

Airfreight – Asia Pacific

“Already Sick Before the Flu”

Based on our proprietary data collection methods of airport cargo volume, the **Broughton Capital APAC Airfreight Index®** (Asia Pacific) ending value for January declined **-9.1% YOY**. This is concerning as it brings the two-year decline to **-14.0%** (January '20 vs. January '18). Recent data suggests the **coronavirus is already driving negative economic consequences more dire than SARS and could produce short-term economic calamity rivaling the 2008 -2009 Great Recession** (Please don't dismiss this prediction as mere 'attention seeking exaggeration' until you have read and considered our reasoning, as outlined on pages 8 - 17).



BROUGHTON CAPITAL, LLC
THE INDEPENDENT VARIABLE

Based on the algorithms that our data science team has developed to forecast the macro and micro trends, that tend to be the consequence of these volumes, our **January Asia Pacific Airfreight Index volumes suggest several very distressing signals:**

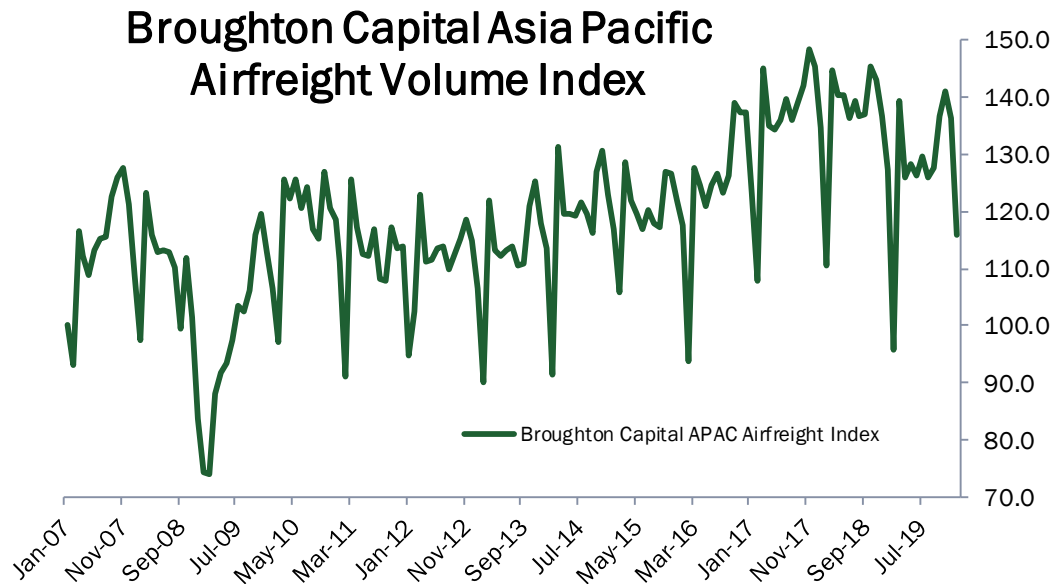
- **SARS drove down passenger volume but not cargo; Coronavirus is driving down both.** Since cargo volumes produce an impact that is several multiples larger, and in manifold ways more substantial, to the economy (directly and indirectly), our concerns are mounting (see exhibits 11 – 14, and 18 - 23).
- The **tumble in Hong Kong volumes (-10.6% Jan. '20 vs. Jan. '19)** is more concerning than it would have been during the SARS outbreak. It has grown by >50% since 2003 and become the world's largest cargo airport (see exhibits 15 - 17), while China's overall air cargo market share has almost doubled.
- The **plunge in Shanghai volumes (-12.1% Jan. '20 vs. Jan. '19)** is far more concerning than it would have been during the SARS outbreak. Since 2003, it has more than tripled in size and gone from 14th to 3rd in the world cargo airport rankings (see exhibit 17).
- Our favorite 'Predictor of the Predictors,' **International Inbound Shanghai volumes nose-dived in January (-20.6%)**, completely erasing any hopes that the contraction rate might be slowing. On top of the January '19 drop (-20.0%), volumes are -36.5% lower than two years ago, which is as a clear signal that the **Chinese economy is materially weaker, especially in the manufacturing and assembly of high value / low density goods**.
- Incheon volumes were less alarming in January (-4.3%), but still signaling **further weakness in the South Korean economy**. In addition to a negative January '19 (-6.5%) they are -10.5% lower than two years ago (see exhibits 9 and 10).
- As APAC volumes languish, further negative Semiconductor Billings reports are to be expected (see exhibits 2 and 3). **Apple's recent announcement may prove to be only a warning flare of the supply chain calamity that is coming.**

As new negative is being added to an already fragile economic environment. We predict that the actions taken by organizations (governments, health, corporations, etc.), as well as behavioral responses by individual citizens, to contain the Coronavirus, will only make trends worse in coming weeks. ***In the aftermath of the prosperity already destroyed by the tariffs and trade restrictions, regardless of the reasons for it, significant declines from current levels could have dire economic consequences*** (also see our current Eurozone Airfreight Index report).

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Exhibit 1



The jump on a nominal basis in October, November, and December looked encouraging when compared to the earlier months of 2019, but it was only reflective of the seasonality in airfreight. January's drop helps put the seasonality into perspective, and brings the 3MMA to -3.4%.

In the wake of recent trade deal announcements, we are looking for any evidence that the rate of deterioration might be slowing. As we have commented repeatedly (and Milton Friedman taught us), tariffs are terrible taxes which destroy prosperity throughout the global economy. We continue to assert that while, the terms of the trade deal recently announced with China may prove to be a first step in the right direction (if only because no additional tariffs will be imposed), the vast majority of the tariffs that were already levied remain in place on ~\$360 billion in Chinese goods, and hence the bulk of economic destruction they create continues to weigh on the prosperity which might otherwise be created between all of the Global trading partners of both the U.S. and China.

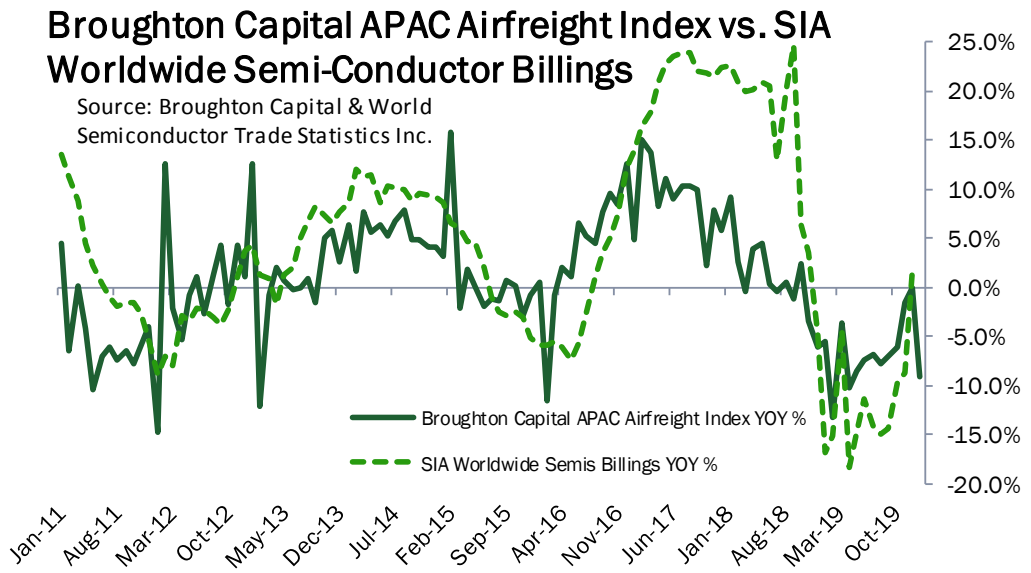
We assert that it was the imposition of the tariffs, which remain in place, that were the principal cause for the deterioration in airfreight shipment volumes before any of us had even heard of the Coronavirus. APAC levels in Dec. 2019 were -7.0% below Dec. 2017, and -1.6% below Dec. 2016. Over three years of growth had already been erased. The expansion, in one of the most vital parts of global trade, which one of the strongest drivers of prosperity for all economies, and the chief foundation for improvements in the quality of our lives (at least from a material perspective), has been reduced / returned to where it was four years ago.

