Tide is turning on chemical growth

The macro trends that have driven growth in the global chemical sector are now turning. Four major factors could cause pain for the group

PAUL HODGES INTERNATIONAL ECHEM

"It's only when the tide goes out, that you learn who's been swimming naked." We may soon discover the meaning of this wisdom from Warren Buffett, one of the world's leading investors. For the past five years, central banks and governments have provided a tidal wave of credit and stimulus to support world markets. It has been worth $33 trillion, nearly half the size of today's global economy, according to Bank of America Merrill Lynch.

But now, this tide is beginning to ebb. The economy thus seems close to a major tipping point, with interest rates already rising sharply in many countries. This is starting to expose those areas that have been swimming naked during the liquidity bubble.

The retreating tide is also highlighting a critical error made by policymakers since 2008 – believing they could quickly return economies to strong and sustainable economic growth. Today, as detailed in the ICIS-published eBook, *Boom, Gloom and the New Normal*, there is instead clear evidence that the ageing of the Western Baby Boomers is radically changing historical growth patterns.

The US provides a good example of the changes underway. As the chart shows, only 29% of adult Americans were in the 55+ "New Old generation" in 2000. But since then, their numbers have grown rapidly from 59m to 87m today. By 2030 they will have nearly doubled to 111m, and be 41% of the adult population.

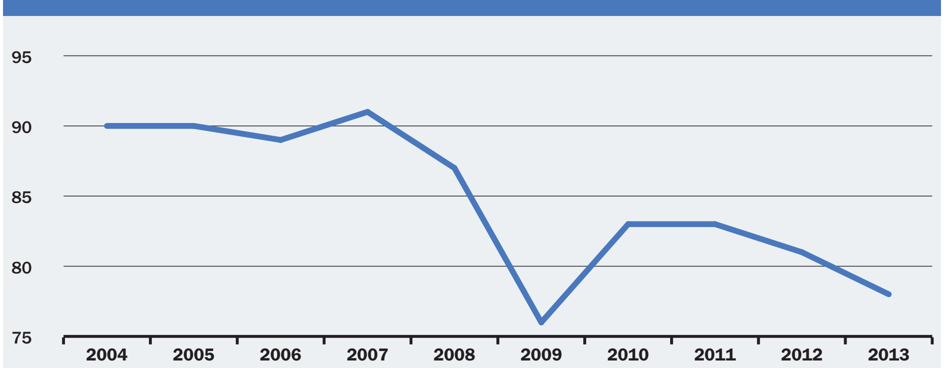
The chemical industry can take much of the credit for the dramatic increase in life expectancy that lies behind this change. Advances such as the chlorination of drinking water, safer packaging for food, the development of antibiotics and other pharmaceutical products have led to life expectancy doubling in the Western world over the past two centuries, and tripling in the developing countries.

But longer life expectancy impacts the economy as well as our personal lives. US household consumption is 70% of GDP, and official data shows how this changes dramatically as people age:

- Consumption and incomes rise steadily as people join the Wealth Creator 25-54 age group, when they settle down, buy homes, have children and build their careers.
- Thus the rise of the Baby Boomers, the largest and wealthiest generation in history, led to a 25-year supercycle of economic growth starting from 1983.
- In turn, chemical demand grew at a multiple of GDP due to its focus on key Boomer needs such as housing and autos.

But now, the Boomers are leaving their Wealth Creation period and joining the New Old generation.

WESTERN EUROPEAN ETHYLENE OPERATING RATES (%) H1 2004-2013



SOURCE: Association of petrochemical products in Europe

Their consumption is falling, as they already own most of what they need. Their incomes are also set to decline as they retire. A 65-year-old couple would need a $1m tax-free pension fund to enable their retirement income to match average US earnings of $40k/year. Yet the median savings of households aged 55-64 is just $61,000.

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FOUR BUTTERFLIES

Four areas should particularly concern us as the tide of liquidity retreats. We all know the saying that butterflies fluttering over the Amazon can cause snow storms elsewhere, and there are at least four butterflies whose flapping wings may deliver equally chilling results for the global economy over the next few months and years.

EUROZONE

One is the eurozone. This butterfly began flapping its wings on 22 September, when Germany went to the polls. The election put the eurozone crisis "on hold" for the past year, as nobody wanted to frighten German voters with the size of the bills they are expected to pay.

But the delay has made the problems worse, not better, with the Bundesbank warning recently about the risks from "ongoing uncertainty about the economic policy situation" and the debt crisis. The chart shows how olefins demand continues to suffer. Ethylene operating rates averaged only 78% in the first half of 2013, just above the 76% level seen in 2009. And Q2 production at 4.6m tonnes was the lowest since 1998 – even lower than in 2009. Meanwhile EU auto sales, a critical market for chemicals and polymers, were back at 1996 levels.

The reason is obvious when one looks at the demographics. The eurozone has passed the point of no return in terms of demand growth. The median age of Germany's population is already 45 years. Over 40% of adults are in the New Old generation, more than double the percentage in 1950. Thus the region's 0.3% GDP growth in Q2 is most unlikely to prove the start of a sustained recovery.

US DEBT CEILING

The second butterfly has also just begun flapping, as the US Congress debates the future of the sequester programme and the debt ceiling. As in the eurozone, politicians have kept postponing hard decisions in the hope that "something will turn up".

But several government departments have already had to impose short-time working – thus 650,000 Department of Defense workers have been on a four-day week since July.

Of course, the shale gas boom is encouraging US companies to reshore manufacturing activities and benefit from shorter supply chains. But this move will likely also reduce exports, a key engine of recent GDP growth, as it means the emerging economies will suffer a loss of jobs and income while further weakening their currencies.

