Yale University

EliScholar - A Digital Platform for Scholarly Publishing at Yale

YPFS Documents (Series 1)

Browse by Media Type

9-1-2020

Public Finance Responses to COVID-19 in Korea

Jaehyun Jung

Hawnoong Lee

Kyung-ho Song

Follow this and additional works at: https://elischolar.library.yale.edu/ypfs-documents

Recommended Citation

Jung, Jaehyun; Lee, Hawnoong; and Song, Kyung-ho, "Public Finance Responses to COVID-19 in Korea" (2020). *YPFS Documents (Series 1)*. 11392.

https://elischolar.library.yale.edu/ypfs-documents/11392

This Document is brought to you for free and open access by the Browse by Media Type at EliScholar – A Digital Platform for Scholarly Publishing at Yale. It has been accepted for inclusion in YPFS Documents (Series 1) by an authorized administrator of EliScholar – A Digital Platform for Scholarly Publishing at Yale. For more information, please contact elischolar@yale.edu.

PUBLIC FINANCE RESPONSES TO COVID-19 IN KOREA

Jaehyun Jung, Hwanoong Lee, and Kyung-ho Song

This article summarizes the current economic status of the Republic of Korea amid the coronavirus pandemic and the government's policy responses. The authors propose the areas of the government's fiscal policy that entail in-depth research to prepare a better response in the future.

Keywords: COVID-19, fiscal policy, tax policy

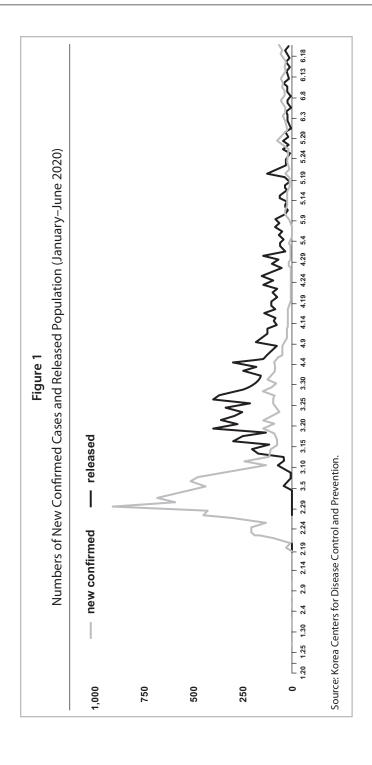
JEL Codes: H50, H31, H24

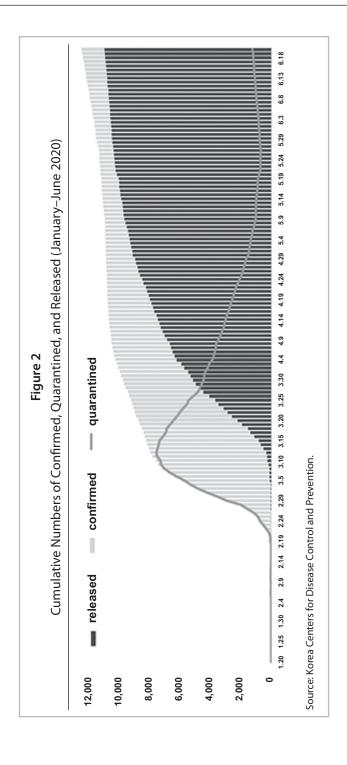
I. INTRODUCTION

has spread globally and caused a profound socioeconomic crisis around the world. In the Republic of Korea, the number of confirmed cases has significantly increased since mid-February after a Chinese traveler who entered Korea on January 20 was found to be COVID-19 positive. As shown in Figure 1, the daily number of confirmed cases reached a peak at the end of February and then began to decline thereafter. Figure 2 shows cumulative confirmed cases, which reached 8,000 on March 13; the rate of infection spread has declined since April.

Soon after the apparent success in fighting COVID-19, however, there was a resurgence of infections mainly from Seoul and its surrounding metropolitan region. In response, the government extended an intensive disease prevention scheme indefinitely until the number of patients in Seoul and the metropolitan region dropped to a single digit.

Economic activity contracted sharply as the government adopted social distancing and other quarantine measures to prevent the spread of the virus. In particular, small business owners and self-employed persons in the service industry have experienced great difficulties. According to the Bank of Korea, real gross domestic product (GDP) decreased by 1.4 percent and private consumption fell by 6.4 percent in the first quarter of 2020 compared to the previous quarter. The contribution of private consumption to GDP growth was –3.1 percent. The Industrial Activity Trend Survey, released by Statistics Korea every month, reported that the service industry production index fell by 6.1 percent from April of the previous year. A decline in three industrial sectors accounted for 70





percent of the downturn. Many service industries were hit particularly hard as people have refrained from activities that involve close contact such as eating or traveling.

The number of employed people decreased by more than one million from February to April, about a 3.7 percent reduction. The seasonally adjusted employment rate decreased by 2.3 percent over the same period (Figure 3). While the employment rate rebounded slightly in May, the seasonally adjusted unemployment rate (Figure 4) increased from 3.8 percent to 4.5 percent of the unemployment rate, with over 1.2 million individuals out of work.²

The Korean government's approach has been considered relatively effective against the pandemic-related economic shocks. Although Korea's economic growth forecast for 2020 in April fell by 3.4 percentage points compared to the January forecast, the decline was comparatively smaller than that in other parts of the world (Table 1).

