Financial Performance Management of Public Service Agency in The Indonesian Health Sector With Covid-19 Pandemi Differentiation

Agus Sunarya Sulaeman¹, Sriyani² and Muhammad Hatta³

{ asunarya@pknstan.ac.id¹, sriyani@pknstan.ac.id², hatta.mh@kemenkeu.go.id³}

Polytechnic of State Finance STAN, Indonesia 1,2, Directorate General of Treasury, Indonesia 3

Abstract. This study aims to determine the effects of Covid-19 on the income and expenditure of Health Public Service Agency in Indonesia. It is to measure whether there were any changes in both income and spending consumption during the Covid-19 pandemic. In this case, they were their incomes and expenditures affecting the performance of the Public Service Agency in health sector during the Covid-19 pandemic. This study used a quantitative approach. The variables that affected Public Service Agency performance (Covid-19 Case, Public Service Agency Revenue, and Public Service Agency Goods Expenditure) only affected 51% of all determining variables. There were still many other variables that affected performance, especially from various service factors. The most important thing is how to optimally manage the determining variables for performance improvement of Covid-19 on the income and expenditure of Health Public Service Agency Units in Indonesia.

Keywords: Public Service Agency, Covid-19, Performance Management.

1 Introduction

The Corona Virus Disease 19, also known as Covid-19 pandemic, has caused the world to experience shocks, leading to many significant changes from health, social, economic aspects to daily routines. In terms of impact transmission, the emergence of the Covid-19 pandemic has brought a direct effect on health aspect, which is closely related to health services provided to the community such as health services in hospitals. During the Covid-19 pandemic, hospitals became the forefront of directly dealing with the Covid-19 pandemic.

The ongoing Covid-19 pandemic has become a major challenge for all healthcare systems in many countries in the world including Indonesia. The consequences of the pandemic have caused not only a large loss of life but also economic, social, political, cultural damage and losses. Variousefforts have been made by countries around the world by adopting various policies and programs tocombat Covid-19, including quarantine, social distancing, lockdowns, school and university closures, and restrictions on air, sea and land travel.

All parties related to the health system in various countries have been trying to prevent, control,

and reduce the mortality rate due to Covid-19. Here, hospitals play an important role in providing health services to Covid-19 patients. However, since many Covid-19 patients need immediate care, some hospitalactivities, other than handling Covid-19, have been suspended. Hospitals have changed some of their treatment and management protocols to deal with the pandemic such as closing outpatient services.

This, as a consequence, has affected the hospital financial system such as reduced income and financial resources. Hospitals need adequate economic funds to ensure continuity of care especially in critical situations such as in dealing with Covid-19 pandemic. Decision and policy makers must pay attention to the financial resources of hospitals to avoid reductions in service provision and quality.

The Covid-19 pandemic has brought a negative impact on the financial performance of hospitals (Y. Cai, et al., 2021; Zeho, Setyowati, and Hermawan, 2020). This has led to the need for government support in the form of fund aid to enable the hospitals to continue to operate (Raghuvanshi and Raghuvanshi, 2020). On the other hand, government support also needs to be balanced by the hospital's internal parties through a good financial management. The financial management quality will ultimately be used as one measure of hospital success.

Covid-19 has had such a huge impact on the world economy and the healthcare financial sector in which many governments have made extensive investments in the healthcare sector to ensure that hospitals do not experience a shortage of funds. Most of the healthcare services and equipment are paid for out of their revenue; therefore, any reduction in revenue impacts the provision of services. Studying the economic impact of Covid-19 can help health policymakers and decision makers to allocate resources and provide the funding they need as well as to come up with plans for revenue cutsif need based on data and evidence.

The Covid-19 pandemic also has a negative impact on the financial performance of hospitals (Y. Cai, et al., 2021; Zeho, Setyowati, and Hermawan, 2020). This has led to the need for support from the government in the form of an injection of funds so that hospitals can continue to operate (Raghuvanshi and Raghuvanshi, 2020). On the other hand, support from the government also needsto be balanced by the hospital's internal parties with good financial management. The quality of financial management will ultimately be used as one measure of hospital success.

Some hospitals in Indonesia are in the form of a health public service agency. Public Service Agency refers to an agency within the government formed to provide services to the public in theform of providing goods and/or services sold without prioritizing profit. The activities of Public Service Agency are conducted based upon the principles of efficiency and productivity. In detail, the phrase without seeking profit here also means that it does not eliminate any obligations to improve its financial performance in order to carry out its activities better. Related to this, this study investigated the financial performance of health Public Service Agency in facing the Covid-19 pandemic.

