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Abstract

Tourism is one of the most significant contributors to the Indonesia economy of growth, with chare of national tourism to GDP is 13.9 percent (Indonesia Central Bureau of Statistics, 2012), through foreign exchange earnings as revenue from tourist consumption. As an economic activity, tourism in Indonesia influenced by various factors economic and non - economic domestically and internationally that can influence the development of tourism; therefore, this study conducted an analysis of the determinants of flow trade in Indonesian tourism goods / services and its impact on the development of Indonesian tourism (demand and supply).

The estimation results indicated that GDP per capita tourist countries, price of Indonesian tourism in tourists countries, tourism competitor prices, exchange rates, investments (physical) Indonesian tourism, and inflow/outflow of tourism goods and services in previous period, and non-economic factors e.g. population, and travel warning affected the outflow/ inflow of Indonesian tourism goods/services. While the amount of visits by foreign tourists, and foreign tourists' consumption per visit is the most impact to demand side of tourism in Indonesia. The estimation also resulted that the total of goods/services of the Indonesian tourism, total government spending, and total investment supply in Indonesian tourism has obtained least influenced to the supply of Indonesia tourism, beside that the increasing of tourism competitiveness is not followed by an increasing value of exports of goods/services the Indonesian tourism due to the high level of economic leakage in commercial transactions of goods / services of Indonesian tourism.

Keywords: inflow, outflow, tourism, determinant factors, and impact

JEL Classification: F04, H08, L84

Introduction

Tourism is one sector of the economy that greatly contribution to the Indonesia economic development. Based on data from the Central Bureau of Statistics in 2012, the share of national tourism 13.9 percent of the total gross domestic product and it also affect to the national

economic growth through foreign exchange earnings received from the large consumption by the tourists and commercial transactions of goods and services.

During the development, tourism activities also encourage and accelerate economic growth, through the formation of both consumption and investment demand, which in turn lead to the production of goods and services, it also generate the final tourism demand in market goods and services. Furthermore, the final tourist demand indirectly raises the demand for capital goods and raw materials (derived investment demand) to meet the demand of tourists will produce these goods and services, and to meet the needs of the tourist consumption, the activities of the supply of goods / services is an activity that needs to be done (supply side).

As we know that tourism includes domestic and international activities which involve two or more countries. It means that activities led to displacement of goods / services, capital and labor from one country to another. In other words, tourism is part of an economic activity in an open economy that creates the interaction between the tourism demand and tourism supply whose different characteristics, culture, economic, social, and geography.

The development of Indonesia tourism (tourism arrival, consumption and trade) can be seen in table 1 as follows:

Table 1. Development and Contribution of Indonesia Tourism Investment, and Trade

Variable	2011	2012	Change	
			(percentage)	
GDP (percentage)	13.8	13.9	10	
National Income (billion IDR)	7.43	8.6	13.6	
Tourism arrival (million people)	7,25	7,67	5.47	
Tourist consumption (billion				
USD):				
- Inbound	7618	8994	18.1	
- Domestic tourist	160.89	172.85	7.43	
Trade (billion USD)				
Export (outflow)	134.54	127.17	-5.81	
Import (inflow)	7.95	8.32	4.66	

Sources: Indonesia Central Bureau of Statistics, Indonesia Ministry of Tourism, and Indonesia Ministry of Trade; 2013

The table above shows that 10 percent increasing tourist arrivals during the period 2011-2012, followed by 18.1 percent the increasing of goods/services consumption from inbound tourism activities, and 7.43 percent from domestic tourism consumption which affect the increasing of tourism demand. While the growth of export in the tourism sector in 2011-2012 on table 1 shows that during this period the value of exports from the tourism sector decreased by 5.81 percent, in contrast to imports actually rose by 4 .66 percent.

Some factors are involved in the transactions of tourism goods / services such as currency,

population, income (as an indicator of the ability to consume), taste, price, distances within the origin tourist country to the country of destination, costs, other goods (either complements or substitutes), as well as other factors that are not fixed as natural conditions, security, political, and others. Those indicate that the factors involved in the tourism transaction needs to be taken both by the government and stakeholders in tourism (tourists, or tour provider). Therefore, some policies can support an increasing of competitiveness of tourism product must be improve regarding to development of tourism sector.

The competitiveness of the tourism product which owned by country, is one of the indicators of improved performance in the sector. Based on data from the World Economic Forum 2011, Indonesia was on ranks 29 out of 139 countries in product of the tourism sector, it means that the competitiveness of Indonesian tourism products is quite able to compete in international market. However when it compared with the amount of import in goods / services (inflow), the value of exports (outflow) of goods / services of tourism is still relatively small, so it cannot be denied if during the period 2011-2012, the value of Indonesia's tourism trade deficit of 1.2 percent. The condition showed us that there is some challenges for policy makers to improve the performance of Indonesia trade in tourism sector, in other words an effort to improve the performance of future tourism trade Indonesia needs to be supported by sufficient government policies (macro and micro) to improve the overall performance of tourism sectors.

