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COVID-19 – Reviewing the Economic Impact in China (Slowdown & Recovery) and Its Potential Implications for the U.S. Economy

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Economic Impact in China in January and February

Summary

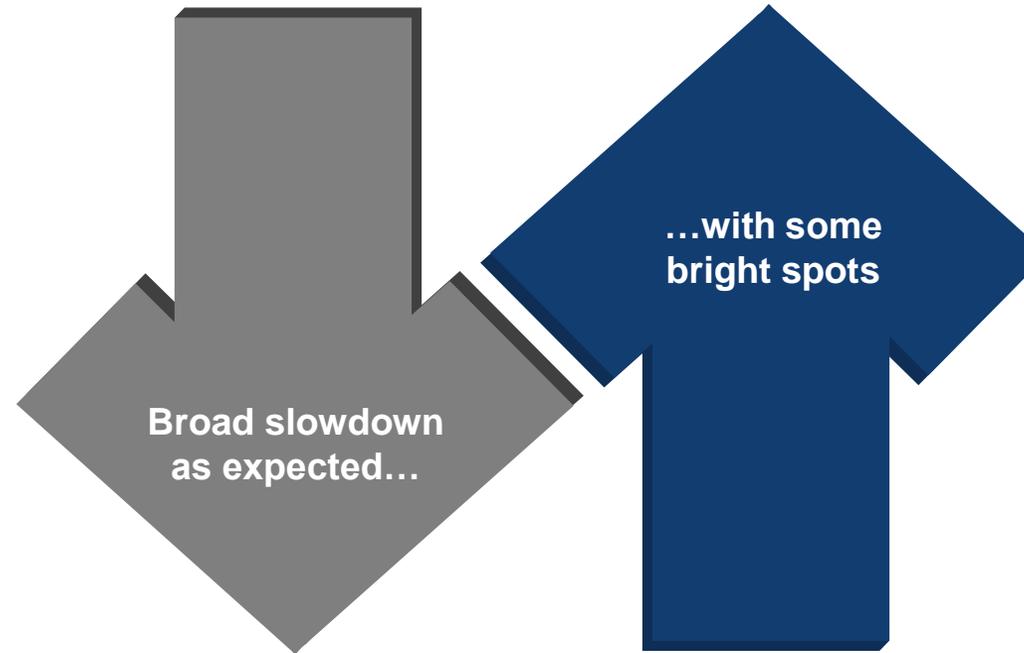
- China's January and February economic metrics slumped across all sectors due to the country's shutdown. Commodity online sales and Food retail sales increased year/year during that period. Recent data indicates the subsequent recovery in China began in late February.
- Production resumption and capacity utilization rates continue to improve daily, and now look likely to fully recover in April. COVID-19 daily new cases across China has dropped to low double-digits on average over the last 10 days (with majority imported cases).
- The U.S. economy may see a milder and longer economic slowdown (versus China) due to the absence of a total country lockdown to date. While we will be monitoring test results in the coming weeks to more accurately estimate the stages of the U.S. outbreak, a look at the data suggests single-digit daily new cases are unlikely in the US until late April.

Due of the country-wide shutdown, China saw a significant, broad economic slowdown

Industrial and services production were both **down 13%**

Total **retail sales** declined **20.5%** while **online sales** declined **3%**

Fixed investments were **down 24%**



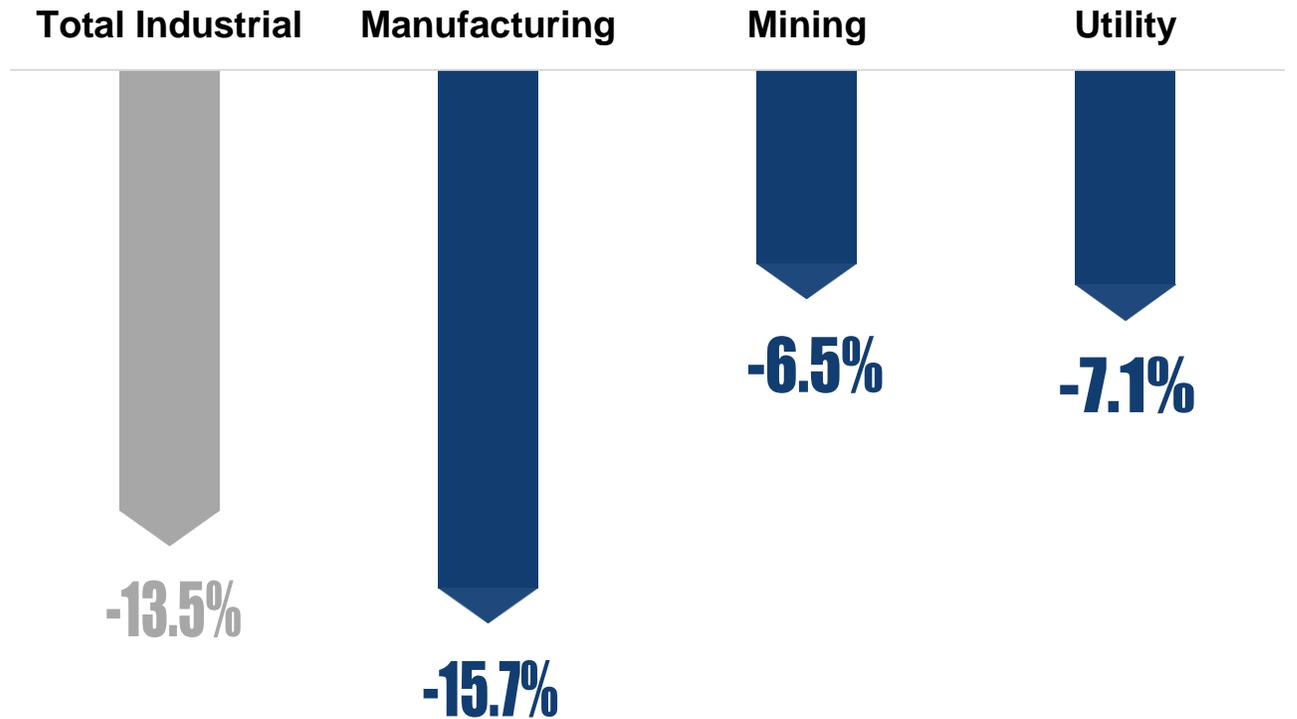
Mask production increased **128%**

Commodities online sales increased **3%** in January and February, representing **21.5% of total sales vs 16.5% in the year ago period**. Food retail sales increased **3.1%** in January and February

