



the
futures
company

Defying Gravity

Sources of Growth in a
Slower Growth Global Economy

J. WALKER SMITH, ANDREW CURRY,
JOE BALLANTYNE AND MARK INSKIP

Future Perspectives

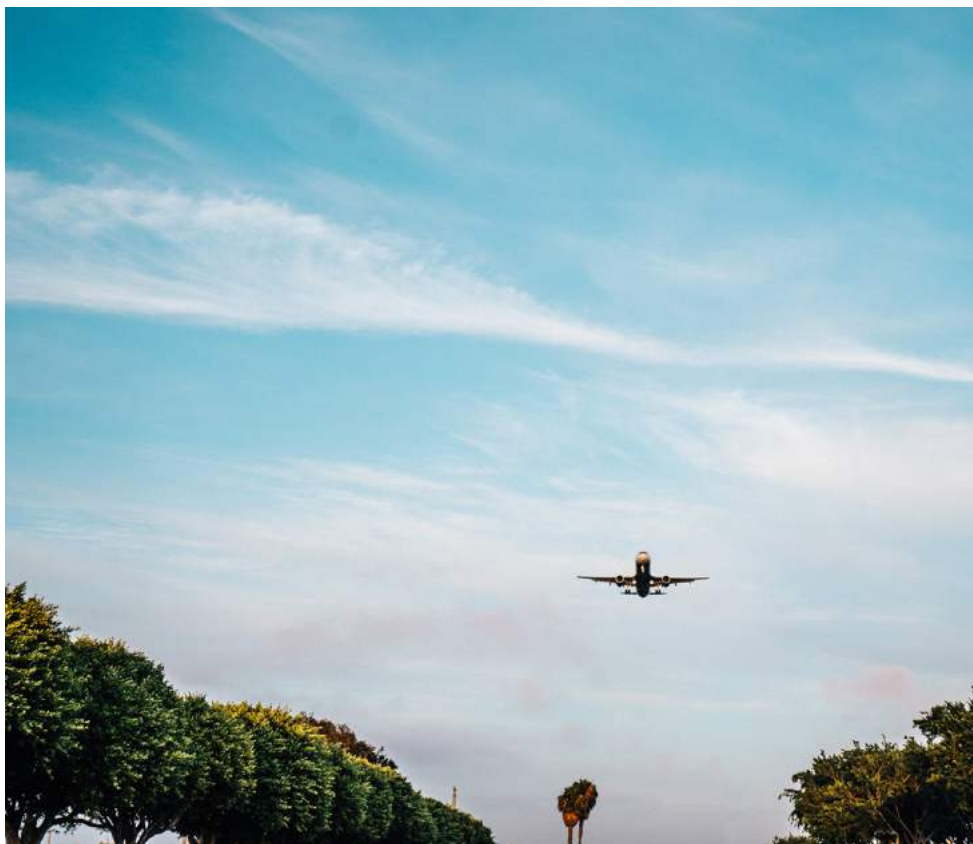
Future Perspectives are thought pieces with concise, focused insights into important issues of interest to marketing and business strategists.

For more information please visit www.thefuturescompany.com

Defying Gravity

Slower growth is the new normal for the global economy, and it has business leaders worried. The fear is “a world of zeroes,”¹ the phrase used by Nigel Wilson, Global CEO of insurance giant Legal and General, to describe a world of zero inflation, zero GDP growth per capita, and zero productivity growth. In short, a global economy in which progress is zeroed out.

Defying gravity in order to grow despite the slowing tug of the marketplace is an undertaking unfamiliar to a generation of business leaders weaned on hardy growth. The critical imperative of future success will be creating demand, not the classic textbook lesson, fruitful for so long, of following trends.



Of course, even with slower growth there will be more people with more money each year, but just not nearly as many more people with nearly as much more money as before. In other words, slower growth in the broader economy will diminish growth in the size of the 'available market' for a company or a brand. The slower growth trend line will not be as

strong, hence, to succeed, companies and brands will have to create demand above and beyond trend.

The challenge of creating demand is not new, but in a slower growth global economy, it must leapfrog following trends as a first priority. Research shows that once a company's growth rate slumps below the rate of

growth in GDP, the chances of that company returning again to high growth become vanishingly small. Companies will face sinking prospects if they don't adapt quickly enough to slowing growth in the size of the available market. The imperative of creating demand is more pressing than ever.

Three things define the challenge of slower growth.

1 The first is the **macroeconomic reality**.
How much will growth slow, and how long will slower growth persist?

2 The second is the **nature of the disruption** confronting business leaders. What, exactly, is being disrupted by slower growth?

3 The third is the **kind of solution** needed to defy the gravity of slower growth. To create the demand needed to grow, what must companies do and where can brands look?

This Future Perspective report addresses each of these questions in turn. It begins by reviewing the evidence on slower growth. Then it examines the consumer disruption of demand that businesses are experiencing because of slower growth. Finally, it outlines approaches for identifying new sources of growth in a slower growth global economy based on the experience and work of The Futures Company to help clients create demand.