Based on explanation above some problems can be proposed in this study:

- 1. What factors are affecting the international tourism flow of goods / services trade in Indonesia?
- 2. What is the impact of international tourism flow of goods / services to the Indonesia tourism demand and supply?
- 3. What is the impact of development of international tourism to the trade of goods / services, and competitiveness of Indonesian tourism product?

Literature Review

The concept of demand is the relationship between the quantity demanded (Qd) with price (P) various price levels. The law of demand (law of demand) explains that in a state other things fixed (ceteris paribus) if the price rises, the demand for the goods will be reduced, and vice versa if the price falls, the demand for goods will increase.

Will offer the goods and services at various price levels are determined by many factors including: the price of the commodity itself and other commodity prices, the cost of production, the purpose of manufacturers, technology, season, and others. Generally, the higher of commodity price then affect to the number of commodities that will be supplied by the manufacturer. Conversely the lower the price of a commodity the less the amount offered by the sales.

Economic approach in the demand for goods / services allow for interaction between the price

and quantity of goods / services to be consumed as well as other variables. The emergence of demand for tourist activities among caused by two things: Effective or actual demand is a demand which derived by a number of tourists who travel. The suppressed demand, is the amount derived from the structure of population / population of a country consists of: a) the potential demand which is a potential tourism demand from a country where a change of demand is greatly influenced by the conditions in the future such as changes in the exchange rate, b) deferred demand, is influenced by the magnitude of the demand supply conditions in tourist areas such as services / tourist facilities, c) lack of demand.

The factors that affect the amount of tourism demand by Tribe (2005) and Bull (1995) are: 1) the elasticity of demand for tourism, 2) Income, 3) the price of the goods themselves and other goods (substitutes), 4) security, 5) convenience and availability of facilities and tourist services, 6) ease, such as: Free Short Visit Visa (BVKS) BVKS, the implementation of Visa on Arrival (VoA), the frequency of the International Flight to Indonesia, and 7) international economic conditions, such as: the economic crisis, exchange rates, world population, income per capita of other countries, taxes / subsidies, and others.

Tourism supply includes all forms of tourism tourist attraction (tourist attractions), all forms to facilitate ease of travel (accessibilities) and all forms of facilities and services (facilities and services) are available on a tourist destination that can satisfy the needs and desires of tourists during visit. Some factors affect the amount of a country's tourism offerings include: 1. the price elasticity of tourism offer, 2. costs, 3. changes in the use of technology, infrastructure and support facilities 4. good of the tourism sector and other sectors (non-tourism), 5. others; such as: the availability of goods / services to be consumed tourism, infrastructure (physical investment), including entry and exit of goods / services which need in tourism activity.

The tourism sector is a form of an open economy in which there are two general price level of a common price prevailing in the country and the price level prevailing abroad. The influence of the presence of the foreign price is the process lies in the macro economy, especially the emergence of the possibility for economic actors to choose whether they will buy or sell foreign markets or domestic market.

As with other forms of open economy, commodity goods / service of tourism is a type of activity that saw commodity exchange relations between countries. Even Heckser-Ohlin theory states that the exchange transactions between countries because of differences in the ownership of the factors of production in each country. This theory based on the international trade theory that we know as a concept of comparative advantage that comes from the difference in the ownership of production factors. In this theory that countries characterized by different factors are innate production function in all countries equally. By using these assumptions it is concluded that the same production function and innate factors differ between countries. This means that a country tends to export commodities that are relatively intensive in the use of relatively many functions held, and at the same time.

As explanation above, it mentioned that any element of limitations or differences in the availability of resources owned by each country, the main factor of the emergence of specialization. This principle is the basis for economic development of trade and finance international, so that these conditions led each country to export and import. Export of tourism is an economic activity in the country selling products to foreign markets. Import tourism is an activity to buy foreign products or marketed for domestic purposes. Exports and imports are very important to establish and control a country's trade balance. Imports must be financed with the same value of exports to maintain equilibrium trade balance. Therefore, the state must do exports to finance imports paid in foreign currency (Hady, 2004).

Tourism price is the price that is formed in the activities / tourism activities, where the interaction between supply and demand equilibrium prices of travel will establish tourism (Bull, 1995). The formation of the equilibrium price in the tourism market motivated by a difference in the perception of geography and tourism products that are required and are available across the region (tourist destination and origin of tourists).

