

FEATURE

G7 economies

In an uncertain recovery

Akrur Barua and Monali Samaddar

Economies in the G7 are witnessing a nascent recovery. But whether this recovery will be a swift one depends on the trajectory of COVID-19 in these countries.

If the post–World War II era is something to go by, the COVID-19 pandemic will remain arguably the deepest scar for G7¹ economies for some time, in terms of the virus’ impact on both human health and economic activity. The pandemic has left in its wake a trail of anxiety, leaving people concerned about their health² and businesses struggling to remain afloat given the sharp drop in demand. Within the G7, economic activity has been hit the most for the United Kingdom—its GDP fell by 20.4% in Q2 from Q1,³ the sharpest quarterly contraction since the series started in 1955.⁴ Yet the United Kingdom is not alone to suffer. Its G7 peers in Europe also experienced strong declines in GDP in Q2, and across the Atlantic, the United States’ economy fell by 9.1%. Predictably, governments and central banks have reacted fast to counter the downturn, enacting large stimulus measures to aid the most vulnerable and set recovery in motion.⁵ Yet stimulus is hardly a guarantee that any recovery will be swift. For much depends on the trajectory of the virus. And even when this is over, countries will have to deal with deteriorated fiscal balances and battered economies, not to mention the health and social scars of the pandemic itself.

The contraction due to the pandemic has been worse than the downturn in 2009

Economies have suffered as consumers cut spending after COVID-19 spread across countries. In the second quarter, consumers held back as they worried about contracting the virus and avoided “nonessential” expenditure due to deteriorating

labor market concerns. Spending by households or consumers fell sharply in Q2—ranging from 8.2% in Japan to 23.1% in the United Kingdom. Fear of being in proximity to other people and closure of certain establishments due to social distancing measures meant that spending on some goods and services suffered more than that on others.⁶ In the United States, for example, consumer spending on recreation fell by 49.5% in Q2; transportation (down 36.7%) and food services (down 34.2%) also saw sharp declines. A similar trend was evident in other countries.

Monthly data on retail sales and manufacturing activity shows that a recovery is likely underway in G7 economies, although it is too soon to conclude whether this is a sustained sharp upswing.

Monthly data on retail sales and manufacturing activity shows that a recovery is likely underway in G7 economies, although it is too soon to conclude whether this is a sustained sharp upswing. While retail sales have picked up in recent months in most G7 economies, they remain subdued in some relative to pre–COVID-19 levels. In Japan, for example, sales in July were still 6.3% below

February while in Italy, sales in June were 2.7% lower than in February. Manufacturing activity too is edging up after sharp declines mostly in March to May—for August, the Purchasing Managers' Index data shows an expansion in every G7 country barring Japan and France.⁷ Yet manufacturing output in almost all economies is still below levels witnessed in December last year (figure 1).

With COVID-19 continuing its spread,⁸ consumers still wary about their health and finances,⁹ and demand far from booming, G7 economies will likely continue to be under pressure. According to Deloitte economists, GDP in the United States is set to contract by 6.4% this year and by 1.7% in 2021.¹⁰ And forecasts by the International Monetary Fund (IMF) reveal that the contraction

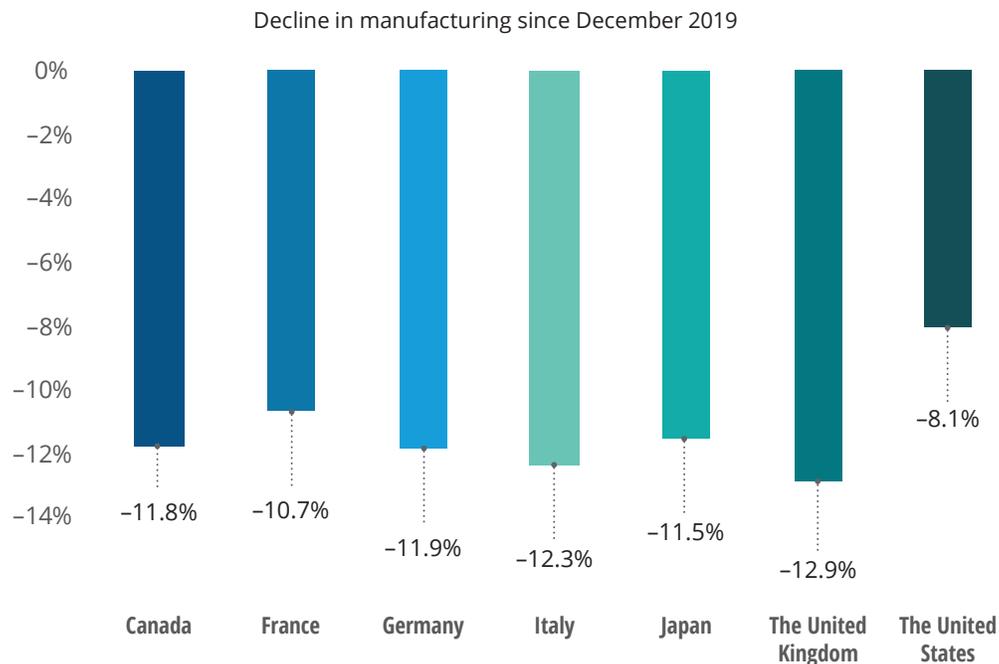
in G7 economies in 2020 will likely be worse than in 2009 when the previous recession was underway (figure 2).¹¹

