# The impact of COVID-19 on global investor attention

Zih-Ying Lin and Jia-Wen Lu\*

#### ABSTRACT

This research explores the effect of COVID-19 on global investor attention using data from G7 and G20 countries. We take the numbers of COVID-19 new confirmed cases and deaths to measure the level of COVID-19. The empirical findings show that COVID-19 new cases and deaths positively significantly correlate to (abnormal) investor attention, especially for G7 countries, but we only see a positively significant correlation in a few G20 countries. We further consider the effect of COVID-19 variants and vaccination rate on such a correlation and present that the COVID-19 effect on global investor attention is more pronounced during the Alpha variant and Delta variant waves. Finally, we provide evidence that when vaccination rates are higher, the positive COVID-19 and global investor attention nexus weakens.

**Keywords**: COVID-19 epidemic; Virus variant; Vaccination rate; Global investor attention.

JEL Classification: G14.

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#### **1. Introduction**

Coronavirus disease 2019 (COVID-19) first broke out in December 2019, and in the following month the World Health Organization (WHO) declared it an epidemic and an "International public health emergency". To avoid the spread of COVID-19, governments implemented policies such as travel bans, social distancing, and lockdowns, which interrupted demand and supply chains that quickly aggravated the deterioration of the global economy. The outbreak of COVID-19 has so far resulted in over 200 million people as confirmed cases and 5 million deaths. Liu et al. (2020) and Sun et al. (2021) indicate that investors' panic and pessimistic expectations over the future global economy led to widespread stock market turmoil. Several studies discuss the impact of COVID-19 on stock markets, especially for volatility and returns. Ali et al. (2020) investigate the impact of COVID-19 on the volatility of stock markets in European and Asian countries and find with the increase of COVID-19 deaths that the stock markets became more unstable, and compared with Asian countries the stock market volatility in European countries was more severe. Baig et al. (2021) indicate that the rise of COVID-19 confirmed cases and deaths has led to the deterioration of liquidity and increased volatility in the U.S. stock market. Zhang et al. (2020) note that there is higher market volatility when confirmed cases increase. Al-Awadhi et al. (2020) study the China stock market and find that COVID-19 total confirmed cases and total deaths in China have significantly negative impacts on stock returns. Ashraf (2020) considers 64 countries and presents that COVID-19 confirmed cases negatively relate to stock returns. Xu (2021) focuses on Canada and the U.S. stock markets and find that COVID-19 cases negatively relate to stock returns. Liu et al. (2020) point out that the outbreak of COVID-19 had a negative impact on the market returns in most countries, among which the Asian stock markets had the fastest negative response to the epidemic and a deeper decline. Yu et al. (2021) use a pandemic anxiety index based on the numbers of daily reported cases and deaths to

investigate the correlation between anxiety indices and stock market returns in BRICS and the G7 countries.

Based on the behavior concept, several studies discuss the relationship between investor attention and market returns, showing that there exists a positive correlation. Both Ying et al. (2015) and Yang et al. (2020) use the Baidu search volume index as a proxy for Chinese investor attention, offering that an increase of investor attention raises both market return and trading volume. Adachi et al. (2017) focus on the Japan market and indicate a positive relationship between search intensity and stock returns. Chai et al. (2021) use Google search volume for Australian investor attention, noting that trading activities and stock returns increase when investor attention rises.

COVID-19 also brings negative sentiments and pessimistic expectations to investors, which in turn have influenced their investment decisions. Some studies use Google search volume (SVI) as a proxy for investor attention to examine whether investor attention to COVID-19 affects market returns. Chundakkadan and Nedumparambil (2021) discuss the correlation between investor attention to COVID-19 and daily returns. They find that search volume about the pandemic negatively relates to stock returns. Smales (2021) focuses on G7 and G20 countries and finds that higher investor attention exhibits lower market returns during the COVID-19 crisis. Wang et al. (2021) indicate that investor attention to the epidemic causes panic during the COVID-19 period, which affects stock market stability.

COVID-19 has plunged the economies of nearly every country into a recession and created extremely high uncertainty in the financial market. Barua (2020) suggests that higher uncertainty driven by COVID-19 has spurred the loss of global public confidence. Hsu et al. (2021) point out that COVID-19 has a negative effect on industries and investor panic comes from market uncertainty. Donadelli et al. (2017) indicate that people are worried that they will be infected with a dangerous disease and hence have pessimism toward the U.S. stock market that brings about its poor performance. This implies that

investors are susceptible to the external environment and change their investment behaviors, resulting in violent fluctuations in the stock market. Haroon and Rizvi (2020) find that COVID-19 news media reports induce investors' panic and increase financial market volatility. However, there is a lack of research on how global infectious diseases affect investor attention in the stock market. We therefore fill this gap in literature and investigate the impact of COVID-19 on global investor attention.

We additionally discuss the impacts of COVID-19 variants and vaccination rate on the relationship between the level of COVID-19 and global investor attention. Several papers investigate how a COVID-19 variant affects a financial market (Díaz et al., 2022; Syed, 2022; Yan, 2022). Díaz et al. (2022) state that stock market volatility increases when news is about COVID-19 variants. Syed (2022) focuses on the U.S. stock market and finds that with each variant the stock index drops in the short run and then stabilizes in subsequence periods. Yan (2022) notes that the Delta variant negatively affects the U.S. stock market and hence exudes higher global uncertainty. We therefore include the effect of virus variants in our study.

Other papers examine the vaccination rate's effect in the financial market (Bao et al., 2021; Chan et al., 2021; Hartono, 2021; Rouatbi et al., 2021; Bakry et al., 2022). Bao et al. (2021) point out that mass vaccinations can mitigate investors' panic and decrease volatility in the international stock markets. Chan et al. (2021) indicate that vaccine research and development positively affects the stock market. Hartono (2021) shows that vaccine research and development increases investors' confidence in the stock market. Rouatbi et al. (2021) and Bakry et al. (2022) suggest that the vaccination rate helps stabilize the financial market and reduce stock volatility. Based on the above, we also include the effect of the vaccination rate in this paper.

The empirical findings are summarized as follows. First, we find that the level of COVID-19 positively significant affects (abnormal) investor attention in G7 countries. In contrast, G20 countries exhibit a weak positive result. Second, we show that COVID-19

variants influence such a relation much more, especially for the Alpha and Delta variants. Finally, we find that vaccination rates negatively affect the correlation between the level of COVID-19 and global investor attention. This implies that vaccination rates can reduce investors' fear and increase their confidence during epidemic periods.

The rest of the paper runs as follows. Section 2 describes details of our hypotheses' development. Section 3 provides data and empirical measures used herein. Section 4 shows our empirical methodology. Section 5 discusses the empirical results and some more issues. Section 6 concludes.

#### 2. Hypotheses' development

Most related studies show that the COVID-19 epidemic increases stock market volatility (Ali et al., 2020; Zhang et al., 2020; Baig et al., 2021) and has a negative effect on stock market returns (Al-Awadhi et al., 2020; Ashraf, 2020; Xu, 2021). Ali et al. (2020) find that stock markets become more unstable when COVID-19 deaths increase. Zhang et al. (2020) analyze the relation between confirmed cases and market volatility, indicating that the pandemic has a strong impact on stock markets. Baig et al. (2021) state that increases in COVID-19 confirmed cases and deaths lead to lower liquidity and higher volatility in the U.S. stock market. Al-Awadhi et al. (2020) suggest that COVID-19 total confirmed cases and total deaths have negatively significant effects on stock returns. Ashraf (2020) finds that growth in COVID-19 confirmed cases increase. Xu (2021) studies Canada and the U.S. stock markets, presenting that COVID-19 cases have a negative impact on stock returns.

Based on behavioral finance arguments, investors' mood is affected by the news media or Internet, which can then change their investment behavior. Haroon and Rizvi (2020) find that the panic generated by COVID-19 news leads to higher volatility in the equity markets. Donadelli et al. (2017) discuss the effect of the fear over dangerously infectious diseases H1N1 and SARS from 2003 to 2014 on U.S. pharmaceutical stocks and find that disease-related news has a positive sentiment effect on investors' mood. Sun et al. (2021) find that COVID-related news can positively affect China, Hong Kong, South Korea, Japan, and U.S. markets' medical stock portfolios. Duan et al. (2021) use two COVID-19 sentiment indices to capture the moods about the disease. They indicate that epidemic sentiment can significantly predict stock trading activities and stock returns. Salisu and Vo (2020) note that health-news Google searches negatively relate to stock returns during the COVID-19 outbreak. Chundakkadan and Nedumparambil (2021) find that search volume about the pandemic is negatively associated with stock returns. Smales (2021) suggests lower market returns in G7 and G20 countries when investor attention is higher during the COVID-19 epidemic. Wang et al. (2021) indicate that investor attention related to the COVID-19 epidemic causes panic and affects stock market stability.

Bird and Yeung (2012) find that investors tend to ignore good news when the market has higher uncertainty and amplify bad news, thus generating excessive pessimism. The outbreak of the epidemic has induced investors to be pessimistic about the future economy (Barua, 2020; Bonadio et al., 2021). Barua (2020) indicates that COVID-19 jeopardizes economies and an end to this pandemic remains uncertain, thus leading to a loss of public confidence worldwide. Bonadio et al. (2021) present that the COVID-19 epidemic has caused disruptions in global supply chains and major contractions in economic activity. Hsu et al. (2021) show that the public's panic about COVID-19 comes from market uncertainty and hence affects investors' behavior. Karamti and Belhasine (2021) suggest that U.S. COVID-19 fear can spill over into the international markets. Liu et al. (2016) discuss public attention through the Internet and social media as it relates to the Ebola epidemic. They find that bad news can lead to higher public attention until the appearance of a good news report. Liu and Fu (2022) point out that public attention increases when the COVID-19 pandemic quickly and severely worsens. Thus, our study provides a theoretical framework on the relationship of the level of COVID-19 and investor attention in Figure 1.

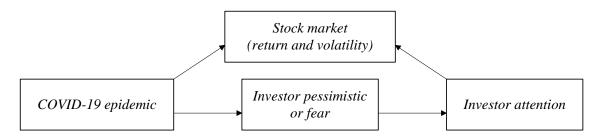


Figure 1 Framework of the level of COVID-19 and investor attention. (Source: Authors' own elaboration)

As mentioned above, we conjecture that investors may search for relevant information on the Internet to resolve the uncertainty or worries they have when the COVID-19 pandemic becomes severe. Therefore, we present the first hypothesis.

#### H1: The level of COVID-19 positively relates to (abnormal) investor attention.

The COVID-19 epidemic has now been around for over two years, and its variants have erupted globally. They are highly infectious, resulting in increasing numbers of COVID-19 diagnoses in nearly every country. The European Center for Prevention and Disease Control (ECDC) points out that the Delta variant could cause daily cases to dramatically increase across much of Europe.<sup>1</sup> The Center for Disease Control (CDC) also shows a similar situation in the U.S.<sup>2</sup> Yan (2022) indicates that the Delta variant triggered a negative influence on the U.S. stock market and a dramatic increase in global uncertainty. Syed (2022) considers three waves, includes Alpha and Delta variants' waves to examine how the different waves affect the U.S. stock market, and finds that the stock

<sup>&</sup>lt;sup>1</sup> Miller, Michael E., Merkel Warns Europe is 'On Thin Ice' as Concerns About Delta Variant Grow, The Washington Post, June 25, 2021.

<sup>&</sup>lt;sup>2</sup> We obtain the information from the Center for Disease Control website. https://covid.cdc.gov/covid-data-tracker/#variant-proportions.

index decreases in the short term and becomes stable in the long run. Díaz et al. (2022) suggest that news from very contagious COVID-19 variants (Alpha and Delta) lead to greater stock market volatility. We therefore conjecture that virus variants may attract more investor attention to the stock market during variants' waves. The hypothesis is as follows.

H2: The positive correlation between the level of COVID-19 and (abnormal) investor attention is more pronounced during COVID-19 variant (Alpha variant and Delta variant) waves.

The spread of COVID-19 has had a great impact on the global financial market, but various countries have helped to successively develop vaccines to stabilize the spread of the epidemic. The first batch of COVID-19 vaccines came out in early 2021, as governments of various countries publicized and formulated relevant policies through the media to increase the vaccination rate. Goel et al. (2021) indicate that searching for greater relevant vaccination information on the Internet increases vaccine administration rates. Chan et al. (2021) show that news of vaccine research and development has a positive effect on abnormal stock returns, which is consistent with Hartono (2021), who believe that news of vaccine research and development gives confidence to investors, but government policy support is still needed to restore stock market performance.

Rouatbi et al. (2021) and Bakry et al. (2022) indicate that the vaccination rate reduces stock volatility and restores stability to the financial market. Bao et al. (2021) state that mass vaccinations can mitigate volatility in the international stock markets and also reduce investors' fears. Demir et al. (2021) find that vaccinations decrease energy stocks' volatility around the world and helps restore stock market stability. Donadelli et al. (2017) present that the effect of disease-related news on investors' mood becomes weaker when companies are more likely to engage in the development of new vaccines. Khalfaoui et al. (2021) suggest that COVID-19 vaccination can positively affect S&P 500 returns.

Duan et al. (2021) find that the mood related to COVID-19 pandemic changes from panic and fear to optimism, and the changes positively relate to stock returns. Based on the above literature, this study expects that the vaccination rate enhances investor confidence in the stock market. Accordingly, we formulate the hypothesis as follows.

H3: The positive correlation between the level of COVID-19 and (abnormal) investor attention weakens when the vaccination rate is higher.

#### 3. Data

Google is the most widely used search engine in the world. We therefore use the Google trend search volume index (SVI) to proxy for investor attention. SVI obtains Google trends and focuses on a specific issue for a specific country at a specific time. It is a standardized index between 0 and 100. The keyword of this study is "stock index market", and the sample period is from March 1, 2020 to December 31, 2021. The search terms for the stock market index in G7 and G20 countries appear in Table 1.<sup>3</sup> Following Da et al. (2011), we also use abnormal investor attention (ASVI), and more detailed information on the variables is in Table 2. The data of COVID-19 new confirmed cases and deaths are collected from Johns Hopkins University, which provides observations on global public health and infectious diseases and includes different countries and regions around the world.

#### <TABLE 1 ABOUT HERE>

Our control variables follow Petkova (2006) and Vozlyublennaia (2014), where we use three macroeconomic variables: term spread (TERMSP), default spread (DSP), and two-year Treasury bond rate (TB). Baker et al. (2016) point out that the uncertainty of global policies has a certain impact on the economy and highly relates to stock market

<sup>&</sup>lt;sup>3</sup> The definitions of G7 and G20 countries follow Smales (2021) whereby G20 countries exclude the European Union. Thus, we only show 19 countries in our study.

volatility. We therefore take global economic policy uncertainty (GEPU) as a macroeconomic variable. Table 2 lists the definitions of variables and data sources.

#### <TABLE 2 ABOUT HERE>

Table 3 shows that the attention of G7 countries ranges from 31 to 45, while that of G20 countries ranges from 8 to 40, indicating that the Internet usage rate of G7 countries is high, and that investors can easily obtain relevant market information through Internet searches to reduce their search costs. In addition, the numbers of new confirmed cases and deaths of COVID-19 in the United States and India are significantly higher than those in other countries.

