Stock Market Performance of Chinese Chemical Companies 2015-2017

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China´s stock markets include quite a large number of chemical companies. The share value of 50 of these companies is used by the China Securities Index Co., Ltd. to calculate the Chemical Sector Stock Index, CSI Chemicals Sub-Industry Index (CSI).

These 50 stocks are taken both from the Shanghai Stock Exchange and the Shenzhen Stock Exchange. The 10 biggest included in the index are Wanhua Chemical (isocyanates and other chemicals), Kangdexin (laminating films), Sanju Environmental Protection (chemicals used in environmental protection), Zhejiang Longsheng (textile chemicals, fine chemicals, auto parts), China Jushi (fiberglass), Hualu-Hengsheng (fertilizer), Rongsheng Petrochemical (PTA, polyester), Qinghai Salt Lake Industry (potassium chloride and other inorganic salts), Zhongtai Chemical (chlor-alkali, PVC, salt, calcium carbide and coke) and Tongkun Group (polyester). Thus the index is dominated by relatively basic commodity chemicals and plastics, with a lower emphasis on specialty chemicals.

How have the listed chemical companies performed compared to these indices? Figure 1 gives an overview of the relative performance from 2015 to 2017.

An analysis of the figure essentially yields the following observations:

• In the period observed, the CSI outperformed the broader indices (e.g., at the end of the observation period CSI was at 129% of the initial value while the Shanghai index was at 99% of the initial value)

• However, this outperformance was only observed in the year 2015. In 2016 and 2017, the CSI performed very similar to the broader indices (e.g., at the end of 2017 the CSI was at 98% of the value of the beginning of 2016, while for the Shanghai index the value was 100%)

• At least in 2015, the CSI was substantially more volatile than the broader indices, reaching a maximum level of more than 200% of the starting point while the Shanghai index only reached about 154%

• Despite this difference in volatility, in general the CSI seems to be affected by the same trends and movements as the broader indices (the peaks and troughs of the curve mirror those of the broader indices)

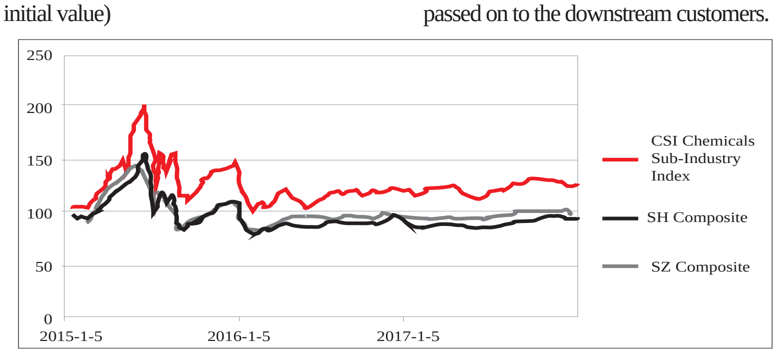

Fig. 1: China Chemicals Sub-Index versus Shanghai and Shenzhen indices, 2015-2017

What do these observations mean?

First of all, the substantial drop in oil prices observed in 2015 (from an average above US$100 per barrel until about mid-2014 to about US$50 per barrel throughout 2015) is the most likely reason for the outperformance of the chemical stock in 2015. For many of the chemical companies in the CSI, particularly those in organic commodity materials, raw material prices can account for 50% or more of total revenue. And of course these raw material prices closely follow the oil price. In fact, had the chemical companies been able to capture all the benefit from the lower oil prices themselves, their stock should have gone up much more than just 30%. However, of course a large share of the lower input costs has to be passed on to the downstream customers.

Second, the greater volatility observed for the CSI in 2015 is probably partly also due to the higher importance of the oil price changes for this sector. Another factor is that – all other things being equal – a broader index should always show less volatility than a narrower one such as the CSI.

Third, and somewhat surprisingly, apart from the oil price effect in 2015, there does not seem to be much of a difference in the performance of the CSI versus the broader indices. This may be a sign of the stock market in China still being relatively immature – investors so far may lack the expertise to distinguish between sectors with good and with inferior performance.

Finally, there was no relative weakening of the chemical sector in 2017. In fact, both the CSI and the Shanghai index ended the year 2017 at 105% of the level of early 2017. In some way this may be surprising as 2017 was a year in which the Chinese government displayed the serious intention to improve environmental protection, which led to a number of production stops and cost increases in the chemical industry. To the extent that investors have taken these factors into account, they may have counterbalanced them with the benefits of tighter regulation for the bigger chemical players (as listed companies typically are), such as the consolidation of the industry and the lower competition from small, marginal players which were most affected by the tightened regulation.

It will be interesting to see how the CSI will perform in the future. Is it a good decision to bet on chemicals? Of course, it needs to be kept in mind that there is a huge variation among the different players in the index. For example, earnings per share of Wanhua Chemical grew by 560% in the period from 2015 to 2017 and stock prices approximately doubled, while those of Qinghai Salt Lake declined by 48% in the period from 2015 to 2016, with the stock value decreasing by about 10% in this period). So, for the individual investor the choice of individual stock still matters more than whether to bet on chemicals as a whole or not. ■