Conference Paper

Financial Impact of the Large-Scale Social Restriction Policy on Employees During the COVID-19 Pandemic

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Abstract.

The Indonesian Government established a large-scale social restriction (LSSR) policy to prevent transmission of the COVID-19 virus. The impact of this policy was felt by employees where LSSR decreased working time, work activities and company output, which led to cuts in employee salaries or termination of employment. This study aimed to analyze the financial impact of the LSSR policy on employees during the COVID-19 pandemic. This research was conducted using an observational non-experimental study with a cross-sectional approach. We used accidental sampling for a period of one month while distributing an electronic questionnaire. The criteria for the respondents were employees aged 17-64 years old and there were 176 respondents in total, consisting of 85 males and 91 females. The majority of respondents were aged 17-25 years. The financial impact analysis showed that the average income before undergoing LSRR was IDR 5,964,702 $\pm$ 330,699; the average income during LSSR was IDR 5,354,588 $\pm$ 298,882; the average expenditure before undergoing LSRR was IDR 3,337,216 $\pm$ 180,370; and the average expenditure during LSRR was IDR 3,176,989 $\pm$ 168,672. The average decrease in income was IDR 610,114 $\pm$ 93,647 ($p < 0.001$) and the average decrease in expenditure was IDR 160,227 $\pm$ 67,223 ($p = 0.068$). The conclusion is that employees in Indonesia during the COVID-19 pandemic experienced a significant decrease in income and also a non-significant decrease in expenditure.

Keywords: employee, COVID-19 pandemic, LSSR, financial impact

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1. Introduction

COVID-19 is a disease that arises from infection with the SARS-CoV-2 virus. Coronavirus in SARS-CoV-2 belongs to the genus betacoronavirus which is included in the same subgenus as the coronavirus that causes the SARS outbreak [1]. COVID-19 is transmitted from person to person through droplets that are released in infected individuals. Asymptomatic carrier patients can transmit SARS-CoV-2, but the exact mechanism is unknown [2]. The clinical manifestations caused by COVID-19 infection range from mild, moderate and severe such as fever, cough and a feeling of shortness of breath, ARDS, septic shock and some are asymptomatic [2].

As an effort to prevent the spread of COVID-19, the government has implemented Large-Scale Social Restrictions (LSSR). LSSR is a form of territorial quarantine by limiting community activities in public spaces. The impact of LSSR or social distancing on the financial aspect is causing national, sectoral, individual or corporate losses (per business actor). The implementation or direct impact will be felt directly by individuals, namely the loss of salaries or benefits and even loss of income because the state has decreased income, especially from taxes, while spending soars for emergency needs, overcoming sick people, deployment of officers and extra medical personnel [3]. Responding to these problems, this research was carried out which aims to analyze the financial impact experienced by employees during the LSSR during the COVID-19 pandemic. This research will have a novelty value in Indonesia because there has not been a similar research conducted in Indonesia.

2. Methods

The research design in this study is non-experimental observational research, with a cross sectional approach, where all variables are measured at the same time, both independent and dependent variables. The research was conducted in June-August 2020 using an electronic questionnaire distributed throughout Indonesia.

The population of this research is employees in the territory of Indonesia. The sample in this research was obtained from distributing questionnaires for one month with an accidental sampling method. The sample inclusion criteria are employees who undergoing LSSR, male or female, aged 17-64 years and are willing to become respondents. Meanwhile, the exclusion criteria were respondents who filled incomplete questionnaires.

The instrument used for data retrieval is an electronic questionnaire made using Google Form and then distributed via social media. The questionnaire used to measure financial impact is a questionnaire compiled by researchers with a total of 9 questions related to finance during the LSSR.

Data analysis begins with a questionnaire validity and reliability test. The validity test was carried out to determine the validity of the research instrument, carried out by the Pearson product moment correlation test method or the corrected item correlation [4]. Reliability test to determine the ability of the instrument to produce the same data (consistent) when repeated measurements are made, one of the reliability test methods is the Cronbach's Alpha method [5].

