Global Recovery Prospects and Policies

NOVEMBER 15, 2021

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IMF Research Department
Continued pandemic uncertainty

COVID-19 1/
(percent; unless otherwise indicated)

- People vaccinated
- Hospitalization over cases (most vaccinated countries)
- New cases (thous.; rhs)

The great vaccination divide 2/
(percent of population)

- At least one dose
- Fully vaccinated

Sources: Our World in Data, and IMF staff calculations.
1/ Hospitalization rate is for countries that have vaccinated 50 percent by July 2021. Hospitalization over cases is as of 10/25.
2/ Data as of November 12, 2021. Fully vaccinated are people who received all the doses prescribed for a full vaccination cycle (typically 2, but 1 for Johnson&Johnson and Cansino). There are a few cases where recorded one-dose numbers are less than fully-vaccinated numbers due to reporting lags. For these cases, we make a minimal consistency adjustment, setting one-dose numbers equal to fully-vaccinated numbers.
The global recovery continues but the momentum has weakened

**PMI manufacturing**
(index; >50 = expansion)

**PMI services**
(index; >50 = expansion)

Sources: IHS Markit; IMF, *Global Data Source*; Haver Analytics; and IMF staff calculations.
Inflation has picked up

Sources: Bloomberg, L.P.; IMF Global Data Source; IMF STA CPI Database; Haver Analytics; IMF, World Economic Outlook; FAOSTAT New Food Balances; GIEWS FPMA Tool; IMF, International Financial Statistics; and IMF staff calculations.
Supply-demand mismatch persists

Supply chain disruptions 1/
(index)

<table>
<thead>
<tr>
<th>Month</th>
<th>Euro Area</th>
<th>US</th>
<th>China</th>
<th>EM</th>
</tr>
</thead>
<tbody>
<tr>
<td>May-16</td>
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<td>Oct-16</td>
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<td>Mar-19</td>
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<tr>
<td>Aug-20</td>
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<tr>
<td>Oct-21</td>
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</tbody>
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Shanghai containerized cargo index (May 2016 = 100; rhs)

Widespread shortages
(percent of businesses reporting equipment shortages limiting production; 2021Q2)

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<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Rubber &amp; plastic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical equipment</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Motor vehicles 2/</td>
<td></td>
<td></td>
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<tr>
<td>Wood</td>
<td></td>
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<tr>
<td>Electronic &amp; optical prods</td>
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<td></td>
<td></td>
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<tr>
<td>Furniture</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Supply and demand drivers of shipping expenditure growth
(percent; Baltic Dry index)

Sources: Bloomberg, L.P.; Haver Analytics; IHS Markit; Beige Book, Federal Reserve Board; U.S. Bureau of Economic Analysis; Eurostat; U.S. Census Bureau; U.S. Bureau of Labor Statistics; and IMF staff calculations.

1/ Supply Chain Disruptions are calculated as the difference between the supply delivery times sub-index in the PMI and a counterfactual, cyclical measure of supply delivery times based on the manufacturing output sub-index in the PMI.

2/ Denotes "Transportation Equipment Manufacturing" for the US and "Motor Vehicles and Trailers" for the EA.
Employment among youth and lower-skilled workers remains weaker than among prime-age and higher-skilled workers

### Employment rate
(average percent difference from 2019:Q4 to 2021:Q1)

<table>
<thead>
<tr>
<th></th>
<th>Advanced economies</th>
<th>Emerging market and developing economies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime-age Men High-skill</td>
<td>-8</td>
<td>-10</td>
</tr>
<tr>
<td>Youth Women Low-skill</td>
<td>-12</td>
<td>-14</td>
</tr>
</tbody>
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### Labor force participation rate
(average percent difference from 2019:Q4 to 2021:Q1)

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Sources: International Labour Organization; Organization for Economic Co-operation and Development; and IMF staff calculations.

Note: The bars are derived from year fixed effects in a regression of each employment rate/labor force participation rate class on time and country fixed effects to account for sample changes (see Karbarbounis and Neiman 2014). High-skill=tertiary education and above; Low-skill=above secondary and nontertiary education and below; Prime-age=ages 25 to 54; Youth=ages 15 to 24. Value for the average labor force participation rate difference for high-skilled workers in advanced economies is 0.01 percent.
Financial conditions remain broadly accommodative; large increases in asset prices

EMs net flows in emerging market funds
(billions of US dollars)

Cumulative real housing price change over the past 18 months
(as of 2021q1)

Sources: Organization for Economic Co-operation and Development; Haver Analytics; World Tourism Organization; and IMF staff estimates.
Emerging markets leading exit from accommodative policies

Change in monetary policy among G-20 economies 1/
(number of increases/ cuts in policy rates)

G-20: Change in fiscal balances
(percentage points; relative to 2019)

Sources: Bloomberg, L.P.; Haver Analytics; IMF; World Economic Outlook; and IMF staff calculations.

