The Impact Of Flight Rates on Economic Growth in Indonesia

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Abstract: The contribution of the Aviation Industry in Indonesia to economic sectors has increased from year to year, although its contribution is not as large as other industries. The aviation industry's contribution to Indonesia's economic growth recorded from 2013-2019 was 0.6% - 0.74%. This increase means that the aviation industry has good prospects as a connectivity medium, especially for Indonesia. Therefore, the performance sustainability of the sector needs to be a focus for the government, especially the market structure of the sector because it will have implications for fares fluctuations. For example, the phenomenon of fare changes that occurred in 2019 affected the aviation industry. This research has a purpose to (i). Assess and analyze how the impact of airfare on economic growth in Indonesia; (ii). To study and analyze how the impact of the number of flights on economic growth in Indonesia; (iii). Reviewing and assessing the impact of foreign debt on economic growth in Indonesia; and (iv). To analyze the impact of the inflation rate on economic growth in Indonesia. This study uses Computable General Equilibrium (CGE) to answer the existing problem formulation. The main finding of this study is that airfares have a negative impact on Indonesia's economic growth through decreasing demand for aviation services. This study recommends that the government needs to maintain the amount of faress in the market to maintain purchasing power and also Indonesia's economic growth in addition to maintaining macroeconomic variable stability.

Keywords: Fares, Aviation, Economic Growth, CGE, Business Competition, Macroeconomics

Introduction

ir transportation is the main choice for people who travel long distances. The advantages of air transportation make the traffic of this transportation mode increase every year. Globally, there is an increase in the distance traveled by passengers every year (see the figure below).

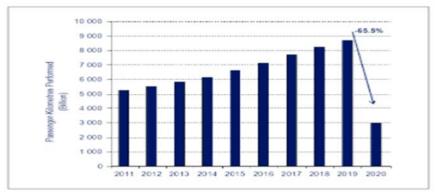


Figure 1. Passenger Traveled Performance

Source: ICAO (2020)

It can be seen that the trend of passengers' travel shows an increase globally. In 2011, the total distance covered was about 5000 km. In 2019, the distance increased to 9000 km. This implies that consumers are increasingly choosing air transportation to support their daily activities, especially over long distances. If viewed further, the decline occurred in 2020 due to restrictions by the government in each country due to the increasingly wide spread of the Covid-19 virus. This situation has made the performance of revenue per passenger decline, as seen in the following figure.

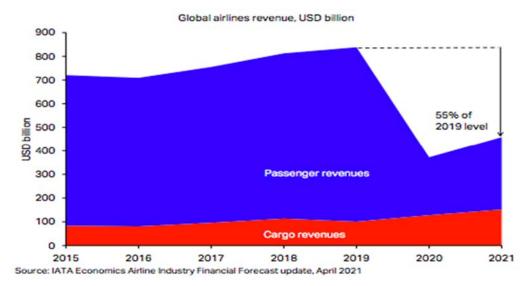


Figure 2. Global Airline Revenue Performance

The revenue contribution from passengers dominates the overall receipts (including Cargo). In terms of passengers or cargo, both have an increasing trend of acceptance from 2015-2019. However, the revenue per passenger which experienced a contraction in 2019, due to the Covid-19 pandemic.

Turning to Indonesia, the performance of air transportation modes is also very promising from a business perspective. Based on data from the Central Statistics Agency /BPS (2022), the contribution of GDP from air transport increases every year, especially from 2013-2019. Although its contribution is still smaller than the sea transportation mode, the potential of the aviation industry still has a contribution to Indonesia's economic growth as shown in the figure below.

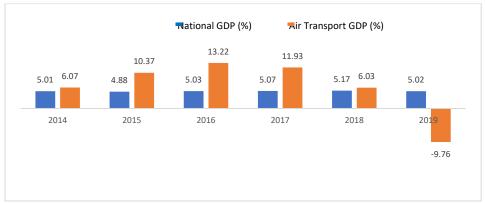


Figure 3. Air Transport GDP Growth Rate and National GDP 2013-2019

Source: Data processed (2022)

Based on the data above, it can be seen that, the performance of Air Transport's GDP always exceeds the national GDP growth. The highest growth occurred in 2016 with a growth of 13.22%. Meanwhile, in 2019, Air Transport GDP growth contracted by -9.8%. From these data, it can be concluded that the output of the aviation industry has a growth of above 5% and certainly has good prospects coupled with the contribution of GDP which is increasing every year.