Data analysis to analyze financial impact uses descriptive method which calculates the average of each test group, namely the average income before LSSR, income during LSSR, expenditure before LSSR and expenditure during LSSR. Then analyze quantitatively by comparing the 2 cost groups to determine whether there is a decrease / increase in income or expenditure. Finally, statistical analysis to determine the average significance of each cost group using the paired t-test method if the data is normally distributed or Wilcoxon signed ranked if the data is not normally distributed.

3. Result and Discussion

3.1. Validity and Reliability Test

The validity of the questionnaire in this research was tested using the Pearson product moment test method. The validity test results showed that out of a total of 9 question items were valid because the value of rcount >0.361. While the reliability test results show the value of Cronbach's alpha coefficient >0.814 where the instrument is reliable or consistent when used for repeated measurements.

3.2. Characteristic of Respondents

This research was disseminated for 30 days via social media in which for one week, 2 questionnaires were distributed. Total employee respondents were 176 respondents with attention to inclusion and exclusion criteria.

3.2.1. Respondents Gender Distribution

The following is the distribution of respondents based on gender can be seen in table 1.

TABLE 1: Respondents Gender Distribution.

Gender	Amount	Persentase (%)
Male	85	48,30
Female	91	51,70
Total	**176**	**100,00**

Based on table 1 based on the gender of the most dominant respondent, namely female with a total of 91 respondents (51.70%). Female personalities who need opportunities to present themselves and dependence on peers so that women use social media more often [6].

3.2.2. Distribution of Age Respondents

The following is the age distribution of the respondents which can be seen in table 2.

TABLE 2: Respondents Age Distribution.

Age	Amount	Percentage(%)
17-25	77	43,75
26-45	73	41,48
46-65	26	14,77
Total	**176**	**100,00**

Based on the data in table 2, it can be seen that the age of the most dominant respondents is in the range 17-25 years with a total of 77 respondents (43.75%). Supported by a survey by the Indonesian Internet Service Providers Association which shows that the greatest penetration of internet users by age is at a young age ranging from 13-18 years (75.50%) [7].

3.2.3. Distribution of Respondents LSSR Duration

The following is the duration of the LSSR undertaken by the respondent, which can be seen in table 3.

TABLE 3: Distribution of Respondents LSSR Duration.

LSSR Duration (weeks)	Amount	Percentage (%)
< 2	13	7,39
2 - 4	14	7,95
5 - 8	32	18,18
9 -12	60	34,09
13 - 16	44	25,00
> 16	13	7,39
Total	**176**	**100,00**

Based on table 3, it shows that most of the respondents undergoing LSSR for 9-12 weeks as many as 60 respondents (34.09%). The quarantine or self-isolation time set by the government is 14 days to prevent the spread of COVID-19 [8].

3.2.4. Respondent Domicile Distribution

Below is a table of the distribution of respondents based on domicile in table 4.

TABLE 4: Respondent Domicile Distribution.

Domicile	Amount	Percentage (%)
Cental Java	24	13,64
Yogyakarta	17	9,66
Jakarta	10	5,68
East Jawa	10	5,68
West Jawa	9	5,11
Banten	7	3,98
South Sumatera	6	3,41
Central Sulawesi	6	3,41
North Sumatera	5	2,84
Riau Island	5	2,84
Bangka Belitung Island	5	2,84
Lampung	5	2,84
East Kalimantan	5	2,84
South Kalimantan	5	2,84
Gorontalo	5	2,84
Jambi	4	2,27
West Kalimantan	4	2,27
Southeast Sulawesi	4	2,27
Papua	4	2,27
Aceh	3	1,70
Riau	3	1,70
East Nusa Tenggara	3	1,70
West Nusa Tenggara	3	1,70
North Kalimantan	3	1,70
Central Kalimantan	3	1,70
Southeast Sulawesi	3	1,70
West Sumatera	2	1,14
Bengkulu	2	1,14
Bali	2	1,14
West Sulawesi	2	1,14
North Maluku	2	1,14
Maluku	2	1,14
West Papua	2	1,14
North Sulawesi	1	0,57
Total	**176**	**100,00**

