Risk Management Measures and Economic Policies of Selected Countries Against COVID 19

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Introduction: Risk Treatment

- When assuming a risk , two steps should be taken for Risk handling:
- **1. <u>Risk Level</u> should be determined accurately:**
- This means the extent, domain , severity and frequency of risk should be determined accurately.
- For the case of COVID 19 some countries, unfortunately, underestimated the risk originally. Even though the Virus had a concealment period of about 14 days, some countries such as USA, UK and Iran underestimated the risk and dealt with it such as influenzas. The mortality rate of 2-6 percent out of infected cases is much higher than influenza and the faster transmission of the virus makes it much riskier than what the mentioned countries originally considered. Moreover, the concealment period of about 2 weeks increases the spread rate of Virus.
- Inversely, some other countries realized the risk accurately and treated the risk rationally and had less mortalities and economic difficulties. The Countries China, South Korea, Hong Kong, Japan, and New Zealand can be categorized in this group.

- **2- The Risk Aversion level of People as well as Authorities should be formed proportionately to the Risk Level:**
- **The countries underestimated the risk level of COVID 19, their Risk Aversion Level became proportionately lower and, consequently adopted weaker and inefficient strategies against this virus. This fact is reflected in the high mortality rates of these countries indicated in the following tables.**

worldometer

https://www.worldometers.info/coronavirus/

As of February 4th 2021

Country	Total Cases	New Cases/ Feb 4th	Total Death	New Death/Feb 4th	Death /1 M Popu.	Test per 1 M	Population
World	105,399,481	+505,398	2,292,664	+14,294	294.1		
USA	27,273,890	+121,627	466,988	+3,523	1,406	959,568	332,161,517
India	10,803,533	+12,410	154,862	+120	112	143,518	1,388,086,332
Brazil	9,397,769	+57,848	228,883	+1,291	1,072	133,982	213,460,896
Russia	3,917,918	+16,714	75,205	+521	515	706,985	145,971,935
UK	3,892,459	+20,634	110,250	+915	1,619	1,110,302	68,098,996
France	3,274,608	+23,448	77,952	+357	1,193	691,640	65,359,921
Spain	2,943,349	+29,960	60,802	+432	1,300	724,919	46,765,623
Italy	2,597,446	+13,659	90,241	+421	1,494	556,263	60,408,532
Turkey	2,508,988	+7,909	26,467	+113	312	355,876	84,879,364
Germany	2,265,536	+12,989	60,885	+673	725	484,912	83,944,131
Colombia	2,135,412	+9,790	55,131	+254	1,077	202,042	51,205,793
Argentina	1,961,635	+8,891	48,700	+161	1,072	140,693	45,442,913
Mexico	1,886,245	+12,153	161,240	+1,707	1,243	36,707	129,739,348
Poland	1,533,511	+6,496	38,344	+444	1,014	232,519	37,821,768
South Africa	1,466,767	+3,751	45,605	+261	763	140,583	59,753,378
Iran	1,445,326	+7,040	58,256	+67	688	112,309	84,632,205
Ukraine	1,232,246	+5,082	23,229	+140	533	144,568	43,575,893
Peru	1,165,052	+6,715	41,753	+215	1,256	195,252	33,244,774
Indonesia	1,123,105	+11,434	31,001	+231	113	34,523	275,245,757
Czechia	1,013,352	+9,567	16,826	+68	1,569	595,575	10,720,869
Netherlands	993,430	+4,193	14,234	+65	830	406,258	17,157,554
Canada	793,734	+4,083	20,513	+158	541	577,787	37,939,397
Portugal	748,858	+7,914	13,482	+225	1,325	734,207	10,178,873
Chile	740,237	+3,592	18,731	+155	975	427,695	19,214,019
Romania	738,152	+2,668	18,675	+75	975	288,280	19,160,557
Belgium	716,395	+3,124	21,216	+43	1,826	721,909	11,619,763
Israel	675,618	+6,744	5,001	+53	544	1,166,078	9,197,590
Iraq	624,222	+1,150	13,091	+12	321	142,399	40,755,941
Sweden	584,674		12,028	+39	1,187	542,507	10,136,855
Pakistan	550,540	+1,508	11,833	+31	53	36,187	223,432,221

worldometer

https://www.worldometers.info/coronavirus/

As of February 3th 2021

Country	Total Cases	New Cases/ Feb 3th	Total Death	New Death/Feb 3th	Death /1 M Popu.	Test per 1 M	Population
World	104,894,083	+493,547	2,278,370	+14,292	292.3		
USA	27,152,263	+114,018	463,465	+4,032	1,395	954,566	332,161,517
India	10,791,123	+12,917	154,742	+107	111	142,983	1,388,086,332
Brazil	9,339,921	+53,665	227,592	+1,209	1,066	133,982	213,460,896
Russia	3,901,204	+16,474	74,684	+526	512	704,245	145,971,935
UK	3,871,825	+19,202	109,335	+1,322	1,606	1,078,560	68,098,996
France	3,251,160	+26,362	77,595	+357	1,187	684,066	65,359,921
Spain	2,913,389	+31,596	60,370	+565	1,291	724,919	46,765,623
Italy	2,583,787	+13,186	89,820	+476	1,487	551,791	60,408,532
Turkey	2,501,079	+8,102	26,354	+117	310	354,167	84,879,364
Germany	2,252,547	+12,579	60,212	+826	717	459,040	83,944,131
Colombia	2,125,622	+11,025	54,877	+301	1,072	200,623	51,205,793
Argentina	1,952,744	+9,196	48,539	+113	1,068	139,537	45,442,913
Mexico	1,874,092	+4,384	159,533	+433	1,230	36,396	129,739,348
Poland	1,527,015	+6,801	37,900	+424	1,002	231,357	37,821,768
South Africa	1,463,016	+4,058	45,344	+398	759	140,064	59,753,378
Iran	1,438,286	+6,870	58,189	+79	688	111,656	84,632,205
Ukraine	1,227,164	+3,285	23,089	+165	530	144,568	43,575,893
Peru	1,158,337	+8,573	41,538	+184	1,249	193,732	33,244,774
Indonesia	1,111,671	+11,984	30,770	+189	112	34,273	275,245,757
Czechia	1,003,785	+9,133	16,758	+120	1,563	588,770	10,720,869
Netherlands	989,237	+4,013	14,169	+61	826	406,258	17,157,554
Canada	789,651	+3,231	20,355	+142	537	574,565	37,939,397
Portugal	740,944	+9,083	13,257	+240	1,302	729,014	10,178,873
Chile	736,645	+2,610	18,576	+17	967	424,986	19,214,019
Romania	735,484	+2,752	18,600	+87	971	286,963	19,160,557
Belgium	713,271	+1,854	21,173	+49	1,822	716,085	11,619,763
Israel	668,874	+8,896	4,948	+61	538	1,156,736	9,197,590
Iraq	623,072	+1,317	13,079	+11	321	141,155	40,755,941
Sweden	584,674	+3,745	11,989	+2	1,183	484,999	10,136,855
Pakistan	549,032	+1,384	11,802	+56	53	35,990	223,432,221
Bangladesh	536,545	+438	8,162	+13	49	22,296	165,666,671

- The data of **Death per 1 million of Population** as of the date of February 4th shows how the Risk Aversion Level of people and authorities is formed regarding the Risk Level of COVID 19:
- **USA : 1406**
- **UK : 1619**
- **Spain : 1300**
- **Italy : 1494**
- **Mexico : 1243**
- **Peru : 1256**
- **Portugal : 1325**
- **Belgium : 1826**
- **Russia : 515**
- **Iran : 688**

- The same data of **Death per 1 million of Population** as of the date of February 4th for some successful countries in handling the mortality risk of COVID 19 appears below:
- Japan : 48
- Malaysia : 25
- South Korea : 28
- China : 3
- New Zealand : 5
- Singapore : 5
- Hong Kong : 25
- Australia : 35

All of these countries adopted efficient risk management measures such as banning international borders immediately, making the use of a face mask mandatory in public, closing Schools, universities and most offices and preventing people from attending halls, stadiums and markets and imposing heavy fines to those who violated these protocols .

Extensive testing; treatment for all patients regardless of whether they are insured or not; support to health-care workers; the enhanced provision of face masks, ICUs and respirators, and etc. were employed in most of the successful countries.

By tackling such heavy risk management measures these countries could handle the risk.