#### <TABLE 3 ABOUT HERE>

As we see in Figure 2 and Figure 3, the numbers of new confirmed cases and deaths in G7 and G20 countries increase significantly in March 2021. They are then affected by the rise of mutant viruses and their extremely high infectivity. The number of infections in various countries increased sharply, and a new wave of the epidemic broke out again in December. Figure 4 illustrates that investor attention is higher in March and December 2020 than in other months - that is, with the increase of COVID-19 diagnoses and deaths, investor attention to the market seems to also increase.

> <FIGURE 2 ABOUT HERE> <FIGURE 3 ABOUT HERE> <FIGURE 4 ABOUT HERE>

#### 4. Methods

This study uses multiple regression to test our hypotheses. First, we discuss how the level of COVID-19 affects investor attention. Second, we run the regression to test virus variant waves. Third, we test the effect of vaccination rates. The regressions are as follows.

(1) The relationship between COVID-19 and (abnormal) investor attention is:

$$SVI_{i,t} \text{ or } ASVI_{i,t} = \alpha + \beta_1 COVID - 19_{i,t} + \gamma_1 GEPU_t + \gamma_2 TERMSP_t + \gamma_3 DSP_t + \gamma_4 TB_t + \varepsilon_{i,t},$$
(1)

where  $SVI_{i,t}$  (ASVI<sub>i,t</sub>) refers to (abnormal) investor attention on day t of country i, and the search term is global index markets.  $COVID - 19_{i,t}$  is  $log(CC_{i,t})$ , or the natural logarithm of the number of new confirmed cases on day t of country i; and  $log(DC_{i,t})$ is the natural logarithm of the number of deaths on day t of country i. The control variables include term spread (TERMSP), default spread (DSP), two-year Treasury bill rate (TB), and global economic policy uncertainty index (GEPU). The sample period is from March 1, 2020 to December 31, 2021.

#### (2) The impact of virus variants

The mutation of the virus has accelerated the spread of the epidemic, and the number of new confirmed cases in the world is rising, setting off a new wave of peak numbers. We therefore further divide the major virus waves into original virus, Alpha variant, and Delta variant and use equation (1) to re-test the effect of the three virus waves on (abnormal) investor attention. The sample period of the original virus wave is from March 1, 2020 to August 31, 2020. The Alpha variant wave covers from September 1, 2020 to December 2020. The Delta variant wave spans from January 1, 2021 to May 2021.

#### (3) The impact of vaccination rates

As the variation of the virus strain increases its infectivity, many people around the world have become infected. In order to control the epidemic and reduce the number of severe patients, countries have successively developed vaccines to stabilize the development of the epidemic and publicized and formulated relevant policies through the media to improve the national vaccination rate. In the following equation we test whether

the advent of vaccines can improve investor confidence in the stock market and decrease their fear in the market.

$$SVI_{i,t} \text{ or } ASVI_{i,t} = \alpha + \beta_1 COVID - 19_{i,t} + \delta_1 log(VC_{i,t}) + \delta_2 COVID - 19_{i,t} * log(VC_{i,t}) + \gamma_1 GEPU_t + \gamma_2 TERMSP_t + \gamma_3 DSP_t + \gamma_4 TB_t + \varepsilon_{i,t},$$
(2)

where  $log(VC_{i,t})$  is the natural logarithm of the vaccination rate of country *i* on day *t*. The sample period is from January 1, 2021 to December 31, 2021.

## 5. Empirical results 5.1 Baseline results

Table 4 and Table 5 show the effect of COVID-19 on investor attention in G7 and G20 countries, respectively. We find that the level of COVID-19 has a significantly positive correlation with global investor attention, which supports Hypothesis 1. Barua (2020) points out that the effect of COVID-19 on the economy is set to run across all economies in the world no matter developed or developing countries, leading to an economic recession. Altig et al. (2020) indicate that all economic uncertainty indicators for the U.S. and UK present huge uncertainty jumps in reaction to the COVID-19 pandemic and its economic fallout. Additionally, prior studies find that COVID-19 confirmed cases and deaths can significantly influence stock market volatility and returns (Baig et al., 2021; Xu, 2021). Our results suggest that COVID-19 generates greater panic and economic uncertainty, and hence investors pay more attention in the stock market. These findings are also consistent with those of Liu et al. (2016) and Liu and Fu (2022), who argue that investors increase their attention when they face bad news.

Our results find strong evidence between the level of COVID-19 and investor attention in the stock market, especially for G7 countries. There are three possible reasons for why the results of G7 countries are more significant. First, G7 countries have a high degree of Internet digitization and easy access to stock market information. Investors can immediately use the Internet to search for market information, reduce their search costs, and solve any uncertainty caused by the epidemic. Second, due to language differences, the market search terms used in this study may not represent the degree of market search of some countries. Third, investors in emerging markets may focus more on relevant policies formulated by the government.

#### <TABLE 4 ABOUT HERE> <TABLE 5 ABOUT HERE>

We also use abnormal investor attention (ASVI) to robust our main results in Table 6 and Table 7. We find that COVID-19 positively significantly relates to abnormal investor attention, implying that the spread of COVID-19 indeed makes investors worried about the future economy (Bird and Yeung, 2012; Barua, 2020). Thus, investors pay more attention to the stock index market.

### <TABLE 6 ABOUT HERE> <TABLE 7 ABOUT HERE>

#### **5.2 COVID-19 variant**

The epidemic as of this report's publication has not yet been fully controlled, and due to the impacts of health environment and local cultural differences, virus strains continue to mutate. With the enhancement of the degree of variation, the virus has quickly spread all over the world, resulting in rising numbers of confirmed cases in every country and setting off a new wave of epidemic peak numbers. Table 8 shows the outbreak time of each variant wave.

#### <TABLE 8 ABOUT HERE>

In Table 9 to Table 14 we separate the data to analyze the original virus, Alpha variant, and Delta variant waves in G7 and G20 countries. We find that the COVID-19 effects on global attention are more significant during the Alpha variant and Delta variant waves than during the original virus wave. This implies that with the variation and transmission of virus strains, the number of confirmed cases and deaths in various countries dramatically increases, leading to investors having greater fear and paying more attention

to the stock market. Our results support Hypothesis 2 and are consistent with the arguments of Díaz et al. (2022) and Yan (2022). We also examine the effect of COVID-19 on different waves for abnormal investor attention (ASVI) and find similar results. To save space, some results of ASVI are not tabulated, but are available upon request.

<TABLE 9 to TABLE 14 ABOUT HERE>

#### **5.3 Vaccination rate**

As the epidemic spread, countries began to develop vaccines to control it. Figure 5 shows the vaccination rates of G7 and G20 countries respectively with an uneven global distribution of vaccines. G7 countries started mass vaccinations in February 2021. However, G20 countries did not do so until April a few months later. As far as the G7 countries are concerned, Japan has the lowest vaccination rate. However, due to the implementation of comprehensive vaccination in Japan and the rapid increase of the domestic vaccination rate, the United States subsequently became the country with the lowest vaccination rate among the G7 countries. This is mainly affected by local culture and most people refusing to vaccinate. Among the G20 countries, those with the highest and lowest vaccination rate of nearly 80%, which denotes near mass immunization and has reduced the probability of a severe disease. The latter is finding it difficult to promote vaccines, because of its poor medical infrastructure and vaccine shortage.

#### <FIGURE 5 ABOUT HERE>

We consider the effect of the vaccination rate and show the results in Table 15 and Table 16. We find that large-scale vaccinations can reduce investors' panic about the epidemic and enhance their confidence in the stock market. The vaccination rate decreases the relationship between the level of COVID-19 and investor attention, especially for G7 countries, which supports Hypothesis 3 and is consistent with the findings of prior studies (Bao et al., 2021; Duan et al., 2021). Thus, we suggest that mass vaccinations help stock market stability.

We find more significant results in G7 countries, and the possible reason is that the popularization of domestic vaccinations in G7 countries has improved investor confidence in the stock market and stabilized the financial market. In contrast, due to the uneven distribution of vaccines, the domestic vaccination rates of G20 countries are lower than those of G7 countries. In addition, we consider the effect of vaccination rates on abnormal investor attention (ASVI) in G7 and G20 countries respectively and also find that the positive relation between COVID-19 and global investor attention becomes weaker when vaccination rates are higher. To save space, some results of ASVI are not tabulated, but are available upon request.

#### <TABLE 15 ABOUT HERE>

#### <TABLE 16 ABOUT HERE>

#### 6. Conclusions

Coronavirus disease 2019 (COVID-19) broke out in China in December 2019, and in March of the following year the epidemic had spread globally, eventually resulting in more than 200 million confirmed cases and 5 million deaths. We therefore take G7 and G20 countries as research samples to examine the effect of COVID-19 on global investor attention. In addition, we consider the effects of variants and vaccination rates on global investor attention.

In this paper we find that the level of COVID-19 has a significantly positive correlation with investor attention, which supports that investors have become pessimistic during the COVID-19 epidemic and now pay more attention to the global stock market. Furthermore, mutation of COVID-19 variants (Alpha variant and Delta variant) in late 2020 and throughout 2021 have erupted globally. Such uncertainty brought about by new virus strains has pushed global stock markets into a high volatility range again and also raised investor attention to financial markets. We find that a large-scale vaccination rate

can alleviate investors' panic about the epidemic and increase their confidence in the stock market. Finally, the vaccination rate has a negative effect on the relationship between the level of COVID-19 and global investor attention.

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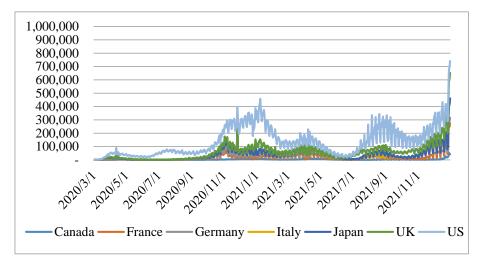
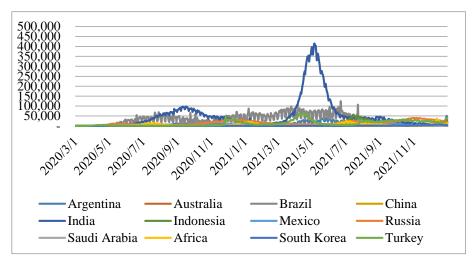


Figure 2-1 COVID-19 new confirmed cases in G7 countries

Figure 2-2 COVID-19 new confirmed cases in G20 countries



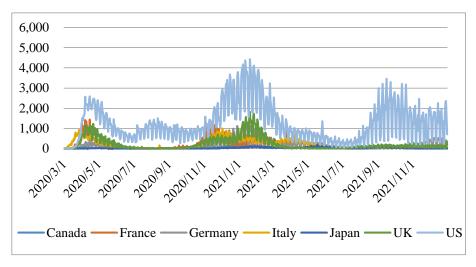
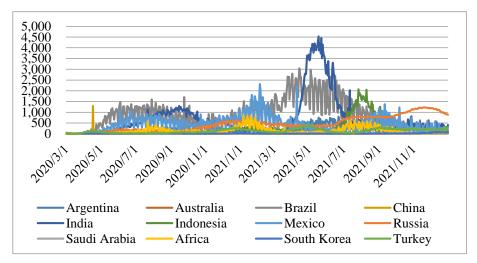


Figure 3-1 COVID-19 deaths in G7 countries

Figure 3-2 COVID-19 deaths in G20 countries



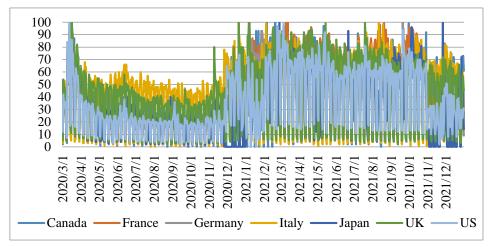
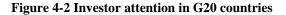
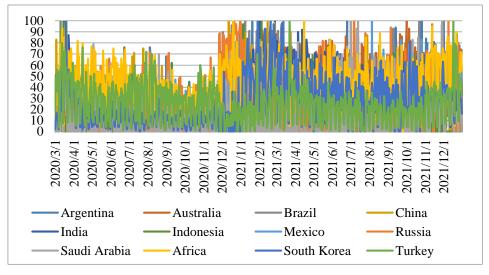


Figure 4-1 Investor attention in G7 countries





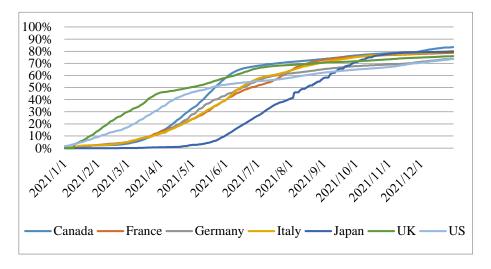
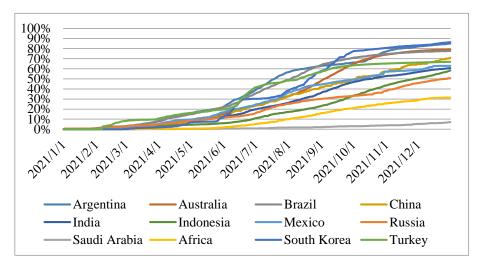


Figure 5-1 Vaccination rates in G7 countries

Figure 5-2 Vaccination rates in G20 countries



This table sho	ows each	country in G7 an	d G20 and its search terms and its	stock index marke
	<b>G7</b>	Country	Stock index market	Search term
	1	Canada	S&P/Toronto Stock Exchange Composite Index	S&P/TSX
	2	France	CAC 40 Index	CAC 40
	3	Germany	XETRA DAX INDEX	DAX
	4	Italy	FTSE MIB Index	FTSE MIB
	5	Japan	Nikkei 225 Index	Nikkei 225
	6	UK	FTSE 100 Index	FTSE 100
	7	U.S.	Standard & Poor's 500	S&P 500
	G20	Countries	Stock index market	Search term
	1	Argentina	Argentina Merval Index	MERVAL
	2	Australia	S&P/ASX 200 Index	S&P/ASX 200
	3	Brazil	Ibovespa Index	Bovespa
	4	China	Shanghai Stock Exchange Composite Index	SSEC
	5	India	S&P BSE Sensex Index	BSE Sensex
	6	Indonesia	Jakarta Stock Price Index	JKSE
	7	Mexico	Mexican IPC index	IPC
	8	Russia	RUSSIAN RTS INDEX	RTS
	9	Saudi Arabia	TADAWUL ALL SHARE INDEX	TASI
	10	South Africa	FTSE/JSE TOP-40 INDEX	JSE
	11	South Korea	Korea Stock Exchange KOSPI Index	KOSPI
	12	Turkey	Borsa Istanbul 100 Index	<b>BIST</b> 100

 Table 1 Stock index markets and search terms in G7 countries and G20 countries

 Table 2 Variables' definitions and sources

Variable	Definition	Source
Investor Attention (SVI)	Divide the number of queries for the keyword by the highest number of searches in the period range and normalize it to a relative value of 0 to 100	Google Trend
Abnormal investor Attention (ASVI)	The log of $SVI_t$ minus the log of the median $SVI$ of the previous five days	Da et al. (2011)
Daily new confirmed cases	Cases <sub>t</sub> -Cases <sub>t-1</sub>	John Hopkins University, Coronavirus
Daily deaths	$Deaths_t$ - $Deaths_{t-1}$	Resource Center (JHU-CRC)
Vaccination rate	Proportion of daily vaccinations in the country's population	University of Oxford
Global economic policy uncertainly (GEPU)	GEPU is a GDP-weighted average of national EPU indices for 20 countries: Australia, Brazil, Canada, Chile, China, France, Germany, Greece, India, Ireland, Italy, Japan, Mexico, the Netherlands, Russia, South Korea, Spain, Sweden, the United Kingdom, and the United States	Federal Reserve Economic Data (FRED)
Term spread (TERMSP)	10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity	
Default spread (DSP)	Moody's Seasoned Aaa Corporate Bond Minus 10-Year Treasury rate	
Treasury bond rate (TB)	U.S. two-year Treasury bond rate	

This table shows all the variables used in this paper and reports their definitions and sources.

