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Commodity bubble pops as China model changes

China's need to rebalance its economy will maintain pressure on its growth. This has critical implications for future petrochemical demand

PAUL HODGES INTERNATIONAL ECHEM

hemical companies face a major challenge now that China's business model has changed. The country is no longer aiming to achieve high levels of economic growth by operating an export-focused development model, supported by vast infrastructure spending.

Instead, its New Normal policies are focused on boosting domestic consumption by creating a services-led model based on exploiting the opportunities created by the power of the internet.

This "China Chill" highlights the chaos now having an impact on petrochemical feedstock and product markets. As we discuss in "Five questions every chemical company needs to answer", the new ICIS/International eChem study, no other country or region can possibly replace China now that its demand growth has stalled.

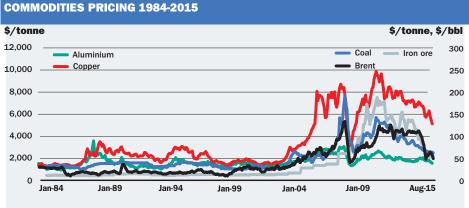
Of course, petrochemicals are not alone in having to face up to this challenge. Sadly, a wide range of industries from commodity producers through to luxury goods manufacturers are realising their strategies have been



based on 2 false assumptions:

firstly, that up to 3bn people were about to become middle class by Western standards; and
secondly, that this would drive a "supercycle" of new demand.

The problem arose because of wishful thinking by international organisations such as the Asian Development Bank. They argued that a "middle income" of \$10-20/day in the emerging economies equalled "middle class", and suggested that anyone earning above \$50/ day was "high income". Understandably,



SOURCE: International eChem pH report, IndexMundi

many people heard the words "middle class" but did not understand the definition.

Yet as the Pew Institute reported recently: "People who are middle income live on \$10-20 a day, which translates to an annual income of \$14,600 to \$29,200 for a family of four. That range merely straddles the official poverty line in the United States – \$23,021 for a family of four in 2011."

Pew's report also confirmed that:

■ 84% of the world's population have incomes below the US poverty line; and

■ 87% of all "high-income" populations live in North America and Europe, with just 1% living in Africa, 4% in Latin America and 8% in Asia.

This wishful thinking was compounded by the stimulus policies adopted by central banks from 2004, first through the subprime bubble and then via quantitative easing. By keeping interest rates very low, and then printing trillions of dollars, they created massive bubbles in financial and property markets. In turn, this created one-off "wealth effects", which temporarily appeared to have boosted consumer demand.

The opening paragraph of a landmark paper from October 2010 by Morgan Stanley,

Petrochemicals – Preparing for a Supercycle, summed up the confusion that was created.

"An inflection point in the global plastics market, driven by China and India:" it reads. "After a recent period of slower growth and a decoupling from global GDP growth, we now expect the strongest period of ethylene demand growth in the past 20 years. We forecast that in the next five years, incremental annual consumption in China and India alone will equal the total current consumption in the US, until recently the world's largest ethylene consumer, and still responsible for 15% of the market."

Very soon, this became a consensus view. And in turn it drove a major rally in commodity prices. Prices of key raw materials such as oil, copper, iron ore and cotton raced higher, in some cases to new all-time highs.

The investment thesis was simple. The coming supercycle would inevitably require unprecedented volumes of raw materials, and provide earnings to match for those companies who chose to invest in the new capacity required.

CHINA POLICIES BURST BUBBLE

Now, of course, China's adoption of its New Normal policies is bursting the bubble. Prices for most commodities are returning to their historical, and much lower, levels. This is already creating major challenges for those companies and countries that had believed in the flawed analysis.

Two of the four BRIC nations, Brazil and Russia, are already in recession as their export volumes and earnings tumble, further reducing their potential future income.

Data for chemical industry capacity utilisation from the American Chemistry Council (ACC) confirms the downturn now under way. It shows the peak created by the subprime bubble in the mid-2000s and then the recovery after the great financial crisis of 2008, as stimulus policies went into overdrive. But utilisation began to weaken in the second quarter of 2011 and has since fallen back to just 81.7% in August 2015, well below its 1987-2008 average of 92.9%.

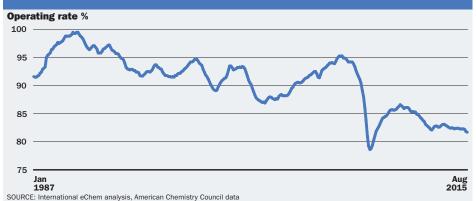
This slowdown is common across all major regions with the exception of central/eastern Europe, where Russian production has been boosted by the collapse in the value of the rouble. The Asia and Middle East/Africa regions have seen chemical production growth rates halve over the past year from 8% to below 4%, while US and western Europe rates have slipped to around 3% and Latin America continues in negative territory.

