Outlook for the Japanese and Overseas Economies

ECONOMIC RESEARCH OFFICE
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MUFG Bank, Ltd.
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Contents

Executive Summary

The global economy is on track to record its largest contraction since the Great Depression in 2020 due to an unexpected disruption caused by Covid-19. In the first half of the year, many countries and regions took strict public health measures which prioritised containing the infection and economic activity declined drastically as a result. After the first wave of infection subsided, economic activities resumed as public health measures were eased and the focus shifted to “maintaining economic activity while curbing infection.” Many economies recorded sizable recoveries after economic activity resumed, but the pace of recovery later slowed due to downward pressure from lingering concerns about the infection, as well as a second and third wave of infection in July to August and from October onwards. With a reduced level of economic activity in 2020 being the baseline, the year-over-year growth rate for 2021 will likely be high. However, the pace of recovery will probably be moderate as countries and regions work to normalize economic activity while curbing infection. Treatments and vaccines are expected to be developed, mass produced and distributed widely, but much about their effectiveness remains unclear and so it is premature to factor this into an economic forecast. We therefore project that it will take some time before economic activities return to pre-pandemic levels, especially in developed economies.

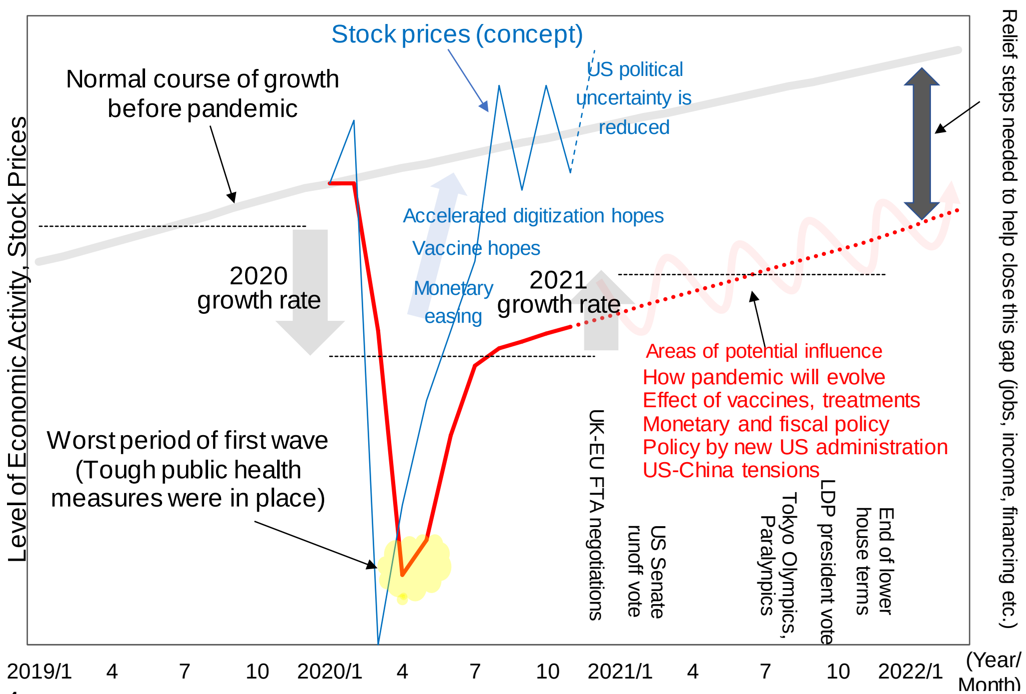
- From the early part of 2020, economic conditions worsened quickly in many countries and regions due to the rapid spread of Covid-19 and strict movement restrictions to curb infection. As economic activity fell significantly, consumer spending, production, trade, employment and corporate earnings all decreased, and many countries and regions registered real GDP contractions in the January-March quarter, followed by double-digit declines (annualised QoQ) in the April-June quarter.
- Many countries and regions carried out large-scale monetary and fiscal policy measures to provide financial support to households and businesses as public health measures to curb infection put downward pressure on economic activities. The first wave of infection then subsided thanks to restrictions on movement and the focus shifted to reopening the economy, resulting in high growth levels in the July-September quarter. The pace of recovery later slowed, however, once the initial recovery had ran its course amid lingering concerns about the virus and the second and third waves of infection, mainly in the northern hemisphere. In many countries and regions, economic activity, especially for face-to-face services, has not returned to pre-pandemic levels. Global real GDP is likely to decline by around 3.9% YoY in 2020.
- In China, which was the first in the world to be hit by Covid-19, the real GDP growth rate fell by an unprecedented -6.8% YoY in the January-March quarter but rebounded to 3.2% YoY in the April-June quarter and 4.9% in the July-September quarter as the country successfully curbed the infection domestically and reopened its economy. Economic activity may not be back to normal yet but the country has achieved a marked recovery as a major economy.
- In 2021, countries and regions will seek a balance between containing the infection and preventing a collapse of their healthcare systems on the one side and sustaining economic activity on the other. As a result, the pace of recovery will likely be moderate. Especially in developed economies, it will likely take some time before economic activities return to pre-COVID-19 levels in 2019. That said, with the decreased economic activity of 2020 being the baseline, we project a global real GDP growth rate of around 5.1% YoY in 2021 as China is expected to register a high growth rate of more than 8% YoY.
- Points of uncertainty going forward include how the pandemic will evolve and the sustainability of measures to support national and local economies. The former will depend on the severity of infection in different parts of the world, as well as the effectiveness of treatments and vaccines and the timing of their development, mass production and distribution. The latter will depend on monetary policy and liquidity support from monetary authorities, as well as the fiscal policy measures taken by governments. Our assumptions regarding these areas of uncertainty are that blanket and prolonged restrictions on economic activity (lockdowns) will not be reinstated, that vaccinations will be available to some extent but will not yet have a substantial impact, and that monetary and fiscal policy measures will be maintained, albeit in on a reduced scale.

1. Overview: Economies in the Post-COVID-19 Era

- The global economy worsened significantly due to COVID-19 in the first half of 2020, but rebounded in the July-September quarter thanks to economic policies and the resumption of economic activities after the first wave of infection. The pace of recovery later slowed as COVID-19 cases resurged in certain parts of the world amid lingering concerns. For the full year, global real GDP is likely to decline by 3.9% YoY.
- Stock prices initially tumbled due to downward revisions of economic outlooks, but they rebounded on monetary easing steps and hopes of progress in vaccine development and accelerated digitalisation. More recently, a decrease in uncertainty after the US presidential election has also buoyed market sentiment.
- The global economy is expected to record a relatively high YoY growth rate in 2021 (our forecast for the global real GDP growth rate is 5.1%), with 2020 being the baseline (see below for underlying assumptions). As countries and regions are forced to balance curbing infection and sustaining economic activity, greater demand for goods and services related to remote working is unlikely to fully offset the declines in other areas of the economy. Thus, the pace of economic recovery is likely to be moderate. It will probably take some time before economic activities return pre-pandemic levels, especially in developed economies.

Assumptions

- ✓ A 3rd wave of infection is a concern but any public health measures will not have the same impact on economic activities of those introduced in the 1st wave.
- ✓ Development and utilisation of treatments and vaccines will advance to an extent but much will remain unknown. It is premature to factor in their effect into an economic forecast for the time being (see note below).
  (Note: Even if side effects or limitations of vaccines come to light, the process will likely take time (hopes will remain for some time)
- ✓ Countries and regions will avoid making drastic changes to monetary and fiscal policy and will maintain measures, albeit on a reduced scale.



Note: Above is a conceptual diagram and does not represent actual levels of economic activity.
Source: Various news reports, MUFG Bank Economic Research Office

Political and Policy-Related Assumptions

President Biden's administration in the US

- ➢ Republican Party wins at least one of two seats in the runoff vote in Georgia. Republicans take control of the Senate while Democrats take control of the House, making it difficult for the Biden administration to push its policy agenda.
- ➢ Division within the Democratic Party surfaces between centrists and leftists.

US Foreign Policy (US-China tensions etc.)

- ➢ China policy will be tweaked as the Biden administration unwinds some confrontational policies of the Trump administration.
- ➢ Bilateral tensions will remain amid worsened public sentiment about the other country and hard lines taken by policymakers.
- ➢ The US will lean more toward international cooperation on issues like climate change and trade, but it will be difficult to demonstrate leadership (domestic conflict in the US and increased predictability about the US will make it easier for allies and strategic competitors to manage relations with the US)

EU-UK FTA negotiations (the UK's exit from the EU)

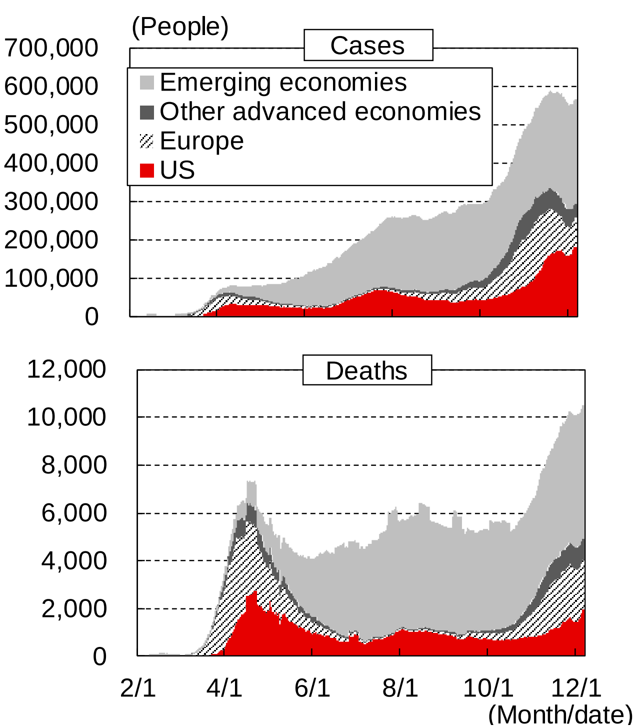
- ➢ No-deal outcome by the end of 2020 will be avoided through a combination of limited-scope trade pact and transitional measures.
- ➢ Some turmoil in logistics will be unavoidable when customs operations resume

Source: Various news reports,
MUFG Bank Economic Research Office

1. Overview: Assumptions based on the Pandemic – Current Number of Cases

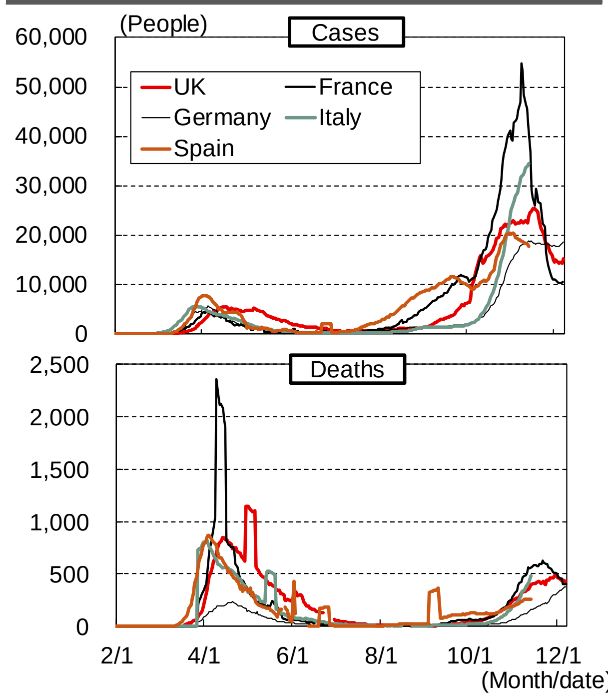
- As of 3rd December, 63.96 million cases and 1.48 million deaths were reported by the World Health Organization (WHO). Europe, the US and Central and South America all have higher numbers of cases and deaths per 100,000 of their populations compared with Asia.
- In emerging economies, the new case count remains high. In many countries where activity restrictions were relaxed, cases have increased again. In Europe, particularly France, the UK, and Italy, the second wave was severe and new cases have surpassed the levels of the first wave which took place between March and May. However, these numbers have either peaked or declined lately. The number of deaths is lower than in the March-May period in developed economies thanks to improvements in the treatment of symptoms, yet the number remains high globally. Death counts must be watched closely along with strains on healthcare resources.
- The global pandemic is far from being over or under control. Based on the considerations below, it is not possible to predict when economic activity will completely return to normal: 1) restrictions on economic activities remain in place; 2) caution about infection remains strong among individuals and companies; 3) second and third waves have become a reality (respiratory infections are often seasonal and the northern hemisphere is currently in winter).

New Cases and Deaths by Country and Region



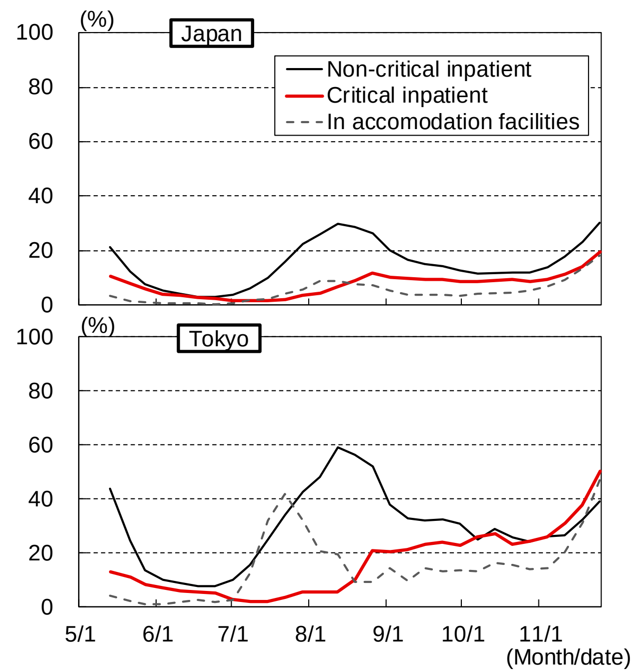
Note: Europe includes UK, Germany, Italy, France and Spain
Source: WHO, MUFG Bank Economic Research Office

New Cases and Deaths in Europe



Note: New cases are shown as a 7-day moving average.
Source: WHO, MUFG Bank Economic Research Office

Bed Occupancy Rates in Japan



Note: Percentages are calculated using numbers of patients in the category and number of beds set aside for Covid-19 cases in the corresponding category.
Source: Ministry of Health, Labour and Welfare, MUFG Bank Economic Research Office

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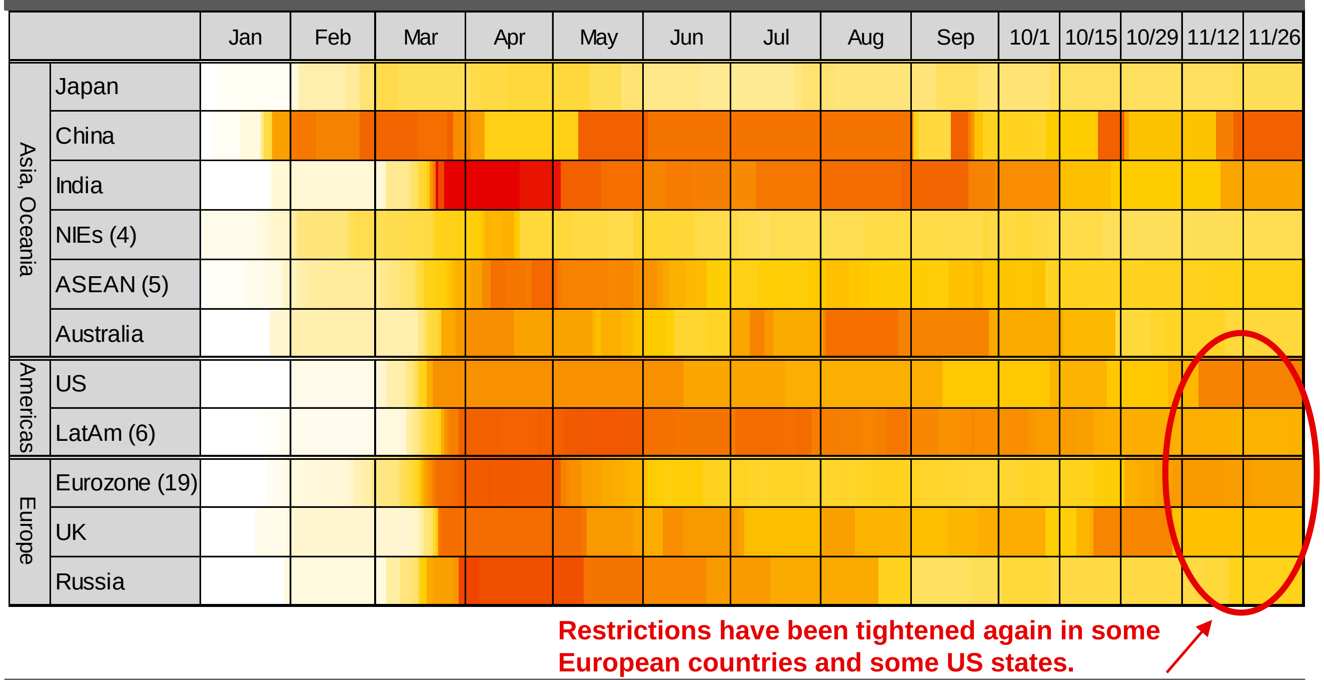
1. Overview: Assumptions based on the Pandemic – Restrictions on Movement

- During the first wave of COVID-19 pandemic, many countries and regions took strict public health measures in order to contain the spread of infection, such as restrictions on going outside and store closures, so the stringency index (based on restrictions on movement) was high in many countries and regions (darker colours in the heat map) during the first wave in March and April.
- The restrictions were later relaxed in stages across various countries and regions but the status of restrictions on commercial facilities, schools, workplaces, events, and individuals going outside the home were still far from normal.
- Starting in July, signs of resurgence in infection emerged, and some localities tightened movement restrictions again. With cases rising severely in Europe lately, France and the UK imposed large-scale lockdowns again even though those measures taken in March and April were thought to have faced high hurdles politically. Movement restrictions are becoming stricter in US states as well (in heat map, Europe turned darker in late October and the US turned darker in early November).
- Decisions about restrictions on movement are influenced not only by case and death counts. Strains on healthcare resources, as shown in hospital bed occupancy rates, are also a major consideration.

Heat Map of Restrictions on Movement by Country and Region



Note: 1. High degree of restrictions on movement shown in red, then yellow and white with none. Most recent data is from 3rd December.
2. Calculation for each region's index is based on weighting of nominal GDP (purchasing power parity basis)
Source: Oxford University (Hale, Thomas, Sam Webster, Anna Petherick, Toby Phillips, and Beatriz Kira (2020). Oxford COVID-19 Government Response Tracker, Blavatnik School of Government), IMF, MUFG Bank Economic Research Office

Movement Restrictions by Country and Region

Country	Content
Japan	After restrictions were placed in some municipalities in summer, they were removed and a govenrment-backed "Go To" campaign was introduced to shore up consumption but case resurgence starting in November forced tightening of restrictions such as rewinding of the campaign and a request to shorten business hours.
China	Domestic cases have been curbed for the most part, but some "imported" cases have appeared on occasion.
Asia	Cases continue to increase in India, Indonesia and the Philippines. Malaysia has seen a resurgence. Restrictions are being kept in place for longer than initially planned in several countries.
US	After the first wave, southern states that rushed to reopen their economies saw a resurgence of cases for a time starting in July. After that, infection was curbed across the country. However, in October, cases started rising again and states tightened restrictions again starting late October.
Europe	Restrictions were eased gradually starting in May but cases resurged in France, Spain, UK among others. France and UK reimposed restrictions on going out for about a month, and other major countries placed restrictions on restaurant operations during the evening and on the number of people allowed to gather.

Source: Various news reports,
MUFG Bank Economic Research Office

1. Overview: Assumptions based on the Pandemic – Developments in Medical and Epidemiological Knowledge

- As for treatments, although trials have been conducted using existing anti-viral medication and other treatments for severely ill patients, there is no specific cure for COVID-19 (that said, the number of deaths was lower in the second wave compared to the first wave, suggesting medical institutions' knowledge about treating symptoms has improved).
- Some vaccines have completed clinical trials and obtained approval which means inoculation will begin this year, fuelling hopes that the pandemic can be suppressed. However, challenges for mass production and distribution still remain. There are also still questions about the effectiveness and potential side effects when vaccines are given to hundreds of millions of people.
- Varying theories exist about the possibility of developing herd immunity through natural infection to raise the proportion of population with antibodies. Regarding the low death rates in Eastern and Southeast Asia, there are different hypotheses, including cross immunity from seasonal infection of other coronaviruses and immunity from taking the BCG vaccine and other live vaccines.
- For now, the spread of the virus is expected to be gradually contained over the medium-to-long term via public health measures that are compatible with economic activity, and the treatment of symptoms (the assumption is that vaccines will not have a drastic effect). That said, recent increases in rates of infection in the northern hemisphere during the winter season must be watched closely.

Developments Related to Treatments and Vaccines	
Trump's Operation Warp Speed	■ Aims to widely distribute vaccines to US population by Jan 2021. ■ Federal government to strengthen involvement at all three stages including development, production and distribution. ■ Biden team reportedly met with pharmaceutical companies in Sep and Oct, a sign that the new administration will generally maintain the same approach.
Development of cure for COVID-19	■ Confirmed cure still does not exist. ■ Initial approach has been to use existing anti-viral medication and treatments for severely ill patients, and some new drugs are also being developed. ■ Medical institutions' knowledge about treatment of symptoms is improving
Vaccine Development	■ According to the WHO, 163 pre-trial vaccines were in development as of 2 December, 51 vaccines have started clinical trials, and 13 of these in Phase 3 (P3), including: ■ Pfizer (US) and BioNTech (German) mRNA vaccine (The vaccine has obtained emergency-use authorisation in the UK and immunisation will reported begin as soon as 7 December. Request for Emergency Use Authorization has been submitted to US FDA, which may grant it in first half of Dec. for immunisation to start by end of the year. EU's Medicines Agency also received request.) ■ Oxford University/AstraZeneca (British) viral vector vaccine ■ Sinova (Chinese) inactivated vaccine ■ Moderna (US) mRNA vaccine

Source: Various news reports, MUFG Bank Economic Research Office

Latest Findings about the Nature of Infection (Herd Immunity)	
Japan	■ A research team at Yokohama City University confirmed that 98% of infected people maintained neutralizing antibodies to prevent reinfection after six months (2 Dec).
Sweden	■ The country aimed for herd immunity and avoided a lockdown, but state epidemiologist Tegnell – responsible for COVID-19 policies – said herd immunity may not be achieved without a vaccine (2 Nov)
Brazil	■ A preprint medical paper stated that the spread of infection had calmed in the Manaus area of Brazil after a sharp rise in cases. The area may have achieved herd immunity with an estimated 66% of the population with antibodies according to a mathematical model (Sep)
WHO	■ Director-General Tedros Adhanom ruled out herd immunity as an approach to fight Covid-19 (12 October)

Social Distancing Efforts	
Japan	■ COVID-19 tracing app (COCOA) released (19 Jun). Around 21.01 million downloads as of 17:00 on 3 Dec. Reported aim is to increase usage to at least 60% of population.
EU	■ EU began joint operations of Covid-19 tracing app involving Germany, Ireland and Italy after a system test in Sep 2020. Participating countries are expected to increase (October).

Source: Various news reports, MUFG Bank Economic Research Office

1. Overview: Medium and Long-Term Outlook (COVID and Post-COVID Eras)

- Irreversible structural changes are expected across policy, demand and supply as governments, businesses and individuals change their mindset and behavior after reflecting on the vulnerabilities of the economy and society brought to light by Covid-19.

COVID-Related Changes in Economy / Society

	Government	Businesses	Individuals
Supply Chain Vulnerabilities	■ Moving back production of key supplies from other countries ■ Support to businesses moving their operations back home	■ Re-examination of global supply chains ✓ Bring operations back home (especially for key supplies) ✓ Diversify to multiple regions	■ The need to control demand for key goods when supply is tight
Importance of Life Security	■ Whether to reserve support for government fundraising, cash distribution etc. as last resort	■ Steps to curb infection in workplaces ■ Performance of businesses and industries facing a decline in demand	■ Changes in demand structure ✓ Decline in demand for services – avoidance of face-to-face and 3Cs ✓ Change in lifestyle in urban areas with high population density
Increased Use of Digital Technology as a Lifeline	■ Digitalisation of public administration infrastructure ■ Data utilisation vs protection of freedom for individuals	■ Comprehensive digitalisation efforts ■ Work-from-home, automation, efficiency boost ■ Nurturing new industries in digital arena ■ Data utilization vs protection of freedom for individuals	■ Work-from-home ■ Preference for online services ■ Data utilisation vs protection of freedom for individuals
Need to Strengthen Crisis Management and Preparedness	■ Balancing public health and economy ■ Strengthening healthcare system ■ Drawing a line between public aid and individuals' self preparation	■ Cash management at a time of crisis (retained earnings as a buffer against loss) ■ Refining business continuity plans	■ Setting aside emergency money to live on in a crisis ■ Softer (human) side of care
Changes in Domestic and International Order	■ Change in US administration (Republican to Democratic) ■ US-China conflict intensify further ■ International cooperation vs unilateralism ■ Going green	■ Running business on assumption that international travel is restricted. ■ Impact of international conflicts on business operations ■ Going green	■ Restrictions on freedom of movement ■ Impact of international conflicts on people's day-to-day lives

Source: Various news reports, MUFG Bank Economic Research Office

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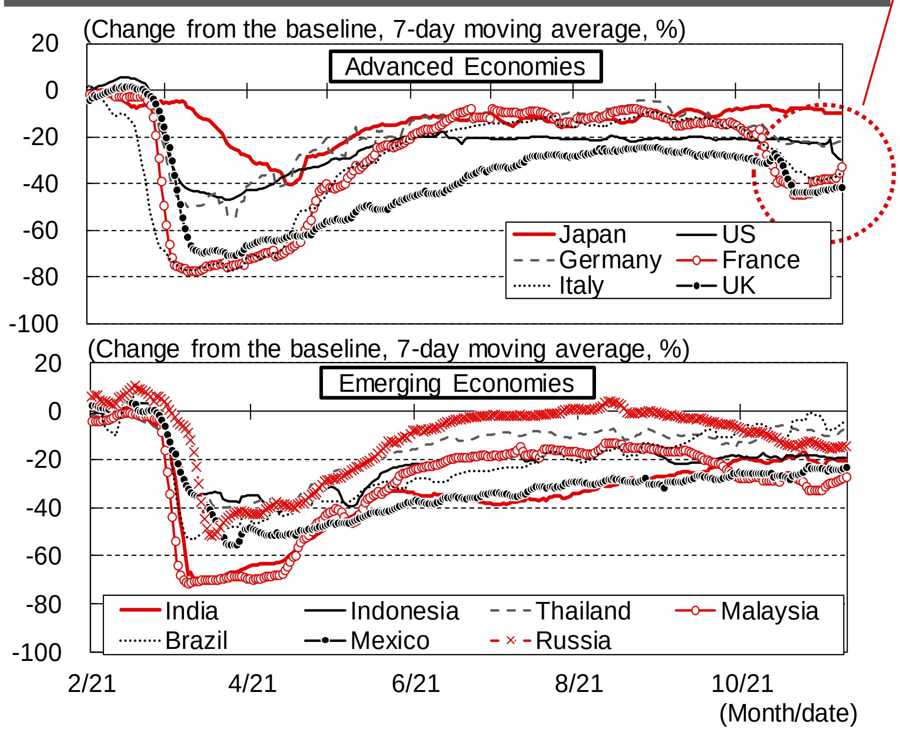
2. Key Points of the Outlook:COVID-19 and High-Frequency Data (Developed Countries)

- Mobility trend data shows that the economic recovery observed in the second half of the April-June quarter and in the July-September quarter has run its course. In Europe, where governments tightened restrictions on activities due to a resurgence in cases, mobility trends have declined significantly again (note: data is still relatively new so seasonal factors may be contributing to the declines as well).
- In the US, where cases are increasing, weekly retail sales data shows that face-to-face services has been flat since summer and is still below February 2020 levels. Overall consumer spending may take some time to return to normal levels.
- In Europe, which has been hit by a second wave, France's power consumption plunged into negative figures YoY at one point as the country put in place the strictest public health measures in the region. The European economy as a whole may contract again in the October-December quarter.

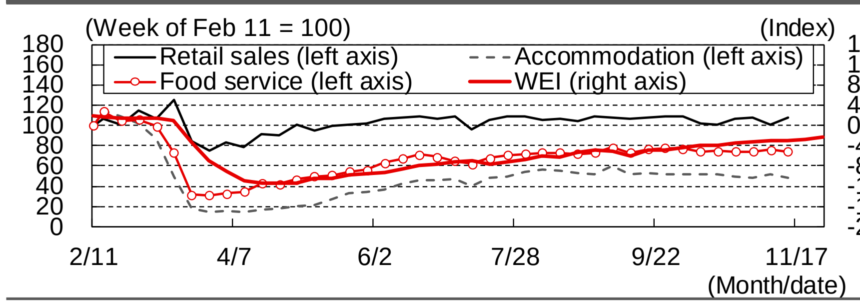
Seasonal factors may be contributing as well

Mobility Trend
(Retail and recreation / grocery and pharmacy / transit / workplaces)



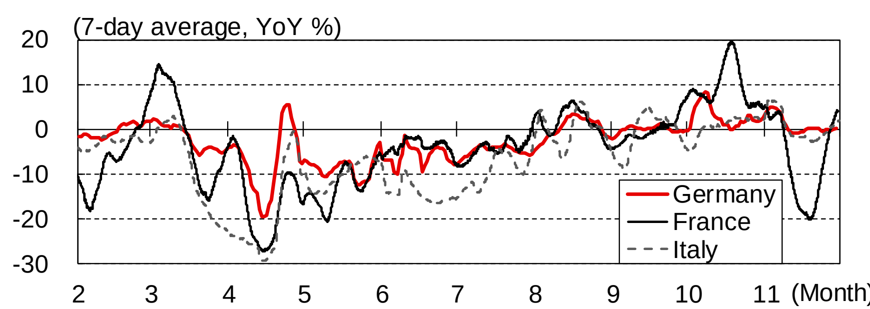
Note: Baseline is calculated using data from 3rd Jan to 6th Feb.
Source: Google, MUFG Bank Economic Research Office

US Weekly Retail Sales and Weekly Economic Index (WEI)



Note: WEI is calculated by Federal Reserve Bank of New York based on economic indicators on jobs, consumption etc., scaled to align with the four-quarter GDP growth rate
Source: Department of Commerce, FRB New York, MUFG Bank Economic Research Office

Daily Power Consumption in Major Eurozone Economies



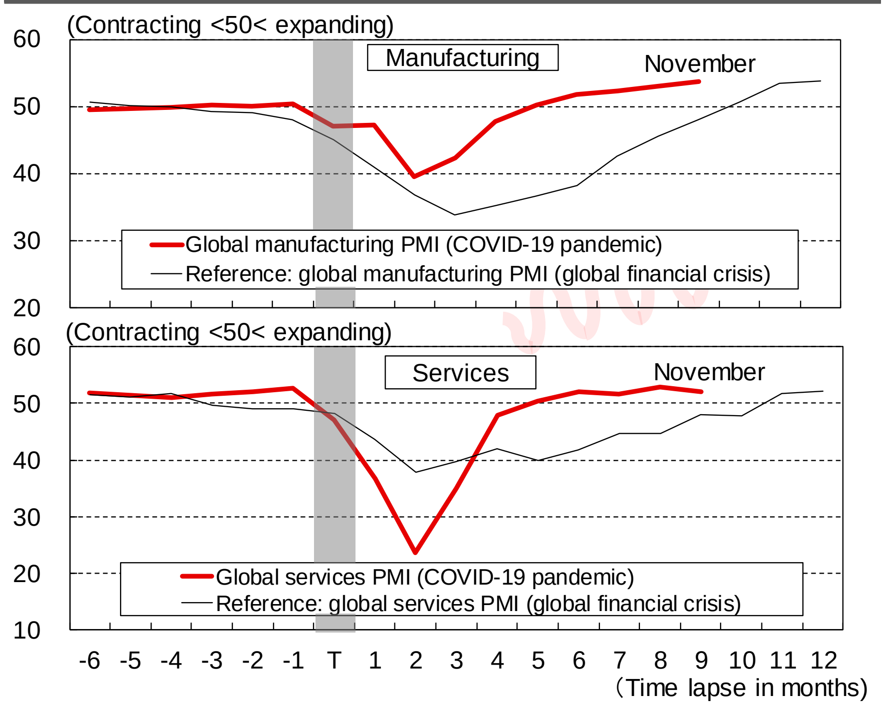
Source: Deutsche Bundesbank, European Network of Transmission System Operators for Electricity, MUFG Bank Economic Research Office

2. Key Points of the Outlook: Business Sentiment and Consumption

- Business sentiment, as measured by PMI, rebounded after bottoming out in April 2020. The contraction in face-to-face service activities did lead to a sharp decline in service PMI earlier, but the index has rebounded to pre-pandemic levels. Still, PMI simply tracks the direction of month-to-month changes (contracting or expanding), so their readings tend to be higher during a recovery phase. Reactions to a third wave of infection should be watched closely.