This article proceeds as follows. Section II describes the Korean government's tax and fiscal policies in response to COVID-19. Section III discusses the imposed conditions on the emergency relief payments and their implications, and Section IV concludes.

II. POLICY RESPONSE TO THE COVID-19 OUTBREAK

In this section, we discuss a set of policy measures the Korean government has proposed in reponse to COVID-19. In Section II.A, we introduce three components of the measures, financial, fiscal, and tax policies, in the order of the government's announcements. More details of the polices follow in Section II.B.

A. Overview of the Policy Responses

As of June 3, the Ministry of Economy and Finance of the Korean government has proposed a set of policy measures amounting to 270 trillion Korean won, which is about 14.1 percent of GDP (based on GDP in 2019).^{3,4} The measures can be broken down into

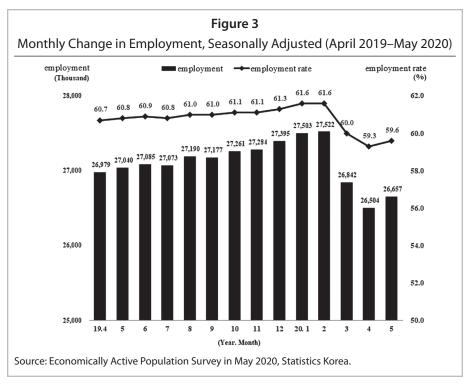
¹ The indices of the transportation and warehouse industry, food and accommodation industry, and arts, sports, and leisure industry decreased by 21, 24.5, and 44.9 percent, respectively.

The reason for the low unemployment rate is that Korea has a high proportion of those who are not in the labor force (full-time housewives, elderly people, and discouraged workers) and a high proportion of self-employed and agricultural workers. Self-employed persons are classified as noneconomically active if they close their businesses and prepare new ones. In Korea, the share of self-employed people among all employed is 21%, and the ratio of agriculture, forestry, and fishery workers is 5.2% as of April 2020.

Also, the labor market structure in Korea is more rigid compared to the United States. Some of the government policies at labor market may be another reason the unemployment rate remains low despite the current economic crisis (see Section *II.B.2*). Last, as shown in Table 1, Korea's economic impact from COVID-19 was small compared to that of other countries; this can also partly explain Korea's low unemployment rate.

The total amount includes three Comprehensive Packages (32 trillion won), Financial Support Packages (135 trillion won), the Key Industry Protection Fund (40 trillion won), Additional Expanded Measures (41 trillion won including the Emergency Relief Payment [14.3 trillion won] and Emergency-Employment-Security Measure [10.1 trillion won]), and the third supplementary budget (35.3 trillion won). We exclude duplicate measures in the supportive packages (about 14 trillion won).

⁴ The monthly average exchange rate in May was roughly 1,230 won per dollar. The 270 trillion Korean won, thus, equals about 219.75 billion U.S. dollars.



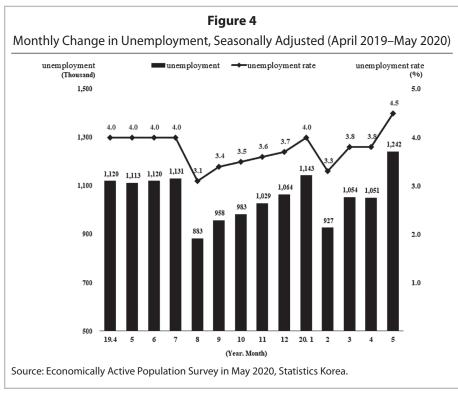


Table 1 Global Economic Growth Forecast for 2020			
	January 2020 (%)	April 2020 (%)	Change (%)
World economies	3.3	-3	-6.3
Advanced economies	1.6	-6.1	-7.7
Emerging market and developing economies	4.4	-1	-5.4
Euro Area	1.3	-7.5	-8.8
United States	2	-5.9	-7.9
Germany	1.1	-7	-8.1
France	1.3	-7.2	-8.5
Italy	0.5	-9.1	-9.6
Spain	1.6	-8	-9.6
Japan	0.7	-5.2	-5.9
United Kingdom	1.4	-6.5	-7.9
China	6	1.2	-4.8
Korea	2.2	-1.2	-3.4

Sources: IMF, World Economic Outlook, January 2020; IMF, World Economic Outlook, April 2020.

three parts: 183.7 trillion won of financial support, 83.7 trillion won of fiscal policy, and 2.6 trillion won of tax policy. The financial support consists of a financial support package (135 trillion won), government guarantee debts (40 trillion won), and other financial supports from the Second Comprehensive Package (8.7 trillion won). The tax policy is made up of 1.7-trillion-won worth of tax cuts and 0.9-trillion-won worth of reduction or deferral of Social Security contribution. Table 2 presents a list of economic policy responses to COVID-19, tabulated by dates of the press releases.

