CHINA ECONOMIC UPDATE DECEMBER 2020

What do alternative indicators suggest about China's COVID-19 downturn and recovery?

NAB Group Economics

In stark contrast to the smoothness recorded in the past decade, China's official economic data have been highly volatile in 2020 – reflecting the impact of COVID-19 restrictions on activity in the early months of the year. Historically there has been some scepticism around the accuracy of the official data – inspiring alternative indicators for China's economy. However, these indicators broadly confirm the path of China's official data in 2020.

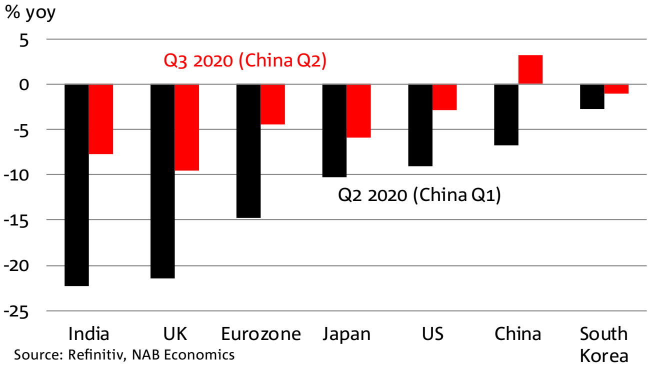
COVID-19 DROVE A DEEP DOWNTURN

According to official data, China's economy contracted by 6.8% yoy in the first quarter of 2020, as measures to control the spread of COVID-19 stalled activity. This was the first time since the end of the Cultural Revolution in the mid-1970s that Chinese authorities reported a negative rate of growth.

The subsequent recovery over the following two quarters – 3.2% yoy in Q2 and 4.9% yoy in Q3 – far outpaced most other economies, which continued to face challenges bringing COVID-19 under control, with widely varying degrees of success.

DOWNTURN IN MAJOR ECONOMIES

China's decline relatively modest, with a rapid recovery

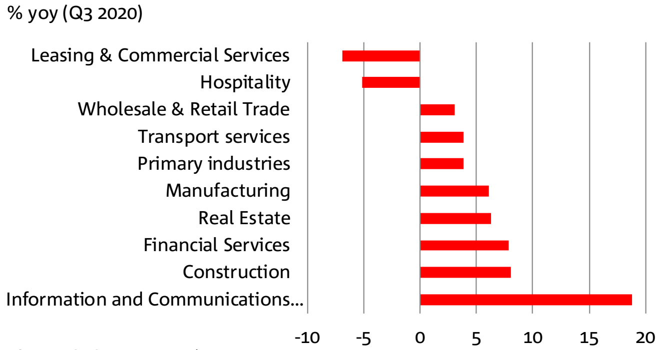


Source: Refinitiv, NAB Economics

Overall, China's industrial sector grew more rapidly in Q3 than services (which had been the key engine for growth prior to COVID-19). This was led by an 8.1% yoy increase in construction, however manufacturing also grew more rapidly than the broader economy – up by 6.1% yoy. In contrast, the services sector increased by 4.3% yoy – with strong increases in the Information and Communications Technology sector (recording an increase of 18.8% yoy in Q3) and Financial Services (up by 7.9% yoy), while hospitality services and leasing & commercial services contracted by 5.1% yoy and 6.9% yoy respectively.

CHINA'S RECOVERY BY SECTOR

Highly mixed conditions with a range of services lagging



Source: CEIC, NAB Economics

We have previously outlined a range of concerns around China's national accounts data. These data are produced rapidly and are rarely revised (compared with other international economies), and may continue to over-represent large, state-owned enterprises (that in turn overstate the share of manufacturing and construction compared with the services sector) – despite transitioning to a more up-to-date system of national accounts in 2016.

These concerns suggest that China's official data may not accurately capture the scale of the downturn, due to COVID-19 restrictions but similarly may not capture the recovery in full. Such concerns have inspired a

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range of observers to develop alternative measures of China's economy.

