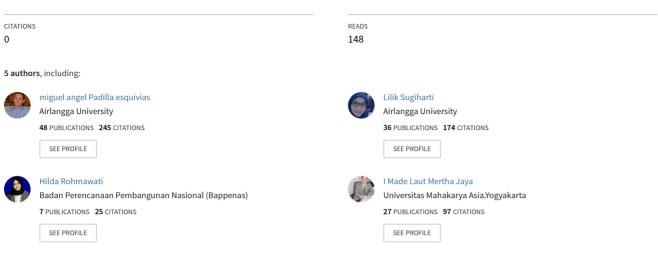
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Policy Socialization and Business Strategy Direction of Eco-Tourism

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Formation of Production Networks in Asean: Measuring Value-Added and Identifying the Role of Asean Countries in World Supply Chains View project

Research Grant Bank Indonesia (RGBI) 2020 View project

Policy Socialization and Business Strategy Direction of Eco-Tourism

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JEL Classification:	Abstract
A1	This study aims to estimate the losses of tourism-related
Z3	sectors and businesses to take recovery steps by disseminating
Z31	policies and strategic directions. This study uses the Seasonal
Z32	Autoregressive Integrated Moving Average (SARIMA) to calculate losses. This study indicates that the average percentage
Received: 09 November 2021	of losses in the tourism sector from January to August 2020 is 68% (9,508 million USD) to 69% (10,328 million USD).
1 st Revision: 02 February 2022	Several sectors experienced losses, especially accommodation (2978 to 3235 million USD); food and beverages (1750 to
2 nd Revision: 12 February 2022	1900 million USD); and shopping (1530 to 1662 million USD). Business actors need to know the socialization of government
Accepted: 15 February 2022	policies such as fiscal stimulus, CHSE (Cleanliness Health Safety Sustainability) certification, and market reactivation. The direction of the right strategy is also carried out, such as product innovation, improvement of health protocols, digitization, and certification.
	Keywords: economic impact, Recovery strategy, Tourism demand forecast (TDA)

How to Cite:

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INTRODUCTION

The COVID-19 pandemic does not only have an impact on the health crisis but also on the social and economic conditions of the community (Abodunrin et al., 2020; Karabag, 2020; Khalid et al., 2021; Milani, 2021). The development of COVID-19 cases in Indonesia is relatively fast compared to other ASEAN member countries. The increasing number of COVID-19 cases in Indonesia weakens economic conditions (Hadiwardoyo, 2020; Hanoatubun, 2020; Jalil et al., 2020; Livana et al., 2020; Thaha, 2020; Yamali and Princess, 2020). Several countries in ASEAN, such as Singapore, Vietnam, and Thailand, have taken control efforts for the COVID-19 pandemic. The Indonesian government's efforts to control the pandemic by imposing a lockdown and travel restrictions have increased the negative impact on the economy (Esquivias et al., 2021).

Large industries also felt, the impact of COVID-19, well-known companies in the United States such as Sears, JCPenney, Neiman Marcus, Hertz, and J. Crew are currently under financial pressure. 80% of hotel rooms are empty, and airlines lay off 80% of existing workers. The tourism sector and related sectors will certainly not profit in 2020 (Donthu & Gustafsson, 2020). Surveys in India show that the transportation, tourism, and hospitality sectors can no longer attract consumer demand, so there is no production in these three sectors. In China, the hotel sector experienced a decline in hotel occupancy by 89% at the end of January 2020. In Germany, the hotel occupancy rate fell by more than 36%. Hotel occupancy rates in Italy are only 6%, and London at 47% (Nicola, 2020).

The United States appears to be suffering so severely that one million restaurants, the second-largest private sector in the United States and employing 15.6 million people, lost eight million jobs and food services due to the pandemic. Hotel occupancy rates fell 11.6% for the week ended March 7, 2020, and suffered a loss of US\$ 13 billion as of February 2020. It is predicted that hotels will lose US\$ 3.5 billion per week (Sönmez et al., 2020; AHLA, 2020). Economic impacts include the temporary closure of hotels, restaurants, entertainment centers, tourist centers, shopping centers, and other points of interest. In June 2020, there were 1,800 hotel closures in Indonesia. Online agent Traveloka laid off 10% of total staff, hotel chain Airbnb cut staff by 25%, and Airy Rooms in Indonesia are permanently closed.

Various countries have faced and improved the impact of COVID-19 with various policies. Europe has prepared 1.7 Trillion Euros for COVID-19 rescue packages. The European Central Bank (ECB) has created an asset purchase program to stabilize and strengthen the euro. The government is also easing the budget to encourage public spending and support businesses affected by this pandemic. Germany has also prepared loans for companies and compensation for employees affected by the COVID-19 pandemic. The government has assisted affected communities in the UK by delaying tax payments, corporate and SME loans, and business funding. In addition, the British government also promised to reduce company costs by paying 80% of staff salaries. The Bank of England also cut interest rates to 0.1%. (Goniewicz, et al., 2020; Nicola, 2020).

