Productivity to the Rescue: Review Article on the McKinsey Global Institute Report *Global Growth: Can Productivity Save the Day in an Aging World?*

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ABSTRACT

This review article provides a synthesis and critical assessment of the McKinsey Global Institute (MGI) report *Global Growth: Can Productivity Save the Day in an Aging World?* The key stylized fact that motivates the report is the expected fall-off in GDP growth for the G-19 and Nigeria from an average annual rate of 3.6 per cent in the 1964-2014 period to a projected 2.1 per cent in the next fifty years (2014-2064). All of this slowdown is due to a fall-off in employment growth and none to slower labour productivity growth. MGI believes that there is great potential to accelerate productivity growth to offset the fall in employment growth and prevent any fall-off in GDP growth. Indeed, the report makes the case that it is feasible, although extremely challenging, to boost productivity growth in the G-19 and Nigeria to 4 per cent a year over the next decade, largely through catch-up to best practices. The report outlines public policies and private sector actions to achieve this target.

IT IS WELL RECOGNIZED that in recent years the rate of economic growth has slowed down throughout the world, with important consequences in many areas. A return to the rate of economic growth of the past would make the resolution of many economic and social problems easier. That is indeed what the report *Global Growth: Can Productivity Save the Day in an Aging World?*, published by the McKinsey Global Institute (MGI), advocates, putting forward a detailed strategy to achieve the objective of faster economic and productivity growth.[2] This review article provides a synthesis and a critical assessment of the key arguments of this ambitious proposal.

First, the argument in a nutshell. The key stylized fact that motivates the report is the expected fall-off in GDP growth for the G-19

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2 Six individuals associated with the McKinsey Global Institute are listed as authors of the report. James Manyika, Jonathan Woetzel, and Richard Dobbs are MGI directors, Jaana Remes is a MGI partner, Eric Labaye is MGI chairman, and Andrew Jordan is a McKinsey consultant. The report, released in January 2015, is posted at http://www.mckinsey.com/~/media/McKinsey/dotcom/Insights/Growth/Can%20long-term%20global%20growth%20be%20saved/MGI_Global_growth_Full_report_February_2015pdf.ashx

Table 1: Trends and Prospects for Output, Employment, and Productivity Growth, 1964-2014 and 2014-2064
(average annual rate of change)

	1964-2014			2014-2064			2014-2024
	Output	Employment	Productivity	Output	Employment	Productivity	Productivity Target
G-19 and Nigeria	3.6	1.7	1.8	2.1	0.3	1.8	4.0
Developed G-19	2.8	0.9	1.9	1.9	0.1	1.9	2.0
Emerging Economies (G-19 and Nigeria)	4.8	1.9	2.8	3.1	0.4	2.8	6.0

Source: Exhibit 19 (MGI, 2015:49).

and Nigeria,[3] which currently account for around 80 per cent of world GDP, from an average annual rate of 3.6 per cent in the 1964-2014 period to a projected 2.1 per cent from 2014 to 2064 (Table 1).[4] All of this slowdown is due to a fall-off in employment growth from 1.7 per cent per year over the last half century to a projected 0.3 per cent in the next 50 years. None of the projected fall-off in GDP growth is due to slower labour productivity as the report projects this crucial variable to continue growth at its historical rate of 1.8 per cent for the next 50 years.

MGI believes that there is great potential to accelerate productivity growth in the world. Indeed, MGI asserts that it is possible, although extremely challenging, to boost productivity growth in the G-19 and Nigeria to 4.0 per cent a year over the next decade. This would more than offset the fall in employment growth and prevent any fall-off in GDP growth. The chapters of the report make a case that this doubling of the historical rate of productivity growth is feasible, largely through catch-up to best practices. The report outlines public policies and private sector actions needed to achieve this objective.

This review article is organized into two main parts. The first part outlines the key arguments of the report. The second part provides a critical assessment.

The MGI Global Growth Report: A Synthesis

The report is organized into six chapters. Key points from each chapter are presented in this part.