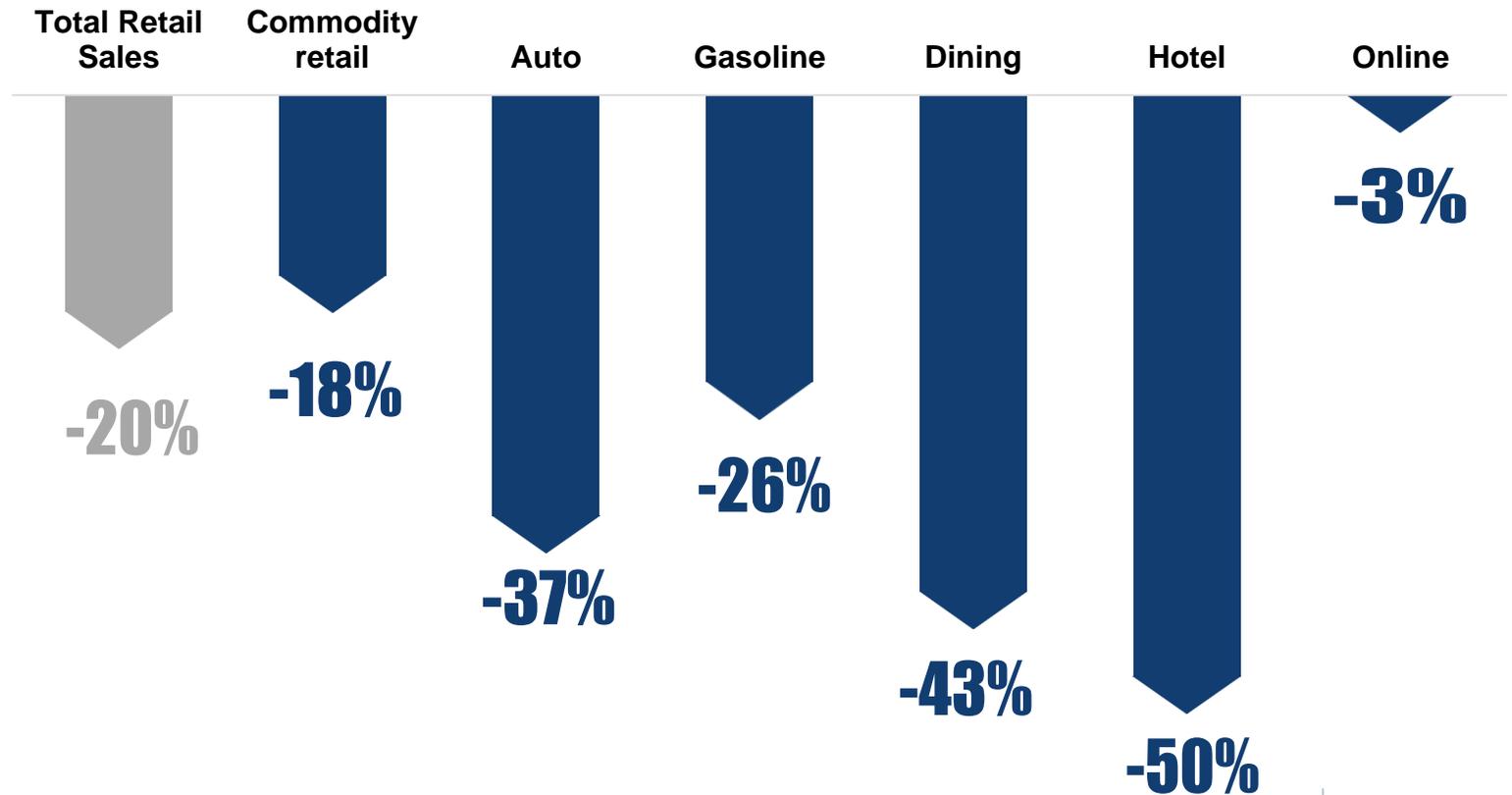
High frequency data shows the **Chinese recovery started in late February** across multiple end markets



'Industrial Value Added' declined 13.5% year/year in January and February compared to up 6.9% back in December



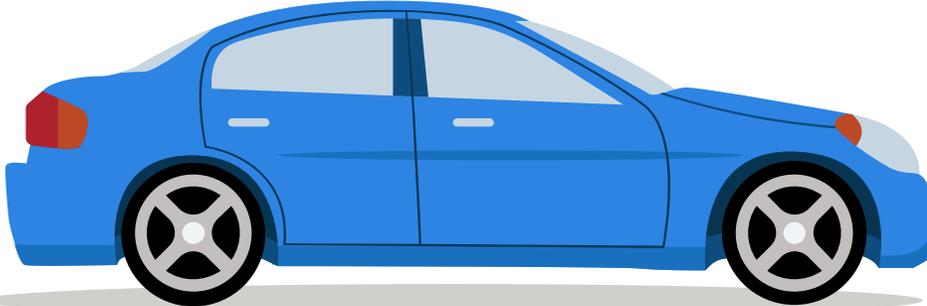
Retail Sales declined 20% year/year in January and February, nearly 30 points slower than prior trend (up 8%). Online sales were the least impacted (down 3%).



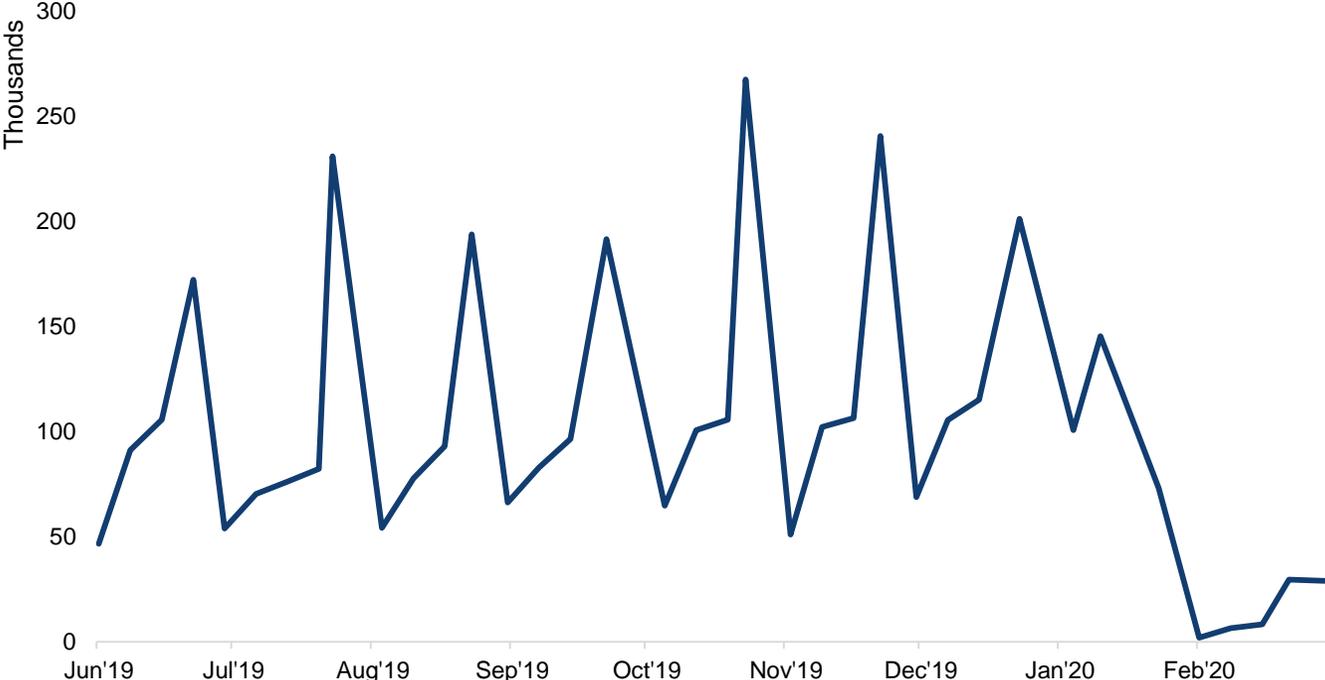
'Total Real Estate' (72% residential and 28% non-res) sales declined nearly 40% year/year in January and February.



February vehicle sales declined 80% year/year in China. Today, the industry expects 2020 total sales to decline 8% without stimulus.