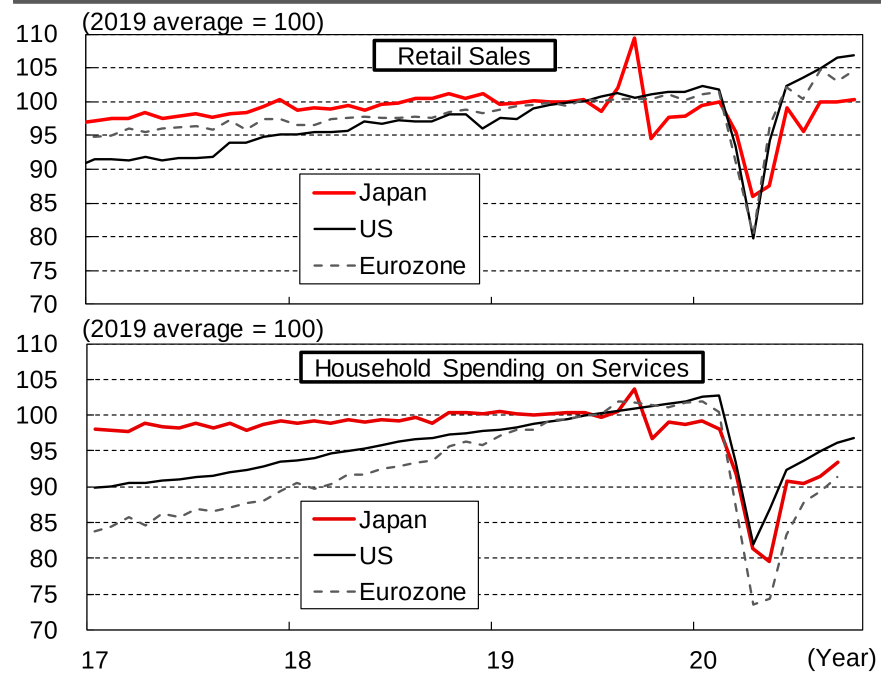
- As for actual levels of economic activity (consumer spending, investment, production etc.), many indicators are still below pre-pandemic levels. Retail sales in advanced economies have rebounded relatively quickly thanks in part to pent-up demand after restrictions were eased. Yet with caution lingering over a resurgence in cases, the recovery status of retail sales varies widely from category to category and overall retail sales have not yet normalised. Household spending on services has been slow to recover in many countries and regions, especially for face-to-face services, and has not rebounded to 2019 levels.

Manufacturing and Services PMI (Global)



Note: T for global financial crisis is September 2009 (collapse of Lehman Brothers) and T for COVID-19 pandemic is February 2020.
Source: IHS Markit, MUFG Bank Economic Research Office

Retail Sales and Service Spending in Major Advanced Economies

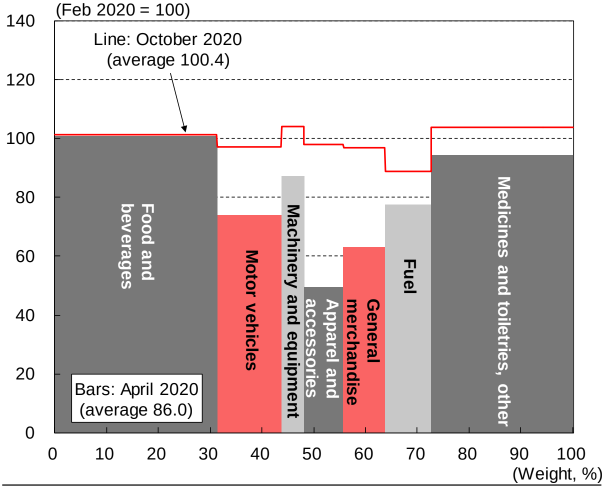


Source: Statistics from each country, MUFG Bank Economic Research Office

2. Key Points of the Outlook: Consumption Trends by Country (Retail Sales)

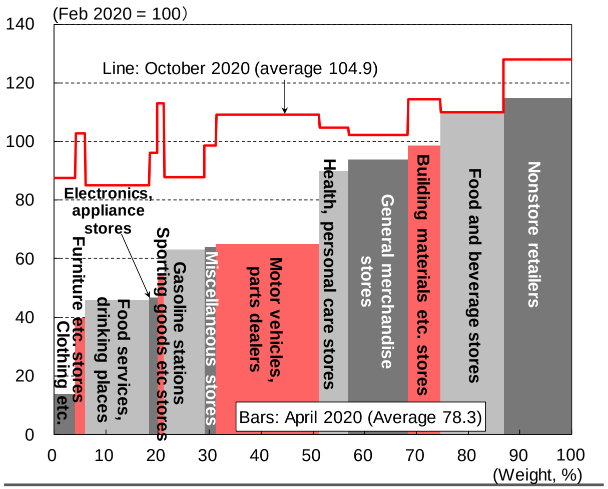
- Retail sales – mostly consumer spending on goods – have rebounded relatively quickly (US and Eurozone retail sales have rebounded above 2019 levels).
- However, as caution remains over a potential resurgence in infections, the level of recovery varies widely from category to category, and retail sales as a whole have not yet normalized.
- In China, where the economic recovery has been quick, the domestic passenger count during the National Day holidays in October was unusually low, suggesting service spending is slow to recover.

Japan Retail Sales by Category



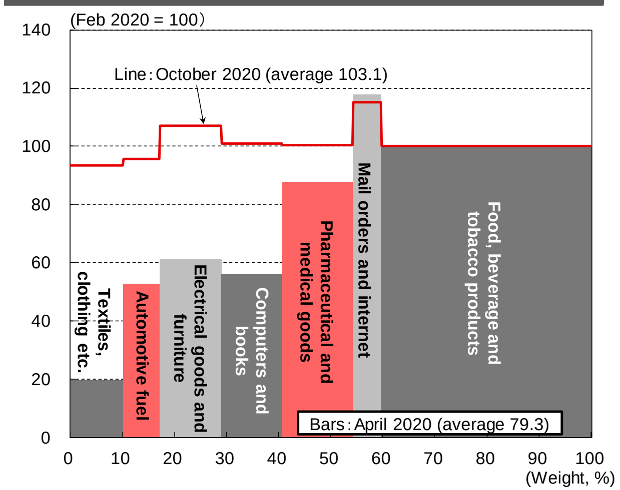
Source: Ministry of Economy, Trade and Industry, MUFG Bank Economic Research Office

US Retail Sales by Category



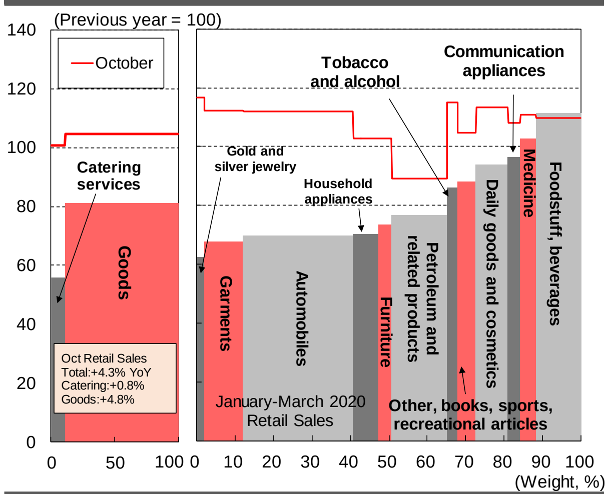
Source: Department of Commerce, MUFG Bank Economic Research Office

Eurozone Retail Sales by Category



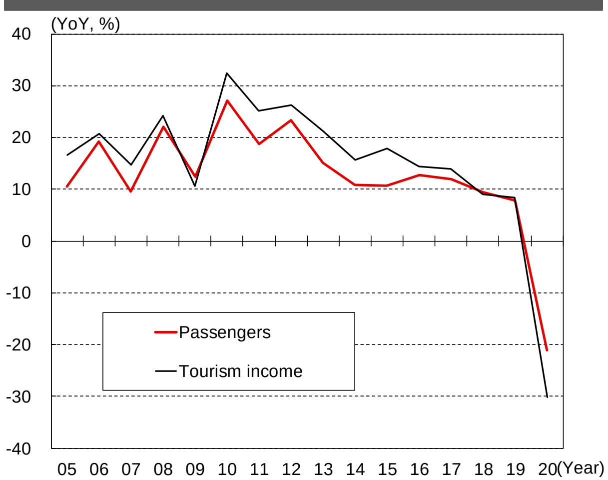
Source: Eurostat, MUFG Bank Economic Research Office

China Retail Sales by Category



Note: Sales by category are publicised only for businesses with annual revenue of 5 million yuan or more.
Source: National Bureau of Statistics of China MUFG Bank Economic Research Office

China Domestic Passengers and Tourism Income During National Day Holidays

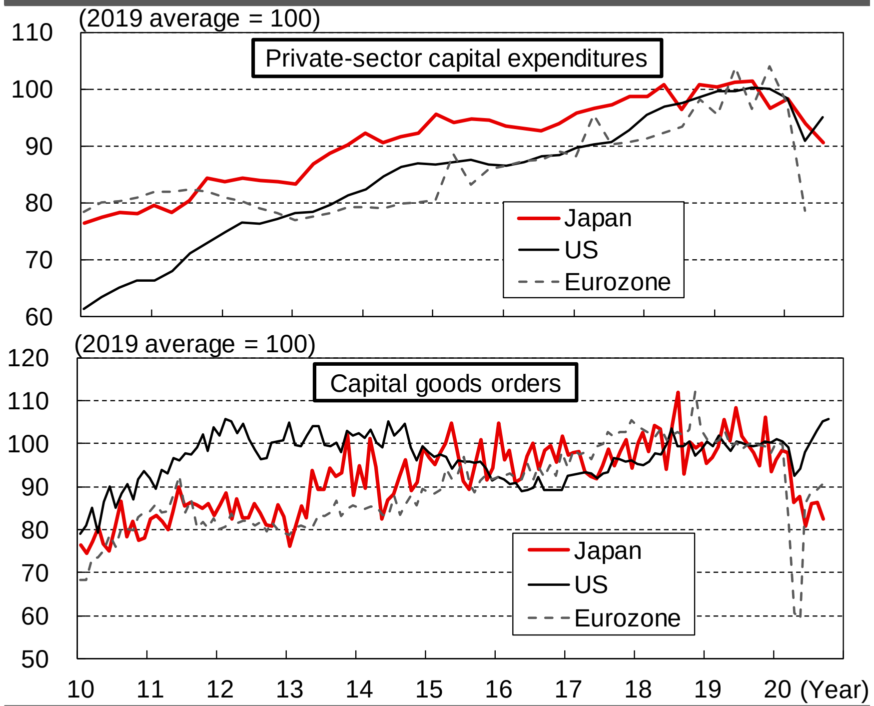


Source: Ministry of Culture and Tourism, MUFG Bank Economic Research Office

2. Key Points of the Outlook: Capex and Production (Developed Countries)

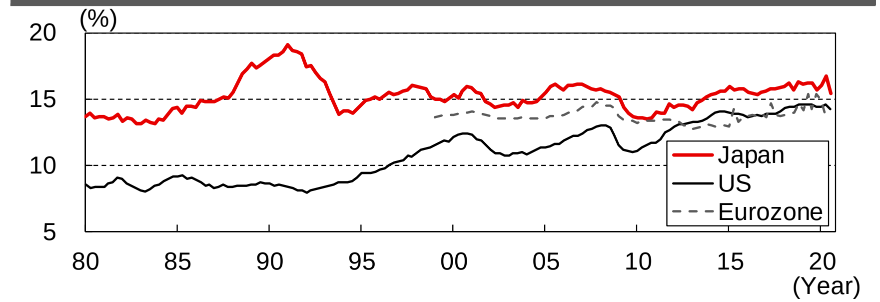
- Private-sector capital expenditures (capex) in major developed economies declined sharply in the April-June quarter owing to restrictions on activities. In the July-September quarter, US capex rebounded as restrictions were relaxed, whereas Japan capex declined further even after the state of emergency ended (US private-sector capex is still 4.8% lower than 2019 average). Capital goods orders – a leading indicator of capex – show US orders recovered to historically high levels while Japan and Eurozone orders are still around 80-90% of their 2019 averages.
- The goods economy has recovered relatively quickly, but the service economy has been facing a decline in demand, mainly for face-to-face services. There appears to be a surplus of capital stock, and with persistent uncertainty about the future, the pace of capex recovery will likely be moderate. As for capex as a percentage of GDP, the readings remain higher in major developed economies than during past recessions, as GDP declined sharply during the latest recession.
- Investment in intellectual properties has been faring relatively well thanks to a rise in demand due to accelerated digitalisation and changes in people's behaviour. This category of investment will likely bolster overall private-sector capex. Green investment may also buoy capex in the future (depending on policy decisions) in countries like the US, where a new government will be launched in January.

Private Capital Expenditures and Capital Goods Orders



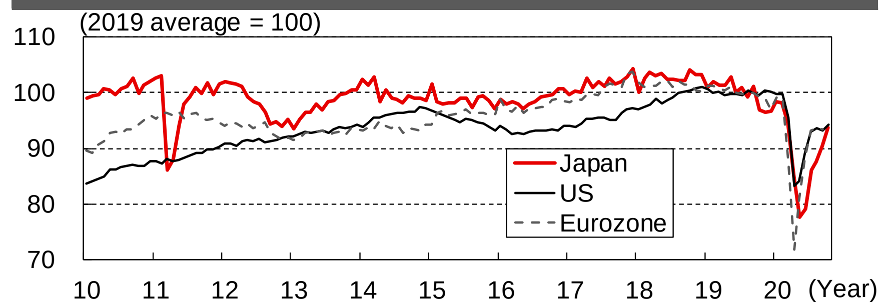
Note: Capital goods orders for Japan are private-sector machinery orders excluding for ships and from power companies; for US are nondefense capital goods excluding aircraft; for Eurozone are manufacturing capital goods new orders.
Source: Japan Cabinet Office, US Department of Commerce, Eurostat, MUFG Bank Economic Research Office

Private Capital Expenditures as Percentage of GDP



Source: Japan Cabinet Office, US Department of Commerce, Eurostat
MUFG Bank Economic Research Office

Industrial Production

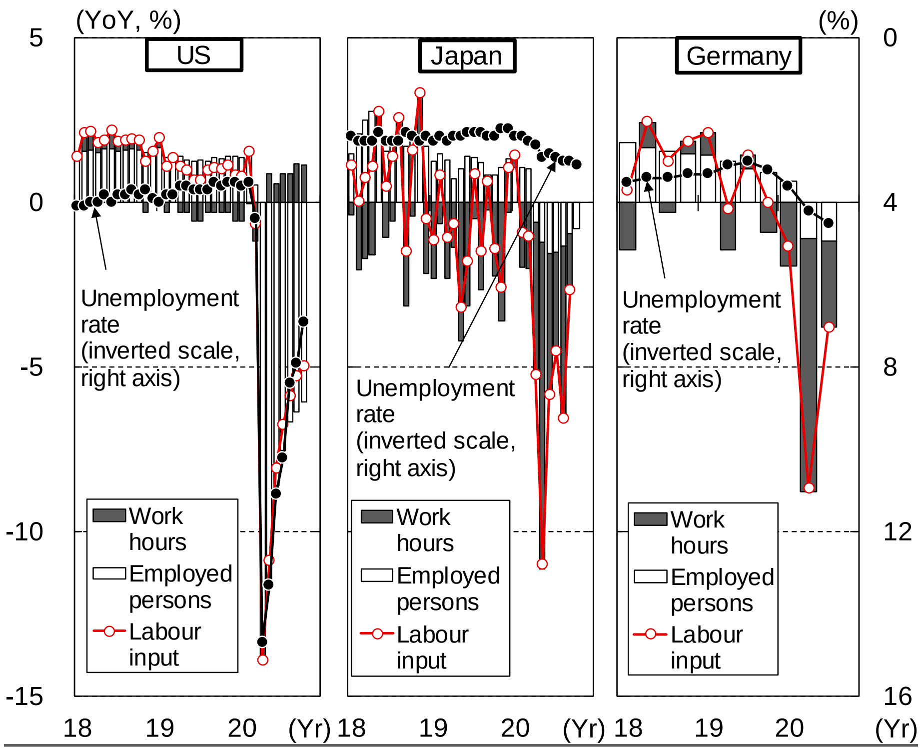


Source: Japan Ministry of Economy, Trade and Industry, US Federal Reserve, Eurostat, MUFG Bank Economic Research Office

2. Key Points of the Outlook: Labour (Developed Countries)

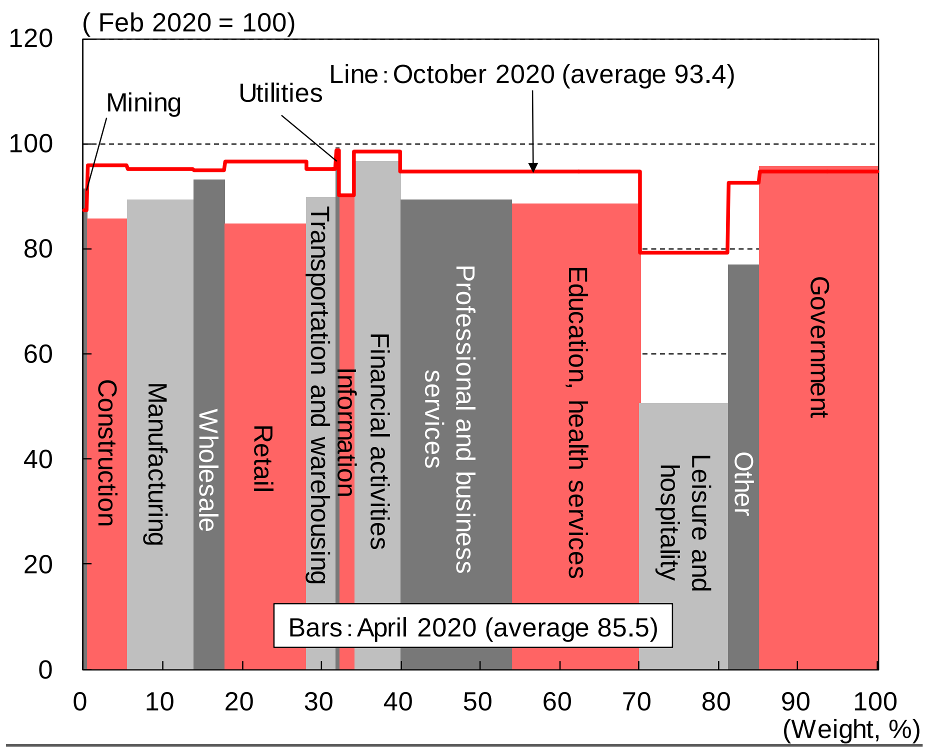
- Employment situations worsened differently by country. In the US, the number of employed persons decreased first, while in Japan and Europe, work hours decreased first. In all three economies, labour input (calculated based on employed persons and work hours) decreased by around 10% YoY at one point. The unemployment rate in the US rose to 14.7%, the worst in post World War II era, in April. In Japan and Europe, unemployment rates have risen moderately.
- Developed economies are recovering after hitting their lowest point in the April-June quarter and employment situations are also improving, although they are still worse than before the pandemic. As shown in the breakdown of US nonfarm payroll, the industries hit severely continue to face difficult conditions. For instance, in the leisure and hospitality industry, including food service and accommodation, employment is still around 80% of pre-pandemic levels. These industries will need continued economic relief measures or structural adjustments going forward.

Labour Input in US, Japan and Germany



Note 1: For Japan, work hours are from Monthly Labour Survey (establishment-based), employed persons are from Labour Force Survey (household-based).
2: Germany's labour input and unemployment rate are quarterly readings.
Source: National statistics from each country, MUFG Bank Economic Research Office

US Nonfarm Payroll

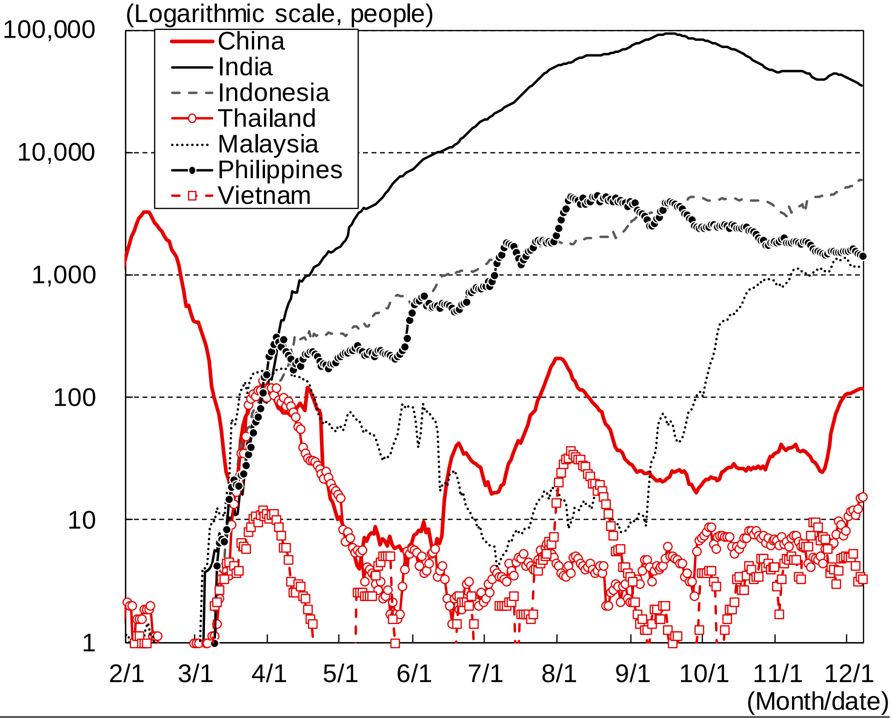


Source: Department of Labor, MUFG Bank Economic Research Office

2. Key Points of the Outlook: Newly Emerging Countries

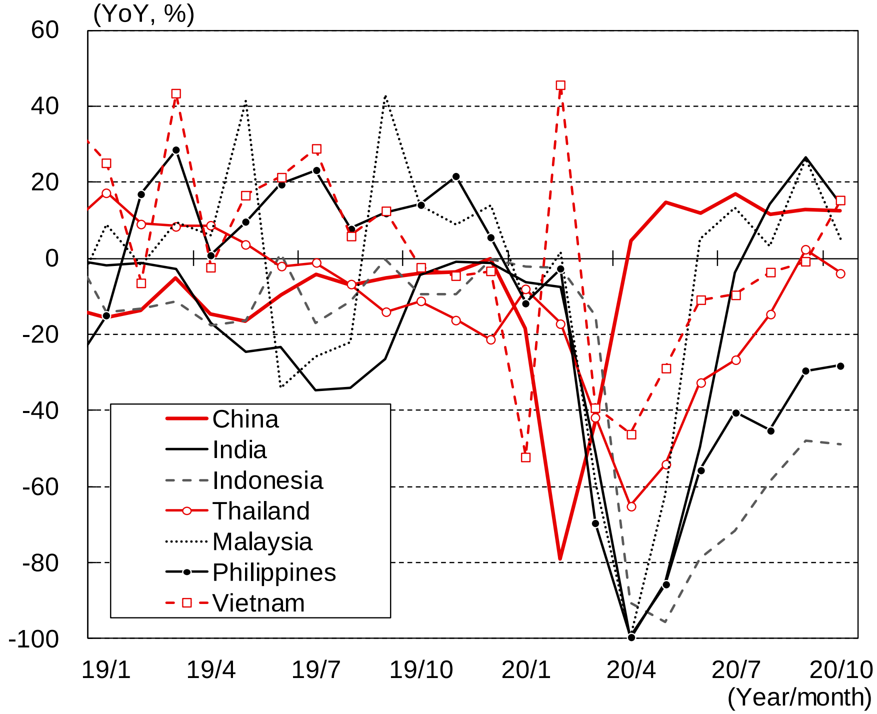
- China, Thailand and Vietnam have relatively low levels of new cases, while other emerging economies such as India, Indonesia and the Philippines have high levels.
- The number of automobile sales has rebounded above prior year levels in countries where the infection has been curbed. This is especially true in the case of China, where thanks in part to policy measures to spur automobile demand, the sales have increased YoY for seven straight months. Meanwhile in Indonesia and the Philippines, where the new case count is still high, auto sales have experienced a double-digit decline from the previous year.
- India has the highest number of daily new cases in Asia, at around 40,000, but its number of auto sales grew for the three months up to and including October as a result of limited sales the prior year due in part to financing issues for vehicle buyers.
- In other emerging economies such as those in Central and South America and Africa, the new case count is still high (there are fewer new cases than before in countries like Brazil and South Africa, but this may be related to the fact that these regions are currently in their summer season).

New Cases of Infection in Asia



Note: Weekly moving average.
Source: World Health Organization, MUFG Bank Economic Research Office

Number of Automobile Sales in Asia

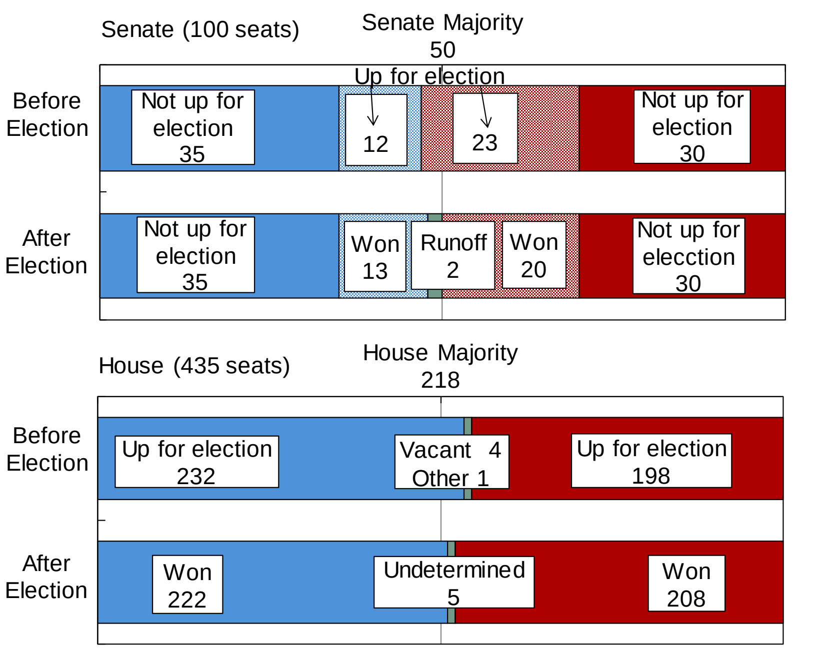


Source: Statistics from each country, MUFG Bank Economic Research Office

3. Points of Uncertainty: US Politics and Policy (Presidential and Congressional Elections, Policies of the New Administration

- Joe Biden of the Democratic Party has secured victory at the presidential election. In Congress elections, the Republican Party has secured 50 of the 100 seats in the Senate and will need to win just one of the two seats available in the runoff elections in Georgia state on 5th January in order to gain control of the Senate. The Democratic Party has secured control of the House of Representatives with 222 seats.
- Our forecast assumes Biden will be the next president, Republicans will control the Senate and Democrats the House. As a result, it will be difficult to carry out policies on which the two parties' views differ considerably. Within the Democratic Party, the centrist-leftist divide may intensify again.
- <u>Investment in clean energy:</u> a key point of contention during the elections and two parties' views on this matter differ considerably. The Biden administration will likely swing back to international cooperation on environmental issues, but with a split Congress, it is unlikely these investments will provide a meaningful boost to economic growth.
- <u>Strengthening the manufacturing sector</u>: a campaign promise of both parties. Tax benefits and trade policy are among the possible methods.
- <u>Additional economic relief (COVID-19 related)</u>: the two parties' views differ widely on the scale. Large scale pushed by Democrats may not materialise.
- As was seen with the naming of former Fed Chair Janet Yellen as the next Treasury Secretary, many members of Biden's Cabinet will likely be those with abundant experience. Moves by leftist members of the Democratic Party should be watched closely.

Congress Election



Note: Information as of 4 December.
Source: Various news reports, MUFG Bank Economic Research Office

Policy Agenda of Incoming Biden Administration

Clean Energy, Other Investments ($2 trillion)	$2 trillion spending on environmental conservation, agriculture, clean technology innovation, transportation infrastructure, broadband, auto industry (electric cars, zero-emission buses, new fuel efficiency standards), power sector (energy efficiency, carbon-free power sector), buildings and residences etc. **Needs approval from Congress**
Manufacturing boost ($700 billion)	Thorough implementation of Buy America, revitalisation of US manufacturing sector, promotion of research and development, tax benefits, trade policy and other steps to support workers in US manufacturing sector. Bring back key supply chains to the US. **Needs approval from Congress**
Employment	・Create millions of jobs with clean energy and other investment. ・Raise federal minimum hourly wage to $15. ・All workers to get 12 weeks of paid family and medical leave
Tax Policy	・Rewind Trump tax cuts (corporate income tax: 21% → 28%) ・Reform tax system for fairer and more progressive taxation, based on notion that the rich should shoulder more of tax burden **Needs approval from Congress**
Trade Policy	Trump administration's trade war with China had no plans. New administration counterbalance China together with allies to sharpen negotiation edge and repay the damage incurred to US farmers.
Regulations, industry	・Large-scale mergers and virtual monopoly in wide variety of industries are a source concern. ・Strengthen the Dodd-Frank Wall Street reform act passed under Obama-Biden administration

Source: joebiden.com, Democratic Party policy platform,
MUFG Bank Economic Research Office

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3. Points of Uncertainty: Future of the US-China Conflict

- The US-China conflict involves many matters beyond trade and it intensified further in 2020 over issues such as the responsibility over the COVID-19 pandemic, Hong Kong and South China Sea disputes, and bans on transactions involving certain Chinese companies. As US public sentiment about China soured quickly, the US government and Congress often took a hard line on China, who then retaliates.
- President-elect Biden has taken a hard-line stance on China, so the conflict is expected to continue. On trade, Biden has said US will not impose punitive measures against China, but he did mentioned the need to establish trade rules with other democracies. On human rights issues, Biden has criticised the treatment of Uighur minorities and Hong Kong by China's government.
- Biden has named high ranking officials from the Obama administration as Secretary of State and National Security Advisor. The Biden administration will likely seek international cooperation with US allies but its foreign policy will not be a simple reversal to policy under the Obama administration as international relations have changed substantially from four years ago, including US-China relations.

Chronology of US-China Conflict

Issue	US	China
May	• US tightens restrictions on imports from Huawei • US Congress enacts Uighur human rights bill (President Trump signed in June)	• China strongly opposes the bill, calling it a "severe interference" in internal affairs
June		• China enacts Hong Kong Security Law
July	• US State Secretary Pompeo rejects China's claims in South China Sea • US Congress enacts Hong Kong Autonomy Act, which includes financial sanctions • US closes Consulate General of China in Houston	• China strongly opposes Pompeo's remarks • China announces retaliation to US individuals and groups • China closes Consulate General of US in Chengdu
Aug	• US imposes sanctions on 11 individuals including Hong Kong Chief Executive Carrie Lam • US Secretary of Health and Human Services visits Taiwan	• China imposes sanctions on 11 US individuals including lawmakers • China opposes US Secretary of Health and Human Services' visits to Taiwan
Sept	• US cancels visas of over 1000 Chinese • Under Secretary of State visits Taiwan and met with Tsai Ing-wen	• China opposes the US Under Secretary of State visit to Taiwan
Oct	• US State Department approves arms sales to Taiwan	• China passes Export Control Law, which took effect on 1 Dec • China's government says it will impose sanctions on companies and individuals involved in arms sale to Taiwan
Nov	• US President's Executive Order bans investment in Chinese companies deemed to be supported by the Chinese military	• China's foreign affairs office announces strong opposition to the US oppression of Chinese companies

Source: Various news reports, MUFG Bank Economic Research Office

President-Elect Biden's Comments related to China in Manifesto

Issue	Remarks
Trade	"Trump's go-it-alone trade war and empty 'phase one' deal with China has been an unmitigated disaster, inflicting maximum pain on American workers and farmers, while doing nothing to curb Beijing's trade abuses." "Take aggressive trade enforcement actions against China or any other country seeking to undercut American manufacturing through unfair practices" "Biden will focus our allies on addressing overcapacity in industries, ranging from steel and aluminum to fiber optics to shipbuilding and other sectors, and focus on the key contributor to the problem – China's government."
Intellectual property rights	"China's government and other state-led actors have engaged in an assault on American creativity" "Biden will set forth clear demands and specific consequences if China's government does not cease cyber espionage against U.S. businesses, and will develop new sanctions authorities against Chinese firms that steal U.S. technology that cut them off from accessing the U.S. market and financial system."
Technology dominance	"To win the competition for the future against China or anyone else, we must sharpen our innovative edge and unite the economic might of democracies around the world to counter abusive economic practices."
Environment	"Stop China from subsidizing coal exports and outsourcing carbon pollution. China is far and away the largest emitter of carbon in the world"
Supply chain	"Joe Biden will work to ensure that the US does not face shortages of the critical products America needs in times of crisis and to protect our national security…" The US should not "be dependent on critical supplies from countries like China"

Source: joebiden.com, MUFG Bank Economic Research Office

3. Points of Uncertainty: Brexit

- The UK and EU are negotiating a trade agreement with a plan to not extend the transition period which will come to a close at the end of 2020. However, the talks have stalled due to disagreements on: 1) limiting state-aid subsidies for fair competition; 2) EU member states' fishing rights in UK waters; and 3) governance rules on dispute resolution.
- Both sides have an incentive to limit additional economic and social burdens on society, so a no-deal end of the transition period in 2020 will likely be avoided by combining a limited trade deal with transitional measures (gradual shift to new rules, applying existing rules temporarily to areas still being negotiated, etc.). That being said, there is still a risk that the two sides will abandon negotiations due to the time constraints and will give higher priority to dealing with the COVID-19 pandemic.
- Over the short term, failure to reach a trade agreement would cause the UK's real GDP growth rate to fall by just 1-2% points: a rather muted impact compared with the impact of COVID-19 (without a deal, the 2021 growth rate is projected at 3.5% YoY). Nevertheless, over the medium-to-long term, the UK's potential growth rate may be affected significantly by tariffs on trade with EU member states, which accounts for half of the UK's exports and imports, and the fact that the country will lose its edge as a gateway to the EU in attracting foreign investment.