In order to flatten the curve of COVID-19 cases, various strategies are carried out, such as lockdown, social distancing, stay-at-home, travel, and mobility restrictions. Not only hospitality, but all restaurants also limit their operations by enforcing only a take-a-way system. This resulted in temporary closures and decreased demand for the hospitality business (Bartik et al., 2020). Operational restrictions by hotels and restaurants led to a decrease in the income of this business (Gursoy & Chi, 2020). Countries such as Italy, Spain, France, China, and the United States have received a significant impact as the world's most prominent tourist destinations (Farzanegan et al., 2020; Rogerson, 2020).

The declining condition of the Indonesian economy has resulted in a decrease in income which leads to a decrease in people's purchasing power. Economic growth contracted to -5.32% in Q2 2020 (Central Bureau of Statistics, 2020). Unemployment also increased by 3.7 million people as of July 2020 due to the pandemic. Exchange rate depreciation to negative inflation in July 2020 also occurred. The economies of other countries are also experiencing similar economic effects in the tourism sector (Gössling et al., 2020; Polyzos et al., 2020; Nicola, 2020; Williams, 2020).

The COVID-19 shock is different from previous shocks that have occurred. This is because COVID-19 impacts an economic slowdown that is twice as large as the previous crisis. The shock caused by COVID-19 also significantly impacted the decline in global travel, thus potentially triggering structural changes in tourism-related sectors (Dolnicar & Zare, 2020; Khalid et al., 2021). COVID-19 has a more severe impact than the impact of the influenza epidemic in 1981. Small businesses have financial fragility and are very vulnerable to the COVID-19 pandemic. A survey on small businesses in the United States shows that they have reduced their workforce by about 40% since January 2020. The more considerable impact resulted in 54% of companies closing and a 47% decline in employment. Most of these impacts are felt by businesses in the tourism sector and its derivatives (Bartik et al., 2020).

Prior to the pandemic, it was predicted that the tourism sector would grow annually by 4%. However, the spread of COVID-19 triggered a change in his predictions, with a decline of up to 57% during 2020 (UNWTO, 2020). The Asia Pacific occupies the area with the highest decline in tourist arrivals, around 35% or around -33 million visits in the first quarter of 2020. The Central Statistics Agency said that this pandemic would reduce foreign exchange from foreign tourists, especially China, which accounts for around 12% of the total visit in 2019. The Ministry of Tourism and Creative Economy predicts that in 2020 Indonesia will lose around IDR 40 trillion of foreign exchange from tourists from China.

This year, the tourism sector is predicted to shrink by 25%, in line with travel restrictions imposed by many countries due to COVID-19 (WTTC, 2020). The global aviation industry suffered losses of up to US\$ 133 billion. The Indonesian Hotel and Restaurant Association (2020) also stated a decline in the occupancy rate at 6,000 hotels in Indonesia. This illustrates that the tourism sector and related businesses have experienced a decline in income and sales.

Over the past decade, the Indonesian government has encouraged the tourism industry to have an essential role in increasing business activity, foreign currency earnings, and job creation. However, the tourism industry tends to be very sensitive to natural disasters (Haksamaet al., 2018), social conflict, war, economic crisis (Kim et al., 2018), acts of terrorism, and against pandemics (Zhang et al., 2020). Muryani et al., (2020) identified that the Tsunami 2004, the global financial crisis 2008), and the terrorist attacks in 2002 and 2005 had dampened tourism activity in Indonesia. The bombing in 2002 caused a decline in real GDP, employment, export prices, and the consumer price index in Bali. Tourist arrivals fell by 50% after the 2002 bomb attacks. Purwomarwanto and Ramachandran (2015) found a decline in tourism arrivals in 2008, with recovery just a year after that.

The impact of the COVID-19 pandemic on the tourism sector in Indonesia has been carried out in several studies. Atmojo and Fridayani (2021) has analyzed the impact of COVID-19 on the tourism sector, especially on MSMEs. Using a qualitative research type with content analysis, they saw the impact of the COVID-19 pandemic on the decline in tourists in Bali and Yogyakarta, which affected the loss of MSMEs that provide travel and hotels souvenirs, regional crafts, and food and beverage at tourist attractions. Laksito and Yudiarta (2021) also researched the financial impact of the tourism sector in Bali due to COVID-19. The results show that COVID-19 had significantly impacted a very severe decline in Bali's inbound tourism in 2020. Other research shows that the impact of COVID-19 on the tourism sector is measured only through the air transport and hotel accommodation sectors using Ordinary Least Square, which shows a significant negative influence from the COVID-19 pandemic on the tourism sector (Purba et al., 2021). Through qualitative research, Kristiana et al. (2021) saw the impact of COVID-19 on the tourism sector in Tanjung Puting, Indonesia. They saw the impact of tourism in general that the tourism industry experienced dormancy, tourism stakeholders lost income, and tourism sector workers shifted to other sectors.

