Part One

Economic Developments of Iran in 2021/22

In the Name of God,

The Compassionate, The Merciful

CHAPTER 1

GLOBAL ECONOMY

Despite the ongoing shocks of the COVID-19 pandemic and the emergence of new variants (Omicron and Delta) in 2021, the global economy experienced relatively favorable conditions compared to 2020. Widespread vaccination, the subsequent easing of lockdowns and restrictions, and expansionary monetary and fiscal policies all contributed to this positive outcome. However, uneven access to vaccines and the outbreak of new variants resulted in unequal economic improvements across the globe. Despite this uneven recovery, global economic growth increased by 9.1 percentage points compared to 2020, recording a growth rate of 6.0 percent in 2021.

The gradual recovery of the global economy from the detrimental impacts of COVID-19 pandemic and its new variant (Omicron), fueled by rising vaccination rates and declining hospitalization and mortality rates, spurred increased global demand. The surge in demand for travel, transportation, recreation (including restaurants), and goods strained supply chains and the global logistics networks, hampered by limited production capacity. The mismatch between rising demand and insufficient industrial production and transportation capacities led to sharp price increases in transportation, energy, basic metals, and energy-intensive inputs, further fueling wage increases in many economies.

The price of Brent crude oil, a global benchmark, started the year 2021 at $50 per barrel and increased to a high of $86 per barrel in by the end of October. However, the price decreased to $77 per barrel at the end of 2021, implying an overall increasing trend in the crude oil price. The average annual price of Brent crude oil reached $71 per barrel in 2021, the highest during the last three years. The major factors contributing to the increase in oil price in this year were the excessive oil demand due to the improved global economic outlook, the rise in gas prices in the second half of 2021, the substitution of oil with gas, the OPEC+ members' decision to decline oil production, and the limited increase in the US shale oil production.

In the aftermath of the outbreak of COVID-19 pandemic, both developed and developing countries prioritized the implementation of support plans, including unemployment insurance and transfer payments, to financially support jobs and businesses adversely affected by the pandemic. However, these financial expansionary policies had a negative effect on global prices following the containment of the COVID-19 pandemic. Consequently, excess global demand encountered severe restrictions in global supply chain in 2021, leading to an increase in the global inflation rate from 3.2 percent in 2020 to 4.7 percent in the year under review.

During 2021, the emergence of new COVID-19 variants, disruptions in global supply chains and rising energy prices snowballed into the formation of inflationary uncertainties and prompted changes in central banks' policies. Consequently, most central banks raised their policy rates. However, these rises in policy rates by central banks in advanced economies also introduced risks to financial stability, capital flows, foreign exchange dynamics, and the financial conditions of emerging markets and developing economies. Additionally, the escalating geopolitical tensions and the dire impacts of climate change created new risks for the global economy.

1.1. Advanced Economies

Following the grave economic slowdown in 2020, various economies experienced recovery at different rates, attributable to the nature and structure of economies, uneven access to vaccination, a generally negative attitude towards the COVID-19 vaccines by the public, and the varying degree and duration of support policies. Countries with advanced economies had more access to vaccines compared to those with emerging and developing economies. However, a distrustful attitude to vaccines, (rather than vaccine shortages), contributed to the slow economic recovery in these economies. In 2021, advanced economies implemented significant financial support policies. In fact, the US administration disbursed $1.2 trillion in the framework of a supportive package for infrastructure purposes, and the European Union allocated 806.9 billion euros to address post-COVID-19 challenges. Additionally, tax incentives from the UK administration encouraged increased trade investments. As a result, advanced economies experienced a growth rate of 5.2 percent, up by 9.6 percentage points compared to the previous year's growth rate of -4.4 percent. In the US, the economy grew by 5.7 percent, up by 9.1 percentage points. However, the rate of American inflation rose from 1.2 percent in 2020 to 4.7 percent in 2021.

The European Central Bank (ECB) maintained its accommodative monetary policies, including quantitative easing and facilitating credit allocation to the real sector to alleviate the impacts of the pandemic. Meanwhile, the European governments continued to offer fiscal support to mitigate the adverse effects of the measures taken during the pandemic emanating from significant health expenditures, reduction of working hours, and financial support of households and manufacturing units through expansionary financial policies. As a result, the economic growth rate of the Euro area rose from -6.4 percent in 2020 to 5.2 percent in 2021. Among the countries in the Euro area, the economic growth rate of Spain and Italy increased from respectively -10.8 and -8.9 percent in 2020, to 5.1 and 6.7 percent in 2021, up by 15.9 and 15.6 percentage points. This was mainly attributable to the improvements in the tourism sector. The growth rates of other advanced economies, including the United Kingdom, Canada, and Japan rose from -9.4, -5.2 and -4.5 percent in 2020 to 7.4, 4.5 and 1.7 percent, respectively, in 2021. Meanwhile, the German economy, heavily reliant on industrial production and the automotive industry, faced a significant decline in industrial output due to unprecedented global shortages of semiconductor chips. This disruption particularly impacted its automotive industry, resulting in Germany's experiencing the lowest GDP growth rate in the Euro area at just 2.6 percent in 2021.

