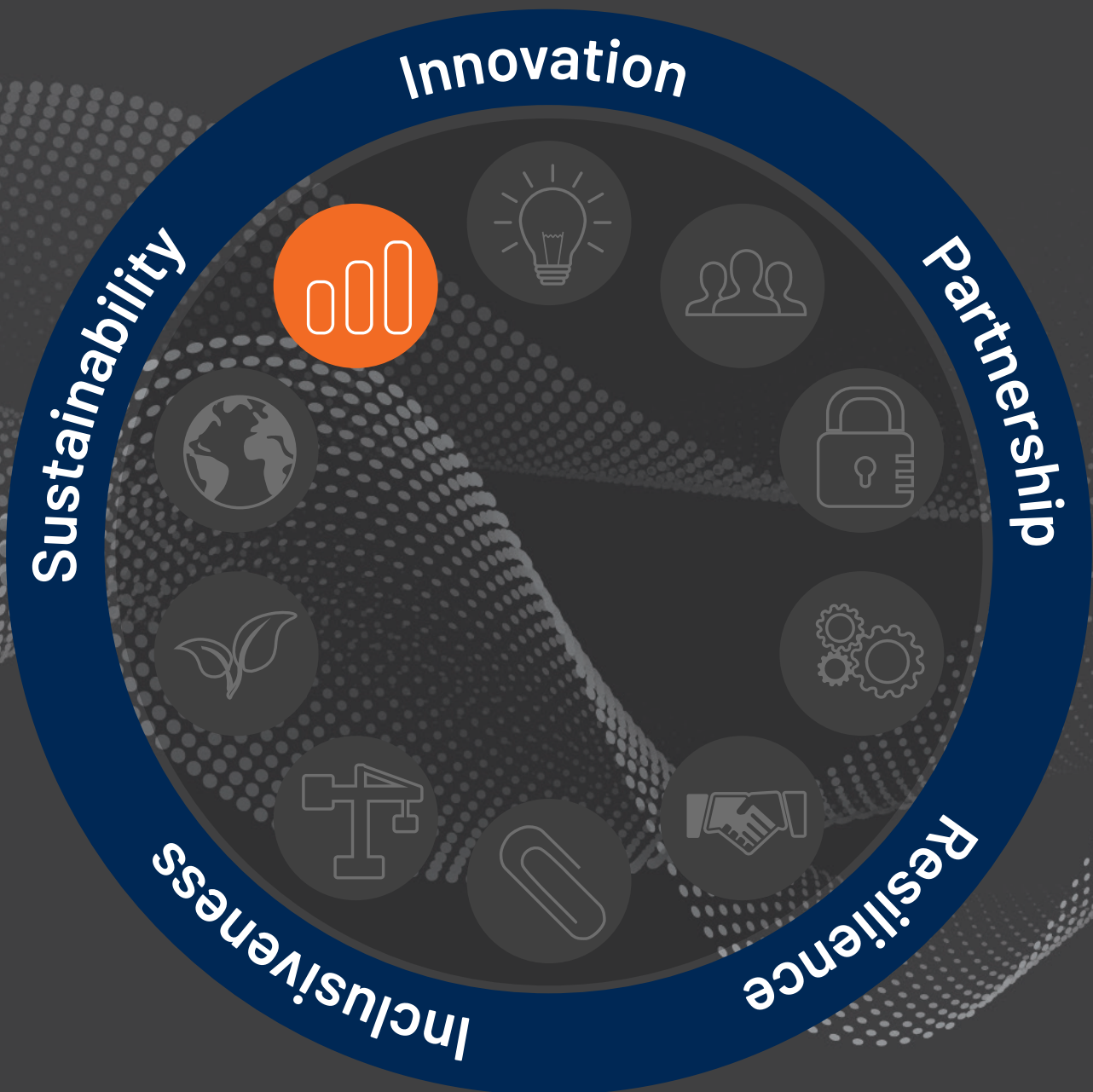


Frame the Future Benchmarking



Benchmarking Competitiveness

Learning to hit a moving target

Introduction

Competitiveness is a fast-paced game. Holding an economic advantage today does not guarantee high productivity levels in the future if improvements are not constantly made. Globalization and growing trade interdependency challenge the speed and scope of competitiveness strategies, demanding efficient methods to boost productivity and performance. In a scenario of rapid change, benchmarking has become a fundamental tool for countries and businesses willing to identify strategic gaps and learn from others to remain competitive in the global economy.

