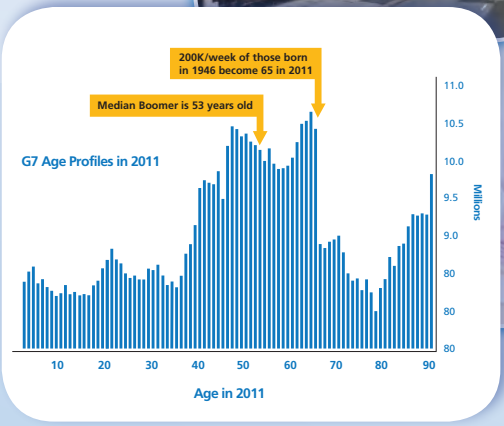
BOOM, GLOOM AND THE NEW NORMAL

BOOM, GLOOM AND THE NEW NORMAL

How Western baby boomers are changing global demand patterns, again



Chapter summaries

By Paul Hodges
& John Richardson

CHAPTER SUMMARIES

an ICIS publication

In association with
International Chem
Creative Energy for Important Issues

Rex Features

An aging population in mature economies will have profound effects on future demand patterns

The challenges of the 'New Normal'

The first chapter of a new eBook considers the impact of an aging BabyBoom generation and the need for a new approach by many companies

PAUL HODGES INTERNATIONAL ECHEM

Consumer spending is the key driver for the economy. The past 30 years have therefore been a "golden age" for most companies, as the Western BabyBoom generation approached its peak spending and consump-tion years. But now, these baby boomers are getting older. They are starting to save more and spend less.

These are the challenges at the heart of our new eBook: *Boom, Gloom And The New Normal: How Western BabyBoomers Are Changing Global Demand Patterns, Again*.

The key issue is simple. As the chart shows, there was a sustained surge in the number of babies born in the G7 Group of the world's richest countries after the Second World War (Canada, France, Germany, Italy, Japan, UK and the US). Their numbers rose by 33m, or 15%, from 1946 to 1970, in comparison with the 1921–1945 period. Then the numbers fell again as 38m fewer babies were born between 1971 and 1995.

These baby boomers were, and are, the largest and richest generation in history, especially if one includes those born in the other Western European economies. By 1980, they had started to enter the critical 25–54 age range in large numbers. This is the period when consumption is at its maximum, as people marry, settle down, and have children. Not surprisingly, consumption began to soar as people bought houses, cars and all the other items that have come to drive economic growth.

By 1995, the entire baby boom generation was in the 25–54 age range. Demand growth had become so strong, that companies were being forced to find new sources of supply, going first to Eastern Europe, after the fall of the Berlin Wall in 1989, and then to the BRIC countries (Brazil, Russia, India, China). Outsourcing became part of business language. Yet neither the word, or even the concept, had »

» existed in 1980. At that time, exports accounted for just 5% of China's GDP. Today, they are nearly 40% of the economy.

Yet in 2001, as China's expansion of its export factories was accelerating, the oldest baby boomer reached the age of 55. This age represents the beginning of a new period in most people's lives, when they start to spend less and save more. And today, of course, the majority are approaching this milestone, with the oldest baby boomer now 65 years old, and the average at 53 years old.

Equally, this change in spending patterns is being reinforced by an increase in life expectancy. Baby boomers can expect to live around a decade longer than their parents' generation. So they need to save more for the future, and spend less today. Thus it should be no surprise that previous core areas of Western consumer demand, such as housing and cars, are struggling. The demographics suggest they will not recover for many years to come.

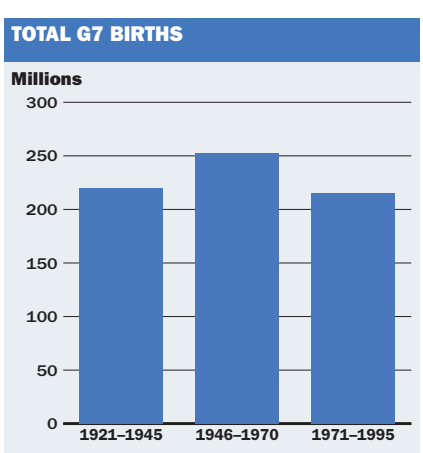
GROWTH DRIVERS FOR DEMAND

Of course, this does not mean the end of all consumer demand. But it means we are entering into a "New Normal". **The G7 is 50% of the global economy.** So a down-turn in Western demand cannot be simply replaced by an increase in the emerging economies. After all, Canada's GDP is larger than India's at $1.6 trillion (€1.1 trillion), even though its population is only 34m ver-sus India's 1.2bn.

In India only 11m households are expected to be in the "affluent segment" in 2013, out of a total of 231m. And even this definition exaggerates the potential demand, being based on a minimum income of just $5,000/year.

Equally in China, for example, disposable income in the urban areas is only around $2,500/year, and less than $1,000/year in rural areas. In the US, by comparison, a standard definition of middle class means a household income of $25,000–100,000/year.

Thus, far-sighted companies are already



Rex Features

Older people spend less and save more

starting to target the real growth areas for the future, such as the "aspirers segment". This is expected to grow in India from just 46m households in 2003 to 124m in 2013. Although this segment will have lower incomes of $1,000–5,000/year, they represent a genuinely new potential mass-market for cconsumer products and services.

Hindustan Lever, part of the Unilever consumer products group, is one example of how companies are moving forward. Their innovative Project Shakti involves the creation of a new distribution channel to reach this segment. And in the process they are helping women in rural areas set up small businesses as direct-to-consumer retailers, thus fulfilling their mission

> **"These babyboomers were, and are, the largest and richest generation in history"**

statement of "Doing well by doing good".

This example highlights how companies need to shift their mindsets as we go through the transition to the New Normal. Over the past 30 years, they have benefited from steady growth in Western demand for most types of consumer products.

They could afford to ignore minor slowdowns, which would simply create "pent-up demand", and instead set "stretch targets" for business units and managers.

These dynamics of market growth meant it made perfect sense for companies to focus their sales activities on affluent Western babyboomers. And as time went on, they were able to further boost sales by focusing on similarly affluent segments of the population in emerging economies.

But in the New Normal, few of these dynamics still apply. Demand is instead becoming much more volatile and unpredictable.

External events, up and down the value chain, are having an increased impact. Yet many companies are still primarily focused on monitoring developments down their own vertical silos.

THE NEW NORMAL IS ARRIVING NOW

The post-baby boom generation, those born between 1971–1995, contains 38m fewer babies. So they cannot sustain the level of demand of their parents. And as we have seen, this gap cannot be simply replaced by increasing the focus on the middle class in the emerging economies. Instead, companies will need to redirect their product development into new areas of innovation. Consumers' spending power will be lower in many major markets globally.

Successful new products will therefore often be lower-cost. But the opportunities are still endless. In emerging economies, for example, there is already a growing demand for plastic-wrapped single-serve food portions in urban areas, and for single-use shampoo in rural areas.

This is why we are now publishing via ICIS our major new eBook. We believe it is vitally important that companies and investors fully appreciate the demographic changes now underway, so that they can adjust their focus to profit from the new opportunities ahead.

Our research for the eBook shows that the transition to the New Normal will require a complete change in approach for many companies. The level of Western housing and automobile demand seen in the golden age cannot be sustained as baby boomers enter the 55 plus age group.

Instead, we believe that demand growth will come from new megatrends such as increasing food production and life expectancy, improving water availability, and reducing carbon footprint. These represent major challenges, and major opportunities, for those companies able and willing to exploit them.

We hope the eBook will help you, and your company, to become a winner in the New Normal. ■

NEW NORMAL

EBOOK AND TRAINING

Our free New Normal ebook begins publication this week, with a new chapter released once a month. Download free at www.New-Normal.com. It has been co-written by Paul Hodges, chairman of International eChem and John Richardson, director, ICIS training Asia.

International eChem are running regular new normal strategy workshops to equip you with essential skills and knowledge. Visit www.New-Normal.com

The financial crisis and the New Normal

Since the latest recession, policy makers have pumped billions into mature economies to try and release pent-up economic growth, but the policy is failing

Rex Features

Where's the money going? Over the past 50 years it has been poured into housing

PAUL HODGES INTERNATIONAL ECHEM

Pent-up demand has been the key driver for economic growth in the past 20 years. Since the 1990s, we have not had to suffer the multiyear downturns that were common in previous decades.

This good fortune may be about to change, however. This is why we have titled our new eBook, *Boom, Gloom and the New Normal: How Western BabyBoomers are Changing Demand Patterns, Again*.

Last month, in Chapter 1, we showed how the number of births had risen by 33m between 1946–1970 in the wealthy G7 countries (US, Japan, Germany, France, UK, Italy, Canada). In turn, we argued that this had led to a Golden Age for consumer demand in recent years.

The reason was that by 1995, all of these babies had entered the 25–54 age group. This is when people typically marry, settle down and have children. And so demand for housing, autos and electronics – all key markets for economic growth – had soared.

This month, in Chapter 2, we look at the Boomers' likely impact over the next 20 years. They are now entering the 55+ age group, when people normally save more, and spend less, as their family commitments decline. They are not only the largest and wealthiest generation that the world has ever seen, but they also have the longest life expectancy, a decade more than their parents. So they will have to save more and spend less, to fund these extra years.

We also analyze two critical issues:

- Housing and auto markets;
- Economic policy and interest rates.

HOUSING IS THE KEY DRIVER

Housing has been the biggest single growth market over the past 50 years. Originally, it spurred demand in the Western economies as more and more Boom-ers began to marry and settle down. Their arrival also began to push up house prices, as housing demand began to exceed supply. In »

» turn, this allowed Western home owners to extract equity from their homes, boosting sales of autos, electronics and other staples of consumer demand.

Housing has also been the main engine behind China's growth, and that of other emerging economies, over the past 20 years. As investment bank UBS noted recently, "real estate and housing construction pervade the entire Chinese growth model. They are the most important determinant of commodity demand."

China's government is not unique in seeing home ownership as being a key route to securing social stability. Western governments have also been keen to promote it with tax benefits to give people a personal stake in the economy. Buying a home is, after all, the largest financial transaction of most people's lives. And it becomes far harder for workers to go on strike when the mortgage still has to be paid at the end of the month.

DEMOGRAPHICS AND DEMAND

But over the past decade, more and more Boomers have been leaving the 25–54 age group. The oldest is now 65, and the typical Boomer will be 55 in 2013. So the concept of pent-up demand for housing and associated products is becoming less and less relevant. It should also be no surprise that we now face a slowdown in growth.

But governments, just like many companies, have shown a considerable reluctance to accept that the world might be changing. "What have demographics to do with growth?" perhaps sums up the general attitude.

Instead, most countries have simply followed Japan's response, from 1990 onwards, to the bursting of its property and asset markets. When I first visited Tokyo in 1987, the land under the Imperial Palace was said to be worth more than all the land in California. This was because Japan's Baby Boom took place a decade earlier than in the West. And its growth model was therefore already beginning to fail, even as my plane touched down at the airport.

Japan's government responded to the slowdown with major stimulus programs, just as we have seen more recently in the West. The only difference is that the scale of the current stimulus has been even larger. This is due to the influence of Ben Bernanke, now chairman of the US Federal Reserve, who argued in a widely reported speech in 2003 that Japan's government had not focused sufficiently on creating "an environment of combined monetary and fiscal ease."

