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Determinants Airport Revenue and Total Passengers : Airport Access, Airport Service, Pandemic Covid 19, Airlines Characteristic, and Ticket Price

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A B S T R A C T

The goal is to test between variables X_1-X_5 with Y, and variables Y-Z, then the result is obtained only the variable ticket Price with the Total Passengers is insignificant, then the variable airport access with variable number of passengers is also insignificant, and variable Number of passengers with variable Airport Income is also insignificant. This research is based on tangible results in the field and at airports cannot be mentioned for any reason.

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INTRODUCTION

The Covid-19 pandemic, which lasted for two years in Indonesia and even around the world, has made various industries severely affected, including the aviation industry in Indonesia. Indonesia, which has a fairly large population of the third largest in the world, faces significant challenges (Andaka, 2020), in addition to the absence of flight schedules, hundreds of aircraft are not used or parked at airports (Widyastuti, 2021). The 2020 Air Transport Action Group (ATAG) from the article (Serrano & Kazda, 2020) gives a picture of the world according to existing data due to covid 19 from 650.5 million people worldwide work in the aviation sector These jobs range from direct employment with crew members, airport operators, airlines, and air traffic control service providers to indirect work with fuel suppliers, building companies, aircraft suppliers and other businesses. In addition, it was found that the tourism sector accounted for about 36.7 million of the 65.15 million jobs. The movement of people and goods throughout the country is made possible by air travel in the tourism sector. As an illustration of aircraft data at the beginning of Covid-19 2020 for domestic and international flights as follows:

Table 1. Domestic In-Flight Aircraft Data

Bandara Utama	Penumpang Pesawat dalam Penerbangan Domestik											
	2020											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Agst	Sept	Okt	Nov	Des
Polonia	288 819	227 602	172 348	29 386	3 593	28 567	62 904	89 451	74 545	85 537	116 956	-
Soekarno Hatta	1 600 594	1 551 967	1 211 697	191 002	27 500	174 352	427 731	574 597	499 930	600 861	828 148	-
Juanda	553 747	481 881	408 725	97 748	5 397	64 137	121 240	186 467	162 402	182 889	238 036	-
Ngurah Rai	453 130	346 962	253 517	44 122	2 423	11 396	41 375	83 260	80 930	99 469	169 655	-
Hasanudin	308 503	273 885	230 917	49 046	6 663	40 508	79 957	134 043	129 773	156 486	193 428	-

Source : BPS 2020

Table 2. Data on Goods Loaded in Domestic Flights in 2020

Bandara Utama	Barang yang dimuat dalam Penerbangan Domestik											
	2020											
	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Agst	Sept	Okt	Nov	Des
Polonia	1 441	1 239	1 182	1 045	887	1 141	1 283	1 271	1 498	1 451	3 181	-
Soekarno Hatta	12 617	11 991	12 258	10 687	8 980	9 405	12 616	13 163	14 929	14 986	15 090	-
Juanda	2 900	2 808	2 618	2 793	1 193	2 188	3 177	3 218	3 524	4 047	3 909	-
Ngurah Rai	1 468	1 019	1 251	960	348	649	716	936	1 023	1 212	1 374	-
Hasanudin	1 858	1 641	1 515	1 656	1 173	1 943	2 254	2 315	2 522	2 723	2 658	-

Source : BPS 2020

The data shows that at the beginning of the Covid-19 pandemic, the government's efforts to limit it have begun, from aircraft operating for each

airline, to restrictions for passengers with a number of is getting less and less. The COVID-19 pandemic has made all airlines turn their minds to follow policies and have to keep getting something in difficult times around the world and Indonesia.

Each air freight or airline has its own characteristics, there are several characteristics for aircraft according to (Rosyidi, 2005) namely weight, size, wheel configuration, capacity and length of the basic runway. Airline characteristic can be seen from the data to be displayed according to the data from (*Characteristics-Angud*, n.d.) as follows :