#### **Table 3 Summary statistics**

This table reports the summary statistics of attention/new cases/deaths, including the mean and standard deviation (sd). The sample period is from March 1, 2020 to December 31, 2021 for G7 and G20 countries.

Country		Attention		New	Cases	Dea	ths
G7/G20	Mean	Median	sd	Mean	sd	Mean	sd
Canada	37.42	32.00	27.19	3,309.83	4,412.27	44.21	46.86
France	39.62	28.00	30.35	15,683.24	22,776.82	186.69	224.04
Germany	34.70	27.00	26.05	11,011.47	15,919.67	168.00	232.56
Italy	45.79	53.00	28.50	9,166.02	12,324.65	205.71	224.62
Japan	31.37	25.00	25.91	2,581.39	4,348.57	27.17	30.12
UK	44.29	47.00	29.19	19,345.93	23,604.39	221.76	314.30
U.S.	35.31	25.00	23.88	81,587.72	74,487.14	1,221.85	926.75
Argentina	26.73	23.00	21.58	8,426.85	8,483.47	170.18	172.48
Australia	34.52	28.00	26.48	634.08	2,319.14	4.74	6.20
Brazil	33.77	28.00	24.70	33,075.06	124,762.73	672.26	568.88
China	11.47	0.00	18.65	43.75	49.04	3.61	49.88
India	36.02	34.00	23.87	51,882.10	76,374.03	695.72	906.87
Indonesia	8.30	0.00	17.47	6,371.34	9,448.78	214.76	356.34
Mexico	21.01	16.00	18.04	6,133.24	5,284.43	436.93	359.95
Russia	24.82	21.00	24.87	15,380.64	9,965.76	451.11	340.67
Saudi Arabia	14.69	0.00	21.47	901.39	1,001.46	13.33	12.96
South Africa	40.55	43.00	22.90	5,147.87	5,834.94	136.18	149.56
South Korea	24.07	17.00	20.61	942.03	1,367.05	8.46	14.71
Turkey	24.71	24.00	17.61	12,949.83	13,373.32	123.57	90.38

#### Table 4 The impact of COVID-19 on investor attention in G7 countries

This table presents the results of the regression model for G7 countries' investor attention. CC refers to the number of new confirmed cases, and DC refers to the number of deaths. GEPU is the index of global economic policy uncertainty. TERMSP is the term spread. DSP is the default spread. TB is the two-year Treasury bond interest rate. The period is from March 1, 2020 to December 31, 2021. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

G7	Intercept	CC	DC	GEPU	TERMSP	DSP	ТВ
Canada	0.6381	2.1834		-0.0454	3.3506	13.7334	30.3762
Callaua	(0.1012)	$(0.0166)^{**}$		(0.1304)	(0.5019)	$(0.0001)^{***}$	$(0.0001)^{***}$
	1.2391		4.3268	-0.1114	2.8872	15.0969	30.1965
	(0.1632)		$(0.0000)^{***}$	(0.2930)	(0.4912)	$(0.0000)^{***}$	$(0.0002)^{***}$
	1.0286	4.5116	5.9492	-0.1301	2.9984	14.0650	29.7934
	(0.7169)	$(0.0908)^{*}$	$(0.0000)^{***}$	(0.5058)	(0.6028)	$(0.0000)^{***}$	$(0.0012)^{***}$
France	0.1129	1.9534		-0.0486	14.4291	14.8263	7.3966
France	(0.9417)	$(0.0788)^{*}$		(0.1198)	$(0.0000)^{***}$	$(0.0678)^{*}$	(0.5764)
	0.7630		4.9025	-0.1124	15.4848	17.0032	12.2266
	(0.9954)		$(0.0000)^{***}$	(0.0364)**	(0.0002)***	$(0.0008)^{***}$	(0.8112)
	1.3329	4.9025	8.0675	-0.1762	19.1462	13.6695	12.4750
	(0.3398)	$(0.0000)^{***}$	(0.0000)***	(0.4652)	(0.0016)***	(0.0230)**	(0.1544)
Cormony	0.7322	1.7322		-0.0338	14.2835	25.1368	9.4645
Germany	(0.1126)	$(0.0108)^{**}$		(0.2276)	(0.5464)	$(0.0003)^{***}$	$(0.0000)^{***}$
	1.4510		3.2061	-0.0838	12.5103	29.1546	7.8885
	(0.2028)		$(0.0000)^{***}$	(0.0028)***	(0.8033)	$(0.0000)^{***}$	$(0.0000)^{***}$
	1.0531	3.3994	5.1436	-0.1082	19.2092	27.7559	10.1993
	(0.3288)	(0.0002)***	$(0.0000)^{***}$	(0.0002)***	(0.3777)	$(0.0000)^{***}$	$(0.0000)^{***}$
Italy	0.1370	5.0238		-0.0501	18.7764	3.3883	11.9848
Italy	(0.3417)	$(0.0776)^{*}$		(0.6710)	(0.1968)	(0.8160)	(0.8491)
	0.7635		4.3057	-0.1468	13.3563	1.7417	10.5756
	(0.2388)		$(0.0000)^{***}$	$(0.0607)^{*}$	$(0.0858)^{*}$	(0.7333)	(0.2881)
	1.3981	6.3947	9.4831	-0.2099	20.3871	5.1450	13.9095
	(0.1776)	$(0.0000)^{***}$	$(0.0000)^{***}$	$(0.0000)^{***}$	(0.0429)**	(0.3830)	(0.1058)
Japan	0.5442	1.2905		-0.0332	23.2662	13.4877	28.0946
Japan	(0.4011)	(0.1449)		(0.2512)	(0.4293)	$(0.0000)^{***}$	$(0.0153)^{**}$
	0.9369		6.1871	-0.0528	17.5189	12.5739	25.7136
	(0.7831)		$(0.0000)^{***}$	(0.8960)	(0.3245)	$(0.0000)^{***}$	$(0.0000)^{***}$
	1.3762	1.1248	6.6602	-0.0632	16.5608	13.0257	23.5041
	(0.6663)	(0.2272)	$(0.0000)^{***}$	(0.6033)	(0.4454)	$(0.0000)^{***}$	$(0.0002)^{***}$
UK	0.6782	1.4826		-0.0133	21.3299	22.6401	15.0515
UK	(0.1147)	$(0.0771)^*$		(0.6874)	$(0.0648)^*$	$(0.0151)^{**}$	$(0.0000)^{***}$
	0.1552		2.7143	-0.0559	27.7973	23.7327	15.6478
	(0.2820)		$(0.0000)^{***}$	$(0.0957)^*$	(0.1362)	(0.0318)**	$(0.0000)^{***}$
	0.1288	2.2150	3.9763	-0.0837	25.4895	20.3913	16.0648
	(0.5421)	$(0.0667)^*$	$(0.0000)^{***}$	(0.0230)**	$(0.0961)^*$	(0.0358)**	$(0.0000)^{***}$
U.S.	0.3815	1.1382		-0.0468	37.3313	25.1979	12.7140
0.3.	(0.2119)	(0.0129)**		$(0.0648)^{*}$	$(0.0147)^{**}$	(0.0049)***	(0.1279)
	1.0205		4.4722	-0.0683	36.0343	28.1284	18.9215
	(0.3871)		$(0.0001)^{***}$	(0.0038)***	$(0.0000)^{***}$	(0.0095)***	(0.0890)**
	0.1941	4.5087	7.0517	-0.0704	34.1108	23.1317	14.4671
	(0.5179)	$(0.0004)^{***}$	$(0.0000)^{***}$	(0.0035)***	$(0.0000)^{***}$	$(0.0000)^{***}$	$(0.0792)^{*}$

#### Table 5 The impact of COVID-19 on investor attention in G20 countries

This table presents the results of the regression model for G20 countries' investor attention. CC refers to the number of new confirmed cases, and DC refers to the number of deaths. GEPU is the index of global economic policy uncertainty. TERMSP is the term spread. DSP is the default spread. TB is the two-year Treasury bond interest rate. The period is from March 1, 2020 to December 31, 2021. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

Argentina         (0.4005)         (0.2147)         (0.2136)         (0.1001)         (0.2923)         (0           0.4295         3.4744         -0.0413         -4.4074         4.6168         1           (0.76671)         (0.0000)***         (0.1009)         (0.3358)         (0.2818)         (0           0.5131         -0.1192         3.5775         -0.0416         -4.3958         4.4957         1           0.014         0.2393         -0.0606         3.6699         13.3681         -0.0000***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.0000)***         (0.2121)         (0           0.4438         (0.301)***         (0.3508)         (0.0000)***         (0.3508)         (0.0000)***         (0.2121)         (0           0.7284         1.1447         -0.0090         21.2702         4.6678         2         (0.4589)         (0.2248)         (0.0115)         (0.3476)         (0.6559)         (0           0.7254<	G20	Intercept	CC	DC	GEPU	TERMSP	DSP	ТВ
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Argentina							15.7033 (0.0000)***
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								17.1051 (0.0000)***
Australia         (0.1469)         (0.6440)         (0.0625)*         (0.0000)***         (0.0000)***         (0.0000)***         (0.0121)         (0           0.7284         1.1447         -0.0043         21.2772         4.6078         2         (0.248)         (0.001)***         (0.3376)         (0           1.7436         3.8846         3.3121         0.0019         22.6260         4.8567         2         (0.248)         (0.331)         (0.3903)         (0.1615)         (0           China         0.6513         1.9781         -0.0041         -1.8273         8.0478         2								17.8355 (0.0000)***
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Australia							8.7165 (0.3493)
$ \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$								9.0518 (0.3070)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								8.9205 (0.3389)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Brazil							24.6000 (0.0004)***
$ \begin{array}{c} (0.2248) & (0.0154)^{**} & (0.1115) & (0.9436) & (0.0000)^{***} & (0.6559) & (0 \\ 0.6513 & 1.9781 & & 0.0041 & -1.8273 & 8.0478 & 2 \\ (0.4230) & (0.0184)^{**} & & (0.3964) & (0.2130) & (0.0276)^{**} & (0 \\ 0.5715 & 1.8187 & -0.0226 & -3.5321 & 5.7032 & 2 \\ (0.4689) & & (0.2468) & (0.3031) & (0.3903) & (0.1615) & (0 \\ 0.0699 & 1.8561 & 0.7197 & -0.0058 & -2.0564 & 7.2099 & 2 \\ (0.6197) & (0.0359)^{**} & (0.6628) & (0.8034) & (0.6210) & (0.0807)^{*} & (0 \\ 0.68901)^{*} & (0.0000)^{***} & (0.6628) & (0.8034) & (0.6210) & (0.0807)^{*} & (0 \\ 1.4770 & 4.6733 & & -0.0529 & 13.4946 & 7.3517 & 1 \\ (0.8901)^{*} & (0.0000)^{***} & (0.3451) & (0.1028) & (0.0000)^{***} & (0.1311) & (0 \\ 1.9917 & & 3.8015 & -0.0429 & 12.2140 & 10.6666 & 1 \\ (0.0673)^{*} & & (0.3451) & (0.1028) & (0.0000)^{***} & (0.4306) & (0 \\ 1.3527 & 6.0743 & 1.15417 & -0.0536 & 12.5446 & 7.5878 & 1 \\ (0.0976)^{*} & (0.0004)^{***} & (0.3565) & (0.0384)^{**} & (0.0000)^{***} & (0.2349) & (0 \\ 1.3527 & 6.0743 & 1.15417 & -0.0536 & 12.5446 & 7.5878 & 1 \\ (0.0976)^{*} & (0.0004)^{***} & (0.3565) & (0.0384)^{**} & (0.0000)^{***} & (0.2349) & (0 \\ 0.0802 & 0.6265 & -0.0125 & -4.5771 & 6.6764 & 1 \\ (0.9483) & & (0.4125) & (0.5578) & (0.4536) & (0.0595)^{*} & (0 \\ 0.0183 & -0.3684 & 0.9060 & -0.0136 & -4.5492 & 6.4095 & 1 \\ (0.9054) & (0.7751) & (0.4657) & (0.5421) & (0.3015) & (0.0803)^{*} & (0 \\ 0.9054) & (0.7751) & (0.4657) & (0.5421) & (0.3015) & (0.0803)^{*} & (0 \\ 0.0637 & 0.8703 & -0.0216 & 8.1941 & 8.1941 & 2 \\ \end{array} \right)$								23.9701 (0.0046)***
$ \begin{array}{cccc} {\rm China} & (0.4230) & (0.0184)^{**} & (0.3964) & (0.2130) & (0.0276)^{**} & (0 \\ 0.5715 & 1.8187 & -0.0226 & -3.5321 & 5.7032 & 2 \\ (0.4689) & (0.2468) & (0.3031) & (0.3903) & (0.1615) & (0 \\ 0.0699 & 1.8561 & 0.7197 & -0.0058 & -2.0564 & 7.2099 & 2 \\ (0.6197) & (0.0359)^{**} & (0.6628) & (0.8034) & (0.6210) & (0.0807)^{*} & (0 \\ (0.6197) & (0.0359)^{**} & (0.6628) & (0.8034) & (0.6210) & (0.0807)^{*} & (0 \\ (0.8901)^{*} & (0.0000)^{***} & -0.0529 & 13.4946 & 7.3517 & 1 \\ (0.8901)^{*} & (0.0000)^{***} & (0.0409)^{**} & (0.0000)^{***} & (0.1311) & (0 \\ 1.9917 & 3.8015 & -0.0429 & 12.2140 & 10.6666 & 1 \\ (0.0673)^{*} & (0.3451) & (0.1028) & (0.0000)^{***} & (0.4306) & (0 \\ 1.3527 & 6.0743 & 1.15417 & -0.0536 & 12.5446 & 7.5878 & 1 \\ (0.0976)^{*} & (0.0004)^{***} & (0.3565) & (0.0384)^{**} & (0.0000)^{***} & (0.2349) & (0 \\ 1.3527 & 6.0743 & 1.15417 & -0.0536 & 12.5446 & 7.5878 & 1 \\ (0.0976)^{*} & (0.0004)^{***} & (0.3565) & (0.0384)^{**} & (0.0000)^{***} & (0.2349) & (0 \\ 0.0802 & 0.6265 & -0.0125 & -4.5771 & 6.6764 & 1 \\ (0.9483) & (0.4125) & (0.5578) & (0.4536) & (0.0595)^{*} & (0 \\ 0.0183 & -0.3684 & 0.9060 & -0.0136 & -4.5492 & 6.4095 & 1 \\ (0.9054) & (0.7751) & (0.4657) & (0.5421) & (0.3015) & (0.0803)^{*} & (0 \\ 0.0802 & 0.6265 & -0.0125 & -4.5771 & 6.6764 & 1 \\ (0.9054) & (0.7751) & (0.4657) & (0.5421) & (0.3015) & (0.0803)^{*} & (0 \\ 0.0183 & -0.3684 & 0.9060 & -0.0136 & -4.5492 & 6.4095 & 1 \\ (0.9054) & (0.7751) & (0.4657) & (0.5421) & (0.3015) & (0.0803)^{*} & (0 \\ 0.0803^{*} & (0.5010) & (0.0164)^{**} & (0.0446)^{**} & (0 \\ 0.0637 & 0.8703 & -0.0216 & 8.1941 & 8.1941 & 2 \\ \end{array}$								23.3494 (0.0025)***
$ \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	China							21.8425 (0.0018)***
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$								20.7831 (0.0105) <sup>**</sup>
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								20.0421 (0.0135)**
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	India							15.9500 (0.0121) <sup>**</sup>
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$								16.5267 (0.0076)***
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$								15.6728 (0.0169)**
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Indonesia							16.4449 (0.0390) <sup>**</sup>
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$								19.0412 (0.0554)*
Mexico $(0.3772)$ $(0.1388)$ $(0.5010)$ $(0.0164)^{**}$ $(0.0446)^{**}$ $(0.0446)^{**}$ $0.0637$ $0.8703$ $-0.0216$ $8.1941$ $8.1941$ $2$								17.2422 (0.1429)
	Mexico							23.8886 (0.0000)***
(0.5704) $(0.240)$ $(0.5007)$ $(0.0215)$ $(0.0515)$ $(0$		0.0637 (0.5704)		0.8703 (0.2469)	-0.0216 (0.3007)	8.1941 (0.0215)**	8.1941 (0.0315) <sup>**</sup>	23.2822 (0.0000)***
								22.6097 (0.0000)**