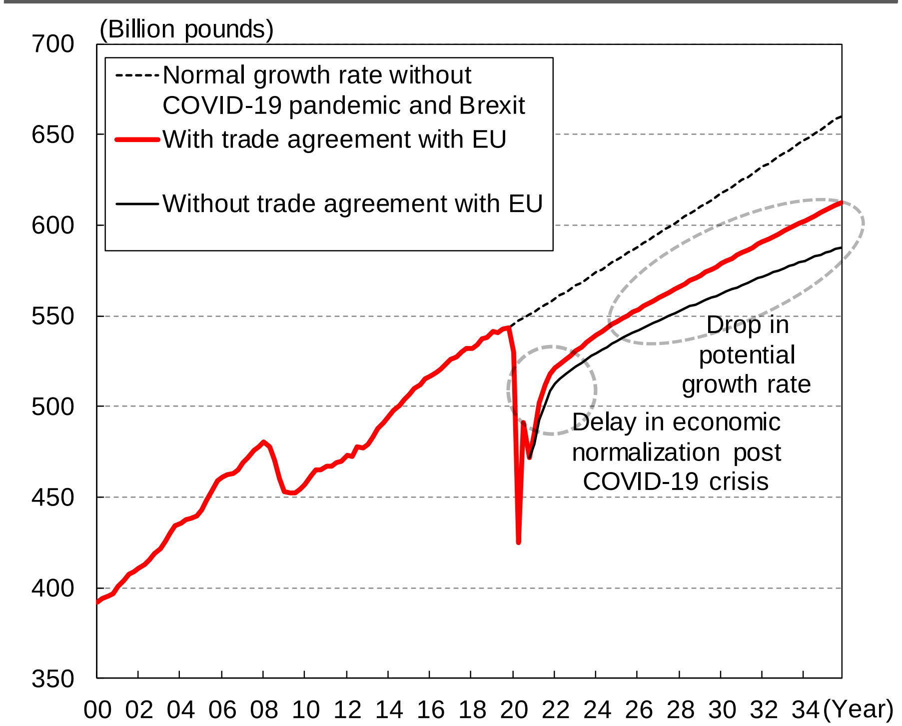
Trade Talks Key Milestones ,Scenarios for End of Transition Period

15-16 Oct	European Council Summit : UK-demanded negotiation deadline
31-Oct	EU-demanded negotiation deadline
23-26 Nov	European Parliament meeting : a trade deal to take effect at the start of 2021 needs to be approved by this time
10-11 Dec	European Council Summit : Key issues need to be agreed by this time, including whether to extend the transition period
14-17 Dec	European Parliament meeting : final approval deadline for a trade agreement
31-Dec	Scheduled end of transition period

<table>
<tr><td>Trade pact</td><td>Comprehensive trade pact reached (0%)</td><td colspan="2">Limited-scope trade pact reached (55%)</td><td colspan="2">No trade pact reached (45%)</td></tr>
<tr><td>Transi-tion period</td><td>Ends (0%)</td><td>Extends partially/ in effect (40%)</td><td>Ends (15%)</td><td>Extends (10%)</td><td>Ends (35%)</td></tr>
<tr><td>New trade pact</td><td>Take effect [broad scope]</td><td>Takes effect [limited-scope] (with transitional means)</td><td>Take effect [limited scope]</td><td rowspan="2">Talks continue</td><td rowspan="2">WTO rules
Orderless transition period ends</td></tr>
<tr><td>Remai ning issues</td><td>WTO rules [limited scope]</td><td>WTO rules or talks continue [broad scope]</td><td>WTO rules [broad scope]</td></tr>
</table>

Source: Various news reports, MUFG Bank Economic Research Office

Growth Path Simulations for UK Real GDP



Source: Office of National Statistics, MUFG Bank Economic Research Office

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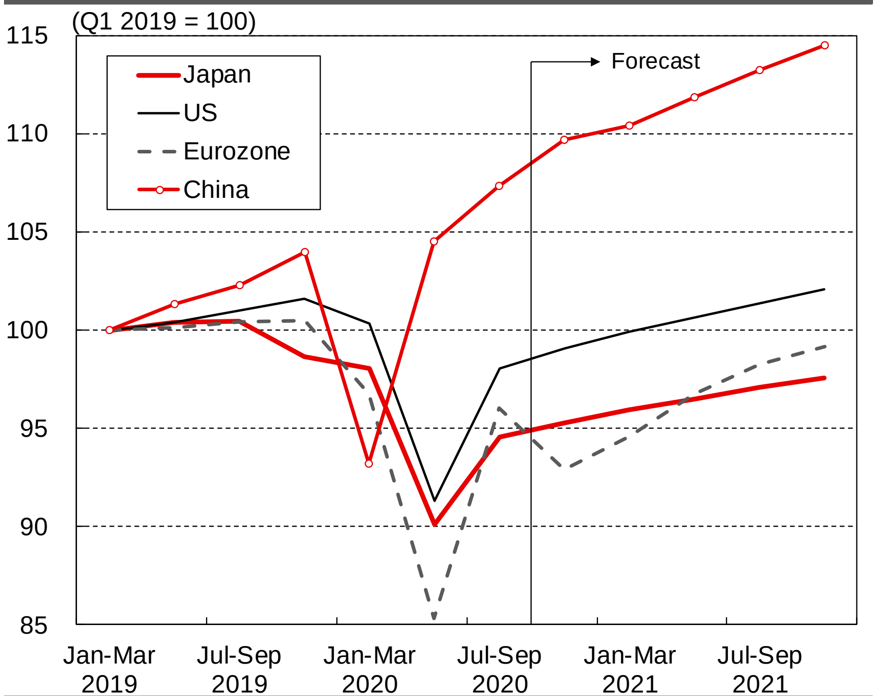
4-1. Overview

- The global spread of COVID-19 and the strict public health measures put in place to stop it led to a restriction and reduction of economic activities in many countries and regions, and the economies slumped considerably in the April-June quarter. However, in the July-September quarter, economic activities were re-started as measures were eased and growth has picked up quickly in many countries. Nevertheless, there appears to be another rise in cases in developed countries in the northern hemisphere, with some countries tightening their restrictions on movement again, such as the UK and France, which both imposed another lockdown. In emerging economies, cases remain at a high level. Until there is a widespread distribution of a highly-effective COVID-19 vaccine, the downward pressure from the pandemic on economic activities is forecast to continue.
- There are currently a number of vaccines in development which offer a high level of protection and although there are high expectations that significant progress will be made in developing a viable vaccine next year, it is unclear if they will have a marked impact next year considering the time necessary to manufacture and distribute the vaccines. For the time being, it seems very likely that the pace of economic recovery will be gradual from the October-December quarter onwards while countries search for a balance between controlling the virus and maintaining economic activity. Additionally, depending on the state of the pandemic, there is a possibility that growth may turn negative for a while in some countries or regions.
- Although several countries and regions have changed the scale and contents of their monetary and financial policies put in place to support incomes and financing for households and businesses, they will remain in place for the most part.
- In light of the above, the global real GDP growth rate is forecast to be -3.9% YoY in 2020 and 5.1% YoY in 2021.

Real GDP Forecast for Major Countries and Regions



Source: National statistics of each country/region, MUFG Bank Economic Research Office

Forecast for the Global Economy (Major Countries and Regions)

■ Real GDP growth rate (%)	2019	Economic Research Office Forecast 2020	Economic Research Office Forecast 2021	IMF Forecast (October) 2020	IMF Forecast (October) 2021
World	2.7	- 3.9	5.1	- 4.4	5.2
US	2.2	- 3.5	3.9	- 4.3	3.1
Eurozone	1.3	- 7.5	4.8	- 8.3	5.2
UK	1.3	- 11.6	5.2	- 9.8	5.9
Japan (fiscal year)	0.0	- 5.4	3.5	-	-
Japan (calendar year)	0.7	- 5.3	2.4	- 5.3	2.3
Asia (11 countries)	5.0	- 1.4	7.1	- 2.0	7.5
China	6.1	1.8	8.5	1.9	8.2
ASEAN (5 countries)	4.9	- 3.3	6.0	- 3.4	6.2
Indonesia	5.0	- 1.8	5.6	- 1.5	6.1
Thailand	2.4	- 5.8	4.1	- 7.1	4.0
Malaysia	4.3	- 6.2	7.7	- 6.0	7.8
The Philippines	5.9	- 8.1	7.6	- 8.3	7.4
Vietnam	7.0	2.7	6.8	1.6	6.7

Note: Economic Research Office's outlook calculated as of 4th December
Source: IMF, MUFG Bank Economic Research Office

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4-2. Financial Market Trends: Outlook for US and Japanese Interest Rates

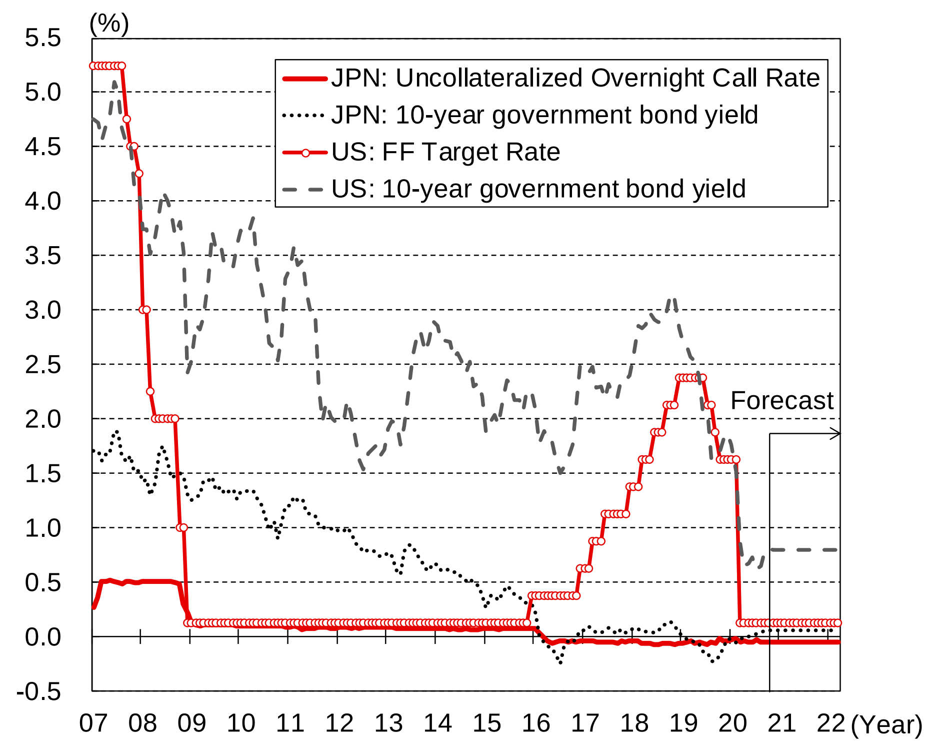
- Japan and the US have eased their monetary policies in response to the COVID-19 pandemic. Japan's policy aims to stabilise 10-year government bond yields at a low level around 0% by carrying out further active purchases of government bonds. The US reduced the lower bound of its target range for its federal funds rate to zero, set out a policy for purchasing government bonds and, in September, it introduced forward guidance that allows interest rates to moderately exceed 2% "for some time" and suggested long-term easing.
- In addition, the Eurozone also loosened its monetary policy with a large-scale purchase programme and a third series of targeted longer-term refinancing operations. For the time being, it will maintain its policy to keep interest rates at low levels through various asset purchases.
- There is still downward pressure on economies from the pandemic, so central banks are expected to maintain their current, loose monetary policies for the period covered by this Outlook. Policy rates in the US and Japan will remain at their current low levels and long-term interest rates will gradually rise as economies slowly recover; however, they are expected to remain at low levels for the most part. In Japan, despite the appointment of a new Suga Cabinet, the top priority for the government has not changed and will be policies related to COVID-19 and the economy, and it appears the impact on the Bank of Japan's monetary policy in the short term will be small.

Current and Future Japanese and US Monetary Policy

	FRB	BoJ
Current plans for policy rate management	FF rate target range: maintain at 0.0% to 0.25% until labour market conditions have reached levels consistent with maximum employment and inflation has risen to 2% and is on track to moderately exceed 2% for some time.	Short-term: apply negative interest rate of -0.1% to the Policy Rate Balances in current accounts Long-term: purchase JGBs so that 10-year JGB yields will remain at around zero %
Bond purchasing plan	Increase holdings at current rate (approx. USD80bn per month) over coming months	Purchase the necessary amount of JGBs without setting an upper limit
Comments regarding future of monetary policy	Looking ahead, we will continue to monitor developments and assess how our ongoing asset purchases can best support our maximum employment and price-stability objectives as well as market functioning and financial stability.（Chair Powell 5th November)	The Bank would closely monitor the impact of COVID-19 and not hesitate to take additional easing measures if necessary, and also it expects short- and long-term interest rates to remain at their present or lower levels. (Governor Kuroda 29 Oct)

Source: Central banks of each country, MUFG Bank Economic Research Office

US and Japanese Policy Rates and Long-Term Interest Rates



Note: From Dec 2008, the "FF Target Rate" is a median of the target rate
Source: Bloomberg, MUFG Bank Economic Research Office

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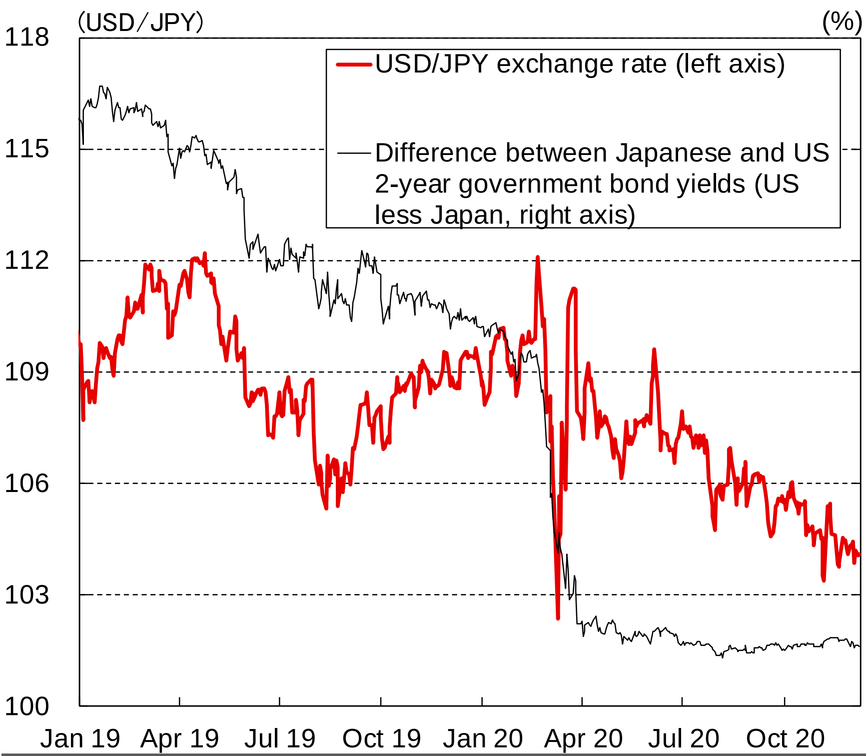
4-2. Financial Market Trends: Outlook for the USD/JPY Exchange Rate

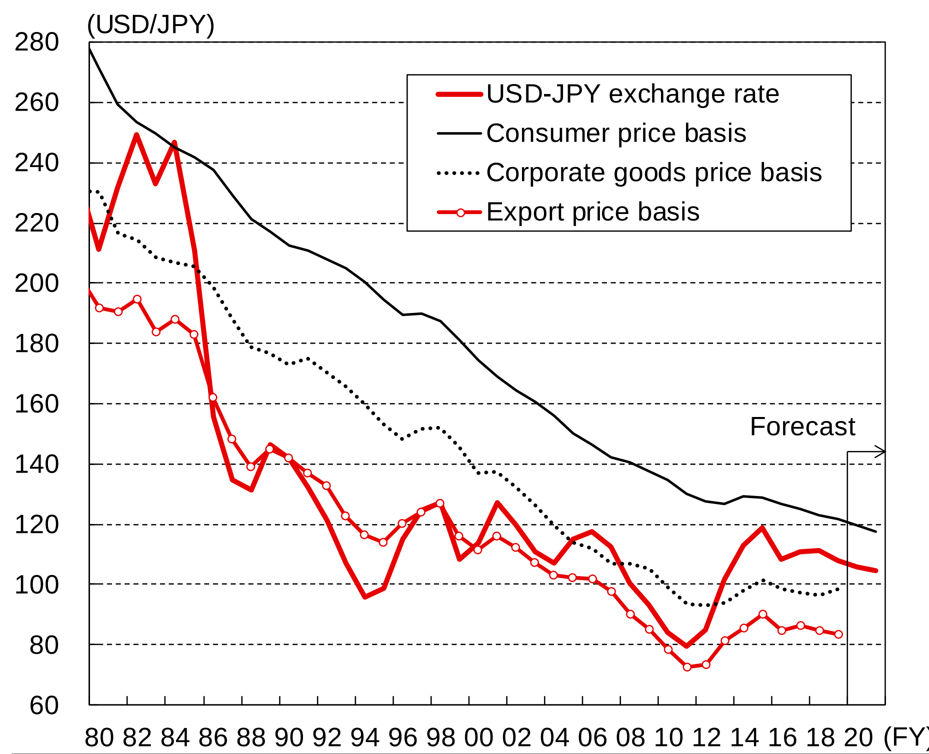
- Long-term interest rates in the US and other developed countries have settled at around 0% and it is unlikely there will be a significant change to the gap between US and Japanese interest rates. It appears that this gap is having less and less of an effect on changes to the exchange rate (a smaller gap between US and Japanese interest rates means the JPY carry trade has become less attractive).
- Although there are temporary fluctuations in the USD/JPY exchange rate in response to the COVID-19 situations in each country and the degree of risk taking by market participants, the overall trend of the USD/JPY exchange rate is expected to remain at current levels with some JPY appreciation. In terms of purchasing power parity, the long-term trend of JPY appreciation that occurred up until the mid 2010s is flattening out and it is unlikely the JPY will appreciate to a level consistently below JPY100 per USD.

USD/JPY and Difference between US and JPN 2-Yr Gov. Bond Yields



Source: Bloomberg, MUFG Bank Economic Research Office

USD/JPY Exchange Rate by Purchasing Power Parity



Note: 1. "Purchasing power parity" is the Japanese price index less the US price index multiplied by the standard rate.
2. "Export price basis" is the average of export price index and export deflator

Source: Each country's national statistics, Bloomberg, MUFG Bank Economic Research Office

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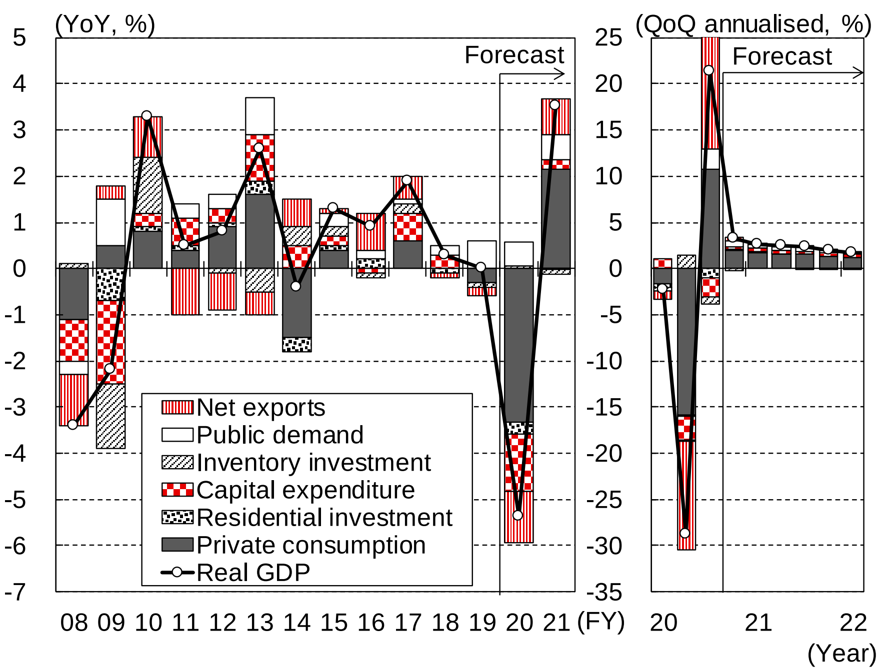
4-3. Japanese Economy: Overview

- The real GDP growth rate for the July-September quarter (first preliminary estimate) was 21.4% QoQ annualized – a huge rebound and the first positive result in four quarters. The economy showed an unprecedented slump during April and May when a nationwide state of emergency was issued in response to the spread of COVID-19. After the state of emergency was lifted, however, the demand that was suppressed during this time have picked up and overall growth was boosted significantly by private consumption and net exports.
- Cases of infection are rising across Japan again and an easing of restrictions on the number of people at large-scale events has been postponed once more. The future of overseas economies, particularly European and the US economy, will also continue to be dependent on further rises in cases, and the sense of uncertainty that surrounds domestic and foreign demand has not been shaken off. It seems the recovery of the economy will continue at a gradual pace and that it will be some time before economic activities return to the level they were at before the pandemic.
- Taking into account the above, the real GDP growth rate is forecast to be -5.4% YoY for FY2020 and 3.5% YoY for FY2021. Real GDP with not return to its FY2019 level until FY2023 or later.

Japan Real GDP and Outlook (Fiscal Year, Quarterly)



Source: Cabinet Office, MUFG Bank Economic Research Office

Japan Real GDP and Outlook (Fiscal Year, QoQ Annualised)

	FY2018 (Actual)	FY2019 (Actual)	FY2020 (Outlook)	FY2021 (Outlook)
Real GDP	0.3	0.0	-5.4	3.5
Private consumption	0.1	-0.5	-6.0	3.9
Residential investment	-4.9	0.6	-9.2	-1.1
Capital expenditure	1.8	-0.3	-7.6	1.4
Inventory investment (contribution)	0.0	-0.1	0.0	-0.1
Public demand	0.8	2.5	2.1	1.9
Net exports (contribution)	-0.1	-0.2	-1.1	0.8
Exports	1.7	-2.6	-13.6	8.5
Imports	2.5	-1.5	-6.8	3.1
Nominal GDP	0.1	0.8	-4.8	2.4
GDP Deflator	-0.2	0.8	0.7	-1.1

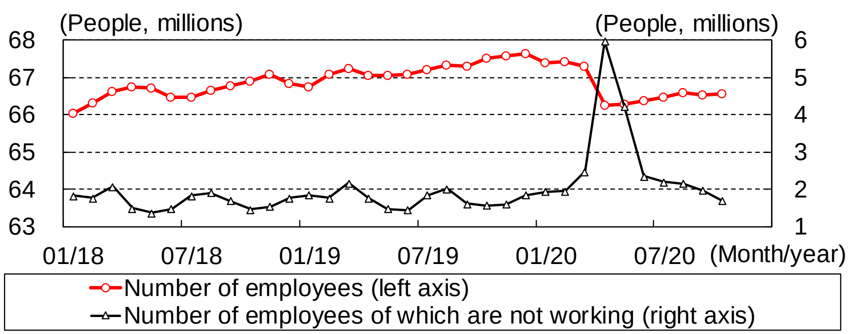
Source: Cabinet Office, MUFG Bank Economic Research Office

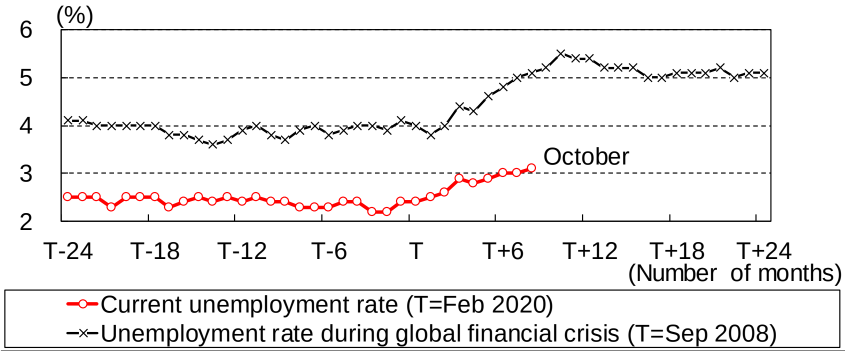
4-3. Japanese Economy: The Labour Market and Wages

- In April, the number of employees (figure includes self-employed and part-time workers) decreased significantly by 1.07 million from the previous month owing to the pandemic. This figure includes employees that are not working, the number of which rose sharply for a short while. The number of employees then stopped falling and the number of those not working has returned to pre-COVID-19 levels for the most part, though the situation remains far from normal. In addition, the deterioration of the unemployment rate was limited compared with its rise during the global financial crisis owing to the effects of swift policy action. Yet while demand for labour has not yet fully returned, it is possible the unemployment rate may rise further depending on how long measures to support employment continue – measures which have suppressed an adjustment to employment – and depending on the trend of job seeking by those who have left the labour market temporarily.

- Real employee compensation decreased for the second consecutive quarter compared with the previous year. The benefit of special cash payments ended in July for the most part and households are being directly hit by a decrease in overtime pay. As the recovery of economic activities continues at a gradual pace, it appears demand for labour will recuperate slowly and there are concerns about the impact on bonuses and pay scale increases. As such, it is highly likely that the support for private consumption from labour and wages will remain weak.

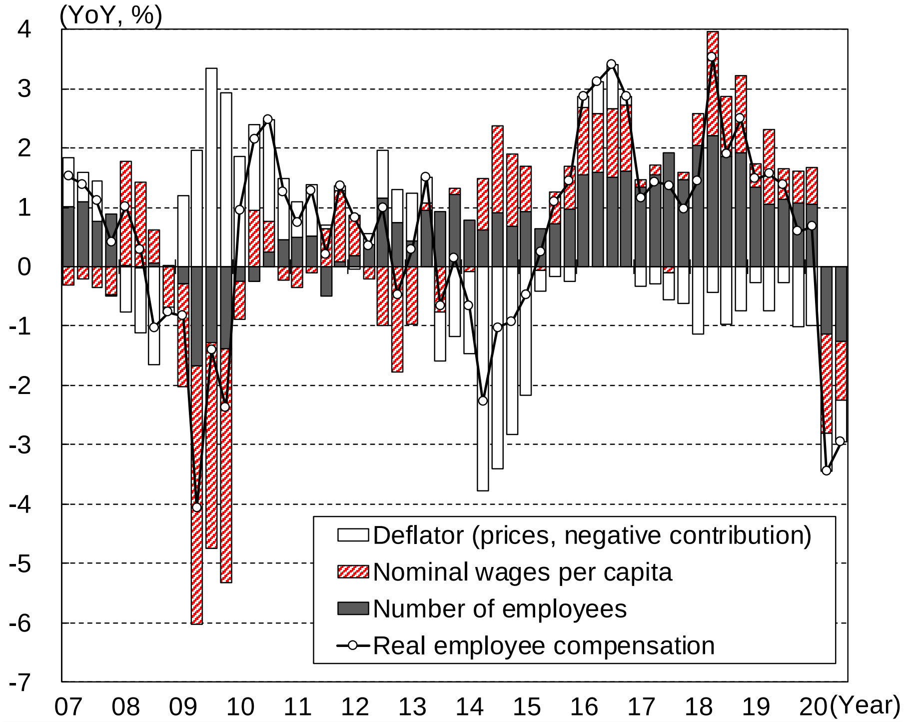
The Number of Employees, Employees Not Working and the Unemployment Rate





Note: “Number of employees of which are not working” is unadjusted number
“Employees” includes self-employed and part-time workers etc.
Source: Ministry of Internal Affairs and Communications, MUFG Bank Economic Research Office

Real Employee Compensation

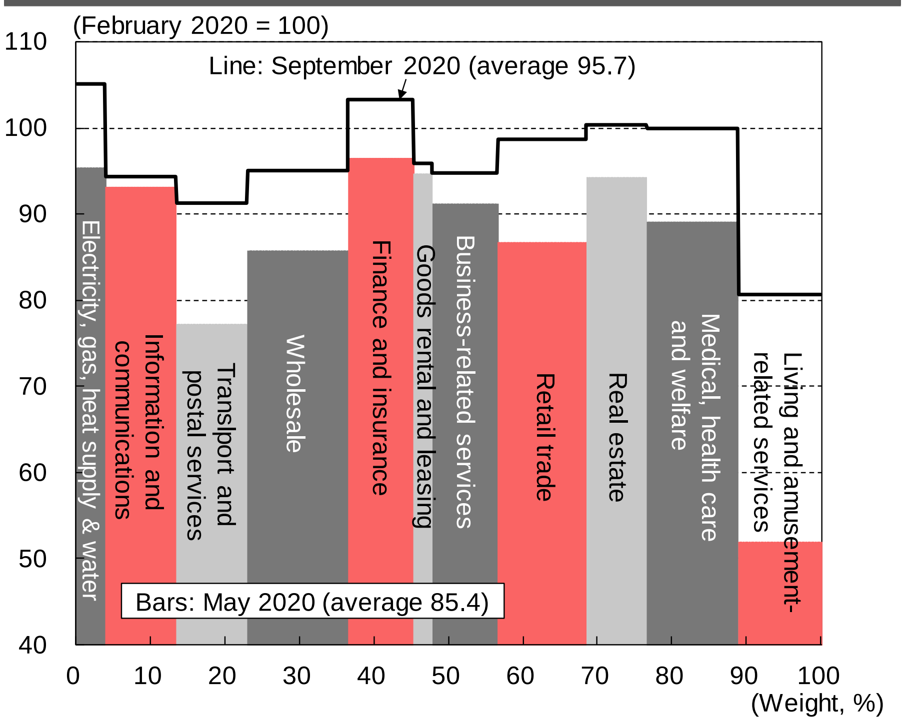


Source: Cabinet Office, Ministry of Internal Affairs and Communications, MUFG Bank Economic Research Office

4-3. Japanese Economy: Private Consumption

- A state of emergency was declared nationwide from April until May and the downward pressure on economic activities from people refraining from going outside and business reducing opening hours was kept to a minimum. After the state of emergency was lifted, movement of people returned and consumption demand is slowly recovering. A breakdown of services by industry reveals “retail trade” related to consumption of goods has more or less returned to the level it was at in February 2020, whereas “transport and postal services” and “living and amusement-related services” related to consumption of services is still some way from normal levels.
- In terms of consumer sentiment, the Economy Watchers Survey, which focuses on the businesses, shows a large rebound, such as the recovery in demand for dining out and travel due to support from the Go To campaigns. On the other hand, the rebound in the Consumer Confidence Index, which focuses on consumers, has been limited. Despite the expectations that a vaccine or medicine will become available, there remains a sense of caution around going outside amid another nationwide increase in cases, and a re-examination of the Go To campaign, such as a suspension of the benefit in some regions, as well as a request that eateries in certain areas shorten their opening hours means the downward pressure on consumption will remain, particularly consumption of face-to-face services. It appears private consumption will not return to levels before the COVID-19 pandemic and the consumption tax rate hike until FY2022 or later.

