McKinsey Global Institute

2020

A year of shocks that tested resilience

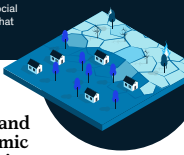
12 highlights from McKinsey Global Institute 2020 research

In the year of the pandemic, it became more important than ever to see risks clearly and respond to them vigorously.

Since its founding 30 years ago, the McKinsey Global Institute has explored key trends shaping business and the economy. In 2020, COVID-19 paused some of those trends, accelerated others, and added a new set of risks and challenges – but also new opportunities. This infographic highlights 12 insights from our research throughout the year.

Focusing a spotlight on global risks

We analyzed physical and socioeconomic risks from a changing climate, vulnerabilities to individuals and society from an evolving social contract, and weak links in supply chains that pose a threat to the global economy.



1 Climate hazards are intensifying and their socioeconomic impacts are growing

As average temperatures rise, acute hazards such as heat waves and floods grow in frequency and severity, and chronic hazards such as drought and rising sea levels intensify. The impact of these hazards is non-linear and can have severe knock-on effects.

Global average temperatures are expected to increase between 1.5 and 5 degrees Celsius relative to today in many locations by 2050.

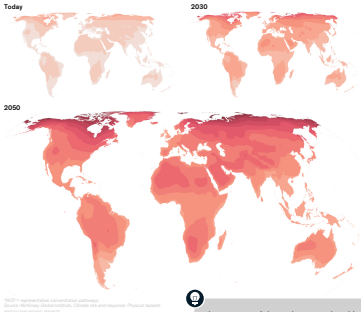
Increase in average temperature (based on RCP 8.5),*
°C shift compared with preindustrial climate

0 1 2 3 4 5 6 7

Today

2030

2050



*RCP = representative concentration pathway.
Source: McKinsey Global Institute, Climate risk and response: Physical hazards and socioeconomic impacts

In some ways, Asia may be more vulnerable to climate risk than other regions.

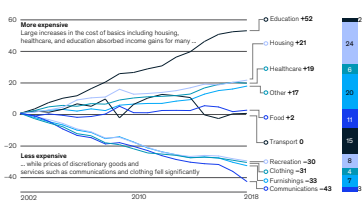
2 How workers, consumers, and savers have fared under a shifting social contract in the 21st century

Economic outcomes in the past 20 years have varied widely. While employment rose, wages stagnated for many, and the rising cost of housing, healthcare, and education eroded income gains.

Consumer prices of many discretionary goods fell, while the cost of basics rose.

Change in category consumer prices in 22 OECD countries, indexed to overall inflation, percentage points

Share of consumer spending, %



Source: McKinsey Global Institute, The social contract in the 21st century

Housing accounts for about 24% of household consumption and its cost has risen faster than general consumer prices.

3 Risk, resilience, and rebalancing in global value chains

Corporate value chains have grown in length and complexity, but operating model choices can have unintended consequences if they are not calibrated to risk exposure.

Companies can expect to lose 42 percent of one year's earnings on average to supply-chain disruptions over a decade.

	Net present value (NPV) of expected losses over 10 years, % of annual EBITDA	NPV for a major company, $ million	NPV of expected losses, EBITDA margin, percentage point
Aerospace (commercial)	66.3	1,564	7.4
Automotive	56.1	6,412	7.3
Mining	46.7	2,240	8.4
Petroleum products	45.6	6,327	8.9
Electrical equipment	41.7	556	5.4
Glass and cement	40.5	805	6.2
Machinery and equipment	39.9	1,084	6.5
Computers and electronics	39.0	2,914	5.9
Textiles and apparel	38.9	788	7.6
Medical devices	37.9	431	8.7
Chemicals	34.9	1,018	5.7
Food and beverage	30.0	1,578	7.6
Pharmaceuticals	24.0	1,436	6.0
Average			

Source: McKinsey Global Institute, Risk, resilience, and rebalancing in global value chains

Supply chain disruptions lasting one month or longer typically occur every 3.7 years.

