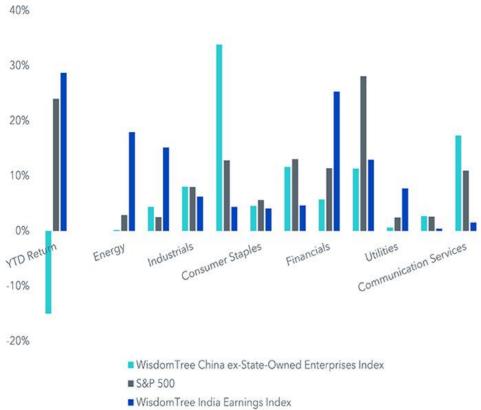
CHINA AND INDIA ENERGY: TWO COUNTRIES FOR THE SAME TALE?

Liqian Ren — Director of Modern Alpha 12/10/2021

Chinese equities, particularly <u>offshore</u> equities, suffered relentlessly in the headlines for their negative performance. India was the other way around: people likely remembered India's heartbreaking pictures of its COVID surge, but not its top-performing equity market.

Figure 1: YTD Performance and Sector



Sources: FactSet, Wisdom Tree, as of 10/29/21. Weights subject to change. You cannot invest directly in an index. Past performance does not guarantee future results.

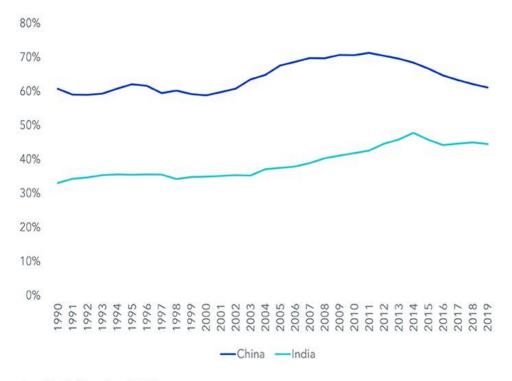
For definitions of indexes in the chart, please visit the glossary.

But when it comes to energy—particularly coal-generated electricity—the two countries are remarkably similar.

About 70% of both China and India's electricity are generated from coal. It's the single largest energy source, for electricity and other uses, in both countries. As shown in the chart below China has a higher percentage of coal as energy source, which expands past electricity, than India.

Figure 2: China and India: % Energy Sources from Coal

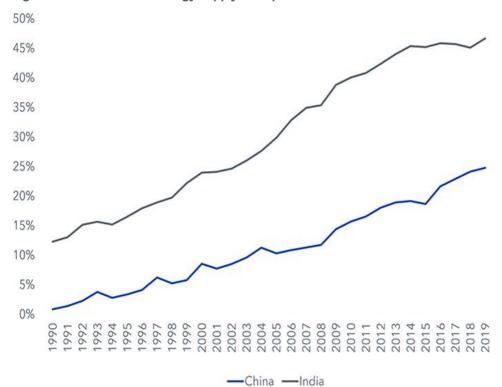




Source: International Energy Agency, 1990-2019.

And both India and China have been increasingly reliant on imported energy, which includes coal, oil and others.

Figure 3: India and China Energy Supply: % Imports

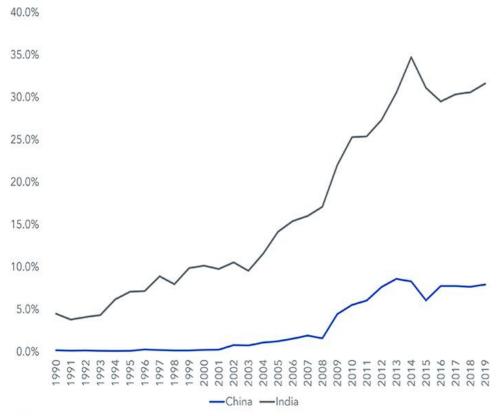


 $Source: International\ Energy\ Agency,\ 1990-2019. This\ chart\ is\ indicating\ the\ percentage\ of\ energy\ that\ imported\ to\ both\ India\ and\ China.$

But in China, less than 10% of coal is imported. Because most top coal producers are state-owned, the government also has some power in influencing the coal price.

