



# COVID-19 Jobs Update #1

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***As expected, in the last two weeks this crisis has accelerated both in terms of active cases, and government and business response measures to “flatten” the infection curve. Social Distancing, Stay at Home, and even stricter separation measures have been implemented in many parts of the country. The World Health Organization (WHO) has assigned pandemic status, and Italy, Spain, and all of Europe and the US are seeing accelerating breakouts. This piece is an update and expansion to last weeks “COVID-19 Impact on Hiring” research. Once again, using the world’s most insightful forward-looking jobs data set from LinkUp®<sup>1</sup>.***

With the premise that a company’s job postings are objective evidence of a company management team’s expected future business outlook, we are first updating our report from last week which looked at the Macro view of expected hiring, and then focused on some key Travel and Leisure companies. Next we will assess the bigger picture Sector and Industry level Impact. Finally we have added a [COVID-19 page to our website](#) which will update various information daily.

## Macro Update

**USE CASE - Macro.** It is clear from the data, at a macro level we will see substantial declines in hiring in the monthly jobs data. Typically, a job post removed indicates a job that has been filled. The removal and fill are highly correlated, only fluctuating as a minor % based on micro and macro impacts on companies.

At a Macro level though, this correlation is very high historically. **Until now.** In the span of a few weeks, we have gone from the strongest employment the country has ever seen, to a situation where outside of a few industries, hiring has completely stopped. For the first time in the history of online job posts, **most removed job posts now are NOT filled jobs.**

This temporal shock is wholly unique. War would not have created this situation. The next closest thing I can think of would be an imminent asteroid impact, or a nuclear war. But even in a nuke, after the shock, humans would fight (and work) to overcome. Fortunately this virus is not going to end the World, and human ingenuity will defeat this likely quickly from a pandemic perspective.

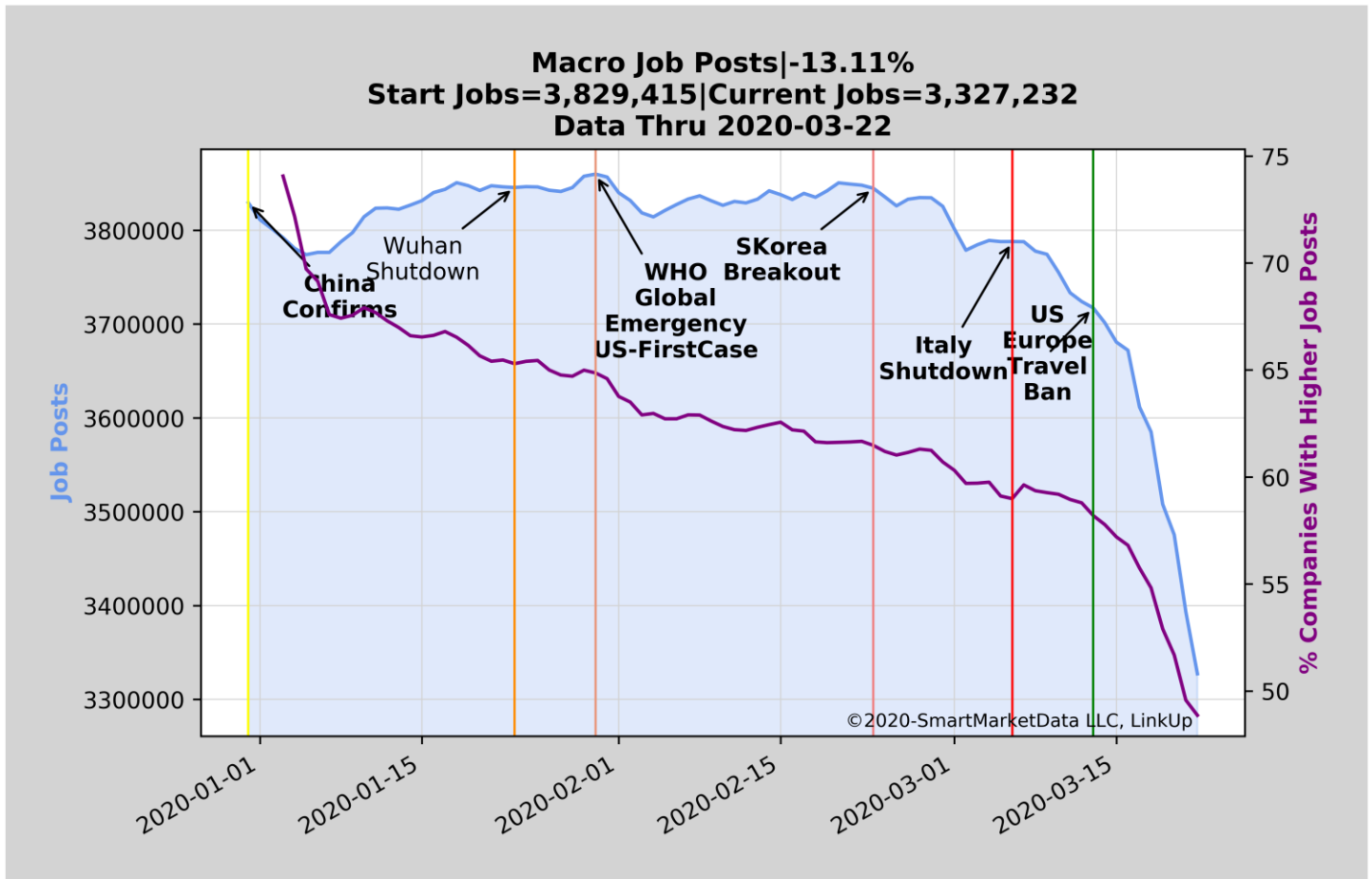
Total job posts are down from roughly 3.82M to 3.32M, and continue to decline. See [Figure 1 - Macro View of Active Job Posts, and % of Companies that have higher Job Posts Today vs. the start of the crisis](#) below (this Figure will be updated daily at our [COVID-19 page](#)). Note the sharp declines since the US-Europe Travel Ban (**Blue Line**). Note that less than 50% of companies with active jobs, have more posted today than they did on January 1 (**Purple Line**). Macro level jobs actually peaked on February 1, when the WHO announced a Global Emergency, and the US announced its first case. We expect this to continue as it has really only been a few weeks, and now that the Stay at Home bans are being implemented, companies may actually get around to removing posts. The reality is, few are hiring, so unlike normal times when remove posts are considered filled, today they are likely not being filled. I would also add that because this situation is so fluid, many HR departments may still be talking with people in anticipation of a resolution to the shock in coming months. So the “job post” capitulation on “selling” their job posts has not likely happened, as the post is for a

<sup>1</sup> **LinkUp® RAW** is the world’s broadest and deepest job post data set, with over 50,000 public, private, government, and not-for profit companies representing over 200 countries. The data set consists of job post data captured from company career portals. The data has > 12 years of daily data, and covers every sector in the economy.



future job that will likely be needed “in the future”. I would not doubt it if we see this trend continue down and lose 50K to 100K active job posts per day until the bottom. Maybe 1,000,000 more before we bottom. This is pure speculation but assumes our stay at home and group bans “flatten the curve” and we start a “return to normalcy” maybe at the end of April. Just as telling is the number of new job posts “Created” on a given date. Typically the data shows that companies add 50K to 100K of job posts per day at the Macro level. Job post creation has literally dried up to a mere few thousand a day. Created jobs will be the key turnaround indicator...

Figure 1 - Macro View of Active Job Posts, and % of Companies that have higher Job Posts Today vs. the start of the crisis



The LinkUp data can be used as a **real-time objective fundamental indicator** of hiring and job growth (or decline). What seems obvious today (that Payrolls will decline, that unemployment will increase, and that JOLTS will decline), is not so obvious in “normal” times. Job post data gives a forward looking edge to understanding employment to those who look at it.

Finally, we believe **you will see objective first signs of recovery from this shock in companies starting to hire** (add job posts), as they expect to need to ramp up again and seek labor to dig out of this trench. History has shown this first sign before, as job posts started to recover before the S&P500 and before the Bureau of Labor Statistics monthly Non-Farm Payrolls during/after the Great Recession. We will be posting the Macro chart on a daily basis at [SmartMarketData.com/COVID-19](https://SmartMarketData.com/COVID-19), along with various downloadable Sector and Industry job post change tables.

