

Future Perspectives are thoughtpieces that offer concise, focused insights into important issues of interest to marketing and business strategists.

For more information please visit www.thefuturescompany.com/free-thinking/

# Succeeding in low-growth markets

It is now more than four years since the financial crisis struck, and the mood has changed. At the time, the conventional wisdom was that, while the crisis was serious, we would see a similar pattern to previous recessions: a two- to three-year period in which output was below its pre-crisis peak, followed by a return to growth. It hasn't happened. The scale of the financial sector's losses, the level of debt in richer economies and the austerity policies pursued by many governments have combined to create a slowdown that is longer and deeper than anticipated.

In their latest assessments, both OECD and IMF are downbeat. Growth has slowed significantly since the boom years of 2003-2007, and the IMF's World Economic Outlook says there a significant risk that "global activity could deteriorate very sharply." The OECD's latest update talks of "a hesitant and uneven recovery" and warns of the threat of renewed recession.<sup>2</sup>

Now some economists are suggesting that the growth years before the crisis were a blip rather than a trend, and that the rich economies will have to learn how to live in a world of low growth. They may be wrong; pessimism is also a feature of recessions. But what if they are not? It would mean a fundamental shift in the way that companies do business in the richer world. In this Future Perspective, we examine the arguments and outline the ways in which businesses need to change their thinking if they are to succeed in a low-growth world.

### **Understanding growth**

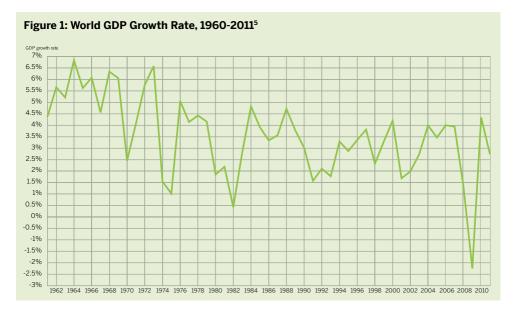
The OECD maintains a website<sup>3</sup> devoted to the authoritative database of economic statistics for all countries and regions back to 1 AD, compiled over many years by Angus Maddison, a British economist and pioneer<sup>4</sup> in the study of national accounts. The home page summary of Maddison's work ends with this stark declaration: "World economic growth has slowed substantially since 1973, and the Asian advance [of the past

half century] has been offset by stagnation or retrogression elsewhere."

This slowing of global growth is easily seen in the World Bank chart in Figure 1.5 During the 1960s, peak annual growth rates regularly topped 6%. In the late 1970s and 1980s, none topped 5%. In the 1990s, no year was above 4%.

The late 2000s saw the deep financial crisis.

Economist Robert Gordon from Northwestern University expects<sup>6</sup> this decline to continue. In a widely <sup>7</sup> discussed paper that sent<sup>8</sup> a jolt <sup>9</sup> through <sup>10</sup> the blogosphere<sup>11</sup> when it was published in 2012, Gordon argues that long-term declines in the productivity gains realized from innovation will, in combination with a number of other headwinds, slow US economic growth to less than, and perhaps a lot less than,





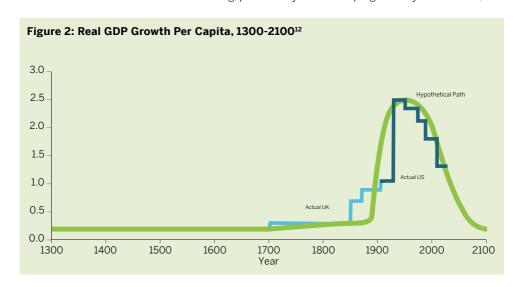
2% per year for decades to come. Gordon focused on the US as the leading economy in the world, whose fortunes have an impact across the globe, but the dynamics he reviewed, in particular trends in productivity levels, are relevant everywhere.