Russia	0.1874 (0.2909)	1.1890 (0.1872)		0.0239 (0.4141)	2.3823 (0.6643)	-11.5798 (0.5294)	23.7805 (0.6464)
	0.9562 (0.3564)	()	1.7918 (0.1729)	0.0253 (0.3884)	3.2690 (0.5518)	-8.9803 (0.5678)	23.4472 (0.4324)
	0.0489 (0.3795)	0.4812 (0.7982)	1.1757 (0.6684)	0.0306 (0.4488)	2.9377 (0.2846)	-9.5637 (0.6160)	23.9767 (0.7099)
Saudi Arabia	0.0441 (0.7334)	0.1711 (0.8123)		-0.0256 (0.3112)	1.1202 (0.6535)	5.5886 (0.1848)	11.3176 (0.5624)
	0.0006 (0.6219)		-0.0047 (0.9960)	-0.0260 (0.3021)	1.0112 (0.7999)	5.5806 (0.3123)	12.7817 (0.8410)
	0.0469 (0.7222)	0.2077 (0.7929)	-0.1161 (0.9105)	-0.0254 (0.3166)	1.0161 (0.8335)	5.4981 (0.1250)	13.8698 (0.3789)
South Africa	0.0786 (0.9649)	0.9251 (0.1816)		0.0076 (0.7839)	$9.2555$ $(0.0808)^{*}$	9.7973 (0.0527)*	17.5633 (0.0004) <sup>***</sup>
	0.3906 (0.1241)		3.9165 (0.0000)***	0.0383 (0.1726)	14.8356 (0.0050) <sup>***</sup>	13.5806 (0.0005)***	16.4407 (0.0000)***
	1.4878 (0.1177)	-1.0326 (0.2014)	4.6151 (0.0000)***	0.0346 (0.4144)	13.8567 (0.0093) <sup>***</sup>	16.1225 (0.0019)***	16.5524 (0.0345)**
South Korea	$0.4427 \\ (0.0905)^*$	1.8989 (0.0305) <sup>**</sup>		-0.0249 (0.1470)	17.9754 (0.0015) <sup>***</sup>	16.4302 (0.0000)***	7.7555 (0.2743)
	$1.1697 \\ (0.0875)^*$		4.3163 (0.0000)***	-0.0330 (0.2315)	18.3777 (0.0029) <sup>***</sup>	16.5682 (0.0000)***	5.9423 (0.6748)
	0.0335 (0.1072)	-0.2956 (0.7554)	4.4251 (0.0000)****	-0.0355 (0.1139)	18.4908 (0.0054) <sup>***</sup>	15.1837 (0.0000) <sup>***</sup>	6.4458 (0.7339)
Turkey	0.0592 (0.6016)	0.7665 (0.1815)		0.0204 (0.6214)	1.9336 (0.1198)	8.4430 (0.0229)**	28.2014 (0.0000)***
	0.1702 (0.3033)		2.1440 (0.0089)***	0.0254 (0.9697)	3.0208 (0.1888)	5.6891 (0.1373)	26.7604 (0.0000)***
	0.4891 (0.6656)	1.2415 (0.1964)	3.5727 (0.0095) <sup>***</sup>	0.0305 (0.1371)	2.4427 (0.5315)	5.8084 (0.1292)	28.5434 (0.0000) <sup>****</sup>

**Table 6 The impact of COVID-19 on abnormal investor attention in G7 countries** This table presents the results of the regression model for G7 countries' abnormal investor attention. CC refers to the number of new confirmed cases, and DC refers to the number of deaths. GEPU is the index of global economic policy uncertainty. TERMSP is the term spread. DSP is the default spread. TB is the two-year Treasury bond interest rate. The period is from March 1, 2020 to December 31, 2021. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

G7	Intercept	СС	DC	GEPU	TERMSP	DSP	ТВ
Canada	0.1072	0.2890		-0.0031	-1.0646	0.1862	0.3229
Canada	(0.2944)	$(0.0000)^{***}$		(0.0202)**	(0.1740)	(0.3641)	(0.4198)
	0.1433		0.3152	-0.0072	-1.3798	0.2592	0.0633
	$(0.0636)^*$		$(0.0000)^{***}$	$(0.0000)^{***}$	(0.9222)	(0.7358)	(0.1432)
	0.0479	0.1192	0.2287	-0.0064	-1.3857	0.3143	0.1183
	(0.5224)	$(0.0453)^{**}$	(0.0001)***	(0.0001)***	(0.2169)	(0.1769)	(0.7741)
France	0.0095	0.0371		-0.0011	0.0330	0.1338	0.1985
Trance	(0.1043)	(0.1285)		(0.3215)	(0.4548)	(0.2345)	(0.5912)
	0.0132		0.2395	-0.0022	0.8445	0.0994	0.4249
	(0.7899)		$(0.0000)^{***}$	$(0.0546)^*$	$(0.0842)^*$	(0.5968)	(0.2302)
	0.0121	0.1171	0.3152	-0.0038	0.9817	0.1791	0.3126
	(0.4973)	$(0.0000)^{***}$	(0.0000)***	(0.0019)***	(0.1240)	(0.3369)	(0.3652)
Germany	-0.0078	0.0412		0.0006	-0.0568	0.0427	0.0676
Germany	(0.1223)	(0.0041)***		(0.7056)	(0.1467)	(0.3021)	(0.2048)
	-0.0276		0.1074	-0.0010	-0.4705	0.0797	-0.0205
	(0.5933)		$(0.0000)^{***}$	(0.2007)	(0.1038)	(0.6682)	(0.9546)
	0.0445	-0.0831	0.1547	-0.0016	-0.5104	0.0361	0.0600
	(0.4716)	$(0.0343)^{**}$	$(0.0000)^{**}$	(0.2050)	(0.1619)	(0.8564)	(0.8683)
Italy	0.0013	0.0045		-0.0003	0.1873	0.2010	0.1637
itary	(0.6651)	(0.9139)		(0.9072)	(0.4766)	(0.4558)	(0.5189)
	0.0135		0.1836	-0.0037	1.1284	0.2774	0.7036
	(0.1846)		$(0.0000)^{***}$	$(0.0478)^{**}$	(0.4465)	(0.3028)	(0.8962)
	0.0036	0.2656	0.3985	-0.0064	1.4194	0.5610	0.8411
	$(0.0723)^*$	$(0.0265)^{**}$	(0.0053)***	$(0.0843)^*$	(0.9423)	(0.1711)	(0.8776)
Japan	0.0017	-0.0202		0.0009	0.0535	0.3845	0.3832
Japan	(0.8865)	(0.6123)		(0.5806)	$(0.0880)^{*}$	(0.5179)	(0.5442)
	0.0306		0.1623	0.0005	0.4796	0.3610	1.4478
	(0.5781)		(0.0001)***	(0.6618)	$(0.0638)^*$	(0.7108)	(0.2583)
	0.0083	-0.0933	0.2016	-0.0002	0.4693	0.4895	0.9496
	(0.2719)	(0.2895)	(0.0009)***	(0.8910)	(0.0320)**	(0.4313)	(0.4074)
UK	-0.0097	0.0250		0.0005	0.0015	0.0167	0.0233
UK	(0.2286)	(0.4945)		(0.6585)	(0.9467)	(0.6225)	(0.3353)
	0.0083		0.0795	-0.0005	0.0969	0.0951	0.0480
	(0.1862)		(0.0054)***	(0.2514)	(0.7813)	(0.4689)	(0.1828)
	0.0495	0.1040	0.1386	-0.0018	0.2054	0.0617	0.0676
	(0.5935)	$(0.0501)^*$	(0.0009)***	(0.1898)	(0.7871)	(0.4540)	(0.2288)
U.S.	-0.0026	0.1188		0.0004	0.0648	0.1198	0.6861
0.5.	$(0.0823)^*$	$(0.0000)^{***}$		(0.5563)	(0.9750)	(0.2697)	$(0.0209)^*$
	-0.0281		0.2040	-0.0001	0.0095	0.1822	0.9725
	(0.6642)		$(0.0000)^{***}$	(0.3452)	(0.9512)	(0.2317)	$(0.0006)^{**}$
	-0.0815	0.1455	0.3243	-0.0006	0.0832	0.0247	0.7605
	(0.1695)	$(0.0014)^{***}$	(0.0000)***	(0.2846)	(0.4282)	(0.8716)	$(0.0080)^{**}$

**Table 7 The impact of COVID-19 on abnormal investor attention in G20 countries** This table presents the results of regression model for G20 countries' abnormal investor attention. CC refers to the number of new confirmed cases; and DC refers to the number of deaths. GEPU is the index of global economic policy uncertainty. TERMSP is the term spread. DSP is the default spread. TB is the two-year Treasury bond interest rate. The period is from March 1, 2020 to December 31, 2021. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

G20	Intercept	CC	DC	GEPU	TERMSP	DSP	ТВ
Argentina	0.0020 (0.7311)	0.0107 (0.6664)		0.0005 (0.3919)	0.2420 (0.1551)	0.0993 (0.1100)	0.3568 (0.3723)
	0.0518 (0.0943)*		0.1246 (0.0000)***	0.0018 (0.2086)	0.3098 (0.0666)*	0.0997 (0.4335)	$0.8491 \\ (0.0471)^{**}$
	0.7188 (0.2252)	0.1146 (0.0008)***	0.2238 (0.0000)***	0.0015 (0.1200)	0.3209 (0.8539)	0.0165 (0.8753)	0.5899 (0.1318)
Australia	0.0029 (0.6701)	-0.0270 (0.3275)		-0.0001 (0.9360)	0.2442 (0.1981)	-0.4111 (0.3756)	1.0664 (0.0106)**
	0.0025 (0.9968)		0.0198 (0.6614)	-0.0003 (0.9232)	0.1646 (0.1120)	-0.3869 (0.2553)	$0.9542 \\ (0.0795)^*$
	0.0029 (0.6750)	-0.0298 (0.3747)	0.0082 (0.8814)	-0.0000 (0.9465)	0.2356 (0.3999)	-0.4142 (0.0530)*	1.0692 (0.0106) <sup>**</sup>
Brazil	-0.0179 (0.3910)	0.1013 (0.0087) <sup>***</sup>		0.0011 (0.9862)	0.1192 (0.2440)	0.0687 (0.3205)	0.9781 (0.2041)
	-0.0217 (0.1069)		0.1914 (0.0001) <sup>***</sup>	0.0008 (0.8518)	0.2144 (0.4184)	0.0747 (0.7679)	1.5995 $(0.0107)^{**}$
	-0.0167 (0.1158)	0.1291 (0.1122)	0.3395 (0.0014) <sup>***</sup>	0.0005 (0.5280)	0.2594 (0.3297)	0.0696 (0.7837)	1.5165 $(0.0154)^{**}$
China	0.0007 (0.5385)	0.0015 (0.8680)		-0.0003 (0.3105)	-0.0875 (0.3881)	0.0596 (0.1265)	0.2290 (0.0023)***
	0.0009 (0.4134)		0.0044 (0.7891)	-0.0004 (0.6309)	-0.0769 (0.5184)	0.0543 (0.2133)	0.2193 (0.0118)**
	0.0001 (0.5169)	0.0008 (0.9316)	0.0040 (0.8210)	-0.0004 (0.3411)	-0.0737 (0.4684)	0.0509 (0.2152)	0.2190 (0.0120) <sup>**</sup>
India	-0.0002 (0.7611)	0.0262 (0.4648)		0.0010 (0.6694)	0.1360 (0.3049)	0.2378 (0.3470)	0.0392 (0.7581)
	-0.0008 (0.1928)		0.0018 (0.5431)	0.0001 (0.5897)	0.0076 (0.3350)	0.0123 (0.3040)	0.1052 (0.5241)
	0.0094 (0.9174)	0.0751 (0.4546)	0.0538 (0.4952)	0.0010 (0.6977)	0.1726 (0.2296)	0.2296 (0.5734)	0.2237 (0.8558)
Indonesia	-0.0249 (0.6874)	-0.0025 (0.4842)		0.0000 (0.8751)	0.0063 (0.6914)	0.0067 (0.5607)	0.0550 (0.1732)
	-0.0059 (0.4163)		-0.0123 (0.7279)	0.0011 (0.7086)	0.1314 (0.2941)	-0.1915 (0.3975)	0.1816 (0.6950
	-0.0077 (0.9015)	-0.0107 (0.1202)	0.0100 (0.4870)	0.0001 (0.7965)	0.0085 (0.5916)	0.0045 (0.4570)	0.0527 (0.1600)
Mexico	0.0004 (0.1378)	0.0096 (0.7139)		-0.0007 (0.4125)	0.1851 (0.9262)	0.1006 (0.5366)	0.7757 (0.5741)
	0.0007 (0.1722)		-0.0053 (0.7841)	-0.0006 (0.3812)	0.1740 (0.5834)	0.0861 (0.6299)	0.7400 (0.1138)
	0.0002 (0.1373)	0.0080 (0.7895)	-0.0024 (0.6313)	-0.0007 (0.3949)	0.1846 (0.2331)	0.1031 (0.7558)	0.7858 (0.3654)