Based on table 4, the majority of respondents are domiciled in Central Java Province as many as 24 respondents (13.64%), followed by Yogyakarta Province with 17 respondents (9.66%). Each province in Indonesia has a representative respondent.

3.3. Financial Impact Analysis

Financial impact analysis of this research was conducted using descriptive analysis to obtain the average reduction in income and expenditure experienced by respondents during the LSSR. Following in table 5 will be presented financial impact data on all respondents.

TABLE 5: Financial Impact of Overall Respondents.

Category	Mean (IDR)	SE (IDR)	Sig
Average income before undergoing social distancing	5.964.702	330.699	p = 0,000
Average income during social distancing	5.354.588	298.882	
Decreased Income	**610.114**	**93.647**	
Average expenditure before undergoing social distancing	3.337.216	180.370	p = 0,068
Average expenditure during social distancing	3.176.989	168.672	
Decresead Expenditure	**160.227**	**67.223**	

Based on table 5, it shows that there was a decrease in income during the LSSR, namely IDR 610,114 ± IDR 93,647. The decrease in income is in line with research conducted by Nurdiansyah, S., et al. (2020) which states that during the COVID-19 pandemic there was a reduction in employee salaries and even layoffs and based on questionnaire data, an average decrease in income was 47% of average income every day [9].

In the expenditure category, there was also a decrease in expenditure, which means that during the LSSR, expenditure was smaller than before the LSSR, the average decrease in expenditure was IDR 160,227 ± IDR 67,223. In the current pandemic condition, most people are very careful about managing their financial expenditures, this has an impact on decreasing the purchasing power of the community for consumer goods or in other words, the community saves their needs during the current pandemic conditions [10].

Financial changes that occur can be caused by several things, namely changes in income sources, the most dominant expenditure, expenses that are difficult to fulfill and solutions to meet needs. Below will be shown table 6 in the form of changes to the respondent's source of income.

After knowing the most dominant change in expenditure in this study, it also collects data on unmet expenditure experienced by research respondents as shown in Table 8.

Based on Table 8, the results show that most respondents stated that there were no expenses that were difficult to fulfill. However, there were also respondents who had

TABLE 6: Sources of Income Change.

Source of Income	Before	During
Salary	174	171
Bussines	13	12
Saving	6	10
Parents	5	5
Loan	1	3
Freelance	1	-
Wife's Income	1	-
Course teacher salaries	1	-

TABLE 7: Expenditures that are Difficult to Meet.

Ependiture Type	Amount	Percentage (%)
Nothing	77	35,65
Credit installment	41	18,98
Pulse/Mobile Internet	39	18,06
Education cost	30	13,89
Health insurance costs	24	11,11
Employee salaries and holiday allowances	4	1,85
Maintenance costs of the company	1	0,46
Total	**216**	**100,00**

difficulty fulfilling credit installments, pulses / mobile internets, etc. Given that the use of the internet during this pandemic has increased to support work from home which requires internet access or mobile internet [11].

Table 9 shows the data regarding solutions taken by respondents to overcome expenses that are difficult to fulfill in Table 8 previously. Most of the respondents did not take any action because most respondents also did not experience difficulties in fulfilling expenses. However, other respondents stated that they used savings as a solution to meet expenses. Saving is a wise way to manage finances, the money from savings can be used in urgent situations or when experiencing a crisis [10].

