0.049	0.341	0.052	0.460	0.031	0.470	0.026	0.258	0.002	0.371	0.027	0.410	0.028

Panel A: Cryptocurrencies (Cont.)

	LINK		NEAR		BCH		TRX		ATOM		XLM		MANA		FTM		AXS	
	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$
Intercept	-2.877	-0.331	-191.296*	2.382	29.307	1.106*	-7.435	0.694	-179.722*	0.771	33.432	0.829	-74.740*	0.128	-195.759*	1.761*	-449.296*	-1.998
	(47.918)	(0.682)	(105.061)	(1.851)	(36.530)	(0.650)	(36.917)	(0.578)	(43.076)	(0.877)	(51.815)	(0.608)	(39.684)	(0.787)	(39.228)	(1.068)	(139.269)	(2.873)
$ABSR_{t-1}$	2.681	0.106***	1.943	0.049	-0.699	0.111***	0.631	0.122***	-0.042	0.171***	1.779	0.159***	3.904**	0.268***	0.206	0.069**	3.061	0.080
	(2.162)	(0.031)	(2.765)	(0.049)	(1.715)	(0.031)	(1.954)	(0.031)	(1.526)	(0.031)	(2.610)	(0.031)	(1.547)	(0.031)	(1.125)	(0.031)	(2.383)	(0.049)
$ABSR_{t-2}$	0.891	0.071**	2.106	8.8E-3	2.271	0.061**	-0.120	0.079**	2.607*	0.105***	3.260	0.072**	0.908	0.046	-0.542	0.043	-0.206	0.064
	(2.167)	(0.031)	(2.761)	(0.049)	(1.724)	(0.031)	(1.967)	(0.031)	(1.546)	(0.031)	(2.634)	(0.031)	(1.602)	(0.032)	(1.125)	(0.031)	(2.388)	(0.049)
$ABSR_{t-3}$	1.929	0.033	0.397	0.048	3.755**	0.012	2.740	0.021	0.067	0.064**	0.638	0.079**	3.801**	0.020	3.533***	0.094***		
	(2.174)	(0.031)	(2.759)	(0.049)	(1.710)	(0.030)	(1.966)	(0.031)	(1.542)	(0.031)	(2.639)	(0.031)	(1.598)	(0.032)	(1.121)	(0.031)		
VC_{t-1}	0.128***	1.0E-3**	0.060	7.8E-4	0.085***	1.7E-3***	0.095***	2.0E-4	0.098***	7.8E-4	0.144***	2.7E-4	0.131***	2.3E-3***	0.116***	1.8E-3**	0.176***	1.4E-3
	(0.031)	(4.4E-4)	(0.049)	(8.7E-4)	(0.030)	(5.4E-4)	(0.031)	(4.8E-4)	(0.031)	(6.4E-4)	(0.030)	(3.6E-4)	(0.030)	(6.0E-4)	(0.031)	(8.3E-4)	(0.049)	(1.0E-3)
VC_{t-2}	0.048	-3.8E-4	0.132***	6.3E-4	0.067**	-2.7E-4	0.085***	4.3E-4	0.061*	4.7E-4	0.056*	1.3E-4	0.074**	-5.8E-4	0.173***	1.4E-3*	0.168***	-9.8E-4
	(0.031)	(4.4E-4)	(0.049)	(8.7E-4)	(0.031)	(5.4E-4)	(0.031)	(4.8E-4)	(0.031)	(6.4E-4)	(0.031)	(3.6E-4)	(0.031)	(6.1E-4)	(0.031)	(8.4E-4)	(0.049)	(1.0E-3)
VC_{t-3}	0.054*	2.5E-4	0.048	1.3E-3	0.053*	-4.6E-5	0.069**	7.6E-4	0.060*	2.9E-5	0.126***	9.1E-5	0.112***	-1.4E-3**	0.067**	-4.7E-4		
	(0.031)	(4.4E-4)	(0.050)	(8.8E-4)	(0.031)	(5.4E-4)	(0.031)	(4.8E-4)	(0.031)	(6.4E-4)	(0.030)	(3.6E-4)	(0.030)	(6.0E-4)	(0.031)	(8.5E-4)		
I	9.709	-0.102	47.972***	-0.202	1.325	-0.327***	0.678	-0.187*	35.942***	-0.267*	-2.060	-0.192*	12.801*	-0.118	35.049***	-0.425**	61.688***	0.462
	(8.007)	(0.114)	(18.478)	(0.326)	(6.068)	(0.108)	(6.173)	(0.097)	(7.536)	(0.153)	(8.567)	(0.101)	(6.582)	(0.131)	(6.598)	(0.180)	(23.796)	(0.491)
C	3.7E-4	0.015**	-1.626	0.037	-0.469	8.4E-3	0.076	4.2E-3	-0.849**	8.1E-3	-1.041**	3.8E-3	-0.292	6.3E-3	-0.483	0.016*	4.076	0.168***
	(0.466)	(6.6E-3)	(2.085)	(0.037)	(0.336)	(6.0E-3)	(0.344)	(5.4E-3)	(0.374)	(7.6E-3)	(0.479)	(5.6E-3)	(0.364)	(7.2E-3)	(0.327)	(8.9E-3)	(3.134)	(0.065)
P	-10.691**	0.191***	-15.353	-0.282	-6.596**	0.153***	1.447	0.076	-3.766	0.155**	-3.671	0.053	0.973	0.116*	0.499	0.129	21.777	-0.197
	(4.547)	(0.065)	(19.394)	(0.342)	(3.064)	(0.054)	(3.125)	(0.049)	(3.494)	(0.071)	(4.270)	(0.050)	(3.281)	(0.065)	(2.930)	(0.080)	(22.441)	(0.463)
T	0.425	0.012**	-1.250	9.3E-3	0.495	0.025***	0.793**	0.015***	0.789**	9.4E-3	0.837*	0.018***	1.153***	0.023***	0.365	0.025***	-1.225	0.037*
	(0.418)	(6.0E-3)	(0.828)	(0.015)	(0.311)	(5.5E-3)	(0.335)	(5.2E-3)	(0.344)	(7.0E-3)	(0.445)	(5.2E-3)	(0.348)	(6.9E-3)	(0.303)	(8.3E-3)	(0.942)	(0.019)
R^2	0.417	0.027	0.445	0.031	0.283	0.009	0.370	0.046	0.323	0.047	0.162	0.061	0.566	0.068	0.354	0.070	0.469	0.047
Adj. R^2	0.404	0.005	0.437	0.016	0.273	-0.004	0.358	0.027	0.301	0.017	0.137	0.033	0.557	0.049	0.341	0.052	0.460	0.031

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(f) Vector auto regression for the log YouTube View Count x sentiment and Cryptocurrency return.

Panel A: Cryptocurrencies	BTC		ETH		BNB		SOL		ADA		XRP		LUNA		AVAX	
	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t
Intercept	45.056*	0.432	37.309	0.738	22.117	1.753**	64.467	3.040	25.833	1.863**	39.511	0.696	27.224	-6.2E-3	69.158	1.831
	(25.834)	(0.587)	(25.513)	(0.760)	(28.826)	(0.760)	(48.250)	(2.140)	(26.872)	(0.855)	(26.025)	(0.908)	(20.751)	(1.193)	(63.844)	(2.570)
R_{t-1}	5.864***	-0.103***	2.858**	-0.120***	2.380**	-0.079**	0.993	-0.111***	1.941*	-0.064**	1.931**	-0.023	0.743	-0.017	3.216***	-0.019
	(1.681)	(0.038)	(1.184)	(0.035)	(1.064)	(0.035)	(0.923)	(0.041)	(1.007)	(0.032)	(0.945)	(0.033)	(0.568)	(0.033)	(1.203)	(0.048)
R_{t-2}	3.872**	0.010	1.574	0.033	3.051***	0.075**	-0.135	-7.2E-3	2.063**	0.044	0.058	-0.032	0.220	0.057*	1.628	0.031
	(1.712)	(0.039)	(1.199)	(0.036)	(1.070)	(0.036)	(0.929)	(0.041)	(1.011)	(0.032)	(0.944)	(0.033)	(0.569)	(0.033)	(1.195)	(0.048)
R_{t-3}	0.662	-0.049	-0.225	-0.058	2.394**	-0.016	-0.545	-3.9E-3	0.915	-0.012	-0.069	-3.8E-3	-0.348	-0.031	2.131*	0.089*
	(1.670)	(0.038)	(1.180)	(0.035)	(1.073)	(0.035)	(0.928)	(0.041)	(1.010)	(0.032)	(0.882)	(0.031)	(0.568)	(0.033)	(1.153)	(0.046)
$VCSENT_{t-1}$	5.7E-54***	1.5E-3*	0.648***	1.4E-3	0.369***	8.6E-4	0.397***	1.4E-3	0.571***	-9.0E-4	0.674***	-4.4E-4	0.327***	2.1E-3	0.386***	1.6E-3
	(0.038)	(8.7E-4)	(0.035)	(1.1E-3)	(0.031)	(1.1E-3)	(0.041)	(1.8E-3)	(0.032)	(1.0E-3)	(0.033)	(1.1E-3)	(0.033)	(1.9E-3)	(0.047)	(1.9E-3)
$VCSENT_{t-2}$	0.147***	-1.1E-3	0.174***	-7.9E-4	0.230***	-4.0E-4	0.221***	-1.6E-3	0.175***	-5.8E-4	0.188***	1.4E-3	0.140***	-2.8E-3	0.191***	-4.3E-4
	(0.044)	(1.0E-3)	(0.042)	(1.2E-3)	(0.033)	(1.2E-3)	(0.044)	(1.9E-3)	(0.037)	(1.2E-3)	(0.039)	(1.4E-3)	(0.034)	(2.0E-3)	(0.049)	(2.0E-3)
$VCSENT_{t-3}$	0.118***	1.2E-3	0.088**	1.7E-3	0.105***	-6.7E-4	0.097**	9.1E-4	0.103***	5.0E-4	0.087***	-7.7E-4	0.178***	2.1E-3	0.264***	4.9E-4
	(0.044)	(1.0E-3)	(0.042)	(1.2E-3)	(0.034)	(1.2E-3)	(0.044)	(1.9E-3)	(0.037)	(1.2E-3)	(0.033)	(1.1E-3)	(0.035)	(2.0E-3)	(0.046)	(1.9E-3)
I	-5.883	-0.040	-5.101	-0.036	-3.981	-0.239*	-9.156	-0.307	-3.694	-0.208	-5.192	-0.097	-5.761	0.131	-7.668	-0.251
	(4.223)	(0.096)	(4.174)	(0.124)	(4.752)	(0.124)	(6.233)	(0.276)	(4.393)	(0.140)	(4.249)	(0.148)	(3.572)	(0.205)	(9.967)	(0.401)
C	-0.376	-2.2E-3	-0.278	-9.1E-3	-0.057	-0.011	-0.657	-0.057	-0.188	-0.011	-0.319	-2.6E-3	0.026	-9.1E-3	-0.363	-0.069
	(0.232)	(5.3E-3)	(0.229)	(6.8E-3)	(0.255)	(6.8E-3)	(0.832)	(0.037)	(0.239)	(7.6E-3)	(0.235)	(8.2E-3)	(0.182)	(0.010)	(1.103)	(0.044)
P	-2.518	-0.044	-1.821	-0.112*	0.012	-0.087	-2.580	-0.256	-1.068	-0.148**	-2.167	-0.033	1.014	-0.152	-5.582	-0.050
	(2.011)	(0.046)	(1.998)	(0.059)	(2.274)	(0.059)	(5.165)	(0.229)	(2.111)	(0.067)	(2.042)	(0.071)	(1.711)	(0.098)	(13.176)	(0.530)
T	0.175	-6.4E-4	0.151	-1.2E-3	0.177	8.2E-3	-0.012	-0.016	0.115	5.5E-3	0.140	5.7E-3	0.199	4.7E-4	0.136	-0.039*
	(0.207)	(4.7E-3)	(0.205)	(6.1E-3)	(0.236)	(6.1E-3)	(0.429)	(0.019)	(0.216)	(6.9E-3)	(0.209)	(7.3E-3)	(0.168)	(9.7E-3)	(0.531)	(0.021)
R^2	0.896	0.018	0.892	0.030	0.712	0.030	0.576	0.030	0.850	0.026	0.889	0.004	0.544	0.038	0.682	0.029
Adj. R^2	0.895	0.007	0.891	0.019	0.709	0.018	0.568	0.011	0.849	0.015	0.888	-0.005	0.536	0.020	0.675	0.007

Panel A: Cryptocurrencies (Cont.)

	DOT		DOGE		SHIB		MATIC		CRO		UNI		ALGO		LTC	
	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t
Intercept	72.828	3.075	41.865	2.575**	32.524	4.916	8.645	2.428*	63.217**	0.100	99.606	4.442*	33.769	0.566	39.573	1.024
	(66.594)	(2.291)	(31.150)	(1.267)	(53.151)	(6.996)	(22.949)	(1.322)	(30.621)	(1.047)	(83.924)	(2.575)	(28.603)	(1.155)	(31.518)	(0.834)
R_{t-1}	3.832***	-0.089*	3.678***	1.2E-3	1.572***	0.200***	1.808***	3.7E-4	-0.058	-0.045	0.430	-0.084*	1.126	-0.087***	5.335***	-0.077**
	(1.394)	(0.048)	(0.762)	(0.031)	(0.339)	(0.045)	(0.563)	(0.032)	(0.892)	(0.030)	(1.507)	(0.046)	(0.833)	(0.034)	(1.227)	(0.032)
R_{t-2}	1.991	-0.032	2.276***	-0.089***	-0.202	-0.082*	-0.065	0.083***	2.059**	5.9E-3	3.121**	-0.014	0.640	-8.4E-3	4.417***	-4.2E-3
	(1.408)	(0.048)	(0.769)	(0.031)	(0.348)	(0.046)	(0.561)	(0.032)	(0.890)	(0.030)	(1.498)	(0.046)	(0.836)	(0.034)	(1.243)	(0.033)
R_{t-3}	1.881	-0.012	1.543**	0.107***	0.016	0.073	-0.284	8.4E-3	1.393	0.151***	0.374	-0.052	0.807	0.026	1.051	-0.070**
	(1.407)	(0.048)	(0.771)	(0.031)	(0.341)	(0.045)	(0.560)	(0.032)	(0.885)	(0.030)	(1.498)	(0.046)	(0.826)	(0.033)	(1.245)	(0.033)
$VCSENT_{t-1}$	0.426***	1.5E-3	0.324***	1.8E-3	0.302***	-1.2E-3	0.269***	3.6E-4	0.256***	-2.1E-4	0.240***	-1.9E-4	0.318***	3.7E-4	0.370***	1.4E-3*
	(0.048)	(1.6E-3)	(0.031)	(1.3E-3)	(0.045)	(5.9E-3)	(0.032)	(1.9E-3)	(0.031)	(1.0E-3)	(0.047)	(1.4E-3)	(0.033)	(1.4E-3)	(0.033)	(8.6E-4)
$VCSENT_{t-2}$	0.228***	1.6E-3	0.218***	-5.7E-4	0.220***	9.7E-3	0.272***	-4.3E-3**	0.155***	-4.4E-4	0.250***	2.5E-3*	0.240***	-7.2E-4	0.184***	1.6E-5
	(0.052)	(1.8E-3)	(0.032)	(1.3E-3)	(0.046)	(6.1E-3)	(0.034)	(1.9E-3)	(0.032)	(1.1E-3)	(0.048)	(1.5E-3)	(0.035)	(1.4E-3)	(0.035)	(9.2E-4)
$VCSENT_{t-3}$	0.026	-1.1E-3	0.151***	1.7E-3	0.186***	-6.9E-3	0.157***	5.5E-4	0.216***	2.9E-4	0.041	-1.1E-3	0.126***	1.5E-3	0.194***	8.8E-4
	(0.053)	(1.8E-3)	(0.033)	(1.3E-3)	(0.046)	(6.1E-3)	(0.035)	(2.0E-3)	(0.032)	(1.1E-3)	(0.050)	(1.5E-3)	(0.036)	(1.4E-3)	(0.035)	(9.3E-4)
I	-15.430	-0.311	-5.608	-0.408**	-1.889	-2.417**	-1.567	-0.352	-10.763**	0.040	-15.970	-1.110***	-7.131	0.087	-5.319	-0.138
	(9.893)	(0.340)	(5.107)	(0.208)	(8.278)	(1.090)	(3.917)	(0.226)	(5.062)	(0.173)	(12.637)	(0.388)	(4.926)	(0.199)	(5.140)	(0.136)
C	-0.889	-0.071*	-0.322	-0.011	-0.503	-0.048	-2.8E-3	-0.017	-0.138	-5.1E-3	-0.573	-0.094**	9.7E-3	-0.016*	-0.336	-6.8E-3
	(1.086)	(0.037)	(0.274)	(0.011)	(0.922)	(0.121)	(0.205)	(0.012)	(0.258)	(8.8E-3)	(1.371)	(0.042)	(0.241)	(9.7E-3)	(0.284)	(7.5E-3)
P	3.395	-0.249	-2.167	-0.063	-4.512	1.883	0.014	-0.095	-0.695	-0.067	-1.869	0.434	1.255	-0.220**	-2.024	-0.052
	(12.759)	(0.439)	(2.425)	(0.099)	(11.625)	(1.530)	(1.903)	(0.110)	(2.298)	(0.079)	(15.009)	(0.460)	(2.266)	(0.092)	(2.466)	(0.065)
T	-0.167	-0.036**	0.093	0.020*	-0.222	0.067	7.1E-3	0.015	0.459*	-1.9E-3	-0.202	-0.026	0.298	-3.5E-3	0.209	2.5E-3
	(0.529)	(0.018)	(0.250)	(0.010)	(0.474)	(0.062)	(0.186)	(0.011)	(0.248)	(8.5E-3)	(0.610)	(0.019)	(0.230)	(9.3E-3)	(0.253)	(6.7E-3)
R^2	0.742	0.090	0.651	0.039	0.530	0.068	0.623	0.046	0.525	0.046	0.556	0.100	0.638	0.039	0.723	0.031
Adj. R^2	0.730	0.047	0.646	0.027	0.519	0.045	0.616	0.030	0.517	0.032	0.540	0.068	0.631	0.022	0.718	0.015

Panel A: Cryptocurrencies (Cont.)