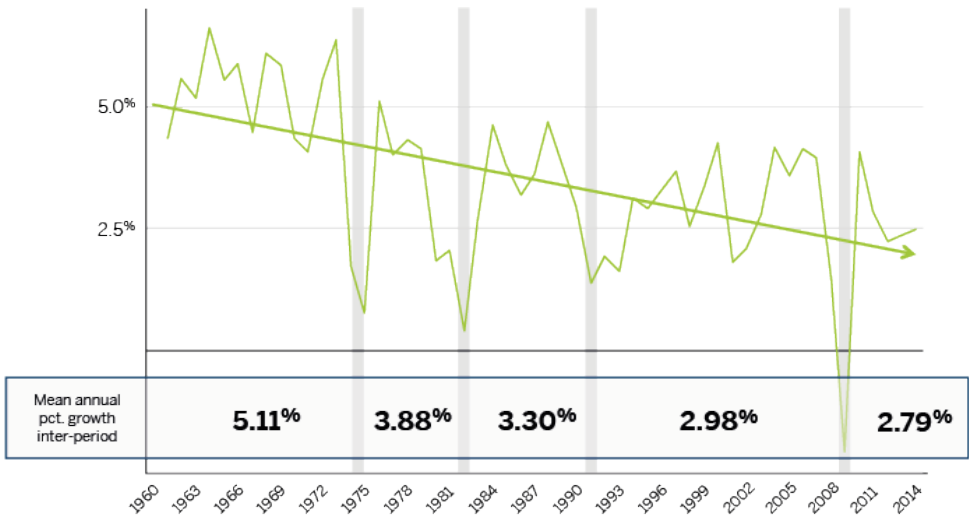
Slower Growth

In developed and developing markets alike, the global economy is not growing at the rate it was before the Great Recession. But, actually, slower growth is nothing new. As Figure 1 shows, the rate of growth in real global GDP has been in steady decline for decades.

According to the International Monetary Fund, there have been four roughly year-long global recessions since the end of WW2, shown by the gray bars in Figure 1 – 1975, 1982, 1991 and 2009. The periods between recessions are telling. After each recession,

average growth has been weaker coming out than going in. Every downturn has pushed the set point of growth lower. The global economy has been losing steam for some time. But the current situation is uniquely worrisome.

FIGURE 1: Real Global GDP Growth
annual pct. change 1961-2014



Source: World Bank (USD 2005)

<http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>

Since 2011, annual growth has continued the historical pattern of being weaker after a recession than before, sputtering along below 2.5 percent, which is a particular threshold of worry. At this slower rate of growth, it is not clear that the global economy can reach escape velocity from the 2009 Great Recession, and if not, the past several years of stagnation in employment, wages, business investment and consumer spending will persist.

The plunge in oil prices and the sharp slowdown in China have worsened prospects for a return to robust growth. Slower growth in China is especially worrisome because in the immediate aftermath of the Great Recession there was hope that developing markets, led by the BRICs of Brazil, Russia, India and China, would take over as the engines of global growth. Indeed, immediately following the Great Recession, developing markets jumped

right back to pre-downturn growth rates. But as Figure 2 clearly shows, this was short-lived. Developing markets have slowed significantly, with Brazil and Russia at a standstill. Business leaders are faced with slower growth everywhere.

FIGURE 2: Real Global GDP Growth in Selected Markets
annual pct. change

Top 5 Developed Markets	Annual GDP Growth			Top 5 Developing Markets	Annual GDP Growth		
	Peak Year, 2003-2007	2010	2014		Peak Year, 2003-2007	2010	2014
U.S.	3.79% (2004)	2.53%	2.39%	China	14.19% (2007)	10.63%	7.27%
Japan	2.36% (2004)	4.65%	- 0.10%	Brazil	6.01% (2007)	7.57%	0.14%
Germany	3.70% (2006)	4.08%	1.60%	India	9.80% (2007)	10.26%	7.29%
U.K.	3.34% (2003)	1.54%	2.94%	Russia	8.54% (2007)	4.50%	0.64%
France	2.79% (2004)	1.97%	0.18%	Mexico	4.94% (2006)	5.20%	2.23%

Structural or Cyclical

Economists are divided over whether slower growth is structural or cyclical.² Either way, though, the economic reality is the same. Slower growth is the new normal.

Larry Summers points to the structural story of 'secular stagnation,' in which low growth and high unemployment are immune to conventional policy tools, such as interest rate reduction.³ As Paul Krugman noted in summarizing this argument, if Summers is correct, slower growth will be a dogged, persistent problem: "Secular stagnation is the proposition that periods like the last five-plus years, when even zero policy interest rates aren't enough to restore full employment, are going to be much more common in the future."⁴

Robert Gordon tells a different story, yet agrees that slower growth is structural in nature and thus here to stay. Gordon argues that post-WW2 economic growth is petering out because it

was powered by turn-of-the-20th-century innovations that were one-time step changes in productivity, never to be seen again. Add to that, strengthening headwinds in demographics, education, inequality, globalization, energy and the environment, and debt overhang. Putting it all together, Gordon foresees future growth slowing to a perpetual crawl.⁵

In contrast, economists like Carmen Reinhart, Kenneth Rogoff and Ben Bernanke contend that the current low growth is a cyclical phenomenon caused (in full or in part) by a 'debt super-cycle' characteristic of financial crises, which will depress household spending and business investment until deleveraging has run its course, after which growth will improve.⁶ However, research by Reinhart and Rogoff finds that the difficulty and hardship of deleveraging makes recoveries from financial crises much longer than average.