Since its foundation in 2010, the Global Federation of Competitiveness Councils (GFCC) has been articulating the importance of benchmarking competitiveness strategies with its members and community. The 2010 *Global Competitiveness Principles*, a flagship publication that set the global competitiveness stage, signaled the relevance of benchmarking competitiveness with "forward-looking metrics" to drive the implementation of policies and business strategies. These measures looked at economic outputs and investments in crucial sectors, such as education and R&D. This two-sided view that accommodates social development and financial performance is essential to support long-term competitiveness goals. The GFCC releases an update to the *Global Competitiveness Principles* each year.

Benchmarking is less about ranking nations and companies on a competitiveness ladder and more about understanding the levers and best practices associated with improved productivity, and considering the specificities of local realities. The process involves multiple steps: selecting a country or organization that is best at what has been benchmarked; studying how they achieve their results; making plans to improve performance based on the collected data; implementing the strategies; and monitor and evaluating the results. Benchmarking also facilitates knowledge transfer across sectors.

Benchmarking Tools

Learning and adaptation are critical capabilities in an increasingly complex global economy marked by accelerated transformations and uncertainty. In this context, benchmarking is a fundamental tool that allows countries and businesses to improve performance and stay competitive.

Recognizing the need for benchmarking in competitiveness strategy, the GFCC launched in 2014 the [Competitiveness Decoder™](#), a data-based online tool that displays key drivers of national competitiveness and is designed to help policy-makers, investors, and corporations understand and identify similarities and differences among countries across more than 125 competitiveness metrics. The tool displays the country's current position, its progress over times, trends, and potential trajectories.

Metrics are organized in eight dimensions: general performance, infrastructure, economic complexity, talent, capital, innovation, quality of life, and future of growth. In addition to that, the Competitiveness Decoder™ includes best practices and references on a variety of decision areas that are relevant for competitiveness strategies.

Benchmarking Crisis to Build Resilience

The COVID-19 pandemic has been the most significant systemic shock in contemporary history. It has affected the livelihoods of populations across the globe, triggered economic recessions, and decisively impacted global health. Since the beginning of the virus outbreak, governments and businesses have tried new models and learned countless lessons with their successes and failures. From remote work to logistics and supply chain management and the development of a vaccine at a record speed — every industry had to adapt and implement changes to react to the situation.

This is not the first time the world is living through a crisis, and it will not be the last. Other turning points in history have challenged decision-makers to act under great danger and difficulties. Countries and businesses that have previously implemented mechanisms to optimize continuous learning were able to mitigate the pandemic's social, economic, and health impacts in a shorter timeframe and remain economically competitive. In the future, building resilience as a national capability will become even more important with climate change and extreme weather threatening societies and economies.

In 2007, the Council on Competitiveness issued *Transform*, a report making the case for investing in resilience as a competitive advantage that would enable business, higher education, and the public sector to recover more quickly from crisis.¹ Economic resilience is the ability to manage increasingly interrelated and emerging risks and bounce back from disruption. COVID-19 has proved their argument.

After the 9/11 terrorist attacks, the United States took measures to strengthen risk management and build economic resilience, but the effort fell short in the face of evolving challenges, with massive impacts on the economy and society, such as during the COVID-19 pandemic. More frequent endemics and epidemics are expected, raising calls for governments to take action now.

A key recurring theme in discussions about future competitiveness is sustainability. Governments and businesses already know that climate change threatens human lives and economies. According to recent research published by the Swiss Re Institute, global GDP is expected to contract 18 percent if no mitigation actions are taken to reduce the effects of rising temperatures.² If countries meet the commitments set by the Paris Climate Agreement, GDP losses could go down to 4 percent. In any case, there are significant environmental, social, and economic risks involved with man-made environmental changes.

Today, more than 80 percent of the global energy matrix relies on fossil fuels,³ which are responsible for high greenhouse gases emissions. By 2040, energy consumption is expected to grow 28 percent,⁴ and according to the International Energy Agency (IEA), fossil fuels will still provide the bulk of global energy supply, close to 77 percent.⁵ Accelerating the energy transition and expanding the reach of renewable energy sources are crucial to building resilience and driving sustainable growth.

