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TURBULENCE AHEAD: RENEWING CONSENSUS AMIDST GREATER VOLATILITY

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TURBULENCE AHEAD: RENEWING CONSENSUS AMIDST GREATER VOLATILITY

SEPTEMBER 2016



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PREFACE

The past 50 years have been the best of times for the global economy. Demographic booms, credit easing, and the opening up of vast markets have driven unprecedented economic growth. But this remarkable era is rapidly coming to a close. Global growth has slowed, and political, economic, and social turbulence appear to be rising.

This discussion document offers a view of the various forces behind this new reality, drawing on a large body of McKinsey Global Institute (MGI) studies on topics including the global economy, productivity, income inequality, public and private investment, and digitisation. We explore the options that policymakers and private-sector leaders have available to adapt and survive. We would like to thank the organisers of the 2016 Singapore Summit for the opportunity to share this research. The Singapore Summit is organized by the Singapore Economic Development Board and the Monetary Authority of Singapore, in collaboration with the Ministry of Trade and Industry, Ministry of Finance, GIC and Temasek.

The research was led by Diaan-Yi Lin, a Senior Partner and Managing Partner of McKinsey's Singapore Office. Duncan Kauffman led the project team, which comprised Thea Tan and Roman Tschupp. We thank MGI Senior Fellows Jan Mischke and Sree Ramaswamy for their insights. The team benefited from the editorial expertise of Roger Malone; Sharmeen Alam, Rebeca Robboy, and Matt Cooke in external communications; Julie Philpot, editorial production manager; and Marisa Carder and Margo Shimasaki in design.

This report contributes to MGI's mission to help business and policy leaders understand the forces transforming the global economy, identify strategic locations, and prepare for the next wave of long-term growth. As with all MGI research, this work is independent and has not been commissioned or sponsored in any way by any business, government, or other institution. We welcome your emailed comments on the research at MGI@mckinsey.com.

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IN BRIEF

TURBULENCE AHEAD: RENEWING CONSENSUS AMIDST GREATER VOLATILITY

The era of easy growth is over. The world economy enjoyed an exceptionally brisk pace of growth over the past 50 years, with corporations and households alike reaping the rewards. But in the next 50 years, global economic growth will slow by almost half, falling from 3.6 percent annually to 2.1 percent. The slowdown will come against a backdrop of increasing political and social volatility, as consensus frays.

- Falls in employment growth driven by demographic ageing alone could cause growth to slow by up to 40 percent. Demand remains weak, with investment growth stalled, and consumption growth subject to the rebalancing of key economies.
- Future growth appears concentrated in idea-intensive sectors such as information and communications technology. These sectors already account for 41 percent of profits, despite constituting only 22 percent of global revenue.
- Consensus is fraying at the seams, strained by growing inequality in a time of increased security concerns and migration. Political volatility has increased: the average tenure of a G20 political leader is at a record low.

Policy makers and business leaders have three opportunities to increase prosperity:

- The demand opportunity: In an era of near-zero interest rates, all leaders must go beyond their traditional role. Fiscal policy must explore new infrastructure and social financing models, monetary policy may need more unorthodox ideas in an era of negative interest rates, and microeconomic policy makers must continue to assess regulatory barriers to growth. Private-sector leaders can also adopt new mindsets and strategies to find opportunities for productive investment.
- The productivity opportunity: Digitisation could contribute more than \$4 trillion by 2025 at a conservative estimate. Expansion of global flows could spur further growth: if all countries had matched the top quartile of connected countries over the past decade, global GDP today would be \$10 trillion, or 13 percent higher. The Internet of Things could usher in the next wave of technology-driven productivity growth.
- The inclusion opportunity: To realise the benefits of broader-based economic growth and halt growing inequality, all leaders must help to boost labour market participation and smooth social costs that are a by-product of growth. For example, equalising labour market participation by women could add up to 26 percent to global GDP by 2025.

In this lower-growth, higher-volatility environment, public- and private-sector leaders must adapt to the rules of the new game. CEOs in particular can help their organisations and society by refocusing on strategy, keeping up with change, and serving as role models for responsible capitalism.

A turbulent political and economic path lies ahead as the world adjusts to this new normal. At the same time, however, the turbulence provides an opportunity for leaders to regain their credibility, fix a system that has left too many on the sidelines, and reawaken global economic growth.



TURBULENCE AHEAD: RENEWING CONSENSUS AMIDST GREATER VOLATILITY

1. THE GLOBAL OUTLOOK IS SUBDUED

GLOBAL DEMAND REMAINS WEAK BECAUSE OF DISAPPOINTING INVESTMENT, CONSUMPTION

The past half century was a time of buoyant growth, with the global economy expanding by about 3.8 percent annually between 1964 and 2014.¹ Vast markets opened up around the world as the global workforce grew, borrowing costs fell, and productivity rose. Governments, households, and companies all shared in the bonanza. Corporate earnings more than tripled from 1980 to 2013,² and 98 percent of households in advanced economies saw real incomes rise between 1993 and 2005.³ But this remarkable era is coming to an imminent close.

The shock of the 2008 global financial crisis triggered the first recorded drop in global GDP and the hangover has since persisted, with many countries struggling with unexpectedly weak recoveries. More worryingly, long-term growth prospects are serious cause for concern. Annual GDP growth from 2014 to 2064 is projected to effectively halve, falling to 2.1 percent globally and 1.9 percent for developed countries.⁴

Two weakening drivers of growth

Two growth engines are virtually certain to subside. First, expansion of the global workforce will succumb to demographic inevitability as population growth slows and even reverses in some countries. Developed country workforces have been ageing for some time, but this is quickly spreading to China and other emerging economies. In 2013, about 60 percent of the world's population lived in countries whose fertility rates were below the replacement rate.⁵ The transition is gaining pace—it took just 20 years for the average number of children born per woman to fall from five to two in South Korea, versus 130 years in the United Kingdom. Overall, the projected fall in workforce growth could cut global GDP growth by 40 percent over the coming 50 years.⁶

Second, credit, which expanded in the halcyon years, is proving less effective in driving growth. Empowered by low inflation, central banks kept interest rates low and oversaw the economic boom throughout the 1990s. However, aggressive cuts after the financial crisis brought rates in many countries so low that they were unable to fall any further. Negative interest rates, once considered a theoretical curiosity, are in place in the Eurozone and Japan. More worryingly, private and public investment remain unresponsive to this cheap credit. Even the much anticipated policy of quantitative easing has done little to change this.

In addition, the integration of a whole host of emerging economies, notably China, into global markets was a significant boon to the world. Today, however, China's economic trajectory is casting a shadow on global growth prospects. It remains unclear whether China's transition from an investment-led growth

¹ James Manyika, Jaana Remes, and Jonathan Woetzel, "A productivity perspective on the future of growth", *McKinsey Quarterly*, September 2014.

² *Playing to win: The new global competition for corporate profits*, McKinsey Global Institute, September 2015.

³ *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016. The 25 advanced economies are Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, and the United States. Japan and South Korea are not included because comparative data were not available.

⁴ *Global growth: Can productivity save the day in an aging world?* McKinsey Global Institute, January 2015.

⁵ Richard Dobbs, James Manyika, and Jonathan Woetzel, *No ordinary disruption: The four global forces breaking all the trends*, Public Affairs, 2015.

⁶ *Global growth: Can productivity save the day in an aging world?* McKinsey Global Institute, January 2015.

model to one based on consumption will proceed smoothly. In the short term, China will no longer grow at breakneck speeds. The International Monetary Fund (IMF) estimates that every 1 percentage point decline in China's growth brings a 0.3 percentage point drop in Asian growth and a decline of up to 0.6 percentage points in the growth of Association of Southeast Asian Nations (ASEAN) member countries.⁷ Of the once-promising BRICS, Brazil, Russia, and South Africa, too, have seen their prospects dim recently, alternately buffeted by depressed commodity prices or engulfed in political scandal; India is the only bright spot remaining.

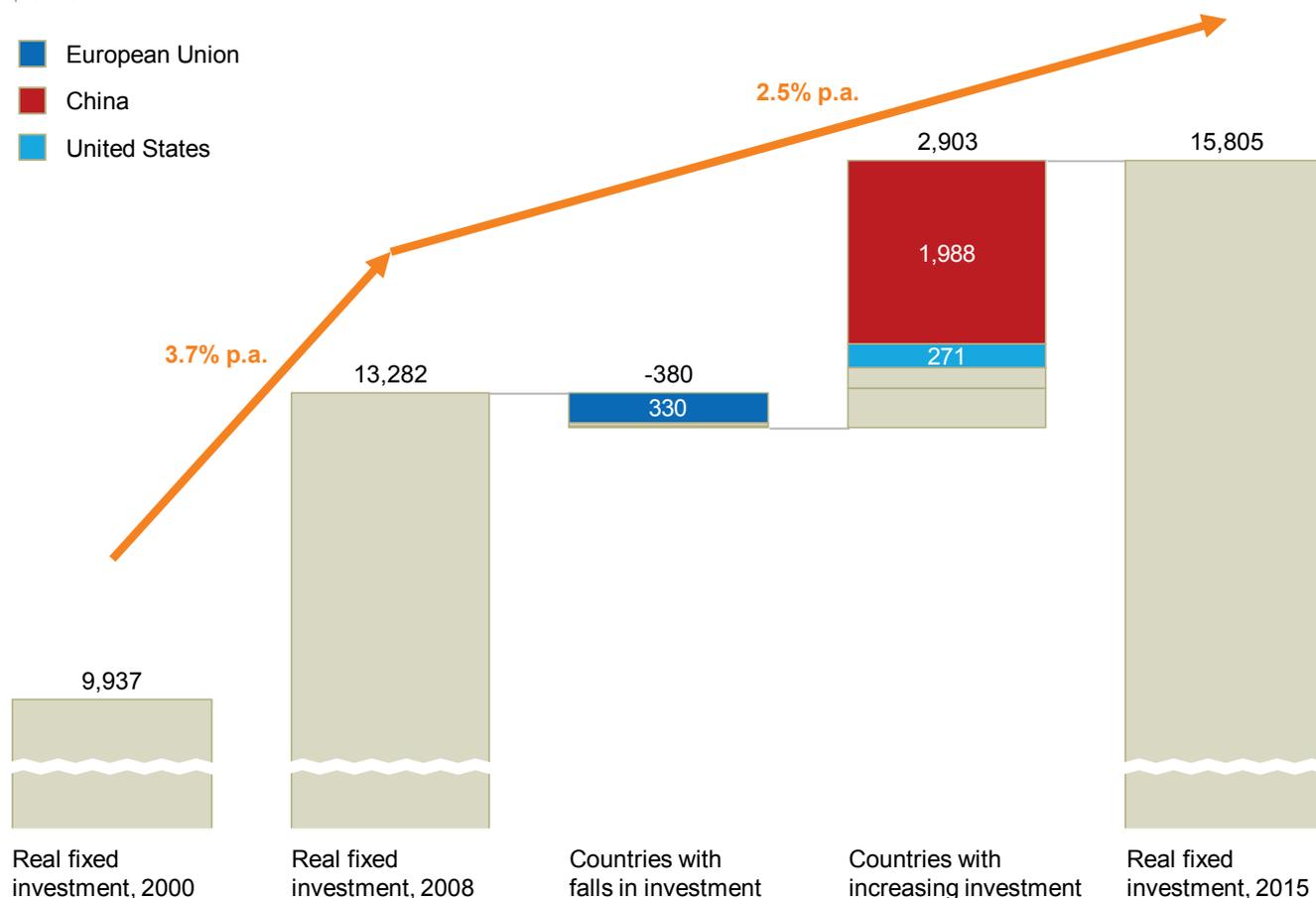
Investment could stimulate growth, but is hindered by uncertainty and pessimism

