Fiscal Policy Options and Responses During a Global Crisis : Lessons for the Developing Countries from the COVID-19 Pandemic

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Abstract

Purpose : This paper investigated the use of fiscal instruments to stimulate economic growth during periods of unprecedented challenges posed by the COVID-19 pandemic. It assessed how developed and developing countries utilized fiscal policy measures to mitigate the pandemic's economic impacts.

Design/Methodology/Approach : Using a comparative analytical approach, this paper compared the budgetary policies of industrialized and developing countries in reaction to the COVID-19 pandemic. It investigated the efficacy of fiscal mechanisms such as stimulus packages, tax relief measures, and social safety nets in alleviating pandemic-induced economic problems. The study collected and analyzed data to determine the speed and amplitude of fiscal policy responses.

Findings : The study revealed that developed countries responded swiftly and effectively to the COVID-19 pandemic with robust fiscal policies. In contrast, due to fiscal constraints and vulnerabilities, emerging market economies (EMEs) faced limitations in their responses. Developed countries' policies prevented job losses and poverty escalation; whereas, EMEs struggled to protect vulnerable populations.

Practical Implications : This paper offered crucial practical insights for policymakers in developing countries, providing recommendations for better preparedness for future crises. Policymakers in EMEs could learn from the successful fiscal policy strategies of developed nations and emphasized the importance of flexibility, rapid response, and targeted support for vulnerable groups. Strengthening fiscal resilience and establishing a robust fiscal policy framework are vital for managing unforeseen crises effectively.

Originality/Value : This research contributed to the literature by presenting a comparative analysis of fiscal policy responses to the COVID-19 pandemic and highlighted disparities between developed and developing nations. It underscored the significance of adaptive fiscal measures and served as a valuable resource for policymakers aimed to build economic resilience when confronted with unprecedented challenges, such as pandemics.

Keywords : **tax administration, tax incentives, irregularities in fund utilization, healthcare infrastructure, social protection**

JEL Classification Codes : E62, G18, I18, J38

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The COVID-19 pandemic in 2020 led to a shift in global policy toward achieving 17 sustainable development goals (SDGs) by 2030, prioritizing climate change and sustainable development. This led to unprecedented economic distress and a paradigm shift in governments' policies, affecting developed and

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developing countries. Significant economic contraction and poverty, fiscal and monetary challenges, external trade and supply chain shocks, digital transformation and innovation, resilience, and sustainable development are the major challenges developing countries face due to COVID-19. It is true that developing economies experienced a substantial contraction in economic activities due to lockdown measures, reduced consumer spending, and disrupted global trade. The manufacturing, construction, and tourism sectors experienced significant job losses and increased poverty. Due to a lack of social security nets and income uncertainty, the informal sector, which employs a sizable section of the population, bore the brunt of the impact. The fiscal and monetary issues that governments faced were mainly tied to balancing public health and economic recovery. Fiscal difficulties were caused by healthcare and social safety net expenditure, necessitating central banks to implement monetary measures such as interest rate decreases and liquidity injections. However, their usefulness was hampered by limited fiscal headroom and heavy debt burdens.

Furthermore, falling international commerce and supply chains seriously affect developing economies. Travel restrictions, lockdowns, and decreased demand impacted textiles, manufacturing, and agriculture industries. This downturn also had an impact on remittances, which are an important source of revenue for many countries.

Several literature have come up on analyzing the effects of COVID-19 on different macro sectors of the economy, the national and global economies. For example, Thach et al. (2022) analyzed how certain specific macroeconomic factors affected economic growth in emerging and growth-leading economies (EAGLE) during COVID-19. Using a Bayesian simulation method, the study found that trade openness and internet usage had an ambiguous impact on economic growth. Countries loosened monetary and fiscal policies simultaneously, but policy rate reduction was less efficient in countries with low interest rates. Thus, the study argued that reasonable pandemic control measures helped accelerate economic recovery. While analyzing the early impact of COVID-19 on the banking sector of India, Mohania and Mainrai (2020) indicated how COVID-19 posed challenges to the sector in the forms of reduced demand, mobility restrictions, logistics issues, and sustainability. Not only that, but the banking sector also faced operational, asset quality, and earnings issues. When the global financial market is considered, the COVID-19 pandemic adversely affected most national and economic/trading blocks. Significantly, Dey and Sharma (2022) undertook an econometric study to examine how government initiatives affected the Indian stock market during the COVID-19 phase. They found that daily total confirmed cases positively impacted returns, while total confirmed death cases negatively affected the returns.

