Cryptocurrency Disruption and Investor Reaction to Earnings Announcements

Minjae Kim* Hui (Eva) Liang† Ashish Ochani‡ Xinyuan Shao§

September 20, 2022

Abstract

In recent years, the capital market has witnessed a cryptocurrency mania. In this paper, we study the relationship between the cryptocurrency market and investor reactions to earnings news. Building on limited investor attention literature, we hypothesize that the cryptocurrency market distracts investors from earnings news. We measure the cryptocurrency distraction as the absolute value of two-week cumulative returns before earnings announcements, and find that the cryptocurrency distraction is associated with a weaker price reaction to earnings surprises. Our result is robust when using the Chinese ban on cryptocurrency as a source of exogenous variation in cryptocurrency prices. Consistent with the distraction hypothesis, we find that the cryptocurrency distraction effect is more pronounced when there is more information load, measured by the number of concurrent earnings announcements. To corroborate the finding, we further show that cryptocurrency distraction is associated with lower Google search volume and abnormal trading volume around earnings announcements. In addition, we document that cryptocurrency distraction effect is concentrated in retail trading rather than institutional trading, and consistently, is associated with more severe information asymmetry. Overall, our study provides evidence that cryptocurrency, a class of asset with no intrinsic value, disrupts information processing in the equity market.

JEL Classifications: G12, G14, M41
Keywords: Cryptocurrency; Limited attention; Earnings announcements; Price efficiency

*University of Minnesota, Minneapolis, MN 55455. *E-mail:* kim00492@umn.edu
†University of Texas at Tyler, Tyler, TX 75799. *E-mail:* hliang@uttyler.edu
‡Cornell University, Ithaca, NY 14850. *E-mail:* ako33@cornell.edu
§University of Minnesota, Minneapolis, MN 55455. *E-mail:* shaox201@umn.edu

1 Introduction

In recent years, cryptocurrency has become one of the most actively traded assets in the world.[1] Attention to the cryptocurrency market has also grown significantly. For instance, Bitcoin was ranked as the second most-searched word on Google in 2017, and terms such as "blockchain mania" and "crypto mania" were created to describe the skyrocketing enthusiasm and pricing related to blockchain and cryptocurrency (O'Keefe 2021). As cryptocurrency goes mainstream, understanding its implications for the traditional capital market is important to regulators, researchers, and practitioners. This paper examines the relationship between attention to the cryptocurrency market and the price efficiency of the equity market.

Although traditional asset pricing theories assume that investors have limitless ability to process value-relevant information, investors may have finite resources to digest a vast amount of information simultaneously (e.g., Kahneman 1973). Recent studies provide evidence that prices do not immediately impound earnings news when there are competing stimuli (e.g., Dellavigna and Pollet 2009; Hirshleifer, Lim, and Teoh 2009; Drake, Gee, and Thornock 2016; Israeli, Kasznik, and Sridharan 2021). Consistent with this argument, the surge in attention to the cryptocurrency market can divert investors from gathering and processing the equity market information, even during the key information events — earnings announcements. Thus, we hypothesize that investors pay less attention and underreact to earnings news when cryptocurrency grabs their attention. We call this prediction the *distraction hypothesis*.

[1] The popularity of cryptocurrency has been documented in various sources. For example, the White House statement releases on March 9, 2022 estimated that the size of the cryptocurrency market was greater than $3 trillion; Nicenko (2022) reports that the average daily trading volume of Bitcoin ($24.73 billion) was 58.42% higher than Apple's stock from February 7, 2022 to March 9, 2022; Data from statista.com indicates the daily trading volume for cryptocurrency was over $500 billion on May 19, 2021.

While there is considerable evidence that information flows across different assets (e.g., Foster 1981; Cohen and Frazzini 2008), the findings from previous studies primarily focus on information transfer when two assets are economically linked. Cryptocurrency as an investment asset is distinct in multiple ways. Unlike other markets, the cryptocurrency market is dominated by retail investors (Subramaniam and Chakraborty 2020). Additionally, most cryptocurrencies have no underlying assets and are less likely to be directly associated with pricing in the equity market. For example, Liu and Tsyvinski (2021) find little evidence of co-movement between cryptocurrencies and traditional assets (e.g., commodities, stocks, and macroeconomics factors). Additionally, Andrew Bailey, the governor of the Bank of England, said "*cryptocurrencies have no intrinsic value*" in a press conference (Smith 2021).[2] Thus, whether cryptocurrency market affects the information gathering and processing in the equity market is an empirical question.

To test the distraction hypothesis, we use the cryptocurrency price movement to proxy for investor attention to the cryptocurrency market and the reasons are as follows. First, the performance of cryptocurrencies is often covered by cable news and financial media (Kiernan 2022), attracting investors' attention. Major business outlets (e.g., Yahoo! Finance) also display the performance of digital tokens along with market-wide indexes on their homepages. Second, the measure is consistent with previous studies that use returns to represent investor attention (e.g., Barber and Odean 2008; Kempf, Manconi, and Spalt 2017).[3] Specifically, our first measure is the absolute value of cumulative returns of Bitcoin over the two-week before earnings announcements.[4] To account for other prominent cryptocurrencies, we use the absolute value of volume-weighted cu-

[2] In addition, Nobel laureate Eric Maskin shared a similar view (Cockrell 2017). Nobel laureate Robert Shiller also stated, "the results of a serious attempt to assess the value of Bitcoin can only be ambiguous," in the New York Times on December 15, 2017 ("What Is Bitcoin Really Worth? Don't Even Ask").

[3] Urquhart (2018) and Liu and Tsyvinski (2021) provide evidence of strong correlation between cryptocurrency prices and investor attention to cryptocurrency.

[4] Bitcoin is the most prominent cryptocurrency. It accounts for 56.7% of the total market cap of all cryptocurrencies during our sample period (2016-2020).

mulative returns of the four most-traded cryptocurrencies (i.e., Bitcoin, Ethereum, Binance Coin, and Cardano) over the two-week before earnings announcements as an alternative measure. It is noteworthy that cryptocurrency returns are not likely to be correlated with earnings announcement dates because cryptocurrencies' prices are volatile and difficult to predict, managers are unlikely to strategically time their earnings announcements based on the cryptocurrency price movement.

Using a sample of 38,098 quarterly earnings announcements from 2016 to 2020, we find that the market reaction to earnings surprise is muted when there is intense cryptocurrency distraction. In terms of economic magnitude, given the same earnings surprises, one standard deviation increase in the absolute value of two-week Bitcoin returns is associated with a 6.7% reduction in the return response to earnings surprises. To reduce the endogeneity concern, we exploit the regulatory ban on Initial Coin Offerings (ICOs) and cryptocurrency exchanges by the Chinese government. These events resulted in price drops in cryptocurrencies that are unrelated to firm fundamentals. To the extent that the earnings announcement dates are pre-scheduled and not affected by Chinese events, we confirm that the lower price reactions to earnings surprises are a result of the cryptocurrency distraction.

To confirm that limited investor attention is the channel for lower earnings responses, we examine the role of information load in the cryptocurrency distraction effect. Risk-averse investors with limited attention would ignore value-relevant information, leading to underreaction to earnings news in the equilibrium (e.g., Dellavigna and Pollet 2009; Hirshleifer, Lim, and Teoh 2011). If investors have limited cognitive capacities, they are less likely to adequately process earnings information when facing information overload. Thus, we expect that the cryptocurrency distraction is stronger where there are more distraction events simultaneously. Consistently, we find that the distraction effect is stronger when there are more concurrent earnings announcements on the same

day, indicating that limited investor attention is the channel through which cryptocurrency price movements affect the equity market.

To provide direct evidence that investors pay less attention to earnings news, we use two measures of investor attention, abnormal trading volume and Google search volume in the equity market, and examine whether cryptocurrency distraction affects investor attention. It is noteworthy that researchers generally cannot directly observe attention allocation of each individual, and thereby existing studies have used trading volume as a measure of investor attention (Barber and Odean 2008; Israeli et al. 2021). We show that trading volume around earnings announcements is negatively associated with the absolute value of past cryptocurrency returns. Specifically, one standard deviation increase in the absolute value of past Bitcoin return is associated with 2.2% reduction in the abnormal trading volume relative to the sample mean. We use Google search volume as an alternative measure of equity investor attention, and find that the Google search volume for stocks around earnings announcements is lower when the absolute value of cryptocurrency return is higher.

In addition, we investigate what types of market participants are affected by the cryptocurrency distraction. Previous studies document that institutional investors are more sophisticated and less likely to be subject to limited attention (Hirshleifer et al. 2009; Drake et al. 2016; Israeli et al. 2021). Furthermore, evidence suggests that retail investors dominate the cryptocurrency market (Subramaniam and Chakraborty 2020). Consistent with these arguments, we find that the retail dollar volume decreases with cryptocurrency distraction around earnings announcements, but not the institutional dollar volume. The finding suggests that retail investors are more susceptible to the distraction effect.

We further extend our analysis to broader market consequences with respect to information asymmetry (Blankespoor, Miller, and White 2014). As uninformed investors (e.g., retail investors)

are more subject to attention constraints and more likely to be distracted by the cryptocurrency price movements, we expect that the proportion of informed investors trading in the market would be higher for the earnings announcements in the presence of cryptocurrency distraction, thus increasing the information asymmetry in the equity market. Consistent with this conjecture, we document that both effective spread and price impact are higher during the earnings announcement window with greater cryptocurrency distraction.