	LINK		NEAR		BCH		TRX		ATOM		XLM		MANA		FTM		AXS	
	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t
Intercept	47.922*	0.185	34.863	-0.955	34.420	0.970	40.805	1.031	42.419*	0.514	34.542	0.679	74.396***	0.504	17.703	1.193	34.074	1.967
	(28.412)	(1.061)	(58.594)	(2.764)	(24.334)	(0.907)	(26.008)	(0.850)	(22.544)	(1.198)	(28.552)	(0.868)	(24.059)	(1.204)	(19.148)	(1.387)	(86.994)	(4.265)
R_{t-1}	3.423***	-0.106***	0.113	-0.019	3.346***	-0.132***	3.747***	-0.091***	0.687	-0.176***	2.819***	-0.028	1.210**	-8.5E-3	1.281***	-0.036	0.863	-0.042
	(0.832)	(0.031)	(1.032)	(0.049)	(0.877)	(0.033)	(0.974)	(0.032)	(0.589)	(0.031)	(1.023)	(0.031)	(0.617)	(0.031)	(0.427)	(0.031)	(1.022)	(0.050)
R_{t-2}	1.320	0.011	2.843***	-0.081*	3.768***	-0.038	0.806	0.010	0.431	-0.075**	2.223**	-0.010	-0.525	-0.038	0.287	0.036	0.226	0.069
	(0.842)	(0.031)	(1.026)	(0.048)	(0.895)	(0.033)	(0.986)	(0.032)	(0.598)	(0.032)	(1.022)	(0.031)	(0.615)	(0.031)	(0.428)	(0.031)	(1.013)	(0.050)
R_{t-3}	1.130	0.028	0.425	-0.041	0.350	-0.026	1.621*	-0.056*	0.559	-6.6E-3	0.431	0.014	1.505**	-0.071**	0.926**	0.035	0.881	0.064
	(0.842)	(0.031)	(1.032)	(0.049)	(0.904)	(0.034)	(0.974)	(0.032)	(0.596)	(0.032)	(1.022)	(0.031)	(0.613)	(0.031)	(0.428)	(0.031)	(1.007)	(0.049)
$VCSENT_{t-1}$	0.354***	4.4E-4	0.204***	2.8E-3	0.436***	2.9E-3**	0.458***	1.3E-3	0.337***	1.3E-3	0.358***	1.0E-3	0.241***	3.6E-3**	0.274***	3.0E-4	0.325***	-2.7E-3
	(0.031)	(1.1E-3)	(0.048)	(2.3E-3)	(0.033)	(1.2E-3)	(0.031)	(1.0E-3)	(0.031)	(1.6E-3)	(0.031)	(9.4E-4)	(0.031)	(1.5E-3)	(0.031)	(2.2E-3)	(0.049)	(2.4E-3)
$VCSENT_{t-2}$	0.177***	-6.5E-4	0.226***	3.2E-4	0.196***	5.8E-4	0.264***	-5.4E-4	0.188***	3.1E-4	0.167***	3.5E-4	0.223***	2.3E-3	0.218***	-2.7E-4	0.159***	-6.9E-4
	(0.033)	(1.2E-3)	(0.049)	(2.3E-3)	(0.035)	(1.3E-3)	(0.034)	(1.1E-3)	(0.033)	(1.7E-3)	(0.033)	(1.0E-3)	(0.032)	(1.6E-3)	(0.032)	(2.3E-3)	(0.052)	(2.5E-3)
$VCSENT_{t-3}$	0.122***	-1.7E-4	0.118**	3.3E-3	0.171***	-5.3E-5	0.052	1.2E-3	0.124***	-1.5E-3	0.186***	2.0E-4	0.152***	4.6E-5	0.183***	2.1E-3	0.114**	-1.8E-3
	(0.033)	(1.2E-3)	(0.051)	(2.4E-3)	(0.036)	(1.3E-3)	(0.034)	(1.1E-3)	(0.033)	(1.7E-3)	(0.033)	(9.9E-4)	(0.032)	(1.6E-3)	(0.033)	(2.4E-3)	(0.052)	(2.6E-3)
I	-7.283	0.037	-9.786	0.517	-4.065	-0.135	-5.104	-0.131	-7.816**	0.041	-6.263	-0.037	-12.134**	0.013	-3.714	-0.077	-12.414	-0.288
	(4.690)	(0.175)	(10.072)	(0.475)	(4.001)	(0.149)	(4.261)	(0.139)	(3.820)	(0.203)	(4.693)	(0.143)	(4.013)	(0.201)	(3.164)	(0.229)	(15.141)	(0.742)
C	-0.319	-3.2E-3	-0.309	0.011	-0.356	-7.0E-3	-0.364	-4.9E-3	-0.116	-0.013	-0.154	-4.8E-3	-0.299	-0.012	2.5E-3	-0.014	-0.152	-5.0E-3
	(0.252)	(9.4E-3)	(1.181)	(0.056)	(0.218)	(8.1E-3)	(0.233)	(7.6E-3)	(0.198)	(0.011)	(0.253)	(7.7E-3)	(0.202)	(0.010)	(0.175)	(0.013)	(1.990)	(0.098)
P	-1.485	-0.081	4.423	-0.417	-2.393	-0.045	-2.528	-0.064	0.259	-0.154	0.123	-0.100	-1.397	-0.119	0.621	-0.159	7.684	-0.072
	(2.184)	(0.082)	(10.866)	(0.513)	(1.898)	(0.071)	(2.037)	(0.067)	(1.821)	(0.097)	(2.243)	(0.068)	(1.789)	(0.090)	(1.583)	(0.115)	(13.297)	(0.652)
T	0.290	-9.6E-3	0.149	-0.030	0.072	2.5E-3	0.109	5.4E-3	0.324*	-5.2E-3	0.261	-5.6E-4	0.466**	1.4E-3	0.177	2.4E-3	0.346	-1.2E-3
	(0.231)	(8.6E-3)	(0.453)	(0.021)	(0.197)	(7.3E-3)	(0.210)	(6.9E-3)	(0.184)	(9.8E-3)	(0.231)	(7.0E-3)	(0.196)	(9.8E-3)	(0.158)	(0.011)	(0.550)	(0.027)
R^2	0.705	0.024	0.442	0.046	0.806	0.032	0.819	0.018	0.488	0.042	0.653	0.023	0.471	0.028	0.499	0.020	0.467	0.025
Adj. R^2	0.701	0.009	0.421	0.010	0.803	0.016	0.817	0.007	0.482	0.030	0.648	0.010	0.464	0.016	0.490	0.002	0.445	-0.014

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(g) Vector auto regression for the weight of YouTube View Count and absolute value of Cryptocurrency return.

Panel A: Cryptocurrencies

	BTC		ETH		BNB		SOL		ADA		XRP		LUNA		AVAX	
	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$
Intercept	40.425	-0.358	216.260	-0.058	-293.046	1.184**	-716.136	2.566*	203.899	0.720	-154.847	1.450**	-1217.226**	-0.086	148.154	1.958
	(227.323)	(0.405)	(271.822)	(0.518)	(302.516)	(0.518)	(447.066)	(1.452)	(316.624)	(0.562)	(226.218)	(0.650)	(217.586)	(0.989)	(627.568)	(1.629)
$ABSR_{t-1}$	0.174	0.029	21.121	0.057*	30.293*	0.153***	7.397	0.120***	0.108	0.132***	16.035	0.172***	22.502***	0.156***	70.924***	0.030
	(17.232)	(0.031)	(16.034)	(0.031)	(15.491)	(0.031)	(12.482)	(0.041)	(17.252)	(0.031)	(10.658)	(0.031)	(7.142)	(0.032)	(18.199)	(0.047)
$ABSR_{t-2}$	-28.024	0.040	19.233	0.045	28.219*	0.138***	5.591	0.077*	-8.598	0.033	13.023	0.152***	-14.660**	0.080**	42.300**	0.095**
	(17.132)	(0.031)	(15.965)	(0.030)	(15.685)	(0.030)	(12.471)	(0.041)	(17.381)	(0.031)	(10.806)	(0.031)	(7.257)	(0.033)	(18.358)	(0.048)
$ABSR_{t-3}$	27.210	-6.0E-3	19.398	0.030	19.199	-6.3E-3	-2.809	0.085**	31.384*	0.023	21.217*	0.032	-7.007	-6.6E-3	27.928	0.158***
	(17.169)	(0.031)	(15.995)	(0.031)	(15.793)	(0.031)	(12.462)	(0.040)	(17.388)	(0.031)	(10.928)	(0.031)	(7.282)	(0.033)	(18.156)	(0.047)
W_{t-1}	2.9E-7***	1.0E-4*	0.114***	7.7E-5	0.114***	2.0E-4***	0.143***	1.3E-4	0.082***	1.4E-4***	0.143***	1.8E-4**	0.138***	4.6E-5	0.138***	2.0E-4
	(0.031)	(5.5E-5)	(0.031)	(5.8E-5)	(0.031)	(5.8E-5)	(0.040)	(1.3E-4)	(0.031)	(5.5E-5)	(0.031)	(8.8E-5)	(0.033)	(1.5E-4)	(0.047)	(1.2E-4)
W_{t-2}	0.082***	3.9E-5	0.032	4.2E-5	0.077**	-5.0E-5	0.158***	-1.3E-4	0.070**	2.0E-5	0.127***	2.7E-5	0.143***	-1.6E-4	0.021	-1.8E-4
	(0.031)	(5.5E-5)	(0.031)	(5.8E-5)	(0.031)	(5.8E-5)	(0.040)	(1.3E-4)	(0.031)	(5.5E-5)	(0.031)	(8.8E-5)	(0.033)	(1.5E-4)	(0.047)	(1.2E-4)
W_{t-3}	0.121***	4.4E-5	0.027	-3.0E-5	0.030	5.5E-5	0.068*	-3.8E-5	0.078**	2.4E-6	0.019	-2.5E-5	0.083**	3.4E-4**	0.127***	-5.0E-5
	(0.031)	(5.5E-5)	(0.031)	(5.8E-5)	(0.031)	(5.8E-5)	(0.041)	(1.3E-4)	(0.031)	(5.5E-5)	(0.031)	(8.9E-5)	(0.033)	(1.5E-4)	(0.047)	(1.2E-4)
I	-4.534	-1.6E-3	13.979	-0.079	71.319	-0.263**	156.456**	-0.493**	22.616	-0.195**	71.930*	-0.336***	224.177***	-0.024	81.244	-0.062
	(37.175)	(0.066)	(44.668)	(0.085)	(52.052)	(0.085)	(61.849)	(0.201)	(53.868)	(0.096)	(38.565)	(0.111)	(38.299)	(0.174)	(105.575)	(0.274)
C	-1.114	9.0E-3**	-5.901**	0.012**	-7.717***	3.6E-3	-1.430	-0.015	-4.867	6.6E-3	-4.552**	1.4E-3	0.529	-1.2E-3	-2.685	-0.025
	(2.211)	(3.9E-3)	(2.710)	(5.2E-3)	(2.921)	(5.2E-3)	(7.534)	(0.024)	(3.067)	(5.4E-3)	(2.088)	(6.0E-3)	(1.661)	(7.5E-3)	(11.411)	(0.030)
P	3.202	0.075**	-55.470**	0.102**	-17.685	0.060	-33.516	0.057	-66.499**	0.078	-43.254**	0.088	-6.244	0.052	-133.196	-0.333
	(19.521)	(0.035)	(24.121)	(0.046)	(25.289)	(0.046)	(48.178)	(0.157)	(28.539)	(0.051)	(19.005)	(0.055)	(15.643)	(0.071)	(139.994)	(0.363)
T	5.443***	4.0E-3	7.811***	6.3E-3	6.331**	0.015***	3.701	-7.1E-4	9.468***	0.011**	1.482	0.025***	-2.642*	0.013*	15.924***	-2.5E-3
	(2.027)	(3.6E-3)	(2.649)	(5.1E-3)	(2.845)	(5.1E-3)	(3.985)	(0.013)	(3.138)	(5.6E-3)	(1.993)	(5.7E-3)	(1.571)	(7.1E-3)	(6.124)	(0.016)
R^2	0.272	0.073	0.376	0.077	0.419	0.170	0.407	0.085	0.453	0.115	0.289	0.165	0.377	0.134	0.337	0.102
Adj. R^2	0.258	0.056	0.364	0.060	0.405	0.151	0.393	0.064	0.441	0.095	0.279	0.153	0.365	0.117	0.320	0.078

Panel A: Cryptocurrencies (Cont.)

	DOT		DOGE		SHIB		MATIC		CRO		UNI		ALGO		LTC	
	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$
Intercept	295.251	1.429	-75.686	1.902**	-3070.141**	3.272	-1981.824**	1.874	-482.960	-0.184	1072.168	1.796	-177.032	0.224	529.874	0.127
	(725.170)	(1.349)	(337.655)	(0.965)	(726.317)	(6.281)	(324.403)	(1.260)	(305.354)	(0.744)	(741.820)	(1.420)	(231.540)	(0.738)	(324.567)	(0.576)
$ABSR_{t-1}$	46.611*	0.083*	47.505***	0.268***	20.310***	0.297***	18.803**	0.117***	8.569	0.116***	-21.193	0.022	27.935***	0.078**	6.580	0.080***
	(24.510)	(0.046)	(10.815)	(0.031)	(5.060)	(0.044)	(8.353)	(0.032)	(12.553)	(0.031)	(24.265)	(0.046)	(10.427)	(0.033)	(17.231)	(0.031)
$ABSR_{t-2}$	-2.459	0.146***	2.770	0.145***	-1.795	0.138***	19.454**	0.123***	16.550	0.029	-17.930	0.088*	2.728	0.056*	-16.779	0.037
	(24.625)	(0.046)	(11.215)	(0.032)	(5.123)	(0.044)	(8.406)	(0.033)	(12.555)	(0.031)	(24.141)	(0.046)	(10.325)	(0.033)	(17.282)	(0.031)
$ABSR_{t-3}$	-45.210*	0.066	11.823	0.062*			8.164	0.081**	17.313	0.112***	-3.022	0.051	8.953	-0.030	7.732	0.031
	(24.822)	(0.046)	(11.278)	(0.032)			(8.404)	(0.033)	(12.543)	(0.031)	(24.056)	(0.046)	(10.351)	(0.033)	(17.293)	(0.031)
W_{t-1}	0.127***	6.6E-5	0.129***	3.6E-4***	0.188***	7.9E-5	0.039	2.9E-4**	0.134***	1.1E-4	0.124***	8.4E-5	0.140***	2.3E-4**	0.122***	1.7E-4***
	(0.046)	(8.6E-5)	(0.031)	(8.8E-5)	(0.044)	(3.8E-4)	(0.032)	(1.3E-4)	(0.030)	(7.4E-5)	(0.047)	(9.0E-5)	(0.033)	(1.1E-4)	(0.031)	(5.4E-5)
W_{t-2}	0.136***	-1.0E-5	0.111***	-3.0E-5	0.152***	-2.0E-4	0.108***	-1.8E-4	0.058*	3.7E-5	0.043	-5.5E-5	0.091***	1.4E-4	0.140***	7.2E-5
	(0.046)	(8.6E-5)	(0.031)	(8.9E-5)	(0.043)	(3.8E-4)	(0.032)	(1.3E-4)	(0.031)	(7.5E-5)	(0.047)	(8.9E-5)	(0.034)	(1.1E-4)	(0.031)	(5.5E-5)
W_{t-3}	0.102**	1.1E-4	0.061*	-1.0E-5			0.070**	-3.0E-5	0.144***	-7.4E-5	0.021	-7.3E-5	6.7E-3	3.0E-5	0.111***	8.7E-6
	(0.047)	(8.7E-5)	(0.031)	(9.0E-5)			(0.033)	(1.3E-4)	(0.030)	(7.4E-5)	(0.047)	(9.0E-5)	(0.034)	(1.1E-4)	(0.031)	(5.5E-5)
I	54.037	-0.246	12.804	-0.363**	413.383***	-1.070	364.422***	-0.449**	94.542*	-0.059	-15.030	-0.561**	68.293*	-0.140	-105.860*	-0.112
	(118.253)	(0.220)	(56.049)	(0.160)	(114.218)	(0.988)	(58.069)	(0.226)	(50.714)	(0.124)	(124.059)	(0.237)	(40.243)	(0.128)	(54.201)	(0.096)
C	-8.011	-0.022	-2.715	-4.3E-3	4.600	0.064	-0.529	2.1E-3	-0.832	6.5E-3	-3.861	-0.020	-4.159*	8.3E-3	-1.296	7.1E-3
	(12.757)	(0.024)	(3.066)	(8.8E-3)	(11.891)	(0.103)	(2.186)	(8.5E-3)	(2.741)	(6.7E-3)	(13.225)	(0.025)	(2.130)	(6.8E-3)	(3.015)	(5.3E-3)
P	-123.299	4.5E-3	2.108	0.028	165.834	0.546	-8.877	0.139*	-8.550	0.111*	-211.924	0.310	-41.805**	0.124*	16.839	0.107**
	(159.955)	(0.297)	(27.149)	(0.078)	(154.490)	(1.336)	(21.086)	(0.082)	(25.183)	(0.061)	(164.613)	(0.315)	(20.496)	(0.065)	(27.635)	(0.049)
T	0.035	3.9E-3	11.306***	0.022**	-1.730	0.111**	-2.065	0.019**	3.427	8.6E-3	6.322	-3.3E-3	4.474**	3.2E-3	3.279	0.015***
	(6.653)	(0.012)	(3.254)	(9.3E-3)	(6.172)	(0.053)	(2.097)	(8.1E-3)	(2.579)	(6.3E-3)	(6.657)	(0.013)	(1.958)	(6.2E-3)	(2.804)	(5.0E-3)
R^2	0.141	0.111	0.572	0.242	0.363	0.172	0.474	0.132	0.478	0.126	0.087	0.096	0.213	0.058	0.143	0.075
Adj. R^2	0.109	0.077	0.563	0.226	0.353	0.159	0.465	0.118	0.469	0.111	0.058	0.067	0.200	0.044	0.128	0.059

Panel A: Cryptocurrencies (Cont.)