Somewhere between these two camps are technology-led perspectives, such as *The Second Machine Age* authors Eric Brynjolfsson and Andrew McAfee, who argue that there are lulls between periods of innovation and productivity growth, and we are in such a lull today.⁷ In this, they are following the work of Carlota Perez about 'great surges' in technology and innovation.⁸ By this model, a new wave of technological innovation will eventually reignite the economy (depending on how the gains from growth are shared). Yet any such return to growth could easily be 15 or more years away.

Whether the economic factors are structural or cyclical, a slower growth global economy is the reality facing business leaders for the foreseeable future. But there is something at work even more fundamental, which is a deeper demographic dynamic that makes slower growth a certainty.



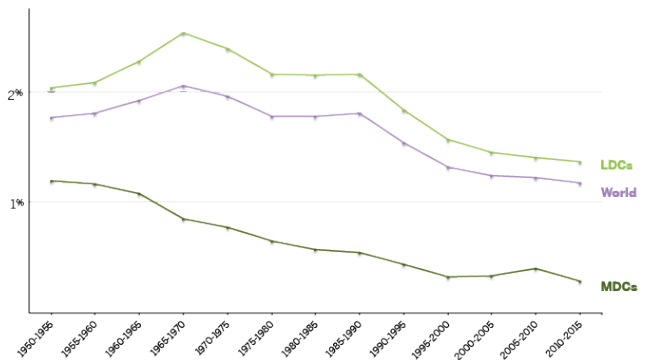
Population and Productivity

Two things generate economic growth – population growth and productivity growth. In other words, the total output of an economy is the number of people producing output, times the amount of output each person produces. When one or both of these grow, the economy grows. It all comes down to numbers and efficiency, or population and productivity. The global economy faces challenges on both fronts, but the more insuperable of the two is population growth.

Figure 3 shows the trend line for the rate of global population growth from the end of WW2 until today. In both developed and developing markets, growth rates have been declining, and are lower now than in the mid-20th century. Demographers expect no change in this trend line through the end of the century.



FIGURE 3: World Population Growth Rate
pct. change



Source: UN Population Division

<http://esa.un.org/unpd/wpp/Download/Standard/Population/>

The population trend that matters most is the working age population, or the people actually producing economic output. Figure 4 shows the worldwide drop in growth of 25-to-64 year-olds. It is a steeper drop than that for total population.

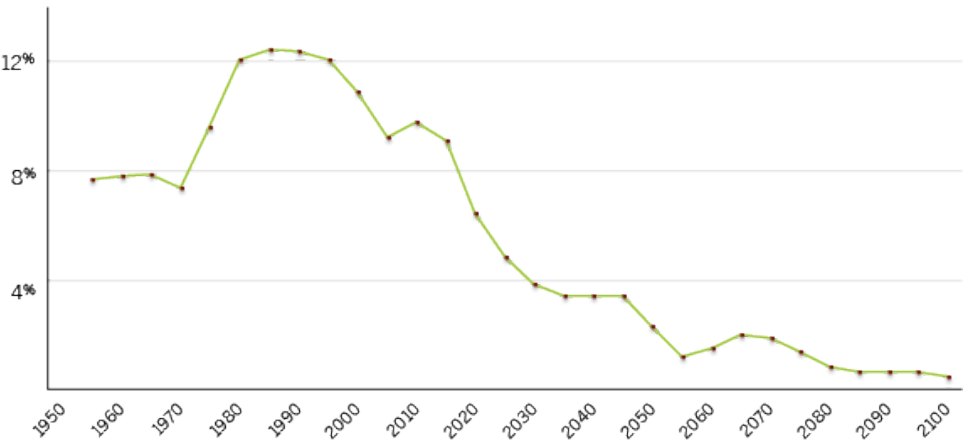
Slowing population growth ensures a future of slower growth. A lower set point is assured. The McKinsey Global Institute calculated the impact of slowing population growth

under an assumption of the same productivity growth over the next 50 years as the past 50 years.⁹ Declining population growth means a 40 percent drop over the next half century in the compound annual GDP growth rate for the G19 markets plus Nigeria.

If experts like Gordon are correct and productivity growth abates, then the drop in global economic growth will be even larger than McKinsey's calculations. The only way to

avert this plunge in economic growth is for productivity to grow so much that it offsets the impact of declining population growth. According to McKinsey estimates, this would require that productivity growth be 80 percent higher in the future than it has been in the past. Unfortunately, recent historical evidence is not encouraging, and it is doubtful that productivity growth can be reignited to that degree.

FIGURE 4: World Working Age Population (25-64) Growth Rate
annual pct. change



Source: UN Population Division

<http://esa.un.org/unpd/wpp/Download/Standard/Population/>

The Federal Reserve of Chicago compared average annual productivity growth in 21 developed markets for the 1990s versus the 2000s.¹⁰ For all but one of these markets, productivity growth in the 2000s was well below that in the 1990s. Furthermore, in the 1990s, average annual productivity growth was negative in only three markets; in the 2000s, it was negative in all but seven markets. Figure 5 shows these comparisons for nine illustrative markets.