Our thesis remains:

1. Overall APAC volumes predict Semi-Conductor Billings;
2. Overall Hong Kong volumes predict overall APAC volumes, as well as Chinese Manufacturing PMI;
3. Overall Shanghai volumes tend to slightly lead or coincide with overall Hong Kong volumes;
4. International Inbound Shanghai volumes predict outbound Shanghai and outbound Hong Kong volumes.

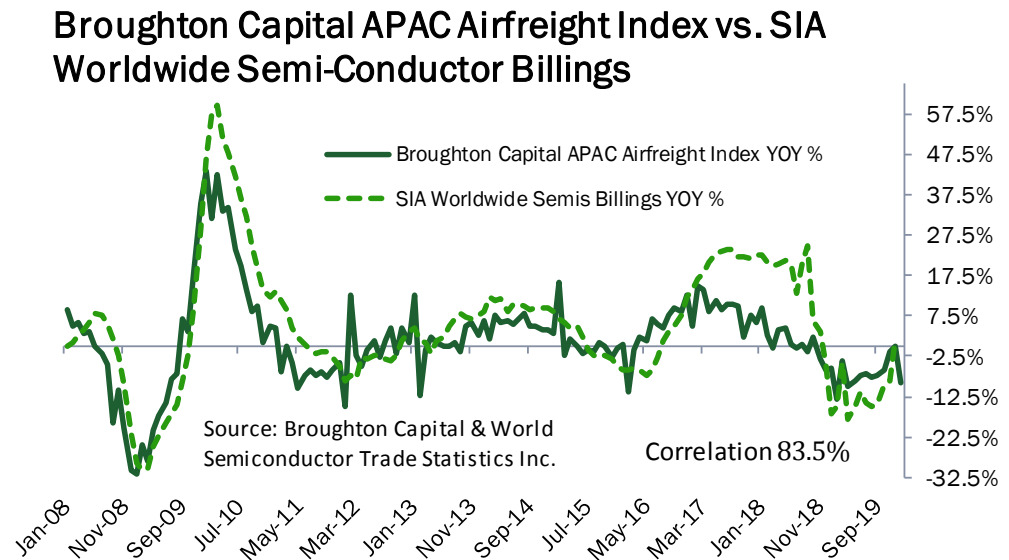
Adding the current outbreak of Coronavirus fears and the actions driven by it, to an already depleted, negative momentum scenario, meaningfully raises the risk of it generating even larger negative repercussions than it ordinarily would.

Exhibit 2



January's data was a YOY negative on top of a negative (-9.1% Jan. '20, -5.4% Jan. '19), and a sharp contrast to the recent improvement reported in semi-conductor billings. If the relationship between these two is any indication (83.5% correlated 2008 - 2019), either the improvement in billings is a false positive or it will be a short-lived blip before a more severe downturn. Remember, **APAC Airfreight volumes lead SIA Billings, but the magnitude of percentage changes in billings tend to exceed the magnitude of percentage changes in airfreight.**

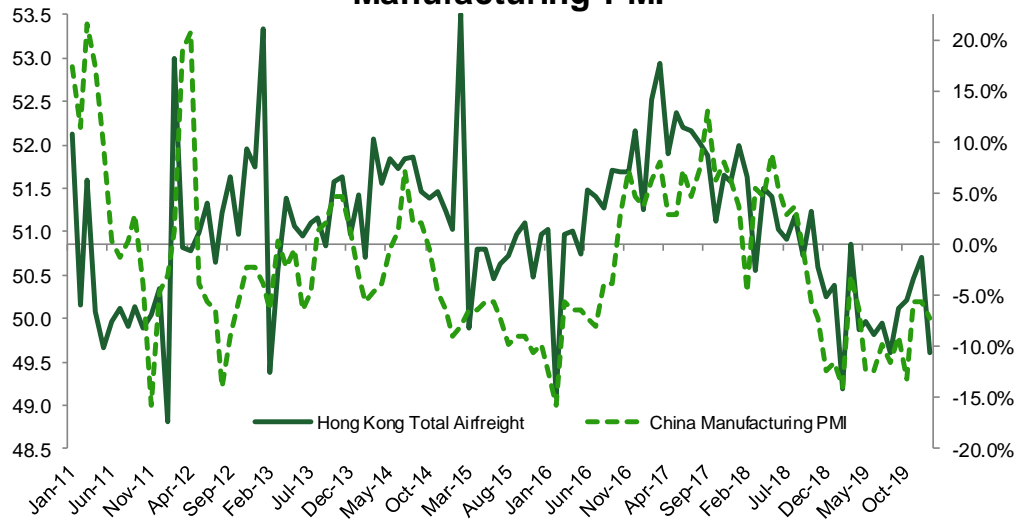
Exhibit 3



We have tracked this data for many years, and highly respect both the relationship as well as the predictive value which it holds. There are outliers in both series of data, and more volatility in semi billings that APAC airfreight, but **with the direct shipments of semis and a substantial percentage of the goods shipped in the region having one or more semis contained in them, the high level of correlation is not surprising.**

Exhibit 4

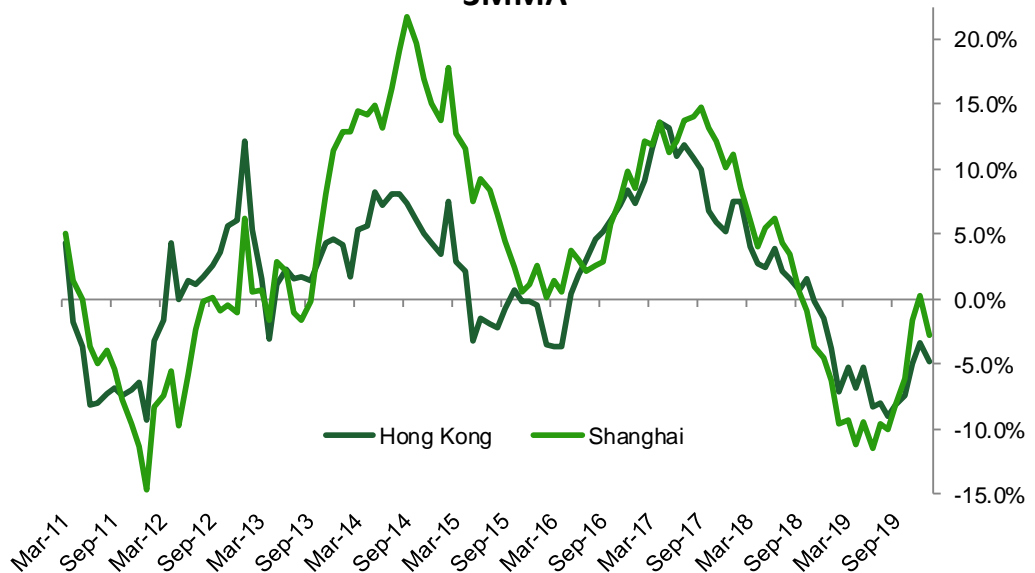
Hong Kong Total Airfreight vs. China Manufacturing PMI



Hong Kong is the world's largest cargo airport with strong global economic influence. Declines in volume are consistent with other Asian airports where there are no protests; bad for the economy, no matter what the reason for the volume decline. Continued declines in Hong Kong volume suggested further softness in the Chinese Manufacturing PMI, even before the Coronavirus became a factor.