While the pandemic posed immense challenges, it also presented opportunities for developing economies to embrace digital transformation and innovation. Digital technologies in education, healthcare, e-commerce, remote work, and payments boost productivity, market access, and inclusive growth, enabling economies to leapfrog certain development stages. The pandemic also highlighted the importance of building resilient and sustainable economies that can withstand future shocks. For example, Indu et al. (2022) found that COVID-19 reduced the digital divide and bridged the rural-urban split by increasing internet access in rural India. Thus, from the experiences of the COVID-19 pandemic, developing economies can prioritize sustainable development by investing in healthcare, education, and social protection systems, strengthening domestic production, diversifying export markets, and promoting self-reliance.

Against such a backdrop, this paper attempts to analyze the various fiscal instruments that trigger economic growth during economic distress situations like the ones caused by the recent COVID-19 pandemic. There have been attempts to discuss the fiscal choices employed by developing countries to handle the many economic issues given by it. This issue is policy-relevant because it can assist policymakers in developing a well-planned strategy to handle similar challenges in the future. The research methodology for this study primarily relies on secondary data sources to analyze the fiscal instruments used during the COVID-19 pandemic. Secondary data includes government reports, international organizations' publications, academic papers, and economic databases. This mixed-method approach combines qualitative and quantitative analysis. Qualitative analysis involves thematically interpreting content from reports and academic papers, while quantitative analysis focuses on the statistical examination of fiscal and economic indicators. The research spans from the onset of the COVID-19 pandemic in 2020 to the latest available data, capturing ongoing developments and policy adjustments. The objective is to comprehensively understand developing countries' fiscal responses to pandemic-induced economic distress and offer valuable policy recommendations based on existing data.

This paper is based on a review of existing literature in the field and has been structured into five sections. The next section analyzes the significant fiscal policy options adopted by various countries, focusing on developing countries from Asia. The third section discussed impediments in revenue mobilization, utilization, and other related issues. The fourth section discusses the factors determining the choice of fiscal instruments in developing countries.

Fiscal Policy Options Adopted During COVID-19

Governments implemented various fiscal policies tailored to their specific circumstances to mitigate the economic impact and promote recovery. These include: (a) direct cash transfers and income support, (b) wage subsidies and employment protection, (c) augmentation of unemployment benefits, (d) support for small- and medium-sized enterprises (SMEs), (e) healthcare and social protection infrastructure and public investment, (f) debt relief and international cooperation, (g) different tax incentives, (h) sector-specific fiscal support and finally, (i) support to sub-national governments. The direct cash transfers and income support programs aimed to provide immediate relief to vulnerable populations, mainly targeting low-income households and informal sector workers. Governments aimed to maintain consumption levels and reduce financial hardship through direct money transfers. Similarly, wage subsidies and employment protection measures were introduced to prevent massive layoffs. These policies provided financial assistance to employers. Here, the government paid a part of employees' salaries so that downsizing the labor force could be avoided.

In some cases, labor training schemes were introduced. Thus, governments aimed to prevent a deepening unemployment crisis by reducing labor costs, preserving jobs, and upskilling the workforce. Some countries also augmented existing unemployment benefit schemes. Such measures included the expansion of eligibility criteria, which enabled a larger section of the population to avail of unemployment benefits or derive a higher level of benefit.

Adequate SME support is critical for overall economic development. These include grants, tax breaks, loan guarantees, and credit facility access. Governments attempted to help SMEs survive the crisis, sustain employment, and recover faster by providing financial aid and lowering bureaucratic barriers. Investments in healthcare infrastructure and strengthening social protection systems were key priorities for developing countries. Governments allocated significant funds to enhance healthcare capacity, procure medical equipment, and support R&D for vaccines and treatments. Social protection programs, such as health insurance and unemployment benefits, aim that individuals have access to essential services.

Fiscal policies were undertaken to upscale healthcare infrastructure and public investment. These measures stimulated economic activity and laid the foundation for long-term growth. Investments in transportation, renewable energy, and digital connectivity created employment opportunities, enhanced productivity, and helped in sustainable recovery. Another challenge for the developing countries was huge debt burdens. Many countries sought debt relief through international initiatives and bilateral agreements. These helped them redirect funds toward healthcare, social programs, and economic recovery. Governments also implemented different tax breaks, such as (a) temporary reductions in personal income tax, indirect tax, and advance tax payments, (b) Deferment of tax payable in some countries pushed back the deadline for tax payment, and (c) Tax breaks were provided to firms in exchange for meeting certain conditions, such as maintaining staff and making new investments.