We also conduct two additional tests to rule out potential alternative explanations. One alternative explanation is that cryptocurrency returns are associated with firm fundamentals or information content in earnings. In other words, lower reactions to earnings news may be driven by lower earnings informativeness or persistence during periods of high cryptocurrency distraction. We investigate whether this is the case. First, we examine whether firm fundamentals are associated with cryptocurrency returns by testing if earnings surprises are related to the cryptocurrency distraction. We find no association between the earnings surprises and the cryptocurrency returns. In addition, following prior literature (Bradshaw, Christensen, Gee, and Whipple 2018), we investigate whether earnings are less useful in predicting future firm performances when the cryptocurrency distraction is higher. We find that predictive power of earnings on high cryptocurrency distraction days is not significantly different from low cryptocurrency distraction days. These results alleviate the concern that the muted market reactions to earnings news are driven by variation of informativeness or persistence of earnings in periods of high cryptocurrency distraction, further confirming the channel of limited investor attention.

In recent years, regulating digital currencies has been an important agenda for the U.S. Congress, Federal Reserve System, Securities and Exchange Commission (SEC), and other regulatory bodies. For example, President Biden signed an executive order, Ensuring Responsible Development of Digital Assets, on March 09, 2022. In light of the growing calls for studies on dig-

ital currencies and intensive effort on cryptocurrency regulation, the findings of this paper provide timely evidence about the consequences of cryptocurrency mania to regulators, researchers, and practitioners. To the best of our knowledge, this paper is the first attempt to study the distraction effect of cryptocurrency on information processing in the equity market, contributing to the understanding of the cryptocurrency mania and its consequences.

Our findings also contribute to the literature on the interaction between different capital markets. Prior literature examines the information flows between equity markets and bond markets (Even-Tov 2017; Gebhardt, Hvidkjaer, and Swaminathan 2005), CDS markets (Augustin, Jiao, Sarkissian, and Schill 2020) and foreign currency markets. Prices in these non-equity markets contain incremental information which is used by the investors in the equity market. Several studies in the literature investigate how news could impact the speed of corporate information incorporated into price. For example, Hirshleifer and Sheng (2022) show that news about macro events bring investor attention towards the earnings announcements in the equity markets and results in stronger reaction to earnings news. Israeli et al. (2021) find that the daily news pressure is associated with lower trading volume and Google searches around earnings announcements. All these markets or events are , to some extent, economically linked with the pricing of the equity market. Thus, the empirical evidence on investor distraction *across* asset classes is limited, especially for assets without underlying fundamentals. Our study fills this gap in the literature by documenting how investors in the equity market are distracted by the cryptocurrency market.

Finally, our paper contributes to the growing literature on limited attention. The research that studies the impact of limited attention on market prices could be broadly classified into the following two strands (Lim and Teoh 2010). One strand of this literature centers on the salience of information, including media coverage (Peress 2008) and innovative efficiency (Hirshleifer, Hsu, and Li 2013). Another strand investigates the competing stimuli that distract investors from mak-

ing timely decisions, including Fridays (Dellavigna and Pollet 2009), busy earnings announcements days (Hirshleifer et al. 2009), sports events (Drake et al. 2016), and daily news pressure (Israeli et al. 2021). Our paper contributes to the second strand of literature by documenting the distraction effect of "competing investment" (i.e., cryptocurrency) on the speed of public information incorporated into prices, complementing the limited attention literature.

The rest of the paper is organized as follows: Section 2 develops the hypothesis. Section 3 discusses the measurements and data. Section 4 describes the empirical analyses. Section 5 presents additional analyses, and Section 6 concludes the paper.

2 Background information and conceptual framework

2.1 Cryptocurrency in recent years

The cryptocurrency market has experienced rapid growth in recent years. The pseudonymous creator Satoshi Nakamoto introduced Bitcoin in 2008 and the first Bitcoin transaction occurred in 2009. Today, it is the most well-known and popular cryptocurrency. In 2011, the price of Bitcoin (BTC) was $0.30. It reached over $60,000 in 2021. In addition to a significant increase in the prices, the cryptocurrency market has grown exponentially in terms of the number of cryptocurrencies and market capitalization—the total number of cryptocurrencies worldwide increased from 66 in 2013 to 10,397 in February 2022, and the total market capitalization soared from $1 billion in July 2013 to $3 trillion in November 2021.[5]

This rapid growth has grabbed the attention of investors and researchers. Most of the existing literature views cryptocurrency as a new class of asset and has studied cryptocurrency market in isolation. Liu and Tsyvinski (2021) and Liu, Tsyvinski, and Wu (2022) examine risk factors

[5] Estimations are based on data from https://www.statista.com.

and the pricing of cryptocurrencies. Hu, Parlour, and Rajan (2019) study correlations in returns across different coins. Several studies focus on Bitcoin trading activities and their implications (e.g., Easley, O'Hara, and Basu 2019; Makarov and Schoar 2020). A stream of literature studies the blockchain[6] technology and smart contracts (e.g., Cong and He 2019). Nonetheless, there is little evidence on the interaction between cryptocurrency and the information process of equity market. Specifically, whether, and to what extent, the information process in the equity market is disrupted by the cryptocurrency market is not well understood yet.

2.2 Conceptual framework

Our analyses aim to fill this void by studying if the cryptocurrency market distracts equity market investors from earnings releases. When examining this question, we build on the limited attention literature to develop our main hypothesis. Attention is a scarce cognitive resource (e.g., Barber and Odean 2008; Hirshleifer et al. 2009; Peng and Xiong 2006). Prior empirical studies on limited investor attention show that investors are resource-constrained, and thus allocate their attention selectively when facing a vast amount of information. For example, Barber and Odean (2008) show that individual investors are more likely to buy attention-grabbing stocks when facing many alternatives. Hirshleifer et al. (2009) show that the market response to earnings news is lower when the earnings news is released on busy earnings announcement days (Hirshleifer, Lim, and Teoh 2009). Dellavigna and Pollet (2009) provide evidence on lower investor reactions on earnings announced on Fridays and attribute the reason for this pattern to limited investor attention. Moreover, Drake et al. (2016) identify the NCAA Division I basketball tournament, March Madness, as an attention-grabbing event and show that the market reactions to earnings news released on tournament days are muted. Finally, Israeli et al. (2021) use the daily news

[6] Blockchain is a technology to record transactions used in cryptocurrencies such as Bitcoin and Ethereum.

pressure index as a measure of investor distraction and find that the distraction is negatively associated with trading volume and Google searches around earnings announcements.

The distraction hypothesis predicts that the attention to cryptocurrency market distracts equity market investor attention from earnings news. Blankespoor, deHaan, and Marinovic (2020) summarize the importance of awareness costs and acquisition costs in determining investor information acquisition and trading decisions. Cryptocurrency returns are often reported in cable-news tickers, financial apps, and major business outlets (e.g., Yahoo! Finance), and thus investors can be aware and acquire cryptocurrency information easily. Existing studies also provide evidence of strong investor enthusiasm for and attention to cryptocurrency. For example, Cheng, De Franco, Jiang, and Lin (2019) document that investors react positively to firms' disclosures of blockchain technology investment and this leads to firms to invest in blockchain speculatively. Moreover, Liu and Tsyvinski (2021) find that investor attention to cryptocurrency is elevated after strong cryptocurrency market performance. Finally, Akyildirim, Corbet, Sensoy, and Yarovaya (2020) provide evidence that blockchain related name changes affects corporate performance. Given that the cryptocurrency market has received significant investor attention, we predict that the market reaction to earnings news is lower for earnings announced during periods with high levels of cryptocurrency distraction.

On the other hand, attention to cryptocurrency may not impact the pricing of earnings surprises for several reasons. First, there is conflicting evidence regarding limited investor attention in the literature. For example, Dellavigna and Pollet (2009) document reduced attention for earnings announcements made on Fridays; however, a subsequent study (deHaan, Shevlin, and Thornock 2015) finds no evidence that Fridays are associated with diminished attention. Second, current literature provides limited evidence on competing investment—how attention to another asset class can impact the speed of incorporating public information into the equity market. In particular,

compared to the equity market, the cryptocurrency market capitalization may be small, and thus cryptocurrency is not able to distract equity market investors. According to data from statista.com, the average weekly market capitalization of all cryptocurrencies was $0.20 trillion during the sample period (2016-2020), while the average monthly market capitalization of all NYSE (NASDAQ) stocks in the same period was $22.86 ($12.08) trillion. Additionally, because the cryptocurrency market is more volatile and riskier than the equity market, not all equity market investors may consider investing in cryptocurrency. Therefore, the equity market and the cryptocurrency market may not compete for investor attention. Thus, it is not clear *ex-ante* whether attention to cryptocurrency distracts equity market investors. We state our hypothesis in the alternative form as follows:

Hypothesis: The market response to earnings news is weaker during periods with high levels of attention to cryptocurrency market.

