# The impact of Covid-19 on the topics in public

In view of the current global health crisis, an empirical analysis of daily financial news for 6000+ stocks has been conducted to examine the impact of Covid-19 on public topics, categorized into three distinct phases: pre-covid (01/01/2019-12/31/2019), during covid (01/01/2020-03/31/2020) and post-covid (04/01/2020-06/31/2020).

### 1. Pre-covid Phase (01/01/2019-12/31/2019)

The year-end of 2019 witnessed the emergence of the novel coronavirus in China, initially characterized by a cluster of patients in Hubei Province, Wuhan city, with symptoms of an atypical pneumonia-like illness that did not respond to standard treatments. Following the Wuhan lockdown, Covid-19 related deaths surged in Europe. The stock market had reached its peak during this phase, especially the new energy and real estate markets, which were in a strong upward position, but were later negatively affected by Covid-19. However, the gold market was not as optimistic, as the overall price of gold was lower compared to the preceding year. The analysis results indicate that the main public topics focused on "bond", "notable earnings and gains" from stocks<sup>1</sup>, and "energy" and "gold" market<sup>2</sup>. Additionally, the RMB exchange rate continued to increase from mid-2019, with the public topic focus on "China" and "earnings".<sup>3</sup>

# 2. During Covid Phase (01/01/2020-03/31/2020)

The outbreak of the pandemic dealt a significant blow to the global economy during January to March 2020. Most stock prices experienced a dramatic decline, and many companies initiated layoffs, resulting in a widespread concern for low "revenues" and declining "earnings". <sup>4</sup>With a global shortage of Personal Protective Equipment (PPE) and hospitals becoming overwhelmed as cases grew, the public focus shifted towards "health" and "healthcare". <sup>5</sup> Furthermore, with the development of vaccines, the public topics focused on "technology". <sup>6</sup> Additionally, gold prices benefited from the strong demand for safe-haven assets amidst the record-high global uncertainty and negative economic data arising from the Covid-19 crisis. Governments also announced fiscal policies to help stabilize economies. From the analysis results, we can observe that the public topics revolved around "gold" and "fiscal". <sup>7</sup>

## 3. Post-Covid Phase (04/01/2020-06/31/2020)

After April, the world entered the "flattening the curve" status, with cases soaring again as states began to reopen in different phases. One notable public topic during this phase was about Walt Disney, which experienced a 63% profit plunge due to the virus impact, leading to the decision to reopen Disney World and some of the Disney hotels. This reflects the global love for Disneyland and the significant influence of Disney on public topics. Additionally, there was a topic about Microsoft, which announced the permanent closure of all Microsoft Store locations in the United States and around the world, highlighting the pandemic's impact on enterprise survival and development, and the business system of a country. Furthermore, public topics continued to revolve around "medical", "technology", and "pharmaceuticals". With the development and production of useful vaccines for Covid-19, the pharmaceutical stocks experienced a significant increase in prices, attracting more and more investors.

#### **Appendix**

```
1. '0.124*"earnings" + 0.096*"results" + 0.053*"ceo" + 0.048*"transcript"
+ 0.028*"notable" + 0.019*"reports" + 0.018*"financial" + 0.018*"heres" +
0.017*"close" + 0.013*"holdings"'
'0.074*"dividend" + 0.030*"declares" + 0.021*"bond" + 0.021*"yield" +
0.019*"investors" + 0.017*"high" + 0.016*"march" + 0.016*"class" +
0.016*"action" + 0.016*"reminds"'
2. '0.043*"zumiez" + 0.035*"energy" + 0.028*"gold" + 0.022*"gainers" +
0.020*"volatility" + 0.020*"losers" + 0.020*"tech" + 0.018*"sector" +
0.018*"consumer" + 0.016*"silver"'
3. '0.062*"week" + 0.041*"china" + 0.037*"report" + 0.029*"earnings" +
0.027*"weekly" + 0.017*"fed" + 0.017*"highlights" + 0.017*"street" +
0.017*"whats" + 0.016*"dividend"'
4. '0.328*"earnings" + 0.175*"estimates" + 0.082*"revenues" + 0.079*"beat"
+ 0.035*"miss" + 0.030*"revenue" + 0.027*"rebound" + 0.020*"include" +
0.019*"loss" + 0.018*"featured"'
'0.090*"earnings" + 0.074*"services" + 0.067*"ahead" + 0.055*"systems" +
0.052*"general" + 0.043*"know" + 0.043*"solid" + 0.042*"outlook" +
0.039*"best" + 0.032*"waste"'
5. '0.131*"partners" + 0.096*"health" + 0.094*"gold" + 0.059*"care" +
0.053*"higher" + 0.049*"heres" + 0.043*"brands" + 0.040*"solutions" +
0.037*"edge" + 0.034*"focus"'
'0.099*"trust" + 0.071*"conference" + 0.065*"announces" + 0.053*"million"
+ 0.044*"realty" + 0.043*"properties" + 0.037*"healthcare" +
0.036*"american" + 0.035*"digital" + 0.032*"board"'
6. '0.099*"week" + 0.076*"bank" + 0.065*"technology" + 0.061*"portfolio" +
0.050*"schwab" + 0.048*"invesco" + 0.044*"resources" + 0.036*"medical" +
0.032*"shortterm" + 0.031*"tech"'
'0.118*"rating" + 0.054*"watch" + 0.053*"key" + 0.051*"high" + 0.050*"rs"
+ 0.050*"rise" + 0.047*"hits" + 0.039*"technical" + 0.037*"ibd" +
0.036*"trading"'
7. '0.088*"company" + 0.058*"fiscal" + 0.051*"december" + 0.050*"files" +
0.050*"k" + 0.049*"highlights" + 0.047*"bristolmyers" + 0.045*"zacks" +
0.044*"ended" + 0.043*"squibb"'
'0.131*"partners" + 0.096*"health" + 0.094*"gold" + 0.059*"care" +
0.053*"higher" + 0.049*"heres" + 0.043*"brands" + 0.040*"solutions" +
0.037*"edge" + 0.034*"focus"'
8.'0.267*"market" + 0.118*"global" + 0.090*"april" + 0.088*"growth" +
0.051*"thursday" + 0.039*"disney" + 0.038*"walt" + 0.034*"key" +
0.032*"monday" + 0.030*"equity"'
```

```
9. '0.092*"investors" + 0.071*"american" + 0.069*"update" +
0.068*"microsoft" + 0.063*"national" + 0.058*"business" + 0.050*"systems"
+ 0.047*"provides" + 0.031*"solutions" + 0.030*"home"'

10. '0.151*"international" + 0.062*"associates" + 0.057*"brands" +
0.048*"air" + 0.045*"proshares" + 0.044*"class" + 0.044*"medical" +
0.043*"technology" + 0.041*"products" + 0.038*"trading"'

'0.121*"shares" + 0.086*"dividend" + 0.074*"sold" + 0.073*"midcap" +
0.071*"million" + 0.065*"ceo" + 0.043*"point" + 0.040*"president" +
0.037*"pharmaceuticals" + 0.035*"royal"'

'0.211*"coronavirus" + 0.190*"value" + 0.132*"buy" + 0.039*"right" +
0.038*"ranked" + 0.037*"crisis" + 0.034*"performance" + 0.032*"companies"
+ 0.028*"woes" + 0.027*"healthcare"'
```