The Contribution of the MGI Report to the Productivity Debate

The first chapter provides an overview of the debate regarding the prospects for long-term growth. In what is now the conventional wisdom across the political spectrum, MGI sees growth as a critical enabler for meeting a much broader set of societal goals, largely related to well-being, rather than as an ultimate goal in itself. In developing economies, growth reduces poverty, while in mature economies growth funds government programs, such as pension obliga-

3 There are 19 countries in the G-20, which also includes the European Union (EU). Data for the non-G-20 EU members are excluded from the G-19 category. The nine developed country G-19 members are South Korea, Japan, Germany, Italy, France, the United Kingdom, Australia, Canada, and the United States. The ten emerging country G-19 members are China, Turkey, India, Mexico, Brazil, Saudi Arabia, Argentina, Russia, Indonesia, and South Africa.

4 Unless otherwise specified, all growth rates in this review article refer to compound or average annual rates of change, expressed in per cent. To lighten the text, the average annual modifier may be dropped.

tions. The report notes that economic growth has been exceptionally rapid over the last 50 years, but that there is no consensus on prospects for the next 50 years.

MGI points out that there are two broad levers for improving productivity: efficiency gains that reduce input for any given output, and innovations that increase the volume and value of output for any given inputs.

The report contributes to the growth debate in three ways. It provides:

- an approach to framing the long-term growth debate with a simple decomposition of GDP growth into changes in employment and labour productivity. Such an approach allows the identification of the impact of demographic trends on growth;
- a microeconomic examination of the productivity-improvement opportunities at the sector level. Drawing on McKinsey industry expertise and productivity studies, the report assesses the productivity gaps related to best practices across sectors for eight or more countries as well as the prospects for technology and business innovations to 2025. This allows for an estimate of the productivity growth potential in the sample sectors and countries in the coming decade and an extrapolation to the global economy; and
- an agenda of what needs to change for the productivity potential to be realized, as synthesized into ten priorities for enabling global growth.

Employment Trends and Prospects

Chapter two provides an overview of employment trends over the last half century, and employment prospects for the next half century. It is noted that from 1964 to 2014 in the G-19 plus Nigeria employment grew at a 1.7 per cent average annual rate and accounted for nearly one half (48 per cent) of economic growth. The emerging economies enjoyed employment growth of 1.9 per cent and the developed economies 0.9 per cent (Table 1). In both groups of countries, it was population growth, not an increase in the employment rate or an increase in the share of the working age population in the total population, that accounted for almost all of the employment growth.

The report projects that employment growth in the G-19 plus Nigeria will be much slower over the next half century, averaging only 0.3 per cent per year. This fall-off affects the developed economies (employment growth of 0.1 per cent, down 0.8 percentage points), and even more the emerging economies (0.4 per cent, down 1.5 points). The demographic tailwind that has powered the world economy over the past half century has lost its force, and in some countries, such as China, Russia, Japan, Germany, Italy and South Korea, it is even turning into a headwind, with negative employment growth projected for these countries for the 2014-2064 period.

Aggregate Productivity Growth and Prospects

Chapter three discusses labour productivity prospects at the aggregate level.[5] The key message is that faster productivity growth can make up for the changing demographic trends. Labour productivity growth averaged 1.8 per cent per year in the G-19 and Nigeria in 1964-2014. Productivity growth was considerably higher in the emerging G-19 economies at 2.8 per cent compared to 1.9 per cent in the developed economies (Table 1). Note that the aggregate productivity growth rates for the two groups was higher than the G-19 average due to a negative composition effect from the growing

5 The only productivity concept discussed in the report is labour productivity so any reference to productivity signifies labour productivity, unless otherwise specified.

weight of the low-productivity level emerging economies.

In addition to slower productivity growth than the emerging economies, the developed economies have experienced a marked slowdown in productivity growth within the 1964-2014 period, from 3.2 per cent per year in 1964-1974 to 1.8 per cent in each of the three 10-year periods between 1974 and 2004 and to 0.8 per cent in 2004-2014. In contrast, since 1994 productivity growth has accelerated in the emerging economies of the G-19, advancing at a 3.6 per cent pace in 1994-2004 and an amazing 5.6 per cent in 2004-2014. This is up from a very weak 1.0 per cent in both the 1974-1984 and 1984-1994 sub-periods. Very strong economic growth in China, and to a lesser degree India, accounts for the revival in productivity growth in the emerging world since the mid-1990s.

Since the developed economies are on, or close to, the world technology frontier, it is somewhat disconcerting that labour productivity growth in those countries has been on a marked downward trend. As technological progress is the main driver of labour productivity advance, this fall in trend productivity growth may bode poorly for attempts to boost productivity growth as they would be going against an unfavourable technological headwind.