3 Measurement and sample construction

3.1 Measuring attention on cryptocurrency

To test our hypothesis, we use cryptocurrency price movements as measures of the extent to which investors allocate more attention to cryptocurrency. Following Barber and Odean (2008) and Kempf et al. (2017), we consider both negative and positive returns in cryptocurrencies for measuring investor distraction towards the cryptocurrency market. We use the absolute value of past two-week cryptocurrency return to measure investor distraction. The variation in cryptocurrencies' performance is going to catch attention from investors. Prior studies document that cryptocurrencies are high volatility and prone to speculation (Akyildirim, Corbet, Cumming, Lucey, and Sensoy 2020), and that cryptocurrency returns exhibit low exposure to traditional assets (Liu and

Tsyvinski 2021). The volatile and unpredictable feature of cryptocurrency returns is important for our references, as it alleviates the concern that our results are explained by strategic disclosures of managers. Our first measure utilize the performance of the largest cryptocurrency, Bitcoin, which is more likely to grab investors' attention. Bitcoin accounts for 56.7% of the total market cap of all cryptocurrencies during our sample period (2016-2020). Our measure is the absolute value of the past two-week cumulative return of Bitcoin (*Abs(BTC_Ret)*). Although most of the existing studies in the literature use a longer time frame when examining the impact of attention across different securities (e.g., Li and Yu 2012; Madsen 2017), we use a two-week window to reduce potential noise from concurrent events in a longer period. Moreover, in order to account for the price movement of other major cryptocurrencies, we include the volume-weighted return of the top four cryptocurrencies. The Top four cryptocurrencies include Bitcoin (BTC), Ethereum (ETH), Binance Coin (BNB), and Cardano (ADA). Specifically, we define *Abs(Top4Crypto_Ret)* as the absolute value of volume-weighted past two-week cumulative return of BTC, ETH, BNB, and ADA.

3.2 Measuring investor attention around earnings announcements

3.2.1 Market reactions to earnings announcements

Our hypothesis focuses on the market reactions to earnings announcements, proxied by earnings response coefficients—the return reactions to earnings surprises immediately after earnings announcements. Specifically, we measure the cumulative abnormal return (CAR) over the [0,+2] trading-day windows relative to earnings announcement dates, where cumulative abnormal returns are defined as the difference of the buy-and-hold return of a stock and the buy-and-hold return of the value-weighted index return from CRSP. To quantify the earnings surprises, we measure

the standardized unexpected earnings (SUE) for each firm-quarter as the difference between the reported earnings per share (*EPS*) and the analysts' consensus EPS from IBES (*Consesus_EPS*, the median EPS forecast), scaled by the stock price at the fiscal period end date:

$$SUE = \frac{EPS - Consesus\_EPS}{Price} \tag{1}$$

3.2.2 Google search volume

To provide direct evidence on investor information acquisition activity, we obtain the Google search volume over the period of 2016 to 2020. We follow prior literature (Da, Engelberg, and Gao 2011; Drake et al. 2016) and define the Google search volume based on the individual stock ticker. We use the Google search volume for the week of the earnings announcement because the Google search volume is only available at weekly frequency between 2016 and 2020.

3.2.3 Abnormal volume

In addition to the return response to earnings announcements and Google search volume, we utilize abnormal volume to examine the effect of cryptocurrency distraction on trading activities, a more direct measure for investor attention. Following Drake et al. (2016), abnormal volume(*AbVol[0,+2]*) is calculated as the daily average share volume of a stock on day [0,+2] relative to an earnings announcement less the daily average share volume on day [-40,-1], scaled by the standard deviation of share volumes on day [-40,-1]:

$$AbVol[0,+2] = \frac{Mean(Vol[0,+2]) - Mean(Vol[-40,-1])}{Std(Vol[-40,-1])} \tag{2}$$

3.2.4 Retail and institutional trading

To further investigate into the differential distraction effect across different types of investors around earnings announcements, we obtain retail and institutional trading data from the NYSE Trade and Quote (TAQ) database. The methodology to identify retail trading follows Boehmer, Jones, Zhang, and Zhang (2021). Retail trades are reported to FINRA Trade Report Facility with the exchange code "D". Furthermore, retail trades frequently receive a price improvement in terms of a fraction of a cent, relative to the national bid or offer price, whereas institutional trades typically are executed at the round penny or half-penny. Based on these institutional features, we are able to identify the retail trading activities. To measure institutional investor trading, we define institutional trades as those with a trade size greater than $50,000 (Barber, Odean, and Zhu 2008). Missing values are replaced by zero. Both retail and institutional trading are measured as the natural logarithm of the average dollar volume during the [0,+2] window relative to the earnings announcement date.

3.2.5 Information asymmetry

We also examine the impact of cryptocurrency distraction on information asymmetry. Our first measure is the effective spreads, which measures the cost at which market makers are willing to trade (Leuz and Verrecchia 2000; Blankespoor et al. 2014). We obtain the effective spreads from the NYSE Trade and Quote (TAQ) database. Specifically, the daily effective spread is defined as:

$$Effspread = \frac{1}{N} \times \sum_{k=1}^{N} \frac{D_k(P_k - M_k)}{M_k}, \tag{3}$$

where k indicates the kth trade in a day; D_k is an indicator variable that equals one (zero) if the kth trade is a buy (sell); P_k is the price of the kth trade; M_k is the midpoint of bid price and ask price. To measure the effective spread during the earnings announcement window, *Effspread* is defined as the average of the daily measure of effective spread over the [0,+2] day period for an earnings announcement. Missing values are replaced by the Fama-French 48 industry median in the same month.

The second measure for information asymmetry is the price impact, which aims to capture the adverse selection component of the trade (Holden, Jacobsen, and Subrahmanyam 2014). The daily price impact measure is defined as:

$$Price\ Impact = \frac{1}{N} \times \sum_{k=1}^{N} \frac{2D_k(M_{k+5} - M_k)}{M_k}, \tag{4}$$

where k indicates the kth trade in a day; D_k is an indicator variable that equals one (zero) if the kth trade is a buy (sell); M_k is the midpoint of bid price and ask price of the kth trade; M_{k+5} is the midpoint of bid price and ask price five minutes after the kth trade. To measure the price impact during the earnings announcement window, *Price Impact* is defined as the average of the daily measure of price impact over the [0,+2] day period for an earnings announcement. Missing values are replaced by the Fama-French 48 industry median in the same month.

3.3 Sample construction

First, we obtain firm characteristics and earnings announcement dates from Compustat for each firm-quarter observation between 2016 and 2020. Then we merge the data with CRSP, which includes the equity returns and abnormal volume measures, and I/B/E/S, which contains analyst consensus data. To assure that our inferences are not impacted by foreign firms or irregular

financial and operating conditions, we exclude firms in the financial industry (SIC codes 6000-6999) and limit the sample to observations with CRSP share codes 10 and 11, positive book-to-market ratio, and total assets greater than $1 million. We further limit the sample to observations for which we can construct the control variables. We then merge our sample with cryptocurrency data from Yahoo! Finance and with trading and information asymmetry data from NYSE Trade and Quote (TAQ). The final sample contains 38,098 quarterly earnings announcements for 3,024 unique firms.[7]

Table 1 presents the summary statistics for the main variables for our sample. We consider two proxies for past performance of cryptocurrencies during the two-week before earnings announcements: (1) *Abs(BTC_ret)*, the absolute value of cumulative Bitcoin returns, and (2) *Abs(Top4Crypto_ret)*, the absolute value of the volume-weighed cumulative return of top 4 cryptocurrencies. During our sample period of 2016-2020, the average *Abs(BTC_ret)* is 12.8%. Compared to the average three-day cumulative abnormal returns (CAR) of stocks around the earnings announcement days of (-0.1%), the returns of cryptocurrencies are highly volatile and more likely to attract equity market investor attention.

4 Empirical design and results

This section presents our analyses and results. We first examine whether the market reactions to earnings surprise are weaker when equity market investors are distracted by cryptocurrency price movements. To mitigate the endogeneity concern, we exploit an exogenous shock in the cryptocurrency market, the Chinese ban of ICOs and cryptocurrency exchanges, and examine

[7] In further analysis, we merge the sample with Google search volume data. As we use ticker symbols to identify firms and remove ticker symbols associated with potential alternative meanings (e.g., "CAT" and "LAKE") in the process, the number of observations is less than that in the main analyses.

whether equity market investors are distracted by the cryptocurrency market. In addition, to corroborate that the limited investor attention is the channel for the weaker market reactions, we examine whether the distraction effects are stronger when a greater number of firms announcing earnings on the same day. We further use alternative measures of investor attention to investigate the relationship between the cryptocurrency returns and equity investor attention. We also examine whether retail or institutional investors contribute to the pattern. Lastly, we study the broader impact of the cryptocurrency distraction on the market trading activities (i.e., effective spread and price impact).

4.1 Earnings response coefficients (ERC)

Our first analysis examines the relationship between the cryptocurrency returns before earnings announcements and the return reactions to earnings news. We predict that the market underreacts to earnings surprises when equity market investors are distracted by the volatile performance of the cryptocurrencies before earnings announcements. To examine this argument, we estimate the following model:

$$CAR[0,+2] = \alpha_0 + \alpha_1 SUE \times Abs(Crypto\ Return) + \alpha_2 SUE + \alpha_3 Abs(Crypto\ Return) + \Sigma\beta Controls + \Sigma\lambda Controls \times SUE + Fixed\ Effects + \epsilon \quad (5)$$

where *CAR[0,+2]* is the two-day cumulative market-adjusted return for a firm around an earnings announcement, and *SUE* is the difference between reported earnings per share (EPS) and the analysts' consensus EPS scaled by the stock price. Controls are covariates that prior studies find to be associated with the market response to earnings news, including the natural logarithm of total assets (*Size*), book-to-market ratio (*BTM*), institutional ownership (*InstOwn*), stock returns over

the past six months (*PastRet*), the number of days difference between reporting period end date and earnings announcement date (*ReportLag*), the number of sell-side financial analysts (*NumAnalyst*), an indicator for December 31 fiscal year-end (*Dec31*), an indicator variable set to one if the number of earnings announcement on the same day is above the sample median (*Busy EA Day*). We also include the interaction terms of the control variables and SUE to control for the marginal effect of the control variables on the market responses to earnings surprises. To control for the unobserved time-invariant firm characteristics, we include firm fixed effects. We use day of week fixed effects to control for the possibility that investors are more likely to be distracted on a specific day of week (e.g., Friday). In addition, we include time (year-month) fixed effects to control for the concurrent macroeconomic conditions. This address the concerns that equity market investors are not distracted by the high absolute returns of cryptocurrencies but by the other attention-grabbing news or macroeconomic factors at the same time that affect the cryptocurrency prices. In all the regressions, standard errors are adjusted for heteroskedasticity and clustered by earnings announcement date.