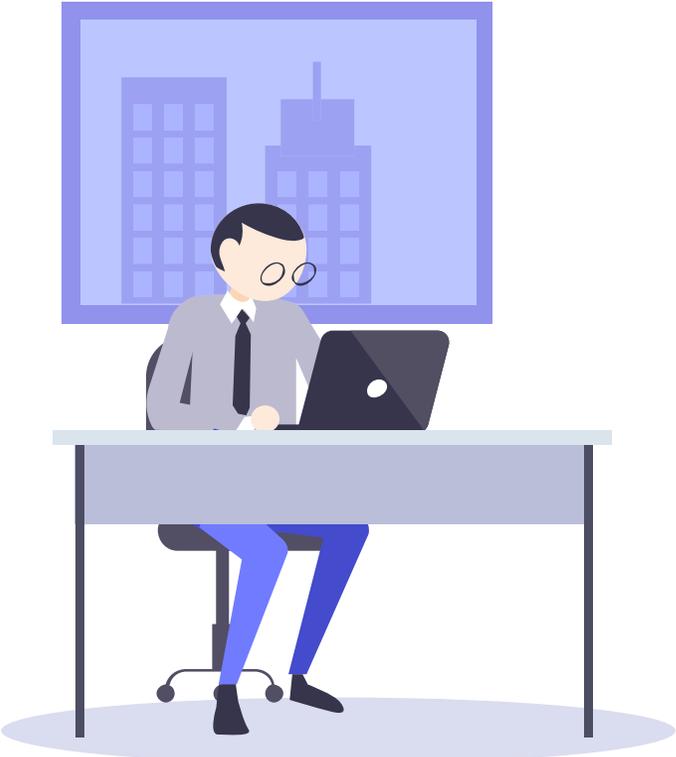


Units of Daily Passenger Vehicle Sales

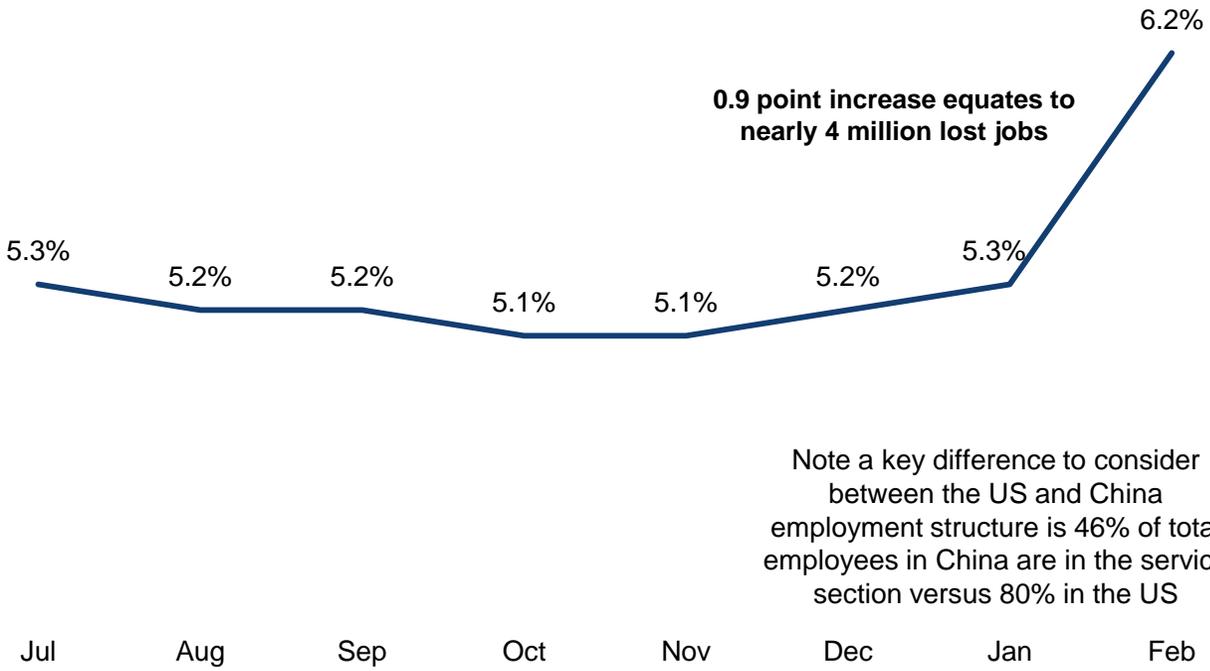


China's unemployment rate increased 0.9 points in February. 80% of employees had returned to work by March 13 (excluding Hubei).

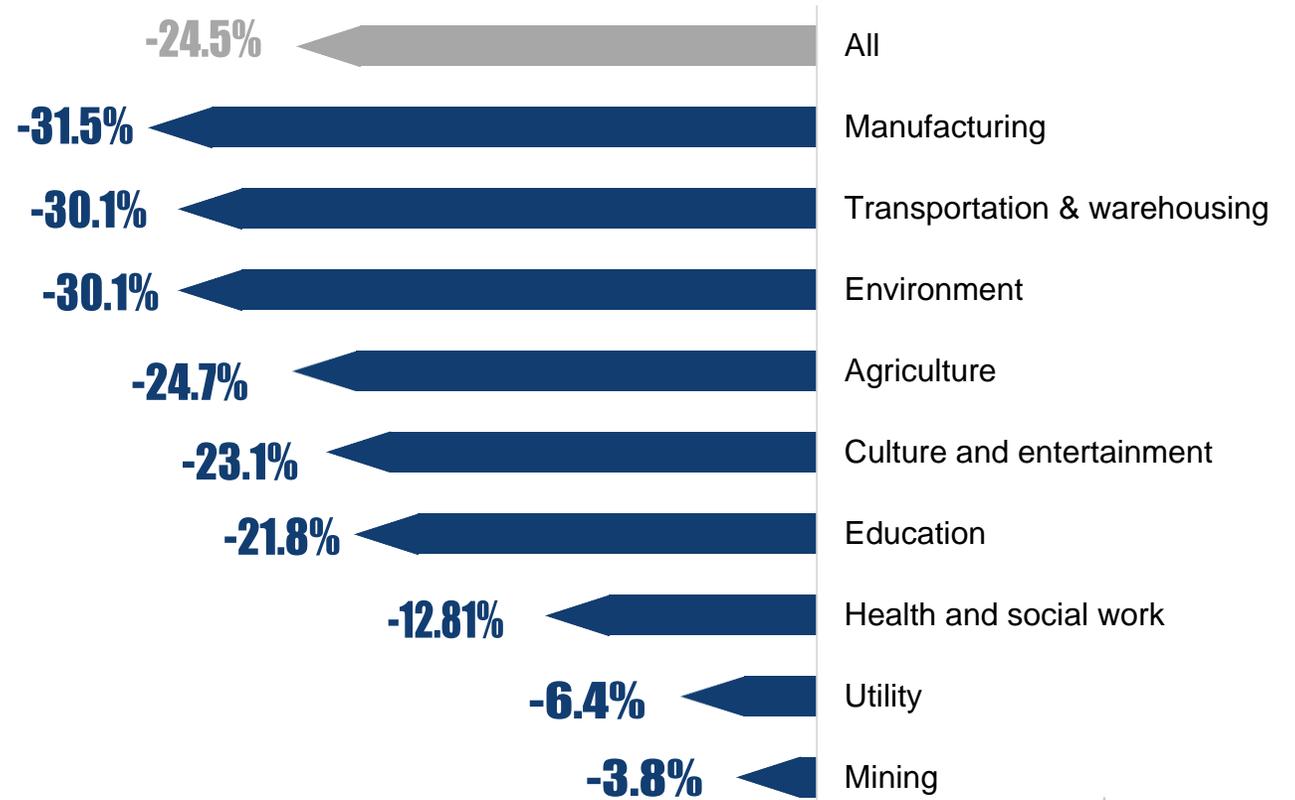
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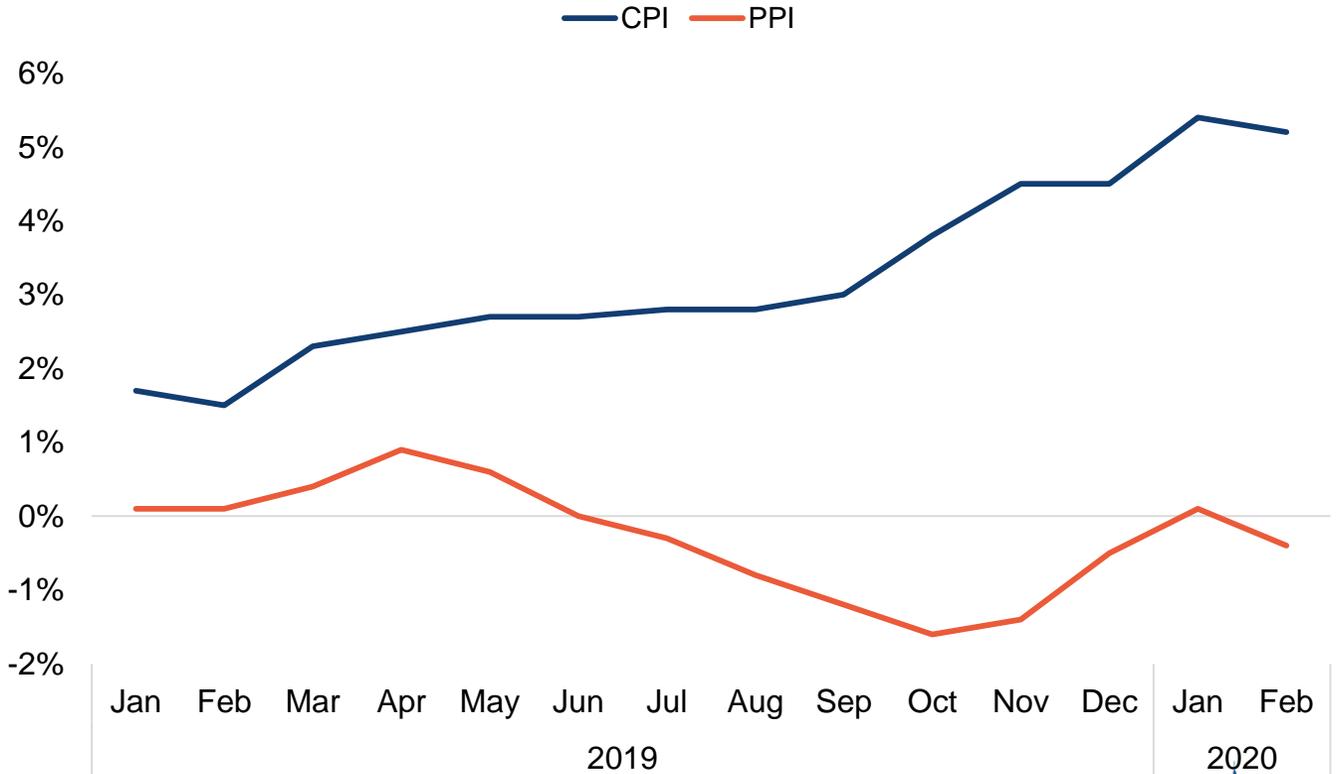
Urban Surveyed Unemployment Rate