What COVID-19 has changed

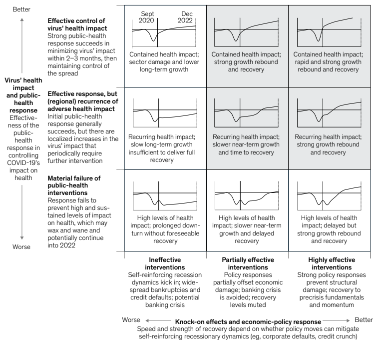
The global health crisis and the measures taken to contain it accelerated many trends in the economy, such as e-commerce, remote work, and automation. They also exacerbated some inequalities and heightened a global debate about the future of capitalism.

4 Saving lives and livelihoods – the imperative of our time

As the COVID-19 virus turned into a global pandemic, we sought to bound the uncertainty about its effects with scenarios taking into account efforts both to contain the virus and the economic crisis it unleashed.

Scenarios for the economic impact of the COVID-19 crisis.

GDP impact of COVID-19 spread, public-health response, and economic policies



Source: McKinsey Global Institute, *Crushing coronavirus uncertainty: The big 'unlock' for our economies*

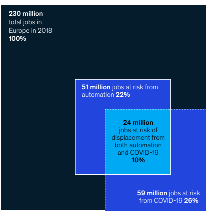
Even early in the crisis, we noted that the economic impact in the United States could exceed any event since World War II.

5 Jobs at risk from COVID-19 were also vulnerable to automation

CEO surveys suggest that the pandemic has accelerated adoption of digitization and automation.

There is a large overlap between jobs at risk due to COVID-19 in the short term and jobs displaced by automation in the longer term.

Breakdown of European employment in 27 EU countries plus United Kingdom



Source: McKinsey Global Institute, *The future of work in Europe: Automation, workforce transitions, and the shifting geography of employment*

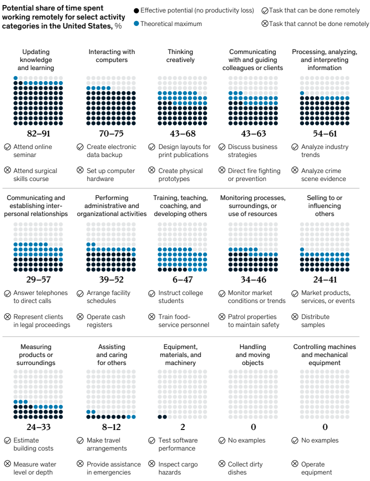
Job growth in the United States and Europe is concentrated in a small number of dynamic cities and counties. Automation could accelerate the trend.

6 Remote work surged during the pandemic. Will that last?

The burst of remote work during the pandemic is unlikely to continue at the same level, but some occupations have considerable potential to work from home in hybrid models several days each week without losing effectiveness.

Activities with the highest potential for remote work include updating knowledge and interacting with computers.

Potential share of time spent working remotely for select activity categories in the United States, %



Source: McKinsey Global Institute, *What's next for remote work: An analysis of 2,000 tasks, 800 jobs, and nine countries*

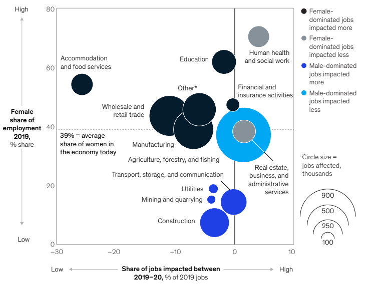
Three-quarters of the time spent on activities in finance and insurance can be done remotely without a loss of productivity.

7 COVID-19 had a regressive effect on gender equality

The pandemic had an especially significant effect on certain demographic groups. For example, our analysis showed that women's jobs were 1.8 times more vulnerable to this crisis than men's jobs. One reason: the virus significantly increased the burden of unpaid care, which is disproportionately carried by women.

Women are disproportionately represented in industries that are expected to decline the most in 2020 due to COVID-19.

World employment impact in 2020 by industry



Women make up 39 percent of global employment but account for 54 percent of pandemic-related overall job losses.

*Includes arts and recreation, public administration, and activities not elsewhere classified (ISIC revision 4).
Source: McKinsey Global Institute, *COVID-19 and gender equality: Countering the regressive effects*

New opportunities are opening up

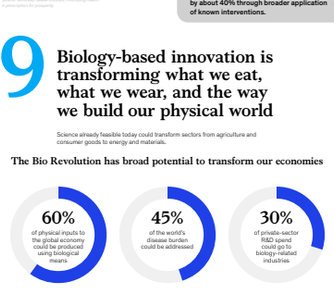
New trends and advances are causes for hope. They include progress in medicine and biological science that will improve health globally, the prospect of robust future global growth, and increased connectivity.