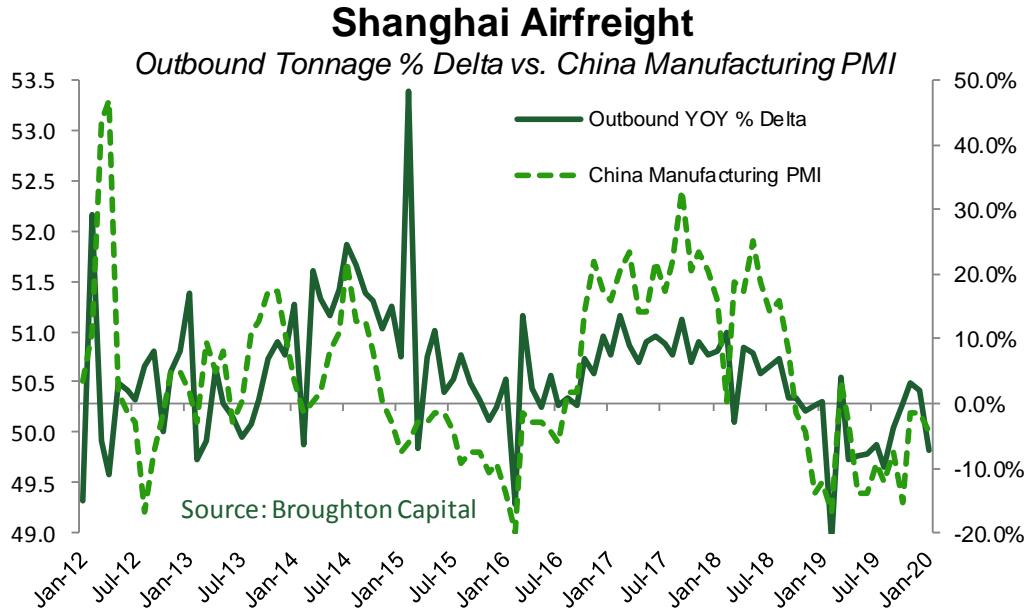
Exhibit 5

Hong Kong vs. Shanghai Airfreight 3MMA



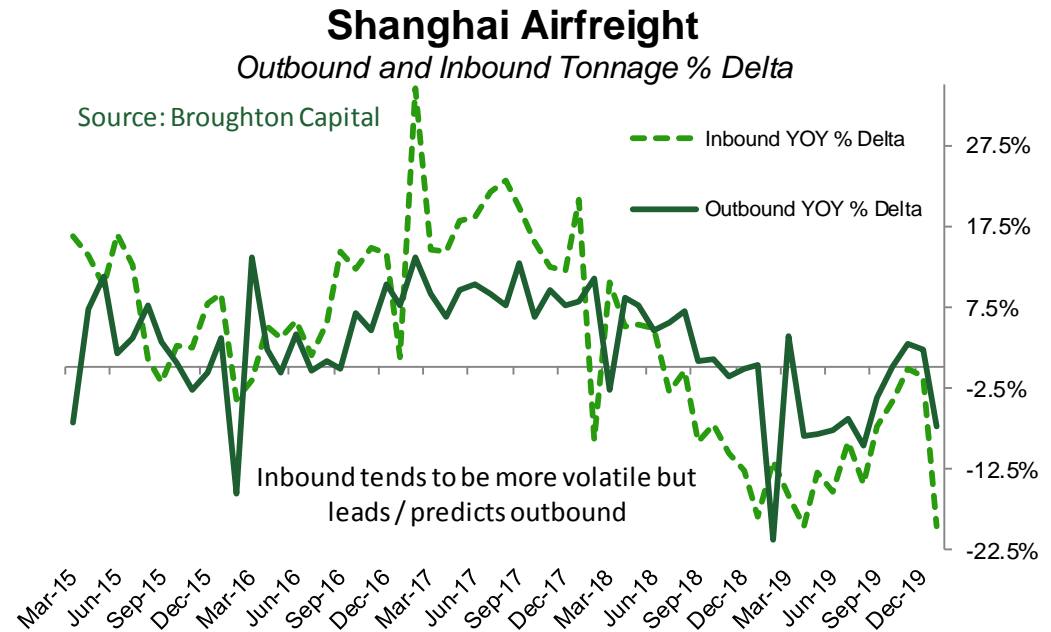
Over the last few months, we have reviewed the potential of the protests (a political factor) to produce a false negative in the Hong Kong volumes. Other airports such as Shanghai (where there were no protests) saw similar changes in volume - total Shanghai volumes continued to consistently predict Hong Kong volumes.

Exhibit 6



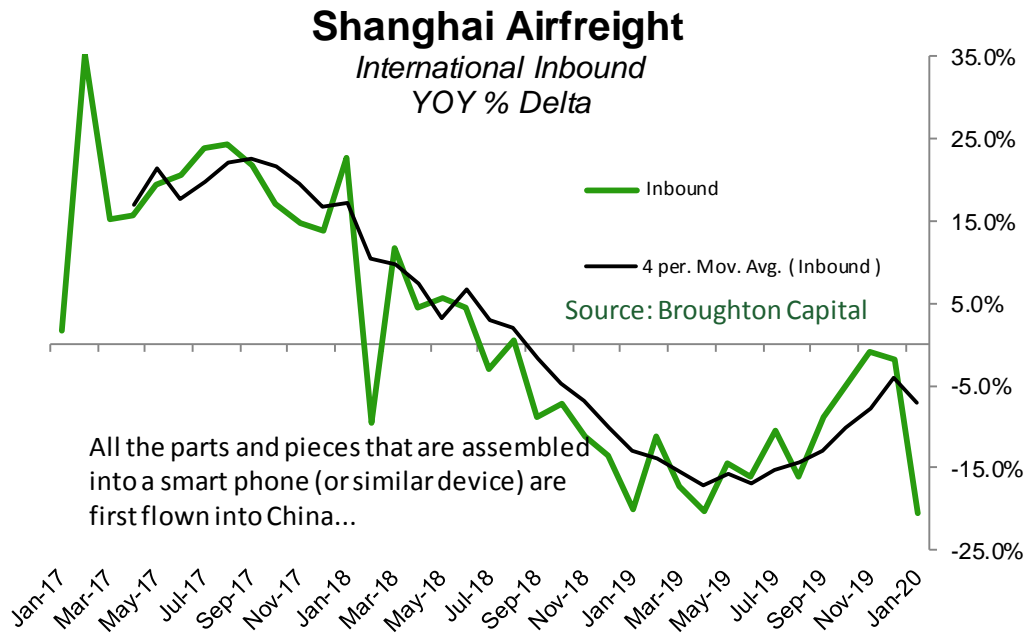
Given the correlation between overall Hong Kong and overall Shanghai volumes, and the correlation between overall Hong Kong and the China Manufacturing PMI, the even tighter correlation between Shanghai Outbound and the China Manufacturing PMI should not be a surprise.

Exhibit 7



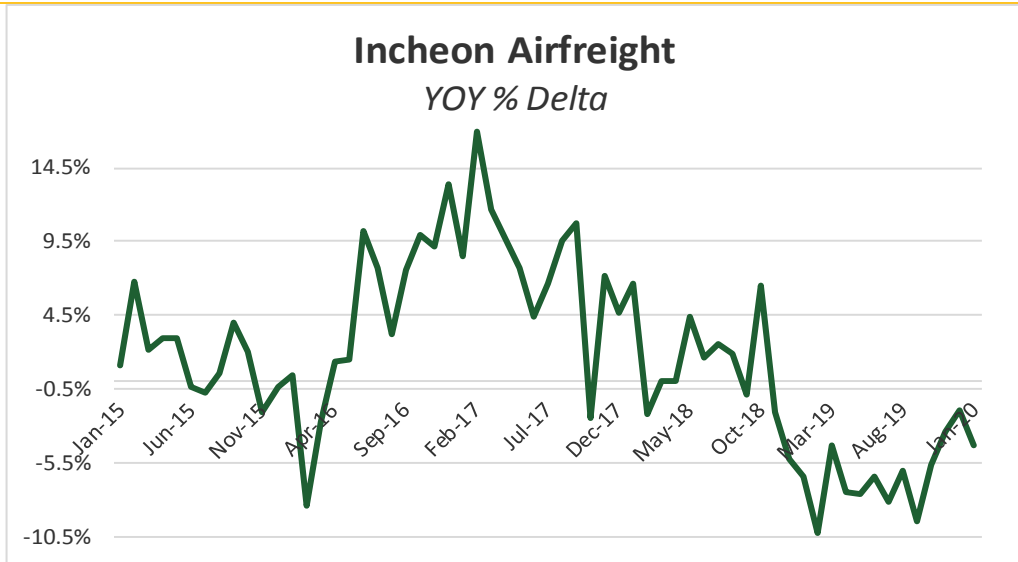
If overall APAC predicts Semi-conductor billings and both Hong Kong as well as Shanghai predict Chinese Manufacturing PMI, then **what predicts overall Hong Kong and Shanghai?**

