BOC Research Institute

Global Economic and Financial Outlook

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Highlights

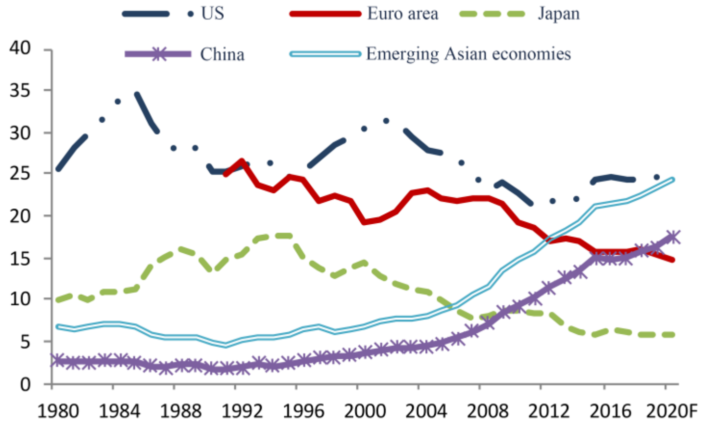
● The world economy sank into a deep recession amid the COVID-19 pandemic in 2020, highly volatile through the year. The global financial markets are stabilizing after drastic turbulences, yet still facing volatility risk.

●Looking forward to 2021, the global economic recovery will face three major headwinds. With the COVID-19 impact expected to continue through 2021H1, the global economy will not stage a successful recovery until 2021H2.

● In the post-pandemic era, the global economy may be characterized by "three lows and three news", which means that low growth, low interest rates and low investment are fostering new drivers, new trends and a new order.

● Eight hot issues deserve our particular attention: accelerating evolution of the global political and economic landscape, green recovery becoming a major driver of global economic growth, continuing regional divergence in foreign direct investment, coexistence of crises and opportunities in the international multilateral trade system, rebalancing of global value chains, moderate rise in global inflation, shift in the role of major central banks and a USD downturn.

Major Economies as % of Global GDP



Source: IMF, BOC Research Institute.

BOC Research Institute Global Economic and Financial Research Team

Team leader: Chen Weidong

Deputy leader: Zhong Hong

Team members: Liao Shuping

Bian Weihong

Wang Youxin

Zhao Xueqing

Wang Ruolan

Cao Hongyu

Li Yu

Zou Ziang

Jiang Xiaochen

Wang Chun

Huang Xiaojun (New York)

Lu Xiaoming (New York)

Qu Kang (London)

Wu Tingting (Singapore)

Zhang Yan (Tokyo)

Ding Meng (Hong Kong)

Contact: Liao Shuping

Telephone: 010-66594052

Email: liaoshuping@bankofchina.com

A New Global Economic and Financial Landscape amid Sweeping Changes

-- Global Economic and Financial Outlook (2021)

The world economy sank into a deep recession amid the COVID-19 pandemic in 2020, highly volatile through the year. The global financial markets are stabilizing after drastic turbulences, yet still facing volatility risk. Looking into 2021, the global economic recovery will face three major headwinds. With the COVID-19 impact expected to continue through 2021H1, the global economy will not stage a successful recovery until 2021H2. In the post-pandemic era, the global economy is expected to feature "three lows and three news", which means that low growth, low interest rates and low investment are fostering new drivers, new trends and a new order. This report provides an outlook on such hot issues as the post-pandemic global landscape, the green recovery, the global foreign direct investment (FDI), the international multilateral trade system, the global industrial chains, the global inflation, the role of central banks and the USD exchange rate.

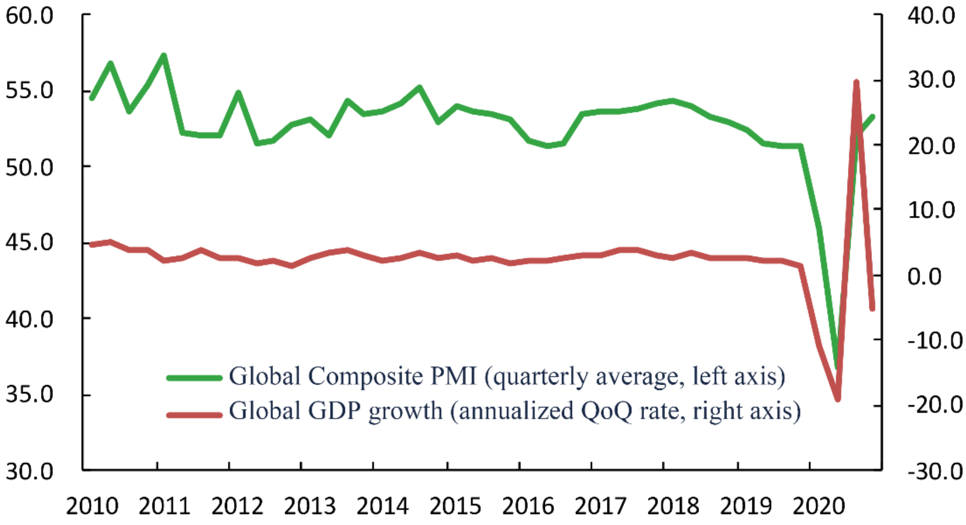
I. Global Economic Review and Outlook

I.1 The global economy is highly volatile in 2020

In 2020, the sweeping COVID-19 impacted all economies in every respect. The world economy fell into the sharpest recession since the Great Depression. In 2020H1 when the coronavirus was rampant across the globe, all economies were propelled to adopt containment measures which disrupted the free flow of production factors. The economic performance felt a dual shock from contraction in supply and demand and financial turbulences. Global trade in goods and services fell by 21% and 30% respectively in Q2. Global foreign direct investment was down by 49% YoY in H1. GDP growth (annualized QoQ growth rate, the same below) in Q1 and Q2 was -10.9% and -18.9% respectively.