Governments also offered certain direct support to select sectors, primarily aimed at increasing employment. Furthermore, considering that in most developing countries, the sub-national governments often have limited

Table 1. ***Policy Instruments of Select Countries from Asia Used During the Recent COVID-19 Pandemic***

Country	Fiscal		Monetary					FX	Macroprudential		CFMs		Containment	Total by Groups		Total by Tools	
	ATL	BTL	ΔRate	APP	Liquidity	Swaps		Purchases	Overall	CCYB	Inflows	Outflows		Stimulus	Any form	Stimulus	Any form
China	U	U	U	NU	U	NU		U	U	NU	U	NU	U	6	6	8	8
India	U	U	U	U	U	OU		U	NU	U	NU	U	U	5	6	8	9
Indonesia	U	U	U	NU	U	NU		U	U	NU	NU	NU	U	5	5	7	7
Japan	U	U	NU	U	U	U		NU	NU	NU	NU	NU	U	3	3	6	6
Kazakhstan	U	U	OU	NU	U	NU		U	U	U	NU	NU	U	5	5	7	8
Korea	U	U	U	NU	U	U		OU	U	NU	U	NU	U	5	6	8	9
Malaysia	U	NU	U	NU	U	NU		OU	NU	NU	NU	NU	U	3	4	4	5
Pakistan	U	DNA	U	NU	U	U		U	U	U	NU	NU	U	5	5	8	8
Philippines	U	U	U	U	U	NU		OU	NU	NU	NU	NU	U	3	4	6	7
Singapore	U	U	U	NU	U	U		OU	U	NU	NU	NU	U	4	5	7	8

Source : Adapted from Bergant (2022).

Notes: In Table 1 : Cells marked with 'U' indicate the country used the policy tool to provide stimulus/ease financial conditions ; cells marked with 'NU' indicate the tool was not used ; cells marked with 'OU' indicate the tool was used in a direction that does not provide stimulus/ease financial conditions ; and cells marked with 'DNA' indicates no data was available (in which case the country might have used the policy) or that the tool is not available in the country (e.g., interest rate changes and QE in fully dollarized countries).

ATL (Above the Line) : On-budget increases in spending and foregone revenue ; BTL (Below the Line) : Loans, equity infusions, and credit guarantees ; ΔRate : change in policy interest rates ; APP : Asset purchase during pandemic ; FX : Foreign Exchange ; Macroprudential : CCYB : counter-cyclical capital buffer ; CFM: capital flow measures.

sources for revenue generation compared to the central/federal governments, the latter had to offer continuous financial help to sub-national governments by transferring additional resources.

Table 1 shows the various policy instruments (fiscal, monetary, foreign exchange, macroprudential, and capital flow measures) implemented during the pandemic by China, India, Indonesia, Japan, Kazakhstan, Korea, Malaysia, Pakistan, Philippines, and Singapore. It is found that all countries typically adopted above-the-line (ATL) fiscal options, in which (a) budgetary spending was increased and (b) government revenue was foregone as various tax incentives, etc. The second common policy was to increase liquidity support to banks (Bergant, 2022). The third common policy was containment measures, like lockdowns and zones. While adopting other policy measures varied across countries, one policy measure, capital flow measures (CFM), was sparingly used. The inflow of capital has been recorded in China and Korea, signaling an inflow of foreign capital in the form of foreign direct investment or others. While many countries alleged China is the epicenter of the COVID-19 crisis, the inflow of funds to the country has special significance. Batini (2020) observed that attempts to introduce CFM are less frequent. Only four of the twenty emerging market economies (EMEs), namely Argentina, China, India, and Peru implemented capital account reforms by lowering inflow CFM standards, whereas Argentina tightened outflow CFM norms. Several additional emerging market and developing economy (EMDE) countries, including Aruba, the Bahamas, Sri Lanka, Turkey, and Turkmenistan, imposed capital outflow restrictions. From Table 1, it is evident that only India had recorded CFM outflow during the pandemic. However, India could initially attract foreign capital into the economy, as the central banks in the United States and other advanced nations signaled interest rate increases to contain the inflationary trend. Foreign portfolio investors (FPIs) moved money to safe heaven/assets like US Treasury bonds and gold. They anticipated a rate hike in the United States in late 2021 to reduce their exposure to risky assets in India (and other emerging economies).

Tables 2 and 3 provide comparative statements of fiscal measures implemented by countries from January 2020 to May 2021 in terms of the absolute volume of expenditures (in US dollars, in Table 2) and as a percentage of GDP (in Table 3). G20 advanced economies (AEs) (Japan and Korea), G20 emerging markets (Argentina, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, and Turkey), other selected emerging

Table 2. ***Country-Wise Fiscal Expenditures in Response to the COVID-19 Pandemic since January 2020 upto May 2021***

(Figures are in USD Billion)

Categories /Countries	ATL Measures				Liquidity Support			
	Additional Spending or Foregone Revenues			Accelerated Spending / Deferred Revenue		Below the Line Measures[#]	Contingent Liabilities	
	Subtotal	Health Sector	Non-Health Sector		Subtotal		Guarantees	Quasi-fiscal Operations
G20 : Advanced Economies								
Japan	831	95	736	27	1,429		147	1,282
Korea	73	8	65	40	166		60	106
G20 : Emerging Markets								
Argentina	17	3	15	0	8		8	
Brazil	132	21	112	44	88	15		73
China	711	21	689	232	193		58	135

