Impact of COVID-19 on Local Public Finance—Did Every Individual Local Government's Balance of General Account Worsen in the COVID-19 Pandemic?*

ISHIKAWA Tatsuya

Professor, Faculty of Economics and Graduate School of Economics and Management, Kyushu Kyoritsu University; Visiting Professor, Osaka School of International Public Policy, Osaka University

AKAI Nobuo

Professor, Osaka School of International Public Policy, Osaka University

Abstract

While COVID-19 measures had not been incorporated at all into the Local Finance Plan decided by the central government nor the Local Allocation Tax for individual local governments for FY2020, intergovernmental transfers were allocated to local governments through three supplementary budgets drawn up by the central government, and a sum amounting to 20.8 trillion yen in additional national treasury disbursements was granted toward local policy measures for the response to COVID-19 measures. The majority of that was used to cope with an increase in expenditures, including special lump-sum benefits of 100,000 yen per inhabitant paid by municipalities and fully subsidized by the central government. The expansion of "Financing System Loans" for individuals and small- and medium-sized enterprises also increased revenues and expenditures of the general accounts; the total revenue for all local governments increased by more than 26.8 trillion yen year-on-year and total expenditure increased by more than 25.7 trillion yen year-on-year, resulting in a slight improvement in the General Account balance.

Much of the additional National Treasury Disbursements could be described as being neutral against the revenue and expenditure, but it is possible for the aggregated balance to either improve or worsen depending on how the "COVID-19 Temporary Grant for Regional Revitalization" was used and the operation was implemented toward local fiscal policy, which functioned as both categorical matching and non-matching grants. Accordingly, by grouping prefectures, municipalities that received the Local Allocation Taxes and those that did not, based on their population size, then analyzing the FY2020 settlement accounts of individual local governments, we found that the "Modified Real Single Fiscal Year Balance", an indicator modified from the published "Real Single Fiscal Year Balance", measuring substantial changes both in a cash balance of General Account and the Fiscal Stability Funds, had improved for more than 80% of the prefectures and about two-thirds of the municipalities. However, when this indicator is broken down into a "Single Fiscal Year

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Balance", as an indicator of substantial changes in cash balance, and "Net Increase in the Fiscal Stability Funds", we found that the breakdown of the indicator was not uniform—40% of the local governments saw improvements in both aspects, 20% saw only in the "Single Fiscal Year Balance" surplus, 30% saw only in the Net Increase in the Fiscal Stability Funds, and 10% saw both worsen. The impact of the COVID-19 pandemic has lingered on in both FY2021 and FY2022, and there is a need to continue conducting such analyses.

Keywords: Single Fiscal Year Balance, Fiscal Stability Funds, COVID-19 Temporary Grant for Regional Revitalization
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I. Introduction

The Central Government of Japan prepares every coming fiscal year the "Local Finance Plan" which is compiled in the form of the net total of the projected revenues and expenditures of overall local governments, and presents it to the Diet usually in January or February. The role of this plan is to ensure the revenue sources of local governments necessary for their economic activities expected by the central government and to secure the conformity with the national public finance, and it serves as a guideline for the compilation of the budget of each local government.

The Local Finance Plan assumes a single local government as an aggregated concept of actual overall local governments, and its main purpose is to determine the amount of the "Local Allocation Tax", transferred by the central government as general non-matching grants. The determined amount is to be disaggregated to the amount of each local government at the end of July.

COVID-19 measures had not been incorporated at all into both revenue and expenditure sides of the Local Finance Plan for FY2020. That is why most General Account balances of individual local governments were expected to deteriorate in the COVID-19 pandemic at the beginning of FY2020. There was concern that some of the Fiscal Stability Funds would run out.

The Government of Japan declared a state of emergency, following by "Emergency Economic Measures to Cope with the Novel Coronavirus (COVID-19)" on April 7. In the first phase of the Economic Measures, priorities on policy tools were to prevent the spread of the infection, to build medical treatment structures, and to protect employment and keeping business viable. The level of real GDP showed a historically large decline in the April-June quarter as economic activities sharply fell in April and May soon after the declaration of a state of emergency. The growth rate was considerably high in the July-September quarter when economic activity resumed, but it was not enough to recover to pre-Corona levels. Under the circumstances, the employment and income conditions remain weak and the number of new infections of COVID-19 pandemic began to increase in November, surpassing the highest level ever. To diminish growing concern among the public that the pandemic will further spread, and economic activities will stagnate, the Government of Japan formulated “Comprehensive Economic Measures to Secure People’s Lives and Livelihoods toward Relief and Hope” on December 8.

To realize these economic measures, three supplementary national budgets were sequentially passed by the Diet on April 7, June 12 of 2022 and January 28 of 2023. The total increase in the finally supplemented FY2020 budgets amounted to 73 trillion yen, equal to 71.1 percent of the initial national budget. It includes huge amounts of intergovernmental transfers to local governments from the central government in order to cope with downside pressure of the COVID-19 pandemic on local public finance.

How much were the intergovernmental transfers? What types of policy measures were undertaken by the local governments? How much were the increases in the revenues and expenditures of local governments? Did each individual local government’s balance of General Accounts in FY2020 improve or worsen during the COVID-19 pandemic?

This paper will try to answer these questions.

II. FY2020 Supplementary Budget Measures by the Central Government

II-1. An Overview of Intergovernmental Transfers Financing Local COVID-19 Measures

It is clear that most expenditures of the local governments on COVID-19 measures in FY2020 had to be financed by intergovernmental transfers which were parts of additional expenditures in the supplementary budgets organized three times by the central government. It is because COVID-19 measures had not been incorporated at all in revenues of the local governments in the Local Finance Plan for FY2020.

But it is surprising that no comprehensive materials were published explaining what types of policy measures to cope with COVID-19 were undertaken by the local governments and how they were financed. The budget of the central governments were detailed, explaining the purposes, final beneficiaries and amounts of expenditures as COVID-19 measures. Still, they did not pay attention to which of the governments would finally carry out the measures and would be responsible for households and corporations. Actually, some measures were carried out by the central government and others were entrusted to the local governments.

But, in administrative documents addressed to the local governments by the central government, newly adopted “National Treasury Disbursements” and “Special Local Grants” to cope with COVID-19 were explained in detail. All types of National Treasury Disbursements in Japan are categorical matching grants earmarked for specific purposes. Special Local Grants are general non-matching grants in order to compensate for a decrease in local tax revenues caused by exempted tax treatments decided by the central government. Comparing the supplementary budgets of the central government with these documents, we can judge which expenditures of the central government meant amounts to be transferred and which measures were entrusted to the local governments.

In contrast, the settlement statistics on the central government and local governments includes no detailed information on intergovernmental transfers corresponding to the type of policy measures to cope with COVID-19 undertaken by the local governments, with a few exceptions.

All exceptions are National Treasury Disbursements as follows.

The first exception is “Financial Assistance for Special Lump-sum Benefit” transferred by the central government. The second is “COVID-19 Temporary Grant for Regional Revitalization”. The third is “COVID-19 Emergency Comprehensive Support Grant”. Characteristics of these National Treasury Disbursements are explained later. Naturally, the supplementary budgets of the central government include all of these National Treasury Disbursements with an explanation of the purposes and amounts.

Table 1 summarizes the details of intergovernmental transfers for FY2020 COVID-19 measures which were undertaken by the local governments. Amounts are total sums.

II-2. Characteristics of Each Intergovernmental Transfer

Eight types of National Treasury Disbursements and two types of Special Local Grants are exhibited in descending order of amounts in the table. It tells us how much the intergovernmental transfers were and what types of policy measures were undertaken by the local governments.