Table 3. Characteristics of Air Freight

NO.	KARAKTERISTIK	KETERANGAN
1.	High Speed	Transportasi yang satu ini memang sangat diandalkan karena kecepatannya. Pagi berada di JKT, siang di SIN dan sore berada di DPS.
2.	High Capital	Modal yang dibutuhkan tidak murah. Ratusan juta US Dollar dihabiskan untuk membeli sebuah pesawatt udara. Belum lagi untuk membangun sebuah sistim operasi penerbangan yang handal
3.	High Risk	Transportasi ini juga memiliki resiko yang sangat besar dan fatal. Namun secara statistik, transportasi udara adalah jenis transportasi yang paling aman dibandingkan dengan jenis transportasi lainnya.
4.	High Technology	Dibutuhkan teknologi yang tinggi untuk mendukung operasi dari sebuah pesawat udara. Semakin besar pesawat , semakin canggih teknologi yang digunakan.
5.	High Cost	Biaya yang sangat besar juga digunakan untuk operasional pesawat udara. Cost yang paling besar dikeluarkan adalah Fuel (avtur).
6.	High Competition	Kompetisi yang terjadi bisa sangat cepat berubah. Setiap menitnya perusahaan penerbangan berlomba-lomba "menjual seat"nya. Berbagai strategi digunakan untuk menarik penumpang.
7.	High Rumors	Dunia penerbangan menjadi sorotan utama jika terjadi sesuatu hal di luar kewajaran. Dapat dikatakan dunia penerbangan disetarakan dengan bencana alam.
8.	High Politic	Dibutuhkan ilmu politik yang tinggi di dalam dunia penerbangan. Dunia penerbangan juga dekat dengan "lobby" tingkat tinggi.
9.	High Regulation	Setiap aktivitas yang terjadi di dunia penerbangan sudah diatur oleh ICAO dan IATA. Tidak boleh ada celah dalam dunia penerbangan.
10.	High Performance	Dibutuhkan performa yang tinggi dalam menjalankan pekerjaannya.

After the pandemic all airlines started sulking back routes and looking for passengers to make up for the shortfall during the pandemic. Airlines today should also look at the potential of passengers with their characteristics, in addition to airlines having the characteristics as mentioned in the table above. This phenomenon of air transportation or flight characteristics allows passengers to choose a full-service airline or an airline with *a low cost carrier* type. In addition, passengers can currently choose tickets from airlines used with both types of flights that exist today. The existence of online tickets for consumers can be easy to track, but it is difficult if consumers only use observation (Ren et al., 2011). Purchasing behavior from passengers in Asean Countries by having different characteristics and attitudes (Truong et al., 2020). In Indonesia, a large number of passengers will be available at certain times such as national holidays, school holidays, holidays Such as Eid al-Fitr, the

Christmas holidays and generally only ordinary passengers with the above needs. Passengers are currently facilitated by the presence of technology, E-ticketing increases the flexibility of passengers and travel agents to change routes by eliminating paper forms and reducing ticket processing costs (Simarmata & Keke, 2019). The phenomenon that with certain times there will be a large number of passengers makes this variable usable in this scientific article.

The number of passengers after this pandemic has made the aviation industry optimistic and growing Again, strategies-strategi are again maximized to achieve passenger growth targets. The economy increases the demand for air transportation and goods in the interaction of the two (Higgoda & Madurapperuma, 2019), besides that services to passengers from the airport can now be in line with passenger expectations where there are many facilities in the terminal that can make it easier for passengers. Administrative actions (e.g. departure and arrival time control) or economic incentives control demand and capacity in busy airport terminals (AlKheder, 2021). The current airport revenue comes from the air side and the ground side at the airport, starting from the management of car parks, concessions, to the air side of parking stands, aviobridge, and those are all services provided by airport managers. The phenomenon of the large number of passengers will increase the income to the airport from what is delivered.

The ease of airport access today makes passengers comfortable and traveling, in Europe there is entry for passengers who are going to travel (Colovic et al., 2022), as well as in scientific articles that stated that passengers who will travel think about the ease of access to the airport (udin., 2022). From the submission of the descriptions above, the phenomena of each variable in this scientific article, the novelty that exists that the use of variables together for Looking for research results with research results, no researcher has implemented it. The goal was to find the influence between the variables in this study by using passenger respondents at XYZ airports.

THEORETICAL REVIEW

Airlines Characteristic and Total Passenger

There is only one research result that is also related to passenger characteristics with the selection of modes to the airport (Wibowo & Rudiarto, 2017), besides that there is data on the characteristics of airlines in the industry aviation and an overview in Indonesia of air freight characteristics (*Characteristi cs-Angud*, n.d.) .