In equation (5), the main coefficient of interest is α_1, which captures the effect of past cryptocurrency returns on the earnings response coefficients (ERCs). Table **??** reports the results. Consistent with our prediction, we find that the return reactions to the earnings surprises are attenuated with high levels of cryptocurrency returns. The estimated coefficients of $SUE \times Abs(Crypto\ Ret)$ are negative and significant at the 5% level (coefficients = -1.326 and -1.336 with t-statistics = -2.32 and -2.35, respectively). In terms of economic magnitude, given the same earnings surprises, one standard deviation increase in *Abs(BTC_Ret)* (0.1) is associated with a 6.7% reduction in the return response to earnings surprises. The results are consistent with our distraction hypothesis that high levels of the absolute value of cryptocurrency returns distract equity market investor attention from earnings announcements.

4.2 Identification strategy

One potential concern when interpreting results is that our finding may be driven by omitted factors that contribute both to cryptocurrency returns and firm fundamentals. In order to address this concern, we utilize Chinese events to introduce exogenous variation to cryptocurrency distraction.

On September 4th, 2017, Chinese government regulators banned initial coin offerings (ICOs) in China. Ten days later, (on Sept 14th, 2017), China announced closure of all Bitcoin and cryptocurrency exchanges. The two adverse news for cryptocurrency are followed by substantial negative returns in the cryptocurrency market: the overnight returns of Bitcoin immediately after the two events are -6.28% and -8.61%, respectively. With more than 15% price decline in Bitcoin, the Chinese events provide sizable negative cryptocurrency returns that are unrelated to firm performance in the US equity market.

More importantly, these Chinese events are unlikely to be related to any equity market news or fundamentals, especially the stock market in the United States. The exogenous nature of the events motivate our identification strategy to examine the different market reaction to earnings news before and after the Chinese government's effort to block cryptocurrency.

More specifically, we choose the two quarters (90-day window) immediately before September 4th, 2017 (the ban on ICOs) and after September 14th, 2017 (the ban on cryptocurrency exchanges) and compare the ERCs. We estimate the following equation:

$$\begin{aligned} CAR[0,+2] = \alpha_0 + \alpha_1 SUE \times Post + \alpha_2 SUE + \alpha_3 (Post) + \Sigma\beta Controls \\ + \Sigma\lambda Controls \times SUE + Fixed\ Effects + \epsilon \end{aligned} \tag{6}$$

where *Post* is an indicator variable that equals one if an earnings announcement is after the events, and zero otherwise. We include the control variables and the interaction terms of control variables and *SUE* as in equation (5). We include firm and day of week fixed effects as well.

The results are tabulated in Panel A of Table 3. In column (1), the variable *Post* is absorbed by the year-month fixed effects. We find that the earnings response coefficients are significantly lower in the quarter immediately after the Chinese regulatory announcements to block cryptocurrency, adding to the evidence that cryptocurrency market fluctuations can distract equity market investors' attention during earnings announcements. The statistical significance are at the 1% level.

One potential alternative explanation for the above results is that investors' attention may follow a seasonal pattern, i.e., investors may tend to pay less attention to earnings news during the quarters after September every year. To rule out this possibility, we perform a placebo test in Panel B of Table 3. If seasonality drives the results, we should observe that the ERCs are lower for the quarter after September 14th than for the quarter before September 4th for every year in the sample period. Specifically, for the years 2016, 2018, 2019, and 2020, we use the two quarters (90-day window) immediately before September 4th and after September 14th, and define the indicator variable *Pseudo Post* that equals one if an earnings announcement is after September 14th for each year, and zero otherwise. Then we replace *Post* with *Pseudo Post* and re-estimate equation (6). We find that the interaction term $SUE \times Pseudo\ Post$ to be positive and insignificant, which contradicts the alternative explanation of seasonal investor attention patterns.

4.3 Cross-sectional analysis

In the models of Dellavigna and Pollet (2009) and Hirshleifer et al. (2011), risk averse investors with limited attention would ignore value-relevant information, leading to prices underreaction to

earnings news in the equilibrium. A predictions from those models is that when the investors' attention spent on acquiring and processing firm information decreases, there should be stronger underreaction to earnings surprises. Since investors have limited cognitive capacities, they are less likely to adequately process earnings information when facing information overload. Consistent with this argument, we expect that cryptocurrency distraction is stronger where there is more concurrent distraction events (Hirshleifer et al. 2009; Israeli et al. 2021). For instance, Hirshleifer et al. (2009) use number of earnings announcements by other firms on the same day to proxy for information load faced by the investors and document busy earning days are associated with underreaction to news announcements. To provide evidence that investor inattention is the channel for the cryptocurrency distraction effects, we investigate whether the distraction effects are stronger when there are more concurrent earnings announcements on the same day.

To examine this prediction, we re-estimate equation (5) by augmenting the interaction term of *Busy EA Day* × *SUE* × *Abs(Crypto Ret)*, as well as all the associated baseline variables and interaction terms. *Busy EA Day* is an indicator variable for observations with number of concurrent earnings announcements greater than the sample median. Table 4 reports the results. Consistent with our prediction, we find that the coefficient estimates for *Busy EA Day* × *SUE* × *Abs(Crypto Ret)* are negative and statistically significant at 5% level for both cryptocurrency distraction measures. The results indicate that number of distracting events at the same time magnifies the cryptocurrency distraction effects, suggesting that investor inattention is the driver for underreaction to earnings news.

4.4 Investor attention

4.4.1 Google search volume

Using Google search volume as a measure of investor attention (Da et al. 2011), we directly examine the cryptocurrency distraction effect on equity market investor attention. Following Drake, Roulstone, and Thornock (2012), we use ticker symbols to identify firms and remove ticker symbols associated with potential alternative meanings (e.g., "CAT" and "LAKE") in the process. Google search volume, *Google*, is defined in section 3.2.2. Specifically, we estimate the following equation:

$$Google = \alpha_0 + \alpha_1 Abs(Crypto\ Return) + \Sigma\beta\, Controls + Fixed\ Effects + \epsilon \tag{7}$$

where *Google* is firm i's Google search volume in the week of earnings announcements t. Other variables is defined as the same as equation (5). We re-estimate equation (5) but replace the dependent variable with *Google*. Control variables are the same as in equation (8), and we include both firm, year-month, and day of week fixed effects. We expect absolute value of cryptocurrency returns to be negatively associated with Google search volume. We report the results in Table 5 Panel A. We find that the coefficient estimates for *Abs(BTC_Ret)* and *Abs(Top4Crypto_Ret)* are negatively associated with Google searches, statistically significant at the 10% level, consistent with our prediction that investors' attention to equity market around earnings announcements is lower when cryptocurrency returns are higher.

To further verify our cryptocurrency distraction measure, in Table 5 Panel B, we perform analysis on the relationship between weekly Google search volume and the absolute value of past cryptocurrency returns. We show that our measures of cryptocurrency distraction are positively

associated with the public attention to cryptocurrency, after controlling for concurrent economic factors including commodity price index, U.S. Dollar to Euro Exchange rate return, an indicator variable for the Federal Open Market Committee (FOMC) meeting and the year fixed effects.

4.4.2 Abnormal volume

We also use abnormal volume to proxy for investor attention (Hirshleifer et al. 2009). We conjecture that when past cryptocurrency returns are higher, equity market investors are more likely to pay less attention to stock market and thus trade less upon earnings announcements. To test this prediction, we estimate the following regression model:

$$AbVol[0,+2] = \alpha_0 + \alpha_1 Abs(Crypto\ Return) + \Sigma\beta Controls + Fixed\ Effects + \epsilon, \tag{8}$$

where *AbVol[0,+2]* is the abnormal volume of earnings announcement events as defined in section 3.2.2. To account for the trading activity reaction to the unsigned earnings surprises, we include another control variable *Decile(Abs_SUE)*, the decile rank of the absolute value of *SUE*. Other control variables and fixed effects are the same as in equation 5. If equity market investors are distracted by the high absolute value of cryptocurrency returns, we expect α_1 to be negative.

In Table 6, we report the empirical results. The estimated α_1s are -0.514 and -0.522 for *Abs(BTC_Ret)* and *Abs(Top4Crypto_Ret)*, respectively. All of the coefficient estimates are statistically significant at the 5% level. In terms of economic magnitude, one standard deviation increase in *Abs(BTC_Ret)* is associated with a 2.2% reduction in the abnormal volume relative to the sample mean.

4.5 Retail and institutional investors

To further shed light on whether cryptocurrency distraction to the equity market vary across different types of investors, we perform analysis on the relationship between retail and institutional trading activities and the absolute value of cryptocurrency returns around earnings announcements. Retail and institutional trades are measured as the natural logarithm of the average daily dollar volume during the [0,+2] window relative to the earnings announcement date (see detailed variable definition in section 3.2.4). We replace the dependent variable in equation (8) with retail and institutional dollar volume and re-estimate the equation.