Next we will update our Travel & Leisure (T&L) analysis from last week, and then walk through a Sector, Industry, Sub-Industry specific analysis; looking at those Sectors with declining jobs, and those bucking the trend with increasing jobs, in an effort to highlight industries which may present opportunities to invest when this ends.



## Travel & Leisure Update

**T&L Use Case.** In the below *Table 1-Travel and Leisure % Change in Job Posts and Stock Correlation*, we update the 30ish companies we highlighted last week, ranked by % change in job posts. United Airlines has moved to the top, eliminating basically all of their posts. Live Nation, Lyft and Allegiant have all gone from having increased job posts a week and a half ago, to declines now. All the companies in the sample have declining active job posts. **See All Charts in Appendix 1.**

Table 1-Travel and Leisure % Change in Job Posts and Stock Correlation

company	ticker	jobs change	stock change	corr
United	UAL.OQ	-100%	-73%	0.93
Southwest	LUV.N	-97%	-29%	0.39
JetBlue	JBLU.OQ	-94%	-67%	0.76
Uber	UBER.N	-93%	-48%	0.56
Hawaiian	HA.OQ	-93%	-72%	0.76
Qantas	QAN.AX	-92%	-61%	0.40
International Air Group	ICAG.L	-91%		
Hertz	HTZ.N	-89%	-75%	0.62
American	AAL.OQ	-87%	-66%	0.30
Expedia	EXPE.OQ	-83%	-60%	0.72
Easyjet	EZJ.L	-82%	-61%	0.47
Hilton	HLT.N	-81%	-46%	0.88
Norwegian	NCLH.N	-78%	-85%	0.59
Marriott	MAR.OQ	-76%	-51%	0.81
Allegiant	ALGT.OQ	-71%	-59%	0.66
Booking	BKNG.OQ	-70%	-44%	0.67
Air France KLM	AIRF.PA	-67%		
Lufthansa	LHAG.DE	-66%	-45%	-0.82
Alaska	ALK.N	-66%	-66%	0.65
Intercontinental	IHG.L	-64%		
Delta	DAL.N	-59%		
Hyatt	H.N	-59%	-50%	0.90
MGM	MGM.N	-50%	-74%	0.97
Carnival	CCL.N	-48%	-77%	0.58
Singapore Air	SIAL.SI	-47%	-34%	0.90
WaltDisney	DIS.N	-46%	-42%	0.52
MSG	MSG.N	-41%	-37%	-0.05
Spirit	SAVE.N	-33%	-81%	0.75
Royal Caribbean	RCL.N	-30%	-82%	0.87
Lyft	LYFT.OQ	-14%	-61%	0.30
Wizz Air	WIZZ.L	-4%	-49%	-0.16
LiveNation	LYV.N	-3%	-55%	0.12



Of note, Uber, Expedia and Hertz cracking into the top 10 which otherwise are Airlines. Hilton and Marriott have both removed around 80%. The top 10 have all removed over 83% of their job posts...

## Sector/Industry View

**USE CASE – Sector/Industry.** Please see this [link to a spreadsheet that outlines the Active Job Post changes by NAICS Sector, Subsector, Industry Group, International Industry, and National Industry](#) (each has a Tab). The table is compiled from companies in the LinkUp Jobs Data and their assigned [NAICS \(North American Industry Classification System\) code](#), and it includes public and private entities. We will update this sheet, which can also be downloaded at <https://www.smartmarketdata.com/covid-19> every day or two. We will also follow up with additional research around specific ticker level examples from the industries most impacted by COVID-19. **You can also download complete Sector, Subsector, Industry Group, International Industry, and National Industry “ChartBooks” from our covid-19 website referenced above.** These are PDFs with Charts for each industry, that we will also update periodically.

We have reduced our sample to only Sectors/Industries etc. that at the start of the shock period had at least 100 active job posts and above. This eliminates many of the smaller “Industry level classifications”, bringing our total sample to something under 700 total Sectors, Industries etc., from the 6,000+ that exist. The industry classifications can be very refined. With the dataset, you can analyze each one of the 6,000+ depending on your needs.

For perspective, In the charts we have added indicators of the following major COVID-19 milestones:

1. China Confirms first Case in **yellow**
2. Wuhan is quarantined in **orange**
3. WHO declares a Global Emergency, and the US First Case in **brown**
4. South Korea Breakout in **light red**
5. Italy Quarantine in **red**
6. US Europe Travel Ban in **green**

It truly is unprecedented to see the mass removal of job opportunities, without offsetting newly created job posts. The charts mostly tell a similar story of accelerating declines. We will highlight a few here. “Jobsdate” is the last date of the analysis. “Jobsactive” is the Active Job Posts on the jobsdate. “StartJobsactive” is the active jobs on 12/31/2019 – the day China confirmed its first case. “Change” is the change from the jobsdate back to 12/31/2019. “Pctchange” is the % change over the period. “NAICSName” is the name associated with the “NAICS” code.

### Sectors

Please see [Table 2 - Sector Job Post Declines By %](#) - for an overview of all Sector job declines during the period 12/31/2019 – When China announced the first COVID-19 case, and yesterday.

Table 2 - Sector Job Post Declines By %

NAICS	jobsdate	jobsactive	StartJobsactive	change	pctchange	NAICSName
49	2020-03-22	8,059	22,681	(14,622)	-64%	Transportation and Warehousing
55	2020-03-22	487	708	(221)	-31%	Management of Companies and Enterprises
81	2020-03-22	26,720	37,605	(10,885)	-29%	Other Services (except Public Administration)



22	2020-03-22	10,159	14,094	(3,935)	-28%	Utilities
53	2020-03-22	22,008	28,969	(6,961)	-24%	Real Estate and Rental and Leasing
21	2020-03-22	7,107	9,264	(2,157)	-23%	Mining, Quarrying, and Oil and Gas Extraction
54	2020-03-22	206,787	268,009	(61,222)	-23%	Professional, Scientific, and Technical Services
72	2020-03-22	249,492	320,313	(70,821)	-22%	Accommodation and Food Services
42	2020-03-22	36,248	45,687	(9,439)	-21%	Wholesale Trade
51	2020-03-22	136,177	165,242	(29,065)	-18%	Information
62	2020-03-22	260,890	309,933	(49,043)	-16%	Health Care and Social Assistance
33	2020-03-22	204,512	240,207	(35,695)	-15%	Manufacturing
92	2020-03-22	47,628	55,059	(7,431)	-13%	Public Administration
31	2020-03-22	54,023	62,421	(8,398)	-13%	Manufacturing
56	2020-03-22	62,512	71,818	(9,306)	-13%	Administrative and Support and Waste Management and Remediation Services
61	2020-03-22	56,589	64,869	(8,280)	-13%	Educational Services
23	2020-03-22	23,050	26,160	(3,110)	-12%	Construction
52	2020-03-22	165,273	180,810	(15,537)	-9%	Finance and Insurance
32	2020-03-22	78,367	84,138	(5,771)	-7%	Manufacturing
71	2020-03-22	31,584	33,905	(2,321)	-7%	Arts, Entertainment, and Recreation
44	2020-03-22	358,891	382,354	(23,463)	-6%	Retail Trade
48	2020-03-22	63,306	67,377	(4,071)	-6%	Transportation and Warehousing
45	2020-03-22	245,061	253,924	(8,863)	-3%	Retail Trade
11	2020-03-22	3,911	3,210	701	22%	Agriculture, Forestry, Fishing and Hunting

As you would expect, the **Transportation Sector (49)** leads the way, which includes Airlines. Interesting that **Retail Trade (44/45)** has somewhat bucked the trend (because of Amazon, Walmart, Grocery etc.). We will explore specific



companies in our next report. **Accommodation & Food Services (72)** also near the top (Hotels and Support for Restaurants).