The government released the first fiscal stimulus package ("First Comprehensive Package"), which provided reserve funds and policy financing for small businesses and small and medium-sized enterprises (SMEs), local economies, exporting firms, and importers of manufacturing supplies, during February 5–17. As the number of confirmed cases increased rapidly, the government announced the subsequent comprehensive measures of approximately 16 trillion won on February 28, to minimize the negative impact on the economy ("Second Comprehensive Package"). The second package provided loans and guarantees for small businesses and SMEs whose economic conditions had been deteriorated by the pandemic and asked public institutions (e.g., Korea Rail Network Authority and Korea Land and Housing Corporation) to increase investment in their projects by 0.5 trillion won. Also, the package provided emergency relief payments

		able 2		
List	List of Economic Policy Responses to COVID-19			
Name of Package (Release Dates)	Amount	Description		
First Comprehensive Package (02.05–02.17)	4 trillion won	 Government reserve funds and policy financing to support disease prevention, local government, and importers of manufacturing supplies To provide business operation loans for SMEs 		
Second Comprehensive Package (02.28)	9 trillion won (the Bank of Korea [5T], public institutions [0.5T], commercial and government- financed banks [3.7T])	To provide loans, guarantees, and investment through financial and public institutions To increase the limits of "The Financial Intermediary Support Loan" provided by the Bank of Korea To increase investment by public institutions To provide loans to small businesses and SMEs affected by the COVID-19 outbreak		
	7 trillion won (financial expenditure [2.8T], tax cuts [1.7T], fundraising plans [2.5T])	 Consumption coupons to promote local demands Emergency family-care leave subsidy Tax credit on rental income for landlords from rent reduction Consumption tax cuts for car purchases Low-rate loans to small businesses and SMEs 		
Third Comprehensive Package (first supplementary budget [03.17])	11.7 trillion won (new spending [10.9T], revenue adjustments [0.8T])	 To enhance disease control efforts To support small merchants and SMEs To support consumption and employment To support local economies hit by the outbreak 		
Financial Support Package (from first and second Emergency Economic Council Meeting [03.19, 03.24])	100 trillion won	 To provide market stabilization funds to restore stability in the country's bond market, stock market, and short-term money market (41.8T) To provide liquidity to businesses (58T) 		
Additional Support Package I (from third Emergency Economic Council Meeting [03.30])	0.9 trillion won (excluding emergency relief payments)	 To reduce or defer Social Security contributions Emergency relief payments (9.1T): cash payout up to 1 million won to all except the top 30 percent of households (expanded to all households in the third supplementary budget) 		

Name of Package (Release Dates)	Amount	Description	
Additional Support Package II (from fourth Emergency Economic Council Meeting [04.08])	10.1 trillion won	 Guarantees and insurance for exporters (6T) To provide loans for and investments in ventures and startups (1.9T) Support for SMEs (2.2T) 	
Expanded Financial Support Package and measures to stabilize employment and indus- try (from fifth Emer- gency Council Meeting [04.22])	85.1 trillion won	 Expanded Financial Support Package (35T added to the 100T financial package) Key Industry Protection Fund to support key industries and help businesses to retain jobs (40T) Government guaranteed debts (40T) Emergency Employment Security Measure (10.1T) to provide wage subsidies and programs for 2.86 million workers New spending (9.3T) and reserve fund (0.8T) 	
Second supplementary budget (04.30)	14.3 trillion won	Cash payout to around 28 million households up to one million won Funded by central government (12.2T) and local government (2.1T)	
Third supplementary budget (06.03)	35.3 trillion won (new spending [23.9T], revenue adjustments [11.4T])	 To finance over 135 trillion financial support package (5T) To improve job security and expand social safety nets (9.4T) To finance economic stimulus packages, including the Korean New Deal (11.3T) 	
Total	270 trillion won (14.1% of 2019 GDP)		

to local economies and introduced an emergency subsidy for family-care leave. Last, the government introduced a consumption tax cut on car purchases and a tax credit for rental income for landlords who give rent reductions to their tenants.

By the end of February, despite the first two rounds of supportive measures worth approximately 20 trillion won, the virus became increasingly prevalent. Against the backdrop of a growing socioeconomic crisis, the National Assembly passed a supplementary budget on March 17. The 11.7-trillion-won supplementary budget ("Third

Comprehensive Package") included financial support for firms and local economies and preventive measures to enhance the disease control efforts.

In the first and second Emergency Economic Council Meetings that took place on March 19 and March 24, respectively, the government announced a financial support package to stabilize the financial markets by providing funds to the bond, stock, and short-term money markets. The package also planned to provide liquidity to small merchants and SMEs. Specifically, it included loan support and expanded special guarantees for SMEs. Despite the 50-trillion-won package from the first meeting, however, the volatility of the stock market continued to increase with the markets reaching new lows. On March 19, the Korea Composite Stock Price Index (KOSPI) fell below 1,500 points for the first time since July 2009. As an additional measure to help stabilize the financial markets, the government increased the total amount of funds at the second meeting from 50 trillion won to 100 trillion won.

At the same time, to prevent the escalation of COVID-19, the government increased its calls that all citizens practice social distancing. The government's calls for social distancing, however, further contracted economic activity and increased demands for additional financial assistance for small businesses and SMEs whose sales had plummeted, and for those who became unemployed or were put on unpaid leave. Accordingly, during the third Emergency Economic Council Meeting, the government decided to reduce or defer Social Security contributions and to finance emergency relief payments up to one million won per household, excluding the top 30 percent of households. In addition, at the fourth Emergency Economic Council Meeting, the government announced its intention to stimulate domestic demand by making government spending on travel and food expenses in advance, and to support startups, ventures, and exporters by providing low-interest loans or full guarantees.

Still, employment in March decreased by 19,500 workers compared to a year earlier, reaching its nadir since January 2010 (Employment Indicators). This drew the attention of the government to the labor market, leading to the announcement at the fifth Emergency Economic Council Meeting on April 22 of special measures to protect jobs. Through the Emergency Employment Security Measure, the government planned to provide wage subsidies and employee maintenance programs totaling 40 trillion won for 2.86 million workers in affected industries such as aviation, shipping, automotive, and oil refining.