Note: 1/ ECB sets monetary policy for all euro area economies, including DEU, ESP, FRA, ITA.
## Growth projections: Advanced economies
*(percent change from a year earlier)*

<table>
<thead>
<tr>
<th>Year</th>
<th>World</th>
<th>Advanced Economies</th>
<th>U.S.</th>
<th>Euro Area</th>
<th>Japan</th>
<th>U.K.</th>
<th>Canada</th>
<th>Other Advanced Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>-3.1</td>
<td>-4.5</td>
<td>-3.4</td>
<td>-6.3</td>
<td>-4.6</td>
<td>-9.8</td>
<td>-5.3</td>
<td>-1.2</td>
</tr>
<tr>
<td>Revision from Jul. 2021</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
<td>0.0</td>
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</tr>
<tr>
<td>2021</td>
<td>5.9</td>
<td>5.2</td>
<td>6.0</td>
<td>5.0</td>
<td>2.4</td>
<td>6.8</td>
<td>5.7</td>
<td>4.8</td>
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<td>0.3</td>
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## Growth projections: Emerging markets and LIDCs

*(percent change from a year earlier)*

<table>
<thead>
<tr>
<th></th>
<th>World</th>
<th>Emerging Market and Developing Economies</th>
<th>China</th>
<th>India</th>
<th>Brazil</th>
<th>Russia</th>
<th>Commodity Exporting Economies</th>
<th>Low Income Developing Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2020</strong></td>
<td>-3.1</td>
<td>-2.1</td>
<td>2.3</td>
<td>-7.3</td>
<td>-4.1</td>
<td>-3.0</td>
<td>-3.8</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Revision from Jul. 2021</strong></td>
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<td>6.4</td>
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<td>-0.1</td>
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Medium-term scarring in several EMDEs

Projected output paths
(index; 2019=100)

- AEs
- EMDEs ex China
- China

Medium-term output losses 1/
(percent deviation from precrisis trend)

Sources: IMF, World Economic Outlook; and IMF staff calculations.
1/ Bars show the difference in real output four years after the crisis and anticipated output for the same period prior to the crisis for the indicated regional group.
Labor recovery lagging output

Share of economies projected to regain pre-pandemic employment and output levels by 2022 1/ (percent)

<table>
<thead>
<tr>
<th>Employment</th>
<th>Output</th>
<th>Employment</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEs</td>
<td></td>
<td>EMDEs</td>
<td></td>
</tr>
</tbody>
</table>

Employment losses relative to pre-pandemic trend, 2024 2/

-3 -2 -1 0 1 2

Source: ILO; OECD; Statistics Canada; US BEA; IMF, *World Economic Outlook*; and IMF staff calculations.

1/ AEs include 38 countries and EMDEs include 74 countries.

2/ Medium-term losses are the difference between forecasts of the indicated variable for 2024 from the October 2021 WEO and January 2020 WEO Update vintages. The sample of countries comprises those which have comparable employment projections in both vintages. The EMDE employment aggregate excludes China and India due to changes in employment definitions across vintages.
Inflation is projected to return to pre-pandemic range

Sources: Bloomberg Finance L.P.; Agur et al. (2021), forthcoming; G-20 model simulation; IMF, World Economic Outlook; Consensus Economics; Haver Analytics; and IMF staff calculations.

1/ Market-implied average inflation rate expected over the five-year period starting five years from date shown.
2/ The chart illustrates the inflation scenarios in Chapter 2 of the WEO. The risk scenarios assume a strong rise in commodity prices and sectoral inflation dispersion over the next 12 months, whose likelihood is less than 0.01 percent based on historical data. The most severe risk scenario also assumes that inflation expectations become adaptive for 12 months.
Under business-as-usual scenario, several LICs may not meet 40 percent target by end-2021

Source: IMF Staff Calculations. Last update: 11 Nov 2021
Note: Effective vaccine supply = doses / 2 / population. J&J and CanSino volumes have been doubled for compatibility with the other two dose candidates in the portfolio. This map illustrates the projected supply and not doses administered. Country borders or names do not necessarily reflect the IMF’s official position.
Fiscal tightening already underway for those with less fiscal space

Fiscal tightening
(change in structural primary fiscal balance; percent of potential GDP)

Sources: IMF, World Economic Outlook; IMF, Fiscal Monitor; and IMF staff calculations.

Interest payments to revenues
(percent)

Sources: IMF, World Economic Outlook; IMF, Fiscal Monitor; and IMF staff calculations.
Sizable learning losses need to be remedied and continued health care is essential

**Learning loss 1/*
(LHS: percent of children without access; RHS: # of weeks of learning loss per week of school closure)

<table>
<thead>
<tr>
<th>Access to learning</th>
<th>Learning loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of children w/o access</td>
<td>Average (rhs)</td>
</tr>
</tbody>
</table>

**Coverage of routine vaccinations (percent)**

<table>
<thead>
<tr>
<th>G-20, Adv.</th>
<th>G-20, Emg.</th>
<th>LIDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTP, 1st dose</td>
<td>2019</td>
<td>2020</td>
</tr>
<tr>
<td>Polio, 1st dose</td>
<td>2019</td>
<td>2020</td>
</tr>
<tr>
<td>Measles, 1st dose</td>
<td>2019</td>
<td>2020</td>
</tr>
</tbody>
</table>

Sources: UNICEF; Engzell and others (2021); World Health Organization; IMF, World Economic Outlook; and IMF staff calculations.