Exhibit 8



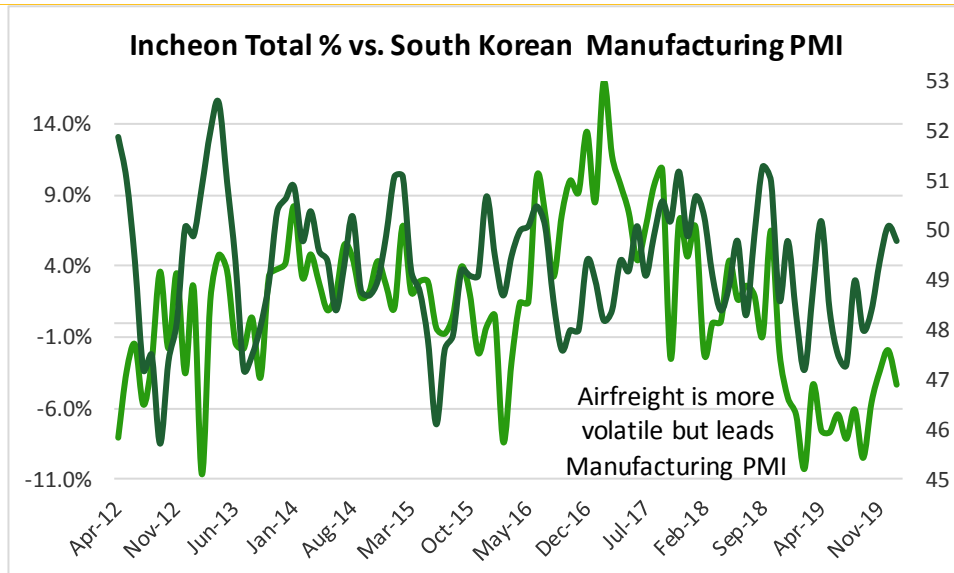
International Inbound volumes to Shanghai is our favorite 'Predictor of the Predictors.' Although it was a negative on top of a negative, this data had started to suggest that the rate of decline might be slowing, but then the bottom fell out. This January's -20.6% decline, comes on top of last January's -20.0% decline, making the two-year stacked decline -36.5% and below any level recorded in over 5 years.

Exhibit 9



As the 4th largest economy in Asia, and the epicenter of many technology components, we look to South Korea for both confirmations of, or reasons to doubt the trends developing in China. After going negative in November last year, volumes have continued to be negative, and consistent with the other Asian regions, are negative in addition to negative (January '20 volumes were -4.3% below January '19, and -10.5% below January '18). This adds further credence to our concerns that the economic weakness is throughout Asia (i.e., not China centric or limited to China), and is consistent with South Korean Manufacturing PMI falling below 50 for 10 of the 12 months in 2019, and below 50 again in January '20 at 49.8

Exhibit 10



The correlation may be less distinct than it is with the Hong Kong and Shanghai volumes, but in a similar fashion the volumes of the largest airport in South Korea (Incheon) are more volatile but still highly predictive of the South Korean Manufacturing PMI. Incheon volumes were already predicting further weakness in the South Korean Manufacturing PMI (and the underlying economy for which it is an indicator).

FLU EPIDEMIC – SHOULD WE BE WORRIED?

Summary: The immediate threat of pandemic is probably over-stated, but we believe the economic threat posed by the virus is under-stated. Even a modest continuation of current infection rates will create modest reduction in, at least, first-quarter growth for China specifically, the Asia Pacific region, as well as trading partners around the world. The real story is one of managing the risk, however modest the possibility, of the worst happening. An industry suffering a 10% reduction in volume and with 20% of its employees out sick and consuming major health expenses would be difficult at any time. **This threat, when combined with the already troubling chance of recession, could produce an event of economic calamity rivaling the 2008-2009 Great Recession.** *Please don't dismiss this prediction as mere 'attention seeking exaggeration' until you have read and considered our reasoning, as outlined below.*

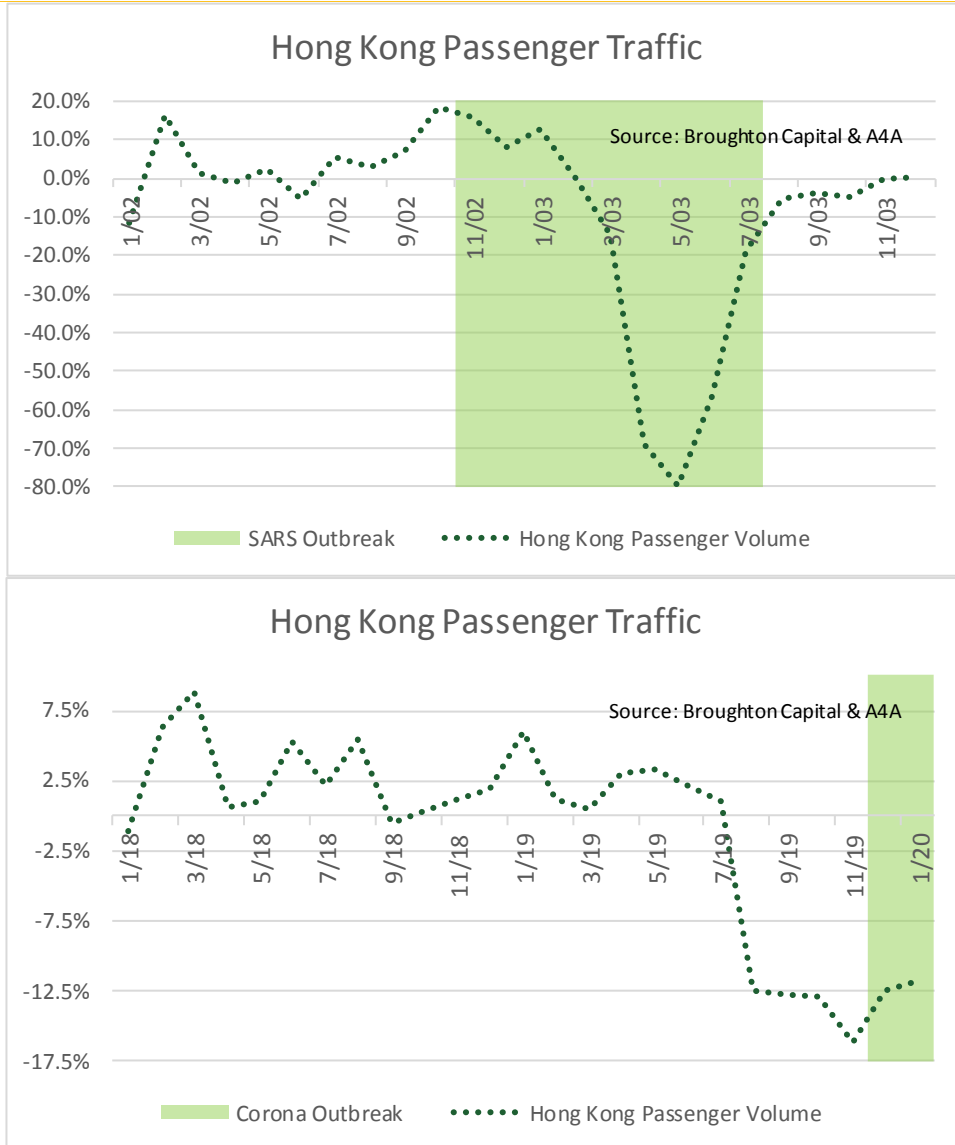
Introduction - the bug: Coronaviruses are but one of the many 'flu' bugs that trouble humans. Doctors and researchers have known about coronaviruses since the 1960s. Flu viruses are constantly mutating. Every once in a while, a strain appears that produces a strong over-reaction in human immune systems. It is the violent reaction that kills. The current outbreak, 2019-nCoV, is the third such strain among coronaviruses this century. The first of the three was SARS from 2002-2003 which caused at least 8,000 cases and 774 deaths. It has been dormant since. The second is still active, MERS, a rare virus from Middle Eastern countries which has killed 400 from the 1,000 people known to have fallen ill from it. In comparison, the current new virus, 2019-nCoV, has infected more than 20,000 people, mainly in China but has killed only 430. Such viruses kill in two ways, one a more severe version of the typical flue attack that has its prime effect on vulnerable older or already sick people. Pneumonia is the most common effect. The second effect, and the most troubling process, is the triggering of strong, violent reactions in human immune systems. Such reactions can lead to severe respiratory distress and organ failures. Ironically, healthy young people with strong immune systems and few antibodies from previous flu attacks are vulnerable to violent reactions. So, this threat may affect healthy young adults, unlike "normal" cases of flu that kill mainly among the very old and very young. Young person mortality occurred during the catastrophic 1918 'Spanish Flu,' which started among young men on a U.S. military base in Kansas. Conclusion: The core of a workforce could be vulnerable to infection and death.