Policymakers around the world have therefore aimed to avoid this mistake since the financial crisis began. US demand, for example, has been artificially inflated via tax credits for house purchases and the "cash for clunkers" programs to boost auto sales. In addition, financial markets have been flooded with two

Rex Features

Cash just keeps getting squeezed

major waves of liquidity, with the latest $600bn of loan buying just coming to an end.

But if we look at housing and auto demand today, it is clear these policies have failed to deliver the expected results. US housing starts have remained well below SuperCycle levels which

> **"We therefore argue in the eBook that that it is time for a new analysis of the underlying issues"**

peaked in 2006 at 2.2m. They are lower than at any time since records began in 1959. Equally, auto sales have been far more volatile than the steady 15m–17m level seen during the Golden Age.

We therefore argue in the eBook that it is time for a new analysis of the underlying issues. This should start with the demographics, as these drive demand. The key issue in our view is that 38m fewer babies were born in the G7 between 1971–96. This was even fewer than in the years between 1921–45. We believe that today's reliance on the concept of "pent-up demand" is starting to look more like wishful thinking.

PENT-UP DEMAND IS WISHFUL THINKING

Equally, we argue that the aging of the Boomers is not all bad news. It is actually self-balancing in its economic impact. As Japan's example shows, interest rates tend to fall as a population ages because older people spend less and save more. So the large Western economies can expect to see an increase in domestic savings, alongside a slowing of demand growth.

This is the same law of supply and demand that boosted housing and asset market values over the past 20 years, when demand also rose ahead of supply. Only now, the demand is for guaranteed long-term income rather than McMansions and Hummers. So prices for "safe" G7 government bonds are rising, causing long-term interest rates to fall.

Return *of* capital, rather than return *on* capital, is instead becoming the driving force behind investment flows. In turn, the cost of long-term project funding is therefore falling. This is excellent news for those companies who share our views about the predictive power of demographics.

As we will discuss in future chapters of the eBook, there are plenty of new ideas (such as the global megatrends concept), to power the next wave of global growth.

The key issue is that we need a change in mindset. Those companies that continue to expect stimulus measures to deliver a return to the Golden Age are likely to be disappointed. Instead, the winners will focus on understanding how to profit from the changes now underway as we transition to the New Normal. ■

KEY FACTS

Authors' credentials

Chapter 2 of *Boom, Gloom and the New Normal – How Western Baby Boomers are Changing Global Demand Patterns, Again* is now available on free download at www.*new-normal*.com. It is co-authored by Paul Hodges, chairman of International eChem, and John Richardson.

International eChem have also launched strategy workshops, aiming at helping companies to become a winner in the New Normal. Visit www.new-normal.com

Crude oil cover-up

Liberalization of trading in commodities markets has allowed speculators to distort market fundamentals, argues chapter three of the New Normal eBook

JOHN RICHARDSON PERTH, AUSTRALIA

The chaotic and confusing direction of oil prices continues to befuddle companies the world over as they wrestle with the perennial problem of making accurate forecasts.

It was the famous economist John Kenneth Galbraith who commented: "The only function of economic forecasting is to make astrology look respectable."

But we argue in the third chapter of our free eBook *Boom, gloom and the New Normal – how Western baby boomers are changing global demand patterns, again* that oil forecasts are arguably even more likely to be wrong than just about any other type of forecast.

The reason is that those assessing its direction make the mistake of thinking that what matters most is supply and demand.

Financial and physical traders in the vital black liquid have instead now become the price setters, thanks to regulatory changes.

OIL-MARKET LIBERALIZATION

The most important change occurred on December 15, 2000. This was when US President Clinton signed the Commodity Futures Modernization Act (CFMA) into law.

The act designated that certain over-the-counter contracts were outside the jurisdiction of the Commodity Futures Trading Commission (CFTC), meaning that financial players were able to bypass the speculative limits set by exchanges.

This was thanks to successful lobbying by the now bankrupt Enron.

The CFMA also excludes swap transactions, allowing institutional investors to take larger positions on actual exchanges than would have been the case if they still had to stick to limits on speculative positions.

The groundbreaking legislation also made it more difficult in general for the CFTC to regulate the New York Mercantile Exchange, according to a research paper published by the James A. Baker III Institute for Public Policy at Rice University in Houston, Texas, US. The paper was written by Kenneth B. Medlock and Amy Myers Jaffe.

The authors suggest that because the International Commodity Exchange in London is outside the jurisdiction of the CFTC, this has further added to financial-sector influence; this is termed the "London loophole."

Non-commercial traders were able to increase their market presence by 15-fold from 1995 to August 2009, the authors add.

Open interest held by these non-commercials in early 2005 was 20% of activity on all the futures markets. Just before the great 2008 crash it had risen to more than 55%.

"And more importantly, open interest by

the non-commercial players moved from a lagging to a leading indicator of price by 2006," the study continues.

THE ONE-WAY BET

Global surplus crude production capacity fell from 5.54m bbl/day in 2002 to 1m bbl/day in 2005. This resulted in the oil price doubling to around $50/bbl, say those who believe that supply and demand fundamentals drive the market.

Surplus capacity, however, then increased in 2006–2007 as prices rose towards historic highs, damaging their case.

Another claim was made during this period to justify the surging cost of crude. There was a lack of refinery capacity able to handle heavy grades of oil – those containing high amounts of sulfur.

This added to the premium for lighter crudes that the refineries could handle. This, in effect, reduced total supply because heavier grades could not be processed by many of the refineries. Oil prices then tumbled in 2009 as surplus crude capacity increased from 1.49m bbl/day to 4.33m bbl/day. All well and good you might argue – a sign that the oil market was once again functioning correctly. But 2010 saw surplus capacity increasing even further to more than 5m bbl/day and yet prices increased – because something else was happening.

That year also saw the start-up of a record amount of "full-conversion" refinery capacity able to handle heavy grades of crude, adding to the length in the overall market. There now follows an explanation about why the market behaved in this way.

"The easiest way to check the underlying health of the oil market since early 2009 has been to go to the east coast of Singapore and enjoy a seafood meal," says a senior executive with a global petroleum and chemicals logistics provider.

> **"Open interest by the non-commercial players moved from a lagging to a leading indicator of price by 2006"**
>
> **RESEARCH PAPER**
> James A. Baker Institute

He is referring to the number of very-large crude carriers (VLCCs) moored outside the Singapore harbor. The higher the number of vessels in-view from the open-air seafood restaurants, the wider the contango. When onshore storage for crude has become full, the VLCCs have been the remaining option.

Putting crude and refinery products, such as gasoline and diesel, into storage became a no-brainer for physical traders from late 2008 to early 2009 onwards (note that the financial, or non-commercial, players trade only in paper contracts as they never want to take physical delivery).

> **"The easiest way to check the underlying health of the oil market... has been to go to the east coast of Singapore and enjoy a seafood meal"**
>
> **SENIOR EXECUTIVE**
> Global petroleum and chemicals logistics provider

This was the result of the "one-way bet" – confidence that there would be no change in US Federal Reserve (Fed) policy for a length of time relevant to the markets.

Since late 2008, the Fed had been printing money in an attempt to achieve a lasting recovery in the US economy.

The purpose had been to avoid deflation, and even to inflate high levels of debt away, while the extra money in circulation stimulated overall economic activity. In August 2010 the Fed signalled it was planning QE2 – a second round of quantitative easing.

A wide range of commodity prices, including crude, rallied as a result of greater confidence in the Fed maintaining high levels of liquidity and record-low interest rates. This was followed by the formal launch of QE2.

Record low interest rates had already made it cheap for participants in the oil market to borrow money to either put physical crude and crude products in storage, or trade in paper contracts. Ironically, the fall in real demand for oil and gasoline had reduced the cost of putting all of these commodities into storage. Ship owners took delivery of brand-new VLCCs just as the 2008 crisis occurred. The owners were unable to occupy these vessels by supplying real demand as demand collapsed.

The only option was to therefore rent out storage space to the speculators at low rates. The result was a historically low total cost of carry – interest rates plus storage charges.

Now QE2 has come to an end it will be fascinating to observe whether this one-way bet will continue. However, recent disappointing US unemployment statistics point to the Fed keeping interest rates at historic lows for a some time. Could there also be a QE3?

UNDERSTANDING CHINA

On the other hand, it will be interesting to see whether oil-market bulls will continue to hold sway now that China's economy appears to be weakening.

The financial world, flush with QE2 cash, justified the post-2008 surge in prices on booming emerging market demand, and in particular Chinese, as we also discuss in chapter three. But we argue that even when GDP growth in China was expanding at a rapid rate, oil consumption did not always follow the same upward trajectory.

INVESTING IN REFINING CAPACITY

China invested heavily in new refinery capacity in 2009–2010 to supply booming domestic gasoline and diesel demand, just as fuels affordability became an issue for many motorists due to subsidies being unwound.

This led to China becoming a substantial exporter of gasoline, indicating that a significant amount of crude was being imported to be re-exported as gasoline.

It is possible you will strongly disagree with the arguments we put forward in chapter three. If so, we want to hear from you.

The idea behind the chapter, and the book as a whole, is to stimulate this kind of debate in an effort to prevent another "Black Swan" moment – an event of complete surprise and with major consequences.

But did the events of late 2008 really represent a Black Swan moment or should we have realized that oil prices would not be trading at $200/bbl by end-2011, as one investment bank had forecast? A little skepticism can go some way towards better planning. ■