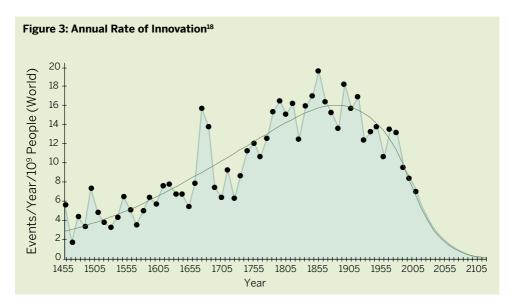
He argues that three eras of innovation since the Industrial Revolution transformed life

worldwide. From 1750-1830 this was driven by steam engines, cotton spinning and railroads; from 1870-1900 by electricity, the internal combustion engine and running water with indoor plumbing; and from 1950-1970 with air conditioning, home appliances and, in the US, the interstate highway system. But by Gordon's reckoning, productivity

returns declined with each epoch, and innovation since 2000, while useful, does "not fundamentally change labor productivity or the standard of living in the way that electric light, motor cars, or indoor plumbing changed it."

What Gordon foresees can be seen in Figure 2, which shows a trend line of real GDP per capita since 1300 for whatever was the leading national economy of the time. An upward trajectory finally appears after the initial epoch, or the Industrial Revolution (at which time the UK was the leading economy). Growth rates continued to increase until 1950 since when there has been a steady decline in rates of growth. Growth continued, but at progressively slower rates,





reflecting lower productivity returns on innovation; which led Gordon to anticipate a bottoming out of growth in the near future, especially when also considering the other headwinds facing the US economy.

Many economists share Gordon's gloomy view, most notably George Mason University economist and Marginal Revolution <sup>13</sup> blogger Tyler Cowen, whose 2011 book The Great Stagnation <sup>14</sup> sparked <sup>15</sup> a widespread <sup>16</sup> critical <sup>17</sup> storm. Cowen's basic thesis is similar to Gordon's—innovation has plateaued, so future growth will be much slower. Although Cowen, like Gordon, focuses his analysis on the US, the

core issue he identifies affects every economy. Figure 3<sup>18</sup> shows a chart Cowen relies on based on work<sup>19</sup> by Pentagon physicist Jonathan Huebner, who plotted the rate of global innovation since the Middle Ages. It peaks in 1873 and plummets after 1955.

Whatever the debate, one thing is not in dispute—the returns on innovation are declining. No matter how you measure it, the result is the same. Plotting the number of significant inventions worldwide per decade since 1700<sup>20</sup> shows a dramatic drop-off since the mid-1970s. Figure 4<sup>21</sup> overleaf is a timeline of US total factor productivity (the residual economic output that can be attributed to

technological innovation). It shows a significant slowdown after 1973, the same critical year identified by Maddison and Cowen.

While Cowen is downbeat about the near term, he is not pessimistic about the long term. He believes that breakthrough innovation will return eventually, reigniting strong growth. Indeed, this challenge to Gordon's pessimism about the long-term future of growth is the primary rebuttal advanced by critics. who include commentators as various as Paul Krugman and Kevin Kelly. Breakthrough innovation always occurs, they argue, even if it can't be reliably predicted.

The argument about patterns of technology innovation made by Carlota Perez, which we discussed in our Future Perspective on *Technology* 2020<sup>22</sup>, suggests that we'll see a fresh wave of innovation around a new technology platform over the course of the next 10-15 years, although in the meantime there will be decreasing returns to information and communications technology (ICT) innovation (we are already seeing this). But even if this is the case, and we do see such innovation, the long-run growth trend could still be downwards. To put faith in a reversal of historical trends is to indulge an unfounded

optimism, particularly when taking account of the other challenges Gordon characterizes as headwinds.

Admittedly, some individual economies will do better than others, especially those not buffeted by the headwinds affecting the US and many other developed markets. As discussed in detail in our Future Perspective <u>Unlocking new sources of growth</u><sup>23</sup>, there are always peaks of growth opportunities even in declining markets. Success can still be found, whatever the economic situation

But the network of tight connections in today's global

economy means that low growth in one country or region has implications for all. Business strategists will have to do exacting analyses of market potential to remain fleet of foot in a global economy growing at a snail's pace.

The inescapable reality is that, for at least a decade to come if not longer, slow economic growth will be the backdrop to everything, a macroeconomic situation utterly unfamiliar to today's business leaders. Thus, the issue at hand is urgent and clear: how to grow a business in a low-growth world?



#### Seven Headwinds

The idea that we might be facing a step change towards a lower underlying growth rate has been around for some years, even before the financial crisis

As discussed in the previous section, Gordon's article has its limits. It looks only at the US economy, and takes quite a narrow view of some of the issues it identifies. For reference, his six headwinds are summarized in the panel on the next page. However, some of the themes in his article, and others, apply more generally to low-growth economies. In this section we explore these themes a little more fully.