Airport Service and Total Passenger

It is also the same with the above variables where there is no direct research result of this variable, but there is something close to the research results of these two variables as stated by (Halpern & Mwesiumo, 2021) in the results of his research stated that the failure in service at the airport made passengers unable to use promotions for the airport.

H1. Airport Service has a positive impact with Total Passenger

Pandemic Covid 19 and Total Passenger

There are so many research results whose results discuss the pandemic 19 variable and passengers using qualitative methods such as research results from (Widyastuti, 2021) and research results from (Brier & lia dwi jayanti, 2020) and research results from (Nižetić, 2020).

H2. Covid 19 pandemic has a positive effect with Total Passengers

Airport Access and Total Passenger

There are some that can make the reinforcement in the article reference to this variable such as the statement that passengers who will travel can already think of access to the airport (Zainal ., 2022), there are research results in scientific articles that state safety is important in the choice of access mode, user-friendliness and comfort for parents (Chang, 2013).

H3. Airport Access is positively affected with Total Passenger

Ticket Price and Total Passenger

Directly this variable is in direct contact with the number of passengers in reality but the results of direct research no one has researched with the results but there are some references that can used in references to this scientific article. Airlines use different accounting strategies such as: Price discrimination and demand forecasting to increase their profits (Abdella et al., 2021).

H4. Ticket Price is positive with total passengers

Total Passenger and Airport Income

The results of the study that are close to the variables in this study state that there is an influence of Gross Domestic Product (GDP) and national rules on upper and lower limits positive with the number of passengers (Main, 2021).

H5. Total passenger positively affects airport income

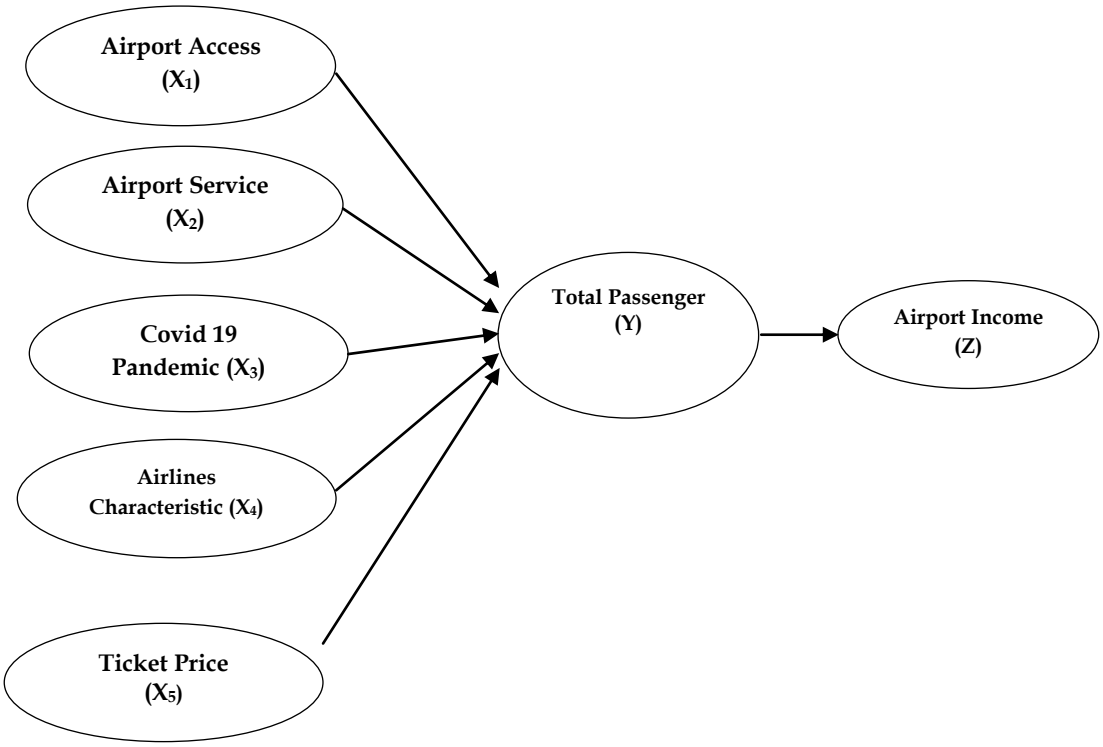

Figure 1. Framework Model Research

METHODOLOGY

This study used a quantifiable method with the population in this study consisting of passengers at XYZ airport by taking random sampling with a total of 150 passengers in December 2022. The sampling technique in this study is purposive with certain conditions by the researcher. according to research needs. Data collection by distributing questionnaires to respondents according to the characteristics of the set sample. The Likert scale is used for a large number of respondents to find out their responses or attitudes.