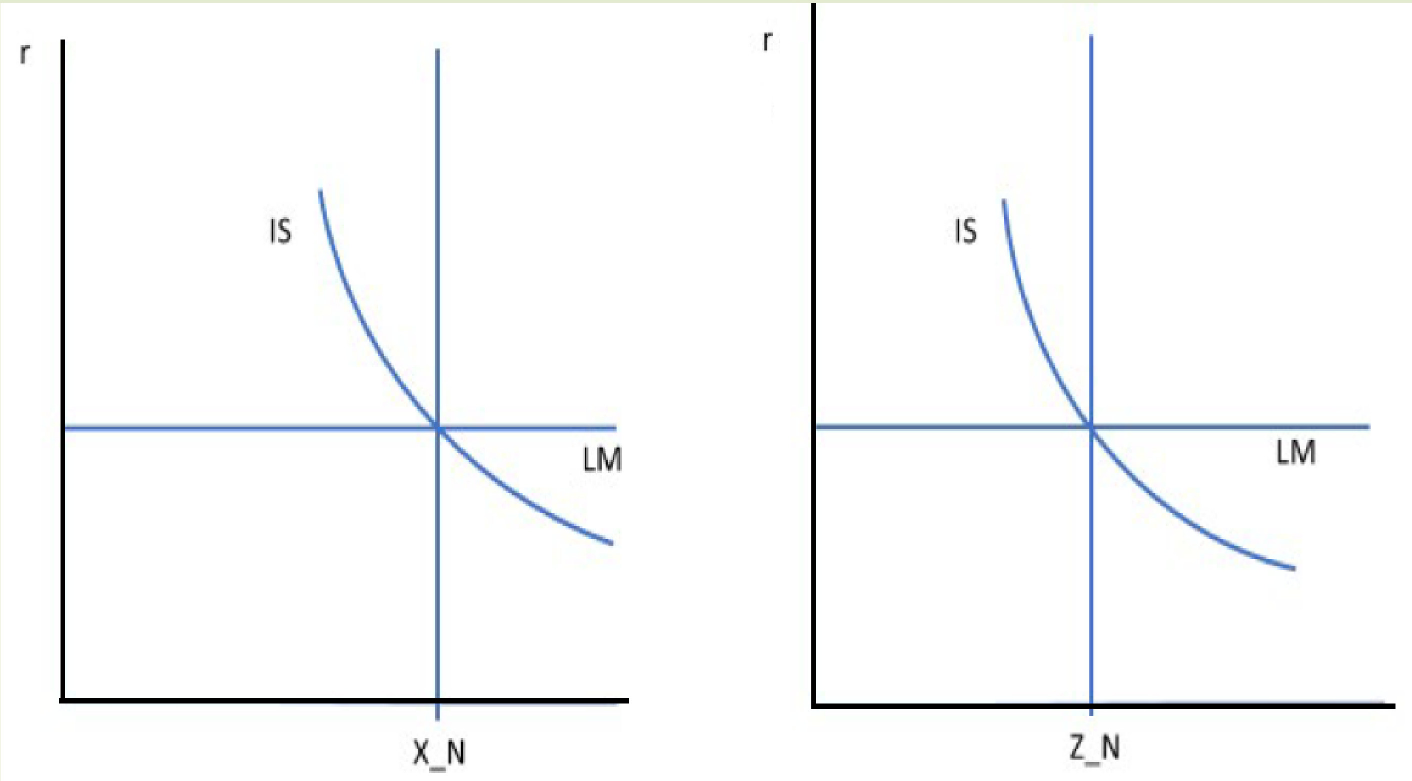
Theoretical Foundations of Financial and Economic Policies of Governments Against the Coronavirus

- After the pandemic was revealed, what happened first was a major policy-induced supply shock. The lockdown forced firms in several directly affected sectors, from restaurants to hotels to airlines, to halt (or at least to drastically decrease) supply.
- As a result of sharply lower output, and thus lower income, and of increased uncertainty, this shock had a major effect on demand, not just in the sectors directly affected by the lockdown, but also in the nonaffected sectors. Thus, the outcome was a combination of a supply shock and a sharp demand response.
- In that context, the role of macroeconomic policy was twofold. First: While it could not do much to increase output in the affected sectors, it needed to protect the firms in those sectors from going bankrupt and the workers who lost work from going hungry. Second: It needed to limit the effect of lower demand in the non-affected sectors. It did both, through a combination of fiscal and monetary measures. The decline in output has been very large, but, absent the strong macro policy response, it would have been much worse.
- The less urgent question is what policy measures they need to take to prepare for the post-COVID economy (Olivier Blanchard , September 2020) .

A-The Economic Effects of Lockdown

- To understand the effects of the COVID shock, we need to think of two sectors. The first is directly affected by COVID; think of it as composed of restaurants, hotels, airlines, as well as their suppliers. Call it the ``affected sector,'' and refer to its output as X. The second is not directly affected by COVID, but is potentially affected by a decrease in demand. Call it the ``non-affected sector,'' and refer to its output as Z.
- The equilibrium is presented in the two panels of Figure 1. The left panel shows the equilibrium in the affected sector, the right panel shows the equilibrium in the non-affected sector.
- The vertical axis in both panels measures the interest rate. The horizontal axis in the left panel measures output in the affected sector, X; the horizontal axis in the right panel measures output in the non-affected sector, Z.

Figure 1-Initial equilibrium in affected Sector and non-affected sector



The left panel shows the equilibrium in the affected sector,

the right panel shows the equilibrium in the non-affected sector.

This is actually a description of where advanced economies were

pre-COVID: Output was roughly at its natural level when the COVID crisis hit.

- The demand for the goods produced by each sector is represented by the two IS curves, which are specific to each sector. A lower interest rate increases demand for each type of good, and so both IS curves are downward sloping. The interest rate, which is set by the central bank for the economy as a whole is the same for both sectors and represented by the two flat LM curves.6 The natural levels of output in each sector are given by **X_N** (N for natural) and **Z_N** respectively.
- Now we discuss about the effects of Lockdown becoming essential because of COVID 19 in both sectors.

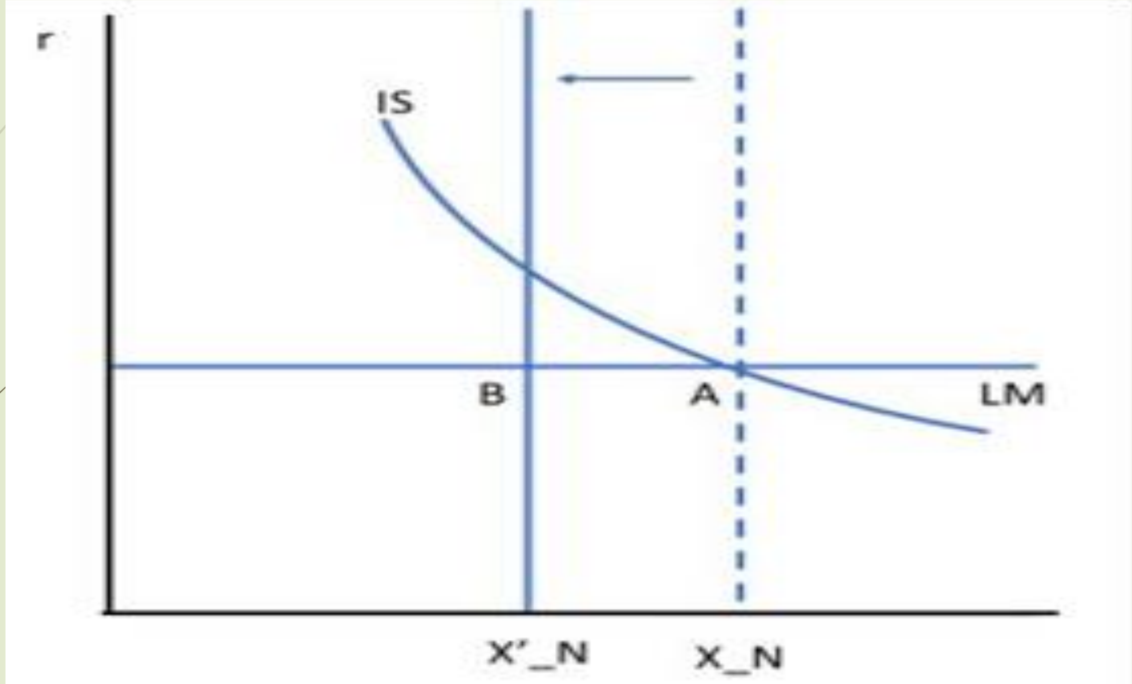
1) The Effect of Lockdown in Affected Sector

On the supply side, output is constrained to decrease, say from X_N to X'_N in Figure 2. Think of restaurants being ordered to close or to remain open under strict conditions, limiting the number of customers they can accommodate.