Fiscal and monetary response to the crisis has been strong

Governments have responded to the crisis with a string of fiscal measures to address both the health and economic aspects of the pandemic.¹² In the United States, for example, there have been three specific approaches—aid for individuals with an eye on health, education, and labor market conditions; help for businesses through instruments such as loans and guarantees; and efforts to counter the pandemic through

FIGURE 1

Manufacturing output in G7 economies is still lower than in December 2019



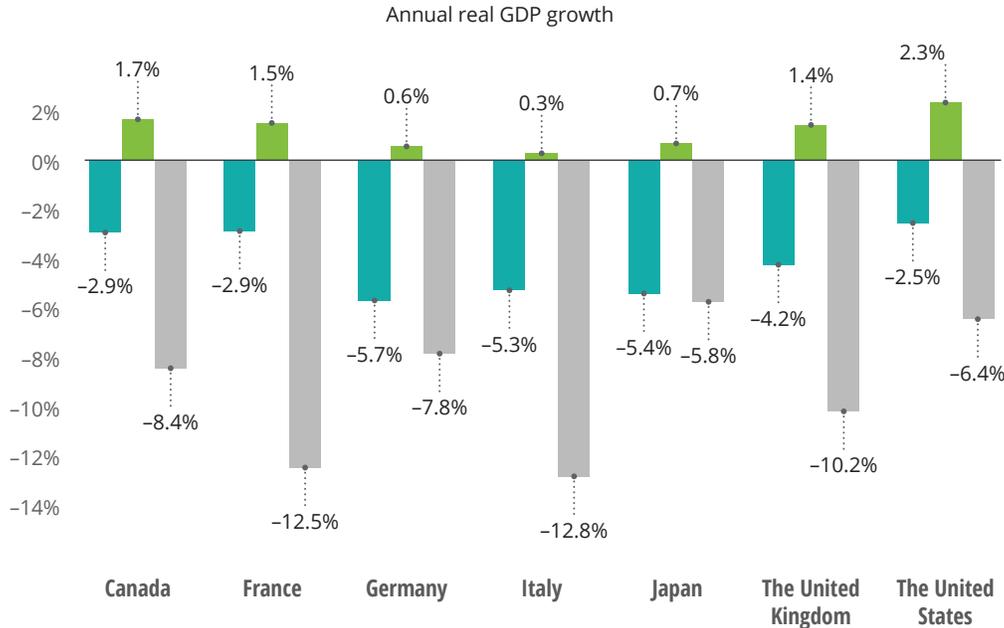
Notes: For the United States and Japan, the decline shown is till July while for the other countries, it is till June. The data is seasonally adjusted for Canada, Japan, the United Kingdom, and the United States. It is seasonally and working-day adjusted for France, Germany, and Italy.

Sources: Haver Analytics; Deloitte Services LP economic analysis.

FIGURE 2

The scale of this downturn is expected to be more than the one in the previous recession

■ 2009 ■ 2019 ■ 2020 (f)



Notes: The “f” denotes forecasts. For the United States, the forecasts are by Deloitte and are baseline numbers (55% probability). For the other G7 countries, the forecasts are by the International Monetary Fund.
Sources: International Monetary Fund (sourced through Haver Analytics); Deloitte Services LP economic analysis.

health-related spending, such as on testing and vaccine development. Other countries have also moved on similar lines using multiple fiscal instruments, such as taxes, credit facilities, and transfers to businesses to shore up economies (figure 3). Figure 3 also shows multiple governments’ focus on aiding people who have lost jobs due to the pandemic as well as small businesses that tend to be left out of more sophisticated credit markets. In Japan, for example, a key focus of two emergency economic packages worth 40% of GDP is cash handouts to affected households, transfers to affected small- and medium-sized enterprises (SMEs) and local governments, and incentivizing credit lending. And in Europe, while countries have launched their own efforts, the European Union’s European Stability Mechanism provides funds worth about 540 billion euros to finance expenditure directly related to the

pandemic in the region while the Next Generation package worth 750 billion euros focuses on a coordinated recovery effort.¹³

Governments have responded to the crisis with a string of fiscal measures.