The odds are very long that future productivity growth can outpace past growth by the margin required. Whatever unfolds with technology and innovation, and the impact on productivity, the size of the gap in lost economic growth due to declining population growth is going to be too much to make up. The bottom-line is clear. Slower growth is the new normal for which business leaders must prepare.

FIGURE 5: Multifactor Productivity Growth
annual pct. change

	Average Annual Pct. Change		Difference
	1990-2000	2000-2010	
U.S.	0.70%	0.39%	- 0.31%
U.K.	0.83%	- 0.01%	- 0.84%
Germany	1.25%	0.41%	- 0.84%
France	0.38%	- 0.41%	- 0.78%
Spain	- 0.07%	- 0.80%	- 0.73%
Italy	0.53%	- 0.85%	- 1.38%
Netherlands	0.70%	0.16%	- 0.54%
Denmark	0.41%	- 0.39%	- 0.80%
Australia	0.69%	- 0.71%	- 1.40%

Source: Federal Reserve Bank of Chicago
<https://www.chicagofed.org/~media/publications/chicago-fed-letter/2013/cfljanuary2013-306-pdf.pdf>

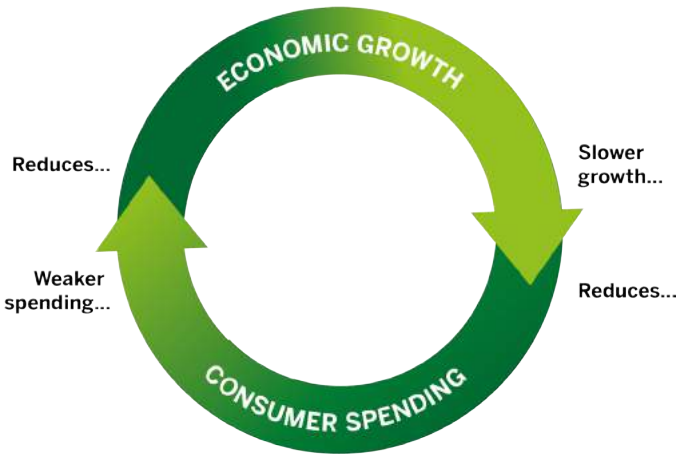
A Demand Problem

Companies and brands are facing a consumer disruption of demand. The challenge of slower growth is more than just a weak economy. It is a big downward shift in the set point of growth, a significant change in the external environment tied directly to consumer demand.

Economists of all stripes agree that greater demand is the fundamental ingredient for a return to strong growth. The conundrum is that growth is not only affected by demand, it also influences demand. This lowers the set point of growth.

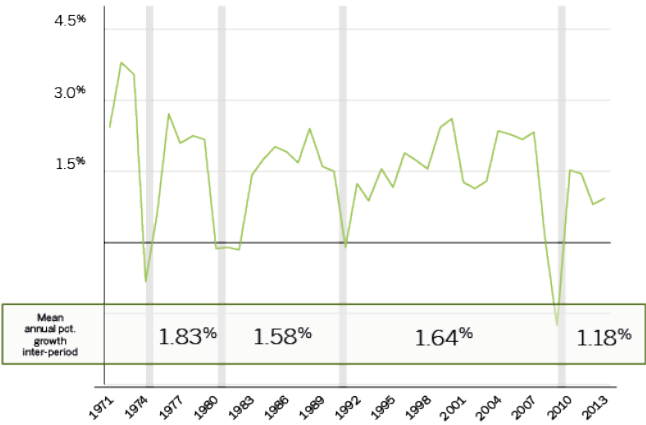
Figure 6 shows this pernicious feedback loop. Slower growth contracts both disposable income and the number of consumers able to spend. As these two things combine to contract spending or demand, growth slows even more, further weakening demand. In other words, once the economy shifts to a lower set point, this feedback cycle keeps the economy at this lower set point. The only way to break the cycle is to get outside of the cycle, and that requires that companies create demand.

FIGURE 6:
The Feedback Loop of Growth and Spending



Weaker consumer spending is evident already. Figure 7 shows the long-term trend line of annual growth in worldwide real consumer expenditure per capita. Since the end of the Great Recession, spending growth is over one-third lower than it was in the late 1970s and nearly 30 percent lower than it was in the period just before the financial crisis. To be clear, this is not a decline in total spending, but rather, a decline in the rate of spending growth, or a leveling out in the trend line of the available market.

FIGURE 7: Global Household Real Consumption Expenditure Per Capita
annual pct. growth 1971-2013



Source: World Bank (USD 2005) <http://data.worldbank.org/indicator/NE.CON.PRVT.PC.KD/countries?display=graph>

These declines in spending growth track in parallel with the declines in GDP growth shown in Figure 1. These two factors are tightly connected in a feedback loop in which slower economic growth weakens spending growth at the same time that weaker spending growth slows down economic growth.

As seen in Figure 8, in the early years of the 2000s, spending growth in developing markets was trending up strongly even as it was trending down in developed markets. But a year or two before the financial crisis,

FIGURE 8: Global Household Real Consumption Expenditure Per Capita by market type
annual pct. growth 1992-2013



Source: World Bank (USD 2005) <http://data.worldbank.org/indicator/NE.CON.PRVT.PC.KD/countries?display=graph>



this reversed, with spending growth in developing markets slowing. Since then, spending growth has been trending down in both developed and developing markets. Each market is different, but slower growth is the external environment everywhere.