Despite the fall-off to 0.8 per cent labour productivity growth in 2004-2014 in the developed economies of the G-19, the MGI report is projecting a strong revival of productivity growth going forward. Output per worker is projected to rise at 1.9 per cent per year from 2014 to 2064, the same rate as enjoyed in the past half century. It appears that the productivity performance in the most recent decade is considered an anomaly with no effect on future productivity growth, an issue that will be revisited later in this review article.

In the emerging economies, productivity growth over the next 50 years is also projected to continue at the rate of the last 50 years, namely 2.8 per cent. This may be more realistic than the projection for the developed economies as the emerging economies have experienced an upturn in productivity growth in recent years, not a downturn.

Given the assumption of no slowdown in productivity growth between the 1964-2014 and 2014-2064 periods in the G-19 and Nigeria (also in all the G-19 countries and Nigeria taken individually), all the slowdown in GDP growth is accounted for by slower employment growth which is in turn very closely linked to population growth. This means that once one controls for population, as one does with per capita measures, the economic growth slowdown does not translate into a major slowdown in the growth of living standards. Per capita GDP for the G-19 and Nigeria is projected to fall only 0.4 percentage points from 2.1 per cent in 1964-2014 to 1.7 per cent in 2014-2064, compared to the 1.5 percentage point fall in GDP growth.

Welfare is more closely associated with per capita metrics than absolute metrics. The relatively small fall-off in per capita GDP growth suggests the economic prospects for the next half century are much less dire than implied by the nearly four times larger fall-off in GDP growth. Perhaps the world is in less need of saving from its aging population than the authors believe. What in my view is more relevant is the assumption that productivity growth does not fall-off. If it does decelerate from the trend of the last half century, as recent trends suggest, then the pace of living standards growth will indeed be endangered.

Opportunities for Productivity Growth

Chapter four provides an assessment of the opportunities for rapid productivity growth

based on MGI case studies of five sectors: agriculture, food processing, automotive, retail, and health care. Given the great uncertainty associated with future productivity growth, the time horizon for this discussion is the next ten years, not the 2014-2064 period. Extrapolating from the studies, the report finds sufficient potential to accelerate productivity growth to about 4 per cent per year in the G-19 and Nigeria. It is estimated that three quarters of the global potential productivity growth would come from the broader adoption of best practices, that is catch-up, and one quarter from pushing the frontier.

The 4 per cent productivity target is not uniform across the world. For the developed G-19 the target is only 2 per cent, barely up from the 1.9 per cent in the projections, with 55 per cent of productivity gains from catch-up and 45 per cent from pushing the frontier. It is the emerging world that is key for the 4 per cent global productivity growth target, with productivity growth more than doubling from 2.8 per cent in the projections to a potential 6 per cent, with 82 per cent (5 percentage points) due to catching-up and 18 per cent from pushing the frontier.

MGI does not see a drying up of technological or business innovations acting as a constraint to growth, but rather believes there is a strong innovation pipeline in both developed and developing countries.

This chapter provides a wealth of details about the potential productivity gains to 2025 in the five sectors examined. These include raising the share of modern retail formats, increasing the scale and capacity utilization of auto assemblers, and improving operational efficiency and reducing waste in health care and food processing. One is particularly struck by the large disparity in relative productivity levels within developing countries. For example, Brazil is the world's most productive chicken producer (page 66), yet its relative aggregate productivity level in 2014 was only 19 per cent of that of the United States (Exhibit 16).

MGI provides interesting insight into the role of government in fostering productivity. The main divide is between developed and emerging economies. In the developed economies MGI estimates for three sectors (retail, automotive and agriculture) that only 13 per cent of potential productivity growth is dependent on government action, compared to 45 per cent in the emerging economies. The role of government also varies by sector. In developed economies, only 5 per cent of potential productivity growth in automotive is dependent on government action, compared to 10 per cent for retail and 25 per cent for agriculture. MGI suggests that one-size-fits-all solutions are rare and governments need to tailor their interventions to the sector.

MGI recognizes that a step change in productivity growth is no easy task. It would

> "… necessitate strenuous efforts by business owners, managers and workers to change established ways of doing things and to adopt new approaches that improve how they operate. To incentivize broad-based change, companies need competitive pressure to perform better, a business environment and institutions that enable change and creative destruction, and access to infrastructure and talent" (pg. 87).