Based on the previous explanation, the purpose of this research is to estimate the losses of tourism-related sectors and businesses so that recovery steps can be taken through the dissemination of policies and strategic directions. The research gaps found are that: (1) most of the research on the impact of COVID-19 on the tourism sector in Indonesia uses qualitative research; (2) research using empirical testing was carried out in Indonesia but was limited to only a few sectors and region such as air transport and hotel accommodation or Bali and Yogyakarta (3) the tourism impact which is analyzed in general terms and does not show how much impact the tourism sector receives as a definite measure. Based on the research gap found above, this research has novelties including (1) this study uses empirical research to see how much loss has been received by the tourism sector due to COVID-19 by showing the amount or value (2) this research also shows losses in all business sectors related to tourism and national aggregate (all province or region).

METHODS

In order to get the value of losses for the tourism sector, secondary data is used in the form of time series for the period January-2009 to August-2020. This data includes the number of tourist visits, tourist spending, and the percentage of tourist spending for each business field. Data on expenditure is average expenditure per foreign tourist based on 2019 data (Tourist Expenditure Statistics, BPS). In line with Joo et al. (2019), the Seasonal Autoregressive Integrated Moving Average (SARIMA) estimation technique is used to calculate losses in the tourism sector. The SARIMA is used in this study because tourism data has a seasonal trend. This is influenced by tourist visits which have an increasing trend during year-end holidays. Dynamic SARIMA can be estimated directly because it can produce forecasting for more than one period. Static SARIMA can only produce forecasting for one period. Dynamic and static SARIMA forecasting will produce predictions of the number of foreign tourist visits if it is assumed that there is no COVID-19 pandemic. The difference between the actual and predicted values of SARIMA will result in a loss of tourism revenue. The percentage of businesses in related fields, namely transportation, accommodation, food and drink, shopping, tour packages, and others, will be multiplied by the loss of tourism revenue so that the losses for each of these sectors will be known.

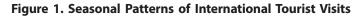
SARIMA estimation begins with identifying whether there is a seasonal pattern in the data. After knowing that there is a seasonal pattern, a unit root test is carried out on the data. Unit root test was performed using Augmented Dickey-Fuller (ADF). If the data is stationary, seasonal and non-seasonal models are identified using ACF (Auto Correlation Function) and PACF (Partial Auto Correlation Function). The next step is to test the significance of the parameters of the models that have been identified. The selected model is a model that has low AIC (Akaike Information Criterion) and BIC (Schwarz Bayesian Information Criterion) values. The selected model does not mean the best model, so it is necessary to carry out a diagnostic test in the form of a normality test using Jarque-Berra and White Noise using Q-Statistics.

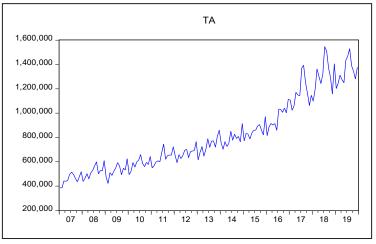
The selected SARIMA model is a model that passes the diagnostic test. After forecasting is done, the next step is to check the MAPE (Mean Absolute Percent Error) value with the following conditions:

- MAPE < 10% indicates that the forecasting results have a high level of accuracy;
- MAPE = 10% 20% indicates that the forecasting results have a good level of accuracy;
- MAPE = 20% 50% indicates that the forecasting results have a reasonable level of accuracy (reasonable);
- MAPE > 50% indicates that the forecasting results are not accurate.

RESULTS AND DISCUSSION

Based on the pattern analysis, it can be seen that the peak of foreign tourist visits is in the 12th month (December), just before the Christmas and New Year holidays. Based on this information, the seasonal pattern of the number of foreign tourist visits is every 12 months. In figure 1, it can also be seen that there is an upward and repeated trend in a certain period which indicates a seasonal element. This uptrend indicates that the data is not stationary at the mean, and there is a difference in variance so that the data is not stationary in the mean and variance. Table 1 shows that the data is not stationary and has a unit root problem. The probability is 0.9989 > 0.05. This result accepts the null hypothesis that there is a unit root problem in the data.





Source: Central Bureau of Statistics (2020); Eviews 9, processed (2021).

Table 1. Unit Root Test

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistics		1.371642	0.9989
Test critical values:	1% level	-3.476472	
	5% level	-2.881685	
	10% level	-2.577591	

*MacKinnon (1996) one-sided p-values. Lag Length: 12

Source: Central Bureau of Statistics (2020), Eviews 9, processed (2021)

Table 2. Unit Root Test after Transformation to Natural Logarithm	Table 2.	Unit Roc	t Test after	Transformation	to	Natural Logarithm
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		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistics		0.387459	0.9818
Test critical values:	1% level	-3.476472	
	5% level	-2.881685	
	10% level	-2.577591	

*MacKinnon (1996) one-sided p-values. Lag Length: 12

Source: Central Bureau of Statistics (2020), Eviews 9, processed (2021)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistics		-5.773118	0.0000
Test critical values:	1% level	-3.476472	
	5% level	-2.881685	
	10% level	-2.577591	

Table 3. Unit Root Test after Differencing

*MacKinnon (1996) one-sided p-values. Lag Length: 11

Source: Central Bureau of Statistics (2020), Eviews 9, processed (2021).