#### **Demographics (aging)**

There are two effects here. The first is history: the post-war 'demographic dividend' that saw a surge in young people joining the workforce, with a resulting boost to output,

We now have the demographic pay-out. The demographic dividend and the gender dividend have been spent

is long gone. So has the economic boost that came in most markets from women coming into labor markets in far greater numbers. Instead we now have the flipside, which is more of a demographic pay-out. Both the demographic dividend and the gender dividend have been spent. Across Europe and Japan, and even in the US. populations are aging, and in aging societies the traffic is the other way; older people leave the workplace faster than young people come into it. The biggest consequence is an increase in the 'dependency ratio, or the ratio of retired

people to working people, with consequences for public spending directly on pensions, and indirectly on health and care costs. While economies are adjusting to this change by encouraging older people to work longer (the UK abolished its official retirement age in 2011) this may only move the problem around. While there are some complex effects here, the upside is that if older people work longer without displacing other workers, the economy gets a boost. But otherwise—especially if young people are pushed out of work by older people<sup>24</sup>—the outcomes are likely to reduce productivity and long-term growth rates.

1%

#### The unequal society

Inequality matters because the rich spend their money differently from the rest of us: in fact, to a significant extent, they don't spend it at all. In contrast, the less rich (and this Growth tends to be lower in more unequal societies and the US and the UK are as unequal now as they have been for 80 years.

includes most middle-income earners as well as poorer households) spend a much greater proportion of their income, and they also spend it closer to home, in their own local economies. The very rich, in contrast, are more likely to spend on niche products or assets. Inequality comes with another cost: it changes patterns of innovation. Instead of innovation for the mass market, which has the potential to be transformative, it chases niche opportunities among the rich.25 The result of both of these factors is simply that growth tends to be lower in more unequal societies. and the US and the UK are as unequal now as they have been for 80 years. This may start to reverse over time—there are patterns in long-term trends but only slowly.



# The growth of the service sector

As economies get richer, they tend to spend more on services and less on goods. And as societies get older and expectations change around healthcare, more is spent on care services. But historically. there is less scope for increasing productivity in the services sector in general, and the care sector in particular. There are fewer gains to be had from automating production. Customers would worry about using a hairdresser who planned to use a machine to cut their hair rather than cutting it themselves; a patient who needs turning in bed will probably be turned by hand for some years to come.

It's not impossible to find ways to improve productivity in the service sector, although there are always arguments as to whether such gains are being measured effectively. It is just to say that the opportunity for productivity gains tends to decline in more service-oriented economies, and with it, the opportunity for economic growth.

-£

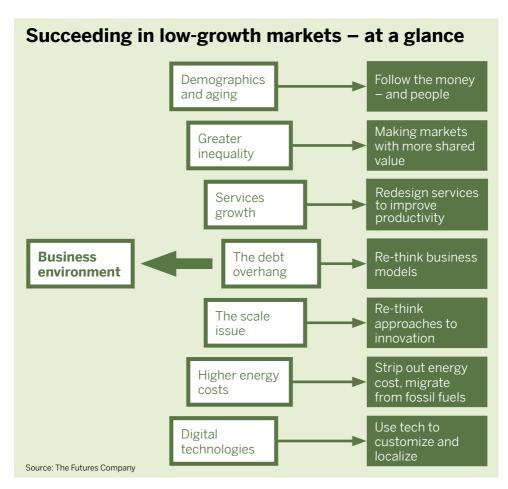
#### The debt overhang

The scale of debt in richer markets is huge, although in some countries their response to the financial crisis has had the effect of moving the debt around between sectors. Some kind of "debt haircut" or "debt jubilee" seems possible in the longer term if the recession continues, but it will be the last resort of governments captured by their financial markets. There is a second. concern: that some markets are suffering from what's been called a "balance sheet recession" and that the policy tools deployed to address the recession in these markets are not suited to the nature of the problem.