The market will face with the disequilibrium point of **"B"** instead of the pre-lockdown equilibrium point of **"A"**.

At point **"B"**, demand will be greater than supply and this stimulates inflation at affected sector.

Figure 2-The Effect of Lockdown in affected Sector

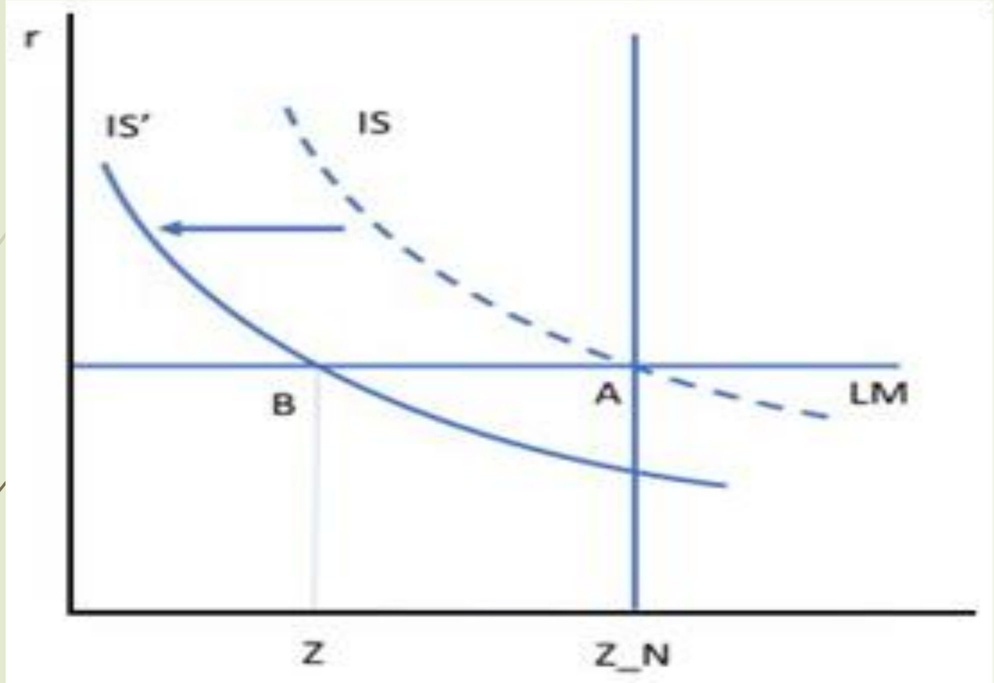


Output goes down in the affected sector because of the lockdown

2) *The Effect of Lockdown in Non-Affected Sector*

- Given our definition of the sector as non-affected, there is no change in the natural level of output, Z_N: Firms are not affected by COVID and can produce in the same way as before. The focus is thus on what happens to demand.
- The following effects may occur:
- A- To the extent that goods produced by the two sectors are substitutable, there is an increase in the demand for the goods produced by the non-affected sector. If people cannot go to cinemas, they watch more Netflix. If they cannot go to restaurants, they order more take-out. This effect increases demand, shifting the IS curve to the right.
- B- To the extent that people lose their jobs in sector X, then, the large decrease in their income leads to a large decrease in demand for goods Z. For example, a laid-off worker from the airline industry may delay buying a car. This effect decreases demand, leading to a shift in the IS curve to the left.
- C- Given the uncertainty about long the COVID will last (e.g. whether the government has the infection under control; whether and when there will be a widely available vaccine; and whether jobs in the affected sector will come back), consumers are likely to worry about the future, and thus do precautionary saving and limit their consumption. This again will shift the IS curve to the left.

Figure 3-The Effect of Lockdown in non-affected Sector



The second and third effects are likely to dominate the first, leading to a shift in the IS curve to the left. At a given interest rate, the equilibrium shifts from A to B, and output decreases down from Z_N to Z in the absence of a macroeconomic policy response.

- ● ***Putting things together, the effect of the lockdown, absent a policy response, is to lead to a large decrease in output, not only in the sector directly affected by the lockdown, but in the rest of the economy as well.***

- ● ***Table 1 below shows the Real GDP Indices for USA, France, Germany and Italy for the first two quarters of 2020 compared to the Index for the last quarter of 2019 assumed to be 100.***

- ● ***It shows how large the decrease in activity has been since the start of the crisis, with second quarter GDP standing, depending on the country, between 81% and 90% of its precrisis level.5 For comparison's sake, GDP at the end of the Great Financial Crisis stood at 96% of its precrisis level.***

Table 1. GDP indices (2019 Q4=100)

	2019 Q4	2020 Q1	2020 Q2
USA	100	99	90
France	100	94	81
Germany	100	98	88
Italy	100	94	82

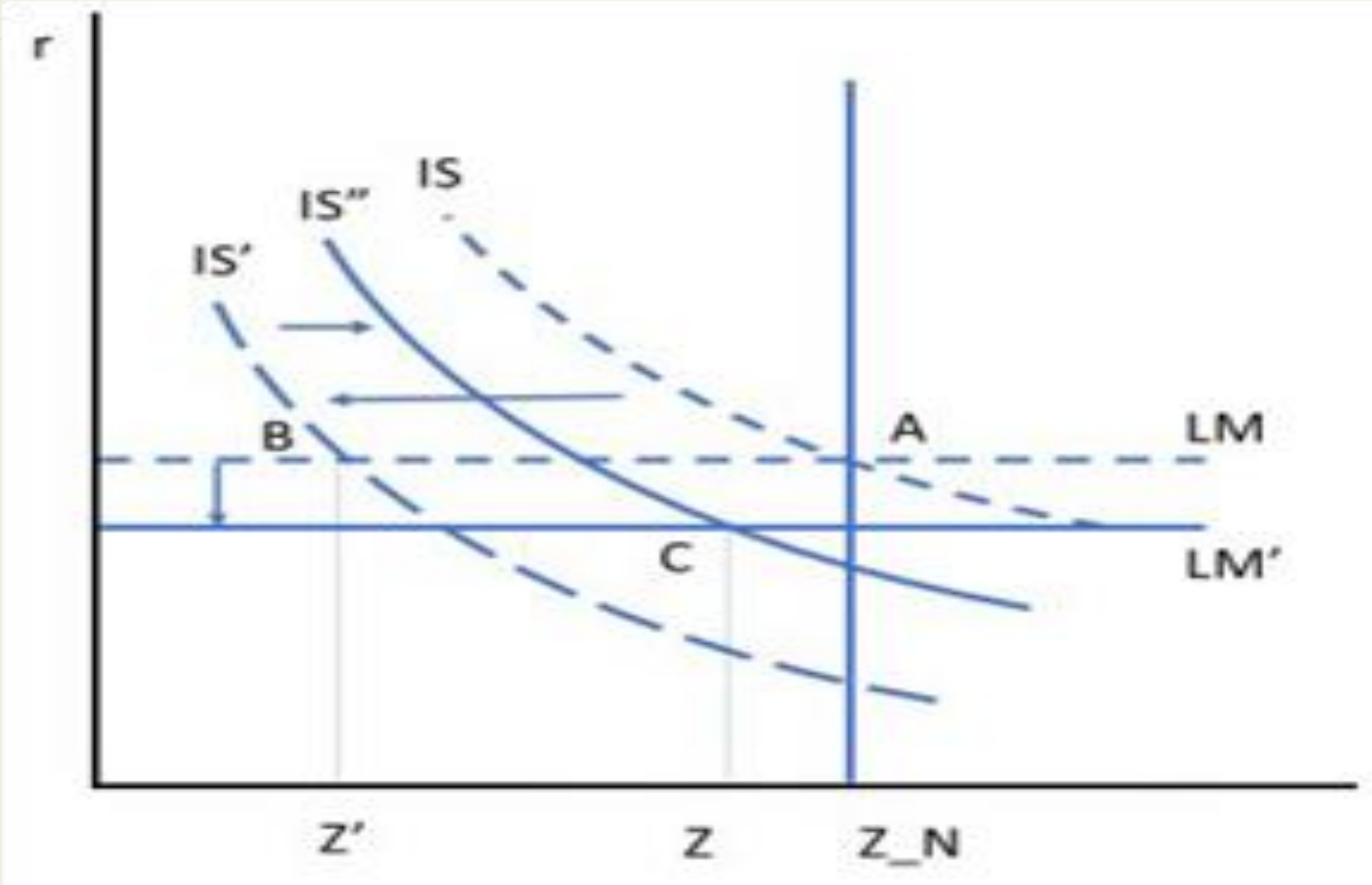
Source: Macroeconomics, 8th edition, Olivier Blanchard , September 2020 (Macrobond) .