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob
· ·		1 -0.575	-0.575	51.982	0.000
141	· ·	2 -0.016	-0.519	52.025	0.000
· 🗖	· ·	3 0.165	-0.302	56.376	0.000
		4 -0.125	-0.319	58.888	0.000
י <u>מ</u> י		5 0.098	-0.166	60.432	0.000
יםי		6 -0.087	-0.219	61.660	0.000
י ו וי	יםי	7 0.079	-0.097	62.674	0.000
·曰 ·		8 -0.103	-0.252	64.423	0.000
· 🖻	ון ו	9 0.182	0.050	69.917	0.000
e ·	יוםי	10 -0.147	0.069	73.512	0.000
 '	·	11 -0.236	-0.585	82.838	0.000
· 💻	· •		-0.213	139.62	0.000
· ·	יםי		-0.061	163.82	0.000
1 🛛 1	יםי	14 0.028	0.090	163.96	0.000
1 🛛 1	1 10		-0.023	164.32	0.000
141	1 1		-0.001	164.42	0.000
1 p 1	יופי	17 0.057	0.061	165.00	0.000
יםי	1 111	18 -0.097	0.013	166.65	0.000
· P·	1 111	19 0.088	0.016	168.04	0.000
יםי	יוםי	20 -0.069		168.88	0.000
' P'	ופי	21 0.118		171.39	0.000
E '	יוי	22 -0.142		175.06	0.000
יםי	יםי	23 -0.108		177.21	0.000
· 💻	יםי		-0.070	204.74	0.000
<u>ц</u> ,	1 1 1		-0.017	217.54	0.000
1 1	יםי		-0.053	217.55	0.000
1 p 1	יוםי	27 0.054		218.11	0.000
141	יוםי	28 -0.028	0.070	218.26	0.000
1 þ í	ווין	29 0.028	0.029	218.41	0.000
יםי	יםי		-0.077	219.48	0.000
י ב ו	1 1	31 0.105	0.004	221.63	0.000
יםי	יםי	32 -0.100	-0.080	223.59	0.000
r þr	1 0 1	33 0.123	-0.108	226.57	0.000
i 🗖 i	1 1	34 -0.100	0.061	228.58	0.000
יםי	יםי	35 -0.107	0.084	230.88	0.000
· 🗖	1 10	36 0.283	-0.029	247.20	0.000

Figure 2. ACF and PACF

Source: Central Bureau of Statistics (2020), Eviews 9, processed (2021).

The non-stationary data is converted into a natural logarithm form to make the stationary data invariance, but not necessarily stationary in the mean. Table 2 shows that the data is still not stationary after being transformed to natural logarithms. Thus, differencing was performed once to make the data stationary in both the mean and variance. Table 3 shows that the probability is less than 0.05, so that it rejects the null hypothesis, then the data is stationary. Based on the ACF and PACF images and the low AIC and BIC values, the selected model is AR (12) I (1) MA(12) SMA(12). The results show that the SARIMA parameter coefficients are all signed with a significance level of 5%. These results are shown in Figure 2.

Variable	Coefficient	Std. Error	t-Statistic	Prob.		
AR(12)	0.410836	0.179841	0.179841 2.284439			
MA(1)	-0.687754	0.063711	-10,79491	0.0000		
high school(12)	-0.886070	0.249929	0.249929 -3.545285			
SIGMASQ	0.003327	0.000547	0.0000			
R-squared	0.470102	Mean dependent va	Mean dependent var			
Adjusted R-squared	0.456278	SD dependent var	0.079572			
SE of regression	0.058674	Akaike info criterion		-2.717960		
Sum squared resid	0.395909	Schwarz criterion		-2.624544		
Likelihood logs	165.7186	Hannan Quinn Criter		-2.680027		
Durbin-Watson stat	1.843616	6				
Method: ARMA Maximum Lik	elihood (OPG – BHH	H)				
Included observations: 119						

Table 4. SARIMA Parameter Test Results

The diagnostic test also shows that the model has a normally distributed residual, namely the Jarque-Berra probability of 0.803345 > 0.05. This means accepting the null hypothesis that the residuals are normally distributed. If the residuals are white noise, it can be ascertained that the model is suitable because there is no correlation between the residuals, the residuals are homogeneous, and there is no pattern in the residuals. Figure 7 shows the white noise test. The probability for each lag shows that the probability value is more than 5% alpha, thus accepting the null hypothesis that the residual is white noise. Based on the forecasting results, the MAPE value is 6.86% (dynamic) and 4.56% (static), so it can be stated that the forecasting results have a high level of accuracy (Figures 5 and 5).

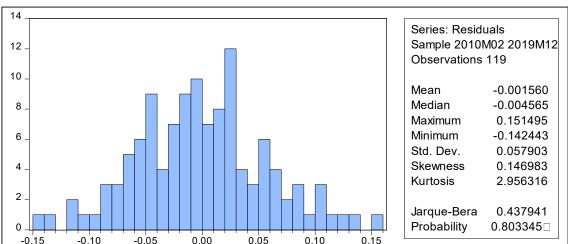


Figure 3. Normality test

Source: Central Bureau of Statistics (2020), Eviews 9, processed (2021).