On April 30, the second supplementary budget was passed by the National Assembly. During the National Assembly deliberation process, all households became eligible to receive the emergency relief payments instead of the bottom 70 percent, resulting in an increase in the total amount of the funding to 14.3 trillion won.⁵

By May 7, the number of confirmed cases of COVID-19 fell below 10 per day. This reduction seemed to be the result of the intensive social distancing efforts. As the spread of COVID-19 slowed, the government relaxed the quarantine scheme from intensive to moderate social distancing. It was considered a strategic approach to finding a bal-

⁵ An amount of 12.2 trillion won out of the total emergency relief payments of 14.3 trillion won is raised through the national budget, and the remaining 2.1 trillion won is collected through local government expenses.

ance between public health safety and economic vitalization; the government sought to resume economic activities while keeping the outbreak under control. With this, stagnant economic activities began to gradually recover. For example, the consumer sentiment index reported by the Bank of Korea in May rose for the first time in four months, an increase of 6.7 points from the previous month.

In response to these changes, the government has begun discussions to set the economic foundations in preparation for the post–COVID-19 era. At the sixth Emergency Economic Council Meeting on June 1, the government proposed economic policies for the second half of the year. The core element of the policy plan was a push for the "Korean New Deal" project that is composed of two parts: the Digital New Deal and the Green New Deal. The government has planned to invest 31.3 trillion won by 2022 and 45 trillion won from 2023 to 2025. On June 3, the third supplementary budget was passed to provide funds for the Korean New Deal project, as well as the Emergency Employment Security Measure and the Expanded Financial Support Package, which were announced at the fifth Emergency Economic Council Meeting. The supplementary budget, worth 35.3 trillion won, would be financed through spending restructuring (10.1 trillion won), borrowing from public fund reserves (1.4 trillion won), and issuing government bonds (23.8 trillion won).

B. Discussion of Major Policy Responses

1. Emergency Relief Payments

The COVID-19 pandemic has significantly shrunk economic activity and consumer spending, increasing challenges for small businesses, self-employed people, and the general public. The Korean government, after heated debates, decided to provide universal, rather than targeted, payments to households because of the urgency of the issue and the time-consuming problem of the selection process. The amount of the relief payments differed only by the number of household members: 400,000 won for single-person households, 600,000 won for two-person households, 800,000 won for three-person households, and one million won for households of four or more members. The payments were distributed to the heads of the households via on- and offline platforms beginning on May 4, with 98.6 percent of households having received them by early June.

2. Emergency Employment Security Measures

As labor market conditions worsened with social distancing and weak manufacturing in key industries (e.g., aviation, shipping, automotive, and oil refining), the government introduced the Emergency Employment Security Measure to support job retention at the Fifth Emergency Economic Council Meeting on April 22. The 10.1 trillion won allocated for this special measure accounted for 40 percent of the total employment budget for 2020. There were three core elements.

First, earlier in March, the government had designated a group of industrial sectors related to tourism and tourist accommodation services (i.e., travel, tourism, lodging, transportation, and performance) as the Special Employment Support Sectors (SESS). The special measure that was introduced in April added more industries to the SESS, including duty-free and retail travel, exhibition and international conventions, aircraft ground handling, and airport bussing. The emergency measure was designed to provide retention subsidies for these sectors in order to cover the salaries of employees — specifically those placed on unpaid leave for more than one month. The subsidy covers up to 50 percent of workers' monthly salaries (up to 70,000 won per day) for up to 180 days.

Second, the measure increased unemployment benefits by 3.4 trillion won to cover the increased number of unemployed and the longer duration of unemployment spells due to the COVID-19 outbreak. In addition, the government introduced the COVID-19 Emergency Employment Stability Subsidy (EESS), which provided 500,000 won per month for up to three months to workers who were not included in the safety net of the unemployment benefits. About 930,000 workers (e.g., self-employed small business owners and freelancers) were expected to benefit from the EESS.

Third, the central government proposed hiring youth and vulnerable groups directly in the public sector, aiming to promote job creation in the private sector. In addition, the local governments planned to expand their regional employment programs to hire an additional 550,000 low-income beneficiaries, anticipating a more stable life for the low-income group.

3. Financial Support Package

The government prepared a 135-trillion-won financial support package to implement sufficient and rapid measures in order to prevent a crisis throughout the market⁶ (Ministry of Economy and Finance, 2020). This financial package had two components, each with a different purpose. An amount of 77.9 trillion won was allocated to provide sufficient liquidity for businesses to withstand the pandemic, and the remaining 56.4 trillion won was provided to market stabilization funds to cushion the financial market shock. The liquidity funds, worth 77.9 trillion won, were divided into two categories (see Table 3 for more details). First, a budget of 47.8 trillion won was allocated to provide funds at ultralow rates to small businesses, SMEs, and medium-sized leading enterprises (MLEs). From this fund of 47.8 trillion won, 26.6 trillion won was allocated to provide low-interest-rate loans for small businesses and the remaining 21.2 trillion won was to be used for SMEs and MLEs. Second, a budget of 30.1 trillion won was to be used for interest repayment deferral and the extension on the maturity of loan principals. More than half of the remaining funds, 17.2 trillion won, were allocated for small business owners (i.e., special guarantees for SMEs and small businesses, full guarantees for emergency small businesses, purchases of small businesses' overdue

⁶ The government introduced the financial support package worth 50 trillion won on March 19. It was expanded to 100 trillion won on March 24 and to 135 trillion won on April 22.