The results are tabulated in Table 7. Panel A reports the regression results for retail dollar volume; panel B presents the regression results for institutional dollar volume. We find that cryptocurrency returns are negatively associated with the retail dollar volume. The statistical significance are all at the 5% level. It is noteworthy that the coefficient estimates for the control variable *Busy EA Day* are negatively significant for retail dollar volume, and positive but insignificant for institutional dollar volume. This is consistent with evidence in Hirshleifer et al. (2009) that shows the distraction effect due to multiple earnings announcements on the same day is weaker for firms with greater institutional ownership. Our finding suggest that retail investors are more susceptible to distraction to the high absolute value of cryptocurrency returns prior to earnings announcements. This finding is consistent with Hirshleifer et al. (2009) and Drake et al. (2016), which find that unsophisticated investors are more susceptible to distraction. It is also consistent with the notion that retail investors are the main player in the cryptocurrency market during our sample period.

4.6 The impact on information environment

In this section, we further examine the relationship between cryptocurrency distraction and information asymmetry in the equity market. As uninformed (retail investors) are more subject to attention constraints and more distracted by the cryptocurrency price movements, the proportion of informed investors trading in the market increases around the earnings announcements. If this argument is true, we should observe more severe information asymmetry during the earnings announcement window, as a consequence of cryptocurrency distraction.

4.6.1 Effective spread

Following Blankespoor et al. (2014), we use effective bid-ask spread as our first measure of information asymmetry in the equity market. We estimate the following equation:

$$EffSpread = \alpha_0 + \alpha_1 Abs(Crypto\ Return) + \Sigma\beta Controls + Fixed\ Effects + \epsilon, \tag{9}$$

where *EffSpread* is the effective spread as defined in section 3.2.5. Control variables and fixed effects are the same as in section 4.4.

Table 8 reports the regression results. The estimated coefficients for *Abs(BTC_Ret)* and *Abs(Top4Crypto_Ret)* are 0.067 and 0.066, respectively. Both coefficients are statistically significant at the 1% level. In terms of economic magnitude, one standard deviation increase in *Abs(BTC_Ret)* is associated with a 2.4% increase in the effective spread. The results suggest that the cryptocurrency distraction is associated with higher information asymmetry around earnings announcements.

4.6.2 Price Impact

We further examine the relationship between cryptocurrency distraction and the adverse selection components of spread in the equity market. We use *Price Impact* as the proxy for adverse selection in the equity market (Holden et al. 2014). We estimate the following equation:

$$PriceImpact = \alpha_0 + \alpha_1 Abs(Crypto\ Return) + \Sigma\beta Controls + Fixed\ Effects + \epsilon, \tag{10}$$

where *EffSpread* is the effective spread as defined in section 3.2.5. Control variables and fixed effects are the same as in section 4.4.

Table 9 reports the regression results. The estimated coefficients for *Abs(BTC_Ret)* and *Abs(Top4Crypto_Ret)* are 0.024 and 0.023, respectively. Both coefficients are statistically significant at 10% level. Consistent with the conjecture that the proportion of informed investors increase, we document that the average price impact around earnings announcement is larger with greater cryptocurrency distraction. It is noteworthy that the higher percentage of informed traders in the market do not necessarily indicate faster speed of information impounded into price: the lose of trading counterparts (i.e., retail investors) may lead to a higher trading cost and discourage informed investors to trade even if they have information advantage.

5 Additional analyses

In this section, we discuss and perform additional analyses to rule out alternative explanations. First, past cryptocurrency price movements may be correlated with firm fundamentals, and thus the underreaction to earnings news may be explained by the hidden correlation. Second, our measure for cryptocurrency distraction may be associated with lower earnings persistence. Therefore, equity

investors rationally react less to the earnings surprises because earning information is uninformative for the future corporate performance at times with greater cryptocurrency price movements.

To investigate into the above arguments, we conduct two tests. First, we examine whether firm fundamentals are associated with cryptocurrency returns. To do so, we modify equation (7) using earnings surprises, *SUE*, as the dependent variable, and regress *SUE* on our cryptocurrency return measures, *Abs(BTC_Ret)* and *Abs(Top4Crypto_Ret)*. Table 10 reports the results, and we find no evidence that earnings surprises are associated with cryptocurrency returns. This alleviates the concern that cryptocurrency returns have information about firm fundamentals.

Second, following prior literature (e.g., Bradshaw et al. 2018), we investigate whether earnings become less useful in predicting future firm performances when cryptocurrency distraction is high. To examine this possibility, we regress future operating performances on the current quarter's earnings interacted with our cryptocurrency distraction measures. We estimate the equation:

$$\begin{aligned} Op\ Performance_{t+1} = \alpha_0 + \alpha_1 Street\ Earnings_t \times Abs(Crypto\ Return)_t + \alpha_2 Street\ Earnings_t \\ + \alpha_3 Abs(Crypto\ Return)_t + \Sigma\beta Controls + \Sigma\lambda Controls \times SUE + \epsilon, \end{aligned} \tag{11}$$

where *Street Earnings* is I/B/E/S actual earnings per share (EPS) for the quarter t, and *Op Performance* is operating income or operating cash flow for the quarter *t+1*.

Table 11 reports that the coefficients for interaction terms *Street Earnings*$\times$*Abs*(*Crypto Return*) are insignificant for the both cryptocurrency return measures. The results indicate that earnings informativeness is not associated with cryptocurrency movements. Overall, we mitigate the concern that the market reactions to earnings announcements are weaker because earnings become less informative to investors during periods with high cryptocurrency distraction.

6 Conclusion

As an asset class, cryptocurrency is gaining popularity with investors. Consequently, understanding the consequences of rising attention to the cryptocurrency market is of interest to policymakers, practitioners, and researchers. This study investigates whether attention to the cryptocurrency market impacts the market response to earnings announcements. We hypothesize that attention to the cryptocurrency market can distract investor from earnings news. Using the absolute value of past two-week cumulative cryptocurrency return as the measure of cryptocurrency attention, we find that higher cryptocurrency distraction is associated with weaker market reactions to earnings news, even after controlling for other competing stimuli. To reduce endogeneity concern, we use the setting that impacts cryptocurrency prices but are not directly related to firm fundamental, i.e., Chinese banning Initial Coin Offerings (ICOs) and cryptocurrency exchanges, and find that our result remains similar. To further shed light on the limited attention hypothesis, we document that the distraction effect is more pronounced when investors face higher attention constraints. Additionally, using two direct measures of equity market investor attention (i.e., abnormal trading volume and Google searches), we find cryptocurrency distraction is associated with a reduction in equity market investor attention around earnings announcements. Further, we document that retail trading volume decreases with cryptocurrency distraction around earnings announcements, but not institutional dollar volume. Collectively, the evidence suggests that the cryptocurrency market competes with the equity market for investor attention, and thus disrupts the pricing of earnings news. Last but not least, we extend our analysis to broader market consequences with respect to information asymmetry and find that both effective spread and price impact are higher during the earnings announcement window with greater cryptocurrency distraction.

To our best knowledge, this paper makes the first attempt to study the impact of cryptocurrency on information gathering and processing of equity investors. Considering the increasing attention on and regulatory efforts of digital currencies, the findings of this paper offer timely evidence about cryptocurrency mania and its consequences.

Our findings make two important contributions to the limited attention literature. First, there is scarce evidence on how investors allocate attention when giving many asset choices in the literature. In this paper, we offer evidence on how cryptocurrency, a class of assets without intrinsic value, impacts pricing of public information. Second, our study extends the empirical evidence on investors' limited attention. One important assumption in the traditional asset pricing models is that information is impounded into prices immediately upon arrival. Such an assumption requires investors to have unlimited resources for acquiring and processing value-relevant information. However, investor attention may be a scarce resource. Therefore how investors' distraction impacts pricing of earnings news is an important question in the accounting and finance literature. The distraction events studied in the literature are either derived from the equity market (e.g., concurrent earnings announcement events) or unrelated to the capital market (e.g., Friday, sport events, or daily news index). Our study focuses on the distraction effect from a unique class of asset in the capital market, yet with little underlying value—cryptocurrency. This unique feature allows us to shed light on how different classes of assets compete for investor attention, and how such competition for attention can have real consequences on the price formation and information environment in the capital market.

Appendix A

Variable	Variable Definition
Abs(BTC_Ret)	The absolute value of cumulative bitcoin returns in the past two-week
Abs(Top4Crypo_Ret)	The absolute value of cumulative volume-weighted returns of BTC, ETH, BNB, and ADA in the past two-week
CAR[0,+2]	Cumulative market-adjusted returns for a firm from earnings announcement day 0 to +2
Google	Google search volume index in the week of an earnings announcement
Abvol[0,+2]	Daily average share volume of a stock on day [0,+2] relative to an earnings announcement minus the daily average share volume on days[-40,-1], scaled by the standard deviation of share volumes on days[-40,-1]
ln($RetailTrades)	The natural logarithm of the average retail dollar volume over the [0,+2] window relative to an earnings announcement. Retail trades are defined following Boehmer, Jones, Zhang, and Zhang (2021)
ln($InsTrades)	The natural logarithm of average institutional dollar volume over the [0,+2] window relative to an earnings announcement. Institutional trades are defined as the trades with trade size greater than $50,000
EffSpread	Average daily effective spread over the [0,+2] window relative to an earnings announcement; see detailed definition in section 3.2.5
Price Impact	Average daily price impact over the [0,+2] window relative to an earnings announcement; see detailed definition in section 3.2.5
Future Op Income	Operating income for the next quarter, defined as the operating income before depreciation, scaled by total assets.
Future Op CF	Operating cash flow, defined as the net cash flow income before depreciation, scaled by total assets
SUE	Standardized unexpected earnings, defined as the difference between reported earnings per share (EPS) and the analysts' consensus EPS, divided by stock price
Street Earnings	Actual earnings per share divided by total assets
BTM	Book-to-market ratio, defined as the market value of equity divided by the market value of equity measured at fiscal quarter-end
Size	Natural logarithm of total assets measured at fiscal quarter-end
PastRet	Past six-month cumulative returns
InstOwn	Institutional ownership calculated as the percentage of outstanding shares held by institutional investors
Dec31	Indicator variable that equals one if a firm's fiscal year-end is December 31, and zero otherwise
Busy EA Day	Indicator variable that equals one if the number of earnings announcements on that day is above the sample median of the number of earnings announcements, and zero otherwise
ReportLag	Number of days difference between reporting period end date and earnings announcement date
NumAnalyst	Number of sell-side financial analysts covering the firm

References

Akyildirim, E., S. Corbet, D. Cumming, B. Lucey, and A. Sensoy (2020). Riding the wave of crypto-exuberance: The potential misusage of corporate blockchain announcements. *Technological Forecasting and Social Change 159*, 120191.