Enablers to Boost Productivity Growth

Chapter five puts forward ten key enablers to unlock long-term growth potential and "retool the world's productivity engine." The enablers are classified into four broad groups:

1. Enable catch-up by creating transparency and competition, which includes three enablers:
   - remove barriers to competition in service industries;

- focus on efficiency and performance management in public and regulated sectors; and
- invest in physical and digital infrastructure, especially in emerging markets.

2. Help push the frontier by incentivizing innovation, which includes four enablers:

- craft a regulatory environment that incentivizes productivity and supports innovation;
- foster demand for R&D investment in innovative products and services;
- exploit existing and new data to identify transformational improvement opportunities; and
- harness the power of new actors in the productivity landscape through digital platforms and open data.

3. Mobilize labour to counter the waning demographic tailwinds, which includes two enablers:

- put in place regulation and social support to boost labour market participation among women, young people, and older people; and
- improve education and matching skills to jobs and make labour markets more flexible.

4. Open up economies to cross-border economic flows, from trade in goods and services to flows of people.

MGI states that it does not underestimate the extent of changes needed to raise the rate of global productivity growth by a significant margin and acknowledges that such a development would require modifying longstanding political, judicial and regulatory practices. Based on MGI's body of analysis, the report provides a fascinating and insightful discussion of the ten enablers.

Trade-offs and Productivity Growth

The sixth and final chapter in the report assesses briefly the trade-offs that will be needed to sustain and accelerate productivity growth. Trade-offs and issues discussed include the treatment of losers in the growth process, data accessibility versus privacy concerns, risks from labour flexibility, the relationship between GDP growth and happiness, rising GDP and environmental sustainability, alternatives to GDP as metrics of progress, and most importantly, the link between economic growth and income distribution.

The MGI Global Growth Report: An Assessment

This section of the review article provides an assessment of the MGI global growth report.

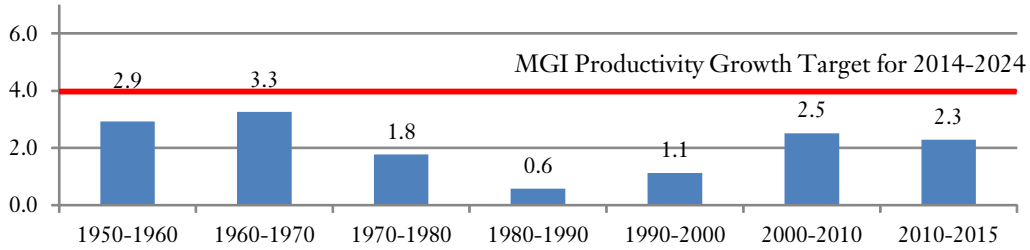
The Deep Insights of MGI Productivity Studies

The report draws on the extensive knowledge base of the economic and productivity growth processes that has been constructed by the McKinsey Global Institute studies and McKinsey consulting projects over many years. The report lists over 90 MGI and McKinsey publications directly related to economic and productivity growth. These publications include country productivity studies (e.g. Australia, Europe, France, Germany, Sweden, Vietnam, Japan, Turkey, Thailand, Russia, Poland, South Korea, Latin America, Nigeria, China, Brazil, Netherlands, Mexico), sector productivity studies (e.g. automotive, service sector, retail trade, government, the social economy, health care, manufacturing), and productivity driver studies (e.g. capital productivity, innovation, technologies). This impressive body of work, freely accessible on the MGI website, represents a public good that can be used by persons responsible for developing strategies and policies to boost productivity

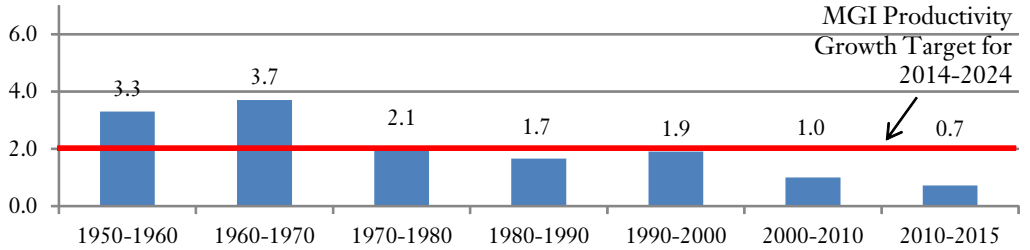
Chart 1: Labour Productivity (Output Per Worker) Growth, Developed and Developing World, 1950-2015, with McKinsey Global Institute (MGI) Productivity Growth Target for 2014-2024