### Sub Sectors

*Table 3 - Sub Sectors Growing Jobs* below shows the subsectors that have bucked the trend and have grown jobs

*Table 3 - Sub Sectors Growing Jobs*

NAICS	jobsdate	jobsactive	StartJobsactive	change	pctchange	NAICSName
115	2020-03-22	1,597	1,219	378	31%	Support Activities for Agriculture and Forestry
111	2020-03-22	1,414	1,122	292	26%	Crop Production
925	2020-03-22	204	170	34	20%	
446	2020-03-22	27,825	25,049	2,776	11%	Health and Personal Care Stores
322	2020-03-22	4,403	3,991	412	10%	Paper Manufacturing
113	2020-03-22	270	245	25	10%	Forestry and Logging
312	2020-03-22	12,421	11,413	1,008	9%	Beverage and Tobacco Product Manufacturing
441	2020-03-22	80,314	75,513	4,801	6%	Motor Vehicle and Parts Dealers
484	2020-03-22	45,171	42,485	2,686	6%	Truck Transportation
444	2020-03-22	43,754	41,199	2,555	6%	Building Material and Garden Equipment and Supplies Dealers
454	2020-03-22	41,432	39,833	1,599	4%	Nonstore Retailers
623	2020-03-22	40,415	38,978	1,437	4%	Nursing and Residential Care Facilities
451	2020-03-22	17,909	17,359	550	3%	Sporting Goods, Hobby, Musical Instrument, and Book Stores
445	2020-03-22	111,932	108,632	3,300	3%	Food and Beverage Stores
425	2020-03-22	205	201	4	2%	Wholesale Electronic Markets and Agents and Brokers
327	2020-03-22	7,191	7,082	109	2%	Nonmetallic Mineral Product Manufacturing
711	2020-03-22	13,199	13,054	145	1%	Performing Arts, Spectator Sports, and Related Industries
624	2020-03-22	12,320	12,217	103	1%	Social Assistance



112	2020-03-22	616	611	5	1%	Animal Production and Aquaculture
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Of note, **Nonstore Retailers (454)**, **Food and Beverage Stores (445)**, **Truck Transportation (484)**, **Beverage and Tobacco Product Manufacturing (312)**, and **Health and Personal Care Stores (446)**.

Table 4 - Sub Sectors with Biggest % Declines below shows

Table 4 - Sub Sectors with Biggest % Declines

NAICS	jobsdate	jobsactive	StartJobsactive	change	pctchange	NAICSName
491	2020-03-22	281	3,506	(3,225)	-92%	Postal Service
492	2020-03-22	7,493	18,829	(11,336)	-60%	Couriers and Messengers
512	2020-03-22	2,698	6,021	(3,323)	-55%	Motion Picture and Sound Recording Industries
928	2020-03-22	164	356	(192)	-54%	National Security and International Affairs
532	2020-03-22	6,627	13,555	(6,928)	-51%	Rental and Leasing Services
812	2020-03-22	8,174	16,129	(7,955)	-49%	Personal and Laundry Services
712	2020-03-22	294	521	(227)	-44%	Museums, Historical Sites, and Similar Institutions
515	2020-03-22	12,821	21,820	(8,999)	-41%	Broadcasting (except Internet)
621	2020-03-22	60,723	98,847	(38,124)	-39%	Ambulatory Health Care Services
488	2020-03-22	3,982	6,482	(2,500)	-39%	Support Activities for Transportation
213	2020-03-22	2,703	4,335	(1,632)	-38%	Support Activities for Mining
337	2020-03-22	2,146	3,412	(1,266)	-37%	Furniture and Related Product Manufacturing
331	2020-03-22	2,944	4,425	(1,481)	-33%	Primary Metal Manufacturing
448	2020-03-22	63,284	93,697	(30,413)	-32%	Clothing and Clothing Accessories Stores
926	2020-03-22	4,123	6,038	(1,915)	-32%	Administration of Economic Programs
525	2020-03-22	9,665	14,126	(4,461)	-32%	Funds, Trusts, and Other Financial Vehicles
551	2020-03-22	487	708	(221)	-31%	Management of Companies and Enterprises





721	2020-03-22	67,256	95,977	(28,721)	-30%	Accommodation
923	2020-03-22	5,117	7,154	(2,037)	-28%	
481	2020-03-22	5,880	8,197	(2,317)	-28%	Air Transportation
221	2020-03-22	10,159	14,094	(3,935)	-28%	Utilities
442	2020-03-22	7,729	10,504	(2,775)	-26%	Furniture and Home Furnishings Stores

**The Postal Service (491)** has retrenched completely. And interesting **Couriers and Messengers (492)** is second. **Funds, Trusts, and Other Financial Vehicles (525)**, and **Air Transportation** among many other interesting no hiring Sub Sectors.

### Industry Groups

*Table 5 – Industry Groups with Biggest % Increases* leads with Specialized Freight Trucking (4842), Individual Family Services (6241), and Tobacco Manufacturing (3122).

*Table 5 – Industry Groups with Biggest % Increases*

NAICS	jobsdate	jobsactive	StartJobsactive	change	pctchange	NAICSName
4842	2020-03-22	274	111	163	147%	Specialized Freight Trucking
6241	2020-03-22	1,711	707	1,004	142%	Individual and Family Services
3122	2020-03-22	508	294	214	73%	Tobacco Manufacturing
7131	2020-03-22	1,034	619	415	67%	Amusement Parks and Arcades
5622	2020-03-22	292	180	112	62%	Waste Treatment and Disposal
5174	2020-03-22	316	211	105	50%	Satellite Telecommunications
3113	2020-03-22	2,049	1,405	644	46%	Sugar and Confectionery Product Manufacturing
2379	2020-03-22	809	564	245	43%	Other Heavy and Civil Engineering Construction
4452	2020-03-22	1,146	800	346	43%	Specialty Food Stores
5239	2020-03-22	19,071	13,958	5,113	37%	Other Financial Investment Activities





Table 6 - Industry Group % Job Post Losers\_lead with **RV (Recreational Vehicle) Parks and Recreational Camps (7212)**. Also, as expected, **Travel Arrangement and Reservation Services (5615)**, and **Gambling Industries (7132)**.

Table 6 - Industry Group % Job Post Losers

NAICS	jobsdate	jobsactive	StartJobsactive	change	pctchange	NAICSName
7212	2020-03-22	26	715	(689)	-96%	RV (Recreational Vehicle) Parks and Recreational Camps
4911	2020-03-22	281	3,506	(3,225)	-92%	Postal Service
4235	2020-03-22	162	1,591	(1,429)	-90%	Metal and Mineral (except Petroleum) Merchant Wholesalers
3274	2020-03-22	25	108	(83)	-77%	Lime and Gypsum Product Manufacturing
6219	2020-03-22	10,223	41,798	(31,575)	-76%	Other Ambulatory Health Care Services
5615	2020-03-22	767	2,743	(1,976)	-72%	Travel Arrangement and Reservation Services
8121	2020-03-22	2,885	9,521	(6,636)	-70%	Personal Care Services
4854	2020-03-22	61	201	(140)	-70%	School and Employee Bus Transportation
5321	2020-03-22	2,988	8,741	(5,753)	-66%	Automotive Equipment Rental and Leasing

Table 7 - Industries with largest % gains in job posts below.

Table 7 - Industries with largest % gains in job posts

NAICS	jobsdate	jobsactive	StartJobsactive	change	pctchange	NAICSName
523999	2020-03-22	5331	429	4902	1143%	Miscellaneous Financial Investment Activities
561790	2020-03-22	939	302	637	211%	Other Services to Buildings and Dwellings
311422	2020-03-22	578	188	390	207%	Specialty Canning
624110	2020-03-22	1549	540	1009	187%	Child and Youth Services
327993	2020-03-22	342	130	212	163%	Mineral Wool Manufacturing
446110	2020-03-22	8872	3836	5036	131%	Pharmacies and Drug Stores
311991	2020-03-22	289	134	155	116%	Perishable Prepared Food Manufacturing



Table 8 - Industry Job Post % losers below. **Cafeterias, Grill Buffets, and Buffets (722212)**, and **Passenger Car Rental (532111)**, and **Travel Agencies (561510)** highlight the losers.