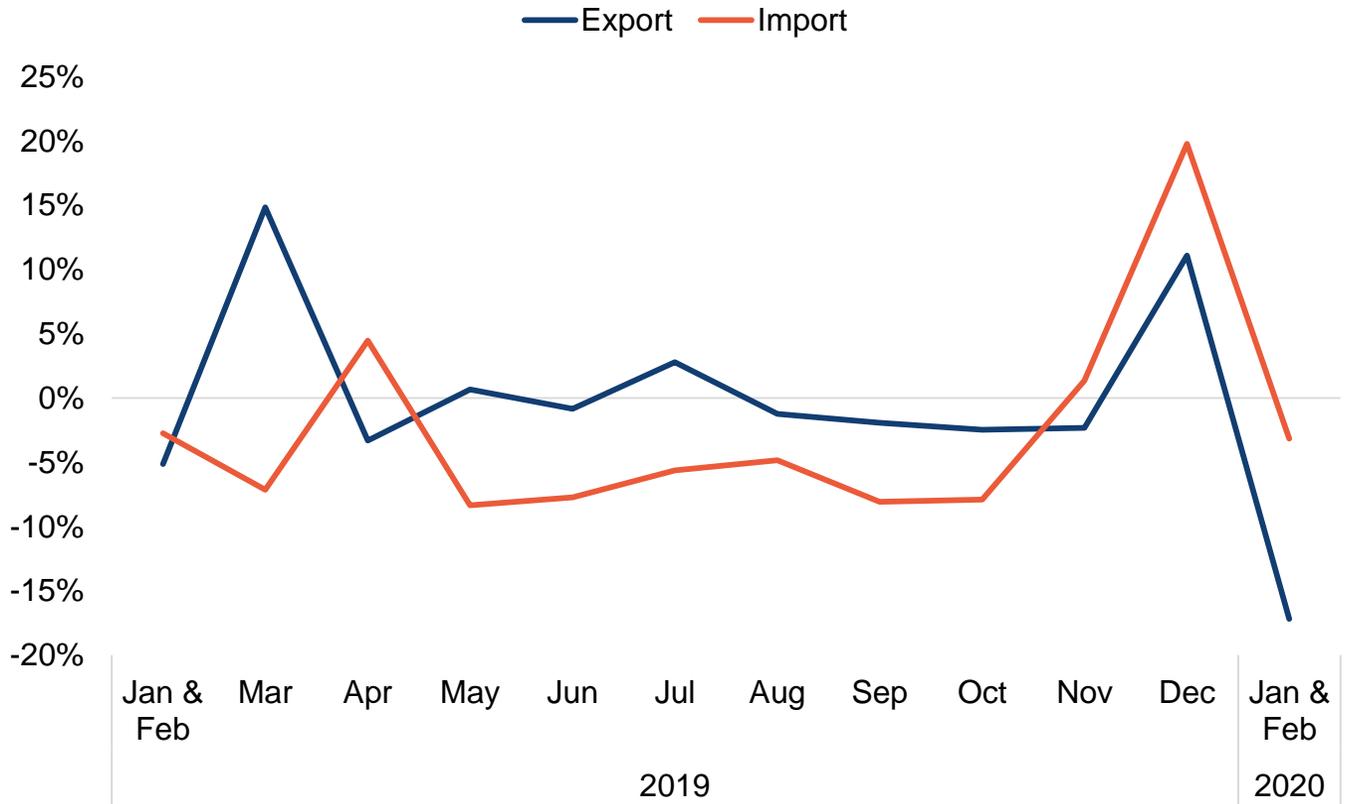
Fixed Investment was down 25.5% year/year in January and February, well below the 5.4% increase in China back in December. Additionally, Construction Back to Work is expected to be ~90% at the end of March.



Due to slower demand, China's CPI and PPI declined in February year/year. As pork production increases (main driver of CPI growth in China in 2019), CPI is expected to decline further in 2020. The collapse of oil prices are likely to put more pressure on PPI prices throughout 2020.

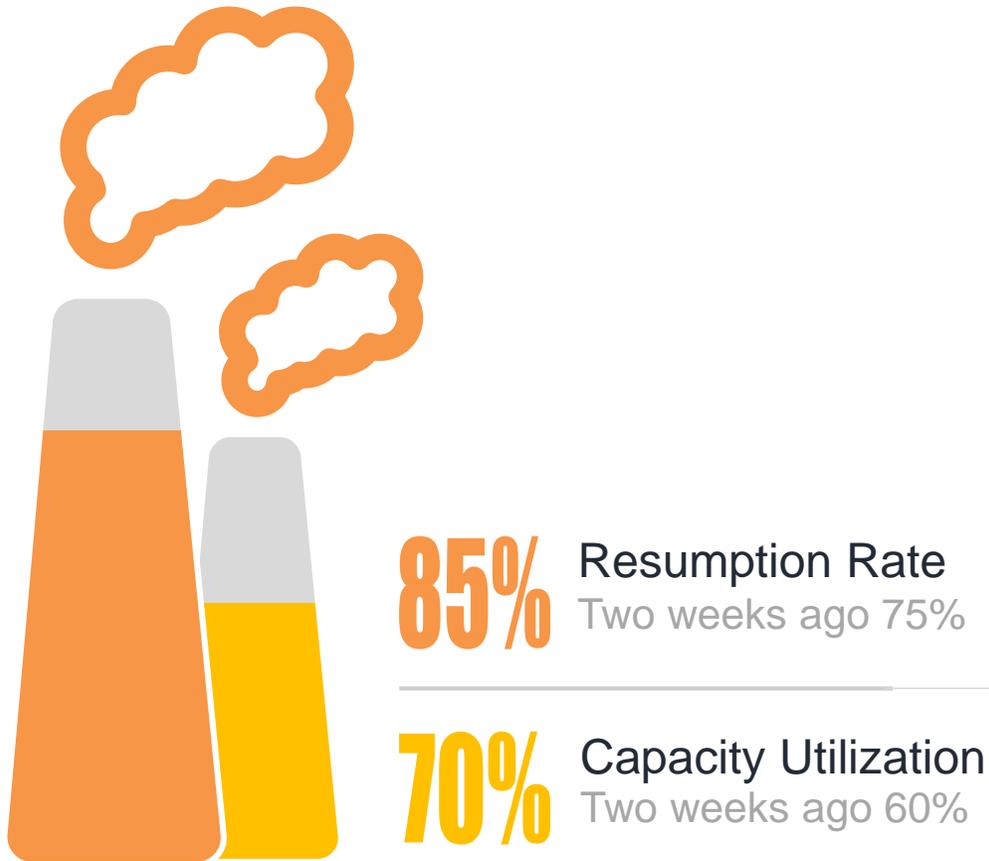


Chinese exports dropped faster than imports due to the halt of transportation and production across the country.