It’s not just governments that have acted; monetary authorities, too, have tapped into their arsenal aggressively to stem the current economic downturn. While the fiscal response has taken center stage, especially to buffer the short-term economic impact of the pandemic, the role of the monetary authorities has largely been of a market

FIGURE 3

G7 governments have undertaken a slew of fiscal measures

G7 member	Key fiscal measures
The United States	<p>Three key fiscal measures have been undertaken worth US\$2.3 trillion, amounting to about 11% of GDP.^a</p> <ol style="list-style-type: none"> 1. Coronavirus Preparedness and Response Supplemental Appropriations Act and Families First Coronavirus Response Act: It includes funds for virus testing and vaccine development; provisions for paid and emergency sick leaves to employees; and expansion of Small Business Administration loan subsidies. 2. Paycheck Protection Program and Health Care Enhancement Act: It includes loans and grants to small businesses through the Small Business Administration.^b 3. Coronavirus Aid, Relief, and Economy Security Act: It includes income support to households and workers; credit lines to businesses and the banking sector; aid to states; and relief toward personal finance and taxes.
Japan	<p>Japan has adopted two stimulus packages worth 234 trillion yen, about 42% of GDP.^c</p> <ol style="list-style-type: none"> 1. Emergency economic package against COVID-19: The package aims to develop preventive measures against the virus; protect employment and businesses; income support to households via cash handouts; deferred tax payments and social security contributions; provision for concessional loans; etc. 2. Second FY20 draft supplementary budget:^d It includes enhancing the Employment Adjustment Subsidy; enhancing financial support to SMEs and major corporations; rent support grant for SMEs; other support measures to medical treatment providers; and enhancing the subsidy program for sustaining businesses.
Germany	<p>Measures adopted by the federal government and the German Länder consist of two supplementary budgets.</p> <ol style="list-style-type: none"> 1. March (156 billion euros, 4.9% of GDP): It includes spending on health care equipment; reduced-hours compensation benefit;^e grants to microenterprises; and higher child-care benefits for low-income parents. 2. June (130 billion euros, 4% of GDP):^f It includes temporary VAT cuts; child bonus for families; support for local governments; tax breaks for companies; and bridging aid for SMEs.
The United Kingdom	<p>The policy response totals 192.3 billion pounds.^g</p> <ol style="list-style-type: none"> 1. Direct spending worth 178.2 billion pounds: It includes the Coronavirus Job Retention Scheme; additional funding to the National Health Service; small-business grant schemes; welfare measures such as an increase in the Universal Credit standard allowance and the Working Tax Credit basic element of GBP1,000; and removal of the minimum income floor. 2. Tax-reduction measures worth 14.2 billion: They include property tax holidays, and VAT and income tax self-assessment deferrals. <p>The government has availed liquidity and loan guarantee programs worth 340 billion pounds (Coronavirus Business Interruption Loan, Large Business Interruption Loan, Corporate Financing Facility, and Bounce Back Loan Schemes).^h</p>
France	<p>The government has availed emergency measures through budget amendments and credit-availability schemes.</p> <ol style="list-style-type: none"> 1. Three budget amendments have been made to raise the fiscal envelope to 135 billion euros.ⁱ Key steps include direct support to households and workers; more spending on medical supplies; extension of unemployment and other benefits; and added exemptions (tax deferrals, advanced tax credits, etc.) for sectors hardest hit by the crisis. 2. Bank loan guarantees and credit reinsurance schemes worth 315 billion euros to support businesses.
Italy	<p>Three stimulus packages have been outlined by the government.</p> <ol style="list-style-type: none"> 1. "Cura Italia" (25 billion euros or 1.6% of GDP): It includes steps to strengthen the health care system; protect workers and preserve jobs; and support businesses via tax deferrals and postponing utility bill payments. 2. Liquidity Decree: This aims to defend and preserve the country's industrial framework through 200 billion euros in loans guaranteed by the state and 200 billion euros in export guarantees.^j 3. "Relaunch" Decree (155 billion euros):^k It is the third major intervention launched by the government to restart and relaunch the economy safely. It includes additional funds for families' income support, the health care system, and other measures to support businesses (grants and tax deferrals).
Canada	<p>The aim of the COVID-19 Economic Response Plan worth CA\$469 billion^l is:</p> <ol style="list-style-type: none"> 1. CA\$256 billion in direct support to households and businesses 2. CA\$123 billion in tax, customs duty payment, and fee deferrals to meet liquidity needs 3. CA\$90 billion federal liquidity measures, including the Business Credit Availability Program, and credit and liquidity support for the agricultural sector <p>Additional CA\$600 billion has been made available by the federal government for other credit and liquidity measures in collaboration with the Bank of Canada and commercial lenders.</p>