	LINK		NEAR		BCH		TRX		ATOM		XLM		MANA		FTM		AXS	
	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$	W_t	$ABSR_t$
Intercept	308.337	-0.588	-542.910	1.808	635.933**	0.800	-171.774	0.687	-616.650*	0.474	245.203	0.870	-245.079	0.167	-402.079*	0.816	-2028.815	-2.181
	(315.400)	(0.693)	(478.579)	(1.839)	(300.215)	(0.662)	(325.064)	(0.577)	(178.364)	(0.856)	(300.755)	(0.607)	(186.000)	(0.802)	(157.350)	(1.025)	(726.648)	(2.850)
$ABSR_{t-1}$	12.572	0.101***	-6.897	0.045	6.437	0.106***	7.159	0.119***	3.221	0.173***	9.567	0.158***	21.664***	0.268***	0.633	0.079***	12.080	0.078
	(14.001)	(0.031)	(12.812)	(0.049)	(13.865)	(0.031)	(17.228)	(0.031)	(6.481)	(0.031)	(15.202)	(0.031)	(7.217)	(0.031)	(4.717)	(0.031)	(12.565)	(0.049)
$ABSR_{t-2}$	16.772	0.076**	13.439	0.017	8.938	0.054*	10.061	0.076**	4.342	0.106***	28.062*	0.072**	-2.931	0.048	5.373	0.052*	8.343	0.069
	(14.021)	(0.031)	(12.760)	(0.049)	(13.944)	(0.031)	(17.337)	(0.031)	(6.563)	(0.031)	(15.334)	(0.031)	(7.472)	(0.032)	(4.720)	(0.031)	(12.572)	(0.049)
$ABSR_{t-3}$	10.507	0.033	-13.112	0.045	14.611	1.3E-3	17.893	0.023	-2.797	0.066**	1.055	0.082***	19.308***	0.025	10.746**	0.096***		
	(14.081)	(0.031)	(12.733)	(0.049)	(13.950)	(0.031)	(17.326)	(0.031)	(6.541)	(0.031)	(15.373)	(0.031)	(7.479)	(0.032)	(4.723)	(0.031)		
W_{t-1}	0.144***	1.5E-4**	-4.9E-4	2.2E-4	0.043	1.4E-4**	0.115***	3.4E-5	0.090***	1.7E-4	0.135***	3.6E-5	0.116***	5.8E-4***	0.043	3.3E-4*	0.117**	2.9E-4
	(0.031)	(6.7E-5)	(0.049)	(1.9E-4)	(0.031)	(6.8E-5)	(0.031)	(5.4E-5)	(0.031)	(1.5E-4)	(0.031)	(6.2E-5)	(0.031)	(1.3E-4)	(0.031)	(2.0E-4)	(0.049)	(1.9E-4)
W_{t-2}	0.034	-4.7E-5	0.075	2.1E-4	0.043	-4.0E-5	0.065**	5.6E-5	-0.013	9.5E-5	0.083***	3.1E-5	0.056*	-3.6E-4***	0.089***	-8.6E-5	0.117**	-2.6E-4
	(0.031)	(6.8E-5)	(0.049)	(1.9E-4)	(0.031)	(6.7E-5)	(0.031)	(5.4E-5)	(0.031)	(1.5E-4)	(0.031)	(6.2E-5)	(0.031)	(1.3E-4)	(0.031)	(2.0E-4)	(0.049)	(1.9E-4)
W_{t-3}	0.058*	-9.5E-6	0.028	2.0E-4	0.058*	-4.1E-5	0.069**	4.1E-5	-0.014	-5.8E-5	0.069**	-2.7E-5	0.099***	-2.1E-4	0.025	-5.4E-5		
	(0.031)	(6.8E-5)	(0.049)	(1.9E-4)	(0.031)	(6.8E-5)	(0.031)	(5.4E-5)	(0.031)	(1.5E-4)	(0.031)	(6.2E-5)	(0.031)	(1.4E-4)	(0.031)	(2.0E-4)		
I	-2.321	-0.067	159.890*	-0.144	-61.536	-0.250**	29.234	-0.189*	125.844**	-0.208	-25.045	-0.197**	40.623	-0.133	77.963***	-0.251	256.454**	0.489
	(51.120)	(0.112)	(85.170)	(0.327)	(49.979)	(0.110)	(54.471)	(0.097)	(31.026)	(0.149)	(49.733)	(0.100)	(30.926)	(0.133)	(26.604)	(0.173)	(124.353)	(0.488)
C	0.334	0.016**	-1.612	0.029	-7.172**	7.5E-3	-0.144	4.7E-3	-2.361	6.7E-3	-4.772*	2.9E-3	-0.820	7.0E-3	-1.714	0.012	27.435*	0.168***
	(3.024)	(6.6E-3)	(9.681)	(0.037)	(2.825)	(6.2E-3)	(3.024)	(5.4E-3)	(1.576)	(7.6E-3)	(2.763)	(5.6E-3)	(1.711)	(7.4E-3)	(1.399)	(9.1E-3)	(16.528)	(0.065)
P	-62.784**	0.205***	-74.062	-0.223	-57.318**	0.127**	4.444	0.079	-16.184	0.150**	-19.025	0.051	4.577	0.124*	-6.049	0.125	118.523	-0.190
	(29.575)	(0.065)	(90.264)	(0.347)	(25.795)	(0.057)	(27.572)	(0.049)	(14.849)	(0.071)	(24.766)	(0.050)	(15.589)	(0.067)	(12.510)	(0.081)	(117.788)	(0.462)
T	2.757	0.012**	-3.339	7.3E-3	2.312	0.020***	5.161*	0.014***	0.028	0.011*	4.738*	0.019***	2.158	0.023***	-0.150	0.026***	1.909	0.036*
	(2.688)	(5.9E-3)	(3.824)	(0.015)	(2.626)	(5.8E-3)	(2.918)	(5.2E-3)	(1.450)	(7.0E-3)	(2.577)	(5.2E-3)	(1.604)	(6.9E-3)	(1.309)	(8.5E-3)	(4.899)	(0.019)
R^2	0.172	0.097	0.248	0.077	0.048	0.076	0.192	0.101	0.158	0.112	0.111	0.085	0.344	0.165	0.325	0.091	0.087	0.092
Adj. R^2	0.157	0.081	0.212	0.033	0.032	0.060	0.179	0.086	0.149	0.101	0.101	0.075	0.329	0.147	0.309	0.071	0.069	0.074

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(h) Vector auto regression for the number of YouTube Video Count and absolute value of Cryptocurrency return.

Panel A: Cryptocurrencies

	BTC		ETH		ETH		SOL		ADA		XRP		LUNA		AVAX	
	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$
Intercept	-45.718	-0.206	-15.908	0.126	-52.490	1.184**	-79.177	2.833*	-11.783	0.749	-47.040	1.518**	-127.002***	-0.566	-132.668**	2.853*
	(73.021)	(0.400)	(64.043)	(0.515)	(40.067)	(0.515)	(49.456)	(1.506)	(41.248)	(0.563)	(56.991)	(0.644)	(20.103)	(1.093)	(63.819)	(1.686)
$ABSR_{t-1}$	-2.368	0.022	-0.615	0.055*	4.888**	0.108***	-0.274	0.119***	3.671	0.123***	3.033	0.138***	-0.271	0.148***	5.549***	0.023
	(5.612)	(0.031)	(3.794)	(0.030)	(2.062)	(0.030)	(1.350)	(0.041)	(2.245)	(0.031)	(2.732)	(0.031)	(0.600)	(0.033)	(1.782)	(0.047)
$ABSR_{t-2}$	-11.636**	0.048	-0.181	0.044	2.963	0.131***	0.990	0.084**	1.479	0.021	-1.460	0.140***	-1.159*	0.087***	5.288***	0.083*
	(5.605)	(0.031)	(3.795)	(0.030)	(2.069)	(0.030)	(1.360)	(0.041)	(2.261)	(0.031)	(2.753)	(0.031)	(0.606)	(0.033)	(1.789)	(0.047)
$ABSR_{t-3}$	-0.316	5.1E-3	-1.735	0.029	-0.977	6.5E-3	1.397	0.084**	2.225	0.015	1.775	0.041	0.524	1.8E-3	-0.542	0.140***
	(5.622)	(0.031)	(3.798)	(0.031)	(2.083)	(0.031)	(1.364)	(0.042)	(2.258)	(0.031)	(2.778)	(0.031)	(0.608)	(0.033)	(1.775)	(0.047)
N_{t-1}	1.7E-39***	8.4E-4***	0.417***	4.7E-4*	0.388***	3.5E-3***	0.316***	1.5E-3	0.323***	1.8E-3***	0.457***	2.2E-3***	0.598***	4.1E-3**	0.422***	3.2E-3**
	(0.030)	(1.7E-4)	(0.030)	(2.4E-4)	(0.031)	(2.4E-4)	(0.040)	(1.2E-3)	(0.031)	(4.2E-4)	(0.031)	(3.5E-4)	(0.033)	(1.8E-3)	(0.048)	(1.3E-3)
N_{t-2}	0.160***	1.2E-5	0.115***	1.3E-4	0.051	-3.3E-4	0.060	-2.2E-3*	0.134***	1.0E-4	0.115***	-3.4E-4	0.077**	-5.4E-3***	0.158***	-2.0E-3
	(0.033)	(1.8E-4)	(0.033)	(2.7E-4)	(0.034)	(2.7E-4)	(0.042)	(1.3E-3)	(0.032)	(4.4E-4)	(0.034)	(3.9E-4)	(0.038)	(2.1E-3)	(0.052)	(1.4E-3)
N_{t-3}	0.062*	-1.9E-4	0.043	2.4E-4	0.094***	-6.0E-4	0.232***	-5.0E-4	0.089***	-4.9E-4	-0.015	-1.8E-4	-0.041	9.8E-4	-1.4E-3	-1.6E-3
	(0.034)	(1.8E-4)	(0.033)	(2.7E-4)	(0.033)	(2.7E-4)	(0.042)	(1.3E-3)	(0.033)	(4.4E-4)	(0.034)	(3.9E-4)	(0.038)	(2.1E-3)	(0.052)	(1.4E-3)
I	7.938	-0.021	7.084	-0.093	10.486	-0.282***	13.994**	-0.543**	5.891	-0.182*	10.215	-0.328***	23.177***	0.065	23.476**	-0.193
	(11.982)	(0.066)	(10.609)	(0.085)	(6.872)	(0.085)	(7.021)	(0.214)	(6.966)	(0.095)	(9.676)	(0.109)	(3.562)	(0.194)	(10.768)	(0.284)
C	0.156	7.3E-3*	-0.362	8.8E-3*	-0.589	5.0E-3	0.227	-0.016	-0.426	5.5E-3	-0.227	-7.9E-4	0.124	-8.9E-4	0.278	-0.027
	(0.708)	(3.9E-3)	(0.621)	(5.0E-3)	(0.361)	(5.0E-3)	(0.801)	(0.024)	(0.392)	(5.3E-3)	(0.511)	(5.8E-3)	(0.139)	(7.5E-3)	(1.117)	(0.030)
P	0.931	0.069**	-4.486	0.083*	-0.891	0.084*	0.188	0.060	-4.177	0.057	-1.580	0.067	-0.410	0.049	0.258	-0.368
	(6.317)	(0.035)	(5.575)	(0.045)	(3.225)	(0.045)	(5.151)	(0.157)	(3.537)	(0.048)	(4.648)	(0.053)	(1.305)	(0.071)	(13.594)	(0.359)
T	0.522	6.0E-3*	0.248	0.011**	0.517	0.020***	0.161	3.8E-5	0.497	0.012**	-0.256	0.026***	-0.454***	0.011	-0.157	4.4E-3
	(0.629)	(3.4E-3)	(0.566)	(4.5E-3)	(0.348)	(4.5E-3)	(0.423)	(0.013)	(0.373)	(5.1E-3)	(0.516)	(5.8E-3)	(0.137)	(7.5E-3)	(0.550)	(0.015)
R^2	0.570	0.098	0.507	0.073	0.581	0.192	0.558	0.097	0.562	0.109	0.456	0.198	0.688	0.137	0.527	0.109
Adj. R^2	0.560	0.078	0.499	0.058	0.574	0.178	0.545	0.070	0.555	0.095	0.447	0.184	0.682	0.121	0.515	0.085

Panel A: Cryptocurrencies (Cont.)

	DOT		DOGE		SHIB		MATIC		CRO		UNI		ALGO		LTC	
	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$
Intercept	-23.029	1.399	9.577	1.805*	-92.942***	4.287	-156.167***	3.337**	-44.948**	-0.113	26.410	1.446	-77.740***	0.898	38.607	0.211
	(63.957)	(1.354)	(23.762)	(0.935)	(29.284)	(6.478)	(33.726)	(1.434)	(18.361)	(0.763)	(44.660)	(1.403)	(22.853)	(0.770)	(24.629)	(0.574)
$ABSR_{t-1}$	2.413	0.062	2.295***	0.191***	0.747***	0.315***	-0.107	0.107***	-0.109	0.114***	-0.611	-1.2E-3	3.250***	0.059*	1.087	0.083***
	(2.189)	(0.046)	(0.821)	(0.032)	(0.203)	(0.045)	(0.763)	(0.032)	(0.730)	(0.030)	(1.485)	(0.047)	(0.980)	(0.033)	(1.312)	(0.031)
$ABSR_{t-2}$	2.321	0.157***	0.190	0.153***	0.208	0.143***	0.879	0.122***	0.872	0.034	-1.057	0.090*	-0.497	0.046	-0.995	0.036
	(2.190)	(0.046)	(0.835)	(0.033)	(0.207)	(0.046)	(0.767)	(0.033)	(0.733)	(0.030)	(1.479)	(0.046)	(0.986)	(0.033)	(1.310)	(0.031)
$ABSR_{t-3}$	1.413	0.095**	2.476***	0.084**	-0.183	-0.022	1.122	0.084***	0.948	0.116***	1.481	0.063	0.404	-0.031	0.146	0.039
	(2.086)	(0.044)	(0.841)	(0.033)	(0.202)	(0.045)	(0.770)	(0.033)	(0.723)	(0.030)	(1.475)	(0.046)	(0.970)	(0.033)	(1.311)	(0.031)
N_{t-1}	0.233***	2.4E-3**	0.544***	0.011***	0.308***	5.7E-3	0.342***	6.5E-3***	0.363***	4.7E-3***	0.220***	4.5E-3***	0.223***	5.3E-3***	0.249***	2.9E-3***
	(0.046)	(9.8E-4)	(0.032)	(1.3E-3)	(0.044)	(9.8E-3)	(0.032)	(1.4E-3)	(0.030)	(1.3E-3)	(0.047)	(1.5E-3)	(0.034)	(1.1E-3)	(0.030)	(7.1E-4)
N_{t-2}	0.098**	-1.3E-4	0.010	-4.1E-3***	0.141***	-2.5E-3	0.031	-1.0E-3	0.052	1.0E-3	0.124***	-1.5E-3	0.106***	-9.2E-5	0.208***	-7.6E-4
	(0.047)	(1.0E-3)	(0.036)	(1.4E-3)	(0.046)	(0.010)	(0.034)	(1.5E-3)	(0.033)	(1.4E-3)	(0.048)	(1.5E-3)	(0.035)	(1.2E-3)	(0.031)	(7.3E-4)
N_{t-3}	0.157***	6.2E-5	0.075**	-3.2E-3**	0.161***	-1.4E-3	0.063*	-1.3E-4	0.048	-1.7E-3	0.012	-3.7E-4	0.105***	5.6E-4	7.6E-3	-4.8E-4
	(0.047)	(9.9E-4)	(0.036)	(1.4E-3)	(0.044)	(9.6E-3)	(0.035)	(1.5E-3)	(0.032)	(1.3E-3)	(0.048)	(1.5E-3)	(0.035)	(1.2E-3)	(0.032)	(7.4E-4)
I	18.048*	-0.300	-2.528	-0.340**	10.937**	-1.175	28.538***	-0.719***	8.339***	-0.077	13.279	-0.521**	17.823***	-0.273**	-8.282**	-0.132
	(10.668)	(0.226)	(3.938)	(0.155)	(4.504)	(0.996)	(6.109)	(0.260)	(3.079)	(0.128)	(8.078)	(0.254)	(4.065)	(0.137)	(4.116)	(0.096)
C	-1.135	-0.019	-0.080	-4.3E-3	0.100	0.060	0.066	9.1E-4	0.042	6.7E-3	-0.148	-0.014	-0.434**	9.3E-3	-0.082	7.3E-3
	(1.127)	(0.024)	(0.213)	(8.4E-3)	(0.465)	(0.103)	(0.199)	(8.5E-3)	(0.159)	(6.6E-3)	(0.812)	(0.026)	(0.201)	(6.8E-3)	(0.226)	(5.3E-3)
P	-16.176	0.074	0.975	0.022	6.972	0.457	-0.529	0.147*	-0.298	0.117*	-21.659**	0.334	-4.396**	0.138**	1.856	0.113**
	(14.277)	(0.302)	(1.913)	(0.075)	(6.116)	(1.353)	(1.927)	(0.082)	(1.461)	(0.061)	(10.225)	(0.321)	(1.928)	(0.065)	(2.066)	(0.048)
T	0.018	1.7E-3	0.531**	0.021**	-0.191	0.105*	-0.392*	0.024***	-0.121	0.011*	0.086	-2.5E-3	0.180	6.4E-3	0.158	0.016***
	(0.585)	(0.012)	(0.215)	(8.5E-3)	(0.244)	(0.054)	(0.206)	(8.8E-3)	(0.145)	(6.0E-3)	(0.402)	(0.013)	(0.181)	(6.1E-3)	(0.210)	(4.9E-3)
R^2	0.316	0.102	0.699	0.289	0.505	0.178	0.689	0.148	0.581	0.139	0.142	0.108	0.452	0.065	0.292	0.072
Adj. R^2	0.296	0.075	0.692	0.273	0.495	0.162	0.684	0.132	0.575	0.126	0.116	0.080	0.444	0.053	0.282	0.060

Panel A: Cryptocurrencies (Cont.)