Current Economic Recovery in China

Chinese production resumption rates (now 85%) and capacity utilization levels (now 70%) improved another 10 points in the last 2 weeks.

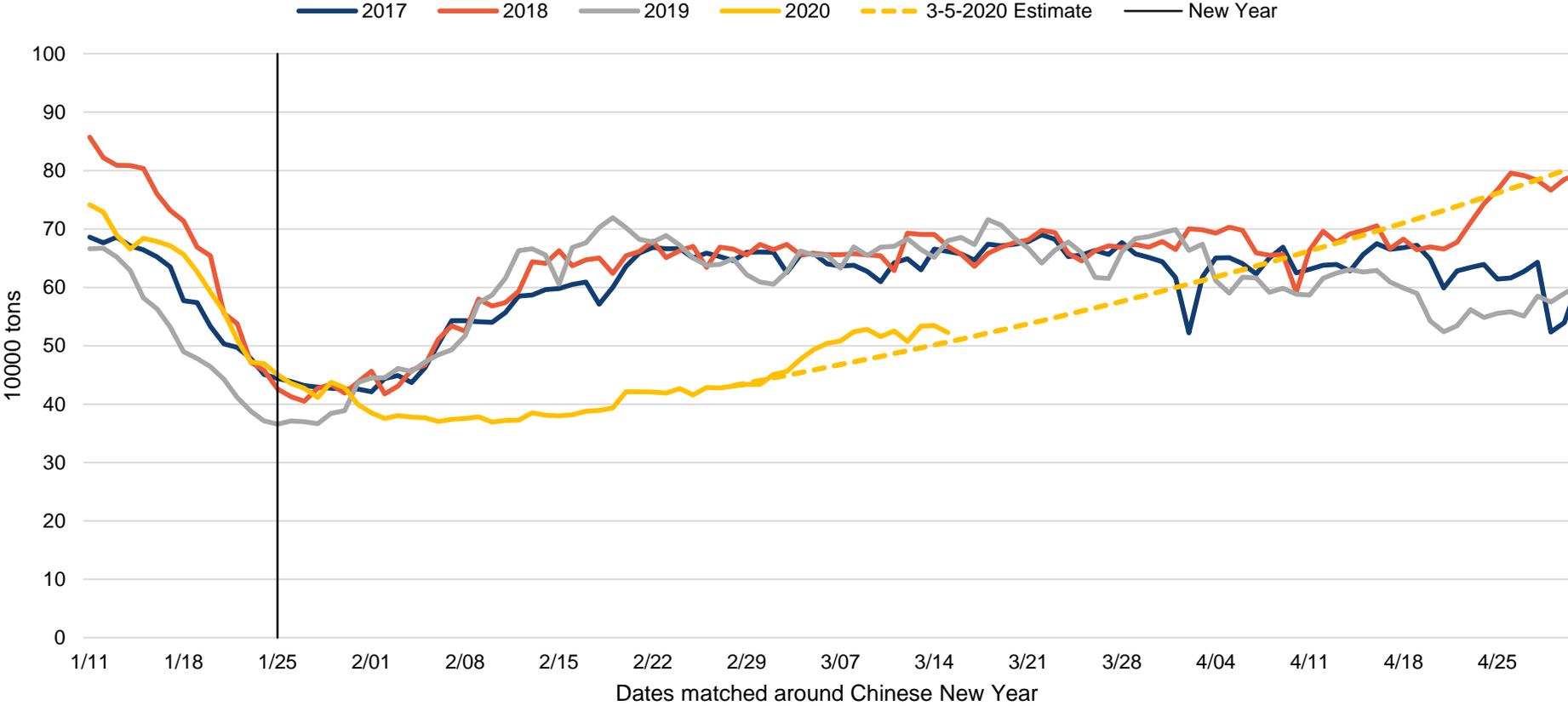


- 90%** Resumption rate of **enterprises above designated size** (annual revenue > \$3 million for industrial companies; GDP weighted average) except Hubei
- 60%** Resumption rate of **small & medium size enterprises** outside of Hubei
- 78%** Coal consumption for **electricity production** compared to prior year levels
- 80%** **Worker return to work levels** outside of Hubei.



Daily coal consumption across China increased faster than expectations, and is now on pace to fully recover in April.

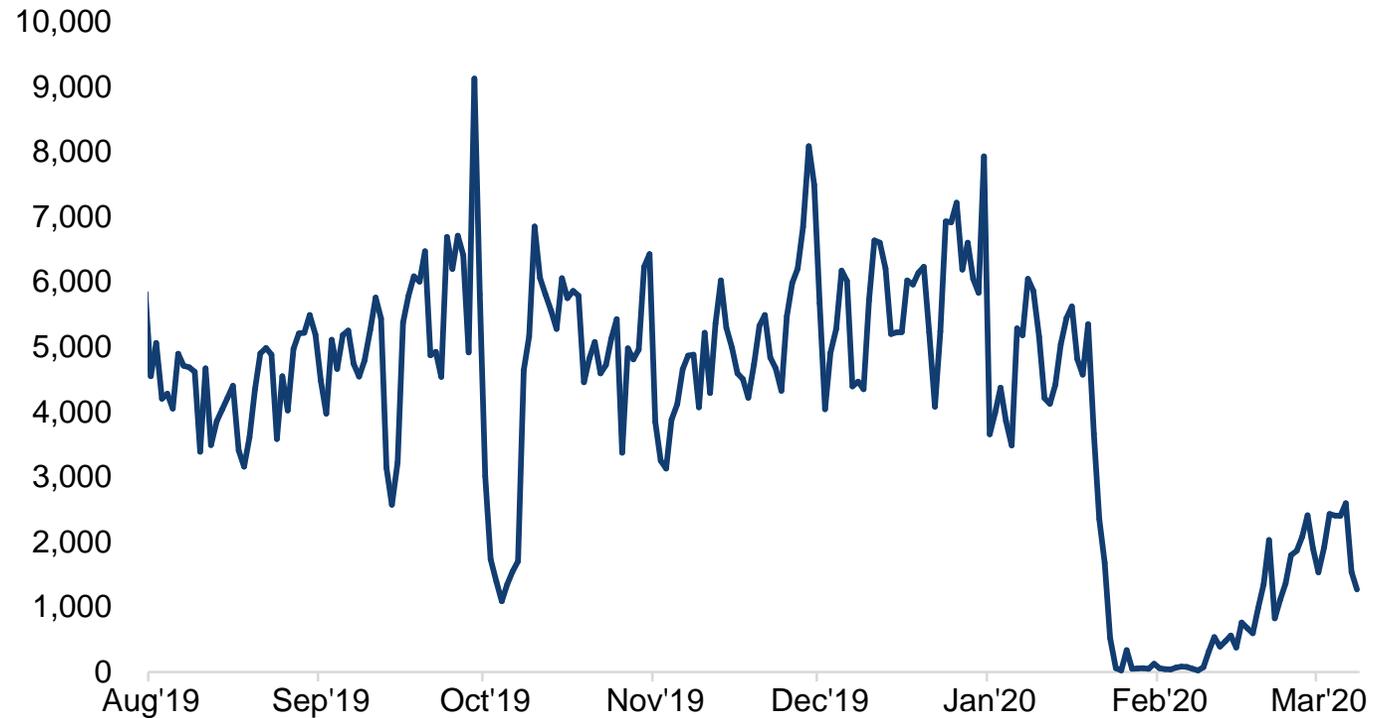
Daily Coal Consumption by Top 6 Chinese Power Generation Groups



Housing transactions began to improve in late February. While regional stimulation policies are beginning, a full recovery is unlikely over the next 45 days.