In 2021, advanced economies experienced inflation rates surpassing expectations set by their central banks. The surge in demand following the implementation of support policies, coupled with the easing of restrictions, contributed to this inflation.

Additionally, ongoing supply chain disruptions, stemming from factory closures, port blockages, land transport restrictions, shipping congestion, and shortages of containers and labor compared to 2020, were key factors driving up inflation rate.

To combat inflation, most central banks in advanced economies raised their policy rates, which further strained the global monetary situation. In the United States, amid persistent pressures on prices and wages, the Federal Reserve decided to reduce its asset holdings, signaling to markets an impending increase in policy rates. The European Central Bank's emergency plan to purchase net assets during the COVID-19 pandemic, initiated in March 2020 to mitigate risks associated with the money transmission mechanism and to improve the Euro area's economic outlook, was an extraordinary monetary policy measure.

On December 16, 2021, the Governing Council of the European Central Bank (ECB) decided to end this asset purchase program till the end of March 2022. Moreover, the ECB committed to maintaining its policy rates until inflation stabilizes.

Figure 1.1. Major Economic Variables in Advanced Economies

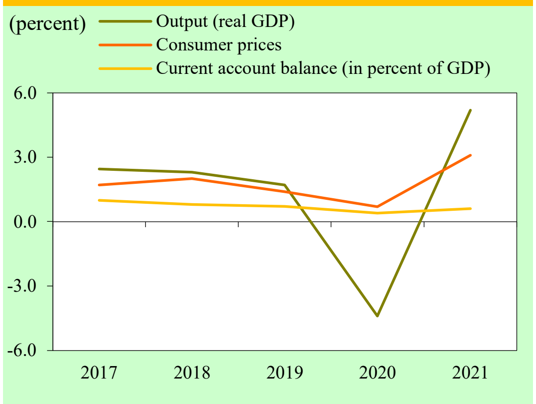

Table 1.1. Major Economic Variables in Advanced Economies (percent)

	Output (real GDP) (annual percent change)		Consumer prices (annual percent change)		Current account balance (in percent of GDP)	
	2020	2021	2020	2021	2020	2021
World	**-3.1**	**6.0**	**3.2**	**4.7**	**0.4**	**0.7**
Advanced economies	**-4.4**	**5.2**	**0.7**	**3.1**	**0.4**	**0.6**
United States	**-3.4**	**5.7**	**1.2**	**4.7**	**-3.0**	**-3.7**
Euro Area	**-6.4**	**5.2**	**0.3**	**2.6**	**1.9**	**2.5**
Germany	-4.6	2.6	0.4	3.2	7.0	7.4
France	-8.0	6.8	0.5	2.1	-1.8	0.4
Italy	-8.9	6.7	-0.1	1.9	3.7	2.4
Spain	-10.8	5.1	-0.3	3.1	0.8	0.9
Japan	**-4.5**	**1.7**	**0.0**	**-0.2**	**2.9**	**2.9**
United Kingdom	**-9.4**	**7.4**	**0.9**	**2.6**	**-2.5**	**-2.6**
Canada	**-5.2**	**4.5**	**0.7**	**3.4**	**-1.8**	**0.0**

Source: IMF, World Economic Outlook, October 2022, and the updated version, January 2022

1.2. Emerging Market and Developing Economies

In 2021, the emerging and developing economies experienced significant economic growth, largely driven by the recovery of the Chinese economy and its substantial contribution to this region's GDP. However, the growth trend in this region was slower and less robust, influenced by unequal access to COVID-19 vaccines and limited support policies compared to advanced economies. Unlike their advanced counterparts, some emerging economies, including Brazil, Chile, Mexico, and Russia, began to reduce their accommodative support policies in 2021. In response to the economic challenges posed by the COVID-19 pandemic, the IMF introduced a credit option worth $650 billion through Special Drawing Rights (SDR) for 190 member countries based on their shares, with $275 billion allocated specifically to the emerging and developing economies (IMF Annual Report, 2022). As a result, the real GDP growth rate of these economies increased by 8.6 percentage points compared with the year before, to reach 6.6 percent in 2021. In the second half of 2021, Chinese economic growth slowed significantly due to disruptions from the COVID-19 outbreak. This decline was exacerbated by interruptions in industrial production caused by electricity shortages, decreased investment in housing and real estate, and a faster-than-expected reduction in public investment. Among the Asian countries, India's and China's real GDP growth rates increased from respectively -7.3 percent and 2.3 percent in 2020 to 8.7 percent and 8.1 percent in 2021, respectively. Overall, the real GDP growth rate of the emerging and developing Asia increased from -0.9 percent in 2020 to 7.2 percent in 2021.