The method of determining the price of tourism in Indonesia was based on data obtained from the Passenger Exit Survey (PES) performed by Indonesia Ministry of Tourism and Creativity of Economy every two years, the data Survey inbound/outbound tourism are conducted once a month, daily data on immigration (E/D card). The survey on destination, length of stay, and the average tourist spending during the visit were recorded in PES is a referral data and set the standard for determining the price of tourism in Indonesia.

Research Methods

The methodology used in this study using a panel approach Gravity and Panel Least Square (PLS). Gravity panel model used in seeing how the flow of goods / services Indonesian tourism along the factors that affect these flows. While the PLS method will be used to look at the impact of trade flows of goods / services Indonesian tourism to the demand and supply side of international tourism in Indonesia. The flow model Trade in Goods/Services Indonesian Tourism is:

- 1. Outflow of Goods /Services Indonesia Tourism Model $L_nOF_{jt} = \beta_0 + \beta_1 LnDIST_{jt} + \beta_2 LnGDPC_{jt} + \beta_3 LnPOP_{jt} + \beta_4 LnEXCH_{jt} + \beta_5 LnPrice_{jt} + \beta_6 LnPrice_{kt} + \beta_7 LnOF_{jt-1} + \beta_8 D1_t + \varepsilon_{ij}$
- Inflow of Goods/Services Indonesia Tourism Model

$$\begin{split} L_n IF_{jt} &= \beta_0 + \beta_1 LnDIST_{jt} + \beta_2 LnGDPC_{jt} + \beta_3 LnEXCH_{jt} + \beta_5 LnPrice_{it} + \beta_6 LnIF_{jt-1} \\ &+ \beta_7 LnFDI_{jt} + \beta_8 D1_t + \varepsilon_{ij} \end{split}$$

To analyze the impact of trade flows of goods/services of international tourism to Indonesia's tourism (supply-demand side) can be explained as follows:

II. Indonesia Tourism Demand

1. Tourism Arrival

$$TA_{it} = aa_0 + aa_1YC_{jt} + aa_2OF_{jt}$$

$$+ aa_3IF_{jt} + aa_4P_{jt} + aa_5ER_{jt} + aa_6D1TRC_{it} + aa_7D1_{it} + aa_8D2_{it}$$

$$+ \mu_{1t}$$

2. Tourism Consumption

$$TE_{it} = ba_0 + ba_1 Y C_{jt} + ba_2 O F_{jt} + ba_3 I F_{jt} + ba_4 P_{jt} + ba_5 E R_{jt} + ba_6 D 1_{it} + ba_7 D 2_{it} + ba_8 D 3_{kt} + \mu_{2t}$$

So that:

$$TD_{it} = da_0 + da_1 TA_{it} + da_2 TE_{it} + da_3 P_{it} + da_4 YC_{it} + \mu_{3t}$$

- III. Indonesia Tourism Supply
- Total Goods/Services for Consumption Tourism

$$\begin{split} T_{INA} = & \ \ \text{eb}_0 + \ \ eb_1 Y_INA_t + \ \ eb_2 OF_{jt} + \ \ eb_3 IF_{jt} \\ & + \ \ eb_4 ER_{jt} + \ \ eb_5 P_{it} + \ \ eb_6 GT_INA_t + \ \ eb_7 D1_{it} + \ \ eb_8 D2_{it} + \ \ eb_9 D3_{kt} \\ & + \mu_{10t} \end{split}$$

2. Government Expenditure for Tourism:

$$GT_{INA} = \text{fb}_0 + fb_1Y_{-}INA_t + fb_2ER_{jt}$$

$$+ fb_3P_{it} + fb_4IF_{jt} + fb_5OF_{jt} + fb_6D1_{it} + fb_7D2_{it} + fb_8D3_{kt} + \mu_{12t}$$

3. Tourism Investment and Capital Goods:

$$\begin{split} IT_{INA} = & \ \text{gb}_0 + gb_1Y_INA_t + gb_2ER_{jt} \\ & + gb_3P_{jt} + gb_4OF_{jt} + gb_5IF_{jt} + gb_6CT_INA_t + gb_7GT_INA_t \\ & + gb_8D1_{it} + gb_9D2_{it} + gb_{10}D3_{kt} + \mu_{13t} \end{split}$$

So that:

$$TS_{it} = hb_0 + hb_1CT_INA_t + hb_2GT_INA_t + hb_3IT_INA_t + hb_4Y_INA_t + \mu_{14t}$$

RESULT ANALYSIS

1. Inflow-Outflow Analysis of Goods / Services Indonesian Tourism

The result indicates that the model of outflow Indonesian tourism goods and services (Table 2) variable economic distance, GDP per capita of the country tourists, the price of Indonesian tourism in the country of origin of tourists, the rupiah exchange rate, the population of the country of origin tourists, tourism outflow previous year, and the travel warning in Indonesia are the dominant variables affecting the level of influence of 83.2 percent.