FIGURE 3 (contd.)

The European Union	<p>The EU Commission has put forward a threefold response^m to mobilize the necessary funds to member states.</p>
	<p>1. European Stability Mechanism (ESM) provides Pandemic Crisis Support worth 540 billion euros based on the Enhanced Conditions Credit Line that is available to all EU countries. Total funds allocated will be up to 2% of respective member states' GDP as of end-2019 with no conditions attached to financing expenditure directly related to the pandemic.</p>
	<p>2. The Next Generation recovery effort worth 750 billion euros will be used for loans and grants under the Recovery and Resilience Facility and for programs such as React-EU and Just Transition Fund.</p>
	<p>3. Multiannual Financial Framework, a new long-term budget framework (2021–2027), will be the main instrument for implementing the recovery package worth about 1,100 billion euros.</p>

Sources:

- (a) *Wall Street Journal*, "What's in the \$2 trillion Senate coronavirus bill," March 26, 2020.
- (b) Congress.gov, "Paycheck Protection Program and Health Care Enhancement Act", accessed April 24, 2020.
- (c) Takaya Yamaguchi and Tetsushi Kajimoto, "Japan approves fresh \$1.1 trillion stimulus to combat pandemic pain," Reuters, May 27, 2020.
- (d) Japan Ministry of Finance, "Overview of the Second Supplementary Budget for FY2020," accessed March 2020.
- (e) Julia Anderson et al., "The fiscal response to the economic fallout from the coronavirus," Bruegel, August 5, 2020.
- (f) Bundesfinanzministerium, "The stimulus package," accessed August 19, 2020.
- (g) Office for Budget Responsibility, "Coronavirus analysis," accessed August 19, 2020.
- (h) Julia Anderson et al., "The fiscal response to the economic fallout from the coronavirus," Bruegel, accessed August 19, 2020.
- (i) International Monetary Fund, "Policy tacker," accessed August 17, 2020.
- (j) Ministry of Economy and Finance, Italian government, "Gualtieri: A liquidity bazooka," April 6, 2020.
- (k) Ministry of Economy and Finance, Italian government, "Relaunch decree, 155 billion euros for phase two of the economy," May 14, 2020.
- (l) Government of Canada, *Overview of Canada's COVID-19 economic response plan*, July 15, 2020.
- (m) European Council, "Special meeting of the European Council (17, 18, 19, 20, and 21 July, 2020)—conclusions," July 21, 2020.

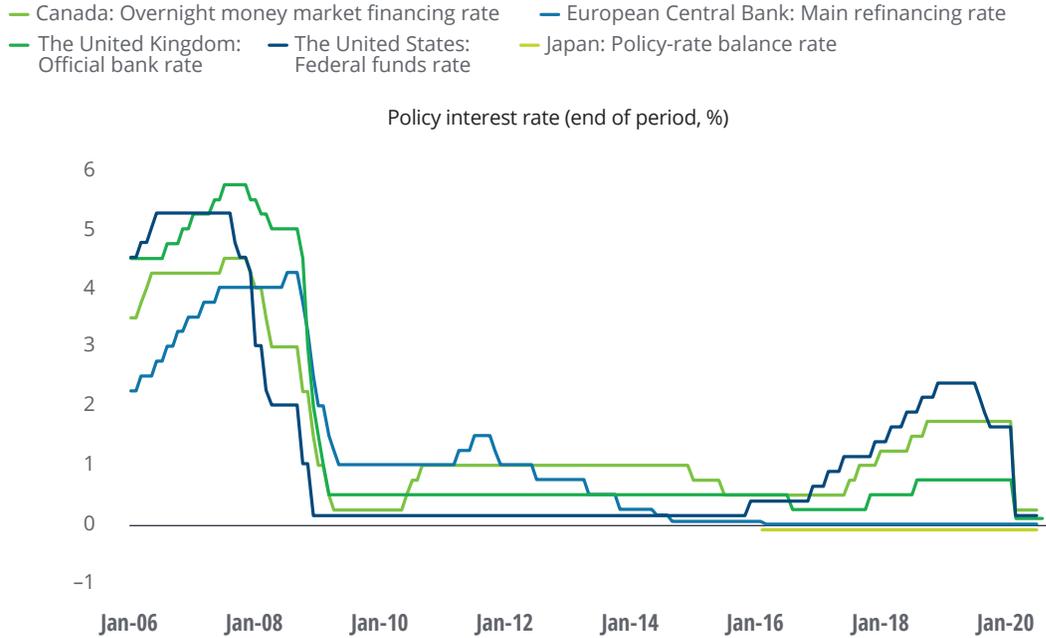
stabilizer. Central banks have focused on easing financial stress by acting as an intermediary between fiscal authorities and financial markets while facilitating a smooth flow of credit to the private sector. In March and April, when concerns about household and corporate liquidity had hampered the functioning of key financial market segments, central banks were quick to respond by easing policy rates (figure 4). These were followed by more targeted operations, such as asset purchases (figure 5). In the United States, for example, the Federal Reserve reactivated the Term Asset-Backed Securities Loan Facility (TALF)—first established in late 2008—to