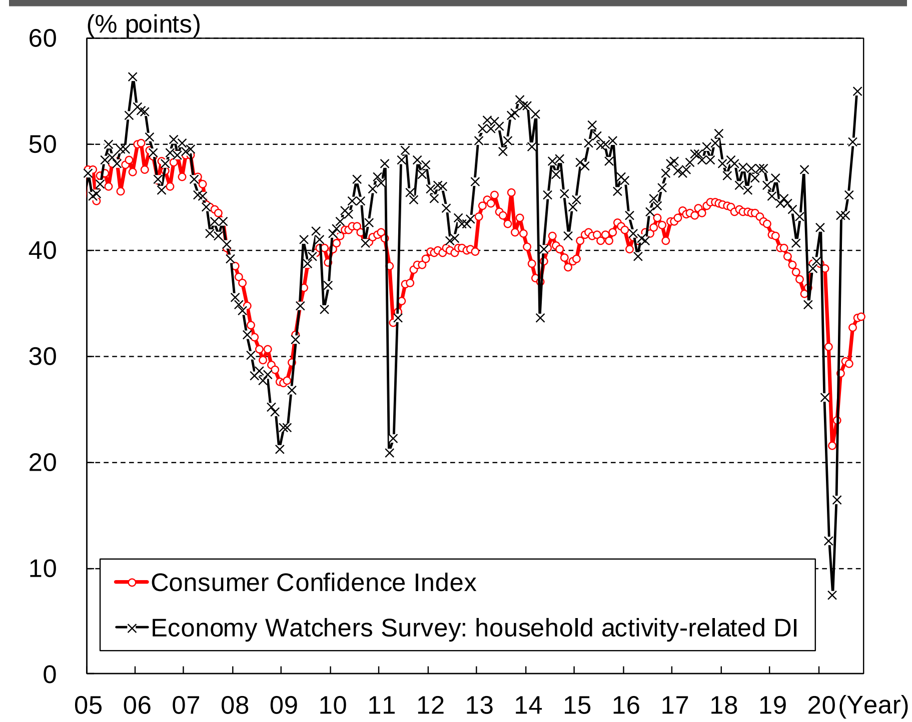
Indices of Tertiary Industry Activity and Change Since February 2020



Note: Includes services for businesses

Source: Ministry of Economy, Trade and Industry, MUFG Bank Economic Research Office

Consumer Sentiment

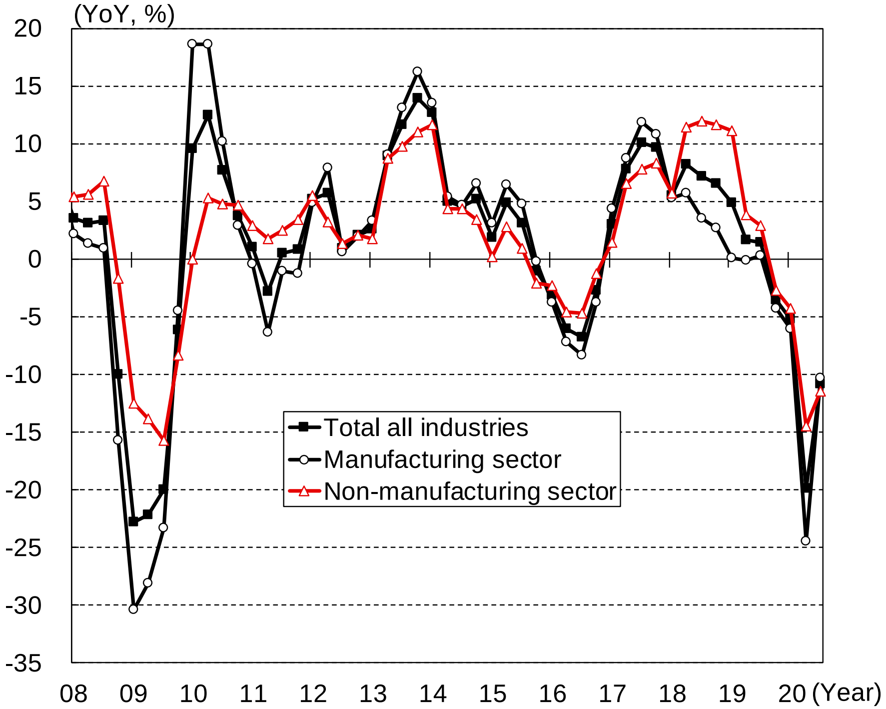


Source: Cabinet Office, MUFG Bank Economic Research Office

4-3. Japanese Economy: Business Results

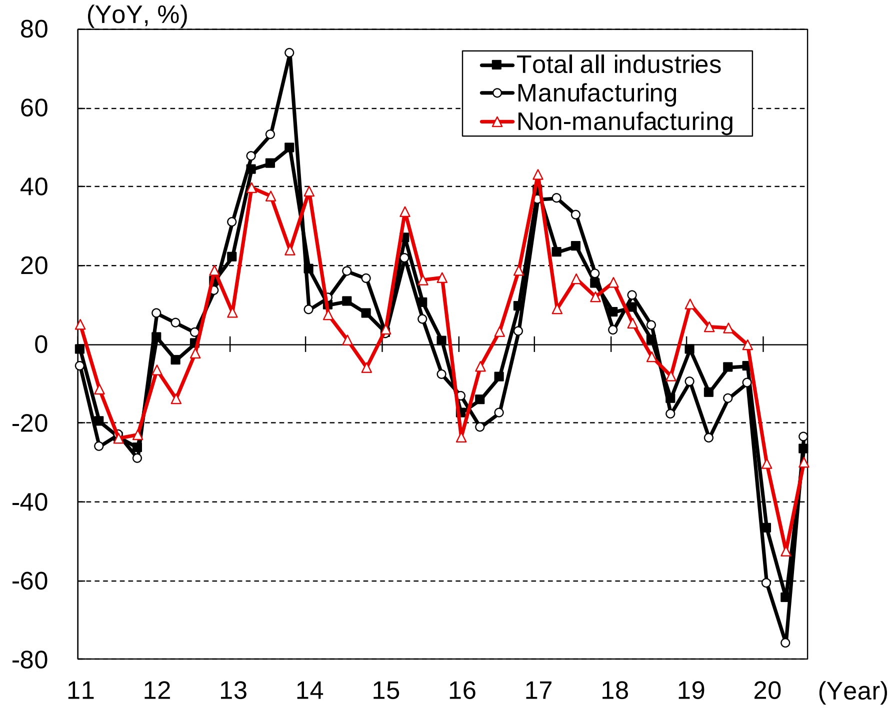
- Sales of corporations listed on the first section of the Tokyo Stock Exchange (excluding financial corporations) fell at a faster pace in the April-June quarter this year – in line with the pace of their slump during the global financial crisis. Despite picking up in the July-September quarter, sales still recorded a large fall from the previous year. Analysis by industry shows the severe slump in “air transportation” continued as growth recorded -60% YoY owing to public health measures and people refraining from travel both domestically and abroad. In addition, there was a large decline in revenues by more than 20% YoY in “coal and petroleum products”, “land transportation” and “iron and steel”.
- Ordinary profits also continue to record a large decrease. The industry breakdown shows a deficit for the fourth consecutive quarter in “iron and steel”, and for the third quarter in a row for both “air transportation” and “land transportation”. While it appears most industries have now passed the worst point, the business situation is still severe, particularly for those industries which were badly affected by the COVID-19 pandemic.

Sales of Non-Financial Corporations Listed on the First Section of Tokyo Stock Exchange



Note: “Sales” of 1,346 firms that have published their Jul-Sep 2020 results as of 30 Nov and have published data continually since FY2006.
Source: Bloomberg, MUFG Bank Economic Research Office

Ordinary Profits of Non-Financial Corporations Listed on the First Section of Tokyo Stock Exchange

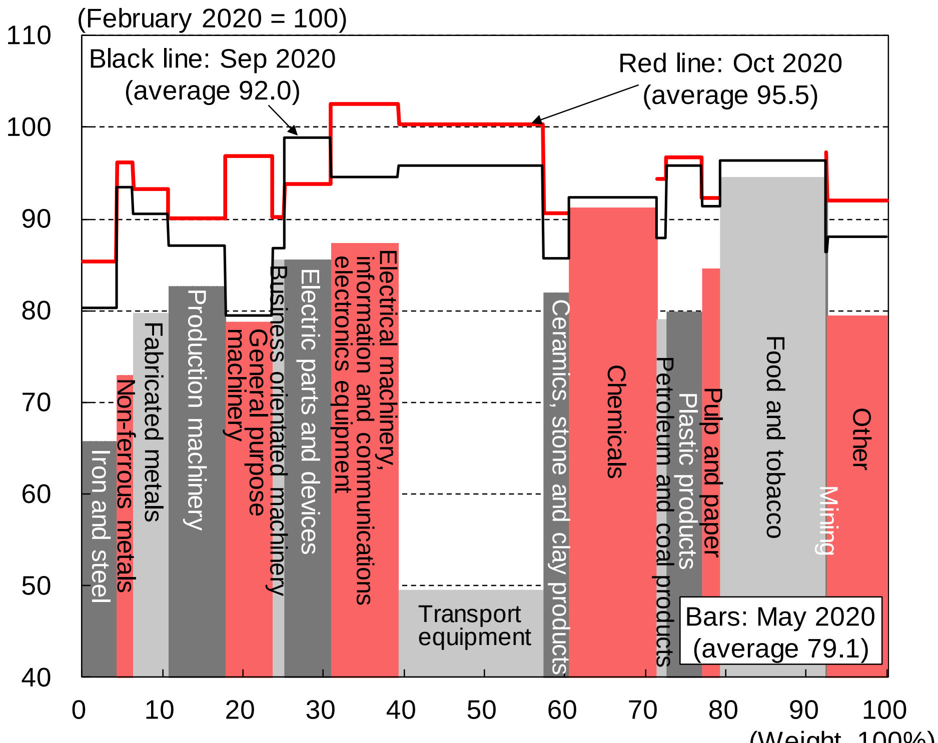


Note: "Ordinary profits" of 1,325 corporations that have published their Jul-Sep 2020 results as of 30 Nov and have published data continually since FY2006
Source: Bloomberg, MUFG Bank Economic Research Office

4-3. Japanese Economy: Production and Exports

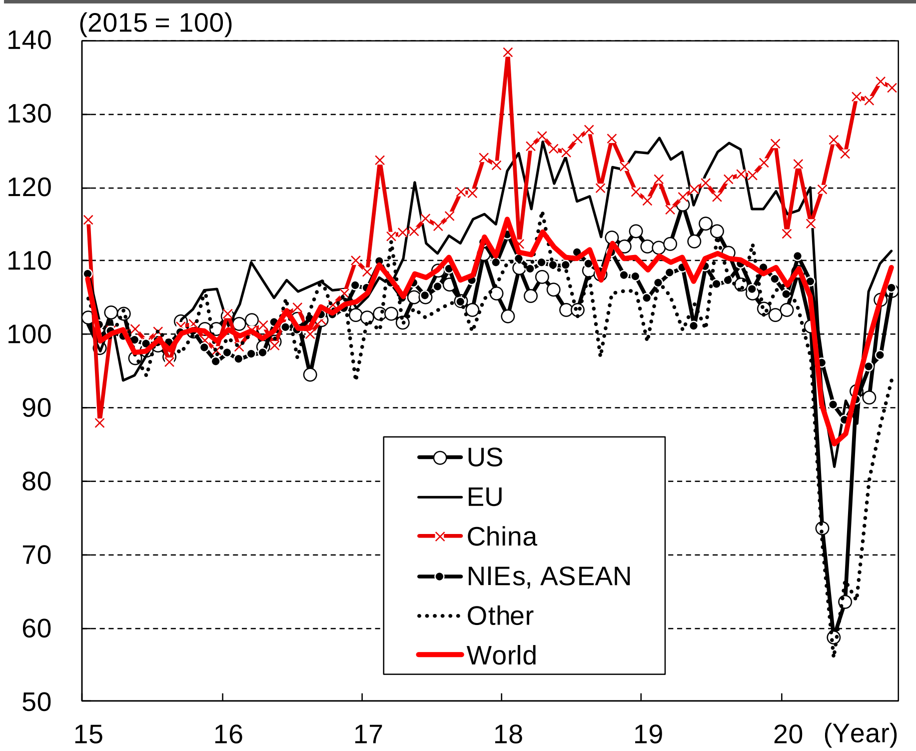
- The fall in exports due to the global COVID-19 shock and the slump in domestic demand brought about the state of emergency declared nationwide in April led to a large decrease in production. The breakdown by industry shows production of “transport equipment” fell by around 50% of normal levels at its lowest point in May, but October’s results (most recent) show it has recovered to normal levels. On the other hand, “iron and steel” remains around 15% lower than normal levels and on the whole its pace of recovery is sluggish.
- Production is affected by the weakness in exports and this weakness remained in the July-September quarter. Nevertheless, exports recovered to last year’s level in October on a monthly basis. According to the breakdown by country and region, the upward trend of export growth to China could be called strong, and those to the US have recovered from their slump. Meanwhile, exports to the EU and Asia (excluding China) are still recovering. Recently, there are areas in the US and Europe where various restrictions on movement have been tightened again (or are being tightened again) due to another rise in cases, which means the pace of recovery in exports may flatten for a while. However, assuming that there is a firm recovery of domestic demand in countries importing from Japan, such as China and the US, Japanese exports are forecast to recover gradually on the whole going forwards.

Industrial Production and Change Since February 2020



Note: Data for “chemicals” and “food and tobacco” for October have not yet been released
Source: Ministry of Economy, Trade and Industry, MUFG Bank Economic Research Office

Real Exports by Country and Region

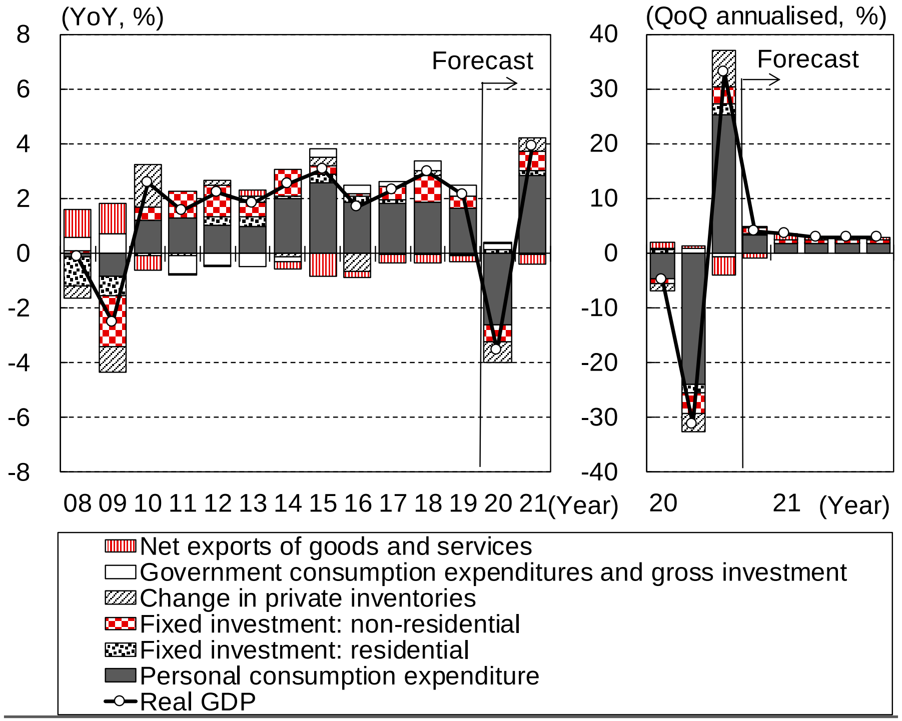


Note: The UK is included in “Other” for the entire period
Source: Cabinet Office, MUFG Bank Economic Research Office

4-4. US Economy: Overview

- The US real GDP growth rate for the July-September quarter (first preliminary estimate) was 33.1% QoQ annualised, rebounding from -31.4% QoQ annualised the previous quarter. The main reason for this was the large increase in personal consumption expenditure (40.6% QoQ annualised), residential investment (62.3% QoQ annualised) and non-residential investment (21.8% QoQ annualised).
- Economic indicators up until now have been good compared with other major developed countries, but with some states tightening restrictions on movement again in response to the sharp rise in the number of new cases since October, the path to economic normality is expected to have some ups and downs. It will take some time before personal consumption expenditure, labour and non-residential consumption return to their pre-COVID-19 levels.
- Real GDP growth for 2020 is forecast to record a large drop of -3.5% YoY and then return to positive growth of 3.9% YoY in 2021. The level of real GDP on an annual basis is predicted to return to its 2019 level (pre-COVID-19) in 2021.
- Mr Biden was declared the winner of the presidential election in November. There will be much attention focused on the outcome of the run-off elections for two Senate seats which will take place on 5th January next year (it is likely the Republican Party will win a majority).

Real GDP and Breakdown of Demand Components



Source: Department of Commerce, MUFG Bank Economic Research Office

Year-on-Year GDP Figures and Outlook

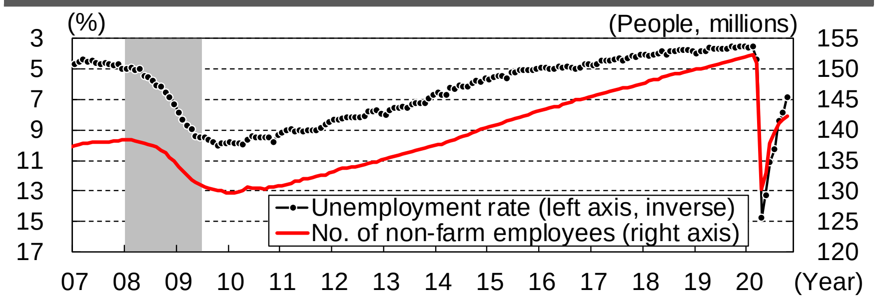
	2019 (actual)	2020 (outlook)	2021 (outlook)
Real GDP	2.2	-3.5	3.9
Personal consumption	2.4	-3.8	4.1
Residential investment	-1.7	4.2	5.4
Non-residential investment	2.9	-4.4	4.8
Change in inventories (contribution)	-0.0	-0.7	0.5
Government consumption expenditure	2.3	1.2	-0.1
Net exports (contribution)	-0.2	0.0	-0.4
Exports	-0.1	-12.2	13.1
Imports	1.1	-9.2	11.4
Nominal GDP	4.0	-2.4	5.6

Source: Department of Commerce, MUFG Bank Economic Research Office

4-4. US Economy: Labour and Personal Consumption

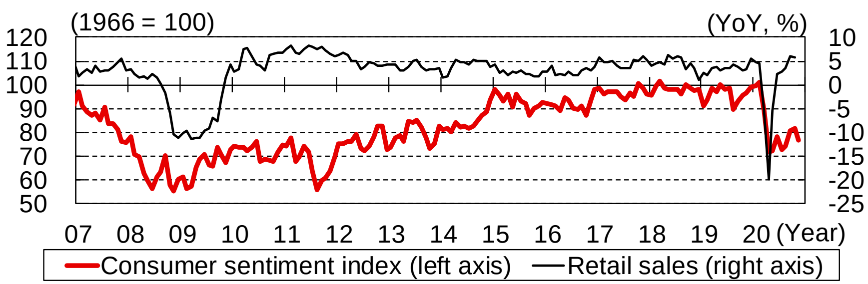
- Labour and consumption-related indicators have continued to improve since all states restarted economic activities in May. The unemployment rate in October was 6.9% – a large decrease from 14.7% in April – and retail sales have shown strong growth since June compared with the previous year which was driven by online sales.
- Personal consumption fell considerably in April owing to the COVID-19 pandemic, especially that of face-to-face services. Nevertheless, even when it appeared cases were rising again, personal consumption continued to recover gradually without a downturn owing to the knowledge accumulated by the medical field and society about COVID-19. Consumption of goods is robust due to pent-up demand and the strong demand for entertainment products as an alternative to consumption of services and goods related to working from home. On the whole, personal consumption has recovered to just below the level it was at before the COVID-19 pandemic.
- That being said, the number of cases is rising quickly and some states are strengthening measures again, such as restrictions on movement. Sentiment statistics also show consumers are maintaining a cautious attitude and the recovery of personal consumption from now is expected to have some bumps (it is possible that public health measures will tend to be stricter in the case of a Biden administration). As a result, personal consumption is not expected to return to the level it was at before the pandemic until the latter half of 2021 at the earliest.

US Labour Statistics



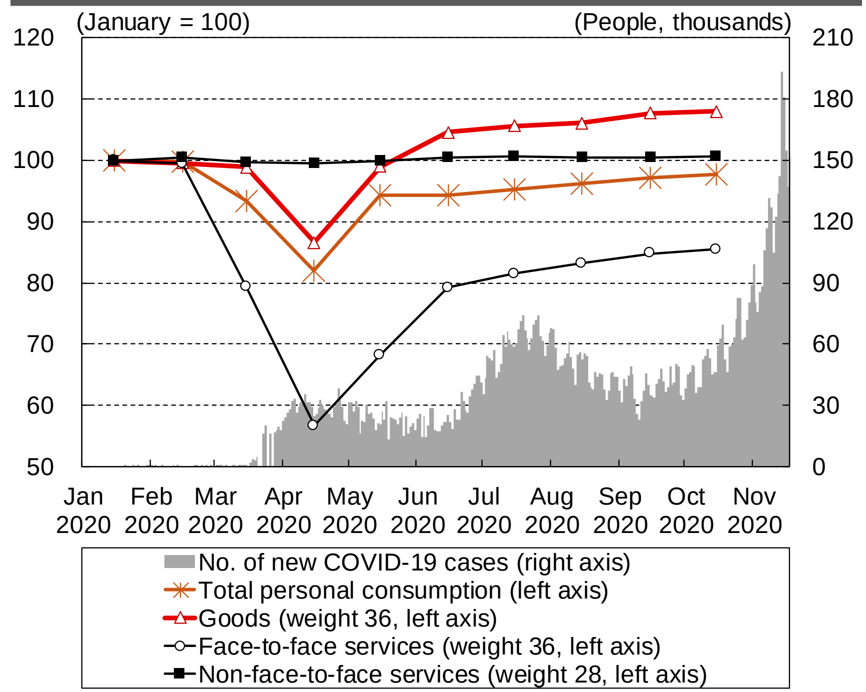
Source: Ministry of Finance, MUFG Bank Economic Research Office

US Retail Sales and Consumer Sentiment



Source: Department of Commerce, University of Michigan, MUFG Bank Economic Research Office

Personal Consumption and New Cases in the US



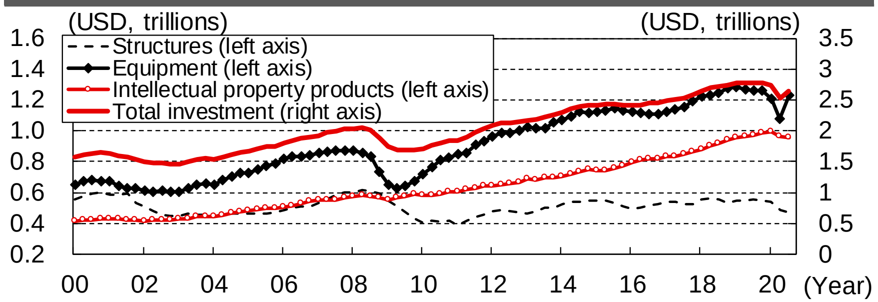
Note: "Face-to-face services" is transport, recreation, dining and accommodation. "Non-face-to-face services" is rent, finance and communication

Source: Department of Commerce, World Health Organization MUFG Bank Economic Research Office

4-4. US Economy: Capital Expenditure

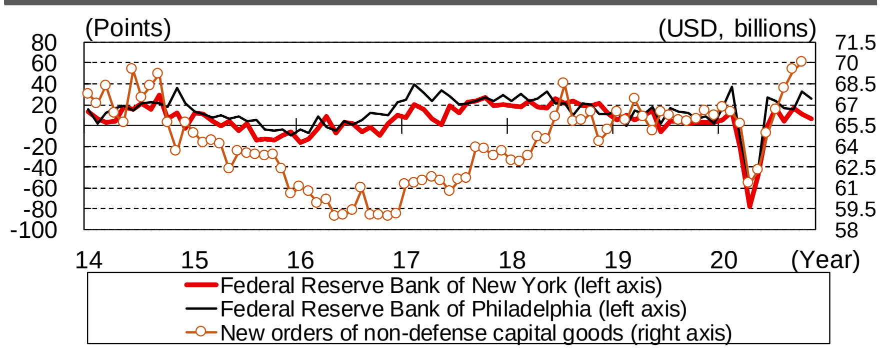
- According to the breakdown of non-residential investment, investment in equipment took a downturn in the April-June quarter but quickly rebounded by a large amount in the July-September quarter. When it comes to intellectual property, the degree of deterioration during this pandemic remains small, as was the case during the global financial crisis.
- Orders of non-defence capital goods (excluding aircraft) – a leading indicator of capital expenditure – continues to recover after bottoming out in April and has exceeded pre-COVID-19 levels since September. Business sentiment also remains at healthy levels and investment in intellectual property is expected to grow at a firm pace. As a result, non-residential investment is forecast to continue to recover in the October-December quarter and beyond.
- On the other hand, industrial production is still around 5% lower than pre-COVID-19 levels, even in October. The pace of recovery of investment in equipment is likely to be slow going forwards as production levels across a wide range of industries cannot be restored to levels before the pandemic, and non-residential investment is not expected to return to pre-COVID-19 levels until the latter half of 2021.

US Non-Residential Fixed Investment



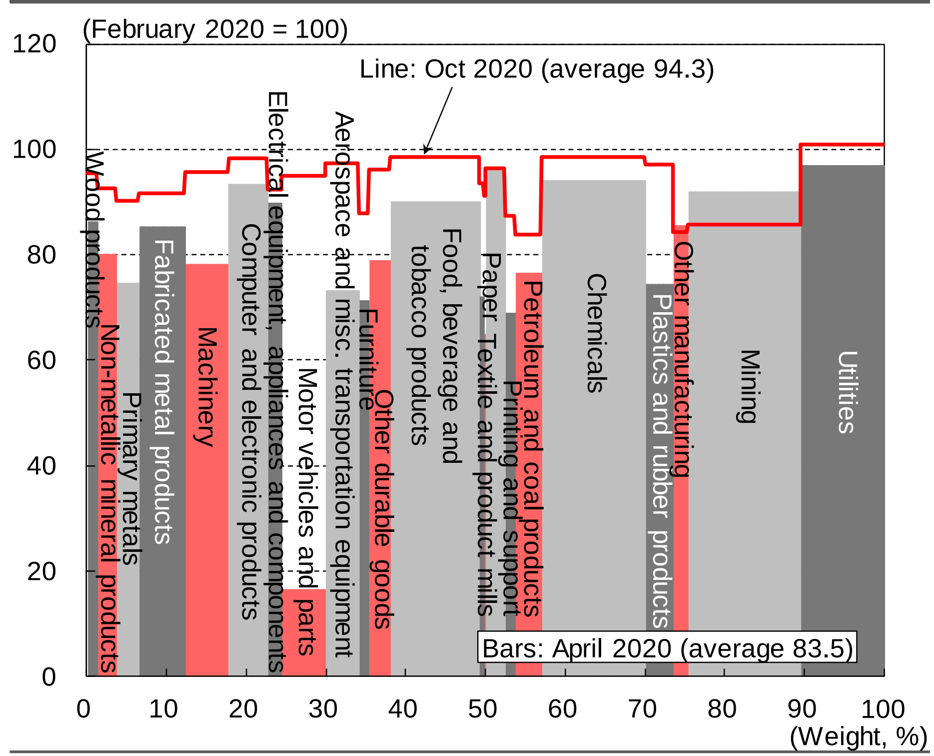
Source: Department of Commerce, MUFG Bank Economic Research Office

US FRB Manufacturing Indices and Non-Defense Capital Goods*



Note: Non-defense capital goods exclude aircraft
Source: Department of Commerce, each district Federal Reserve Bank, MUFG Bank Economic Research Office

US Industrial Production



Note: Result of each product indexed to Feb 2020 = 100. X axis shows weight of each product as of Feb 2020 used to calculate industrial production
Source: Federal Reserve Board, MUFG Bank Economic Research Office

4-4. US Economy: Policies

- The Federal Reserve Board announced a series of large-scale easing policies in March and April and introduced forward guidance at its Federal Open Market Committee (FOMC) in September which said it will keep the target range for the federal funds rate at its current levels until “inflation has risen to 2% and is on track to moderately exceed 2% for some time”. The risk asset purchasing programme is serving as an important “backstop” in financial markets (statement by Chair Powell after the FOMC meeting on 5th November); however, the balance of purchases will remain just below 10% of its upper limit and the programme is scheduled to come to a close at the end of December this year.
- Between March and April, US Congress passed USD 2.8 trillions’ worth of economic policies (rounds 1 to 4, 15% of GDP) which has caused outlays for FY2020 (October 2019 to September 2020) to rise sharply and underpinned the economy directly after the COVID-19 pandemic. In FY2021, income security outlays are forecast to decrease significantly compared with FY2020 based on an estimate that assumes no additional economic policies that year. That being said, income security outlays are expected to reach a high level and be 60% higher than those in FY2019. In addition, it seems the normal social security system for benefits like unemployment compensation will also provide a certain amount of support for the US economy in the future regardless of the direction taken by economic policy.

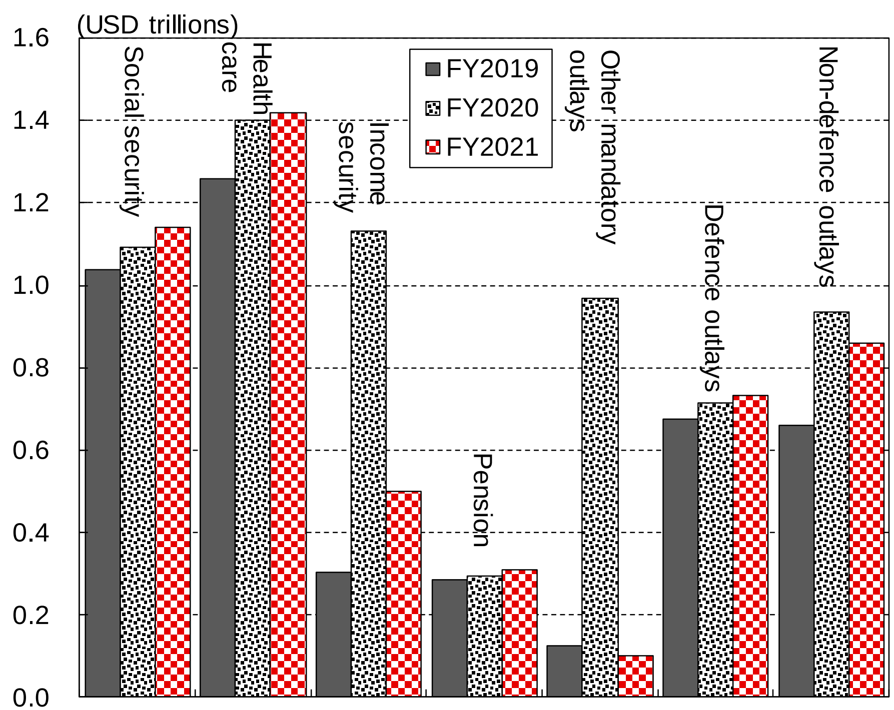
Main Points of Monetary Policy

FF rate cuts	Lowered the target range for the federal funds rate by 150bp in March, remained at 0.0% to 0.25% since then
Forward guidance	Seeks inflation average of 2% over time (27 Aug)
Quantitative easing	Maintain target range for FF rate until inflation averages 2% over time
Risk asset purchasing	Establish 9 facilities for risk asset purchases in Mar and Apr with funding from Department of the Treasury

Name of program	Overview	Funding (USD bns)	Balance (USD bns)	Approx. upper purchase limit	Limit
1: CPFF	CP and ABCP purchases	10	8.6	100	End Mar ’21
2: PDCF	Securities firms may use discount rate	-	0.2	-	End Mar ’21
3: MMLF	Support for asset purchasing from MMF	10	5.2	100	End Mar ’21
4: PMCCF	Purchase of bond and loan issuance	50	46	750	End ‘20
5: SMCCF	Liquidity for corporate bonds	25			
6: TAFL	ABS (some CMBC and CLOs) purchases	10	12.3	100	End ‘20
7: PPPLF	Extend credit taking PPP loans as collateral	-	56	660	End ‘20
8: MSLP	Purchase loans to small & medium firms	75	43.4	600	End ‘20
9: MLF	Purchase states and districts’ notes	35	16.6	500	End ‘20

Note: “Balance” as of 25 November. Some “upper limits” are estimates
Source: Federal Reserve Board, MUFG Bank Economic Research Office

Actual Results and Forecast for Outlays

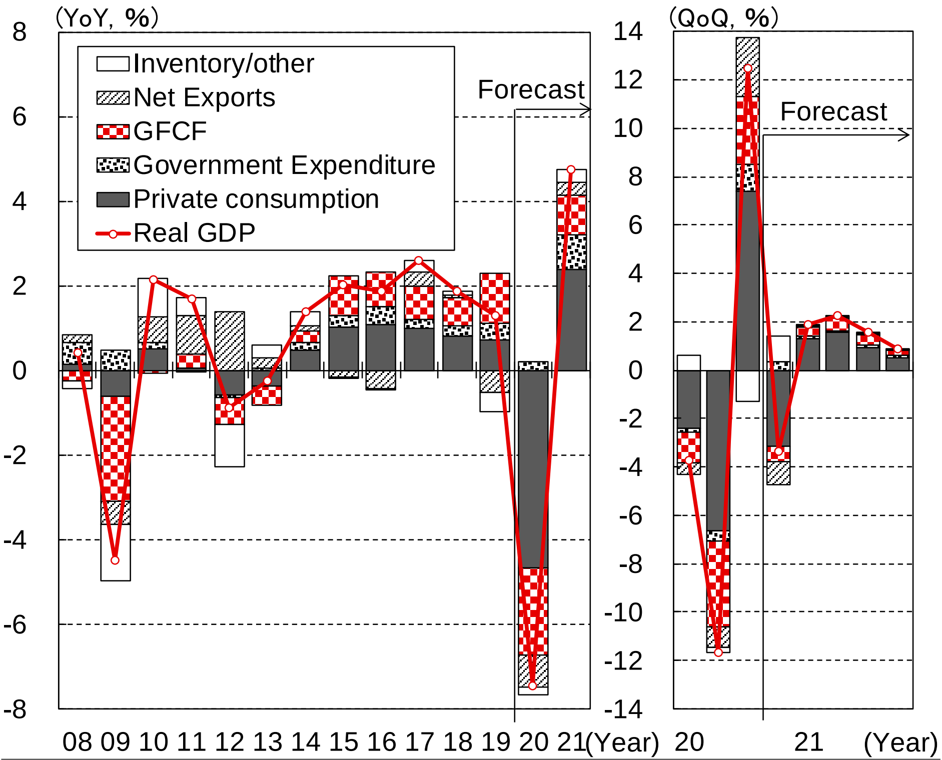


Note: 1. Each year shown is fiscal year (previous October to September that year)
2. The forecast for FY2021 does not take into account the manifesto of the new administration or an addition COVID-19 economic package
Source: Congressional Budget Office, MUFG Bank Economic Research Office

4-5. European Economies: Eurozone - Overview

- Eurozone real GDP growth for Q3 increased to 12.6% quarter-on-quarter (QoQ) (60.5% QoQ annualised), and economic activity in each country has restarted with economic activity supported by rebounding private consumption. Each country's GDP increased significantly: Germany to 8.5% QoQ, France to 18.7% QoQ, and Italy to 15.9% QoQ. Real GDP in the Eurozone as a whole recovered to 96% of its Q4 2019 level.
- In the major Eurozone countries from the end of October, the daily number of new COVID-19 cases increased rapidly and measures to control COVID-19 were strengthened. As a result, we expect that Q4 will have negative growth for a short time. However, the stringency of the new restrictions varied by country. France was the only major Eurozone country to introduce a full lockdown with store closures and curfews (although the manufacturing sector escaped tougher policies).
- The number of new daily cases seems to be falling in each Eurozone country. With restrictions already looser than in the spring, a gradual economic recovery seems likely if this easing of restrictions continues. We expect that, after falling by 7.5% in 2020, real GDP will rebound by 4.8% in 2021. However, it may be several years before real GDP fully recovers to 2019 levels.