	LINK		NEAR		BCH		TRX		ATOM		XLM		MANA		FTM		AXS	
	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$
Intercept	-27.588	-0.215	-92.818**	2.345	31.333	0.813	-49.156	0.691	-78.331**	1.140	5.511	0.855	-39.998**	0.234	-72.156**	1.379	-148.916*	-2.756
	(25.474)	(0.685)	(47.288)	(1.885)	(30.979)	(0.647)	(40.269)	(0.578)	(16.782)	(0.929)	(23.652)	(0.598)	(19.059)	(0.807)	(20.766)	(1.123)	(57.634)	(3.129)
$ABSR_{t-1}$	1.097	0.097***	-2.056*	0.028	1.810	0.102***	3.039	0.114***	0.244	0.164***	1.913	0.131***	2.289***	0.217***	-0.334	0.063**	1.534*	0.070
	(1.157)	(0.031)	(1.246)	(0.050)	(1.466)	(0.031)	(2.134)	(0.031)	(0.565)	(0.031)	(1.222)	(0.031)	(0.751)	(0.032)	(0.572)	(0.031)	(0.923)	(0.050)
$ABSR_{t-2}$	-0.727	0.076**	-0.251	0.037	-0.265	0.036	-1.307	0.075**	0.555	0.104***	-9.0E-3	0.064**	-0.831	0.056*	-0.126	0.045	1.546*	0.079
	(1.159)	(0.031)	(1.251)	(0.050)	(1.471)	(0.031)	(2.148)	(0.031)	(0.571)	(0.032)	(1.228)	(0.031)	(0.766)	(0.032)	(0.572)	(0.031)	(0.920)	(0.050)
$ABSR_{t-3}$	0.081	0.037	0.999	0.083*	2.800*	-0.011	1.896	0.026	0.383	0.064**	1.443	0.070**	0.079	0.046	1.480***	0.095***	-0.831	0.079
	(1.159)	(0.031)	(1.249)	(0.050)	(1.471)	(0.031)	(2.144)	(0.031)	(0.569)	(0.032)	(1.215)	(0.031)	(0.767)	(0.032)	(0.572)	(0.031)	(0.906)	(0.049)
N_{t-1}	0.227***	1.9E-3**	0.485***	7.4E-3***	0.217***	1.3E-3**	0.273***	9.1E-4**	0.185***	4.1E-3**	0.287***	3.9E-3***	0.387***	0.012***	0.292***	6.9E-3***	0.217***	5.8E-3**
	(0.031)	(8.3E-4)	(0.049)	(2.0E-3)	(0.031)	(6.4E-4)	(0.031)	(4.4E-4)	(0.031)	(1.7E-3)	(0.031)	(7.8E-4)	(0.032)	(1.3E-3)	(0.031)	(1.7E-3)	(0.049)	(2.7E-3)
N_{t-2}	0.054*	-3.4E-4	-0.034	-1.5E-3	0.102***	-1.1E-4	0.193***	4.6E-5	0.143***	1.1E-3	0.085***	-1.2E-3	0.021	-5.9E-3***	0.063**	-9.3E-4	0.146***	-6.8E-3**
	(0.032)	(8.5E-4)	(0.055)	(2.2E-3)	(0.031)	(6.5E-4)	(0.032)	(4.6E-4)	(0.031)	(1.7E-3)	(0.032)	(8.1E-4)	(0.034)	(1.4E-3)	(0.032)	(1.7E-3)	(0.050)	(2.7E-3)
N_{t-3}	0.126***	-4.9E-4	-0.012	1.2E-3	0.038	1.3E-3**	0.073**	1.7E-4	0.101***	-2.0E-3	0.117***	5.8E-4	0.081**	-2.1E-3	0.127***	1.8E-3	0.106**	-1.2E-3
	(0.032)	(8.5E-4)	(0.055)	(2.2E-3)	(0.032)	(6.6E-4)	(0.032)	(4.6E-4)	(0.031)	(1.7E-3)	(0.031)	(7.9E-4)	(0.035)	(1.5E-3)	(0.032)	(1.7E-3)	(0.050)	(2.7E-3)
I	8.200*	-0.108	21.208**	-0.205	-1.110	-0.288***	8.896	-0.191**	15.229***	-0.340**	0.273	-0.200**	6.183*	-0.133	13.090***	-0.355*	20.658**	0.548
	(4.311)	(0.116)	(8.445)	(0.337)	(5.228)	(0.109)	(6.750)	(0.097)	(2.987)	(0.165)	(3.907)	(0.099)	(3.197)	(0.135)	(3.609)	(0.195)	(9.592)	(0.521)
C	-0.028	0.015**	0.423	0.017	-0.575*	0.012*	-0.035	4.4E-3	-0.122	7.7E-3	-0.423*	5.9E-3	0.051	6.0E-3	-0.048	0.012	1.745	0.156**
	(0.245)	(6.6E-3)	(0.917)	(0.037)	(0.298)	(6.2E-3)	(0.373)	(5.3E-3)	(0.136)	(7.6E-3)	(0.218)	(5.5E-3)	(0.167)	(7.1E-3)	(0.168)	(9.1E-3)	(1.256)	(0.068)
P	-3.787	0.174***	-5.526	-0.261	-5.041*	0.168***	0.023	0.081*	-1.273	0.164**	-1.200	0.056	1.231	0.111*	-0.083	0.128	6.647	-0.131
	(2.333)	(0.063)	(8.507)	(0.339)	(2.746)	(0.057)	(3.400)	(0.049)	(1.289)	(0.071)	(1.948)	(0.049)	(1.521)	(0.064)	(1.507)	(0.082)	(8.439)	(0.458)
T	6.3E-3	0.014**	-0.608	9.8E-3	0.553*	0.015**	0.147	0.016***	-0.152	0.013*	0.330*	0.017***	0.193	0.021***	-0.144	0.028***	-0.334	0.029
	(0.218)	(5.9E-3)	(0.370)	(0.015)	(0.284)	(5.9E-3)	(0.363)	(5.2E-3)	(0.126)	(7.0E-3)	(0.201)	(5.1E-3)	(0.155)	(6.6E-3)	(0.160)	(8.7E-3)	(0.358)	(0.019)
R^2	0.362	0.093	0.524	0.121	0.375	0.093	0.604	0.105	0.520	0.118	0.249	0.104	0.523	0.202	0.468	0.096	0.461	0.109
Adj. R^2	0.351	0.078	0.499	0.073	0.364	0.076	0.597	0.090	0.514	0.107	0.243	0.096	0.515	0.188	0.456	0.076	0.445	0.083

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(i) Vector auto regression for the number of YouTube Video Count x sentiment and Cryptocurrency return.

Panel A: Cryptocurrencies	BTC		ETH		BNB		SOL		ADA		XRP		LUNA		AVAX	
	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t
Intercept	102.619*	0.576	76.900*	0.674	20.871	1.765**	4.476	3.873*	20.341	2.083**	53.726	0.774	14.121*	0.074	16.100	2.533
	(53.304)	(0.593)	(43.403)	(0.765)	(23.307)	(0.765)	(24.840)	(2.081)	(27.072)	(0.867)	(34.934)	(0.897)	(8.008)	(1.191)	(34.062)	(2.407)
R_{t-1}	12.543***	-0.087**	4.667**	-0.140***	2.163**	-0.116***	0.294	-0.113***	1.185	-0.080**	2.903**	-0.036	-0.050	-0.016	1.471**	-7.0E-3
	(3.079)	(0.034)	(1.860)	(0.033)	(0.873)	(0.033)	(0.492)	(0.041)	(0.993)	(0.032)	(1.253)	(0.032)	(0.219)	(0.032)	(0.671)	(0.047)
R_{t-2}	5.982*	9.2E-3	3.303*	0.021	2.648***	0.066**	-0.140	-0.010	3.189***	0.030	1.029	-0.014	-0.023	0.060*	2.469***	0.025
	(3.119)	(0.035)	(1.889)	(0.033)	(0.882)	(0.033)	(0.493)	(0.041)	(0.997)	(0.032)	(1.256)	(0.032)	(0.218)	(0.032)	(0.669)	(0.047)
R_{t-3}	9.306***	-0.020	1.839	-0.016	0.866	-0.021	0.279	-0.014	0.699	-0.022	2.294*	0.014	0.024	-0.031	1.118*	0.091**
	(3.110)	(0.035)	(1.886)	(0.033)	(0.886)	(0.033)	(0.492)	(0.041)	(1.000)	(0.032)	(1.256)	(0.032)	(0.218)	(0.032)	(0.656)	(0.046)
$NSENT_{t-1}$	0.568***	5.6E-4	0.618***	2.1E-3***	0.571***	7.5E-3***	0.494***	1.4E-3	0.430***	1.2E-3	0.651***	5.9E-4	0.548***	7.0E-3	0.366***	1.3E-4
	(0.034)	(3.8E-4)	(0.033)	(5.8E-4)	(0.032)	(5.8E-4)	(0.041)	(3.4E-3)	(0.032)	(1.0E-3)	(0.032)	(8.2E-4)	(0.033)	(4.9E-3)	(0.047)	(3.3E-3)
$NSENT_{t-2}$	0.159***	-2.3E-4	0.090**	-7.1E-4	0.051	-5.8E-3***	0.047	1.2E-3	0.207***	-6.4E-4	0.087**	-8.0E-4	0.041	-9.9E-3*	0.285***	6.0E-3*
	(0.039)	(4.3E-4)	(0.038)	(6.7E-4)	(0.036)	(6.7E-4)	(0.045)	(3.8E-3)	(0.034)	(1.1E-3)	(0.038)	(9.7E-4)	(0.037)	(5.5E-3)	(0.048)	(3.4E-3)
$NSENT_{t-3}$	0.029	3.1E-5	0.011	-1.1E-3*	0.147***	5.0E-4	0.130***	5.1E-4	0.101***	-2.0E-4	-0.033	-8.0E-4	0.129***	4.0E-3	0.144***	-3.4E-3
	(0.039)	(4.3E-4)	(0.038)	(6.7E-4)	(0.037)	(6.7E-4)	(0.046)	(3.8E-3)	(0.035)	(1.1E-3)	(0.038)	(9.8E-4)	(0.037)	(5.6E-3)	(0.046)	(3.3E-3)
I	-16.878*	-0.061	-13.215*	-0.017	-4.393	-0.252*	-1.854	-0.413	-3.899	-0.224	-8.487	-0.115	-2.930**	0.118	-4.618	-0.279
	(8.771)	(0.098)	(7.138)	(0.126)	(3.825)	(0.126)	(3.172)	(0.266)	(4.431)	(0.142)	(5.753)	(0.148)	(1.382)	(0.205)	(5.624)	(0.397)
C	-0.542	-3.5E-3	-0.325	-9.8E-3	0.029	-0.010	0.088	-0.068*	-0.044	-0.014*	-0.317	-2.9E-3	9.0E-3	-9.6E-3	0.228	-0.078*
	(0.470)	(5.2E-3)	(0.384)	(6.8E-3)	(0.207)	(6.8E-3)	(0.436)	(0.037)	(0.238)	(7.6E-3)	(0.313)	(8.0E-3)	(0.070)	(0.010)	(0.612)	(0.043)
P	-1.713	-0.049	-0.639	-0.121**	0.728	-0.075	1.223	-0.302	0.299	-0.175***	-1.289	-0.029	0.456	-0.154	1.929	-0.165
	(4.116)	(0.046)	(3.389)	(0.060)	(1.835)	(0.060)	(2.765)	(0.232)	(2.129)	(0.068)	(2.770)	(0.071)	(0.662)	(0.098)	(7.288)	(0.515)
T	0.729*	2.5E-4	0.590*	-2.5E-3	0.251	1.0E-2	0.079	-0.017	0.176	5.7E-3	0.314	6.4E-3	0.109*	9.3E-4	0.330	-0.041*
	(0.433)	(4.8E-3)	(0.354)	(6.2E-3)	(0.189)	(6.2E-3)	(0.227)	(0.019)	(0.219)	(7.0E-3)	(0.285)	(7.3E-3)	(0.065)	(9.7E-3)	(0.303)	(0.021)
R^2	0.815	0.015	0.777	0.041	0.694	0.081	0.545	0.053	0.734	0.027	0.769	0.009	0.609	0.038	0.611	0.034
Adj. R^2	0.812	0.002	0.773	0.027	0.687	0.060	0.532	0.025	0.730	0.011	0.766	-0.004	0.601	0.019	0.602	0.012

Panel A: Cryptocurrencies (Cont.)

	DOT		DOGE		SHIB		MATIC		CRO		UNI		ALGO		LTC	
	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t
Intercept	71.341*	2.707	26.511*	2.484**	5.382	6.264	5.970	2.596**	30.848***	-0.059	68.632**	5.272**	25.430*	0.567	16.018	1.281
	(41.335)	(2.141)	(13.888)	(1.207)	(13.176)	(7.026)	(11.728)	(1.311)	(10.749)	(1.086)	(31.406)	(2.580)	(13.151)	(1.162)	(13.307)	(0.818)
R_{t-1}	2.928***	-0.072	1.471***	-0.039	0.372***	0.195***	0.547*	-1.0E-3	-0.337	-0.043	1.156**	-0.090*	0.484	-0.087***	2.279***	-0.062*
	(0.916)	(0.047)	(0.375)	(0.033)	(0.085)	(0.045)	(0.287)	(0.032)	(0.301)	(0.030)	(0.567)	(0.047)	(0.377)	(0.033)	(0.517)	(0.032)
R_{t-2}	1.251	-0.042	1.352***	-0.076**	4.4E-3	-0.079*	0.122	0.085***	1.094***	6.1E-3	1.399**	-0.024	-0.246	-0.011	0.975*	-7.9E-4
	(0.930)	(0.048)	(0.363)	(0.032)	(0.087)	(0.047)	(0.285)	(0.032)	(0.301)	(0.030)	(0.566)	(0.047)	(0.378)	(0.033)	(0.522)	(0.032)
R_{t-3}	0.564	0.048	1.392***	0.109***	0.042	0.063	-0.435	3.9E-3	0.442	0.141***	0.645	-0.057	0.302	0.031	0.348	-0.047
	(0.890)	(0.046)	(0.357)	(0.031)	(0.087)	(0.046)	(0.286)	(0.032)	(0.301)	(0.030)	(0.568)	(0.047)	(0.373)	(0.033)	(0.519)	(0.032)
$NSENT_{t-1}$	0.328***	3.0E-3	0.566***	0.015***	0.259***	0.015	0.406***	-0.011***	0.302***	7.4E-3**	0.294***	1.7E-3	0.274***	5.6E-4	0.381***	2.2E-3
	(0.048)	(2.5E-3)	(0.032)	(2.8E-3)	(0.045)	(0.024)	(0.032)	(3.6E-3)	(0.030)	(3.1E-3)	(0.047)	(3.9E-3)	(0.034)	(3.0E-3)	(0.032)	(1.9E-3)
$NSENT_{t-2}$	0.235***	6.0E-3**	0.068*	-0.016***	0.163***	0.012	0.107***	1.2E-3	0.082**	-1.0E-2***	0.266***	5.3E-3	0.155***	-7.2E-4	0.211***	1.8E-3
	(0.050)	(2.6E-3)	(0.036)	(3.1E-3)	(0.046)	(0.025)	(0.035)	(3.9E-3)	(0.032)	(3.3E-3)	(0.049)	(4.1E-3)	(0.035)	(3.1E-3)	(0.034)	(2.1E-3)
$NSENT_{t-3}$	0.156***	-6.6E-3**	0.147***	3.9E-3	0.167***	-0.016	0.206***	3.3E-3	0.052	4.4E-3	-4.2E-3	-2.0E-3	0.179***	3.5E-3	0.081**	-2.1E-3
	(0.051)	(2.6E-3)	(0.032)	(2.7E-3)	(0.047)	(0.025)	(0.035)	(3.9E-3)	(0.032)	(3.2E-3)	(0.050)	(4.1E-3)	(0.036)	(3.2E-3)	(0.034)	(2.1E-3)
I	-11.338*	-0.238	-3.990*	-0.394**	0.014	-2.416**	-1.106	-0.376*	-5.452***	0.070	-8.042*	-1.219***	-4.910**	0.088	-2.318	-0.184
	(6.315)	(0.327)	(2.275)	(0.198)	(2.056)	(1.096)	(2.003)	(0.224)	(1.795)	(0.181)	(4.577)	(0.376)	(2.272)	(0.201)	(2.184)	(0.134)
C	-0.894	-0.058	-0.160	-0.011	-0.074	-0.062	5.6E-3	-0.018	-0.050	-5.1E-3	-0.401	-0.105**	-0.023	-0.017*	-0.135	-8.0E-3
	(0.695)	(0.036)	(0.125)	(0.011)	(0.229)	(0.122)	(0.105)	(0.012)	(0.087)	(8.8E-3)	(0.499)	(0.041)	(0.109)	(9.6E-3)	(0.120)	(7.4E-3)
P	-1.287	-0.265	-0.871	-0.059	-1.152	1.594	0.034	-0.102	-0.110	-0.068	-4.974	0.392	0.407	-0.221**	-0.619	-0.052
	(8.409)	(0.436)	(1.112)	(0.097)	(2.879)	(1.535)	(0.977)	(0.109)	(0.775)	(0.078)	(5.792)	(0.476)	(1.035)	(0.091)	(1.056)	(0.065)
T	-0.087	-0.033*	0.130	0.019*	-0.023	0.066	-4.5E-3	0.016	0.208**	-2.8E-3	0.106	-0.029	0.160	-2.9E-3	0.115	4.7E-3
	(0.349)	(0.018)	(0.112)	(9.8E-3)	(0.118)	(0.063)	(0.095)	(0.011)	(0.086)	(8.7E-3)	(0.226)	(0.019)	(0.104)	(9.2E-3)	(0.109)	(6.7E-3)
R^2	0.605	0.079	0.649	0.064	0.534	0.067	0.684	0.049	0.497	0.049	0.492	0.089	0.532	0.040	0.624	0.023
Adj. R^2	0.594	0.052	0.646	0.055	0.519	0.036	0.680	0.035	0.489	0.035	0.474	0.056	0.524	0.023	0.619	0.010

Panel A: Cryptocurrencies (Cont.)