support the issuance of asset-backed securities and embarked on large-scale purchases of government bonds. Asset purchases, in turn, have ensured smooth functioning of the market for US Treasuries, thereby preserving its key role in the pricing of financial assets.¹⁴ Such purchase programs are key to restore the financial market's confidence and create the necessary credit conditions for a potential rebound of aggregate demand. Central banks have also focused on

Monetary authorities too have tapped into their arsenal aggressively to stem the current economic downturn.

FIGURE 4

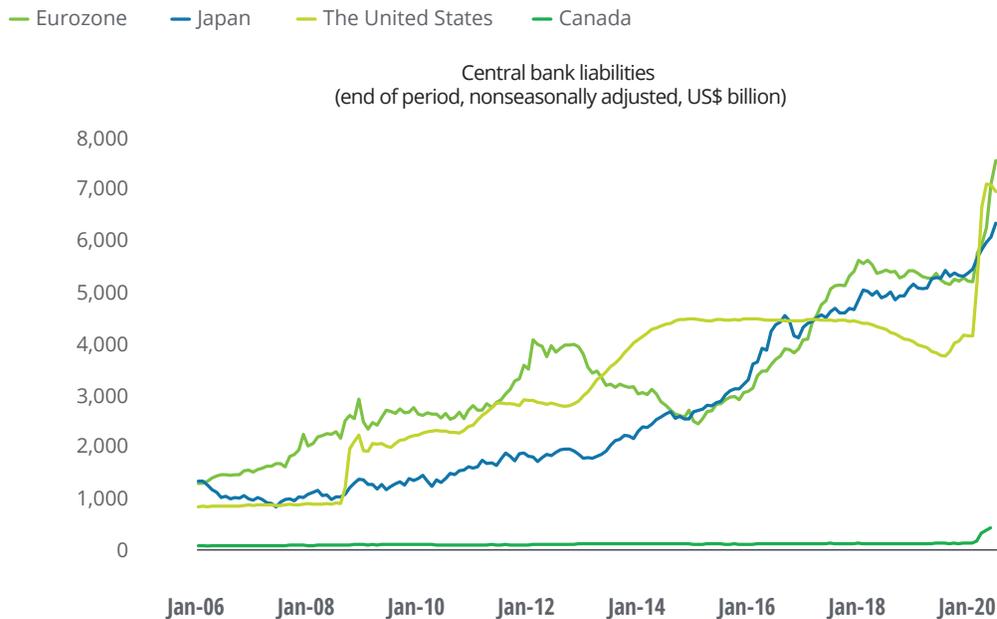
Central banks have either cut policy interest rates or kept them near zero



Sources: Haver Analytics; Deloitte Services LP economic analysis.

FIGURE 5

Central banks have sharply expanded their balance sheets to stem the economic downturn



Sources: Haver Analytics; Deloitte Services LP economic analysis.

targeted lending operations. The Fed, for example, has launched several emergency lending programs worth a total of US\$2.3 trillion aimed at businesses, states, and cities. And in Germany, the Bundesbank has made available additional funds to refinance short-term liquidity provisions through public development and commercial banks.

