

Executive Summary

The 2019 edition of *The Global Competitiveness Report* series, first launched in 1979, features the Global Competitiveness Index 4.0 (GCI 4.0). As the decade concludes and we look towards the dawn of the 2020s, the GCI 4.0 offers insights into the economic prospects of 141 economies. Drawing on these results, the report provides leads to unlock economic growth, which remains crucial for improving living standards. In addition, in a special thematic chapter, the report explores the relationship between competitiveness, shared prosperity and environmental sustainability, showing that there is no inherent trade-off between building competitiveness, creating more equitable societies that provide opportunity for all and transitioning to environmentally sustainable systems. However, for a new inclusive and sustainable system, bold leadership and proactive policy-making will be needed, often in areas where economists and public policy professionals cannot provide evidence from the past. The report reviews emerging and promising ‘win-win’ policy options to achieve the three objectives of growth, inclusion and sustainability.

The Global Competitiveness Index 4.0: An Economic Compass for Uncertain Times

Introduced in 2018, the GCI 4.0 provides a detailed map of the factors and attributes that drive productivity, growth and human development in the era of the Fourth Industrial Revolution. The 2019 edition covers 141 economies, which account for 99% of the world’s GDP.

The index is anchored in growth accounting economic literature and aims to measure the drivers of ‘total factor productivity’ (TFP), the part of economic growth that is not explained by the growth in the factors of production. TFP can be interpreted as how smartly these factors are used and is the main determinant of long-term economic growth. To put it simply, how efficiently units of labour and capital are combined for generating output.

The GCI 4.0 is the product of an aggregation of 103 individual indicators, derived from a combination of data from international organizations as well as from the World Economic Forum’s Executive Opinion Survey. Indicators are organized into 12 ‘pillars’: Institutions; Infrastructure; ICT adoption; Macroeconomic stability; Health; Skills; Product market; Labour market; Financial system; Market size; Business dynamism; and Innovation capability.

A country’s performance on the overall GCI results as well as each of its components is reported as a ‘progress score’ on a 0-to-100 scale, where 100 represents the ‘frontier’, an ideal state where an issue ceases to be a constraint to productivity growth. Each country should aim to move closer to the frontier on each component of the index. The GCI 4.0 allows economies to monitor progress over time. This approach emphasizes that competitiveness is not a zero-sum game between countries—it is achievable for all countries.

Global Findings and Implications

Enhancing competitiveness is still key for improving living standards

Sustained economic growth remains a critical pathway out of poverty and a core driver of human development. In fact, there is overwhelming evidence that growth has been the most effective way to lift people out of poverty and improve their quality of life. For least-developed countries (LDCs) and emerging countries, economic growth is critical for expanding education, health, nutrition and survival across populations. With a decade left, the world is not on track to meet most of the 17 United Nations’ Sustainable Development Goals by the deadline of 2030. On Goal 8 (Decent Work and Economic Growth), LDCs have consistently missed the target of 7% growth since 2015. Extreme poverty reduction is decelerating. At current pace, it is estimated that by 2030 the rate will stand at about twice the 3% target set in Goal 1. As of 2015, 46% of the world’s population struggled to meet basic needs. Hunger is on the rise again and affects one in nine people in the world. The “zero hunger” target set by Goal 2 will almost certainly be missed. It is clear that for most of the past decade, growth has been subdued and has remained below potential in many developing countries.

Economic development is not a pre-determined destiny. Pro-active efforts are needed to start and sustain the development process. The GCI 4.0 highlights the profound competitiveness deficit that needs to be urgently addressed to restore productivity and growth to improve living standards.

The global economy is ill-prepared for a downturn after a lost decade for productivity-enhancing measures

Persistent weaknesses in the drivers of productivity growth, highlighted by the GCI 4.0, are among the principal culprits of the lacklustre performance and frailty of the global economy over the past decade. Productivity growth started slowing down well before the financial crisis and had decelerated in its aftermath. The financial crisis may have contributed to this deceleration through “productivity hysteresis”. Furthermore, beyond strengthening financial system regulations, many of the structural reforms designed to revive productivity did not materialize.

The 2019 results of the GCI 4.0 reveal the size of the global competitiveness deficit. The average GCI score across the 141 economies studied is 60.7, meaning that the ‘distance to the frontier’ stands at almost 40 points. On nine of the 12 pillars, the average gap globally stands at more than 30 points. Advanced economies perform consistently better than the rest of the world, but overall, they still fall 30 points short of the frontier. Singapore, the best performer overall, still falls 15 points short of the ideal.