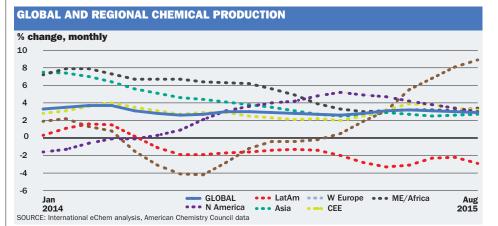
CAPACITY ADDITIONS CONTINUE

One added complication is the delayed impact of China's own stimulus programme.

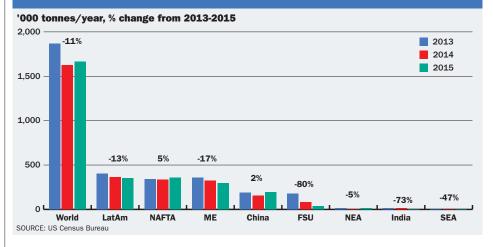
Although this is now being reversed by President Xi Jinping, it is too late to stop many







US NET PVC EXPORTS



of the projects planned under the previous government.

As a result, China is continuing to bring new capacity online in a wide range of core products. As a result, its polypropylene (PP) production has risen by an astonishing 21% so far this year versus 2014, leading to an 8% fall in imports and 34% rise in exports. All the major exporting regions – northeast Asia, southeast Asia and the Middle East have suffered a decline in volume.

China has also been boosting polyvinyl chloride (PVC) exports to compensate for its property slowdown. As a result, the US has suffered an 11% fall in its PVC exports since 2013, despite having had a major cost advantage due to its feedstock being based on ethane/natural gas. US exports have declined to Latin America, the Middle East and the former Soviet Union, a worrying backdrop when major capacity expansions are being planned.

These developments highlight a number of key unknowns as companies start to finalise budgets for the 2016-2018 period.

China's economic growth. China's need to rebalance its economy will maintain pressure on its growth. Many experts suggest growth in its Old Normal economic sector is already

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close to zero. This has critical implications for future petrochemical demand.

• Commodity prices. Financial markets remain mostly in denial about the outlook for commodity prices. Major supply/demand imbalances have been created during the commodity bubble, and prices could well have much further to fall.

• Deflation. Overcapacity in China and in commodities could easily lead the world into deflation. This would dramatically change demand patterns, as people delay non-urgent purchases in the expectation of lower prices in the future.

• Currency markets. Volatility is rising as investors move back into "safe haven" currencies such as the US dollar. Companies are also putting pressure on emerging economy currencies as they reshore production to the West.

■ Ageing populations. Demand patterns in key markets such autos, housing and electronics are already seeing major change as the world hits the "demographic cliff". For the first time in history, more people are now entering the lower-spending 55+ age group than are joining the main wealth-creating 25-54 cohort.

It seems clear that we face a difficult few years. And as we argue in the study, very dif-

China's adoption of its New Normal policies is bursting the bubble. Prices for most commodities are returning to historical, much lower, levels

ferent scenarios could emerge as a result. One can hope that central bank policies might finally prove effective, and lead to a sustained revival in global demand, although few would now wish to "bet the company" on this assumption. Or perhaps a middle ground might emerge, where growth stabilises at current levels.

But common sense suggests the need to also include a third scenario, where the worst of the downturn still lies ahead.

It is a long time since we had to deal with such high levels of uncertainty, across such a wide variety of critical areas. One has to go back to the traumatic period of the 1970s for a parallel.

In turn, this suggests the petrochemical industry is undergoing a generational change that challenges current supply-driven business models based on forecasts for GDP growth. Have we instead arrived at a fork in the road, where future profit will come from new business models that are less productoriented and more service-focused?

This study is of critical importance for both producers and consumers, and will be essential reading for chemical industry CEOs, executive management, planners and investors. Its aim will be to provide you with a roadmap through today's challenges, and a clear vision of the new opportunities now emerging for future growth and profit. ■

ICIS/INTERNATIONAL ECHEM STUDY

The study "How to survive and prosper in today's chaotic petrochemical markets: 5 critical questions every company and investor needs to answer" covers the olefins, aromatics and polymers markets. See how feedstocks and product supply and demand will affect your business and investments over the next 10 years. For more, visit

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