Interestingly, governments are increasingly assisting central banks to offer additional lending support. The United States Department of Treasury has provided a backstop to various lending programs by the Fed, while in the United Kingdom, the Bank of England's (BOE) purchases of commercial paper enjoys complete guarantee by the UK Treasury.¹⁵

There are, however, challenges ahead

As Deloitte's State of the Consumer Tracker reveals, consumers across G7 nations remain anxious about their health and job prospects due to the ongoing economic downturn.¹⁶ These concerns will continue to weigh on consumer spending in 2020.

Businesses in certain sectors, including tourism and hospitality, aviation, and food services, will struggle more than others as consumers hold back on their spending and the flow of foreign tourists remains sharply and consistently lower than last year. Tourist arrivals have all but dried up and are nearly close to zero in almost all G7 countries. And although some countries in Europe have opened cross-border movement for select nationalities,¹⁷ tourists haven't been returning to key destinations in the region.

Available data for Spain, for example, shows that tourist arrivals were up in June from zero in the prior two months but are still 97.7% below the arrivals

seen a year ago. According to the International Air Transport Association, passenger demand for aviation *for the whole of 2020* could fall by as much as 52.6% in North America and by 56.4% in Europe.¹⁸ Given the sharp dent to demand, the risk of bankruptcies has risen, with small businesses being most vulnerable, especially if fiscal and monetary support is scaled down.¹⁹ Rising bankruptcies may, in turn, hit banking asset quality and strain credit growth.

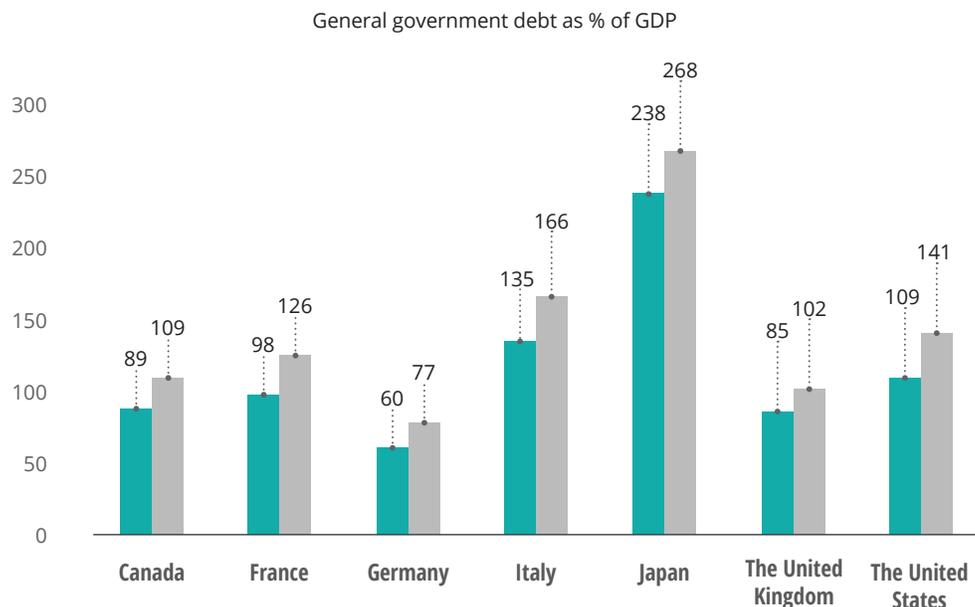
The massive amounts of stimulus engaged by G7 governments mean that a return to fiscal prudence will be a challenge over the medium to long term. According to the IMF, general government fiscal balance as a share of GDP for advanced economies is set to deteriorate by 13.3 percentage points in 2020 compared to a year before.²⁰ Within the G7, the IMF expects the rise in the deficit in 2019–2020 to be the highest in the United States (23.8% of GDP from 6.3%), followed by Canada (12.6% of GDP from 0.3%) and Germany (10.7% of GDP from a surplus of 1.5%). As borrowing surges to fund fiscal stimulus, government debt is also expected to rise sharply (figure 6). For countries such as Italy that had not long ago suffered during the sovereign debt crisis in Europe, the expected rise in government debt will be a worry. High debt and deficit will likely translate to future cuts in fiscal support and higher taxes, thereby putting more burden over the long term on the younger generation, which is worrying for countries with aging populations such as Japan, Germany, and Italy.²¹

The massive amounts of stimulus engaged by G7 governments mean that a return to fiscal prudence will be a challenge over the medium to long term.

FIGURE 6

Government debt for G7 economies will likely rise sharply in 2020 due to the fiscal stimulus measures

■ 2009 ■ 2020 (f)



Note: “f” denotes forecasts by the International Monetary Fund.