(average annual rate of change)

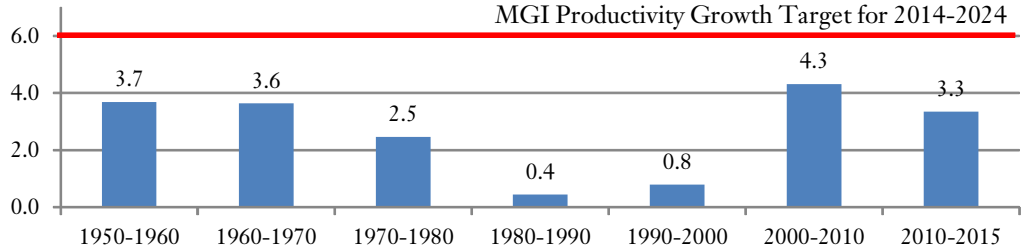
Panel A: World



Panel B: Developed World



Panel C: Developing World



Source: The Conference Board (2015) The Conference Board Total Economy Database, May 2015, http://www.conference-board.org/data/economydatabase/.

This real-world orientation of the McKinsey approach in addressing the productivity issue is refreshing. It lies in stark contrast to theoretical, often ahistorical, academic research on productivity whose only real world interface is generally regression analysis. Such research generally does not benefit from knowledge and insights gained through industry studies of the topic under investigation, which includes interaction with the actors who are directly responsible for decisions affecting productivity. To be sure, both approaches have their strengths and can be complementary. The MGI contribution is to increase the amount of high-quality, observation-based productivity research, which is in much shorter supply than productivity research from the academy.

How Realistic Is a 4 per cent Productivity Growth Target for the World?

The report makes the case, based on its five sector studies, that a 4 per cent productivity growth rate is a realistic target for the 2014-2024 period for the G-19 and Nigeria, with 2 per cent productivity growth in the developed economies and 6 per cent in the emerging economies. I question the feasibility of this target for several reasons. First, such a productivity growth rate is historically unprecedented. Second, the motivation of firms to vigorously pursue such an objective is unclear. Third, potential productivity growth identified in the five sectors presented may not be representative of the overall productivity potential of the economy. Fourth, recent trends point to a productivity growth slowdown more than the continuation of the 1964-2014 trend. Fifth, the demand-side drivers of such strong productivity and output growth are not identified.

Chart 1 shows output per worker growth rates for the world economy, the developed countries, and developing countries for ten-year periods since 1950. In terms of the world economy, in not one of the six ten-year periods was 4 per cent productivity growth achieved. For the developing countries the 6 per cent target was also never achieved. The developed economies did exceed the 2 per cent productivity growth in the 1950s and 1960s and were close to 2 per cent in the 1970s, 1980s, and 1990s, but have been well below 2 per cent since 2000. Given this historical reality, it seems audacious if not somewhat farfetched to propose such productivity targets. Of course, the productivity targets may just be meant to be aspirational, that is to inspire governments and firms to better their game.

Firms already have a financial incentive to maximize profits, and one of the means to accomplish this is through adopting best-practises. Given existing incentives for cost-minimization, there must be some reason firms have not already adopted best practices. However, the report does not grapple with this. What are the market failures or structural frictions that keep firms from adopting best practices? One possibility might be a knowledge gap, but there could be others. It is important to understand the details of this because different frictions may imply different strategies or policy interventions. In addition, the report never identifies a political strategy or specific policies that governments can adopt to boost productivity growth. At the world level, does the productivity issue need global champions such as the OECD for the developed world and the World Bank for the developing world?

The report identifies the potential to accelerate productivity growth in five sectors from a recent base period to 2025 (Exhibit 22 on Page 58). It finds that at the world level productivity has the potential to increase at a 5.5 per cent average annual rate in automotive, 4.4 per cent in agriculture, 3.4 per cent in retail, 2.9 per cent in food processing, and 2.2 per cent in health care (the unweighted average is 3.6 per cent).[6]

Based on these estimates and the assumption that other sectors have similar productivity growth potential, MGI concludes that 4 per cent is a realistic productivity target, but the representative nature of the five sectors is unproven.