Akyildirim, E., S. Corbet, A. Sensoy, and L. Yarovaya (2020). The impact of blockchain related name changes on corporate performance. *Journal of Corporate Finance 65*, 101759.

Augustin, P., F. Jiao, S. Sarkissian, and M. J. Schill (2020). Cross-listings and the dynamics between credit and equity returns. *The Review of Financial Studies 33*(1), 112–154.

Barber, B. M. and T. Odean (2008). All that glitters: the effect of attention and news on the buying behavior of individual and institutional investors. *Review of Financial Studies 21*(2), 785–818.

Barber, B. M., T. Odean, and N. Zhu (2008). Do retail trades move markets? *The Review of Financial Studies 22*(1), 151–186.

Blankespoor, E., E. deHaan, and I. Marinovic (2020). Disclosure processing costs, investors' information choice, and equity market outcomes: A review. *Journal of Accounting and Economics 70*(2-3), 101344.

Blankespoor, E., G. S. Miller, and H. D. White (2014). The role of dissemination in market liquidity: Evidence from firms' use of twitter™. *The accounting review 89*(1), 79–112.

Boehmer, E., C. M. Jones, X. Zhang, and X. Zhang (2021). Tracking retail investor activity. *The Journal of Finance 76*(5), 2249–2305.

Bradshaw, M. T., T. E. Christensen, K. H. Gee, and B. C. Whipple (2018). Analysts' gaap earnings forecasts and their implications for accounting research. *Journal of Accounting and Economics 66*(1), 46–66.

Cheng, S. F., G. De Franco, H. Jiang, and P. Lin (2019). Riding the blockchain mania: public firms' speculative 8-K disclosures. *Management Science 65*(12), 5901–5913.

Cockrell, J. (2017). What's the fundamental value of a bitcoin? *Retrieved from https://www.chicagobooth.edu/review/whats-fundamental-value-bitcoin*.

Cohen, L. and A. Frazzini (2008). Economic links and predictable returns. *The Journal of Finance 63*(4), 1977–2011.

Cong, L. W. and Z. He (2019). Blockchain Disruption and Smart Contracts. *The Review of Financial Studies 32*(5), 1754–1797.

Da, Z., J. Engelberg, and P. Gao (2011). In search of attention. *The Journal of Finance 66*(5), 1461–1499.

deHaan, E., T. Shevlin, and J. Thornock (2015). Market (in)attention and the strategic scheduling and timing of earnings announcements. *Journal of Accounting and Economics 60*(1), 36–55.

Dellavigna, S. and J. M. Pollet (2009). Investor inattention and friday earnings announcements. *The Journal of Finance 64*(2), 709–749.

Drake, M. S., K. H. Gee, and J. R. Thornock (2016). March market madness: The impact of value-irrelevant events on the market pricing of earnings news. *Contemporary Accounting Research 33*(1), 172–203.

Drake, M. S., D. T. Roulstone, and J. R. Thornock (2012). Investor information Demand: Evidence from Google Searches Around Earnings Announcements: investor information demand. *Journal of Accounting Research 50*(4), 1001–1040.

Easley, D., M. O'Hara, and S. Basu (2019). From mining to markets: The evolution of bitcoin transaction fees. *Journal of Financial Economics 134*(1), 91–109.

Even-Tov, O. (2017). When does the bond price reaction to earnings announcements predict future stock returns? *Journal of Accounting and Economics 64*(1), 167–182.

Foster, G. (1981). Intra-industry information transfers associated with earnings releases. *Journal of accounting and economics 3*(3), 201–232.

Gebhardt, W. R., S. Hvidkjaer, and B. Swaminathan (2005). The cross-section of expected corporate bond returns: Betas or characteristics? *Journal of financial economics 75*(1), 85–114.

Hirshleifer, D., P.-H. Hsu, and D. Li (2013). Innovative efficiency and stock returns. *Journal of Financial Economics 107*(3), 632–654.

Hirshleifer, D., S. S. Lim, and S. H. Teoh (2009). Driven to distraction: extraneous events and underreaction to earnings news. *The Journal of Finance 64*(5), 2289–2325.

Hirshleifer, D., S. S. Lim, and S. H. Teoh (2011). Limited investor attention and stock market misreactions to accounting information. *The Review of Asset Pricing Studies 1*(1), 35–73.

Hirshleifer, D. and J. Sheng (2022). Macro news and micro news: complements or substitutes? *Journal of Financial Economics 145*(3), 1006–1024.

Holden, C. W., S. Jacobsen, and A. Subrahmanyam (2014). The empirical analysis of liquidity. *Foundations and Trends® in Finance 8*(4), 263–365.

Hu, A. S., C. A. Parlour, and U. Rajan (2019). Cryptocurrencies: Stylized facts on a new investible instrument. *Financial Management 48*(4), 1049–1068.

Israeli, D., R. Kasznik, and S. A. Sridharan (2021). Unexpected distractions and investor attention to corporate announcements. *Review of Accounting Studies*, 1–42.

Kahneman, D. (1973). *Attention and effort*. Englewood Cliffs, NJ: Prentice-Hall.

Kempf, E., A. Manconi, and O. Spalt (2017). Distracted Shareholders and Corporate Actions. *The Review of Financial Studies 30*(5), 1660–1695.

Kiernan, P. (2022). The $2 trillion cryptocurrency market is drawing interest from investors, scrutiny from U.S. regulators. *Wall Street Journal*.

Leuz, C. and R. E. Verrecchia (2000). The economic consequences of increased disclosure. *Journal of accounting research*, 91–124.

Li, J. and J. Yu (2012). Investor attention, psychological anchors, and stock return predictability. *Journal of Financial Economics 104*(2), 401–419.

Lim, S. S. and S. H. Teoh (2010). Limited attention. *Behavioral finance: Investors, corporations, and markets 16*, 295–312.

Liu, Y. and A. Tsyvinski (2021). Risks and returns of cryptocurrency. *The Review of Financial Studies 34*(6), 2689–2727.

Liu, Y., A. Tsyvinski, and X. Wu (2022). Common risk factors in cryptocurrency. *The Journal of Finance 77*(2), 1133–1177.

Madsen, J. (2017). Anticipated earnings announcements and the customer–supplier anomaly. *Journal of Accounting Research 55*(3), 709–741.

Makarov, I. and A. Schoar (2020). Trading and arbitrage in cryptocurrency markets. *Journal of Financial Economics 135*(2), 293–319.

Nicenko, A. (2022). Bitcoin's average daily trading volume is almost 60% higher than apple's. *Retrieved from https://finbold.com/bitcoins-average-daily-trading-volume-is-almost-60-higher-than-apples/*.

O'Keefe, B. (2021). How crypto went from mania to mainstream. *Fortune*.

Peng, L. and W. Xiong (2006). Investor attention, overconfidence and category learning. *Journal of Financial Economics 80*(3), 563–602.

Peress, J. (2008). Media coverage and investors' attention to earnings announcements. *Available at SSRN 2723916*.

Smith, A. (2021). Cryptocurrency has 'no intrinsic value' and investors could 'lose all your money', says bank of england chief. *Retrieved from https://finance.yahoo.com/news/cryptocurrency-no-intrinsic-value-investors-163626143.html?guccounter=1*.

Subramaniam, S. and M. Chakraborty (2020). Investor attention and cryptocurrency returns: Evidence from quantile causality approach. *Journal of Behavioral Finance 21*(1), 103–115.

Urquhart, A. (2018). What causes the attention of Bitcoin? *Economics Letters 166*, 40–44.

Table 1 : Summary Statistics

	N	Mean	SD	P25	P50	P75
Abs(BTC_Ret)	38,098	0.128	0.100	0.042	0.108	0.196
Abs(Top4Crypto_Ret)	38,098	0.128	0.100	0.042	0.109	0.199
CAR[0,+2]	38,098	-0.001	0.102	-0.054	-0.000	0.053
Google	32,409	37.422	26.408	15.000	36.000	58.000
AbVol[0,+2]	38,098	2.292	2.905	0.359	1.449	3.184
ln($RetailTrades)	38,095	14.155	2.182	12.668	14.169	15.636
ln($InsTrades)	38,063	15.172	2.126	13.587	15.095	16.679
Effspread	38,093	0.282	0.428	0.062	0.132	0.288
Price Impact	38,093	0.193	0.218	0.058	0.123	0.240
SUE	38,098	0.000	0.017	-0.001	0.001	0.003
BTM	38,098	0.566	0.600	0.204	0.391	0.702
Size	38,098	7.196	1.979	5.842	7.240	8.552
PastRet	38,098	0.005	0.085	-0.037	0.005	0.045
InstOwn	38,098	0.633	0.351	0.364	0.761	0.901
Dec31	38,098	0.191	0.393	0.000	0.000	0.000
Busy EA Day	38,098	0.498	0.500	0.000	0.000	1.000
ReportLag	38,098	35.909	10.974	29.000	35.000	39.000
NumAnalyst	38,098	6.349	5.735	2.000	4.000	9.000

This table reports the summary statistics. The sample consists of 38,098 quarterly earnings announcements during 2016 to 2020. All continuous variables are winsorized at the 1^{st} and 99^{th} percentiles. Variable definitions are in Appendix A.