In H2, some economies reopened as the pandemic situation improved. The unprecedented relief policies worked to lift the world economy out of the COVID-19 trough. On the supply side, JPMorgan Global Composite PMI has stayed above the boom-or-bust line since July. The prosperity indices of manufacturing and service sectors have improved, with the new orders index for manufacturing sector rebounding to 55 in October. On the demand side, OECD's consumer confidence index bounced back, and the domestic demand for business travels and other mobility needs picked up in some countries. Manufacturing export orders started to increase, the global trade volume has expanded for four consecutive months and the contraction in global trade slowed down significantly. However, some economies have showed signs of subdued growth in consumption and exports as a coronavirus resurgence occurred in Q4. The global GDP growth is projected to be 29.5% and -5.3% in Q3 and Q4 respectively. Overall, the world economy experienced major ups and downs in 2020, with the annual GDP growth estimated to be -4.9%, down 7.4 percentage points YoY (Fig. 1).

Fig. 1: Global GDP Growth V.S. Global Composite PMI (%)



Source: Wind, BOC Research Institute

I.2 The global economy will embrace a fragile recovery in 2021

Despite the signs of improvements emerging in some sectors of the world economy, the COVID-19 pandemic is still taking its toll on the economy. There will be three major factors adverse to the global economy in 2021. **First, the employment outlook is gloomy.** According to the International Labor Organization (ILO), the working hours in 2020Q3 worldwide fell by as much as 12.1% (equivalent to a loss of 345 million full-time jobs), and that figure is projected to be 8.6% (equivalent to a loss of 245 million full-time jobs) in Q4. **Second, there is a lack of momentum for economic growth.** The COVID-19 shutdowns have resulted in less time worked and more jobs lost, translating into a sharp fall in income and worsening the global poverty issue. According to an ILO report, the global labor income in 2020Q1-Q3 was down 10.7% YoY (representing 5.5% of the global GDP), plunging about 70 million to 100 million people into the extreme poverty. Given the future downturn concerns, households tend to save more, resulting in a lack of momentum for domestic demand recovery. **Third, the second coronavirus wave will hit the world.** The recent escalation in global COVID-19 spreads will dent the economic recovery. The effectiveness of coronavirus vaccines remains to be further verified. For technical reasons, the vaccines are unlikely to be made broadly available in the short term. The pandemic containment will be a long and arduous process.

With the COVID-19 impact expected to continue into 2021H1, major economies will keep the current expansionary fiscal and monetary policies unchanged. If the coronavirus vaccines are made broadly available in Q2 or Q3 of 2021, the world economy may embrace a successful recovery in 2021H2, with the annual GDP growth estimated to be 4.5% for the year.

I.3 A new pattern of global economic order will emerge

The world is undergoing seismic changes not seen for a century. The pandemic accelerates the process, and the international environment faces profound and complicated changes. In the coming years, the world economy is expected to feature “three lows and three news”.

Three lows: First, low growth. Faced with the above-mentioned constraints, the global economy lacks momentum for recovery, and may remain in low growth even after the ending of the pandemic. **Second, low interest rates.** To boost economic recovery and ease debt burden, developed economies cannot withdraw the expansionary monetary policy too early and, instead, should keep relatively low interest rate policies. **Third, low investment.** Against the backdrop of sluggish recovery, low return on funds and rebalancing of global industrial chains, foreign direct investment may remain low, unlikely to return to the past peak.

Three news: First, new drivers. With developed economies slowing down, the center of global economy and trade will move to the Asia Pacific in a faster pace. Regional economic blocs represented by the Regional Comprehensive Economic Partnership (RCEP) will be on the rise and emerge as a new driver of the world economy. **Second, new trends.** Green recovery has become a global consensus. Globalization shows a new trend of being digitalized, IT-based and service-oriented. The in-depth integration of digital economy and real economy and the integrated development of manufacturing and service sectors may give rise to a new globalization pattern driven by trade in goods and trade in services. **Third, a new order.** After Joe Biden takes office as president, the US is expected to return to multilateralism and reshape the international trade landscape. However, as the foundation of cooperation with developed allies has been shaken and the developing economies demand more of a say, the international trade order faces restoration and adjustments.