Table 1: Intergovernmental Transfers for COVID-19 Measures in Supplemented FY2020 Budgets

	1	2	3	4	5	6
Name of the transfers from the central government	Financial Assistance for Special Lump-sum Benefit	COVID-19 Temporary Grant for Regional Revitalization	COVID-19 Emergency Comprehensive Support Grant	Grant for Special Loans as Emergency Small-amount Funds for Individuals	Subsidies for Expenses of Vaccination for the Novel Coronavirus	Subsidies for Improvement of Vaccination System for the Novel Coronavirus
Jurisdiction in the central government	Ministry of Internal Affairs and Communications	Cabinet Office and Ministry of Internal Affairs and Communications	Ministry of Health, Labour and Welfare	Ministry of Health, Labour and Welfare	Ministry of Health, Labour and Welfare	Ministry of Health, Labour and Welfare
Classification as revenues of the local governments	National Treasury Disbursements	National Treasury Disbursements	National Treasury Disbursements	National Treasury Disbursements	National Treasury Disbursements	National Treasury Disbursements
Purposes of the transfers from the central government	To pay special lump-sum benefit of 100,000 yen per inhabitant and to secure operating expenses	Supporting regional economy and lives of residents as well as preventing the spread of the disease	To prevent the spread of the infection and to build medical treatment structures	Payment of benefits to people facing difficulties due to the decline in income	To secure direct expenses for vaccination other than purchase of vaccine for the Novel Coronavirus	To subsidy expenses for improvement of vaccination system for the Novel Coronavirus
Types of the local governments as recipients	All municipalities	All prefectures and municipalities who formulate action plans for COVID-19 measures	All prefectures	All prefectures	All prefectures and municipalities with health centers testing infections	All prefectures and municipalities with health centers testing infections
Amounts allocated in the supplementary budgets of the central government	12 trillion and 880.3 billion yen	7 trillion and 879.1 billion yen	4 trillion and 604 billion yen	1 trillion and 510.5 billion yen	431.9 billion yen	346.7 billion yen

	7	8	9	10	—
Name of the transfers from the central government	Novel Coronavirus Infectious Diseases Safety Net Enhancement Grant	Grant for Temporary Special Benefits for Single-parent households with children	Special Local Grants for Compensation for Decreased Car Tax Revenue	Special Local Grants for Compensation for Decreased Light vehicle Tax Revenue	(Maintaining the initial budget amount of Local Allocation Tax)
Jurisdiction in the central government	Ministry of Health, Labour and Welfare	Cabinet Office and Ministry of Health, Labour and Welfare	Ministry of Internal Affairs and Communications	Ministry of Internal Affairs and Communications	Ministry of Internal Affairs and Communications
Classification as revenues of the local governments	National Treasury Disbursements	National Treasury Disbursements	National Treasury Disbursements	Special Local Grants	Local Allocation Tax
Purposes of the transfers from the central government	To subsidy payment of special benefits for low-income two-parent households with children	To subsidy payment of temporary special benefits for single-parent households with children	Compensation for decreased car tax revenues	Compensation for decreased light vehicle tax revenues	To secure adequate levels of General Revenue Resources
Types of the local governments as recipients	All municipalities	All prefectures and municipalities with welfare offices responsible for social welfare	All prefectures and municipalities	All prefectures and municipalities	All prefectures and municipalities whose standard tax revenues are less than standard fiscal expenditures
Amounts allocated in the supplementary budgets of the central government	232.5 billion yen	210.5 billion yen	22.6 billion yen	2.3 billion yen	2 trillion and 633.9 billion yen*

*: Though total amount to local governments was unchanged from the initial budget level, additional revenues had to be allocated by the central government owing to expected decline in National Tax revenues.

As mentioned before, Japan's National Treasury Disbursements are classified into categorical matching grants earmarked for specific purposes, and subsidy rates to the original prices of the specific goods faced by the local governments are less than 100 percent in general. But the subsidy rate applied to the National Treasury Disbursements coping with COVID-19 other than "COVID-19 Temporary Grant for Regional Revitalization" was 100 percent and all eight National Treasury Disbursements had their ceilings.

II-2-1. Financial Assistance for Special Lump-sum Benefit

The National Treasury Disbursements with the largest amount was "Financial Assistance for Special Lump-sum Benefit". This measure was determined as one of the main pillars of measures protecting employment and keeping business viable in the "Emergency Economic Measures to Cope with the Novel Coronavirus (COVID-19)". The central government decided that the amount of the benefit would be 100,000 yen per person to all inhabitants in Japan including people who were not facing difficulties in living, and payment was entrusted to the municipalities. Then, 100 percent of the amounts of the benefits and their operating expenses were to be transferred to the municipalities by the central government.

The amount of the "Financial Assistance for Special Lump-sum Benefit" of each municipality was recorded in its settlement statistics. The total transferred amount, which was to be consistent with the aggregated amount of "Financial Assistance for Special Lump-sum Benefit" of all municipalities, was recorded also in the settlement statistics of the central government.

12 trillion and 880.3 billion yen transferred by the central government consisted of payment of benefits and operating expenses. The amount of the former was 12 trillion and 734.4 billion yen and the amount of the latter was 145.9 billion yen. As the population in Japan in April 2020 was 126 million, the assumed operating expense per person can be estimated to

be 1,158 yen.

A municipality just mediates between a household as a final recipient of the benefit and the central government as the ultimate bearer of the cost. It is understood that the amount of the National Treasury Disbursements benefits, the payment to inhabitants and the operating expenses seemed almost exogenously determined from a viewpoint of each municipality. In other words, the effect of this COVID-19 measure to the overall balance of revenues and expenditures in the General Account of each municipality was thought to be neutral.

II-2-2. COVID-19 Temporary Grant for Regional Revitalization

The National Treasury Disbursements with the second largest amount was “COVID-19 Temporary Grant for Regional Revitalization”. This measure was introduced by the “Emergency Economic Measures to Cope with the Novel Coronavirus (COVID-19)” and fulfilled by the “Comprehensive Economic Measures to Secure People’s Lives and Livelihoods toward Relief and Hope”. The purposes of this Grant were urging the local governments to take necessary measures so as to support the regional economy and lives of residents as well as to prevent the spread of the infection, aiming for the revitalization of local area. All prefectures and municipalities were eligible for “COVID-19 Temporary Grant for Regional Revitalization” just if they formulated action plans for COVID-19 measures.

The total sum of the Grants in the supplementary budgets for FY2020 amounted to 7 trillion and 879.1 billion yen. The unused amount by the central government was to be carried forward to the budget in the coming fiscal years.

It could finance both expenditures for independent activities originally formulated in no-specified fields and for co-operative activities with the central government in the specified fields, and could be spent to all investment expenses, consumption expenses and transfers to private sectors. It functioned like one of the “General Revenue Resources[1]”, as it could be appropriated to expenditures not fully subsidized. In other words, the “COVID-19 Temporary Grant for Regional Revitalization” was considered a function as both categorical matching and non-matching grants.

Determination of the maximum amount granted to a local government was based on the number of inhabitants and offices, compositions of infants and the elderly, dependency on Local Allocation Tax and the state of COVID-19 infections.

II-2-3. COVID-19 Emergency Comprehensive Support Grant

The National Treasury Disbursements with the third largest amount was “COVID-19 Emergency Comprehensive Support Grant”. This measure was introduced by the “Emergency Economic Measures to Cope with the Novel Coronavirus (COVID-19)”. The purposes of the Grant were for all prefectures to prevent the spread of the infection and to build medical

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[1] Revenues of the local governments are classified into “General Revenue Resources” and “Specified Revenue Resources”. While no restrictions are imposed on the use of the former, use of the latter is restricted to specified fields. While Local Tax, Local Allocation Tax and Local Transfer Tax are classified as General Revenue Resources, National Treasury Disbursements and Local Bonds are classified as Specified Revenue Resources.

treatment structures. It was expected to be spent to ensure proper setup of medical institutions in prefectures (beds, ventilators, oxygenators, medical workers) and making available medical treatment facilities other than medical institutions for people with mild symptoms.

