



INDUSTRIAL DEVELOPMENT REPORT 2022

THE FUTURE OF INDUSTRIALIZATION IN A POST-PANDEMIC WORLD

BRIEF 1

Weathering the storm: industrial capabilities and socio-economic resilience



Executive summary

The COVID-19 pandemic has triggered a socio-economic crisis with no precedent in recent economic history. In its first year, the crisis caused a drop of 3.3 percent in world GDP—the deepest global recession since the end of WWII. This sudden stop has affected jobs and incomes across the globe, causing the first reversal in the world's fight against global poverty in two decades. Not all countries suffered the same blow, however. Across regions, countries with stronger manufacturing systems fared better. Output and employment losses were less severe and prolonged in these countries. The IDR2022 argues that this is because of manufacturing's role as an engine of growth, but also because industrial capabilities ensure access to essential goods and inputs and are therefore key to public health, national security, and emergency preparedness.

Key Findings

- 1.** The socio-economic crisis triggered by the pandemic has caused an estimated loss of 255 full-time jobs and an increase in extreme poverty of over 15 percentage points relative to pre-pandemic trends.
- 2.** Industrialized economies were less affected than developing and emerging industrial economies, and the range of impacts is also much more pronounced among the latter group.
- 3.** Across regions and country groups, economies with larger industrial sectors consistently outperformed their peers. Manufacturing has emerged as a key source of resilience for economies at different income levels.

A heterogeneous blow, across and within regions

The impact of the COVID-19 pandemic has been unprecedented (Figure 1). During 2020, world GDP fell by 3.3 percent—the deepest global recession in 70 years. This sudden stop in economic activity impacted incomes, employment, and livelihoods around the world. By 2021, economic growth in many countries began bouncing back, partly reverting the initial negative shock. Yet the twin health and economic crisis triggered by the pandemic has left the global economy profoundly scarred. Current projections put global GDP in 2021 at a 4.2 percent lower level relative to the trend which was projected before the pandemic. This is a **huge loss of output, which is roughly equivalent to the combined GDPs of Brazil and Turkey.**

Not all regions have suffered a blow of the same magnitude. Generally speaking, **industrialized economies (IEs) were less affected than developing and emerging industrial economies (DEIEs).** Whereas on average, output fell by an estimated 3.9 percent in the former group, **DEIEs experienced an estimated average loss of 7.7 percent of output.** Impacts have been particularly heterogeneous among DEIEs. Here, estimated output losses range from a maximum of 13.8 percent for Small Island Developing States (SIDS) to a minimum of 1.4 percent in China. Least developed countries (LDCs) in Asia, and South and South-East Asian DEIEs were also hard hit. India, in particular, is projected to have lost 11.7 percent of its output relative to pre-pandemic trends.