Table 1: Forecasts for Key Indicators of Major Economies in 2021 (%)

Region	Quarter/Year Country	GDP growth			CPI growth			Unemployment rate		
		2019	2020f	2021f	2019	2020f	2021f	2019	2020f	2021f
America	US	2.3	-4.5	3.1	1.8	1.2	1.9	3.7	8.1	6.3
	Canada	1.6	-7.1	5.2	1.9	0.7	1.6	5.7	9.5	8.0
	Mexico	-0.1	-9.0	3.5	3.6	3.5	3.6	3.5	5.1	5.3
	Brazil	1.1	-5.8	2.8	3.7	2.8	3.1	11.9	14.0	13.7
	Chile	2.3	-6.0	4.5	2.6	2.9	2.6	7.2	11.5	10.0
	Argentina	-3.0	-11.8	4.9	53.7	42.0	45.0	9.8	12.6	11.5
Asia Pacific	Japan	0.8	-5.3	2.3	0.5	0.0	0.2	2.4	2.9	3.2
	Australia	1.8	-4.2	3.0	1.6	0.7	1.5	5.2	7.0	7.4
	India	5.8	-7.3	7.2	3.7	5.8	4.3	—	—	—
	South Korea	2.0	-1.9	2.9	0.4	0.5	1.1	3.8	4.1	4.0
	Indonesia	5.0	-3.9	2.6	2.8	2.0	2.5	5.1	6.8	6.3
Europe and Africa	Euro area	1.2	-8.5	5.1	1.2	0.3	0.9	7.6	8.0	9.3
	UK	1.4	-9.8	5.9	1.8	0.9	1.5	3.8	5.0	6.9
	Russia	1.1	-4.1	2.8	4.5	3.3	3.6	4.6	5.8	5.6
	Turkey	0.3	-5.0	5.0	15.5	11.8	11.2	13.7	14.5	14.0
	Nigeria	2.3	-4.3	1.7	11.4	13.0	13.0	—	—	—
	South Africa	0.5	-8.0	3.0	4.1	3.3	4.0	28.7	32.5	33.8
Global		2.5	-4.9	4.5	3.5	2.2	2.6	—	—	—

Source: BOC Research Institute. Note: "f" stands for forecast.

II. Global Financial Forecast for 2021

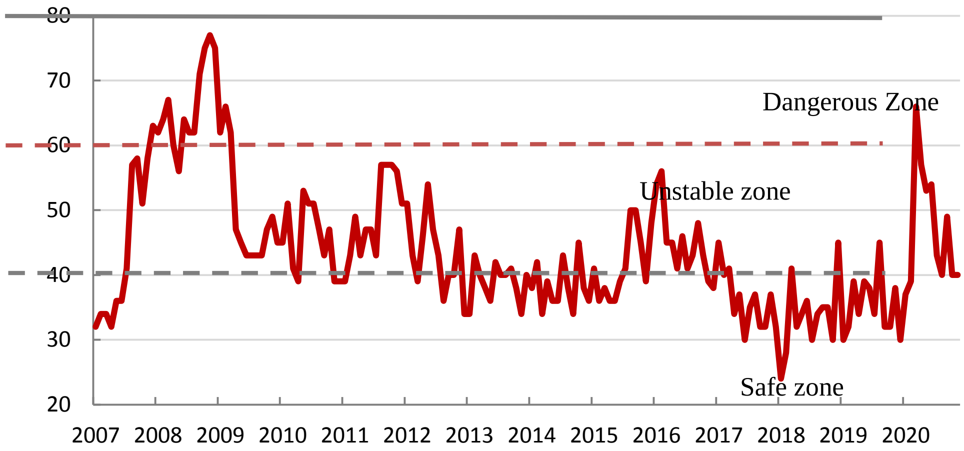
II.1 With global financial markets stabilized in 2020, vigilance will be required against capital outflows from emerging markets

The global financial markets were highly volatile amid the COVID-19 pandemic in 2020, showing three stages of development. In the first stage, financial markets sank into drastic turbulences and liquidity crisis, with a number of assets hitting the highest level of volatility since 2008. More cash flocked into safe-haven assets, pushing up the government bond prices of major economies and bringing down their yields sharply. In the second stage, major economies issued policies to stimulate the economic activity and financial markets. The liquidity crisis eased and investors' risk appetite rebounded, capital flowed back to risky assets and policy-makers encouraged credit flows into the real economy. In the third stage, the economic recovery faltered on a resurgence of COVID-19 and subdued stimulus in major economies. Both business and household sectors underwent a rise in leverage ratio and default ratio. The liquidity crisis turned into the problem of insolvency. The sectors and SMEs hit harder by the coronavirus showed a higher risk of default and insolvency.

As for the stock market, global stock markets had a strong rally from the COVID-19 low. Developed markets outperformed emerging markets. VIX remained above the historical average through 2020. The investor panic has been alleviated after the US presidential election. However, VIX futures term structure shows a possible bounce-back of volatility in the coming quarter. The S&P 500 Black Swan index remained above the warning level of 130 during most of 2020, and trended up after the US presidential election, suggesting that investors stay vigilant against the fat tail risk in the future. **In the bond market,** major developed economies achieved good performances in the corporate bond market in 2020. Lower interest rates and relaxed debt service conditions eased the debt burden of companies. This situation, coupled with the rising demand for financing against the pandemic, new bond issues have surged in many markets. However, the continued business closures, decline in earnings and ability to service debts and deterioration in the quality of corporate assets have led to more downgrades in credit ratings and rising refinancing risk, delinquency ratio and default ratio. Energy-sector, highly leveraged, non-investment-grade and BBB-rated companies are most vulnerable. **As for the exchange rate,** the US Dollar Index (DXY) started to move higher from mid-March 2020, and peaked and stabilized in mid-May as the US Federal Reserve (Fed) provided massive liquidity. As the drop in US interest rates made USD assets less attractive, major developed economies' currencies appreciated against the USD. With the US economy recovering in Q3, DXY has stabilized and picked up slightly since August, but the trading in USD against other major currencies showed greater market volatility. Latin American currencies have depreciated significantly as investors have lower demand for emerging market assets amid the pandemic. Nevertheless, the currencies of some Asian emerging markets doing better in the COVID-19 containment have edged up modestly in value.