The total sum of this Grant in the supplementary budgets for FY2020 was 4 trillion and 640 billion yen.

II-2-4. Grants for People Facing Difficulties in Their Lives Due to Decreased Income

The purpose of the “Grant for Special Loans as Emergency Small-amount Funds for Individuals” is to urge prefectures to support people facing difficulties in their lives due to decreased income.

For those people, “Grant for Special Loans as Emergency Small-amount Funds for Individuals” are formally financing instruments, but are virtually the closest to grants or benefits. The special loan is one of the financing instruments with repayment-free provisions introduced to existing “Livelihood Welfare Loan Systems”. Low-income individuals as borrowers or heads of households who bear no income tax or no inhabitant tax do not have to repay. Generally speaking, individuals who earn income enough to impose income tax or inhabitant tax cannot be called facing difficulties in their lives due to low-income. An individual who borrows this loan almost automatically satisfies repayment-free provisions.

Prefectures were entrusted by the central government to diffuse this measure. That is why intergovernmental transfers were necessary to be fully-subsidized Grants. The amount transferred in the supplementary budgets of the central government for FY2020 was 1 trillion and 510.5 billion yen.

Pure financing instruments supplied by the local government, especially by prefectures were “Financing System Loans” coordinated by banking facilities, credit guarantee associations and local governments. They were not exhibited in Table 1, because their financing principals were not transferred. In addition, they were existing instruments.

The purpose of the “Financing System Loans” as financial measures was to urge private banking facilities expand interest-free loans without collateral. The local governments lend private banking facilities principal with no interest at the beginning of the fiscal year, and they are repaid at the end of the fiscal year. As private banking facilities lend to individuals and small- and medium-sized enterprises[2], they are regarded as subsidized as much as interest abandoned by the local governments.

II-2-5. Two Types of Subsidies Related to Vaccination for the Novel Coronavirus

While the purchase of vaccines and consignment of distribution to wholesalers were carried out by the central government, coordination with the wholesalers was handled by prefectures. Municipalities with health centers testing infections were responsible for vaccination. If a municipality has no health center, the prefecture who covers its area is responsible. There are 1,741 municipalities in Japan, but only 110 cities have health centers testing in-

[2] Hereinafter expressed as “SMEs”.

fections.

The amount of “Subsidies for Expenses of Vaccination for the Novel Coronavirus” per municipality was to be determined based on the unit cost per vaccination, the number of vaccinations per person, the unit cost of preliminary examinations, and the number of preliminary examinations. 431.9 billion yen was allocated in the national supplementary budget for FY2020. As the scheduled start date of vaccination for ordinary inhabitants was February 17, 2021, and most of the “Subsidies for Expenses of Vaccination for the Novel Coronavirus” was carried over to the next fiscal year.

“Subsidies for Improvement of Vaccination System for the Novel Coronavirus” was to cover the cost of encouraging residents to be vaccinated, mailing and individual notification of vaccination tickets, the cost of securing a group vaccination venue and labor costs of the doctors, nurses and other staff.

The lesser of the standardized amount per each expense category specified by the Ministry of Health, Labour and Welfare and the actual expenditure was to be fully subsidized. 346.7 billion yen was allocated in the national supplementary budget for FY2020. It may have to be noted that the standardized cost for each category was not published.

As the division of roles for COVID-19 vaccinations inside the governments was decided by the central government and unit costs possibly varied among regions, the Ministry of Health, Labour and Welfare might account the applied unit price by a local government as the standard unit price. It may and may not be true. We cannot judge whether or not there would be some differences between the amount transferred by the central government and the actual costs of vaccination, mailing, securing vaccination venue and labor costs of staff.

As for FY2020, the effect on the overall balance of the General Account of each local government is thought to be small, even if there were some differences. Because only a small number of residents were able to get vaccinated by the end of March 2021.

II-2-6. Two Types of Grants for People Facing Difficulties in Their Lives Due to Decreased Income

“Novel Coronavirus Infectious Diseases Safety Net Enhancement Grant” and “Grant for Temporary Special Benefits for Single-parent Households with Children” had the same purpose, to support households facing difficulties in their lives due to decreased income. The target for the former to be subsidized special benefits were low-income two-parent households with children, and the target for the latter was low-income single-parent households with children. The amount of benefit brought by either type of these Grants was 50 thousand yen per child.

While the total sum of the “Novel Coronavirus Infectious Diseases Safety Net Enhancement Grant” in the supplementary budgets of the central government was 232.5 billion yen, the total sum of the “Grant for Temporary Special Benefits for Single-parent Households with Children” was 210.5 billion yen.

The characteristics of these two types of Grants were similar to the “Financial Assistance for Special Lump-sum Benefit”. As the local governments just mediate between a household as a final recipient of the benefits and the central government as the ultimate bearer of the costs, the effect by these Grants to the overall balance of revenues and expenditures in the General Account of each municipality can be thought to be neutral.

II-2-7. Two Types of Special Local Grants for Compensation for Decreased Tax Revenues

The Government of Japan decided to extend temporary mitigations to the Car Tax and Light Vehicle Tax in FY2020 as a part of COVID-19 measures, so that demand for cars by households and SMEs would not decline. As the mitigations meant a decrease in local tax revenues, Special Local Grants were introduced to cancel the effects completely. These grants were positioned as General Revenue Resources and the total effect was neutral for the overall General Account balance of each local government.

The total sum of additional "Special Local Grants for Compensation for Decreased Car Tax Revenue" was just 22.6 billion yen, relatively small compared with the eight types of National Treasury Disbursements. The "Special Local Grants for Compensation for Decreased Light Vehicle Tax Revenue" was 2.3 billion yen, which was much smaller.

II-2-8. Maintaining the Initial Budget Amount of Local Allocation Tax

Local Allocation Tax is regarded as one of the most important intergovernmental transfers. It is granted by the central government to approximately 95 percent of the local governments. The smaller the amount of local tax revenues compared with the standardized amounts of expenditures expected by the central government, the larger the amount of Local Allocation Tax, according to rules of calculation applied to each local government. At the same time, no restrictions are imposed on its use.

As explained at the top of this paper, the total amount of Local Allocation Tax is determined by the "Local Finance Plan" in January or February prior to the beginning of the fiscal year from April to March. The main portion of the amount is based on revenues of five kinds of National Tax strictly defined by the "Local Allocation Tax Law".

If the amount of National Tax revenues in the supplementary national budget differs from the assumed amount in the "Local Finance Plan", the total amount of Local Allocation Tax must be modified. Also, the amounts of Local Allocation Tax for individual local governments are to be modified if the actual amounts of local tax revenues are proved to deviate owing to changes in circumstances within the fiscal year from the assumed amount when calculating Local Allocation Tax.

In fact, the third supplementary budget of the central government reduced the amount of National Tax revenues, and the amount of the main portion of Local Allocation Tax decreased. At the same time, the central government made additions equal to the decreased amount to other portions of Local Allocation Tax than the main portion. That is why the final amount of Local Allocation Tax to be transferred to local governments was unchanged from the initial budget amount.