Measures to	Provide Liquidity for Businesses (Jur	ne 3)
Policy Measures	Detailed Descriptions	Amount (KRW Trillions)
Provide funds at ultralow rates	Low-interest-rate loans for small businesses	26.6
	Loans for SMEs and MLEs	21.2
Total	47.8 (2.	.49% of 2019 GDP
Interest repayment deferral Extension on the maturity of loan principals	Special guarantees for SMEs and small businesses	5.5
	Full guarantees for emergency small businesses	3
	Purchase of small businesses' overdue debt	2
	Support small businesses by issuing the primary collateralized bond obligations (P-CBOs)	6.7
	Guarantees and insurance for exporters	6
	Loans for and investment in ventures and startups	1.9
	Support SMEs and MLEs by issuing P-CBOs	5
Total	30.1 (1.	.57% of 2019 GDP)

debts, and issuance of the primary collateralized bond obligations), and the rest were to be used for SMEs and MLEs.

To stabilize the bond, stock, and short-term money markets, the government allocated funds of 56.4 trillion won, which were composed of six parts (Table 4). A 20-trillion-won Bond Market Stabilization Fund (BMSF) was financed by a joint venture of 84 financial companies (i.e., banks, securities, and insurance) and the Korea Development Bank for the purpose of normalizing operations in the corporate borrowing market. The Korea Development Bank also directly purchased 1.9 trillion won of convertible

Elements of the Market Stabilization Fund	ds (June 3)
Measure	Amount (KRW Trillions)
BMSF	20
Quick bond takeover program	2.2
Purchase investment-grade conversion issue of corporate bonds	1.9
Short-term money market stabilization	7
SMSF	10.7
Expanded stabilization fund for buying lower-rated corporate bonds and CP (announced on April 22)	14.6
Total	56.4 (2.93% of 2019 GI

bonds from companies with credit ratings above A or from companies whose ratings were downgraded due to the COVID-19 outbreak. As an effort to swiftly reduce the risk factors embedded in the short-term money market, the government implemented a 7-trillion-won financial assistance package to provide liquidity for securities companies through stock finance loans and repo market financing by the Bank of Korea. Additionally, the government created the Stock Market Stabilization Fund (SMSF) worth 10.76 trillion won to be financed by government-owned banks, 23 financial companies (10 trillion won), and four securities institutions such as the Korea Exchange (760 billion won). As part of the SMSF, three trillion won was raised through capital calls intended to be invested in index funds such as KOSPI 200.7

While the BMSF and other financial support programs mentioned above have been considered effective in stabilizing financial markets, they had excluded corporate bonds and commercial papers (CPs) with low ratings. On April 22, the government announced the establishment of a special purpose vehicle (SPV) to purchase corporate bonds and CPs with low credit ratings. The SPV would obtain liquidity through policy banks and the Bank of Korea and purchase corporate bonds with AA–BB ratings and CPs with A1–A3 credit ratings.

⁷ The KOSPI 200 index consists of 200 big companies, which make up 93 percent of the total market value of the Korea Stock Exchange.

The Digital New Deal, an intensive investment plan meant to guide the future of the economy based on innovation, would allow for the investment of 13.4 trillion won by 2022 and the creation of 330,000 jobs. The first part of the Digital New Deal is the development of data, networks, and artificial intelligence (AI). To do so, the government will support training of 100,000 professionals in these fields. The plan will also invest 140 billion won to establish digital inclusiveness⁸ and trusted data protection systems.

The government will also install ultra-high-speed internet networks in rural areas and at public facilities and increase research and development in the country's digital security systems. A 750-billion-won fund has been allocated to promote the government's initiative "Smart Working and Doing Business Remotely."

Under the agenda, the government will expand the digitally based infrastructure to enable students at all levels, from elementary through high school, to receive distance education without any inconvenience, while promoting online education at universities and job-training centers across the country. Finally, to digitalize social overhead capital (SOC), 580 billion won will be invested in 2020. The government plans to build digital security systems especially for facilities that are important for public safety such as public transportation and water.

Table 5 describes the details of the Green New Deal, which is a comprehensive investment plan for substantial growth. The government plans to invest 12.9 trillion won by 2022 and is expected to create 133,000 jobs.

The first part of the Green New Deal is converting cities and residential infrastructure into "green facilities" by investing 370 billion won to renovate the public facilities to become zero-energy buildings. Also, 480 billion won will be used in 2020 to promote green industries and eco-friendly manufacturing by establishing low-carbon industrial complexes across the country. Finally, 580 billion won will be used to encourage low-carbon and distributed generation technologies, which also include the utilization of renewable energy such as wind, solar, and hydropower.

4. Tax Policies

On March 17 and April 8, the Korean government made announcements on the amendment of the Restriction of Special Taxation Act that includes a number of tax benefits to aid businesses and individuals who have suffered from the COVID-19 outbreak. The measures for businesses and the self-employed are intended to alleviate temporary cash flow problems, such as the inability to pay suppliers or employees, and to prevent the closure of businesses or bankruptcies. The measures for individual taxpayers were gener-

The vision of an inclusive state was presented by the Moon administration and has been frequently reflected in policy objectives (e.g., inclusive society, inclusive growth, and inclusive prosperity). Inclusion is the administration's principle to have all people enjoy the fruits of economic growth and welfare services. As such, the term "digital inclusion" refers to ensuring vulnerable and disadvantaged groups have access to and skills to use information and communication technologies.