Investment growth has slowed significantly since 2008 (Exhibit 1). It collapsed outright in the European Union (EU), declining by \$330 billion. Although gross investment in the United States has picked up, net investment as a percentage of GDP has halved since 2007.⁸ This is significant as net investment accounts for rising depreciation rates; companies have invested in more short-lived assets but failed to compensate by raising gross investment. China has propped up global investment, constituting 79 percent of the rise in investment since 2008. But this will not last: annual investment growth in China is expected to fall from 10.4 percent between 2008 and 2015 to 4.5 percent between 2015 and 2030.

Exhibit 1

Investment growth has slowed significantly since 2008; Chinese investment drove ~80 percent of all growth between 2008 and 2015

Change in investment in G20+Nigeria, 2000–08 and 2008–15¹
\$ billion



¹ G20 including all European Union economies but excluding France, Germany, Italy, and the United Kingdom to avoid double-counting.

SOURCE: IHS; McKinsey Global Institute analysis

⁷ Douglas Rediker, Michael Levi, and Elizabeth Economy, *Can the world adjust to China's "new normal"?* World Economic Forum's Global Agenda Council on Geo-Economics, February 2016.

⁸ *Secular stagnation and low investment: Breaking the vicious cycle*, McKinsey Global Institute discussion paper, April 2016.

Falls in private investment have occurred even as companies record stronger balance sheets than ever. Our research indicates that the main reason behind this is under-confidence in medium- to long-term growth prospects; corporate investment tends to follow economic recovery instead of leading it.⁹ Governments have the power to address this with public investment, but spiralling public debt has prompted a political shift towards fiscal austerity. Across Europe, net public investment is a mere 0.2 percent of GDP—barely sufficient to sustain existing capital stock. It has even turned negative in Germany, Greece, and elsewhere.¹⁰

Underinvestment damages long-term growth, hollowing out the economy's long-run productive capacity as crucial infrastructure needs are not met. In infrastructure, MGI estimates a global investment gap of up to 11 percent of required infrastructure from 2015 to 2030 if current trends continue.¹¹ Housing is another example of increased investment needs; severe underinvestment in housing in the United Kingdom, for example, has resulted in only half the number of homes needed being built each year, costing London's economy alone about £1.04 billion a year.¹²

Consumption growth has not yet taken up the slack

Consumption has staged an especially weak recovery, remaining below pre-recession levels for a longer period than during any other recession on record and even declining in Europe and the United States for a period. In the long term, stagnant population growth means that consumption growth must be fuelled by increases in per capita consumption. In advanced economies, this is threatened by low wages and rising inequality. Inequality has severe implications due to differences in spending between low-income and high-income households. In Europe, for example, the wealthiest 20 percent of households spend about 10 percent of their income, while the less wealthy half of households spend about 60 percent.¹³

Over time, global consumption growth will depend on forces such as wage growth and urbanisation, as well as the rebalancing towards consumption of large economies such as China and Germany. China has clearly committed to shifting towards consumption-led growth, but any shocks in its transition will be costly to the global economy, with China estimated to account for 40 percent of global consumption growth till 2030. That said, even slower growth in China will have enormous impact. Chinese GDP growth of “only” 7.3 percent in 2014 represented an increase in nominal output that was larger than Turkey's entire economy.¹⁴

Meanwhile, the lack of consumption-supporting policies in Germany and elsewhere is potentially a greater threat to global consumption and demand growth. Germany has remained committed to fiscal austerity over steps to boost domestic demand despite its large current-account surplus propped up by an artificially advantageous exchange rate. If this persists, Germany's demand deficit could pose a risk to growth recovery in the world generally and the Eurozone in particular.

Political volatility further compromises growth

Increased political volatility is the backdrop to the lacklustre economic situation. Symptoms are global, whether signs of strain in the European Union, more aggressive security measures in China, or a rise in populist and far-right political parties in Western democracies. Our analysis bears this out: from an assessment of the G20 countries and Nigeria going back to 1945, in no other ten-year period was the average tenure of the main political leaders lower than from 2007 to 2016 (Exhibit 2).¹⁵ Political tenure itself has been on a steady downward trend since its postwar high.

⁹ Ibid.

¹⁰ Ibid.

¹¹ *Bridging global infrastructure gaps*, McKinsey Global Institute and McKinsey Capital Projects and Infrastructure Practice, June 2016.

¹² Based on unrealised consumer spending in other parts of the economy as a result of high housing prices. *Housing crisis: The economic impact revealed*, Centre for Economics and Business Research, October 2015.

¹³ *Urban world: The global consumers to watch*, McKinsey Global Institute, March 2016.

¹⁴ Yuan Yang and Tom Mitchell, “China adds G20-sized economy every year”, *Financial Times*, January 19, 2016.

¹⁵ Including the European Union as a composite member.

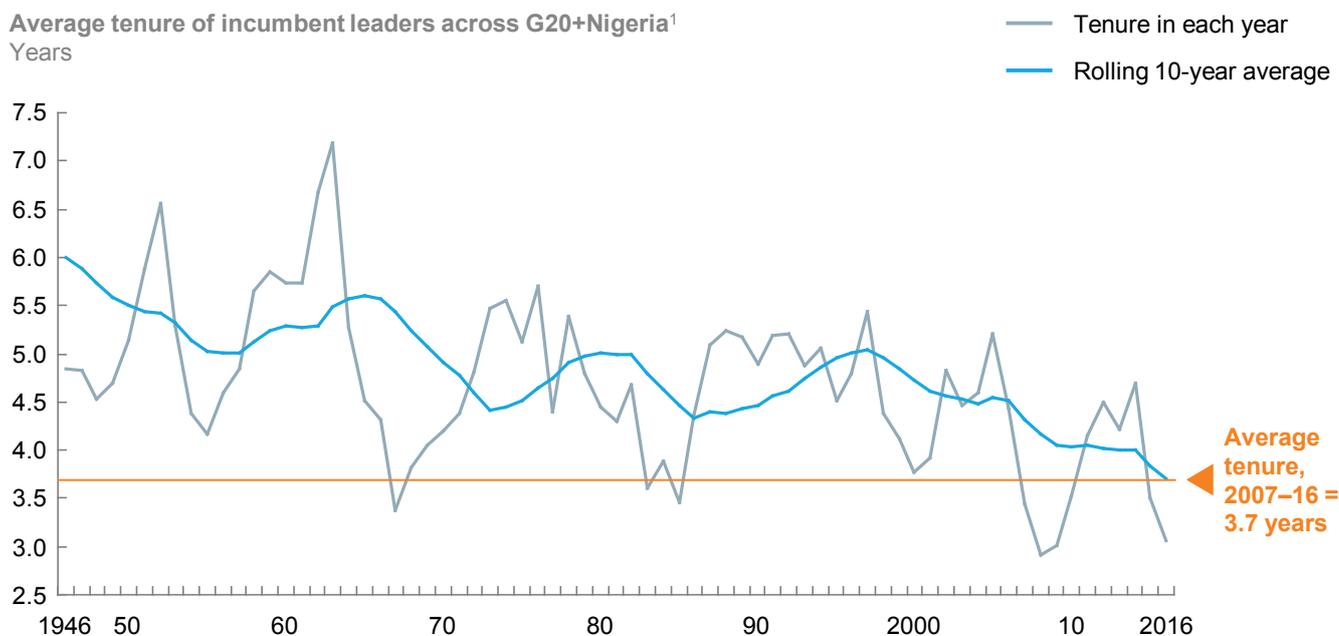
Using political tenure as a proxy for political volatility, this trend is cause for concern. Increased political volatility has been empirically proven to “reduce GDP growth rates significantly”, according to a 2011 IMF study.¹⁶ As political tenure shortens, there is less predictability to policy making as frequent leadership changes result in constant redirection. This affects growth as increased uncertainty inhibits investment and productivity growth.¹⁷ Slowing growth in turn further affects political volatility in a two-way relationship.¹⁸ Left unchecked, this could set the stage for a vicious cycle.

Exhibit 2

Average political tenure in the past ten years has been lower than in any other ten-year period in postwar history

Average tenure of incumbent leaders across G20+Nigeria¹

Years



1 Including European Union (president of European Commission).

2 Backward-looking, 10-year average.

SOURCE: Publicly available country data; McKinsey Global Institute analysis

THE OVERALL GROWTH OUTLOOK MASKS STARK VARIATION AMONG SECTORS

Even as the overall outlook points to feeble global growth, some sectors appear poised to buck the trend, as ideas and knowledge are replacing labour and capital as the foundations of economic strength. Increasingly, growth and profits are migrating towards idea-intensive sectors, away from labour- or capital-intensive industries.