Though little attention was paid to maintaining the initial amount, it was certainly one of the COVID-19 measures. Additional revenues equivalent to 2 trillion and 633.9 billion yen were financed by additional issuance of National Deficit Bonds. As for total effects to local governments, a decrease in the amount of the main portion and increase in the other portion of Local Allocation Tax were perfectly cancelled out. Still, it contributed to an almost unchanged total sum of General Resource Revenues, because the amount of Local Allocation Tax in FY2020 was larger than the amount in the previous fiscal year by 249.7 billion yen.

II-3. Summary of Effects to General Account Balance

Potential effects of eight types of National Treasury Disbursements and two types of Special Local Grants in the national supplementary budgets in FY2020 to local public finance are summarized as follows.

The total sum of eight types of National Treasury Disbursements was 28 trillion and 95.5 billion yen. The sub-total excluding the top three items was 2 trillion and 732.1 billion yen. All of those National Treasury Disbursements must have increased the net revenues of local governments overall.

In contrast, two types of Special Local Grants accompanied by decreases in Car Tax and Light Vehicle Tax must have been neutral to the net revenues.

Seven types of National Treasury Disbursements other than “COVID-19 Temporary Grant for Regional Revitalization” might have been neutral or took little effect to the General Account balance, as most of them were to be accompanied by almost the same amount of expenditures.

But “COVID-19 Temporary Grant for Regional Revitalization” is thought to be non-neutral to the balance.

III. Features in FY2020 Settlement of Aggregated Local Governments

III-1. Settlement Statistics for Prefectures and Municipalities

In this section, we describe main features of results in FY2020 settlement on General Accounts[3] based on aggregated data for all local governments in order to recognize the general tendency of individual prefectures and municipalities. There would be answers regarding how much the increases in the revenues and expenditures of local governments were.

Regardless of the abundance of items and details in settlement statistics for each local government, we can find the words “Novel Coronavirus (COVID-19)” or “Special Lump-sum Benefit” only on four revenue items regarding National Treasury Disbursements. We cannot find these words on any expenditure items. Table 2 exhibits aggregated amounts of these items.

[3] Strictly speaking, it should be expressed as “Ordinary Account”, an adjusted and unified concept of the General Account whose coverage is allowed to vary among local governments.

Table 2: National Treasury Disbursements Coping with COVID-19 in FY2020 Settlement

	Settlement for Local Governments			Central Government	
	Prefectures	Municipalities	Total	Budget	Settlement
Financial Assistance for Special Lump-sum Benefit	0.0	12,756.0	12,756.0	12,880.3	12,772.4
COVID-19 Temporary Grant for Regional Revitalization	1,835.9	1,421.6	3,257.5	7,879.1	2,614.5
COVID-19 Emergency Comprehensive Support Grant	3,021.1	0.0	3,021.1	4,604.0	3,056.5
Other National Treasury Disbursements coping with COVID-19	1,253.8	569.0	1,822.8	not available	not available
Total	6,110.8	14,746.6	20,857.4	not available	not available

Note 1. Unit: billion yen
2. Settlement statistics for local governments have no explanation on “Other National Treasury Disbursements” coping with COVID-19.
Source: Ministry of Finance, *General Account Budget, Settlement on General Account*
Ministry of Internal Affairs and Communications, *Survey on Local Fiscal Situation*

The financial statement of the settlement of the central government explains that the difference between the amount of the budget and the settlement means an unpaid amount which can be carried forward to revenues of the next fiscal year. On a settlement basis, the amounts received by the local governments are thought to be equal to the amounts paid by the central government. But they do not actually match. The difference is relatively large in the “COVID-19 Temporary Grant for Regional Revitalization”. As this Grant requires the local governments to formulate action plans for COVID-19 measures and the amounts received without corresponding action plans must be paid back to the central government, the difference may suggest the amount to be paid back.

III-2. Overview of Revenues

III-2-1. Specified Revenue Resources

Net total revenues of all local governments for FY2020 were 130 trillion and 47.2 billion yen, up 26 trillion and 801.4 billion yen from the previous fiscal year. Total revenues of prefectures were 61 trillion and 894.1 billion yen, with an increase of 10 trillion and 980.1 billion yen. Total revenues of municipalities were 78 trillion and 34.1 billion yen, with an increase of 16 trillion and 629 billion yen.

The increase in revenues originated from “Specified Revenue Resources”, especially from National Treasury Disbursements and "Repayment Income of Principal and Interest".

Total National Treasury Disbursements of prefectures were 12 trillion and 349.3 billion yen, with an increase of 6 trillion and 424.1 billion yen. 95.1 percent of this increase corresponds to the amount of 6 trillion and 110.8 billion yen exhibited in Table 2.

Similarly, total National Treasury Disbursements of municipalities were 25 trillion and 53.1 billion yen, with an increase of 15 trillion and 229.3 billion yen. 96.8 percent of the increase corresponds to the amount of 14 trillion and 746.6 billion yen exhibited in Table 2.

These facts show that an increase in total revenues was mainly brought by the National Treasury Disbursements as COVID-19 measures.

The remaining part of the increase in total revenues is explained by Repayment Income of Principal and Interest. Total Repayment Income of Principal and Interest of prefectures were 6 trillion and 251.5 billion yen, with an increase of 4 trillion and 556 billion yen. Total Repayment Income of Principal and Interest of municipalities were 1 trillion and 659.7 billion yen, with an increase of 1 trillion and 399.7 billion yen.

The surge in Repayment Income of Principal and Interest is consistent with an increase in "Financing System Loans" as financial measures to urge private banking facilities to expand interest-free loans without collateral. As explained before, the local governments lend private financial institutions at the beginning of the fiscal year and receive repayment at the end of the fiscal year. If a borrower hopes for a loan period over a year, the one-year loan must be rolled over. Receipt of repayment from borrowers by local governments corresponds to Repayment Income of Principal and Interest in the settlement statistics.

III-2-2. General Revenue Resources

General Revenue Resources of all local governments for FY2020 were almost the same as the amount in the previous fiscal year, even though economic activities sharply declined under the downward pressure caused by COVID-19.

Total revenues of Local Tax were 40 trillion and 825.6 billion yen, with a decrease of 385.8 billion yen. One reason why a decrease in the sum of Local Tax revenues was slight is that the rising Local Consumption Tax rate to 2.2 percent effective from October 1 of 2019 increased its tax revenues in FY2020 on a year-on-year basis. The other reason is that the earlier recovery from the downward pressure caused by COVID-19 in the manufacturing sector than what was expected contributed to the support of revenues of Corporate Inhabitant Taxes and Corporate Business Tax.

The decrease was partially cancelled out by the increase in Local Allocation Tax of 249.7 billion yen, as mentioned before. As a result of maintaining the initial budget amount of the central government, the total amount of Local Allocation Tax for all local governments was 16 trillion and 989 billion yen.

III-3. Overview of Expenditures

All of the expenditures in settlement statistics for the local governments can be classified according to the concept of “Expenditures by Type” which focus on the economic nature of expenses. Classified expenditures consist of “Mandatory Expenses”, “Investment Expenses” and “Other Expenses”. Mandatory Expenses contain “Personnel Expenses”, “Debt Service” and “Social Assistance Expenses” including benefits based on the social security system and provided voluntarily by the local governments. Investment Expenses are expenditures for the development of social infrastructure such as ordinary construction work expenses and recovery work expenses from disaster. The main components of Other Expenses are “Goods Expenses” as consumption expenditure, “Funding to Reserves”, “Lending” and “Subsidies” including transfers to other governments, public corporations and the private sector.

Net total expenditures of all local governments for FY2020 were 125 trillion and 458.8 billion yen, up 25 trillion and 756.7 billion yen from the previous fiscal year. Total expenditures of prefectures were 59 trillion and 706.3 billion yen, with an increase of 10 trillion and 367.3 billion yen. Total expenditures of municipalities were 75 trillion and 633.5 billion yen, with an increase of 16 trillion and 197.2 billion yen. These figures and tendencies are very similar to those in revenues.