8 Prioritizing health could add 10 healthy years in midlife and boost the economy

Improved health could be a shot in the arm for the global economy over the next two decades, boosting global GDP by $12 trillion to 2040.

Fewer health conditions and expanded participation in the labor force could increase global GDP by about 8 percent by 2040.

GDP, $ trillion



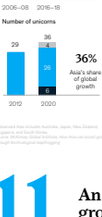
*Includes impact on labor supply from high- and low-per middle-income countries, informal caregivers (only in 2040), and people with disabilities (2040). Source: McKinsey Global Institute, Prioritizing health: A prescription for prosperity

The global disease burden could be reduced by about 40% through broader application of known interventions.

9 Biology-based innovation is transforming what we eat, what we wear, and the way we build our physical world

Science already feasible today could transform sectors from agriculture and consumer goods to energy and materials.

The Bio Revolution has broad potential to transform our economies



Source: McKinsey Global Institute, The Bio Revolution: Innovations transforming economies, societies, and our lives

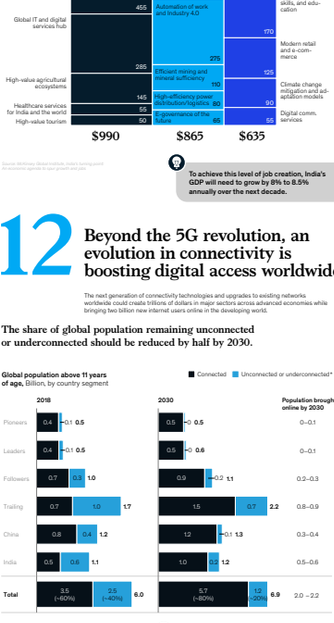
A visible pipeline of ~400 applications could deliver direct annual economic impact of up to $4 trillion over the next ten to 20 years.

10 How Asia can boost growth through technological leapfrogging

Asia has been building its technological capabilities and infrastructure. More is to come based on the scale of markets and investment and the speed of technology adoption, as well as through intellectual property creation.

Asia has accounted for a large regional share of global growth in key technology metrics over the past decade.

Asia's share of global total, 3-year average, %



*Advanced Asia includes Australia, Japan, New Zealand, Singapore, and South Korea.
Source: McKinsey Global Institute, How Asia can boost growth through technological leapfrogging

Asia has a strong presence in 11 technologies in startup investment, ten in IP creation, and four in both.

11 An economic agenda to spur growth and jobs in India

India will need to get back on the track of rapid GDP growth to create at least 90 million nonfarm jobs by 2030.

Three growth boosters, spanning 43 high-productivity business opportunities, can contribute $2.5 trillion to the economy by 2030.

Potential economic value for financial year 2030, $ billion

Source: McKinsey Global Institute, India's turning point: An economic agenda to spur growth and jobs

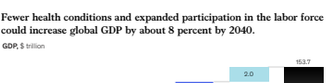
To achieve this level of job creation, India's GDP will need to grow by 8% to 8.5% annually over the next decade.

12 Beyond the 5G revolution, an evolution in connectivity is boosting digital access worldwide

The next generation of connectivity technologies and upgrades to existing networks worldwide could create trillions of dollars in major sectors across advanced economies while bringing two billion new internet users online in the developing world.

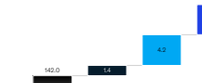
The share of global population remaining unconnected or underconnected should be reduced by half by 2030.

Global population above 11 years of age, Billion, by country segment



*The unconnected population includes individuals who do not use mobile internet (3G or later technology).
Source: McKinsey Global Institute, Connected world: An evolution in connectivity beyond the 5G revolution

Greater flows of information, communication, and services could add another $1.5 trillion to $2 trillion to global GDP.



Perspectives for the post-pandemic economy

Over the course of 2021, the McKinsey Global Institute will publish research highlighting changes to the future of work, to consumer demand, and to growth and productivity, among other topics.

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McKinsey Global Institute's research helps business and policy leaders understand global trends, empowering them to make better-informed decisions.

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