Russia	-0.0002 (0.5625)	0.0030 (0.9623)		0.0007 (0.3326)	0.0712 (0.2894)	0.1607 (0.1405)	0.0711 (0.8651)
	-0.0003 (0.3551)	(0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.0046 (0.8297)	0.0001 (0.7501)	0.0711 (0.4325)	0.1937 (0.1160)	0.1052 (0.5318)
	0.0029	0.0254	0.0372	0.0007	0.0536	0.2245	0.0733
	(0.3953)	(0.4129)	(0.4112)	(0.7151)	(0.5642)	(0.0816)*	(0.8278)
Saudi	-0.0016	0.0061		-0.0000	0.0014	0.0806	0.2752
Arabia	(0.2884)	(0.4786)		(0.7849)	(0.3042)	(0.1106)	(0.1200)
	-0.0007 (0.6209)		0.0067 (0.5748)	-0.0001 (0.7422)	0.0124 (0.8286)	0.0766 (0.1485)	0.1765 (0.9836)
	-0.0013	0.0093	0.0121	-0.0000	0.0122	0.0711	0.2285
	(0.3918)	(0.2948)	(0.3280)	(0.9208)	(0.3057)	(0.1664)	(0.1326)
South	0.0089	-0.0454		-0.0007	0.2123	-0.2855	0.6477
Africa	(0.2097)	(0.1059)		(0.5803)	(0.8425)	(0.1902)	(0.1248)
	0.0253 (0.3402)		0.1727 $(0.0000)^{***}$	0.0016 (0.1485)	0.2292 (0.7852)	0.4035 (0.9904)	1.4863 (0.1300)
	0.0984	-0.1664	0.2853	0.0012	0.0715	0.1685	1.0207
	(0.1809)	(0.6306)	(0.0213) <sup>**</sup>	(0.3811)	(0.8034)	(0.6817)	(0.4021)
South	0.0058	0.0673		0.0007	0.0713	-0.0268	0.3434
Korea	(0.3419)	(0.1166)		(0.5323)	(0.7149)	(0.5752)	(0.3273)
	0.0032 (0.9449)		0.0393 (0.2872)	0.0002 (0.8655)	0.0468 (0.8097)	-0.1038 (0.5543)	0.2864 (0.4144)
	0.0051	0.0584	0.0178	0.0006	0.0692	-0.0278	0.3846
	(0.3849)	(0.2179)	(0.6625)	(0.5477)	(0.7231)	(0.6098)	(0.3221)
Turkey	0.0009 (0.3601)	0.0548 (0.1316)		0.0008 (0.4977)	0.1305 (0.5991)	0.1783 (0.4476)	0.0680 (0.8706)
	0.0061 (0.3539)		$0.0948 \\ (0.0683)^*$	0.0006 (0.7323)	0.1412 (0.3800)	0.1125 (0.6436)	0.0532 (0.8963)
	0.0006	0.0044	0.0899	0.0006	0.1432	0.1121	0.0595
	(0.3797)	(0.9433)	(0.3047)	(0.7312)	(0.6714)	(0.6452)	(0.8869)

 Table 8 Comparison of virus variants

 This table shows the COVID-19 virus waves' timeline. The data source is the World Health Organization.

Virus	Outbreak site	First outbreak time	Pandemic time
Original	China	December 2019	March 2020
Alpha variant	UK	September 2020	December 2020
Delta variant	India	October 2020	March 2021

**Table 9 The impact of the original virus on investor attention in G7 countries** This table presents the results of the regression model for G7 countries' investor attention with original virus. CC refers to the number of new confirmed cases, and DC refers to the number of deaths. GEPU is the index of global economic policy uncertainty. TERMSP is the term spread. DSP is the default spread. TB is the two-year Treasury bond interest rate. The period is from March 1, 2020 to August 31, 2020. \*\*\*, \*\*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

<b>G7</b>	Intercept	CC	DC	GEPU	TERMSP	DSP	ТВ
Canada	0.2586	3.9356		-0.0261	24.5071	21.1832	16.6661
Canada	(0.1435)	(0.0273)**		(0.5142)	(0.0003)***	(0.0003)***	$(0.0011)^{***}$
	0.8123		1.7547	-0.0327	23.1131	15.7594	13.9290
	(0.6653)		(0.1385)	(0.4830)	(0.2718)	(0.0000)***	$(0.0050)^{***}$
	0.3351	5.1665	1.0079	-0.0129	24.3582	19.7496	17.2838
	(0.1535)	$(0.0877)^{*}$	(0.6133)	(0.7872)	(0.2447)	(0.0026)***	$(0.0015)^{***}$
France	0.1802	1.5902		-0.0068	13.7860	16.7649	21.1406
Flance	(0.1984)	$(0.0270)^{**}$		(0.8105)	(0.3862)	(0.0002)***	$(0.0003)^{***}$
	0.1705		1.8697	-0.0518	8.1430	14.7296	15.9676
	(0.8970)		(0.0022)***	$(0.0807)^{*}$	(0.6067)	(0.0010)***	$(0.0001)^{***}$
	-0.1637	1.3523	1.6802	-0.0457	8.6631	14.5552	16.2804
	(0.9174)	(0.6987)	(0.0318)**	(0.1736)	(0.5862)	(0.0013)***	$(0.0001)^{***}$
Gormony	0.4215	4.0159		-0.0027	4.9539	16.5460	14.8781
Germany	$(0.0992)^*$	(0.0021)***		(0.9308)	(0.7777)	(0.0030)***	$(0.0000)^{***}$
	0.8705		1.9585	-0.0486	5.3208	13.6977	18.4121
	(0.5536)		(0.0132)**	(0.1428)	(0.4974)	$(0.0000)^{***}$	$(0.0001)^{***}$
	0.3308	3.1856	0.9415	-0.0165	5.5087	16.7731	18.2815
	$(0.0772)^*$	$(0.0375)^{**}$	(0.3046)	(0.6467)	(0.7536)	(0.0027)***	$(0.0000)^{***}$
Italy	0.3987	-1.6864		-0.0354	2.4981	10.6802	14.1970
Italy	(0.1926)	(0.4159)		(0.4435)	(0.9275)	(0.2161)	(0.4200)
	1.4461		5.8874	-0.0691	4.5354	8.3732	13.5677
	(0.2591)		(0.0091)***	(0.1886)	(0.5823)	(0.9637)	(0.4397)
	1.7814	-5.1144	4.0357	-0.1038	0.2511	6.5974	12.9493
	(0.2987)	(0.2458)	$(0.0251)^{**}$	$(0.0594)^*$	(0.9926)	(0.4490)	(0.4570)
Japan	0.3008	-2.1324		-0.0804	14.1149	18.7429	20.6146
Japan	(0.2644)	(0.1423)		(0.0493)**	(0.4967)	$(0.0003)^{***}$	
	0.2026		-0.2438	-0.0457	13.2312	19.4283	22.9443
	(0.8991)		(0.8477)	(0.1994)	(0.8683)	$(0.0002)^{***}$	
	0.3201	-2.2489	0.3403	-0.0847	14.3731	18.6197	21.0087
	(0.2538)	(0.1408)	(0.7975)	$(0.0564)^*$	(0.4905)	$(0.0003)^{***}$	
UK	0.1378	3.5107		-0.0332	9.0408	16.4106	14.0842
СК	(0.5115)	$(0.0592)^*$		(0.4500)	(0.7083)	$(0.0184)^{**}$	$(0.0071)^{***}$
	0.1269		2.0147	-0.0596	13.7001	18.2261	15.7719
	(0.5446)		$(0.0520)^*$	(0.2248)	(0.5703)	$(0.0059)^{***}$	
	0.3474	2.0085	1.2863	-0.0545	11.4580	16.4277	12.1224
	(0.9892)	(0.4107)	(0.3446)	(0.2702)	(0.6374)	$(0.0184)^{**}$	$(0.0071)^{***}$
U.S.	0.0405	0.3805		-0.0373	21.9648	21.0959	45.4236
0.0.	(0.8686)	(0.8292)		(0.1643)	(0.1507)	$(0.0000)^{***}$	$(0.0619)^*$
	0.0180		0.4357	-0.0410	22.1079	21.1957	45.5506
	(0.8945)		(0.7016)	(0.1300)	(0.1428)	$(0.0000)^{***}$	$(0.0540)^{*}$
	0.0795	0.2002	0.5273	-0.0423	21.9126	21.2822	44.0758
	(0.9977)	(0.9365)	(0.7446)	(0.1713)	(0.1527)	(0.0000)***	$(0.0747)^*$

G20	Intercept	CC	DC	GEPU	TERMSP	DSP	ТВ
Argentina	1.2018 (0.3751)	3.4506 (0.0506)*		0.0308 (0.4176)	13.4806 (0.5149)	0.4336 (0.9372)	20.3931 (0.1908)
	1.3628 (0.5085)		8.5967 (0.0361) <sup>**</sup>	0.0109 (0.7876)	14.7607 (0.8091)	6.4698 (0.2951)	12.0148 (0.1128)
	0.8450 (0.7321)	2.9140 (0.0796)*	6.9362 (0.0070)***	0.0103 (0.7989)	14.3032 (0.4819)	7.6571 (0.2157)	18.4492 (0.1220)
Australia	0.0863 (0.6612)	0.1606 (0.8700)		-0.0199 (0.6135)	19.5067 (0.3243)	26.5185 (0.0000)***	27.1698 (0.0599)
	0.0774 (0.6662)		-0.4147 (0.7358)	-0.0211 (0.5607)	20.6234 (0.3022)	26.5803 (0.0000)***	26.3739 (0.0602)
	-0.0069 (0.7340)	-0.0758 (0.9409)	-0.3887 (0.7615)	-0.0224 (0.5791)	20.8889 (0.3050)	26.6942 (0.0000)***	25.9923 (0.0828)
Brazil	1.2572 (0.5563)	7.7227 (0.6018)		-0.0194 (0.5261)	12.7873 (0.5431)	8.4474 (0.0004) <sup>***</sup>	31.6911 (0.0947)
	1.3835 (0.4757)		10.2694 (0.0006)***	-0.0103 (0.7420)	9.0639 (0.6575)	11.3394 (0.0649)*	25.7061 (0.8668)
	0.1890 (0.3960)	6.9266 (0.0034) <sup>***</sup>	8.8932 (0.0014) <sup>***</sup>	0.0373 (0.2808)	5.4408 (0.7917)	6.2510 (0.3160)	26.3232 (0.1357)
China	0.2907 (0.2029)	-1.5287 (0.2783)		-0.0564 (0.2182)	21.5007 (0.3671)	5.8725 (0.3231)	40.2655 (0.0103)
	0.1479 (0.4268)		0.3410 (0.8902)	-0.0326 (0.4183)	14.2425 (0.5497)	5.2367 (0.3933)	38.3774 (0.0638)
	0.2938 (0.2019)	-1.5739 (0.2802)	0.3263 (0.8980)	-0.0564 (0.2200)	20.7746 (0.3977)	5.6796 (0.3554)	38.5425 (0.0625)
India	0.4512 (0.0966) <sup>*</sup>	-4.0647 (0.1038)		-0.0436 (0.2255)	17.0874 (0.0490) <sup>**</sup>	$10.7368 \\ (0.0983)^*$	29.5071 (0.1042)
	0.3278 (0.1796)		-2.5200 (0.4054)	-0.0322 (0.3552)	14.2122 (0.0624) <sup>*</sup>	7.4332 (0.3165)	23.8633 (0.2420)
	0.4453 (0.1045)	-2.7121 (0.3421)	-1.7888 (0.5869)	-0.0415 (0.2516)	15.1043 (0.0452)**	8.6604 (0.2506)	27.1118 (0.1337)
Indonesia	0.1362 (0.6446)	3.0379 (0.2305)		-0.0197 (0.6218)	-13.9335 (0.3760)	4.5438 (0.4316)	20.0714 (0.0225)
	0.1019 (0.6586)		-1.8391 (0.7399)	-0.0351 (0.3627)	-9.2885 (0.6913)	3.0673 (0.6152)	12.7373 (0.0440)
	1.2651 (0.6702)	3.7183 (0.2236)	-1.2188 (0.6881)	-0.0209 (0.6013)	-12.4529 (0.4152)	3.7475 (0.5403)	19.7608 (0.0235)
Mexico	0.1657 (0.3035)	-1.5152 (0.2220)		-0.0032 (0.8906)	3.0942 (0.8538)	7.4483 (0.0770)*	14.7696 (0.4306)
	0.6688 (0.6449)		1.4991 (0.6373)	-0.0013 (0.9562)	6.0202 (0.6937)	8.5718 (0.0988) <sup>*</sup>	14.4979 (0.9710)

**Table 10 The impact of the original virus on investor attention in G20 countries** This table presents the results of the regression model for G20 countries' investor attention with original virus. CC refers to the number of new confirmed cases, and DC refers to the number of deaths. GEPU is the index of global economic policy uncertainty. TERMSP is the term spread. DSP is the default spread. TB is the two-year Treasury bond interest rate. The period is from March 1, 2020 to August 31, 2020. \*\*\* \*\* and \* indicate cignificance at the 1% 5% and 10% lawels respectively.

	0.1591	-2.7664	1.3543	-0.0059	3.7991	9.9536	18.0832
	(0.3246)	(0.1694)	(0.4288)	(0.7989)	(0.8214)	(0.0595)*	(0.3470)
Russia	0.2885 (0.1410)	-1.9471 (0.2696)		-0.0162 (0.6786)	21.6688 (0.3579)	10.4122 (0.0809)*	19.4591 (0.1612)
	0.2796 (0.1471)		-2.0312 (0.2612)	-0.0090 (0.8036)	23.4858 (0.2983)	7.7311 (0.2989)	17.3403 (0.1490)
	0.3085	-1.1847	-1.3022	-0.0167	19.1481	17.8323	18.5563
	(0.1222)	(0.5913)	(0.5648)	(0.6679)	(0.4252)	(0.2938)	(0.1724)
Saudi	0.0596	0.3276		-0.0096	24.6428	12.4913	16.4516
Arabia	(0.7724)	(0.8533)		(0.8041)	(0.3088)	(0.0384) <sup>**</sup>	(0.5173)
	0.5687 (0.8124)		-1.4067 (0.5612)	-0.0039 (0.9205)	15.9079 (0.5074)	9.1744 (0.2171)	15.6492 (0.7605)
	0.4107	1.2239	-2.2981	-0.0082	19.8096	8.9665	15.7962
	(0.8650)	(0.5595)	(0.4229)	(0.8543)	(0.4274)	(0.2290)	(0.5347)
South	0.2460	-1.0073		-0.0328	17.8224	15.2418	7.0616
Africa	(0.3472)	(0.4776)		(0.4581)	(0.5098)	(0.0325)**	(0.7694)
	0.1348 (0.6058)		2.0706 (0.9620)	-0.0264 (0.5726)	10.0344 (0.7000)	17.2302 (0.0290)**	5.0159 (0.7919)
	0.2017	-1.9776	1.4096	-0.0225	17.2162	17.4582	10.0358
	(0.4555)	(0.3327)	(0.5076)	(0.6303)	(0.5251)	(0.0271) <sup>**</sup>	(0.6827)
South	-0.1452	-1.0813		-0.0608	16.6699	23.7958	23.8268
Korea	(0.2037)	(0.2289)		(0.0107)	(0.1554)	(0.0000)***	(0.0077)***
	-0.1179 (0.1238)		0.5063 (0.7293)	-0.0456 (0.0273)**	14.9728 (0.2014)	23.5584 (0.0000) <sup>***</sup>	17.8700 (0.0298) <sup>**</sup>
	-0.1319	-1.1848	0.8762	-0.0609	17.7752	22.8937	22.8506
	(0.2578)	(0.1967)	(0.5561)	(0.0107) <sup>**</sup>	(0.1355)	(0.0000) <sup>***</sup>	(0.0120)**
Turkey	0.5737 (0.1034)	2.8994 (0.4965)		-0.0729 (0.0570)*	13.0044 (0.5514)	6.0216 (0.2953)	8.9458 (0.7012)
	1.5680 (0.2019)		6.1419 (0.2048)	-0.0593 (0.1382)	16.5013 (0.4434)	5.2217 (0.3519)	6.1327 (0.7439)
	0.4741	2.7543	5.2677	-0.0428	25.2792	2.7576	7.9449
	(0.1217)	(0.3355)	(0.1506)	(0.3227)	(0.2800)	(0.6544)	(0.3791)