The Indian rupee, for example, has already hit an all-time low versus the US dollar. Plus, of course, financial markets may not remain calm if political uncertainty rises and rhetoric starts to fly.

CHINA

November sees a third butterfly take to the skies, as China's ruling communist party holds its critical "3rd plenum" to agree on a new economic strategy.

China's One Child Policy since 1978 means its population is now ageing fast, and its labour force starting to shrink. So it faces a clear risk of growing old before it gets rich, as average per capita income last year was only around $2,500/year.

This is bad news for many foreign companies, who have planned major new investments on the basis that China's growth would continue to be supercharged by stimulus. These projects will now have to be cancelled, further slowing global growth.

Plus the receding tide is already revealing that much of the stimulus has been wasted. As the official government publication China Daily reported recently, the "reckless expansion of cities in China has left many of them empty. Nearly every big or medium-sized city across China has plans to erect a new town… [and these] new towns are usually bigger than old ones and many cities are left empty as a result."

Equally, the ebbing tide of official credit is also impacting auto sales. Inventories are already rising, particularly for luxury cars. The UK publication *Financial Times* reports that many dealers are having to offer 0% credit to attract buyers, and also guaranteeing to refund the purchase price after two years.

The *Financial Times* adds that such offers seem more like pyramid schemes than business deals, warning, "if you live in a country where any meaningful part of growth is built on such pyramid schemes, you are living on the edge of a crisis."

INTEREST RATES

The fourth butterfly has been flapping its wings since May, when the US Federal Reserve announced that it might "taper" its tide of liquidity. Interest rates for the 10-year government bond have since risen by 100 basis points (1%), sending shock waves through the critical housing sector as mortgage costs increased.

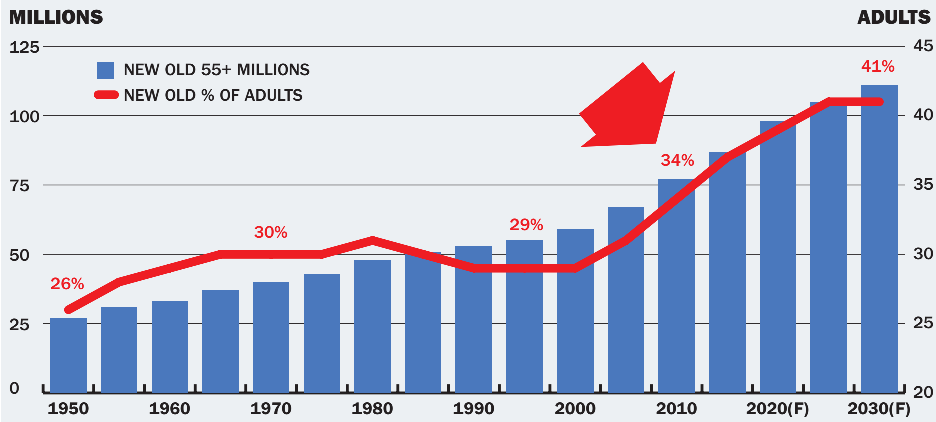
Even before this, there were signs that appearances in the housing market, as in China's auto market, might be deceiving. As the Census Bureau chart shows, home ownership rates are well down from 2004's peak of 69%, and back at 1995 levels of 65%.

Equally, the recent price recovery seems mainly due to investor demand for rental properties – a much less stable basis for growth – with investment bank Goldman Sachs reporting that cash sales are now 50% of the market, compared to 20% before the subprime bubble burst.

Other butterflies, such as the impact of record oil price levels on demand, could easily be added to this list. And while policymakers may claim their policies will eventually produce recovery, businesses cannot afford to indulge in the same wishful thinking. Five years is surely long enough to judge results.

The ageing of the Boomers inevitably means that the world is heading towards a New Normal of relatively slow economic growth. Those businesses that have been swimming naked under cover of the liquidity tide will increasingly find their weaknesses exposed for all to see. ■

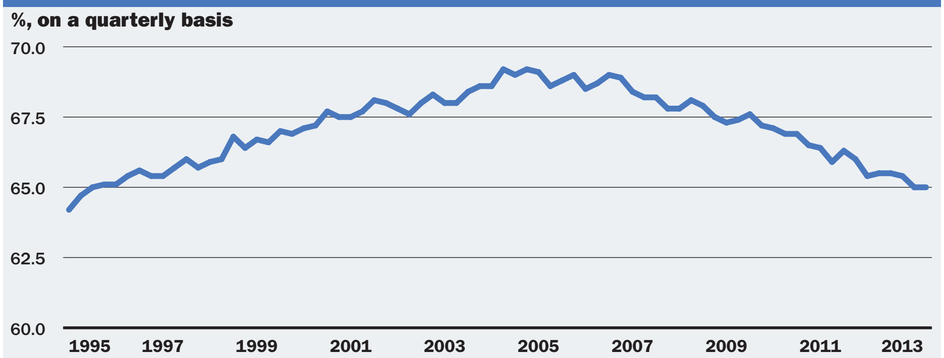
NEW OLD 55+ POPULATION, & PERCENTAGE OF ADULTS USA, 1950 - 2030(F)



SOURCE: International eChem, United Nations

ADULTS = 20 YEARS AND OVER

US HOME OWNERSHIP RATES



SOURCE: US Census Bureau

Paul Hodges is chairman of International eChem (www.iec.eu.com), and with John Richardson is co-author of *Boom, Gloom and the New Normal – How Western Baby Boomers are Changing Global Chemical Demand Patterns*, published by ICIS. Both blog for ICIS at icis.com/blogs