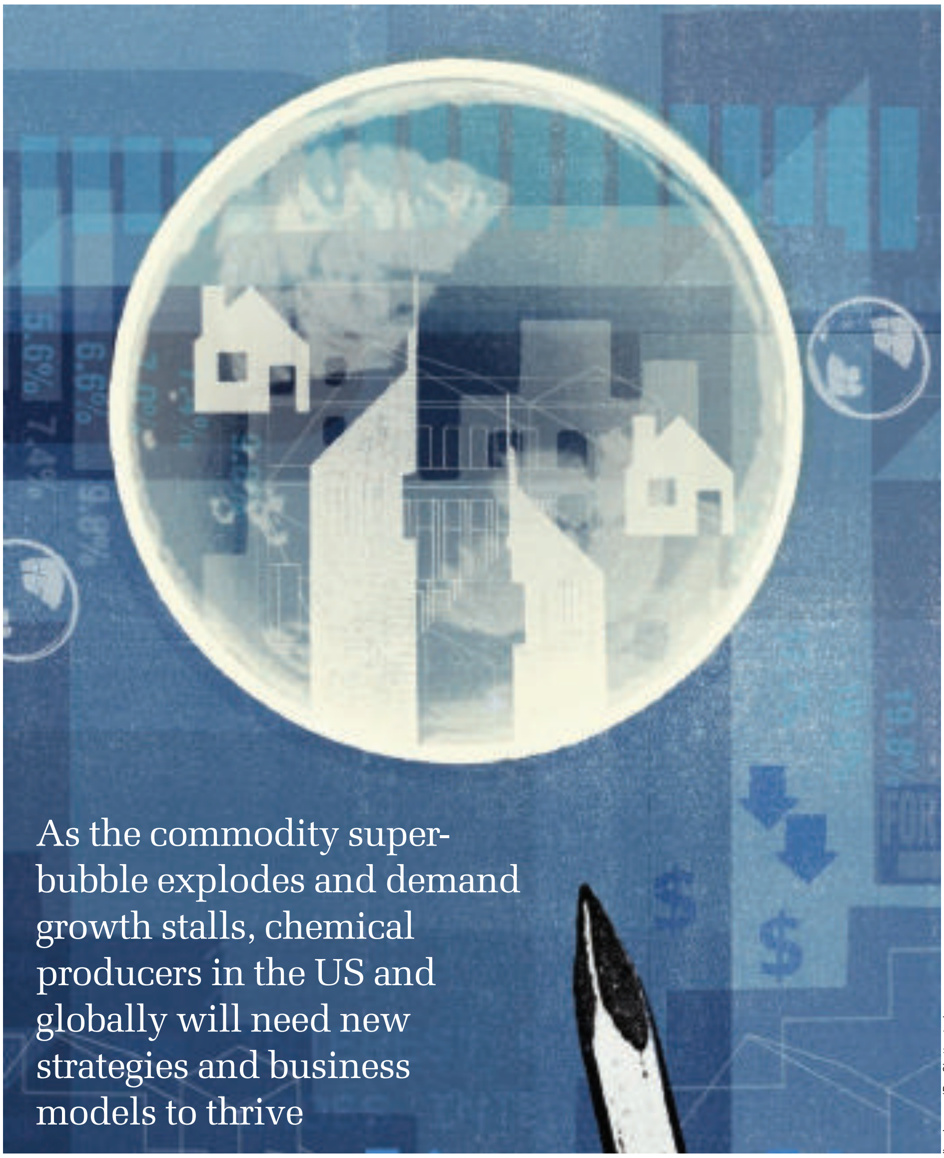
Chemicals chaos



As the commodity super-bubble explodes and demand growth stalls, chemical producers in the US and globally will need new strategies and business models to thrive

The China commodities bubble has burst, with grave consequences for chemicals demand

PAUL HODGES INTERNATIONAL ECHEM

Major change is under way in world markets for all petrochemicals. It is no exaggeration to say that we now face chaos on the supply and demand side – affecting both feedstocks and products. Producers and consumers cannot afford to ignore the risks that this development creates for their business. Nor can investors afford to indulge in the wishful thinking that says central banks can quickly return growth to previous levels.