A big reason why spending growth was so much stronger for many years in developing markets was that economic growth was lifting people out of poverty, giving them disposable income to spend for the first time. Since the beginning of this century, over 700 million people worldwide have been lifted from poverty, but slower growth is now putting the continuation of this trajectory at risk.

A detailed analysis by the Pew Research Center concluded that the newly emerging global middle class is “more promise than reality.”¹¹ Little of the progress made in reducing poverty has expanded the ranks of the middle class. People are better off, but just barely, and remain vulnerable

to economic shocks that would return them quickly to poverty. Even those who have moved into the middle class are at the lower end of the range, and thus vulnerable as well. As Pew noted in reviewing figures published by other organizations, the bullish estimates of the new middle class that have made big headlines use over-broad income ranges that tend to exaggerate progress.

Already, slower growth is chipping away at some of the gains made during the 2000s. For example, the reversal of fortunes in Brazil is expected to return three million newly middle class families back to poverty.¹² Developed countries are affected as well. In the U.S., the share of people who fall into the middle class is no longer a majority of Americans.¹³

More than setbacks in numbers, though, slower growth will reduce the rate at which people are lifted from poverty. When growth is strong, faster economic

expansion enables larger numbers of people to enjoy higher incomes more quickly (assuming shared distribution of gains). Conversely, when growth is slower, fewer people move up. With slower growth ahead, the emerging middle class will still expand, but the numbers emerging each year will be fewer.

In every way that it affects the marketplace, slower growth is a consumer disruption of demand. Growth for companies and brands won't come from expanding markets. Instead, it will have to come from expanding within bounded markets. Companies and brands can't piggyback their business growth any longer on a trend line of fast growth in money and consumers in the economy at large. The set point is lower. This is what makes fast growth in a slower growth global economy a feat of defying gravity. It requires creating demand, not following trends.

Diminished Compound Effects

When economic growth is strong, its effects can be spectacular because of the way in which it compounds gains. The annual global GDP growth of roughly 5 percent in the 1960s and early 1970s meant the average standard of living worldwide was growing at a rate of doubling every 14 years (using the Rule of 72). So over that period, it did! At 3 percent, doubling takes 24 years. At 2 percent, doubling takes 36 years. In other words, small declines in growth rates, translate into multiplicative increases in the time it takes for standards of living to grow.

The impact of such diminished compound effects was put bluntly by *New York Times* Upshot reporter Neil Irwin, who noted that at current rates of U.S. productivity growth (translated into its impact on GDP growth), “your grandchildren would be no richer than you.”¹⁴

China is another case in point. Over the 34 years from 1978 to 2011, average annual GDP growth in China was 10 percent.

That meant a doubling of the average standard of living approximately every 7 years. The average Chinese person who lived through that period saw his or her standard of living double five times, more than a thirty-fold increase. Going forward, China’s growth is expected to be much slower, perhaps less than half of what it was for those thirty-plus years.

Slower growth does not mean an end to growth. It means an end to higher economic growth and to the growth in demand it generated. Thus, it also means an end to business practices built for higher growth. Slower growth requires fresh ways of divining growth opportunities and building on them.

Nothing in the global economy is the same everywhere. But, slower growth has a reach that touches everything through tightly knit, interlocking chains of trade, finance and communications. Just as stronger growth influenced decisions about everything, so too, will slower growth.



Sources of Growth in a Slower Growth Global Economy



Money to spend and people to spend it won't grow like before. Companies and brands that just stay even with growth in the overall economy will be growing more slowly. Achieving faster growth will require that business leaders find ways to defy the gravity of slower growth.

The evidence is stark about the failure to sustain high business growth. Once companies

fall below the rate of overall growth, it is rare to become a fast-growth business again. Research reported by Clay Christensen and Michael Raynor finds that less than one company in twenty succeeds in regaining above average growth after falling below average GDP growth.¹⁵ The challenge at hand is that continuing to employ high-growth strategies in a slower growth marketplace puts companies

and brands at significant risk of slipping so far behind that, as the evidence shows, they will never catch up again. The conventional business strategies that have been used to ride out recessions are not the answer. Slower growth is not a down cycle, soon to rebound. Rather, the entire economy has been shifted to a lower set point that will persist. Cycles will go up and down around this lower set point.

Almost without exception, in the higher growth global economy of past decades, growth strategies have been market-led strategies focused on growing segments of consumers who have growing amounts of disposable income. This dictated decisions about targeting and pricing, which in turn determined decisions about communications and distribution. More consumers and higher prices were central to everything. It was all about following market trends.

The biggest consequence of slower growth is that it caps market-led opportunities of more consumers and higher prices. The available market is contracted. As the population of prospects levels off and as disposable income becomes more constrained, these levers of growth lose the effect they used to have. Pull them now, and little happens. The strategies of success in a high-growth global economy are taken out of play in a slower growth global economy. This is exactly the situation in which many companies find themselves today. It is not a down cycle that will rally soon. It is the new normal of a lower set point.