MEET THE AUTHORS

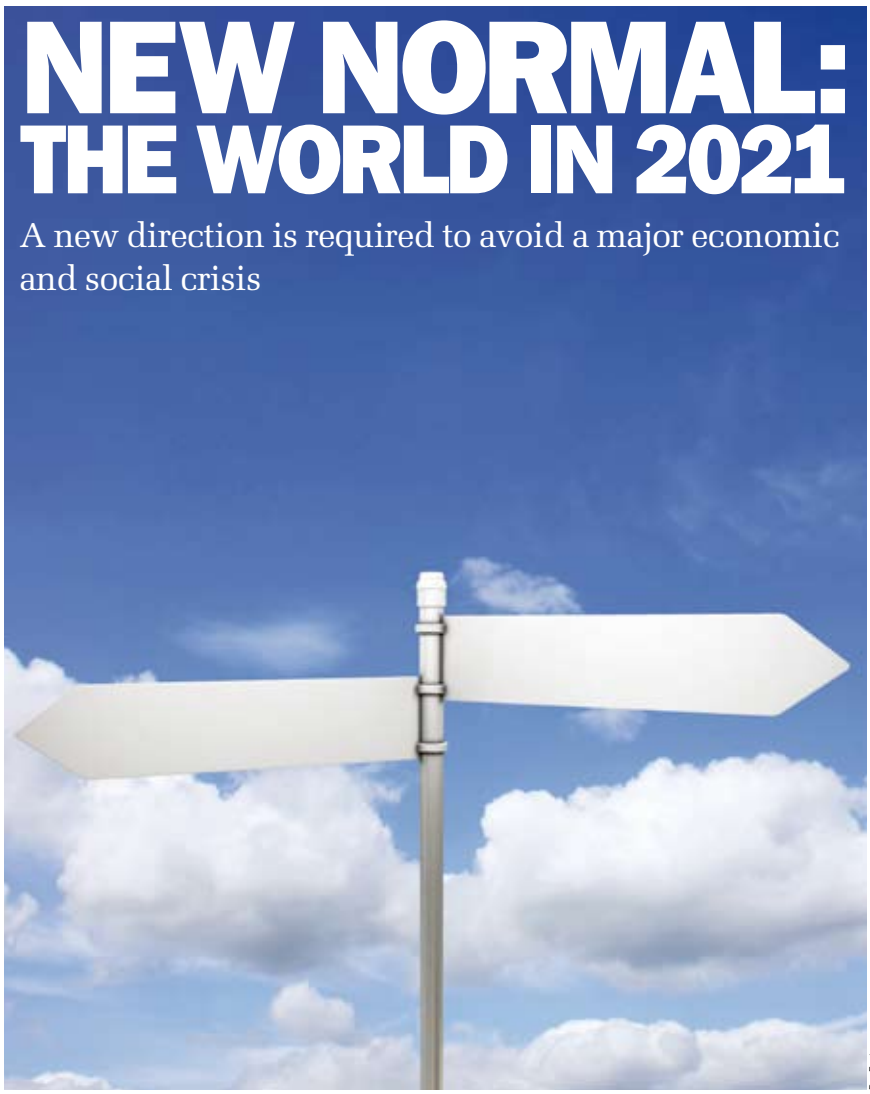
Chapter three of *Boom, gloom and the New Normal – how Western baby boomers are changing global demand pat-terns, again* is now available on free download at www.**New-Normal**.com

It is co-authored by Paul Hodges, chairman of International eChem, and John Richardson, director, ICIS training Asia.

International eChem have launched a strategy workshop aimed at helping companies become winners in the New Normal. Visit **www.New-Normal.com**

NEW NORMAL: THE WORLD IN 2021

A new direction is required to avoid a major economic and social crisis



Rex Features

There is still time to change the road we are on

JOHN RICHARDSON PERTH, AUSTRALIA

A parent's advice to their child in late 1990s Britain: "My dear child, go to university if you feel like it, but don't bother taking a degree in a subject that will help you to do something productive for the world. Instead, buy a flat in London on borrowed money, perhaps several, and your prosperity will be assured."

A parent's advice to their child in late 1990s China: "My dear child, get a degree in engineering. Then you can work for a consumer products company selling to Westerners living on the debt provided by asset-price bubbles."

All of us would love to be able to see into the future, especially when we worry about the financial security of our children.

The purpose of this chapter is to argue that there is a lot of clarity about the next 10 years and beyond, although we might prefer to ignore it.

Chapter Four in the free ICIS/International eChem eBook *Boom, Gloom And The New Normal: How Western BabyBoomers Are Changing Global Demand Patterns, Again*, describes how the next decade will be radically different for all of us, whether we live in the developed or developing world. And by 2021, the world will have realised that the supercycle seen between 1982–2007 was an exceptional period of time. It will not be repeated in our lifetimes.

As we discussed in "The Challenges of the New Normal" (Chapter 1, May 23–29 2011), the economic boom seen during the supercycle was driven by the Western baby boomers (those born between 1946–1970). Their demand for housing, autos and electronics soared as they reached the 25–54 age range when many people settle down and have children. But now the boomers are leaving this age range. By 2021, there will be 324m Westerners over the age of 55 years. They will account for 33% of the Western population (North America, Western Europe, Japan, Australia and New Zealand).

Over-55s typically spend less and save more. And the boomers have to save as much as they can afford to provide for their extra decade of life expectancy compared with previous generations. Their savings will have pushed down interest rates in the more stable economies to Japanese levels of around 1–2%.

As a result, this is what the world may look like in 2021.

THE NEW NORMAL WORLD IN 2021

1. Western countries will have increased the retirement age beyond 65 in order to reduce unsustainable pension liabilities. Deep cuts will have been made to social welfare programs as governments struggle to reduce their debts.
2. Taxation will have been increased across the Western world in an effort to tackle the public debt issue. It will no longer be relatively easy to move large sums of money off-shore to countries with lower tax regimes, as regulations will have been tightened.
3. Western and Asian property markets will be flat, having suffered major price declines. Housing will no longer be seen as investments that will serve as pension funds. Around the world, house prices will instead be back at levels which are affordable for the majority of wage-earners.
4. A major shake-out will have occurred in Western consumer markets. The supercycle led to a focus on the middle-market, as the boomers increased their spending. But by 2021, the middle classes in the West will have largely traded down to bargain-basement shopping. The mid-market will be a small shadow of its former self. Luxury spending will once again be confined to a small minority as debt levels will be much lower.
5. Consumer products companies will have also recognised that in the emerging economies, the phrase "middle class" doesn't define people with Western income levels. Instead, it is often used to describe the mid-tier of the population, those earning only $2–$10/day. Companies who have understood this will be focused on more entry-level products. They will, as a result, be reporting very strong sales and profit growth.
6. Markets will have become more regional. The slowdown in boomer demand will have reduced the need to outsource production from the West. This will probably have been accompanied by a growth in protectionism as politicians – focusing on the next election cycle – erect tariff and other trade barriers.

Rex Features

Social unrest: countries with younger populations will be angry at the lack of employment and prospects for income

7. Social unrest will have become a more regular part of the landscape. Those countries with younger populations such as the Middle East will be angry at the lack of employment and prospects for income. Those with older populations will complain about the impact of government debt-reduction programs on their lives and the reductions in entitlement programs.

8. Both young and old will be focused much more on "needs" rather than "wants". Consumers will look for value-for-money and what is good for the environment as well as their budgets. Frequently asked questions will include "Why not make the old car last a bit longer?" or "Do I even need a new car?"

9. Investors will be focused on "return of capital" rather than "return on capital". Their prime aim will be to understand the riskiness of any investment rather than its potential to make them rich overnight.

10. A new mood will also have replaced the consumerism that drove the supercycle. In part, this will be driven by anger over the asset-bubble era that left governments bankrupt. But it will also be driven by a growing desire to develop a more sustainable way of life, in contrast with the environmental recklessness seen during the supercycle.

IT DOESN'T HAVE TO BE THIS WAY

The New Normal offers the potential to restore a greater balance to society if companies refocus their creativity and resources on real needs.

Water shortages are just one of the megatrends that provide tremendous opportunities for economic growth over the next decade and beyond. In addition, there is the need for more affordable methods of treating water. Millions die every year in developing economies, and suffer serious illness, because of water-borne diseases.

Food preservation is a huge challenge in countries such as India. More than 50% of food rots before it gets to the people who need it.

There is also an urgent need for companies to focus on basic research to tackle these issues rather than on using government grants to deploy old technologies. Solutions will need to be the result of long-term partnerships between governments and companies.

The wider population will find itself following the model of the ageing boomers, consuming less, saving more

The transition to the New Normal will be a difficult time. The world will be less comfortable and less assured for many millions of Westerners.

The wider population will find itself following the model of the aging boomers, consuming less and saving more.

Rather than expecting their assets to grow magically in value every year, they may find themselves struggling to pay down debt left over from the credit binge.

More engineers and more scientists are going to be required to create the new products that will serve needs arising from the megatrends.

We will also need to find politicians with sufficient vision to sell the need for hardship and long-term struggle. This will be difficult, given that voters have become used to having all their wants met by quick "fixes" of increased debt.

We could instead decide to ignore all of this potential unpleasantness.

As Mohamed El-Erian, CEO of PIMCO (the world's largest bond fund managers) has warned, "In these circumstances, human nature is to resort to an 'active state of inertia' and look back to what we are familiar with rather than try to define the new paradigm. That kind of Old Normal oriented behavior is clouding many people's views."

But doing nothing is not a solution. It will mean we miss the opportunity to create a new wave of global growth from the megatrends. And we will instead end up with even more uncomfortable outcomes. ■

THE NEW NORMAL EBOOK

A new chapter of our free *New Normal* eBook is published each month. Download chapter four and previous chapters at www.New-Normal.com.

It has been co-written by Paul Hodges, chairman of consultancy International eChem, and John Richardson, director, ICIS training Asia.

International eChem are running regular "New normal – and the new demand drivers" strategy workshops to equip you with essential skills and knowledge.

When I'm Sixty-Four

As a large section of the population in western economies hits retirement age, it is imperative that companies plan for the changes this will bring

PAUL HODGES LONDON

Will you still need me? Will you still feed me? The Beatles asked the right questions back in 1967, when singing When I'm Sixty-Four on their iconic *Sgt. Pepper's Lonely Hearts Club Band* album. What would happen to the Western baby boomers when they became 64? Would they be about to die, as had previous generations? Or would their future be different? The boomers strongly believed they were different, and they hoped this would lead to a longer life expectancy.

Today, we know this hope has come true, thanks to the scientific advances driven by companies and far-sighted leaders. We're now starting to discover the answer to The Beatles' questions, as the oldest boomer reached the age of 64 last year. Chapter five of "Boom, gloom and the new normal: How Western baby boomers are changing demand patterns, again," describes how companies need to adapt their business models to

this new normal. One measure of the change underway is that two-thirds of all those who have ever reached the age of 65 years in the world are alive today. This is the demographic time bomb that faces us. The boomers have been the richest and largest generation the world has ever seen. However since 2001 they have been entering the 55+ age range, when people typically spend less and save more. By 2020, an unprecedented 33% of the developed world population will be over 55.

It is not surprising, therefore, that recent recoveries have proven relatively weak, in spite of unprecedented amounts of stimulus. The boomers simply don't need more housing or new cars. Equally, they are becoming uncomfortably aware that their pension funds may have to support them for one or more decades, rather than just a few months or years.

Western women are particularly likely to become more cautious in their spending, as equal pay for equal work remains elusive for many. While women have longer life expectancies than men, 25% are only in part-time employment, according to figures from the Organisation for Economic Co-operation and Development. So their prospective pensions are even smaller. Thus, we must assume that demand growth will be slower. We also must plan for a world where regular and deeper recessions are likely to become a feature of the global economy once more, in contrast to the relatively smooth growth seen during the boomer-led Super Cycle. The key question is therefore one of mindset. Successful companies will be those prepared to venture into the unknown, as until recently the 55+ generation had no real existence as a separate economic unit. Advertisers ignored it, for the simple reason that once people reached the age of 55, their needs usually began to reduce quite sharply, and often became primarily focused on health-related issues.

> **"We cannot reasonably expect to grow our way out of our fiscal imbalances"**
>
> **BEN BERNANKE**
> Chairman, US Federal Reserve

If we are going to venture into the unknown, it seems sensible to avoid being too prescriptive about what we might expect to see over the next 20 years. Instead, we might sensibly try to construct some potential scenarios (see box) to highlight the key variables that need to be considered as we approach this brave new world.