On the supply-side, oil prices have tumbled, and yet inventories remain at record levels – suggesting further price weakness cannot be ruled out. This has had a major impact on the relative values of oil- and gas-based feedstock. US shale gas cracker investments no longer look to have the secure long-term advantage assumed when they were conceived.

On the demand side, there is increasing evidence that today's globally ageing populations mean a "demographic deficit" is replacing the "demographic dividend" created by the baby boomers when they were in their prime spending mode. The same trends are developing in many emerging economies, with China's working-age population already in decline.

These developments raise a fundamental question as to whether the petrochemical industry is undergoing a generational change that challenges current supply-driven business models based on forecasts for GDP growth.

These concerns are highlighted by the impact of China's New Normal policies. These have dramatically slowed economic growth, even if one takes the official numbers at face value. Its move towards a service economy is challenging previous certainties about its ability, along with that of other emerging markets, to underpin high levels of demand growth for major petrochemicals and polymers.

Companies need to respond quickly by developing new, less product-oriented and more service-driven offerings

Additional levels of uncertainty are created by the impact of the major stimulus policies implemented by central banks post-2008. These appear to have created only a fragile recovery, and have left behind a legacy of debt which will inevitably depress future demand. China's stock market downturn over the summer has also emphasised the fragility of many global financial markets.

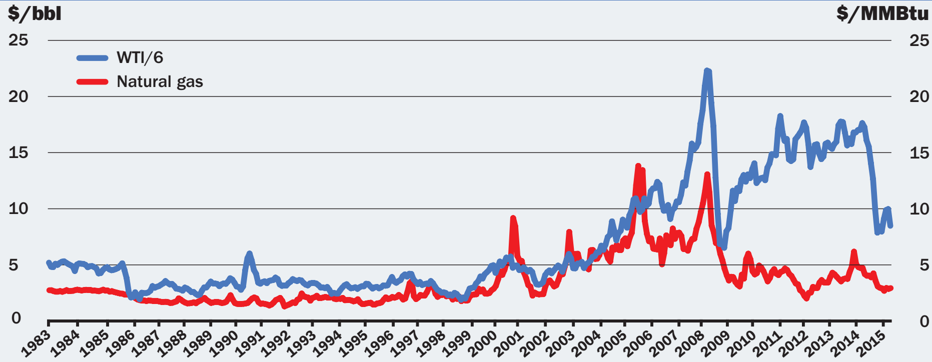
DECISION TIME FOR EXECS

Petrochemical companies and investors have come to a fork in the road. It is no longer possible to believe in the concept of a quick "return to trend" following the financial crisis. Equally, there are clear signs of major secular change taking place in core end-user markets such as automotive and construction. Plus, there are major question marks on the outlook for emerging economies, with two of the previously all-conquering BRIC countries (Brazil and Russia) already in recession.

China president Xi's determination to move away from stimulus policies is essentially acting as a catalyst for the bursting of the commodities bubble. This had been one of the main reasons for oil prices returning to the \$100/bbl level after the financial crisis.

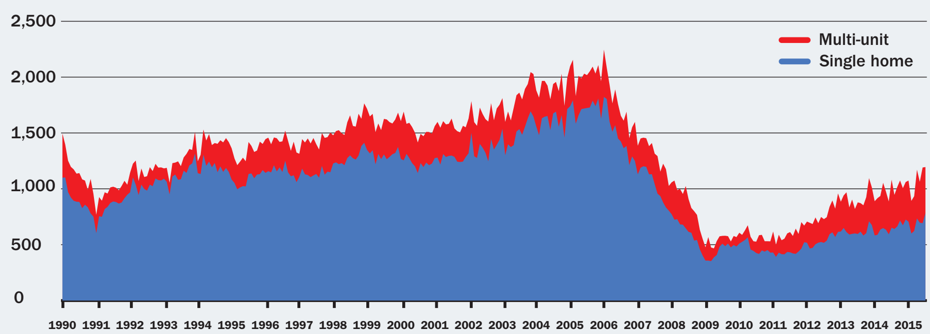
From the supply/demand viewpoint, there was never any reason for prices to rise to this level. But the central banks' stimulus programmes from 2009 onwards put \$25 trillion of cheap liquidity into the markets, for which investors had to find a home rather than leaving it in the bank, earning zero interest. Conveniently, the main focus of China's stimulus was on construction and infrastructure investment – all of which required ever-increasing volumes of commodities such as oil, copper, iron and polymers.