Conceptually, easier access to transportation to remote areas will increase trade openness in these areas. In rating, there are 10 best and most popular airlines (including: Garuda Indonesia, Citilink, Sriwijaya Air, Lion Air, and Batik Air) that are often used by passengers based on several criteria such as safety, passenger satisfaction, ticket prices, schedule accuracy, entertainment, cabin cleanliness, food quality, service efficiency, and other paid factors. According to INACA (2020), the Indonesian airline Air Asia dominates the market for domestic flights by 40%. The second place was followed by Garuda Indonesia with a market share of 37%. Lion Air is in third place with a market share of 10.5%. In addition, in international flights, Air Asia is the airline that is most in demand by consumers. The possible factor where Air Asia ranks at the top on domestic or international flights is the price level given.

The year 2019 was the lowest year in terms of the number of passengers. The ticket prices (air fare) from airline services make the demand fall instantly (see also: Mumbower et al., 2014; Brons et al., 2002). Slightly different results were found in Amin's (2013), where the frequency of flights and the amount of income per capita affect the number of flights passengers, while fares have no effect on the number of passenger flights. On the other side, the increase in air fares not only has an impact on decreasing demand for aviation services but also triggers inflation in some areas (due to supply problems). Increasing prices is one of the strategies that airlines can take to cover large operating costs, but price increases also pose various risks that may occur, especially in Indonesia's economic growth. Based on this background, researchers are interested in conducting research with the title "Impact of Airline Fares on Indonesia's Economic Growth".

Literature Review Price Theory and Market structure

The theory of price clearly began to appear in the theory of individual demand in the classical flow through Adam Smith. The greatest role that Adam Smith gave to economic theory was that of a market-based price system. In this case there is an interaction in the supply and demand model. Smith argues that prices play an important role in informing consumers and producers about what resources are of value and encouraging economic actors to make the most efficient decisions to utilize these resources (see Nicholson, 2000). Based on the existing description, it can be concluded that, price is the value of a product or service in conducting exchanges in the modern era which also acts as a medium for providing information to the market as one of the basis for decision making.

Along with the development of the price theory, the concept or theory of inflation emerged. According to Pass and Lowes (1988), inflation is an increase in general prices in an economy that takes place continuously from time to time. The theory of inflation can be related to various aspects in the field of macroeconomic science, one of which is the unemployment rate. This study was first developed by Alban Wilian Philips in the 1950s who tried to see how the relationship between inflation variables and the unemployment rate in England. These results indicate that there is a negative relationship between inflation and the unemployment rate. The mechanism that occurs is that low unemployment will increase the nominal wage level, in the end, an increase in nominal wages will increase the price of goods (see Blanchard and Johnson, 2013). This can be seen as an increase in the company's costs to the wages of its employees. In this case, the electricity tariff policy, which is indeed a basic input in carrying out production or business activities, allows for an effect on the price of finished goods.

In general, there are two explanations for inflation, namely inflation due to excess demand and inflation due to cost drives. Inflation due to excess demand is known as demand-pull inflation. This condition is related to the high demand at the level of full employment from the national output which ultimately puts pressure on the price level. Meanwhile, inflation that occurs due to cost drives is a condition where there is an increase in the price of input factors, in this case, it can be in the form of wages or raw materials, thereby reducing production costs which result in an increase in the price of final goods.

Furthermore, the market structure itself is part of the science of microeconomics which emphasizes the classification of producers into several forms of market-based on characteristics such as the type of product produced, the number of companies in the industry, the ease with which they enter or exit and the role of advertising in industrial activities. There are several categories of the market structure according to Hasibuan (1993): (i). Perfect Competition Market. The definition of a perfectly competitive market is a form of interaction between demand and supply where

there are many sellers and buyers. Thus, the ability of each company is considered very small which is unable to influence the market; (ii). Monopoly Market. In this case, there is only one producer and many buyers and the goods produced have no substitutes; (iii). Oligopoly Market. This market structure is dominated by a small number of competing firms. Each firm has considerable power to influence market prices. Products can be homogeneous or differentiated. The behavior of each company will affect the behavior of other companies in the industry; and. (iv). Monopolistic Market. Monopolistic competition is a market structure characterized by a large number of firms selling substitutes but different enough that the demand curve for each firm has a negative slope.