Idea-intensive sectors have standout growth prospects

Exhibit 3 illustrates future growth projections for the six largest economies between 2015 and 2030. Across the board, idea-intensive industries are expected to grow at the greatest speeds. In all countries studied, the same few sectors—communications (including information and communications technology), finance, electronics, and health care—were expected to post higher growth rates during this period than estimated GDP growth rates. These sectors generally create value through knowledge (such as software, patents, and copyrights), customer insights and relationships (such as brands), and human capital (such as specialised skills and innovation).

¹⁶ Ari Aisen and Francisco Jose Veiga, *How does political instability affect economic growth?* International Monetary Fund working paper number 11/12, January 2011.

¹⁷ Ibid.

¹⁸ Alberto Alesina et al, “Political instability and economic growth”, *Journal of Economic Growth*, volume 1, issue 2, 1996.

Exhibit 3

Growth is largely concentrated in idea-intensive sectors

Growth, compound annual growth rate, 2015–30
%

■ > GDP growth ■ ≤ GDP growth

		United States	China	Japan	Germany	India	Brazil
GDP growth¹		2.4	6.1	0.9	1.8	7.2	2.2
Selected sectors							
Idea-intensive sectors	Communications	2.7	8.1	2.0	2.8	9.3	3.0
	Banking and finance	2.7	7.4	1.9	2.0	7.7	2.9
	IT and business services	3.1	8.0	1.5	2.6	8.8	2.9
	Pharma/medical devices	3.5	8.7	1.6	2.6	7.6	2.2
	Share of absolute growth	45	33	60	44	35	35
Labour-intensive sectors	Health care	4.4	10.6	0.9	1.6	7.7	2.0
	Consumer products	2.4	5.6	0.5	1.4	7.3	1.4
	Agriculture	2.7	3.8	0.2	1.8	4.0	2.4
	Share of absolute growth	32	30	22	21	29	29
Capital-intensive sectors	Construction	-0.2	4.2	1.2	2.0	7.2	1.1
	Oil and gas	0.9	2.2	-0.2	2.7	4.3	2.4
	Utilities	1.1	1.5	0.6	0.8	6.9	1.4
	Share of absolute growth	22	37	18	35	37	36

1 Calculated based on real value-added projections across all ISIC industry sectors.

SOURCE: IHS Global Insight; McKinsey Global Institute analysis

Idea-intensive sectors also enjoy above-average profitability, accounting for 41 percent of global profits with only 22 percent of global revenue. Other sectors, meanwhile, are suffering as productivity gains are competed away as consumer surplus. Car prices, for instance, have remained flat in real terms since 1985, even as car performance, safety, and reliability have improved dramatically. Other than idea-intensive sectors, highly localised industries shielded from international competition, such as utilities, are most likely to expect to maintain their margins.¹⁹

These shifts illustrate the changing nature of competition and business models we see in today's economy and corporations. The most prominent recent corporate success stories have been digital platform-based rather than traditional asset-based businesses—Airbnb, the world's largest provider of accommodation, owns no rooms, and Uber, the world's largest car service, owns no cars. Moreover, technology giants have been using their impressive cash reserves to fund aggressive expansion into non-tech sectors, disrupting formerly quiescent industries by introducing technological innovations. For example, Chinese platforms Alibaba and Tencent have made hugely successful forays into finance, and Microsoft and Facebook have expanded into telecommunications through acquisitions of Skype and WhatsApp, respectively.

¹⁹ *Playing to win: The new global competition for corporate profits*, McKinsey Global Institute, September 2015.

However, trends such as urbanisation and ageing will support growth in other sectors

In terms of absolute dollar growth, however, traditional labour- and capital- intensive sectors remain key components of the economy, particularly in less developed economies. Construction in India, for example, will be sustained by accelerating urbanisation; by 2030, India alone will have an urban population larger than the entire population of the United States.²⁰ Indian leaders have already set an infrastructure investment goal of \$1 trillion from 2012 to 2017 to support this; it is likely that more will be needed.²¹ Consumer products and health, too, will be buoyed as urbanisation lifts incomes and augments demand for services. China's working-age consumers, for example, will double their per capita consumption by 2030, spending an increasing proportion of it on discretionary purchases such as personal products, dining out, and tourism. The effects of ageing will also be felt in health care, with the ballooning 60-plus age segment set to add \$1.4 trillion to health-care spending.²²

THE GLOBAL ECONOMIC CONSENSUS IS UNDER THREAT

For decades, growth was treated as a universal good that would ultimately trickle down to all members of society. Globalisation was seen as a means to achieve this end—free movement of capital, labour, and goods was the foundation of the European Union, and China's accession to the World Trade Organization (WTO) in 2011 was a watershed event that came to symbolise the relentless march of global economic integration. But now this faith has been shaken by swelling cross-border flows of people and security concerns, as well as increasingly prevalent perceptions that the benefits of growth have not been evenly shared.

Growing economic inequality is spurring protectionism

Households have good reason to feel economically insecure. Between 2005 and 2014, the real incomes of 65 to 70 percent of households stagnated or fell, a significant increase from only 2 percent of the households in the previous decade.²³ More worryingly, pressure on household well-being appears likely to continue into the immediate future: if the economy remains mired in low growth, real incomes for up to 70 to 80 percent of households will likely remain stagnant or decline between 2015 and 2024.²⁴

The Great Recession and muted recovery exacerbated these concerns but were far from solely responsible. Chief amongst the factors behind income stagnation has been the declining returns to labour compared with returns to capital. Across major advanced economies, labour's share of national income has fallen from 76 percent to 66 percent since 1980, and wages have trailed productivity growth.²⁵ Myriad forces are behind this decline, including the strong returns to technology investments, the flight of low-skilled jobs to low-wage countries, greater use of part-time work contracts, and weakened labour unions.²⁶

Technology is adding to the pressure. Automation is a looming threat—MGI estimates that about 60 percent of the US workforce could have 30 percent of its workload automated by current or emergent technologies.²⁷ This is not restricted to manual work—110 million knowledge worker jobs globally could be affected by 2025.²⁸ Digitisation has also allowed companies to keep their organisations much leaner than successful companies in the past. In a stark example, WhatsApp was valued at \$19 billion in 2014 with a workforce of 55 people.²⁹ Walmart, in contrast, employs about 2.3 million people with a market

²⁰ *India's urban awakening: Building inclusive cities, sustaining economic growth*, McKinsey Global Institute, April 2010.

²¹ Vrishti Beniwal, "A \$750 billion gap in India's push for top infrastructure", *Bloomberg*, May 14, 2015.

²² Across Northeast Asia, Western Europe, and North America. See *Urban world: The global consumers to watch*, McKinsey Global Institute, March 2016.

²³ Taken for a group of 25 advanced economies; see note 3, *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

²⁴ *Ibid.* Taken for a group of six advanced economies: France, Italy, the Netherlands, Sweden, United Kingdom, and the United States.

²⁵ *Playing to win: The new global competition for corporate profits*, McKinsey Global Institute, September 2015.

²⁶ *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

²⁷ Michael Chui, James Manyika, and Mehdi Miremadi, "Four fundamentals of workplace automation", *McKinsey Quarterly*, November 2015.

²⁸ *Disruptive technologies: Advances that will transform life, business, and the global economy*, McKinsey Global Institute, May 2013.

²⁹ Kristin Brunham, "Facebook's WhatsApp buy: 10 staggering stats", *InformationWeek*. February 21, 2014.

capitalisation of \$230 billion³⁰—roughly 12 times the value of WhatsApp, but with more than 40,000 times the workforce.

In an idea-intensive economy, low- and middle-income households are particularly at risk in the shift away from labour, as high-wage workers are most likely to capture all the gains. In the United States, wage growth in the most digitised industries, such as information and communications technology (ICT) and professional services, has been approximately twice as fast as the national average.³¹

The economic marginalisation of large swaths of the working population undermines belief in the global economic system. A recent MGI survey found the citizens who held the most negative views on trade and immigration were the same group who believed their incomes were not advancing and did not expect the situation to improve for the next generation. This group was also more likely to support nationalist political parties such as France's National Front.³²

Openness under threat as migration and terrorism rise

There has been a spurt in cross-border migration since the turn of the century. Spurred by violent conflict and economic insecurity, cross-border flows of people rose by 41 percent between 2000 and 2015.³³ Economically, migration has in aggregate been a boon for receiving countries, helping to cushion the impact of ageing populations and adding 4 percent to global GDP in 2015. Despite this, as migrant flows increase, so do fears in the host country about the presumed impact on the national economy and social welfare. These fears are not necessarily baseless—there is evidence that low-skilled migration may exert downward pressure on wages and raise inequality.³⁴ These fears are amplified during times of economic instability, an observation borne out in our research.³⁵ In the aforementioned MGI survey, the same respondents who believed their incomes were not advancing were twice as likely as respondents with neutral or advancing incomes to believe that “legal immigrants are ruining the culture and cohesiveness in our society”.³⁶

An increase in terrorist attacks has exacerbated matters. Between 2000 and 2015, the number of annual terrorist incidents increased by more than sevenfold (Exhibit 4). As a result, public fear of terrorism is at its highest levels since the aftermath of the September 11, 2001, attacks in the United States.³⁷ Besides the loss of human life and destruction of property, terrorism inflicts a severe economic cost; estimated in 2014 to be \$52.9 billion.³⁸ Its impact on public attitudes towards economic openness is perhaps even more significant, particularly given the perceived connection between migration and terrorism. In a recent survey, more than 50 percent of Europeans believed that migration increased the likelihood of terrorism.³⁹ The result has been growing public fear and hostility that could strongly undermine the principles of market openness that have anchored economic growth.

³⁰ Company website, 2016.

³¹ *Digital America: A tale of the have and have-mores*, McKinsey Global Institute, December 2015.

³² *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

³³ *World development indicators 2016*, World Bank, April 2016.