Table 8 - Industry Job Post % losers

NAICS	jobsdate	jobsactive	StartJobsactive	change	pctchange	NAICSName
336321	2020-03-22	2	494	-492	-100%	Vehicular Lighting Equipment Manufacturing
561622	2020-03-22	10	385	-375	-97%	Locksmiths
812191	2020-03-22	56	1691	-1635	-97%	Diet and Weight Reducing Centers
721211	2020-03-22	26	715	-689	-96%	
491110	2020-03-22	281	3506	-3225	-92%	Postal Service
722212	2020-03-22	29	359	-330	-92%	Cafeterias, Grill Buffets, and Buffets
423510	2020-03-22	156	1578	-1422	-90%	Metal Service Centers and Other Metal Merchant Wholesalers
485112	2020-03-22	14	134	-120	-90%	Commuter Rail Systems
532111	2020-03-22	826	6434	-5608	-87%	Passenger Car Rental
331314	2020-03-22	13	101	-88	-87%	Secondary Smelting and Alloying of Aluminum
323117	2020-03-22	23	170	-147	-86%	Books Printing
423120	2020-03-22	200	1306	-1106	-85%	Motor Vehicle Supplies and New Parts Merchant Wholesalers
561510	2020-03-22	269	1561	-1292	-83%	Travel Agencies

We hope this gives some ideas of how you can use this data to generate ideas. The full lists of Sector/Industry job post gains/losses can be found at <https://www.smartmarketdata.com/covid-19>, there is a button at the bottom called "Sector/Industry Spreadsheet Download".