While the predicted slowdown is unlikely to be nearly as severe as the Great Recession of 2008–2009, policy-makers generally have fewer policy options today than they did back then to stimulate aggregate demand. Monetary policy may have run out steam and some countries are facing a liquidity trap. Furthermore, the geopolitical context is more challenging than in 2007, with gridlock in the international governance system, and escalating trade and geopolitical tensions fuelling uncertainty, which holds back investments, and increases the risk of supply shocks.

Policy-makers must look beyond monetary policy to other policies, investments and incentives for reviving productivity growth

Since the Great Recession, policy-makers have kept the global economy afloat primarily through loose and unconventional monetary policy. But despite the massive injection of liquidity—four among the world’s major central banks alone injected over \$10 trillion between 2008 and 2017—productivity growth has continued to stagnate over the past decade. Although loose monetary policy mitigated the negative effects of the global financial crisis, it may have also contributed to reducing productivity growth by encouraging capital misallocation.

With extremely low (or even negative) interest rates and increasing capital constraints, banks have become less interested in lending to businesses and favoured firms that were not credit-constrained rather than to credit-constrained ones that might have more productivity potential. Furthermore, over-reliance on monetary policy, fiscal prudence, limited fiscal space and/or high levels of public debt have meant that fiscal

policy has been underutilized and contributed to the steady decline in public investments, despite the very low borrowing costs.

In this context, investment-led stimulus appears as an appropriate action to re-start growth in stagnating advanced economies. More specifically, fiscal policy that prioritizes stimulating productivity-enhancing investments in infrastructure, human capital and R&D can indeed help the economy to return to a higher growth trajectory, complemented by structural reforms that make it easier to innovate and enable responsible and inclusive businesses to thrive. In addition, a revived fiscal policy that incentivizes green investments could offer an opportunity to ‘de-carbonize’ the economy. Similarly, greater investment in social protection measures could support the shift towards greater shared prosperity.

Finding a balance between technology integration and human capital investments will be critical to enhancing productivity

Making technology and innovation part of an economy’s DNA is challenging in itself but governments must also account for enabling this change through human capital investments and mitigating the unintended adverse impacts of technological advancements on income distribution and social cohesion through a holistic approach. In the Schumpeterian process of “creative destruction”, creativity must be encouraged, and the destruction must be managed. Increased precariousness of workers, the skills gap, excessive market concentration, corrosive effects on the social fabric, regulatory loopholes, data privacy issues and cyberwarfare are all but a few of the potential negative effects that governments must mitigate.

The GCI results show that technology governance has not kept pace with innovation in most countries, including some of the largest and most innovative. Further, countries must improve talent adaptability; that is, enable the ability of their workforces to contribute to the creative destruction process and cope with its disruptions. Talent adaptability also requires a well-functioning labour market that protects workers rather than jobs. The GCI 4.0 reveals that in several countries with significant innovation and technological capabilities such as Korea, Rep., Italy, France and Japan, insufficient talent development may increase the risk of negative social consequences. Emerging economies with growing innovation capacity such as China, India and Brazil must also better balance technological integration and human capital investments.

Regional and Country Analysis

With a 2019 GCI score of 84.8 out of 100, Singapore is the country closest to the frontier of competitiveness. The country ranks first in terms of infrastructure, health, labour market functioning and financial system

development. Going forward, in order to become a global innovation hub, Singapore will need to promote entrepreneurship and further improve its skills base.

Among the G20, the United States (2nd, down 1 place), Japan (6th), Germany (7th, down 4) and the United Kingdom (9th, down 1) feature in the top 10, but they all have experienced erosion in their performance. So has Canada (14th, down 2). Korea (13th, up 2), France (15th, up 2) and Italy (30th, up 1) are the only advanced economies to improve this year. Argentina (83rd, down 2 places) is the lowest ranked. Among the BRICS, China is by far the best performer, ahead of the Russian Federation, 32 places ahead of South Africa (60th) and some 40 places ahead of both India (68th) and Brazil (71st).

Led by Singapore, the East Asia and the Pacific region is the most competitive in the world, followed by Europe and North America. Hong Kong SAR (3rd) and Japan (6th) also feature in the top 10. Viet Nam (67th) is the country whose score improves the most globally. But the region is also home to economies with significant competitiveness deficits, such as Cambodia (106th) and Lao PDR (113th).