"67%

of Americans say that "being debtfree" is a sign of success and accomplishment"

**US MONITOR 2012** 



Richard Koo summarizes this as follows:

"When a debt-financed bubble bursts, asset prices collapse while liabilities remain, leaving millions of private sector balance sheets underwater. In order to regain their financial health and credit ratings, households and businesses are forced to repair their balance sheets by increasing savings or paying down debt. This act of deleveraging reduces aggregate demand and throws the economy into a very special type of recession."<sup>26</sup>

The specter that sits behind such analyses is that of a Japanese-style "lost decade" in which deleveraging across the private sector leads to both low investment (by the corporate sector) and low demand (by the household sector), and these simply face each other off. Public sector investment is required to break the cycle, but debt-laden governments may be unwilling to intervene in this manner, for a number of reasons.



#### **Higher energy prices**

As demand continues to climb and supply plateaus, oil prices are trending upwards. This will continue until global demand starts to decline significantly, energy efficiency increases substantially, or renewables start to provide a significant share of energy, especially for transport. None of these things looks likely to happen soon: at best over two decades rather than one. And despite the excitement in some quarters about the emergence of shale gas and oil, there is little reason to believe that these will be produced in sufficient quantities over a sustained period of time to make more than a dent in the price of oil.

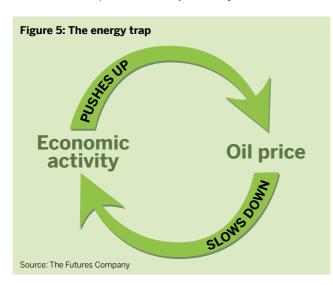
There's a larger story here. and a larger controversy. about the extent to which long-run growth in the richer economies has been a product of 200 years of cheap fossil-based energy. That is beyond the scope of this Future Perspective. But in the short term, some economists. now believe that the effect of the relationship between underlying high oil prices and the global economy may be to keep it continually on the edge of recession.<sup>27</sup> The model works like this: when economies are in recession the oil price falls because of low demand. As economies pick up, the oil price increases in response to the extra demand. In turn, this slows the economy again (see Figure 5). This is a headwind that blows just when you don't want it to.



#### The rise of the digital economy

The economist Robert Solow once observed that he could see computers everywhere, except in the productivity figures. But since the 1990s, when computers started to become networked this has been stood on its head. Brian Arthur, who developed the idea of increasing returns to scale, estimates that digital networks account for 60-80% of productivity gains since 1995.28 As reported by journalist Gillian Tett, the US export credit guarantee agency Exim has seen an export boom. with exports 25% up on last vear. But the number of jobs sitting behind those increased exports has fallen by 12%. Tett notes "This is jobless growth." As people joked in the 1970s, the factory of the future would be staffed by a man and a dog. The man would be there to feed the dog, the dog to make sure the man did not touch any of the machinery.

A broader effect of digital networks has been to expose national economies to much broader competition than previously, effectively suppressing middle-income wages and removing swathes of middle-income



jobs. At the same time, it has made nationally-based companies more vulnerable to international competition, even if this sometimes takes the form of gaining competitive advantage through (digitally enabled) tax avoidance.

The digital wave has produced upsides. Falling prices mean greater consumer utility. Arguably, lower prices have acted to offset the lower wages produced by global transparency, although there are limits to the extent of this. As the digital economy

reaches saturation, in terms of high levels of penetration, and as wage levels in emerging markets start to rise (in particular in the so-called 'tradable sectors' which export), the global impact of digital technology should level off. But at the same time. although workers freed by technology innovation should be able to move<sup>29</sup> to newly productive sectors of the economy (that, at least, is what the theory says), it's hard to see for the moment where those new jobs will come from



#### The problem of scale

As organizations become larger, it is harder to grow at the same rate as previously. This is more a matter of arithmetic than economics, but it does have implications for long-run growth rates.

It becomes harder to command the necessary resources, whether people or capital or raw materials. Larger organizations also tend to get

# Robert Gordon's Six Headwinds for the Future of the US Economy

The demographic 'dividend' has gone into reverse. The original dividend was the movement of women into the labor force between 1965 and 1990, which raised hours per capita. With the retirement of the baby-boomers, hours per capita are now in decline.

Educational attainment in the US peaked more than 20 years ago. The US is now steadily slipping down the international league tables in terms of its population of a given age that has completed higher education.