	LINK		NEAR		BCH		TRX		ATOM		XLM		MANA		FTM		AXS	
	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t
Intercept	27.953*	0.379	18.645	0.096	33.079*	0.905	43.403*	1.036	17.457**	0.539	25.611*	0.554	31.948***	0.264	7.178	1.248	3.607	0.163
	(14.580)	(1.067)	(21.727)	(2.757)	(19.356)	(0.918)	(24.680)	(0.862)	(7.967)	(1.183)	(14.498)	(0.860)	(11.309)	(1.226)	(8.863)	(1.358)	(27.516)	(4.101)
R_{t-1}	1.052**	-0.116***	0.106	-0.017	1.779***	-0.126***	3.025***	-0.082***	-0.045	-0.174***	0.919*	-0.093***	0.604**	-0.040	0.213	-0.041	0.077	-0.030
	(0.431)	(0.032)	(0.384)	(0.049)	(0.679)	(0.032)	(0.897)	(0.031)	(0.210)	(0.031)	(0.537)	(0.032)	(0.293)	(0.032)	(0.202)	(0.031)	(0.331)	(0.049)
R_{t-2}	0.530	0.011	0.677*	-0.074	2.449***	-0.022	0.969	0.014	0.423**	-0.069**	0.902*	-0.048	-0.409	-0.052*	0.211	0.038	0.325	0.058
	(0.436)	(0.032)	(0.382)	(0.048)	(0.689)	(0.033)	(0.907)	(0.032)	(0.213)	(0.032)	(0.540)	(0.032)	(0.294)	(0.032)	(0.202)	(0.031)	(0.331)	(0.049)
R_{t-3}	0.392	0.021	-0.239	-0.031	1.593**	-9.3E-3	1.671*	-0.036	0.245	-0.011	0.897*	-6.7E-3	-0.209	-0.080**	0.014	0.027	0.544	0.063
	(0.435)	(0.032)	(0.382)	(0.048)	(0.692)	(0.033)	(0.905)	(0.032)	(0.212)	(0.032)	(0.541)	(0.032)	(0.294)	(0.032)	(0.202)	(0.031)	(0.332)	(0.049)
$NSENT_{t-1}$	0.307***	4.6E-3**	0.464***	-2.7E-5	0.406***	3.8E-3**	0.426***	5.3E-4	0.396***	8.4E-3*	0.377***	0.014***	0.347***	0.015***	0.400***	8.2E-3*	0.422***	-0.013*
	(0.032)	(2.3E-3)	(0.048)	(6.1E-3)	(0.032)	(1.5E-3)	(0.031)	(1.1E-3)	(0.031)	(4.6E-3)	(0.032)	(1.9E-3)	(0.032)	(3.4E-3)	(0.031)	(4.7E-3)	(0.049)	(7.2E-3)
$NSENT_{t-2}$	0.118***	-3.2E-3	0.070	7.4E-3	0.172***	-7.2E-4	0.298***	-1.3E-4	0.224***	-7.8E-3	0.214***	-2.8E-3	0.123***	-4.0E-4	0.015	-6.5E-3	0.174***	-6.0E-4
	(0.033)	(2.4E-3)	(0.054)	(6.8E-3)	(0.035)	(1.6E-3)	(0.034)	(1.2E-3)	(0.033)	(5.0E-3)	(0.034)	(2.0E-3)	(0.033)	(3.6E-3)	(0.033)	(5.1E-3)	(0.053)	(7.9E-3)
$NSENT_{t-3}$	0.189***	1.2E-3	0.028	7.6E-3	0.083**	-3.4E-4	-0.028	-1.0E-3	0.030	-3.0E-3	0.072**	1.5E-3	0.116***	4.3E-3	0.205***	6.1E-3	0.106**	3.9E-3
	(0.033)	(2.4E-3)	(0.055)	(6.9E-3)	(0.035)	(1.7E-3)	(0.035)	(1.2E-3)	(0.033)	(5.0E-3)	(0.035)	(2.1E-3)	(0.034)	(3.7E-3)	(0.033)	(5.1E-3)	(0.053)	(7.9E-3)
I	-4.797**	9.2E-3	-4.853	0.350	-4.871	-0.116	-7.159*	-0.121	-3.306**	0.040	-4.502*	5.3E-3	-5.459***	0.086	-1.463	-0.088	-2.605	0.050
	(2.427)	(0.178)	(3.735)	(0.474)	(3.197)	(0.152)	(4.050)	(0.142)	(1.354)	(0.201)	(2.409)	(0.143)	(1.910)	(0.207)	(1.456)	(0.223)	(4.746)	(0.707)
C	-0.118	-5.3E-3	-0.052	-8.9E-3	-0.248	-7.4E-3	-0.187	-6.4E-3	-0.027	-0.013	-0.093	-6.2E-3	-0.096	-0.016	-3.3E-3	-0.014	0.024	0.039
	(0.127)	(9.3E-3)	(0.434)	(0.055)	(0.170)	(8.1E-3)	(0.215)	(7.5E-3)	(0.070)	(0.010)	(0.126)	(7.5E-3)	(0.093)	(0.010)	(0.082)	(0.013)	(0.633)	(0.094)
P	-0.238	-0.089	1.810	-0.432	-1.190	-0.053	-0.710	-0.076	0.202	-0.158	-0.090	-0.124*	-0.319	-0.153*	0.202	-0.158	2.344	-0.111
	(1.117)	(0.082)	(4.052)	(0.514)	(1.487)	(0.071)	(1.909)	(0.067)	(0.650)	(0.097)	(1.131)	(0.067)	(0.832)	(0.090)	(0.740)	(0.113)	(4.392)	(0.655)
T	0.210*	-8.7E-3	0.220	-0.034	0.166	1.2E-3	0.268	4.5E-3	0.133**	-5.0E-3	0.193	-3.0E-3	0.212**	-1.4E-3	0.079	2.7E-3	0.115	2.7E-3
	(0.121)	(8.8E-3)	(0.170)	(0.022)	(0.158)	(7.5E-3)	(0.200)	(7.0E-3)	(0.065)	(9.7E-3)	(0.119)	(7.1E-3)	(0.092)	(1.0E-2)	(0.073)	(0.011)	(0.182)	(0.027)
R^2	0.591	0.028	0.540	0.041	0.667	0.033	0.748	0.018	0.482	0.046	0.509	0.072	0.463	0.047	0.375	0.018	0.540	0.024
Adj. R^2	0.584	0.012	0.523	0.005	0.661	0.017	0.745	0.005	0.476	0.035	0.500	0.056	0.452	0.027	0.366	0.003	0.526	-0.005

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

Appendix I *Vector auto regression for Top Finfluencer*

(a) Vector auto regression for the number of YouTube Video Count and Cryptocurrency return for Top Finfluencer.

Panel C: Top FinFluencers	BTC		ETH		BNB		SOL		ADA		XRP		DOGE		SHIB		MATIC	
	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t
Intercept	-6.325	0.708	7.437	1.044	1.677	1.044**	-4.543	4.320**	-6.997	2.327***	-15.165**	0.390	0.247	3.060***	-6.746	5.843	-11.111**	2.245
	(5.847)	(0.550)	(6.611)	(0.722)	(2.057)	(0.722)	(4.548)	(2.051)	(4.418)	(0.814)	(6.677)	(0.907)	(3.908)	(1.179)	(4.402)	(6.985)	(2.283)	(1.380)
R_{t-1}	0.029	-0.067**	0.594**	-0.091***	0.107	-0.091***	0.162*	-0.097**	0.181	-0.074**	0.259	-0.031	0.365***	-0.040	-0.045	0.200***	-0.102*	-3.6E-3
	(0.322)	(0.030)	(0.280)	(0.031)	(0.076)	(0.031)	(0.089)	(0.040)	(0.165)	(0.030)	(0.224)	(0.030)	(0.106)	(0.032)	(0.028)	(0.044)	(0.053)	(0.032)
R_{t-2}			0.161	0.050	0.110	0.050**	0.086	-1.2E-3	-0.073	0.033	-0.043	-0.023	0.379***	-0.081**	0.071**	-0.095**	0.040	0.079**
			(0.282)	(0.031)	(0.076)	(0.031)	(0.089)	(0.040)	(0.165)	(0.030)	(0.225)	(0.030)	(0.106)	(0.032)	(0.028)	(0.044)	(0.053)	(0.032)
N_{t-1}	0.029	-2.3E-3	0.035	1.5E-3	0.092***	1.5E-3**	0.067*	-0.012	0.046	5.2E-3	0.040	1.7E-3	-0.032	0.075***	0.011	0.028	0.061*	0.020
	(0.030)	(2.8E-3)	(0.031)	(3.4E-3)	(0.031)	(3.4E-3)	(0.040)	(0.018)	(0.030)	(5.6E-3)	(0.030)	(4.1E-3)	(0.032)	(9.7E-3)	(0.044)	(0.070)	(0.032)	(0.020)
N_{t-2}			0.075**	4.3E-3	-0.027	4.3E-3	0.169***	-0.014	0.077**	-1.4E-3	0.015	6.8E-3*	-0.069**	-0.024**	0.123***	-0.023	-0.044	-0.015
			(0.031)	(3.3E-3)	(0.031)	(3.3E-3)	(0.040)	(0.018)	(0.030)	(5.6E-3)	(0.030)	(4.1E-3)	(0.033)	(9.9E-3)	(0.045)	(0.072)	(0.033)	(0.020)
I	1.646*	-0.080	-1.129	-0.080	-0.224	-0.080**	1.102*	-0.499*	1.412*	-0.280**	2.503**	-0.052	-0.296	-0.478**	0.993	-2.347**	1.976***	-0.310
	(0.961)	(0.090)	(1.078)	(0.118)	(0.334)	(0.118)	(0.588)	(0.265)	(0.724)	(0.133)	(1.101)	(0.149)	(0.641)	(0.193)	(0.696)	(1.104)	(0.391)	(0.237)
C	-0.066	-4.5E-3	-0.106*	-0.011*	-0.017	-0.011	-0.025	-0.078**	-0.045	-0.014*	-0.040	-3.1E-3	-0.016	-0.014	2.8E-3	-0.070	0.010	-0.018
	(0.054)	(5.0E-3)	(0.062)	(6.8E-3)	(0.019)	(6.8E-3)	(0.080)	(0.036)	(0.040)	(7.4E-3)	(0.058)	(7.9E-3)	(0.035)	(0.011)	(0.076)	(0.121)	(0.019)	(0.012)
P	-0.562	-0.054	-0.204	-0.124**	-0.088	-0.124	-0.333	-0.291	-0.157	-0.161**	0.298	-0.020	0.306	-0.082	0.268	1.609	0.028	-0.105
	(0.482)	(0.045)	(0.560)	(0.061)	(0.167)	(0.061)	(0.504)	(0.227)	(0.362)	(0.067)	(0.525)	(0.071)	(0.319)	(0.096)	(0.960)	(1.523)	(0.181)	(0.110)
T	0.110**	1.3E-3	0.307***	-1.3E-3	0.040**	-1.3E-3*	9.9E-4	-0.019	0.059	8.0E-3	0.112**	7.9E-3	0.118***	0.020**	-0.017	0.054	-0.035**	0.015
	(0.048)	(4.5E-3)	(0.062)	(6.7E-3)	(0.017)	(6.7E-3)	(0.042)	(0.019)	(0.036)	(6.6E-3)	(0.052)	(7.1E-3)	(0.033)	(0.010)	(0.039)	(0.063)	(0.018)	(0.011)
R^2	0.082	0.007	0.199	0.055	0.084	0.052	0.081	0.020	0.089	0.018	0.249	0.016	0.137	0.110	0.108	0.064	0.075	0.043
Adj. R^2	(0.077)	(0.002)	(0.181)	(0.033)	(0.063)	(0.030)	(0.069)	(0.007)	(0.083)	(0.011)	(0.238)	(0.001)	(0.119)	(0.091)	(0.086)	(0.041)	(0.062)	(0.029)

Panel C: Top FinFluencers (Cont.)

	CRO		UNI		ALGO		LTC		LINK		BCH		TRX		ATOM		XLM	
	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t	N_t	R_t
Intercept	-3.380	0.385	10.697	4.980**	-4.142**	1.004	2.127	1.271	2.100	0.904	1.852	1.182	1.121	1.371*	0.179	1.064	5.571**	1.097
	(2.441)	(0.953)	(7.019)	(2.114)	(1.774)	(1.056)	(1.943)	(0.785)	(2.039)	(0.979)	(1.271)	(0.869)	(1.650)	(0.801)	(1.662)	(1.154)	(2.470)	(0.823)
R_{t-1}	-0.089	-0.051*	0.215	-0.099**	0.079	-0.087***	0.088	-0.046	-8.5E-3	-0.102***	-0.030	-0.099***	-0.072	-0.085***	-0.027	-0.155***	-0.057	-0.026
	(0.077)	(0.030)	(0.154)	(0.046)	(0.055)	(0.033)	(0.075)	(0.030)	(0.063)	(0.030)	(0.045)	(0.031)	(0.062)	(0.030)	(0.044)	(0.031)	(0.091)	(0.030)
R_{t-2}	0.234***	-0.010	0.153	-0.025	-0.022	-0.021	0.044	0.014			-0.026	-3.9E-3						
	(0.077)	(0.030)	(0.154)	(0.046)	(0.055)	(0.033)	(0.075)	(0.030)			(0.045)	(0.031)						
N_{t-1}	0.160***	-9.0E-3	-0.035	-1.0E-3	0.202***	0.032	-0.033	0.019	-0.019	-2.0E-3	-0.020	-1.2E-3	-0.012	5.4E-3	-0.019	-3.6E-3	0.030	0.017
	(0.030)	(0.012)	(0.047)	(0.014)	(0.033)	(0.020)	(0.030)	(0.012)	(0.030)	(0.015)	(0.030)	(0.020)	(0.030)	(0.015)	(0.031)	(0.022)	(0.030)	(0.010)
N_{t-2}	-0.029	2.7E-3	0.063	7.2E-3	-0.084**	-0.045**	9.2E-3	-0.021*			-0.020	-1.1E-3						
	(0.031)	(0.012)	(0.046)	(0.014)	(0.034)	(0.020)	(0.030)	(0.012)			(0.030)	(0.020)						
I	0.553	-0.018	0.816	-1.235***	0.764**	-0.022	-0.372	-0.182	-0.209	-0.092	-0.033	-0.167	-0.197	-0.185	-0.089	-0.063	-1.171***	-0.104
	(0.402)	(0.157)	(1.170)	(0.353)	(0.304)	(0.181)	(0.319)	(0.129)	(0.335)	(0.161)	(0.207)	(0.141)	(0.271)	(0.132)	(0.281)	(0.195)	(0.406)	(0.135)
C	5.1E-4	-5.5E-3	-0.134	-0.099***	8.9E-4	-0.015	-0.014	-8.0E-3	-0.019	-6.8E-3	-0.018	-9.0E-3	-9.5E-3	-7.1E-3	-6.4E-3	-0.014	-0.023	-7.1E-3
	(0.022)	(8.7E-3)	(0.127)	(0.038)	(0.016)	(9.5E-3)	(0.018)	(7.2E-3)	(0.019)	(9.0E-3)	(0.012)	(8.0E-3)	(0.015)	(7.4E-3)	(0.015)	(0.010)	(0.023)	(7.5E-3)
P	0.067	-0.059	-3.262**	0.473	-0.021	-0.184**	-6.8E-3	-0.052	-0.190	-0.080	-0.352***	-0.050	2.4E-3	-0.071	0.071	-0.148	0.211	-0.110
	(0.202)	(0.079)	(1.525)	(0.459)	(0.152)	(0.090)	(0.160)	(0.065)	(0.168)	(0.081)	(0.108)	(0.074)	(0.136)	(0.066)	(0.140)	(0.097)	(0.203)	(0.068)
T	0.025	1.9E-3	0.037	-0.032*	-0.015	1.4E-3	0.039**	5.0E-3	2.9E-3	-4.4E-3	-1.3E-3	3.3E-3	2.2E-3	7.6E-3	0.019	-9.9E-4	0.090***	1.7E-3
	(0.020)	(7.8E-3)	(0.062)	(0.019)	(0.014)	(8.5E-3)	(0.016)	(6.5E-3)	(0.017)	(8.0E-3)	(0.010)	(7.0E-3)	(0.014)	(6.6E-3)	(0.014)	(9.5E-3)	(0.020)	(6.8E-3)
R^2	0.067	0.036	0.087	0.065	0.068	0.034	0.030	0.028	0.002	0.013	0.076	0.028	0.003	0.010	0.009	0.026	0.032	0.007
Adj. R^2	(0.056)	(0.025)	(0.059)	(0.036)	(0.055)	(0.022)	(0.017)	(0.015)	-(0.004)	(0.007)	(0.057)	(0.007)	-(0.003)	(0.005)	(0.003)	(0.020)	(0.026)	(0.001)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(b) Vector auto regression for the log YouTube View Count and Cryptocurrency return for Top Finfluencer.