The COVID-19 pandemic and its severe global impact

Figure 1

Estimated world output loss due to COVID-19 by 2021

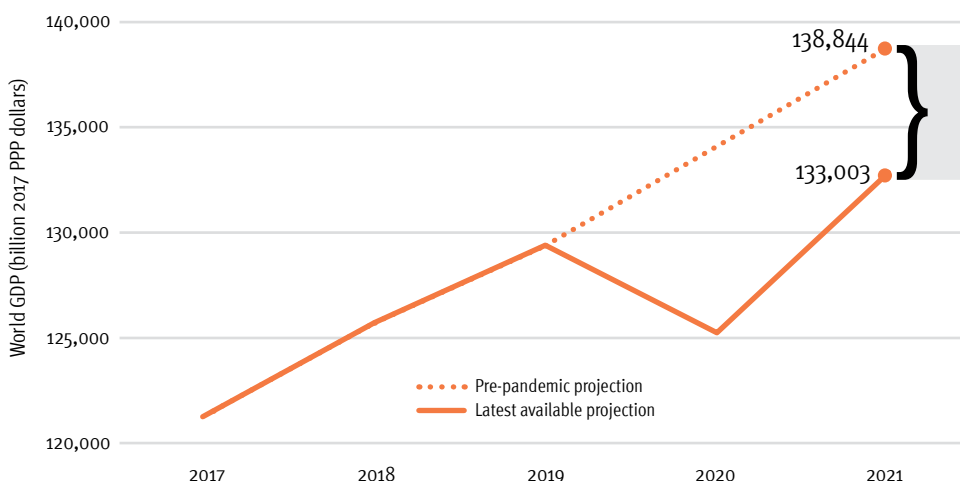
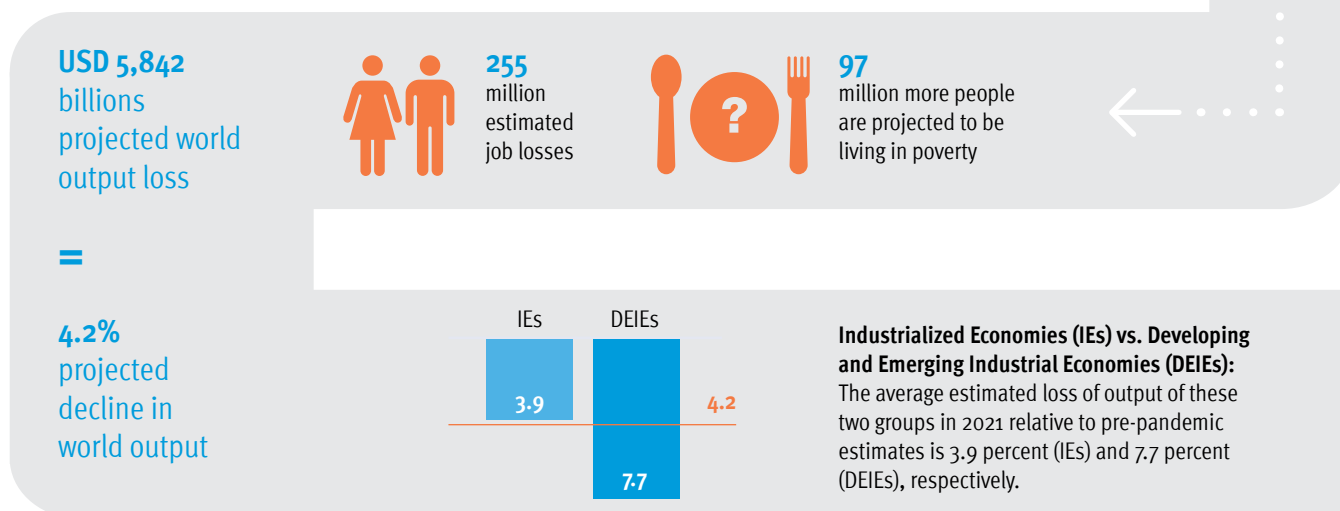


Figure 1 (cont.)



Note: Projected world output loss by 2021 is defined as the difference in 2017 PPP dollars between the level of GDP projected before the pandemic (October 2019, dotted line) and the latest available projection (October 2021, solid line). GDP= gross domestic product; PPP = purchasing power parity.
Source: The UNIDO Industrial Development Report 2022. <https://www.unido.org/idr2022>

Which countries were hardest hit—and which managed to weather the storm?

What explains the differences in the severity of the crisis across and within regions? A first factor relates to success in containing the health emergency. Especially during the early days of the pandemic, the timing and effectiveness of containment measures—which included a combination of test-and-trace systems, the use of personal protective equipment (PPE), and limits to social interactions—could limit, to some degree, economic disruptions.

Yet in those countries where containment relied almost exclusively on lockdowns (i.e., government-mandated social distancing), disruptions to economic life were particularly severe. Using the Oxford Stringency Index—a synthetic indicator of the strictness of restrictions imposed by governments to limit the spread of the virus—the IDR 2022 finds that more stringent containment measures are linked to larger drops in output. With the development of COVID-19 vaccines, containment measures are quickly focusing on the speed of the vaccine rollout. Vaccines are critical to the recovery. Indeed, the IDR 2022 finds that across countries, having a higher share of vaccinated population is associated with a decrease in the stringency of government regulations—and, therefore, with a higher chance of

BOX 1. Resilience: a key term for the recovery

According to the United Nations Office for Disaster Risk Reduction (UNDRR), resilience refers to a system’s ability “to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner”. Risk management and the ability to bounce back—by preserving and quickly restoring basic structures, functions, and institutions—after a crisis are key aspects of resilience.

bouncing back. As we write, the speed and sustainability of the post-pandemic recovery crucially hinges on equitable access to vaccines.

And by itself, however, a successful policy of containment was no guarantee that a country would weather the storm. Ultimately, the depth and duration of the socio-economic impact of the pandemic depends on a wider set of factors which shape the resilience of countries and communities (see Box 1).

