

China's recovery from COVID-19

China KT & CRT

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China is getting back to speed - overall situation



work resumed¹ (by Mar 17)



recovery of metro passengers (by Mar 24)



recovery of coal consumption (by Mar 24)



provinces announced to resume schools in late Mar/early Apr (by Mar 20)



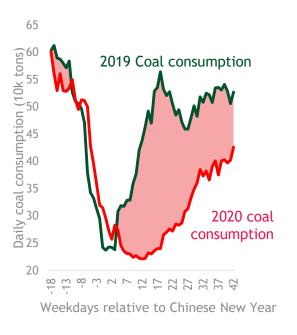
recovery of property transaction (by Mar 24)



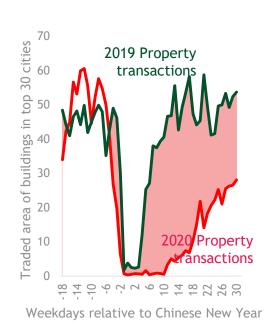
reopened (by Feb 20)

Backup: key indices of China economy recovery

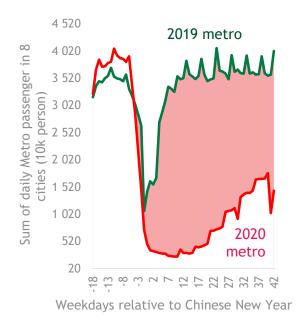
Daily coal consumption¹ (by Mar 24)



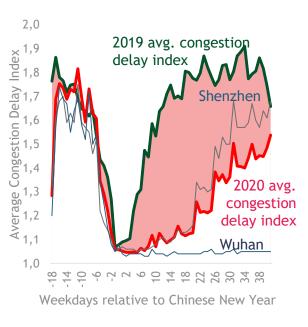
Property transaction (by Mar 24)



Metro passenger volume² (by Mar 24)



Average congestion delay index³ (by Mar 24)



- 1. Sum of Jerdin Electric, Guangdon Yudean Group, Datang International Power Generation, and Huaneng Power International, Inc.
- 2. Sum of Shanghai, Guangzhou, Chengdu, Nanjing, Xi'an, Suzhou, Zhengzhou, Chongqing
- 3. Average of Beijing, Shanghai, Guangzhou, Shenzhen, Wuhan Source: WIND

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China is getting back to speed -by sector view (1/2)

Healthcare

- >90% pharma companies resumed operation in late Mar (vs. 60% in Feb)
- ~80% Medtech companies resumed work in late Mar
- ~95% pharmacies resumed work in late March (vs. 90% in late Feb)
- 5-10% expected sales growth of pharmacy chains in Q1

Consumer

- 18% drop of retail goods sales, 43% drop of catering services, while 3% increase of online retail sales of physical goods in first two months of 2020
- ~90% of large retailing business¹ has resumed in Mar
- **5.6**% increase of daily sales of 1,000 retail enterprises monitored by Ministry of Commerce (compared to mid-Feb), a positive growth after consecutive negative growth since late Jan

TMT

- >80% electronic component manufacturers resumed operation in mid March (vs. 70% in early March)
- >80% smartphone supply chain resumed operation in late March
- ~5% cinemas reopened in late March

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China is getting back to speed - by sector view (2/2)

IG (Auto)

90% OEM resumed production on Mar. 11th (vs. 84.4% on Mar. 2nd)

>80% production capacity recovered in 11 of 13 major suppliers by Mar. 9th

66.2% work resumption in dealers on Mar. 23rd

YOY auto sales for Week 2 of Mar dropped 44%, climbing from 61% drop of Week 4 of Feb

IG (Real Estate)

~18.2% increase of total residential housing sales area in 16 major cities during 3.15-3.21 (vs. previous week)

~140% increase of total supply of real estate land of 40 large cities during 3.16-3.22 (vs. previous week)

CRland and Greentown(Stateowned companies) take a lead to purchase the land actively in February

~84.4% increase of Evergrande's sales due to the launch of online sales platform in Feb. (vs. 2019 Feb.)

FI

95% bank branches resumed work by 22 Mar

300Bn RMB and 500Bn RMB loan issued by PBOC during Jan-Feb

2.08% NPL rate (by end of Feb), only increased 0.06% from beginning of this year

750Bn total amount of corporate bonds issued in Feb, more than twice than last Feb

Appendix

Healthcare in China (1/2)

China HC overall

• COVID-19 is expected to have limited negative impact on China's healthcare industry overall and most of companies are back in operation in late March. Biopharma and medical service sectors encountered a decline in Q1, but expected to rebound rapidly in Q2 and Q3. Distribution and retail sector has experienced a growth as the demand for protective supplies & drugs, testing reagents increased significantly. Medtech sector also expected to increase as the demand for high-end medical devices is predicted to rise in long term.