³⁴ Ping Xu, James C. Garand, and Ling Zhu, “Imported inequality? Immigration and income inequality in the American states”, *State Politics & Policy Quarterly*, volume 16, number 2, June 2016.

³⁵ Oksana Yakushko, “Xenophobia: Understanding the roots and consequences of negative attitudes toward immigrants”, Educational Psychology Papers and Publications paper number 90, 2009.

³⁶ *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

³⁷ *Trends A to Z: Terrorism in the United States*, Gallup, December 2015: <http://www.gallup.com/poll/4909/terrorism-united-states.aspx>.

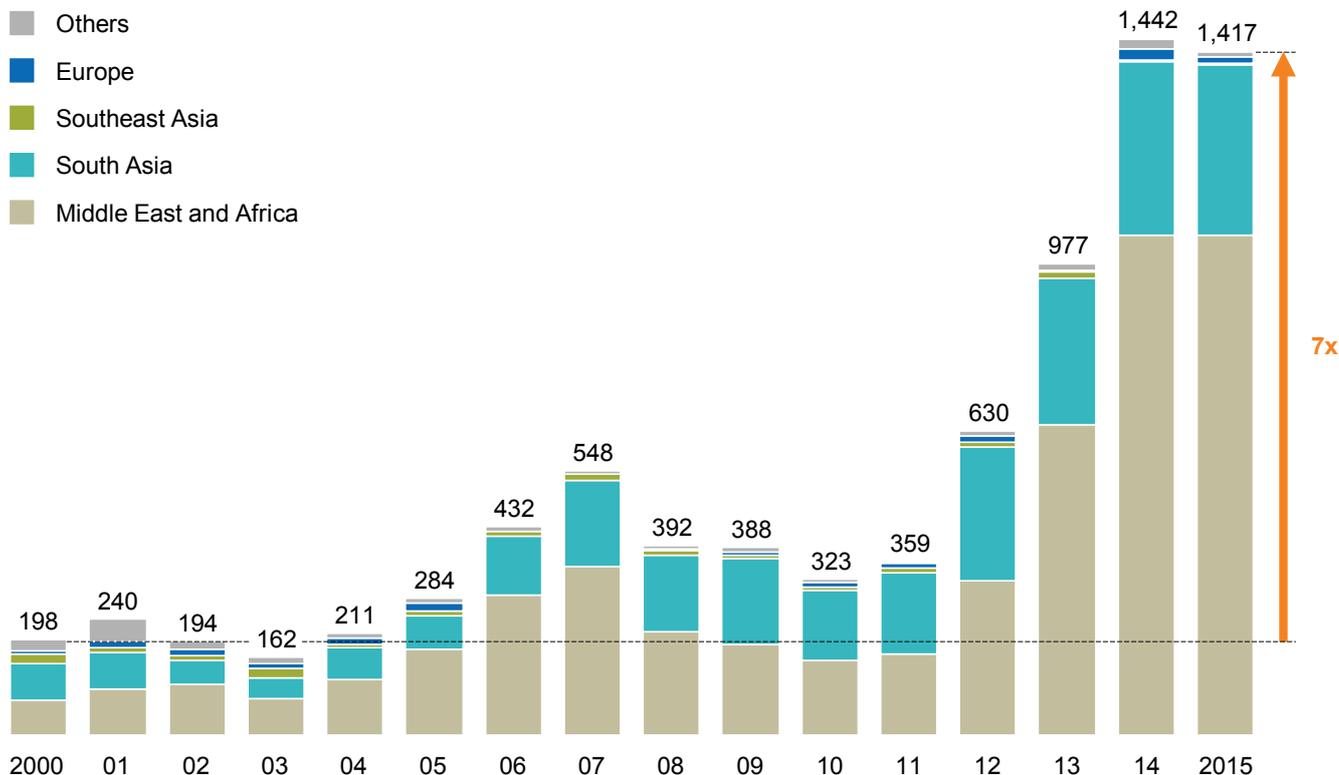
³⁸ *Global terrorism index 2015: Measuring and understanding the impact of terrorism*, Institute for Economics and Peace, November 2015.

³⁹ *Spring 2016 global attitudes survey*, Pew Research Center, 2016.

Exhibit 4

The number of major terrorism incidents has increased sevenfold between 2000 and 2015

Terrorism incidents with 5 or more fatalities per year



SOURCE: *Global Terrorism Database*, National Consortium for the Study of Terrorism and Responses to Terrorism (START), 2016; McKinsey Global Institute analysis



The confluence of these forces is threatening the political consensus for the existing global economic architecture. The impact is tangible: the WTO has warned that protectionist trade measures in the G20 are multiplying at their fastest rate since 2008.⁴⁰ More recently, the United Kingdom's surprise vote to leave the EU has raised uncertainty and is likely to further paralyse business investment. As yet there is not enough clarity on the exit process to evaluate the long-term impact of Brexit, although the implications will certainly differ across sectors. One study estimated that a Brexit-induced fall in foreign direct investment (FDI) could cause a 3.4 percent decline in real household income, and that trade could decline a further 1.3 to 2.6 percent.⁴¹ What is certain, however, is that calm and focused leadership is needed to deal with both the risks and opportunities, and that such leadership could be hampered by further political or social volatility

Against this backdrop, countries and regions that can offer social, political, and economic stability will have a significant advantage. FDI in countries such as India and Indonesia has boomed since decisive election wins of leaders perceived to be serious about tackling economic problems. ASEAN, meanwhile, is being touted as the new economic engine of Asia, having attracted more annual FDI than China for the past two years.

⁴⁰ *Report on G20 trade measures*, World Trade Organization, June 2016.

⁴¹ Swati Dhingra et al., *The impact of Brexit on foreign investment in the UK*, Centre for Economic Performance Brexit analysis number 3, London School of Economics and Political Science, April 2016.

2. THREE OPPORTUNITIES FOR POLICY MAKERS AND BUSINESS LEADERS

THE DEMAND OPPORTUNITY

Without resurgent demand, the global economy will continue to struggle to regain its footing. Thus far governments have relied on monetary policy to stimulate consumption and investment. New measures are necessary to fully seize the demand opportunity.

Monetary policy can do more but cannot do it alone

Since the financial crisis, monetary policy has been described as “the only game in town” for kick-starting growth in advanced economies.⁴² Concerted central bank action helped avert financial meltdown on a greater scale, but concerns remain about the continued effectiveness and limits of monetary policy. There are strong indications that monetary easing failed to deliver the expected stimulus to private investment or consumption.⁴³ On investment, many companies have not lowered the hurdle rates used to assess potential investments, and on consumption, the impact on asset prices has been ambiguous, with correspondingly inconclusive effects on wealth creation, household confidence, and consumer spending. The clearest impact of monetary easing may instead have been in expanding government budgets. Public finances in the Eurozone, the United Kingdom, and the United States benefited from \$1.6 trillion in lower debt service costs and central bank profits between 2007 and 2012.⁴⁴

In an environment of increasing inequality, a second problem arises from the distributional consequences of quantitative easing. For example, Bank of England research found that quantitative easing led the prices of a wide range of assets to rise, but returns were likely to be “heavily skewed with the top 5 percent of UK households holding 40 percent of these assets”.⁴⁵ MGI research also found that, in aggregate, households in the Eurozone, the United Kingdom, and the United States have so far been net losers from monetary policy because they hold more interest-earning assets (deposits and bonds) than liabilities (debt). The impact varies across demographic groups, with older households tending to be worse off because of losses on pensions and lower returns on interest-earning assets.

Where, then, can monetary policy go from here? Past policy successes provide useful guidance. Central banks have generally maintained credibility by providing forward-looking guidance and showing a willingness to take unconventional actions, epitomised by European Central Bank President Mario Draghi’s 2012 commitment to do “whatever it takes”.⁴⁶ Central banks must continue to take a pragmatic, rather than dogmatic, approach, evaluating all policy options, including “helicopter money” or monetary financing of public investment. If prevailing policy conditions are to be deliberately unwound, policy makers must be clear about the risks and interdependencies. For example, we calculate that returning to 2007 interest rates could increase government debt service costs by up to 20 percent.⁴⁷ Better central bank coordination would be necessary to maximize policy effectiveness and prevent currency wars.

Fiscal policy must rise to the occasion

Many economists are calling for a greater role for fiscal stimulus in reviving the global economy, citing unprecedented constraints on monetary policy. Larry Summers, for one, has noted that there is no better time for public investment than now when rates are at historic lows. The IMF, too, finds that investment has a greater effect on output in periods of low demand, reducing the risk of increasing public debt.⁴⁸ Nevertheless, public investment remains controversial and is opposed by those who fear the near-term impact on public finances.

⁴² Mohamed El-Erian, *The only game in town: Central banks, instability, and avoiding the next collapse*, Random House, 2016.

⁴³ *QE and ultra-low interest rates: Distributional effects and risks*, McKinsey Global Institute discussion paper, November 2013.

⁴⁴ Ibid.

⁴⁵ “The distributional effects of asset purchases”, *Bank of England Quarterly Bulletin*, Q3 2012, August 2012.

⁴⁶ Text of speech by Mario Draghi at the Global Investment Conference in London, July 26, 2012.

⁴⁷ *QE and ultra-low interest rates: Distributional effects and risks*, McKinsey Global Institute discussion paper, November 2013.

⁴⁸ Public debt as a percentage of GDP. Abdul Abiad, David Furceri, and Petia Topalova, “IMF survey: The time is right for an infrastructure push”, *World Economic Outlook*, September 2014.