India	93	10	84	18	139	9	114	16
Indonesia	48	19	29		9	2	7	
Mexico	7	5	2	4	13	1	0	12
Russia	67	11	56	6	22	8	7	7
Saudi Arabia	15	13	3	15	6	6		
Turkey	19	3	17	10	68	3	46	19
Other Selected Emerging Markets								
Kazakhstan	7.6	1.2	6.4	0.5	4.9	2.9		1.9
Malaysia	17.7	0.9	16.8	0.0	11.9	0.0	11.9	
Pakistan	5.2	1.1	4.1	3.0				
Sri Lanka	0.7	0.1	0.6					
Selected Low-Income Developing Countries								
Afghanistan	0.4	0.1	0.3					
Bangladesh	4.6	0.4	4.2		0.2		0.2	
Cambodia	1.1	0.1	1.0		0.6			0.6
Myanmar	0.6	0.1	0.5		0.2	0.2		
Global	10,417	1,458	8,882	772	6,132	388	4,054	1,690

Table 3. ***Country-Wise Fiscal Expenditures in Response to the COVID-19 Pandemic since January 2020 upto May 2021***

(Figures are as a percentage of GDP)

Categories /Countries	**ATL Measures**				**Liquidity Support**			
	Additional Spending or Foregone Revenues			**Accelerated Spending / Deferred Revenue**		**Below the Line Measures#**	**Contingent Liabilities**	
	Subtotal	**Health Sector**	**Non-Health Sector**		**Subtotal**		**Guarantees**	**Quasi-fiscal Operations**
G20 : Advanced Economies								
Japan	16.5	1.9	14.6	0.5	28.3		2.9	25.4
Korea	4.5	0.5	4.0	2.4	10.1		3.7	6.5
G20 : Emerging Markets								
Argentina	4.5	0.7	3.8	0.0	2.0		2.0	
Brazil	9.2	1.5	7.8	3.1	6.2	1.1		5.1
China	4.8	0.1	4.6	1.6	1.3		0.4	0.9
India	3.5	0.4	3.1	0.7	5.2	0.3	4.3	0.6
Indonesia	4.5	1.8	2.7		0.9	0.2	0.6	
Mexico	0.7	0.4	0.2	0.4	1.2	0.1	0.0	1.1
Russia	4.5	0.7	3.8	0.4	1.5	0.5	0.5	0.5
Saudi Arabia	2.2	1.8	0.4	2.1	0.8	0.8		
Turkey	2.7	0.4	2.3	1.4	9.5	0.4	6.4	2.7

Other Selected Emerging Markets								
Kazakhstan	4.4	0.7	3.7	0.3	2.9	1.7		1.1
Malaysia	5.2	0.3	5.0	0.0	3.5	0.0	3.5	
Pakistan	2.0	0.4	1.6	1.2				
Sri Lanka	0.8	0.1	0.7					
Selected Low-Income Developing Countries								
Afghanistan	2.1	0.7	1.4					
Bangladesh	1.4	0.1	1.3		0.1		0.1	
Cambodia	4.1	0.4	3.7		2.3			2.3
Myanmar	0.7	0.2	0.6		0.3	0.3		
Global	9.7	1.4	8.2	0.9	6.2	0.4	4.1	1.6

Source : (Tables 2 and 3) : National authorities and IMF staff estimates.

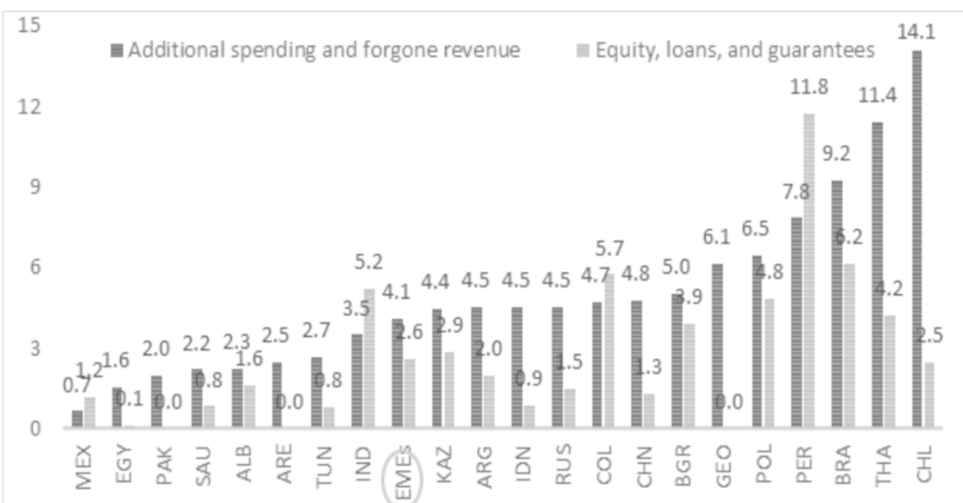
Includes Equity injections, loans, asset purchases, or debt assumptions.