Eurozone Real GDP Growth Forecast



Source: Eurostat, MUFG Bank Economic Research Office

Table of Real GDP Growth Forecast of Major European Countries

(QoQ, %) (YoY, %)

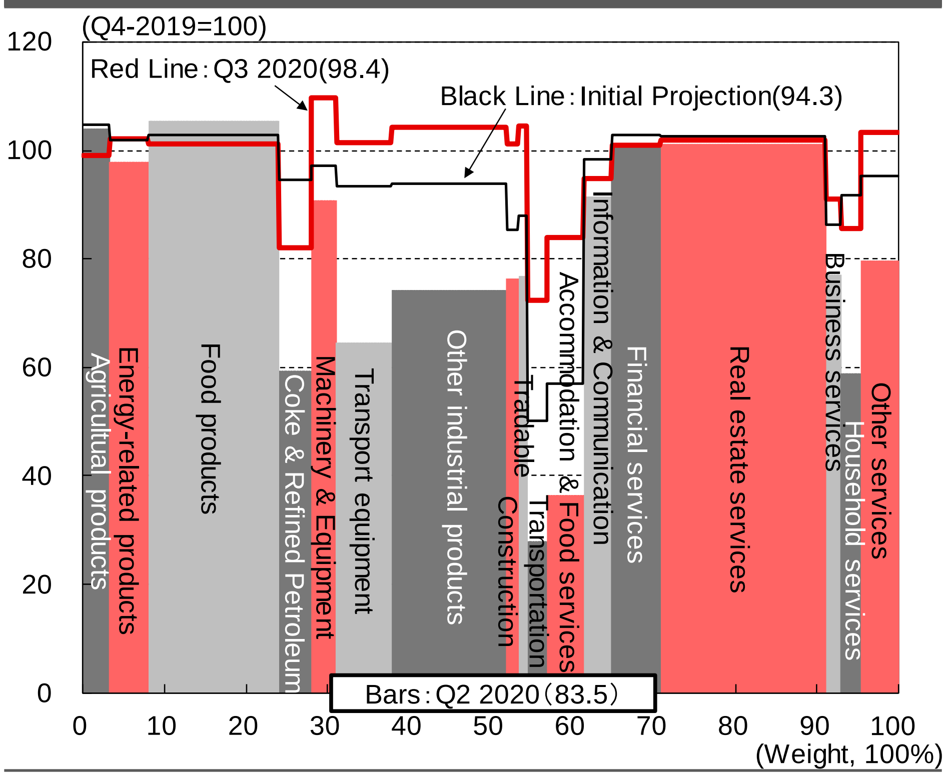
	2019		2020			2019	2020	2021
	Q3	Q4	Q1	Q2	Q3	(Actual)	Forecast	
Eurozone	0.3	0.0	-3.7	-11.8	12.6	1.3	-7.5	4.8
Germany	0.3	0.0	-1.9	-9.8	8.5	0.6	-5.7	3.9
France	0.2	-0.2	-5.9	-13.8	18.7	1.5	-9.2	6.7
Italy	0.0	-0.2	-5.5	-13.0	16.1	0.3	-9.2	6.1
UK	0.3	0.1	-2.5	-19.8	15.5	1.3	-11.6	5.2

Source: Eurostat, Office of National Statistics, MUFG Bank Economic Research Office

4-5. European Economies: Eurozone - Private Consumption and Labour Market

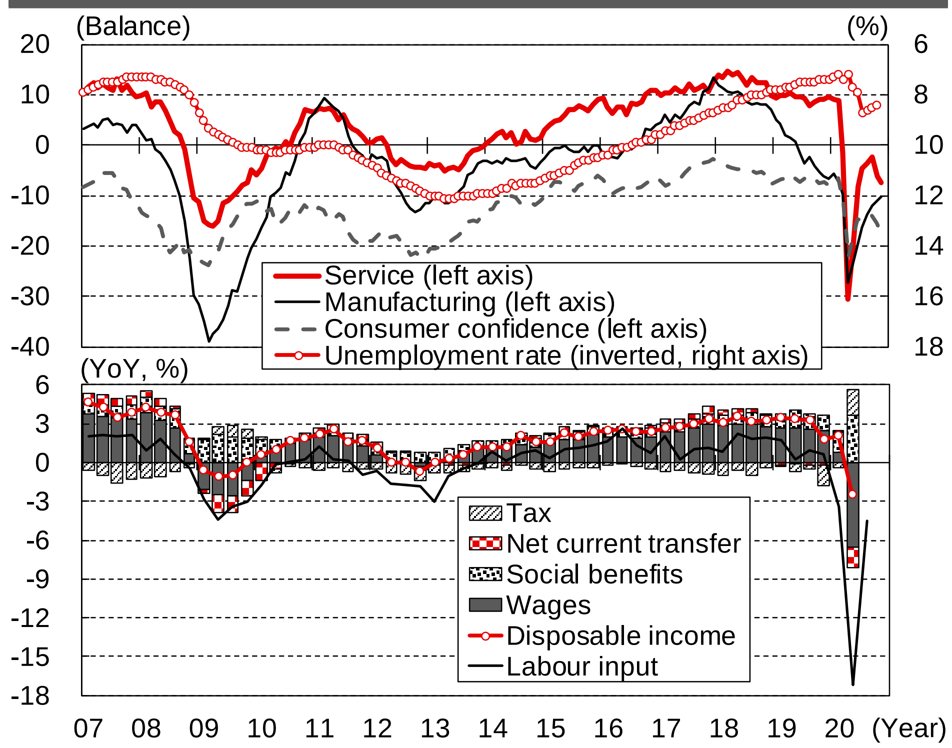
- France, one of the Eurozone's largest countries, published its own detailed breakdown of household consumption. Its goods consumption in Q3 was already improving to pre-COVID-19 levels due to pent-up demand. However, service consumption in 2020 Q2 remains below 2019 Q4 level by -4.6%.
- The unemployment rate fell for three consecutive months to 8.4% in October. But, with the recent new COVID-19 wave, the forecast for the service industry employment that accounts for 3 in 4 jobs, has shifted in a negative direction, adding to concerns of another labour market downturn. Consumer confidence has fallen.
- Disposable household income was lower in Q2 than in previous years following reduced working hours. We expect an improvement in Q3 as business conditions recovered. However, lockdown measures may need to increased again which could result in another drag on hours worked. This is to have an knock-on effect on household income despite the furlough schemes in place. The return to previous disposable household income is set to slowly continue to next year. In this regard, a labour market adjustment corresponding to corporate bankruptcies and the change of demand in the medium-term also seems unavoidable, leaving concerns that it may be difficult to return to previous income and consumption levels.

Breakdown of France Household Consumption by Category



Note: 'Initial COVID-19 Projection' is the Eurozone's estimated value.
Source: INSEE, MUFG Bank Economic Research Office

Eurozone Hiring Forecast by Sector, Unemployment and Income

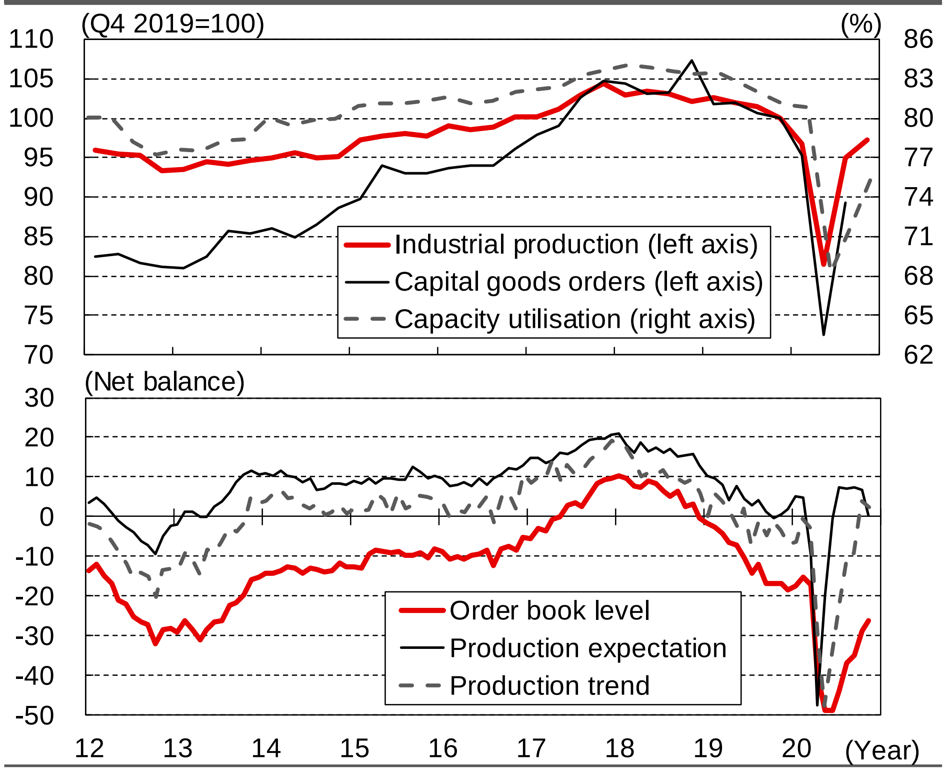


Source: Eurostat, European Commission, MUFG Bank Economic Research Office

4-5. European Economies: Eurozone - Capital Expenditure

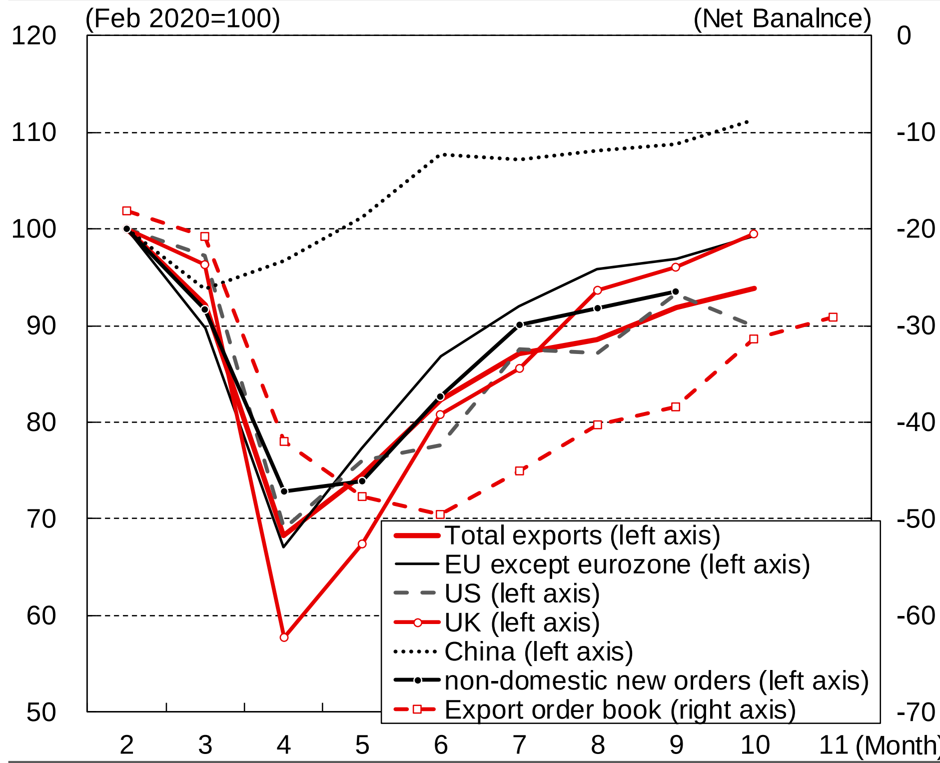
- The mining and manufacturing industries have already bottomed out, but in September, the improvements remained at 94% of pre-COVID levels. The manufacturing industry's capacity utilisation is improving, but it is still below normal levels. Capital goods orders have improved, but it will be a while before there is a return to pre-COVID-19 levels. Based on this, capital investment is likely to improve, but at a slow pace.
- In terms of business sentiment in the manufacturing sector, the order book levels are still at a low level and the sudden improvement in production expectations remains unlikely. Demand recovery in this area is expected to be slow due to the high likelihood of continuous restraint on corporate investment intentions.
- In addition, the recovery of gross exports is slow and there are concerns that EU exports to both the UK and outside the Eurozone will reduce in the short-term, due to the resurgence of COVID-19. This will put downward pressure on not only manufacturing production, but also capital investment.

Eurozone Industrial Production, Capacity Utilisation and Capital Orders



Source: Eurostat, ECB, European Commission, MUFG Bank Economic Research Office

Eurozone Exports and Orders

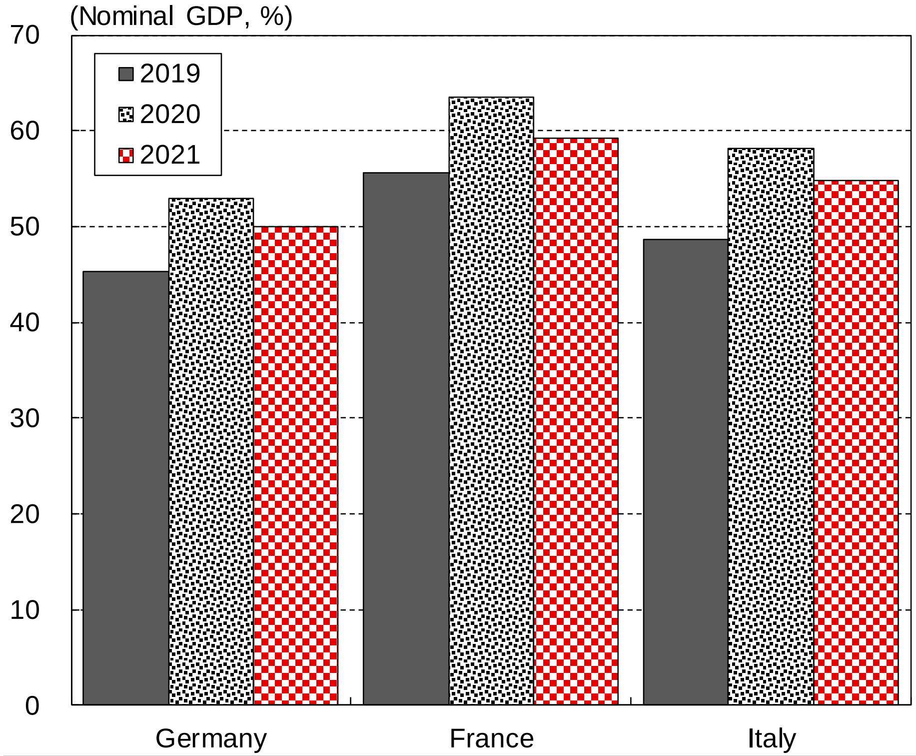


Source: Eurostat, ECB, European Commission, MUFG Bank Economic Research Office

4-5. European Economies: Eurozone - Policy Response

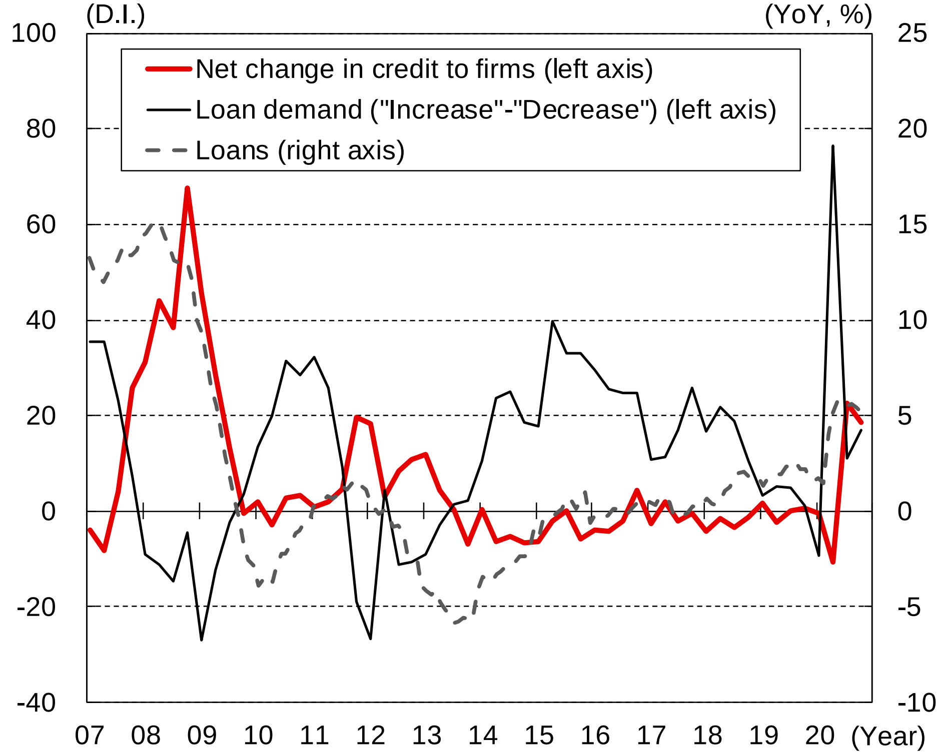
- Since the outbreak of COVID-19 in March, national governments have introduced large-scale fiscal policies to stimulate demand and maintain employment. The scale of the budget is to be reduced to a set amount from 2020 and will continue to 2021, but all economic policies are likely to continue to support the economy.
- Concerning monetary policy, ECB President Christine Lagarde stated at the October policy meeting that "the Eurozone economic recovery is losing momentum more rapidly than expected", and hinted to additional easing at the December meeting. Easing tools are being considered, such as the expansion of quantitative easing and further easing of its targeted longer-term refinancing operations (TLTRO3).
- In regards to quantitative easing, the highly flexible Pandemic Emergency Purchase Programme (PEPP) is forecasted to be extended (from June 2021 to the end of 2021 at least) and approximately an additional 500 billion dollars is to be allocated (1 trillion 350 billion euros to 1 trillion 850 billion euros). For TLTRO3, given that the lending standards of banks are becoming stricter, we expect that there will be an increase in the number of funds provided, and an extension on the ECB's offer of reduced-interest loans for commercial banks.

National Budgets of Major Countries in the Eurozone



Source: National Governments, MUFG Bank Economic Research Office

Eurozone Banks' Lending Standard and Corporate Loan Demand

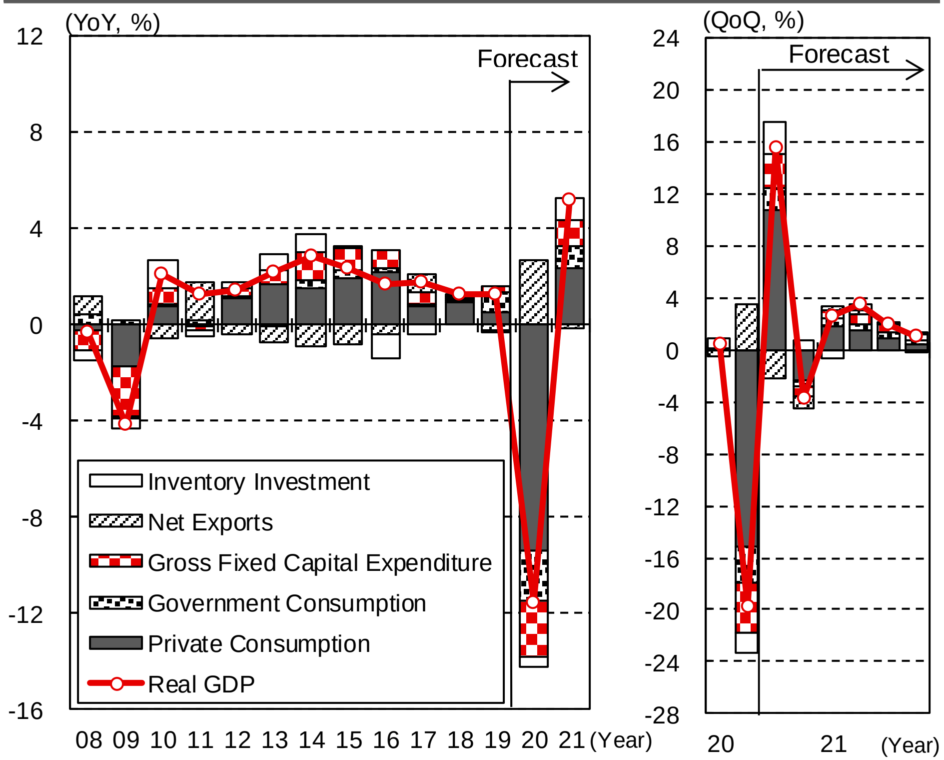


Source: ECB, MUFG Bank Economic Research Office

4-5. European Economies: UK - Overview

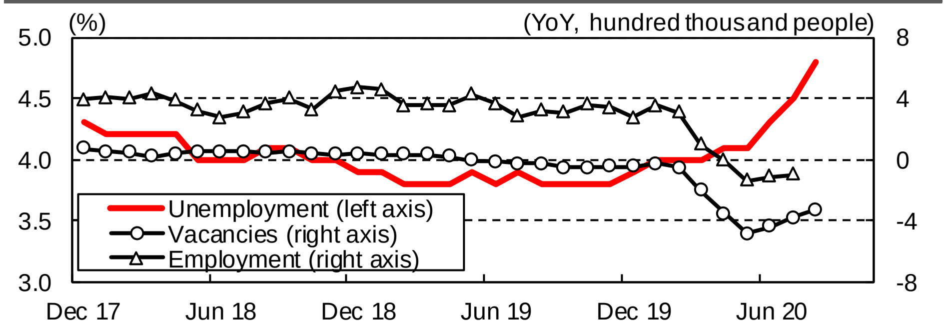
- UK real GDP growth rebounded greatly from -19.8% QoQ in Q2 to 15.5% QoQ in Q3, due to the reopening of the economy and reduction of restrictions in the summer. However, the level of GDP remained around 10% lower than a year previously. Currently, the resurgence of COVID-19 from autumn has led to a re-introduction of a month-long lockdown in England in November.
- The current measures are light in response compared to spring, but with the reduction in footfall, business sentiment and employment, a temporary fall in economic activity is unavoidable. Economic activity is also affected by the unpredictable factors of COVID-19 and Brexit combined with the slow recovery of corporate investment intentions.
- Knowledge of how to balance economic activity with COVID-19 restrictions has increased in both government and the private sector. We expect that a slow upward-W shaped recovery due to the continued aggressive fiscal and monetary policies implemented by the government and Bank of England. Real GDP in 2020 is likely to fall to -11.6% YoY, after which we expect a recovery to 5.2% YoY in 2021. However, real GDP will need many years for a return to pre-COVID-19 levels (even assuming that a trade-deal with the EU will be agreed).

UK Real GDP Growth Forecast



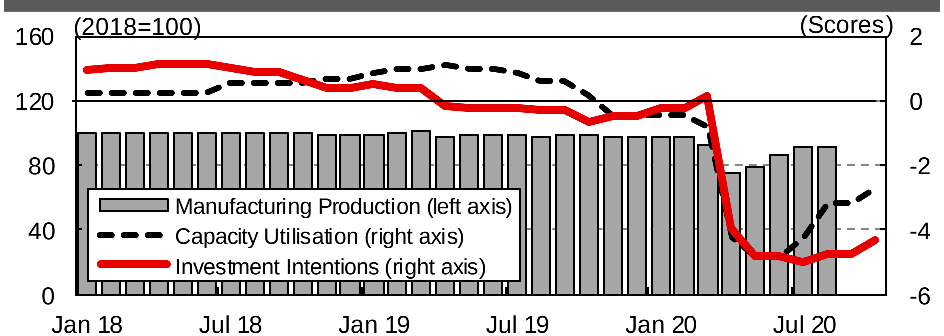
Source: Office of National Statistics, MUFG Bank Economic Research Office

UK Unemployment, Vacancies and Employment



Source: Office of National Statistics, BoE, MUFG Bank Economic Research Office

UK Manufacturing Production and Investment Intentions

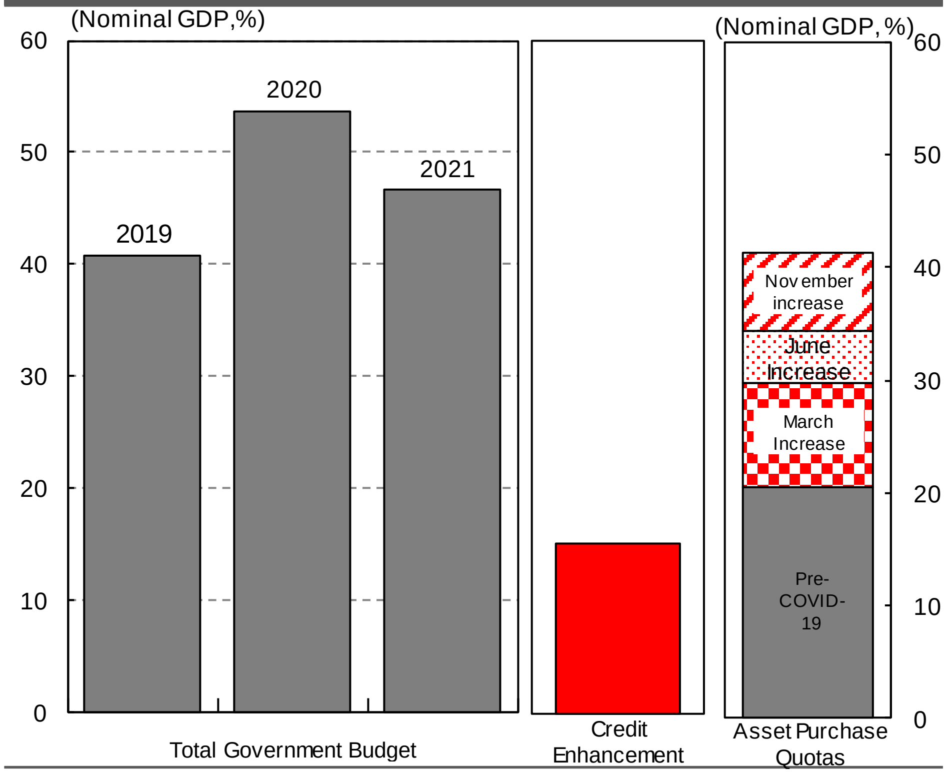


Source: Office of National Statistics, BoE, MUFG Bank Economic Research Office

4-5. European Economies: UK Economy - Policy Response

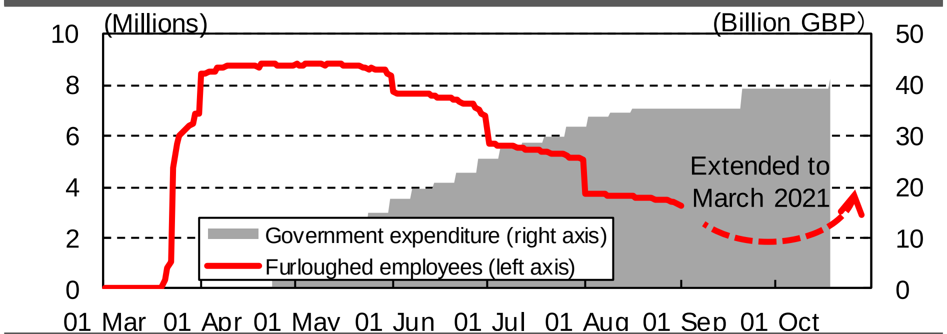
- The government has estimated the total expenditure in response to COVID-19 to reach 280 billion (equivalent to 13% of GDP) in 2020. Government expenditure for 2021 is planned to greatly exceed that of 2019, and GBP330 billion (equivalent to 15% of GDP) has been allocated to support corporate financing via commercial paper purchases and government-backed loans. The government and BoE will maintain this accommodative stance and continue to support companies and household incomes considerably.
- The number of furloughed workers on the Coronavirus Job Retention Scheme fell to 2 million in October from its peak of approximately 9 million. However, the number is likely to increase again during the second lockdown. The government has not imposed a limit on its budgetary support for the Job Retention Scheme.
- In terms of monetary policy, the initial response included cutting policy interest rates (0.75% to 0.1%) and increasing asset purchases (GBP445 billion to GBP745 billion). The QE programme was expanded further in November (to GBP895 billion).
- Currently, we forecast that economic activity will continue to be supported strongly by the government and the Bank of England's accommodative fiscal and monetary policies.

UK Policy Response to COVID-19



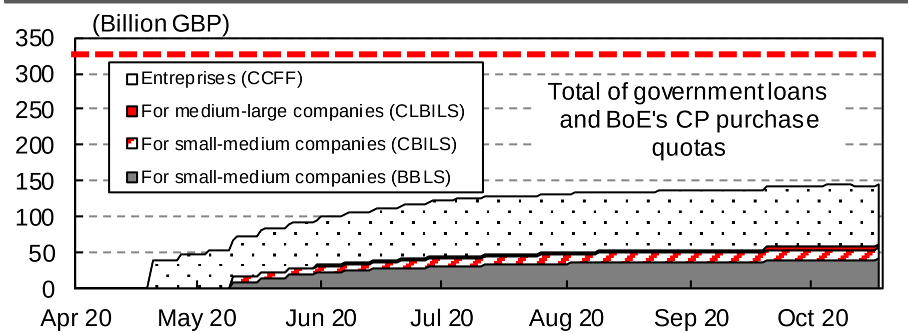
Source: UK Government, BoE, MUFG Bank Economic Research Office

UK Furlough Scheme Adoption and Government Expenditure



Source: UK Government Statistics, MUFG Bank Economic Research Office

Government and BoE's Loan support and CP Purchase Scheme



Source: UK Government Statistics, MUFG Bank Economic Research Office

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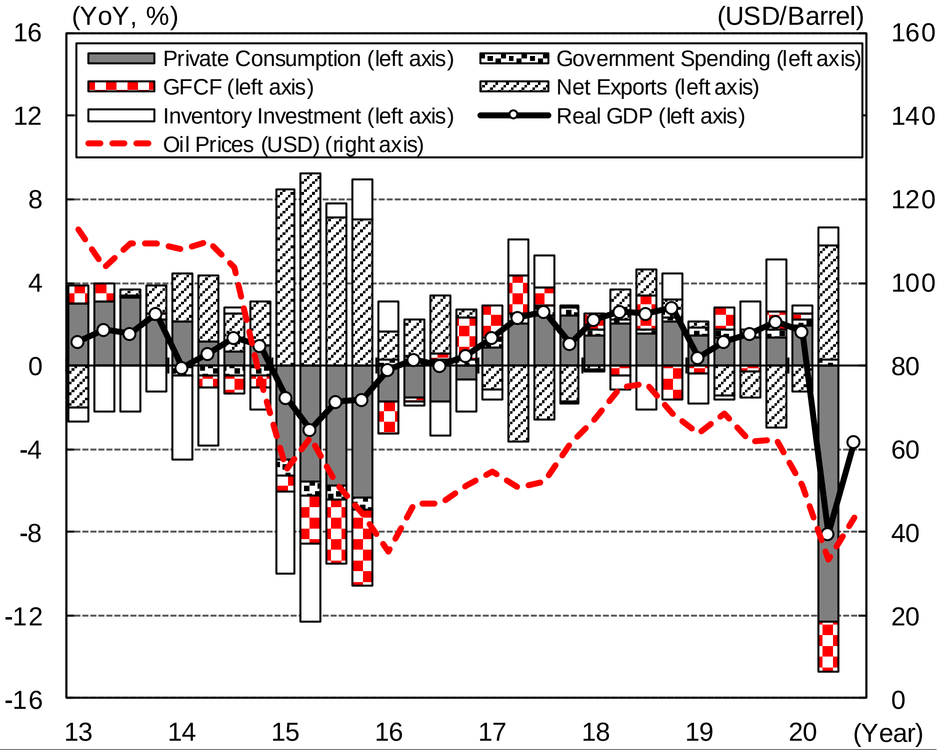
4-5. European Economies: Russia

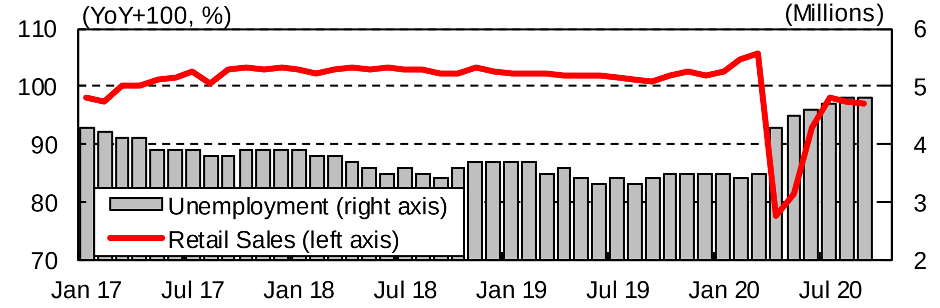
- Russian real GDP has recovered from -8.0% YoY in Q2 to -3.6% YoY in Q3, due to the re-starting of its economic activity following a relaxation of activity restrictions. However, as in other European countries, COVID cases have been returning to Russia since autumn.
- Retail sales have come to a standstill from its recovery in autumn because of this increase in COVID-19 cases and a worsening employment situation. The government have not implemented strict restrictions, but while the increase of infections has not stopped, people are refraining from social activities out of the home. Therefore, there is a high possibility that the recovery will be extremely slow.
- In addition, the production curtailment, due to crude oil prices crashing since the start of the pandemic, has weighted down both on economic activity and the government's annual revenue. This is especially so because high inflation and weak RUB, in combination with low crude oil prices, means that there is limited room for further relaxation from a currency protection standpoint. Concerning fiscal policy, caution needs to be exercised as the reduction of revenue from crude oil and natural gas has the potential to become a hurdle and a large-scale problem.
- Knowledge of how to combine economic activity with COVID-19 restrictions has increased in both government and the private sector. While the crude oil prices are improving, the slow recovery of the economy is likely to continue. However, a large-scale policy response is not expected. Russian real GDP growth in 2020 is likely to be around -5.0% YoY and we expect a limited recovery to 2.5% YoY in 2021.