Consumer prices in the emerging and developing markets rose from 5.1 percent in 2020 to 5.9 percent in 2021, exceeding the targets set by their central banks. Rising agricultural prices had a spillover effect on these economies, including those in Eastern Europe, the Caucasus, the Middle East, and North Africa. Key factors behind this inflation included increases in food prices and import costs, delayed effects of oil price changes, and supply disruptions.

In 2021, real GDP growth in Latin America and Caribbean region surged by 13.8 percentage points, reaching 6.9 percent compared to the previous year. This growth was fueled by increased capital inflows and the economic expansion of the US and China as the major export destinations for these countries. Brazil, as the largest economy in Latin America, achieved a growth rate of 4.6 percent in 2021, recovering from a contraction of 3.9 percent in 2020 due to the pandemic. The notable increase in real GDP growth rate in Brazil by 8.5 percentage points was driven by growth in services, particularly transportation, storage, and communication, as well as growth in the industrial sector. Mexico's real GDP grew by 4.8 percent in 2021, up by 13.0 percentage points compared with the previous year (-8.2 percent). Geopolitical events, including the trade war between China and the US, the new trade agreement among Mexico, the United States, and Canada established in July 2020, Mexico's geographical proximity to the US, and the subsequent technological advancements contributed to a significant transfer of production industries and a notable rise in foreign direct investment in Mexico, particularly in the industry sector and the automotive industry. The primary driver of Mexico's strong economic growth was the establishment of an efficient ecosystem encompassing logistics, manufacturing facilities, and collaborative efforts aimed at enhancing global exports and trade.

The growing demand and rising prices of energy and food products, disruptions in electricity generation, increased costs of imported goods, and the devaluation of national currencies were the primary factors contributing to a growth rate of 9.8 percent in consumer prices in Latin America and Caribbean region in 2021. In response to this rising inflation and the formation of inflation expectations, policy rates were increased in 9 out of 11 countries in the region.

Thanks to improvements in the global trade situation and rising commodity prices, economies in Sub-Saharan Africa experienced favorable conditions. However, the unequal distribution of vaccines, varying degrees of vulnerability to the pandemic, and differing support policies among these countries resulted in uneven recovery. Overall, real GDP growth in Sub-Saharan Africa was 4.7 percent in 2021, indicating a rise of 6.4 percentage points compared with 2020. Consumer prices in the region rose from 10.2 percent in 2020 to 11.1 percent in 2021, largely due to the global rise in food prices.

In contrast to other emerging economies' central banks, the Turkish Central Bank lowered its policy rate by 5.0 percentage points as of August 2021 (17.5 percent), despite facing an inflation rate of 19.6 percent. This decision resulted in a substantially negative real policy rate. Despite the interventions by the Central Bank of Turkey in the foreign exchange market, the value of the Turkish Lira fell by about 45.0 percent against the US dollar in 2021.

Figure 1.2. Major Economic Variables in Emerging Market and Developing Economies

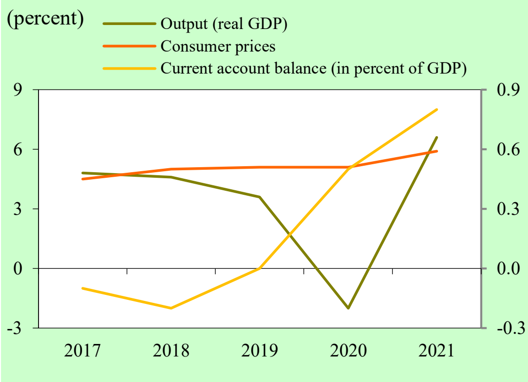

Table 1.2. Major Economic Variables in Emerging Market and Developing Economies

(percent)