The growth in median real income has been substantially slower than that

for average income between 1993-2008, a function of increasing inequality. (Average real household income grew by 1.3% per year, but for the bottom 99% growth was only 0.75%.) Consumer well-being, and therefore economic growth, is driven by the bottom 99%.

The interaction between globalization and ICT has led to outsourcing of all types. Effectively this means that inexpensive foreign labor competes with America labor through both outsourcing and imports.

The cost of coping with the effects of global warming

represents a payback for previous economic growth. For example, a carbon tax will generally reduce the amount that households have to spend on goods and services.

Household and government deficits also represent a substantial headwind. In 2007, US households experienced record debt levels. Although they have been paying off debt, this has largely been as a result of an explosion in government debt levels. The long-term consequence is reduced public spending, or higher taxes, or both, which dampens growth.

There is a risk of low growth becoming structured into economies and societies that experience it, at a social, cultural and a political level. For low-growth pessimists, Japan and its two decades of stagnation are an awful warning.

layered with bureaucracy and institutional politics that make decision-making slower. Even in recession (as we discussed in our Future Perspective on *Unlocking new sources of growth*<sup>30</sup>) there are peaks within the economy which represent areas of growth. But these are not always large enough to represent sufficiently interesting opportunities to companies with shareholder-driven expectations of

particular levels of growth or innovation assessment processes which apply aggressive discount rates.

At the other end of the scale, the rate of new business start-ups has been declining in the US since the 1980s, and contrary to received wisdom this trend has accelerated since the financial crisis. As a result, the share of job creation among young firms (5 years old or less) has fallen from 40% of new jobs in the 1980s to around 30% recently.<sup>31</sup> The reasons for this decline are unclear.

Finally, with scale comes greater scrutiny. The period after a financial crash is when governments start worrying about competition law, excessive corporate profits, and anti-trust policies.



# And some bigger questions

There are some further issues that emerge from this analysis that also compound the long-term likelihood that growth will remain low. The first is, simply, that the global economy is not conforming to the 'Consensus Future' model. As Mark Thirlwell of Australia's Levy Institute has observed, this is "a view

of the future that is shared by international financial institutions, by investment banks, by consultancy firms, and by think tanks."<sup>32</sup>

The Consensus Future model depends on two significant features. The first is that the leading-edge 'frontier' economies (such as the US and Germany) continue to move forwards, through a combination of innovation and growth, and that the rest converge on the frontier, largely through being fast followers, and so are quick to catch up. But right now the 'frontier' economies are largely stuck, while the record of middle-income countries succeeding in the transition to high income is actually quite poor (most don't escape from middle-income status). The combination of population growth and resource pressures that most now face makes this transition even harder than previously.

Beyond that, there is the risk of low growth becoming structured into economies and societies that experience it, at a social, cultural and even political level. For low-growth pessimists, Japan and its two decades of stagnation are an awful warning. Charles Hugh Smith argues that "The decline of permanent employment has led to the unraveling of social

# Gordon's provocation

A thought experiment helps to illustrate the fundamental importance of the Second Industrial Revolution [19th century] to the subset of Third Industrial Revolution inventions that have

You are required to make a choice between option A and option B.

With option A you are allowed to keep 2002 electronic technology, including your Windows 98 laptop accessing Amazon, and you can keep running water and indoor toilets; but you can't keep anything invented since 2002.

Option B is that you get everything invented in the past decade, right up to Facebook, Twitter, and the iPad, but you have to give up running water and indoor toilets. Which option do you choose?



mores and conventions. Many young men now reject the macho work ethic and related values of their fathers ... For their part, young women are opting out of the burdens of being in effect a single parent who carries the immense responsibility of guaranteeing the academic success of her son(s) and the marriageability of her daughter(s) ... it's no wonder a third of Japanese young women have not married and have no plans to marry."33

And it appears that the political dynamics of an aging population have helped to lock Japan onto its deflationary path: older voters on fixed incomes have supported economic programs which promote deflation because this preserves, even increases, their incomes.

There are politically-led approaches which could re-open paths to growth. But they require states to become lead actors and also to act against the interests of the financial sector. For example, the geographer David Harvey has argued that previous economic crises have been overcome by significant public and private investment in housing programs: "to recover from recession, we build houses and then fill them with things."34 Even if large-

"We have been living off lowhanging fruit for at least 300 years ... free land, immigrant labor, powerful new technologies. Yet during the last forty years, that started disappearing, and we started pretending it was still there."

