

OCC market and China

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Most people interested in OCC have seen or heard forecasts predicting the imminent rise of OCC prices over the last few years. Forecasts have come in the form of soon-to-occur price spikes and steadily rising prices over time. However, for quite a while, OCC prices have been falling steadily, and within a stubbornly low range. How could this be since collection rates reported by the press are high and common wisdom says we're about to run out of OCC? Since OCC is the largest single expense in recycled packaging products like containerboard, investment decisions based on flawed OCC predictions can be costly.

What has actually been happening with OCC is interesting. Far from rising as predicted, OCC prices have trended lower (until just this month) for the last three years. China's imports of OCC have been declining, too. Many have explained this in terms of a "slowdown" of the Chinese economy. However, OCC demand can't be slowing at the same time as the economy is growing at 6.5%, even if that rate is lower than in previous years!

Another common belief is that domestic U.S. collection rates are high – close enough to full saturation to indicate stress in OCC availability which keeps pushing prices upwards. This also turns out not to be true. Fisher International Inc., STE's partner company in USA, analysis shows that published OCC collection rates are misleading. Publishers report regional collection rates as the amount collected divided by domestic production. The reality is that there is a lot more OCC available to collect in North America and Europe than what is produced domestically.

Developing countries such as China export to North America and Europe large amounts of finished goods that are packed in boxes. Those boxes are available for collection once their goods have been delivered. When these boxes are factored in, one sees that North American

Collection rates are still among the lowest in the world, there is headroom to collect more, and there should not be constant upward pressure on prices. (We have modeled the actual process to predict price cycles and turning points with high accuracy so talk with STE for more information.)

So why have OCC prices been falling and what will happen to them next? Systems Thinking Europe Oy (STE), simulates the OCC market, taking into account the critical factors that drive when and why OCC prices change. Normally, OCC prices respond to the drivers of OCC which are variants of supply and demand measures. However, today, the OCC market is driven by another phenomenon and is in an unusual state. The next price event will probably take place soon and be quite dramatic. Here's why.

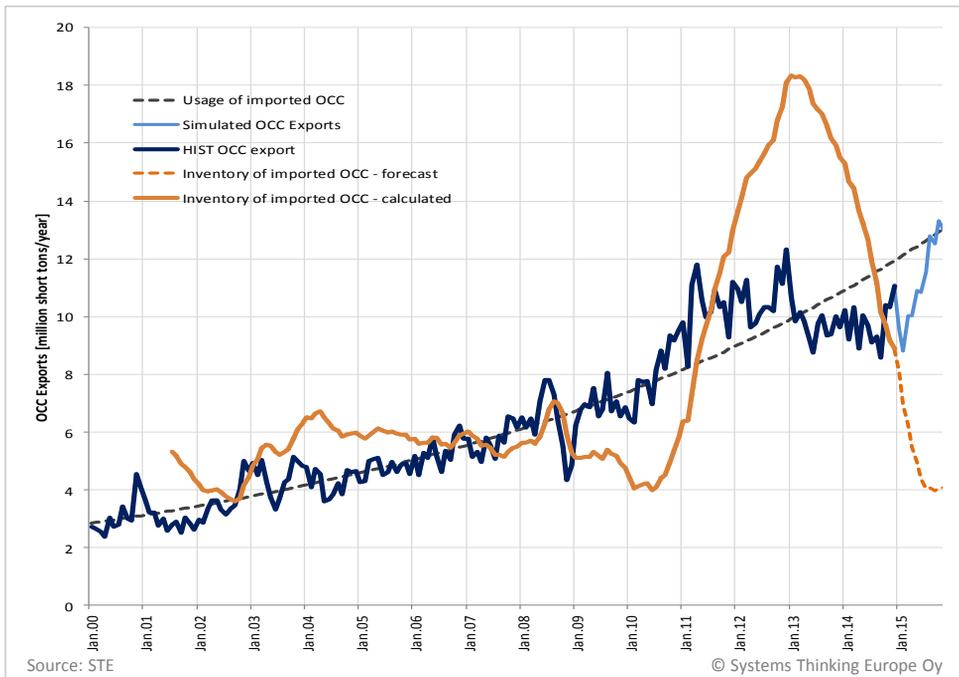


Figure 1 – How the Chinese OCC inventory affects buying behavior: When inventories (orange line) grew above normal levels starting in 2011, exports actually declined in volume, even though the economy was still growing (and OCC prices, therefore fell).



Until mid-2010, OCC exports from the U.S. to China were in synch with economic growth and growth in China's packaging production (see the blue lines in Figure 1). As a result, inventory levels (the orange line) through 2010 were basically flat, too. In mid-2010, however, China started to build OCC inventory and continued to do so for a full two-and-a-half years. Inventories peaked at an extremely high level at the beginning of 2013. At this point, Chinese OCC buyers decreased their order levels to less than what they were using. The decline in demand caused prices to fall. However, since data on China's OCC inventories are not reported publicly few people realized why exports to China were falling and few drew the correct conclusion on why prices started falling, too.

THE MATH BEHIND THIS TREND

For those interested in the math behind this trend: inventories grew by 3.5 million tons over a two-and-one-half year period. The inventory was not entirely raw OCC. Some was converted to roll stock and some of that was converted to boxes that were put into inventory. Altogether, the supply chain contained 3.5 million tons more of OCC than it should have had for the level of production in that period. (STE clients interested in learning more should feel free to contact us.)

All this will change once China's OCC inventory levels fall to their typical operational level. Chinese buyers will be forced back into the market and that will result in an increase in prices. Once prices start to rise, buyers will try to buy additional amounts before they rise further. This will create a spike that overshoots where prices will eventually end up. We calculate that prices will rise in the third quarter of 2015.

Low OCC prices created a windfall for producers of recycled packaging products and have lasted long enough to make many feel they might continue at a low level for much longer. However, once prices rise again, it is highly unlikely that the phenomenon will repeat itself in the foreseeable future. Once the coming price spike has resolved itself, prices will remain volatile but will again be driven by cyclical forces that were in play before the inventory phenomenon and will behave as described in the STE model.

