

## China's power shortage: another supply side shock to global inflation

Tommy Xie Dongming  
Economist  
+65 6530 7256  
[xied@ocbc.com](mailto:xied@ocbc.com)

- The power shortage in Autumn could be mainly the result of supply side shock due to two factors, including surging coal prices and China's climate push.
- Looking at the bigger picture, the recent coal crisis in China and natural gas crisis in Europe are no coincidence.
- China's recent power shortage is not an idiosyncratic issue. The impact is likely to be more long lasting if we have another cold winter.
- Domestically, the recent power shortage in China could be the catalyst for China to speed up its reform in its electricity market, which is expected to drive production costs higher.
- Whether the world needs to worry about stagflation, that will largely depend on the weather this upcoming winter.

In my memory, China's power shortage is not something new. In the past decade, my friend's factory in Shanghai has been shut down once every few years in hot summer for just a few days when demand for electricity peaked. Then, this one single example seemed to suggest that the impact of power shortage on Chinese and global economy is quite limited.

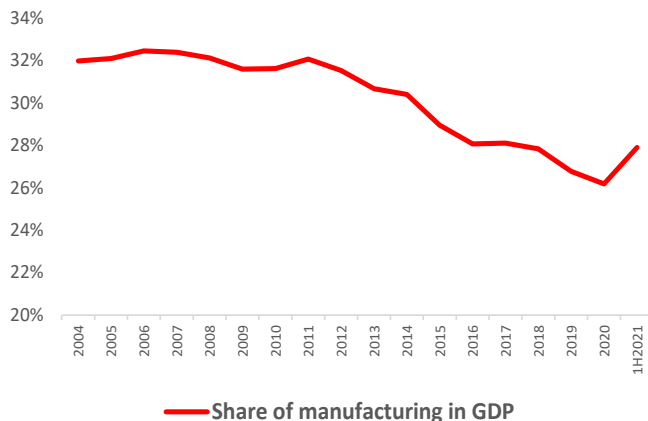
However, the sentiment has clearly shifted this time as concerns about a more long-lasting effect heightened for three reasons. **First**, the current power shortage is happening outside of the usual summertime, where peak demand for electricity typically occurs. **Second**, the power shortage happens against the backdrop of global climate push. With the COP26 meeting in November and winter Olympics in February 2022, the expectation on Chinese government's rollback of control of energy intensity and consumption is low. **Third**, the power shortage happens at the same time when European are facing natural gas shortage. All these point to the making of the perfect (electrical) storm.

### What has caused the power shortage in China?

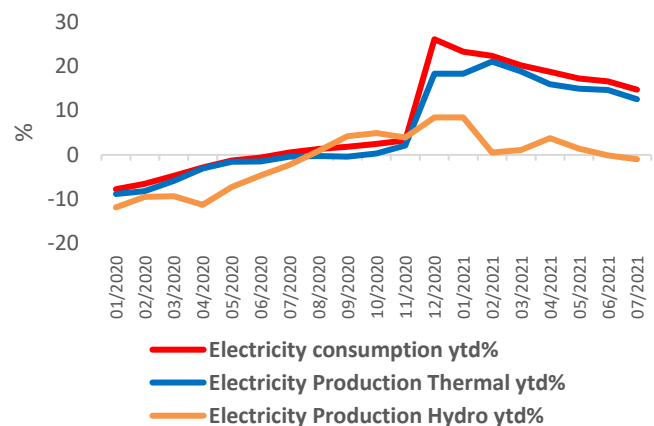
The power shortage in Autumn could be mainly the result of supply side shock due to two factors, including surging coal prices and China's climate push to meet China's dual controls of energy intensity targets and caps on total energy consumption. The supply chain shift out of China has paused since the second quarter of 2021 as a result of outbreak of delta variants in emerging economies. External demand has been one of the key drivers to China's growth this year with the share of manufacturing in China's GDP rebounded in 2021. The accelerating industrial activities led to rising demand for electricity. However, due to drought conditions experienced in southern China, the output of hydroelectricity fell this year and the demand for thermal power surged, which drove up coal prices. The recent surging coal prices has led to disruption to electricity production, as some power

generators are unable to pass higher costs to end users due to current pricing mechanism.

**Chart 1:** Share of manufacturing in GDP rebounded in the first half of 2021.



**Chart 2:** Thermal power continued to do the heavy lifting in the absence of stable hydroelectricity



Source: Wind, CEIC, OCBC Bank

### Two sides of the coin

Looking at the bigger picture, the recent coal crisis in China and natural gas crisis in Europe are no coincidence. The cause of natural gas crisis in Europe could be attributable to four factors. **First**, China's demand for natural gas continues to rise this year to reduce its reliance on coal. **Second**, the rising carbon price in Europe may also cap the room for power plants to switch back to coal. **Third**, the bounce in Russian gas production failed to meet demand spikes both domestical and externally. Concerns about extremely tight gas markets in Europe this upcoming winter heightened against the backdrop of low inventory. **Fourth**, the increasingly volatile weather also contributed to recent natural gas shortage. The warm winter in 2019/2020 and cold winter in 2020/2021 has contributed to inventory miscalculation. Meanwhile, the contribution from renewable energy was also affected by volatile weather such as drought and lack of wind. For example, the recent drought in Brazil reduced their supply of LNG.

Overall, we think China's recent power shortage is not an idiosyncratic issue. The development of the story will depend on the weather this winter: **The impact is likely to be more long lasting if we have another cold winter.** According to the World Meteorological Organisation, a weak La Nina event may re-emerge later in 2021 for the second consecutive year. This may exacerbate existing drought in some parts of the world and increase the risk of heavy rainfall and flooding in others. We have seen the spill-over effect from this natural gas crisis to other markets, such as rise of oil prices due to replacement demand. This may create additional inflationary shock to the world.

Domestically, the recent power shortage in China could be the catalyst for China to speed up its reform in its electricity market. Electricity prices are

likely to be revised higher to reflect the rising costs. This may drive local production costs higher, which could be inflationary to the world.

To conclude, this is not the usual power crunch which we are used to seeing in the past. Together with the natural gas shortage in Europe, we need to pay more attention to possible impact on global inflation. Whether the world needs to worry about stagflation, that will largely depend on the weather this upcoming winter.

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