The negative relationship between GDP per capita of the tourist origin country to the outflow of goods / services Indonesian tourism showed with an increase in GDP per capita of the country of origin of tourists actually reduce the outflow of goods / services of Indonesian tourism. It can be

explained that should the increase in GDP per capita of the country of origin of foreign tourists will only increase the outflow of goods / services, empirically. These conditions are the tendency of the leakage exports generally prevalent in international trade transactions (especially in the tourism sector) in most of developing countries. The cause is the use of the goods / services that international adoption that triggered the magnitude of the import / procurement / tourism services. In most of the physical facilities and tourism infrastructure in developing countries is in the form of the type of investment with a franchise system / franchise which is a network of investment / investment from abroad, which is a consequence of the franchise model is the use of the goods / services are standardized internationally.

The estimation results of table 2 showed the relationship between the outflow of goods and services at a price of Indonesian tourism in origin tourists countries related positively, which means that if the price of Indonesian tourism in the countries of origin of foreign tourists increased by 1 percent, the amount of the value of tourism outflow will rise the coefficient. In contrast to the price of competing countries tourism, which of the estimation results obtained negative relationship between the price of competing countries tourism to the outflow of goods / services of tourism. This shows that the Indonesian tourism remain a substitution of another country tourism, so the price is formed also in the form of price substitution. In other words, if the price of the nearest competitor countries increases, tourists tend to choose the Indonesian tourism products. Meanwhile, when the price increases, the Indonesian tourism tourists will tend to choose the goods / services from other countries.

While the relationship between the exchanges rate to the amount of tourism outflow is negative. It means that if the exchange rate depreciated by 1 percent would increase the value of tourism outflow as its coefficient changed. The reducing of the domestic currency against foreign currencies led to goods originating from abroad (imports) will be more expensive than the goods in the country, and this also leads to an increase in the outflow of goods and services.

The population size of the outflow of goods / services showed that the size of the population of a country is a potential market / market for goods and services, even by Alguacil (2002), a large population is a potential for a country in penetrating overseas markets. This means the size of the potential market / market being owned by a country becomes a backdrop for a company other countries to enter into it. While the relationship between the outflows with Indonesian tourism travel warning from the estimation results, expressed as a positive correlation indicates that there is a travel warning does not affect the amount of inflow / outflow of tourism.

The estimation results show that the variable distance between the Indonesian economy with the country of origin of tourists showed a negative influence on the value of the outflow of goods and tourism services is meant by the increasing economic distance (accessibility and mobility of goods / services out) between the Indonesian origin countries of foreign tourists to increase the value outflow of goods / services of Indonesian tourism. While the Indonesian tourism inflow models, estimation results also show that the distance variable, GDP per-capita state tourists,

physical investment is available, and the inflow of goods and services in the previous Indonesian tourism is the dominant variable influence on the inflow of goods / services Indonesian tourism the magnitude of the effect of 70 percent.

Finally, this study shows that the exchange rate is a factor to be reckoned with because of the exchange rate will have an impact on the value of goods and tourism services into Indonesia where the current domestic currency to depreciate against foreign currencies, the prices of goods from abroad (imports) becomes more expensive than domestic goods. As for the condition expressed by the estimation results showed a negative relationship between the exchange rate and the inflow of goods / services of Indonesian tourism.

As to more clearly seen in Table 2 the results of the estimated trade flows of goods / services of international tourism as follows:

Table 2 Results of Estimation of Gravity Flow Model Inflow/Outflow Goods / Services Indonesian Tourism

Model	Variable	Cooeficient		t-stat	Prob.	R-squared
	Economic distance	-0.517714	***	-3.8923	0.0002	
	GDP per capita of tourist's country	-4.94085	**	-3.0094	0.0032	
Indonesia	Population of Tourst's country	1.088042	*	0.8976	0.3711	
Tourism	Exchange rate	-1.861213	***	-4.1692	0.0001	0.832
Outflow	Indonesia Tourism price	-0.456932	**	-3.1997	0.0063	0.832
Model	Other country tourism price	1.35468	***	2.7765	0.003	
	Previously outflow	0.078847		3.0279	0.6881	
	Indonesia Travel warning	-0.036554	***	-0.4023	0.0000	
	Economic distance	-0.136168	***	-4.2675	0.0000	
	GDP per capita of tourist's country	0.425335	0.425335 *** 1	10.3699	0.0000	
Indonesia	Indonesia Tourism price	0.698331	***	17.0012	0.0000	
Tourism	Other country tourism price	-0.0833	***	5.3615	0.0000	0.7
Inflow Model	Previously Inflow	0.298913	***	19.0436	0.0000	
	Tourism Physical Investment	-0.0083	*	-0.5472	0.0852	
	Indonesia Travel warning	0.127017	*	1.5879	0.1147	