**Table 11 The impact of the Alpha variant on investor attention in G7 countries** This table presents the results of the regression model for G7 countries' investor attention with the Alpha variant. CC refers to the number of new confirmed cases, and DC refers to the number of deaths. GEPU is the index of global economic policy uncertainty. TERMSP is the term spread. DSP is the default spread. TB is the two-year Treasury bond interest rate. The period is from September 1, 2020 to December 2020. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

G7	Intercept	СС	DC	GEPU	TERMSP	DSP	ТВ
Canada	1.9797	7.8475		-0.0789	25.4563	16.3690	16.3491
Canada	(0.7731)	$(0.0250)^{**}$		(0.2069)	(0.4522)	(0.5514)	(0.6297)
	1.8584		3.1517	-0.0631	22.1465	11.6579	13.9056
	(0.1716)		(0.1522)	(0.3201)	(0.5368)	(0.2494)	(0.6527)
	1.5757	9.8269	1.0983	-0.2219	21.3178	18.9405	11.1474
	(0.2235)	$(0.0560)^*$	(0.7547)	$(0.0392)^{**}$	(0.2189)	(0.3693)	(0.3135)
Energy	2.4206	5.5721		-0.1401	26.8370	11.2029	22.6080
France	(0.4891)	(0.0043)***		$(0.0148)^{**}$	(0.8240)	(0.2678)	(0.1572)
	2.4514		4.7403	-0.1979	23.1814	10.1275	13.8178
	(0.7821)		(0.0033)***	(0.0005)***	(0.5124)	$(0.0000)^{***}$	$(0.0991)^*$
	1.4825	4.9666	6.4591	-0.1951	24.5252	17.6443	10.8947
	(0.3798)	$(0.0161)^{**}$	(0.0001)***	$(0.0372)^{**}$	(0.0000)***	(0.3511)	(0.3518)
Comment	1.2695	8.7089		-0.2159	4.4729	3.6231	15.7145
Germany	(0.1236)	$(0.0000)^{***}$		(0.0001)***	(0.1872)	(0.0212)**	(0.5144)
	1.0387		7.8739	-0.2282	4.2183	10.5713	11.6943
	(0.1638)		(0.0000)***	(0.0001)***	(0.1143)	(0.6782)	(0.6219)
	1.7187	5.5872	5.8588	-0.4319	4.7264	2.9508	10.0109
	(0.2303)	$(0.0170)^{**}$	(0.0001)***	(0.0000)***	(0.8760)	(0.8676)	(0.2082)
T4 1	1.6963	-6.9969		-0.0235	13.7117	25.2320	26.5754
Italy	$(0.0577)^*$	(0.1916)		(0.8277)	(0.1786)	(0.0419)**	(0.8527)
	1.6170		5.0155	-0.2229	12.5809	22.5027	20.9052
	$(0.0745)^{*}$		(0.0264)**	$(0.0454)^{**}$	(0.8180)	(0.3575)	(0.7295)
	1.7519	-5.2897	4.5418	-0.1598	18.2202	23.6419	17.0372
	$(0.0619)^*$	(0.1151)	(0.0321)**	(0.4095)	(0.5485)	(0.4361)	(0.9106)
<b>T</b>	0.6274	-2.1301		-0.1006	13.2949	30.4649	36.3124
Japan	(0.3619)	(0.5194)		$(0.0380)^{**}$	(0.2539)	(0.2539)	(0.6531)
	1.6352		5.6104	-0.1449	4.3837	18.2315	24.6570
	(0.4520)		(0.0014)***	(0.0029)***	(0.8580)	(0.0016)***	(0.2048)
	0.8993	-5.7117	4.0288	-0.1367	9.5367	11.2664	27.4858
	(0.1392)	(0.1328)	$(0.0261)^{**}$	(0.1501)	(0.2517)	(0.4844)	(0.3698)
UW	0.7136	-3.1393		-0.0583	25.1466	26.1060	13.5728
UK	(0.3713)	(0.3754)		(0.4697)	$(0.0927)^*$	(0.4336)	(0.6655)
	1.7004		7.5551	-0.1031	26.6202	24.2173	13.1629
	(0.3811)		(0.0075)***	(0.2079)	(0.2980)	(0.4784)	(0.6683)
	0.3259	-3.5637	6.7763	-0.1813	23.1726	26.9959	16.2913
	(0.7934)	(0.5235)	(0.0022)***	(0.3400)	(0.1369)	(0.3708)	(0.4480)
ПO	1.8008	3.8448		-0.3268	21.2380	21.0152	67.5607
U.S.	(0.3673)	$(0.0000)^{***}$		(0.0000)***	$(0.0706)^{*}$	(0.4384)	(0.3257)
	2.3712	*	16.1544	-0.1955	16.1748	9.5211	47.3223
	(0.6863)		(0.0000)***	(0.0000)***	(0.6427)	$(0.0685)^*$	(0.1864)
	2.0517	2.9685	17.3649	-0.2295	19.4944	5.1497	37.2778
	(0.3305)	(0.5090)	(0.0000)***	(0.0034)***	(0.0828)*	(0.7409)	$(0.0057)^{***}$

**Table 12 The impact of the Alpha variant on investor attention in G20 countries** This table presents the results of the regression model for G20 countries' investor attention with the Alpha variant. CC refers to the number of new confirmed cases, and DC refers to the number of deaths. GEPU is the index of global economic policy uncertainty. TERMSP is the term spread. DSP is the default spread. TB is the two-year Treasury bond interest rate. The period is from September 1, 2020 to December 2020. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

G20	Intercept	СС	DC	GEPU	TERMSP	DSP	ТВ
Argentina	1.5833	3.2596		-0.0743	29.8642	5.2406	17.2838
Argentina	(0.2092)	$(0.0090)^{***}$		(0.1008)	(0.2211)	(0.2028)	(0.3138)
	1.7657		7.2057	-0.0822	18.8411	6.7994	10.7140
	$(0.0906)^*$		$(0.0000)^{***}$	$(0.0548)^*$	(0.2102)	$(0.0528)^*$	(0.7698)
	0.8597	2.3323	6.9362	-0.0842	18.6111	6.9167	11.7347
	(0.2582)	(0.0191)**	$(0.0070)^{***}$	(0.1089)	(0.2126)	$(0.0514)^{*}$	(0.8686)
Australia	0.0547	0.8366		0.0771	13.9361	20.3137	35.8170
Australia	(0.3113)	(0.6291)		(0.1377)	(0.8844)	(0.3363)	(0.1462)
	0.7794		6.3155	0.0935	15.4811	23.8026	39.7198
	(0.1495)		(0.0443)**	(0.1653)	(0.5969)	(0.2571)	(0.1285)
	0.0450	-0.1620	5.1133	0.1062	14.5211	22.7087	24.6491
	(0.4096)	(0.5315)	$(0.0543)^*$	(0.2864)	(0.2321)	(0.2011)	(0.3525)
D	0.2798	1.1394		-0.2008	11.8125	3.7091	27.3654
Brazil	(0.3489)	(0.1283)		(0.0013)***	(0.7161)	(0.0000)***	$(0.0810)^{*}$
	2.7027		12.4121	-0.1896	13.4814	4.1891	27.3701
	(0.5621)		(0.0335)**	(0.0022)***	(0.6750)	$(0.0000)^{***}$	$(0.0856)^{*}$
	1.1323	0.9764	12.1773	-0.0245	11.5933	4.2019	26.6562
	(0.8052)	(0.1319)	(0.0471)**	(0.8072)	(0.5514)	$(0.0613)^*$	$(0.0911)^*$
China	0.2337	4.5249		-0.0315	15.5692	3.5263	42.0228
China	(0.6825)	$(0.0918)^*$		(0.5656)	(0.6074)	(0.5684)	(0.8038)
	0.0369		-0.9675	-0.0165	18.9477	8.7304	36.2434
	(0.5929)		(0.3223)	(0.7629)	(0.3296)	(0.4290)	(0.6841)
	0.2655	4.9378	-0.4172	-0.0438	16.2775	5.6721	35.0272
	(0.5461)	$(0.0742)^{*}$	(0.6054)	(0.5606)	(0.9902)	(0.7572)	(0.2845)
India	1.2159	9.8326		-0.0783	17.2186	9.3374	21.0739
India	(0.1444)	(0.0000)***		(0.1824)	(0.3509)	(0.0005)***	(0.8298)
	1.5582		3.7005	-0.0647	10.2723	7.4993	34.6055
	(0.1631)		(0.0294)**	(0.2736)	(0.7955)	$(0.0001)^{***}$	(0.7155)
	1.2017	9.1688	2.9066	-0.1004	15.8008	8.6604	27.1118
	(0.1192)	(0.0060)***	$(0.0645)^*$	(0.3354)	(0.2149)	(0.2506)	(0.1337)
Indonesia	1.4995	5.0487		-0.0805	-12.1786	4.4875	19.3689
Indonesia	(0.9905)	(0.5583)		(0.1772)	(0.6919)	(0.8818)	(0.8400)
	0.8668		-2.1000	-0.0973	-15.3084	1.9998	6.3122
	(0.3299)		(0.7567)	(0.1071)	(0.6214)	(0.4955)	(0.4955)
	0.7985	3.6595	-1.8645	-0.0739	-12.5554	3.4933	14.3514
	(0.3435)	(0.2154)	(0.9023)	(0.3526)	(0.4664)	(0.9085)	(0.6804)
Maniaa	1.0644	9.4841		-0.1563	18.0493	17.2197	26.8880
Mexico	(0.2398)	$(0.0549)^*$		(0.0271)**	$(0.0000)^{***}$	(0.0301)**	(0.2727)
	1.6958		3.4510	-0.1701	16.1652	10.8243	14.3532
	(0.1300)		(0.1102)	(0.0164)**	(0.0001)***	(0.0223)**	(0.1969)
	1.5164	7.7887	1.4658	-0.0026	13.6754	9.4212	19.6931
	(0.3928)	$(0.0636)^*$	(0.8401)	(0.9761)	(0.0001)***	(0.0210)**	(0.5150)
	()						
Russia	2.5910	11.2439		-0.2108	19.0929	22.0279	24.5193

	2.8784		11.2503	-0.2658	21.2070	19.7274	17.3244
	(0.4780)		(0.8635)	(0.0030)***	(0.4069)	$(0.0000)^{***}$	$(0.0070)^{***}$
	2.9997	9.0541	12.4933	-0.0549	24.3181	20.5626	15.5325
	(0.3401)	$(0.0949)^{*}$	(0.1568)	(0.0000)***	(0.3203)	(0.0038)***	$(0.0479)^{**}$
Saudi	0.2688	-0.7907		-0.0468	35.9490	15.5877	15.7560
Arabia	(0.6922)	(0.9074)		(0.4533)	(0.3202)	(0.6179)	(0.5444)
	-1.5225		-8.8332	-0.0405	20.0319	20.2837	16.7196
	(0.8194)		(0.3631)	(0.5176)	(0.6046)	(0.3745)	(0.4982)
	0.6599	-2.1316	-10.9110	-0.0845	26.2314	17.4851	12.0901
	(0.9896)	(0.7743)	(0.2961)	(0.3841)	(0.2648)	(0.4446)	(0.1761)
South	1.2004	7.3079		-0.1580	39.7428	41.2945	30.2224
Africa	(0.2427)	$(0.0651)^*$		$(0.0288)^{**}$	(0.2901)	$(0.0806)^{*}$	(0.8078)
	1.8139		8.8160	-0.1264	35.0594	43.4955	38.6118
	(0.2736)		(0.0016)***	$(0.0610)^{*}$	(0.3232)	$(0.0666)^*$	(0.5009)
	1.5125	7.7793	10.0831	-0.0514	39.8942	40.7269	37.0804
	(0.1111)	$(0.0450)^{**}$	(0.0010)***	(0.5702)	(0.3720)	(0.1073)	(0.2276)
South	0.0304	-0.0697		-0.0605	7.0704	11.0142	28.2099
Korea	(0.5686)	(0.9713)		(0.1000)	(0.9971)	(0.5991)	(0.0906)*
	0.0241		0.9105	-0.0528	12.2678	17.9049	26.7987
	(0.6059)		(0.4832)	(0.1615)	(0.9085)	(0.6213)	$(0.0487)^{**}$
	0.0308	-0.0595	1.3211	-0.0350	11.1234	21.7891	44.0398
	(0.2793)	(0.9684)	(0.3485)	(0.4822)	(0.9957)	(0.1165)	(0.5051)
T 1	1.3867	9.0231		-0.0081	9.3946	8.6034	23.7175
Turkey	(0.9681)	(0.0119)**		(0.8892)	(0.7567)	(0.8183)	(0.0301)**
	0.9187		4.5405	-0.0252	12.9927	4.1569	20.1238
	(0.3907)		(0.9437)	(0.6533)	(0.6691)	(0.3001)	(0.0292)**
	1.2784	8.9981	5.9884	-0.0128	5.6403	4.1042	16.2889
	(0.6412)	$(0.0299)^{**}$	(0.1260)	(0.8731)	(0.1836)	(0.0328)**	(0.1760)

**Table 13 The impact of the Delta variant on investor attention in G7 countries** This table presents the results of the regression model for G7 countries' investor attention with the Delta variant. CC refers to the number of new confirmed cases, and DC refers to the number of deaths. GEPU is the index of global economic policy uncertainty. TERMSP is the term spread. DSP is the default spread. TB is the two-year Treasury bond interest rate. The period is from January 1, 2021 to May 2021. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