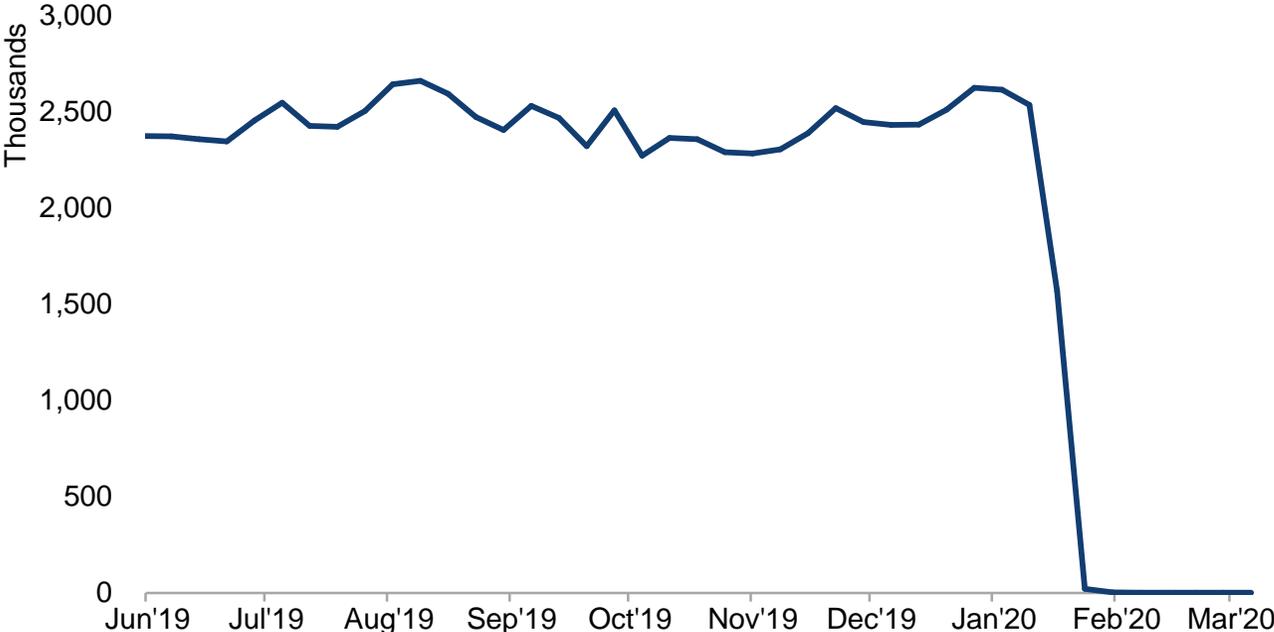
Transactions of Residential Real Estate



The Entertainment Industry was one of the most impacted and is expected to recover slower than most other industries.



of Movie Screenings in China



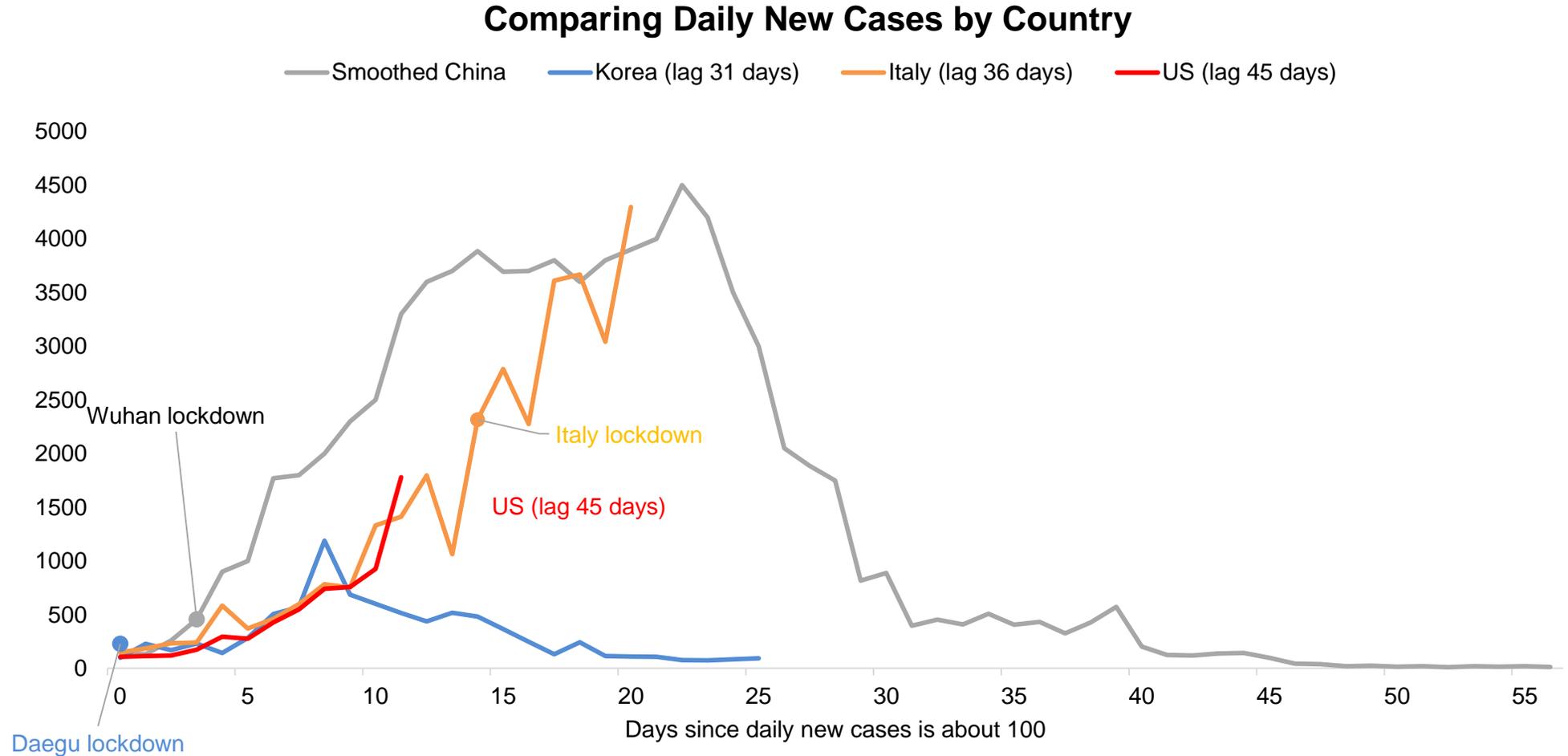
Potential Implications for the U.S. Economy

Using China as the benchmark (implemented the most strict measures), the depth and length of impact on the economy could be adjusted based on each country's strategy. We believe it is likely the US sees a milder but longer decline, with the UK and Sweden potentially seeing an even milder and longer disruption.