2. Analysis of Demand and Supply Indonesian Tourism

I. Tourism Demand Analysis

1. Results of the estimation equation the number of tourists (TAit) in table 3 impact the outflow of demand for goods / services Indonesian tourism and inflow of goods / tourism services to the amount of foreign tourists visiting the estimation is obtained based on the positive. These conditions show that with the increase in the size of the outflow / inflow of goods / services of Indonesian tourism abroad by 1 percent would increase the number of foreign tourists coming to Indonesia for the coefficient changes. The magnitude of the flow of demand for goods /

services that tourism entrance / exit of course have an impact on the large number of foreign tourists visiting, because in both tourism activities and goods are commodities that are consumed services and required by tourists during the tourist activities such as food, accommodation, transportation, souvenirs, as well as other items are brought in (import) and outgoing (export).

The estimation results show a negative relationship between the variable exchange rate and the price of Indonesian tourism to the number of tourists. The decline in the value of the domestic currency against foreign currencies (depreciation of the domestic currency) will have an impact on tourism through price transmission. Where, at the time of the domestic currency to depreciate against foreign currencies, the prices of goods in the country tend to be cheaper than the prices of foreign goods including tourism prices in turn triggered huge demand for foreign tourist arrivals to Indonesia, because of the perceived price Indonesian tourism is much cheaper than other countries tourism. So also with the increase in the price of Indonesian tourism in the countries of origin of tourists to the amount of foreign tourists would affect the competitiveness of Indonesian tourism, if competitiveness (price) decreased the price of Indonesian tourism is considered expensive compared to other countries.

The overall results showed the estimated impact of the eight factors of the number of foreign tourists (TAit) is at 99 percent. It meant that there was a strong influence on the magnitude of the enormous impact tourists' arrival and equal to 1 percent is influenced by other factors beyond observation. In addition, the estimation can also be identified that factor, the outflow of goods / services of tourism, the inflow of goods / services of tourism, tourism prices, exchange rates, GDP per capita, economic crisis, the cost of transportation, travel warnings are all factors that greatly affect the amount of the number of international tourists visit to Indonesia, otherwise the amount of the provision of Indonesian tourism investment, and exchange rate are factors that do not affect the amount of foreign tourists visit.

2.The result of the consumption equation estimation of tourists per visit (TEit) shows the negative impact of the price factor tourism, domestic exchange rate against foreign exchange rate, the outflow of goods / services of tourism, the economic crisis, and Indonesia travel warning. Empirically Table 3 shows that the relationship between price and exchange rate on tourism expenditure / consumption of tourists per visit is negative. This means that if the price rises, the Indonesian tourist's consumption will decrease. Negative relationship between price and exchange rate on tourism tourist's consumption shows that with the increase in prices and the appreciation of the exchange rate causes the price of Indonesian tourism tend to be expensive and will affect tourist's consumption.

In addition, the estimation results in Table 3 obtained the negative impact of foreign tourist consumption per visit to the outflow of goods / services of tourism. The relationship between the outflow of goods / services to the amount of consumption of tourism tourists per visit shows the large number of goods / services used / consumed in Indonesian tourists during both

the originating and taken from his country during a visit to Indonesia (inflow) and local goods purchased and brought by foreign tourists to the country of origin (outflow). This means that at the time of consumption increases (as a result of rising incomes), the need for better goods acquired in the country or from abroad (imports) tends to increase, and vice versa when the consumption rate decreased tendency to allocate expenditures to the goods / services both from domestic and imports also declined.

Overall impact of the eight factors (Table 3) to the amount of consumption of tourists per visit is at 99 percent which shows a very influential impact on the amount of foreign tourist consumption per visit, while the remaining 1 percent is influenced by other factors beyond observation. In addition, the estimation results indicated that factors GDP per capita, the outflow of goods / services of tourism, the inflow of goods / services of tourism, tourism prices, exchange rates, Indonesia travel warning, and a travel warning competitor countries are all factors that determine the magnitude of the number of international tourists visit.