Our experience, however, suggests that fiscal policy can unleash productive public investment even in the face of tight budgetary constraints. Three approaches could help.⁴⁹

- **Modify public accounting and budgeting procedures.** Governments—as well as rating agencies and other observers—should ensure that investments are accounted for on a balance sheet and depreciated over the life cycle of the assets, rather than booked as one-off expenditures. The change could help reduce pro-cyclical public investment behaviour and bias public spending in favour of investment. Strong review institutions would be needed to avoid waste.
- **Expand partnership models.** Well-executed partnerships between the public and private sectors can increase efficiency and minimise cost, not only in infrastructure but also in other areas such as education and health care. In Mumbai's School Excellence Programme, private partners deliver targeted services such as teacher training, headmaster coaching, or learning assessments to more than 220 government schools. Centralised assessments have improved by 15 to 20 percentage points.⁵⁰ There is also room to involve private partners along more of the value chain, such as identifying projects and planning portfolios, instead of just financing and project management.
- **Seek new funding streams.** Governments can increase funding streams for infrastructure projects by raising user charges, capturing property value, or selling existing assets to recycle the proceeds into new infrastructure.⁵¹

These new approaches must be accompanied by continued efforts to increase efficiency in the public sector. Project management skills are vital in this regard. MGI research has shown that adopting global best practices in project selection, delivery, and management of existing assets could reduce the cost of public works by up to 40 percent.⁵² There is also scope for open innovation models to increase efficiency and effectiveness. For example, the US government's Challenge.gov platform is a crowdsourcing model where challenges on pressing public policy questions are issued to companies and individuals with a cash prize incentive. The platform has accelerated the procurement process, lowered costs, and improved quality by paying for only the best solution. It has also promoted citizen engagement, having received more than 300,000 citizen solutions ranging from breast cancer detection strategies to solar-powered desalination technology.⁵³

Fiscal policy can also do more to spur consumption, especially by supporting lower-income households, which tend to consume a larger percentage of their income. Two broad policy approaches, when crafted carefully, could help where most needed.⁵⁴

- **Invest in infrastructure that helps the poor.** When prioritising investments, giving extra weight to infrastructure and services that are disproportionately used by low-income households could put more money in their pockets for more productive uses. Examples include investments in mass transit, affordable housing, primary health care, and publicly provided education. The benefits also go beyond simply redirecting spending—good investments can have multiplier or intergenerational effects. Better public transport can enable low-income workers to commute farther to better jobs, greater access to education can increase social mobility, and so on.
- **Adjust taxes, transfers, and payouts.** MGI has found that in Europe, redistribution equivalent to 1 percent of GDP could create additional spending of about €200 billion by targeting low-income households.⁵⁵ This can take the form of multiple programs from direct payments, such as

⁴⁹ See *Secular stagnation and low investment: Breaking the vicious cycle*, McKinsey Global Institute discussion paper, April 2016.

⁵⁰ *Partnering for outcomes: Public-private partnership for school education in Asia*, McKinsey Center for Government, October 2014.

⁵¹ *Bridging global infrastructure gaps*, McKinsey Global Institute and McKinsey Capital Projects and Infrastructure Practice, June 2016.

⁵² *Infrastructure productivity: How to save \$1 trillion a year*, McKinsey Global Institute, 2013

⁵³ Challenge.gov success stories (July 15, 2016). Retrieved from <https://www.challenge.gov/success-stories/>.

⁵⁴ *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

⁵⁵ *A window of opportunity for Europe*, McKinsey Global Institute, June 2015.

unemployment benefits, to in-kind transfers, such as health insurance or housing and food subsidies. Tax adjustments are also crucial, as income and consumption taxes pose a heavier burden on lower-income households, which depend more heavily on income as opposed to asset returns, and consume more of their income.

Microeconomic policy can unlock investment

In many sectors, microeconomic policy remains an effective lever to unlock private investment at low fiscal cost. Land use reforms that would release more land and reduce volatility in land prices are often cited as crucial in addressing underinvestment in the UK housing market.⁵⁶ Policy uncertainty is often cited by the private sector as a paramount barrier to greater investment in a sector. India, for instance, has unlocked significant investment in its renewable energy sector by undertaking straightforward measures such as setting specific targets, with private investment reaching more than \$1 billion in 2015.⁵⁷

Three points are useful to bear in mind when designing policy to attract investment.

- **Tailor the approach by sector.** Unsubstantiated approaches such as blanket tax breaks or flashy flagship projects, are unlikely to have much impact. Microeconomic planners must adopt a rigorous, sector-led approach, identifying sectors with the best growth prospects based on sound assessment of such factors as competitive advantage, long-term benefit, and linkages to other sectors. Supporting existing clusters can also deliver benefits through economies of scale. Estonia, the birthplace of Skype, nurtured one of Europe's most energetic technology clusters with policies such as funding for accelerator schools and hackathons, extensive government digitisation, and programming curriculum in primary schools.⁵⁸
- **Remove constraints.** Governments must actively court investment by holding industry conversations, connecting businesses to investors and talent, organising road shows and conferences, and leading trade delegations. Bogotá's investment promotion agency provides a one-stop shop for potential investors including fact-finding visits, regulatory compliance support, and workforce development programs.
- **Plan for adaptation.** In a volatile economy, policy makers should adopt flexible, principles-based plans rather than attempting to determine the future once and for all.⁵⁹ Changes in economic context will require adaptation. For example, Singapore has made efforts to position itself as a hub for art dealing and culture, capitalising on the strong increase in high net-worth individuals residing in the country.

The private sector can reap large benefits by contributing actively, guiding policy proactively and responsibly, and working with the government in execution. For example, Americana—Egypt's leading food and beverage, distribution, and retail company—was having difficulty finding employees with the right skills, so it worked with government to create external training programmes designed specifically for its segment of the hospitality industry.⁶⁰

The private sector can also act independently of government

Business leaders can help boost growth without waiting for government action by increasing efforts to seek areas for productive investment. With low interest rates and markets suffering from underinvestment, companies can seize growth opportunities and encourage public demand by putting cash resting on corporate balance sheets to productive use.

⁵⁶ Matt Griffith and Pete Jefferys, *Solutions for the housing shortage: How to build the 250,000 homes we need each year*, Shelter, July 2013.

⁵⁷ Saurabh Mahapatra, "Over \$1 billion PE investment recorded in India's renewable energy sector in 2015", *CleanTechnica.com*, December 4, 2015. See also *Tackling the world's affordable housing challenge*, McKinsey Global Institute, October 2014.

⁵⁸ "Estonia's technology cluster: Not only Skype", *The Economist*, July 11, 2013.

⁵⁹ *How to make a city great*, McKinsey & Company, September 2013.

⁶⁰ *Education to employment: Getting Europe's youth into work*, McKinsey Center for Government, January 2014.

Companies can take four actions to break the inertia surrounding new investments.

- **Make capital allocation more adaptive.** Companies must stay vigilant against reallocation inertia. In a study of more than 1,600 firms, we found that firms that reallocate capital more flexibly had a substantially higher growth rate and return to shareholders.⁶¹ Building in processes such as shorter budgeting cycles, discretionary budgets, or venture capital-style budgeting could help. One large natural resource group allows its CEO wide discretion in allocating 5 percent of its capital expenditure budget, amounting to well over \$1 billion.⁶²
- **Unearth hidden growth opportunities.** The decision of where to compete explains nearly 80 percent of the growth differences amongst companies.⁶³ Companies must do more to seek hidden opportunities, for example, by looking into micro-markets, such as cities or individual products that hold latent potential. Nearly 50 percent of global GDP growth to 2025 will come from a group of 440 cities in emerging markets, comprising relatively unknown cities such as Foshan (China), Cali (Colombia), and Kumasi (Ghana).⁶⁴ To make the most of investments in new markets, companies will also need to understand customers in more detail than ever before. Chinese consumers, for example, are almost twice as likely as Americans to make purchasing decisions in-store.⁶⁵
- **Take a long-term view.** It is widely acknowledged that a chronic emphasis on short-term results can ultimately be damaging to corporate growth—yet shareholder pressure can encourage it nevertheless. In the current climate of disruption, however, a long-term perspective can pay off handsomely. Amazon's long-term investment strategy makes its quarterly margins unpredictable but has enabled winning strategies such as the move into cloud computing. Institutional investors, too, have a vital role to play. By engaging with corporate managers on long-term objectives and metrics, such as economic value added over a ten-year horizon, the patent pipeline, and research and development efficiency, investors can cultivate the processes and mindsets to ensure that investments are based on fundamentals.
- **Reimagine investment.** Firms should also shift their perceptions of what investments are. In an environment where growth is shifting to knowledge-intensive firms and sectors, and competition for talent intensifies, companies should view spending on recruitment and staff development as critical investments, rather than operating costs to be minimised.

THE PRODUCTIVITY OPPORTUNITY

In the long run, productivity determines the capacity of an economy and the living standards it provides. To compensate for ageing, productivity growth rates over the next 50 years would need to be almost twice the 1.8 percent average of the past 50 years, which itself was considered rapid. This is possible, albeit very challenging. Our research suggests annual productivity growth in the G20 countries plus Nigeria could reach as high as 4 percent within a decade, with three-quarters of this growth coming from wider adoption of current best practices and the remainder from further innovation.⁶⁶ Labour productivity in China, for example, is 15 to 30 percent the OECD average, and productivity in ASEAN is estimated to be 60 percent that of China.⁶⁷

⁶¹ Stephen Hall, Dan Lovullo, and Reinier Musters, "How to put your money where your strategy is", *McKinsey Quarterly*, March 2012.

⁶² Michael Birshan, Marja Engel, and Olivier Sibony, "Avoiding the quicksand: Ten techniques for more agile corporate resource allocation", *McKinsey Quarterly*, October 2013.

⁶³ Including market growth and M&A. Based on a study of more than 200 large companies. Mehrdad Baghai, Sven Smit, and S. Patrick Viguerie, "The granularity of growth", *McKinsey Quarterly*, May 2007.

⁶⁴ *Urban world: Cities and the rise of the consuming class*, McKinsey Global Institute, June 2012.

⁶⁵ Yuval Atsmon, Peter Child, Richard Dobbs, and Laxman Narasimhan, "Winning the \$30 trillion decathlon: Going for gold in emerging markets", *McKinsey Quarterly*, August 2012.

⁶⁶ *Ibid.* The EU is not included to avoid double-counting France, Germany, Italy, and the United Kingdom.

⁶⁷ Excluding the ASEAN countries of Singapore and Brunei. See *China's choice: Capturing the \$5 trillion productivity opportunity*, McKinsey Global Institute, June 2016; *Southeast Asia at the Crossroads: Three paths to prosperity*, McKinsey Global Institute, November 2014.