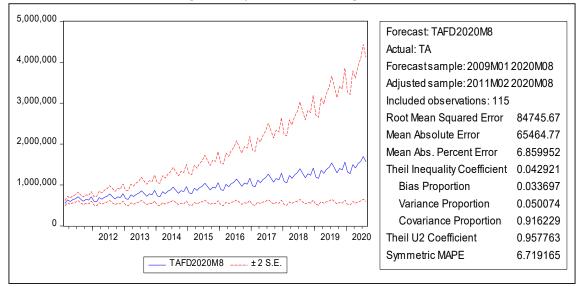
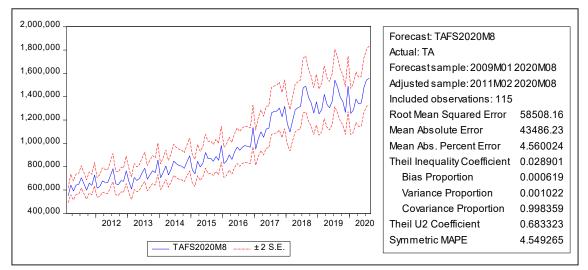


Figure 4. Dynamic Forecasting Results

Figure 5. Static Forecasting Results



Source: Eviews 9 (2021).

Based on the estimation results of Table 5, it can be seen that the tourism sector has suffered heavy losses due to this pandemic. The average percentage of losses in the tourism sector from January to August 2020 was 67.92% to 69.07%. The worst losses occurred in July when foreign tourist visits reached 9.29%-10.24% of tourist visits that would have been if there was no pandemic. The pandemic reduced foreign tourist arrivals significantly, in line with the results in Lu et al. (2018), Rehman et al. (2020), and Mair et al. (2016).

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
1 b 1	1 1 1	1 0.050	0.050	0.3011		
1 1	1 1 1	2 -0.003	-0.005	0.3020		
1 1	1 1 1	3 -0.001	-0.001	0.3021		
	10	4 -0.121	-0.121	2.1308	0.144	
141	1 1 1	5 -0.016	-0.004	2.1638	0.339	
1 þ 1	ומי	6 0.048	0.049	2.4614	0.482	
141	10	7 -0.036	-0.042	2.6311	0.621	
יםי	10	8 -0.101	-0.114	3.9458	0.557	
1 þ 1	ומי	9 0.048	0.058	4.2472	0.643	
יוםי	10	10 -0.110	-0.106	5.8474	0.558	
1 p 1	וםי	11 0.087	0.094	6.8450	0.553	
141	יםי	12 -0.030	-0.075	6.9638	0.641	
10	1 1 1	13 -0.060	-0.039	7.4523	0.682	
1 þ 1	1 1 1	14 0.031	0.021	7.5859	0.750	
141	1 1 1	15 -0.036	-0.034	7.7669	0.803	
1 þ 1	լ ւր։	16 0.036	0.035	7.9502	0.847	
1 þ 1	ון ו	17 0.067	0.047	8.5756	0.857	
1) 1	1 1 1	18 0.010	-0.011	8.5895	0.898	
1 1 1	ינףי	19 0.024	0.055	8.6749	0.926	
1 p 1	լ ւր։	20 0.073	0.040	9.4603	0.925	
 	[]	21 -0.182	-0.168	14.343	0.706	
' 티'	יםי		-0.092	15.843	0.668	
· 🏳		23 0.192	0.218	21.380	0.375	
1 þ 1	יוםי	24 0.058	0.082	21.891	0.406	
141	י 🗐 י	25 -0.046	-0.133	22.211	0.447	
יםי	יםי	26 -0.068		22.926	0.465	
יםי	וויו	27 -0.074	0.029	23.782	0.474	
יםי	1 1	28 -0.041		24.048	0.517	
1 1	יםי		-0.079	24.049	0.573	
יםי	יםי	30 -0.050		24.460	0.605	
1 j 1	יוםי	31 0.029	0.074	24.600	0.650	
q '	[]	32 -0.156		28.627	0.485	
יםי	יםי	33 -0.079		29.672	0.483	
יםי	□ '	34 -0.085		30.909	0.471	
יםי	יםי	35 0.050	0.101	31.344	0.500	
i þi		36 0.030	0.007	31.504	0.542	

Figure 7. White Noise Test

Source: Central Bureau of Statistics (2020), Eviews 9, processed (2021).