We expect these trends to continue until COVID-19's spread either loses momentum (like it has in China) or is threatened with a successful vaccine (not likely soon). As more tests are implemented, and more cases identified, the medical "risk" appears will continue to accelerate, and the perceived "psychological" risk will likely follow suit.

We will provide periodic updates on job posts as the event marches on. We will update the above website Macro and tables daily or every other day. We also will be issuing a follow up report looking at listed companies specifically.

If you have any questions, please reach out directly. If you have any interest in the LinkUp Jobs Data, or any of our other alternative data sets, please drop us a line.



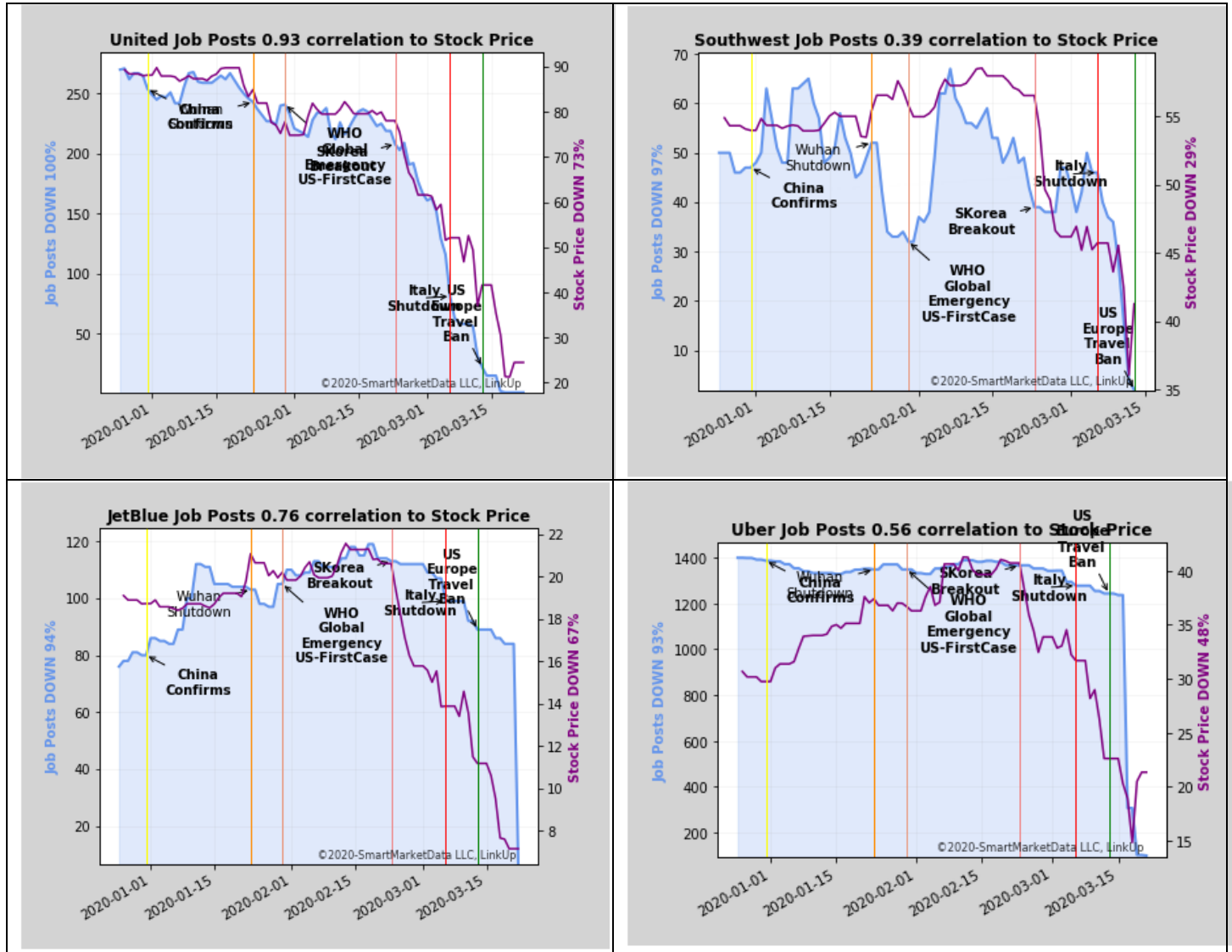
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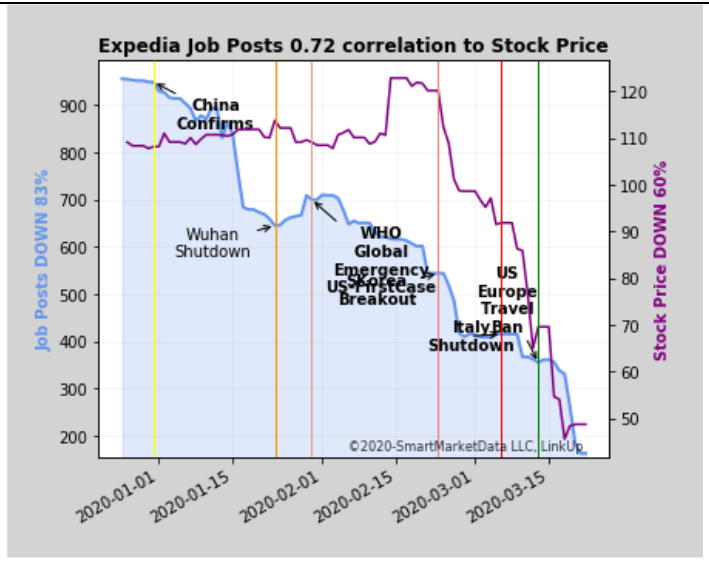
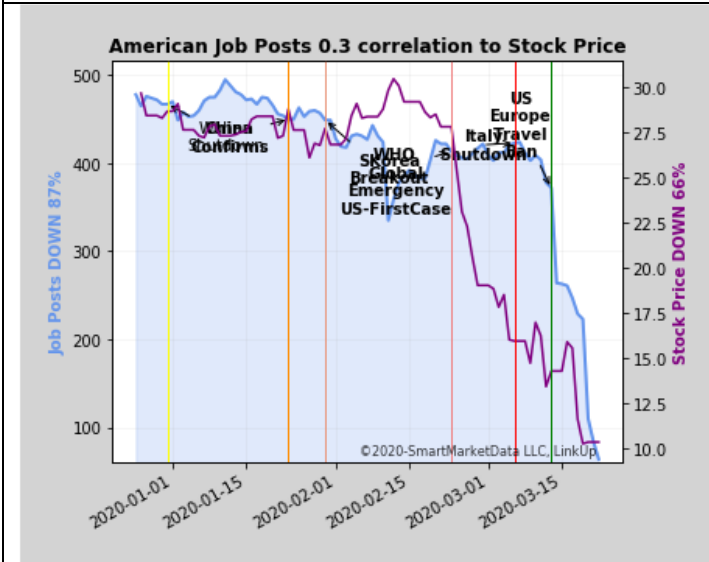
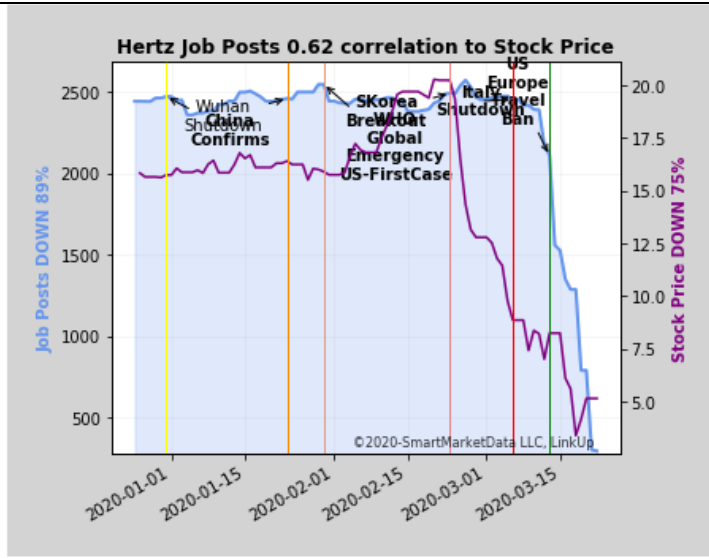
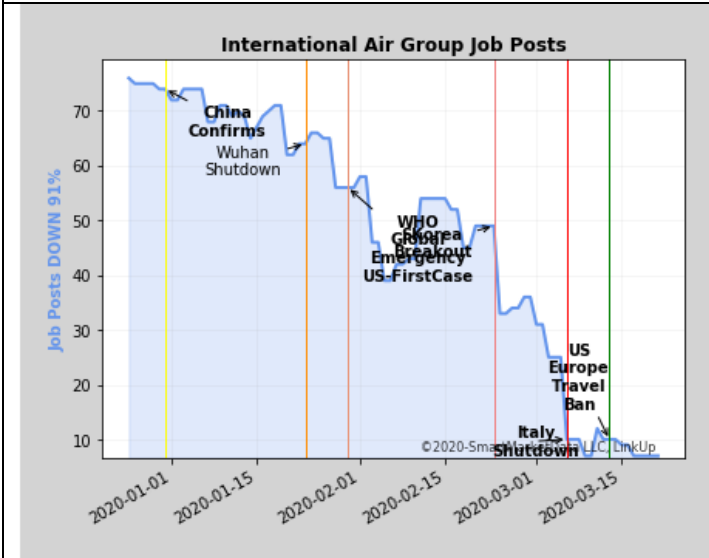
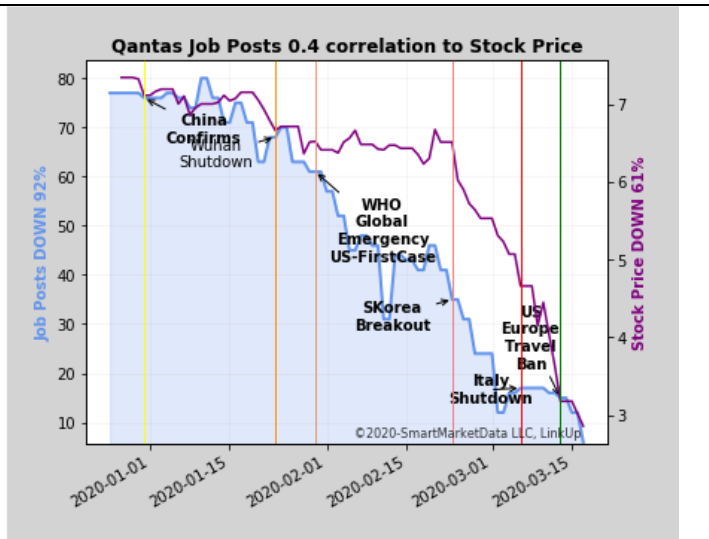
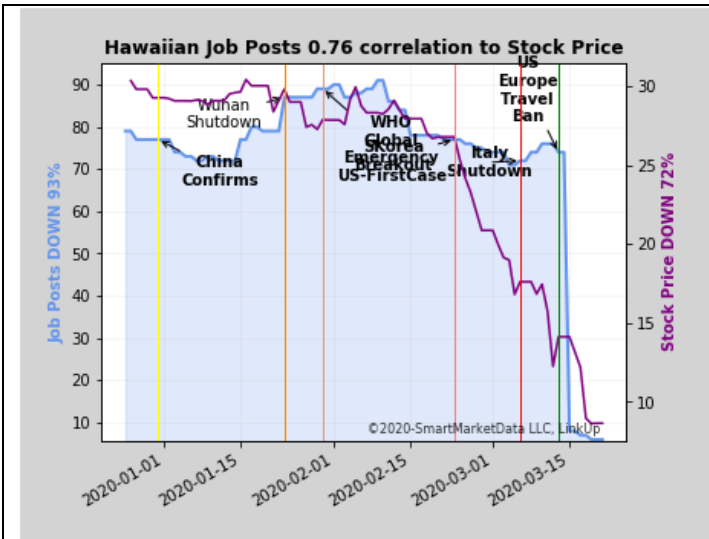