Country	Goal	Recommended Prevention Actions				National Measures							
		Social distancing	Isolation of infected	Hand wash	Masks	Lockdown	Test	Patients Receive	National Alert	Close Schools	Close Restaurants	Cancel Gatherings	Border Control
China	Minimize Infection	✓	✓	✓	✓	✓	All/Majority	All	✓	✓	✓	✓	✗
Italy	Minimize Infection	✓	✓	✓	✓	✓	All/Majority	Likely to recover patients first	✓	✓	✓	✓	✗
Korea	Minimize Infection	✓	✓	✓	✓	✗	All/Majority	Severe cases first	✓	✓	✓	✓	✓
US	Flatten Curve	✓	✓	✓	✗	✗	Limited Eligibility	Only severe cases	✓	By state	By state	By state	✓
Japan	Flatten Curve	✓	✓	✓	✓	✗	Limited Eligibility	Only severe cases	✗	✓	✗	✓	✓
UK	Herd Immunity → Flatten Curve	✓	✓	✓	✗	✗	Limited Eligibility	Only severe cases	✗	From March 20	✗	✓	✗
Sweden	Herd immunity	✓	✓	✓	✗	✗	Limited Eligibility	Only severe cases	✗	✗	✗	> 500 person events cancelled	✗

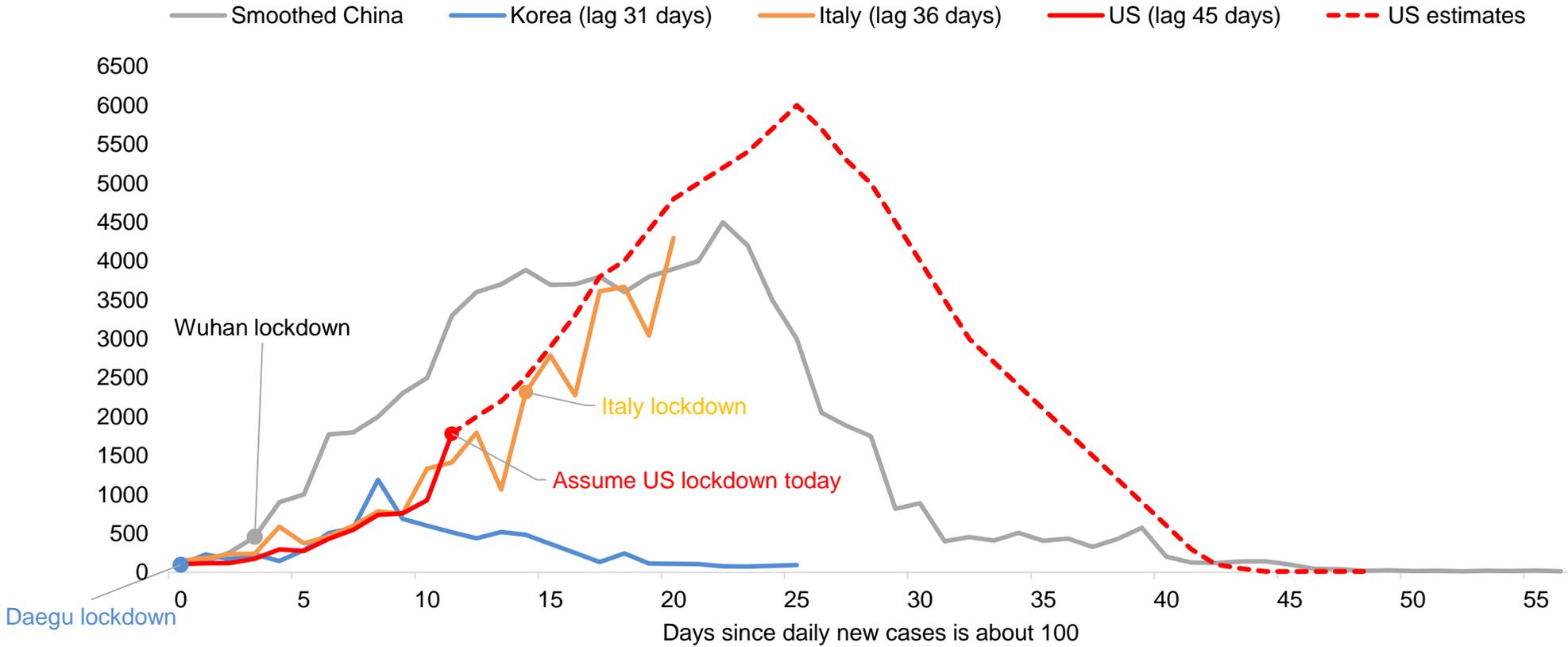


The U.S. virus outbreak is lagging China by about 45 days, and today the trend looks more like Italy than South Korea...



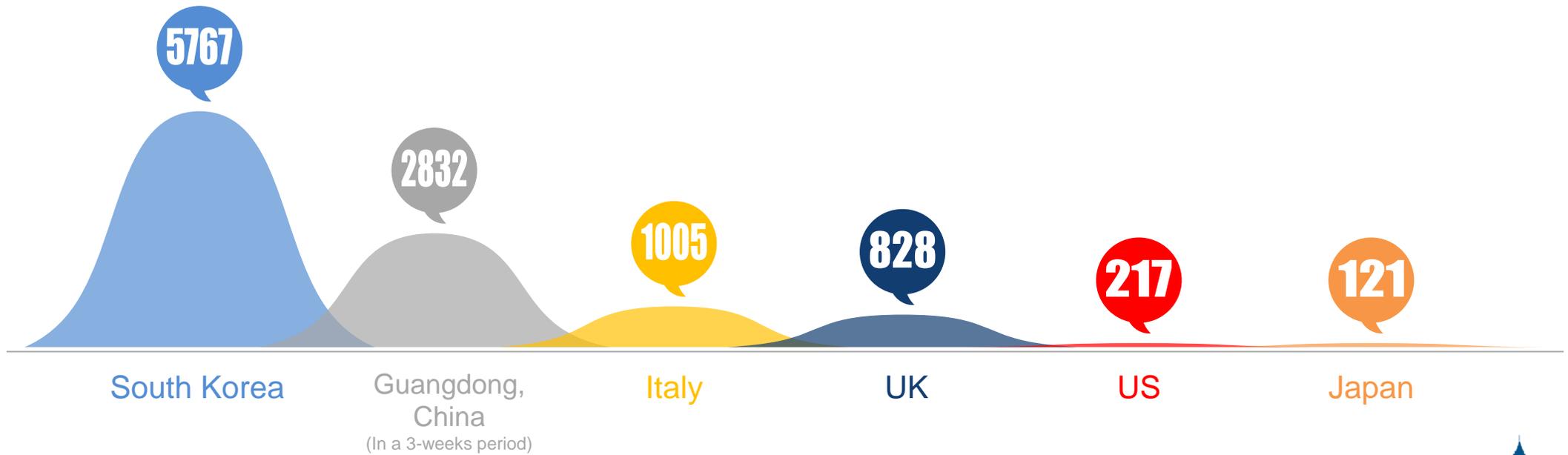
Daily new cases peaked in China 19 days after Wuhan was locked down and 9 days in South Korea after Daegu was declared a 'special care zone.' Assuming the US began strict social distancing today, and the daily cases peak in 14 days, the earliest we should expect single-digit daily new cases would be the end of April.