Digitisation: The greatest benefits could be just around the corner

Digitisation is firmly linked to productivity gains within companies and sectors. In the United States, highly digitised sectors—ICT, media, finance, and business services, for example—enjoyed four times the productivity growth of the overall economy.⁶⁸ Despite this, digitisation has yet to trigger a broad-based productivity improvement across the economy, possibly because benefits have spread unevenly across sectors. MGI's Industry Digitisation Index has found that most sectors are less than 15 percent as digitised as the leading sectors.⁶⁹ This differentiation also exists across regions—Europe's ICT sector, representing the continent's digital frontier, was only 60 percent as digitised as its US counterpart.⁷⁰

The gains from catch-up digitisation could be massive, given that lagging sectors tend to constitute a large portion of the economy. Asset-heavy sectors such as utilities and mining have great scope to digitise and connect their physical assets, and labour-heavy sectors such as hospitality and health care have scope to digitise their workforces and customer transactions. A conservative estimate places the value at \$1.6 trillion to \$2.2 trillion for the United States, and \$2.8 trillion for Europe, by 2025. Potential gains would almost certainly be higher as new applications are found and technology advances. For example, blockchain, the technology behind Bitcoin, is in only the nascent stages of revolutionising the financial industry by enabling peer-to-peer transactions without a third-party intermediary.

To unlock this potential, digital technologies must be disseminated faster to bring lagging countries, sectors, and companies up to speed. Companies must also invest in the necessary processes, organisational structures, supply chains, and business models to capture the full value from digitisation. The following practices, among others, are helpful:

- **Capture external ideas.** To keep in touch with the ever-expanding digital frontier, companies must absorb ideas from employees, customers, suppliers, and others. Softbank, a Japanese telecommunications company, launched the SoftBank Innovation Program to offer funding and commercialisation opportunities to innovative proposals from outside applicants. AstraZeneca has created an Open Innovation platform to work with academics, non-profit organizations, and other partners across all stages of drug development.
- **Make innovation a priority.** The CEO and other senior executives must commit to innovation and cascade it throughout the organisation. Executives at Lantmännen, a Nordic agricultural cooperative, set an aspirational target of 6 percent growth in its core business and 2 percent growth in new organic ventures. These targets were cascaded down to business units and product groups. As a result, Lantmännen's annual revenue growth jumped from 4 percent to 13 percent, helped largely by the successful launches of several new brands.⁷¹
- **Broaden use of digital tools.** Technology can no longer be the sole province of the IT or business intelligence departments. To realise the full productivity potential of digital tools, they must be placed in employees' hands. For example, self-service data visualisation can radically improve frontline decisions. Data-sharing initiatives, virtual collaboration, and other open processes should replace siloed operations and traditional roles. Board members and top managers can also benefit from mastering these digital tools.
- **Balance agility with stability.** Rapid technological change requires organisations to be both responsive and resilient, combining dynamic elements with a stable backbone of processes and governance, just as an ever-changing array of mobile applications sits on a stable operating system. The music streaming service Spotify embodies this approach. Its 1,500 employees are assigned to both functional units called "chapters" and cross-functional product units called "squads". Squads have an end-to-end accountability for the customer experience and are completely self-organising.

⁶⁸ *Digital America: A tale of the have and have-mores*, McKinsey Global Institute, December 2015.

⁶⁹ *Ibid.*

⁷⁰ *Digital Europe: Realizing the continent's potential*, McKinsey Global Institute, June 2016.

⁷¹ Marc de Jong, Nathan Marston, and Erik Roth, "The eight essentials of innovation", *McKinsey Quarterly*, April 2015.

This allows Spotify to redeploy talent smoothly where it is needed most as new opportunities emerge.⁷²

Data flows present a huge opportunity as the new face of globalisation

Economic flows—of trade, capital, and ideas—have a tremendous impact on global growth, bolstering world GDP growth in 2014 by about 10 percent.⁷³ They do so primarily through productivity, as they facilitate diffusion of best practices and raise the competitive bar. Even as traditional flows in goods, services, and capital have ebbed with the financial crisis, data flows have emerged as the new dominant form of globalisation. From a negligible contribution 15 years ago, by 2014 they accounted for a \$2.8 trillion, or 3 percent, increase in world GDP, more than the impact from goods trade.

The pre-eminence of data flows is significant. First, they represent a more inclusive form of integration. Globalisation used to be driven exclusively by governments and large corporations, but today's agents are startups, freelancers, tech developers, and small producers, enabled by platforms such as Alibaba and PayPal. Second, they mitigate the erstwhile curse of geography by extending growth to landlocked areas. Alibaba, for instance, is investing in growth in rural China, such as a \$155 million programme to support college graduates who return to their home provinces to become rural entrepreneurs. Third, innovations such as digital wrappers help companies raise the value of their offerings. Radio-frequency identification (RFID) tags have reduced transit losses by up to 14 percent in some cases and could have the potential to cut inventory costs by as much as 70 percent.⁷⁴

Traditional economic flows remain vital, of course, and have ample room to continue supporting global growth, especially as more people join the formal economy. We estimate that increased participation in global economic flows could trigger massive growth for some countries. For example, if India's economic flows over the past decade had matched those of top-quartile countries, its GDP in 2014 would have been \$1.2 trillion, or 58 percent, higher. Other countries that do not yet participate fully in global economic flows include Egypt, Indonesia, Nigeria, the Philippines, and South Africa.⁷⁵

To tap into this potential, companies can consider the following practices.

- **Prepare for the new face of competition.** In addition to emerging market and technology firms, companies must worry about “micromultinationals”. Pools of small enterprises on digital platforms are threatening to pick off customers by undercutting prices and speeding up product cycles. In the United States, the share of exports by large multinational corporations fell from 84 percent in 1977 to 50 percent in 2013.
- **Fight for talent.** A recent survey of US executives found that almost 40 percent of companies had missed business opportunities in the previous five years due to a shortfall in international competencies.⁷⁶ A human resources function that is strategic, not just a cost centre, will be essential for the future. Digital tools must also be put to work—for example, internal talent matching platforms can be used to match employees with specific assignments, teams, and development opportunities.
- **Rethink product strategy to achieve global scalability.** The Internet is cutting into the window of exclusivity companies once enjoyed on new products and services. Rocket Internet, a startup incubator, specialises in transplanting successful business models to new international markets. However, companies can take advantage of this to streamline their global product portfolios. Media and consumer technology companies are shifting to simultaneous global product launches, since today's consumers are already instantly aware of new offers around the world thanks to social media platforms.

⁷² Wouter Aghina, Aaron De Smet, and Kirsten Weerda, “Agility: It rhymes with stability”, *McKinsey Quarterly*, December 2015.

⁷³ *Digital globalization: The new era of global flows*, McKinsey Global Institute, March 2016.

⁷⁴ Jacques Bughin, Susan Lund, and James Manyika, “Five priorities for competing in an era of digital globalisation”, *McKinsey Quarterly*, May 2016

⁷⁵ *Digital globalization: The new era of global flows*, McKinsey Global Institute, March 2016.

⁷⁶ Shirley J. Daniel, Fujiao Xie, and Ben L. Kedia, “2014 US business needs for employees with international expertise”, presented at the Internationalization of US Education in the 21st Century research conference in Williamsburg, Virginia, April 11–13, 2014.

The Internet of Things is poised to lead the next wave of technology-driven growth

The Internet of Things (IoT) — devices which automatically communicate with one another— could represent a new phase of the information technology age. By blending digital and physical realms, IoT is promising to transform all facets of the economy ranging from how companies manage their physical assets to how cities operate. The annual potential economic impact of nine of these applications alone could be as much as \$11.1 trillion through 2025, if businesses and policy makers put in place the right technical, organisational, and regulatory systems.⁷⁷

Applications that deliver real productivity gains to firms and other users are already beginning to mature. Wearable devices are making waves in fields such as health care and manufacturing, in applications such as using data display to guide the performance of workers. Such augmented reality systems are already being used in warehouses to decrease error rates in picking activities by as much as 40 percent.⁷⁸ Beacon technology could also increase retail productivity by up to 5 percent through improvements such as real-time personalised promotions and store layout optimisation. IoT applications in other areas, such as automating domestic chores, may not be captured by productivity statistics but have enormous impact by freeing up labour time to be devoted to other pursuits. Devices such as self-guided vacuum cleaners and lawn mowers could cut the time required for household activities by 17 percent.⁷⁹ Finally, the data opportunities provided by IoT could empower companies to redesign jobs and processes for greater efficiency, effectiveness, and human fulfilment.

Realising IoT's full potential at scale will require appropriate regulatory frameworks, including privacy, intellectual property, and data ownership. Data privacy and security in particular must be dealt with sensitively so as not to compromise public trust. Governments must take an informed and inclusive approach to regulating these new areas, issuing transparent and clear guidelines that balance public interest with business and economic value. For their part, organisations must instil a data-driven decision-making culture; those in the top third of their industry in this respect were found to be 5 to 6 percent more productive on average, and the explosion of IoT-related data could widen this gap.⁸⁰

THE INCLUSION OPPORTUNITY

Inclusive growth is both an economic and moral imperative. To realise the full growth potential, all segments of society must participate—as both workers and consumers—and thereby benefit. Frustration with the prevailing economic order has grown since the global financial crisis. Leaders must credibly address social and economic concerns related to growing inequality in order to rebuild consensus.

This is not just an issue for governments; businesses also have a vital stake in an economic system that depends on public trust for its legitimacy and its very survival. There are tangible benefits as well—one study found that companies with higher ratings for environmental, social, and governance factors tend to outperform the market in the medium and long term.⁸¹

Boosting labour force participation

Large groups of the world's population still face barriers to participating in the labour force on an equal basis. Across seven of the world's largest economies, we estimate that 850 million people, or 30 to 50 percent of the working-age population, are economically underutilised (Exhibit 5).⁸² This represents a huge untapped growth opportunity; equalising the participation of women alone could boost global GDP by as much as 26 percent by 2025.⁸³

⁷⁷ *The Internet of Things: Mapping the value beyond the hype*, McKinsey Global Institute, June 2015.

⁷⁸ Gavin van Marle, "How 'augmented reality eyewear' can give you a smarter view of the future of logistics", *The Loadstar*, November 26, 2014.