Furthermore, there are multiple risks related to cyber-attacks and the digitalization of critical infrastructure sectors that could trigger economic losses and affect livelihoods. Countries and businesses must take measures that improve digital resilience and cyber protection, improving effective oversight regarding internet standards and the norms of acceptable behavior in cyberspace. A key challenge is the creation of comprehensive internet privacy law governing the collection, use, and sale of personal data.⁶

Learning From Past Crises

The concept of crisis has been identified as a transformation process in which the old system can no longer be maintained.⁷ It requires an overhaul in operations that unleashes a change. In that context, benchmarking responses to crises is an important process to help countries and organizations understand the ups and downs in their operations and build resilience.

Benchmarking responses to crises helps countries to design an improvement pipeline to build resilience and sustainability as capabilities. For that to happen, three factors need to be considered: a) identifying the types of crises faced; b) the desired societal goals and associated targets; c) societies' core values coupled with improvements in productivity, growth, and rising income levels.

Humanity has faced many severe crises that deeply affected populations and changed the world. Four such instances are: the 9/11 terrorist attacks in the United States, the Global Financial Crisis, the Great East Japan Earthquake, and the COVID-19 outbreak. Identifying some of the concrete actions that have helped nations, cities, and organizations respond to these events, the GFCC hopes to further catalyze the thinking on the development of resilient solutions for future crises.

9/11, 2001

The terrorist attacks of September 11, 2001, left nearly 3,000 people dead in New York City, Washington D.C., and Shanksville, Pennsylvania, and transformed American society. The attacks, carried out by al-Qaeda, led to permanent changes in the United States – namely the "war on terror" and the Patriot Act, but also other changes like the creation of the Department of Homeland Security, the U.S. Immigration and Customs Enforcement, and the massive overhaul of the Transportation Security Administration.

1 <https://www.compete.org/reports/all/3412>.

2 <https://www.swissre.com/media/news-releases/nr-20210422-economics-of-climate-change-risks.html>.

3 <https://www.iea.org/reports/world-energy-balances-overview/world>.

4 <https://eos.org/articles/worlds-heavy-dependence-on-fossil-fuels-projected-to-continue>.

5 Ibid.

6 <https://www.gao.gov/highrisk/ensuring-cybersecurity-nation>.

7 Venette, S. J. (2003). Risk communication in a High Reliability Organization: APHS PPQ's inclusion of risk in decision making. Ann Arbor, MI: UMI Proquest Information and Learning.

The 9/11 attacks had immediate economic impacts. The New York Stock Exchange (NYSE), NASDAQ, and the London Stock Exchange shut down, followed by nearly all banks and financial institutions on Wall Street. The Federal Reserve had to take numerous actions following 9/11, including adding \$100 billion in liquidity per day for three days. The U.S. dollar fell sharply against the euro, British pound, and the Japanese yen. Globally, European stock markets, the London Stock Exchange, and Latin American markets all fell sharply.

The United States' quick economic recovery was due, in part, to a combination of actions taken before, on, and shortly after 9/11. Ahead of 9/11, the U.S. GDP was in its third quarter of contracting, leading to the Federal Reserve easing credit during the first half of 2001 to aid aggregate demand.⁸ Immediately after 9/11, the Federal Reserve reduced a liquidity shortage, and foreign central banks helped shore up the dollar in world markets.⁹ Several industries, mainly air travel and insurance, saw significant negative impacts immediately after 9/11, but the challenges facing the insurance industry were mitigated through the Terrorism Risk Insurance Act.¹⁰ Air travel continued to take a hit, and many airlines filed for bankruptcy due to a nosedive in traveling.

9/11 put pressure on the U.S. government and American companies to rethink the resilience of the domestic and global economies. The 9/11 attacks hit both a symbolic and actual economic center during an economic recession, yet the macroeconomic effects were only felt immediately after the crisis. The actions taken by the Federal Reserve and other American policymakers kept economic impacts to a minimum after an event that could have caused significant economic shocks globally.

The Global Financial Crisis, 2008

The global financial crisis (GFC) of 2007-2008 was one of the worst economic disasters in modern history, which was primarily due to flawed banking practices. According to estimates by the World Bank, the GFC caused the whole world economy to contract by 2.1 percent.¹¹ The World Trade Organi-

zation (WTO) reported a decrease of 12 percent in the volume of world trade in goods and services in 2009.¹² The GFC also led to a 0.6 percent reduction of the world GDP in 2009, when the global GDP growth in 2009 was 5.8 percentage points lower than in 2007.¹³ Such a financial disaster demands that governments and financial institutions minimize future risks and build economic resilience.