B- The Effect of Macro Policy Response (Fiscal-Monetary Policy)

- **A) Fiscal Policy :**
- Generally speaking, during a recession, the **government <u>may employ expansionary fiscal policy</u> by lowering tax rates or increasing its expenditure to increase aggregate demand and fuel economic growth.**
- Fiscal policy cannot do much to increase output in the <u>affected sector</u>, but it can still do two things:
- The first is to protect the firms and the workers in that sector. Absent help, many firms are likely to go bankrupt, and many workers, having lost their job, may go hungry. Fiscal policy can help them.
- The **second** is to reduce demand spillovers in the non-affected sector. Avoiding bankruptcies and giving unemployed workers more income already goes some way towards achieving this, but more may be needed to limit the decrease in demand and the decrease in output. The potential effect of fiscal policy is shown in Figure 4.
- <u>Absent fiscal policy, the IS curve would shift to IS'. Policy can offset some of the shift, so that the IS curve shifts only to IS" rather than to IS'.</u>

- **B) Monetary Policy** :
- Generally speaking, **Monetary policy consists of the management of <u>money supply</u> and <u>interest rates</u>, aimed at meeting macroeconomic objectives such as controlling <u>inflation</u>, <u>consumption</u>, <u>growth,</u> and <u>liquidity</u>. This is achieved by actions such as modifying the interest rate, buying or selling government bonds, regulating foreign exchange (forex) rates, and changing the amount of money banks are required to maintain as reserves. In other word, Monetary policy refers to the actions undertaken by a nation's central bank to control interest rate and money supply to achieve sustainable economic growth.**
- Monetary policy can help as well, by decreasing the policy rate and increasing demand. As shown in Figure 4 it can shift the LM curve from LM down to LM' by decreasing the interest rate.
- The final equilibrium point becomes point "C" with the interest rate lower than the initial interest rate and the output "Z".
- Figure 4 shows total effect of Fiscal-Monetary policy theoretically.

Figure 4- The Effect of Fiscal-Monetary Policy after COVID crisis



Equilibrium output in the non-affected sector, which, absent policy, would have been given by Z' is instead given by Z.

- - *As a result of both fiscal and monetary policy, equilibrium output in the non-affected sector, which, absent policy, would have been given by Z' is instead given by Z. Ideally, policy could lead output to remain at the natural level Z_N. Here, the policy response falls short, and output falls even in the non-affected sector.*

- - *The combination of supply constrained lower output in the affected sector, and demand constrained lower output in the non-affected sector still leads to a major recession, but less dramatic than it would have been if Fiscal-Monetary Policy is not undertaken.*

Table 2- Evolution of Employment in different sectors in USA after COVID 19 crisis in 2020

	February	April	August
Total nonfarm payrolls	**100**	**85**	**92**
Motion picture and sound recording industries	100	48	50
Performing arts and spectator sports	100	53	54
Scenic and sightseeing transportation	100	34	57
Amusements, gambling, and recreation	100	42	67
Leisure and hospitality	100	51	75
Air transportation	100	85	79
...			
Furniture and home furnishings stores	100	54	87
Electronics and appliances stores	100	90	91
Motor vehicles and parts	100	82	93
...			
Food and beverage stores	100	99	101
Building material and garden supply stores	100	97	106
Couriers and messengers	100	102	109

The table indicates after Fiscal-Monetary policy, the employment indices increases in all sectors from April to August.

- ● ***The table 2 gives numbers for three groups of sectors:***

***First**, those directly affected by the lockdown, such as restaurants and airlines, for whom (excepting for airlines) employment typically decreased by half.*
***Second**, those not directly affected by the lockdown, but affected by the decrease in demand, such as furniture, electronics, or automobiles. For those, employment decreased substantially as well.*
***Third,** sectors that were affected positively by the lockdown, such as food, garden supply equipment, and couriers. Employment barely decreased in those sectors.*

- ● ***After applying Fiscal-Monetary policy, the employment indices increases in all sectors from April to August.***

Risk Management, Financial and Economic Measures of Governments Against Coronavirus

- The COVID-19-induced the world recession has been frequently compared with past recessions, including the Great Depression of the 1930s and financial crises of 2008. Even though the origin of these crises are different, all of them had severe economic effects .
- Most of the countries of the world undertook different fiscal and monetary policies as well as risk managemet measures. For example, Subsidies to workers and firms, together with tax deferrals, amounted to 7.8% of GDP in the United States, 5.9% in France, 11.3% in Germany, all of which were extremely large amounts by historical standards. Furthermore, in order to lower risks to banks, governments committed to partly guarantee loans made by banks to firms in trouble. Guaranteed loans made by banks amounted up to 5.2% of GDP in the United States, 13.4% in France, 30.3% in Germany.
- We summarize the key economic and risk management responses governments are taking to limit the human and economic impact of the COVID-19 pandemic for some selected economies.

USA

Background:

- USA with the largest number of total death amounted to more than 490,000 which is about 20% of the world death toll and more than 28 million cases which is about 25% of the world infected cases was seriously shocked by COVID 19. Its economy was also strongly affected with the virus.
- Following a deep contraction in the second quarter of 2020 that reflected the impact of the containment measures, the U.S. economy rebounded strongly by an annualized rate of 33.1 percent. The unemployment rate stayed at 6.7% in November.
- The containment measures in place vary by state and geographical area. As of mid-December, many states had imposed new restrictions on business and activities. Some states closed indoor dining and entertainment venues and banned indoor gatherings in the whole state or in some regions (e.g. Washington, California, Michigan). Schools have reopened in most states with varying approaches (in-person instruction, virtual or hybrid).

USA

- **Key Policy Responses as of January 7, 2021**
- **Fiscal Response:**
- **More generous' than other countries in Amount but not in Percentage**
- On March 27, 2020 President Trump signed the CARES Act, a $2.2 trillion stimulus package that included direct payments to Americans and expanded unemployment benefits for those affected by the pandemic. Under the bill, American adults earning less than $99,000 per year received a one-time payment of $1,200. Workers who lost their jobs due to the outbreak were eligible to receive an additional $600 per week until late July.
- The legislation also included the creation of the Paycheck Protection Program loan, which was designed as an incentive for small businesses to keep employees on their payroll. According to the Small Business Administration, PPP loans will be forgiven if "employee retention criteria are met."
- In total, till the end of Sept. 2020, the U.S. fiscal response to the coronavirus pandemic amounts to roughly 13% of the country's GDP, or about $2.5 trillion, according to Ned Davis Research.
- Till the end of Sept. 2020 , total fiscal stimulus in Japan totals roughly 42% of the country's GDP. In Germany and France, government measures amount to 33% and 21% of GDP, respectively.
- **Ref. How the U.S. economic response to the coronavirus pandemic stacks up to the rest of the world,** Published Mon, Sep. 28 20208:43 PM EDT Updated Mon, Sep 28 20209:10 PM EDT

USA

- On December 28, 2020, President Trump signed a US $ 877bn (about 4½ percent of GDP) coronavirus relief and government funding bill which includes enhanced unemployment benefits of US $ 300 weekly federal enhancement in benefits through March 14, direct stimulus payments of $600 to individuals, another round of PPP loans, resources for vaccines, testing and tracing, and funding for K-12 education.
- US $ 483 billion Paycheck Protection Program and Health Care Enhancement Act. The legislation includes (i) US $ 321 billion for additional forgivable Small Business Administration loans and guarantees to help small businesses that retain workers; (ii) US $ 62 billion for the Small Business Administration to provide grants and loans to assist small businesses; (iii) US $ 75 billion for hospitals; and (iv) US $ 25 billion for expanding virus testing.
- An estimated US $ 2.3 trillion (around 11% of GDP) Coronavirus Aid, Relief and Economy Security Act ("CARES Act"). The Act includes (i) US $ 293 billion to provide one-time tax rebates to individuals; (ii) US $ 268 billion to expand unemployment benefits; (iii) US $ 25 billion to provide a food safety net for the most vulnerable; (iv) US $ 510 billion to prevent corporate bankruptcy by providing loans, guarantees, and backstopping Federal Reserve 13(3) program; (v) US $ 349 billion in forgivable Small Business Administration loans and guarantees to help small businesses that retain workers; (vi) US $ 100 billion for hospitals, (vii) US $ 150 billion in transfers to state and local governments and (viii) US $ 49.9 billion for international assistance (including SDR28 billion for the IMF's New Arrangement to Borrow).
- **Ref. : Policy Responses to COVID-19** , International Monetary Fund, Last updated on February 5, 2021.