Table 2 Cryptocurrency Distraction and ERC

	(1) $CAR[0,+2]$	(2) $CAR[0,+2]$
SUE × *Abs(BTC_Ret)*	-1.329**	
	(-2.32)	
SUE × *Abs(Top4Crypto_Ret)*		-1.338**
		(-2.36)
Abs(BTC_Ret)	0.011	
	(1.08)	
Abs(Top4Crypto_Ret)		0.010
		(1.06)
SUE	1.906***	1.908***
	(6.21)	(6.22)
SUE × *Size*	0.168***	0.168***
	(5.81)	(5.81)
SUE × *BTM*	-0.341***	-0.341***
	(-7.38)	(-7.38)
SUE × *PastRet*	-0.350	-0.349
	(-0.98)	(-0.98)
SUE × *InstOwn*	0.810***	0.811***
	(5.59)	(5.60)
SUE × *ReportLag*	-0.028***	-0.028***
	(-7.00)	(-7.00)
SUE × *Dec31*	-0.259	-0.258
	(-1.30)	(-1.29)
SUE × *NumAnalyst*	-0.020	-0.020
	(-1.28)	(-1.28)
SUE × *Busy EA Day*	-0.132	-0.133
	(-1.17)	(-1.17)
Observations	38,098	38,098
Adj R-Squared	0.07	0.07
Control Variables	Yes	Yes
Firm FE	Yes	Yes
YearMonth Fixed Effects	Yes	Yes
Day of Week Fixed Effects	Yes	Yes

This table reports the regression results on the relationship between cryptocurrency distraction and earnings response coefficients (ERCs) around earnings announcements. The standard errors are clustered by earnings announcement date. T-statistics are in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively. Variables are defined in Appendix A.

Table 3 Cryptocurrency Distraction and ERC: Identification using Chinese Ban on ICO and Cryptocurrency Trading Platforms

Panel A

	(1) $CAR[0,+2]$	(2) $CAR[0,+2]$
SUE × *Post*	-0.967**	-0.965**
	(-2.52)	(-2.49)
SUE	5.897**	6.021**
	(2.44)	(2.51)
Post		0.014***
		(4.23)
SUE × *Size*	0.337**	0.342**
	(2.01)	(2.04)
SUE × *BTM*	-0.559*	-0.555*
	(-1.80)	(-1.79)
SUE × *PastRet*	2.413	2.373
	(0.91)	(0.89)
SUE × *InstOwn*	2.308***	2.307***
	(3.20)	(3.20)
SUE × *ReportLag*	-0.047	-0.050
	(-1.21)	(-1.30)
SUE × *Dec31*	-3.502**	-3.530**
	(-2.51)	(-2.57)
SUE × *NumAnalyst*	-0.165***	-0.169***
	(-3.07)	(-3.17)
Busy EA Day	0.000	-0.000
	(0.00)	(-0.05)
SUE × *Busy EA Day*	-0.080	-0.096
	(-0.16)	(-0.19)
Observations	3,465	3,465
Adj R-Squared	0.11	0.11
Control Variables	Yes	Yes
Firm FE	Yes	Yes
YearMonth FE	Yes	No
Day of Week FE	Yes	Yes

Panel B: Placebo

	(1) $CAR[0,+2]$	(2) $CAR[0,+2]$
SUE × *Post*	0.058	0.081
	(0.39)	(0.54)
SUE	2.302***	2.169***
	(4.72)	(4.57)
Post		0.001
		(0.48)
SUE × *PastRet*	0.068	0.054
	(0.13)	(0.10)
SUE × *InstOwn*	0.980***	0.983***
	(3.87)	(3.86)
SUE × *ReportLag*	-0.036***	-0.033***
	(-4.52)	(-4.12)
SUE × *Dec31*	-0.729**	-0.722**
	(-2.56)	(-2.58)
SUE × *NumAnalyst*	-0.027	-0.027
	(-1.18)	(-1.17)
Busy EA Day	-0.006*	-0.006
	(-1.74)	(-1.48)
SUE × *Busy EA Day*	-0.078	-0.066
	(-0.45)	(-0.38)
Observations	15,426	15,426
Adj R-Squared	0.09	0.08
Control Variables	Yes	Yes
Firm FE	Yes	Yes
YearMonth FE	Yes	No
Day of Week FE	Yes	Yes

This table reports the regression results on the relationship between Chinese events and ERC. Panel A reports the analysis focusing on the two quarters around the Chinese events; panel B reports the placebo tests for the quarters around the pseudo event dates in non-event years. The standard errors are clustered by earnings announcement date. T-statistics are in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively. Variables are defined in Appendix A.

Table 4 Cryptocurrency Distraction and ERC: Cross-sectional Analysis on Busy Earnings Days

	(1) $CAR[0,+2]$	(2) $CAR[0,+2]$
Busy EA Day × *SUE* × *Abs(BTC_Ret)*	-2.794**	
	(-2.39)	
Busy EA Day × *SUE* × *Abs(Top4Crypto_Ret)*		-2.787**
		(-2.39)
SUE × *Abs(BTC_Ret)*	-0.352	
	(-0.69)	
SUE × *Abs(Top4Crypto_Ret)*		-0.369
		(-0.72)
Busy EA Day	0.001	0.001
	(0.21)	(0.19)
Busy EA Day × *Abs(BTC_Ret)*	-0.004	
	(-0.28)	
Busy EA Day × *Abs(Top4Crypto_Ret)*		-0.004
		(-0.25)
Busy EA Day × *SUE*	0.349*	0.348*
	(1.78)	(1.77)
SUE	1.736***	1.739***
	(5.86)	(5.86)
Abs(BTC_Ret)	0.012	
	(1.05)	
Abs(Top4Crypto_Ret)		0.011
		(1.02)
Observations	38,098	38,098
Adj R-Squared	0.07	0.07
Controls and Controls × SUE	Yes	Yes
Firm FE	Yes	Yes
YearMonth FE	Yes	Yes
Day of Week FE	Yes	Yes

This table reports the regression results of the cross-sectional analyses on the relationship between cryptocurrency distraction and earnings response coefficients (ERCs) around earnings announcements, which focuses on the information load, proxied by the number of concurrent earnings announcements; *Busy EA Day* is an indicator variable that equals one if the number of earnings announcements on that day is above the sample median of the number of earnings announcements. The standard errors are clustered by earnings announcement date. T-statistics are in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively. Variables are defined in Appendix A.

Table 5 Cryptocurrency Distraction and Google Search Volume

Panel A: Equity Market Google Search Volume

	(1) *Google*	(2) *Google*
Abs(BTC_Ret)	-2.933**	
	(-2.13)	
Abs(Top4Crypto_Ret)		-2.718**
		(-2.01)
Size	4.350***	4.423***
	(10.16)	(10.41)
BTM	-0.190	-0.231
	(-0.60)	(-0.73)
InstOwn	-2.211***	-2.186***
	(-4.04)	(-4.02)
PastRet	8.126***	8.005***
	(5.64)	(5.56)
ReportLag	0.023	0.023
	(1.29)	(1.30)
NumAnalyst	0.113***	0.113***
	(3.30)	(3.30)
Dec31	1.741	1.729
	(0.65)	(0.65)
Busy EA Day	-1.586***	-1.589***
	(-5.46)	(-5.52)
Observations	32,160	32,299
Adj R-Squared	0.64	0.64
Firm FE	Yes	Yes
YearMonth FE	Yes	Yes
Day of Week FE	Yes	Yes

Panel B: Google Search Volume for Cryptocurrency

	(1) *Crypto Search Volume*	(2) *Crypto Search Volume*
Past Abs(BTC_Ret)	45.547***	
	(6.17)	
Past Abs(Top4Crypto_Ret)		44.839***
		(6.06)
Commodity index	0.055***	0.055***
	(2.71)	(2.72)
EUR-USD Ret	527.073	529.819
	(1.33)	(1.33)
FOMC	-0.119	-0.106
	(-0.05)	(-0.05)
Observations	261	261
Adj R-Squared	0.29	0.28
Year Fixed Effects	Yes	Yes

Panel A of this table reports the regression results on the relationship between the absolute value of cryptocurrency return and Google search volume around earnings announcements. The standard errors are clustered by earnings announcement date. Panel B of this table reports the regression results on the relationship between the absolute value of past two-week cryptocurrency return and Google search volume of the keyword "Cryptocurrency". T-statistics are in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively. Variables are defined in Appendix A.

Table 6 Cryptocurrency Distraction and Abnormal Volume

	(1) $AbVol[0,+2]$	(2) $AbVol[0,+2]$
Abs(BTC_Ret)	-0.535**	
	(-2.16)	
Abs(Top4Crypto_Ret)		-0.543**
		(-2.21)
Decile(Abs_SUE)	0.323***	0.323***
	(9.17)	(9.17)
Size	0.414***	0.414***
	(6.72)	(6.72)
BTM	-0.249***	-0.249***
	(-5.57)	(-5.57)
InstOwn	0.604***	0.604***
	(6.58)	(6.58)
PastRet	-0.525***	-0.526***
	(-2.79)	(-2.79)
ReportLag	0.017***	0.017***
	(5.68)	(5.68)
NumAnalyst	-0.025***	-0.025***
	(-4.66)	(-4.66)
Dec31	-0.488	-0.488
	(-0.88)	(-0.88)
Busy EA Day	-0.406***	-0.406***
	(-7.33)	(-7.33)
Observations	38,098	38,098
Adj R-Squared	0.27	0.27
Firm FE	Yes	Yes
YearMonth FE	Yes	Yes
Day of Week FE	Yes	Yes

This table reports the regression results on the relationship between cryptocurrency distraction and abnormal volume around earnings announcements. The standard errors are clustered by earnings announcement date. T-statistics are in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively. Variables are defined in Appendix A.