To defy gravity in a slower growth world, businesses need to create market-space opportunities. What this means in more specific terms has been diagrammed and discussed in a previous Future Perspective report, *Unlocking New Sources of Growth* (2012).¹⁶ To create demand, companies and brands must look to markets, consumer groups or categories to realign or reinvent their business models in order to better match shifts in who has money, shifts in social values, shifts in technologies, or shifts in business models. What all of these things have in common, is that they represent unrecognized, poorly understood market-space opportunities that are below the horizon of competitors. These are opportunities to create demand.





Rethinking Growth

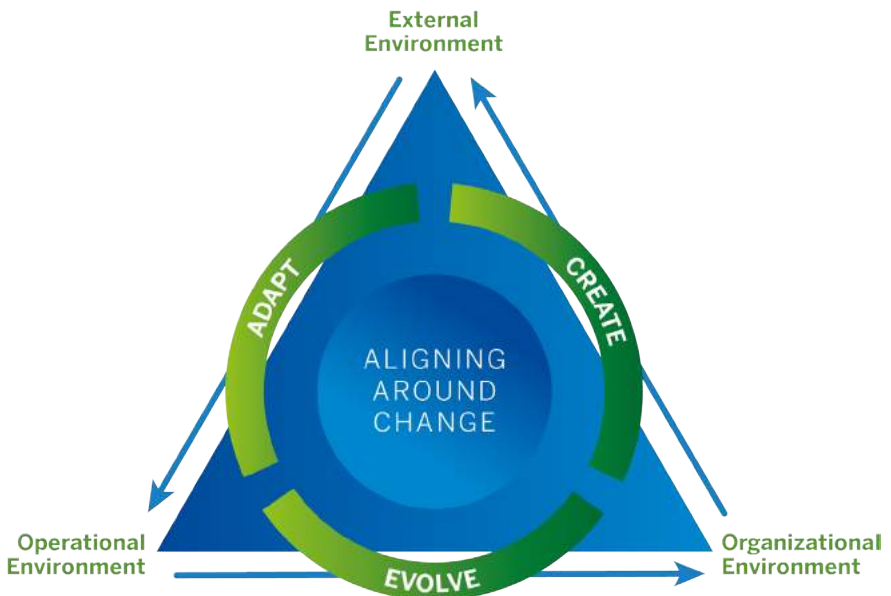
The Futures Company employs a structured way of identifying opportunities to rethink and reshape markets in order to create demand. It is a process that begins by scanning change in order to understand the dynamic ways in which markets are evolving as shifts in economics, demographics, values and technologies interact to create swirling pools of potential across categories and sectors.

However, to act upon this understanding of change, it is necessary to go a step further and determine how change interacts with a company's or a brand's competencies and capabilities, as well as the design of its business model. To enable companies and brands to visualize this intersection of external environment and internal capacities, The Futures Company has developed the

Change Triangle shown in Figure 9, which depicts the ways in which external changes flow into a company or brand, thereby channelling the scope and direction of response.

Moving counter-clockwise from the peak of the Change Triangle, the risk-reward ratio becomes more demanding, but more attractive, too. The level of business challenge increases, but the outcomes of success increase even more.

FIGURE 9: The Futures Company Change Triangle



The left-hand side of the Change Triangle shows that, initially, as the external environment changes, businesses can respond by adapting. This means new branding and positioning or incremental innovation. These are necessary changes, but, ultimately, are unlikely to be transformational. Indeed, data show that branding is less valued and returns to incremental innovation are declining.¹⁷

Along the bottom of the Change Triangle, as external pressures increase, companies and brands must respond by evolving. Such a response means structural things like long-term innovation or operational adjustments. These can improve the competitive situation for a company or a brand by distancing it from category issues about things like health and safety or by broadening its offer beyond traditional category contours.

The right-hand side of the Change Triangle corresponds to the consumer disruption of demand for which the

response must be new business models that better align a business with shifts in the external environment. Not only does such a response upend categories, it is hard for competitors to copy, too. This side of the Change Triangle is the challenge posed by slower growth, and it requires more than just adapting or evolving. In the face of contracting demand, such responses won't be enough. Instead, wholly new approaches to create demand are imperative, especially new business models.

To over-simplify, though not unfairly, the traditional focus of business-building has long been to do old things in new ways. With slower growth ahead, the future focus must be about finding new things to do in new ways. For this, companies and brands must broaden their conceptual horizons. Thinking and planning like this is not easy or intuitive, but the Futures Company utilizes six ways of doing so that help companies and brands unlock innovative ways to create demand.





1 First, *take an integrated, interactive view of how change is happening in a category.* Trends happen in clusters, never in isolation. The interactions of trends create novel patterns that open up fresh market possibilities. These opportunities are hidden only if companies and brands refuse to see them. As management consultant Richard Normann has written, “Driving forces for change are there to be utilized, unless they are blocked out by myopia or politics. Driving forces may be borrowed from the external environment in the form of critical change factors such as new technology, important customers [with] new demands, political changes, deregulation creating new opportunities, or new

competitors or invaders.”¹⁸ The tensions between these driving forces create new market ‘dynamics’ (as they are designated in client work at The Futures Company), that in turn create demand by opening up new innovation spaces.