In the future, financial markets will remain stable as a whole, yet still exposed to potential geopolitical and stimulus policy risks that no one can afford to neglect. The trend of the US Risk of Financial Crisis Index (ROFCI) depends largely on the level of COVID-19 containment following the launch of vaccines, implementation of new stimulus measures and default ratio of corporates (Fig. 2). Emerging markets may suffer capital outflow. Latin American countries with big demand for foreign financing will become more vulnerable. The pandemic has also driven up the fiscal spending and deficits of emerging economies and squeezed their room for policy easing, which may further worsen the currency depreciation and capital outflows.

Fig. 2: US Risk of Financial Crisis Index



Source: BOC Research Institute

II.2 Global financial markets will be challenged by many risks in 2021

First, developed economies will face a dilemma in "withdrawal" of their massive fiscal stimulus packages. As of September 2020, fiscal stimulus packages across the world totaled USD11.7 trillion, close to 12% of the global GDP, with the average deficit ratio up 9 percentage points YoY. One third of the developed economies will experience a double-digit increase in the deficit-to-GDP ratio. Developed economies' total government debt will account for 126% of GDP on average, up nearly 30 percentage points from 2019. The interest expenses of over half of low-income developing countries are expected to exceed 20% of tax revenue in 2021, with the public debt further expanding. In addition, the unprecedented expansionary fiscal policy will put the governments in a dilemma at the time of withdrawal. Governments' endeavor to service debts by raising interest rates and shrinking balance sheets means more tax revenue and less expenses, which will impact the economic recovery or even trigger a recession. On the other hand, less developed economies that are more debt-ridden may have to seek debt rescheduling or even go into default.

Second, the second round of monetary easing has been launched, which fuels the risk of protracted low interest rates. The Fed is expected to maintain its current interest rates till the end of 2023. European and Japanese central banks will continue with the ultra-low interest rates over the longer term. Emerging markets generally have lowering effective interest rates. The over-expansionary monetary policies of global central banks and the protracted low interest rates will trigger a number of financial risks. First, protracted interest rates and cheap loans will likely to encourage financial institutions for undertaking risky projects, amplifying their risk appetite and risk taking in monetary policy transmission. Second, corporates are more likely to increase their debt level as their financial pressure is heavier, worsening the problem of debt hike and over-capacities in the corporate sector. Third, major economies' withdrawal from the stimulus will add to the exchange rate risk of emerging economies.

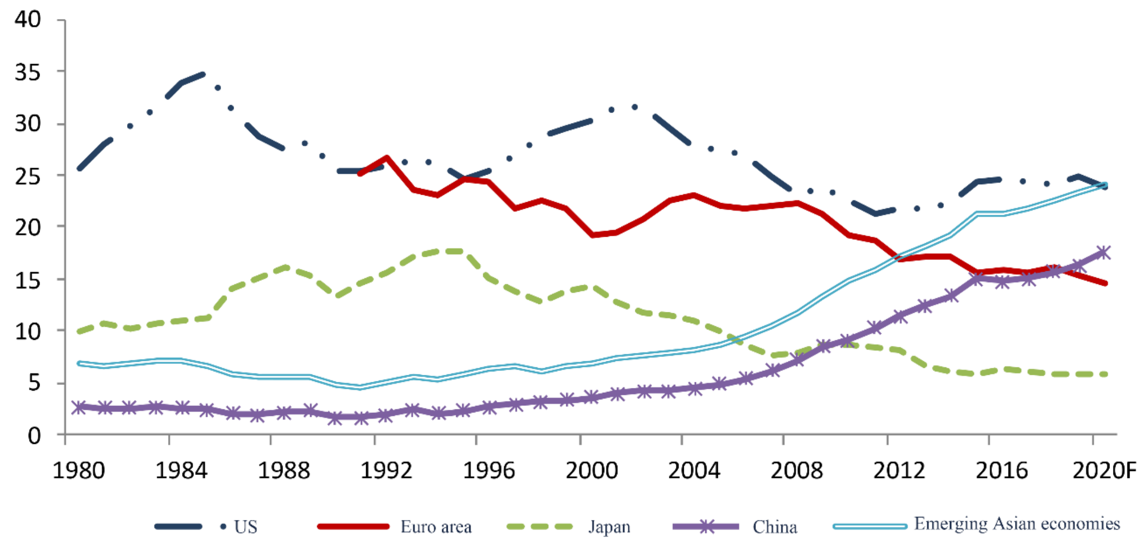
Third, LIBOR will cease to exist at the end of 2021, which may spur pricing chaos. To prepare for the ending of Libor, major economies are carrying out the interest rate benchmark reform actively. To date, the selection of alternative interest rate benchmark has been substantially completed. However, the shift in interest rate benchmark may trigger financial market turbulence as Libor-linked financial products and derivatives remain in a huge volume. The Libor transition will increase the compliance costs of both parties to outstanding transactions. Moreover, if the chosen interest rate benchmark to replace Libor and the spread are not recognized by the market, there will be chaos in the pricing mechanism for relevant products.