	Output (real GDP) (annual percent change)		Consumer prices (annual percent change)		Current account balance (in percent of GDP)	
	2020	2021	2020	2021	2020	2021
World	**-3.1**	**6.0**	**3.2**	**4.7**	**0.4**	**0.7**
Emerging Market and Developing Economies	**-2.0**	**6.6**	**5.1**	**5.9**	**0.5**	**0.8**
Emerging and Developing Asia	**-0.9**	**7.2**	**3.1**	**2.2**	**1.5**	**1.0**
China	2.3	8.1	2.4	0.9	1.7	1.8
India	-7.3	8.7	6.2	5.5	0.9	-1.2
ASEAN[1]	-3.4	3.4	1.4	1.9	1.8	-0.3
Emerging and Developing Europe	**-1.8**	**6.8**	**5.3**	**9.5**	**0.0**	**1.7**
Russia	-2.7	4.7	3.4	6.7	2.4	6.9
Turkey	1.9	11.4	12.3	19.6	-4.9	-1.7
Middle East and Central Asia	**-2.8**	**4.5**	**10.5**	**12.9**	**-2.5**	**2.3**
Latin America and the Caribbean	**-6.9**	**6.9**	**6.4**	**9.8**	**-0.2**	**-1.6**
Brazil	-3.9	4.6	3.2	8.3	-1.7	-1.7
Mexico	-8.2	4.8	3.4	5.7	2.5	-0.4
Sub-Saharan Africa	**-1.7**	**4.7**	**10.2**	**11.1**	**-2.9**	**-1.1**

Source: IMF, World Economic Outlook, October 2022, and the updated version, January 2022

[1] Includes Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

On August 23, 2021, the IMF introduced a credit option worth $650 billion through Special Drawing Rights (SDR) for its 190 member countries, aimed at mitigating the adverse economic impacts of the outbreak of COVID-19 pandemic. This marked the first SDR allocation since 2009 and was designed to enhance resilience and stabilize the global economy. This prudent mechanism provided liquidity and availed all countries regardless of their income levels. SDRs are a globally accepted international asset that can be exchanged for major currencies and used for various intentions. Each member's SDR allocation serves as a line of credit that can be withdrawn at their discretion. The cost of this asset is based on the weighted average short-term interest rates of five key currencies: the US dollar, euro, yen, British pound, and, since 2015, the Chinese yuan. In 2021, this cost was almost zero, and because allocations are made according to each member's quota share, higher-income members received a larger portion due to their larger shares.

1.3. Middle East, North Africa, Afghanistan, and Pakistan (MENAP)

The real GDP growth rate in the Middle East, North Africa, Afghanistan, and Pakistan (MENAP), increased by 7.1 percentage points compared with the year before, to 4.3 percent in 2021. This growth was primarily driven by rising global demand, the economic recovery of the oil exporters in the MENAP region due to higher global prices, and the effective containment of the pandemic. Additionally, improved oil prices and the increased export volumes by the oil exporters contributed to the favorable position of the current account balance in the region. Consequently, the current account balance of the MENAP region in percent of GDP improved from -2.4 percent in 2020 to 2.6 percent in 2021.

Figure 1.3. Major Economic Variables in Middle East and Central Asia

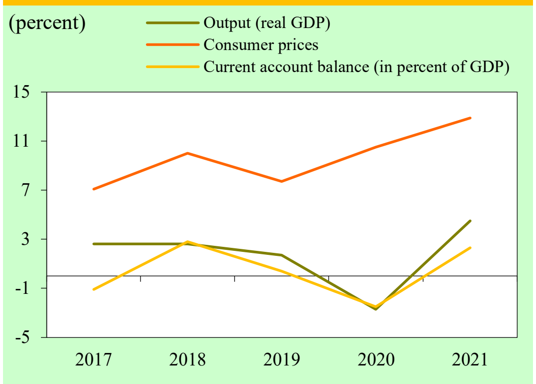

Table 1.3. Major Economic Variables in MENAP Region (percent)

	Real GDP (annual percent change)		Inflation (year average, percent)		Current account balance (in percent of GDP)	
	2020	2021	2020	2021	2020	2021
World	**-3.1**	**6.0**	**3.2**	**4.7**	**0.4**	**0.7**
Middle East, North Africa, Afghanistan, and Pakistan (MENAP)[1]	**-2.8**	**4.3**	**10.9**	**13.4**	**-2.4**	**2.6**
MENA oil exporters	-4.0	4.5	9.1	11.4	-2.1	4.6
MENA oil importers	-1.0	4.1	13.5	16.6	-3.3	-3.7

Source: IMF Statistical Appendix; IMF, Regional Economic Outlook (Middle East and North Africa), October 2022
[1] Excludes Syria and Afghanistan due to their unstable political situations.