Russia Real GDP Growth and Brent Crude Oil Prices



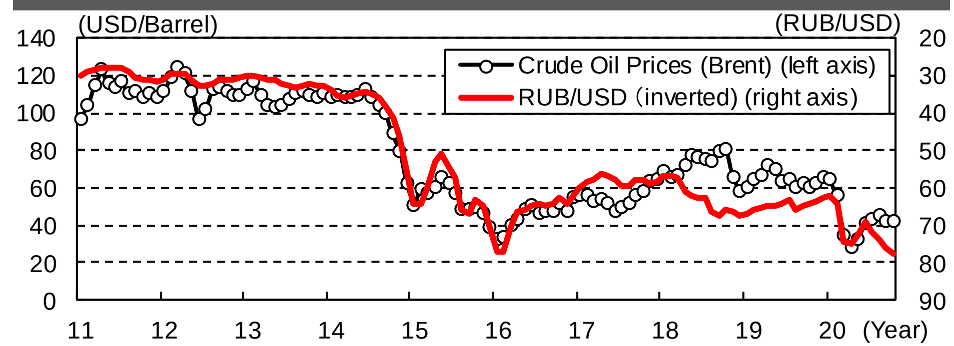
Source: Russia Statistics Office, MUFG Bank Economic Research Office

Russia Retail Sales and Unemployment



Source: Russia Statistics Office, MUFG Bank Economic Research Office

RUB Spot Price and Crude Oil Prices



Source: Macrobond, MUFG Bank Economic Research Office

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4-6. Asian and the Australian Economies: Overview

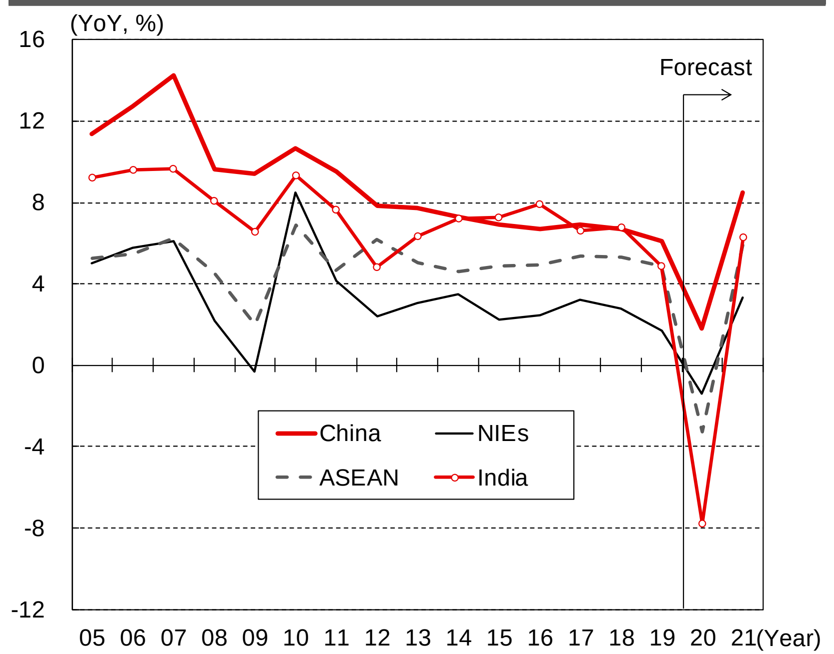
- Examination of China's economy reveals that while consumption continues to recover, growth is still weak compared with before the pandemic, particularly consumption of face-to-face services. On the other hand, growth of investment remains strong. Looking ahead, it seems the Chinese economy will continue to record firm growth, particularly the corporate sector, due to the impact of government policies. As a result, its recovery it expected to continue. The economy will maintain positive growth of 1.8% YoY in 2020 and will rebound to a high level of 8.5% YoY the following year.
- In general, the number of COVID-19 cases in ASEAN and NIEs is comparatively low and economies continue to pick up as restrictions on movement are eased. However, there are countries where the number of new cases remains at a high level and growth has still not returned to pre-COVID-19 levels. Although it appears economies will continue to recover as economic activities are re-started in stages, the pace is forecast to be gradual in light of concerns about another rise in cases and the resulting reluctance to engage in activities. The growth rate in ASEAN and NIEs for 2020 is forecast at -3.3% YoY and -1.4% YoY, and for 2021 is predicted to be 6.0% YoY and 3.3% YoY respectively.
- The Australian economy continues to recover, but the rebound in consumption of durable goods and services is sluggish. Looking ahead, while the economy will continue to recuperate gradually, the impact of the rise in cases during the first half of the year was large. The growth rate for 2020 is forecast to be -4.2% YoY and for 2021 it is 3.0% YoY.

Outlook for Asian and the Australian Economies

	Real GDP growth rate (%)			Consumer Price Index (%)		
	2019 (Actual)	2020 (Forecast)	2021 (Forecast)	2019 (Actual)	2020 (Forecast)	2021 (Forecast)
Asia (11 countries/regions)	5.0	- 1.4	7.1	2.9	2.9	2.3
China	6.1	1.8	8.5	2.9	2.6	1.9
India (FY basis)	4.2	- 8.8	8.2	4.8	5.5	4.1
NIEs	1.7	- 1.4	3.3	0.7	0.2	1.1
South Korea	2.0	- 0.7	3.0	0.4	0.5	1.2
Taiwan	2.7	1.6	2.9	0.5	- 0.2	1.0
Hong Kong	- 1.2	- 7.0	4.3	2.9	0.8	1.6
Singapore	0.7	- 6.1	4.8	0.6	- 0.3	0.4
ASEAN 5	4.9	- 3.3	6.0	2.1	1.3	1.9
Indonesia	5.0	- 1.8	5.6	2.8	2.0	1.8
Thailand	2.4	- 5.8	4.1	0.7	- 0.9	1.0
Malaysia	4.3	- 6.2	7.7	0.7	- 1.2	1.4
The Philippines	6.0	- 8.1	7.6	2.5	2.4	3.0
Vietnam	7.0	2.7	6.8	2.8	3.3	3.1
Australia	1.9	- 3.3	3.0	1.6	0.6	1.3

Source: National statistics of each country, MUFG Bank Economic Research Office

Real GDP in Major Countries and Regions in Asia



Source: National statistics of each country, MUFG Bank Economic Research Office

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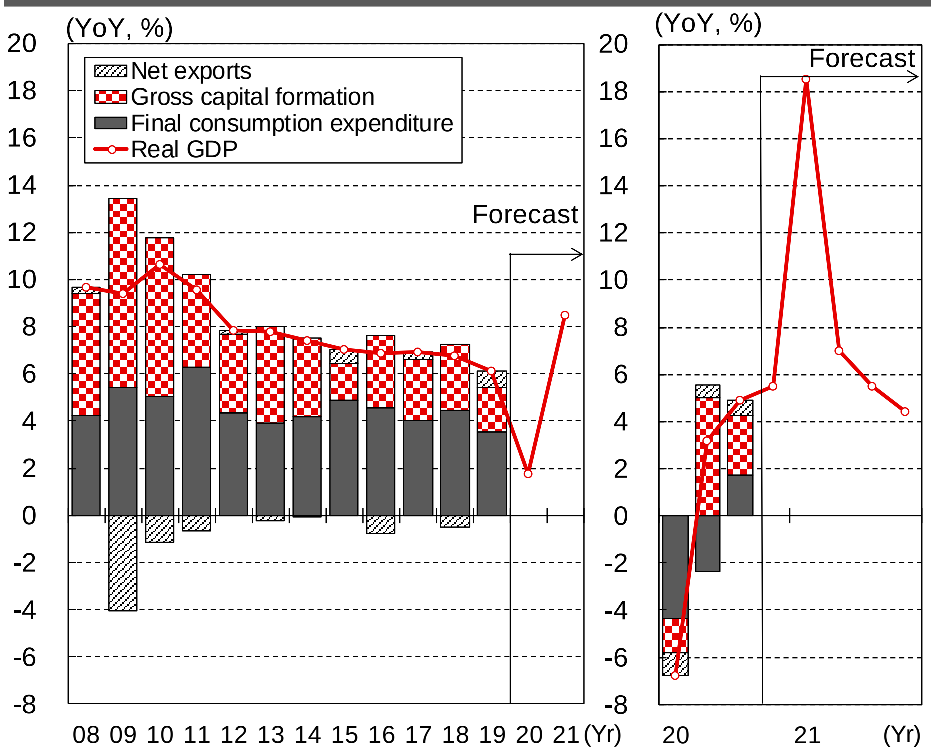
4-6. Asian and the Australian Economies: China – Overview and Investment

- China's real GDP for the July-September quarter was 4.9% YoY. The level of economic activities continues to pick up and growth accelerated from the previous quarter (3.2% YoY) owing to China's control of the spread of COVID-19 domestically.
- A breakdown of growth by demand component shows investment maintains high levels of growth due to the government's decision at the National People's Congress in May to expand the framework for issuing special local government bonds (RMB 3.75 trillion in 2020, an increase of RMB 1.6 trillion from the previous year), which are used to fund infrastructure, as well as due to the robust growth of investment in real estate. In the future, investment is expected to remain firm in light of the government's promotion of "new infrastructure investment" via policy.

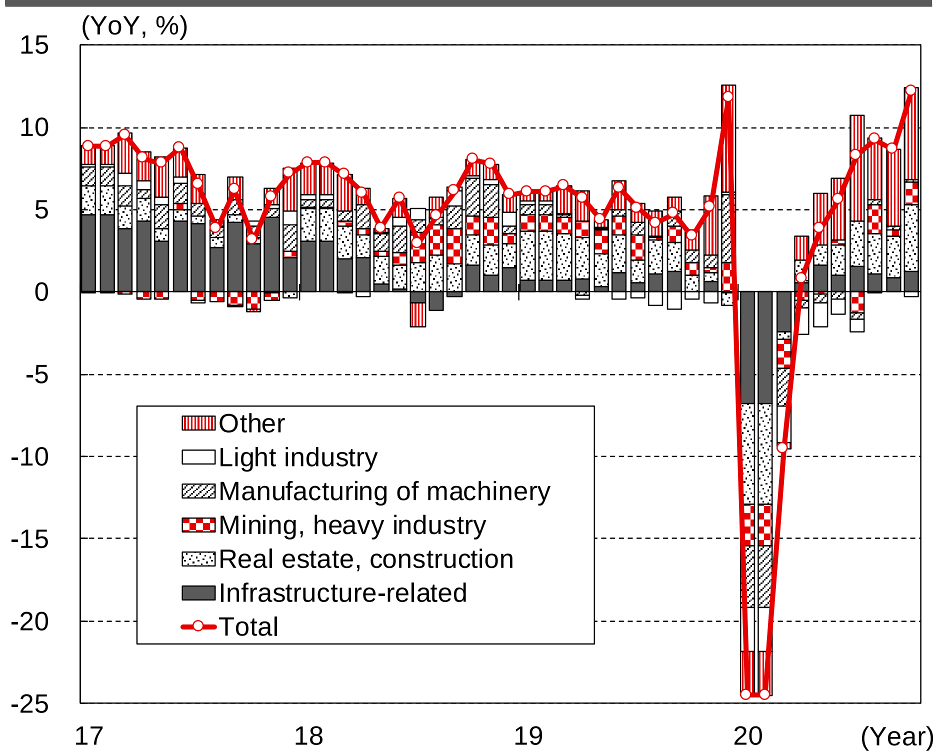
  "New investment infrastructure" is comprised of 3 fields: information infrastructure (5G, IoT, AI), fusion infrastructure (a shift away from conventional technology using internet and big data) and innovation infrastructure (high-tech public infrastructure that supports scientific research).

China's Real GDP Growth Rate



Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

China's Fixed Asset Investment

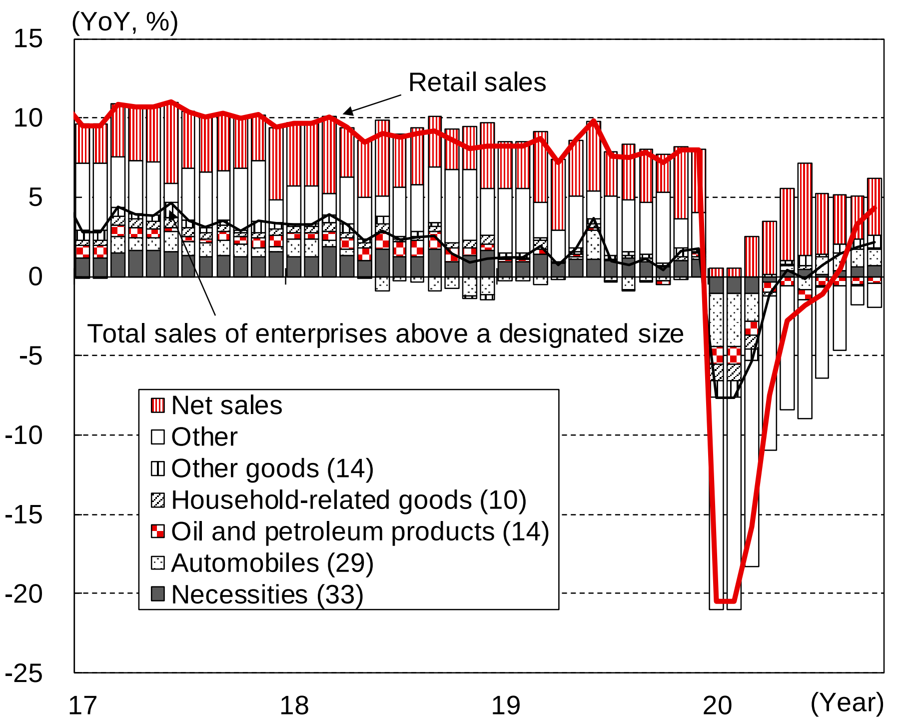


Note: "Infrastructure-related" covers transport, storage, postal services, water conservancy, environment and utility management. New infrastructure investment is not just contained within "infrastructure-related", but is likely included in other items too
Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

4-6. Asian and the Australian Economies: China – Private Consumption & Exports

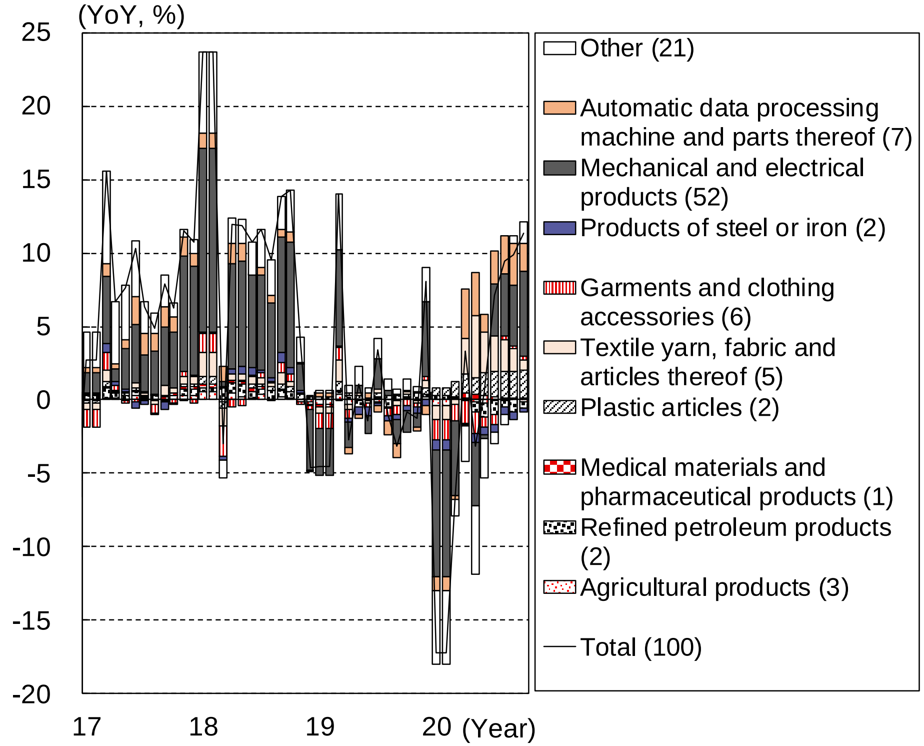
- Private consumption shows continued improvement with retail sales growth of 4.3% YoY in October and restaurant sales recording positive growth for the first time in ten months. However, the number of domestic tourists on China's National Day was around 20% lower than the previous year, which shows there is still a deep-rooted sense of caution about the spread of infection. Looking ahead, private consumption is expected to be lower than before the COVID-19 pandemic, especially the consumption of face-to-face services.
- Exports are robust and are around 10% higher than the previous year, underpinned by exports of "textile yarn, fabric and articles thereof", such as masks, and a rise in demand for "automatic data processing machines and parts thereof", such as laptops, as more people work from home. While it will be important to keep an eye out for another rise in cases, particularly in the US and Europe, and downward pressure from RMB appreciation, it seems growth of exports will remain firm due to the positive affects of the current change in global demand brought about by the pandemic. That being said, growth of exports is expected to slow early next spring in reaction to the strong growth the previous year and a fall in demand that will occur due to the widespread purchase of laptops the previous year.

Breakdown of China's Retail Sales by Item



Note: 1. "Enterprises above a designated size" are those with annual sales of RMB 5 million and over. Figure in brackets each enterprise's share of total
2. "Necessities" are food, clothes, daily goods and medicine. "Household-related goods" is furniture and construction materials.
Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

Breakdown of China's Exports by Item

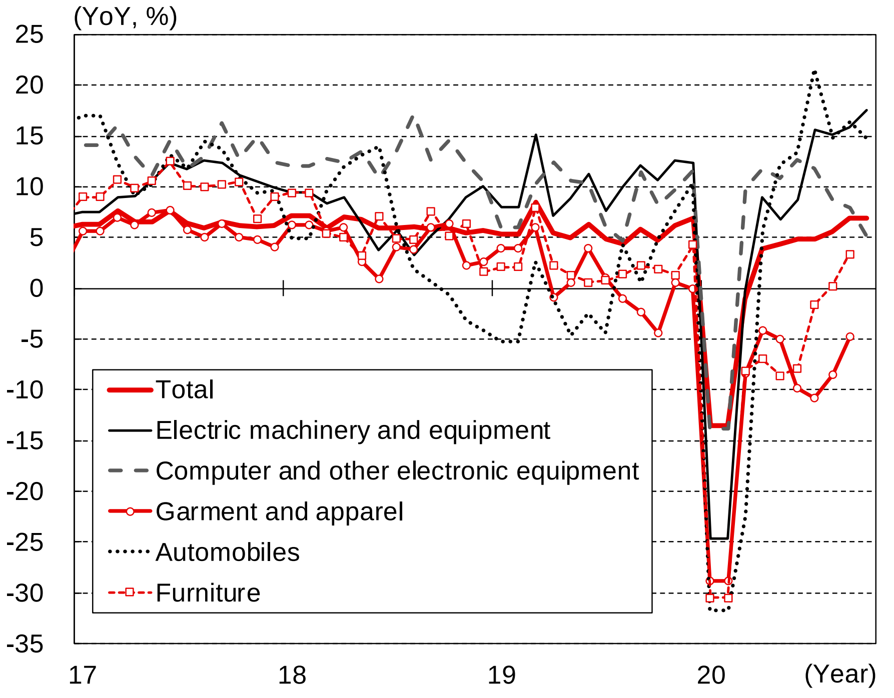


Note: 1. In order to smooth the irregularities caused by the lunar new year, figures for January and February are an average of the two months
2. The numbers in brackets in the chart denote the weight of each item as a percentage of the 2019 total
Source: General Administration of Customs, MUFG Bank Economic Research Office

4-6. Asian and the Australian Economies: China – Production

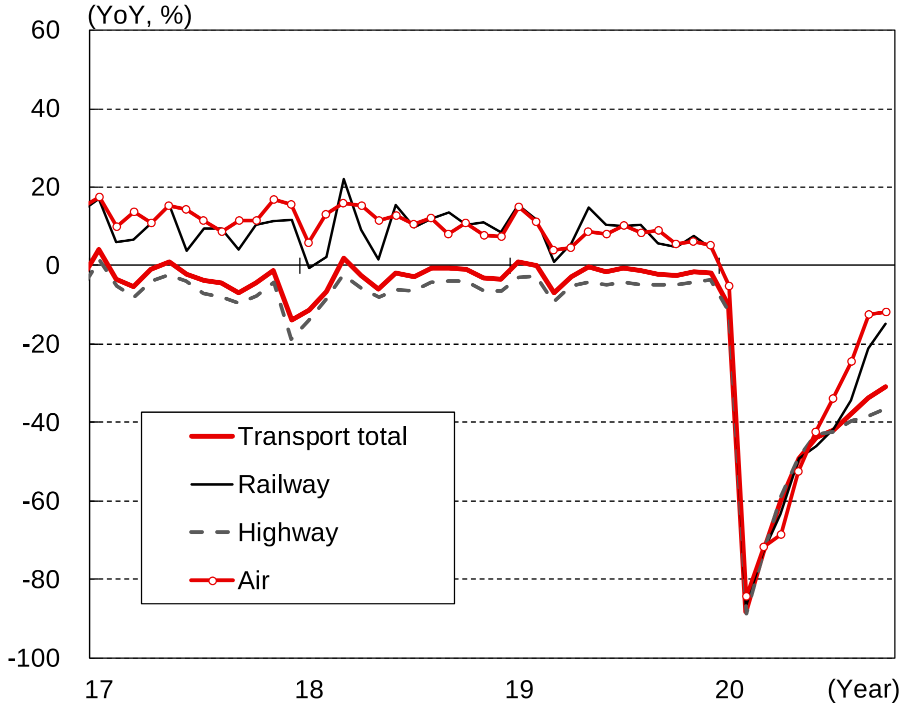
- On the whole, real value-added industrial production has recovered to the point where growth is higher than before the COVID-19 pandemic. However, the pace of recovery differs by industry. Production of “automobiles” is robust as demand picks up and output of “electric machinery and equipment” is also growing at a fast past owing to a rise in demand as more people work from home. On the other hand, output of “garments and apparel” is weak. Looking ahead, although it appears value-added industrial production will remain firm for the time being, particularly “electric machinery and equipment”, there is expected to be a slowdown at the start of spring next year in reaction to the strong growth of output the previous year and a decrease in demand after high levels.
- The number of passengers using China’s transport system shows a downturn of around 30% from the previous year and, although the spread of infection is being controlled domestically, the recovery is slow. It is highly likely that overall service output will also continue to fall below pre-COVID-19 levels in light of the fact that demand for services is not picking up.

China’s Real Added-Value Industrial Production



Source: National Bureau of Statistics of China, MUFG Bank Economic Research Office

China’s Passenger Transportation



Source: Ministry of Transport, China State Railway Group, Civil Aviation Administration of China, MUFG Bank Economic Research Office

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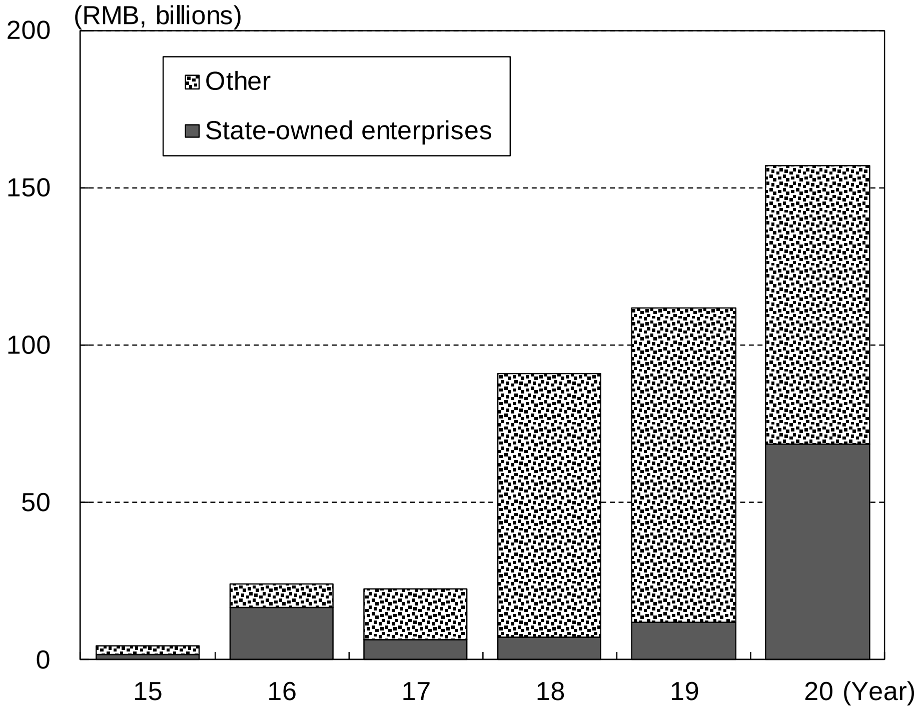
4-6. Asian and the Australian Economies: China – Debt

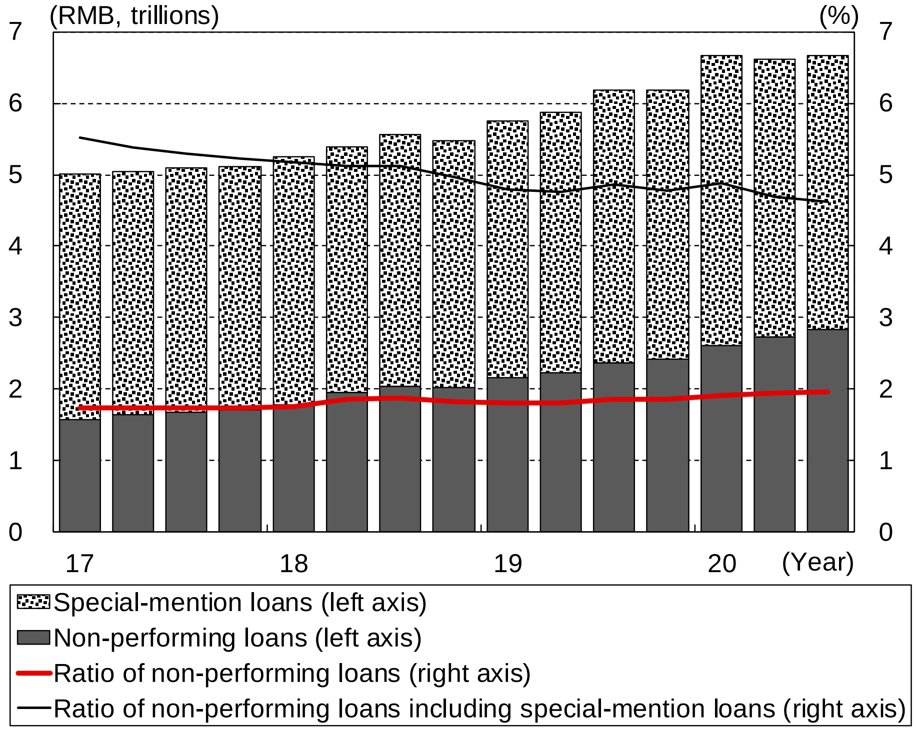
- The Chinese economy continues to recover in general, yet there is currently a wave of corporate bond defaults amongst large state-owned enterprises. The amount of corporate bond defaults up until the end of November has already exceeded those of the previous year. In particular, there has been a sharp rise in the amount of corporate bond defaults among state-owned enterprises. The government has emphasised that a crisis in the financial system will not happen, yet it is important to keep an eye on this going forwards.
- As of the end of September, it appears there has been no marked rise in the ratio of commercial banks' non-performing loans. However, it will be important to watch out for a possible increase in the future in light of the current rise in corporate bond defaults.

Defaults on Corporate Bonds



Note: Figure shows data up until 23rd November 2020
Source: Wind, MUFG Bank Economic Research Office

Ratio of Commercial Banks' Non-Performing Loans

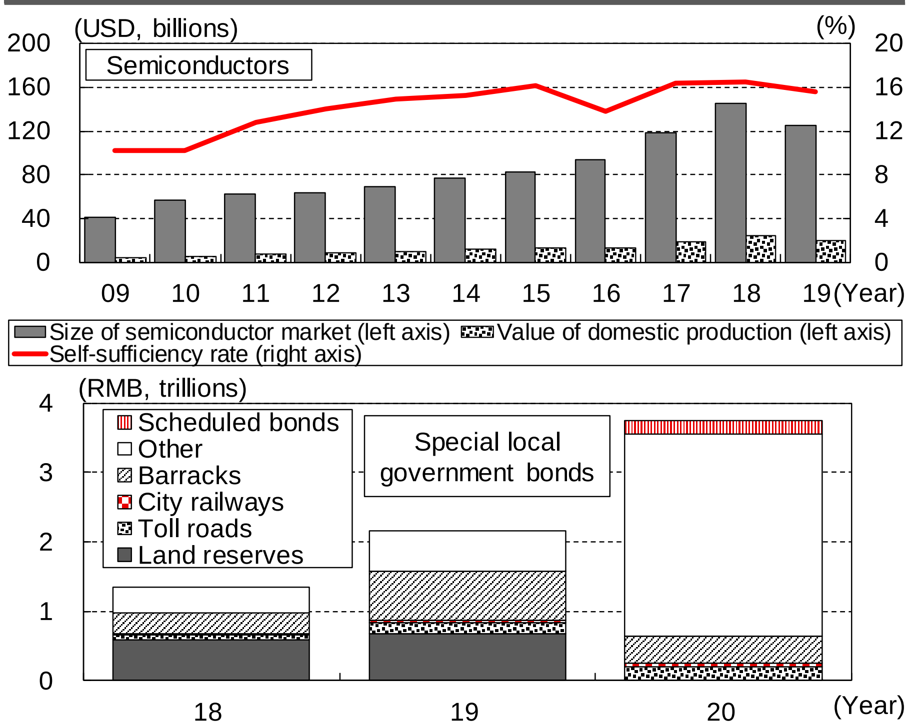


Note: Special-mention loans is debt that although the borrower can repay principal and interest payments at present, it is a source of concern
Source: China Banking Regulatory Commission, MUFG Bank Economic Research Office

4-6. Asian and the Australian Economies: China – Policies

- The Chinese government continues to try and find a balance between controlling the spread of COVID-19 and economic activities, and to deal with difficult issues such as its escalating conflict with the US. It is pushing forwards with several policies to maintain growth in the medium and long term. In August, the government announced a policy to grow its semiconductor industry with an aim to increasing its self-sufficiency rate, which was only around 15% in 2019. It stated that it will give tax incentives to companies that meet a certain level of technological development (a self-sufficiency rate of 70% by 2025 was set as a target for China's semiconductor industry in the "Made in China 2025" policy published in 2015).
- In addition, China is driving forwards with investment in new infrastructure, such as 5G and AI. The current use of special local government bonds (the main resource for investment in infrastructure) reveals a sharp rise in those grouped under "other", suggesting a considerable amount is being devoted to new investment, which is not classified as a separate item under the conventional system.
- In the draft of its 14th Five-Year Plan (2021 to 2025) published at the fifth plenary session of the 19th Central Committee in late October, the CPC announced it will speed up the growth of its semiconductor industry and the digitalisation of its economy, will invest in new infrastructure and will set forth "self reliance through one's own efforts", which assumes its conflict with the US will intensify. On the whole, it appears the government is not taking a conciliatory stance with the US over foreign affairs and national security, economy, science and technology policies.

China's Semiconductor Market and Special Local Government Bonds



Note: Breakdown of special local government bonds as of 2 December 2020
Source: IC Insights, Wind, MUFG Bank Economic Research Office

Overview of the 14th Five-Year Plan

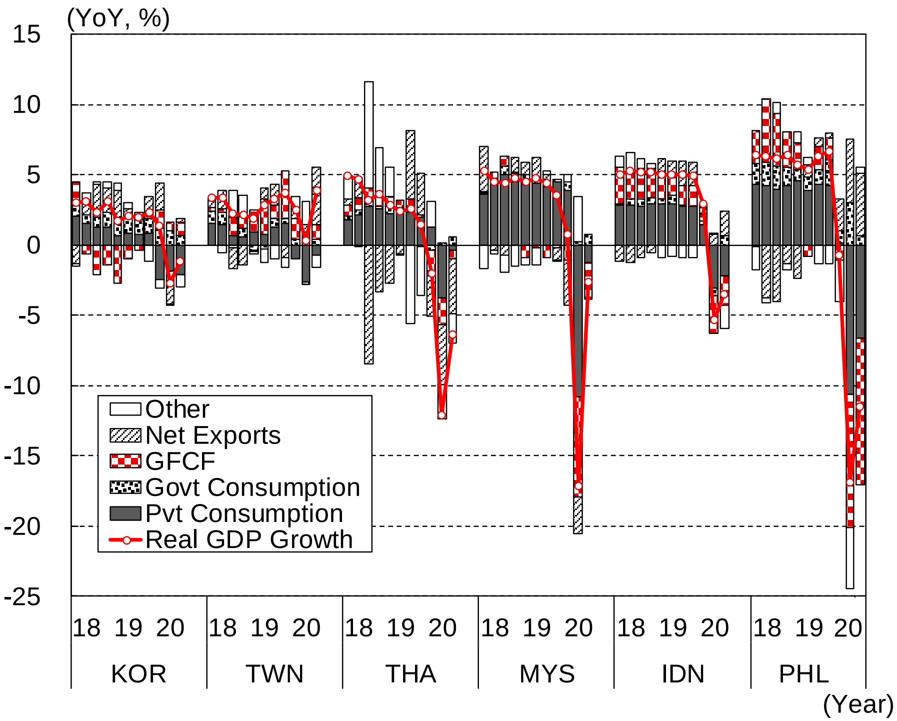
Continued development driven by innovaton
・Enhance important stategic science and technology projects and strengthen China's position and technical capabilities in fields like AI, quantum computing and integrated circuits. ・Improve innovation by encouraging R&D by business and tax incentives for investment in basic research. ・Improve the system for innovation in technology by tightening protection for intellectual
Accelerated development of modern industry systems
・Encourage the construction of infrastructure, such as 5G and an industrial internet. ・Accelerate the development of the digital economy.
Strengthen domestic market, establish framework for new development
・Further the implementation of strategies for increasing domestic demand and structural reforms on the supply side (eliminating monopolies) and connect the two organically. ・Promote "dual circulation", which creates a virtuous cycle between domestic and foreign demand. ・Encourage consumption across the board by increasing conventional consumption and cultivating new forms of consumption.
Open up country further
・Use the advantage of China's market size to further international cooperation and cultivate mutually beneficial relationships. ・Cooperate in construction of the "Belt and Road Initiative" and push forwards with high-quality development. ・Participate proactively in reforming the framework of the global economy and comply with a result that benefits everyone.