 Table 5. Estimated Losses in the Tourism Sector Due to the COVID-19 Pandemic

Deviad	Devied summer t		entage	Tourist Expenditure	Loss (million USD)
Period	current	Dynamic	Static	Dynamic	Static
January	1.272.083	3.39%	0.12%	54.40	1.92
February	863,960	32.44%	33.02%	506.17	519.58
March	470.970	68.59%	65.86%	1,254.99	1108.45
April	160,042	88.69%	88.05%	1,531.51	1,438.71
May	163.646	89.25%	87.81%	1,657.18	1,438.34
June	158,256	89.98%	89.29%	1,734.66	1610.64
July	157,939	90.71%	89.76%	1,880.69	1,690.75
August	164.970	89.47%	89.41%	1,709.21	1,699.77
Total	3,411,866	69.07%	67.92%	10,328.81	9,508.16

Source: Central Bureau of Statistics (2020), Eviews 9, processed (2021)

If accumulated, Indonesia experienced a loss of foreign tourist arrivals of 9,508.16 million USD to 10,328.81 million USD as of January to August 2020 (Table 5). Dynamically the worst losses occurred in July, and statically the most significant losses occurred in August. This considerable loss, of course, also dramatically impacts tourism-related businesses (Donthu & Gustafsson, 2020). The average tourist spending the most

on accommodation is 31.32% (Figure 1). The second line of business most purchased by tourists is food and beverages with 18.39%. The shopping business sector is the third sector that encourages tourists to spend the most money, 16.10%.

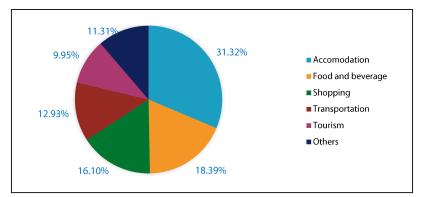


Figure 8. Percentage of Tourist Spending on Business in the Tourism Sector

Source: Central Bureau of Statistics, 2020.

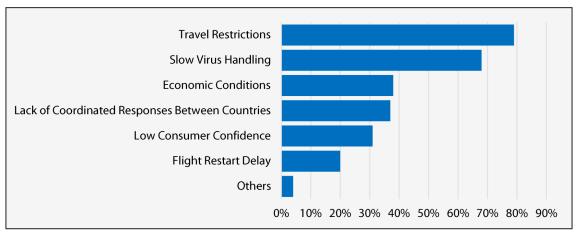
Business losses in the accommodation sector are estimated at USD 2,977.95 million to USD 3,234.98 million (Table 6). This loss is in line with the decline in the Room Occupancy Rate (TPK) of hotels in Indonesia. The ROR for hotels in Indonesia in 2018 was around 60% for 2-5 star hotels. In 2019 the TPK of hotels was in the range of 50%-60% for 2-5 star hotels. In January 2020, TPK for hotels was 49.17%, and in August 2020, TPK for hotels was 32.93%(Central Bureau of Statistics, 2020). Losses in the food and beverage sector are estimated at 1,748.54 million USD to 1,899.45 million USD. This result is in line with Amar et al. (2021) and Laksito and Yudiarta (2021) that COVID-19 has had a tremendous impact on the decline in the tourism sector. This impact is felt very deeply by business actors, especially MSMEs engaged in the tourism sector (Amar et al., 2021; Laksito & Yudiarta, 2021; Nursjanti & Amaliawati, 2021).

David	Accommodation		Food an	d Drink	Shopping	
Period	Dynamic	Static	Dynamic	Static	Dynamic	Static
January	17.04	0.599	10.00	0.352	8.76	0.308
February	158.53	162.73	93.09	95.55	81.49	83.65
March	393.07	347,17	230.79	203.84	202.05	178.46
April	479.67	450.60	281.64	264.58	246.57	231.63
May	519.03	450.49	304.75	264.51	266.81	231.57
June	543.29	504.45	319.00	296.19	279.28	259.31
July	589.03	529.54	345.86	310.93	302.79	272.21
August	535.32	532.37	314.32	312.59	275.18	273.66
Total	3,234.98	2,977.95	1,899.45	1,748.54	1,662.93	1,530.79

Table 6. Estimated Business Losses in the Tourism Sector Due to the COVID-19

Description: in a million USD

Source: Eviews 9, processed (2021).





Source: UNWTO (2021).

This is natural because Indonesia anticipates the spread of COVID-19 with a lockdown or Large-Scale Social Restrictions/PSBB. The PSBB resulted in a decrease in the community's mobility as a whole. Unusual tourist arrivals reduce the income of various food and beverage businesses, especially restaurants. The restaurant business is closed for an indefinite period. Along with the new normal era, some restaurants are starting to reopen with health protocols. Restaurant visitor capacity could be cut by 50% to comply with health protocols (Gursoy & Chi, 2020).

During the pandemic, the decline in tourists has stopped the wheels of business in the shopping sector, especially souvenirs, which MSMEs mainly own. Estimated losses experienced by businesses in the shopping sector are 1,530.79 million USD to 1,662.93 million USD. MSMEs in this field has been hit hard by the COVID-19 pandemic. Furthermore, Laksito and Yudiarta (2021) said that MSMEs need to adapt to COVID-19 through several mechanisms, such as changing the advertisement paradigm, developing new business models, and improving quality control.

Globally, tourism is predicted to start to recover in 2023. Based on the report UNWTO (2021), several things affect the slowdown in tourism recovery, namely 1) travel restrictions; 2) slow virus handling; 3) economic conditions; 4) lack of coordinated government response, especially between countries; 5) low consumer confidence; 6) slow resumption of flight (Figure 9). Several studies have stated that government policies are urgently needed to accelerate tourism recovery (Yeh, 2020; Sharma et al., 2021; Zhang et al., 2021; Mair et al., 2016).