CRITICAL SUCCESS FACTORS

These scenarios give us valuable insight into the challenges ahead for companies and individuals. They also suggest some critical success factors for achieving a successful transition to the New Normal, as set out below:

- Flexibility: This involves adapting to new circumstances and being willing to compromise rather than battling for an impossible nirvana.
- Change management: The next 20 years will likely see rapid and unpredictable change in the business environment in contrast to the remarkable stability of recent decades.
- Scenario planning: Companies need to adapt their planning processes to cope with the greater uncertainty that will come from operating in a more events-driven world.
- Real needs: Over the past 20 years, Westerners have often confused "wants" with "needs." In the New Normal, mere "wants" are unlikely to be reliable market drivers for the future.
- Action orientation: Uncertainty can breed a loss of energy, and so companies will need to encourage their employees to experiment creatively if they are to move forward.

The positive news is that most Boomers are likely to lead active and healthy lives well into their 60s and 70s. So the opportunities to capture their interest and their business are still very large indeed. We will highlight some valuable case studies to help with this process in chapter 7. Companies focusing on the emerging economies face similar challenges, as we will discuss in chapter 6 next month.

Their core market will also consist of a currently underserved demographic – those just moving out of poverty and able to afford a bar of soap, or a bra and pair of panties, for the first time. However, The Beatles provide a reliable guide – if we are prepared to listen to their message from When I'm Sixty-Four. The megatrends such as an aging population and the need for improved food production provide the key to future success. ■

DYNAMICS

POTENTIAL SCENARIOS

■ All's well that ends well
In this scenario, the key dynamic is that there is a rapid adaptation to the new normal. This may be driven by the observation of the major pain being suffered in countries already at the sharp end of some most unwelcome restructuring – Greece, Portugal, Ireland and Spain, for example. This gives Western politicians the courage to talk seriously about the issues that society faces, while the wider population becomes prepared to listen to their messages and to accept that major changes need to be made.

■ Muddle through
In this scenario, there is no rapid adaptation to the new normal, and although a higher quality of dialogue takes place between policymakers and the electorate than in the past, no firm agreements are reached on key policies and objectives. However, social cohesion is retained, and so society does not fragment into warring groups.

■ If you don't where you're going, any road will do
A third scenario is based on the potential for politicians to remain more focused on sound bites than on formulating policies that will drive long-term success for their populations. In this scenario, the current dysfunctional state of many Western political systems, and their alienation from the wider electorate, is not a temporary phenomenon, but a sign of the future.

■ Don't worry, everything will be fine
This is the scenario under which the West had been effectively operating for the past few years, ignoring the demographic changes that are taking us in a new direction. It is characterized by an increasingly desperate belief that everything is just about to "return to normal" – that is, the former Super Cycle – via the magic elixir of either tax cuts or yet more stimulus.

The challenge facing us, however, has been summed up by Ben Bernanke, chairman of the US Federal Reserve, who has warned that "We cannot reasonably expect to grow our way out of our fiscal imbalances, but a more productive economy will ease the trade-offs that we face."

THE NEW NORMAL

Chapter 5 of "Boom, Gloom and the New Normal – How Western Baby Boomers are Changing Global Demand Patterns, Again" is now available free to download at www.new-normal.com
It is co-authored by Paul Hodges, chairman of International eChem,, and John Richardson, director, ICIS training Asia.
International eChem have also launched a strategy workshop, aiming at helping companies to become a winner in the New Normal. Visit www.New-Normal.com.

The risks to China and India growth

The emerging countries face huge challenges to continuing robust growth rates. What will this mean for companies?

JOHN RICHARDSON PERTH, AUSTRALIA

In recent years, it has become received wisdom that China and India will reach developed economy status. This will result in "the end of economic cycles," as one excited chemicals industry executive said in 2008, because of the strength of their future growth.

For a while, it seemed as if he might be right as China's economy expanded at more than 10% per year. At the same time, India began long-awaited economic reforms necessary to unlock its enormous potential.

But as we discuss in chapter six of "Boom, Gloom and the New Normal," the new International eChem/ICIS eBook, there are major risks to this rosy scenario, including China's demographic time bomb.

Its one-child policy was introduced in 1978, to counter fears of overpopulation and famine. By China's own accounting, about 400m births were prevented between 1979 and 2010.

This has reduced today's 25-to-35-year-old age group by 75%. As demographer Kenneth Gronbach notes, "the 30-somethings will have to do the majority of China's production, consumption and taxpaying, and when you have a 75% reduction in the group that is chiefly responsible for those activities, you've got a real problem."

China and India's "middle class" also have incomes that are only a tenth of those in developed markets, as we discussed in chapter four. This has major implications for the nature of consumption in China and India – and for the type of products that companies will need to make to prosper.

The transition to developed economy status is therefore not guaranteed.

It takes 50 consecutive years of 7% annual growth for a country to boost per capita income from $500 to $20,000, says Nobel Prize-winning economist Michael Spence. China's per capita GDP was only $4,382 at the end of 2010, and India's $1,371, according to the International Monetary Fund. So both countries still have a long way to go.

Recent growth in China and India has also come at a price – poor air quality, chronic water shortages and deforestation.

Equally, China needs to rebalance its economy away from overreliance on exports.

India must improve its infrastructure and reform the harmful government subsidies that are holding back the agricultural sector.

THE CHINA REALITY

The theory about the inevitability of China's continued rapid economic rise was partly founded on its extraordinary growth in terms of trade, particularly after its accession to the World Trade Organization in 2001. But continuation of this export-based growth depended on credit remaining easy to obtain in the West. This, of course, is no longer the case.

China contributed to the West's credit boom by creating "a virtuous circle" in 2000–2008. Heavy investment by China and other foreign governments in US government bonds helped keep long-term US interest rates low, thereby making it easier for US consumers to keep on buying goods from China.

This also provided the cash that allowed US financial institutions to develop new lending products, including most importantly mortgage derivatives. These were the root cause of the 2008 economic crisis, as we discussed in chapter two.

Yet as long ago as 2003, China's leaders had recognized that the export growth model was unsustainable, as its success was founded on subsidies that were damaging the economy.

The massive economic stimulus package of 2009–2010 – the largest in history for an economy the size of China's – was therefore a case of turning the clock back.

INVESTMENT PUSH

Money poured into investment in real estate and new industrial capacity, reducing domestic consumption as a driver of GDP growth. Consumption as a percentage of GDP has fallen from more than 50% a decade ago to just 33%, according to official statistics.

CRITICAL SUCCESS

Critical success factors for companies in the new normal focus on meeting future market needs "Make what you can sell most cost-effectively"

- **Flexibilty:** Able to adapt to changing circumstances and compromise
- **Scenario Planning:** Thinking through a wide range of potential outcomes
- **Action Orientation:** Overcoming passivity and stimulating creativity
- **Real Needs:** Focus on reliable market drivers close links to key customers
- **Change Management:** Coping with rapid and unpredictable change

Rex Features

Excess investment in 2009–2010 has left China with a legacy of deeply entrenched inflation, a real estate bubble that could burst and non-performing loans on a scale that might disrupt its whole economy.

Turning the economy around towards a greater reliance on domestic consumption is therefore crucial because of not only the wasteful nature of overinvestment, but also because too much wealth is concentrated in the hands of the big, state-owned enterprises (SOEs). They have benefited from low labor costs and poor environmental standards in manufacturing – to the detriment of the vast majority of the Chinese population.

China is attempting such a turnaround under its 12th Five-Year-Plan (2011–2015). But the SOEs, and other powerful interest groups, which have benefited greatly from the current growth model, are likely to fight hard against change.

INDIA'S CHALLENGES

For a while, it felt as if the traditional Indian economic dance of one step forward, two steps back, had been abandoned due to the political stability achieved by Prime Minister Manmohan Singh's government.

But now the government has been discredited and severely weakened by corruption scandals. These include bloated construction and other contracts awarded during the build-up to the Delhi Commonwealth Games, and allegations that telecom companies grossly underpaid for 2G licenses.

Foreign direct investment fell by 25% to $24.2bn in the fiscal year ended March 2011, as overseas companies were deterred by the slowdown in economic reform, corruption scandals, high inflation and high interest rates.

Indian companies invested $43.9bn outside their home market during the same financial year, according to the Reserve Bank of India. This was a 144% increase over the previous year.

With economic reforms held-up by politics, and with less investment available to resolve India's chronically overburdened infrastructure, growth is likely to stall. And crucially, as could be the case with China, India might fail to spread its wealth more evenly among a population that remains predominantly "dirt poor" by Western standards.

Here are a couple of facts about India that illustrate the scale of the challenge:

- It is home to a third of the world's poor, with 37.2% of its people (about 410m) classified as poor, according to the World Bank.
- Overall literacy is 61% and just 47.8% for women, according to the CIA World Factbook. China's overall is 92.2%, and 88.5% for China's women.

IMPLICATIONS FOR COMPANIES

Chapter six discusses what slower growth in China and India could mean for companies. We also revisit the critical success factors we introduced in chapter five and reflect on what success might be in China and India.

One example shows what may be required. A leading producer of the polymers used to make baby diapers tells us that China has abundant capacity to make the front and back panels for baby diapers, but labor costs in the coastal provinces are now too high to justify final assembly.

India doesn't have the manufacturing capacity to make the panels. Infrastructure problems and restrictive labor practices have held back investment in state-of-the art factories.

So in an example of flexibility, China ships the panels to India for final assembly in village workshops and people's homes, where labor costs are lower. The diapers are then sold profitably in the Indian market, for as little as 1 rupee each. This is the kind of thinking that is likely to separate the winners from the losers as the New Normal evolves. ■

THE NEW NORMAL

Chapter six of "Boom, Gloom and the New Normal – How Western Baby Boomers are Changing Global Demand Patterns, Again" is now available free to download at **www.new-normal.com**
It is co-authored by Paul Hodges, chairman of International eChem, and John Richardson, director, ICIS training Asia.
International eChem have also launched a strategy workshop, aiming at helping companies to become a winner in the New Normal. **www.New-Normal.com**

Rex Features

Aging consumers are moving away from flashy designer labels and more toward creature comforts

Baby boomers change markets

In today's environment the time has come for companies to move from a narrow definition of success to one that embraces shared value

PAUL HODGES INTERNATIONAL ECHEM

Consumption drives economic growth. Chapter 7 of our new 'Boom, Gloom and the New Normal' eBook therefore looks at the changes taking place in consumer markets. They provide vital insight into how companies will need to develop in the New Normal. The key point is that companies are now having to change their business models.

The focus on purely financial metrics and shareholder value was successful in its day, but has now become a dead end. Instead, the great companies of tomorrow will build their businesses by learning to provide products that are of genuine benefit to society.

We start by analyzing how the arrival of the baby boomers created a structural change in Western demand patterns. They were the largest and wealthiest generation that the world has ever seen. Their entry into the 25–54 age group when consumption typically peaks, helped to create a new middle ground. The previous division between providing either luxury goods with high perceived value, or functional products with a low delivered cost, became less important.

Consumer companies instead saw the opportunity to refocus on the middle ground of the value versus cost spectrum, via a process of "mass-customization." This meant that consumers were provided with extra value on

a cost-conscious basis – often due to the benign influence of the outsourcing model that we discussed in Chapter five.