III. Forecast of Hot Issues in 2021

III.1 Trends of international landscape in the post-pandemic era

The international political and economic landscape showed three main characteristics before the COVID-19 pandemic. **First, the global economy had a pattern of "rising in the East, falling in the West".** Developed economies contributed as much as 76% of the global GDP in 1980, which fell to about 60% in 2019. Over the same period, Asia-Pacific emerging economies as a percentage of GDP rose notably from 6.8% to 23.5% (Fig. 3). **Second, the trend of de-globalization was on the rise.** The US Trump administration launched the "America First" policy, waged a tariff war against a number of countries and withdrew from multilateral organizations. Populism gained ground in Europe, exacerbating social divide and disrupting mainstream political and economic policies. Brexit became a typical case of de-globalization. **Third, the major power game was escalating as the world's economic center of gravity is marching eastwards, coupled with ongoing global imbalance.** The competition among major countries intensified due to failure of the global governance system and the impossibility of addressing conflicts and disputes between countries within a multilateral framework. International trade conflicts could not be resolved through negotiation or arbitration. National governments tended to adopt countermeasures and "tit-for-tat" policy, only to worsen the situation.

Fig. 3: Major Economies as a Percent of Global GDP



Source: IMF, BOC Research Institute.

The pandemic speeds up global political and economic rebalancing. First, COVID-19 is better contained in most Asian countries than in Western developed economies. Asian economies, represented by China, will recover ahead of Western economies, expected to further lead the global growth. **Second,** some developed economies required critical and strategic supply chains to move back home during the pandemic, which may become a permanent change. Even if the pandemic comes to its end, developed economies will give high priority to controlling their own strategic resources and tighten the policy on relevant acquisition by foreign investors.

After the US presidential election, the international political and economic landscape will present fresh changes. **First, the international governance system marked by multilateralism remains in place for the time being, but shows a rising level of internal vulnerability.** The Biden administration will return to multilateralism and embarking on restoring the US relations with main allies. However, this shift cannot address problems facing the current multilateral international governance system. On the one hand, the US has a lower ability to dominate the international order as its overall strength is weakening. On the other hand, European and Asian-Pacific countries are also affected severely by coronavirus and face economic challenges. In the absence of realistic security threats, these countries tend to maintain balance using the strategy of equilibrium. **Second, the US may slip into a "double-dip recession" in early 2021, while the world's economic center of gravity moving eastwards.** Biden called for taking more active actions to fight the pandemic and reopening the economy prudently. The US may gradually escalate its COVID-19 containment measures to usher in a double-dip recession of the world's largest economy in early 2021. By contrast, China has taken the lead in shrugging off the fallout from COVID-19 and become the first major economy to return to the positive territory of growth. Most developing economies in East Asia and Southeast Asia are recovering faster than Western developed economies. A Biden administration will not change the global economic pattern of "rising in the East, falling in the West". **Third, globalization is gradually shifting from "protectionism" to "regionalism".** Though Biden supports free trade and the multilateral trade system, the public security, national security and technological race will become increasingly hot issues amid the pandemic and power game. It is difficult to simply go back to the past of globalization. If Biden takes office as president, the US relations with European countries, Japan and other allies will improve, and the US may resume CPTPP negotiations and step up the reshoring or nearshoring of industrial chains.

III.2 Green recovery boosts global economy growth

In the post-pandemic economic recovery initiatives, countries across the world generally look to green recovery as a key part of economic development, a lesson learnt from the stimulus packages in the 2008 financial crisis. Green economy has become a significant boost to global recovery.

Of the EUR750 billion COVID recovery package announced by the European Commission (EC), one fourth is earmarked for environmental protection, clean infrastructure and electric vehicle investment. EC particularly noted that stopping climate change would become central to getting the European economy out of the COVID-19 crisis and putting it on track for recovery. After assuming power as US president, Biden will identify post-pandemic recovery and green development as key areas of work for his administration, including bringing the United States back into the Paris Climate Agreement on his first day in the office and spending USD2 trillion in climate action over the four-year term. In the Report on the Work of the Government in 2020, China announced for the first time to step up the new infrastructure and new urbanization initiatives. At the general debate of the 75^{th} Session of the United Nations General Assembly, President Xi Jinping committed that China "aims to have CO_2 emissions peak before 2030 and achieve carbon neutrality before 2060". China will pursue green transformation in every respect in the next stage of economic and social development.

The coronavirus has severely affected the global economic growth. However, the post-pandemic recovery also provides an opportunity for economic restructuring and green development of countries, giving a fresh impetus to globalization. The International Energy Agency and the International Monetary Fund (IMF) jointly drafted a USD3 trillion green recovery plan. The plan will enable the world economy to grow by 1.1% on average in the next three years while effectively control greenhouse gas emissions, saving or creating 9 million jobs each year worldwide. A report released by the International Renewable Energy Agency noted that USD1 of renewable energy investment would create a return worth of USD3 to USD8, and the energy mix transition would increase the global GDP by nearly USD100 trillion by 2050 and enable a three-fold increase in jobs in related industries.