6 The report finds that for developed countries, productivity growth to 2025 has the potential to advance at 3.5 per cent in automotive, 2.0 per cent in agriculture, 2.0 per cent in food processing, 2.0 per cent in retail and 2.2 per cent in health care. The unweighted average is 2.3 per cent, above the 2 per cent target for G-19 developed countries. For emerging economies, the report finds that productivity growth in automotive has the potential to advance at 8.1 per cent, agriculture at 4.9 per cent, food processing at 4.7 per cent, retail at 5.3 per cent and health care at 2.2 per cent. The unweighted average is 5.0 per cent, below the 6 per cent productivity growth target for G-19 emerging economies.

The report projects that productivity growth in the 2014-2064 period will be identical to that observed in the 1964-2014 period, and makes the case that it can be even stronger in the 2014-2024 period. As noted earlier, the developed G-19 economies have experienced a marked slowdown in productivity growth within the 1964-2014 period, from 3.2 per cent per year in 1964-74 to 1.8 per cent in each of the three 10-year periods between 1974 and 2004 and to 0.8 per cent in 2004-2014. The United States, the world technology leader, has experienced business sector output per hour growth of only 0.8 per cent per year since 2004, down from 2.2 per cent from 1995 to 2004.

Surprisingly, the report does not address the reasons for the recent slowdown in trend productivity growth nor discuss the implications for its productivity projections. But even the continuation of the 1964-2014 productivity trends may be optimistic, not to mention the acceleration of productivity growth to 4 per cent. In the long run productivity growth is largely driven by technological progress. If the supply of major new productivity-enhancing innovations is dwindling, as some technological pessimists like Robert Gordon (2016) believe, then future productivity growth may be closer to recent trends than those enjoyed over the past half century.

In other words, the slowdown in GDP growth between the 1964-2014 and 2014-2064 periods may be much worse than the report projects, because of the failure of productivity growth to maintain its past growth rate.

The focus of the report is on increasing productivity (and output) growth by boosting the supply-side potential of the world economy. But output (and productivity) growth is determined by both supply-side and demand-side forces. Potential increases in supply due to technological advances do not automatically translate into actual increases if demand is deficient. The report fails to identify the demand-side forces that will ensure that the increased productive capacity is actually realized. For example, China's rapid output and productivity growth in recent years was driven by very strong growth in exports. Will export growth also drive output and productivity growth in the emerging world in the 2014-2064 period, or will internal demand play a larger role? Say's Law may hold in the long run, but how this is expected to happen needs to be fleshed out.

In defense of the report, it can be noted that all of the potential productivity acceleration in the 2014-2024 period takes place in the emerging G-19 countries (Table 1). The productivity growth target for these countries at 6.0 per cent is more than double projected productivity growth (2.8 per cent). In the developed G-19 countries target productivity growth at 2.0 per cent is virtually the same as projected productivity growth (1.9 per cent). Thus virtually all the acceleration in productivity growth for the G-19 and Nigeria from the 1.8 per cent figure in the projection to the 4.0 per cent target is due to the emerging economies. This is consistent with a technological slowdown as such a development is largely confined to the developed world. The emerging countries can still continue to enormously benefit from catch-up to the frontier, even if this frontier is not advancing as rapidly as it once did.

Do We Really Need 4 per cent Productivity Growth?

The motivation for the report is that without a substantial broad-based productivity agenda, global growth is likely to decline substantially from rates enjoyed in the past half century. But this decline is based on slower employment growth and consequently has a small impact on per capita metrics. Indeed, with 4 per cent productivity growth and population growth projected to be 0.4 per cent in the 2014-2064 period in the G19 and Nigeria, GDP per capita growth

would be around 3.6 per cent, well above the 2.1 per cent experienced in 1964-2014. A case might be made that what matter for well-being are trends in living standards measured as growth in GDP per capita, not growth in total GDP.

Of course, the options open to humanity would be greatly enhanced by 4 per cent productivity growth and aspirational targets can positively affect behaviour. But would a more realistic productivity target be preferable, especially when the attainment of such an objective not only sustains living standards growth, but boosts it considerably? Does the report lose credibility by championing such overly ambitious objectives? Analysts will differ on their answer to this question. My view is of lost credibility.