Transportation Concept

Transportation can be interpreted as the movement of goods or people in the dimensions of space, time, and value (Stoper and Meyburg, 1978; Nasution, 1996; Atmajaya, 2011). The movement of goods or people cannot take place without the supporting facilities and infrastructure, therefore a systems approach is more appropriate to use in understanding transportation. According to Whynne-Hammond (1995), most transportation routes are not built as a whole, meaning that this transportation network always develops gradually and gradually over time. So with these activities, there are three things, namely the presence of cargo being transported, the availability of vehicles as a means of transportation, and the presence of roads that can be passed. The process of moving from the movement to the place of origin, where the transportation activity begins and to the destination where the activity ends. For this reason, with the transfer of goods and people, transportation is one of the sectors that can support economic activity (the promoting sector) and service providers (the servicing sector) for economic development.

Morlok (1988) suggests that due to differences in the level of resource ownership and the limited ability of the region to support the needs of the population of a region, there is an exchange of goods, people and services between regions. This exchange begins with a supply and demand process. As a tool for supply and demand processes that need to be delivered to other areas, transportation facilities are needed. The means of transportation that allows for mobility in the form of public transportation. Further more, Tamin (2008), transportation is needed because the sources of human needs are not found in any place, so that there is a gap in distance between source locations, production locations and human locations as consumers, this distance gap gives birth to transportation activities. There are five main elements of transportation, namely: (i). Humans, who need transportation; (ii). Goods, which humans need; (iii). Vehicles, as transportation advice; (iv). Roads, as transportation infrastructure; and (v). Organization as a transportation manager.

The Previous Study

Several separate studies related to the effect of flight fares, number of flights, per capita income, inflation, and foreign debt on economic growth in increasing the number of passengers have been carried out to date (among them by: Amin, 2013; Escobari & Lee, 2013; Granados, et al. al., 2011; Mumbower, et al., 2014; Brons, et al., 2002; Derimbas, 1995; Barro, 1995; Ardiansyah, 2017; Daniel, 2018; Kasidi & Said, 2013; and Amoateng & Amoako-Adu, 2006). Amin (2013) found that changes in the number of flight frequencies and the amount of income per capita affect the number of flight passengers, while fares have no effect on the number of passenger flights. Meanwhile, Escobari & Lee (2013) found that an unexpected increase in demand will reduce capacity utilization.

Granados et al. (2011) find that consumer demand on the Internet channel is more price elastic for online travel agents. In the following year, Granados et al. (2012) again conducted a study with a similar theme and the results of the study were different, where the demand for online channels was inelastic. Mumbower et al. (2014) concluded that each airline can design an optimal promotion, in relation to the departure schedule that must be targeted. Derimbas (1995) implicitly means that input factors (such as fuel) are important aspects of transportation costs. Ardiansyah (2017) and Daniel (2018) state that in general inflation has an impact on economic growth and specifically Barro (1995) states that in 100 countries from 1960 to 1990, an average increase in inflation of 10% per year will have an impact on decreasing inflation. real GDP per capita growth rate of 0.2%-0.3%. Kasidi & Said (2013) show that foreign debt in the short term affects economic growth significantly, but not in the long term. Similar results were previously found by Amoateng & Amoako – Adu (2006) where there is a two-way causality relationship between economic growth and the level of foreign debt.

Research Methodology

As described earlier, this study aims to analyze the impact of airline service tariffs on Indonesia's economic growth through two different analytical approaches, namely through Computable General Equilibrium (CGE) and coding analysis (code). The novelty of this research is the analytical technique used and the resulting policy recommendations. The analysis tool of this study is different from previous studies (Brons et al., 2002; Granados et

al., 2011; Amin, 2013; and Mumbower et al., 2014) which tend to use an econometric approach to measuring flight fare elasticity. In this study, the authors use a mixed approach (mixed method), namely Computable General Equilibrium (CGE), and also coding analysis (coding) in achieving the research objectives that have been determined previously. The CGE model that will be compiled in this research is included in the category of neoclassical class model, which assumes that the market is in perfect competition and all resources are used by each economic actor to achieve maximum profit or get maximum benefit.