USA

- **In the United States, the government used two main tools (for more detail, see the Bruegel study listed at the end of the box.) The first was to let firms lay off workers, rely on unemployment benefit offices to distribute unemployment checks, and to top it off by adding 600 dollars a week (for four months) to regular benefits 9 . This did not go smoothly. Given April's gigantic increase in the number of newly unemployed, unemployment offices were overwhelmed, and many laid-off workers waited weeks to get their first check. The second was the issue of checks for 1,200 dollars to all tax-paying individuals (up to a high level of income---e.g. $155,000 for joint filers).**
- **This was generous, but since no distinction was made based on employment status, many of the checks went to people who were not unemployed and did not need the funds. By increasing income, it boosted aggregate demand (but see the Focus box on what people did with the money), but it did not particularly help those workers most in need. (Ref.:**The COVID economic crisis. (additional chapter for ``**Macroeconomics**, 8th edition).1 Olivier Blanchard, September 2020 **)**

USA

- **Monetary Response**

The Fed slashed rates to a range of zero to 0.25% on March 15 and launched an open-ended bond-buying program entailing the purchase of Treasurys and mortgage-backed securities. The U.S. central bank followed that up with a slew of measures to ensure credit markets ran smoothly.

- The Fed also launched a Main Street lending program aimed at supporting small and midsize businesses. In May and June, the Fed increased its stimulative efforts when it started buying corporate-bond exchange-traded funds as well as debt from individual companies.
- These efforts led the Fed's total assets to balloon by more than 68% since March to more than $7 trillion. (Ref. How the U.S. economic response to the coronavirus pandemic stacks up to the rest of the world, Published & Updated Mon, Sep 28 20209).
- Federal funds rate: The Fed has cut its target for the federal funds rate, the rate banks pay to borrow from each other overnight, by a total of 1.5 percentage points since March 3, bringing it down to a range of 0% to 0.25%. The federal funds rate is a benchmark for other short-term rates, and also affects longer-term rates, so this move is aimed at lowering the cost of borrowing on mortgages, auto loans, home equity loans, and other loans, but it will also reduce the interest income that savers get.
- Direct lending to banks: The Fed lowered the rate that it charges banks for loans from its discount window by 2 percentage points, from 2.25% to 0.25%, lower than during the Great Recession.
- Temporarily relaxing regulatory requirements: The Fed is encouraging banks—both the largest banks and community banks—to dip into their regulatory capital and liquidity buffers, so they can increase lending during the downturn. (Ref: What's the Fed doing in response to the COVID-19 crisis? What more could it do?, Jeffrey Cheng, Tyler Powell, Dave Skidmore, and David Wessel Monday, January 25, 2021)

Japan

- Background:
- The total infected cases and total Death amounted 415,000 and 6,900 respectively in Feb. 15th.
- In response to the outbreak, the authorities have taken several measures targeted towards health and containment efforts. Japan expanded entry bans; as a result, this brings to a total of 152 countries/regions currently subject to Japan's entry ban which will restrict the entry of foreigners who have visited COVID-19 affected countries and regions within the last 14 days.
- Then Prime Minister Shinzo Abe declared the state of emergency for seven prefectures (including Tokyo, Saitama, Kanagawa, Chiba, Osaka, Hyogo, and Fukuoka) on April 7 and expanded the coverage of the state of emergency to all Japanese prefectures on April 16, effective through May 6.
- The state of emergency enabled prefectural governors in the designated areas to request people to stay at home, order closures of schools and public facilities, build temporary medical facilities, and adopt actions to support medical and food supplies. On May 4, PM Abe extended the nationwide state of emergency through May 31. The 2020 Tokyo Olympic Games have been postponed to July 23-August 8, 2021.

Japan

- **Fiscal Response:**
- On April 7 (partly revised on April 20), the Government of Japan adopted the Emergency Economic Package Against COVID-19 of ¥117.1 trillion (20.9 percent of 2019 GDP) aiming at five objectives, including to: (i) develop preventive measures against the spread of infection and strengthen treatment capacity (expenditure of 0.4 percent of 2019 GDP), (ii) protect employment and businesses (15.8 percent of 2019 GDP), (iii) regain economic activities after containment (1.5 percent of 2019 GDP), (iv) rebuild a resilient economic structure (2.8 percent of 2019 GDP), and (v) enhance readiness for the future (0.3 percent of 2019 GDP).
- The key measures comprise cash handouts to every individual and affected firms, deferral of tax payments and social security contributions, and concessional loans from public and private financial institutions.
- The direct support was the depositing of 110,00 JY into accounts of all individuals residing inside Japan and applied for the help.

Japan

- On May 27, the Government of Japan announced the second FY2020 draft supplementary budget (passed on June 12). The package, worth ¥117.1 trillion (20.9 percent of 2019 GDP), covers (i) health-related measures, (ii) support to businesses, (iii) support to households, (iv) transfers to the local governments, and (v) raising the ceiling of the COVID-19 reserve fund. The specific measures include expansion of the work subsidies, provision of subordinated loans by the public financial institutions to affected firms, and subsidies to affected firms for their rent payments.
- On December 8, the Government of Japan adopted the Comprehensive Economic Measures to Secure People's Lives and Livelihoods toward Relief and Hope. The package, worth ¥73.6 trillion (13.1 percent of 2019 GDP), covers measures to: (i) contain COVID-19, (ii) promote structural change and positive economic cycles for Post-Corona era, and (iii) secure safety and relief with respect to disaster management, together with allocation of the COVID-19 Reserve Fund. The specific measures include incentives for firms to invest in digitalization and green technologies, as well as an extension of the ongoing COVID-19 responses such as concessional loans to affected firms.

Japan

- **Monetary Response**
- On March 16, the Bank of Japan (BoJ) called a monetary policy meeting and announced a comprehensive set of measures to maintain the smooth functioning of financial markets (notably of U.S. dollar funding markets), and incentivize the provision of credit. These include targeted liquidity provision through an increase in the size and frequency of Japanese government bond (JGB) purchases, special funds-supplying operation to provide loans to financial institution to facilitate financing of corporates, a temporary increase in the annual pace of BoJ's purchases of Exchange Traded Funds (ETFs) and Japan-Real Estate Investment Trusts (J-REITs), and a temporary additional increase of targeted purchases of commercial paper and corporate bonds.
- The BoJ has provided lending support through the special funds-supplying operation, and made purchases of Japanese government securities, commercial paper, corporate bonds, and exchange-traded funds.
- At its April 27 monetary policy meeting, the BoJ announced additional measures to maintain stability in financial markets and support credit provision.

Japan

- The BoJ in coordination with the Bank of Canada, the Bank of England, the European Central Bank, the Federal Reserve and the Swiss National Bank enhanced the provision of U.S. dollar liquidity on March 15, by lowering the pricing on the standing U.S. dollar liquidity swap arrangements by 25 basis points. Japan also has several important bilateral and regional swap arrangements with Asian countries.
- The government expanded the volume of concessional loan facilities (interest free without collateral) primarily for micro, small and medium-sized businesses affected by COVID-19 through the Japan Finance Corporation and other institutions. The government will also enhance access to loans with the same conditions from local financial institutions, such as local banks.
- To support borrowers during this period of stress, the Financial Services Agency (FSA) has reassured banks that they can assign zero risk weights to loans guaranteed under public guarantee schemes, draw down their regulatory capital and systemically important bank buffers to support credit supply, and draw down their stock of high-quality liquid assets below the minimum liquidity coverage ratio requirement. The FSA has also asked banks to defer principal payments on mortgage loans as needed, and refrain from charging fees for modifying mortgage loan conditions.

Russia

Background

- The total infected cases and total Death amounted 4,000,000 and 81,000 respectively in Feb. 15th.
- The first cases were reported on January 31, 2020. The authorities started preemptive containment at end-December 2019. They progressively closed the border with China and Europe; mandated self-quarantine for people arriving from other countries and people at risk; closed schools, theaters, and sports facilities; and encouraged remote work.
- GDP contracted by 8.0 percent in Q2 of 2020. On March 30, the authorities announced an open-ended quarantine in Moscow requiring non-essential businesses to close and people to remain indoors. The central government asked regional authorities to implement containment policies commensurate with the extent of infection in their regions. The COVID-19 shock was compounded by a steep fall in oil prices and the associated instability in financial markets. The authorities have adopted an action plan to support households and businesses and stand ready to take further measures.