	(5.1 Trillion Won)		
Categories	Measures	KRW (Trillions)	
Digital New Deal	Develop data, networks, and AI	1.3	
	Establish digital inclusiveness and trusted data protection	0.14	
	Promote "smart working and doing business remotely"	0.75	
	Mack SOC smart	0.48	
Total	2.7 (0.14%	6 of 2019 GDF	
Green New Deal	Eco-friendly management of cities and infrastructure	0.37	
	Promote green industries and eco-friendly manufacturing	0.48	
	Promote low-carbon and distributed generation technology	0.58	
Total	1.4 (0.07%	6 of 2019 GDF	
Strengthen employment security	Expand employment security for all citizens	1	
	Support those outside the employment insurance system		
	Promote future-oriented vocation training		
Total	1 (0.05%	6 of 2019 GDF	

ally focused on reducing burdens in meeting the financial obligations of filing taxes or paying bills. In this section, we document an overview of the measures that have been undertaken by tax administrations in Korea. These focused primarily on extensions for tax and payment deadlines, temporary tax deductions, and tax base narrowing measures.

(1) TAX FILING AND PAYMENT EXTENSION

Because the COVID-19 outbreak in Korea coincided with the tax filing deadlines, the deadlines for the corporate tax and value-added tax (VAT) were postponed by a month and up to three months on request, respectively. A one-month postponement for both deadlines was automatically applied to the businesses in the designated disaster zones, including the fourth largest city of Daegu and its neighboring province where nearly

90 percent of positive cases were reported in March. The taxpayers in the designated disaster zones have been allowed to request a maximum two-year extension for certain tax items. The administration also allowed an extension of up to nine months for the taxpayers who have been quarantined due to COVID-19.

(2) OTHER TAX ADMINISTRATION SUPPORT

The refunds for the year-end settlement of VAT and earned income have been expedited by shortening refund deadlines from 30 to 10 days after filing tax. Since audits could be a demanding process for taxpayers as well as tax administrations, tax evasion investigations have been initiated only for the cases in which the statute of limitations is nearing expiration. The initiation of any new cases in designated disaster zones has been discouraged until further notice, and a two-week hold has been put in place for every ongoing case. Debt recovery processes that include asset seizures and public sales also have been suspended if delinquent taxpayers are affected by COVID-19.

(3) CORPORATE INCOME TAX RATE REDUCTIONS

A corporate income tax (CIT) reduction aims to target particular taxpayers who may have suffered the most from cash flow issues during the outbreak. The tax reduction has been doubled for all small and medium-sized firms located in designated disaster zones, except for certain businesses such as gambling, bars, and real estate and rental and leasing. The reduction is capped at 60 percent for small businesses and 30 percent for medium-sized businesses, with a limit of 200 million won. This tax relief is expected to amount to, at most, 340 billion won.

(4) VAT REDUCTIONS

Perhaps the most salient tax for small businesses in Korea is the VAT, levied at a rate of 10 percent. Therefore, tax relief measures that include cutting the VAT are arguably most crucial to small businesses and the self-employed. Taking into account the substantial administrative burden of VAT filing, the threshold of gross annual turnover was 48 million won for small businesses to be eligible for a simplified scheme and lower rates. To mitigate the impact of COVID-19, the government increased the threshold to 80 million won until the end of 2020. Small businesses with annual revenue of less than 48 million would be exempted from VAT. This measure is anticipated to help 1.2 million people and reduce tax revenue by 710 billion won in 2020.

(5) SPECIAL TAX CREDIT FOR THE VOLUNTARY REDUCTION OF RENT

Small business owners have faced challenges to paying rent amid the sharp decline in sales. As such, the tax relief package includes a special tax credit for landlords who voluntarily give a discount on the rent of small and medium-sized business tenants. A tax credit of 50 percent of the rent reductions given to tenants in the first half of 2020 will be deducted from the income tax or corporation tax of the landlords.

(6) SPECIAL DEDUCTIONS

The Korean government introduced a credit card spending deduction program in 1999, which encouraged citizens to use credit cards, to capture the tax bases of corporate income more transparently. The income tax deduction is given to wage and salary earners for expenditures using credit cards, debit cards, and cash receipts that exceed 25 percent of the earners' gross income. The tax relief package has temporarily doubled the rate of deduction for taxpayers from March to June: the rate for the credit card expenditure went from 15 percent to 30 percent and that of the debit card and cash receipt expenditure went from 30 percent to 60 percent. The deduction rates for spending in traditional markets and on public transportation have increased from 40 percent to 80 percent. The government projects this to cost about 345 billion won.

(7) OTHER MEASURES TO SUPPORT CONSUMPTION

The special excise tax on vehicle purchases was reduced from 5 percent to 1.5 percent from March to June, with a limit of one million won. In addition, consumers receive an additional 1.05-percentage-point tax cut on top of the latest reduction if they buy a new car to replace a car older than 10 years. The relief package also includes a temporary increase in entertainment expense allowances for large and midsized firms to boost the sales of small merchants and SMEs. Finally, there is a 1 percent tax deduction from either personal taxes or CITs for those who make an advance payment for goods and services from small and medium-sized business owners.

III. PROBLEMS OF EMERGENCY RELIEF PAYMENTS

The government provided emergency relief payments in the forms of credit card points, prepaid cards, or local vouchers (local currency). The government intentionally excluded direct cash payment to impose conditions in three aspects: locality, type of industry, and time of spending. In the event of an economic crisis, it is important to study which of the two, between the direct cash payments or vouchers, would be more effective and desirable to boost consumption. In this section, the effectiveness of the emergency relief policy will be discussed by comparing the cash payments and vouchers, with a particular focus on three restrictions embedded in the voucher distribution.