The stages of compiling the CGE model are broad as shown in Figure 4. The preparation of the model begins with the preparation of SNSE data and inventory of the CET and CES coefficients which is carried out simultaneously with a theoretical study of the CGE Model, then continues with the development of the CGE model. After the CGE model is built, it is necessary to test the suitability of the model replicated variable with the benchmark variable which is the initial value. The suitability test of the replicated variables from the model results with benchmark variables is very important for all macroeconomic variables, such as household consumption, government consumption, investment, exports, imports, sectoral output, and other variables.

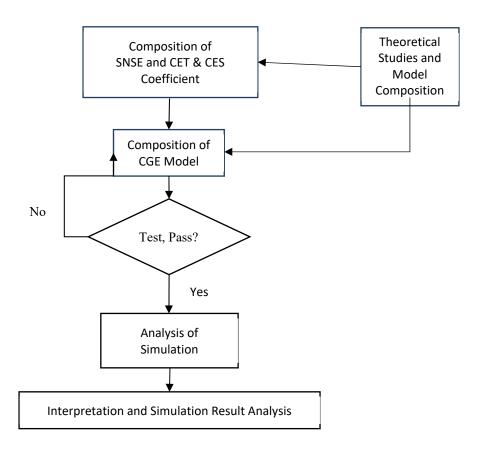


Figure 4. Design Model

Results and Discussion

Description of Research Variables

Before describing the results of the CGE simulation, firstly we describe the logging rates of each airline. The following are the average upper and lower fares of the four routes (CGK-JOG, CGK-SUB, CGK-DPS, and CGK-KNO) on Garuda Indonesia airlines during 2013-2019.



Figure 5. Average Fares Up & Down Four Routes of Garuda Indonesia 2013-2019

Based on the figure above, 2015 was the year with the highest average upper fares of the four routes of Garuda Indonesia, which was IDR2,275,000. Then the second highest upper fares occurred in 2016-2018 when the average fares were constant at IDR2,108,000. The lowest average of upper fares occurred in 2013 which was IDR1,847,000. Furthermore, for lower fares, 2019 was the highest year for the average lower fares of the four routes. Then the second highest lower fares occurred in 2015 where the average fares were constant at IDR650,000. Then the third highest lower fares occurred in 2016-2018 where the average fares were constant at IDR632,000. The fourth highest lower fares occurred in 2014 where the average fares were constant at IDR565,100. As for the average upper fares, the lowest occurred in 2013 which was IDR498,100.

Next is the average level of the upper and lower fares of the four routes (CGK-JOG, CGK-SUB, CGK-DPS, and CGK-KNO) on Citilink airlines during 2013-2019.

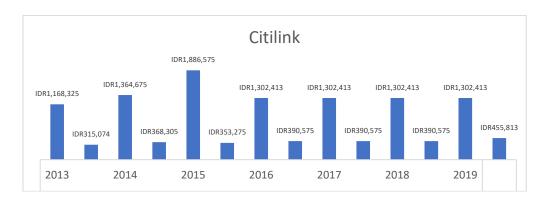


Figure 6. Average Fares Up & Down Four Routes of Citilink 2013-2019

Source: Data processed

Based on the figure above, 2015 was the year with the highest average upper fares of the four routes of Citilink, which was IDR1,886,575. Then the second highest upper fares occurred in 2016-2018 where the average fares were constant at IDR1,302,412. The lowest average upper fares occurred in 2013 which was IDR1,168,325. Year 2019 was the highest year for the average lower fares of the four routes available at Garuda Indonesia during 2013-2019. Then the second highest Lower Fares occurred in 2016-2018 where the average fares was constant at IDR390,575. Then the third highest lower fares occurred in 2014 where the average fares were constant at IDR368,305. Then the fourth highest lower fares occurred in 2014 where the average fares were constant at IDR353,275. As for the average upper fares, the lowest occurred in 2013 which was IDR 315,073.