The most apparently measure of the financial performance of health Public Service Agency is its revenue. The main source of revenue for Public Service Agency comes from the patients it treats. In other words, Health Public Service Agency is highly relying upon the number of patients treated. Figure 1 provides an explanation of the sources of hospital revenue divided into three groups including *outpatient revenue* (outpatient), *inpatient revenue* (inpatient), and

pharmacy income (medicines) (Raghuvanshi and Raghuvanshi, 2020). In practice, these revenue sources continue to experience negative growth due to the Covid-19 pandemic, especially those from the outpatient group (KaufmannHall, 2021; Y. Cai,et al., 2021; Alan D. Kaye, et al., 2021).

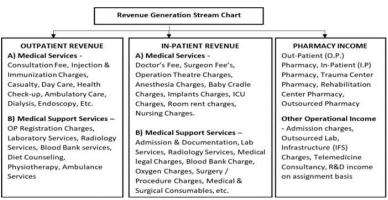


Figure 1. Sources of Hospital Revenue

The Covid-19 pandemic disrupted the health services of hospitals, especially for the outpatients. The number of outpatients decreased specifically due to activity restrictions and internal factors of the patients (Y. Cai, et al., 2021; Raghuvanshi and Raghuvanshi, 2020). In addition, hospital competitors in providing outpatient services are not only clinics, health centers and doctor practices but also online health organizations/entities. This condition has increased a competition in the health world in which it in turn is potential to cause a decrease in patients handled by health public service agency. The reduction in the number of patients treated will directly impact health Public Service Agency revenue.

The Covid-19 pandemic has caused a shift in the services provided by health public service agency. Health public service agency, which initially concentrated on general services to the community (outpatient,inpatient and drug sales), then has shifted to services for handling the Covid-19 pandemic (inpatient). This shift in service then led to an increase in *Bed Occupancy Rate (BOR)*; as a result, health Public Service Agency reached its maximum capacity without being able to generate maximum revenue. On the other hand, the Covid-19 pandemic counter measures implemented by health Public Service Agency are financed using health insurance such as the Health Social Security Organizing Agency (BPJS) and social assistance funds from the government in which it is provided for a certain period. This has an impact on the revenue and expenditure streams of the health public service agency work unit. Therefore, this study aimsto investigate how the flow of expenses and revenues of the health public service agency work unit and other impacts arising from the Covid-19 pandemic.

From the description above, the authors formulate the problems as follows:

How is the description of the revenue of the health public service agency unit with the Covid-19 pandemic inIndonesia? What is the picture of health public service agency work unit spending with the Covid-19 Pandemic in Indonesia? And how does the influence of expenditure management, revenue, the size of the work unit andCovid-19 conditions on the performance of the health public service agency work unit in Indonesia?

This study aims to determine the effects of Covid-19 pandemic on the income and expenditure of health public service agency work unit in Indonesia. It is to measure whether there were any changes in both income and expenditure consumption during the Covid-19 pandemic and whether the income and expenditure affected the performance of the public service agency work unit in the health sector during the Covid-19 pandemic.

The results of this study can be used to determine development programs for managers andtheir management and for the government and those authorized to implement a program in order to improve the performance of the health public service agency work unit.

2 Literature Review

Public service agencies are the result of adjusting financial management from companies to government organizations. This is explained in Government Regulation of the Republic of Indonesia Number 23 of 2005 on the financial management of public service agencies where public service agency has been amended by Government Regulation of the Republic of Indonesia Number 7 of 2021, whichis expressed in the form of a public sector financial management model. Public Service Agency receives financial management flexibility and is required to manage financing as the management of a commercial entity and apply the principles of efficiency and productivity. Government exercise units are encouraged to manage their assets and create revenue from these assets (Ostern and Gaebler, 1992).

The consequence of the flexibility and responsibility of public service agency financial management is that public service agency needs to provide financial statements not only to provide location information, but also to make changes to resources, economics, and budgetary obligations. The Statement of Government Accounting Standards (PSAP) regulates that public service agency presents financial statements of public service institutions. Kawenas, Kalangi and Lambey (2018) stated that one of the tools to evaluate the performance of public service agency is through the presentation of financial statements based upon PSAP 13 PSAP No. 13. Public service agency's performance assessment carried out before the occurrence of pandemic showed that the implementation of financial management of the Project Service Agency provided the positive results(Carroll & Smith, 2020; Coccia, 2021) Sari, et al. (2019) found that the financial situation of public service agency education has improved. This situation can be realized as it is supported by the flexibility of financial management (Ernitti, 2018). This improvement is not only in financial sector, but also in non-financial efficiency and quality of educational services (Julia and Siei, 2016). In a study of the financial efficiency of public service agency hospitals, Imam and Arisandi (2017) found that the financial condition and services of hospitals tended to improve due to budget flexibility. Meanwhile, Nurliah et al. (2020) mentioned that despite the good financial health condition, hospitals should rationalize the use of current species and assets and accountability exercises.