III.3 Outlook on global foreign direct investment

Global foreign direct investment fell sharply in 2020 due to the pandemic. According to the latest report of the United Nations Conference on Trade and Development, global FDI totaled

USD399 billion in 2020H1, down 49% YoY. According to the UN projections, global FDI will further drop by 5% to 10% in 2021, and may start to recover in 2022 and then gradually return to the pre-pandemic level.

The global investment slump results mainly from the following three factors. First, multinational corporations have experienced a plunge in profits and a significant drop in reinvestment income. The world's largest 5,000 multinational corporations lowered their expected income for 2020 by 40% on average. The falling profits have seriously affected their reinvestment income. **Second,** the global COVID-19 containment measures have led to tardy progress of ongoing investment projects. The concerns over global economic prospects also make multinational corporations cautious about investing in new projects. **Third,** the coronavirus pandemic put developing economies with a vulnerable industrial structure under rising uncertainties threatening a fiscal or debt crisis, adding to the risk in local infrastructure investment and other long-term investments.

The COVID-19 pandemic has accelerated the divergence in investment policy orientation between developed and developing economies. COVID-19 has a long-term impact on global investment policies. **For developed countries,** the coronavirus will intensify their concerns over industrial chain security and national security, and cause them to impose higher thresholds for foreign investment, so as to protect domestic healthcare and other strategic industries. **In emerging economies,** the governments have introduced measures to liberalize and facilitate foreign investments, thereby attracting foreign investors as contributors to their post-pandemic economic recovery.

Over the long term, global FDI will flow mainly to the RCEP region and countries along the Belt and Road. The RCEP agreement covers about 30% of the world's population and 29.3% of the global GDP, making the region a market with the largest consumption potential across the globe. The technological strengths of Japan and South Korea, the industrial chain advantages of China, the cheap labor in the ASEAN, and the abundant natural resources in Australia and New Zealand will attract multinational corporations to invest and build factories in the region. In addition, countries along the Belt and Road show vast opportunities in investment, financing, privatization reform, M&A and reorganization that will boost local economic growth and industrial upgrading, another major driver of FDI inflows.

III.4 Crises and opportunities in the international multilateral trade system

The international multilateral trade system is the cornerstone of a stable global economy. In recent years, the rising tide of protectionism and unilateralism and the de-globalization undercurrents have dealt a heavy blow to the world's multilateral trade system. The coronavirus, taking a toll on the global supply and industrial chains, has also further widened the cracks in the global free trade system.

Now the multilateral trade system faces three crises. **First, the existing international trade governance system lags far behind the reality of global economic development.** Since the beginning of the 21st century, the reforms of such multilateral organizations as the World Bank, IMF and WTO have come to a standstill. Their institutional support for the multilateral trade system has been seriously undermined. The inequality in the allocation of economic and trade benefits in the course of globalization and the short supply of public goods in international trade have challenged the existing international trade governance system. **Second, the rising tide of "protectionism" and "unilateralism" is shaking the foundation of the world's multilateral trade system.** International trade and investment have shrunk sharply amid the profound rebalancing of the world economy, intensifying competition along international industrial and supply chains and the pursuit of "protectionism" and "isolationism", coupled with the fallout from COVID-19. Globalization is encountering the strongest ever headwinds. **Third, bilateral and regional agreements have become the mainstream choice in the near term, posing challenges and opportunities to the global trade system.** Regional organizations are increasingly capable of promoting regional economic integration. Intra-regional or inter-regional bilateral or multinational trade agreements are marginalizing or even replacing the existing global trade system, and gradually dominating a new generation of international trade rules.

Nevertheless, we opine that as the coronavirus gets effectively contained across countries and the economic and trade order returns to normal, the world's economies will remain closely interconnected as seen in the era of globalization, and the multilateral trade system will usher in new development opportunities. **First, digital economy will give a fresh impetus to global trade.** As the new round of technological revolution advances fast, the global trade model is shifting from conventional trade in goods to trade in services and digitalization. **Second, the RCEP and other free trade agreements will inject new impetus into the global trade system.** The RCEP helps safeguard the multilateral trade system. It will create a relatively stable trade order within the Asia Pacific region, and alleviate the adverse impact of global trade protectionism resurging in recent years. The RCEP will also reshape the regional system of industrial chains and create new momentum for economic growth in the Asia Pacific. **Third, more green and sustainable concepts will be added to the global governance system, providing new cooperation opportunities for the world's multilateral trade system.** The coronavirus has caused all countries to gradually arrive at a consensus on building a community with a shared future for mankind, highlighting the importance of establishing a sound public service system and developing the economy in a sustainable manner. The pandemic has a far-reaching effect on global governance. In the foreseeable future, all national governments will strengthen intervention, especially the cooperation in global health and public products.

III.5 Trends of rebalancing in global industrial chains in the post-pandemic era

The global industrial chains showed two main stages of development prior to the COVID-19 pandemic: the stage of expanding and the stage of remaining substantially stable with a weakening trend. In the first stage, economic globalization was on the rise. Enterprises planned their industrial activity based on comparative advantages, while technological advancement drove the quick flow of information and physical supplies around the world. Market barriers between countries were lowered continuously and global industrial chains kept expanding in scale. In the second stage, with the total size remaining stable, national efforts were made to rebalance industrial chains. The resurgent Populism and the rising trade protectionism in the Western developed countries derailed the expansion of value chains. The broad use of automation discouraged some enterprises from decentralizing their production activities among developing countries with lower production costs.