Next is the average level of the upper and lower fares of the four routes (CGK-JOG, CGK-SUB, CGK-DPS, and CGK-KNO) on Batik Air airlines during 2013-2019:



Figure 7. Average Fares Up & Down Four Routes of Batik Air 2013-2019

Based on the figure above, 2015 was the year with the highest average Upper Fares of the four available Batik Air routes, which was IDR2,219,500. Then the second highest Upper Fares occurred in 2014, where the average fare was IDR1,605,550. The lowest average Upper Fares occurred in 2013 which was IDR 1,374,500. Furthermore, for Lower Fares, 2019 was the highest year for the average Lower Fares of the four routes available at Garuda Indonesia during 2013-2019. Then the second highest Lower Fares occurred in 2016-2018 where the average fares were constant, which was IDR 459,500. Then the third highest Lower Fares occurred in 2015 where the average fares were constant at IDR366.460. Then the lowest Lower Fares occurred in 2014 where the average fares were constant at IDR366.460.

Next is the average level of the upper and lower fares of the four routes (CGK-JOG, CGK-SUB, CGK-DPS, and CGK-KNO) on Lion Air airlines during 2013-2019:



Source: Data processed

Figure 8. Average Fares Up & Down Four Routes of Lion Air 2013-2019

Based on the figure above, 2015 was the vear with the highest average upper fares of the four routes of Lion Air, which was IDR1,886,575. Then the same magnetic array fares occurred in 2014, where the average fares were IDR1,364,675. The lowest average upper fares occurred in 2013 which was IDR1,168,325. Furthermore, for lower fares, 2019 was the highest year for the average lower fares of the four routes available at Lion during 2013-2019. Then the second highest lower fares occurred in 2016-2018 where the average fares were constant at IDR369,575. Then the third highest lower fares occurred in 2015 where the average fares were constant at IDR369,580. Then the fourth lower fares occurred in 2014 where the average fares were constant at IDR294,644. Then, the lowest of lower fares occurred in 2013 where the average fares were constant at IDR294,644. Then, the lowest of lower fares occurred in 2013 where the average fares were constant at IDR2952,059.

The conclusions that can be drawn from the average upper and lower fares for the CGK-KNO route: (i). Garuda Indonesia and Batik Air are the airlines with the most expensive upper fare; (ii). Lion Air and Citilink are the airlines with the cheapest upper fares; (iii). Garuda Indonesia is the airline with the most expensive lower fares; and (iv). Lion Air is the cheapest lower-fare airline. Overall, Garuda Indonesia and Batik Air are the airlines with the most expensive upper fare for the 4 available routes (CGK-JOG; CGK-SUB; CGK-DPS; and CGK-KNO). Meanwhile, Lion Air is the airline with the lowest lower fares for the 4 available routes.

In the next section, we will describe the development of economic growth from 2013-2019. The following is a figure showing Indonesia's real GDP from 2013-2019:

Gros Domestic Product (Billion Rupiah)

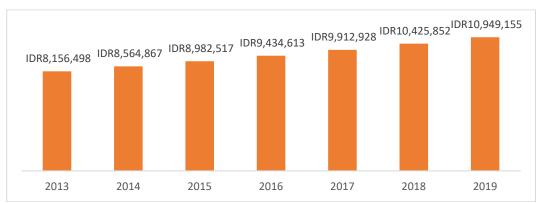


Figure 9. The Performance of Indonesia's Real Gross Domestic Product 2013-2019

Source: Data Processed

Based on the figure above, it can be seen that Indonesia's real GDP during 2013-2019 has an increasing trend, where in 2013 it was valued at IDR8,156 trillion to IDR10,949 trillion in 2019.

Furthermore, it will be shown regarding the performance of sectoral GDP (Air Transport) from 2013-2019:



Figure 10. Indonesia's Air Transport GDP Performance in 2013-2019

Source: Data Processed

Based on the figure above, it can be seen that Indonesia's Air Transport GDP during 2013-2019 has an increasing trend, where in 2013 it was valued at IDR49 trillion to IDR69 trillion in 2019. The highest GDP occurred in 2018 amounting to IDR 77 trillion.