Sayadi (2021) conducted a study of state revenue performance during Covid-19 and found that state revenue experienced a negative growth throughout 2020. The characteristics of public service agency as a form of entity should also adhere to the research meetings made to assess how companies respond to the Covid-19 pandemic. Bachman (2020) stated that temporary interventions that might affect input fields and productivity are related to the Covid-19 activities that might pressure firms, especially for low liquidity firms. Meanwhile, Teng et al. (2021) showed that financial flexibility had a positive and significant impact, especially for companies with direct property ownership. Reeves et al. (2020) mentioned that people will be able to

understand, react and learn from the *issue* quickly and face changes that are difficult to predict in the face of a pandemic situation. Bunga et al. (2020) explained that the recognition of the accounting impact of the Covid-19 pandemic depends on the situation and environment of each company.

The Covid-19 pandemic has also changed the service diagram and the behavior of the people served. Zaharah et al. (2020) investigated the field of education services and found that there has been a transfer of teaching and learning activities to focus on *e-learning* method and the use of technological facilities such as smartphones, computers and laptops. According to Aji (2020), changes occurred after the pandemic resulted in the disruption of performances started from the learning process to the evaluation process of students' career development. With such condition, it isdeemed necessary to determine a special budget to recover losses due to the scale of bureaucracy and coordination of education between ministries, especially education with the field of work.

Medical services are also undergoing significant changes. As the government organization that provide health services to the public, hospitals plays a role as a major safeguard against the pandemic. (Alhassan et al., 2020; Eissa, 2020). The hospital's efforts to optimize the service for the Covid-19 patients in the form of caviver patients and patient care staff, and the development of medical teleworking services have reduced patient containing hospitals and organizations. This situation then affected the hospital revenue and service models during the pandemic (Sugeno et al., 2021; Mahayana et al., 2020; Putstra and Suryanata, 2021; Pangoumpia et al., 2021). Meanwhile Djasri (2020) claimed that the Covid-19 pandemic status can be a motivation to improve hospital governance.

The Covid-19 pandemic in Indonesia began to be detected in March 2020, and until now it has not disappeared completely. Hospitals were certainly financially affected earliest (Abor & Abor, 2020; Carroll & Smith, 2020). Most hospitals in several countries experienced profit adjustments in their financial management (Behzadifar et al., 2022; Kruse & Jeurissen, 2020). Likewise, the cost structure also needed to adjust due to the impact of this pandemic. Some hospitals must rearrange the cost structure purposely to adjust the situation and conditions as affected by Covid-19 (Carroll & Smith, 2020; Raghuvanshi & Raghuvanshi, 2020).

2.1. Framework and Hypothesis

The framework is the rationale for the research, developed on the basis of facts, observations, and literature review. The framework focuses on investigating various types of revenue of the health public service agency work unit, and investigating various types of expenditure both by the type of expenditure and the source of expenditure funds. It then focuses on the performance of the public service agency work unit with the factors that influence it. The research framework is illustrated as follows:

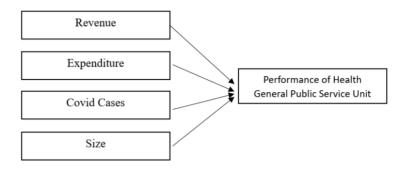


Figure 2. Framework of Thought

The hypotheses in the study entitled Covid-19 Pandemic and Financial Performance, Revenue and Expenditure Surgery of Health Public Service Agency Work Unit in Indonesia are presented as follows:

H1: Revenue (service revenue, cooperation revenue, other public service agency income) has a positive effect on theperformance of the health public service agency work unit.

H2: Expenditure (employee expenditure, pure rupiah goods expenditure, & non-tax state revenue public service agency, pure Rupiah capitalexpenditure & non-tax state revenue public service agency) has a positive effect on the performance of health public service agency work unit.

H3: Covid-19 conditions have a negative effect on health public service agency work unit spending.

H4: The size of the work unit has a positive effect on the revenue of the health Public Service Agency

3 Methods

In this quantitative research, the data source was taken from the realization of revenue and expenditure before and after the occurrence of Covid-19. The secondary data were taken from each public service agency in the health sector and from the Ministry of Finance data publication for the 2019-2021 fiscal year period.

The data were processed in the form of monthly revenue realization based on attestation/deposit data by type of revenue and expenditure based on attestation data by type of monthly expenditure for health public service agency work unit. 106 units of health public service agency spread throughout Indonesia, and having become public service agency work unit before 2019 were involved as the object of research. Meanwhile, in this study the financial performance of public service agency health became the dependent variable and revenue from various sources became the independent variable, which was calculated using the ratio of revenue by source to total revenue. This variable consisted of service revenue ratios, grant revenue ratios and other revenue ratios. Likewise, expenditure was calculated using the ratio of each type of expenditure to total expenditure. This variable consisted of the ratio of employee expenditure, the ratio of pure rupiah (RM) goods expenditure, the ratio of public service

agency goods expenditure, the ratio of RM capital expenditure and the ratio of public service agency capital expenditure. Further, variable of the Covid-19 condition was calculated based upon coverage per province, and the size of the work unit for all public service agency health work units was calculated based on the amount of budget allocated in DIPA.