<b>G7</b>	Intercept	CC	DC	GEPU	TERMSP	DSP	ТВ
Canada	5.2365	13.6744		-0.4831	-3.0395	24.3080	13.9591
Callaua	$(0.0802)^{*}$	$(0.0000)^{***}$		(0.1115)	(0.9051)	$(0.0000)^{***}$	(0.9442)
	6.5480		13.9141	-0.5395	-6.8833	16.8880	10.5552
	$(0.0408)^{**}$		(0.0001)***	$(0.0719)^*$	(0.1177)	(0.0002)***	(0.8056)
	5.3164	13.2932	15.1673	-0.05464	-1.3859	15.3577	17.7818
	(0.1004)	(0.0010)***	(0.0012)***	(0.0005)***	(0.4739)	$(0.0000)^{***}$	(0.9290)
France	0.1717	0.2377		-0.1818	-15.8565	13.5847	28.0251
France	(0.9441)	(0.9306)		(0.2948)	(0.2351)	(0.1254)	(0.1010)
	0.2365		1.5461	-0.2385	-12.3577	17.9636	22.6947
	(0.6707)		$(0.0000)^{***}$	$(0.0563)^*$	(0.5690)	$(0.0944)^*$	$(0.0223)^{**}$
	0.2980	1.6998	1.2078	-0.2141	-7.6069	12.6919	17.0309
	(0.7892)	(0.1748)	$(0.0000)^{***}$	$(0.0887)^{*}$	(0.7284)	$(0.0713)^*$	(0.0269)**
Cormonu	1.5924	2.6809		-0.0643	3.5213	8.7519	3.5823
Germany	(0.7725)	(0.0014)***		(0.6946)	(0.1936)	(0.0499)**	(0.1347)
	1.8166		1.8118	-0.1392	1.4598	10.2709	2.3699
	(0.1411)		(0.0028)***	(0.3514)	(0.5881)	(0.0339)**	(0.1613)
	1.9691	1.4621	1.6925	-0.0160	1.2781	14.7080	2.9511
	(0.7250)	$(0.0075)^{***}$	(0.0001)***	(0.9186)	(0.6510)	(0.2927)	(0.1310)
Italy	-0.0967	-0.9014		-0.2464	-3.0611	10.4293	12.1691
Italy	(0.8046)	(0.8698)		(0.1728)	(0.2018)	(0.1254)	(0.1629)
	-0.1916		3.5194	-0.6079	-5.4128	10.9474	14.9439
	(0.1276)		$(0.0000)^{***}$	(0.1002)	(0.2300)	(0.2128)	(0.1112)
	-0.1362	-0.4311	4.1102	-0.3802	-1.7011	7.4926	12.1588
	(0.1478)	(0.7360)	$(0.0000)^{***}$	$(0.0903)^*$	(0.9437)	(0.4643)	(0.1338)
Japan	-3.1092	-7.8267		-0.1134	12.2350	16.9867	13.8122
Japan	(0.8197)	(0.2892)		(0.4301)	(0.2565)	(0.1284)	$(0.0604)^*$
	1.0577		5.5242	0.0638	13.0550	17.4682	21.6356
	$(0.0615)^*$		(0.0018)***	(0.6717)	(0.4712)	$(0.0651)^*$	(0.2082)
	2.5906	-2.0544	3.6985	0.2362	12.6564	17.5944	14.2647
	(0.3678)	(0.1005)	$(0.0000)^{***}$	(0.1039)	(0.6120)	(0.1286)	$(0.0792)^*$
UK	6.6755	9.8483		-0.7053	15.7988	16.3639	16.2078
υĸ	(0.3610)	$(0.0475)^{**}$		(0.0079)***	(0.6559)	(0.2796)	$(0.0303)^{**}$
	6.9729		9.3692	-0.5574	13.5102	20.4211	15.2325
	(0.4883)		(0.0018)***	(0.0038)***	(0.4158)	(0.7010)	(0.0222)**
	5.7333	7.3233	8.3640	-0.6739	15.4423	15.7639	15.3320
	(0.8622)	$(0.0544)^*$	(0.0127)**	(0.0098)***	(0.6574)	(0.7686)	(0.0192)**
U.S.	15.6059	24.9881		-0.7096	7.7004	11.2731	31.8899
0.5.	$(0.0710)^*$	$(0.0000)^{***}$		(0.0000)***	(0.7044)	(0.0019)***	(0.1324)
	12.3338		28.4794	-0.5592	7.3591	15.2926	26.6800
	$(0.0661)^*$		$(0.0000)^{***}$	(0.0000)***	(0.1443)	(0.0096)***	$(0.0546)^*$
	12.0865	25.5633	28.8185	-0.5536	6.3828	14.0651	26.0068
	$(0.0983)^*$	$(0.0273)^{**}$	$(0.0000)^{***}$	(0.0000)***	(0.1454)	$(0.0692)^*$	$(0.0552)^*$

**Table 14 The impact of the Delta variant on investor attention in G20 countries** This table presents the results of the regression model for G20 countries' investor attention with the Delta variant. CC refers to the number of new confirmed cases, and DC refers to the number of deaths. GEPU is the index of global economic policy uncertainty. TERMSP is the term spread. DSP is the default spread. TB is the two-year Treasury bond interest rate. The period is from January 1, 2021 to May 2021. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

Argentina $(0.1303)$ $(0.0002)^{***}$ $(0.3092)$ $(0.77)^{***}$ $1.4956$ $8.6348$ $0.1465$ $-4.0$ $(0.2122)$ $(0.0011)^{***}$ $(0.2088)$ $(0.9)^{***}$ $2.8951$ $10.7062$ $7.8785$ $0.1356$ $-3.6$ $(0.3598)$ $(0.0678)^{*}$ $(0.0072)^{***}$ $(0.2414)$ $(0.8)^{**}$ Australia $0.5396$ $2.4147$ $-0.3168$ $12.9^{*}$ $(0.9437)$ $(0.6088)$ $(0.0529)^{*}$ $(0.11)^{***}$ $1.6473$ $5.0822$ $-0.3809$ $9.9^{*}$ $(0.8461)$ $(0.0489)^{***}$ $(0.0140)^{***}$ $(0.14)^{***}$ $0.2387$ $3.7170$ $2.7713$ $-0.3246$ $12.6^{*}$ $(0.8816)$ $(0.2335)$ $(0.0252)^{***}$ $(0.0444)^{***}$ $(0.44)^{***}$ Brazil $0.6787$ $3.2916$ $-0.0208$ $17.7^{*}$ $(0.3218)$ $3.0542$ $0.0404$ $16.9^{*}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	993)       (0.0252)**       (0.8027         5614       9.4890       1.1554         506)       (0.1144)       (0.9937         9811       10.6209       26.9076         175)       (0.0276)**       (0.1742         472       9.9472       27.944'         074)       (0.0174)**       (0.1609         5179       10.1096       25.8466         268)       (0.0127)**       (0.1716)
Australia $(0.3598)$ $(0.0678)^*$ $(0.0072)^{***}$ $(0.2414)$ $(0.88)$ Australia $0.5396$ $2.4147$ $-0.3168$ $12.9$ $(0.9437)$ $(0.6088)$ $(0.0529)^*$ $(0.11)$ $1.6473$ $5.0822$ $-0.3809$ $9.9$ $(0.8461)$ $(0.0489)^{**}$ $(0.0140)^{**}$ $(0.11)$ $0.2387$ $3.7170$ $2.7713$ $-0.3246$ $12.6$ $(0.8816)$ $(0.2335)$ $(0.0252)^{**}$ $(0.0444)^{**}$ $(0.444)^{**}$ Brazil $0.6787$ $3.2916$ $-0.0208$ $17.7$ $0.3218$ $3.0542$ $0.0404$ $16.9$	506)       (0.1144)       (0.9937         9811       10.6209       26.9076         175)       (0.0276)**       (0.1742         472       9.9472       27.944*         074)       (0.0174)**       (0.1609         5179       10.1096       25.8466         268)       (0.0127)**       (0.1716)
Australia $(0.9437)$ $(0.6088)$ $(0.0529)^*$ $(0.1$ $1.6473$ $5.0822$ $-0.3809$ $9.9$ $(0.8461)$ $(0.0489)^{**}$ $(0.0140)^{**}$ $(0.140)^{**}$ $0.2387$ $3.7170$ $2.7713$ $-0.3246$ $12.6$ $(0.8816)$ $(0.2335)$ $(0.0252)^{**}$ $(0.0444)^{**}$ $(0.444)^{**}$ Brazil $0.6787$ $3.2916$ $-0.0208$ $17.7$ $(0.0534)^*$ $(0.0000)^{***}$ $(0.8691)$ $(0.016666)$	175)       (0.0276)**       (0.1742         472       9.9472       27.944'         074)       (0.0174)**       (0.1609         5179       10.1096       25.8466         268)       (0.0127)**       (0.1716)
$Brazil \begin{array}{cccccccccccccccccccccccccccccccccccc$	074)(0.0174)**(0.1609517910.109625.8460268)(0.0127)**(0.1716)
$(0.8816)$ $(0.2335)$ $(0.0252)^{**}$ $(0.0444)^{**}$ $(0.44)^{**}$ Brazil $\begin{array}{c} 0.6787 & 3.2916 \\ (0.0534)^{*} & (0.0000)^{***} \end{array}$ $\begin{array}{c} -0.0208 & 17.7 \\ (0.8691) & (0.011) \\ 0.3218 \end{array}$ $\begin{array}{c} 0.3218 \end{array}$ $\begin{array}{c} 3.0542 \\ 0.0404 \end{array}$ $\begin{array}{c} 0.0444 \\ 16.9 \\ 16.9 \end{array}$	268) (0.0127)** (0.1716
Brazil $(0.0534)^*$ $(0.0000)^{***}$ $(0.8691)$ $(0.01)$ 0.3218         3.0542         0.0404         16.9	700 7 4907 25 700
	7799 7.4807 25.799 14)** (0.0467)** (0.1290
$(0.0489)^{**}$ $(0.0000)^{***}$ $(0.7418)$ $(0.00)$	945812.424021.752409)***(0.0004)***(0.0881)
	995910.599627.434213)***(0.0027)***(0.0940)
( hing	0078 4.8928 34.2672 459) (0.0805)* (0.0181)
	15485.221336.1970276)(0.0743)*(0.0134)
	57945.778232.1139554)(0.0774)*(0.0193)
India	9941 9.5219 23.168 534)* (0.6854) (0.0987
	39846.859223.4532224)**(0.4169)(0.1093
	34887.123923.3065536)*(0.7838)(0.1092
Indonesia	38044.715910.1239630)(0.1396)(0.7091
	26454.740013.9700270)(0.1313)(0.3043)
	70654.674616.7992051)(0.1296)(0.6382
Mexico	5191.60228.3032572)(0.9542)(0.5354
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	952 1.4939 12.8032

	4.0856 (0.4263)	6.5471 (0.0916) <sup>*</sup>	6.7494 (0.0321) <sup>**</sup>	-0.0266 (0.8044)	6.2227 (0.7244)	1.6692 (0.9522)	14.3493 (0.3900)
Russia	-1.1157 (0.3835)	-2.0073 (0.4145)		-0.0805 (0.6337)	23.2784 (0.2674)	11.8611 (0.7272)	11.5076 (0.6180)
	-0.3983 (0.8631)		1.6232 (0.6953)	-0.0272 (0.8294)	21.7857 (0.5314)	6.2188 (0.8591)	8.8181 (0.5873)
	-1.7114 (0.5084)	-2.9836 (0.3965)	0.8954 (0.6468)	-0.0702 (0.6810)	19.5755 (0.2948)	8.0018 (0.8198)	8.3905 (0.6110)
Saudi Arabia	0.2751 (0.4322)	-1.4960 (0.8533)		-0.2711 (0.1476)	15.0609 (0.3807)	7.2209 (0.0203)**	14.4540 (0.0635)*
	0.7633 (0.7102)		-1.2212 (0.5313)	-0.1158 (0.2795)	15.6907 (0.7414)	9.5137 (0.0471) <sup>**</sup>	17.8175 (0.1425)
	0.7702 (0.3013)	-1.2309 (0.4489)	-0.7103 (0.3576)	-0.2891 (0.3350)	11.4061 (0.5098)	8.8058 (0.0096) <sup>***</sup>	17.6178 (0.1203)
South Africa	-0.7628 (0.2527)	-3.3109 (0.2635)		-0.2779 (0.0190)**	8.8214 (0.0240)**	15.5955 (0.0681)*	4.0692 (0.1198)
	0.6163 (0.8623)		2.6335 (0.0000) <sup>***</sup>	-0.4477 (0.0001) <sup>***</sup>	9.8640 (0.8683)	$12.1096 \\ (0.0840)^*$	2.3491 (0.1418)
	-0.7238 (0.2247)	-2.9968 (0.6359)	2.1417 (0.0000) <sup>***</sup>	-0.3917 (0.3300)	12.9595 (0.5180)	$15.6841 \\ (0.0848)^*$	2.9558 (0.1581)
South Korea	8.9102 (0.2609)	13.5711 (0.1672)		-0.0505 (0.6855)	12.5754 (0.1393)	12.4515 (0.0009)***	21.4251 (0.1106)
	2.2461 (0.1272)		8.9282 (0.0129) <sup>**</sup>	-0.1288 (0.2994)	18.9118 (0.4033)	10.2151 (0.0033)***	18.2896 (0.1044)
	$5.8978 \ \left( 0.0660  ight)^{*}$	11.2593 (0.2461)	8.5139 (0.0180) <sup>**</sup>	-0.1081 (0.3884)	14.8893 (0.5417)	11.4473 (0.0017) <sup>***</sup>	22.5194 (0.1723)
Turkey	3.4785 (0.4217)	8.7289 (0.0041) <sup>***</sup>		-0.0057 (0.9477)	2.8935 (0.8568)	5.2536 (0.0516) <sup>*</sup>	9.6380 (0.9332)
	2.3749 (0.5522)		5.0146 (0.2613)	-0.0093 (0.9176)	1.9128 (0.3490)	5.0938 (0.6577)	6.1633 (0.8993)
	4.6574 (0.5879)	9.8827 (0.0014) <sup>***</sup>	8.0138 (0.1708)	-0.0423 (0.6326)	1.6944 (0.6794)	8.4248 (0.5930)	9.6793 (0.7984)

#### Table 15 The impact of vaccination rates on investor attention in G7 countries

This table presents the results of the regression model for G7 countries with vaccination rates. CC refers to the number of new confirmed cases; and DC refers to the number of deaths. VC refers to vaccination rate. GEPU is the index of global economic policy uncertainty. TERMSP is the term spread. DSP is the default spread. TB is the two-year Treasury bond interest rate. The period is from March 1, 2020 to December 31, 2021. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