Source: State Council, MUFG Bank Economic Research Office

4-6. Asian and the Australian Economies: Other Asian Economies – Overview, Private Consumption and Exports

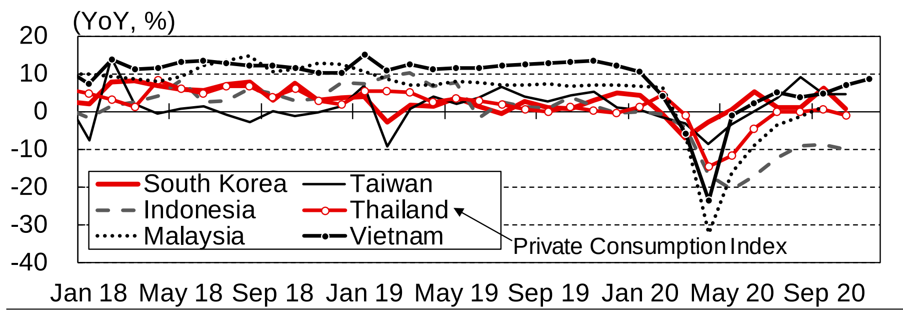
- The real GDP growth of ASEAN and NIEs for the July-September quarter was -4.1% YoY and -0.9% YoY respectively. Although the pace of decrease slowed from the previous quarter, negative growth was recorded for the second consecutive quarter.
- Looking at retail sales, which indicate the level of domestic consumption activities, it appears they are continuing to pick up as various restrictions on movement are eased, yet retail sales on the whole have not yet reached the level they were at before the pandemic. Looking ahead, domestic consumption is expected to continue to recover; however, based on the fact that cases are rising again in some countries, it seems unlikely that growth will return to pre-COVID-19 levels next year and the pace of recovery will be gradual.
- The exports of major countries and regions in Asia to China remain robust and those to other countries (mainly the major developed countries) have picked up significantly. As a result, growth of exports has recovered to positive territory for the most part. That being said, it appears the pace of recovery after the rebound that occurred in the July-September quarter will remain gradual, which means even if exports to China remain robust, growth of exports is forecast to be gradual overall.

Real GDP of Major Countries/Regions in Asia



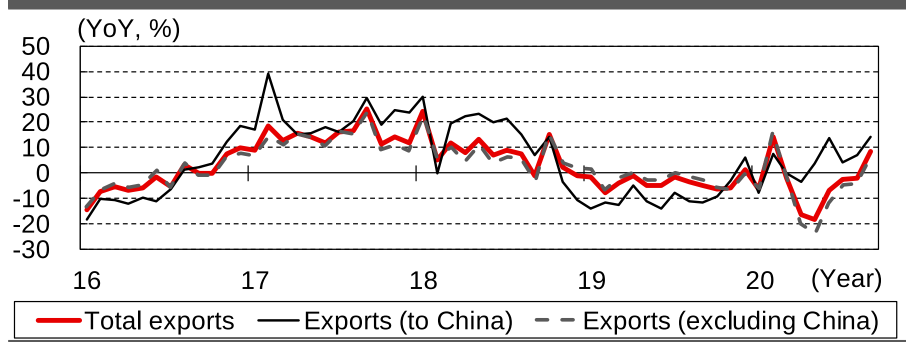
Source: National statistics of each country/region, MUFG Economic Research Office

Retail Sales of Major Countries/Regions in Asia



Source: National statistics of each country/region, MUFG Bank Economic Research Office

Exports of Major Countries/Regions in Asia



Note: Major Asian countries/regions is a total of South Korea, Taiwan, Thailand, Malaysia and Vietnam

Source: National statistics of each country/region, MUFG Bank Economic Research Office

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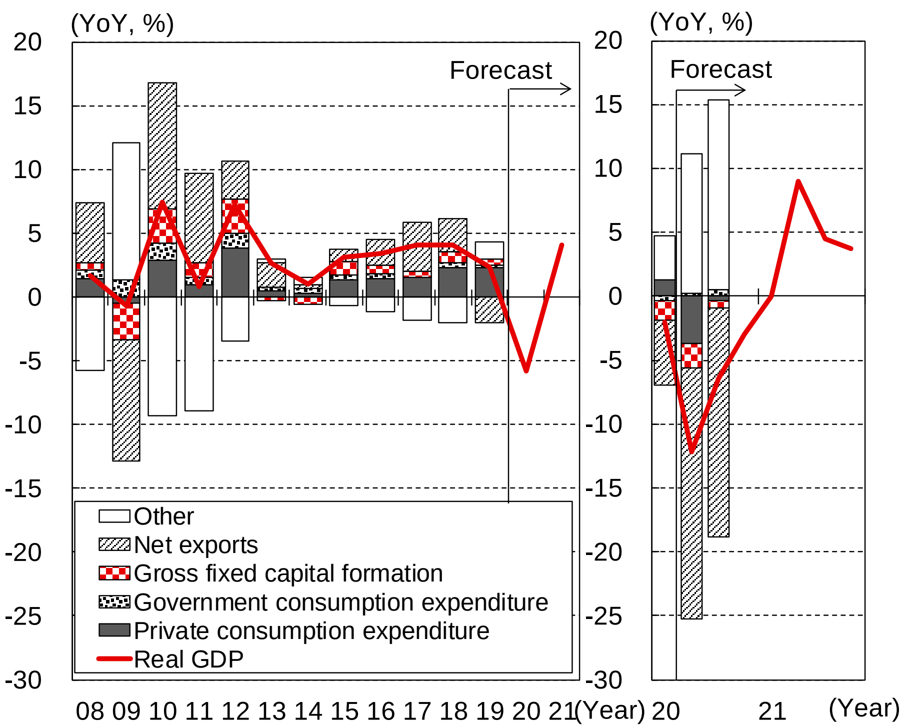
4-6. Asian and the Australian Economies: Other Asian Economies – Thailand

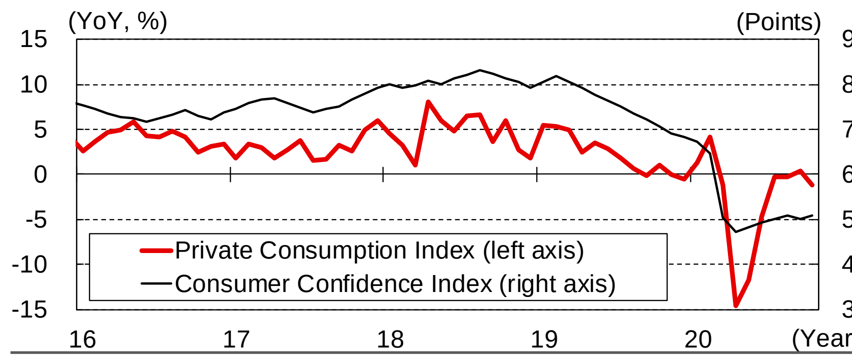
- Although the decline in Thailand's real GDP growth rate decelerated to -6.4% YoY in the July-September quarter from the previous quarter, growth remained negative for the second consecutive quarter. The fall in private consumption also slowed to -0.6% YoY, whereas exports continued to decline significantly, dropping 28.3% YoY.
- The Private Consumption Index – an indicator of domestic consumption activities – is picking up as restrictions on movement are eased after it bottomed out, yet it recorded -1.1% YoY in October as its decline picked up pace again by a small amount. Foreign demand is still in the process of recovering as exports fell by 5.6% YoY in October, the number of international visitors still remains at around zero and there has been a large fall in service exports.
- Looking ahead, the gradual recovery will continue, particularly that of domestic demand. However, since it does not appear that the number of COVID-19 cases will decrease worldwide, conditions for the tourism industry – a major industry in Thailand – are expected to remain severe. In addition, the real GDP growth rates for 2020 and 2021 are forecast to be -5.8% YoY and 4.1% YoY respectively, and economic activities are not expected to return to 2019 levels next year. Furthermore, the anti-government demonstrations taking place now are growing more intense, and it will be important to keep on eye on whether or not they stifle economic growth in the long term.

Thailand's Real GDP



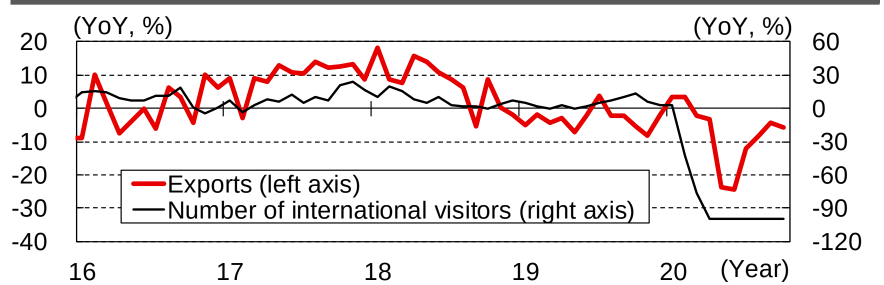
Source: Thailand Office of the National Economic and Social Development Board, MUFG Bank Economic Research Office

Thailand's Private Consumption and Consumer Confidence Index



Source: Bank of Thailand, MUFG Bank Economic Research Office

Thailand's Exports and Number of International Visitors

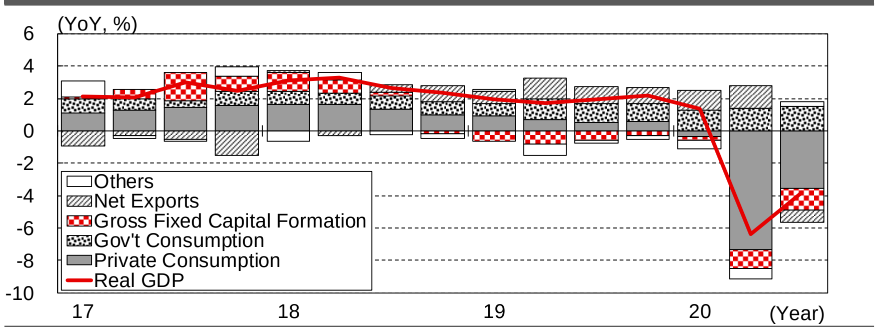


Source: Ministry of Commerce of Thailand, Ministry of Tourism and Sport, MUFG Bank Economic Research Office

4-6. Asian and the Australian Economies: Other Asian Economies – Australia

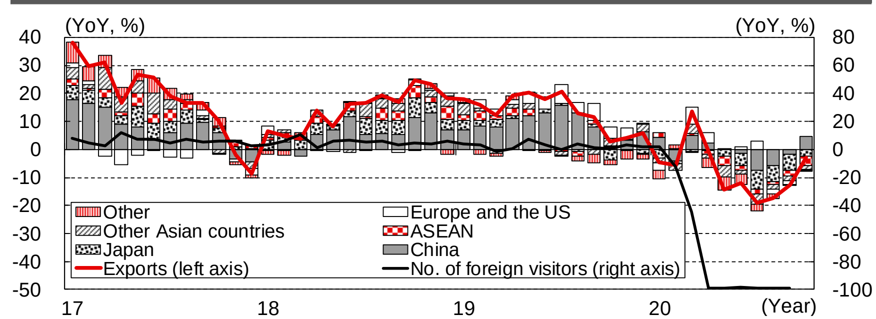
- Australia's real GDP growth rate for the July-September quarter was -3.8% YoY and, although the pace of decline slowed from the previous quarter, real GDP growth was negative for the second quarter in a row. Private consumption fell by 6.5% YoY, which was less of a decrease than the previous quarter, whereas the contribution to growth by net exports turned negative due mainly to a large decrease in exports.
- Currently, economic activities are restarting in stages as the rise in the number of COVID-19 cases slows, and it is highly likely the economy will continue to recover in future. Major indicators have been improving since May and financial assistance from the government (an employment assistance package worth 7.5% of GDP up until end July and a large-scale support package worth 5.0% of GDP included in the budget announced in October which includes income tax cuts for individuals and benefits) and monetary easing by the central bank (introduction of quantitative easing in November: additional easing, policy rate lowered from 0.25% to 0.10% and purchases of national and local government bonds) have underpinned the economy. From mid-June, there appeared to have been another increase in cases in Victoria and restrictions on economic activities were tightened again. Nevertheless, the number of cases nationwide was brought under control in general from late September.
- The real GDP growth rate for 2020 is forecast to fall significantly by 3.3% YoY due to the negative impact from the rise in cases during the first half of the year. However, growth is then predicted to gradually pick up, recording 3.0% YoY in 2021. It will be important to note the situation at the middle of next year, which is winter in the southern hemisphere.

Australia's Real GDP



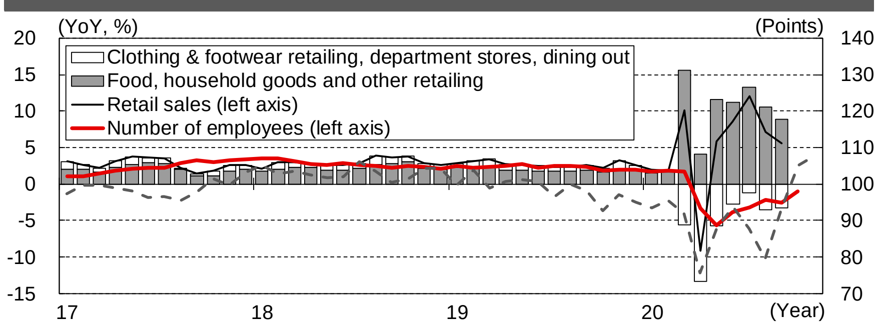
Source: Australian Bureau of Statistics, MUFG Bank Economic Research Office

Australia's Exports and Number of Foreign Visitors



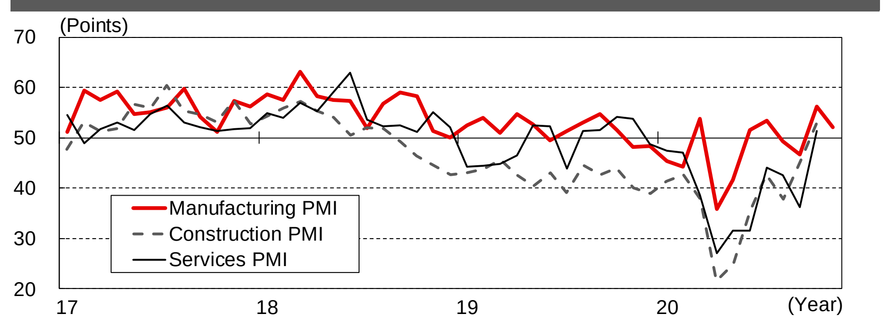
Source: Australian Bureau of Statistics, MUFG Bank Economic Research Office

Australia's No. of Employees, Retail Sales & Consumer Sentiment



Source: Australian Bureau of Statistics, Westpac, MUFG Bank Economic Research Office

Australia's PMI

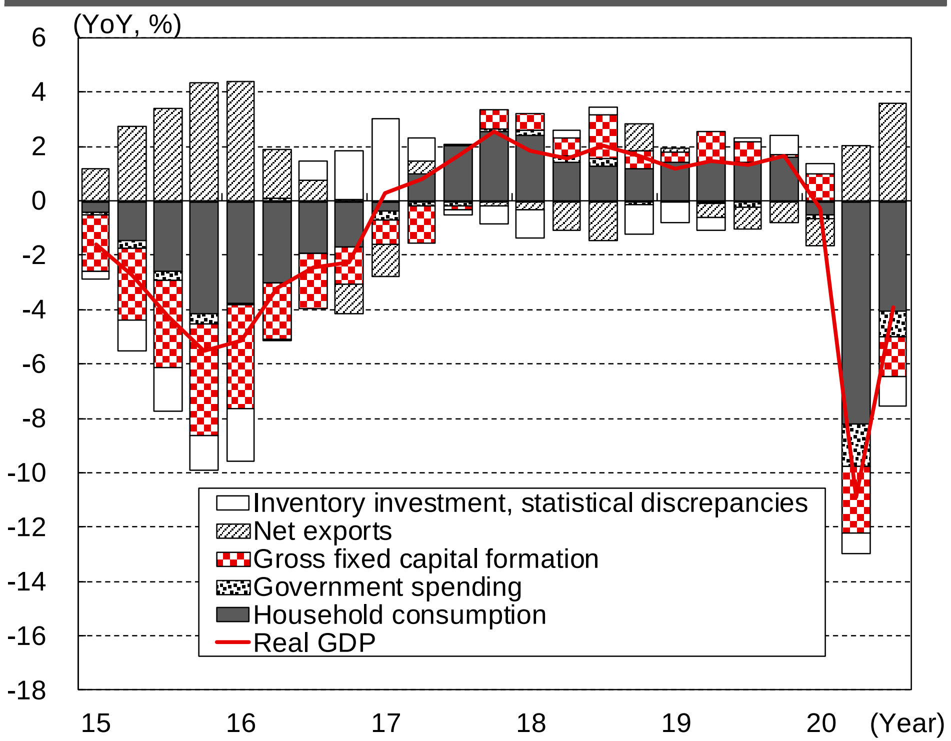


Source: The Australian Industry Group, MUFG Bank Economic Research Office

4-7. Central and South American Economies: Brazil

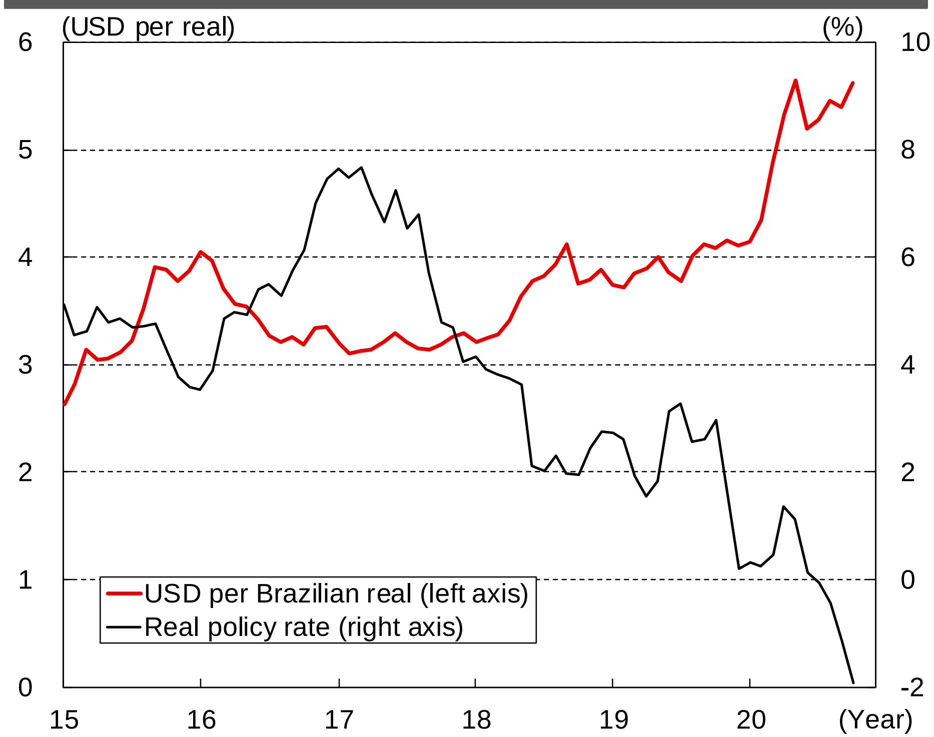
- Brazil's government declared a state of emergency in late March, and state and local governments imposed restrictions on movement in April out of concern that COVID-19 would spread at an increased pace. As a result, economic activities were significantly curtailed, and real GDP declined 11.4% YoY% in the April-June quarter.
- State governments began reopening the economy in phases starting in mid to late May. With help from economic relief measures totalling BRL 1.1 trillion (about 15% of nominal GDP), industrial production increased 1.5% YoY in the July-September quarter and the real GDP declined at a slower pace, falling 3.9% YoY in the July-September, a sign that the economy is moving toward recovery.
- However, there is still great uncertainty about the future path of the economy. While the number of new cases remains high, public aid for household income halved in October and will expire at the end of 2020. So the effect of economic relief will likely diminish gradually. In addition, room for further monetary easing is limited due to weak real. Therefore, we project that Brazil's real GDP will increase only moderately by 2.5% YoY in 2021 after a sharp decline of 5.5% YoY in 2020.

Brazil's Real GDP Growth Rate



Source: The Brazilian Institute of Geography and Statistics, Central Bank of Brazil, Institute for International Monetary Affairs

Brazil's Real Policy Rate and Foreign Exchange Rate

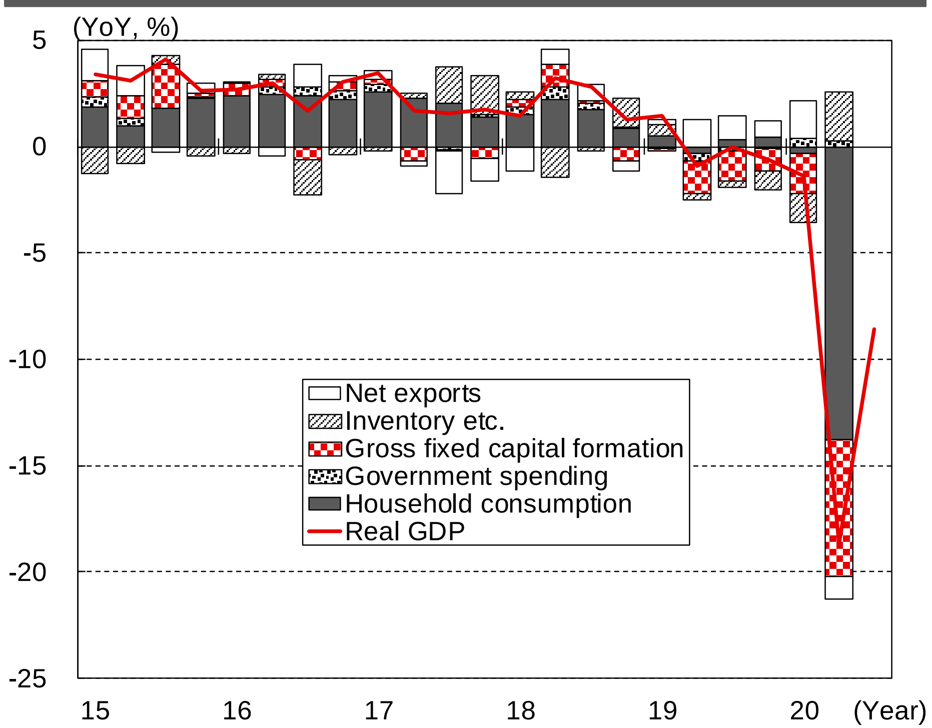


Source: Central Bank of Brazil, Institute for International Monetary Affairs

4-7. Central and South American Economies: Mexico

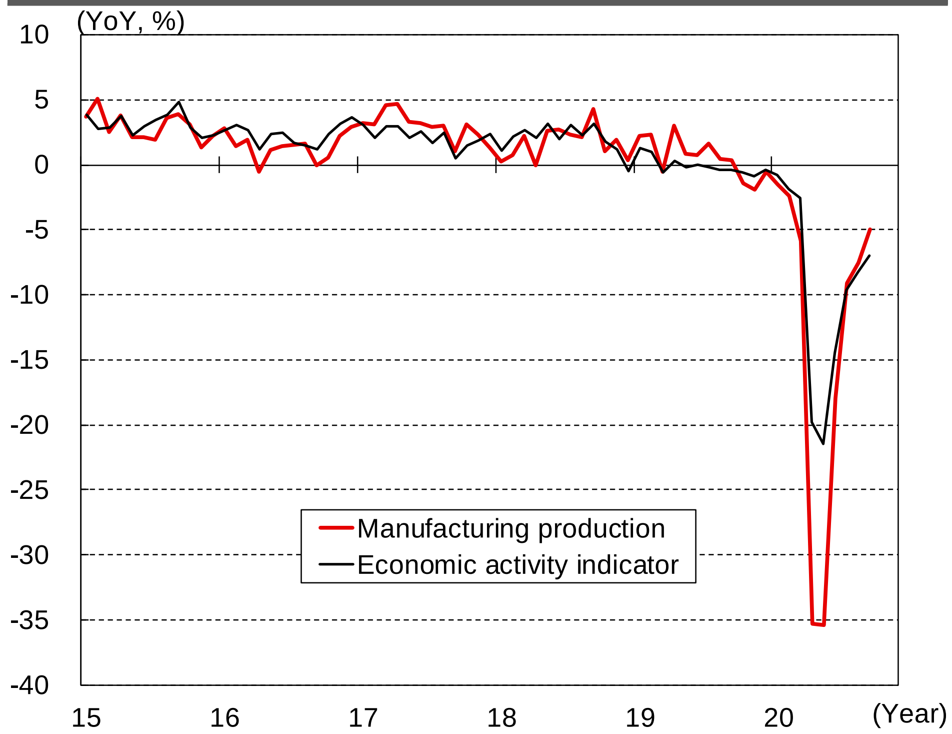
- The economic decline that started in 2019 continued into 2020, and the real GDP decline deteriorated further in the April-June quarter, to -18.7% due to a COVID-19-related state of emergency declared in late March and restrictions on movement.
- Thanks to the gradual resumption of economic activities starting in mid May, the worst period for the economy is over and the economic activity indicator and manufacturing production rebounded to around 95% to 99% of prior year levels as of September. Real GDP fell at a slower pace of 8.6% YoY in the July-September quarter compared with -18.7% the previous quarter.
- Still, there is great uncertainty about the future of the economy as room for further monetary easing is limited due to the weak Mexican peso. We project Mexico's real GDP will decline significantly by 9.0% YoY in 2020 and recover only moderately by 2.0% YoY in 2021, although an economic recovery of the US, Mexico's largest trading partner, will likely help bolster the economy.

Mexico's Real GDP Growth Rate



Source: The National Institute of Statistics and Geography (INEGI), Institute for International Monetary Affairs

Mexico's Manufacturing Production and Economic Activity Indicator

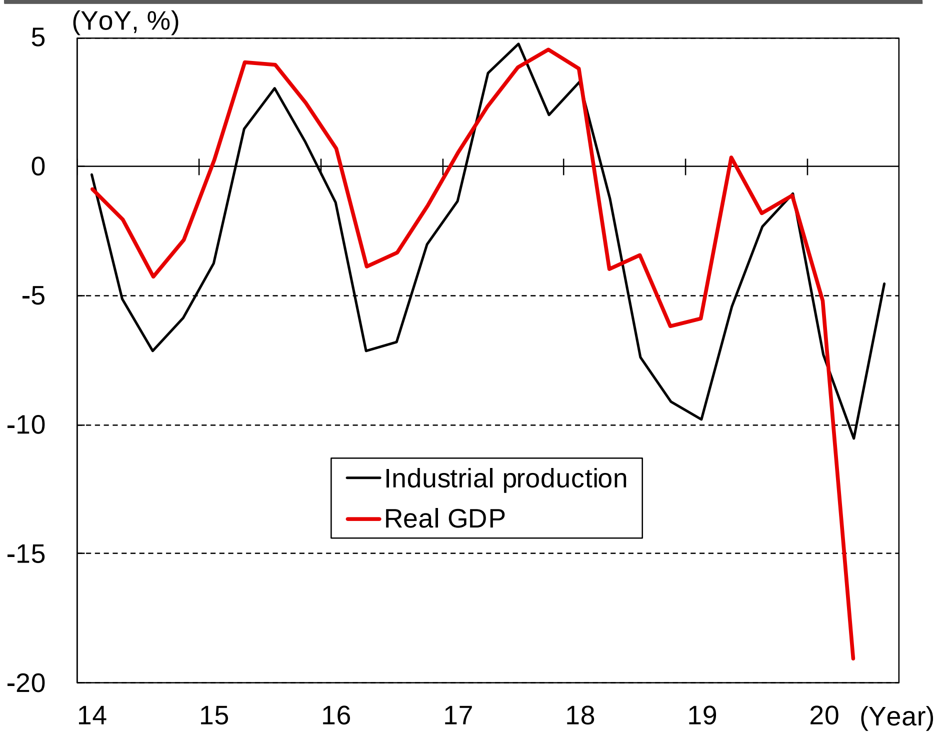


Source: The National Institute of Statistics and Geography (INEGI), Institute for International Monetary Affairs

4-7. Central and South American Economies: Argentina

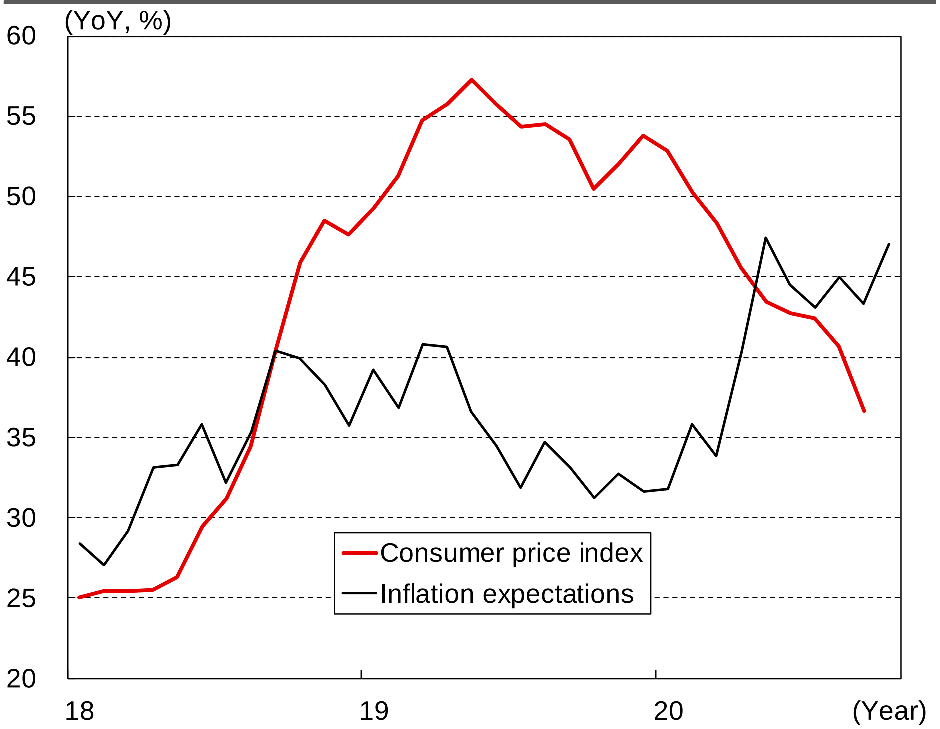
- Argentina's economy had been in a serious condition even before the COVID-19 pandemic, with real GDP contraction and high inflation persisting since around 2018. In the January-March quarter, even before the pandemic was in full swing, real GDP declined significantly by 5.4% YoY. In the April-June quarter, the real GDP decline worsened significantly, recording -19.1% YoY.
- With the government easing movement restrictions in cities starting from around June, the decline in industrial production slowed in the July-September quarter, signalling that the worst period is over.
- However, with the number of new cases still high and the inflation rate still not far off 40% YoY, there is still great uncertainty about the future of the economy. We project that Argentina's real GDP will increase by only 1.0% YoY in 2021 after a 9.0% decline in 2020 as its neighbour Brazil, which has strong economic ties with Argentina, also faces economic difficulties.