What drives resilience? The role of industrial capabilities

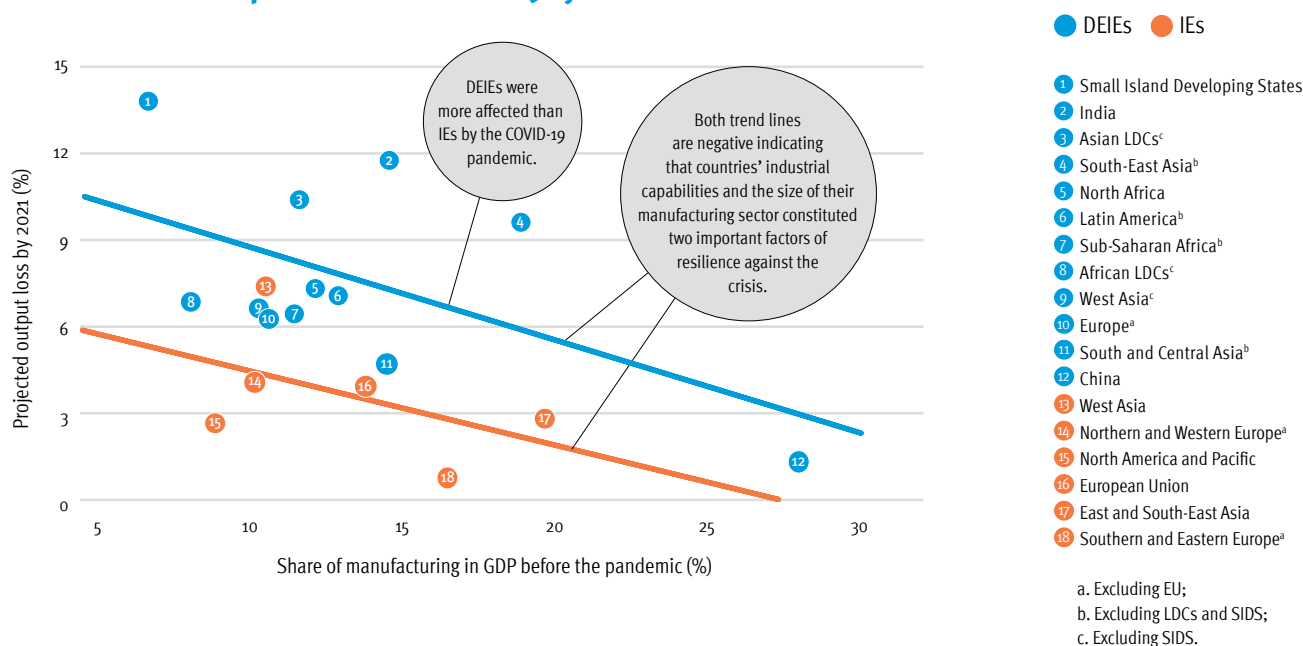
An economy's sectoral composition proved to be a key determinant of resilience. Regardless of the severity of the health emergency, economies that are more oriented towards services were more affected, largely due to social distance requirements and travel restrictions. Countries reliant on tourism, such as SIDS, were particularly hard hit. The share of manufacturing in GDP, however, plays a more important role. Countries with stronger manufacturing systems were more resilient than the rest. A larger share of manufacturing in GDP is associated with a lower estimated dip in output and economic activity (see Figure 2.1). This finding is consistent across IEs and DEIEs and holds also when considering the pandemic's impact on jobs: countries with larger manufacturing sectors experienced fewer employment losses.

The role of manufacturing in resilience is confirmed by the IDR's econometric analysis. Among the factors expected to amplify the economic impact of COVID-19—severity of the health crisis; stringency of containment measures; and reliance on vulnerable industries—and those expected to mitigate it—income; relative size of domestic markets; and level of industrial capabilities—the level of industrial capabilities turns out to have a large and significant effect in reducing projected output losses (see Figure 2.2).

Why did some countries fare better than others? The role of industrial capabilities

Countries with a larger share of manufacturing in GDP weathered the pandemic crisis better.