Data processing was carried out by performing calculations, comparisons, horizontal and vertical analysis, analysis of the structure of income and expenditure by type and tabulation analysis. All variables were tested differently from the beginning of Covid-19 in April 2020. Data were firstly processed before Covid-19 and after Covid-19. If the tested variable turned out to be different, then the variable was not processed further to prove the hypothesis.

Data analysis was used by firstly conducting a classic assumption test, followed by multiple regression. The interpretation of the results was carried out on variables that had a positive or negative effect. Then, conclusions and recommendations were given.

4 Results And Discussion

4.1. Income Before and After Covid-19 Pandemic

The revenue of Public Service Agency work units in the health sector in Indonesia before and during the Covid19 pandemic has increased on average. The data from January 2019 to December 31, 2021 showed that the source of income derived from the results of cooperation and grants in the year Covid19 started decreased by around 45% from the 2019 income. However, in 2021 it again increased around 50% compared to 2020.

Even though there was a pandemic in 2020, the service revenue of the health public service agency work unit increased compared to the revenue in the year before the pandemic, though the increase was only around 0.57%. In 2021, the service revenue of the Indonesian public service agency work unit actually decreased though the decrease was only 0.55% compared to 2020. For other public service agency revenues, it turned out in which during the pandemic there was a significant increase in 2020 by 877% compared to the revenue in 2019. In 2021 it increased by 621% compared to the same income in 2020.

Table 1. Revenue 2019-2021

		Tubic It ite tende 201	2021	
Type		Total per Type		
	2019	2020	2021	•
Results of cooperation & grants	179.767.587.113	98.405.222.420	147.758.319.928	425.931.129.461
Services	17.103.399.168.801	18.071.598.551.059	17.076.951.656.639	52.251.949.376.499
Other Income	126.002.924.957	1.230.830.966.458	8.880.002.345.018	10.236.836.236.433
Total	17.409.169.680.871	19.400.834.739.937	26.104.712.321.585	62.914.716.742.393

The increase in revenue for public service agency hospitals in Indonesia is dominated by other revenues. In 2021 the increase was quite drastic contributed by other revenues when service revenues and yield revenues were found lower for the same type of revenue in 2019. What does this unique revenue behaviorhave to do with the Covid-19 pandemic? The Covid-19 pandemic in Indonesia peaked in the second half of 2020. From here, service revenue actually increased during the peak of Covid-19 cases, and when Covid-19 cases decreased, service revenue

decreased - even lower than that of before the Covid-19 pandemic.

The Covid-19 pandemic condition has put pressure on overall economic growth (Abor & Abor, 2020). In health sector, its impact was found quite significant to increase state spending to improve hospital services. On the other hand, the increase in hospital services in overcoming the Covid-19 pandemic maintained the hospital's income condition at the *sustainability* level. Government hospitals at the forefront of Covid-19 health services continued to operate stably when other industries experienced economic shocks (Carroll & Smith, 2020; Kruse & Jeurissen, 2020).

In contrast to the conditions in Iran, hospitals were under pressure to generate revenue to finance operational activities when Covid-19 pandemic occurred (Behzadifar et al., 2022). Likewise, the impact of the Covid-19 pandemic in Ghana had made hospitals to seek some ways to overcome the operationalization of the impact of the pandemic (Abor & Abor, 2020). In Indonesia, in the last 3 years for public service agency hospitalwork units, service revenue before Covid-19 pandemic was quite high. It then began to decline when the Covid-19 pandemic occurred and towards the end of the year it increased sharply. For investment and cooperation income, it tended to *stagnate*, while other income crept up and in the end of the period it increased dramatically. It should also be understood that the public service agency work unit income reporting model appeared to increase at the end of the quarter because there was an obligation to certify income and expenditure at least once every quarter. As a result, revenues in March, June, September and December tended to increase and was at peak in December. Analyzing revenue behavior means to look at the relevant quarterly. The results of the analysis of hospital public service agency work unit revenues in Indonesia Types of Cooperation & grants, service services, and other revenues are presented in Image 3 below.