⁷⁹ *The Internet of Things: Mapping the value beyond the hype*, McKinsey Global Institute, June 2015.

⁸⁰ Erik Brynjolfsson, Lorin Hitt, and Heekyung Kim, "Strength in numbers: How does data-driven decision-making affect firm performance?" *Social Science Review Network*, April 2011.

⁸¹ Mark Fulton et al., *Sustainable investing: Establishing long-term value and performance*, DB Climate Change Advisors and Deutsche Bank Group, June 2012.

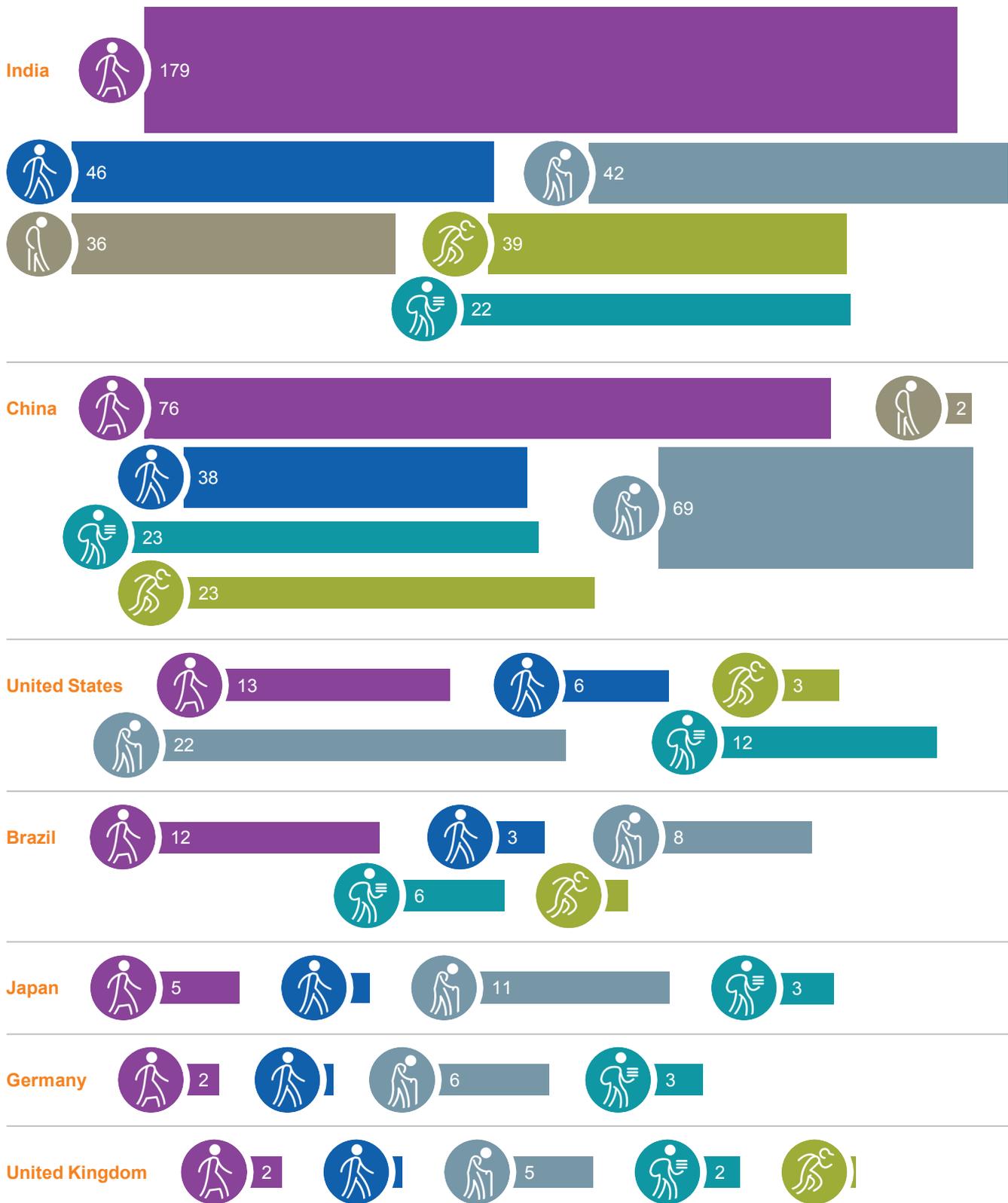
⁸² *A labor market that works: Connecting talent with opportunity in the digital age*, McKinsey Global Institute, June 2015. The study covered Brazil, China, Germany, India, Japan, the United Kingdom, and the United States.

⁸³ *The power of parity: How advancing women's equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

Exhibit 5

850 million people across seven countries are economically underutilised

million  Women¹  Men¹  Retired  Discouraged  Students  Inactive youth



¹ Excluding youth, students, discouraged workers, and retired.
NOTE: Data labels <2 not shown. Numbers may not sum due to rounding.

SOURCE: OECD; UN; World Bank; ILO; Eurostat; national sources; McKinsey Global Institute analysis

Many groups face systemic barriers to labour force participation. Women are perhaps the most prominent example, where multiple policies have been tried and tested. Explicit recruiting goals, flexible employment, adequate parental leave, sponsorship, and training programs are just a few examples. These can have real impact—in Taiwan, employment-protected, paid maternity leave has increased employment of women and their work hours by 7 percent.⁸⁴ Public policy makers in some countries also require companies to hire more women to executive positions. Such policies help companies as well as workers—companies with diverse boards have been linked to better financial performance, amongst other metrics.⁸⁵

Young adults are another group that urgently require attention. The youth unemployment rate is nearly 14 percent worldwide and has reached crisis levels in Spain and South Africa.⁸⁶ Joint public and private solutions are crucial to tackle this problem. IBM has partnered with New York City’s Department of Education and the City University of New York to create Pathways in Technology (P-Tech), a school that teaches computer science and engineering to students from low-income backgrounds. The model has proven so successful that 40 more schools have opened across the United States, sponsored by private companies.⁸⁷ Private players can also act on their own. In the United States, Toyota and Volkswagen have set up apprenticeship systems to train their own recruits with specific carmaking skills. On the other end of the spectrum, seniors with their wealth of work experience are another obvious focus in ageing societies. Mitsui’s retired employees in Japan, for example, provide consulting services to more than 650 small and midsize enterprises and handle projects worth hundreds of millions of yen, transferring knowledge to younger workers in the process.⁸⁸

Managing the social externalities

A rising tide may not have lifted all boats. The quest for growth over the past half century has left some groups no better off and may have generated detrimental side effects. Business and public leaders must engage on these issues to mitigate the social externalities.

In a winner-takes-all employment market, low- and middle-income households are in a precarious position. They face increased economic uncertainty and may struggle unsuccessfully to recover from an economic hardship. Governments must design effective social safety nets that cushion those who are most vulnerable. Universal basic income has gained attention, with the potential benefit of eliminating costly management of traditional welfare programs though risking moral hazard and incentive issues. Conditional cash transfers have proven useful in certain emerging economies, boosting consumption amongst the poor by 15 to 30 percent and reducing poverty rates in Colombia and Honduras.⁸⁹ Furthermore, as the gig economy grows and more people become dependent on one-off jobs arranged through digital marketplaces such as Uber and TaskRabbit, governments must reconsider the provision of benefits traditionally supplied by employers, such as health-care insurance, paid sick leave, and retirement benefits.

For their part, businesses can deploy measures such as regular wage reviews and profit-sharing arrangements. Retailers Ikea and Costco choose to pay above the industry average because they believe it helps them attract the best talent and minimise turnover costs. Even in times of restructuring, businesses can still do much to help. After shutting its plant in Salo, Finland, in 2012, Nokia worked with the government to establish Nokia Bridge, a business incubator programme to help former employees launch new businesses. As a result, 400 new companies have been created in the area.⁹⁰

⁸⁴ Alice Newton, *Women in work: How can policy makers encourage female labour force participation?* Harvard University Press, 2011.

⁸⁵ *Why diversity matters*, McKinsey & Company, January 2015.

⁸⁶ *A labor market that works: Connecting talent with opportunity in the digital age*, McKinsey Global Institute, June 2015.

⁸⁷ *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

⁸⁸ Misato Adachi, Ryo Ishida, and Genki Oka, “Japan: Lessons from a hyperaging society”, *McKinsey Quarterly*, March 2015.

⁸⁹ *The case for conditional cash transfers in the People’s Republic of China*, Asian Development Bank, March 2012.

⁹⁰ Mark Bosworth, “The upside to being let go by Nokia”, *BBC Magazine*, January 2014.

Societal burdens such as obesity, smoking, and diabetes also hinder growth and require more attention. The economic promise of many emerging countries especially could be compromised by these problems—Indonesia, for instance, could have a \$66 billion GDP loss by 2020 if it does not actively intervene to halt diabetes.⁹¹ Change is possible. The United States Healthy Weight Commitment Foundation, for example, works with more than 250 organisations to promote healthy diets and physical activity. It has garnered commitments from Kraft, Kellogg, Mars, and other food and beverage giants to remove 6.4 trillion calories a year from the US market.⁹²

3. MANAGING IN THIS NEW WORLD: A CEO AGENDA

A RENAISSANCE OF STRATEGY

In many companies, strategic vision has been pushed aside by operational concerns. But while agility enables companies to respond quickly to shifts in their environment, it is strategy that enables companies to anticipate these shifts, prepare for them, and stay the course while turbulences rock the boat. In an era of volatility, strategic thinking is more critical than ever.

As technological change is accelerating, new business models and products that can disrupt established companies' value propositions emerge more rapidly than ever. Many companies fail because they either do not recognize disruptive threats soon enough, or they do not act boldly enough—or often both.⁹³ The role of good strategy is to spot disruptive business models and define the actions needed to take advantage of these opportunities.

To cope with a more dynamic environment, strategists must refocus on the forecasting and search steps of the strategy process.⁹⁴ A thorough scan for potentially disruptive technologies and business models and a comprehensive search for the potential pathways to capturing these opportunities are the first steps. Strategists must also look well beyond traditional business factors. Regulators, politicians, activists, and civic organisations can exert substantial influence on businesses, which may have to respond with strategic alternatives.