Labour Productivity Versus Total Factor Productivity

The standard approach to productivity analysis is growth accounting, which decomposes labour productivity growth into three sources: capital deepening, labour quality or composition, and total factor productivity. The MGI report eschews this methodology, apparently on the grounds that capital is difficult to measure, although no discussion of the limitations of growth accounting is offered. Instead it focuses on the division of economic growth into employment growth and labour productivity growth, with no attempt to quantify the sources of this productivity growth, past or future.

While many economists would likely see this as a major failing of the report, I do not share this view.[7] Because so much technical progress is embodied in capital equipment, the idea that total factor productivity is a proxy for technological progress can be highly misleading. For example, Statistics Canada's official estimates for the business sector show that multifactor productivity growth in Canada was zero between 1977 and 2013. Yet the idea that no technological change (or even disembodied technological change) took place over that 36 year period is preposterous.

The Economist versus the Business Approach to Productivity

Economists and business people have different approaches to productivity. Economists focus on the changes over time in real, that is inflation-adjusted (constant price), output per unit of input. Business people on the other hand define productivity as the nominal or current price value added per unit of input, reflecting their focus on profitability, which is measured in current prices. A firm that through marketing is able to increase its margins and hence current price value added per unit input would have higher productivity. But if this increased margin has no effect on the output of the firm, measured in physical or inflation-adjusted terms, economists would register no increases in productivity.

MGI attempts to bridge this gap on the meaning of productivity between the economist and business communities. McKinsey consultants are well trained in economics and work closely with the clients in the business community, obtaining a keen understanding of business interests. Consequently, the MGI studies focus on productivity growth both in the economist sense and in the business sense. These studies discuss ways firms can increase the value of output through innovative marketing, even if such changes are not captured as real output changes, and hence do not represent productivity changes in the economist sense.

The impact of business innovation related to the introduction of new and improved goods and services on official estimates of industry prices,

7 Indeed, many economists see the term productivity as synonymous with total factor productivity as they focus on efficiency in the use of all inputs and pay limited attention to labour productivity.

real output and productivity is highly complex and still poorly understood. MGI is well positioned to advance our understanding in this area. Hopefully this will be a topic for future MGI reports.

The Dismal MGI Perspective on Canada's Past and Future Productivity Performance

Canada is of course one of the G-19 countries so the report includes productivity estimates for Canada in an international perspective. The results are not pretty. Over the 1964-2014 period Canada experienced the weakest labour productivity growth among the nine developed economies in the G-19, posting an average annual rate of growth of only 1.1 per cent.[8] This was well behind the next worst performers (Australia and the United States), both at 1.5 per cent. It is little solace that two countries in the emerging economies group of the G-19, Saudi Arabia and Mexico, had an even worse productivity performance than Canada, 0.7 per cent and 0.6 per cent respectively.

In 1964, GDP per employed person in Canada was 93 per cent of that in the United States. By 2014, it had declined 14 percentage points to 79 per cent. Not one other developed country in the G-19 saw a deterioration in its productivity level relative to the United States over the period.

Going forward for the next half century, MGI projects Canada's future productivity growth at 1.1 per cent. Based on the 0.4 per cent employment growth projection, output growth is projected to be 1.5 per cent per year for the 2014-2064 period, down from 3.1 in 1964-2004. At 53 per cent, this is the largest per cent fall in output growth between periods among the developed economies of the G-19. In terms of absolute growth rates, only Germany and Italy are expected to have worse economic growth for the next half century (1.0 per cent and 1.4 per cent respectively). This reflects actual declines in employment in these countries, as their productivity growth is projected to be superior to that in Canada.

Not surprisingly given Canada's positive employment growth, the MGI outlook for Canada's future per capita GDP growth is even worse than GDP growth. Per capita output is projected to advance at a 0.8 per cent average annual rate between 2014 and 2064, the lowest rate in the G-19 developed economies. Canada's 57 per cent decline from per capita GDP growth of 1.9 per cent in 1961-2014 to 0.8 per cent in 2014-2064 is by far the largest in the developed economies.

One is struck by the similarity of the MGI projections for Canada for the 2014-2064 period with the projections for Canada for the 2014-2038 period by Don Drummond and Evan Capeluck (2015). They project GDP growth at a 1.6 per cent average annual rate for their reference period, very close to the 1.5 per cent from MGI for its reference period. The productivity projections are also very close (1.0 per cent for Drummond and Capeluck versus 1.1 per cent for MGI), as are the employment projections (0.6 per cent versus 0.4 per cent).