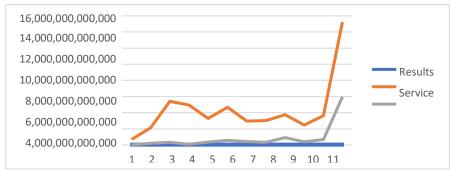
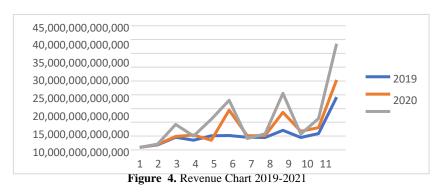


Figure 3. Revenue graph of Indonesian Public Service Agency hospital

Looking at more detailed at monthly income in 3 years before and after the pandemic, it is clear that in 2020 and 2021 the behavior of income was almost equal. Revenue increased at the end of all quarter 1, quarter 2, quarter 3 and quarter 4. Slightly different for 2019, where revenue in January was low, rose slightly in the following month and at the end of quarter 2, rose before the end of quarter 3 and increased dramatically at the end of quarter 4. This means that almost all new public service agency work unit authorized large amounts at the end of each quarter and peaked at the end of the year.



Based on data related to revenue before and after the Covid-19 pandemic, hospitals with the status of Public Service Agency work unit, the total revenue, on average, continued to increase. What made them different was related to the type of income where service revenue experienced a slight decrease at the end of 2021 as well as for investment and cooperation results different from other revenues, which actually increased sharply.

What about non-public service agency hospitals either under central government control or under local governmentcontrol? It seemed that the revenue behavior was not much different, but to be sure it needs further research. Likewise with private hospitals, is the impact the same? Further research is needed to consider that in the end some private hospitals also participated in the government program to participate in handling the impact of Covid-19 pandemic.

4.2. Expenses Before and After the Covid-19 Pandemic

In terms of expenditures of health public service agency unit in Indonesia, the presence of the Covid-19 pandemic increased the amounts of expenditures. The total expenditure of all health public service agency unit in 2021 was almost double the total expenditure of all health public service agency work unit in 2019. Expenditure from non-tax revenue sources remained highest in the last 3 years with an increase of 49% in 2020 from 2019 and 45% in 2021 from 2020.

The high increase in expenditure during Covid-19 pandemic came from the loan sources, both foreign loans, domestic loans and through the issuance of SBSN. Although there was an increase in expenditure sourced from pure Rupiah, both before and after the Covid-19 pandemic, it still remained with a normal increase.

Table 2. Details of Health Public Service Agency Expenditures Based on funding sources 2019-2021

Tahun	'BLU	'HLD	'PLN	'PNP	'RM	'RMP	SBSN	Grand Total
2019	44.894.054.172.747	10.492.157.615	791.291.323.238	1.093.399.811.895	19.980.535.161.612	2.547.377.211	251.096.482.101	67.023.416.486.419
2020	67.123.208.774.732	21.450.000	1.349.939.315.509	924.963.188.609	24.042.767.199.180	429.998.161.469	1.270.547.340.406	95.141.445.429.905
2021	97.813.533.119.292		395.452.167.793	7.611.739.512.357	25.189.989.799.658	48.659.119.015	1.385.565.260.375	132.444.938.978.490
Total	209.830.796.066.771	10.513.607.615	2.536.682.806.540	9.630.102.512.861	69.213.292.160.450	481.204.657.695	2.907.209.082.882	294.609.800.894.814

In terms of spending, there was a fairly drastic increase after the Covid-19 pandemic. Signs that the Covid-19 pandemic increased the state spending in the health sector in Indonesia can be seen in the spending trend of public service agency hospitals. Though public service agency

hospitals are clearly government hospitals, they have flexibility in managing their finances sourced from the community. Expenditure sourced from pure Rupiah is relatively fixed on average. This means that the budget provided by the government for health public service agency work unit proportionally remains in accordance with the APBN ceiling. Both before and after the pandemic there was no increase in the amount of expenditure. This can be understood because as a government work unit, even though it is a public service agency work unit, operational expenditure is still allocated from pure Rupiah. Meanwhile, variable operational expenses are allocated from non-tax state revenue public service agency sources including salaries and allowances for non-PNS human resources.

Looking at the following graph, the increase was quite sharp for non-tax state revenue public service agency sourced expenditure. Expenditure sourced from pure Rupiah increased but not sharply in 2021. The increase was also quite sharp for expenditure sourced from loans.

During the pandemic, expenditures sourced from loans increased, especially for domesticloans such as SBSN in funding health response activities. This condition was related to the fact that duringthe pandemic, there was a change in the structure of the state budget where there was a decrease in the tax revenue target, but the expenditure side needed to increase. Hence, the government loosened the budget deficit. This budget deficit was covered from both foreign and domestic loan sources. The portion of domestic loans was higher than foreign loans. The effect of this government loan policy alsoaffected the expenditure side of the health public service agency work unit, where the source of expenditure came from loans

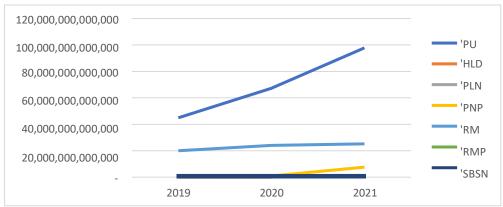


Figure 5. Expenditure Chart of Public Service Agency in the Period of 2019-2020

The increase in government spending during the pandemic was also experienced by various countries experiencing the pandemic crisis. The budget allocated for health has increased dramatically to cope with the pandemic (Eissa, 2020). In covering government spending, especially to overcome the problem of overcoming the pandemic and economy, it was done by carrying out several refocusing and reallocation activities. This was also done in several countries but differed in some practices (Anser et al., 2020; Curristine et al., 2007; Eissa, 2020).