Russia

- Key Policy Responses as of February 4, 2021
- Fiscal
- Key measures include: (i) increased compensation for frontline medical staff as well as health and safety inspectors; (ii) individuals under quarantine to received sick leave benefits and leave pay to equal at least the minimum wage until the end of 2020; (iii) for those who lost a job after March 1, 2020, including for sole proprietors, the standard unemployment benefit to equal the minimum wage for five months; the minimum unemployment benefit to be tripled until end-August; and eligibility was extended by 3 months;
- (iv) all children up to 3 years of age to receive an additional lumpsum benefit for 3 months, starting in April; all children 3-15 years of age eligible for a one-time lumpsum benefit; all children under 16 years of age eligible for another one-time lumpsum benefit; all families with children to get an additional lumpsum benefit for each child for up to 6 months if a parent loses job (for up to 4 months for parents who lost their jobs before March 1); (v) interest rate subsidies for SMEs and systemically important enterprises; (vi) tax deferrals for most affected companies on most taxes; (vii) deferrals on social contributions for SMEs in affected sectors for 6 months (extended for three more months for selected affected sectors)
- (vi) tax deferrals for most affected companies on most taxes; (vii) deferrals on social contributions for SMEs in affected sectors for 6 months (extended for three more months for selected affected sectors);

Russia

- (viii) social contributions by SMEs on wages in excess of the minimum wage permanently reduced; social contributions and CIT permanently reduced for IT firms; (ix) a tax holiday on all taxes (excluding VAT) and social contributions for Q2 for SMEs, sole proprietors, and NGOs providing social services; (x) registered self-employed will be refunded their taxes for 2019 and get a partial refund on their 2020 taxes; eligibility age to register as self-employed lowered from 18 to 16;
- (xi) sole proprietors will get a partial refund on their social contributions; (xii) deferrals on rent payments to all levels of government until the end of the year plus zero rent to the federal government for three months for SMEs in affected sectors; (xiii) budget grants for SMEs in affected industries to cover salaries at the rate of one minimum salary per employee for two months plus subsidized and forgivable loans for all enterprises in affected industries to pay minimum wages for 6 months;
- (xiv) zero import duties for pharmaceuticals and medical supplies and equipment; (xv) guaranteed loans to SMEs and affected industries; (xvi) subsidies to airlines, airports, automakers, and others; (xvii) state-owned bank, airlines and development institution re-capitalization and (xviii) expanded eligibility for subsidized mortgage lending. The total cost of the 2020 fiscal package is estimated at about 3½ percent of GDP— 4½ percent if debt guarantees and capital injections are also included.

Russia

Monetary Response:

- On July 24, 2020 the CBR cut the policy rate by 25 bps to 4.25 percent, rate cut in 2020 amounted to 200 b.p. The Central Bank of Russia (CBR) started selling FX reserves from the National Welfare Fund on March 10, reflecting the fall in oil prices below the reference price under the fiscal rule and later for the purchase of Sberbank by the government. Also, CBR increased the limit on its FX swap operations and temporarily introduced a long-term refinancing instrument. FX purchases by the fiscal rule resumed in mid-January 2021, as oil and gas revenue of the federal budget exceeded the baseline level in December 2020.
- The CBR has introduced temporary regulatory easing for banks intended to help corporate borrowers, and more favorable treatment for FX loans issued to certain sectors. Forbearance on provisioning for restructured corporate and SME loans was granted to all sectors. The deadline for full provisioning of restructured corporate loans was extended until April 1, 2021 (until July 1, 2021, for restructured SME loans). The CBR has introduced a RUB 500bn refinancing facility to support SME lending (including 150bn rubles to provide loans to SMEs to support and maintain employment). The interest rate on CBR refinancing loans aimed at supporting lending to SMEs was reduced to 2.25 percent. This anti-crisis mechanism expired on September 30, 2020.

Russia

- Further regulatory changes to support lending include new credit risk assessment methods and lower risk weights in mortgage lending that would free about Rub 300 bn (around 0.3 percent of GDP) of banking sector capital.
- Lower risk weights will be applied to subordinated bonds (including perpetual bonds) of largest non-financial corporations – the risk coefficient is reduced to 100 percent from 150 percent. To stimulate conversion of problem loans to systemic enterprises into capital the risk coefficient on such equity will be lowered to 100 percent from 150 percent. Higher risk coefficients for bank holdings of NFC capital are postponed for one year.
- Lower risk coefficients at 70 percent for loans to medical and pharmaceutical companies were extended till end-2020. To promote high-tech exports, the risk coefficient on loans to non-commodity exporters guaranteed by EXCAR was reduced to 0 from 20 percent.
- Additionally, the CBR reduced risk buffers for unsecured loans to be issued since September 1, 2020, and cancels risk buffers for consumer loans issued by August 31, 2019. The CBR lifted its cap on banks' fees for online retailers implemented during the lockdown.

Germany

Background

- The total infected cases and total Death amounted 2,340,000 and 65,500 respectively as of Feb. 15th.
- The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements, enforcement of mask-wearing, and a ban on public gatherings. Following a steady decline since early-April, infections are again on the rise, with daily new cases gradually trending up since late July and now exceeding the previous peak. Mortality rates, although rising, remain low to date compared with peer countries.
- On April 20, smaller shops re-opened subject to social distancing requirements. Select grades in schools gradually re-opened on May 4, as did cultural and leisure venues. On May 6, the government announced further easing of containment measures extending to all shops, restaurants and sports facilities, with the exact timeline to be determined at state level. Re-opening is subject to an “emergency brake”, whereby an occurrence of more than 50 new infections per 100.000 inhabitants over 7 days will require state governments to reverse the re-opening and re-institute containment. Border controls to neighboring countries are being gradually lifted starting May 16. Quarantine requirement for travelers from EU-countries has been lifted in several states starting May 18.

Germany

- Key Policy Responses as of February 3, 2021
- **Fiscal**
- To combat the COVID-19 crisis and subsequently support the recovery, the federal government adopted two supplementary budgets: €156 billion (4.9 percent of GDP) in March and €130 billion (4 percent of GDP) in June. The authorities plan to issue €218.5 billion in debt this year to finance the packages.
- Early measures include: (i) spending on healthcare equipment, hospital capacity and R&D (vaccine), (ii) expanded access to short-term work ("Kurzarbeit") subsidy to preserve jobs and workers' incomes, expanded childcare benefits for low-income parents and easier access to basic income support for the self-employed, (iii) €50 billion in grants to small business owners and self-employed persons severely affected by the COVID-19 outbreak in addition to interest-free tax deferrals until year-end and €2bn of venture capital funding for start-ups,
- (iv) temporarily expanded duration of unemployment insurance and parental leave benefits. The stimulus package in June comprises a temporary VAT reduction, income support for families, grants for hart-hit SME's, financial support for local governments, expanded credit guarantees for exporters and export-financing banks, and subsidies/investment in green energy and digitalization. In August, the government extended the maximum duration of short-term work benefits from 12 to 24 months.

Germany

- At the same time, through the newly created economic stabilization fund (WSF) and the public development bank KfW, the government is expanding the volume of available guarantees and access to public guarantees for firms of different sizes, credit insurers, and non-profit institutions, some eligible for up to 100 percent guarantees, increasing the total volume by at least €757 billion (24 percent of GDP). The WSF and KfW also include facilities for public equity injection into firms with strategic importance.
- In addition to the federal government's fiscal package, many local governments (Länder and municipalities) have announced own measures to support their economies, amounting to €141 billion in direct support and roughly €70bn in state-level loan guarantees.
- Parallel to the renewed lockdown to combat the second wave of COVID infections, the government introduced additional fiscal measures and enhanced existing ones to support affected businesses, including revenue compensation (of up to 75 percent), as well as, public loan guarantees andbasic income provision.