Notes. In Tables 2 and 3:

- Estimates as of June 5, 2021. Unless otherwise stated, numbers in US dollars and percent of GDP are based on July 2021 World Economic Outlook. The fiscal measures include resources allocated or planned in response to the COVID-19 pandemic since January 2020, which will cover implementation in 2020, 2021, and beyond.
- The global estimate of fiscal support includes ATL measures of additional spending and foregone revenue, BTL measures, and contingent liabilities from guarantees and quasi-fiscal operations. The numbers are based on official estimates covering cumulative spending in 2020 and the first five months of 2021.

Figure 1. *Additional Spending and Forgone Revenue in Select Emerging Market Economies*

(In percentage of GDPs)



markets (Kazakhstan, Malaysia, Pakistan, and Sri Lanka), and selected low-income developing countries (Afghanistan, Bangladesh, Cambodia, and Myanmar) are included in Tables 2 and 3. Table 2 shows the fiscal packages in development; the EMEs are smaller than the AEs. This happened because the AEs were affected by the pandemic earlier than the others (Alberola et al., 2021).

Table 3 reveals that in ATL, Japan spent the most proportion of its GDP (16.5%), followed by Brazil (9.2%), with the worldwide average being 9.7%. India spent 3.5% of its GDP, compared to 4.8% in China, 4.5% in

Indonesia, 5.2% in Malaysia, 4.4% in Kazakhstan, and 4.1% in Cambodia. Other South Asian countries, such as Sri Lanka and Myanmar, spend less than 1% of their GDP.

Governments were also expected to provide the economy with other sorts of liquidity support in addition to ATL provisioning. Tables 2 (absolute values in US dollars) and 3 (as a percentage of GDP) show this. Figure 1 provides a visual representation of data (as a percentage of GDP) of additional spending and forgone revenue in select EMEs.

Impediments in Revenue Mobilization, Utilization, and Related Issues

Impediments in Revenue Mobilization

Gupta and Liu (2020) found several barriers in five low-income nations: Senegal, Nigeria, Kenya, Zambia, and Bangladesh, which faced revenue mobilization during the pandemic. They grouped those into six broad categories, viz., (a) tax concessions, (b) political fragmentation and policy uncertainty, (c) weak revenue administration, (d) poor public services and their impact on taxpayers, (e) reluctance to adjust excise taxes, and (f) opposition to property taxation. The study indicates that in countries like Senegal and Nigeria, beneficiaries of *tax concessions* were neither adequately documented nor explicitly proposed in budget documents. Most of the time, they could be offered to "cronies" of the political leaders. In Kenya as well, beneficiaries of tax exemptions were found to "disappear" from a region just after getting the tax exemptions but again "reappear" in other names in other regions for the same purpose, exposing an inefficient revenue administrative system. Bangladesh also reveals a highly inefficient system of tax collection. While the garment industry generates 12% of Bangladesh's GDP, it contributes little to the tax system. This industry is subject to a 12% corporate tax rate rather than the 35% rate that applies to other industries. Surprisingly, most businesses in the garment industry do not pay even this lower tax rate, pushing the Government to impose a minimum tax of 0.3% of its gross revenue. In Zambia, only a select group of businesses are subject to corporation taxes. Zambia provides significant tax breaks to businesses, such as duty-free import of machinery and equipment. There are also provisions to work out a one-of-a-kind tax arrangement with the government, in which business firms investing more than USD 10 million can negotiate tax rates. However, the government lacks data on revenue lost and tax exemptions; most advantages go to large international corporations. Poorly constructed double-taxation agreements with 22 nations allow local multinationals to move earnings to low-tax jurisdictions, worsening the situation.

Frequent tax policy changes due to political fragmentation and uncertainty undermine domestic revenue mobilization efforts in many developing countries. For example, Zambia changed its mining tax structure seven times from 2000 to 2019. While this was done by stating that the mining industry was not doing enough to advance the nation and was also made an election agenda, the government's opaque dealings with the mining industry (including international operators) and the latter's capacity to obtain favorable terms from the government only have increased tensions between the two parties. Contrarily, a considerable tax burden has eroded the legitimacy of tax laws in the country and increased mistrust between the government and major economic entities. Kenya also showed volatility in tax policy, revealing political differences between the parties. In 2019, a presumptive tax replaced the turnover tax in 2006. Due to noncompliance and lack of cooperation from county governments, it turned unsuccessful, forcing medium- and small-sized businesses to use both turnover and presumptive taxes. Tax collection issues have erupted in Bangladesh since parliament adopted the 2012 VAT law. Its implementation has been frequently delayed; these delays are due to political and electoral motives. In Nigeria, the overall revenue level has also been kept low by opposition to raising the VAT rate.