WTI/6 VERSUS NATURAL GAS PRICES



SOURCE: IeC analysis, US EIA

US HOUSING STARTS: SINGLE HOME AND MULTI-UNIT SPLIT FROM 1990



SOURCE: IeC analysis, US Census Bureau

Thus was born the commodities super-bubble, based on the idea that Chinese growth would continue to power forward forever. Understandably, investors did not want to ask too many questions about the underpinnings of this boom, which had temporarily stabilised global markets and the economy from 2009. Instead, they put pressure on companies to invest in new opportunities apparently being created in this market ruled by wise and far-sighted leaders.

IGNORANCE IS BLISS

For a while, ignorance was bliss, especially on Wall Street. Investors loved the idea that the US was poised to earn outsize returns from the Chinese market, as a result of the transformative impact of shale gas. This created a win-win situation in their minds, where they could invest in new US capacity in order to profit from China's import demand. They rushed to provide $1.2 trillion for new energy exploration and production, and encouraged the US chemical industry to spend $145bn on export-focused investment.

Unfortunately, there were two flaws in their investment thesis.

- There was never any fundamental reason for oil to suddenly start selling at a premium to natural gas, instead of being based on its relative energy value. As I noted in March (ICIS Chemical Business, 2-8 March 2015), it was only the activities of the financial speculators that drove oil to its unsustainable premium versus gas.
- There was also no reason to believe China would suddenly adopt capitalist economics and throw large numbers of people out of work by closing its own capacity, even if its growth had been able to continue at the stimulus-inspired level. And no other country or region could possibly absorb all this new production.

This wishful thinking is being revealed for what it was. In energy markets, Iran's return following the nuclear agreement may well prove the catalyst that returns oil prices to their historical levels of around $25/bbl. The flaws in China's previous growth model have also become clear for all to see, and have increased doubts over the reliability of its published figures for GDP growth. US companies now face a very difficult few months as they re-examine the economics of their projects in the light of the oil price collapse and China's economic slowdown.

Wall Street's support for these projects is also weakening after its Black Monday panic in August. This shock led many investors to become more cautious on the outlook for China and energy markets. Instead of cheerleading, they are now asking the questions they chose to ignore when wearing rose-tinted glasses.

NEW BUSINESS MODELS REQUIRED

But this does not mean the industry has no opportunities to grow. Instead, it needs to develop new business models that better reflect the New Normal world. Previous supply-driven models served us very well in recent decades, when the rise of baby-boomer spending meant we could reliably estimate future growth by using a multiple of the IMF's GDP forecast. But now we need to return to demand-led models, based on detailed analysis of key drivers in markets.

The US automotive market, for example, currently worth around $60bn in terms of petrochemical and polymer demand, is moving in completely new directions. The advent of social media, combined with greater environmental awareness, has changed young people's attitude to car ownership – which is no longer seen as a rite of passage into adulthood. Sales are also falling among older Americans as retiring boomers return to the cities from the suburbs. Couples no longer need two cars once they stop providing a taxi service for their kids and move into retirement.

Similar paradigm shifts are taking place in housebuilding. Not only have housing starts halved since their 2006 peak, but the type of home being built is also changing in line with living patterns. Multi-unit condominium-type apartments now account for more than one-third of all starts, compared to less than half this ratio in the boom years. As a result, demand is suffering a double hit – both from the reduction in overall starts, and from the reduction is size caused by the shift away from single homes.

Change is always painful, especially on today's scale. But one cannot simply cross one's fingers and hope that today's chaotic market conditions will somehow disappear. The bursting of the commodity bubble, and the changes under way in critical end-markets such as autos and housing, create both challenges and opportunities. Companies need to respond quickly by developing new offerings that are less product-oriented and more service-driven.

Those who delay risk being left behind in a profitless wilderness, as more agile competitors consolidate their first-mover advantage. ■

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