Germany

- **Monetary Response**
- **The authorities extended all ECB (European central Bank)-issued regulatory and operational relief to German banks under national supervision. In addition to measures at the euro area level: (i) release of the countercyclical capital buffer for banks from 0.25 percent to zero; (ii) additional €100 billion to refinance expanded short-term liquidity provision to companies through the public development bank KfW (**German state-owned development bank) **, in partnership with commercial banks; and**
- **(iii) following the structure of the former Financial Stabilization Fund, €100 billion is allocated within the WSF to directly acquire equity of larger affected companies and strengthen their capital position. A three-month payment moratorium on consumer loans established before March 15th was granted until June 30th 2020 for households financially affected by the COVID-19 crisis. Loans issued under KfW guarantees are exempt from the calculation of lenders' own funds requirement, their leverage ratio, as well as the large exposure limit.**

China

- Background
- The total infected cases and total Death amounted 89,000 and 4600 respectively as of Feb. 15th.
- On early January 2020, Chinese authorities determined that a pneumonia outbreak in Wuhan was caused by a novel coronavirus. The government imposed strict containment measures, including the extension of the national Lunar New Year holiday, the lockdown of Hubei province, large-scale mobility restrictions at the national level, social distancing, and a 14-day quarantine period for returning migrant workers. Reflecting these containment measures, the economy contracted by 6.8 percent (yoy) in Q1.
- Reopening of the economy. Starting in mid-February, the government has gradually removed mobility and activity restrictions, prioritizing essential sectors, specific industries, regions, and population groups based on ongoing risk assessments. Most businesses and schools have reopened nationwide, but social distancing rules remain in place at the micro level and foreign entry remains restricted to contain imported cases. Localized movement restrictions have been re-imposed in new hotspots, including in Jilin, Heilongjiang, Beijing, Shanghai, and Hebei. Testing and individualized health QR codes are used to gauge the path of the virus and contain outbreaks. The authorities encourage less travel during the upcoming lunar new year holiday, while imposing strict testing and quarantine requirements. With normalizing economic activity, real GDP rebounded by 3.2 percent (yoy) in Q2 and continued to recover by 4.9 and 6.5 percent in Q3 and Q4, respectively. Thus, real GDP grew by 2.3 percent in 2020.

China

- Key Policy Responses as of February 4, 2021
- Fiscal
- An estimated Renminbi (Yuan) RMB 4.8 trillion (or 4.7 percent of GDP) of discretionary fiscal measures have been announced.
- Key measures include: (i) increased spending on epidemic prevention and control, (ii) production of medical equipment, (iii) accelerated disbursement of unemployment insurance and extension to migrant workers, (iv) tax relief and waived social security contributions, and (v) additional public investment.
- Automatic stabilizers further increase on budget support. The overall public sector support is expected to be higher. For example, support outside the budget includes additional guarantees for SMEs of RMB 400 billion (0.4 percent of GDP) and fee and tariff cuts of over RMB 900 billion (0.9 percent of GDP) for usage of such items as roads, ports, and electricity.

China

- The PBC (The People's Bank of China) provided monetary policy support and acted to safeguard financial market stability. Key measures include: (i) liquidity injection into the banking system via open market operations (reverse repos and medium-term lending facilities), (ii) expansion of re-lending and re-discounting facilities by RMB 1.8 trillion to support manufacturers of medical supplies and daily necessities, micro-, small- and medium-sized firms and the agricultural sector (of which 0.8 trillion was phased out at end-June) and reduction of their interest rates by 50 bps (re-lending facilities) and 25 bps (re-discounting facility),
- (iii) reduction of the 7-day and 14-day reverse repo rates by 30 bps, as well as the 1-year medium-term lending facility (MLF) rate and targeted MLF rate by 30 and 20 bps, respectively, (iv) targeted RRR cuts by 50-100 bps for large- and medium-sized banks that meet inclusive financing criteria which benefit micro- and small-sized enterprises (MSEs), an additional 100 bps for eligible joint-stock banks, and 100 bps for small- and medium-sized banks to support SMEs, (v) reduction of the interest on excess reserves from 72 to 35 bps, (vi) expansion of policy banks' credit line to private firms and MSEs (RMB 350 billion), and (vii) introduction of new instruments to support lending to MSEs, including a zero-interest "funding-for-lending" scheme (RMB 400 billion) to finance 40 percent of local banks' new unsecured loans and incentivizing them to further extend payment holidays for eligible loans by subsidizing 1 percent of loan principles (RMB 40 billion).

China

The government has also taken multiple steps to limit tightening in financial conditions, including measured forbearance to provide financial relief to affected households, corporates, and regions facing repayment difficulties.

- Key measures include (i) encouraging lending to SMEs, including supporting uncollateralized SME loans from local banks, raising the target for large banks' lending growth to MSEs from 30 percent to 40 percent, and establishing an evaluation system for banks' lending to MSEs, (ii) delay of loan payments, with the deadline extended to the end of March 2021 or later, and eased loan size restrictions for online loans, and other credit support measures for eligible SMEs and households,
- (iii) tolerance for higher NPLs and reduced NPL provision coverage requirements, (iv) support bond issuance by financial institutions to finance SME lending, (v) additional financing support for corporates via increased bond issuance by corporates, including relaxing rules on insurers for bond investments,
- (vi) increased fiscal support for credit guarantees, (vii) flexibility in the implementation of the asset management reform, and (viii) easing of housing policies by local governments.

South Korea

- **Background:**
- The total infected cases and total Death amounted 83,000 and 1,527 respectively as of Feb. 15th.
- Korea first reported confirmed COVID-19 cases in January 2020, with the average daily number of new cases peaking at over 500 in March. The authorities rapidly implemented a comprehensive strategy to combat the virus based on widespread testing, aggressive contact tracing, and prompt isolation and treatment of cases. Along with voluntary social distancing, this approach slowed infections, allowed most businesses to remain open, and brought new cases near zero during the summer. A spike in infections occurred in Q4-2020, with the average daily number of new cases peaking at over 1,000 in December. Real GDP in 2020 declined by -1.0 percent but recovered in quarterly terms in both Q3 and Q4-2020.

South Korea

- **Fiscal Response**
- On March 17, the National Assembly passed the first 2020 supplementary budget. The supplementary budget includes a decline in revenue by KRW 0.8 trillion (KRW: Korean Republic Won), and additional KRW 10.9 trillion spending on disease prevention and treatment, loans and guarantees for business affected, support for households affected, and support for local economies affected.
- On April 30, the National Assembly passed the second 2020 supplementary budget. The supplementary budget includes an increase in spending by KRW 8 trillion to fund an emergency relief payment program of KRW 14.3 trillion that provides transfers to households.
- On July 3, the National Assembly passed the third supplementary budget. The KRW 35.1 trillion package includes a revenue reduction (11.4 trillion) and additional KRW 23.7 trillion spending on financial support for companies, expansion of employment and social safety, disease control, and spending on digital and green industries.
- On September 22, the National Assembly passed the 4th supplementary budget. An additional KRW 7.8 trillion will be spent on support for small businesses and SMEs (3.9 trillion), employment support (1.5 trillion), support for low income households (0.4 trillion), and daycare support and others (2 trillion).

South Korea

- On December 2, the National Assembly passed the 2021 budget. Budgeted revenue for 2021is 482.6 trillion, about KRW 23 trillion (1.2 percent of GDP) lower than the projected 2021 revenue published in the2020 budget plan. Budgeted expenditure is 558 trillion, about KRW 11 trillion (0.6 percent of GDP) higher than the amount projected in the 2020 budget plan.

- Monetary Response
- The Bank of Korea (BOK) has taken several measures to ensure continued accommodative monetary conditions and facilitate financial system liquidity. These include
- 1) lowering the Base Rate by a cumulative 75 basis points, from 1.25 percent to 0.5 percent;
- 2) making unlimited amounts available through open market operations (OMOs);
- 3) expanding the list of eligible OMO participants to include select non-bank financial institutions;
- 4) expanding eligible OMO collateral to include bank bonds, certain bonds from public enterprises and agencies, and government-guaranteed MBS issued by KHFC;
- 5) easing collateral requirements for net settlements in the BOK payments system;

South Korea

- 6) purchasing Korean Treasury Bonds (KRW 6.0 trillion, with 5.0 trillion in additional purchases announced by end-2020).
- On March 24, President Moon announced a financial stabilization plan of KRW 100 trillion (5.3 percent of GDP). The main elements are:
- 1) expanded lending of both state-owned and commercial banks to SMEs, small merchants, mid-sized firms, and large companies (the latter on a case-by-case basis) including emergency lending, partial and full guarantees, and collateralization of loan obligations;
- 2) a bond market stabilization fund to purchase corporate bonds, commercial paper, and financial bonds;
- 3) financing by public financial institutions for corporate bond issuance through collateralized bond obligations and direct bond purchases;
- 4) short-term money market financing through stock finance loans, BOK repo purchases, and refinancing support by public financial institutions; and
- 5) an equity market stabilization fund financed by financial holding companies, leading financial companies, and other relevant institutions.