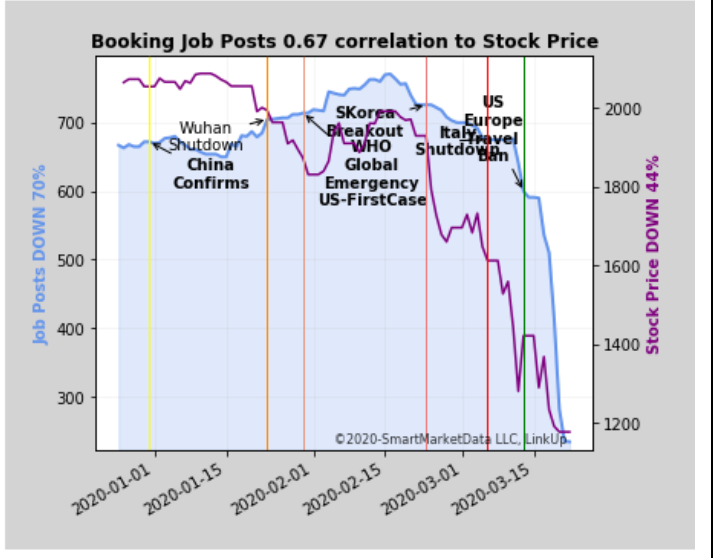
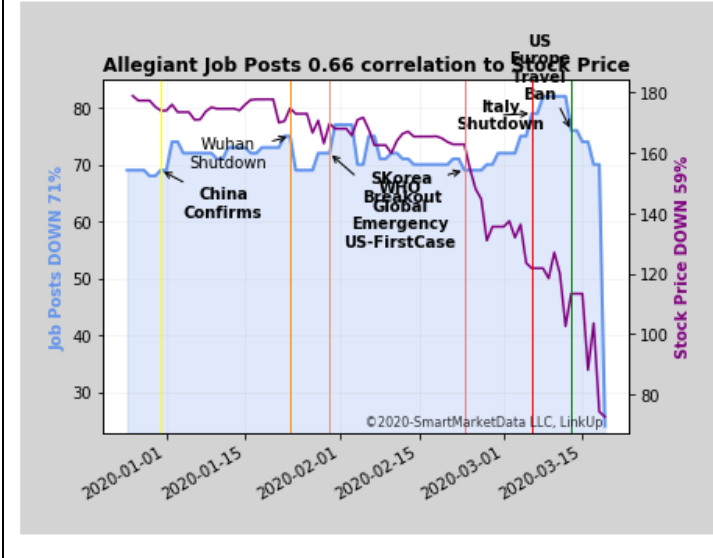
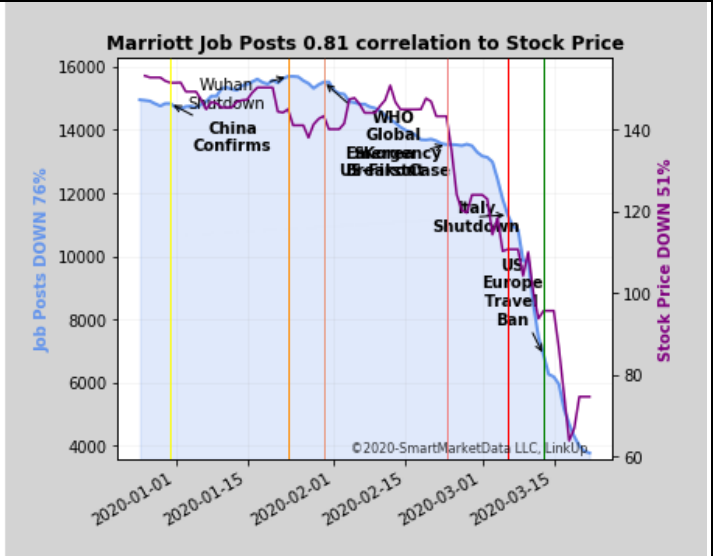
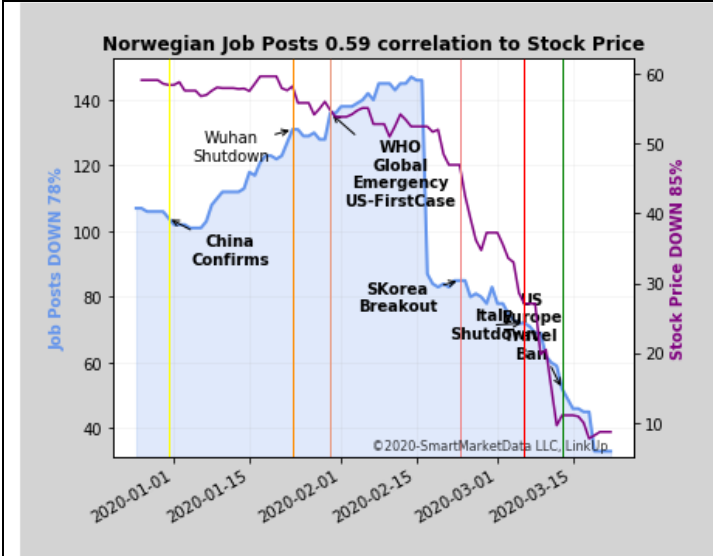
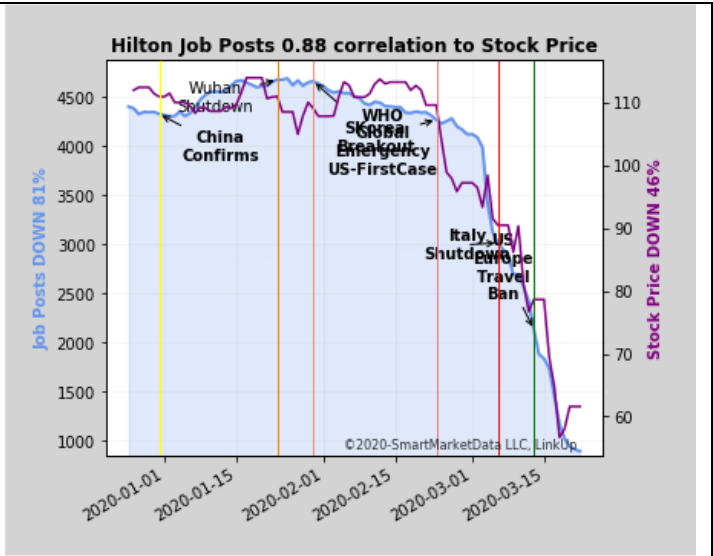
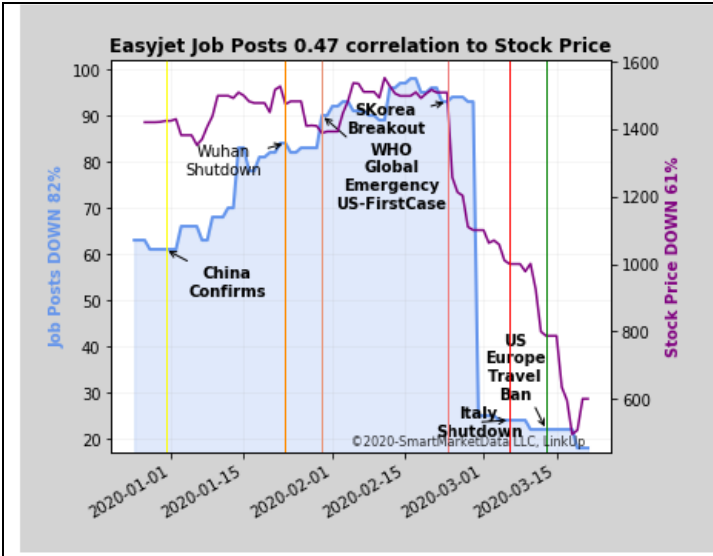
## Appendix 1. Travel & Leisure Charts