Panel C: Top FinFluencers

	BTC		ETH		BNB		SOL		ADA		XRP		DOGE		SHIB		MATIC	
	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t
Intercept	-81.459	0.695	100.431*	1.062	12.575	1.062**	-3.022	4.446**	-84.706**	1.973**	-155.431*	0.506	-16.689	3.040**	-76.922	5.838	-136.538*	2.156
	(56.034)	(0.552)	(54.909)	(0.722)	(21.228)	(0.722)	(43.742)	(2.048)	(40.262)	(0.854)	(50.336)	(0.908)	(31.948)	(1.212)	(52.810)	(6.982)	(24.628)	(1.395)
R_{t-1}	-1.479	-0.065**	4.658**	-0.094***	1.174	-0.094***	1.123	-0.098**	0.870	-0.076**	3.228*	-0.028	1.956**	-4.0E-4	-0.536	0.200***	-0.751	-5.8E-3
	(3.084)	(0.030)	(2.319)	(0.030)	(0.782)	(0.030)	(0.860)	(0.040)	(1.447)	(0.031)	(1.690)	(0.030)	(0.817)	(0.031)	(0.336)	(0.044)	(0.564)	(0.032)
R_{t-2}	0.492	0.023	2.236	0.042	0.899	0.042**	0.675	-2.5E-3	-2.357	0.034	-0.275	-0.016	1.703**	-0.081***	0.833**	-0.095**	-0.107	0.078**
	(3.081)	(0.030)	(2.329)	(0.031)	(0.785)	(0.031)	(0.857)	(0.040)	(1.450)	(0.031)	(1.686)	(0.030)	(0.815)	(0.031)	(0.335)	(0.044)	(0.561)	(0.032)
VC_{t-1}	-3.9E-3	-2.3E-4	0.025	-6.4E-6	0.055*	-6.4E-6**	0.041	3.7E-4	-0.013	6.0E-4	0.028	-3.3E-4	-0.042	3.7E-3***	7.0E-3	2.3E-3	0.074**	1.2E-3
	(0.030)	(3.0E-4)	(0.030)	(4.0E-4)	(0.031)	(4.0E-4)	(0.040)	(1.9E-3)	(0.031)	(6.5E-4)	(0.030)	(5.5E-4)	(0.031)	(1.2E-3)	(0.044)	(5.8E-3)	(0.032)	(1.8E-3)
VC_{t-2}	-0.092***	1.0E-4	0.036	4.5E-4	-0.027	4.5E-4*	0.102**	-1.7E-3	0.074**	-6.7E-5	-9.3E-3	8.4E-4	0.033	7.2E-5	0.126***	-1.8E-3	-0.048	2.7E-4
	(0.030)	(3.0E-4)	(0.030)	(4.0E-4)	(0.031)	(4.0E-4)	(0.040)	(1.9E-3)	(0.031)	(6.5E-4)	(0.030)	(5.5E-4)	(0.031)	(1.2E-3)	(0.045)	(6.0E-3)	(0.033)	(1.9E-3)
I	20.939**	-0.079	-13.581	-0.086	-1.288	-0.086**	4.538	-0.527**	15.225**	-0.218	26.727***	-0.068	0.409	-0.479**	11.170	-2.348**	24.601***	-0.293
	(9.224)	(0.091)	(8.981)	(0.118)	(3.449)	(0.118)	(5.629)	(0.264)	(6.497)	(0.138)	(8.325)	(0.150)	(5.235)	(0.199)	(8.341)	(1.103)	(4.232)	(0.240)
C	-0.677	-4.4E-3	-1.115**	-0.012*	-0.169	-0.012	-0.450	-0.077**	-0.198	-0.013*	-0.453	-3.6E-3	-0.049	-0.014	-1.0E-3	-0.071	0.122	-0.018
	(0.513)	(5.1E-3)	(0.509)	(6.7E-3)	(0.195)	(6.7E-3)	(0.770)	(0.036)	(0.360)	(7.6E-3)	(0.438)	(7.9E-3)	(0.290)	(0.011)	(0.916)	(0.121)	(0.208)	(0.012)
P	-7.050	-0.053	-4.884	-0.121**	-1.106	-0.121	-4.661	-0.284	0.158	-0.159**	1.792	-0.026	3.113	-0.076	3.255	1.613	-0.037	-0.106
	(4.618)	(0.045)	(4.548)	(0.060)	(1.730)	(0.060)	(4.855)	(0.227)	(3.260)	(0.069)	(3.933)	(0.071)	(2.605)	(0.099)	(11.518)	(1.523)	(1.933)	(0.110)
T	1.189***	1.1E-3	2.529***	6.0E-4	0.383**	6.0E-4*	0.283	-0.019	0.486	9.5E-3	0.962**	7.8E-3	0.926***	0.021**	-0.192	0.053	-0.523***	0.014
	(0.459)	(4.5E-3)	(0.479)	(6.3E-3)	(0.172)	(6.3E-3)	(0.408)	(0.019)	(0.319)	(6.8E-3)	(0.393)	(7.1E-3)	(0.274)	(0.010)	(0.474)	(0.063)	(0.191)	(0.011)
R^2	0.099	0.008	0.162	0.026	0.072	0.052	0.046	0.019	0.125	0.043	0.265	0.014	0.167	0.060	0.111	0.064	0.077	0.043
Adj. R^2	(0.092)	(0.000)	(0.151)	(0.013)	(0.051)	(0.031)	(0.033)	(0.007)	(0.105)	(0.021)	(0.256)	(0.001)	(0.149)	(0.040)	(0.089)	(0.041)	(0.064)	(0.029)

Panel C: Top FinFluencers (Cont.)

	CRO		UNI		ALGO		LTC		LINK		BCH		TRX		ATOM		XLM	
	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t	VC_t	R_t
Intercept	-41.989	0.370	117.988*	4.939**	-42.655**	0.915	18.660	1.337*	13.596	0.904	14.111	1.215	13.412	1.371*	-5.453	1.058	44.958**	1.107
	(26.201)	(0.955)	(66.960)	(2.124)	(17.005)	(1.061)	(18.981)	(0.785)	(17.897)	(0.978)	(13.735)	(0.852)	(16.152)	(0.802)	(13.735)	(1.154)	(22.093)	(0.822)
R_{t-1}	-0.940	-0.051*	1.362	-0.099**	1.109**	-0.086***	0.430	-0.048	-0.041	-0.102***	-0.395	-0.103***	-0.775	-0.084***	-0.166	-0.156***	-0.426	-0.025
	(0.830)	(0.030)	(1.461)	(0.046)	(0.525)	(0.033)	(0.737)	(0.030)	(0.553)	(0.030)	(0.486)	(0.030)	(0.611)	(0.030)	(0.366)	(0.031)	(0.813)	(0.030)
R_{t-2}	2.641***	-0.010	1.612	-0.023	-0.372	-0.023	0.542	0.013										
	(0.822)	(0.030)	(1.460)	(0.046)	(0.527)	(0.033)	(0.733)	(0.030)										
VC_{t-1}	0.139***	-6.6E-4	-0.037	-4.5E-4	0.152***	1.8E-3	-0.025	1.4E-3	-0.018	-3.0E-4	-0.022	-4.1E-4	-0.010	3.9E-4	-0.017	-9.4E-4	0.045	1.8E-3
	(0.030)	(1.1E-3)	(0.047)	(1.5E-3)	(0.033)	(2.1E-3)	(0.030)	(1.3E-3)	(0.030)	(1.7E-3)	(0.030)	(1.9E-3)	(0.030)	(1.5E-3)	(0.031)	(2.6E-3)	(0.030)	(1.1E-3)
VC_{t-2}	-0.019	1.5E-4	0.041	9.0E-4	-0.065*	-3.6E-3*	-0.033	-2.9E-3**										
	(0.031)	(1.1E-3)	(0.047)	(1.5E-3)	(0.034)	(2.1E-3)	(0.030)	(1.3E-3)										
I	6.709	-0.016	3.857	-1.216***	7.773***	-5.6E-3	-2.931	-0.193	-1.170	-0.092	0.728	-0.174	-2.536	-0.185	0.777	-0.062	-9.576***	-0.105
	(4.312)	(0.157)	(11.104)	(0.352)	(2.914)	(0.182)	(3.119)	(0.129)	(2.938)	(0.161)	(2.255)	(0.140)	(2.652)	(0.132)	(2.326)	(0.195)	(3.630)	(0.135)
C	0.017	-5.5E-3	-1.382	-0.099**	0.020	-0.015	-0.144	-8.5E-3	-0.117	-6.8E-3	-0.179	-8.5E-3	-0.069	-7.2E-3	-0.055	-0.014	-0.195	-7.1E-3
	(0.240)	(8.7E-3)	(1.206)	(0.038)	(0.152)	(9.5E-3)	(0.174)	(7.2E-3)	(0.164)	(9.0E-3)	(0.126)	(7.8E-3)	(0.148)	(7.4E-3)	(0.125)	(0.010)	(0.202)	(7.5E-3)
P	1.024	-0.058	-29.782**	0.459	-0.106	-0.185**	-0.451	-0.054	-1.452	-0.080	-3.840***	-0.050	0.209	-0.071	0.278	-0.148	1.866	-0.110
	(2.161)	(0.079)	(14.446)	(0.458)	(1.452)	(0.091)	(1.561)	(0.065)	(1.476)	(0.081)	(1.135)	(0.070)	(1.331)	(0.066)	(1.156)	(0.097)	(1.819)	(0.068)
T	0.277	1.9E-3	0.490	-0.032*	-0.166	1.1E-3	0.345**	6.2E-3	0.036	-4.4E-3	-0.040	4.0E-3	0.057	7.6E-3	0.094	-9.8E-4	0.757***	1.8E-3
	(0.214)	(7.8E-3)	(0.593)	(0.019)	(0.137)	(8.6E-3)	(0.157)	(6.5E-3)	(0.147)	(8.0E-3)	(0.112)	(7.0E-3)	(0.132)	(6.6E-3)	(0.114)	(9.5E-3)	(0.182)	(6.8E-3)
R^2	0.068	0.036	0.060	0.066	0.061	0.032	0.030	0.030	0.002	0.013	0.017	0.012	0.003	0.010	0.009	0.026	0.031	0.007
Adj. R^2	(0.058)	(0.025)	(0.031)	(0.037)	(0.049)	(0.019)	(0.017)	(0.017)	-(0.004)	(0.007)	(0.012)	(0.007)	-(0.002)	(0.005)	(0.003)	(0.020)	(0.026)	(0.001)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(c) Vector auto regression for the log YouTube View Count and absolute value of Cryptocurrency return for Top Finfluencer.

Panel C: Top FinFluencers

	BTC		ETH		BNB		SOL		ADA		XRP		DOGE		SHIB		MATIC	
	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$
Intercept	-79.780	-0.415	114.529**	7.8E-3	26.287	7.8E-3*	-0.410	2.195	-63.582*	0.918	-173.800*	1.130*	-6.631	1.813*	-86.497	3.858	-138.257*	1.238
	(56.178)	(0.406)	(55.080)	(0.521)	(20.789)	(0.521)	(44.696)	(1.410)	(38.581)	(0.572)	(51.212)	(0.684)	(31.832)	(0.967)	(54.286)	(6.072)	(24.216)	(1.000)
$ABSR_{t-1}$	-6.962*	0.055*	4.771	0.062**	-0.380	0.062***	0.513	0.115***	2.879	0.142***	0.036	0.181***	5.500***	0.268***	-0.112	0.316***	-0.323	0.128***
	(4.197)	(0.030)	(3.223)	(0.030)	(1.088)	(0.030)	(1.272)	(0.040)	(2.037)	(0.030)	(2.274)	(0.030)	(1.018)	(0.031)	(0.402)	(0.045)	(0.774)	(0.032)
$ABSR_{t-2}$	4.215	0.056*	-0.873	0.047	1.032	0.047***	0.702	0.072*	0.348	0.026	3.480	0.154***	2.639**	0.150***	0.305	0.145***	1.115	0.127***
	(4.208)	(0.030)	(3.231)	(0.031)	(1.098)	(0.031)	(1.277)	(0.040)	(2.058)	(0.030)	(2.309)	(0.031)	(1.061)	(0.032)	(0.409)	(0.046)	(0.776)	(0.032)
VC_{t-1}	3.1E-3	-2.0E-4	0.033	2.7E-4	0.058*	2.7E-4***	0.040	1.1E-4	-5.9E-3	8.1E-4*	0.027	4.6E-4	-0.052*	3.1E-3***	-5.6E-3	3.6E-3	0.074**	-4.7E-4
	(0.031)	(2.2E-4)	(0.030)	(2.9E-4)	(0.031)	(2.9E-4)	(0.040)	(1.3E-3)	(0.030)	(4.5E-4)	(0.030)	(4.1E-4)	(0.031)	(9.3E-4)	(0.044)	(4.9E-3)	(0.032)	(1.3E-3)
VC_{t-2}	-0.093***	4.8E-5	0.045	-2.5E-4	-0.026	-2.5E-4*	0.103**	-1.4E-4	0.069**	2.9E-4	-0.012	-3.4E-4	0.014	1.0E-3	0.131***	1.3E-4	-0.047	4.0E-4
	(0.031)	(2.2E-4)	(0.030)	(2.9E-4)	(0.031)	(2.9E-4)	(0.040)	(1.3E-3)	(0.030)	(4.5E-4)	(0.030)	(4.1E-4)	(0.031)	(9.4E-4)	(0.045)	(5.1E-3)	(0.033)	(1.4E-3)
I	20.113**	-2.8E-3	-13.558	-0.069	-1.444	-0.069**	4.227	-0.424**	13.240**	-0.217**	30.541***	-0.253**	0.632	-0.343**	9.756	-1.168	24.979***	-0.351**
	(9.285)	(0.067)	(9.072)	(0.086)	(3.536)	(0.086)	(5.835)	(0.184)	(6.433)	(0.095)	(8.577)	(0.115)	(5.276)	(0.160)	(8.462)	(0.947)	(4.229)	(0.175)
C	-0.614	0.010***	-1.389***	9.3E-3*	-0.472**	9.3E-3	-0.501	-0.015	-0.396	6.4E-3	-0.446	-1.3E-3	-0.207	-5.3E-3	-0.023	0.061	0.129	3.6E-3
	(0.524)	(3.8E-3)	(0.536)	(5.1E-3)	(0.196)	(5.1E-3)	(0.775)	(0.024)	(0.353)	(5.2E-3)	(0.437)	(5.8E-3)	(0.285)	(8.7E-3)	(0.922)	(0.103)	(0.206)	(8.5E-3)
P	-6.447	0.092***	-7.856*	0.081*	-3.766**	0.081	-4.831	0.054	-1.957	0.063	1.157	0.062	0.700	0.023	7.065	0.542	-0.129	0.158*
	(4.715)	(0.034)	(4.748)	(0.045)	(1.796)	(0.045)	(4.902)	(0.155)	(3.181)	(0.047)	(3.940)	(0.053)	(2.558)	(0.078)	(12.172)	(1.362)	(1.969)	(0.081)
T	1.166**	8.9E-3***	2.168***	9.1E-3*	0.209	9.1E-3***	0.252	9.3E-4	0.354	0.016***	0.676	0.025***	0.600**	0.024***	-0.220	0.103*	-0.547***	0.020**
	(0.474)	(3.4E-3)	(0.515)	(4.9E-3)	(0.192)	(4.9E-3)	(0.410)	(0.013)	(0.329)	(4.9E-3)	(0.426)	(5.7E-3)	(0.278)	(8.5E-3)	(0.484)	(0.054)	(0.196)	(8.1E-3)
R^2	0.102	0.051	0.162	0.071	0.075	0.173	0.046	0.078	0.098	0.085	0.264	0.165	0.185	0.242	0.094	0.179	0.078	0.120
Adj. R^2	(0.092)	(0.041)	(0.148)	(0.055)	(0.054)	(0.154)	(0.027)	(0.060)	(0.088)	(0.075)	(0.255)	(0.154)	(0.166)	(0.224)	(0.072)	(0.159)	(0.067)	(0.109)

Panel C: Top FinFluencers (Cont.)