Sources: International Monetary Fund (sourced through Haver Analytics); Deloitte Services LP economic analysis.

Strong monetary stimulus has meant a sharp rise in central banks’ balance sheets, which were already at elevated levels after a surge since the global downturn of 2008–2009. Between February and July of this year, the total liabilities of the Fed went up by 67.7% and for the European Central Bank (ECB), they shot up by 45.7%. Also, key policy rates are at record lows with bond yields too dropping sharply as investors rush to safety (figure 6). Low interest rates, if they continue for long, are not good news for savers. Pensioners too suffer as they typically hold more of fixed-income assets in their portfolio than younger people who likely invest more in equities. If yields remain low,

people—especially the younger generations—may end up working longer due to higher retirement age, pay more taxes, and yet earn lower incomes in their old age. Insurance companies and pension funds face the risk of falling short of their liabilities.²² Most importantly, low interest rates, along with high government debt and deficit, leave less room for monetary and fiscal policy responses should another crisis arise.

Low interest rates, along with high government debt and deficit, restrict room for monetary and fiscal policy responses should another crisis arise.

FIGURE 7

Bond yields have fallen again this year

- The United States: 10-year Treasury bond yield at constant maturity
- Germany: Estimated 10-year government debt yield
- The United Kingdom: 10-year nominal zero coupon yield on government securities
- Japan: 10-year benchmark government bond yield



Sources: Haver Analytics; Deloitte Services LP economic analysis.

The biggest worry is the virus itself

The biggest challenge, however, is the virus itself. Data on new virus cases and deaths due to COVID-19²³ shows that the pandemic is far from over. Even in countries where the spread of the virus has been under control for some time, localized outbreaks have happened—such as the United Kingdom, Spain, and Australia—resulting in local lockdowns, social distancing measures, and travel

restrictions.²⁴ Uncertainty, therefore, will continue till a credible vaccine is found, which seems unlikely at least till the end of this year.²⁵ By that time, even if a vaccine were to be found, ensuring production and supply will depend on supply chains spread across the globe, competition with other countries for supplies, and the logistics of delivering these vaccines to the population.²⁶ Till that time people and businesses in G7 countries, as in other parts of the world, will have to learn to live with the virus.

Endnotes

1. G7 refers to the seven major advanced economies in the world. The group includes the United States and Canada from North America; Germany, France, United Kingdom, and Italy from Europe; and Japan from Asia. For more, see International Monetary Fund, "A guide to committees, groups, and clubs," March 8, 2019.
2. Deloitte, "State of the consumer tracker," accessed August 3, 2020. Unless otherwise stated, all deductions about consumers' concerns and anxieties are derived from the tracker.
3. Growth in GDP and key expenditure components of GDP in this article have been calculated quarter on quarter for ease of comparison across countries.
4. Haver Analytics, sourced on August 17, 2020. Unless otherwise stated, all economic data is sourced from Haver Analytics.
5. International Monetary Fund (IMF), "Policy responses to COVID-19," accessed August 17, 2020.
6. Akrur Barua and David Levine, *What's weighing on consumer spending: Fear of COVID-19 and its economic impact*, Deloitte Insights, August 27, 2020.
7. IHS Markit, "Purchasing Managers Index," sourced through Haver Analytics on August 17, 2020.
8. Johns Hopkins Coronavirus Research Center, "Tracking," accessed August 12, 2020.
9. Deloitte, "State of the consumer tracker."
10. Daniel Bachman, *United States Economic Forecasts: 3rd Quarter 2020*, Deloitte Insights, September 14, 2020.
11. IMF, "World Economic Outlook (Interim Update)," sourced through Haver Analytics on August 14, 2020.
12. IMF, "Policy responses to COVID-19."
13. European Council, "Long-term EU budget 2021–2027," sourced August 14, 2020.
14. Paolo Cavallino and Fiorella De Fiore, "Central banks' response to Covid-19 in advanced economies," BIS Bulletin No. 21, June 5, 2020.
15. Ibid.
16. Deloitte, "State of the consumer tracker"; Barua and Levine, *What's weighing on consumer spending*.
17. European Council, "Council agrees to start lifting travel restrictions for residents of some third countries," press release, June 30, 2020.
18. International Air Transport Association, "Industry losses to top US\$ 84 billion in 2020," press release, June 9, 2020.
19. Kristalina Georgieva, "The next phase of the crisis: Further action needed for a resilient recovery," IMF Blog, July 15, 2020; Aisha Al-Muslim, "Chapter 11 business bankruptcies rose 26% in first half of 2020," *Wall Street Journal*, July 2, 2020.
20. IMF, "World Economic Outlook (Interim Update)."