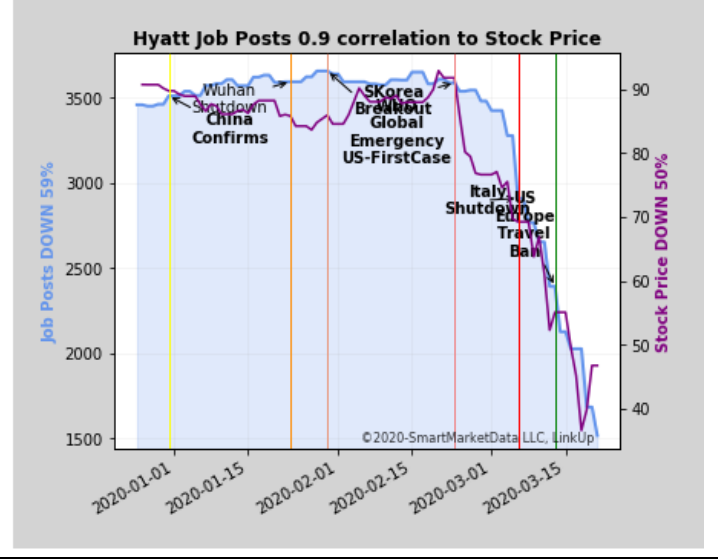
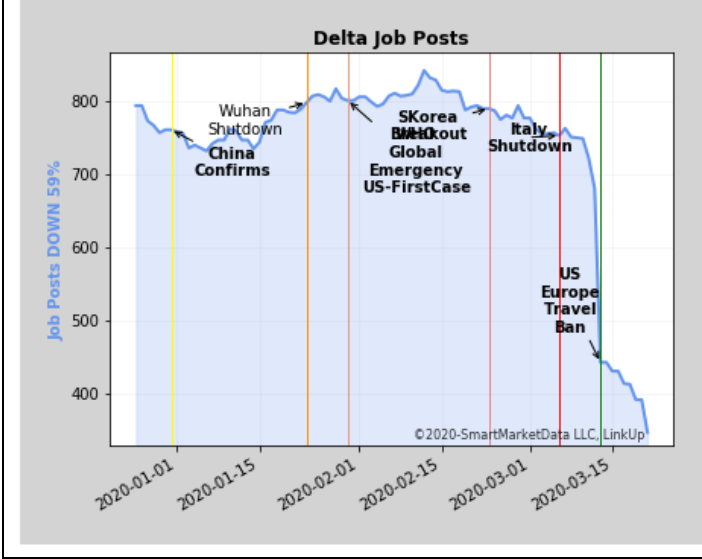
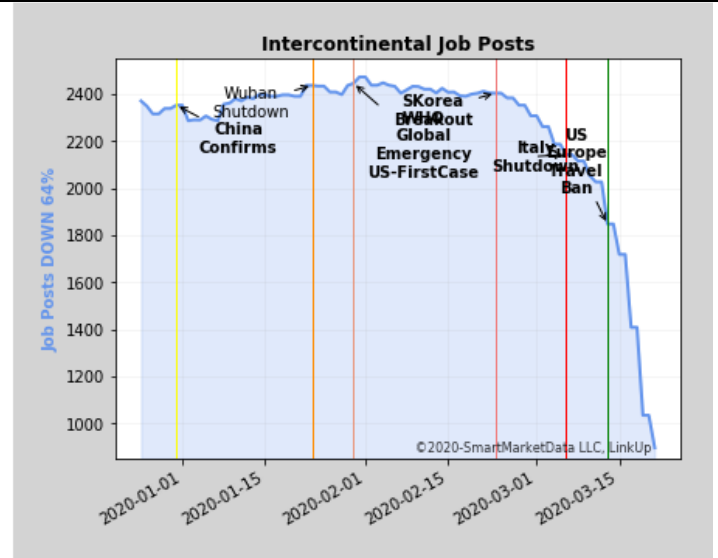
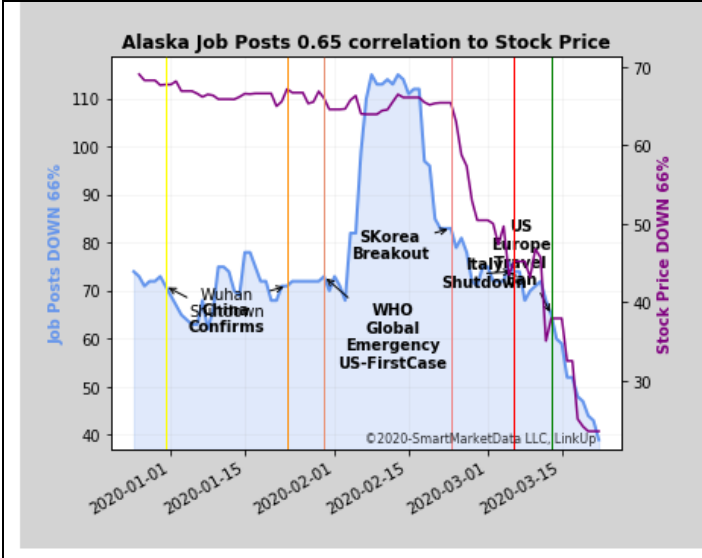
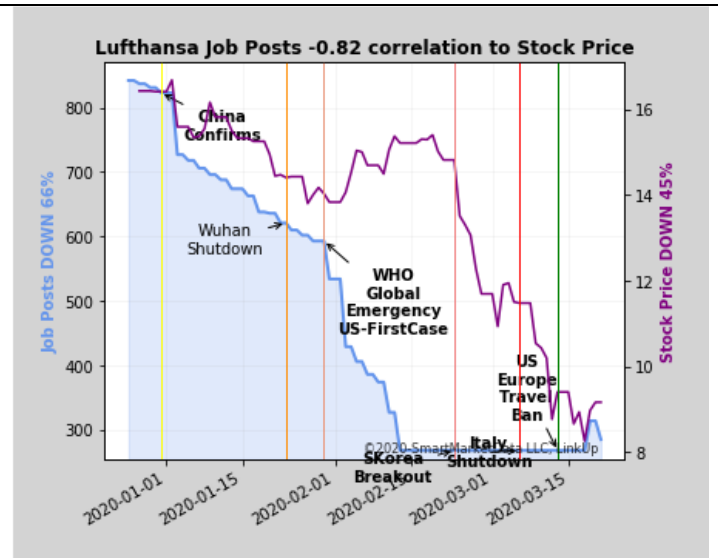
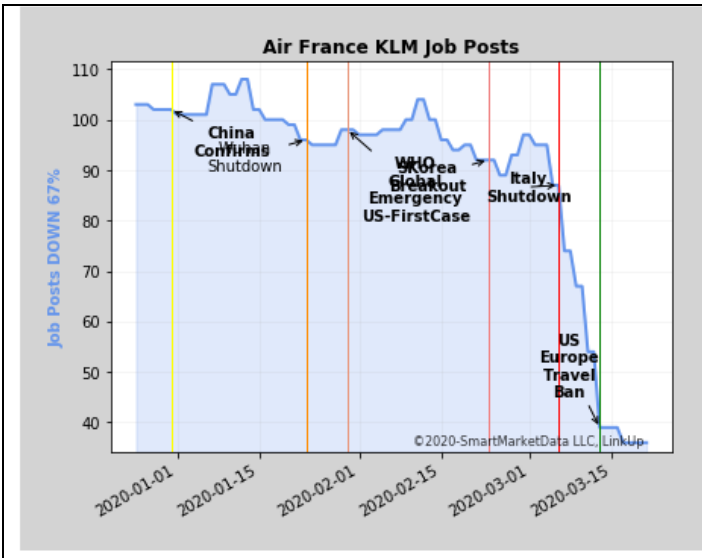
For perspective, we have added indicators of the following major COVID-19 milestones in each chart:

7. China Confirms first Case in **yellow**
8. Wuhan is quarantined in **orange**
9. WHO declares a Global Emergency, and the US First Case in **brown**
10. South Korea Breakout in **light red**
11. Italy Quarantine in **red**
12. US Europe Travel Ban in **green**

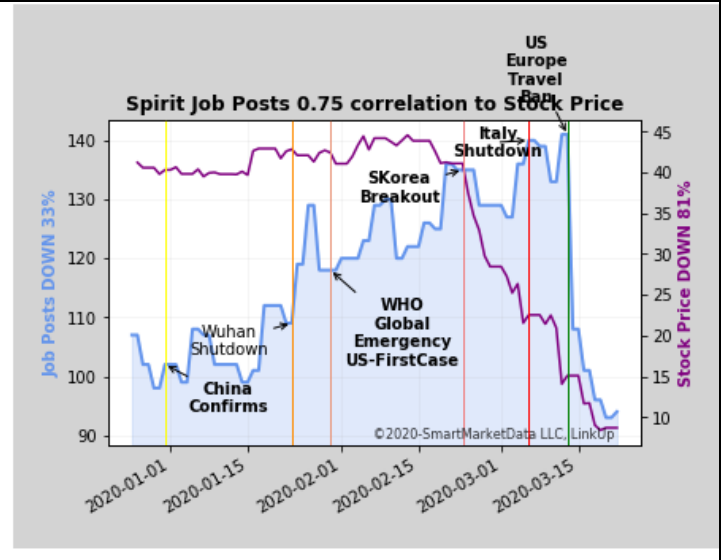
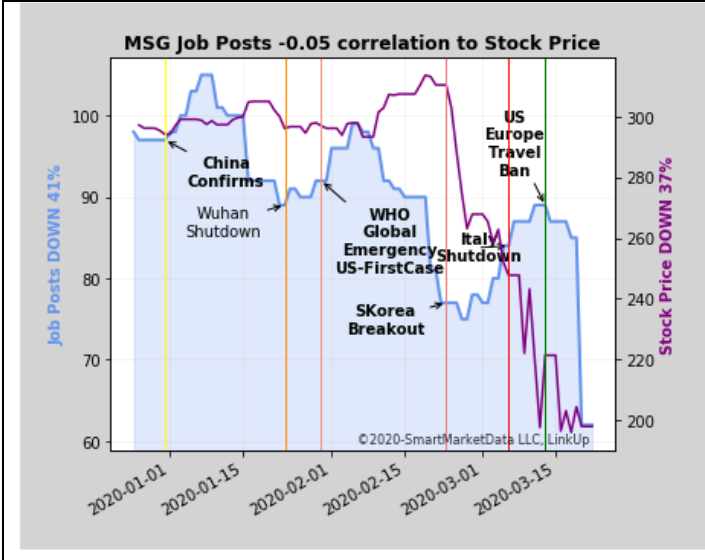
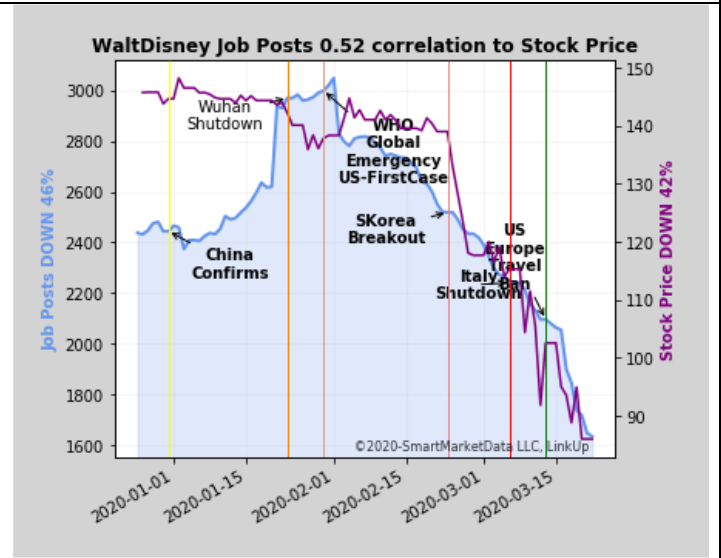
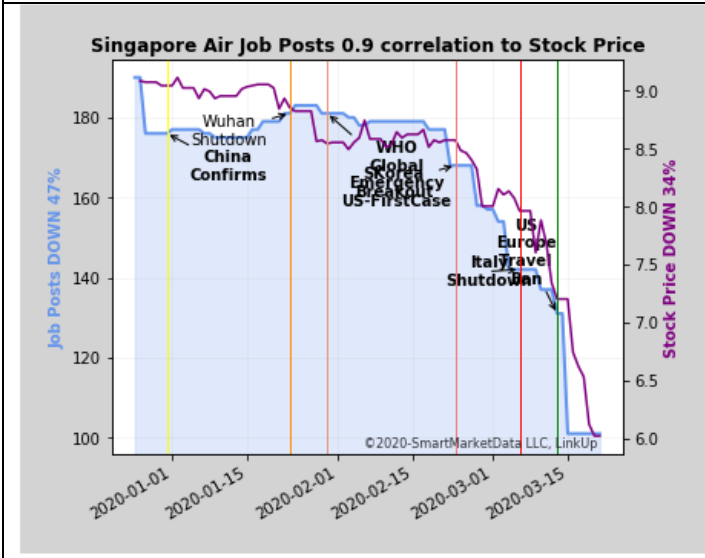
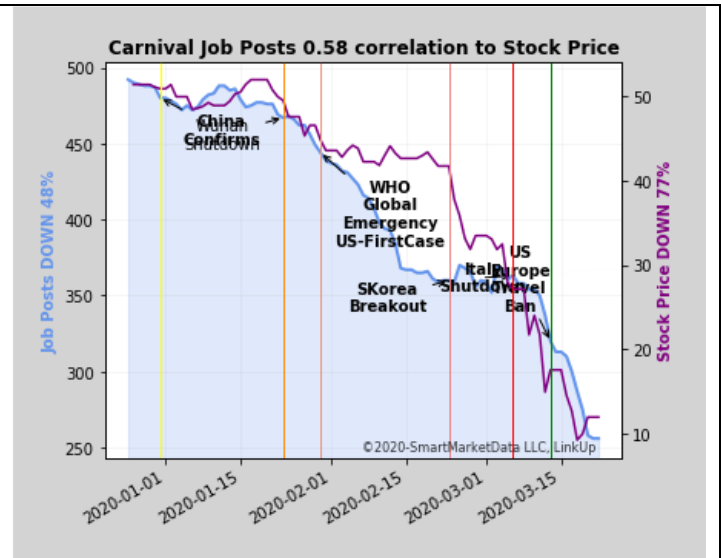
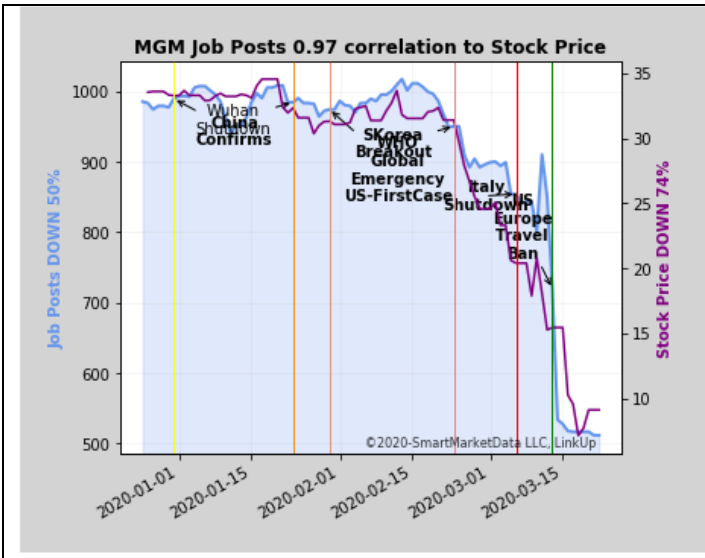






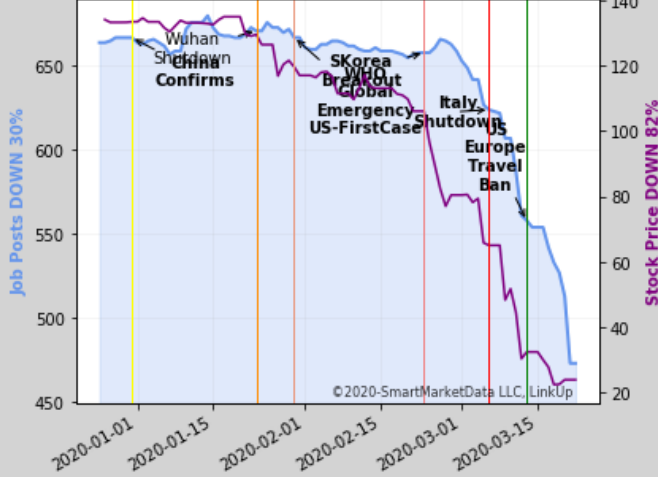




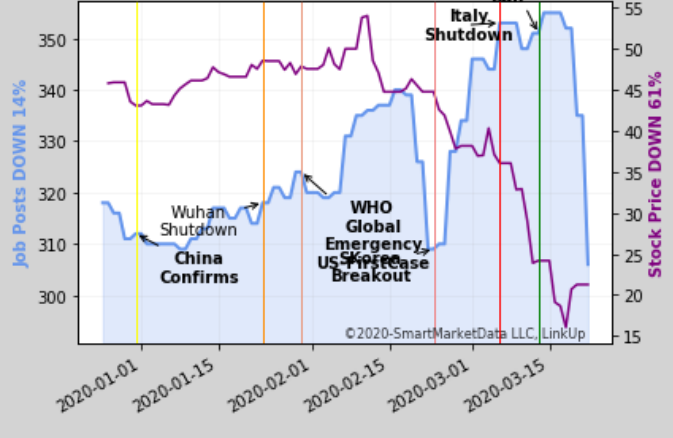




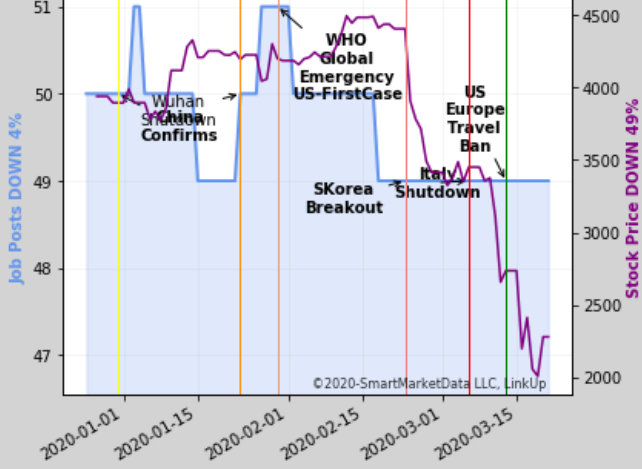
**Royal Caribbean Job Posts 0.87 correlation to Stock Price**



**Lyft Job Posts 0.3 correlation to Stock Price**



**Wizz Air Job Posts -0.16 correlation to Stock Price**



**LiveNation Job Posts 0.12 correlation to Stock Price**