	CRO		UNI		ALGO		LTC		LINK		BCH		TRX		ATOM		XLM	
	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$	VC_t	$ABSR_t$
Intercept	-41.358	-0.274	148.062**	2.024	-43.951**	0.153	19.623	0.344	14.648	-0.419	12.981	1.239*	11.527	0.736	-4.833	0.164	46.843**	0.933
	(26.350)	(0.730)	(66.387)	(1.425)	(16.930)	(0.757)	(18.903)	(0.564)	(17.915)	(0.684)	(13.762)	(0.648)	(16.290)	(0.579)	(13.803)	(0.828)	(22.259)	(0.607)
$ABSR_{t-1}$	-0.532	0.135***	1.986	0.030	2.072***	0.085**	-1.720*	0.100***	-0.699	0.111***	0.456	0.126***	-0.360	0.128***	-0.784	0.175***	-1.282	0.163***
	(1.080)	(0.030)	(2.160)	(0.046)	(0.739)	(0.033)	(1.012)	(0.030)	(0.791)	(0.030)	(0.638)	(0.030)	(0.850)	(0.030)	(0.518)	(0.031)	(1.110)	(0.030)
$ABSR_{t-2}$	1.534	0.047	-2.585	0.077*	0.557	0.073**	0.939	0.029	2.095***	0.077**			0.989	0.083***	-0.554	0.106***	-0.158	0.069**
	(1.082)	(0.030)	(2.151)	(0.046)	(0.743)	(0.033)	(1.018)	(0.030)	(0.795)	(0.030)			(0.856)	(0.030)	(0.525)	(0.032)	(1.122)	(0.031)
VC_{t-1}	0.132***	3.3E-5	-0.024	-7.0E-4	0.137***	9.9E-4	-0.026	-1.7E-3*	-0.019	1.0E-3	-0.023	2.4E-3*	-0.011	-3.4E-4	-0.020	-2.2E-3	0.048	-7.8E-4
	(0.030)	(8.5E-4)	(0.047)	(1.0E-3)	(0.033)	(1.5E-3)	(0.030)	(9.1E-4)	(0.030)	(1.2E-3)	(0.030)	(1.4E-3)	(0.030)	(1.1E-3)	(0.031)	(1.9E-3)	(0.030)	(8.3E-4)
VC_{t-2}	-0.011	-3.7E-4	0.049	2.0E-4	-0.070**	-3.4E-4	-0.030	1.9E-3**	-0.018	1.1E-3			-0.016	-4.5E-4	-0.020	-6.0E-5	-0.033	6.1E-4
	(0.031)	(8.5E-4)	(0.047)	(1.0E-3)	(0.034)	(1.5E-3)	(0.030)	(9.1E-4)	(0.030)	(1.2E-3)			(0.030)	(1.1E-3)	(0.031)	(1.9E-3)	(0.030)	(8.3E-4)
I	7.013	-0.064	-2.316	-0.589**	8.471***	-0.101	-3.221	-0.159*	-0.909	-0.084	0.983	-0.358***	-2.207	-0.212**	0.312	-0.146	-10.124**	-0.212**
	(4.352)	(0.121)	(10.892)	(0.234)	(2.933)	(0.131)	(3.142)	(0.094)	(2.951)	(0.113)	(2.271)	(0.107)	(2.711)	(0.096)	(2.361)	(0.142)	(3.687)	(0.101)
C	-0.015	7.9E-3	-2.157*	-0.025	-0.015	5.1E-3	-0.137	6.9E-3	-0.165	0.018***	-0.180	8.7E-3	-0.064	6.0E-3	-0.041	5.3E-3	-0.170	2.9E-3
	(0.241)	(6.7E-3)	(1.185)	(0.025)	(0.151)	(6.7E-3)	(0.175)	(5.2E-3)	(0.169)	(6.5E-3)	(0.126)	(5.9E-3)	(0.150)	(5.3E-3)	(0.125)	(7.5E-3)	(0.203)	(5.5E-3)
P	0.529	0.136**	-28.464**	0.297	-0.674	0.094	-0.311	0.118**	-1.983	0.189***	-3.903***	0.164***	0.216	0.096**	0.712	0.143**	2.118	0.056
	(2.202)	(0.061)	(14.451)	(0.310)	(1.447)	(0.065)	(1.598)	(0.048)	(1.534)	(0.059)	(1.141)	(0.054)	(1.356)	(0.048)	(1.182)	(0.071)	(1.825)	(0.050)
T	0.245	0.012*	0.287	-3.0E-3	-0.206	8.4E-3	0.378**	0.016***	-7.8E-3	0.016***	-0.057	0.028***	0.038	0.017***	0.136	0.012*	0.812***	0.020***
	(0.219)	(6.1E-3)	(0.589)	(0.013)	(0.139)	(6.2E-3)	(0.164)	(4.9E-3)	(0.151)	(5.8E-3)	(0.114)	(5.4E-3)	(0.139)	(4.9E-3)	(0.116)	(7.0E-3)	(0.191)	(5.2E-3)
R^2	0.057	0.118	0.058	0.103	0.065	0.042	0.028	0.070	0.010	0.079	0.017	0.052	0.006	0.090	0.014	0.111	0.036	0.087
Adj. R^2	(0.046)	(0.108)	(0.028)	(0.075)	(0.053)	(0.029)	(0.017)	(0.060)	-(0.001)	(0.069)	(0.012)	(0.047)	-(0.005)	(0.079)	(0.002)	(0.100)	(0.027)	(0.079)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(d) Vector auto regression for the log YouTube View Count x sentiment and Cryptocurrency return for Top Finfluencer.

Panel C: Top FinFluencers	BTC		ETH		BNB		SOL		ADA		XRP		DOGE		SHIB		MATIC	
	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t
Intercept	43.544	0.667	50.131	0.843	4.825	0.843**	-4.965	4.603**	20.197	2.072**	5.625	0.772	18.897	2.746**	18.712	6.023	12.656	2.704**
	(29.943)	(0.570)	(31.983)	(0.765)	(11.545)	(0.765)	(18.184)	(2.036)	(20.084)	(0.841)	(24.688)	(0.875)	(16.440)	(1.237)	(25.027)	(6.950)	(12.283)	(1.309)
R_{t-1}	1.990	-0.059*	2.814**	-0.094***	0.528	-0.094**	-0.268	-0.102**	-0.205	-0.077**	2.578***	-0.021	1.220***	1.8E-3	-0.065	0.200***	0.257	-3.8E-3
	(1.625)	(0.031)	(1.289)	(0.031)	(0.421)	(0.031)	(0.357)	(0.040)	(0.736)	(0.031)	(0.866)	(0.031)	(0.414)	(0.031)	(0.160)	(0.044)	(0.300)	(0.032)
R_{t-2}	6.727***	0.022	1.254	0.050	0.641	0.050***	0.176	-5.9E-4	0.531	0.028	-0.133	-0.014	1.206***	-0.091***	0.061	-0.096**	0.331	0.080**
	(1.627)	(0.031)	(1.296)	(0.031)	(0.422)	(0.031)	(0.355)	(0.040)	(0.738)	(0.031)	(0.869)	(0.031)	(0.413)	(0.031)	(0.159)	(0.044)	(0.299)	(0.032)
$VCSENT_{t-1}$	0.121***	-5.0E-4	0.091***	3.5E-4	0.138***	3.5E-4	0.054	6.1E-3	0.048	1.8E-3	0.160***	-2.3E-3**	-3.1E-3	6.9E-3***	0.033	9.0E-3	0.181***	-4.7E-3
	(0.031)	(5.9E-4)	(0.031)	(7.4E-4)	(0.031)	(7.4E-4)	(0.040)	(4.5E-3)	(0.031)	(1.3E-3)	(0.031)	(1.1E-3)	(0.031)	(2.3E-3)	(0.044)	(0.012)	(0.032)	(3.4E-3)
$VCSENT_{t-2}$	-0.027	3.5E-4	0.136***	-7.2E-4	0.017	-7.2E-4*	0.083**	0.011**	0.098***	3.7E-4	0.162***	1.8E-3	-9.4E-4	4.4E-6	0.186***	4.0E-3	-0.065*	1.1E-3
	(0.031)	(5.9E-4)	(0.031)	(7.4E-4)	(0.031)	(7.4E-4)	(0.040)	(4.5E-3)	(0.031)	(1.3E-3)	(0.031)	(1.1E-3)	(0.031)	(2.3E-3)	(0.046)	(0.013)	(0.034)	(3.6E-3)
I	-9.342*	-0.070	-9.867*	-0.042	-1.551	-0.042*	0.716	-0.555**	-3.779	-0.224	-1.369	-0.118	-3.979	-0.426**	0.420	-2.410**	-2.248	-0.391*
	(4.941)	(0.094)	(5.266)	(0.126)	(1.886)	(0.126)	(2.337)	(0.262)	(3.264)	(0.137)	(4.052)	(0.144)	(2.702)	(0.203)	(3.954)	(1.098)	(2.100)	(0.224)
C	-0.074	-4.6E-3	-0.085	-0.011*	5.0E-3	-0.011	0.074	-0.078**	-0.058	-0.014*	0.027	-2.6E-3	-0.040	-0.013	-0.406	-0.061	-0.025	-0.019
	(0.271)	(5.2E-3)	(0.286)	(6.8E-3)	(0.105)	(6.8E-3)	(0.320)	(0.036)	(0.181)	(7.6E-3)	(0.226)	(8.0E-3)	(0.147)	(0.011)	(0.439)	(0.122)	(0.110)	(0.012)
P	1.807	-0.058	1.029	-0.127**	0.806	-0.127	0.167	-0.284	0.188	-0.173**	0.413	-0.025	0.699	-0.077	-4.373	1.642	-0.025	-0.106
	(2.432)	(0.046)	(2.565)	(0.061)	(0.934)	(0.061)	(2.014)	(0.225)	(1.644)	(0.069)	(2.032)	(0.072)	(1.313)	(0.099)	(5.500)	(1.528)	(1.028)	(0.110)
T	0.538**	3.0E-4	0.528**	-1.7E-3	0.159*	-1.7E-3	0.039	-0.020	0.241	5.3E-3	0.057	6.8E-3	0.264*	0.019*	-0.109	0.058	9.2E-3	0.016
	(0.247)	(4.7E-3)	(0.263)	(6.3E-3)	(0.094)	(6.3E-3)	(0.169)	(0.019)	(0.163)	(6.8E-3)	(0.201)	(7.1E-3)	(0.135)	(0.010)	(0.227)	(0.063)	(0.100)	(0.011)
R^2	0.160	0.019	0.241	0.048	0.096	0.054	0.012	0.031	0.092	0.037	0.341	0.017	0.109	0.056	0.096	0.064	0.053	0.042
Adj. R^2	(0.144)	(0.000)	(0.224)	(0.026)	(0.075)	(0.032)	-(0.001)	(0.019)	(0.073)	(0.017)	(0.328)	-(0.003)	(0.091)	(0.036)	(0.074)	(0.042)	(0.040)	(0.028)

Panel C: Top FinFluencers Cont.

	CRO		UNI		ALGO		LTC		LINK		BCH		TRX		ATOM		XLM	
	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t	$VCSENT_t$	R_t
Intercept	24.342**	0.441	85.584**	4.429**	13.940*	0.878	12.452	1.175	17.854*	0.827	17.080**	1.338	9.826	1.351*	7.065	1.066	17.436*	1.204
	(10.798)	(0.962)	(34.779)	(2.200)	(7.774)	(1.068)	(10.102)	(0.784)	(9.461)	(0.979)	(8.365)	(0.888)	(8.312)	(0.802)	(7.082)	(1.154)	(9.933)	(0.823)
R_{t-1}	0.259	-0.052*	-0.053	-0.095**	-0.385	-0.081**	0.131	-0.059*	-0.197	-0.104***	0.169	-0.100***	0.176	-0.084***	-0.036	-0.155***	0.035	-0.025
	(0.340)	(0.030)	(0.734)	(0.046)	(0.244)	(0.033)	(0.390)	(0.030)	(0.292)	(0.030)	(0.289)	(0.031)	(0.313)	(0.030)	(0.189)	(0.031)	(0.366)	(0.030)
R_{t-2}	0.338	-8.7E-3	0.798	-0.029	0.320	-9.7E-3	0.626	0.020			0.082	-2.9E-3						
	(0.336)	(0.030)	(0.731)	(0.046)	(0.244)	(0.034)	(0.390)	(0.030)			(0.290)	(0.031)						
$VCSENT_{t-1}$	0.144***	-2.8E-3	-0.027	5.2E-4	9.2E-3	-3.0E-3	-5.0E-3	2.8E-3	-5.7E-3	4.3E-3	-0.013	-1.4E-3	-9.0E-3	2.5E-3	-6.2E-3	-3.8E-4	0.086***	-5.7E-4
	(0.030)	(2.7E-3)	(0.047)	(3.0E-3)	(0.033)	(4.6E-3)	(0.030)	(2.4E-3)	(0.030)	(3.1E-3)	(0.030)	(3.1E-3)	(0.030)	(2.9E-3)	(0.031)	(5.1E-3)	(0.030)	(2.5E-3)
$VCSENT_{t-2}$	-0.015	5.3E-4	0.062	3.0E-3	-0.037	6.4E-3	-7.5E-3	6.8E-3***			-0.012	-2.3E-3						
	(0.031)	(2.7E-3)	(0.047)	(3.0E-3)	(0.033)	(4.6E-3)	(0.030)	(2.3E-3)			(0.030)	(3.1E-3)						
I	-4.132**	-0.027	-6.974	-1.161***	-2.512*	0.018	-2.119	-0.169	-3.660**	-0.076	-3.286**	-0.189	-1.820	-0.181	-1.247	-0.063	-3.435**	-0.125
	(1.779)	(0.158)	(5.615)	(0.355)	(1.320)	(0.181)	(1.660)	(0.129)	(1.555)	(0.161)	(1.393)	(0.148)	(1.365)	(0.132)	(1.200)	(0.196)	(1.632)	(0.135)
C	-0.072	-5.5E-3	-0.988	-0.093**	-4.6E-3	-0.017*	-0.022	-7.4E-3	1.7E-3	-6.8E-3	-0.094	-1.0E-2	-0.079	-7.0E-3	-0.031	-0.014	-4.8E-4	-7.6E-3
	(0.098)	(8.7E-3)	(0.612)	(0.039)	(0.071)	(9.8E-3)	(0.092)	(7.2E-3)	(0.087)	(9.0E-3)	(0.075)	(8.0E-3)	(0.076)	(7.4E-3)	(0.064)	(0.010)	(0.091)	(7.5E-3)
P	-0.276	-0.060	-9.626	0.500	1.4E-3	-0.204**	-0.142	-0.048	0.518	-0.082	0.290	-0.058	0.092	-0.071	-0.019	-0.148	0.339	-0.107
	(0.884)	(0.079)	(7.271)	(0.460)	(0.682)	(0.094)	(0.829)	(0.064)	(0.779)	(0.081)	(0.674)	(0.072)	(0.684)	(0.066)	(0.596)	(0.097)	(0.818)	(0.068)
T	0.169*	1.2E-3	-0.196	-0.029	0.027	1.0E-3	0.064	4.4E-3	0.203***	-5.3E-3	0.153**	4.4E-3	0.130*	7.3E-3	0.090	-1.0E-3	0.223***	3.3E-3
	(0.088)	(7.9E-3)	(0.296)	(0.019)	(0.062)	(8.5E-3)	(0.082)	(6.4E-3)	(0.078)	(8.0E-3)	(0.069)	(7.3E-3)	(0.068)	(6.6E-3)	(0.059)	(9.5E-3)	(0.081)	(6.8E-3)
R^2	0.033	0.036	0.049	0.068	0.083	0.047	0.022	0.029	0.007	0.015	0.084	0.026	0.008	0.011	0.004	0.026	0.016	0.004
Adj. R^2	(0.023)	(0.025)	(0.019)	(0.039)	(0.060)	(0.024)	(0.012)	(0.018)	(0.001)	(0.009)	(0.065)	(0.006)	(0.003)	(0.005)	-(0.002)	(0.020)	(0.011)	-(0.001)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(e) Vector auto regression for the number of YouTube Video Count and absolute value of Cryptocurrency return for Top Finfluencer.

Panel C: Top FinFluencers	BTC		ETH		BNB		SOL		ADA		XRP		DOGE		SHIB		MATIC	
	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$
Intercept	-6.463	-0.330	9.410	0.062	2.993	0.062*	-4.112	2.862**	-6.746	0.853	-15.006**	1.013	1.548	1.792*	-7.237	4.125	-12.844**	1.438
	(5.883)	(0.405)	(6.552)	(0.517)	(2.013)	(0.517)	(4.596)	(1.412)	(4.430)	(0.572)	(6.885)	(0.697)	(3.874)	(0.955)	(4.509)	(6.116)	(2.335)	(1.030)
$ABSR_{t-1}$	-0.244	0.045	0.411	0.064**	-0.015	0.064***	0.049	0.138***	0.331	0.143***	-0.130	0.189***	0.758***	0.230***	-0.013	0.319***	0.024	0.122***
	(0.443)	(0.031)	(0.386)	(0.030)	(0.106)	(0.030)	(0.130)	(0.040)	(0.234)	(0.030)	(0.303)	(0.031)	(0.130)	(0.032)	(0.033)	(0.044)	(0.073)	(0.032)
$ABSR_{t-2}$	0.429	0.048	-0.109	0.047	0.111	0.047***	0.072	0.099**	0.017	0.028	0.739**	0.150***	0.452***	0.147***	0.034	0.126***	0.152**	0.125***
	(0.443)	(0.031)	(0.387)	(0.031)	(0.107)	(0.031)	(0.130)	(0.040)	(0.236)	(0.030)	(0.307)	(0.031)	(0.134)	(0.033)	(0.033)	(0.044)	(0.074)	(0.033)
N_{t-1}	0.036	-2.0E-3	0.045	2.4E-3	0.094***	2.4E-3***	0.072*	2.1E-3	0.045	6.8E-3*	0.031	5.2E-3*	-0.045	0.045***	-1.7E-3	0.042	0.058*	8.7E-3
	(0.031)	(2.1E-3)	(0.030)	(2.4E-3)	(0.031)	(2.4E-3)	(0.040)	(0.012)	(0.030)	(3.9E-3)	(0.031)	(3.1E-3)	(0.032)	(7.8E-3)	(0.044)	(0.060)	(0.032)	(0.014)
N_{t-2}	-0.078**	3.4E-4	0.091***	-4.0E-3*	-0.027	-4.0E-3	0.167***	-4.3E-3	0.069**	1.1E-3	0.012	-6.3E-3**	-0.083**	8.8E-3	0.156***	-1.3E-3	-0.046	0.010
	(0.031)	(2.1E-3)	(0.030)	(2.4E-3)	(0.031)	(2.4E-3)	(0.040)	(0.012)	(0.030)	(3.9E-3)	(0.031)	(3.1E-3)	(0.032)	(8.0E-3)	(0.045)	(0.062)	(0.033)	(0.014)
I	1.591	8.0E-4	-1.139	-0.075	-0.224	-0.075**	1.066*	-0.509***	1.427*	-0.205**	2.521**	-0.233**	-0.301	-0.339**	1.038	-1.106	2.306***	-0.367**
	(0.971)	(0.067)	(1.083)	(0.085)	(0.342)	(0.085)	(0.598)	(0.184)	(0.738)	(0.095)	(1.158)	(0.117)	(0.642)	(0.158)	(0.709)	(0.961)	(0.411)	(0.181)
C	-0.054	7.7E-3**	-0.141**	8.8E-3*	-0.047**	8.8E-3	-0.036	-0.020	-0.050	6.2E-3	-0.032	-1.4E-3	-0.032	-5.0E-3	-5.8E-3	0.060	0.012	1.5E-3
	(0.056)	(3.9E-3)	(0.064)	(5.0E-3)	(0.019)	(5.0E-3)	(0.080)	(0.025)	(0.041)	(5.2E-3)	(0.058)	(5.8E-3)	(0.035)	(8.6E-3)	(0.077)	(0.105)	(0.019)	(8.5E-3)
P	-0.469	0.070**	-0.604	0.077*	-0.359**	0.077	-0.379	0.016	-0.231	0.062	0.234	0.063	0.034	0.023	0.324	0.411	4.3E-3	0.135
	(0.501)	(0.035)	(0.566)	(0.045)	(0.174)	(0.045)	(0.504)	(0.155)	(0.366)	(0.047)	(0.525)	(0.053)	(0.312)	(0.077)	(1.004)	(1.362)	(0.187)	(0.082)
T	0.116**	7.2E-3**	0.263***	9.4E-3*	0.022	9.4E-3***	-2.4E-3	5.3E-4	0.044	0.016***	0.075	0.024***	0.080**	0.024***	-0.016	0.096*	-0.044**	0.019**
	(0.051)	(3.5E-3)	(0.062)	(4.9E-3)	(0.019)	(4.9E-3)	(0.042)	(0.013)	(0.038)	(4.9E-3)	(0.058)	(5.9E-3)	(0.034)	(8.3E-3)	(0.040)	(0.054)	(0.019)	(8.2E-3)
R^2	0.098	0.066	0.185	0.072	0.089	0.175	0.076	0.058	0.094	0.084	0.267	0.177	0.162	0.259	0.064	0.174	0.093	0.132
Adj. R^2	(0.083)	(0.050)	(0.171)	(0.056)	(0.068)	(0.156)	(0.064)	(0.046)	(0.084)	(0.073)	(0.252)	(0.160)	(0.144)	(0.242)	(0.049)	(0.161)	(0.075)	(0.116)

Panel C: Top FinFluencers Cont.