Some companies went even further, as in the case of those auto manufacturers who got into the habit of adding "Go Faster" stripes to their cars, as a means of increasing the perceived value of the product. In essence, these companies developed what became known as lifestyle brands, which promoted a feel-good mentality among customers, but had nothing tangible behind them. This move proved extremely popular, and many boomers wore their new status with pride.

A luxury suit from Savile Row, or a Dior dress, had always been immediately obvious to those whom it aimed to impress. The label was hidden discreetly inside the garment, and acted simply as a reminder to the owner from the manufacturer. But for many boomers, the label instead became their own advertisement to the rest of the world, helping to define their own status. Thus even the simple T-shirt became worthy of a logo.

The boomers were a consumer generation when they were in their peak consumption years in the 25–54 age range. But since 2000, they have been entering the 55+ group in increasing numbers. Their values are now changing quite dramatically. Equally, they are not following in the path of previous generations for whom 55+ was assumed to be an end-of-life period.

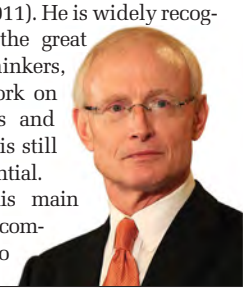
This major change requires companies to operate in new ways, if they are to be successful in the future. Shareholder value has recently been described as a "dumb idea" by its inventor, former GE CEO Jack Welch. But this message has not got through to many in the financial community, who still believe that a spreadsheet and a few good PowerPoint slides are all that is required to run a successful business.

We therefore highlight three case studies to help companies develop their thinking in this critical area. These build on the Scenarios and Critical Success Factors that we developed in Chapter 5. They provide concrete examples of the changes already being made by far-sighted companies in different regions.

- Procter & Gamble, the world's largest consumer products company, is now following a "white space strategy" to reposition itself for future growth.
- We also look at the lessons to be learned from the lfailed aunch by India's Tata Motors of the world's then-cheapest car, the Nano.
- Plus we highlight the new business and technical innovation models being successfully developed by the Bill Gates-funded Meningitis Vaccine Project in sub-Saharan Africa.

The case studies are not only directly relevant to tompanies. They also represent new ways of doing business that will impact everyone who supplies products into these customer industries. All three examples highlight the opportunity for companies to grow sustainably and profitably as we enter the New Normal.

They also support the new concept of Shared Value that has been developed by Professor Michael Porter in the *Harvard Business Review* (January 2011). He is widely recognized as one of the great management thinkers, and his earlier work on competitive forces and company strategy is still enormously influential.



He takes as his main theme the idea that companies "continue to view value creation narrowly, optimizing short-term financial performance in a bubble while missing the most important customer needs and ignoring the broader influences that determine their longer-term success."

"This will drive the next wave of innovation and productivity growth in the global economy"

PROFESSOR MICHAEL PORTER
Harvard University

This leads him to propose a purpose statement for corporations that is "redefined as creating shared value, not just profit per se. This will drive the next wave of innovation and productivity growth in the global economy." He also discusses whether taking a more societal approach might in some way damage companies' ability to operate. One argument put forward in recent years by the supporters of the Shareholder Value concept has been that companies should only exist to maximize shareholder return. In other words, they should aim to reduce costs to a minimum and so maximize profits. But as we now see all too clearly, this approach is also a prime cause of today's growing social inequality and unrest in the West.

As Porter summarizes the position, "Firms have focused on enticing consumers to buy more and more of their products. Facing growing competition and shorter-term performance measures from shareholders, managers resorted to waves of restructuring, personnel reductions and relocating to lower-cost regions, while leveraging balance sheets to return capital to investors. The results were often commoditization, price competition, little true innovation, and no clear competitive advantage… Companies have overlooked opportunities to meet fundamental societal needs… Our field of vision has simply been too narrow."

We demonstrate in chapter seven that companies can instead create great economic and societal value by becoming aware of the "white space" around their current operations. They can also reinvigorate their growth models by reconfiguring value chains to develop affordable products for today's currently unserved or under-served markets.

The two major examples of new opportunities are the 55+ generation in the West, and the millions of people emerging from poverty in the emerging economies. They also highlight the full power of the megatrend concept.

Meeting the needs of the aging Western population, improving water quality, increasing food production, and reducing carbon footprint are all profit opportunities that rely for their power on creating societal value as well as financial gain.

We argue that doing nothing, and hoping that yesterday's consumer-led boom will reappear, is no longer the low-risk option for companies, faced with today's slowdown in profits and growth levels.

Those who shut their eyes, and hope that things might one day return to the 'old normal' are likely to be disappointed.

"Who dares, wins" might instead be a good motto to post on every boardroom wall.

This, after all, is how today's great companies built their franchises in the past, through world wars, depressions and many other equally uncertain times. ■

THE NEW NORMAL

Chapter seven of *Boom, Gloom and the New Normal – How Western Baby Boomers are Changing Global Demand Patterns, Again* is now available free to download at **www.New-Normal.com**. It is co-authored by Paul Hodges, chairman of International eChem, and John Richardson, director, ICIS training Asia. International eChem have also launched a strategy workshop, aiming at helping companies to become a winner in the New Normal. Visit **www.new-normal.com**

Products of the future

Product development strategies need to change as the aging Western population and nascent developing-world middle class look for value for money, not high-end products

PAUL HODGES INTERNATIONAL ECHEM

The global economy is moving into a difficult period, as it transitions to the New Normal. Debt levels are high, and incomes are under pressure, particularly for the large numbers of people moving into retirement.

Cost must be the key criteria when examining the opportunities for research and innovation. Equally, the money that is available must be spent wisely. We cannot afford to waste precious resources in satisfying mere "wants," when "needs" are still unmet.

Chapter eight of our free *Boom, Gloom and the New Normal* ebook examines the application of this philosophy to the four megatrends that we have identified as being key to the future:

- Improving water availability
- Improving food production
- Increasing life expectancy
- Reducing carbon footprint

It argues that the key need is to be practical. Companies should focus:

- In the fields of water/food, on reducing the amount of waste, and the output that is lost when product is moving to market
- In developing new products and services for those over 55, on core needs such as food, water, health, shelter and mobility
- On doing more with less. Carbon footprints need to be reduced, and products to be made more affordable.

This philosophy is quite different from that seen during the 1982–2007 economic supercycle. Then, companies competed for the middle ground, as we saw in Chapter 7. They added features, and pursued the concept of adding value in order to boost profits. Over time, they focused more and more on the wealthier parts of the global population, and became increasingly disinterested in those outside this privileged group.

Today, however, it is no longer viable to focus in this way. The Western baby boomers are joining the New Old generation of those aged 55-plus, and they face the prospect of much lower incomes as they transition from salaries to pensions. Equally, the rest of the population faces a world where credit is much less available to support their desired lifestyles.

Thus, the focus must be on more basic products and services. This is especially true for those aiming to target sales in the developing and emerging economies. Incomes in these regions are dramatically lower than those in the West. It is wishful thinking to imagine they can somehow replace the demand for added-value products that is disappearing in the west.

This is not bad news, although it may seem like it at first. We argue that the opportunities ahead are enormous. To access these, we propose a new philosophy for research and product development. This starts with megatrends, and is based on the work done to produce the UN Millennium Development Goals in 2000.

This means that affordability will become the key parameter, rather than value in use. Whatever we produce must be usable by as many people as possible. The core markets for these products will be driven by volume, whether we are talking about potential consumers in the emerging, developing or developed worlds.

The gloomy global economic outlook means consumers need to spend wisely

The advantage of this approach is that more functionality can be added to meet the specific needs of the middle income groups in the developing world, and for the middle classes in the West. Value-in-use thinking can then be employed when selling the more limited volumes required at the top of the pyramid in the global luxury sector.

Ford's launch of its new EcoSport SUV range of cars in India provides a good example of how this concept may work in practice. Ford believes increased affordability is the key to meeting its goal of boosting global sales volumes by 50% by 2015. It has therefore developed a new 1 liter version of the Ecosport for sale in low-cost markets, and will manufacture it in India. This will complement sales of more expensive models, which have engine sizes ranging from 1.6 to 3.5 liter luxury models.

PRINCIPLES FOR SUCCESSFUL NEW PRODUCT R&D

- **Societal value** – Provides motivation for fast adoption among all relevant stakeholders
- **Long-term ambition** – Products need major long-term growth potential in order to sustain the required investment
- **Upfront investment** – Genuine innovation is essential to meet key needs in currently underserved or unserved markets
- **Local presence** – Close contact with potential customers and partners, to ensure alignment with real needs
- **Value for money** – Products requiring long-term subsidy, or high margins, are unlikely to be successful

Rex Features

Our proposed new philosophy also takes a wider view of companies' responsibilities to the societies in which they operate. As we have argued in previous chapters, operating only by reference to financial parameters is no longer affordable. Instead, we need to adopt the concept of "shared value" (creating value for society as well as profits) because, as US Harvard University professor Michael Porter has argued, this is the only way to "drive the next wave of innovation and productivity growth in the global economy".

AGRICULTURE DRIVES GROWTH

The use of water for agricultural purposes highlights the scale of the opportunity. The US Geological Survey estimates that "almost 60% of all the world's freshwater withdrawals go toward irrigation." Cotton production alone accounts for more than 3% of all agricultural water use. Traditional cultivation processes such as field flooding are obvious targets for reducing water use.

This challenge has led to the development of a program organized by the Better Cotton Initiative and including companies such as Levi Strauss, to provide technical know-how to Indian farmers. Over three years, this has enabled a 32% drop in the use of water and pesticides. The farmers' profits are 20% higher as a result, thus also helping to stimulate economic development.

The key is to use drip irrigation systems, essentially plastic veins that can direct water to each plant's root system. This not only spreads water and fertilizer more evenly than traditional pumping, but also means less water is available to encourage weed growth around the plants. In addition, electricity consumption is reduced, as drip irrigation requires less pumping.

Of course, these techniques are not new concepts in themselves – in many ways they go back to principles first established by the earliest agriculturally based societies. And cotton is only one of the crops that can benefit from the techniques that have been developed. But it highlights the potential for many more such innovations that companies could help to deliver.

We believe examples such as these can provide companies with potential ground rules for success, as summarized in the chart. This can help to guide research and development-project selection and portfolio development.

- Societal value is the key factor. This provides the essential motivation to attract potential stakeholders and value-chain partners, and thus drive fast adoption.
- Value for money is also critical. The market for products that require long-term subsidy, or high margins to recoup development costs, will be much smaller than in the past.
- Local market presence is essential. A centralized organization will almost certainly either fail to notice the new opportunity, or regard it as being too small to matter.
- Up-front investment in developing the initial offering is required. Companies have to be prepared to develop new products and services, rather than just following a me-too process.
- Long-term ambition is also key. The focus should not be on "cute technology" products, but on those that have genuine major growth potential.

Doing more with less is therefore our motto for future success. The chapter contains, as always, a wide range of practical examples to help stimulate ideas within your own business. We are convinced that those who accept its challenges will benefit for many years to come. ■

THE NEW NORMAL

Chapter eight of *Boom, Gloom and the New Normal – How Western Baby Boomers are Changing Global Demand Patterns, Again* is now available free to download at **www.New-Normal.com.** It is co-authored by Paul Hodges, chairman of International eChem, and John Richardson, director, ICIS training Asia.