The United States (2nd overall) is the leader in Europe and North America. Despite dropping one position it remains an innovation powerhouse, ranking 1st for business dynamism and 2nd for innovation capability. The Netherlands (4th), Switzerland (5th), Germany (7th), Sweden (8th), the United Kingdom (9th) and Denmark (10th) all feature in the top 10. The region's most improved country is Croatia (63rd).

In Latin America and the Caribbean, Chile (33rd) is the most competitive economy thanks to a stable macroeconomic context (1st, with other 32 economies) and open markets (68.0, 10th). It is followed by Mexico (48th), Uruguay (54th), and Colombia (57th). Brazil, despite being the most improved economy in the region is 71st; while Venezuela (133rd, down 6 places) and Haiti (138th) close out the region.

In Middle East and North Africa, Israel (20th) and the United Arab Emirates (25th) lead, followed by Qatar (29th) and Saudi Arabia (36th); Kuwait is the most improved in the region (46th, up 8 places) while Iran (99th) and Yemen (140th) lose some ground. The region has caught up significantly on ICT adoption and many countries boast well developed infrastructure. Greater investments in human capital, however, are needed to transform the countries in the region into more diversified, innovative and creative economies.

Eurasia's competitiveness rankings see the Russian Federation (43rd) on top, followed by Kazakhstan (55th) and Azerbaijan (58th), both improving their performance over 2018. Focusing on financial development and innovation capability would help the region to achieve a higher competitiveness performance and advance the process towards structural change.

In South Asia, India, in 68th position, loses ground in the rankings despite a relatively stable score, mostly due to faster improvements of several countries previously ranked lower. It is followed by Sri Lanka (the most improved country in the region at 84th), Bangladesh (105th), Nepal (108th) and Pakistan (110th).

Led by Mauritius (52nd), sub-Saharan Africa is overall the least competitive region, with 25 of the 34 economies assessed this year scoring below 50. South Africa, the second most competitive in the region, improves to the 60th position, while Namibia (94th), Rwanda (100th), Uganda (115th) and Guinea (122nd) all improve significantly. Among the other large economies in the region, Kenya (95th) and Nigeria (116th) also improve their performances, but lose some positions, overcome by faster climbers. On a positive note, of the 25 countries that have improved their Health pillar score by two points or more, 14 are from sub-Saharan Africa, making strides to close the gaps in healthy life expectancy.

Competitiveness, Equality and Sustainability— The Way Forward

Decades of focus on economic growth without equal focus on making growth inclusive and environmentally sustainable are having dire consequences for the planet and humankind. Accelerating climate change is already affecting hundreds of millions around the world, and it is likely that people under 60 will witness its radical destabilizing effects on Earth. In parallel, rising inequality, precarity and lack of social mobility are undermining social cohesion with a growing sense of unfairness, perceived loss of identity and dignity, weakening social fabric, eroding trust in institutions, disenchantment with political processes and an erosion of the social contract.

It has become clear that environmental, social and economic agendas can no longer be pursued separately and in parallel: they must be merged into a single sustainable and inclusive growth agenda. In this approach, the perceived trade-offs between economic, social and environmental factors can be mitigated by adopting a holistic and longer-term approach to growth. This implies addressing the spillover effects and externalities, positive and negative, intended or unintended, of economic policies beyond the direct objectives they pursue.

The very different degrees and speeds at which countries are adopting such holistic approach to growth are reflected in the fact that countries at similar levels of competitiveness achieve very different environmental and social outcomes. For example, Sweden, Denmark and Finland have not only become among the world's most technologically advanced, innovative and dynamic economies in the world, but are also providing better

living conditions and better social protection, are more cohesive and more sustainable than their peers.

Sustainability, growth and competitiveness

While the traditional narrative has focused on the trade-offs between growth and sustainable practices, there is emerging evidence that failing to address the environmental tipping points will affect productivity. Environmental-driven TFP losses may even outweigh the costs associated with transitioning to a low-carbon economy; for example, climate change is resulting in lower agriculture productivity, more capital depreciation due to infrastructure damage, and a fall in both labour supply and workers' output due to higher temperatures. Additionally, exposure to chemicals and air pollution increases the incidence of non-communicable diseases and mortality rates.

Furthermore, constraints to specific renewable and non-renewable inputs such as energy and water may have also important productivity spillover effects. Despite increasingly efficient electric vehicles, growing installed capacity of solar and wind farms and energy-saving appliances, non-renewable resources still account for over 80% of global energy consumption. In the short run, a lack of alternatives to meet the global demand for energy, a push towards non-fuel energy may lead to an increase in production costs in most sectors and hurt productivity. Finally, episodes of water shortage have proven to have an extremely negative effect on productivity in agriculture, as well as for smelting, chemical and mining activities.