South Korea

- On April 22 additional measures were announced totaling KRW 25 trillion (1.3 percent of GDP), mainly through creation of a special purpose vehicle to purchase corporate bonds and commercial paper (KRW 10 trillion) and additional funds for SME lending (KRW 10 trillion). Financing support to exporters and specific industries has also been announced.
- On April 8, a package of measures totaling KRW 36 trillion (1.9 percent of GDP) was announced to ease financing constraints for exporters, including increasing the amount and maturity of trade credit and expanding trade insurance.
- On April 22, President Moon announced a key industry stabilization fund would be established for KRW 40 trillion (2.1 percent of GDP) and operated by Korea Development Bank to support seven key industries: airlines, shipping, shipbuilding, autos, general machinery, electric power, and communications.
- Funds will be raised by issuance of government-guaranteed bonds and contributions of private funds. Support will be provided through loans, payment guarantees, and investments. As conditions for accessing support, businesses will be required to maintain employment, limit executive compensation, dividends, and other payouts, and share benefits from business normalization in the future.

Turkey

- Background
- The total infected cases and total Death amounted 2,594,128 and 27,562 respectively as of Feb. 15th.
- The first case of COVID-19 was reported on March 11, 2020. The government adopted multiple containment measures to address the pandemic including social distancing, curfews, travel bans along with quarantines for returning nationals, and the closures of schools/universities, stores, and entertainment venues. GDP contracted by 9.9% y-o-y in Q2, but then rebounded in Q3 by 6.7% y-o-y.
- On May 4, the government announced a phased approach to lifting lockdown measures. This included the reopening of retail stores, the removal of travel restrictions between major cities, the reopening of restaurants, cafes, sporting facilities and government institutions, and the resumption of domestic flights. On June 10, further reopening measures were announced, including the phased resumption of international flights and the reopening of most land borders. Schools restarted in end-August, mostly on a virtual.
- Following the onset of the second wave of infections, containment measures were reintroduced from September onwards (e.g.the mandatory wearing of masks in public areas), before being tightened further in November, including: age-based stay-at-home orders, weekend curfews, restaurant and cafe closures (except for pick-up), closures of some entertainment venues e.g. cinemas, along with restricted opening hours for retail establishments; and again in December, including: extension of curfews, closing pre-schools and restricting gatherings. In December, the government temporarily suspended flights from the UK, Denmark, the Netherlands and South Africa due to new fast-spreading coronavirus strain.

Turkey

- Key Policy Responses as of January 7, 2021
- Fiscal
- As of early-October, the authorities estimate that the entire discretionary fiscal support package will amount to TL646 billion (12.9 percent of GDP) in 2020. Of this, around TL173 billion (3.5 percent of GDP) is in the form of 'on-budget' measures. Key fiscal measures include –
- i) loan guarantees to firms and households (6.4 percent of GDP);
- ii) loan service deferrals by state-owned banks (2.6 percent of GDP);
- iii) tax deferrals for businesses (1.4 percent of GDP;
- iv) equity injections into public banks (0.5 percent of GDP); and,
- v) a short-term work scheme (0.4 percent of GDP), which was reopened in December and extended into February 2021. In addition, VAT has been reduced on certain goods (e.g. food and accommodation services) until May 2021.
- Finally, alongside the short-term work scheme, a nationwide ban on employee layoffs is in force until March 2021.

Turkey

- **Monetary and macro-financial**

- In response to the coronavirus shock, the policy rate was cut by 300bps (Basis Points=0.0001); these cuts were subsequently reversed, and the policy rate now stands at 17 percent. Furthermore, on March 31, the CBRT introduced a program of outright purchases of sovereign bonds, and has substantially increased its liquidity facilities to banks.
- The bank regulator announced a number of forbearance measures, primarily to limit the accounting impact of the Turkish Lira depreciation and fall in securities' prices. The regulator implemented a new regulatory ratio to incentivize banks to support the real economy, which was removed at end-2020. In December, the bank regulator tightened the maximum tenure of retail auto loans and credit card instalment plans for purchases of certain types of goods.
- Other macro-financial measures include – i) debt enforcement and bankruptcy proceedings (except in alimony cases) were temporarily suspended; ii) restrictions on dividend payments by banks and firms in 2020; iii) a new Turkish Lira lending facility for SMEs in the export sector was established to support trade finance.

Iran

- Background
- The total infected cases and total Death amounted 1,518,000 and 58,000 respectively as of Feb. 15th.
- Iran reported its first confirmed COVID-19 cases on February 19, 2020 in the city of Qom. After the outbreak, the government introduced a range of measures to limit the spread of the virus, including stopping flights from China, closing schools, malls, markets and key religious sites, and banning cultural and religious gatherings. On March 25, President Rouhani announced a partial lockdown, closing businesses and government offices for two weeks and banning travel between different cities. Accordingly, the Purchasing Managers' Index in March and April collapsed.
- Reopening of the economy. Concerned about the economic damage from the outbreak, the government ordered a step-by-step reopening of businesses that it considered to be at low or average risk in terms of spreading the virus starting on April 8. On April 27, Iran reopened all international borders to revive regional trade, while mosques and schools reopened in mid-May. On May 26 all businesses and major religious sites were opened. While the Purchasing Managers' Index in May and June suggested that industries had started to recover, it registered a 6 percent contraction in July.

Iran

Second and third wave: A "second wave" of virus cases hit Iran during the summer. Following this, the government instituted mandatory mask-wearing and new restrictions in Tehran. Based on this order, all schools and universities, restaurants, cafes, cultural facilities and beauty salons were closed and a third of government employees in Tehran worked remotely.

- Iran entered a "third wave" of COVID-19 cases in the fall, with the number of new infections peaking at 14,000 a day in November. Border crossings between Iran and Iraq have been sealed to prevent Iranian pilgrims from traveling to the neighboring country for the annual Arbaeen pilgrimage which took place on October 7th. Tehran and six other provinces have closed down recreational centers, universities, schools and places at high risk of contagion for one week to stem the spread of the pandemic. Facemasks became compulsory in public (indoors and outdoors) in Tehran starting from October 10 with fines for those who breach the law.
- A slew of new restrictions, including partial lockdowns and curfews, came into effect on November 28 in the most affected regions. A mandatory mask rule is implemented across the country. At end December 2020, the Bashmaq border crossing between Iran and Iraq was closed until further notice due to concerns over the new COVID-19 variant. In January 2021 the coronavirus infection rate has slowed but night-time curfew and distance learning has been extended to keep the contagious outbreak at bay. Iran Air has resumed flights to Qatar, Dubai, and Turkey.

Iran

- **Key Policy Responses as of February 4, 2021**
- At the end of March President Rouhani announced over 10 percent of GDP in COVID-19 relief and recovery measures. Iran has also received a $50mn loan from the World Bank in July, which was used for financing imports of medicine and medical equipment through the WHO. In response to a new surge in cases, the government unveiled another round of relief measures for households in November, totaling 1 percent of GDP.
- **Fiscal**
- Key measures include (i) extra funding for the health sector (2 percent of GDP); (ii) cash transfers to vulnerable households (0.5 percent of GDP); (iii) support to the unemployment insurance fund (0.3 percent of GDP); and (iv) subsidized loans for affected businesses and vulnerable households (4.7 percent of GDP). In addition, the government announced a moratorium on tax payments for a period of three months through June (6 percent of GDP). Sukuk bonds, the National Development Fund, and privatization proceeds will provide part of the financing.

Iran

- On April 15, the government embarked on its biggest-ever initial public offering, selling its residual shares in 18 companies (including 12 percent share of Social Welfare Fund (SHASTA), the largest public company) to generate income as it struggles with the economic consequences of COVID-19 and U.S. sanctions. The estimated privatization proceeds are at around 165 trillion rials (0.6 percent of GDP) from banks and insurance companies and 70 trillion rials (0.2 percent of GDP) from SHASTA.
- On May 3, the government's spokesman said that shares of four state-owned oil refineries will begin to be offered to the public soon.
- As of end of August, 13 percent of business applicants affected by the pandemic has received part of the aid package and 56.5 trillion rials ($245 million) have been paid from the National Development Fund of Iran.

Iran

- **Monetary Response**
- The Central Bank of Iran has (i) announced the allocation of funds to import medicine; (ii) agreed with commercial banks that they postpone by three months the repayment of loans due in February 2020; (iii) offered temporary penalty waivers for customers with non-performing loans; and (iv) expanded contactless payments and increased the limits for bank transactions in order to reduce the circulation of banknotes and the exchange of debit cards.
- The Central Bank of Iran announced it injected USD 1.5 billion in the foreign exchange market in March to stabilize the rial. In July it injected another USD 1 billion. In September it announced that it will put aside one percent of the country's sovereign wealth fund to stabilize the stock market.

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