Table 7 Cryptocurrency Distraction and Retail and Institutional Trading

Panel A: Retail Dollar Volume

	(1) $ln(\$RetailTrades)$	(2) $ln(\$RetailTrades)$
Abs(BTC_Ret)	-0.228***	
	(-2.60)	
Abs(Top4Crypto_Ret)		-0.227***
		(-2.60)
Decile(Abs_SUE)	0.050***	0.050***
	(3.96)	(3.96)
Size	0.736***	0.736***
	(27.15)	(27.15)
BTM	-0.498***	-0.498***
	(-19.34)	(-19.34)
InstOwn	0.256***	0.256***
	(7.60)	(7.60)
PastRet	0.959***	0.959***
	(12.15)	(12.15)
ReportLag	0.003***	0.003***
	(2.66)	(2.65)
NumAnalyst	0.008***	0.008***
	(5.38)	(5.38)
Dec31	-0.656***	-0.656***
	(-4.40)	(-4.40)
Busy EA Day	-0.186***	-0.186***
	(-9.57)	(-9.57)
Observations	38,095	38,095
Adj R-Squared	0.84	0.84
Firm FE	Yes	Yes
YearMonth FE	Yes	Yes
Day of Week FE	Yes	Yes

Panel B: Institutional Dollar Volume

	(1) $ln(\$InsTrades)$	(2) $ln(\$InsTrades)$
Abs(BTC_Ret)	-0.047	
	(-0.60)	
Abs(Top4Crypto_Ret)		-0.043
		(-0.56)
Decile(Abs_SUE)	-0.004	-0.004
	(-0.25)	(-0.25)
Size	0.604***	0.604***
	(22.35)	(22.36)
BTM	-0.401***	-0.401***
	(-15.54)	(-15.54)
InstOwn	0.100***	0.100***
	(3.14)	(3.14)
PastRet	0.281***	0.281***
	(3.05)	(3.05)
ReportLag	-0.002	-0.002
	(-1.57)	(-1.57)
NumAnalyst	0.007***	0.007***
	(4.58)	(4.58)
Dec31	-0.506**	-0.506**
	(-2.37)	(-2.37)
Busy EA Day	-0.112***	-0.112***
	(-6.08)	(-6.08)
Observations	38,063	38,063
Adj R-Squared	0.77	0.77
Firm FE	Yes	Yes
YearMonth FE	Yes	Yes
Day of Week FE	Yes	Yes

This table reports the regression results on the relationship between cryptocurrency distraction and the retail and institutional dollar volume around earnings announcements. Panel A reports the regression results for retail dollar volume; panel B reports the regression results for institutional dollar volume. The standard errors are clustered by earnings announcement date. T-statistics are in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively. Variables are defined in Appendix A.

Table 8 Cryptocurrency Distraction and Effective Spread

	(1) *EffSpread*	(2) *EffSpread*
Abs(BTC_Ret)	0.067***	
	(2.62)	
Abs(Top4Crypto_Ret)		0.066***
		(2.60)
Decile(Abs_SUE)	0.012***	0.012***
	(5.21)	(5.21)
Size	-0.129***	-0.129***
	(-17.70)	(-17.69)
BTM	0.131***	0.131***
	(22.50)	(22.50)
InstOwn	-0.101***	-0.101***
	(-9.93)	(-9.93)
PastRet	-0.199***	-0.199***
	(-9.56)	(-9.56)
ReportLag	0.001***	0.001***
	(2.81)	(2.81)
NumAnalyst	0.000	0.000
	(0.42)	(0.42)
Dec31	0.049	0.049
	(1.63)	(1.63)
Busy EA Day	-0.007	-0.007
	(-1.14)	(-1.14)
Observations	38,093	38,093
Adj R-Squared	0.77	0.77
Firm FE	Yes	Yes
YearMonth FE	Yes	Yes
Day of Week FE	Yes	Yes

This table reports the regression results on the relationship between cryptocurrency distraction and effective spreads around earnings announcements. The standard errors are clustered by earnings announcement date. T-statistics are in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively. Variables are defined in Appendix A.

Table 9 Cryptocurrency Distraction and Price Impact

	(1) *Price Impact*	(2) *Price Impact*
Abs(BTC_Ret)	0.023*	
	(1.69)	
Abs(Top4Crypto_Ret)		0.023*
		(1.65)
Decile(Abs_SUE)	0.011***	0.011***
	(7.30)	(7.30)
Size	-0.064***	-0.064***
	(-16.61)	(-16.61)
BTM	0.074***	0.074***
	(21.74)	(21.74)
InstOwn	-0.043***	-0.043***
	(-8.50)	(-8.50)
PastRet	-0.108***	-0.108***
	(-8.58)	(-8.58)
ReportLag	0.001***	0.001***
	(3.99)	(3.99)
NumAnalyst	0.000	0.000
	(0.85)	(0.85)
Dec31	0.051**	0.051**
	(2.20)	(2.19)
Busy EA Day	0.001	0.001
	(0.27)	(0.28)
Observations	38,093	38,093
Adj R-Squared	0.65	0.65
Firm FE	Yes	Yes
YearMonth FE	Yes	Yes
Day of Week FE	Yes	Yes

This table reports the regression results on the relationship between the cryptocurrency distraction and price impact around earnings announcements. The standard errors are clustered by earnings announcement date. T-statistics are in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively. Variables are defined in Appendix A.

Table 10 Relationship between Cryptocurrency Distraction and Unexpected Earnings

	(1) *SUE*	(2) *SUE*
Abs(BTC_Ret)	-0.001	
	(-0.41)	
Abs(Top4Crypto_Ret)		-0.000
		(-0.39)
Size	-0.002***	-0.002***
	(-3.86)	(-3.86)
BTM	0.002***	0.002***
	(3.28)	(3.28)
InstOwn	0.001	0.001
	(1.50)	(1.50)
PastRet	0.007***	0.007***
	(4.54)	(4.54)
ReportLag	-0.000***	-0.000***
	(-4.52)	(-4.52)
NumAnalyst	-0.000	-0.000
	(-0.51)	(-0.51)
Dec31	-0.000	-0.000
	(-0.05)	(-0.05)
Busy EA Day	-0.000	-0.000
	(-0.06)	(-0.06)
Observations	38,098	38,098
Adj R-Squared	0.12	0.12
Firm FE	Yes	Yes
YearMonth FE	Yes	Yes
Day of Week FE	Yes	Yes

This table reports the regression results on the relationship between cryptocurrency distraction and standardized unexpected earnings. The standard errors are clustered by earnings announcement date. T-statistics are in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively. Variables are defined in Appendix A.

Table 11 Relationship between Cryptocurrency Distraction and Earnings Persistence

	(1) *Future Op Income*	(2) *Future Op Income*	(3) *Future Op CF*	(4) *Future Op CF*
Street Earnings × Abs(BTC_Ret)	0.406		0.257	
	(0.39)		(1.09)	
Street Earnings × Abs(Top4Crypto_Ret)		0.391		0.251
		(0.38)		(1.08)
Abs(BTC_Ret)	0.021**		0.003	
	(2.44)		(1.40)	
Abs(Top4Crypto_Ret)		0.020**		0.003
		(2.38)		(1.39)
Street Earnings	1.882***	1.883***	0.810***	0.811***
	(7.89)	(7.92)	(11.65)	(11.68)
Size	0.052***	0.052***	0.021***	0.021***
	(13.98)	(13.98)	(15.12)	(15.12)
BTM	-0.007***	-0.007***	-0.010***	-0.010***
	(-4.59)	(-4.59)	(-12.00)	(-12.00)
InstOwn	-0.007**	-0.007**	-0.001	-0.001
	(-2.30)	(-2.30)	(-1.08)	(-1.09)
PastRet	0.043***	0.043***	0.011***	0.011***
	(5.17)	(5.17)	(4.01)	(4.01)
ReportLag	-0.000***	-0.000***	-0.000***	-0.000***
	(-2.71)	(-2.70)	(-8.37)	(-8.37)
NumAnalyst	-0.000	-0.000	-0.000***	-0.000***
	(-0.70)	(-0.70)	(-3.32)	(-3.32)
Dec31	0.044***	0.044***	0.001	0.001
	(7.79)	(7.78)	(0.65)	(0.65)
Busy EA Day	0.003	0.003	0.001	0.001
	(1.54)	(1.54)	(1.55)	(1.55)
Observations	37,683	37,683	37,298	37,298
Adj R-Squared	0.77	0.77	0.84	0.84
Firm FE	Yes	Yes	Yes	Yes
YearMonth Fixed Effects	Yes	Yes	Yes	Yes
Day of Week Fixed Effects	Yes	Yes	Yes	Yes

This table reports the regression results on the relationship between cryptocurrency distraction and earnings persistence. The standard errors are clustered by earnings announcement date. T-statistics are in parentheses. *, **, and *** indicate significance at the 0.1, 0.05, and 0.01 levels, respectively. Variables are defined in Appendix A.