	CRO		UNI		ALGO		LTC		LINK		BCH		TRX		ATOM		XLM	
	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$	N_t	$ABSR_t$
Intercept	-3.334	-0.283	13.828**	2.008	-4.307**	0.210	2.231	0.387	2.113	-0.426	1.569	1.033	0.917	0.734	0.307	0.189	5.894**	0.936
	(2.454)	(0.729)	(6.942)	(1.420)	(1.764)	(0.753)	(1.938)	(0.566)	(2.039)	(0.685)	(1.271)	(0.657)	(1.661)	(0.578)	(1.670)	(0.827)	(2.493)	(0.608)
$ABSR_{t-1}$	-0.041	0.135***	0.268	0.026	0.205***	0.081**	-0.156	0.098***	-0.056	0.111***	0.022	0.113***	-0.025	0.127***	-0.075	0.176***	-0.148	0.164***
	(0.101)	(0.030)	(0.227)	(0.046)	(0.078)	(0.033)	(0.104)	(0.030)	(0.090)	(0.030)	(0.059)	(0.031)	(0.087)	(0.030)	(0.063)	(0.031)	(0.124)	(0.030)
$ABSR_{t-2}$	0.139	0.047	-0.353	0.081*	0.073	0.070**	0.103	0.032	0.206**	0.077**	0.040	0.053*	0.151*	0.083***	-0.057	0.105***	-0.023	0.068**
	(0.101)	(0.030)	(0.226)	(0.046)	(0.078)	(0.033)	(0.104)	(0.030)	(0.090)	(0.030)	(0.060)	(0.031)	(0.087)	(0.030)	(0.064)	(0.031)	(0.126)	(0.031)
N_{t-1}	0.153***	6.7E-4	-0.023	-6.1E-3	0.185***	0.017	-0.032	-0.011	-0.017	8.3E-3	-0.022	0.030*	-0.013	-4.8E-3	-0.021	-0.020	0.032	-7.8E-3
	(0.030)	(9.1E-3)	(0.047)	(9.6E-3)	(0.034)	(0.014)	(0.030)	(8.9E-3)	(0.030)	(0.010)	(0.030)	(0.015)	(0.030)	(0.011)	(0.031)	(0.015)	(0.030)	(7.4E-3)
N_{t-2}	-0.022	-4.8E-3	0.069	-1.6E-3	-0.090***	3.2E-4	0.011	0.012	-0.019	9.2E-3	-0.022	0.024	-0.018	-6.3E-3	-0.022	7.9E-3	-0.034	5.7E-3
	(0.031)	(9.2E-3)	(0.046)	(9.4E-3)	(0.034)	(0.015)	(0.030)	(8.9E-3)	(0.030)	(0.010)	(0.030)	(0.016)	(0.030)	(0.011)	(0.031)	(0.015)	(0.030)	(7.4E-3)
I	0.577	-0.062	0.165	-0.580**	0.841***	-0.114	-0.406	-0.167*	-0.173	-0.082	0.046	-0.279**	-0.157	-0.211**	-0.156	-0.150	-1.257***	-0.212**
	(0.405)	(0.120)	(1.144)	(0.234)	(0.306)	(0.130)	(0.323)	(0.094)	(0.336)	(0.113)	(0.214)	(0.111)	(0.276)	(0.096)	(0.286)	(0.142)	(0.413)	(0.101)
C	-1.9E-3	7.9E-3	-0.215*	-0.025	-2.7E-3	5.3E-3	-0.012	6.6E-3	-0.024	0.018***	-0.019	5.2E-3	-9.4E-3	5.9E-3	-4.7E-3	5.4E-3	-0.021	2.9E-3
	(0.023)	(6.7E-3)	(0.124)	(0.025)	(0.016)	(6.7E-3)	(0.018)	(5.3E-3)	(0.019)	(6.5E-3)	(0.012)	(6.1E-3)	(0.015)	(5.3E-3)	(0.015)	(7.5E-3)	(0.023)	(5.5E-3)
P	0.030	0.136**	-3.115**	0.289	-0.079	0.097	0.011	0.118**	-0.236	0.188***	-0.386***	0.113*	-1.8E-3	0.096**	0.125	0.143**	0.246	0.055
	(0.205)	(0.061)	(1.522)	(0.311)	(0.151)	(0.065)	(0.165)	(0.048)	(0.175)	(0.059)	(0.113)	(0.059)	(0.138)	(0.048)	(0.143)	(0.071)	(0.204)	(0.050)
T	0.022	0.012*	0.016	-3.1E-3	-0.020	8.7E-3	0.042**	0.017***	-2.2E-3	0.016***	-7.1E-3	0.021***	-5.3E-4	0.017***	0.025*	0.012*	0.099***	0.020***
	(0.020)	(6.1E-3)	(0.062)	(0.013)	(0.014)	(6.2E-3)	(0.017)	(5.0E-3)	(0.017)	(5.8E-3)	(0.011)	(5.9E-3)	(0.014)	(4.9E-3)	(0.014)	(7.0E-3)	(0.021)	(5.2E-3)
R^2	0.057	0.118	0.089	0.100	0.073	0.044	0.028	0.068	0.013	0.078	0.075	0.077	0.007	0.090	0.013	0.112	0.036	0.086
Adj. R^2	(0.046)	(0.108)	(0.060)	(0.072)	(0.061)	(0.032)	(0.016)	(0.056)	(0.002)	(0.068)	(0.056)	(0.057)	-(0.004)	(0.080)	(0.001)	(0.101)	(0.027)	(0.078)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

(f) Vector auto regression for the number of YouTube Video Count x sentiment and Cryptocurrency return for Top Finfluencer.

Panel C: Top FinFluencers	BTC		ETH		BNB		SOL		ADA		XRP		DOGE		SHIB		MATIC	
	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t
Intercept	4.779	0.636	6.734*	0.825	0.554	0.825**	-0.789	4.623**	3.828*	1.910**	0.108	0.802	3.753*	2.605**	1.784	5.995	0.854	2.704**
	(3.087)	(0.563)	(3.747)	(0.766)	(1.086)	(0.766)	(2.008)	(2.040)	(2.103)	(0.820)	(3.149)	(0.866)	(2.160)	(1.219)	(2.126)	(6.953)	(1.129)	(1.308)
R_{t-1}	0.043	-0.062**	0.285*	-0.097***	0.057	-0.097**	-0.024	-0.101**	-0.033	-0.078**	0.203*	-0.022	0.188***	-0.028	-4.1E-3	0.200***	0.051*	-2.9E-3
	(0.170)	(0.031)	(0.151)	(0.031)	(0.040)	(0.031)	(0.039)	(0.040)	(0.078)	(0.030)	(0.111)	(0.031)	(0.057)	(0.032)	(0.014)	(0.044)	(0.028)	(0.032)
R_{t-2}	0.725***	0.024	0.173	0.043	0.061	0.043***	0.029	-3.5E-3	0.118	0.028	0.035	-0.015	0.227***	-0.088***	2.3E-3	-0.096**	1.0E-3	0.080**
	(0.170)	(0.031)	(0.152)	(0.031)	(0.040)	(0.031)	(0.039)	(0.040)	(0.078)	(0.031)	(0.111)	(0.031)	(0.057)	(0.032)	(0.014)	(0.044)	(0.028)	(0.032)
$NSENT_{t-1}$	0.189***	-1.3E-3	0.094***	8.2E-3	0.220***	8.2E-3*	0.100**	0.028	0.096***	0.020*	0.166***	-0.022***	0.030	0.127***	0.037	0.104	0.164***	-0.026
	(0.031)	(5.6E-3)	(0.031)	(6.3E-3)	(0.031)	(6.3E-3)	(0.039)	(0.040)	(0.030)	(0.012)	(0.030)	(8.3E-3)	(0.032)	(0.018)	(0.044)	(0.144)	(0.032)	(0.037)
$NSENT_{t-2}$	-0.038	-1.9E-3	0.117***	-2.6E-3	-3.4E-3	-2.6E-3	0.222***	0.091**	0.109***	-1.4E-3	0.150***	0.018**	-0.077**	-0.049***	0.183***	0.041	-0.071**	0.043
	(0.031)	(5.7E-3)	(0.031)	(6.4E-3)	(0.031)	(6.4E-3)	(0.039)	(0.040)	(0.030)	(0.012)	(0.031)	(8.4E-3)	(0.033)	(0.018)	(0.047)	(0.152)	(0.034)	(0.039)
I	-0.940*	-0.074	-1.342**	-0.037	-0.160	-0.037**	0.096	-0.555**	-0.654*	-0.209	-0.057	-0.123	-0.705**	-0.404**	0.018	-2.409**	-0.136	-0.391*
	(0.509)	(0.093)	(0.619)	(0.127)	(0.177)	(0.127)	(0.258)	(0.262)	(0.345)	(0.134)	(0.517)	(0.142)	(0.355)	(0.200)	(0.336)	(1.098)	(0.193)	(0.223)
C	-0.019	-3.6E-3	-0.013	-0.011*	5.9E-4	-0.011	0.011	-0.079**	-0.017	-0.012	4.5E-3	-2.7E-3	-0.012	-0.012	-0.037	-0.061	-3.0E-3	-0.019
	(0.028)	(5.1E-3)	(0.033)	(6.8E-3)	9.8E-3	(6.8E-3)	(0.035)	(0.036)	(0.019)	(7.4E-3)	(0.029)	(7.9E-3)	(0.019)	(0.011)	(0.037)	(0.122)	(0.010)	(0.012)
P	0.101	-0.046	0.159	-0.128**	0.071	-0.128	0.049	-0.288	-0.036	-0.157**	0.043	-0.025	0.038	-0.073	-0.391	1.646	-0.019	-0.106
	(0.251)	(0.046)	(0.301)	(0.061)	(0.088)	(0.061)	(0.222)	(0.226)	(0.171)	(0.067)	(0.260)	(0.071)	(0.172)	(0.097)	(0.467)	(1.528)	(0.095)	(0.110)
T	0.052**	9.7E-4	0.074**	-2.0E-3	0.015*	-2.0E-3	5.3E-3	-0.020	0.040**	4.6E-3	5.8E-4	6.9E-3	0.040**	0.018*	-9.8E-3	0.058	-3.1E-3	0.017
	(0.025)	(4.6E-3)	(0.031)	(6.4E-3)	8.8E-3	(6.4E-3)	(0.019)	(0.019)	(0.017)	(6.7E-3)	(0.026)	(7.0E-3)	(0.018)	(1.0E-2)	(0.019)	(0.063)	9.2E-3	(0.011)
R^2	0.160	0.015	0.224	0.046	0.132	0.053	0.067	0.028	0.071	0.029	0.323	0.018	0.108	0.098	0.085	0.064	0.065	0.041
Adj. R^2	(0.147)	(0.000)	(0.207)	(0.024)	(0.113)	(0.032)	(0.055)	(0.015)	(0.061)	(0.018)	(0.311)	(0.002)	(0.087)	(0.077)	(0.063)	(0.042)	(0.052)	(0.027)

Panel C: Top FinFluencers Cont.

	CRO		UNI		ALGO		LTC		LINK		BCH		TRX		ATOM		XLM	
	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t	$NSENT_t$	R_t
Intercept	2.163**	0.452	9.181**	4.617**	1.082	1.021	0.998	1.206	2.046**	0.813	1.477*	1.353	0.774	1.353*	0.890	1.064	2.299**	1.198
	(1.036)	(0.959)	(3.707)	(2.209)	(0.731)	(1.051)	(1.052)	(0.786)	(0.969)	(0.979)	(0.788)	(0.888)	(0.795)	(0.801)	(0.805)	(1.154)	(1.096)	(0.823)
R_{t-1}	0.019	-0.052*	-0.047	-0.095**	-0.037	-0.077**	0.030	-0.059*	-0.016	-0.104***	9.7E-3	-0.100***	0.027	-0.084***	6.0E-3	-0.155***	-0.011	-0.025
	(0.033)	(0.030)	(0.078)	(0.046)	(0.023)	(0.033)	(0.041)	(0.030)	(0.030)	(0.030)	(0.027)	(0.031)	(0.030)	(0.030)	(0.021)	(0.031)	(0.040)	(0.030)
R_{t-2}	0.031	-8.8E-3	0.074	-0.028	0.030	-0.029	0.036	0.013			4.4E-3	-3.8E-3						
	(0.032)	(0.030)	(0.078)	(0.046)	(0.023)	(0.033)	(0.041)	(0.030)			(0.027)	(0.031)						
$NSENT_{t-1}$	0.168***	-0.034	-0.023	6.9E-3	0.025	-0.055	-6.4E-3	0.048**	-8.4E-3	0.043	-0.012	-5.7E-3	-0.011	0.028	-4.4E-3	-5.9E-4	0.072**	-1.9E-3
	(0.030)	(0.028)	(0.047)	(0.028)	(0.033)	(0.048)	(0.030)	(0.023)	(0.030)	(0.031)	(0.029)	(0.032)	(0.030)	(0.031)	(0.031)	(0.045)	(0.030)	(0.023)
$NSENT_{t-2}$	-0.025	0.013	0.075	0.028	-0.045	0.063	-0.020	0.048**			-0.012	-0.021						
	(0.031)	(0.029)	(0.047)	(0.028)	(0.033)	(0.048)	(0.030)	(0.023)			(0.029)	(0.032)						
I	-0.362**	-0.029	-0.679	-1.180***	-0.184	-0.015	-0.185	-0.169	-0.426***	-0.073	-0.274**	-0.192	-0.132	-0.182	-0.154	-0.063	-0.447**	-0.124
	(0.171)	(0.158)	(0.596)	(0.355)	(0.125)	(0.180)	(0.173)	(0.129)	(0.159)	(0.161)	(0.131)	(0.148)	(0.130)	(0.132)	(0.136)	(0.196)	(0.180)	(0.135)
C	-6.2E-3	-5.5E-3	-0.105	-0.095**	-1.5E-3	-0.017*	-9.8E-4	-8.0E-3	-6.3E-4	-6.8E-3	-0.010	-0.010	-9.4E-3	-6.9E-3	-3.7E-3	-0.014	-1.6E-3	-7.6E-3
	9.4E-3	(8.7E-3)	(0.065)	(0.039)	6.6E-3	(9.5E-3)	9.6E-3	(7.2E-3)	8.9E-3	(9.0E-3)	7.1E-3	(8.0E-3)	7.3E-3	(7.4E-3)	7.3E-3	(0.010)	(0.010)	(7.5E-3)
P	-0.030	-0.060	-1.117	0.483	-0.013	-0.197**	7.0E-3	-0.054	0.068	-0.083	0.013	-0.057	-5.5E-3	-0.071	-6.1E-3	-0.148	0.039	-0.107
	(0.085)	(0.079)	(0.777)	(0.463)	(0.063)	(0.091)	(0.086)	(0.065)	(0.080)	(0.081)	(0.064)	(0.072)	(0.065)	(0.066)	(0.068)	(0.097)	(0.090)	(0.068)
T	0.015*	1.3E-3	-0.023	-0.029	8.1E-4	1.4E-3	6.9E-3	4.1E-3	0.025***	-5.5E-3	0.012*	4.5E-3	0.011*	7.3E-3	9.4E-3	-1.1E-3	0.028***	3.2E-3
	8.5E-3	(7.8E-3)	(0.032)	(0.019)	5.9E-3	(8.5E-3)	8.6E-3	(6.4E-3)	8.0E-3	(8.0E-3)	6.5E-3	(7.3E-3)	6.5E-3	(6.6E-3)	6.7E-3	(9.5E-3)	9.0E-3	(6.8E-3)
R^2	0.038	0.036	0.045	0.064	0.059	0.034	0.031	0.029	0.009	0.015	0.137	0.026	0.011	0.011	0.003	0.026	0.016	0.004
Adj. R^2	(0.027)	(0.026)	(0.015)	(0.035)	(0.044)	(0.019)	(0.019)	(0.017)	(0.004)	(0.009)	(0.119)	(0.006)	(0.005)	(0.005)	-(0.003)	(0.020)	(0.011)	-(0.001)

Estimated coefficients are followed by the standard errors in parenthesis.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

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