In the United States, where the crisis started, the government created the Dodd-Frank Wall Street Reform and Consumer Protection Act to restore stability and oversee the financial system to prevent another significant financial crisis.¹⁴ This act includes numerous regulations, but a key one is the creation of the Financial Stability Oversight Council, which is responsible for preventing banks and other financial institutions from becoming "too big to fail." It imposes strict regulations on banks, with the entitled power of shutting down firms that pose significant risks to the economy. Another step was the creation of the Consumer Financial Protection Bureau, which protects consumers from risky or abusive financial products by regulating companies and enforcing laws against discrimination in consumer finance.

In the EU, a resilient mechanism included the creation of the Bank Recovery and Resolution Directive (BRRD) in 2014 to establish standard rules for the restructuring and recovery of failing banks, which emphasized that national authorities show "a minimum harmonized set of resolution tools and powers" to avoid bailouts in future cases of bank fallouts.¹⁵ A Single Resolution Mechanism (SRM) was also established in 2014 to centralize the resolution processes mandated by the BRRD.¹⁶ Under the SRM, a Single Resolution Board (SRB) acts as the resolution authority for all participating states' banks that are considered significant. The European Central Bank has decided to directly exercise all of the relevant supervisory powers.¹⁷

The United Kingdom created a new Financial Policy Committee (FPC) as part of the Bank of England, which monitors and takes action to remove risks to the financial system.¹⁸ The FPC's goal is to ensure the financial system will be resilient to shocks, so it will not again act as an amplifier that worsens the impact in the real economy.

8 <https://irp.fas.org/crs/RL31617.pdf>.

9 Ibid.

10 <https://www.investopedia.com/financial-edge/0911/the-impact-of-september-11-on-business.aspx#citation-10>

11 <https://www.oecd.org/insights/46156144.pdf>.

12 Ibid.

13 https://unctad.org/system/files/official-document/gdsmdp20101_en.pdf.

14 <https://www.forbes.com/advisor/investing/dodd-frank-act/>.

15 https://group30.org/images/uploads/publications/Managing_the_Next_Financial_Crisis.pdf.

16 Ibid.

17 Ibid.

18 <https://www.bis.org/review/r190603e.pdf>.

Other international mechanisms include the establishment of a Financial Stability Board (FSB) by the G20 nations. The board coordinates the development and implementation of new policies across all countries and monitors the global financial system to prevent new market failures.¹⁹

The Great East Japan Earthquake, 2011

On March 11, 2011, an magnitude 9.0 earthquake hit Japan's northeastern coast, close to the Tohoku region. The shock was the strongest ever recorded in the history of Japan. About a half-hour to an hour after the quake shook the ground, a tsunami with a maximum run-up height of 30 meters or more broke over the coast line. As a result of the disaster, approximately 20,000 people lost their lives, and more than 2,500 are still officially reported as missing, while a further 6,000 suffered injuries. In total, more than 470,000 people were evacuated from their homes.²⁰ The event caused massive environmental devastation and infrastructure damage, destroying roads, railways, and businesses.

The city of Fukushima, which used to host a nuclear power plant, was one of the worst-hit by the tsunami. The tsunami damaged power lines and the back-up power supply was lost by the water flood. The loss of electric power stopped the cooling function, which resulted in the damage of the reactors' core. The chemical reaction between water and nuclear fuel generated hydrogen and triggered the explosion of the building units of three nuclear reactors (reactors themselves did not explode, fortunately). Toxic and radioactive materials leaked from the reactors' core were diffused in the surrounding area. People were forced to flee due to the risk of contamination. The disaster was named the Great East Japan Earthquake (GEJE) and has been recorded in Japan's history as one of the most destructive and devastating natural disasters.

Ten years later, there are relevant lessons to draw from the resilient mechanisms implemented after the disaster. In an in-depth study compiling best practices from the GEJE, the World Bank highlights three common themes that have emerged after a decade of joint recovery efforts with the Government of Japan.

First is the importance of planning for disasters. Second is the importance of sharing resilient mechanisms across infrastructure, preparedness, finance, businesses, and industries. The idea is that all stakeholders get involved in risk reduc-

tion mechanisms, response, and continuity through mutual support. The third is that resilience is an iterative process that needs to be adjusted and sustained over time.²¹

The Japan Science and Technology Agency (JST), a GFCC member and partner in the Frame the Future of Benchmarking session, notes that co-creation in policymaking and societal management is the most relevant resilient mechanism stemming from the 2011 disaster. Top-down approaches from a single authority are no longer sufficient. It is necessary to engage all stakeholders to promote co-creative visioning and management of society.