RESULTS

The results of the model with SEM PLS obtained an image as a God ness of Fit figure as follows:

Table 4. Goodness-of-Fit Models

Goodness-Of-Fit (GOF)	Analysis Results	*Cut Off Value*	Model Evaluation
Chi-square	χ^2 = 335 P = 0. 098	Probability ≥ 0.05	Good
TLI	0.979	GFI > 0. 90	Good
GFI	0.867	AGFI > 0. 90	approach
AGFI	0.834	TLI > 0. 90	approach
CFI	0.982	CFI > 0.90	Good
RMSEA	0.027	RMSEA ≤ 0.08	Good

Source : Processed results by researchers

Based on the existing GOF criteria, the GOF has not been met, it is concluded that the model is fit with data. Meanwhile, from the results that are then obtained, the results are as follows:

Table 5. Intervariable Analysis Results

			Estimate	S.E.	C.R.	P	Label
Airport Revenue_Z	<---	Acces_X1	.428	.106	4.055	***	
Airport Revenue_Z	<---	Service_X2	.247	.084	2.954	.003	
Airport Revenue_Z	<---	Pandemic_X3	.264	.082	3.229	.001	
Airport Revenue_Z	<---	Charateristic_X4	.372	.089	4.164	***	
Airport Revenue_Z	<---	Price_X5	.323	.085	3.795	***	
Total Passengers_Y	<---	Satisfaction_Z	.195	.149	1.308	.191	
Total Passengers_Y	<---	Acces_X1	.060	.124	.480	.631	
Total Passengers Y	<---	Service_X2	.188	.098	1.913	.056	
Total Passengers_Y	<---	Pandemic_X3	.227	.098	2.309	.021	
Total Passengers_Y	<---	Characteristic_X4	.278	.112	2.492	.013	
Total Passengers_Y	<---	Price_X5	.145	.102	1.414	.157	

Source : Processed results by researchers

From the data above, it is explained that the variables of the results are only the variable Airport Income (Z) with variabal Number of Passengers (Y), Variable Airport Access (X_1) with Variable Number of Passengers (Y), Price Variable (X_5) with an insignificant Number of Passengers (Y) variable from the above data test results.

DISCUSSION

Effect of Airport Access on Number of Passengers

From the test results that have been obtained that hypothesis testing carried out using a partial test (t test), it is known that with a value of 0.060, it is not valid for the variable Airport Access with the Variable Number of Passengers.

Effect of Airport Service on Passenger Numbers

From the test above, the results of the partial test (t test) are known that with a value of 0.188, the Airport Service variable is significant to the variable Number of Passengers.

The Effect of Covid-19 Pandemic on the Number of Passengers

From the above tests, the partial test (t test) is known that with a value of 0.227, the Covid 19 Pandemic variable on the Number of Passengers is significant with the number of Passengers

Effect of Airlines Characteristic on Passenger Numbers

From the test results using a partial test (t test), the Airlines Characteristic Variable is significant with the variable number of passengers.

Effect of Ticket Price on Number of Passengers

From the test results using a partial test (t test), the price variable is insignificant with the variable number of passengers.

The Effect of Passenger Numbers on Airport Income.

The test results showed that the Variable Number of passengers was not significant with the variable Airport Income.

CONCLUSIONS AND RECOMMENDATIONS

This study aims to test between the variables $X_{1-X\ 5}$ with Y , and the variables Y-Z, then the results are obtained only the variable Ticket Price with the Number of Passengers is not significant , then the variable airport access with variable number of passengers is also insignificant , and variable The number of passengers with variable Airport Income is also insignificant. This research is based on tangible results in the field and at airports cannot be mentioned for any reason.

FURTHER STUDY

In this study, it can still be developed, especially between variables with the same method, or with a wider number of research objects , so that there is a novelty in the results research in aviation.

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