International eChem has also launched a strategy workshop, aiming at helping companies to become a winner in the New Normal. Visit **www.new-normal.com**

A changing landscape

Future demographic trends will have a huge effect on manufacturers and the way they produce goods

JOHN RICHARDSON PERTH

The big transformations in the nature of consumer markets are creating great opportunities for future growth, if our economy can be adapted to serve their needs.

Chapter nine of our free *Boom, Gloom and the New Normal* ebook looks at the implications for manufacturing of:

- the increasing size of the "New Old" 55+ age group in the West
- the number of young Westerners struggling with higher unemployment
- the increasing number of people moving out of poverty in the developing world.

The Western baby boomers (those born from 1946–70) are the largest and richest generation that the world has ever seen. As they moved into their peak wealth-creating period between the ages of 25 and 54, so the global economy boomed. The US suffered only 16 months of recession in the 25 years between 1982–2007. There was always pent-up demand, as more and more boomers were entering the age group.

But since 2001, the oldest boomers have been entering the "New Old" 55+ age group, when people typically spend less money because their children have left home. And the boomers have to spend less, and save more, because they also have the longest life expectancy in history. Today, we therefore need to focus on the megatrends that will drive future demand growth.

When it comes to water and food, we should focus on reducing the amount of waste and the output that is lost when product is moving to market. In developing new products and services for the over-55s, we should focus on core needs, such as food, water, health, shelter and mobility.

In turn, this will enable us to do more with less. We will reduce carbon footprint, and ensure that our output can be afforded by the maximum number of people.

These changes in market drivers will have a profound effect on how, and where, products are manufactured.

Manufacturing processes will need to change in many companies as we transition to the New Normal. Quality will matter more and more as we move away from the throwa-way society of the past couple of decades. So will approaches such as Process Intensifica-tion. They involve reducing the size of manufacturing plant, and can often enable companies to lower capital and operating costs while reducing waste.

THE HISTORY OF QUALITY

The chemical industry has long been an enthusiastic champion of the importance of quality management. It was one of the first to appreciate the importance of the concept of the "learning organization", which was originally brought to the West from Japan.

This discovery of the Quality Circle approach, which enabled major improvement in manufacturing processes, led to the flowering of the quality movement in the 1980s and 1990s.

The work of US management consultant W Edwards Deming was enthusiastically adopted by DuPont and ICI, while General Electric adopted the Six Sigma concept across its whole organization.

These changes in market drivers will have a profound effect on how, and where, products are manufactured

This transformation was based on a realisation that quality was not something to be added on after the event via a process of inspection. Instead, it needed to be designed into the whole manufacturing process. Measurement thus became critical, on the principle that management cannot monitor what isn't measured.

Companies also learned how to detect the sources of problems rather than their symptoms. This enabled products to be made to very tight specifications on a consistent basis.

Companies learned how to detect the sources of problems

Equally, safety cultures were revolutionised as it was realized that accidents didn't just happen, and so could be prevented.

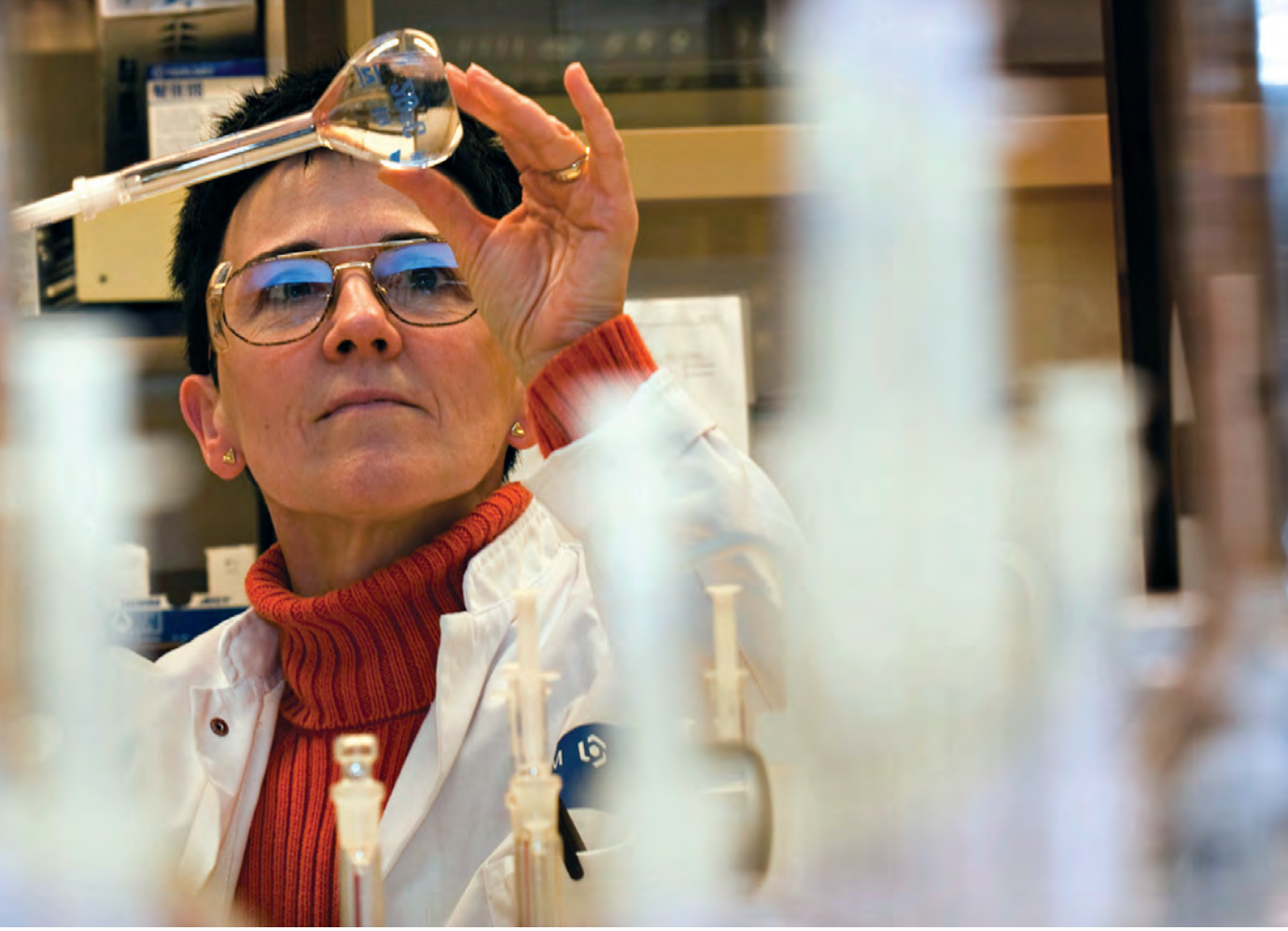
WHERE IT WENT WRONG

But in the early 2000s, the quality movement seemed to stall. Many of the people who had launched this revolution retired. More worryingly, some companies began to forget that quality was a process, and had to be reinforced by senior management at every possible opportunity.

China's admission to the World Trade Organization in December 2001 was a key moment in this loss of direction. Under Deng Xiaoping, it had decided to open up to Western markets. China's new leadership then saw an opportunity to short-cut this process by becoming the manufacturing capital of the world. Its advantages were based on the provision of a cheap and highly-disciplined workforce that was prepared to migrate from the rural areas to work in export-focused factories on the coast. But it had very little tradition of manufacturing itself, and certainly had no pretensions to being a manufacturing center of excellence.

China cannot therefore be blamed for what then went wrong.

Many Western companies did take the time, and spent the necessary money, to ensure that Western standards of quality and safety were adopted in the factories that they established in China.



But too many didn't. They instead simply seized on the opportunity to reduce costs. Their aim was to produce goods that were seen as being cheap and cheerful, which was by then becoming the motto of the West's throwaway society.

If a T-shirt only cost $2, did it really matter if it ripped when it was worn? Many customers only ever intended it to be worn once and thrown away. The credit boom then underway made it easy to borrow more money to spend on new T-shirts.

Today, however, the throwaway society is on the way out. Instead, the key markets for the future are going to be those we detailed at the start of this article.

And in order to serve these markets, we need to relearn what has been forgotten or ignored over the past decade.

Fortunately, there is a good place to start, back in Japan, by studying The Toyota Way. This evolved out of the quality movement, and emphasises that having the right corporate philosophy is the critical starting point. It includes a focus on benefiting wider society, good leadership, and on rooting out inefficiencies through getting everybody involved in processes and problem solving.

The strength of The Toyota Way was highlighted when the company ordered the recall of 9m vehicles in the US in 2009–10, as a result of suspected uncontrolled acceleration and faulty brakes. Extensive official investigations later concluded that the problems were not the result of manufacturing issues.

But Toyota realized, in the spirit of continuous improvement, that this favorable verdict wasn't enough. Thus Akio Toyoda, Toyota's president, announced in December 2010 that he was establishing a special committee for global quality under his leadership, and was "taking the company back to basics."

The chapter looks in-depth at the 14 principles of The Toyota Way. Its case studies also illustrate how:

- shareholder value was a total waste of time and is at the root of many problems with manufacturing today
- you can be very successful by paying your staff well and by treating them well – for instance, the US wholesale retailer, Costco
- it is possible to completely change your strategic direction in three months if you treat your staff in the right way, which is what happened at Salesforce.com – the online customer-relationship management company
- you can make products very cheaply, that also serve the wider needs of society – for example, the One Laptop Per Child initiative.

Its aim is to help companies ensure that manufacturing delivers the competitive advantage that is required as we transition to the New Normal. ■

International eChem have launched a strategy workshop about the New Normal. Visit www.new-normal.com

To remind you about the key trends behind the shift to the New Normal, cut out this box and stick it on the wall of your control room or workstation.

FACTORS DRIVING THE NEW NORMAL

- The increasing size of the New Old 55+ age group in the West
- The number of young Westerners struggling with higher unemployment
- The increasing number of people moving out of poverty in the developing world

THE NEW NORMAL

Chapter nine of *Boom, Gloom and the New Normal – How Western Baby Boomers are Changing Global Demand Patterns, Again* is now available free to download at www.New-Normal.com. It is co-authored by Paul Hodges, chairman of International eChem, and John Richardson, director, ICIS training Asia.

Rex Features

Could the US policy of quantitative easing be too reliant on consumers conforming to the life-cycle hypothesis?

Political challenge

We need a new policy framework to reflect major changes in the global economy

JOHN RICHARDSON PERTH

Politicians are floundering for solutions as the West swings between austerity and economic stimulus.

Which is the better route to growth? Cut spending to bring budgets back into balance, as has been the case in Europe, or pump money into the economy via quantitative easing, as has been the policy of the US government? These are the questions being posed, time and again, in private policy debates and in the public arena.

But in Chapter 10 of our e-book, *Boom, Gloom and the New Normal – How Western Baby Boomers are Changing Western Demand Patterns, Again*, we argue that policymakers are on the wrong track. The first challenge is to get over their adherence to an economic theory – the life-cycle hypothesis.

The theory holds that we are, on the whole, rational beings, meaning that most of us save enough money for our retirements.