ALTERNATIVE INDICATORS SHOW SOME DIFFERING OUTCOMES

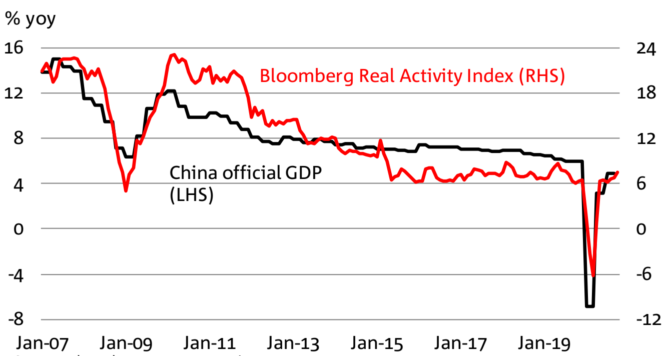
There are a wide range of alternative indicators of economic activity in China. Most rely on lower profile official statistics, which are thought to be less prone to smoothing or distortions that may exist in headline data.

As we noted in our previous exploration of these alternative measures, they have a range of shortfalls, including an inability to provide a complete picture of the economy and that they cannot be independently validated, meaning that there is no way to ascertain whether these measures provide a more accurate picture of China's economy than official statistics. Nevertheless, they can provide a useful double check on how the economy is tracking.

For example, Bloomberg's China Real Activity Index weighs a range of representative indicators from manufacturing, construction, energy, trade and services, divided between old economy (mostly heavy industry) and new economy segments (including higher tech manufacturing and services). Similarly, Capital Economics' China Activity Proxy uses a selection of data, including construction, electricity and transport sectors. Fathom Consulting's China Momentum Indicator builds on the Li Keqiang index – the favoured measure of China's current Premier when he served as Party Secretary in Liaoning province – adding services components to the original measure of rail freight, electricity consumption and bank lending.

REAL ACTIVITY INDEX

RAI points to weaker growth in past five years and a smaller downturn



Source: Bloomberg, NAB Economics

Each of these measures show a significant slowdown in China's economy during the period from 2015 through 2016. There was no substantial recovery in the Bloomberg index following this period. In contrast, the other two measures lifted after 2016 but then slowed more rapidly than the official Chinese data over the course of the US-China trade war – meaning that all of the measures implied a weaker starting point going into the COVID-19 pandemic.

The alternative indicators showed some notable differences in their measurement of the downturn in Q1 2020. The Bloomberg indicator did not fall as sharply as the official measure of GDP during this period, however its subsequent recovery brought the indicator back to its pre-COVID-19 levels by the end of Q3, something that China's official data is yet to do.

The China Momentum Indicator fell sharply in February, however its overall decline in Q1 was less substantial (around -5.3% yoy) than official data. That said, the recover evident in this measure has been much slower than official data suggest – with a contraction in Q2 and very modest growth in Q3 (when measured in year-on-year terms).

OTHER INDICATORS

Higher volatility than official GDP

Source: Capital Economics, Refinitiv, NAB Economics

The China Activity Proxy (CAP) recorded the largest decline in Q1 of these alternative measures – down by around 15% yoy – comparable to the downturn triggered by COVID-19 countermeasures in the Euro-zone. The subsequent recovery in the CAP has been strong – outpacing the growth in China's official GDP measure in Q3 and in October 2020, the CAP recorded its strongest reading in just over three years.

CONCLUSIONS

While there remains uncertainty around the accuracy of China's economic data, the results in 2020 fall within the range of outcomes of these alternative measures. Therefore, taken together, they broadly confirm the picture presented by the official data; namely, there was a substantial fall in China GDP in Q2, but a relatively quick recovery. Unlike most other countries, GDP was higher than pre-COVID-19 level by Q3, even though the annual growth rate was likely still weaker than previously.

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