Weaknesses in revenue administrative systems also adversely affect revenue mobilization in many developing countries. According to Gupta and Liu (2020), the Kenyan Revenue Authority failed to undertake frequent audits to dissuade taxpayer noncompliance. Similarly, old-fashioned manual, paper-based processes inherited from the

British colonial administration endanger Bangladesh's tax administration. Furthermore, tax administration continues to be location-oriented rather than functional-oriented, resulting in inadequate coordination across various branches of government. Nigeria's efforts to collect customs are impeded by the widespread smuggling of commodities from neighboring nations. As there is no registration threshold in Nigeria, there are a lot of inactive taxpayers in the system, leading to low VAT yield. Political involvement in key appointments also limits the effectiveness of tax administration. In Nigeria, barely 2% and 3% of corporate and VAT applicants use e-filing.

Evidence (Gupta & Liu, 2020) suggests that the VAT in the aforementioned nations has a relatively poor C-efficiency, partly indicating inefficient revenue management. Kenya's C-efficiency ratio has dropped from 0.32 in 2010 to 0.29 in 2017. In Senegal and Nigeria, however, it has risen to 0.20 and 0.45, respectively, but remains below the 0.5 mark characteristic of developing economies. Ideally, in the case of a single rate, complete compliance, and no exemptions, C-efficiency would be 1. The average C-efficiency in industrialized economies has remained constant over the past 20 years at roughly 0.6%. Because governments cannot tax the sizable informal sector, it accounts for just a small part of total tax receipts. Senegal makes a key point: although it contributes more than 50% of the country's GDP, the informal sector only collects 3% of all taxes. As a result, the formal sector has borne a disproportionately large percentage of the expanding tax-to-GDP ratio's burden.

Poor public services also have an adverse impact on taxpayers. As government services are either ineffective or non-existent in all of the countries analyzed, the populace is unsure of the advantages of taxation. Taxpayers see large and influential economic players as not paying their fair share of taxes. The wealthy and powerful continue to misappropriate public money on a vast scale, giving the impression that the government cannot be trusted to collect taxes. Police and security forces frequently intimidate and harass taxpayers in Nigeria.

Reluctance to adjust excise taxes is another issue of fiscal policy administration. As pointed out by Gupta and Liu (2020), every time the government of Kenya has proposed raising taxes on alcohol and cigarettes, there has been opposition from special groups. Bangladesh's excise yield is unusually low, mainly because tobacco items with 400% or more extra duty only pay the VAT. Some nations may have room to increase petroleum taxes by imposing higher excise duties or the normal VAT.

Finally, opposition to property taxation is another fiscal impediment in countries like Senegal, Kenya, and Bangladesh, where powerful, politically motivated groups continue to fight against property taxes. The overall scenario is worrisome as the rich section consumes real estate products, and rapid growth of the real estate sector also calls for public spending on urbanization. Low property tax collection is also the result of exemptions for various classes of property owners (Kenya), out-of-date property values, and extremely low tax rates (Bangladesh). Weaknesses in the cadastre system and governments' incapacity to value properties in thin markets are some of the causes of insufficient revenue from property taxes. The issue turns only worse in Nigeria by the distribution of the legislative power to impose property taxes among the three tiers of government: federal, state, and municipal.

Irregularities in Utilization of COVID-19 Funds

Irregularities in the utilization of COVID-19 funds are another noticeable issue. The World Bank stated that though misuse of public funds is not new, the COVID-19 pandemic seems to have fanned the malpractice when proper resource management was more than desirable. Misuse, mismanagement, and misappropriation of funds, particularly regarding COVID-19 funds, widely appeared in the public domain, especially in developing countries. For example, widespread corruption and mismanagement of COVID-19 funds have been reported by (Redaction Africanews, 2023; Sovon & Laura, 2023; Tovar, 2021) in the healthcare sector in Peru. COVID-19 vaccine mishap was reported in Nepal by the alleged involvement of agents and a modification in the cost of vaccines to be purchased from the Serum Institute of India. People's countries paid a severe price for the government's inability to maintain order during a pandemic (Mahaseth & Mittal, 2022). Tankwa and Sieleunou

(2021) emphasized Cameroon's recurrent scandals of fund embezzlement. It has been suggested that, even though such scandals have occurred in the country for over three decades, the current COVID-19 pandemic money management scam, commonly known as "Covidgate," accused more than 160 high-profile government personnel of embezzling public funds for their own profit. Nayupe et al. (2022) also pointed out that public funds were mismanaged during the first wave of COVID-19 in Malawi due to a lack of disaster management procedures and rules. Evidence suggests that significant decision-making bodies in several district councils did not adhere to trustworthy procurement procedures, resulting in resource mismanagement.