An increase in total expenditures was mainly due to a surge in Subsidies, while the contribution rate to growth rate of total expenditures from the previous fiscal year was 58 percent for prefectures and 86 percent for municipalities. The remaining increase other than Subsidies can be explained by the surge in Lending. The contribution rate of Lending to growth rate of total expenditures other than Subsidies is 90 percent for prefectures, and that for municipalities is 28 percent. Providing “Financing System Loans” by local governments at the beginning of the fiscal year corresponds to Lending in the settlement statistics.

While the total amount of Subsidies by prefecture was 19 trillion and 465.9 billion yen with an increase of 5 trillion and 993.2 billion yen, that by municipalities was 18 trillion and 384.1 billion yen with an increase of 13 trillion and 969.2 billion yen. A much larger amount of increase in municipalities was mainly due to the “Special Lump-sum Benefit” for payment of 100,000 yen per inhabitant which was fully subsidized to municipalities by the central government.

III-4. Overview of General Account Balance

Most of the increase in both revenues and expenditures was related to COVID-19 measures such as the transfer benefits to individuals and “Financing System Loans”. Then, were these factors explained above truly neutral to the General Account balance? What balances should be focused on to judge the fiscal state in a single year?

The answers are as follows.

III-4-1. Balance as an Indicator to Judge Fiscal State in a Single Fiscal Year

The “Real Balance” or “Real Deficit” as a reversal indicator of Real Balance when Real Balance is negative are being paid much attention, because these indicators summarize the present state of fiscal conditions and show early signs of fiscal crisis of a local government.

Real Balance is defined as the Balance, the difference between revenues and expenditures, minus the amount to be spent for exceptional usage in the next fiscal year. The "Real Balance Ratio" is defined as a percentage of the Real Balance to the "Standard Fiscal Scale", which is a sum of the "Standard Tax Revenue" which means ordinary local tax revenue due to standard tax rates mandated by "Local Tax Law", Local Allocation Tax and the issuable amount of "Bonds for Extraordinary Fiscal Measures[4]". Thus, the Standard Fiscal Scale is almost the same amount of General Resources Revenues, and the Real Balance Ratio is the standardized value of Real Balance comparable among different sizes of local governments.

As surplus and deficit in the General Account can be carried forward to the coming fiscal years infinitely, Real Balance and Real Balance Ratio are stock-basis-indicators. Therefore, "Single Fiscal Year Balance" or "Real Single Fiscal Year Balance" as pure flow-basis-indicators on settlement statistics are to be calculated to judge the fiscal state in a single year. Single Fiscal Year Balance is defined as a change in the amount of Real Balance from the previous fiscal year. Real Single Fiscal Year Balance is defined as a Single Fiscal Year Balance plus "Net Increase in the Fiscal Stability Funds" plus "Advanced Redemption".

"Single Fiscal Year Balance Ratio" and "Real Single Fiscal Year Balance Ratio" are defined as percentages of the Single Fiscal Year Balance and Real Single Fiscal Year Balance to the Standard Fiscal Scale .

The Real Single Fiscal Year Balance Ratio as well as the Real Balance Ratio were introduced by the Ministry of Home Affairs[5] 50 years ago when a local bond with lump-sum redemption of principal at maturity had not been issued. Also, a fund only to prepare for future redemption had not been introduced. In other words, only "Advanced Redemption" and "Net increase in the Fiscal Stability Funds" were effective methods to accelerate the reduction of net liabilities of local governments. Namely, the concept of Real Single Fiscal Year Balance had rationality 50 years ago. Even if Advanced Redemption is effective in reducing net liabilities, why Advanced Redemption is to be excluded from calculation of balance and normal redemption is to be reflected in the balance is not clear.

Today some local governments issue local bonds with lump-sum redemption of principal at maturity. They accumulate the dedicated funds to secure redemption at maturity. Accumulation in the funds is regarded as a more effective method to decrease net liabilities than Advanced Redemption which requires approval of investors to Local Bonds. There seems little rationality in adding only Advanced Redemption but not accumulation in the funds when calculating the Real Single Fiscal Year Balance.

In this paper, we introduce "Modified Real Single Fiscal Year Balance" defined as the published Real Single Fiscal Year Balance minus Advanced Redemption. From an analytical point of view, Modified Real Single Fiscal Year Balance is a very useful indicator, as it can be decomposed to Single Fiscal Year Balance and Net increase in the Fiscal Stability Funds.

[4] "Bond for Extraordinary Financial Measures" is a kind of deficit-financing local bond whose issuable amount is exogenously determined by the central government. When National Tax revenues are not enough to finance the Local Allocation Tax, it is virtually substitutable by Bonds for Extraordinary Financial Measures.

[5] The previous institution of the Ministry of Internal Affairs and Communications.

As Single Fiscal Year Balance indicates substantial changes in the cash balance of the General Account. The decomposition tells us a preference to cash and funds of the local governments.

III-4-2. "Modified Real Single Fiscal Year Balance" of Aggregated Prefectures in FY2020

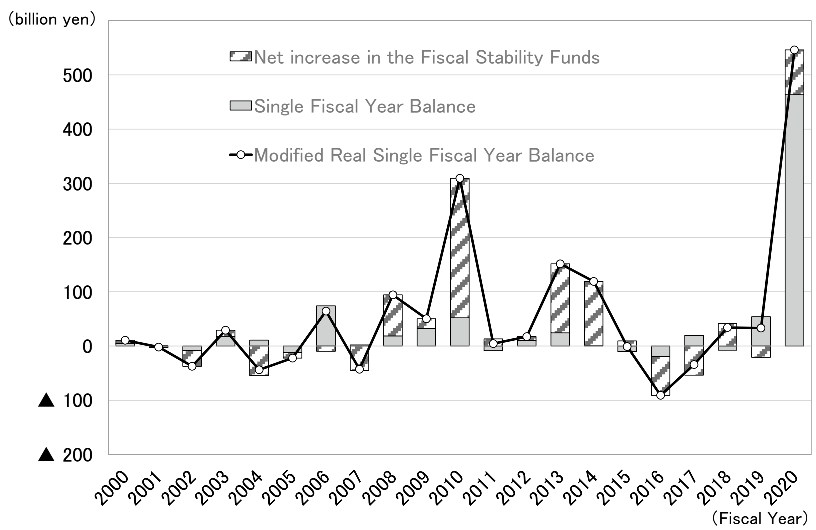
Figure 1 shows a transition in aggregated values of all prefectures excluding Tokyo of Modified Real Single Fiscal Year Balance, Single Fiscal Year Balance and Net increase in the Fiscal Stability Funds. The purpose of excluding Tokyo is to ascertain correctly the trends in these variables, as the size of Tokyo is extremely large enough to surpass tendencies of the other 46 prefectures.

Important facts in the 21 years of FY2000 and after are summarized as follows.

First, in the period till FY2007, all of the Modified Real Single Fiscal Year Balance, Single Fiscal Year Balance and Net increase in the Fiscal Stability Funds were around zero. After that, the amplitude increased. A large surplus of Modified Real Single Fiscal Year Balances were observed in FY2010 and FY2020.

Second, in the period of FY2008 and after, the absolute values of the Modified Real Single Fiscal Year Balance were over 90 billion yen in six fiscal years. In five of those six years, the absolute values of Net Increase in the Fiscal Stability Funds were larger than those of the Single Fiscal Year Balance. This means that large amounts of absolute values of the Modified Real Single Fiscal Year Balance were absorbed mainly by accumulation or withdrawal of Fiscal Stability Funds. One exceptional year was FY2020 when a large surplus in Single Fiscal Year Balance was observed.