The current threat – 2019-nCoV: The current flue mutation causing concern appeared late last year in the Chinese industrial city of Wuhan, a city on the Yangtze River about 500 miles due west of Shanghai. So far, the majority of cases have occurred there. Much of the city and its factories (auto) are shut down. China is attempting to isolate the disease there, as the rest of the world is attempting to limit its interaction with China.

Course of Disease: The respiratory system reacts quickly and violently to such infections, causing congestion, fluid buildup and sometimes bleeding. Death can occur quickly, sometimes within 24 hours of the first symptoms. So rapid diagnosis and hospitalization are critical. The victim is sick for one to two weeks. To date, 2019-nCoV has a fatality rate of 2%, roughly ten times the normal mortality from flu, hence the worldwide concern.¹ Conclusion: People will be absent for sickness for 2-3 weeks at a time and absent for 3-5 weeks for family care or fear reasons. If the U.S. is hit hard, 20% to 30% of our people would require doctor's care. 5% to 10% would require hospitalization. 3% to 6% would require critical care. This is a major exposure for a self-insured health care provider, as well as the health insurance industry.

¹ However, 'normal' flu killed perhaps 80,000 Americans last year.

Exhibit 11 & 12



During the SARS outbreak, the most severe decline was in passenger traffic in Hong Kong. In a similar fashion, Hong Kong passenger traffic has recently started to decline; not nearly as severe yet, as it is still early in the outbreak.

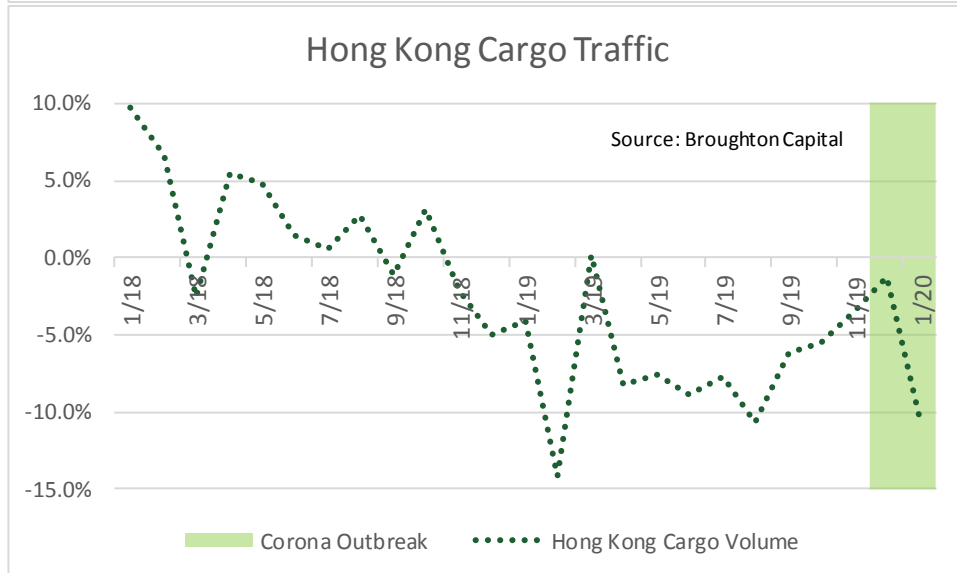
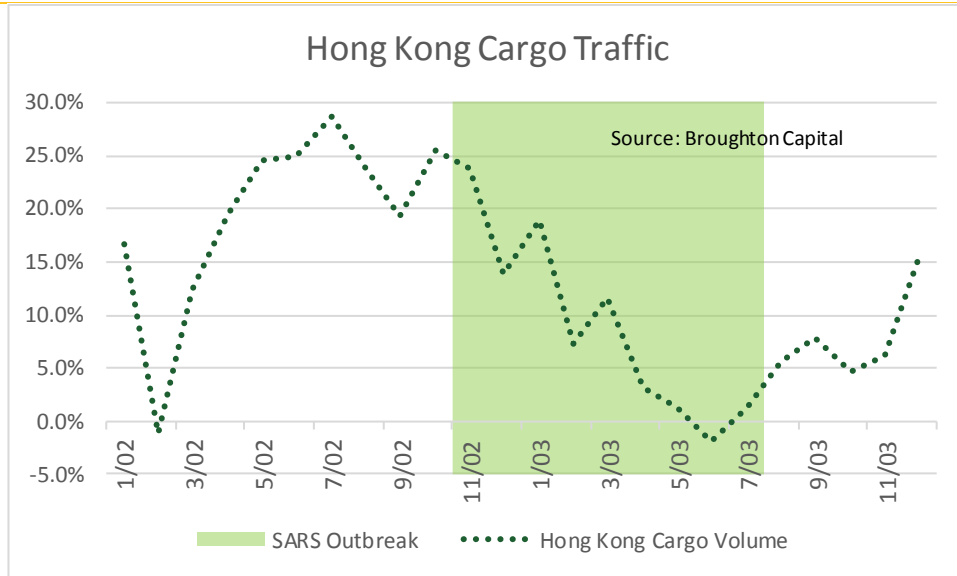
Spread: The bug spreads through contact with water droplets (sneezes, etc.) So, the prime defense is to prevent contact with such droplets through masks, disinfection and personal cleanliness. The bug can spread very rapidly. The 1918 flu went nation-wide in about six weeks: 25% of our population became ill, but 100% were exposed. The modern interconnected world makes the spread of such bugs even more likely. However, that same interconnectedness also accelerates the subsequent mutations of the bug which in turn works to reduce or eliminate the illness.² Conclusion: If we are not prepared before the appearance of a bad bug in the U.S., it will be too late.

Prevention and Cures: Quarantine can help if the bug spreads slowly, as with the SARS outbreak. However, easily-spread viruses, like the common cold, 'normal' cases of flu and, perhaps this threat, keep spreading until the combination of mutation and increased resistance run their courses. Vaccines can help but the rapid mutation of the bug limits their effectiveness. Effectiveness ranges from 60% to single-digit results depending on the type of virus. Of course, no shot prevents the 'common cold'. As a result, doctors focus mainly on the symptoms, because it is the body's intense reaction that kills. The ultimate cure is the eventual mutation of the bug away from the virulent strain. In 1918, that took about four months.³ Conclusion: the best defense is to quarantine early and to buy time. There will be quarantines. People will stay home to avoid infection. Get the shot as soon as available. But, many people will still get sick if this strain gets a foothold in the U.S.

² Note that China has twice the interaction with the global economy now than when the SARS outbreak hit.

³ There were three major waves of infection during those four months

Exhibit 13 & 14



Unlike passenger traffic, Hong Kong cargo traffic was relatively unaffected by the SARS outbreak, and went negative for only one month. This time, Hong Kong cargo volume was already negative, and has already been under severe pressure in recent weeks.