1.4. Developments of the Prices of Raw Materials

In 2021, global demand outpaced supply, due to the increasing rate of COVID-19 vaccinations, the easing of pandemic-related restrictions, and the reopening of the global economy. Pandemic-related limitations on production led to soaring global prices, which adversely impacted global transportation networks and had detrimental effects on downstream industries. Additionally, container transportation costs reached unprecedented levels, compounded by order backlogs and delays in goods delivery. The mismatch between global semiconductor supply and demand resulted in significant disruptions in the productions of downstream industries. Consequently, in the first half of 2021, the automotive production fell by 15.0 percent in most countries. Furthermore, restrictions on the production capacity contributed to a dramatic increase in energy prices, including thermal coal and LNG (Liquefied Natural Gas).

In England and Europe, slowdown and contraction in gas markets were more pronounced compared to other regions. This led to increased production restrictions in these areas, resulting in declining profit margins and a notable rise in prices, particularly affecting downstream industries.

In Australia, the segmentation of domestic and export gas markets kept gas prices relatively low. During the closing months of 2021, China experienced energy shortages, which resulted in reduced production of energy-intensive products such as aluminum, other basic metals, and cement. Rising coal and LNG prices contributed to oil prices reaching their highest levels in seven years.

The spot prices of Brent oil, as a global benchmark, started 2021 at $50 per barrel and surged to a high of $86 per barrel by the end of October, before slightly decreasing to $77 by the end of 2021. The average annual of Brent oil in 2021 was $71, the highest in the past 3 years. West Texas Intermediate (WTI) oil followed a similar trend, averaging $3 per barrel lower than the Brent oil throughout 2021.

During 2021, global oil production rose at a slower pace than oil demand, primarily caused by a decline in production by OPEC+ members, a trend that began in 2020. This imbalance contributed to rising global oil prices. In December 2020, OPEC members and other countries, including Russia, which produce oil in coordination with OPEC (collectively known as OPEC +), announced plans to continue reducing oil production. Meanwhile, U.S. oil production in 2021 fell compared to the previous year. This decline was driven by the reduced investment from the U.S. oil producers starting in mid-2020, severe cold weather in February, and the devastating storms in August, all of which impacted Shale oil production. The combination of increasing oil demand and decreasing supply resulted in the continuous extraction of oil reserves and global liquid fuel from February to December, further driving up global oil prices.

The restrictions on the global supply chain led to constrains in energy markets in 2021, contributing to rising prices for basic metals and other inputs with energy-intensive processes. In addition, China's efforts to lower air pollution from coal-based electricity generation placed increased pressures on energy markets, resulting in significant increases in the prices of natural gas and coal. By December 2021, natural gas prices had reached their highest levels. As global activities improved, demand surged. Furthermore, adverse weather conditions in many countries increased energy consumption for heating and cooling, negatively affecting coal production and reducing hydroelectricity energy output. This situation substantially raised electricity costs in most countries, particularly in Europe. The price of tin also hit a peak due to heightened demand in the electronics sector and supply disruptions. Meanwhile, aluminum prices rose following China's decision to limit production amid significant electricity shortages. However, after China opted to reduce steel production to contain air pollution, the price of iron ore, which had reached its highest point in mid-2021, declined significantly. The price of copper slightly decreased from its peak, partly attributable to sluggish economic activity in China. The debt crisis of Evergrande Group, one of the largest property developers and construction companies in China, culminated into reduced factory operations in 2021 among the country's struggling with severe electricity restrictions. Changes in China's economic data, as the largest consumer and producer of steel globally, significantly impact metal markets across the globe. In September and October 2021, China experienced energy shortages, which resulted in a falling trend in the production of energy-intensive products, including aluminum, basic metals, and cement.

Figure 1.4. Price Index of Basic Commodities (2016=100)

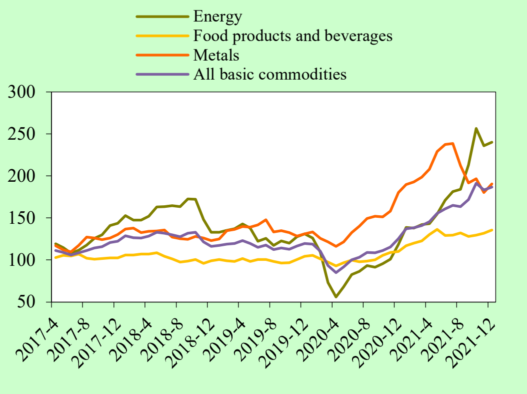

Figure 1.5. Price of Brent Crude (USD)