2 Second, *identify emerging profit pools.* As demographics and values shift, so do pools of money. Future-proofed strategies look for these new value pools as money moves between groups— to new generations or to new markets or to new segments of consumers. As one sector contracts, the money doesn’t disappear. Rather, it shifts to a new value pool where a new source of demand can be created. It’s exactly as

Peter Drucker, the dean of management consultants, urged business leaders to ask themselves, “What has already happened that will create the future?”¹⁹

3 Third, *look to the cultural edges.* It is no secret that leading edge consumers are the best guide to shifting cultural and social values and the products or services associated with these shifts. As business scholars Rita Gunter McGrath and Ian Macmillan have observed, such products or services “differentiate massively on some dimension of performance that enough customers really care about (even if they are worse on others).” In doing so, “they change




the criteria that customers use to judge value.”²⁰ A shift in value perceptions requires a reinvention of value propositions in order to create demand around a radically different way of understanding needs and benefits.

4 Fourth, *learn from the disruptors*. Cultural edges are always roiling markets. But in turbulent times, competitors will also be experimenting with changes in the operating assumptions of their businesses. Such learning may come from direct category competitors or disruptors in other categories, like retail ideas applied to automotive or media ideas applied to travel, and so forth.

5 Fifth, *create new markets*. Perhaps the best way of explaining this point is to cite an example from Apple (albeit at the risk of cliché). Management scholar Richard Rumelt interviewed Steve Jobs a year after he had returned to the company.²¹ The success of Apple was not yet assured and Rumelt asked Jobs about the conventional wisdom at the time that Windows and Intel had a lock on the market. Jobs replied that every decade or so a window of opportunity opened up, and when it did, he planned to jump through it. Jobs had no intention of betting the future of Apple on adapting or evolving. He was “going to wait for the next big thing” in order to create a new market

for Apple to dominate. Such opportunities are not unique to the technology sector.

6 Sixth, *reinvent the value chain*. If a brand’s value chain remains unchanged, slower growth will gradually squeeze it dry. The old ways of doing business won’t yield profitable margins in a marketplace upended by slower growth. When strong growth is a tide lifting all boats, little thought is given to creating demand by reinventing the value chain. But when the ebbing tide of slower growth exposes the shoals, companies and brands must rethink their business structures.



Success in transforming business structures means undertaking several types of business model innovations at once, in particular, streamlining the operational architecture while also honing the consumer proposition. This is the topic of a forthcoming thought-leadership white paper from The Futures Company, but it is important to note here that even though this kind of reinvention often means cutting costs, it is not about cost-cutting for its own sake. As management guru Michael Porter has noted, reducing costs in and of itself rarely creates competitive advantage.²² Instead, reinventing the value chain is about delivering a fresh proposition to consumers. As noted in The Futures Company report, *Making High Value Work*, “Value is created by investing, even over-investing, where it matters most, and using effective business systems to keep the rest of the company lean.”²³

Oftentimes, this entails taking costs out in order to create a margin for innovation, which is a way to unlock, even catalyze, new sources of value.

Several critical market trends are already reshaping value chains for the future. Pricing will be dynamic and occasion-based, often free instead of fixed and premium. Distribution will provide immediate fulfillment on demand. Transactions will be more anticipatory, automatic and agent-based. Data will be at the heart of everything.

These six ways of rethinking growth are not entirely new. They touch on many things that brands do now to spot new opportunities. But generally speaking, in a high-growth environment, these ways of rethinking growth take a back seat to the market-led opportunities of higher prices and greater penetration. It's always easier to follow trends than to create demand. But the easy growth is now gone, making it imperative to move these six ways of rethinking growth to center stage.

Continuing to think in the same old way has always been perilous. There is no better expression of this than the tearful words of the former Nokia CEO at the press conference announcing Nokia's acquisition by Microsoft: “We didn't do anything wrong, but somehow, we lost.”²⁴ The market changed and overtook Nokia. Now, slower growth is changing the market for all companies and brands, making it more perilous than ever to keep thinking in the same old ways. Yet for companies and brands that are able to defy gravity—by rethinking sources of growth in a slower growth global economy—the rewards are bigger than ever, too.