To some extent, more competitive economies are better positioned to transition to a low-carbon economy. For instance, they typically boast greater innovation capability and are therefore more likely to come up with breakthrough green technology. In addition, countries with stronger human capital, better developed infrastructure and greater innovation capacity are, on average, more likely to adopt a greener energy mix. But success will depend on policy choices ultimately. Here are four areas for policy intervention towards more sustainable growth:

- *Openness and international collaboration.* Sustainability issues are a global problem. No country can manage environmental challenges with national policies only. It is essential that, even in a context of trade tensions and diminished commitment to international governance systems, countries discuss shared solutions to climate change and the transition to a low-footprint global economy.
- *Carbon taxes and subsidies.* The prices of carbon-intensive products do not fully reflect their true

cost because of unaccounted externalities and distortions from energy subsidies. Efforts to tax emissions and phase out subsidies remain insufficient. Seventy-six percent of emissions are still not subject to carbon pricing. Phasing out subsidies to fossil fuels and implementing bolder carbon pricing schemes must be paired with measures that minimize the potential social costs of these reforms. Externality-adjusted prices could potentially further accelerate the re-allocation of investment towards green projects.

- *Incentives for green R&D.* Renewable energy technologies still need to overcome technical limitations that prevent them from becoming the main and possibly the sole source of energy in the future. These limitations and the continuous increase in demand explain why fossil fuels still account for about 80% of total energy consumption, despite the significant decrease in the cost of electricity production from renewable resources. More investments in research are needed to overcome these technical limitations and develop new technologies. Tax incentives and/or direct public investments can boost these efforts.
- *Green public procurement.* Public procurement can sustain markets for innovative products as well as for sustainable products or services. Some countries have already started to introduce environmental standards in technical specifications, procurement selection and award criteria, and have inserted environmental performance clauses into contracts. Despite potential implementation challenges, green public procurement can signal a major policy shift and break from the lock-in effects of status-quo technologies and production models.

Shared prosperity, growth and competitiveness

Over the past few decades, income inequality has increased in both advanced and emerging economies. Growth and shared prosperity started to decouple in most of the advanced economies in the 1970s and have further diverged since the early 2000s. Similarly, in developing and emerging economies, growth has been accompanied by a significant increase in inequality—despite pulling millions out of poverty and reducing the gap with advanced economies.

The most-cited causes behind these trends are globalization and technology. Globalization has increased inequality within countries by transferring low-skilled jobs in high-productivity sectors from advanced economies to developing and emerging countries. Technology has impacted inequality by reducing demand for low-skilled

jobs and rewarding high-skilled jobs disproportionately. But there are further causes: increased market concentration; decline in public and private productivity-enhancing investments; inequality of opportunities that limit social mobility; and hysteresis effects of economic downturns that disproportionately affects the poor.

Inequality is not the inevitable by-product of capitalism, but the result of policy choices: over the past 40 years, countries have embraced liberalism, globalization and technology—all with insufficient attention to the negative impact on workers and income distribution. Rather than going against these forces, policy interventions should focus on addressing the factors that can lead to improve productivity while reducing inequalities at the same time. Here are four promising areas for intervention:

- *Increasing equality of opportunities.* Inequality of opportunity, inequality of income and economic growth form a circular nexus. Among the factors that can create a virtuous cycle, family policies (parental leave and access to quality childcare), equitable access to quality education systems, equal access to quality healthcare, meritocratic processes to access fair and dignified employment, and social safety nets to shelter households from temporary hardship can form the basis for a fairer and more prosperous society.
 - *Fostering fair competition.* Stronger enforcement of antitrust policies and a reduction of barriers to entry remain important but approaches that address the effect of concentration without stifling innovation could be adopted, including using technology to reduce barriers to entry and shifting the focus from price levelling to address broader socioeconomic effects of winner-take-all business models.
 - *Updating tax systems and their composition as well as the architectures of social protection.* Restoring greater tax progressivity with higher top tax rates should allow for more equitable income distribution without much impact on economic activity or productivity. As for corporate taxation, solutions need to consider the complexity of international tax architecture, the increasing importance of intangible assets and the digital economy which, together, are allowing for greater profit shifting.
- *Fostering competitiveness-enhancing investments.* As monetary policy is running out of steam, in countries with fiscal leeway, targeted fiscal policy towards productivity-enhancing investments in infrastructure, education and innovation could revive productivity growth, support employment and broaden aggregate demand.