China biopharma

- Covid-19 has limited negative impact on biopharma sector. >90% of pharma companies are back in operation in late March (vs. ~60% in late Feb)
- R&D investment, including R&D outsourcing demand, is expected to increase
- Sales are expected to gradually return to normal
 - Sales of anti-virus, antibiotics, TCM and other Covid-19-related products are expected to increase in Q1
 - Most non-epidemic related products expected to be affected, but impact throughout the year is limited
- Lot release of blood products, especially Human Immumoglobulin (PH4), has significantly increased in the short term due to Covid-19, which may lead to increases in price

China Medtech

- ~80% of Medtech companies resumed work in late March
- Funding for hospital development and capability expansion is expected to increase, including areas like life support devices, imaging, cardiac catheterization room, hemodialysis, IVD, etc.

Healthcare in China (2/2)

HC Distribution in China

• Demand for protective supplies & drugs and testing reagents has risen steeply with certain positive impacts on distribution. Nonetheless, sharp increases in international aviation expenses have hindered API export businesses

HC retail in China

- About 95% (compared to ~80% in late February) pharmacies resumed work in late March
- Sales of masks, thermometers, medical alcohol, and other related OTCs have increased significantly and pharmacy chains are expected to see a 5% -10% sales growth in Q1. In addition, public health values in pharmacies have been widely recognized in epidemic
- E-commerce capabilities offer drug retailers an advantageous position as social insurance scheme releases new opportunities.

Medical service in China

- Medical service sector has seen sharp declines in the inpatient and outpatient volumes (except for ICU) in Q1, but speedy rebound is expected in Q2 and Q3 as delayed medical demand returns to higher volumes
- Daily medical services have gradually return to normal
- Covid-19 has sparked partnership between hospitals and internet healthcare providers, and promoted the integration of social insurance scheme with internet healthcare services
- Online consultation volumes during the epidemic period has expanded exponentially

Consumer in China(1/2)

The epidemic has a large short-term impact on the consumer market, and retail sales of goods have fallen sharply

- Total retail sales of consumer goods went down by 20.5 percent in the first two months of 2020
 - From January to February, the total retail sales of social consumer goods amounted to 5,213 billion yuan, down 20.5 percent in nominal terms on a year-on-year basis (23.7 percent in real terms after deducting the price factor).
 - The catering services in the first two months gained 419.4 billion yuan, dropped by 43.1 percent
 - The retail sales of goods reached 4,793.6 billion yuan in the first two months, decreased by 17.6 percent.
- Consumer staples show resistance, while consumer discretionary plunged in the first two month of 2020

Among the income of retail sales of goods of the enterprises (units) above designated size:

- 必选消费Consumer Staples: Grain, Oil, Foodstuff(+9.7%), Beverage(+3.1%)
- 可选消费Consumer Discretionary: Garments, Footwear, Hats, Knitwear(-30.9%), Cosmetics (-14.1%), Household Appliances and AV Equipment(-30.9%)
- In the late Feb, we have seen sign of consumer goods sales bottom out
 - The nation's large agricultural product wholesale markets, large supermarkets, brand chain stores, e-commerce platforms, and the express delivery industry all opened more than 90%
 - In late February, the average daily sales of 1,000 retail enterprises monitored by the Ministry of Commerce increased by 5.6% compared to mid-February. This is a positive growth since the consecutive negative growth in late January.

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Consumer in China(2/2)

Retail and catering companies accelerate transformation and online retailing continues to grow

- The online retail sales of physical goods reached 1,123.3 billion yuan in the first two months of 2020, an increase of 3.0 percent, accounting for 21.5 percent of the total retail sales of social consumer goods
- Retail and catering companies are actively exploring online businesses and accelerating the development of
 contactless services such as Internet sales and food delivery. Relevant takeaway platform data shows that from
 January 26 to February 8, 2020, users using "contactless delivery" orders accounted for more than 80% of the total
 order amount.

TMT in China (1/2)

Consumer devices

- Severe demand decline in end user device in Feb, e.g., domestic mobile phone shipments dropped 56% Y/Y in Feb; home appliances saw negative growth in both online and offline in Feb
- Offline sales channel reopened in March, e.g., Vivo reopened over 90% offline stores by mid March; Apple reopened all of its mainland stores on March 13.
- ~80% of electronics manufacturers resumed work by mid March, up from ~70% in early March¹. Assembly factories resumed work in late February. By late March, Foxconn has resumed ~87% of its production line in Zhengzhou. Xiaomi and Vivo have resumed over 80% and 90% of their supply chain in March

Semiconductor

- Limited impact to semiconductor upstream
 - e.g., Foundry continued operation during the outbreak
 - e.g., SMIC claimed to resume 100% of its normal capacity by the end of March. Packaging and testing factories resumed work in February.