Workplace exposure: Supply chain facilities and truck stops are the hotspots because of the frequency of contact. Because a company can control its facilities, public locations like truck stops have the worst exposure. Loading docks are relatively safe because of minimal human contact. Conclusion: Driver exposure may be one of the hardest to control.

Health System Response: The U.S. system does not have the capacity to deal with a major attack. The U.S. has sufficient hospital capacity to simultaneously care for 950,000 people or 0.2% of the population. A full pandemic would require ten times that capacity. Conclusion: Organizations will have to fight for capacity and will have to do some self-care.

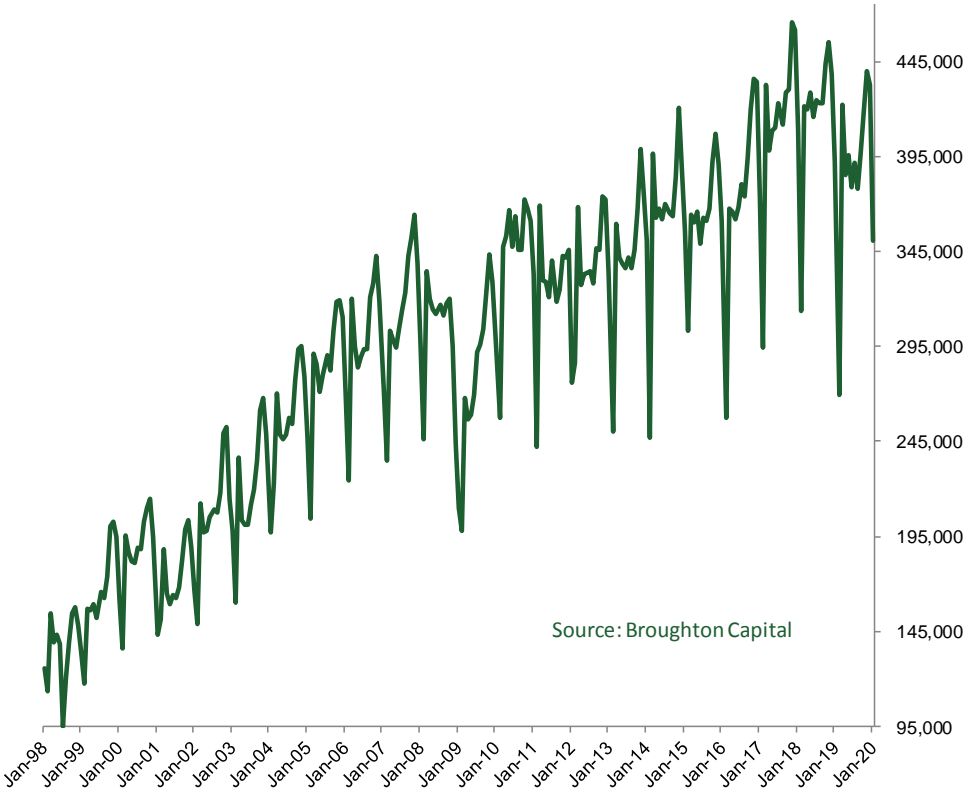
Macro-Economic Impact: Assuming a reasonable restriction of this outbreak, economists are estimating a modest, but measurable effect on Chinese growth, perhaps a reduction of 0.8 percentage points in 2020:1 and 0.4 for the full year. However, a cascading series of plant and supply chain disruptions may threaten U.S. retailers and electronics manufacturers who already have low inventories. We will see such effect sometime late in February or early in March as the China-based supply chains would normally be increasing shipments after the Chinese New Year. The digital revolution at the heart of so many products is currently dependent on Chinese production of the parts critical to the operation of many products. This is the downside of the ‘internet of things’ movement. We are all increasingly more interconnected and interdependent.

We are confident in our assertion that declines in cargo volume are more economically damaging than declines in passenger volume. Declines in passenger volume are economically damaging to those directly providing those services (airlines, flight and ground crews, food service, etc.) and dampen demand for other supporting services (hotels, taxis, etc.), while declines in cargo volume damage the manufacturing, technology, and e-commerce industry economies, as well as damaging the same services and supporting services as passenger volume.

This assertion is materially magnified by the prodigious growth in Hong Kong (and Chinese) air cargo over the last two decades. In 2003, Hong Kong was smaller and ranked below other major airports, but continued growth which outpaced the other air cargo hubs resulted in Hong Kong becoming the world’s largest cargo airport in 2010.

Exhibit 15

Hong Kong Total Airfreight Volume



Just as a reminder, and as an attempt to provide perspective, Hong Kong became the world’s largest cargo airport by expanding its volume by a factor of more than 4X over the last 20 years. Hong Kong eclipsed Memphis (the epicenter of FedEx) in 2010.

Exhibit 16

2003 Airport Cargo Volume (top 30 airports)	Total Cargo Tonnes	% of Total
China	4,520,324	11.1%
US	18,218,603	44.9%
Europe	6,685,610	16.5%
Asia and Mid-East (not including mainland China)	11,143,353	27.5%
Total	40,567,890	

2018 Airport Cargo Volume (top 30 airports)	Total Cargo Tonnes	% of Total
China	12,853,950	21.4%
US	21,695,034	36.1%
Europe	9,479,438	15.8%
Asia and Mid-East (not including mainland China)	15,993,188	26.6%
Total	60,021,610	

Source: Broughton Capital and Airport Authorities

Since the 2003 SARS outbreak, the market share in global cargo volumes represented by China has almost doubled (21.4% vs. 11.1%).