In trend, Indonesia's Air Transport GDP growth is higher than Indonesia's national GDP, the following will show the comparison of sectoral GDP (Air Transport)

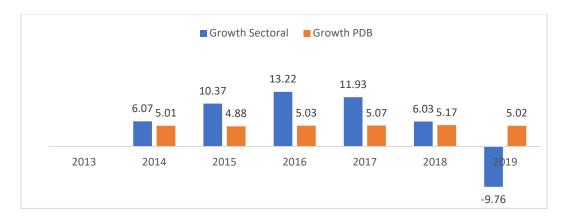
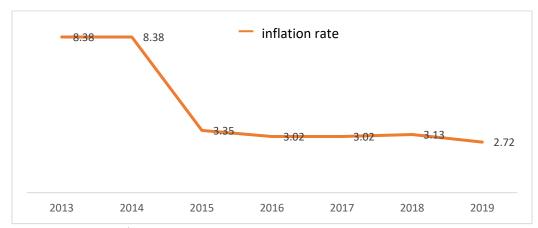


Figure 11. Air Transport GDP Growth Performance Comparison with Indonesia's National GDP, 2013-2019

Based on the Figure above, it can be seen that sectoral GDP growth (Air Transport) was higher than Indonesia's GDP as a whole in 2014-2018. Meanwhile, sectoral GDP growth in 2019 was below compared to Indonesia's GDP growth.

In the next section, the development of the inflation rate in 2013-2019 will be described. The following is a figure showing the performance of Indonesia's inflation rate from 2013-2019.



Source: Data processed

Figure 12. Average Performance Level of Inflation in Indonesia 2013-2019

Based on the figure above, it can be seen the average inflation rate during 2013-2019. The inflation rate in Indonesia experienced a downward trend, which was at 8.38% in 2013 and 2014 to 2.72% in 2019. This is a reflection that the inflation rate is in a better range (low inflation). Encourage economic growth, particularly related to purchasing power. However, in real terms, interest rates have increased due to declining inflation, but not followed by interest rates on loans.

Result Analysis and Discussion

The impact analysis of the increasing flight fares, number of flights, foreign debt, and inflation on Indonesia's economic growth uses the Computable General Equilibrium (CGE) model approach with the GAMS software tool. The improvement simulation consists of six scenarios, namely an increase in each of these indicators by 2%, 5%, 10%, 15%, 20%, and 30%. The results of the simulation of each indicator in this study can be seen in the following table 1.

Table 1. The Simulation of Impact on Economic Growth in Indonesia

Simulation	The Result/Impact on Economic Growth in Indonesia			
	Flight Rate	Number of Flight	Foreign Debt	Inflation
Increase 2%	-0.00093%	0.00286%	0.00058%	-0.00288%
Increase 5%	-0.00233%	0.00572%	0.00144%	-0.00720%
Increase 10%	-0.00467%	0.01429%	0.00288%	-0.01439%
Increase 15%	-0.00700%	0.02000%	0.00432%	-0.02160%
Increase 20%	-0.00933%	0.02858%	0.00576%	-0.02879%
Increase 30%	-0.01400%	0.04286%	0.00864%	-0.04318%

Source: CGE processed (2022)

Based on the table above, an increase in flight fares and inflation will create a decrease in economic growth. This shows that the air transportation sector is one sector that has an important role in the national economy. An increase in airline ticket prices for each destination will create a decrease in the demand for flight services which will ultimately have an impact on the decline in Indonesia's economic growth rate. The negative relationship between the price level and the level of demand for aviation services can refer to data from BPS (2020), IATA (2020), and ICAO (2020) which show that the performance of the aviation sector in 2019 experienced a very drastic decline compared to the previous year. For example, the revenue per passenger contracted, but cargo receipts were still able to grow.

This negative impact is related to the theory of oligopoly market structure in the aviation industry in Indonesia. Kinked Demand Curve which has a negative slope and a different level of elasticity at a given price level. When prices tend to rise, the elasticity of demand will tend to be more elastic. This is because competitors are not trying to increase their rates. On the other hand, when prices fall and competitors follow suit, the elasticity of demand tends to become inelastic.