Some practices to accelerate the handling of Covid-19 were carried out through several regulatory arrangements, especially in the field of goods and services procurement related to health management needs and the impact of the pandemic. (Plague et al., 2020). Expenditures during this Covid-19 pandemic were considered as expenditures in an emergency period so that some adjustments werehighly required (Fahrurrazi, n.d.) (Surabaya & Hermawan, 2020)

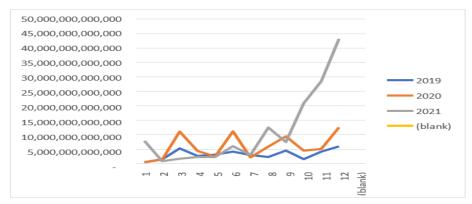


Figure 6. Expenditure Chart 2019-2021

The monthly expenditure in the period of 2019 and 2020 showed almost the same behavior where expenditure increased at the end of all quarter 1, quarter 2, quarter 3 and quarter 4. Slightly different for 2021 where the expenditure in January was high, and fell in the following month, slightly rose at the end of quarter 2, rose before the end of quarter 3 and increased drastically in quarter 4.

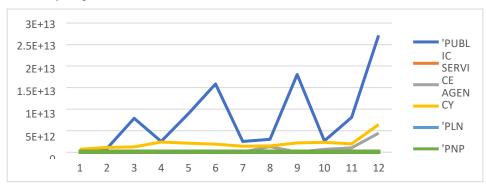


Figure 7. Expenditure Chart for 2021

Public service agency's expenditures in the health sector before and after the pandemic experienced a drasticincrease after the occurrence of the pandemic. The source of expenditure that increased dramaticallyin 2020 came from non-tax state revenue public service agency. In addition, the source of increased expenditure came from loan funds. Meanwhile, the source of pure Rupiah expenditure was relatively fixed.

If public service agency work unit in the health sector can increase spending, especially related to service operations, even though part of it comes from loans, do all hospitals other than those with public service agency work unit status experience the same thing? For private hospitals or regional public hospitals, the need for expenditure increases, but the increase in the amount of expenditure cannot necessarily be realized. What is possible for regional public hospitals is by being subsidized by the local government, from unexpected expenditure or other expenditure. While, for private hospitals, to increase efficiency, they tend to do organizational restructure.

Further research is required on the spending behavior of non-work unit public service agency hospitals, for both central and regional hospitals. Why were they able to be sustainable during

a pandemic, whether they did financial leverage or other financial reengineering in facing an uncertainty in financial management and the severity of budget pressures so that they have entered a budget stress situation?

4.3. Public Service Agency Work Unit Performance and Covid-19 Pandemic

To answer the hypotheses as proposed, a causality analysis of theperformance of the public service agency health unit was carried out using panel data regression. From the results ofdata processing, the following results were obtained:

	Variables	Coef	T-value	P-value		
	Constanta	-3407301979	-4,36	0,000		
	Service Ratio (X1.1)	9958113875	18,51	0,000		
Revenue	Cooperation Result Ratio	3630170786	0,17	0,863		
(X1)	(X1.2)					
	Other Income Ratio (X1.3)	4957083612	0,66	0,506		
	Employee Expd Ratio (X2.1)	3846825	0,52	0,606		
	RM Goods Expd Ratio (X2.1)	-5519552	-0,09	0,930		
	Expd Ratio of Public Service	-4421664	-3,33	0,001		
	Agency Goods (X2.3)					
	RM Capital Expd Ratio (X2.4)	155762	0,00	0,998		
Expenditure Public Service Agency Capital		203778	0,05	0,959		
(X2)	Expd Ratio (X2.5)					
Covid-19 cases (X3)		-9879107	-5,34	0,000		
Budget Size (X4)		-0,0438	-3,54	0,000		
R-sq = 51.22% R-sq (adj)=50.83%						

Regression Equation:

Public Service Agency Performance =-3407301979 X1.1 + 9958113875 X1.2 + 3630170786 X1.3 + 4957083612 X1.4 + 3846825 X2.1 - 5519552 X2.2 -4421664 X2.3 + 155762 X2.4 + 203778 X2.5 - 9879107 X3 - 0.0438 X4

Hypothesis testing was not all proven for revenue and expenditure variables when variable detailingwas carried out, but the dominant variable that had a positive effect was the service revenue variable and had a negative effect on the Public Service Agency goods expenditure variable. For hypotheses related to the Covid-19 case and the size of public service agency, it affected the financial performance of public service agency even though the effect was negative.