3. Results Table 3 shows the estimated number of foreign tourists visiting factors, consumption of tourists per visit, the price of Indonesian tourism, and the per capita income of the country of origin of tourists are all factors that greatly affect the amount of the total dominant Indonesian tourism demand (TDit) with the magnitude of the effect of 99 percent. This means that these factors are all factors that determine the development of Indonesian tourism demand which will directly affect the amount of revenues (incoming foreign exchange) from the tourism sector.:

Table 3: Results of Indonesian tourism demand estimation

Model	Variable	Cooeficient		Pr I t I	R-squared
	GDP per capita of tourist's country	0.0054	***	0.0407	
	Tourism outflow	-0.0301	**	0.0323]
	Tourism inflow	0.07205	*	0.088	
Inbound and Domestic	Indonesia Tourism price (riil)	-0.2673	***	0.0484	0.9987
Tourism (TA)	Exchage rate	-0.0063	**	0.9851	0.9367
Tourism (TA)	Transportation Cost	-0.0117	***	0.0923	
	Economic crisis	-0.0003		0.0907	
	Indonesia Travel warning	-0.0205	***	0.0158	
	GDP per capita of tourist's country	0.1703	***	0.0663	
	Tourism outflow	0.0524	***	0.0574	
Tourism	Tourism inflow	-0.626	***	0.0000	
Consumption	Indonesia tourism price	-0.5864	***	0.0000	0.9914
Per visit (TE)	Exchange rate	-0.0479	***	0.1032	
	Indonesia Travel warning	-0.063	*	0.2215	
	Competitor Travel warning	0.0876	*	0.0323	
	Tourist's arrival	1.0292	***	0.0000	
Total Indonesia	Tourist's consumption	0.0568	***	0.0000	0.9981
Tourism	GDP per capita of tourist's country	0.0002	**	0.0126	0.5501
Demand (TD)	Indonesia Tourism price (riil)	0.0006	*	0.1074	

II. Tourism Supply Analysis

1. The model equations consumption flow of goods/services Indonesian tourism (CT_INA), which as a whole is obtained coefficient of determination (R-square) of 99 percent which shows the impact of endogenous factors / descriptors such as Indonesia's GDP, the inflow of goods / services of Indonesian tourism, outflow goods Indonesian tourism services, the exchange rate against the currencies of the country of origin of tourists, the price of Indonesian tourism, government spending tourism sector, the economic crisis Indonesia, Indonesia travel warning, and a travel warning other countries, the total consumption of goods / services Indonesian tourism (CT_INAt) and the remainder is equal to 1 percent is influenced by factors other than observation.

The factors that greatly affect the total consumption of Indonesian tourism is a factor of the outflow of goods / services of tourism, the rupiah against the US dollar, the price of Indonesian tourism, the economic crisis, and the travel warning competitor countries are considerable factors affecting the total supply of goods / services Indonesian tourism . While the national income, and the inflow of goods / services of tourism are factors that determine the magnitude of the supply of goods / services of Indonesian tourism.

Empirically, the impact of tourism goods/services inflow is positive, which means if there is an increase of 1 percent inflow will raise the level of consumption of its coefficients and it will affect the amount of national income earned from tourism. In fact, according Thapa (2005), this condition is very potential for against foreign exchange leakage while according to Sinclair and Sutcliffe (1998) multiplier income in the tourism sector need to consider the level of leakage produced, including in this case the use of imported goods (goods production / intermediate goods and final goods entering carried by tourists).

The relationship between the outflow of goods / services of tourism with a total supply of goods / services of Indonesian tourism is positive which means if there is an increase of 1 percent inflow will increase the inflow of goods / services for tourism coefficient changes. Outflow of goods / services of course tourism will affect the amount of consumption due to the increased demand for goods / services to be consumed and taken out by tourists and will result in increased consumption of raw materials in an effort to meet the needs of the production process of the tourism industry which generates tourism commodities (Thapa, 2005).

The relationship between the exchange rate to the total supply of goods / services empirically tourism expressed as a relationship in the opposite (negative). It means that when the exchange rate depreciated by 1 percent would increase the total amount of the provision of goods/services of the coefficient changes Indonesian tourism. Theoretically, the negative relationship between the exchange rate and the total supply of goods / services showed that the rate of tourism as an instrument of payment in the transaction of goods / services in the tourism sector determines the size of the goods / services to be consumed. Based on Purchasing Power Parity theory, the exchange rate will determine the purchasing power of various kinds of commodities, including commodity goods / services import (Hady, 2004). This may imply that the strengthening / weakening of the domestic currency (dollars) will affect the total supply of goods / services of tourism.

2. In the model of equation total government expenditure in the tourism sector of Indonesia (GT_INAt) obtained the overall impact of factors such as income (GDP), the total flow of incoming and outgoing goods / services Indonesian tourism (inflow and outflow), the exchange rate, the price of Indonesian tourism , the economic crisis, Indonesia travel warning, and a travel warning against the rival state government total expenditure Indonesian tourism sector amounted to 70 percent, and the remaining 30 percent are influenced by other factors beyond observation.