Tyler Cowen<sup>14</sup>

scale housing initiatives are hard to imagine at present, it is possible—at the least—to envisage new infrastructure investment (for example in clean energy or transit systems) as a route from recession. But in governments and finance departments that are dominated by a view of the world seen through austerity lenses, such a change in policy could be, at best, a slow train coming.

### Succeeding in low-growth markets

If the headwinds identify the factors likely to depress growth, they also provide clues for where to look for opportunity. For the headwinds are not evenly distributed. In this final section we look at where opportunities are to be found in low-growth markets.

# Look for markets where the headwinds are weaker

In previous Future Perspectives, we have identified such markets. writing in *The Future of the* Eurozone,35 for example, about the strong prospects for Poland, which combines low debt levels and a younger population. Equally, some markets, such as Italy where the economy is currently persistently weak, nonetheless have more scope for growth because the current low economic participation rate by women means it has more headroom to grow if they become economically active. (See Unlocking new sources of growth).



#### Follow the money

As demographics shift, so does the money. It is a familiar refrain, but the over-50s—for the foreseeable future—control most of the wealth and a significant proportion of the income, yet few sectors (outside of Hollywood<sup>36</sup>) have adjusted to this. Older consumers will also be increasingly visible in the labor market, out of both

necessity and choice. The Futures Company has argued elsewhere<sup>37</sup> that older workers will be looking for "bridge jobs" that allow them to make a slow transition to retirement, although their choices in this will be limited by their skills and position in the labor market. Smart businesses will look to redesign human resources structures to attract and utilize such "bridge workers".

# Changing debt into running costs

In a world where consumers are trying to avoid debt, business models that depend on debt will come under pressure. This is one of the reasons why consumers have delayed new purchases of 'big ticket' items, which are often associated with debt-based purchase models. It will be hard for businesses to let go of these, because they have been supremely profitable (think of the margins in car finance) but competitive advantage will likely follow those businesses that innovate their business models first. In other sectors. such as the cellphone/mobile market, providers have rolled capital costs into fixed-price service contracts.

# Designing costs out of services

One of the benefits of 'coproduced' or 'co-created' services is that the service user both expects to do some of the work—and gains a better or more personalized service as a result. Digital networked technologies provide such opportunities (think of personalized health, for example). In doing so, the provider can reduce costs while focusing more acutely on the needs of the user.

# Squeeze energy out of your operations

Most organizations have been actively doing this already through their climate change programs. In a world of high energy prices and continuing competition for fossil-based energy from emerging economies, organizations that are most aggressive in squeezing out energy costs, and shifting to renewables, will gain competitive advantage.

#### **Rescaling innovation**

Conventional innovation approaches can focus too much on incremental improvement, and, while these are often necessary to maintain market share. they don't necessarily help to find the peaks in a lowgrowth world. It is perhaps not coincidence that recent books on innovation emphasize experimentation (and rapid scaling of successes) or the importance of networks. contexts and innovation ecologies, or of learning from low-cost innovation in emerging markets.38 But traditional assessment frameworks that measure outcomes against high anticipated discount rates will not work

#### **Making markets**

Markets need consumers. It is an obvious point, but one which seems to have been lost in the race to the bottom. represented by notions of 'shareholder value' and the pursuit of profit at the expense of wages. The economics editor of The Guardian newspaper in the UK. Larry Elliott,39 made the point this way "Capital's victory over labour since the late 1970s has come at a price: workers lack the purchasing power to buy the goods and services they are producing, and are no longer willing or able to borrow the money to do so."40 In other words, wages will have to rise as a share of the overall economy if there is to be longterm growth. This is not so much a question of economics as of political economy. There are already signs of the politics involved in this change in the notion of shared value popularized by Michael Porter and, perhaps, underlined by the corporate tax campaigns in the UK

#### Conclusion

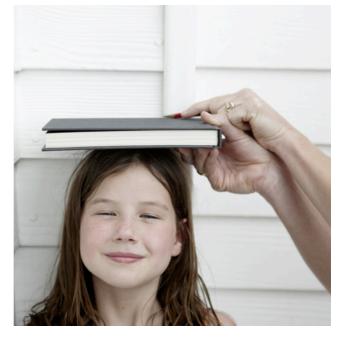
Because low-growth economics is a crisis of politics as well as economics businesses will have to be alert to changes in the political landscape. We are already seeing this in the rise of the Global Enraged, documented in 2012's Global MONITOR As Tamara Lothian and Roberto Unger argue "The present debate. however, is almost entirely deficient in any view of the institutional innovations that would be required to organise socially inclusive economic growth over the long term."41 If low growth continues for any length of time, the whispers about socially inclusive institutions and socially inclusive economic growth will become a scream.