3.3.1. Financial Impact Analysis by Gender

Financial impact analysis based on gender is shown in Table 10. Based on table 10, it shows that the average decrease in income for male respondents is greater than that of women, namely IDR 831,882 ± IDR154,614. A survey by the Indonesia Central Statistics Agency (2020) stated that 44.67% of male respondents and 38.55% of female

TABLE 8: Expense Fulfillment Solutions.

Solution	Amount	Percentage (%)
Didn't take any action	76	36,54
Use Savings	75	36,06
Get Help	21	10,10
Apply for debt relaxation	18	8,65
Debt	14	6,73
Cut employee salaries	1	0,48
Live frugally	1	0,48
Put off traveling	1	0,48
Reduce purchasing needs	1	0,48
TOTAL	208	100,00

respondents claimed to have decreased their income due to the COVID-19 outbreak [12].

TABLE 9: Financial Impact Based on Gender.

Category	Respondents	Mean (IDR)	SE (IDR)
Decreased Income	Male	831.882	154.614
	Female	348.022	92.511
Decreased Expenditure	Male	209.412	105.584
	Female	119.780	84.022

The decrease in expenditure also occurred for both male and female respondents. The average reduction in expenditure for men is also greater than that of women. According to the same survey by the Central Statistics Agency (2020) respondents experienced a decrease in expenditure, 27% of respondents achieved a decrease of more than 50% compared to before the outbreak [12].

3.3.2. Financial Impact Analysis by Age

Financial impact analysis based on age is shown in Table 11. Based on Table 11, the average decrease in income increases with age. Employees who are old are considered as workers who are less flexible and do not follow technological advances, so that salary cuts are greater for employees who are old enough [12].

In the expenditure category, all age categories also experienced a decrease in expenditure. The largest decrease in expenditure was in the 46-65 year age category. However, it is the same for all age categories to experience a decrease in expenditure. The decrease in spending was supported by a study made by the Ministry of Finance

TABLE 10: Financial Impact by Age.

Category	Responde	Mean (IDR)	SE (IDR)
Decreased Income	17-25 years	308.377	97.457
	26-45 years	786.781	161.288
	46-65 years	1.026.923	312.880
Decresead Expenditure	17-25 years	106.494	83.013
	26-45 years	126.712	100.829
	46-65 years	430.769	258.681

that the COVID-19 pandemic had negative impacts such as a decrease in people's consumption and purchasing power [13].

3.3.3. Financial Impact Analysis Based on LSSR Duration

The financial impact analysis based on the duration of LSSR is shown in Table 12. Based on Table 12, it can be seen that there was a decrease in income based on the duration of undergoing LSSR. All respondents who undergoing LSSR both from a minimum duration of <2 weeks to a maximum duration of> 16 weeks experienced a decrease in income. During the LSSR period, employees were asked to work from home so that the output and productivity produced by the company were not optimal, causing the company to cut employee salaries [9].

TABLE 11: Financial Impact Based on LSSR Duration.

Category	Respondents	Mean (IDR)	SE (IDR)
Decreased Income	< 2 weeks	92.308	92.307
	2-4 weeks	660.714	433.494
	5-8 weeks	595.312	220.066
	9-12 weeks	533.500	95.956
	13-16 weeks	883.409	254.429
	>16 weeks	576.923	391.603
Decresead Expenditure	< 2 weeks	-69.231	122.152
	2-4 weeks	171.428	247.110
	5-8 weeks	96.875	163.781
	9-12 weeks	132.500	92.736
	13-16 weeks	352.273	168.918
	>16 weeks	46.154	281.164

Expenditures also decreased in all duration categories of undergoing LSSR. In the financial management guidelines by the BKKBN (2020) the reduction in spending can be caused by savings made by respondents and avoiding consumptive purchases for items that are not needed or basic needs [14].

4. Conclusion

Based on the results and discussion that has been presented, it can be concluded that the LSSR during the COVID-19 pandemic had a financial impact on employees in the form of a significant decrease in income and also a decrease in expenditure but not significantly.

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