Government policies that need to be prioritized in the recovery and transition period must be coordinated to support an uncertain tourism sector so that workers, businesses, and destinations are ready when recovery arrives. Among other things, efforts are needed to 1) restore tourist confidence and support tourism businesses to adapt and survive; 2) maintain domestic tourism and support the safe return of international tourism; 3) provide clear information regarding security and health conditions; 4) start building more resilient and sustainable tourism. Similar policies are shown in various countries worldwide (OECD, 2020). One of the policies issued by the Indonesian government is fiscal stimulus. The government provides a budget of IDR. 686.20 Trillion for handling COVID-19, and IDR. 123.46 Trillion to be given to MSMEs with details of an interest subsidy of IDR. 35.28 Trillion; placement of funds for restructuring of IDR. 78.78 trillion; spending on loan fees for working capital of IDR. 1 Trillion; DPT MSME financial PPH IDR 2.4 Trillion; investment financing to cooperatives through LPDB KUMKM IDR 1 Trillion.

Several countries issued various policies to save the business in the tourism sector. The Estonian government has budgeted EUR 26 million for business assistance in tourism which is valid until December 2020. The Icelandic government has suspended the accommodation tax from April 1, 2020, to December 2021, and for the payment of taxes from January 1 to March 31, 2020, it is deferred until February 5, 2022. The Peruvian government provides funds support for SMEs and provides credit guarantees to meet the capital needs of SMEs. The United States government provides a USD 2.2 trillion aid package, including grants and loans to the travel and tourism industry and broader business assistance(OECD, 2020). To improve the tourism sector during the recovery period due to the COVID-19 pandemic, efforts are focused on improving hygiene, health, and safety service protocols, the Cleanliness, Health, Safety, Environment Sustainability (CHSE) certification program, designing a covid-free tourist application through the eHAC application which is to perform tracing if there are tourists who are affected by COVID-19.

Adhering to health protocols is a step to guide safe business operations during the COVID-19 pandemic. Several world organizations also gave examples of the application of health protocols. Cruise Lines International Association (CLIA) implements and improves health protocols as an initial form of starting passenger operations. The World Travel and Tourism Council (WTTC) also restores 100 million jobs by opening up mobility by aligning health protocols. WTTC also launched safe travels in May 2020 to increase tourist confidence in health and safety protocols. In addition to certification and application of health protocols, completeness of information, especially for accommodation businesses. This information includes information about the identity of tourists, health conditions, where tourists come from, information on how assistance can be provided, information on how tourists can be contacted in times of distress, emergencies, or dangers, and how they are repatriated. (OECD, 2020; UNWTO, 2020). The Indonesian government has also reactivated the domestic tourist market and developed 5 Super Priority Destinations. The government has reopened tourism destinations in several places. The opening of Bali Tourism Destinations starts July 31, 2020. Based on input from tourism players, Bali is reopened with strict health protocols. Business actors must follow the provisions of Large-Scale Social Restrictions from each Regional Government and follow the provisions of the Health Protocol in places and public facilities (Decree of the Minister of Health Number 382/2020).

Several countries have also reactivated tourism markets to restore tourist confidence and boost demand. Chile has reactivated its domestic tourism and Taste Chile booking program with a particular budget of CLP 83 million. Denmark is launching summer packages for domestic residents with free public transport for eight days and half-price tickets. Japan has also begun to reactivate the domestic tourism market by providing discounts and vouchers to consumers for tourism, transportation, food, and events businesses(OECD, 2020). Food and beverage and shopping businesses, most of which are still in the form of MSMEs, can take advantage of the fiscal stimulus provided by the government. MSMEs can receive from the government business assistance and credit interest subsidies. MSMEs can improve health protocols in the production and distribution process. In addition, MSMEs with products whose demand is low or even non-existent can produce and modify their production goods with goods in high demand by society today. Innovation is the key to the survival of MSMEs (Romão, 2020). Businesses in the accommodation, food, beverage, and shopping sectors can take advantage of the policies issued by the government with the right strategy.

Efforts can be made by adapting the business model, such as offering takeaway food services, more flexible marketing conditions, price adjustments, changing operating hours, offering products and experiences digitally, and creating new products and packages. Businesses in the accommodation sector can also meet new market needs so that business operations can continue, namely by providing accommodation for students and alternative workspaces for long distances (Gursoy and Chi, 2020; Liguori and Pittz, 2020; OECD, 2020; Pasquinelli et al., 2021). Efforts that can be made to support businesses in the recovery process are to increase access to digital technology. Digital technology can simplify communication and increase time efficiency. In addition, digital technology can also reduce transaction costs and help provide complete information to minimize the occurrence of asymmetric information problems (Esquivias et al., 2020a). Financial services can also support businesses in the recovery process, one of which is by increasing financial inclusion. Financial inclusion is a condition where every community member has access to quality, timely, smooth, and secure legal, financial services at affordable costs according to their individual needs and interests. Based on this explanation, financial inclusion can positively affect company performance and support company competitiveness. One of the roles of financial inclusion is to facilitate access to credit for companies so that financial inclusion has an essential role in helping the recovery process (Esquivias et al., 2020b).