Figure 1: Modified Real Single Fiscal Year Balance of 46 Prefectures



Source: Ministry of Internal Affairs and Communications, *Survey on Local Fiscal Situation*

Third, in nine fiscal years, one was positive and the other was negative as decompositions of the Modified Real Single Fiscal Year Balance. As Single Fiscal Year Balance is change in Real Balance, this fact means that Real Balance and Fiscal Stability Funds sometimes changed in the opposite direction of each other. It has to be taken to heart that analysis focusing only on either Real Balance or Fiscal Stability Funds probably misled us.

Fourth, both positive values in FY2020 of the Modified Real Single Fiscal Year Balance and Single Fiscal Year Balance were the largest in the period of 21 years. But if we use aggregated value including Tokyo, the Modified Real Single Fiscal Year Balance was slightly negative in FY2020. Tokyo had a large deficit.

III-4-3. “Modified Real Single Fiscal Year Balance” of Municipalities in FY2020

Figure 2 shows the transition in aggregated values of all municipalities of Modified Real Single Fiscal Year Balance, Single Fiscal Year Balance and Net Increase in the Fiscal Stability Funds.

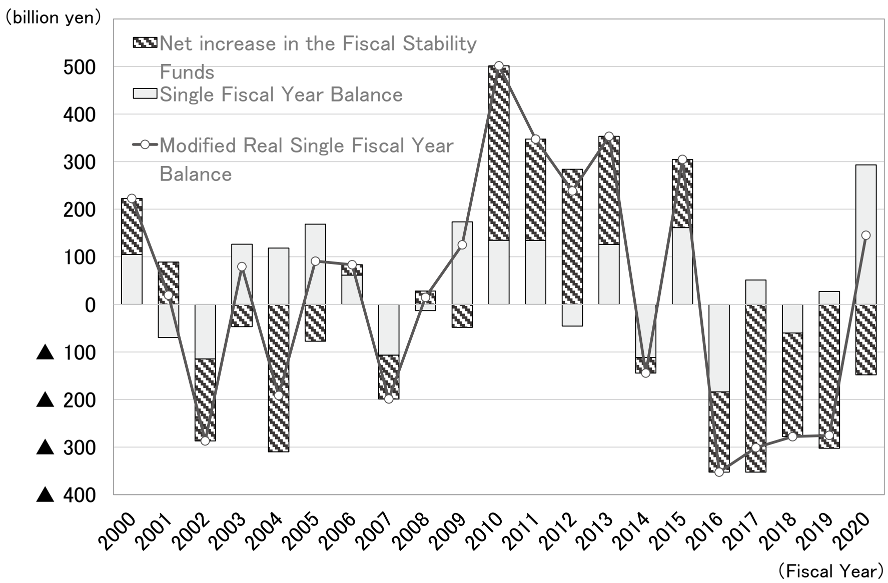
The main features in 21 years are summarized as follows.

First, after FY2007, either positive or negative values of the Modified Real Single Fiscal Year Balance lasted for several years.

Second, with regard to the relation between Single Fiscal Year Balance and Net Increase in the Fiscal Stability Funds, one was positive and the other was negative in 12 fiscal years.

Third, in FY2020, as the absolute value of a positive Single Fiscal Year Balance was larger than the absolute value of a negative Net increase in the Fiscal Stability Funds, surplus in the Modified Real Single Fiscal Year Balance was observed after 4 years. This fact

Figure 2: Modified Real Single Fiscal Year Balance of 46 Prefectures



Source: Ministry of Internal Affairs and Communications, *Survey on Local Fiscal Situation* suggests that cash flows of some individual municipalities were improved regardless of carrying out COVID-19 measures.

IV. Features in FY2020 Settlement of Each Local Government

IV-1. Classification of Local Governments

In this section, we describe features of results in the FY2020 settlement on General Accounts based on data for individual local governments, focusing on decomposition of the Modified Real Single Fiscal Year Balance into Single Fiscal Year Balance and Net Increase in the Fiscal Stability Funds. We are seeking answers regarding whether the FY2020 individual local government's General Account balance improved or worsened during the COVID-19 pandemic.

Local governments in Japan consist of 47 Prefectures and 1,741 Municipalities. Any municipality is located on a prefecture. Municipalities are classified into Cities, Towns, Villages and Tokyo Special Districts. Though the standard population size of a new city is 50 thousand and more, from a viewpoint of urging a merger of municipalities in the periods from July 1999 to March 2005, new cities with populations of 35 thousand and more but less than 50 thousand were allowed to be established by the central government. Some cities have actual populations of less than 50 thousand owing to a decrease in inhabitants. The standard population size of a town is 8 thousand and more and that of a village is less than 8 thousand.

As shown later, we divide municipalities into two groups, Group 1 and Group 2, for analytical purposes. Group 1 consists of municipalities who received Local Allocation Taxes from the central government. Group 2 consists of municipalities who did not.

The importance of Fiscal Stability Funds to secure stable revenues for Group 2 is extremely larger than that of Group 1, because Local Allocation Taxes automatically ease cyclical fluctuations in Local Tax revenues caused by changes in the economic growth rate. This nature is due to the calculation formula of Local Allocation Tax for each individual local government.

The "Standard Fiscal Expenditures" are calculated as a sum of the multiplication of "Unit Cost", "Measurement Unit" and "Correction Coefficient" in various fields of expenditures. Measurement Unit and Correction Coefficient for individual local governments are different for each[6]. Allocatable amounts as Specified Revenue Resources to each field of expenditures are to be deducted from the Unit Cost which the central government determines according to revenues and expenditures in the Local Finance Plan.

If the amount of Standard Fiscal Expenditures exceeds the amount of "Standard Tax Revenues", the basic amount of Local Allocation Tax must be equal to the difference. The

[6] All of these values are to be renewed every year. The amount of Local Allocation Tax determined in advance by the Local Finance Plan must be reflected in the Unit Costs, in order for the sum of individual Local Allocation Taxes based on the calculating formula here correspond to the amount determined in advance.

amount of Standard Tax Revenues is almost the same as 75 percent of Ordinary Local Tax revenues excluding taxation by excess rate, plus 100 percent of "Local Transfer Tax[7]" revenues. As 75 percent of the amount of changes in Ordinary Local Tax revenues is cancelled out by the amount of changes in Local Allocation Tax, the total amount of Local Tax and Local Allocation Tax is stable for a municipality who belongs to Group 1. This relation is not applicable at all for a municipality who belongs to Group 2. That is the reason why Group 2 municipalities deeply depend on accumulation or decumulation of Fiscal Stability Funds to secure stable revenues.

The number of Group 1 municipalities was 1,642 and the number of Group 2 municipalities was 99 in FY2020. As for prefectures, Tokyo didn't receive Local Allocation Tax from the central government. But, the other 46 prefectures did.

In the later analysis, Group 1 will be divided into five sub-groups according to their population size. We define one of the sub-groups as municipalities with the smallest population of less than 50 thousand and the other sub-groups as municipalities with the largest populations of 500 thousand and more.

IV-2. "Modified Real Single Fiscal Year Balance" of Individual Prefectures in FY2020

As we explained in Section II, most of National Treasury Disbursements might have been neutral or took little effect on the General Account balance, as most of them were to be accompanied by almost the same amounts of expenditures. The "COVID-19 Temporary Grant for Regional Revitalization" is only thought to be non-neutral to the General Account balance. One reason is that this Grant was usable to almost any type of expenditure.