Exhibit 17

World's Largest Cargo Airports

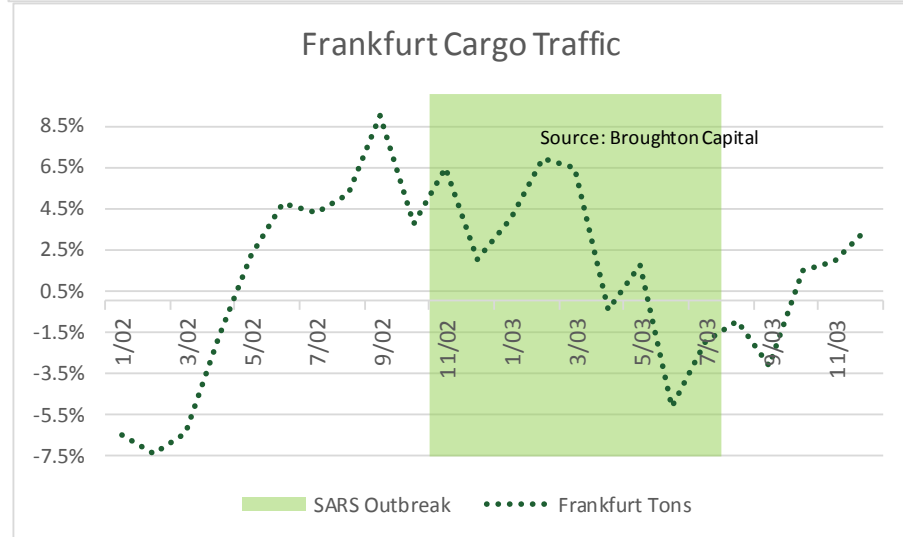
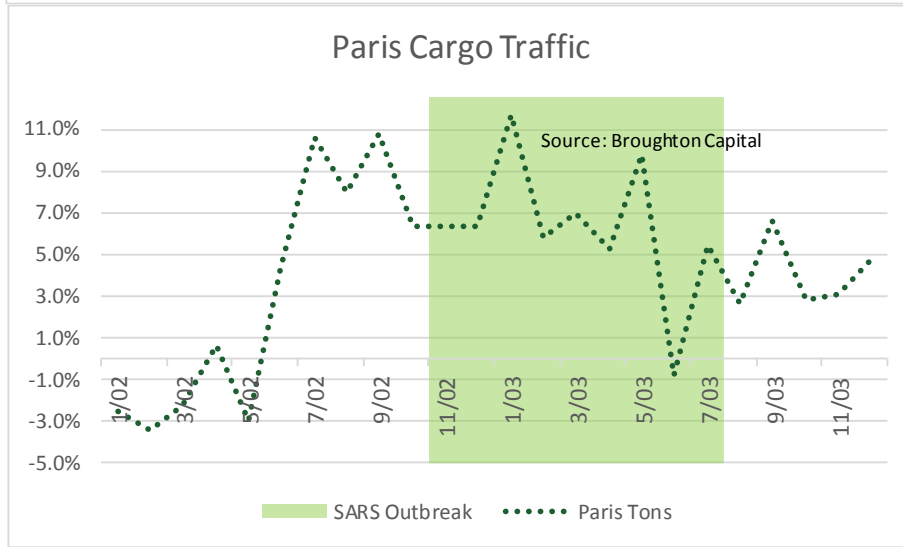
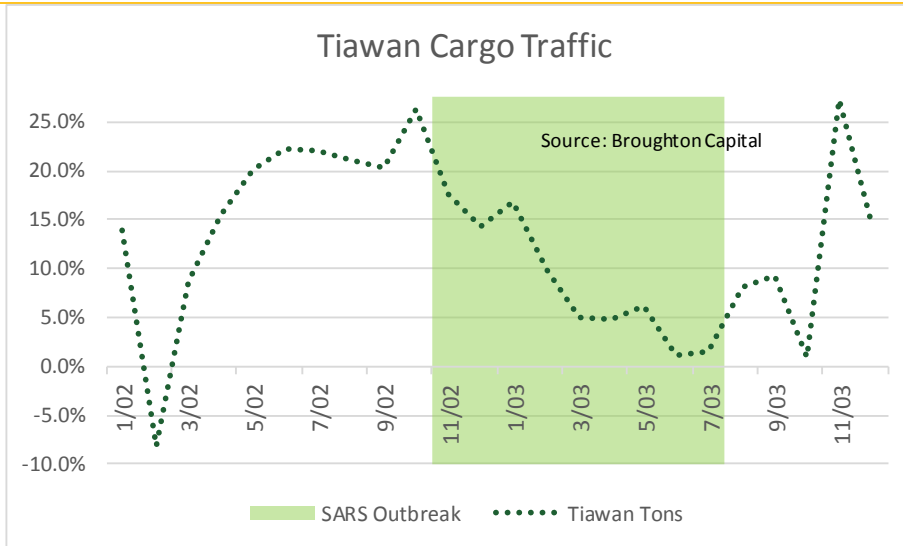
2018 Final Statistics

Source: Broughton Capital and Airport Authorities

Rank	Airport	Code (IATA)	Total Cargo Tonnes	% Change '18 vs '03
1	Hong Kong International Airport	HKG/VHGG	5,120,811	91.9%
2	United States Memphis International Airport	MEM/KMEM	4,470,196	31.8%
3	China Shanghai Pudong International Airport	PVG/ZSPD	3,768,573	216.9%
4	South Korea Incheon International Airport	ICN/RKSI	2,952,123	60.2%
5	United States Ted Stevens Anchorage International Airport	ANC/PANC	2,806,743	33.5%
6	United Arab Emirates Dubai International Airport	DXB/OMDB	2,641,383	176.1%
7	United States Louisville International Airport	SDF/KSDF	2,623,019	62.1%
8	Taiwan Taiwan Taoyuan International Airport	TPE/RCTP	2,322,823	54.8%
9	Japan Narita International Airport	NRT/RJAA	2,261,008	4.9%
10	United States Los Angeles International Airport	LAX/KLAX	2,209,850	20.5%
11	Qatar Hamad International Airport	DOH/OTHH	2,198,308	opened Dec '13
12	Singapore Changi Airport	SIN/WSSS	2,195,000	34.5%
13	Germany Frankfurt am Main International Airport	FRA/EDDF	2,176,387	31.9%
14	France Charles de Gaulle Airport	CDG/LFPG	2,156,327	25.1%
15	United States Miami International Airport	MIA/KMIA	2,129,658	30.1%
16	China Beijing Capital International Airport	PEK/ZBAA	2,074,005	213.2%
17	China Guangzhou Baiyun International Airport	CAN/ZGGG	1,890,561	opened Aug '04
18	United States Chicago O'Hare International Airport	ORD/KORD	1,868,880	23.7%
19	United Kingdom London Heathrow International Airport	LHR/EGLL	1,771,342	36.2%
20	Netherlands Amsterdam Airport Schiphol	AMS/EHAM	1,737,984	28.4%
21	Don Mueang Airport	BKK	1,637,398	37.7%
22	John F. Kennedy International Airport	JFK	1,431,090	-12.0%
23	Indianapolis International Airport	IND	1,054,766	11.0%
24	Dallas-Fort Worth International Airport	DFW	918,129	15.0%
25	Newark Liberty International Airport	EWR	904,673	3.4%
26	Luxembourg-Findel Airport	LUX	853,354	76.5%
27	Hartsfield-Jackson Atlanta International Airport	ATL	764,773	-3.6%
28	Kuala Lumpur International Airport	KUL	714,669	8.7%
29	Oakland International Airport	OAK	670,198	12.2%
30	Logan International Airport	BOS	367,777	-44.0%

Since the 2003 SARS outbreak, China has gone from having two airports in the top twenty, to having four airports in the top twenty (including a new one opened in 2004).

Exhibit 18, 19, & 20



During the SARS outbreak, cargo volumes in other major airports around the world did not experience any material, or at least not discernable, loss in volume.

Geometric risk: The limitation of most cases to a single region in China, as happened with SARS, is no longer a possibility. While supply chains have shown a remarkable ability to flex and improvise under such stress, however this bug carries more risk than the two previous dangerous Coronaviruses for three reasons. First, the global economy is currently in a tentative state that makes it vulnerable to even small external shocks such as this. Keep in mind what happened to the current recovery in 2011, after the tsunami idled important manufacturing plants in Japan. Second, and more worrisome, is the alarming run-up in the number of cases, already more than double SARS. Perhaps this is the bug that overwhelms through its easy transmittal rather than the severity of individual cases. Third, is the possibility of cascading plant shutdowns (Apple has already warned investors of the potential threat this virus poses to its operations in the short-term). The absence of an electronic part shuts down a fuel systems plant – which shuts down an engine plant – which shuts down an assembly plant, which starves the dealer network, which reduces financing operations. Fourth, the ubiquity of information and governmental concern could occasion an over-reaction just as the 9/11 attacks spawned a defensive reaction that was far out of proportion to the threat. The worst-case then is a mild but very widespread global pandemic that would reduce GDP by up to 5% with a logistics reduction more significant than that. It could feel like 2008-2009, at least for a few months.