1/ Weeks of learning loss are based on the estimates from the Netherlands in Engzell and others (2021).
Innovation can help lift productivity

Trend of remote work and E-commerce related new patent applications in the United States 1/

(Percent of total applications)

- Proportion of applications related to remote work technologies
- Proportion of applications related to e-commerce technologies
- Average (Jan 15 - Feb 20)

Estimated effect on productivity of a 10 percent increase in research stocks 2/

Sources: USPTO; and IMF staff calculations.

1/ Non-provisional utility and plant patent applications only. Based on the methodology in Bloom, Davis, and Zhestkova (2021). See also IMF, 2021, G-20 Background Note on Boosting Productivity in the Aftermath of the Pandemic.

2/ The figure shows the estimated effect of a permanent 10 percent increase in research stocks on real GDP per worker. An estimated elasticity of 0.674/1.358 for patents with respect to own basic research/foreign basic research is used. An estimated elasticity of 0.044 for productivity with respect to the stock of patents is used.
Invest in climate actions

Global GHG Emissions: Historical, Projected, NDCs, and Targets 1/
(million metric tons of CO2 equivalent)

- Historical
- Projected under Business-As-Usual
- 2030 projected under NDCs
- 2030 target for 2°C warming cap
- 2030 target for 1.5°C warming cap

Environmental policy actions (percent)
- Expenditure on environment, share of GDP
- Revenues from environmental taxes, share of GDP
- GHG emissions subject to carbon pricing, share of total (rhs)

Sources: IMF Climate Data Dashboard; Parry, Black, and Roaf (2021); World Bank Carbon Pricing Dashboard; and IMF staff calculations.
1/ Total GHG emissions exclude potential effects from land use, land-use change, and forestry. NDCs are based on the IMF estimates of current commitments as of August 2021. Estimates of the emissions targets under warming caps are CO2-only estimates from Parry, Black, and Roaf (2021) scaled up to account for past non-CO2 GHG (about 30 percent). GHG = greenhouse gases; NDCs = nationally-determined contributions.
Policy recommendations

Adopt the global plan to bring COVID-19 under control:
• Work towards the goal of vaccinating at least 40 percent in every country by end-2021, as recommended by the IMF/WB/WHO/WTO Task Force on COVID-19 vaccines and 70 percent by mid-2022
• Countries to deliver on pledged doses in a timely manner
• Vaccine manufacturers prioritize deliveries to COVAX
• Remove remaining restrictions on exports of medical equipment, raw materials and finished vaccines
• Diversify and increase vaccine production and distribution capabilities
• Close grant financing gap for vaccines testing, tracing and therapeutics and scale up genomic surveillance.

Agree on concrete policy actions to tackle climate change at the UN COP26:
• Policy actions should include:
  - International carbon price floor adjusted to country circumstances
  - A green public investment program and research subsidies
  - Targeted transfer schemes to households adversely affected by the climate policies
  - Advanced economies should deliver on their pledge to mobilize USD100 billion annually in climate finance to support developing nations
• Strengthen the global climate information architecture (data, disclosures, taxonomies)

Ease financial constraints to vulnerable countries:
• The recent general allocation of SDRs contributes to the liquidity of the international monetary system and through rechanneling may provide support to the most vulnerable countries
• Urgent improvement in the implementation of the Common Framework for Debt Treatments is needed, in particular given the expiry of the DSSI at the end of December 2021
Policy recommendations

Tailor policy mix to the stage of economic recovery and to country-specific characteristics, while ensuring credibility of fiscal and monetary policy frameworks

Fiscal policies:
• Continue to prioritize spending to end the pandemic
• Reorient away from poorly targeted subsidies and recurrent expenditure, where fiscal space is more limited, particularly in some EMDEs, to make room for needed health, social spending and infrastructure outlays
• Strengthen tax capacity and improve revenue administration

On monetary policy, central banks should:
• Act decisively to prevent a de-anchoring of inflation expectations when the risks become tangible
• Remain accommodative where inflation pressures are contained, inflation expectations are below target and labor market is slack.
• Provide clear guidance about the future policy stance to prevent unwarranted tightening of financial conditions

Financial sector policies:
• Tighten selected macroprudential tools to tackle pockets of vulnerabilities
• Expedite resolution of debt overhangs. Strengthen insolvency frameworks and expedited, out of court, restructuring mechanisms

Emerging and frontier markets should rebuild buffers as appropriate and implement structural reforms to insulate themselves from the adverse impact of a possible tightening of external financial conditions

Invest for the longer term to achieve a durable and inclusive structural transformation. Global and national policies must be complements in order to
• Facilitate new growth opportunities: Greening the economy and facilitating digitalization
• Reverse the setback to human capital accumulation due to school closures
• Reduce inequality
• Address sovereign debt overhangs
Thank you