The simulation results show that the effect of inflation on Indonesia's economic growth is relatively large compared to other variables (ticket prices, number of flights, and foreign debt). This is partly because the largest component of economic growth in terms of expenditure is the consumption sector, which is generally strongly influenced by the inflation rate. Furthermore, a higher price level will reduce the level of real income so it will have an impact on a decrease in the level of consumption. One example is the demand for aviation services which response strongly to price changes at a certain level.

Furthermore, an increase in the number of flights and foreign debt will create an increase in economic growth. These results also indicate that the air transport sector is one sector that has an important role in the national economy. While the bigger the government debt, the bigger the opportunity for government spending. As a result, Indonesia's economic growth also has a bigger chance because government spending is one of the components in the calculation of GDP based on expenditure groups. Furthermore, the impact of small government spending on economic growth can be considered as the effect of the relatively small contribution of government spending compared to other items (Consumption and Investment) on the GDP structure.

However, the resulting impact is related to the GDP contribution of the air transport sector to Indonesia's overall GDP. The following is a table that shows this condition.

Air Transport GDP Real GDP Year Share (IDR) (IDR) 2013 49,263 8,156,498 0.60 2014 52,255 8,564,867 0.61 2015 8,982,517 0.64 57,672 2016 65,295 9,434,613 0.69 2017 73,084 9,912,928 0.74 2018 77,493 10,425,852 0.74 2019 69,927 10,949,155 0.64

Table 2. Air Transport's GDP Contribution to Indonesia's GDP 2013-2019

Based on the table above, it can be seen that, from 2013 to 2019, the share of the transportation sector, especially air transportation, did not reach 1%. Meanwhile, if average, the total contribution of the air transport sector to Indonesia's GDP as a whole is 0.67% from 2013-2019.

Conclusions and Implications Conclusion

Based on the simulation results, descriptions and discussions on the analysis of the impact of airline fares on Indonesian economic indicators, it is found that in general the impact of airline ticket fares on macroeconomic indicators is in accordance with economic concepts and theories. Airline fares are inversely proportional to economic growth. In addition, the number of flights is directly proportional to Indonesia's economic growth. Specifically, the conclusions of the impact of airline ticket fares on Indonesia's economic growth are as follows: (i). An increase in flight fares by a certain level will have an impact on a certain level of decline in economic growth. An increase in airline ticket prices for each destination will create a decrease in the demand for flight services which will ultimately have an impact on the decline in Indonesia's economic growth rate; (ii). An increase in the number of flights by a certain level will have an impact on increasing economic growth by a certain amount. This also shows that the air transportation sector is one sector that has an important role in the national economy. However, the resulting impact on GDP is still relatively small. This is also possible due to the contribution of the GDP of the air transport sector which is also small to Indonesia's overall GDP; (iii). An increase in the amount of foreign debt by a certain level will have an impact on increasing economic growth by a certain amount. The greater the government debt, the greater the opportunity for government spending. As a result, Indonesia's economic growth also has a greater chance because government spending is one of the components in the calculation of GDP based on expenditure groups; and (iv). An increase in inflation by a certain level has an impact on a decrease in economic growth by a certain amount. The simulation results show the effect of inflation on Indonesia's economic growth which is relatively large compared to other variables (Ticket Prices, Number of Flights, and Foreign Debt). This is partly because the largest component of economic growth in terms of expenditure is the consumption sector which is generally strongly influenced by the inflation rate through a decrease in the level of real income.

Implications

The results of the previous simulations and conclusions imply that: (i). The price level that has a negative impact on economic growth needs to be kept within limits (upper and lower fares), if the amount is not maintained it will have an impact on business activities in the aviation business sector, not only airlines, which will also have an impact on the national economy; (ii). The number of flights that have a positive impact on economic growth also needs to be maintained which is a reflection of demand in the air transportation sector, one of which is through ticket prices, for the sake of airline business continuity and also national economic growth; (iii). Foreign debt which has a positive impact on increasing economic growth also needs to be considered because although it has a positive impact, the growing external debt needs to be followed by growth in the number of net exports and hedging activities against the exchange rate to maintain the ability to pay; and (iv). The inflation rate which has a negative impact on economic growth implies that the government, especially the Central Bank, must maintain the inflation rate, which will affect the unemployment rate, output, and also affect the level of consumption.

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