Policymakers are therefore convinced that the total volume of spending will not decline when populations age, even though the nature of spending might undergo radical changes. The over-65s are, for example, going to buy fewer sports cars, but the economy will be compensated by an equal amount of spending on Zimmer frames and, for the more able, sedate walking holidays in the countryside, they believe.

What about the effect on pensions of the recent collapse in equity and housing markets? No problem, say policymakers in the US. All we have to do is reinflate stock and housing markets with a few hefty doses of fiscal stimulus to enable everyone to rebuild their savings for retirement.

In Europe, too, although the debate continues to rage over austerity versus stimulus, politicians and central bankers are in agreement that the life-cycle hypothesis holds true. They are therefore convinced that once this current economic sticky patch is over, demand will come roaring back.

WE ARE NOT RATIONAL

But we argue that people are far from rational, making life very difficult for policymakers and economists, who like nice, neat models to explain where things are going. This helps keep them in jobs. Lending decisions by institutions and borrowing decisions by individuals are, of course, often irrational. Take, for example, the dot-com bubble. People were desperate to rebuild their savings after the bubble burst in 2001, thus taking more big risks, this time on property rather than equity.

The psychology of any bubble can be reinforcing. People tend to believe that "this time it will be different" – that a particular bubble »

Rex Features

Companies such as Hyundai now form a world-class manufacturing sector in South Korea

» will go on forever, rather than believing in the inevitable, eventual end of all bubbles.

The influence of the media, and of the "Hollywood effect," on people's lifestyle choices is also important. We are constantly bombarded with images, through TV and magazines, of the seemingly wonderful lives of the rich and famous, and so can be tempted into taking on too much debt in futile efforts to emulate those we envy.

This was the case during the subprime mania, with average-income earners further lured into high debt levels by the failure of politicians to issue warnings about the risks ahead. Why on earth did we expect anything better of the average guy or gal when political leaders, as well as most economists and other "experts," failed to see this coming?

Once politicians get over their belief in the life-cycle hypothesis, they can then begin to come to grips with the need to retool Western economies to take advantage of the changing nature of demand.

DEALING WITH SKEWED INCENTIVES

The right products need to be made, at the right cost, for the aging baby boomers – who are spending less and saving more – and for younger people struggling with reduced employment and income prospects.

Manufacturing industry also needs to be reconfigured in order to tap not only into demographics, but also into the other megatrends such as carbon footprint and scarcity of food and water.

We argue that companies cannot do this alone. Public investment in research and development, and in industry-focused education programs, is needed so that both the young and old are given new opportunities to find work that is both meaningful and financially rewarding.

Picking the right industries to support, and avoiding waste often associated with government involvement in industry, will be the obvious challenges. But the opportunities are enormous for governments and for companies, in home and export markets. Incentives, which have become badly skewed in the West as a result of the growth in importance of the financial sector, also need to be adjusted.

"Now, South Korea has some tremendous brands, including Samsung and LG..., and Hyundai Motors"

Young engineers and scientists, who would be much better employed in industry, prefer to work in the financial sector where salaries are far higher. The size and rewards of the financial industry are way out of line with the needs of society, and are distorting Western economies. It needs to be reformed and we suggest how this might be done.

In the Middle East and in China, major debate is already underway about the role that manufacturing can play in stabilizing societies through job creation. China has created hundreds of millions of low-paid manufacturing jobs, but now faces an enormous challenge in successfully moving on to the next phase of its development.

We explore how China's highly ambitious 12th Five Year Plan is at risk of failure. The plan defines a clear path towards a new, sustainable growth model. But can the reforms work if China fails to become more open and more democratic?

China is very good at copying – and sometimes improving on – Western technologies. But without more creativity and innovation, it might struggle to produce the original designs and brands necessary to justify rising wage costs. Can the right levels of creativity and innovation occur without its society becoming more open and democratic?

South Korea serves as a good example of a country that has successfully made the transition from developing to developed status. From 1961 to 1979, when it was run by the military dictator Park Chung-hee, the focus was on rebuilding the country through low-value manufacturing after the devastation of the Korean War.

In 1987, it became a democracy and, as wage costs rose, it shifted to shipbuilding, steel, chemicals and basic electronics manufacturing. The 1997–1998 Asian financial crisis exposed flaws in the economy, most notably overcapacity in steel and chemicals as a result of the over-dominance of the Chaebol, the country's industrial conglomerates.

Thanks to the election of the first president from an opposition party, Kim Dae-Jung, which occurred shortly after the Asian financial crisis, the Chaebol and the financial sector were restructured and corporate governance improved. Now, South Korea has some tremendous brands, including Samsung and LG, which dominate the LCD TV business, and Hyundai Motors.

It is the job of politicians everywhere to be frank and open about the challenges ahead. They also need to encourage and inspire companies and individuals to benefit from the transition to the New Normal, while creating the policy framework to make this possible. ■

THE NEW NORMAL

Chapter ten of *Boom, Gloom and the New Normal – How Western Baby Boomers are Changing Global Demand Patterns, Again* is now available free to download at **www.New-Normal.com.** It is co-authored by Paul Hodges, chairman of International eChem, and John Richardson, director, ICIS training Asia.

A road map for success

As the global economy transforms, companies need to take tough decisions and be prepared to move in new directions

PAUL HODGES INTERNATIONAL ECHEM

The penultimate chapter of our free *Boom, Gloom and the New Normal* ebook sets out a road map to success for companies in the New Normal of changing demand patterns caused by an aging Western population.

Its aim is to highlight the key challenges and opportunities. It also identifies four key areas where major change is already underway. We start by looking at the history of success within the chemical industry. It is the world's third-largest industry (the others are agriculture and energy), and has a history of adapting to major change over the past two centuries. However, we cannot underestimate the challenges ahead. They will create winners and losers.

FOUR ELEMENTS FOR SUCCESS

■ **Demand-driven** Markets have essentially been supply-driven in recent decades, with growth being forecast on the basis of ratios to expected GDP growth. Companies have focused on increasing their efficiency via a one-size-fits-all business model. As we transition to the New Normal, they will need to refocus on being effective. Robust strategies, flexible implementation planning, plus a commitment to local techno-commercial support and long-term research and development will be required.

■ **Market focus** New world-scale plants will still be needed during the transition. But these opportunities will be mainly in the few countries where good growth can still be expected in the size of the 25–54 year-old "Wealth-Creator" cohort. Companies operating in the West will instead need to reposition their businesses to focus on the needs of the aging 55+ "New Old" generation if they wish to drive future growth. Those operating in the emerging countries will need to develop mechanisms to sustain growth in the domestic economy, particularly in the rural areas.

■ **Affordability** The focus on needs rather than wants is a different way of looking at the world. It requires the development of new offerings based on the megatrends of food, water, shelter, mobility and health. These products must be affordable, as they are aimed at meeting basic needs rather than mere wants. Consumers have less money to spend, and so the highly profitable middle ground of the past couple of decades is disappearing.

■ **Shared Value** Consumer values are also changing quite dramatically, away from the materialism of the recent past. Concerns about sustainability and carbon footprint are rising. Equally, companies in the emerging economies of the Middle East, Asia and Latin America no longer see profit as the only driver for business. Social stability is becoming equally, if not more important. The former focus on purely financial metrics needs to change.

THE "VUCA" ENVIRONMENT

The transition to the New Normal is a sea-change for the global economy. Its full impact will take years, if not decades, to become clear. Meanwhile, the world will face much greater uncertainty, as conflicting views of the world play out on a day-to-day basis. Companies therefore need to plan for a VUCA environment: Volatility, Uncertainty, Complexity and Ambiguity will be the order of the day.

GDP growth will once again become more volatile and uncertain as we transition to the New Normal. Those who have joined the industry since the 1980s have grown up in an economic Supercycle where the US suffered just 16 months of recession in the 25 years between 1982–2007. But now, with the aging of

Rex Features

the Western baby boomers, we are returning to the pre-1982 environment. Recessions every four to five years will add more complexity to business and increase ambiguity.

A straight-line approach to planning will no longer work. Instead, a more demand-driven methodology is now required.

This is particularly true of the two high-potential growth sectors that we have identified.

Both the New Old 55+ generation in the West, and those emerging from poverty in the emerging economies, are relatively unknown markets.

Their demand patterns are unlikely to mimic those of the Western baby boomers as they entered their Wealth-Creator phase.

A more proactive approach, based on understanding their potential needs, therefore seems to be essential because:

- The New Old hardly existed as a commercial proposition until recently. People over the age of 54 were instead assumed to 'drop off the map' as they entered their so-called declining years.
- In the emerging economies, the focus during the Supercycle was on the few relatively affluent people. Little is known about the more than 90% who earn less than $20/day.

This move to more of a needs-driven approach will require a change of mind-set within the industry. The key shift required is to move from a product focus towards more of a market focus.

Taking this new approach may prove uncomfortable at first, because of its unfamiliarity. But as companies become more used to it, they will find it is a powerful tool for capturing new growth opportunities. They can map these onto their own capabilities and aspirations, and develop a comprehensive program for future profit.

Our suggestion is that companies should focus on developing new product offerings for the new major demographic opportunities we have identified: the New Old 55+ generation in the West, and the Wealth-Creator 25 – 54 age-group in emerging economies. These offerings should be based on core needs – water, food, health, shelter and mobility – and developed with sustainability in mind.

Their demand patterns are unlikely to mimic those of the Western baby boomers as they entered their Wealth-Creator phase

This approach will enable companies and consumers to do more with less. It will help to reduce carbon footprint, and maximize the affordability of new products. It will also require us to relearn old skills that were largely forgotten during the Supercycle.

But as we show in the chapter, our discomfort can be minimized by utilizing the lessons learnt by the major consumer products companies.

Rex Features

How will you plan for the New Normal?

They are ahead of us in this journey, and their experience can provide valuable pointers for what we need to do. Equally, there is little we can do to avoid the transition now underway. Demographics drive demand, and the aging of the boomers is taking us down a new road.

SEEKING A NEW SET OF VALUES

Volatility, Uncertainty, Complexity and Ambiguity are clearly increasing as we transition to a new set of values in the New Normal. A key cause is that consumers' value structures are also going through a major change. Increasingly, they refuse to define themselves any more by the size of their car, house or new kitchen. Instead, their focus is in 5 key areas:

- Value for money – they are price sensitive
- Simplicity – they are looking for less complex lifestyles
- People, not things – family and friends are increasingly important
- Values – they value trust, and are concerned about carbon footprint
- Convenience – they want products to last, and to be available locally

Another cause is that companies themselves, and governments, are confused about what is happening. Many still expect government stimulus programs to return us to the Supercycle world. This also makes it harder for the world to move forward in a new direction, when such powerful forces are still trying vainly to turn back the clock.

This VUCA landscape is creating winners and losers. No longer will the rising tide of affluent Boomers provide an effortless route to increased sales and revenues. Instead, companies need to create their own VUCA as they develop strategies and implementation plans. Vision, Understanding, Clarity and Agility will be their road map to success. ■

THE NEW NORMAL

Chapter 11 of *Boom, Gloom and the New Normal – How Western Baby Boomers are Changing Global Demand Patterns, Again* is now available free to download at **www.New-Normal.com**. It is co-authored by Paul Hodges, chairman of International eChem, and John Richardson, director, ICIS training Asia

Prepare for a new normal

The world has changed, and it is now up to both companies as well as individuals to refocus on the new challenges and opportunities ahead

JOHN RICHARDSON PERTH, AUSTRALIA

The world economy has changed irrevocably as a result of the financial crisis and the demand changes created by the aging of the Western Baby Boomers.