A. Restrictions on Region

The idea of setting a regional boundary for the emergency relief payments was borrowed from the operation method of local currency programs (i.e., regional vouchers) that have already been in operation throughout the country. The idea behind the program is for the "local currency" or regional vouchers to be spent only within the region of issuance, as to concentrate revitalization to a specific local area and prevent the external

⁹ In Korea, an electronic payment system enables imposition of such restrictions on credit card points and prepaid cards.

outflow of consumption. However, restricting spending to a particular locality may pose several problems.¹⁰

In particular, the increased spending in local region A may come at the expense of spending in local region B. In response, local region B may be incentivized to create its own local currency, impacting spending in local region A. Given this, the ultimate impact of the local currency would be a net zero or even negative due to the additional cost for managing the program. Moreover, by limiting consumer choice, the program may introduce inefficiencies into the economy.¹¹

The central government cannot prevent local governments from introducing local currency programs, and local government leaders with fixed-term tenures may want to introduce the programs for political reasons. Because the provision of emergency relief funds is a national-level policy that is administered by the central government, we highlight an in-depth discussion on the motive and relevancy of restrictions on regions.

B. Restrictions on Types of Industries

The second condition on the emergency relief funds is imposed on the types of industries. Payments cannot be spent at entertainment venues, such as golf clubs, bars, casinos, and video arcades, or at department stores, online shopping malls, and large-scale supermarkets that are usually owned by conglomerates. Those industries were excluded from the eligible spending destinations under the government's rationale that it is not desirable for tax-based funds to be spent on entertainment during a national economic crisis. Also, department stores, online shopping malls, and supermarkets are considered to have sufficient ability to respond to the COVID-19 pandemic compared to small businesses and the self-employed. Nevertheless, it is important to verify the effectiveness and the potential side effects of the restrictions on the types of industries. Because money is fungible, it is impossible to prevent individuals from using funds that may have otherwise gone to a small business before payment but are now available to use elsewhere after payment.

Moreover, an additional problem arises from arbitrary restrictions on the eligible industries. It is challenging for the government to design restrictions without systemic flaws and raising various issues of equity. For example, there is the seemingly arbitrary situation where the emergency relief payment was not allowed to be used in large corporate supermarkets (e.g., E-Mart and Lotte Mart), while, at the same time, other international business giants, such as IKEA and Starbucks, were able to accept the payment depending on the location of their regional headquarters. Other such arbitrary examples exist, for instance, luxury retail stores were eligible to accept the relief payments unless their stores were located within department stores — in which case they were not eligible.

¹⁰ Song and Lee (2020) analyze the problems of local currency theoretically and empirically.

Song and Lee (2020) find that if the two regions are sufficiently heterogeneous and one region is much larger than the other, it is likely that the smaller region will suffer when both introduce a local currency.

Large-scale retail stores may be more capable of responding to the COVID-19 crisis than small business owners and self-employed persons. Still, they face a sharp decline in sales due to the COVID-19 crisis and are left to reduce their workforces. The first group of employees to be let go would be temporary workers, who may need the government's assistance the most. In other words, excluding large-scale retail stores may put temporary workers on the verge of losing jobs. Moreover, if large-scale supermarkets close, the damage would be borne, in part, by consumers in the region due to the reduction in convenience and competition. We can consider either placement of a spending portion at a certain rate (e.g., 10–20 percent) for the excluded industries or removal of restrictions on the industries so consumers can make their own decisions.

C. Restrictions on Time

The government has set a deadline to spend the relief payments to boost consumption immediately during the economic crisis, and any unused balance would expire on August 31. The government's restrictions on time sound reasonable considering the goal of the relief funds. While we understand the purpose and the intended effect of the restrictions, we also point out potential problems and propose a more rigorous analysis as a follow-up study.

First, the restrictions on time raise a question of the relief payments' effectiveness in stimulating consumption compared to the direct cash payments. We suggest the following example of two individuals: a person who earns sufficient income to sustain living without emergency support and another person who is in desperate need of aid.

The high-income person may save cash from his income in case he receives an emergency relief payment that must be spent in a few months, and he would spend the payment first. In this case, the short-term consumption promotion effect would be zero. The low-income person, on the other hand, would spend the relief payment instantly whether he receives it in the form of cash payments or vouchers because he did not have sufficient income to buy necessities. Therefore, there would be no effect of promoting consumption if the government gives vouchers instead of cash.

The next issue to consider is the substitution effect with durable goods consumption. If a high-income person receives a subsidy for which the period of use is fixed, a replacement effect with his own cash (savings) could occur. Also, it may accelerate planned durable goods consumption. In other words, there may be an effect of making purchases in advance within a predetermined time. In fact, the consumption of alcoholic beverages, such as beer and wine, and the purchase of products that can be stored for a long period, such as tobacco and canned food, have increased rapidly since the emergency relief payment was paid. The consumption of durable goods that can be purchased with emergency relief payments, such as bicycles, glasses, and mobile devices, has also increased.