Significant positive variables related to public service agency performance were found only generated by service revenue management, while during Covid-19 pandemic, public service agency expenditure management and public service agency size had a significant negative effect. The variables of RM expenditure and other revenues had no significant positive effect. The classic assumption test has previously been carried out and these variables jointlyaffected only about 51% of public service agency performance. There are still many other factors, especially related toservice performance that can be explored further.

The performance of the public service agency health service unit was associated with the pandemic situation and it turned out that its performance was significantly determined by pandemic condition but had a negative symbol. This means that the relationship between

performance and pandemic was opposite. When Covid-19 pandemic case increased, public service agency performance decreased and vice versa. This result is also inline with the opinion (Abor & Abor, 2020; Raghuvanshi & Raghuvanshi, 2020) about revenues coming under pressure when the pandemic increased.

Indeed, revenues increased during the pandemic, but expenditures increased more sharply than the income earned. This test proved that deficits occurred during the Covid-19 pandemic, but for public service agency work unit can be covered by their spending needs from loan sources.

This public service agency performance, if related to the management of goods expenditure sourced from public service agency funding, turned out in which public service agency goods expenditure management had a significant negative effect on public service agency performance. This means that the more efficient the health public service agency in managing its goods expenditure, the more its performance will improve. It is because goods expenditure sourced from public service agency is actually operational goods expenditure, which can accommodate salaries and allowances, maintenance expenses, inventory expenses, service expenses, travel expenses and other service expenses. If these expenses can be managed efficiently, it will certainly improve the performance of the public service agency itself. This is also in line with what has been conveyed (Abor & Abor, 2020; Alhassan et al., 2020) about how the impact of this pandemic on increasing costs and ultimately affecting the performance of hospitals affected by Covid-19 pandemic.

Besides being influenced by the efficiency of public service agency goods expenditure, the performance of public service agency is significantly positively determined by the management of public service agency service revenue. Public service agency performance increases if service revenue increases. Why is this so? Service revenue illustrates how a hospital manages the best service of the hospital concerned. The better the services provided, the more revenue received and the more increasing the performance.

From this study, one more variable that had a negatively significant effect on performance was the size of the public service agency work unit. This means that public service agency work unit in the health sector that has a large ceiling is relatively difficult to perform well. The larger the size of the work unit, the lower the public service agency performance. Why is this the case? It seems that public service agency work unit whose budget or assets are quite large during this pandemic are quite difficult to increase revenues that far cover the operational expenses that must be borne. The relatively large fixed expenses of public service agency work unit resulted in a low level of efficiency. What has been done during this pandemic may be below the capacity that should be. During this pandemic, relatively all public service agency hospitals had a policy following what the government did/ordered. Service rates followed what was set by the government during the pandemic. It is possible that what the government applies is actually below the capacity of the hospital.

The variables affecting the performance of this public service agency (Covid-19 case, public service agency revenue, and public service agency goods expenditure) only affected 51% of all determining variables. There were still many other variables that affect performance, especially from various service factors. The most important thing is how to optimally manage the variables determining the performance improvement. However, other variables, both those currently not proven to have an effect and other variables that have not been tested, must still be considered to be combined with other models to obtain innovations and initiations in improving performance.

5 Conclusion

From the discussion carried out, several points can be concluded:

- 1. For the hospitals with the status of a Public Service Agency work unit, total revenue, on average, continued to experience an increase in revenue. What made them different was related to the type of income, where service revenue experienced a slight decrease in the end of 2021 as well as investment and cooperation results but it was not so for other revenues, which actually increased sharply.
- 2. Public service agency's expenditures in the health sector before and after the pandemic increased after thepandemic. The source of expenditure that increased drastically occurred in 2020 came from non-tax state revenue public service agency. In addition, the source of increased expenditure came from loan funds. Meanwhile, the source of pure Rupiah expenditure was relatively fixed. If public service agency unit in the health sector can increase expenditure, especially related to service operations, even though some of it comes from loans
- 3. The variables affecting the performance of this public service agency (Covid-19 case, public service agency revenue, public service agency goods expenditure) only affected 51% of all determining variables. There were still many other variables that affected performance, especially from various service factors. The most important thing is how to manage the variables that influence optimally to improve performance.