Figure 2.1
Estimate of world output loss due to COVID-19 by 2021



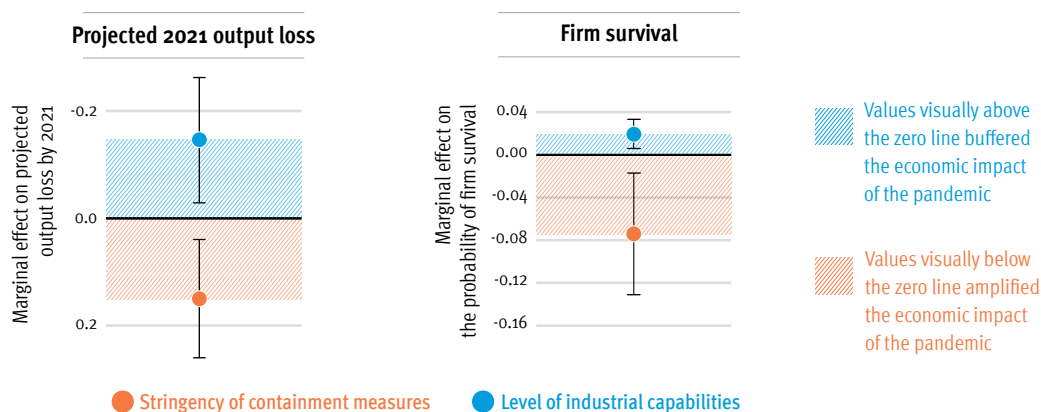
The correlation between the manufacturing sector's size and the impact suffered may be influenced by a number of factors. Let us take a closer look at them.

Note: The graphs show simple averages. *Projected output loss by 2021* is defined as the difference between the pre-pandemic projection of the level of GDP (October 2019) and the latest available projection (October 2021) and presented as share of the pre-pandemic projection. The solid line indicates the linear regression estimate. DEIEs = developing and emerging industrial economies; IEs = industrialized economies; LDCs = least developed countries.

Figure 2.2

Determinants of the impact of COVID-19 on economic activity and manufacturing firms

A country's preexisting industrial capabilities has had a mitigating effect on the pandemic's impact, while the stringency of containment measures has had the opposite effect.



Note: The figure depicts coefficients (dots) and confidence intervals (at 95 percent) (lines) for the average marginal effects of the variables of interest on the projected output loss of each country for the year 2021 (first panel), and the probability of firm survival (second panel). *Stringency of containment measures* is defined as the cumulative average level of Oxford's Stringency Index by October 2021; *level of industrial capabilities* is defined as the level of UNIDO CIP Index in 2019. *Firm survival* is proxied with a binary variable that takes the value of 1 if the firm is fully operational at the time of the World Bank Enterprise follow-up survey, and 0 if it closed operations (temporarily or permanently). *Source:* UNIDO Industrial Development Report 2022. <https://www.unido.org/idr2022>

Manufacturing is key to resilience: growth, jobs, and beyond

The role of the manufacturing sector in shoring up countries' resilience relates to its ability to generate employment—jobs in manufacturing and in activities linked to manufacturing, such as business services, tend to be more stable and better paid—and thus to sustain incomes and livelihoods across the globe. Manufacturing is also a key source of innovations which diffuse throughout the economy, benefitting different sectors and powering economic growth.

More broadly, the pandemic highlighted the industrial sector's contribution to public health, national

security, and, consequently, emergency preparedness.

Not only does manufacturing provide access to vital goods, ranging from food and clothing to medicines, and critical inputs for infrastructure. It also ensures a stable supply of essential goods, such as PPE and ventilators, which were and remain critical in fighting the pandemic. Early on, shortages of these goods critically affected countries' ability to cope with the emergency—especially among DEIEs. Building industrial capabilities is thus a key priority.

References and/or suggestions for further reading

- [Lavopa, A., Zagato, L. and Donnelly, C., 2021. Assessing the Role of Industrial Capabilities in Supporting Socioeconomic Resilience during the COVID-19 Crisis: An Exploratory Note. Background note prepared for the Industrial Development Report 2022. Vienna.](#)
- [López-Gómez, C., Castañeda-Navarrete, J., Tong, Y.S. and Leal-Ayala, D., 2021. Adding the Resilience Dimension to Industrial Policy: Lessons from COVID-19. Background paper prepared for the Industrial Development Report 2022. Vienna.](#)
- [UNIDO. 2021. Industrial Development Report 2022: The Future of Industrialization in a Post-Pandemic World. Vienna.](#)

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