<b>G7</b>	Intercept	CC	DC	VC	CC*VC	DC*VC	GEPU	TERMSP	DSP	ТВ
Canada	-1.0381 (0.1879)	7.0699 (0.0015) <sup>***</sup>		3.9040 (0.8701)	-10.0094 (0.0974)*		-0.2619 (0.0990)*	18.7594 (0.1355)	39.4263 (0.0004)***	8.4259 (0.0295) **
	-3.4513 (0.3942)		18.0725 (0.0000) ***	6.5379 (0.0718)*		-6.0721 (0.0082)***	-0.0904 (0.5303)	22.1347 (0.0203)**	31.6000 (0.0006)***	6.4420 (0.1150)
	-2.2392 (0.1112)	7.4503 (0.0082) <sup>***</sup>	10.7622 (0.0000) ***	3.8706 (0.1543)	-17.6768 (0.0000)***	-14.7704 (0.0005)***	-0.2231 (0.1443)	17.9728 (0.0004) ***	27.0893 (0.0000)***	8.4446 (0.0283)**
France	1.5808 (0.3014)	3.4234 (0.0510)*		9.8352 (0.0397)**	-0.7360 (0.0204)**		0.0722 (0.6190)	2.9337 (0.8132)	3.2637 (0.3114)	3.7155 (0.9317)
	1.4813 (0.2598) 1.2804 (0.0832)*	8.4680 (0.0000)***	6.8803 (0.0008)*** 11.4896 (0.0000)***	15.3529 (0.0000) *** 16.4261 (0.0000) ***	-2.1509 (0.0064)***	-7.1666 (0.0000)*** -5.9949 (0.0000)***	-0.2290 (0.0601)* -0.1801 (0.1421)	3.7518 (0.0010) *** 3.7661 (0.0009) ***	5.4500 (0.8442) 1.3217 (0.4912)	7.8224 (0.0596)* 8.5881 (0.0326)**
Germany	0.0295 (0.5905) -0.3035 (0.5535)	0.2779 (0.8961)	1.0677 (0.0000) ***	21.9714 (0.0170)** 18.3471 (0.0000)***	-3.2815 (0.0214)**	-3.6100 (0.0004)***	-0.1243 (0.3504) 0.0758 (0.4232)	23.1245 (0.0310)** 29.6575 (0.0011)***	64.0435 (0.0284)** 65.0433 (0.0000)***	2.9302 (0.9342) 4.8438 (0.0311)**
	0.5935 (0.9147)	0.7379 (0.7232)	0.3471 (0.0000) ***	16.4233 (0.0000) ***	-5.9356 (0.0169) <sup>**</sup>	-4.8507 (0.0049) <sup>***</sup>	0.0552 (0.5659)	23.5691 (0.0000) ***	58.5691 (0.0000) ****	4.9891 (0.0328)**
Italy	1.6237 (0.8057)	1.1998 (0.0677) <sup>*</sup>		6.0479 (0.0682)*	0.9148 (0.8114)		-0.0844 (0.5760)	15.9428 (0.2243)	62.3131 (0.0724)*	18.7458 (0.6742)
	0.4700 (0.4115)		4.0723 (0.0235)**	10.0714 (0.0000) ***		-17.0777 (0.0000)***	-0.3419 (0.0188) **	12.5775 (0.0001) ***	58.2400 (0.0001)***	11.6049 (0.7739)
	0.7033 (0.2334)	1.6012 (0.0005) ***	6.0715 (0.0019) ***	12.6003 (0.0002)***	-3.4478 (0.5353)	-14.3941 (0.0007)***	-0.2709 (0.0545)*	9.1250 (0.0000) ***	59.8744 (0.0000) ***	18.7246 (0.4720)

Japan	0.5178 (0.4040)	4.2879 (0.1334)		1.6853 (0.7450)	0.2459 (0.7030)		0.0045 (0.9738)	0.5373 (0.9653)	13.6716 (0.6798)	7.3362 (0.8808)
	1.3609 (0.1158)		9.5344 (0.0000)***	6.8009 (0.0865)*		-1.7640 (0.0162)**	0.0498 (0.6354)	1.4972 (0.1169)	13.6579 (0.2829)	3.3237 (0.0042)***
	-0.4965 (0.3941)	3.3560 (0.1942)	10.7671 $(0.0000)^{***}$	0.5287 (0.9157)	-1.7296 (0.0023)***	-2.6415 (0.0006)***	-0.3393 (0.0140) **	1.6123 (0.2423)	12.7396 (0.6871)	4.0077 (0.9281)
UK	0.2673 (0.7119)	2.8926 (0.7146)		14.1207 (0.8067)	-2.0927 (0.0458) <sup>**</sup>		-0.0308 (0.8146)	14.3566 (0.5450)	51.0845 (0.1910)	17.9275 (0.7237)
	1.4709 (0.7982)		6.3809 (0.7171)	15.3582 (0.0865)*		-5.9624 (0.0193)**	-0.2069 (0.1305)	26.1104 (0.1053)	30.5381 (0.3793)	14.1769 (0.3668)
	1.6902 (0.3601)	7.1237 (0.2005)	5.6143 (0.0130)**	16.6666 (0.0276)**	$-8.7840 \ (0.0818)^*$	-1.9509 (0.0586)**	-0.1656 (0.2358)	19.3348 (0.4210)	49.6043 (0.1234)	19.5444 (0.6962)
U.S.	2.3444 (0.1372)	10.2424 (0.0000) ***		14.6289 (0.7097)	-1.9398 (0.0866)*		-0.3687 (0.0020)***	24.0584 (0.0065)***	58.2258 (0.0306)**	9.1599 (0.7519)
	2.5951 (0.2410)		14.2025 (0.0000) ****	20.5345 (0.2388)		-2.7494 (0.3203)	-0.1326 (0.2180)	13.2988 (0.1132)	51.8971 (0.0158) <sup>**</sup>	15.2331 (0.5731)
	-0.3188 (0.4286)	4.9943 (0.1330)	16.9350 (0.0000) ***	16.6275 (0.3352)	-3.7774 (0.3316)	-1.0817 (0.9196)	-0.1204 (0.3111)	11.6229 (0.2175)	57.0063 (0.0306) <sup>**</sup>	15.1598 (0.5813)

#### Table 16 The impact of vaccination rates on investor attention in G20 countries

This table presents the results of the regression model for G20 countries with vaccination rates. CC refers to the number of new confirmed cases; and DC refers to the number of deaths. VC refers to vaccination rate. GEPU is the index of global economic policy uncertainty. TERMSP is the term spread. DSP is the default spread. TB is the two-year Treasury bond interest rate. The period is from March 1, 2020 to December 31, 2021. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

G20	Intercept	CC	DC	VC	CC*VC	DC*VC	GEPU	TERMSP	DSP	ТВ
Argentina	0.1595 (0.7338)	1.2947 (0.0209)**		8.4903 (0.0172) <sup>**</sup>	-3.8159 (0.0121)**		-0.0845 (0.4091)	15.7462 (0.0019) ***	29.1625 (0.1037)	14.7760 (0.0014) <sup>***</sup>
	-1.5775 (0.2128)		9.7209 (0.0000) ***	5.4592 (0.0267) <sup>**</sup>		-1.0892 (0.0664)*	0.0128 (0.9002)	13.4395 (0.1144)	24.9505 (0.2722)	10.7265 (0.0102)**
	-0.3985 (0.3962)	1.1659 (0.0004) ***	13.9883 (0.0000) ***	7.7541 (0.0039)***	-3.5504 (0.0028)***	-2.3389 (0.0820)*	0.0274 (0.7886)	6.3581 (0.5063)	25.0784 (0.0216)**	10.2431 (0.0040)**
Australia	1.3219 (0.8086)	1.7025 (0.2813)		0.9168 (0.3672)	-0.1308 (0.7680)		-0.2134 (0.0808)*	4.8722 (0.7139)	15.7802 (0.0925)*	18.1341 (0.6373)
Brazil	$\begin{array}{c} 2.3784 \\ (0.5928) \\ 0.3354 \\ (0.5404) \\ -1.1906 \\ (0.4352) \\ -1.8675 \\ (0.3709) \end{array}$	0.0124 (0.9962) 12.0671 (0.0000)***	14.9434 (0.0081)*** 8.9639 (0.0092)*** 11.6313 (0.0000)***	0.8908 (0.8251) 1.2024 (0.2995) 17.6364 (0.0015)*** 17.1317 (0.0014)***	-0.3346 (0.4951) -2.6704 (0.0011)***	10.6179 (0.3127) 9.7466 (0.3571) -2.7607 (0.0007)***	$\begin{array}{c} -0.1675 \\ (0.1379) \\ -0.2252 \\ (0.0666)^* \\ -0.0154 \\ (0.8960) \\ -0.0619 \\ (0.6002) \end{array}$	6.7394 (0.5832) 5.9415 (0.7088) 2.7339 (0.0062)*** 4.3583 (0.0001)***	$\begin{array}{c} 16.0984 \\ (0.0690)^* \\ 15.6504 \\ (0.0649)^* \\ 19.0378 \\ (0.4417) \\ 17.9537 \\ (0.1143) \end{array}$	19.6083 (0.6838) 15.0917 (0.7550) 18.5308 (0.0530)* 18.0395 (0.0160)**
	-1.9339 (0.1520)	9.5417 (0.1496)	10.9828 (0.1810)	14.1427 (0.3307)	-0.8277 (0.7883)	-3.6656 (0.2323)	-0.0984 (0.4209)	4.3579 (0.0002)***	11.6944 (0.1228)	15.8271 (0.0121)*
China	-0.5762 (0.7797)	3.3439 (0.2208)		0.4749 (0.8347)	-0.1022 (0.8436)		0.0242 (0.7978)	3.8778 (0.6402)	23.5096 (0.0918)*	11.9709 (0.6213)
	-2.3328 (0.2714)		15.5389 (0.3855)	0.4439 (0.5460)		1.6621 (0.9898)	0.0883 (0.3319)	11.1743 (0.1142)	21.2191 (0.2578)	12.1541 (0.6237)
	-0.5621 (0.4891)	3.7031 (0.1776)	16.9705 (0.3482)	0.1014 (0.9648)	-0.0035 (0.9947)	-3.9269 (0.1883)	0.0223 (0.8134)	3.8241 (0.6450)	23.0599 (0.0868)*	12.4966 (0.6062)

India	0.6066 (0.9357)	3.2329 (0.4641)		7.1274 (0.2645)	2.6277 (0.1101)		-0.2742 (0.0276)**	19.3548 (0.1562)	22.5343 (0.2639)	17.4778 (0.6785)
	1.4572 (0.3486)		5.6638 (0.2255)	6.4629 (0.0955)*		2.7052 (0.1271)	-0.2639 (0.0380)**	13.8593 (0.2315)	25.5606 (0.4117)	15.7076 (0.6714)
	1.9851 (0.8999)	4.9694 (0.5543)	3.7186 (0.3657)	12.2826 (0.5370)	2.6349 (0.9983)	1.9688 (0.5586)	-0.2514 (0.0550)*	21.4353 (0.1750)	19.3311 (0.5685)	13.6085 (0.4305)
Indonesia	0.5173 (0.1765)	2.9046 (0.2496)		12.4065 (0.1350)	-2.0378 (0.1158)		-0.0170 (0.8502)	0.4985 (0.9524)	22.3570 (0.2232)	13.2345 (0.2658)
	0.3156 (0.3567)	2 (701	0.8611 (0.7479)	11.0633 (0.9926)	2 0 2 2 0	-0.3563 (0.7737)	-0.0745 (0.4063)	0.6874 (0.9679)	23.6062 (0.1971)	8.3398 (0.7728)
Marrian	-0.5178 (0.1767) -1.3160	3.6791 (0.1380) 3.7685	2.3910 (0.3852)	13.8277 (0.1821) 4.5497	-2.9339 (0.0796)* -1.0894	-1.0184 (0.5111)	-0.0190 (0.8332) 0.0357	0.4193 (0.6659) 16.4968	18.7368 (0.3169) 3.2921	12.3169 (0.4244) 7.5119
Mexico	(0.4405) 1.3357 (0.9233)	(0.7209)	4.4771 (0.0636)*	(0.2550) 3.3239 (0.6769)	(0.0246)**	-2.0812 (0.0031)***	(0.6287) 0.0396 (0.6443)	(0.0793)* 10.0614 (0.1934)	(0.8760) 2.3858 (0.9085)	(0.7728) 4.0385 (0.8756)
	-1.4967 (0.8000)	2.1399 (0.7791)	(0.0030) 1.7314 (0.2730)	5.4462 (0.8361)	-1.3916 (0.0288)**	-2.7938 (0.0065)***	0.0681 (0.4711)	13.9263 (0.7178)	4.0115 (0.8567)	2.4435 (0.9249)
Russia	2.4856 (0.0703)* 1.3467	8.8466 (0.0368) **	9.8423	8.9556 (0.0360)** 6.5023	-8.1590 (0.0339)**	-10.8479	-0.0372 (0.6999) -0.0369	10.6366 (0.2822) 4.3135	11.1095 (0.6942) 17.132	20.5945 (0.3368) 27.8725
	(0.7658) 1.6614	7.3939	(0.5279) 5.5022	(0.0899) <sup>*</sup> 4.7972	-10.4572	(0.0800) * -6.5515	(0.6919) -0.0447	(0.7612) 8.8416	(0.5064) 11.4216	(0.4827) 24.8977
Saudi Arabia	(0.2030) 0.1820 (0.7360)	$(0.0065)^{***}$ 4.6074 (0.4470)	(0.2382)	(0.0093) *** 2.9878 (0.6394)	(0.0276)** -0.3339 (0.7617)	(0.0068)***	(0.6402) -0.1162 (0.2810)	(0.6538) 1.7266 (0.8656)	(0.6884) 13.4903 (0.6131)	(0.3848) 15.9502 (0.5712)
	1.3225 (0.5642) 1.8848	8.1686	5.4774 (0.5264) 2.3606	2.3488 (0.3732) 5.55338	-0.8111	0.5579 (0.6866) 0.1602	-0.1362 (0.1462) -0.1532	0.1921 (0.9872) 5.8100	9.7798 (0.7105) 8.4823	12.3773 (0.7726) 12.0599
South Africa	$(0.6483) \\ (0.7338) \\ (0.1588)$	(0.2881) 1.1173 (0.0550)*	(0.7824)	(0.5088) 2.2273 (0.5403)	(0.5388) 0.1895 (0.6506)	(0.9045)	-0.1332 (0.1920) -0.1920 (0.0621)*	(0.6370) 14.2347 (0.2097)	(0.5013) 13.5187 (0.3454)	(0.9784) 11.5093 (0.7509)
7 milea	-1.3646	(0.0550)	10.3046	0.9155	(0.0200)	-0.1949	-0.2961	7.6246	14.5323	13.3785

South Korea	(0.3871) 0.8546 (0.1709) -1.9339 (0.2961)	1.6119 (0.0002)*** 13.3891 (0.0014)***	(0.0014)*** 18.8137 (0.0000)***	(0.7946) 2.9709 (0.3977) 3.9208 (0.4343)	-0.4583 (0.3697) -1.1627 (0.1546)	(0.7377) -0.0562 (0.9323)	(0.0008)*** -0.3614 (0.0002)*** -0.0886 (0.2803)	(0.0013)*** 15.8604 (0.0263)** 13.1949 (0.0008)***	(0.5385) 13.4791 (0.8789) 6.2310 (0.0059)****	(0.0985)* 17.3756 (0.5595) 10.8696 (0.0279)**
	-0.5829 (0.1299)		3.0900 (0.1658)	-0.5818 (0.6019)		-0.3915 (0.4413)	-0.0804 (0.3727)	12.9377 (0.1330)	5.7953 (0.0156) **	9.2780 (0.1969)
	-1.9564 (0.3213)	13.5254 (0.0042)***	1.1211 (0.6490)	3.8924 (0.4797)	-0.9009 (0.3375)	-0.9400 (0.0713)*	-0.1967 (0.0328)**	12.5487 (0.0003)****	5.2608 (0.0020) ****	6.2711 (0.0573)*
Turkey	-1.0823 (0.1169)	12.4214 (0.0000) ****		18.9406 (0.0404) <sup>**</sup>	-2.4554 (0.0456)**		-0.0560 (0.5320)	11.2540 (0.2181)	2.4777 (0.9155)	5.5496 (0.0519)*
	-0.6439 (0.1469)		3.9616 (0.1059)	14.5053 (0.0124)**		-2.9711 (0.0126)**	-0.2058 (0.0110) **	4.7888 (0.0002)***	0.8138 (0.9672)	9.8136 (0.6520)
	-1.0279 (0.9934)	7.6645 (0.0773)*	8.0141 (0.1176)	14.8689 (0.0094)***	-1.1758 (0.0641)*	-3.2394 (0.0067)***	-0.1527 (0.2020)	13.3434 (0.1443)	3.8729 (0.2386)	5.1078 (0.0699)*