Figure 4: India and China Coal: % Imported





Source: International Energy Agency, 1990-2019.

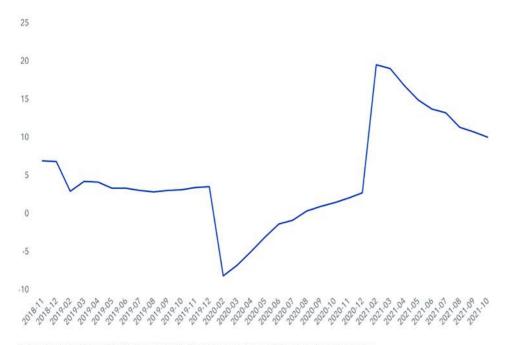
This was the energy and coal landscape in September when China was facing an electricity shortage. It was forced to ration electricity until early November, except for those companies considered highly energy inefficient, such as aluminum production.

Because China has relied on exports for its growth, which tend to come more from manufacturing than services, electricity demand has gone up significantly. Coal prices were very low in 2020 due to the pandemic, depressing coal output, and then reversed rapidly. Electricity prices are regulated, which created a perfect storm as many electricity generating companies were reluctant to generate electricity at a loss.

The following chart illustrates how dramatic electricity demand has increased after initial COVID-related economic slowdown in 2020.

Figure 5: China Electricity: YTD Cumulative Electricity Production (%y/y)





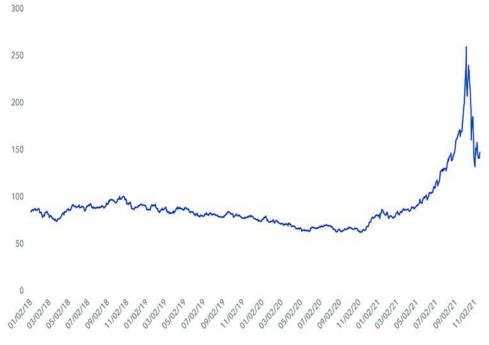
Source: China National Bureau of Statistics, Nov2018-Oct2021. This chart depicts the increase of electricity production year over year.

In the last two months, China's National Development and Reform Commission (NDRC) has asked state-owned coal producers to increase output and prioritize coal transportation, increased coal imports, relaxed the price band for electricity trading and allowed electricity prices to increase 50% for high-energy-use industries.

The Zhengzhou futures exchange also put limits on who, and how many, domestic coal futures contracts could be traded, reducing financial speculation. Coal prices, though still elevated, have come down significantly.

The energy crunch thus far has been alleviated, before it made real, negative economic impact, with the manufacturing official <u>Purchasing Manager Index (PMI)</u> dipping into contraction in October.

Figure 6: New Castles Coal Futures Price



Source: Bloomberg 01/01/18-11/17/21.

In the short term, the current Chinese energy crunch is close to being over. But in the long run, energy will continue to be the constraining factor for Indian and Chinese growth.



The more volatile the weather and global demand, the more India and China will rely on coal for energy.

As we discussed with Chase Taylor of Pinecone Macro in the *China of Tomorrow* podcast, electricity and energy demand, in our opinion, will not be peaking soon. It is no wonder that while China and India promised carbon neutrality in 2060 and 2070 respectively, both countries want watered down language on coal usage in their commitments and are muted on any concrete targets in the next 5–10 years.

You can listen to the full episode below:

China of Tomorrow by WisdomTree Asset Management · Interview with Chase Taylor, Pinecone Macro Research

For standardized performance and the most recent month-end performance click <u>here</u> NOTE, this material is intended for electronic use only. Individuals who intend to print and physically deliver to an investor must print the monthly performance report to accompany this blog.

View the online version of this article here.



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DEFINITIONS

Offshore: Refers to firms producing goods and/or services outside Japan, frequently in the country to which they are being sold.

Purchasing Managers' Index (PMI): An indicator of the economic health of the manufacturing sector. The PMI is based on five major indicators: new orders, inventory levels, production, supplier deliveries and the employment environment. A reading above 50 indicates an expansion of the manufacturing sector compared to the previous month; below 50 represents a contraction while 50 indicates no change.