Factors outflow of goods / services of Indonesian tourism, provision of investment from the agricultural sector for Indonesia's tourism and economic crisis are the factors that determine the amount of government spending in Indonesia's tourism sector, but it is also a factor incomes (GDP), the exchange rate, the outflow of goods / services of tourism Indonesia, the price of Indonesian tourism, and economic crisis Indonesia is considerable factors determine the amount of total government expenditure in the tourism sector in Indonesia. While the factors of national income, the price of Indonesian tourism, the exchange rate

against the US dollar are all factors that determine the reasonably large / small of her government spending in the tourism sector, otherwise travel warning Indonesia and competitor countries, and the inflow of goods / services of Indonesian tourism is a factor that is not determine the size of government spending in Indonesia's tourism sector.

The estimation results in Table 4 show the relationship between the outflow / inflow of goods / services Indonesian tourism with total government spending in Indonesia's tourism sector which showed a negative relationship. This means that if the outflow / inflow of goods / services increased by 1 percent tourism will reduce the amount of total government spending in Indonesia's tourism sector of the coefficient changes.

3. The model equations are all three in the Indonesian tourism supply equation is the total equation model of investment and capital formation in tourism sector in Indonesia (FDI_INAt), which in this model obtained the coefficient of determination (R-square) explanatory factors to the total investment and Indonesia's tourism sector capital formation by 43 percent. The factors that greatly affect investment spending variables Indonesia's tourism sector is a factor of GDP, exchange rate, the outflow of goods / services of tourism, the price of Indonesian tourism, and economic crisis are factors that determine the amount of investment that is provided in order to develop the tourism sector. While factors such as the total supply of investment goods / services of tourism, the inflow of goods / services of Indonesian tourism, the total supply of goods / services of Indonesian tourism, travel warning Indonesia and competitor countries are all factors that do not specify the amount of the total supply of Indonesian tourism investment.

Impact of the flow of goods / services Indonesian tourism both out (outflow) of the total investment expenditure Indonesian tourism lies in the size / quantity of goods / services entry / exit as the goods / services were taken from the country of consumption and foreign tourists to Indonesia and goods / services that are consumed in in the country by tourists and taken to his home country. The impact of the outflow will provide induction effect (Mason, 2003) to the amount of government investment expenditure in the tourism sector, due to the increased consumption of foreign tourists of course be followed by an increase in output produced by the production sectors of the economy that are involved directly or indirectly supporting tourism sectors (such as agriculture, communications), and in order to support these sectors need adequate infrastructure and this means a need to increase investment spending in building an infrastructure and support facilities.

The estimation results in Table 4 also shows a negative relationship to tourism prices and exchange rates, the condition is empirically shows that the decline in the exchange rate against foreign currencies had a negative effect on the overall economic conditions, including investment. Fluctuations in the value of the rupiah against foreign currencies stable will greatly affect the investment climate in the country. The appreciation of the exchange rate against the dollar for example, will have an impact on the development of

Indonesian product marketing abroad, especially in terms of price competition. When this happens, it does not directly have an impact on the trade balance deficit but the balance of payments Indonesia then affect the reserves as well. Finally, reducing in reserves will reduce investor confidence in the Indonesian economy.

Table 4 also shows that the factor of the total supply of goods / services of tourism, the total supply of Indonesian tourism investment, total government expenditure Indonesian tourism sector and the Indonesian national income (GDP) are the factors that determine the amount of the total supply of Indonesian tourism. This shows that the supply of goods / services, the total investment, total government expenditure and GDP Indonesia are all factors that determine the growth (size) offers Indonesian tourism