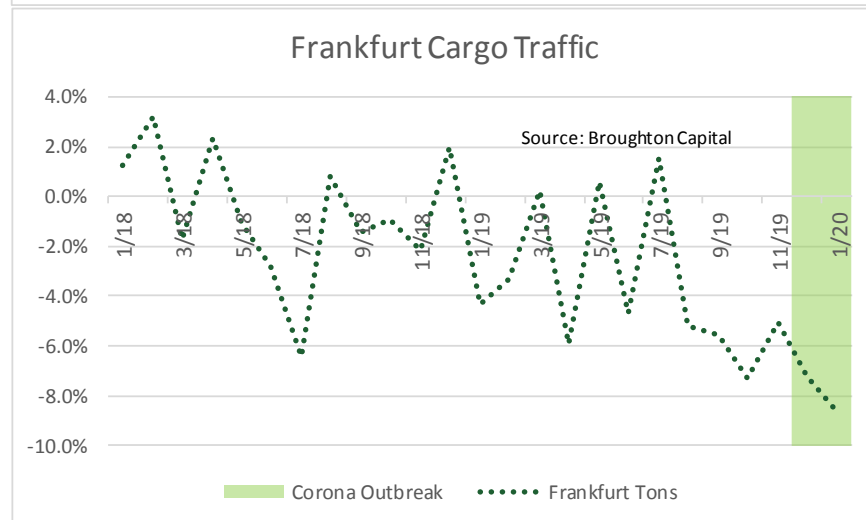
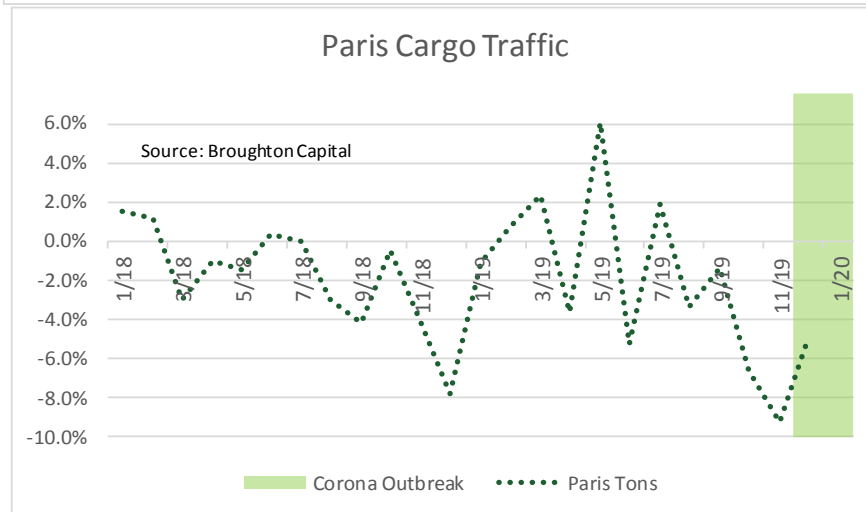
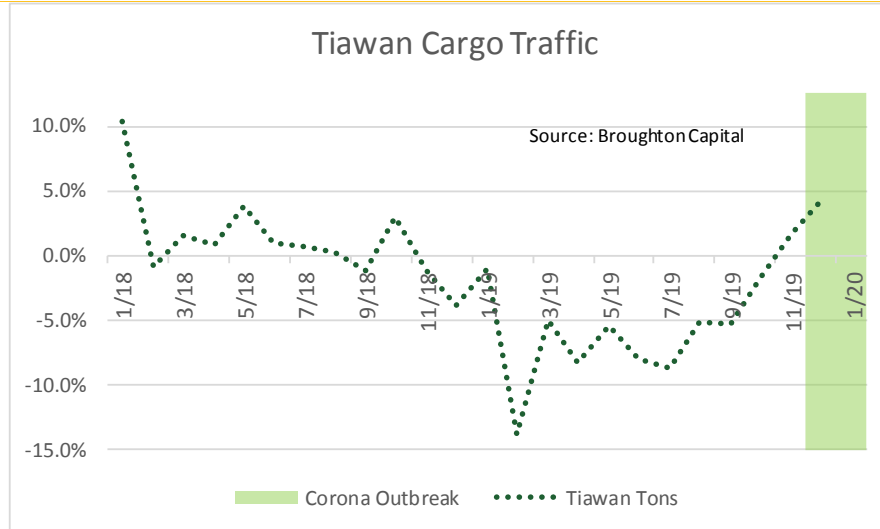
Conclusion: This is a significant matter of risk management.

Operational Impact: Supply chains would be vulnerable in two important ways. First, drivers and other geographically dispersed workers would be isolated from help. What urgent care center or hospital provides big rig parking? Second, employers should be concerned about where people work in proximity, operating centers, customer service floors, truck stops. The brokerage sector would be particularly vulnerable in the absence of solid plans for remote operations.

Long Term Effects: Survivors of bad attacks or with pre-existing health problems could have long-term health effects from the respiratory trauma. Also, at current turnover rates, it could take three to four years to replace drivers lost to illness and interruptions in the hiring pipeline.

Conclusion: A pandemic would slow supply chain growth and reduce earnings for an extended period, long after the outbreak has come to an end.

Exhibit 21, 22 & 23



Unfortunately, this time airports globally were already seeing significant declines in volume, declines which have only gotten materially worse in recent weeks as efforts to contain the Coronavirus have restricted travel and shuttered manufacturing plants, first in Asia and then in regions outside of Asia, as **supply chains have been interrupted or shut down.**

***Why this data matters more?** Since it only makes sense to pay the premium cost of transport by air for high-value / low density products, this volume represents 'high-tech' types of goods. These high value goods (1% of the weight, but >15% of the value of the tangible goods flowing through the economy) produce an outsized bearing on global prosperity and global quality of life.*

We remind clients that we respect both the nominal monthly index value as well as the moving averages for two basic reasons:

- One-month anomalies are common. Timing of holidays, a severe storm, or a change in sourcing, can create big temporal shifts that appear significant in one month's data, but prove insignificant within weeks. Alternatively, no one month should be ignored, but carefully considered along with other data, as valuable clues on changes in direction or changes in magnitude of trend are revealed.
- Some of our data sources are more-timely than others. The initial index for the month is adjusted and we release a final index value after all the sources make their data available. Focusing on both the monthly and moving averages, lowers the risk of the more-timely reporters of data creating a false positive or false negative in the overall data.

What is this Index?

Data from individual airports and other sources is generally available long before industry associations or individual air cargo carriers release information concerning ton-mile volume or regional breakout of that activity. Via several methodologies, we have been gathering this data using our proprietary procedures since 2007 and have historically tested it against the data sources and economic indicators that will eventually be released. This is volume data only, and does not capture yield charged or what type of product is being transported. Both indices (APAC and European) were set to 100 based on January 2007 volume. We reserve the right to make adjustments as additional data becomes available, and while we pride ourselves on being as meticulous as possible in the collection and calculation of these indices, we make no warranties as to the accuracy of the data provided to us from our sources.

Important Disclosures

Broughton Capital, LLC is an independent, privately held, deep-data driven quantamental economics balanced with fundamental equity research, firm. Headquartered in St. Louis, with personnel in Boston, Dallas, Chicago, Nashville, and Philadelphia, we travel the globe to meet with companies, their customers and vendors, and clients, as we strive to be the single best resource for transportation data and understanding the trends driving the future of the commercial transportation of goods. The material contained herein is based upon sources we believe to be reliable, but is not guaranteed to be accurate or complete. It is published for informational purposes only and should not be construed as an offer, or the solicitation of an offer to buy or sell any security. Opinions expressed are solely those of the author and subject to change as new data becomes available.

We are “The Independent Variable.” Why? Two reasons:

1. As is true in a mathematical equation, **the independent variable drives the value, changes the value of the dependent variables.** Knowing the independent variable, allows you to solve for the value of not only the dependent variables but the value of the overall equation. We know that through good fundamental research, high quality data, and years of industry experience, we can literally change the value of an equity, a company’s access to capital (debt and equity), ability to merge or acquire, and even a management team or their behavior. We know that if we do our job well, *we become the ‘Independent Variable’ in a company’s future.*

2. **We are Independent.** We do not work for a large commercial bank. We are not beholden to lending relationships, or our firm’s investment holdings, or even worse – our firm’s investment bankers. While we pride ourselves on being independent from emotion and influence, we are aware of, and guarded against falling victim to, the cognitive biases inherent in the human brain. We are dependent on math and the power of back tested multivariable analysis, especially when balanced with wisdom of experience from those who have made decades of mistakes. **We are Variable.** Over the last several decades, we have been everything from strongly positive about to strongly negative about almost every single equity in the transportation universe. We have built our reputation upon having an opinion, and being clear about that opinion (i.e., no one ever finishes a conversation with us and says, “I wonder what they really think?”). We know that our opinions and outlooks may be everything from slightly flawed to completely wrong. As a result, we consider it our professional duty to change our opinions and outlooks as the statistics, data, or evidence warrant.

Transportation stocks have the reputation for predicting the overall market #dowtransporttheory because the underlying goods flow is heartbeat of the economy. That goods flow becomes increased (or decreased) levels of asset utilization for asset intensive transportation companies, which becomes increased (or decreased) levels of financial returns, which becomes stock price. We believe that the stock price performance of transportation companies is only symptomatic of the underlying goods flow.