Argentina's Real GDP Growth Rate and Industrial Production



Source: The National Institute of Statistics and Censuses (INDEC), Institute for International Monetary Affairs

Argentina's Consumer Price Index and Inflation Expectations

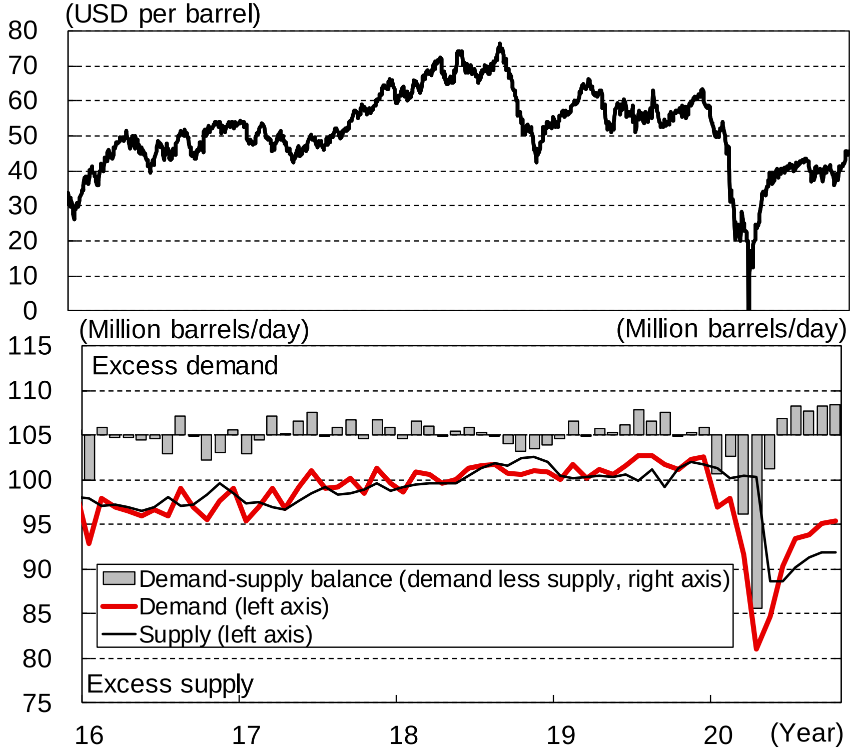


Source: The National Institute of Statistics and Censuses (INDEC), Institute for International Monetary Affairs

4-8. Oil Prices: Overview

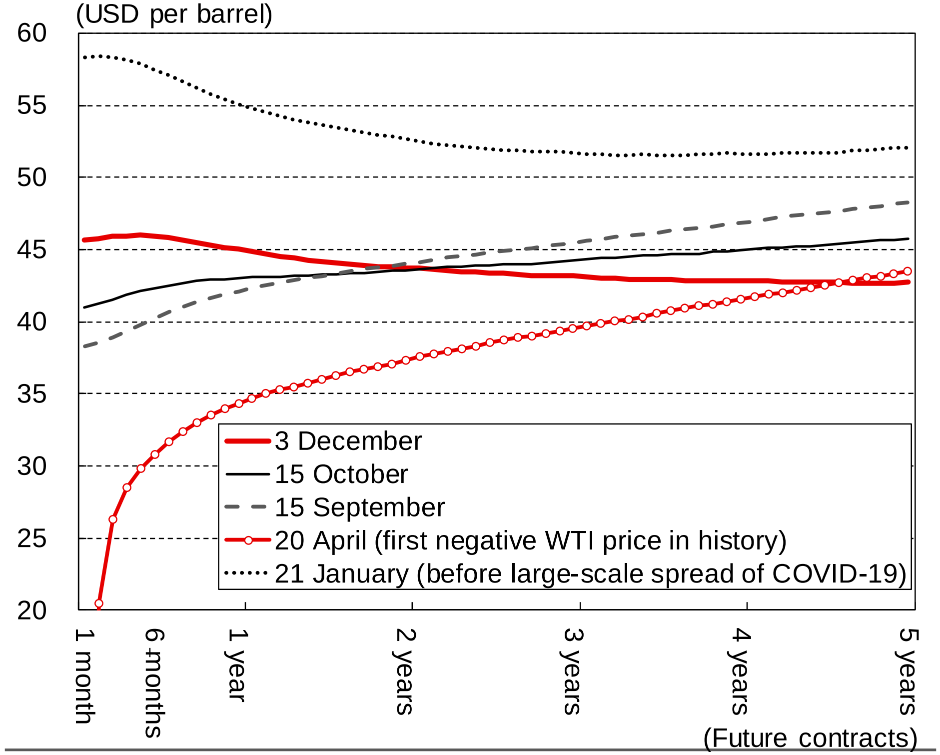
- A sharp fall in demand after the outbreak of COVID-19, a large rise in inventories and reduced storage capacity resulted in oil prices (WTI front month, USD per barrel) plummeting into negative territory temporarily for the first time in history. Nevertheless, prices picked up thanks to an improvement in demand as economic activities were re-started and a decrease in supply brought about the OPEC+ cooperative production cuts. Since June, oil has been trading within a narrow range centred around the USD40 mark for the most part. At the start of October, a number of factors put downward pressure on oil prices: another rise in cases in Europe, awareness of an increase of output by Libya and a fall in US stock prices. As a result, oil prices fell to around USD35 per barrel at the end of the month. Nevertheless, after the US presidential election, prices rose to around USD45 per barrel due to a rise in US stock prices and expectations of a usable COVID-19 vaccine. At the OPEC Ordinary Meeting and the OPEC and non-OPEC Ministerial Meeting which concluded on 3rd December, OPEC+ agreed to reduce the reduce the scale of their current oil output cuts from 7.7 million barrels per day to 7.2 million barrels per day in January, and to deliberate again from February. However, even if they reduce the scale of their output cuts (in order words, an increase in production), oil prices are unlikely to react much and will continue to trade around USD45 since the scale of cuts was only reduced by 500,000 barrels per day.
- Looking at the oil futures curve (WTI), 1-month futures were around USD35~39 during mid-September and 5-year futures were around USD45~49. However, 1-month futures rose to USD40~44 in mid-October, whereas 5-year futures fell to around USD45. Now,1-year futures are around USD45, whereas 5-year futures are at USD42, which means that on the whole prices are not anticipated to rise.

Oil Prices and the Current Balance of Global Supply and Demand



Source: US Energy Information Administration, Bloomberg, MUFG Bank Economic Research Office

Oil Futures Curve (WTI)

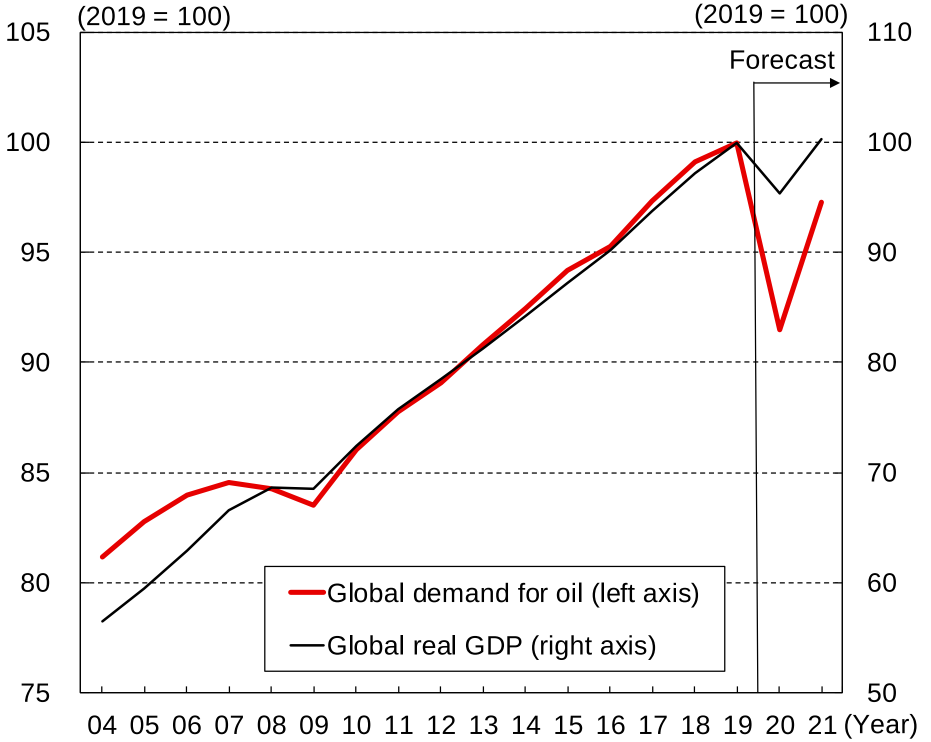


Source: Bloomberg, MUFG Bank Economic Research Office

4-8. Oil Prices: Demand

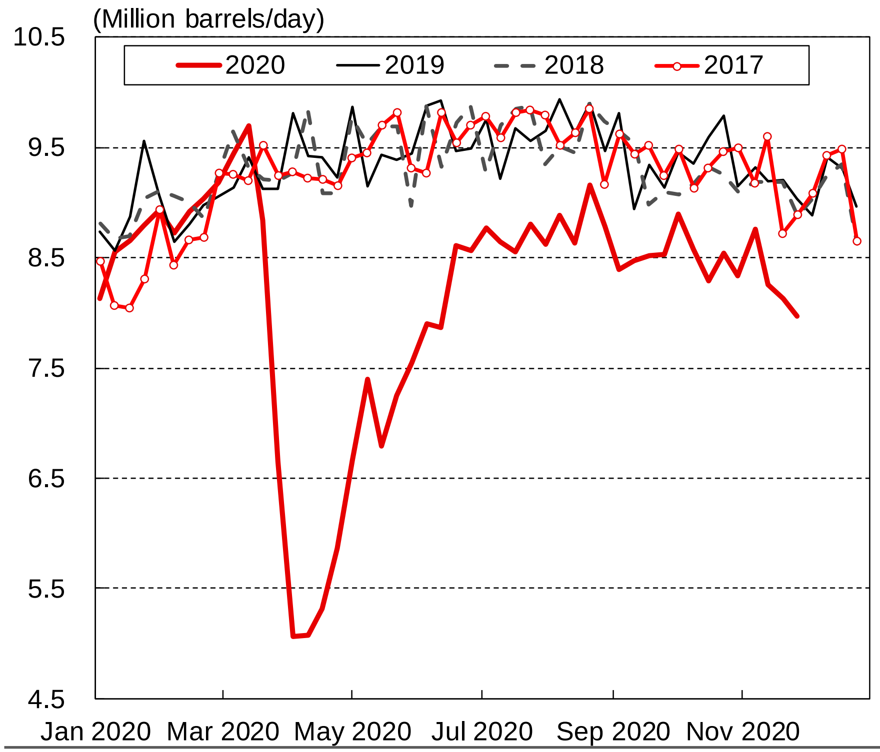
- The fall in demand for oil has been larger than the respective decrease in the level of economic activities and it is thought that the sudden loss of demand for transportation (such as gasoline and jet fuel) owing to restrictions on movement has had a heavy impact on demand for oil. Global demand for oil is forecast to maintain its gradual upward trend in 2021 as the global economy recovers. However, it is unlikely COVID-19 will stop spreading, which means demand for oil, such as demand related to transportation of travellers (particularly long distance), is forecast to lag behind the economic recovery.
- The volume of US gasoline consumption fell dramatically in the middle of March due to restrictions on going outside, but it swiftly picked up again from mid-April as restrictions were eased. However, from the middle of the year it fell to around 10% of that of a typical year and it appears the recovery has peaked. Due to the occurrence of a second and third wave of the pandemic, it seems likely that people's amount of travel and movement will not return to normal.

Global Real GDP Growth Rate and Oil Demand



Source: US Energy Information Administration, IMF, MUFG Bank Economic Research Office

Volume of US Gasoline Consumption



Source: US Energy Information Administration, MUFG Bank Economic Research Office

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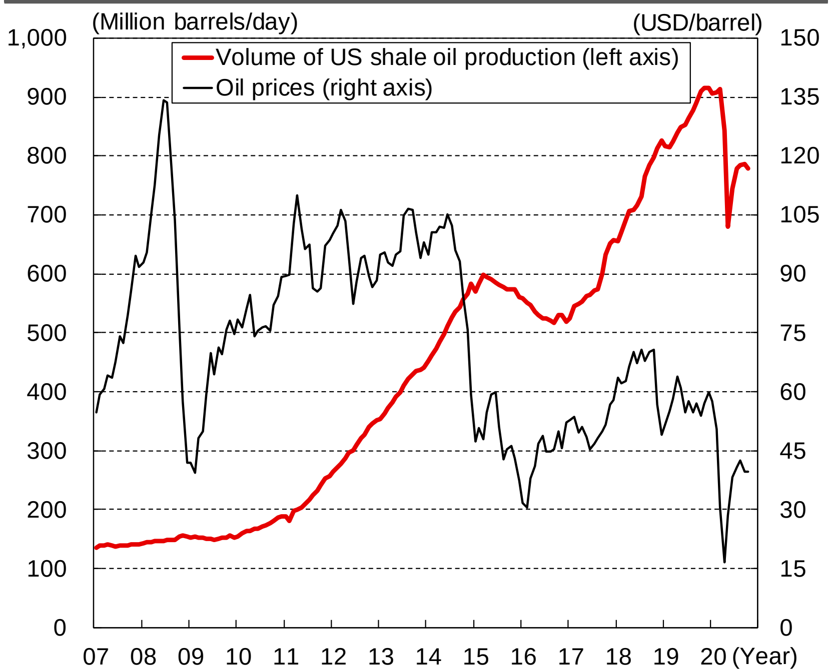
4-8. Oil Prices: Supply

- The volume of US shale oil production declined by a large amount from April on the back of reduced demand and a sharp decrease in oil prices due to the pandemic. However, it has been picking up on the whole since June owing to a recovery in global demand for oil. For a number of months, oil prices have hit a ceiling of around USD40, as has production, but both are forecast to gradually rise as the global economy recovers.
- OPEC+ is expected to continue with the system of cooperative oil production cuts that it implemented in May this year in order to maintain oil prices, yet it seems the group will reduce the scale of its cuts at a gradual pace of around 500,000 barrels per day each month from February (in order words, a gradual increase in production).
- During the period from May to October, although the rate of compliance with output cuts differed by country, the overall rate was 99.5% (103% for October alone). In light of this, it is highly probable that on the whole OPEC+ will continue to reduce production as planned.

US Shale Oil Output and Oil Prices



Note: 1. "Volume of US shale oil production" is a total of output from Permian, Eagle Ford, Bakken, Niobrara, Appalachia, Anadarko and Haynes Hill oil fields

2. Oil prices are mean price for the month

Source: US Energy Information Administration, MUFG Bank Economic Research Office

Target and Actual Oil Output for by OPEC+ Members

(Million barrels/day)

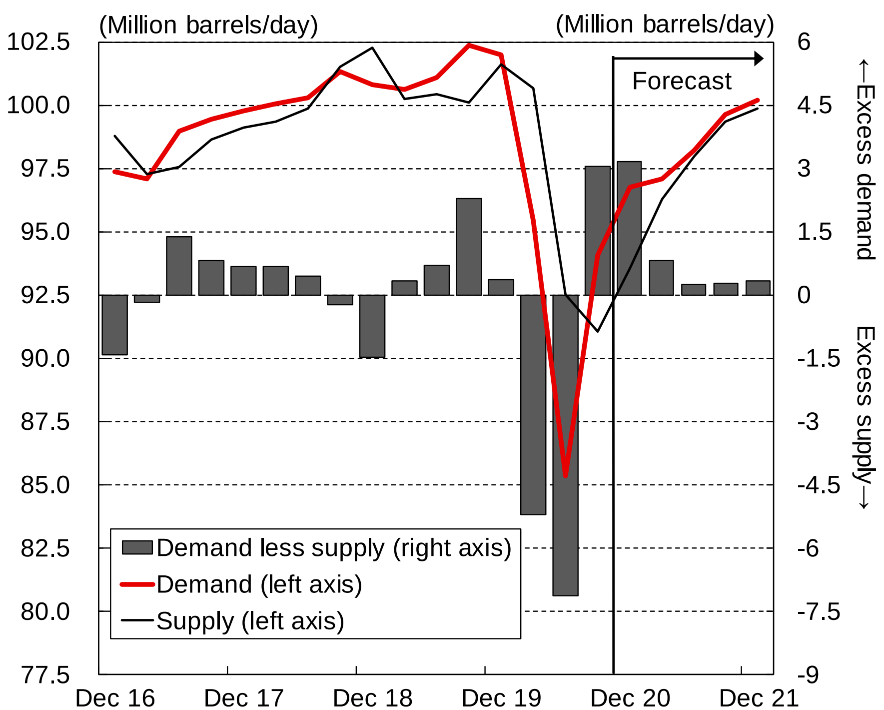
	Actual production in October 2018	Target output for August-December 2020	Actual output in October 2020	Compliance rate (%)
Saudi Arabia	11.00	8.99	8.98	101
Iraq	4.65	3.80	3.82	98
UAE	3.17	2.59	2.42	129
Other	7.86	6.44	6.29	111
OPEC10	26.68	21.82	21.51	106
Russia	11.00	8.99	9.08	95
Kazakhstan	1.71	1.40	1.40	100
Other	2.71	2.21	2.22	98
Non-OPEC	15.42	12.60	12.70	97
Total	42.10	34.42	34.21	103

Source: International Energy Agency, MUFG Bank Economic Research Office

4-8. Oil Prices: Outlook

- Demand for oil is predicted to continue to gradually increase as the global economy recovers. On the other hand, it is thought that the supply of oil will continue to be squeezed relative to demand as US shale oil production continues to increase gradually and OPEC+ also keeps the reductions to their oil output cuts at a gradual pace. Based on this, demand is forecast to continue exceed supply for the time being while the rise in supply is kept in line with the recovery in demand.
- As a result, oil prices are expected to continue to rise little by little, and will remain at around USD45~49 for the most part with some fluctuations until the end of 2021. However, depending on the future of the COVID-19 pandemic, it will be important to keep an eye on the continued risk of a fall in prices due to a downturn in demand.
- In addition, the move to create societies with no carbon emissions is growing worldwide: it is highly likely that the new Biden administration in the US will focus on environmental policies, and Prime Minister Suga in Japan has set a target of carbon neutrality by 2050. This trend will put downward pressure on demand for oil in the medium and long term. It will be important to keep an eye on if this starts to inhibit a rise in oil prices.

Outlook for Balance of Oil Demand and Supply



Source: US Energy Information Agency, MUFG Bank Economic Research Office

Oil Price Forecast

	WTI price (USD/barrel)	YoY (%)	Brent price (USD/barrel)	YoY (%)
Q1 2019	54.9	-12.7%	63.8	-5.1%
Q2	59.9	-11.8%	68.5	-8.7%
Q3	56.4	-18.7%	62.0	-18.2%
Q4	56.9	-4.2%	62.4	-9.0%
Q1 2020	45.8	-16.6%	50.8	-20.4%
Q2	28.0	-53.3%	33.3	-51.3%
Q3	40.9	-27.5%	43.3	-30.2%
Q4	42.0	-26.1%	45.0	-27.9%
Q1 2021	45.0	-1.7%	48.0	-5.5%
Q2	46.0	64.3%	49.0	47.0%
Q3	46.5	13.7%	49.5	14.3%
Q4	46.8	11.3%	49.8	10.6%

Forecast

2019	57.0	-12.1%	64.2	-10.5%
2020	39.2	-31.3%	43.1	-32.8%
2021	46.1	17.6%	49.1	13.8%

Note: Prices shown are average for period
Source: Bloomberg, MUFG Bank Economic Research Office

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Appendix: Global Economic Outlook

Forecast for the Global Economy

		World (weighted average of nominal GDP)				Japan (FY)	Americas					Europe					
			Developed countries	Emerging countries	Other		US	Central and South America (6 countries)				Eurozone (19 countries)				UK	Russia
									Brazil	Mexico	Argentina		Germany	France	Italy		
Nominal GDP	USD trillions	142.0	52.9	53.3	35.8	5.5	21.4	8.6	3.2	2.6	1.0	16.8	4.7	3.2	2.7	3.3	4.1
(2019)	Japan = 100	2,605	971	978	657	100	393	157	59	48	19	308	86	59	49	60	76
Real GDP	2019 Actual	2.7	1.6	4.5	1.8	0.0	2.2	0.6	1.1	-0.3	-2.1	1.3	0.6	1.5	0.3	1.3	1.3
YoY, %	2020 Forecast	-3.9	-5.3	-2.7	-3.8	-5.4	-3.5	-7.5	-5.5	-9.0	-9.0	-7.5	-5.7	-9.2	-9.2	-11.6	-5.0
	2021 Forecast	5.1	4.0	6.4	4.6	3.5	3.9	2.7	2.5	2.0	1.0	4.8	3.9	6.7	6.1	5.2	2.5
CPI	2019 Actual	3.5	1.4	4.0	5.8	0.6	1.8	8.6	3.7	3.6	53.5	1.2	1.4	1.3	0.6	1.8	4.5
(YoY, %)	2020 Forecast	3.2	0.7	3.8	6.0	-0.5	1.3	7.1	3.2	3.5	42.0	0.3	0.4	0.5	-0.2	0.9	3.2
	2021 Forecast	3.0	1.2	3.2	5.3	0.1	1.7	7.0	3.7	3.5	40.0	1.1	1.1	0.9	0.7	1.3	3.4

		Asia and Oceania														
		Asia (11 countries and regions)														Australia
			China	India (FY)	NIEs (4 countries and regions)					ASEAN (5 countries)						
						S. Korea	Taiwan	Hong Kong	Singapore		Indonesia	Thailand	Malaysia	Philippines	Vietnam	
Nominal GDP	USD trillions	45.2	23.4	9.5	4.6	2.3	1.3	0.5	0.6	7.6	3.3	1.3	0.9	1.0	1.0	1.3
(2019)	Japan = 100	829	429	175	85	42	23	9	11	140	61	25	17	18	19	25
Real GDP	2019 Actual	5.0	6.1	4.2	1.7	2.0	2.7	-1.2	0.7	4.9	5.0	2.4	4.3	6.0	7.0	1.9
(YoY, %)	2020 Forecast	-1.4	1.8	-8.8	-1.4	-0.7	1.6	-7.0	-6.1	-3.3	-1.8	-5.8	-6.2	-8.1	2.7	-3.3
	2021 Forecast	7.1	8.5	8.2	3.3	3.0	2.9	4.3	4.8	6.0	5.6	4.1	7.7	7.6	6.8	3.0
CPI	2019 Actual	2.9	2.9	4.8	0.7	0.4	0.5	2.9	0.6	2.1	2.8	0.7	0.7	2.5	2.8	1.6
(YoY, %)	2020 Forecast	2.9	2.6	5.5	0.2	0.5	-0.2	0.8	-0.3	1.3	2.0	-0.9	-1.2	2.4	3.3	0.6
	2021 Forecast	2.3	1.9	4.1	1.1	1.1	1.0	1.6	0.4	1.9	1.8	1.0	1.4	3.0	3.1	1.3

Note: 1. "Nominal GDP" is based on purchasing power parity

2. For "CPI", Japan is composite figure excluding fresh food, Eurozone and the UK are the EU standardised inflation rate (HICP)
3. Figures for Japan and India based on their financial years (April to following March) except Japan's nominal GDP
4. "World", "developed countries", "emerging countries" calculated using Japan data based on the calendar year, India data based on the fiscal year for nominal GDP only and other countries' data based on the calendar year
5. "Developed countries" is a total of Japan, NIEs (4 countries and regions), Australia, US, Eurozone (19 countries) and the UK. "Emerging countries" is a total of China, India, ASEAN (5 countries), Central and South America (6 countries) and Russia
6. "Central and South America (6 countries)" is a total of Brazil, Mexico, Argentina, Colombia, Chile and Peru
7. "Other" uses the IMF forecast for April as reference

Source: National statistics of each country, MUFG Bank Economic Research Office

Appendix: Outlook for the Japanese Economy and Financial Markets

Outlook for the Japanese Economy

Reflecting Jul-Sep 2020 GDP (the first preliminary estimates)

Forecast

	2019				2020				2021				FY2019	FY2020	FY2021
	1Q	2Q	3Q	4Q	Q1	2Q	3Q	4Q	Q1	2Q	3Q	4Q			
1. The Real Economy (QoQ annualized change)															
Real GDP	2.9	1.6	0.2	-7.1	-2.3	-28.8	21.4	3.2	2.6	2.5	2.4	1.9	0.0	- 5.4	3.5
Private Consumption	0.3	2.2	1.8	-11.0	-2.8	-28.7	20.1	3.5	3.2	2.9	2.8	2.5	-0.5	-6.0	3.9
Housing Investment	5.8	-0.7	5.2	-8.9	-15.0	-2.0	-28.1	8.2	0.7	0.4	-0.8	-0.8	0.6	-9.2	-1.1
Private Business Fixed Investment	-1.9	3.3	1.0	-17.7	7.0	-16.9	-12.8	1.2	2.8	2.4	2.4	2.2	-0.3	-7.6	1.4
Business Inventory (Contribution)	0.2	0.0	-1.0	0.1	-0.3	1.5	-0.8	-0.2	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1
Government Expenditures	2.1	4.6	3.6	1.6	-0.1	-0.3	7.6	2.7	1.3	1.5	1.5	0.9	2.5	2.1	1.9
Public Investment	10.5	6.1	3.4	2.7	-1.3	5.1	1.5	1.6	1.6	1.2	1.2	1.2	3.3	2.2	1.3
Net Exports (Contribution)	2.1	-1.2	-1.0	2.1	-0.9	-11.8	12.2	0.4	0.1	0.1	0.1	0.0	-0.2	-1.1	0.8
Exports	-6.8	0.6	-2.5	1.7	-19.7	-53.4	31.3	23.9	8.2	4.9	4.1	3.0	-2.6	-13.6	8.5
Imports	-16.9	7.5	2.8	-9.3	-15.5	9.0	-33.8	19.3	7.4	4.1	3.2	2.8	-1.5	-6.8	3.1
Nominal GDP	5.0	2.0	1.5	-5.7	-1.7	-27.7	22.7	1.7	0.9	-8.4	16.2	1.4	0.8	-4.8	2.4
GDP Deflator (YoY)	0.1	0.4	0.6	1.2	0.9	1.4	1.1	0.5	-0.4	-3.2	-0.4	-0.2	0.8	0.7	-1.1
Industrial Production Index (QoQ)	-2.1	0.0	-1.1	-3.6	0.4	-16.9	8.7	4.5	1.9	1.5	1.1	0.9	-3.8	-10.4	8.8
Domestic Corporate Goods Price Index (YoY)	0.9	0.6	-0.9	0.2	0.5	-2.3	-0.8	-2.0	-1.0	-0.5	0.0	1.0	0.1	-1.5	0.1
Consumer Price Index (excl. fresh food, YoY)	0.8	0.8	0.5	0.6	0.6	-0.1	-0.2	-1.0	-0.6	-0.2	-0.1	0.5	0.6	-0.5	0.1
2. Balance of Payments															
Trade Balance (billion yen)	69	-307	78	388	616	-1,645	1,374	3,495	2,639	-1,651	1,184	3,213	666	5,863	4,828
Current Balance (billion yen)	5,042	4,970	4,813	5,419	4,956	1,972	4,000	6,122	5,273	1,001	3,842	5,878	20,141	17,367	15,474
3. Financial															
Uncollateralized overnight call rate	0.0	-0.1	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Euro-Yen TIBOR (3-month rate)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Newly Issued 10-Year Government Bonds Yield	0.0	-0.1	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0
Exchange Rate (USD/JPY)	110	110	107	109	109	108	106	105	104	105	105	105	109	106	104

Note: *Uncollateralized overnight call rate* is the average rate during the last month of the period. *Euro-Yen TIBOR (3-month rate)*, *Newly Issued 10-Year Government Bonds Yield* and *Exchange Rate (USD/JPY)* are averages during the period.

Source: Various statistics, Bloomberg, MUFG Bank Economic Research Office

Appendix: Outlook for the US Economy and Financial Markets

Outlook for the US Economy

Forecast

	2019				2020				2021				2019 (Actual)	2020 (Forecast)	2020 (Forecast)
	1～3	4～6	7～9	10～12	1～3	4～6	7～9	10～12				10～12			
1. Main Economic Indicators															
Real GDP (QoQ annualized, %)	2.9	1.5	2.6	2.4	-5.0	-31.4	33.4	4.1	3.6	2.9	2.9	2.8	2.2	-3.5	3.9
Personal Consumption Expenditures	1.8	3.7	2.7	1.6	-6.9	-33.2	41.0	4.8	2.5	2.5	2.4	2.4	2.4	-3.7	4.2
Fixed Investment (Residential)	-1.7	-2.1	4.6	5.8	19.0	-35.6	63.0	5.2	1.9	1.9	1.8	1.8	-1.7	4.2	5.5
Fixed Investment (Nonresidential)	4.2	0.0	1.9	-0.3	-6.7	-27.2	22.9	8.6	4.5	4.5	4.4	4.4	2.9	-4.3	5.0
Changes in Business Inventories (Contribution)	0.2	-1.0	-0.1	-0.8	-1.3	-3.5	6.6	0.0	0.0	0.0	0.0	0.0	0.0	-0.7	0.5
Government Expenditures	2.5	5.0	2.1	2.4	1.3	2.5	-4.8	1.1	0.2	0.2	0.2	0.2	2.3	1.2	-0.1
Net Exports (Contribution)	0.6	-0.8	0.0	1.5	1.1	0.6	-3.2	-0.9	1.1	0.4	0.4	0.4	-0.2	0.0	-0.4
Exports	1.8	-4.5	0.8	3.4	-9.5	-64.4	59.6	38.4	18.1	8.4	8.2	8.1	-0.1	-12.2	13.0
Imports	-2.1	1.7	0.5	-7.5	-15.0	-54.1	93.1	31.1	6.0	3.5	3.5	3.5	1.1	-9.2	11.4
Domestic Private End User Demand	2.1	2.9	2.6	1.4	-6.0	-32.3	38.6	5.4	2.8	2.8	2.7	2.7	2.3	-3.5	4.4
Nominal GDP (QoQ annualized, %)	4.0	4.1	4.0	3.9	-3.4	-32.8	38.3	6.1	5.3	3.9	4.9	4.9	4.0	-2.3	5.7
Industrial Production (QoQ annualized, %)	-1.9	-2.3	1.1	0.4	-6.8	-42.6	42.5	9.7	6.8	6.1	5.4	2.4	0.8	-6.7	6.3
Unemployment Rate (%)	3.9	3.7	3.6	3.6	3.8	13.1	8.8	6.5	6.2	5.9	5.7	5.5	3.7	8.0	5.8
Producer Price Index (YoY, %)	1.9	2.0	1.7	1.1	1.1	-1.1	0.0	0.5	0.8	1.6	1.2	1.5	1.7	0.1	1.3
Consumer Price Index (YoY, %)	1.6	1.8	1.8	2.0	2.1	0.4	1.2	1.4	1.4	2.2	1.6	1.7	1.8	1.3	1.7
2. Balance of Payments															
Trade Balance (hundred million dollars)	-2,161	-2,246	-2,242	-2,287	-2,332	-2,377	-2,423	-2,468	-2,514	-2,559	-2,605	-2,651	-8,643	-8,656	-8,756
Current Account (hundred million dollars)	-1,266	-1,277	-1,258	-1,289	-1,319	-1,349	-1,379	-1,409	-1,439	-1,468	-1,497	-1,526	-4,802	-4,618	-4,668
3. Financial Indicators															
FF Rate Target (%)	2.25-2.50	2.25-2.50	1.75-2.00	1.50-1.75	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	1.50-1.75	0.00-0.25	0.00-0.25
Euro Dollar (3M) (%)	2.7	2.5	2.2	1.9	1.5	0.6	0.3	0.2	0.2	0.2	0.2	0.2	2.3	0.7	0.2
10-year Treasury Note's Yield (%)	2.7	2.3	1.8	1.8	1.4	0.7	0.6	0.9	0.9	0.9	0.9	0.9	2.1	0.9	0.9

Note: FF Rate Targets is end-of-period figures, Euro Dollar (3M) and 10-year Note's Yield are averages for periods.
Source: Compiled by MUFG Bank Economic Research Office from various reports and Bloomberg

Appendix: Outlook for the European Economies and Financial Markets

Outlook for European Economies

1. Overview

	Real GDP growth rate (YoY, %)			CPI (YoY, %)			Current Account (USD billions)		
	2019 (Actual)	2020 (Forecast)	2021 (Forecast)	2019 (Actual)	2020 (Forecast)	2021 (Forecast)	2019 (Actual)	2020 (Forecast)	2021 (Forecast)
Eurozone	1.3	- 7.5	4.8	1.2	0.3	1.1	355	306	394
Germany	0.6	- 5.7	3.9	1.4	0.4	1.1	273	255	295
France	1.5	- 9.2	6.7	1.3	0.5	0.9	- 18	- 57	- 20
Italy	0.3	- 9.2	6.1	0.6	- 0.2	0.7	59	58	64
UK	1.3	- 11.6	5.2	1.8	0.9	1.3	- 122	- 79	- 108
Russia	1.3	- 5.0	2.5	4.5	3.2	3.4	65	23	16

2. Forecast by Demand Component (YoY, %)

	Eurozone			UK		
	2019 (Actual)	2020 (Forecast)	2021 (Forecast)	2019 (Actual)	2020 (Forecast)	2021 (Forecast)
Nominal GDP	3.0	- 6.5	6.0	3.4	- 8.3	6.2
Real GDP	1.3	- 7.5	4.8	1.3	- 11.6	5.2
Contribution by domestic demand	1.8	- 6.2	4.4	1.5	- 14.3	5.2
Contribution by foreign demand	- 0.5	- 1.3	0.4	- 0.2	2.7	-0.0
Private consumption	1.4	- 8.4	4.2	0.9	- 14.6	3.7
Government consumption	1.8	0.5	3.7	4.1	- 11.0	4.8
Gross fixed capital formation	5.7	- 9.3	5.4	1.5	- 13.0	6.1
Inventory investment (contribution)	- 0.4	0.2	0.2	0.1	0.1	0.3
Exports	2.5	- 10.7	8.7	2.8	- 12.4	4.3
Imports	3.9	- 8.8	8.3	3.3	- 20.0	4.6

Note: 1. "Eurozone" is total of 19 countries - Germany, France, Italy, Ireland, Estonia, Austria, The Netherlands, Cyprus, Greece, Spain, Slovakia, Slovenia, Finland, Belgium, Portugal, Malta, Luxembourg, Lithuania

2. "CPI" is the standardised inflation rate for the EU (HICP)

Source: Eurostat, UK Office for National Statistics, MUFG Bank Economic Research Office

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