References

- [1] Abor, P. A., & Abor, J. Y: Implications of COVID-19 Pandemic for Health Financing Systemi Ghana. *Journal of Health Management*, 2(4),559569 (2020)
- [2] Alhassan, G. N., Agabo, T. J., & Bekun, F.V.: Do life expectancy, death rate and public health expenditure matter in sustaining economic growth under COVID-19: Empirical evidence from Nigeria? July (2020)
- [3] Anser, M. K., Yousaf, Z., Khan, M. A., Sheikh, A. Z., Nassani, A. A., Abro, M. M. Q., & Zaman, K.: Communicable Diseases (Including COVID-19)-Induced Global Depression: Caused by Inadequate Healthcare Expenditures, Population Density, and Mass Panic. *Frontiers in Public Health*, 8(August), 1-13. (2020)
- [4] Behzadifar, M., Aalipour, A., Kehsvari, M., Teli, B. D., Ghanbari, M. K., Gorji, H. A., Sheikhi, A., Azari, S., Heydarian, M., Ehsanzadeh, S. J., Kong, J. D., Ahadi, M., & Bragazzi, N. L: The effect of COVID-19 on public hospital revenues in Iran: An interrupted time-series analysis. *PLoS ONE*, *17*(March 3), 1-10. (2022)
- [5] Carroll, N. W., & Smith, D. G.: Financial implications of the CoviD-19 epidemic for hospitals: A case study. *Journal of Health Care Finance*, 46(4), 11-22.(2020)
- [6] Coccia, M.:High health expenditures and low exposure of population to air pollution as critical factors that can reduce fatality rate in COVID-19 pandemic crisis: a global analysis. *Environmental Research*, 199(January), 111339. (2021)
- [7] Curristine, T., Lonti, Z., & Journal: Improving Public Sector Efficiency: Challenges and Opportunities. *OECD Journal on Budgeting*, 7(1), 1-41. (2007)
- [8] Directorate General of Treasury: https://djpb.kemenkeu.go.id/portal/id/layanan/kantor-pusat/pembinaan-pengelolaan-keuangan-Public Service Agency.html accessed on March 2022.
- [9] Djasri, H.: Corona virus and quality management of clinical services in hospitals. The Journal of Hospital Accreditation, 2(1), 1-2. (2020)
- [10] Eissa, N.: Pandemic Preparedness and Public Health Expenditure. *Economies*, 8(3). (2020)
- [11] Fahrurrazi, H. (n.d.). COVID-19 EMERGENCY.

- [12] KaufmanHall. (2021). Financial Effects of Covid-19: Hospital Outlook for the Remainder of 2021.
- [13] Kruse, F. M., & Jeurissen, P. P. T.: For-profit hospitals out of business? Financial sustainability during the COVID-19 epidemic emergency response. *International Journal of Health Policy and Management*, 9(10), 423-428 (2020)
- [14] Mahayana, F. S., Suryawati, C., & Agushybana, F.: Handling of Covid-19 Patients in Hospitals in Indonesia. Journal of Health, 7(2), 353-60. (2014)
- [15] Putra, P. A., & Suryanata, I. G. N. P.: Halodoc Synergy in Hospital Service Quality during the Covid-19 Pandemic. Ejurnal Ekonomi Dan Bisnis Universitas Udayana, 10(04), 211-222. (2021)
- [16] Raghuvanshi, V. P., & Raghuvanshi, S. P.: Implications and future strategies on cost management for hospitals during and after COVID-19. *International Journal of Community Medicine and Public Health*, 7(6), 2405. (2020)
- [17] Republic of Indonesia: Government Regulation Number 23 of concerning Financial Management of Public Service Agencies. Jakarta. (2005)
- [18] Republic of Indonesia: Government Regulation Number 7 of 2021 concerning Ease, Protection, and Empowerment of Cooperatives and Micro, Small, and Medium Enterprises, Jakarta. (2021)
- [19] Sugiyono, P. D.: Research Methods (3rd ed.). Alfabeta. (2015)
- [20] Surabaya, U. M., & Hermawan, M.: View of Procurement of Health Services in the Emergency of Covid-19. 13, 128-136. (2020)
- [21] Wabah, P., Covid, P., & Perdana, R.: GOODS/SERVICES IN ANTICIPATION AND. April. (2020)
- [22] Y. Cai., et al.: Impact of the COVID-19 pandemic on a tertiary care public hospital in Singapore: resources and economic costs. Journal of Hospital Infection, 121, 1-8. (2021)
- [23] Zaharah, Z., Kirilova, G. I., & Windarti, A.: Impact of corona virus outbreak towards teaching and learning activities in Indonesia. SALAM: Journal of Syar-i Social and Culture, 7(3), 269-282. (2020)
- [24] Zeho, Fannidya Hamdani, Setyowati, Endah, and Hermawan, Romy.: The Impact of Covid-19 Pandemic on the Performance of Regional Public Hospital Based Approach to Balanced Scorecard in RSUD "X". Discourse, Vol. 23, no 3, 194-19 (2020)