Other National Treasury Disbursements must have been spent in the specified fields entrusted by the central government. But this Grant might have been spent on independent activities as COVID-19 measures originally formulated by each local government. If the total cost of a new independent activity was large, this Grant might not have always been enough finance for the total cost. In that case, usage of the "COVID-19 Temporary Grant for Regional Revitalization" with a COVID-19 measure originally formulated by a local government can be regarded as a negative factor to its General Account Balance.

But if this Grant was spent on the existing field which other revenues had already been allocated, a part of the already allocated amount would have been unspent. It was possible for a local government to formulate original COVID-19 measures which would have overlapped with the existing measures pre-COVID-19. In such a case, the "COVID-19 Temporary Grant for Regional Revitalization" could be regarded as a positive factor to its General Account balance.

Its total effects on the General Account balance cannot be judged other than by settlement results. Therefore, we focus on (A) Modified Real Single Fiscal Year Balance and its

[7] Any Local Transfer Tax has a corresponding National Tax which is revenue by the central government. The revenue is to be fully transferred to the local governments according to particular rules, and the transferred is defined as Local Transfer Tax.

decomposition into (B) Single Fiscal Year Balance and (C) Net Increase in the Fiscal Stability Funds for individual prefectures in FY2020.

Then, according to whether these three indicators of each prefecture are positive or negative in FY2020, we classified 47 prefectures into ten categorized groups. Table 3 indicates the numbers of prefectures in each category.

Table 3: Ten Categorized Prefectures by Positive or Negative Values of Three Indicators

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
	B<0 and C<0	B<0 and C>0		C<0 and B>0		B>0 and C>0	=(a)+(b)+(d)	=(a)+(b)+(c)	=(a)+(d)+(e)	=(c)+(e)+(f)
		A<0	A>0	A<0	A>0		A<0	B<0	C<0	A>0
Number of prefectures	3	1	1	4	10	28	8	5	17	39

Note A: Modified Real Single Fiscal Year Balance, B: Single Fiscal Year Balance, C: Net Increase in the Fiscal Stability Funds

Important facts are as follows.

With regard to Modified Real Single Fiscal Year Balance, while surpluses were observed in 39 prefectures, deficits were observed in 8 prefectures, as numbers were exhibited in the table. The absolute value of the deficit to Standard Fiscal Scale of Tokyo was the highest, at 15.6 percent. The values of the other six prefectures were all under 0.2 percent. Thus, most of the deficits were relatively small and the majority had surpluses. It can be said that the fiscal states measured by the Modified Real Single Fiscal Year Balance were not worse in prefectures except Tokyo.

But all aspects of cash flows cannot be said to have improved much. First, only 28 prefectures had positive values in both of the Single Fiscal Year Balance and Net increase in the Fiscal Stability Funds. Some of them had small ratios, percentages of surplus to Standard Fiscal Scale. Second,17 prefectures decumulated their Fiscal Stability Funds, as exhibited in Table 3.

IV-3. “Modified Real Single Fiscal Year Balance” of Individual Municipalities in FY2020

IV-3-1. Decomposition of “Modified Real Single Fiscal Year Balance”

Here again, we focus on (A) Modified Real Single Fiscal Year Balance and its decomposition into (B) Single Fiscal Year Balance and (C) Net Increase in the Fiscal Stability Funds for individual municipalities in FY2020.

Table 4 indicates the numbers of municipalities in ten categorized groups according to whether these three indicators are positive or negative. Total municipalities were divided into two groups, Group 1 and Group 2. Group 1 is also divided into five sub-groups according to their population size.

Important facts are as follows.

Table 4: Ten Categorized Municipalities by Positive or Negative Values of Three Indicators

Groups		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Sub-groups by population size	Total	B<0 and C<0	B<0 and C>0		C<0 and B>0		B>0 and C>0	=(a)+(b) +(d)	=(a)+(b) +(c)	=(a)+(d) +(e)	=(c)+(e) +(f)
			A<0	A>0	A<0	A>0		A<0	B<0	C<0	A>0
Group 1	1642	174	134	202	257	197	678	565	510	628	1077
under 50,000	1166	116	111	158	175	119	487	402	385	410	764
up to 100,000	236	31	11	22	36	37	99	78	64	104	158
up to 300,000	173	19	10	15	34	33	62	63	44	86	110
up to 500,000	41	3	1	3	9	6	19	13	7	18	28
500,000 and more	26	5	1	4	3	2	11	9	10	10	17
Group 2	99	11	2	15	20	11	40	33	28	42	66

Note 1. A is Modified Real Single Fiscal Year Balance, B is Single Fiscal Year Balance and C is Net Increase in the Fiscal Stability Funds.

2. Group 1 consists of municipalities which received Local Allocation Taxes from the central government. Group 2 consists of municipalities which received no Local Allocation Taxes.

First, the number of municipalities with surpluses in the Modified Real Single Fiscal Year Balance in Group 1 was 1,077, equivalent to 65.6 percent of municipalities which received Local Allocation Taxes. The number of municipalities with surpluses observed in Group 2 which received no Local Allocation Taxes was 66, and its percentage was 66.7 percent.

Second, the number of municipalities with positive values of both the Single Fiscal Year Balance and Net increase in the Fiscal Stability Funds in Group 1 was 678, equivalent to 41.3 percent of municipalities which received Local Allocation Taxes. This percentage is lower than the ratio observed in prefectures which received Local Allocation Taxes. The number of municipalities with both positive values observed in Group 2 was 40 and its percentage was 40.4 percent.

Third, the number of municipalities indicating different signs of positive or negative in the Single Fiscal Year Balance and Net Increase in the Fiscal Stability Funds in Group 1 was 790, equivalent to 48.1 percent. The number of municipalities satisfied with these conditions in Group 2 and its percentages were 48 and 48.5 percent, respectively. It is clear that we have to refrain from focusing only on either the Single Fiscal Year Balance or Net Increase in the Fiscal Stability Funds in order to avoid being misled, if we want to recognize the fiscal state of the local governments correctly.

It is surprising that those percentages mentioned above are not so different between Group 1 and Group 2, because the importance of Fiscal Stability Funds in each group to secure stable revenues seems quite different.

IV-3-2. Details in “Modified Real Single Fiscal Year Balance” by Population Size

Table 5 exhibits Descriptive statistics of the Modified Real Single Fiscal Year Balance as a percentage to the Standard Fiscal Scale among sub-groups of municipalities classified by population size.

Table 5: Descriptive Statistics of Modified Real Single Fiscal Year Balance (as Percentage to Standard Fiscal Scale)

Groups / Sub-groups by population size	Number of observed municipalities	Percentage to Standard Fiscal Scale				Municipalities with deficits	
		Average (%)	Maximum (%)	Minimum (%)	Standard Deviation (%)	Number of municipalities	Percentage to total number(%)
Group 1	1,642	1.0	56.6	−92.5	6.0	565	34.4
under 50,000	1,166	1.0	56.6	−92.5	6.9	402	34.5
up to 100,000	236	1.1	17.9	−23.1	3.6	78	33.1
up to 300,000	173	0.7	7.5	−10.2	2.3	63	36.4
up to 500,000	41	1.2	5.7	−3.4	2.0	13	31.7
500,000 and more	26	0.6	4.3	−2.7	1.4	9	34.6
Group 2	99	0.8	25.6	−28.8	6.5	33	33.3

Note: Group 1 consists of municipalities which received Local Allocation Taxes from the central government.
Group 2 consists of municipalities which received no Local Allocation Taxes.

The main features are as follows.

First, the fact that both of averages in Group 1 and Group 2 are around 1.0 percent in Table 5 is consistent with the fact that more than a half of municipalities both in Group 1 and Group 2 have surpluses as Table 4 shows.