The intertemporal substitution effect of consumption, as seen in the examples above, could be claimed as one of the intentions of the policy, in terms of consumption smoothing by advancing future consumption in more difficult times. However, this could also

be translated as a sharp decline in the consumption of products that have been purchased in advance, soon after the period of spending expires. Because the spending deadline is set as August 31, the consumption cliffs may make it more difficult to mediate the economic situation if the pandemic-led economic crisis persists after the deadline. Considering the complexity of the issue, we propose a more thorough review of the time constraints on the emergency relief payments as the next research topic.

IV. CONCLUSION

This paper documents the economic implications of the COVID-19 pandemic in Korea and discusses the government's policy responses to contain the damage from COVID-19. To minimize the impact of the outbreak on the socioeconomic side, the Korean government has announced and implemented policy measures worth 270 trillion won in total as of June 3, 2020. Among the policy packages of 270 trillion won, the Expanded Financial Support Package for stabilizing the financial market is 135 trillion won; emergency relief payments for stimulating national consumption are 14.3 trillion won; Emergency Employment Security Measures for employment stability are 10.1 trillion; and, finally, the Korean New Deal in preparation for the post-COVID-19 era will reach 5.1 trillion won. Meanwhile, tax measures generally aim to mitigate insolvency and reduce burdens of tax filing and payment obligations. We find that many tax policies also intend to boost demands to support small businesses that are hit hard by the COVID-19 outbreak. We then discuss the system of emergency relief payments and the government's rationale for implementing them. We also describe three restrictions the government has imposed on the relief payments and discuss the effectiveness and challenges of the restrictions. Finally, we propose a more in-depth theoretical and empirical analysis for future research after sufficient data become available. Our discussions raise several important questions for the expansionary fiscal policy response to the pandemic: How can we decide the appropriate level of fiscal deficits especially when the government needs an expansionary fiscal policy during the epidemic? How do we finance increased government expenditure due to COVID-19? What are the expected problems in financing through government bonds? These questions will be more important as the government maintains an expansionary fiscal policy during and after the pandemic.

DISCLOSURE

The authors have no financial arrangements that might give rise to conflicts of interest with respect to the research reported in this paper.

REFERENCES

Ministry of Economy and Finance, 2020. "1st Supplementary Budget Proposal of 2020." Press Release (March 4). Ministry of Economy and Finance, Sejong, Republic of Korea, https://www.moef.go.kr/nw/nes/detailNesDtaView.do?menuNo=4010100&searchBbsId1=MOSFBBS_0000 00000028&searchNttId1=MOSF_000000000032454.

Ministry of Economy and Finance, 2020. "1st Emergency Economic Council Meeting." Press Release (March 19). Ministry of Economy and Finance, Sejong, Republic of Korea, https://www.moef.go.kr/nw/nes/detailNesDtaView.do?searchBbsId1=MOSFBBS_0000000000028&searchNttId1=MOSF_000000000032775&menuNo=4010100.

Ministry of Economy and Finance, 2020. "2nd Emergency Economic Council Meeting." Press Release (March 24). Ministry of Economy and Finance, Sejong, Republic of Korea, http://www.fsc.go.kr/info/ntc_news_view.jsp?bbsid=BBS0030&page=1&sch1=&sword=&r_url=&menu=7210100&no=33766.

Ministry of Economy and Finance, 2020. "3rd Emergency Economic Council Meeting." Press Release (March 30). Ministry of Economy and Finance, Sejong, Republic of Korea, https://www.moef.go.kr/nw/nes/detailNesDtaView.do?searchBbsId1=MOSFBBS_0000000000028&searchNttId1=MOSF 000000000032940&menuNo=4010100.

Ministry of Economy and Finance, 2020. "4th Emergency Economic Council Meeting." Press Release (April 9). Ministry of Economy and Finance, Sejong, Republic of Korea, http://www.moef.go.kr/nw/nes/detailNesDtaView.do?menuNo=4010100&searchBbsId1=MOSFBBS_0000 00000028&searchNttId1=MOSF_00000000033084.

Ministry of Economy and Finance, 2020. "2nd Supplementary Budget Proposal of 2020." Press Release (April 16). Ministry of Economy and Finance, Sejong, Republic of Korea, http://www.moef.go.kr/nw/nes/detailNesDtaView.do?menuNo=4010100&searchNttId=MOSF_000000000000033184&searchBbsId=MOSFBBS_000000000028.

Ministry of Economy and Finance, 2020. "5th Emergency Economic Council Meeting." Press Release (April 22). Ministry of Economy and Finance, Sejong, Republic of Korea, http://www.moef.go.kr/nw/nes/detailNesDtaView.do?menuNo=4010100&searchBbsId1=MOSFBBS_0000 00000028&searchNttId1=MOSF_00000000033287.

Ministry of Economy and Finance, 2020. "6th Emergency Economic Council Meeting." Press Release (June 1). Ministry of Economy and Finance, Sejong, Republic of Korea, http://www.moef.go.kr/nw/nes/detailNesDtaView.do?menuNo=4010100&searchBbsId1=MOSFBBS_0000 00000028&searchNttId1=MOSF 00000000033287.

Ministry of Economy and Finance, 2020. "3rd Supplementary Budget Proposal of 2020." Press Release (June 3). Ministry of Economy and Finance, Sejong, Republic of Korea, http://www.moef.go.kr/nw/nes/detailNesDtaView.do?menuNo=4010100&searchNttId=MOSF_00000000000033184&searchBbsId=MOSFBBS 000000000028.

Song, Kyungho, and Lee, Hwanoong, 2020. "The Effect of Introducing Community Currency on Regional Economy: The Case of Korea." Working Paper. Sejong, Republic of Korea, SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3554493.