Marketing innovation includes the product, price, place, and promotion innovation. Changes in demand due to the pandemic require MSMEs to innovate their marketing mix. MSMEs took marketing mix actions in Norrbotten to survive during a crisis, such as facilitating reservations, ease of payment (by e-wallet, for example), and discounting, reorienting promotions for a long-term focus (safety and health certification). Other companies in Europe are implementing successful innovation efforts that MSMEs can replicate in Indonesia (Gössling et al., 2020). Some hotels in Denmark rent rooms to students to meet the shortage of student housing (dormitory). In Slovakia, the Bratislava Tourism and Hospitality Business Agency created a promotional campaign to extend the length of stay of tourists (free third-night stay, OECD, 2020).

Governments in various countries have also supported innovation for businesses in the tourism sector. Businesses in the accommodation, food, beverage, and shopping sectors must certify health protocols to ensure consumer safety. The Finnish government grants companies new products or innovative production solutions (usually covering new accommodation or business development). The Icelandic government provides funds for technology development to encourage investment. The Lithuanian government seeks to restore tourism by transforming tourism promoting innovation and digital technology through developing tourism services and products, for example, through company workers and innovation (OECD, 2020).

Certification of health protocols to ensure consumer safety can increase consumer demand because they feel safe during the pandemic. This certification is provided free of charge by the Ministry of Tourism and Creative Economy of Indonesia. Over time, consumers will be willing to pay more, for example, for hotel accommodation, with standard health and hygiene protocols (Qiu et al., 2020; Zhang et al., 2020). A study in China conducted by Qiu et al. (2020) found that most respondents are willing to pay more to reduce their risk due to COVID-19. The study also explained that youth showed higher responsiveness and motivation to service. This indicates that local governments must involve the younger generation in recovering from the crisis caused by COVID-19. Gursoy and Chi (2020) prove that easing travel restrictions does not immediately restore consumers' willingness to return to eating at restaurants or staying at hotels. Around 18% of consumers will eat at a restaurant or stay at a hotel when the destination has relatively low COVID-19 cases. In addition, they will go to a restaurant or hotel with suitable health protocols (there is a hand sanitizer area, staff wear masks and gloves, apply social distancing, limit the number of consumers served, strict public area cleaning, health, and safety protocol training for employees). Consumers' demands to maintain their health and safety encourage consumers to pay better at restaurants and hotels. Surveys show that 40% of consumers agree to pay more for their health and safety.

This is in line with the study conducted by Fong et al. (2021) that during the pandemic period, the government should prioritize health protocols to prevent the spread of COVID-19 compared to intervening to create a perception of tourism recovery. This is because the population will form a positive outlook if the government controls the spread of COVID-19 during the pandemic. If the government prioritizes this control, it will ultimately increase trust in tourism. The strengthening of its tourism image can impact the development of domestic tourism, essential for a faster economic recovery (Jiang et al., 2019).

People's consumption patterns that change from face-to-face to online must be put to good use by these three business actors (Pasquinelli et al., 2021). Hotels can promote their products through digital platforms by providing discounts and guaranteeing health protocol standards through digital platforms such as Traveloka, Tiket.com, and OYO. Food and beverage businesses have also started to put their products on digital platforms. Typical foods that are usually used as souvenirs for tourists can also be sold through digital platforms and businesses in the shopping sector.

CONCLUSION

The purpose of this study is to estimate the losses of the tourism sector and business actors in related fields from January to August 2020 so that steps can be taken to save business actors in the tourism sector so that they can survive during the pandemic. Our findings show that tourism experienced a loss of revenue of USD 9,508.16 million to USD 10,328.81 million, with a decrease in tourist arrivals by an average of 67%-69% as of January to August 2020. Businesses in the tourism sector also experienced losses, namely accommodation (2,977,95-3,234.98 million USD); food and beverage (1,748.54-1,899.45 million USD); and shopping (1,530.79-1,662.93 million USD).

The following strategies can be implemented for the implications of government policies in helping the difficulties faced by MSMEs during the COVID-19 pandemic, including (1) MSMEs in the food and beverage and shopping sectors must develop innovations. One form of innovation is the marketing mix carried out by MSMEs in Norrbotten to survive during the crisis, such as facilitating reservations, facilitating payments and providing discounts, reorienting promotions for a long-term focus. (2) Food and beverage and shopping businesses can adapt business models, such as offering take-away food services, more flexible marketing conditions, price adjustments, changing operating hours, and digitally offering products and experiences, creating new products and packages. (3) The strategy that can be done for the accommodation business is to meet the needs of new markets so that business operations can continue, namely by providing accommodation for students and alternative workspaces. (4) The strategy that needs to be applied for business actors in the accommodation, food, beverage, and shops is the application of standard health protocols.

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