Comparing Daily New Cases by Country

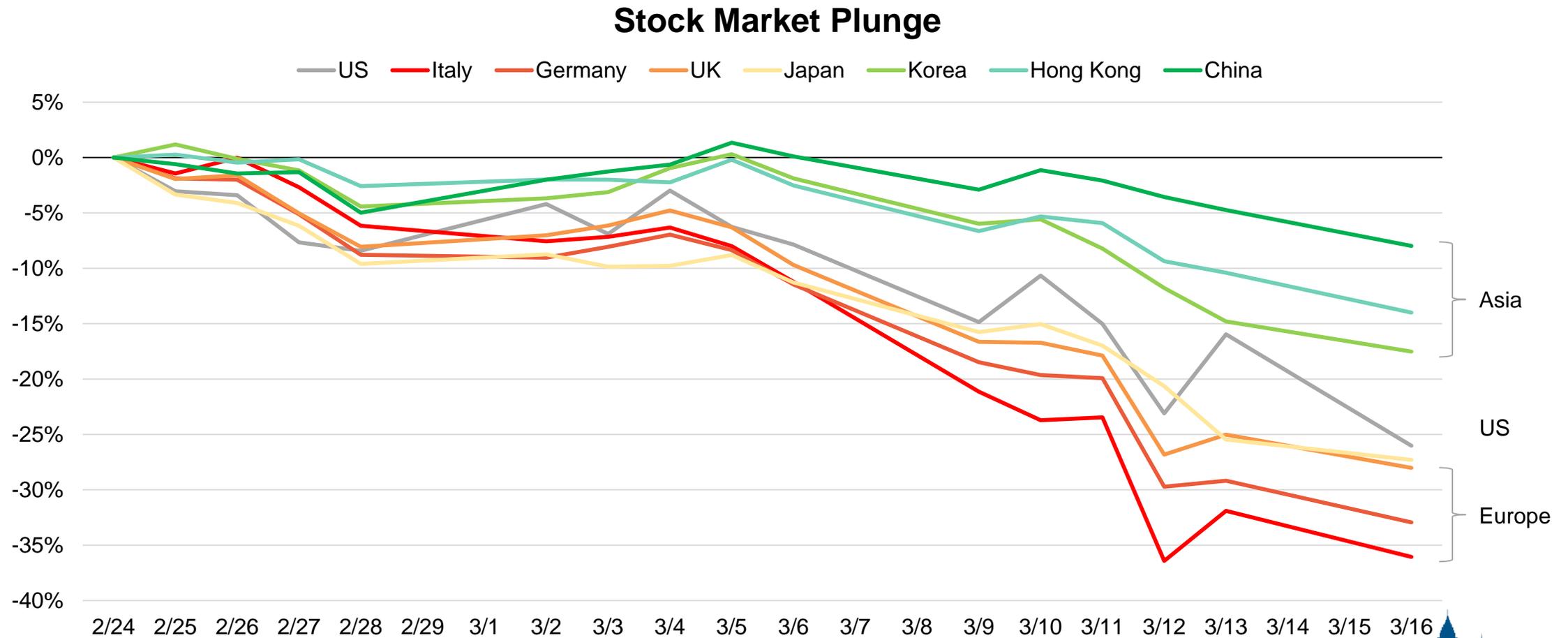


The US is behind on COVID-19 tests (per million people) compared to the UK, Italy, China, and South Korea, implying current data is likely underestimating infected cases, and the peak of daily new cases could be further delayed in the US.

COVID-19 Tests per Million People



Stock market sentiment reflects the significant concerns of the global pandemic, with the consensus suggesting the US is worse-off than East Asia but likely still better than Europe.



Source: FactSet, Cleveland Research Company

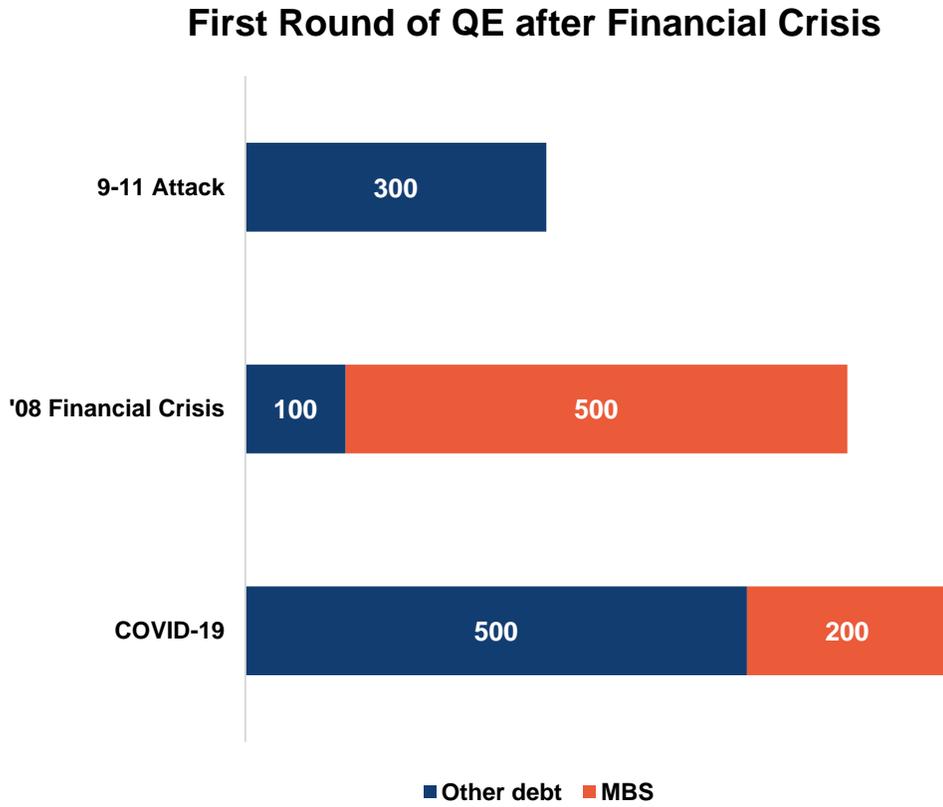
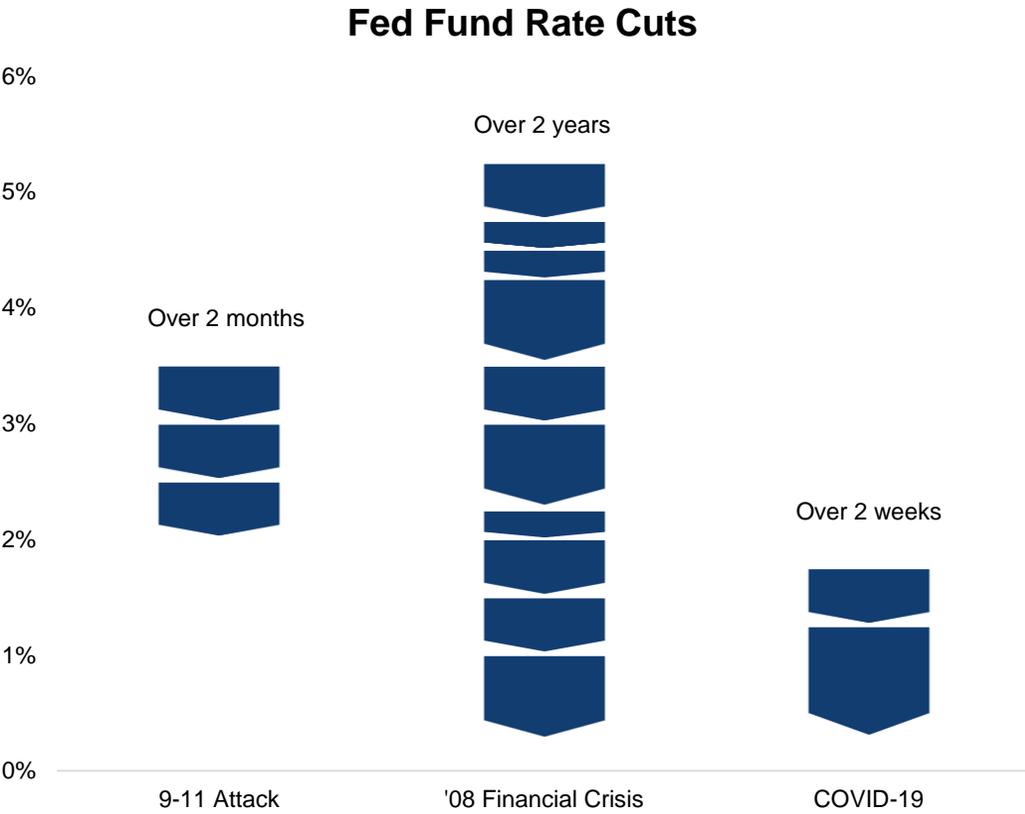


In response to the panic of the market, on March 15, the Fed used significant tools to provide broad liquidity including...

- Cut fed funds target to 0.0-0.25%
- Treasury holdings increase by at least \$500 billion, and mortgage-backed securities by at least \$200 billion
- Reduce reserve requirement ratios to 0%
- Lower primary credit rate by 150 basis points to 0.25%
- Extended discount window by up to 90 days
- US dollar liquidity swap lines with four other central banks
- Creation of Commercial Paper Funding Facility on March 17



...and these are much more aggressive and earlier compared to 9-11 and the 2008 financial crisis



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Source: thebalance.com, Cleveland Research Company



The Fed is trying to prevent the negative feedback loop of deflation by buoying corporations and consumers with cheap liquidity, anticipating weakness across both demand and supply.



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Appendix

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