The COVID-19 pandemic, which battered the global economy, is adding strains to the weakening global industrial chains. **First, the pandemic has caused a huge loss of interests to enterprises participating in global industrial chains.** The pandemic has shut down the world's economies. Numerous enterprises depending on the global Just-In-Time operations suffered from failure or disruption of supply chains. **Second, the governments of countries battered by COVID-19 recognizes the importance of a complete, secure and sustainable system of industrial chains.** Some countries have launched policies to decentralize industrial chains. In the post-pandemic era, national governments will strengthen the policy support for the rebalancing of industrial chains.

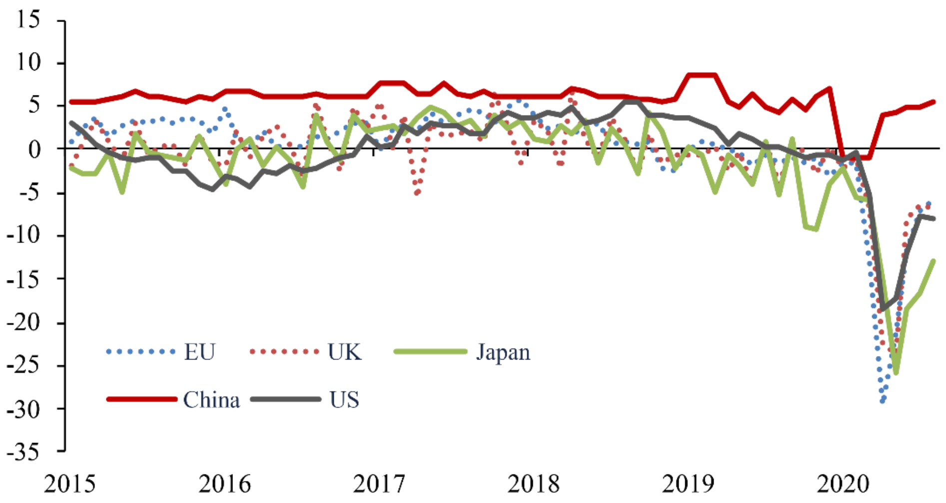
In the post-pandemic era, global industrial chains will transform from cost- and efficiency-driven development to a dual growth model that gives equal priority to sustainability and efficiency. First, enterprises sensitive to geographical isolation and geopolitics will seek to developed full-fledged industrial chains. With cost and comparative advantages gradually subdued, the stability and sustainability of production will reshape the future of industrial chains. **Second,** for general enterprises relying heavily on global industrial chains, their production will be increasingly localized and move to the places where consumers are located. **Third,** the risk control mode of global industrial chains will be changed dramatically. The future risk control system should be a data-based architecture featuring full coverage. With chain-wide integration and application of big data, the supply chains will become much more visible to enable early warning of risks. **Fourth,** enterprises will attach importance to digitalization related to industrial chains and strengthen the stability of global industrial chains. They can further effectively simplify the process of selecting prospective suppliers and improve the risk control ability through big data analysis, effectively manage suppliers through cloud computing and greatly increase the efficiency of logistics and transportation through automation and the Internet of Things.

III.6 Global inflation will pick up slightly and make national stimulus policies more cautious

As the COVID-19 vaccine is applied progressively and the waves of the pandemic ebb, the world economy will move into the post-pandemic era in which the economic analysis will turn from unusual external shock to normal rebalancing, and inflation will become a major concern in economic recovery.

In the short term, global inflation level and expectations will bounce back slightly, mainly for the following four reasons. **First, the low-base effect.** In 2021, the world's GDP growth and CPI will rebound significantly from the 2020 deep recession and low inflation of the global economy. **Second, commodity prices will bounce back temporarily.** As economies are reopening with a rising demand for industrial metals, energy prices are likely to bounce back from the 2020 plunge. **Third, the global recovery on the supply side may lag behind the demand side.** Producers enter the re-stocking stage as the demand recovers fast. However, the recovery in supply may lag behind to widen the demand-supply gap, fueling the inflation to some degree. **Fourth, the unconventional stimulus policy exacerbates inflation expectations.** All countries have expanded fiscal stimulus and bailouts since the COVID-19 outbreak, launching an ultra-expansionary monetary policy. The boundary in between has become vague to increase the tolerance of inflation in the unconventional state.

Fig. 4: YoY Growth (%) in Industrial Production of Major Countries



Source: CEIC, BOC Research Institute

Global inflation level and expectations are expected to pick up slightly in 2021, which will have a significant impact on national stimulus policies. On the one hand, the inflation risk will restrict the room for central banks' monetary easing, making it hard to sustain the massive asset-buying program.

On the other hand, the interest rates of government bonds of all countries are generally priced to be the real interest rate plus inflation compensation. The restricted quantitative easing and rising inflation compensation will push the interest rates of government bonds higher, aggravate fiscal burden and debt risk and eventually soften the global economic recovery.