Endnotes

1. Patrick Jenkins, "FT City Network: Is the Outlook for Growth All Doom and Gloom?" *Financial Times*, January 31, 2016, <http://www.ft.com/intl/cms/s/0/b7e6d730-c6b0-11e5-808f-8231cd71622e.html#axzz3zWGFEIV9.2>, <http://www.wemeanbusinesscoalition.org> [accessed 16th June 2014]
2. We have reviewed these arguments in a more detailed background report.
3. Lawrence Summers, "U.S. Economic Prospects: Secular Stagnation, Hysteresis, and the Zero Lower Bound," Keynote Address, NABE Policy Conference, February 24, 2014, <http://larrysummers.com/wp-content/uploads/2014/06/NABE-speech-Lawrence-H.-Summers1.pdf>.
4. Paul Krugman, "Four Observations on Secular Stagnation," in *Secular Stagnation: Facts, Causes, and Cures*, Coen Tuelings and Richard Baldwin (eds.), September 10, 2014, CEPR Vox eBook, <http://voxeu.org/article/secular-stagnation-facts-causes-and-cures-new-vox-ebook>.
5. Robert Gordon, "Is U.S. Economic Growth Over? Fltering Innovation Confronts Six Economic Headwinds," NBER Working Paper No. 18315, August 2012, <http://www.nber.org/papers/w18315>.
6. Ben Bernanke, "Why Are Interest Rates So Low, Part 2: Secular Stagnation," Ben Bernanke's Blog, Brookings Institution, March 31, 2015, <http://www.brookings.edu/blogs/ben-bernanke/posts/2015/03/31-why-interest-rates-low-secular-stagnation>.
7. Carmen M. Reinhart and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly* (Princeton, N.J.: Princeton University Press, 2009).
8. Erik Brynjolfsson and Andrew McAfee, *The Second Machine Age* (NY: W.W. Norton, 2014).
9. Carlota Perez, "Great Surges of Development and Alternative Forms of Globalization," *The Other Canon Foundation*, Tallinn University of Technology, Working Papers in Technology Governance and Economic Dynamics, No. 15, <http://hum.ttu.ee/wp/paper15.pdf>.
10. James Manyika, Jonathan Woetzel, Richard Dobbs, Jaana Remes, Eric Labaye and Andrew Jordan, "Can Long-Term Global Growth Be Saved?" McKinsey Global Institute Report, January 2015, <http://www.mckinsey.com/global-themes/employment-and-growth/can-long-term-global-growth-be-saved>.
11. Jake Fabina and Mark L.J. Wright, "Where Has All the Productivity Growth Gone?" *Chicago Fed Letter*, January 2013, <https://www.chicagofed.org/-/media/publications/chicago-fed-letter/2013/cfljanuary2013-306-pdf.pdf>.
12. Rakesh Kochhar, "A Global Middle Class is More Promise Than Reality," Pew Research Center, July 8, 2015, http://www.pewglobal.org/files/2015/08/Global-Middle-Class-Report_8-12-15-final.pdf.
13. Agence France-Presse, "Brazil's New Middle Class Faces Plunge Back to Poverty," *Raw Story*, November 22, 2015, <http://www.rawstory.com/2015/11/brazils-new-middle-class-faces-plunge-back-to-poverty/>.
14. Pew Research Center, "The American Middle Class is Losing Ground," December 9, 2015, <http://www.pewsocialtrends.org/2015/12/09/the-american-middle-class-is-losing-ground/>.
15. Neil Irwin, "Why is Productivity So Weak? Three Theories," *The Upshot*, *The New York Times*, April 28, 2016, <http://www.nytimes.com/2016/04/29/upshot/why-is-productivity-so-weak-three-theories.html>.

15. Clayton Christensen and Michael Raynor, *The Innovator's Solution* (Cambridge, MA: Harvard Business School Press, 2003).

16. Andrew Curry, *Unlocking New Sources of Growth: How to Find Value in New Places*, The Futures Company Future Perspective, 2012, <http://thefuturescompany.com/unlocking-new-sources-of-growth-2/>. See also, Andrew Curry and J. Walker Smith, *Succeeding in Low-Growth Markets*, The Futures Company Future Perspective, 2012, <http://thefuturescompany.com/succeeding-in-low-growth-markets/>.

17. Christof Binder and Dominique M. Hanssens, "Why Strong Customer Relationships Trump Powerful Brands," *Harvard Business Review*, April 14, 2015, <https://hbr.org/2015/04/why-strong-customer-relationships-trump-powerful-brands>.

18. Richard Normann, *Reframing Business* (NY: John Wiley & Sons, 2001).

19. Peter Drucker, *Managing in a Time of Great Change* (Cambridge, MA: Harvard Business Review Press, 2009).


20. Rita Gunther McGrath and Ian Macmillan, *Discovery-Driven Growth* (Cambridge, MA: Harvard Business Review Press, 2009).

21. Richard Rumelt, *Good Strategy, Bad Strategy: The Difference and Why It Matters* (NY: Crown Business, 2011).

22. Michael Porter, "What Is Strategy?" *Harvard Business Review*, November-December 1996, <https://hbr.org/1996/11/what-is-strategy>.

23. The Futures Company and the Association of Finnish Work, *Making High Value Work*, 2015, <http://thefuturescompany.com/making-high-value-work/>.

24. Ziyad Jawabra, "Nokia CEO Ended His Speech Saying This, 'We Didn't Do Anything Wrong, But Somehow, We Lost,'" LinkedIn post, November 13, 2015, <https://www.linkedin.com/pulse/nokia-ceo-ended-his-speech-saying-we-didnt-do-anything-ziyad-jawabra>.



Defying Gravity was written by J. Walker Smith, Andrew Curry, Joe Ballantyne and Mark Inskip. Production was by John Catlett, and design by Jaclyn Salem.

About The Futures Company

The Futures Company helps clients “Profit From Change.”

As the leading global strategic insights and innovation consultancy, with unparalleled global expertise in foresights, trends and futures, The Futures Company offers a complete range of subscription services and consulting solutions. The Futures Company was formed through the integration of The Henley Centre, HeadlightVision, Yankelovich and TRU. The Futures Company is a Kantar company within WPP, with teams located in Europe, North America, Latin America and Asia.

To find out more, please contact:

Simon Kaplan, *Director of Sales Operations*
+1 (919) 932 8858

simon.kaplan@thefuturescompany.com
www.thefuturescompany.com
www.twitter.com/futuresco

the
futures
company