For many businesses, these are truly disruptive changes. They could require significant shifts in the way businesses organize their marketing, their innovation, their business models, their operational assumption and their human resources approaches. In this Future Perspective, we have barely scratched the surface

of the issues that would affect businesses—almost regardless of sector—if the pessimists are right in seeing a long-term lowgrowth future for the richer economies

Of course, the pessimists could be wrong. Although this recession has been longer and deeper than previous recessions, good times might be just around the corner.

We could be on the verge of a return to business as usual. The new wave of technological investment might be just about to break across these struggling economies. But if they are not, it might at least be worth understanding what Plan B looks like. If low growth has settled in for the long haul, then it is worth knowing what your business would need to do differently.



### **How The Futures Company can help**



The issues identified in this report raise significant challenges, and some unfamiliar opportunities for businesses. The Futures Company can help you respond to these in a number of ways.

# Identifying strategic challenges in your sector or categories

The long-run drivers of change in the economic landscape identified in this report represent a high-level analysis. But these drivers play out differently in different markets and in different sectors. The Futures Company's Strategic Futures process can help you identify which issues are most critical for your business, the impact they will have on your sector, and what you can do to respond most effectively. First-movers are likely to gain an advantage.

## Understanding new consumer mindsets

Some of the consumer trends which follow from these economic drivers of change were evident even before the financial crisis. For example, attitudes towards consumption generally were changing in the mid-00s as a result of increasing debt levels. Some of these drivers of change, such as demographics, are also reshaping markets. The Futures Company's qualitative experts can help you look at your categories through these two lenses - the objective and subjective - and to identify who vour consumers will be in lowgrowth markets and the values they bring to their spend on goods and services.

# Identifying new innovation spaces

Even if many of these big picture economic drivers seem relatively certain over the next decade, businesses still have room to maneuver. Even in low-growth markets there are opportunities for growth in particular categories, in particular sectors, or among particular consumer groups. The Futures Company's innovation specialists can work with you to think creatively how to re-design or re-position your products or services so they work for consumers in this new low-growth landscape.

Contact us at unlockingfutures@thefuturescompany.com or see www.thefuturescompany.com