Table 4: Results of Indonesian Tourism Supply Estimation

Model	Variable	Cooeficient	Pr I t I	R-squared
	National Income	0.4172 ***	0.0000	
	Tourism outflow	0.0552 *	0.0683	
	Tourism inflow	0.1331 ***	0.0000	
Tourism Goods	Exchage rate	-0.2536 ***	0.0024	
and Services	Indonesia Tourism price (riil)	-0.0386 **	0.0205	0.9976
(CT-INA)	Government Spending in Tourism Sector	0.3126	0.4831	
	Economic crisis in Indonesia	0.0088 ***	0.0078	
	Indonesia Travel warning	0.0062	0.7853	
	Competitor Travel warning	-0.0721 ***	0.0616	
	National Income	0.0007 **	0.0101	
	Indonesia Tourism price (riil)	0.0015 *	0.0648	
Tourism	Exchage rate	-0.0012 **	0.0381	
Government	Tourism inflow	-0.0001	0.6740	0.705
Spending	Tourism outflow	-0.0009 ***	0.0002	0.705
(GT-INA)	Economic crisis in Indonesia	-0.0003 *	0.0551	
	Indonesia Travel warning	-0.0002	0.3979	
	Competitor Travel warning	0.0001	0.7430	
	National Income	0.1373 *	0.0602	
	Exchage rate	-0.4708 *	0.1121	
	Indonesia Tourism price (riil)	-0.2256	0.4366	
Tourism	Tourism outflow	0.2649 *	0.1242	
Investment	Tourism inflow	0.1252	0.5703	0.43262
1111000110111	Total Goods and Services in Tourism	0.9288 *	0.0586	0.43202
(FDI_INA)	Total Government spending in Tourism	4.1019	0.2056	
	Interest rates	-0.9995 *	0.1512	
	Economic crisis in Indonesia	-0.2032	0.2666	
	Indonesia Travel warning	0.8985 *	0.1112	
Total Indonesia	National Income	0.3256 ***	0.0000	
	Total Goods and Services in Tourism	0.2684 ***	0.0000	0.6048
Tourism Supply	Total Government spending in Tourism	1.9620 **	0.0290	0.0048
(TS)	Total Tourism Investment (FDI) Indonesia	0.0579 **	0.0100	

Conclusion and Implications

The factors that influence the discharge flow of goods and tourism services (outflow) is predominantly a variable distance between the Indonesian economy with the country of origin of tourists, the population of the country of origin of tourists, the exchange rate, the price of Indonesian tourism in the countries of origin of tourists, and the value of the outflow of goods and services in the previous year, with 83.2 percent of the variation magnitude of the influence of these factors on the development of exit flow (outflow) goods / services Indonesian tourism.

Meanwhile the factors that affect the inflow of goods and tourism services is predominantly economic distance variable, GDP of Indonesia, and the inflow of goods and services Indonesia tourism previous year, the price of Indonesian tourism, and travel warnings competitor countries with 70 percent of the variation of these factors influence the development of the inflow of goods and services Indonesian tourism. The negative impact of the increase in GDP per capita of the country of origin of tourists to the flow of goods and services activities of the tourism economy showed the presence of leakage economy (import leakage)

Factors GDP per capita countries of origin of tourists, the outflow / inflow of goods / services of Indonesian tourism, the price of Indonesian tourism, and travel warning Indonesia are all factors that greatly affect the number of foreign tourists, tourists consumption per visit and Indonesian tourism demand with variations influence factors Indonesia is on tourism demand by 99 percent and the rest is influenced by other factors such as product competitiveness, tourism price competitor countries, fees and subsidies.

In addition, the Indonesian national income factor, the outflow / inflow of goods / services of tourism, the exchange rate are factors that greatly affect the total supply of goods / services of Indonesian tourism, total government spending in Indonesia's tourism sector, the total supply of tourism investment, and total supply Indonesian tourism with large variations in the influence of the explanatory factors for Indonesian tourism offerings by 60 percent, and the rest is influenced by other factors such as the competitiveness of infrastructure, tourism price competitor countries, the amount of taxes and subsidies.

The fluctuation of developments in the tourism sector (demand -supply side) is strongly influenced by the economic conditions of a country (both domestic and international), but it also macroeconomic stability policies relating to trade in goods / services, the origin of tourists GDP, and GDP per capita country of origin of tourists also greatly impact on the development of national tourism.

The improvement in the competitiveness of Indonesian tourism products (according to the Report of the World Economic Forum in 2011 was ranked 29th out of 140 countries rated) but not followed by an increase in outflow (export) goods / services. This demonstrates that the level of leakage (leakage economy) arising from commercial transactions of goods / services as a result of the dominance of tourism standardization rules on the goods / services to be provided by the tourism travel service providers in order to meet the needs of foreign tourists.

Meanwhile, based on the discussion and conclusions previously formulated, then given some recommendations can be given in this study, namely: (1) Increase the volume of trade goods / services of Indonesian tourism, through efforts such as: increased cooperation and trade promotion, product quality improvement tourism, improvement and development of individual infrastructure, increase stability and security that supports the trading of goods / services of tourism, as well as government policy support (central and local) that facilitate the flow of goods / services of tourism; (2) The increase in trade in goods / services of tourism needs to be done by improving the competitiveness of excellent quality, price competition, technology used, and the resulting innovations, as well as support for government policies that facilitate the transaction flow of goods / services, and good fiscal policy tax and government spending is supporting the development of the tourism sector. And (3) enhancing the competitiveness of Indonesian tourism products and services both domestically and abroad to increase the volume of trade in goods / services in order to compete with tourism goods / services of international standard used / consumed by tourists during travel.

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