Winners and losers in the new normal

With major structural changes underway in the global economy, only chemical company leaders who are prepared to think creatively will succeed and grow their businesses

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our transformational changes are underway as we enter 2015. As a result, the global economy is now firmly headed in a New Normal direction. Companies and investors can therefore no longer rely on traditional "business as usual" strategies. Future winners will recognise the need to change their business models to reflect the challenges and opportunities ahead. Losers, however, will suffer setback after setback, until finally they are forced to recognise the hard way that the Baby-Boomer-led economic SuperCycle disappeared some years ago.

The first of these transformational changes is the supply glut that now exists in all the major energy markets — oil, gas, coal and renewables. The second is China's emergence as an exporter rather than importer of petrochemical and refinery products. The third is the reduction in global growth prospects caused by the impact of today's ageing global population and high levels of unemployment among young people. The fourth is technologically driven, as "the internet of things" becomes as ubiquitous as the smartphone.

Separately, these changes are already creating major disruption in the global economy. The OPEC oil producer cartel tried to hold prices for as long as possible, before Saudi Arabia's oil minister reminded his colleagues that "the market will decide". Similarly China has abandoned its vast stimulus programme, having quantified \$6.8 trillion of "wasted investment" from its 2009-2013 spending.

Ageing populations create a different challenge, as we discussed in the ICIS-published



Nissan is relaunching the low-cost Datsun brand for emerging markets

Boom, Gloom and the New Normal eBook. As the chart shows, 1.8bn people, nearly a third of the world's adult population, will be over the age of 55 by 2030 due to increasing life expectancy and the decades-long collapse in fertility rates. Ageing populations create a paradigm shift in demand patterns, with people's needs reducing along with their incomes as they enter retirement. Unfortunately, young people's spending power is also under pressure from high unemployment and housing costs, as well as the burden of tuition fees.

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"The internet of things" is creating another paradigm shift, as the digital and physical worlds converge. The opportunity is to develop smart, connected products, with capabilities far beyond current levels. As management experts Professor Michael Porter and James Heppelmann have described in the Harvard Business Review ("How Smart Connected Products are Transforming Competition", November 2014), this has enormous

implications for the chemical industry, which currently relies on delivering physical products for its revenue and profits.

Developments in the auto industry highlight the scale of the challenges and opportunities that these transformations are creating in downstream markets:

- Young people's attitude to cars is undergoing major change in the developed world. They often see car ownership as unaffordable, while the advent of social media and greater environmental awareness reduce its perceived benefits. Thus in the US, only four out of five young Americans aged 20 29 held a driving licence in 2010
- Demand for cars is also weakening at the other end of the age spectrum. Parents drive less once their children leave home, and their mileage reduces still further on retirement. German data shows almost a 50% reduction in annual mileage between the ages of 30 and 70 years. The US shows similar patterns.

Taken together, these developments make it almost certain that we have reached peak car sales in the West. Median age is already past 40 years in most countries, and in the US the ageing Baby Boomers are now reversing their earlier flight to the suburbs, which had vastly increased demand for new homes and cars. In Japan, the case study for ageing populations, annual car sales peaked as long ago as 1990.

Contrary to popular belief, it is also most unlikely that demand in the emerging economies will somehow pick up the slack. China's new leadership have recently highlighted how their predecessors' stimulus spending resulted in \$6.8 trillion of "wasted investment" between 2009-2013. It is most unlikely they will repeat this mistake by introducing similar stimulus in future. And without China, there would have been no overall increase in global car sales in recent years, as the chart shows.

China's wasteful lending programme trebled its annual car sales to nearly 15m after 2007, as people rushed to spend the wealth created by the property bubble that it created. But total sales in the other six major markets were virtually unchanged over the period, with 2014 sales forecast at 41.2m versus 40.8m in 2007. The bursting of China's lending and property bubble means future spending will instead depend on incomes once more. As these are just a tenth of those in developed countries, growth levels will inevitably be much lower than in the past.

Two key conclusions result from these developments in terms of the impact of the four transformations on future auto industry demand trends:

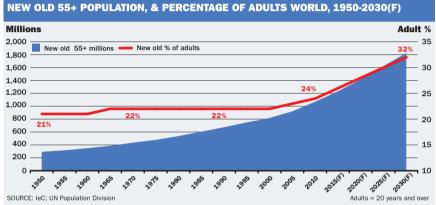
- Future sales growth will be in the low-cost sector. Renault/Nissan are already developing global leadership in this field. Renault's Dacia sells at just €7,000 (\$8,700) in the West, and Nissan are planning a \$3,000 model in their Datsun range for developing economies.
- The sharing economy has arrived. The impact of smart, connected products can be seen in the growth of car-sharing and taxi apps such as Uber. As BMW have noted, the auto industry is now following the example of the music industry. "You used to have to buy an album, now you can pay per play."

NEW BUSINESS MODELS REQUIRED

These developments highlight the need for new business models as we move into the New Normal. The good news, however, is that lower energy prices will allow companies to refocus on affordability as the key driver for future sales. US ethane and propane markets have already signposted this shift, and as Shell Chemicals CEO Graham van't Hoff told the European Petrochemical Association last October, "An efficient refiner would switch their attention to aromatics and discover growth and margins from petrochemicals".

But simply producing cheaper products will not create the necessary platform for future success. As Prof Porter reminds us, the development of the necessary smart, connected products requires a complete change in mindset, based on a more service-driven approach. And anyone who ignores this trend will soon find themselves under major pres-





sure from another of the transformations, namely China's emergence as a net exporter rather than importer of many products.

China now suffers from major over-capacity in both refining and petrochemicals as a legacy of the stimulus programmes. Closing these unwanted plants will prove difficult, due to the need to maintain employment. And at the same time, it is continuing to build new petrochemical capacity based on coal, due to its need to boost employment away from the major cities and to reduce current dependence on imported oil and gas.

Trade data shows that, almost unnoticed, China has already become a net exporter of products such as PVC, where it was previously the world's largest importer. Similar developments are underway in polyester with terephthalic acid. China is also fast becoming a net exporter of gasoline and diesel for the first time in history. In turn, of course, this means that companies need to urgently review plans for new investments. The financial disaster facing the mining industry is a timely warning of the problems caused by over-optimistic assumptions about Chinese demand levels.

Change is never easy, particularly when existing business models have served us well until recently.

But we cannot simply bury our heads in the sand and ignore these transformational changes now underway in energy markets, demand patterns, China's economy and information technology. The future will be very different, and we need to adapt or die.

Our industry has, of course, seen many such transformational changes in the past, and there is no reason to think we cannot rise to the challenge again. The opportunity ahead is to create new, more service-oriented business models that will prove sustainable in terms of future revenue and profit flows as well as environmentally.

The critical first step is to abandon today's silo-based mind-set that currently constrains our creativity. Instead we need to think 'outside of the box', and follow the example of previous generations who saw the opportunity to create not only petrochemicals and plastics, but also pharmaceuticals and agrochemicals. There is an exciting future ahead of us in the New Normal, for companies with the vision and commitment to embrace it.



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