Cuadrado (2022) stated that COVID-19 corruption has impeded global health systems, particularly in developing countries. The chronic systemic deficiencies of aid-recipient countries necessitate ongoing financial and technical assistance. Despite this, all nations struggled to meet the increasing demand for high-quality healthcare services and the limited availability of medical supplies, services, and personnel. Corruption-related occurrences spread throughout all essential components of health systems, including service delivery, health funding, governance, leadership, medical goods, vaccines, technology, health management information systems, and human resources. Corruptions include the sale of falsified COVID-19 test certificates (Mexico, Poland, Iran, India, and China); (Lebanon, Malaysia, the Philippines, Peru, Argentina, Spain, Poland, Canada, and Ecuador); black market of COVID-19 vaccination (Lara in Venezuela), price gouging and profiteering in the supply of oxygen as well as hospital beds in state-run hospitals (India); corruption in the purchase of COVID-19 materials and equipment (African countries like Malawi, South Africa, Kenya, Nigeria, Uganda, Malaysia, and the UK); over-pricing of COVID-19 vaccine (Bangladesh); mismanagement, embezzlement, and/or expenditure of COVID-19 funds without reporting (Afghanistan and Democratic Republic of Congo and Cameroon).

Most countries saw significant corruption in the provision of vaccines, with several countries attempting to purchase Covaxin vaccines through intermediaries at costs higher than the market rate and even prior to government clearance. Former health ministers and high-level government officials have been arrested in several other nations for their role in COVID-19-related wrongdoing. Falsified COVID-19 vaccines have been discovered in Mexico, Poland, Iran, India, and China.

Drivers of Corruption in Fund Utilization During COVID-19

Cuadrado (2022) identified a few driving factors behind the irregularities in providing and delivering COVID-19-related healthcare services. Those have been broadly categorized as economic, political/institutional, and social. The economic drives include two significant factors. First, increased financing and limited absorption capacity. Many avoided traditional procedures because governments were pressured to act from the outbreak's start. They implemented insufficient regulatory, budgetary, and accounting measures due to their limited ability to manage a significant amount of COVID-related funds. Second, high demand and restricted supply caused supply systems worldwide to fail to fulfill the expanding medical supply needs. For example, the COVID-19 vaccine supply chain encountered significant challenges due to a scarcity of vaccine manufacturing companies, an ineffective supply chain, a lack of vaccine monitoring organizations, maintaining proper vaccine temperature, vaccination costs, and a lack of funds for vaccine purchases. These led to overpricing medical supplies and services, bribery, vaccine line-jumping, favoritism, and nepotism.

Poor preparedness and planning, impunity trends, lack of openness, collapse of safeguarding systems, poor management of conflicts of interest, and weak and unreliable data information systems were among the political/institutional drivers. Societal drivers, on the other side, included elements such as limited municipal space during the pandemic, societal pressures, and desperation.

Determinants of the Fiscal Responses : Which Fiscal Instrument to Use?

Alberola et al. (2021) highlighted the factors influencing fiscal policy responses during the COVID-19 pandemic. These are essentially divided into four categories: (a) pandemic incidence and containment measures, (b) fiscal policy room, (c) monetary policy, and (d) structural variables. Except for a few Asian EMEs, the pandemic hit AEs earlier and more severely. Evidence implies that fiscal packages in countries with higher disease rates were substantially larger. The size of the fiscal packages in EMEs did not significantly correlate positively with the stringency index used by Alberola et al. (2021). These findings imply that the lower incidence of the pandemic was not the only factor contributing to the less aggressive fiscal response in EMEs. Another crucial element is the room for fiscal policy or flexibility of budgetary policy. Higher finance costs and difficult access to outside financing during difficult financial circumstances restrained the fiscal response of EMEs. Evidence also suggests that fiscal packages were much smaller in nations that entered the crisis with higher bond yields and lower sovereign debt ratings. In the fight against the epidemic, monetary policy can support fiscal policy.

EMEs could have more room to lower policy rates than AEs. These economies could reduce policy rates by about 114 basis points (excluding Argentina), as opposed to AEs, which saw a 40 basis point reduction. With unconventional monetary policies, particularly through sizable purchases of government bonds, it was still possible even when policy rates were close to zero. Quantitative easing (QE) can broaden the fiscal base by lowering interest rates across the yield curve when the central bank's credibility is high. To combat the pandemic, AEs actively used asset purchases. Long-term rates in the majority of nations consequently decreased from their pre-crisis levels. Even though they navigated uncharted seas, some EMEs were dabbling in QE. Their asset acquisition schemes aim to assist the market's operation rather than reduce the cost of government funding (Arslan et al., 2020).