21. Christine Tamir, "G7 nations stand out for their low birth rates, aging populations," Pew Research Center, August 23, 2019.
22. Akrur Barua, *Monetary policy in advanced economies: Low policy rates are here to stay*, Deloitte Insights, October 18, 2019.
23. Johns Hopkins Coronavirus Research Center, "Tracking," accessed August 12, 2020..
24. United Kingdom Department of Health and Social Care, "Local restrictions: Areas with an outbreak of coronavirus (COVID-19)," July 31, 2020; BBC, "Coronavirus: Spain imposes local lockdown in Galicia," July 5, 2020; Australia Department of Health, "COVID-19 in Victoria," accessed August 12, 2020; BBC, "Coronavirus: France to be added to UK quarantine countries," August 14, 2020.
25. World Health Organization, "Draft landscape of COVID-19 candidate vaccines," August 10, 2020.
26. World Health Organization, "Immunization supply chains and logistics," accessed August 12, 2020; William Wan and Carolyn Y. Johnson, "The biggest challenge for a coronavirus vaccine could be getting countries to share," *Washington Post*, June 5, 2020; World Health Organization, "More than 150 countries engaged in COVID-19 vaccine global access," July 15, 2020.

Acknowledgments

The authors would like to thank **Dr. Patricia Buckley** and **Dr. Daniel Bachman**, Deloitte US Economics; **Dr. Michela Coppola**, Deloitte Germany; **Debapratim De**, Deloitte UK; and **Michael Wolf**, DTTL, for their reviews and suggestions.

About the authors

Akrur Barua | abarua@deloitte.com

Akrur Barua is an economist with the Research & Insights team. As a regular contributor to several Deloitte Insights publications, he often writes on emerging economies and macroeconomic trends that have global implications, such as monetary policy, real estate cycles, household leverage, and trade. He also studies the US economy, especially demographics, labor market, and consumers.

Monali Samaddar | msamaddar@deloitte.com

Monali Samaddar, of Deloitte Services India Pvt. Ltd., is an economist and senior analyst in the Research & Insights team. She contributes to periodic macroeconomic briefings and research focused on the United States and the global economy. Earlier in her career, she covered the ASEAN 5 economies. She holds a postgraduate degree in economics from the Mumbai School of Economics and Public Policy.

Contact us

Our insights can help you take advantage of change. If you're looking for fresh ideas to address your challenges, we should talk.

Practice leadership

Patricia Buckley

Director | Deloitte Services LP
+1 571 814 6508 | pabuckley@deloitte.com

Patricia, Deloitte Services LP, is the managing director for Economics with responsibility for contributing to Deloitte's Eminence practice with a focus on economic policy.

Akrur Barua

US Economics | Deloitte Insights
Executive Manager | Deloitte Services India Pvt. Ltd
+1 678 299 9766 | abarua@deloitte.com

Akrur Barua is an economist with the Research & Insights team.

Deloitte Global Economist Network

The Deloitte Global Economist Network is a diverse group of economists that produces relevant, interesting, and thought-provoking content for external and internal audiences. The network's industry and economics expertise allows us to bring sophisticated analysis to complex industry-based questions. Publications range from in-depth reports and thought leadership examining critical issues to executive briefs aimed at keeping Deloitte's top management and partners abreast of topical issues.

Deloitte. Insights

Sign up for Deloitte Insights updates at www.deloitte.com/insights.



Follow @DeloitteInsight

Deloitte Insights contributors

Editorial: Kavita Saini, Aparna Prusty, and Rupesh Bhat

Creative: Tushar Barman and Kevin Weier

Promotion: Nikita Garia

Cover artwork: Kevin Weier

About Deloitte Insights

Deloitte Insights publishes original articles, reports and periodicals that provide insights for businesses, the public sector and NGOs. Our goal is to draw upon research and experience from throughout our professional services organization, and that of coauthors in academia and business, to advance the conversation on a broad spectrum of topics of interest to executives and government leaders.

Deloitte Insights is an imprint of Deloitte Development LLC.

About this publication

This publication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or its and their affiliates are, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your finances or your business. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser.

None of Deloitte Touche Tohmatsu Limited, its member firms, or its and their respective affiliates shall be responsible for any loss whatsoever sustained by any person who relies on this publication.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee (“DTTL”), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as “Deloitte Global”) does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the “Deloitte” name in the United States and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte.com/about to learn more about our global network of member firms.