The 4th Science and Technology Basic Plan of Japan issued in 2011 was a major policy instrument to advance and implement mechanisms in the field, and cited the GEJE as a global event that required "mobilizing every possible policy measure." The Science and Technology Basic Plan, which is issued every five years, includes explicit chapters on the importance of dialogue and collaboration with multiple stakeholders and developing knowledge convergence as a source of value creation.

In the words of Dr. Hamaguchi, President of the JST, "teaching people to read data is not enough." It is necessary to foster a collaborative and open spirit to advance science and build a better future. The importance of collaboration across sectors might have been the most important lesson learned from the GEJE disaster.

COVID-19 Pandemic, 2020

The COVID-19 pandemic has had an enormous impact on world GDP growth. The global economy contracted by 3.5 percent in 2020, which is a 7 percent loss relative to the 3.4 percent growth forecast in October 2019.²² The lessons from 2020 and 2021 show the importance of investing in a systemic approach to build resilient economies and societies, and prepare health systems for events such as pandemics and epidemics.

One important action is to revise risk management policies and frameworks.²³ This ensures a comprehensive all-hazards-and-threats approach to resilience, with international co-operation and tools playing a central role, consistent with the OECD Recommendation on the Governance of Critical Risks.²⁴ This should be supported by evaluating best practices used to fight the COVID-19 pandemic and mitigate its impacts, including benchmarking preparedness and responses. For example, a measure could be comparing national health emergency response plans.

19 <https://www.fsb.org/wp-content/uploads/S110521.pdf>.

20 <https://www.reconstruction.go.jp/english/topics/GEJE/index.html>.

21 <https://www.worldbank.org/en/news/feature/2021/03/11/learning-from-megadisasters-a-decade-of-lessons-from-the-great-east-japan-earthquake-drmhubtokyo>.

22 <https://www.brookings.edu/research/social-and-economic-impact-of-covid-19/>.

23 <https://www.oecd.org/newsroom/OECD-G7-Report-Fostering-Economic-Resilience-in-a-World-of-Open-and-Integrated-Markets.pdf>.

24 Ibid.

Ensuring the resilience of global supply chains has also become a key concern for policymakers.²⁵ Resilient mechanisms include strengthening cooperation with the private sector to promote the resilience of global supply chains, improving national and international planning strategies, enhancing critical infrastructure resilience and increasing international co-operation to achieve a stable, predictable, rules-based international trading system.²⁶

The World Health Organisation (WHO) released a position paper on building health system resilience and provided seven policy recommendations. These include leveraging the current response to strengthen both pandemic preparedness and health systems; investing in essential public health functions, including those needed for all-hazards emergency risk management; building a strong primary health care foundation; investing in institutionalized mechanisms for whole-of-society engagement; creating and promoting environments for research, innovation, and learning; increasing domestic and global investment in health system foundations and emergency risk management; and addressing pre-existing inequities and the disproportionate impact of COVID-19 on marginalized and vulnerable populations.²⁷

Building the Future

The aftermath of COVID-19 presents itself as a new opportunity to review models, benchmark lessons, and accelerate institutional learning. Building the future economy will depend on conciliating economic growth with the preservation of natural resources and enhancing the capacity to respond to shocks.

It is crucial to prepare organizations, societies, and governments to deal with disasters related to environmental degradation — such as climate change, earthquakes, floods, hurricanes, heat waves, extreme weather, wildfire, and drought — but also to plan for cybersecurity attacks and other emerging threats. This comes in addition to the ever-necessary effort to advance the conditions that are conducive to low-friction business environments. Resilience planning should also not diminish the importance of enhancing mitigation efforts and acting on the root causes of the key challenges the world faces today, such as carbon emissions.

Finally, countries and businesses need to couple benchmarking with future casting and design. After benchmarking and systematizing learnings from past crises, it is essential to look at the future from a design perspective to build systems that would perform well and create prosperity in the years and decades to come. The GFCC asserts that five elements must be highlighted in designing those systems: innovation, resilience, sustainability, inclusiveness and partnership.

This material was prepared by Simone Melo and Rylie Pope, with the help of Karina Shafira.

²⁵ Ibid.

²⁶ Ibid.

²⁷ <https://www.who.int/news/item/19-10-2021-who-s-7-policy-recommendations-on-building-resilient-health-systems>

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