#### **Endnotes**

- 1. http://www.imf.org/external/pubs/ft/weo/2012/02/index.htm
- 2. http://www.oecd.org/newsroom/globaleconomyfacinghesitantandunevenrecoverysaysoecd.htm
- 3. www.theworldeconomy.org
- http://www.nytimes.com/2010/05/01/business/01maddison.html?adxnnl=1&adxnnlx=1354647917-5IKOhGMwgjwAx-cpBel/sdw
- Source: https://www.google.com/publicdata/explore?ds=d5bncppjof8f9\_&met\_y=ny\_gdp\_mktp\_kd\_ zg&tdim=true&dl=en&hl=en&q=gdp%20growth%20rate%20world#lctype=l&strail=false&bcs=d&nselm=h&met\_ y=ny\_gdp\_mktp\_kd\_zg&scale\_y=lin&ind\_y=false&rdim=region&ifdim=region&tdim=true&tstart=-254862000000&ten d=1322974800000&hl=en\_US&dl=en&ind=false
- 6. http://www.cepr.org/pubs/PolicyInsights/PolicyInsight63.pdf
- 7. http://www.ft.com/intl/cms/s/0/78e883fa-0bef-11e2-8032-00144feabdc0.html
- 8. http://johnhcochrane.blogspot.com/2012/08/gordon-on-growth.html
- 9. http://economistsview.typepad.com/economistsview/2012/09/gordon-is-us-economic-growth-over.html
- http://www.freakonomics.com/2012/10/04/why-america%25E2%2580%2599s-economic-growth-may-be-shhover-a-new-marketplace-podcast/
- 11. http://krugman.blogs.nytimes.com/2012/08/28/is-economic-growth-going-down-the-dra
- 12. Source: http://www.cepr.org/pubs/PolicyInsights/PolicyInsight63.pdf
- 13. http://marginalrevolution.com/
- 14. http://www.amazon.com/The-Great-Stagnation-Low-Hanging-ebook/dp/B004H0M8OS
- 15. http://www.motherjones.com/kevin-drum/2011/01/great-stagnation
- 16. http://www.ft.com/intl/cms/s/0/ea3bb3b4-2a7d-11e1-8f04-00144feabdc0.html
- 17. http://www.economist.com/blogs/freeexchange/2011/01/growth\_2
- 18. Source: J Huebner, Technological Forecasting & Social Change 72 (2005) 980-986
- 19. http://accelerating.org/articles/huebnerinnovation.html
- 20. Source: http://akinokure.blogspot.com/2011/02/great-stagnation-of-inventions-in-two.html
- 21. Source: http://macromarketmusings.blogspot.com/2011/02/great-stagnation-and-total-factor.html
- 22. http://marketing.thefuturescompany.com/acton/attachment/4161/f-0043/0/-/-/-/file.pdf
- 23. http://marketing.thefuturescompany.com/acton/attachment/4161/f-0051/0/-/-/-/file.pdf
- 24. http://ftalphaville.ft.com/2012/10/10/1204051/the-old-are-stealing-our-jobs/ (free registration required)
- 25. http://www.ippr.org/juncture/171/9818/stimulus-slump-superstition-and-recovery-thinking-and-beyond-vulgar-keynesianism acting-
- 26. Koo, RWER 58, The world in balance sheet recession: causes, cure, and politics
- 27. Alexander, Degrowth, RWER 61
- 28. http://www.businessspectator.com.au/bs.nsf/Article/jobs-america-united-states-employment-exim-exports-pd20121214-2Y5YW
- 29. Kevin Kelly: http://www.wired.com/gadgetlab/2012/12/ff-robots-will-take-our-jobs/all/
- 30. http://marketing.thefuturescompany.com/acton/attachment/4161/f-0051/0/-/-/-/file.pdf
- 31. http://blogs.wsj.com/economics/2013/01/08/slow-start-up-formation-raises-job-creation-questions/
- 32. http://www.lowyinterpreter.org/post/2010/09/03/Our-consensus-future.aspx
- 33. http://www.oftwominds.com/blogaug10/Japan-lost-generations08-10.html
- 34. David Harvey (2012), Rebel Cities. London, Verso
- 35. http://marketing.thefuturescompany.com/acton/attachment/4161/f-0017/0/-/-/-/file.pdf
- 36. http://www.hollywoodreporter.com/news/meryl-streep-arnold-schwarzenegger-sylvester-stallone-364548
- 37. http://thefuturescompany.com/2013-planning-horizons-posts/the-boomer-bridge-job/
- 38. Grant McCracken, Culturematic; Ron Adner, The Wide Lens; Govinder and Trimble, Reverse Innovation
- 39. http://www.guardian.co.uk/profile/larryelliott
- 40. http://www.guardian.co.uk/business/economics-blog/2012/dec/23/uk-economy-stuck-groove-prospects
- 41. http://www.ippr.org/juncture/171/9818/stimulus-slump-superstition-and-recovery-thinking-and-acting-beyond-vulgar-keynesianism

### **Notes**



#### **About The Futures Company**

The Futures Company is an award-winning, global strategic insight and innovation consultancy. Unparalleled global expertise in foresight and futures enables The Futures Company to unlock new sources of growth through a range of subscription services and research and consulting solutions.

The Futures Company is a Kantar company within WPP with teams in Europe, North America, Latin America and (from 2013) Asia.

Succeeding in low-growth markets was written by Andrew Curry and J Walker Smith. Design: Augustus Newsam and Tania Conrad. Production: Karen Kidson and Tania Conrad.

Will Galgey, Global CEO T: +44 (0)20 7955 1818 will.galgey@thefuturescompany.com

www.thefuturescompany.com www.twitter.com/futuresco http://www.linkedin.com/company/the-futures-company