Second, averages in all of the sub-groups are above 0.7 percent and below 1.3 percent. Percentages of municipalities with deficits are almost the same, one-third. It is about two times higher than the percentage observed in all prefectures, 17 percent. For FY2019, the percentage of municipalities with deficits in Group 1 was 62.2 percent and the percentage in Group 2 was 68.7 percent.

Third, the absolute values of the maximum and the minimum of percentages to Standard Fiscal Scale are large in small-sized sum-groups, as far as Group 1 is concerned. But the larger the population size is, the smaller the absolute values of the maximum and the minimum are. Owing to non-competitiveness as a nature of public goods, local governments sometimes spend huge amounts of infrastructure investment regardless of their population sizes. The larger the population size becomes, the smaller the relative effect of special factors such as these expenditures and unspent amounts on General Account balances gets.

It can be said that a majority of municipalities seem to have improved their Modified Real Single Fiscal Year Balance in FY2020. At the same time, it should be additionally said that surpluses were not so large even if municipalities had positive balances.

IV-3-3. Details in Single Fiscal Year Balance by Population Size

Table 6 exhibits Descriptive statistics of Single Fiscal Year Balance as a percentage to Standard Fiscal Scale among sub-groups of municipalities classified by population size.

The main features are as follows.

First, the table shows averages in all of the sub-groups in Group 1 are 1 above 0.4 percent and below 1.2 percent. A sub-group with the largest population size has the lowest average of 0.4 percent among five sub-groups. The average in Group 2 was 1.1 percent.

Second, percentages of municipalities with deficits to total vary among sub-groups. As

Table 6: Descriptive Statistics of Single Fiscal Year Balance (as Percentage to Standard Fiscal Scale)

Groups / Sub-groups by population size	Number of observed municipalities	Percentage to Standard Fiscal Scale				Municipalities with deficits	
		Average (%)	Maximum (%)	Minimum (%)	Standard Deviation (%)	Number of municipalities	Percentage to total number(%)
Group 1	1,642	0.8	24.1	−56.9	3.5	510	31.1
under 50,000	1,166	0.8	24.1	−56.9	4.0	385	33.0
up to 100,000	236	1.1	6.8	−6.6	2.1	64	27.1
up to 300,000	173	1.0	7.1	−2.9	1.6	44	25.4
up to 500,000	41	1.0	6.1	−3.3	1.6	7	17.1
500,000 and more	26	0.4	4.1	−0.9	1.0	10	38.5
Group 2	99	1.1	6.9	−4.2	2.1	28	28.3

Note: Group 1 consists of municipalities which received Local Allocation Taxes from the central government.
Group 2 consists of municipalities which received no Local Allocation Taxes.

exhibited in Table 6, the lowest is 17.1 percent as the percentage observed in sub-grouped municipalities with a population of 300 thousand and more but less than 500 thousand. It is suggested that this sub-group of municipalities may probably have preference of Single Fiscal Year Balance Surplus to Net Increase in the Fiscal Stability Funds. Because the percentage of municipalities with Modified Real Single Fiscal Year Balance Deficit to total is 31.7 percent as exhibited in Table 5, some of them may have decumulated their Fiscal Stability Funds in order to make the Single Fiscal Year Balance positive. Preferring Single Fiscal Year Balance Surplus is to place great importance on improvement in Real Balance Surplus.

Third, only 11 of all municipalities have a negative Single Fiscal Year Balance whose percentage to Standard Fiscal Scale is less than minus 10 percent. The number of municipalities with negative percentages under minus 10 percent of Modified Real Single Fiscal Year Balance to Standard Fiscal Scale is 36.

These two facts also suggest that some of the municipalities which belong to another sub-group than those mentioned before preferred decumulation of Fiscal Stability Funds. The large absolute value of Single Fiscal Year Balance Deficit may make Real Balance deficit. To avoid such a situation, municipalities will prefer decumulation of Fiscal Stability Funds in order to avoid deterioration of the Single Fiscal Year Balance. Because the Real Deficit Ratio is regarded as the most important indicator under the “Act on Assurance of Sound Fiscal Status of Local Governments”.

IV-3-4. Details in Net Increase in the Fiscal Stability Funds by Population Size

Table 7 exhibits Descriptive statistics of Net Increase in the Fiscal Stability Funds as a percentage to Standard Fiscal Scale among sub-groups of municipalities classified by population size.

The main features are as follows.

First, the average of the percentages of Net Increase in the Fiscal Stability Funds to Standard Fiscal Scale is near zero, at 0.2 percent. While all of the averages of the percentages of Modified Real Single Fiscal Year Balance for Group 2 and all sub-groups in Group 1 exhibited in Table 5 are positive, the averages of the percentages of Net Increase in the Fis-

Table 7: Descriptive Statistics of Net Increase in the Fiscal Stability Funds (as Percentage to Standard Fiscal Scale)

Groups / Sub-groups by population size	Number of observed municipalities	Percentage to Standard Fiscal Scale				Municipalities with negative values	
		Average (%)	Maximum (%)	Minimum (%)	Standard Deviation (%)	Number of municipalities	Percentage to total number(%)
Group 1	1,642	0.2	113.5	−84.0	5.7	628	38.2
under 50,000	1,166	0.3	113.5	−84.0	6.6	410	35.2
up to 100,000	236	−0.0	13.0	−17.6	2.9	104	44.1
up to 300,000	173	−0.3	7.8	−14.0	2.2	56	32.4
up to 500,000	41	0.2	3.9	−3.9	1.5	18	43.9
500,000 and more	26	0.1	2.7	−4.3	1.2	10	38.5
Group 2	99	−0.3	24.0	−29.0	6.3	42	42.4

Note: Group 1 consists of municipalities which received Local Allocation Taxes from the central government.
Group 2 consists of municipalities which received no Local Allocation Taxes.

cal Stability Funds for Group 2 and two sub-groups in Group 1 exhibited in Table 7 are below zero. These facts also prove that some municipalities may have decumulated their Fiscal Stability Funds in order to improve Real Balance.

Second, it almost observed that the larger the population size is, the smaller the absolute values of the maximum, the minimum and the standard deviation of percentages to Standard Fiscal Scale are. These properties are consistent with differences in stabilities of revenues by population size and roles of Fiscal Stability Funds to secure stability.

V. Concluding Remarks

In FY2020 revenues necessary for the local governments to carry out COVID-19 measures were supplied by the central government as intergovernmental transfers, mainly National Treasury Disbursements. All of them were determined as parts of additional expenditures in the supplementary budgets organized three times by the central government.

Most of National Treasury Disbursements might have been neutral or took little effect on General Account balances for the local governments, as most of them were to be accompanied by almost the same amounts of expenditures. Only the “COVID-19 Temporary Grant for Regional Revitalization”, usable to almost any type of expenditure, had a possibility to take non-neutral effects on the General Account balance. It is consistent with the following facts.

The Modified Real Single Fiscal Year Balance was not worse in prefectures except Tokyo. But all aspects of cash flows cannot be said to have improved much. Because not all of them had positive values in both the Single Fiscal Year Balance and Net Increase in the Fiscal Stability Funds, which are a decomposition of the Modified Real Single Fiscal Year Balance.

A majority of municipalities seem to have improved their Modified Real Single Fiscal Year Balance. At the same time, it should be additionally said that surpluses were not so large even if municipalities had positive balances.

It was suggested that some of the municipalities may have probably had preference of Single Fiscal Year Balance Surplus to Net Increase in the Fiscal Stability Funds and that they may have decumulated their Fiscal Stability Funds in order to make Single Fiscal Year Balance positive, in other words, to improve Real Balance.

The impact of the COVID-19 pandemic has lingered on in both FY2021 and FY2022, and there is a need to continue conducting such analyses.

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