Enterprise hardware

 Demand for cloud related hardware such as servers has increased due to growth in remote working and online entertainment

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TMT in China (2/2)

Internet/consumer apps/software

- COVID-19 boosted user traffic for internet sector, particularly for online gaming, online video and grocery delivery. Online advertising was negatively affected due to closures of offline businesses.
- Over 55% of restaurants resumed work in early March, which facilitated the recovery of food delivery
- Remote working SAAS such as DingTalk saw explosive growth in February and March. Over 120 million students took classes via DingTalk in March.
- Most ecommerce businesses have resumed work in February as logistics started to recover. Online demand was less affected vs. offline. The total online retail sales dropped 3% Y/Y in Jan-Feb vs. 20% Y/Y decrease for overall retail during the same period

Media

• Cinemas started to reopen in mid March with ~5% of domestic cinemas reopened by March 22. Customer demand remained weak. The total ticket sales was just RMB110,000 during the first week of reopening (March 16-22)

Source: Lit research

Auto in China

- Retail side: Auto sales of W4 of Feb. dropped 61% YOY, but sales improved significantly starting from Mar as sales decline of W1 and W2 of Mar. are 50% and 44% YOY respectively.
- OEM production: work resumption rate of major OEMs on Mar. 11th is 90.1% while employee return rate is 77%, a notable increase from 84.4% of resumption and 67% of employee return on Mar. 2^{nd 1}
- Supplier production: 12 out of 13 China major suppliers resumed work capacity by 50+% on Mar. 9th; 11 of them with 80+% of work resumed
- Dealer side: composed work resumption index increased from 19.8% on Feb. 11th to 30.19% on Feb. 28th, 50.49% on Mar. 10th, and all the way to 66.20% on Mar. 23rd.

Real Estate in China (1/2)

RE Industry-housing trading side

- Real Estate industry saw increases in trading data in March. The trend of residential housing sales area remains upward. The trading data in 16 major cities monitored¹ increase on a week to week basis
 - In Week 12(3.15-3.21), the total residential housing sales area of the 16 monitored major cities increased by 18.2% compared to previous week

RE Industry-land supply and demand side

- The overall supply of real estate land rose week to week, however the paid transfer land fee (amount of money for real estate land sold) reduced
 - In week 12(3.16-3.22), the total supply of real estate land of the 40 largest cities monitored was increased by 140% compared to previous week. The real estate land sold in major cities decreased by 17%. The overall paid transfer land fee reduced by 36%, and the paid transfer land fee of residential land decreased by 30%.

RE Companies- player side

- State-owned enterprises took the lead to purchase the land actively showing that they hold a positive attitude toward the real estate market.
 - The paid transfer land fee of Top10 land acquisition RE enterprises in January and February are 63.9 billion yuan and 78.4 billion yuan respectively, the amount of land sold for Top 10 and acquisition RE enterprises in February rose 23% from previous month.

Source: CREIS 13

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Real Estate in China (2/2)

RE Companies- player side

- Evergrande Real Estate Group launched online marketing platform forcing the industry marketing innovation
 - Since the start of the online sale by Evergrande on february 13, more than 90% of the top 100 RE companies have gradually launched online sales business. Evergrande's sales in February were 46.07 billion yuan, up 84.4% compared to last February
- In the current financing window period, the financing cost of large-scale housing enterprises decreased and the cost of small and medium-sized housing enterprises increased resulting in industry reshuffle accelerating

RE Policy -government side

• In week 12(3.16-3.22), Governments of Guangzhou, Nanjing, Suzhou etc. issued talent policies which encourage the talent inflow and settlement

Source: CREIS

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FI in China

Branch reopening

• Except hu bei province, overall 95% bank branches are back to work across different regions

PBOC has issued loans to provide market liquidity

 PBOC has issued 300bn RMB and 500bn RMB loan during Jan-Feb to help minimize the impact of work/production due to COVID-19 virus

NPL rate is under control

• As of end of Feb, bank NPL rate is 2.08% which has only increased 0.06% from beginning of this year

PBOC has set up green channel for interbank bond market

• In February, the total amount of bonds issued by enterprises was 750 billion, more than twice than last year

Bank index bounce back

The bank index has bounced back from Feb 3rd

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Potential double dips?

Number of new cases rose slightly, mainly from overseas

- Cumulative 353 oversea cases since 2/26
- 39 new oversea cases on 3/22, accounts for 100% of new cases outside Hubei province.

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