Furthermore, structural considerations and policy space determine the size and composition of fiscal packages. More prosperous economies have more robust institutional and economic defenses to absorb unexpected shocks. A restrained discretionary budgetary response is required to adapt to deeper financial markets, broader social safety nets, and larger automatic stabilizers. Smaller budgetary measures are used in AEs with strong social safety nets, allowing governments to focus on non-budgetary measures to help enterprise survival and recovery.

Policy Implications for Developing Countries and Concluding Remarks

The study reveals that global fiscal policy reactions to the coronavirus emergency were swift and powerful, but EMEs' responses were limited. Factors contributing to this gap include limited fiscal space and tightening financing conditions due to the pandemic shock. The smaller pandemic incidence and delayed responses in some EMEs only partially account for this gap.

Fiscal initiatives gave consumers and businesses the necessary boost and reduced economic activities. Budgetary reactions, such as wage subsidies and furlough programs, helped mitigate the effects of the pandemic recession on the labor market and company insolvencies. In 2020, corporate insolvencies were lower than pre-pandemic norms, reducing scarring barriers to recovery. Positive spillovers from fiscal stimulus in major economies, particularly the United States, may have aided the economic recovery in smaller open economies.

Australia, China, Japan, and Korea were among the Asian economies that could quickly contain the pandemic due to their solid fiscal responses and low financing prices. With less labor market damage and corporate insolvencies, these nations were well-positioned to emerge from the crisis. Indonesia and India faced higher financing expenses, which rose further due to the pandemic. Despite these challenges, these countries came at the bottom of the fiscal policy response, even lower than others. The COVID-19 pandemic significantly impacted developing economies, exacerbating existing challenges and creating new ones. However, there is also an opportunity for transformation and growth. Governments, international organizations, and businesses must collaborate to provide targeted support, stimulate recovery, and build resilience. By leveraging digital technologies, fostering innovation, and embracing sustainable development practices, developing economies can emerge stronger and create a more inclusive and resilient future.

It was seen that developing countries implemented a range of fiscal policies to address the unprecedented challenges. These policies could provide immediate relief to affected individuals and businesses, support healthcare systems, stimulate economic activity, and build resilience for the future to some extent. Governments must balance short-term relief measures and long-term sustainable development goals. The long-term policy measures of the developing countries should include: first, adequate checks should be implemented to prevent corruption and misutilization of public funds. This may be done by fixing individual responsibilities and appropriate administrative reforms. Second, effective tax reforms are significant major challenges and post-pandemic agenda for most developing countries in Asia, Africa, and elsewhere. Third, the developing countries should derive a lesson from Sri Lanka's misfortune, which was plagued by decade-long misgovernance and misutilization of public funds and had to face the fate of an economic, political, and social crisis, ill-timed with the COVID-19 global pandemic (Attanayake, 2022). Finally, international cooperation and support are vital to ensure that developing economies have the necessary resources to navigate this crisis and emerge stronger and more resilient in a post-pandemic world.

Limitations of the Study and Scope for Further Research

The study offers insights into fiscal responses in developing economies during the COVID-19 pandemic. Still, it has notable limitations, such as data quality issues, a lack of qualitative analysis, and a focus on short-term effects. Future research avenues include improving data quality, exploring regional variations, establishing causal relationships, scrutinizing political and institutional factors, conducting comparative analyses, and assessing the alignment of fiscal policies with the SDGs. Exploring these areas can contribute to a deeper understanding of the challenges and opportunities developing nations face in times of crisis and the effectiveness of various policy measures in promoting recovery and resilience.

Authors' Contribution

Dr. Bhaskar Sarmah was instrumental in designing the research report. He designed the study's focus on employing fiscal measures to encourage economic growth in the unprecedented context of the COVID-19 pandemic. He was responsible for the research design, data collecting, and comparative analysis. His contributions included generating crucial research findings and formulating incisive inferences, demonstrating how developed-country fiscal policies prevented job losses and poverty escalation. Dr. Pooja Sikka's contributions were critical in establishing a solid foundation for the research. She did a thorough literature assessment, which assisted in contextualizing the study by reviewing existing research and studies on fiscal policy responses during pandemics. Dr. Sikka also contributed significantly to the study's policy implications section. Dr. Bhaskar Sarmah and Dr. Pooja Sikka's united work resulted in a comprehensive and informative study on fiscal policy responses to the pandemic, providing valuable insights applicable to industrialized and developing nations.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this manuscript.

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