Nevertheless, the inflation risk transmission varies from country to country. Different countries show different space of fiscal and monetary policies and different tolerances of inflation. For some emerging economies with higher inflation and hit harder by COVID-19, such as Brazil, Argentina and Turkey, inflation will be a big drag on the fiscal policy and adversely affect the economic recovery.

III.7 Changes in the role of global central banks and their implications

In the wake of the COVID-19 outbreak, the world's major central banks have taken an unprecedented expansionary policy in line with the fiscal policy to cushion the economic recession and financial market turmoil. These policies reflected central banks' role and policy goals, delivering an immediate and effective effect in preventing a deep recession and re-stabilizing the market. However, the global economic woes triggered by the coronavirus have forced the world's major central banks to change their roles.

Change 1: Central banks' quantitative easing (QE) has been further normalized and the fiscal policy is further monetized. Since the 2008 global financial crisis, major central banks have used QE as a normal monetary policy instrument. After the coronavirus outbreak hit the world, the use of QE has been further normalized. **Change 2: Many central banks have gone beyond the "lender of last resort" function.** The world's major banks provide liquidity support for commercial banks and other conventional financial institutions on a smaller scale than during the 2008 global financial crisis. Meanwhile, they have expanded the scope of liquidity replenishments to financial institutions, lowered lending rates to financial institutions and significantly relaxed collateral requirements.

The changes in central banks' role pose potential risks. **First,** central banks link their monetary policies to the fiscal policies, monetize the bulk of new government debts and participate in credit allocation, which may impair their control over money supply and independence. **Second,** central banks extend credit to poor-performance, highly-leveraged businesses, which may incur a credit loss in the future.

There will be two reflections on the post-pandemic role of global central banks. **First,** central banks will have increasingly limited space for the monetary policy in the post-pandemic era, finding it difficult to return to their normal role. Fiscal policy monetization will increasingly become a conventional mode acceptable to major economies. Central banks will play an even more limited role when the next financial crisis emerges. In particular, they will have few policy options in stagflation. **Second,** central banks' monetary policies will have a diminishing effect in the post-pandemic era, and the policy withdrawal may give rise to potential risks. In the long term, the easy monetary policies implemented by central banks at present may fuel a strong bounce-back in inflation after an economic recovery. The capital separated from the real economy will result in elevated prices of financial assets, and the buildup of an asset bubble will endanger the stability of financial markets.

III.8 Is USD already in a downturn?

The US dollar trended down in 2020. Since the termination of gold/dollar convertibility in 1970s, the US dollar has shown cyclical movements. The current USD cycle began in April 2008 and entered another upturn in 2011, peaking in 2016 with fluctuations. The US dollar fell from the peak in 2018, and the US Dollar Index dropped to around 93 in November 2020. As shown by the overall trend, the recent bull run of the US Dollar Index was the longest ever. Since the COVID-19 pandemic began, the US Dollar Index moved with major ups and downs, peaked in March and then turned down with fluctuations. The US Dollar Index has shown a more noticeable downtrend since late May and began to fluctuate at lows since September (Fig. 5). On November 18, 2020, the US Dollar Index dropped by 10.1% from the year's peak, and by 4.3% from the beginning of the year.

Fig. 5: US Dollar Index Movements in 2020

Source: Wind, BOC Research Institute

The ongoing USD downturn is a result of many factors. **First, the US economy is more unstable in growth than other economies.** The coronavirus pandemic has added serious uncertainties to the US economy. The W-shaped recovery of the US economy in 2020 resulted in a weakening dollar. By contrast, the euro area shows more stable GDP growth, expected to embrace a stronger recovery than the US and weigh on the US Dollar Index. **Second, the Fed's expansionary fiscal and monetary policies have driven interest rate spreads down.** The Fed's ultra-expansionary monetary policy drags on the US dollar. The soaring fiscal deficits have weakened the US government's ability to service debts, softening global investors' demand for USD-denominated assets and intensifying the expectation of USD depreciation. **Third, capital outflows triggered by a falling relative return on assets put the USD dollar under pressure.** As the Fed slashed benchmark interest rates and will keep rates low for a protracted period, coupled with the narrowing interest rate spreads of US treasury securities and other assets, investors tend to move their funds away from the US, obviously indicating a bearish trend in the US Dollar Index. A strong US stock market was also among contributors to the bull run of the US Dollar Index seen in recent years. However, the potential weakening trend of the US stock market adds strains to the US dollar.

The US Dollar Index in 2021 is likely to show the following trends. In the short term, the US Dollar Index has limited upward space given the Fed's balance sheet expansion, fiscal deficits and the trends of return on assets. In the medium and long terms, the income inequality worsened by COVID-19, the unsustainable fiscal deficits and the US trade war with China backfiring on US industries will curb the US government spending and consumer spending, and impact the US economic growth. Thus the USD will weaken over the medium and long terms. Given the great global uncertainties and sluggish growth of the world economy, however, other developed economies also may face similar twists and turns in the road to recovery. Thus there is a low probability of a sharp drop in the US Dollar Index, which is more likely to move downwards gradually with fluctuations, expectedly within a wide band of 85 to 95 in 2021.

中國銀行 BANK OF CHINA

BOC Research Institute
1 Fuxingmen Nei Street, Beijing, 100818 China
Postal Code: 100818
Telephone: +86-10-66594097
Fax: +86-10-66594040