Additional Comments

About a decade ago, William Lewis, the Founding Director of the MGI, published an important book entitled *The Power of Productivity: Wealth, Poverty, and the Threat to Global Stability*. That book was also based on extensive MGI research. Lewis argued that the key to improving economic conditions is increasing productivity through intense, though fair, com-

8 This estimate for Canada, based on the Conference Board Total Productivity Database, is somewhat below other productivity estimates. For example, the productivity database maintained by the Centre for the Study of Living Standards, based on Statistics Canada estimates, gives an annual compound rate of growth of 1.3 per cent for GDP per job for the 1961-2014 period in Canada, and 1.7 per cent for GDP per hour worked.

petition and protecting consumer rights. Perhaps surprisingly, the report under review makes no mention of the Lewis book. It would be interesting to know whether the current MGI perspective on productivity is the same as that put forward by Lewis or whether an additional ten years of MGI productivity studies brought to light new knowledge that has changed this perspective?

The most awkward term used in the report is "G-19 plus Nigeria." It is unclear why the authors felt it necessary to add Nigeria to the 19 country members of the G-20 group. Since the G-19 plus Nigeria accounts for 80 per cent of world GDP and 75 per cent of world employment, it would have in my view been better to conduct the analysis for all countries, with the basic breakdown between the developed world and the developing or emerging world.

Chapter six on trade-offs related to productivity is the most unsatisfying chapter in the report, largely because of its brevity in dealing with a diverse set of complex and important issues, such as the link between the environment and growth and inequality and growth. One can however understand the reluctance of the authors of the report to tackle in a substantial manner the issues outlined, given their focus on the traditional productivity calculus. One can only hope it extends and applies the framework developed in this report to the trade-offs related to productivity growth.

Conclusion

This is a very important report. It is the distillation of the collective wisdom of many very knowledgeable, well trained, and extensively experienced McKinsey staff. It is highly accessible to a general audience as it is relatively short (136 pages), written in a readable, non-technical manner, and can be downloaded without charge from the MGI website. It addresses issues that are of the utmost importance to the future of the world economy, with implications for the future of humanity. Needless to say, I highly recommend the report to all persons interested in the productivity issue.

My major concern is the report's focus on GDP, as opposed to per capita GDP. I consider the latter a much more relevant metric for assessment of future trends in living standards and welfare. Because of demographic developments, the expected slowdown in growth in per capita GDP is much less than in GDP growth. Adoption of a per capita GDP framework would consequently paint a considerably less bleak picture of the change in actual and projected economic developments between the 1964-2014 and 2014-2064 periods. Productivity of course contributes to both GDP and per capita GDP growth so use of a per capita perspective would in no way undermine the importance of productivity growth.

In my view, it is extremely unlikely that the MGI productivity targets for 2014-2024 (4 per cent at the world level (G19 plus Nigeria), 6 per cent in the emerging G19, and 2 per cent in the developed G-19) will or even can be met. As noted earlier, in no 10-year period between 1950 and 2010 did the world or the developing world ever attain the targets. At the world level the gap between target and actual productivity growth has been considerable since 1970. But such targets attract attention, which may be their real purpose.

The only conceivable scenario in which such productivity targets could be achieved is if major international organizations, such as the OECD and World Bank, or a key inter-governmental group, such as the G-19, championed the targets and took serious measures to foster best practice diffusion and to provide incentives to business to boost productivity. With a number of major issues dominating the global agenda, including international terrorism, climate change, world poverty reduction, and growing income inequal-

ity, it is very difficult for a productivity agenda to garner the sustained attention of world leaders, and perhaps rightly so. First, the other issues enumerated may be more important for the well-being of the world's population than faster productivity growth, and hence merit more attention. Second, as noted in the MGI report, the lion's share of productivity growth is not dependent on government action and is driven by private sector decisions. Productivity growth may not be the appropriate focus of the limited time and attention of world leaders.

Despite the overreach in terms of productivity targets, the report provides an exceedingly rich, real world discussion of policies and actions needed by government and employers to sustain or better yet accelerate productivity growth. This is the true contribution of the report.

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