We are about to set out on a great journey as the New Normal of sustained lower economic growth develops. There is no going back.

In the 12th and final chapter of our ICIS/International eChem ebook, *Boom, Gloom and the New Normal*, we provide our view of how individuals, companies and politicians can best prepare for the journey ahead.

For most companies, this will require nothing short of a radical re-examination of all the old assumptions about how the global economy behaves, and what this means for demand-growth patterns in end-use industries.

Rex Features

Pack for a long journey – there's no going back, the experts say

In chapter 4, we imagined two sets of parents addressing their children during the late 1990s, one in Britain and one in China.

The British parent told his child not to bother with a degree that would enable him or her to do something productive for the world, but to instead buy several properties in London. In China, the advice was to get a degree in engineering in order to help make the products Westerners were buying in abundance from China, thanks to the credit bubble.

What advice should parents give their children today? One option is to remain as cynical as our imaginary 1990s parents and look for new opportunities to make a quick buck. But it is better to take a more refreshingly positive view because, by so doing, each of us can help shape a better future.

The world has converged, and so we make no distinction between a British parent, a Chinese parent or any parent in the West or in the emerging world.

We suggest: "Go and get a degree that will allow you to work for a company that will constantly innovate, making products that meet the needs of the future – the 55+ generation in the West and those emerging from poverty in the developing world. The firm you work for must also be mindful of the other megatrends – food and water scarcity, carbon footprint – in everything it does and everything it makes."

So what exactly does a New Normal company look like? How, also, should the Old Normal corporate world go about making this transition?

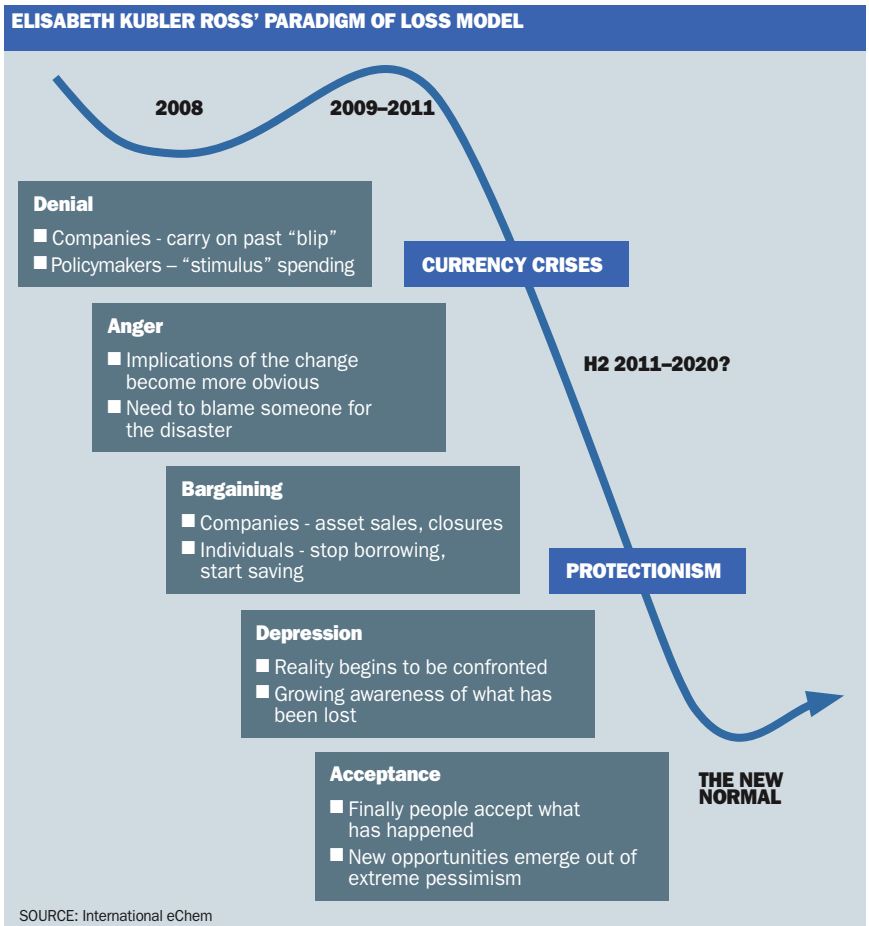
TOO MUCH COMMODITIZATION

Michael Porter, the management thinker, in his Shared Value article in the Harvard Business Review (January 2011) neatly summarized the kind of company we need to watch out for, the type still welded to the Old Normal, when he wrote about firms that have "focused on enticing consumers to buy more and more of their products."

"Facing growing competition and shorter-term performance measures from shareholders, managers resorted to waves of restructuring, personnel reductions and relocating to lower-cost regions, while leveraging balance sheets to return capital to investors," Porter also said.

"The results were often commoditization, price competition, little true innovation, and no clear competitive advantage… Companies have overlooked opportunities to meet fundamental societal needs… Our field of vision has simply been too narrow."

The key for companies to avoid this trap is to break away from the tyranny of the focus on short-term financial metrics. They instead need to start planning for the longer term. Companies also need to establish and stick to a set of values that enable them to meet the



needs of society and be successful, which we also discuss. But what is also needed is the support of policymakers. Unemployment is a major problem across the Western world. It has the potential to create repeated waves of social unrest that could bring governments down and wreck economic growth. If skills atrophy, and people lose the energy to learn new skills, it will become much harder to make the products and services of the future.

STRONG SOCIAL POLICY IS NECESSARY

Good social policy is therefore needed, as without a healthy society there cannot be a healthy economy. For example, increased investment in education is required to create the skills necessary to make the products of the future. This will involve partnerships between governments, both central and local, and industry in order to provide the right type of education and retraining programs.

Many developing countries have social policies that emphasize job creation over short-term profitability. But they face their own challenges. A key part of the New Normal journey will be the realization that the financial market's view of emerging markets is over-simplified and often wrong: their rise cannot inevitably replace lost demand in the West. In the case of China, additional challenges exist. These include the battle against economic reform by those who have done well out of the existing growth model, such as the state-owned enterprises.

China's economic model, which has prioritized exports and infrastructure over domestic consumption, needs major reform. India's continued economic rise is also far from guaranteed, as a result of corruption and stalled reform. Hopefully, the right politicians will come along to resolve these issues.

DON'T UNDERESTIMATE EMOTION

And then there is the emotional reaction to the changes now underway that could completely change the course of events. We look at this through the insights of Elisabeth Kübler-Ross, the Swiss-American psychiatrist, who identified five stages of grief while working with terminally ill patients, as detailed in the chart.

Today, many companies and governments remain in the Denial stage. They think that we can carry on past this "blip" in the old model of growth through fiscal stimulus or tax cuts.

"If we can just get the Western consumer to start buying again" is the argument of policymakers. But the problem is that the Baby Boomers' transition into retirement means demand is not there any more to fuel the kind of growth we saw in the 1982–2007 SuperCycle.

In some countries, we are already seeing the first signs of the next stage – Anger. In turn, this is causing investors to take fright, as they worry their loans may not be repaid. This is happening now in the eurozone, where interest rates in Greece reached 30–40% before it defaulted. Countries such as Spain and Italy are dangerously close to the 7% level that makes repayment almost impossible.

Creativity will begin to flourish once again. New opportunities will emerge and people will reorient themselves

Working through these first two stages will probably take a long time. The Bargaining stage is still to come. Old Normal companies will have run out of road in their cost-cutting efforts, and may find themselves forced to make asset sales on a distressed basis in a market where there are few buyers.

Understandably, therefore, if the parallel with Kübler Ross' work holds true, what will follow is Depression. This will be derived from a sense of hopelessness at the scale and difficulty of the tasks ahead. It is at this point, as in the 1930s, that we risk seeing a return to protectionism.

Only after all this time will we approach the end of our journey and reach Acceptance, where individuals, companies and countries start working together again in a search for solutions. This will allow creativity to really flourish and encourage confidence to return. New opportunities will then emerge as we arrive in the New Normal. ■

THE NEW NORMAL

Chapter 12 of *Boom, Gloom and the New Normal – How Western Baby Boomers are Changing Global Demand Patterns, Again* is now available free to download at **www.New-Normal.com**. It is co-authored by Paul Hodges, chairman of International eChem, and John Richardson, director, ICIS training Asia,.

BOOM, GLOOM AND THE NEW NORMAL

About the authors

PAUL HODGES is chairman of International eChem and a trusted adviser to the global chemical industry and its investment community. He has worked in the chemical industry for 30 years. Initially he spent 17 years at ICI – one of the world's leading companies – working in both the UK and the US. He held senior positions in petrochemicals and chlor-alkali, and was executive director of a $1bn ICI business.

He founded International eChem in 1995 and has strong professional relationships with the leading players. He follows developments on a detailed day-to-day basis. He writes the ICIS Chemicals & the Economy blog (www.icis.com/blogs/chemicals-and-the-economy) and has been recognised in the *Financial Times* and elsewhere for his success in forewarning readers of the global financial crisis.

Paul is a Freeman of the City of London. He is a graduate of the University of York, and subsequently studied with the IMD business school in Switzerland.

JOHN RICHARDSON is a journalist who has been covering the chemical industry for more than 15 years.

Based in the Asia-Pacific region, John has deep knowledge of the companies and people who have transformed the region into the world's major production and consumption region.

His aim is to provide insightful, factually based analysis of the key issues facing the industry and his views are highly valued by senior executives.

Since 2006, John has been director of ICIS training Asia, which provides a range of courses covering petrochemicals, oil refining, fertilisers and base oils.

He also writes regularly for ICIS Insight and *ICIS Chemical Business*. Previously, John was editor of *Asian Chemical News* (2000–2005) and deputy editor (1997–2000).

Before joining ICIS in 1997, John had roles working for both the BBC and the UK national press.

About ICIS

ICIS provides price information, news and analysis for the global chemical, energy and fertilizer industries.

We publish independent, unbiased pricing and market reports covering a broad range of products - from petrochemicals and base oils to fertilizers, gas and power.

Our global news service delivers breaking news, up-to-the-minute product pricing and market intelligence, bringing you the information you need as it happens.

ICIS

©2011 Reed Business Information/International eChem. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission in writing of the publishers.

Cover images: Rex Features and iStock

Printed by Short Run Press Ltd, Exeter, UK

Reed Business Information

ICIS

ICIS is the trusted information provider for the chemical and energy industries. ICIS aims to help companies in global commodity markets improve their revenues and profits by providing high quality, timely, commercially useful information, business leads and brand positioning across the globe.

www.icis.com

International eChem

Creative Energy for Important Issues

International eChem (IeC) are trusted commercial advisers to the global chemical industry and its investment community. Our team has an in-depth understanding of the issues, and of the 'real world' in which clients operate, due to our experience in working with many of the world's major companies and financial institutions.

www.iec.eu.com