Once a potentially disruptive opportunity has been identified, companies must act boldly. This begins with mechanisms to set flexible and responsive strategy. Leadership teams need to gather more frequently and increase the time they spend on strategy to revisit corporate aspirations and to make big, directional changes.⁹⁵ Capital allocation must follow suit—we find that dynamic companies that reallocate resources more flexibly on average tend to deliver better, less volatile annual returns to shareholders.⁹⁶

And finally, companies cannot leave strategy as just a plan on paper. They must translate it into behavioural changes using a social process to change deep-seated beliefs about how the organisation should work.⁹⁷ Only when it secures widespread traction in the organisation can a strategy be considered implemented.

⁹¹ *Tackling Indonesia's diabetes challenge*, McKinsey Center for Healthcare Research and Innovation, May 2016.

⁹² *Overcoming obesity: An initial economic analysis*, McKinsey Global Institute discussion paper, November 2014.

⁹³ Chris Bradley and Clayton O'Toole, "An incumbent's guide to digital disruption", *McKinsey Quarterly*, May 2016.

⁹⁴ The seven steps are to frame, diagnose, forecast, search, choose, commit, and evolve. See Chris Bradley, Angus Dawson, and Antoine Montard, "Mastering the building blocks of strategy", *McKinsey Quarterly*, October 2013.

⁹⁵ Chris Bradley, Lowell Bryan, and Sven Smit, "Managing the strategy journey", *McKinsey Quarterly*, July 2012.

⁹⁶ Michael Birshan, Emma Gibbs, and Kurt Strovink, "Rethinking the role of the strategist", *McKinsey Quarterly*, November 2014.

⁹⁷ Chris Bradley, Angus Dawson, and Antoine Montard, "Mastering the building blocks of strategy", *McKinsey Quarterly*, October 2013.

LEARNING AT SPEED

Managing in an era of greater volatility also requires leaders themselves to keep up with the ever-faster pace of change. In the words of AT&T CEO Randall Stephenson, people who do not invest time in regular learning online “will obsolete themselves with technology”.⁹⁸ Along with staying abreast of changes, leaders must learn how to adapt and fill in gaps in their skills and knowledge. Five strategies can help.

- **Design a system for staying on top of current events.** Leaders have varying strategies for tracking news during busy schedules: Some read daily briefings prepared by their staff. Others rely on software; Dylan Tweney, executive editor at VentureBeat, uses an app to send articles to his Kindle, where he reads them later.⁹⁹
- **Enlist a coach.** Leaders can engage a coach to observe their meetings, conference calls, time allocation, and interpersonal style, offering candid and specific feedback.
- **Promote dissent and debate disagreements openly.** Senior executives can encourage genuine debate by building diverse teams, establishing a climate of trust, and reassuring that dissent will be welcomed.¹⁰⁰ When Bridgewater founder Ray Dalio received criticism from a client adviser, he sought honest comments from others and asked to be graded on scale from A to F. He then forwarded the email exchange to the whole company to promote similar feedback and dissent.¹⁰¹
- **Seek help from “digital native” employees.** “Reverse mentoring” was first popularised in 1999 by Jack Welch when he was the CEO of General Electric, for his managers to learn how to use the internet.¹⁰² Today, younger colleagues can teach more senior ones how to stay current with news aggregators, automate daily tasks, and even use augmented reality to catch Pokémon in the boardroom.
- **Design personal challenges with clear goals and KPIs.** Executives are generally good at tracking the performance of their organisations but fall short in monitoring their own personal improvement initiatives.¹⁰³ Facebook’s Mark Zuckerberg publicly sets himself a measurable self-improvement challenge each year, such as running 365 miles, learning Mandarin, and reading two books a month.¹⁰⁴ In 2014 Larry Page encouraged Google engineers to spend one day a week without a laptop and using just a mobile device, to prepare them for a world in which mobile is becoming much more important.¹⁰⁵

ROLE MODELLING: A CAPITALISM TO BE PROUD OF

In the current social environment, business leaders must work to rebuild society’s trust, but the task is not as onerous as many might fear. Already, business is already the institution most trusted to keep pace with rapid change.¹⁰⁶ Encouragingly, in one study a decisive 80 percent of the public believed that a business can increase its profits while at the same time improving the economic and social conditions in the communities in which it operates.

Maximising corporate value must no longer be seen to be at odds with serving all major stakeholders—whether employees, customers, creditors, or communities. Leaders can begin by embracing this concept wholeheartedly, embedding it within their organisations, and publically advocating strengthening the social contract between the private sector and citizens. Several companies have done so by using their visibility and resources to take a stand on societal norms that compromise inclusive growth. As part of a “global campaign to inspire and empower women”—in the words of its president, Markus Strobel, P&G-

⁹⁸ Quentin Hardy, “Gearing up for the cloud, AT&T tells its workers: adapt, or else”, *New York Times*, February 13, 2016.

⁹⁹ Grace Nasri, “How CEOs stay so productive”, *Fast Company*, February 12, 2013.

¹⁰⁰ Dan Lovallo and Olivier Sibony, “The case for behavioral strategy”, *McKinsey Quarterly*, March 2010.

¹⁰¹ Adam Grant, *Originals: How non-conformists move the world*, Viking, 2016.

¹⁰² Josh Steimle, “Reverse mentoring—Investing in tomorrow’s business strategy”, *Forbes*, May 5, 2015.

¹⁰³ See Stewart Friedman, “Total leadership: Be a better leader, have a richer life”, *Harvard Business Review*, April 2008.

¹⁰⁴ Mark Rivett-Carnac, “Mark Zuckerberg wants you to join him in running 365 miles this year”, *Time*, January 5, 2016.

¹⁰⁵ Miguel Helft, “Google’s Larry Page: The most ambitious CEO in the universe”, *Fortune*, November 13, 2014.

¹⁰⁶ Compared to the media, government, and nongovernmental organizations. 2016 Edelman Trust Barometer.

owned Japanese beauty brand SK-II launched a hard-hitting advertisement highlighting unfair standards facing unmarried women in China. The ad went viral, drawing huge praise amongst Chinese netizens and prompting serious discussion.

Increasingly, leaders will need to be what Harvard political scientist Joseph Nye calls “tri-sector athletes”, adept at collaborating across the private, public, and social sectors to build more empathy between them. Of course, managing at these intersections will require trade-offs; win-win solutions are not always available, and the essence of effective leadership is prioritisation, preferably based on a set of clearly communicated principles. One such principle could be the prioritisation of long-term value over short-term considerations. Unilever, for example, committed its Sustainable Living Plan to double turnover while reducing absolute environmental impact and increasing positive social impact. To evince his commitment to the long-term plan, CEO Paul Polman abolished full reporting on a quarterly basis to remove the temptation to work towards short-term numbers, and focused instead on attracting the right longer-term shareholders to the company’s share register.¹⁰⁷ Translating ideas into action is crucial to prompt a real shift away from quarterly capitalism.¹⁰⁸



Global economic growth is slowing creating new tensions and exacerbating lingering ones. While the changes create significant challenges, they also open the opportunity to redefine approaches to the global economy and rekindle the growth momentum. In doing so, public- and private-sector leaders must ensure that the benefits of a resurgent economy are shared more equitably than in the past and that vulnerable groups are protected. Failure to do so will risk further deterioration of the social acceptance for the economic agenda. The bleak economic outlook will not brighten immediately, but immediate action is needed by leaders throughout society to create a shared vision of a brighter future.

¹⁰⁷ Paul Polman, “Business, society, and the future of capitalism”, *McKinsey Quarterly*, May 2014.

¹⁰⁸ Dominic Barton and Mark Wiseman, “Focusing capital on the long term”, *Harvard Business Review*, January-February 2014.

QUESTIONS FOR LEADERS

ON THE IMPACT OF SLOWER GROWTH AND INCREASED VOLATILITY

- How will lower global growth impact your organisation? How are you shifting your long-term strategy to cope with this?
- How does the value your organisation creates get distributed in society, for instance, among customers, investors, employees, and other stakeholders? Is your organisation actively helping to uphold the social consensus?
- **For policy makers:** Can you position your country to take advantage of the bleak outlook? Will economic growth remain a priority for your country going forward? If not, what will take its place?

ON SEIZING THE DEMAND OPPORTUNITY

- What are the biggest barriers to investment and consumption growth in your sector? Who could help remove them, and how can you influence them? What are some of the core limiting assumptions that need to be reviewed or debunked?
- What would you do differently if you reported annually rather than quarterly?
- **For policy makers**
 - Are policies set by different public bodies causing a disproportionate effect on certain groups of society? What are you doing to make sure that policy making is coordinated among different public bodies?
 - What are you doing to engage private-sector leaders? What benefits could closer collaboration with the private sector provide?

ON SEIZING THE PRODUCTIVITY OPPORTUNITY

- How far is your organisation from the frontier of productivity in your sector or country? What steps can you take to catch up?
- What organisational or process obstacles are stopping you from making the most of your technological investments? What would it take for you to overcome these?
- Where will your biggest competitive threat come from in the future? What are you doing to prepare?

ON CONTRIBUTING TO A NEW SOCIAL CONSENSUS

- What is your organisation doing to promote inclusive growth? What social initiatives are priorities for your senior managers? Are these having a tangible impact?
- Does your organisation provide equal opportunities for all groups of people? Do you have the necessary channels of feedback to know if they don't?

ON THE CEO AGENDA

- In any given week, how much time do you and your top team spend thinking through key strategic issues? Is this enough?
- What initiatives are you taking to improve your performance as a business leader? How are you getting feedback and measuring your progress?
- Are you and the other leaders in your organisation role models for society? Would others agree?

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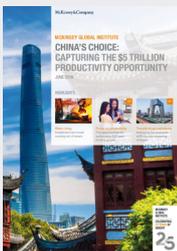
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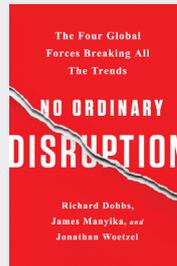
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