IMPORT DISCLOSURE IN ECONOMY OF SMALL ISLANDS OF BALI, INDONESIA

Ngurah Wisnu Murthi[1], I Nyoman Gede Marta[2], Ni Rai Artini[3]

[1,2,3] Faculty of Economics, Tabanan University, Tabanan, Bali, Indonesia

Abstract: The research aims to find out: trends in the degree of openness of Balinese imports and their influence on the rate of growth of the Balinese economy, the nature of the elasticity of imports between provinces and abroad. Bali is a research area and was chosen because it has economic growth above the national (5-6 percent) and is in the center of the tourism industry, high population growth (above 2 percent per year), and people's income measured by GRDP is always increasing. The growing economy of the community has encouraged their ability to import various types of commodities to meet consumption needs. This reality inspired researchers to focus on researching the import problems of Bali Province. The analytical tools used are linear trends, multiple linear regression models, and income elasticity coefficients. Based on the results of this study it is expected to be able to reveal, that the trend of openness of imports in the Balinese economy is believed to be going forward, then the GRDP has a positive effect on imports between provinces and abroad, and finally the income elasticity of imports between provinces and abroad is thought to be inelastic. This inelastic character indicates that commodity imports between the provinces of Bali abroad are still limited to the basic commodities used to fulfill the consumption of local residents. With the findings of the above in the future, the community is advised to the government, the producer community to strive to increase production and at the same time the productivity of imported commodities, specifically those that can already be produced in Bali. For consumers of imported goods, they want to reduce consumption of imported goods and make maximum use of local products in all consumption activities.

Keywords: Economic Openness, Import Products, Import Elasticity, Income Elasticity.

I. INTRODUCTION

Fulfilling domestic consumption needs for a country can be done through increasing domestic or imported production. These export and import activities are related to free trade. And if exports and imports are carried out in fulfilling consumption, the country concerned is said to have a dependency on international trade. In theory the export and import sectors are seen in the calculation of Gross Regional Domestic Product (GRDP) in regional size or Gross National Product (GNP) in the national size of a country. For example, for the Province of Bali: GRDP = Consumption + Investment + Government Expenditures + Exports - Imports. (BPS, Denpasar, 2016). Judging from the import component in particular, the share of imports in GNP was 24.99 percent (2012) and decreased to 18.31 percent (2016). According to Sumitro (1982), the ratio of total imports exceeding 10 percent of GDP indicates that the country's economy is in the open economy category.

The problem of consumption of imported products has now received much attention from many circles. Sugawa Korry (Antara, 2014) highlights that Balinese people still like to use imported fruit compared to local fruits which are generally used for ritual activities such as making gebogan, a combination of various types of fruits, cakes and janur. Seeing the increasing trend in fulfilling the needs of imported commodities, there is one thing that needs to be watched out for is the dependence of the Province of Bali on products outside Bali. Especially at the end of 2016 the World Trade Organization (WTO) ordered that Indonesia should lift barriers to import horticulture such as fruits, vegetables and meat and poultry. As a result, Indonesia will be flooded with imported products. Bali as a world tourist destination will not be separated from international trade. Until the end of 2015 the proportion of imports in GRDP increased, from 7.56 percent (2011) to 12.80 percent (2015). Entering 2015, the GDP ratio to imports again showed an increase of 12.80 percent. According to BPS (2016), this meant that dependence on imports had decreased slightly in 2015.

The main problems raised are formulated, as follows: (1) What is the open trend of Bali imports so far?, (2) What is the effect of openness of imports on the rate of economic growth in Bali?, (3) How much is the income elasticity of the import of Bali Province?. Research purposes: (1) To analyze the coefficient of openness trends in Bali imports. With the results of the analysis of the trend coefficient, we can predict further the direction of the development of openness of Balinese imports in the future. (2) To analyze the influence of Bali's economic openness on the rate of economic growth in Bali. The tendency of openness of imports is important to know to be used as a tool to detect regional economic capabilities in importing products. (3) To analyze the nature of the elasticity of people's income towards Balinese imports. This community income response needs to be known to reveal the needs of the community for imported products that indeed cannot be produced in Bali and also to monitor the income of local people flowing out of Bali.

II.   LITERATURE REVIEW

A. *Inter-Regional Trade Theory*

The trade sector is one of the joints of the economy that contributes income that influences an area if the area has considerable potential. The superiority of the trade sector is very necessary to be developed as much as possible to get maximum income for the local area so that it indirectly affects the level of welfare of the population. Trading activities consist of export and import trade both between countries and between provinces (regions) or inter-island trade, with the types of commodities traded include commodities of agricultural, mining, industrial, plantation, fishery, animal husbandry and forestry, while for imports are capital goods and industrial raw materials and others. With the differences between regions in terms of population, community income, tastes, the demand curve differs between regions.

For more details, a country that has many islands and is divided into provincial regions such as the Indonesian state of international trade theory can be applied using the following explanation. Suppose here that between islands A and B at first there was no contact at all between the people between the islands, whose reviews were based using Picture 1.
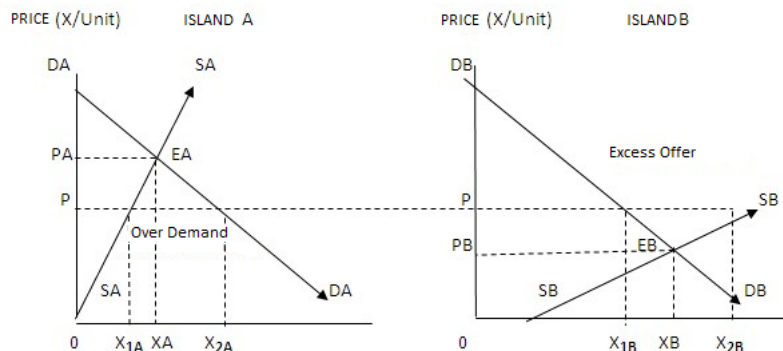
Picture: 1
Inter-Regional Trade --- Partial Equilibrium Approach
(Source : Soediyono R. 1987)

In Figure 1, the market demand curve for island A will be X as DA - DA curve, while a similar curve for island B is marked DB - DB, it appears that the elasticity of the two curves is different. Similarly, the market supply curve for an item's tendencies also differs between regions. This is due to differences in the quantity, quality and composition of existing resources in the region. In Figure 1, the market supply curve will be X goods for residents of island A in the figure as the SA-SA curve, while residents of island B as SB-SB curves, it is also seen that the two elasticity curves are different.

The occurrence of sale and purchase of goods X between residents of island A and residents of island B in the form of the flow of goods X and island B to island A, resulted in one side increasing the number of goods X that can be purchased by consumers on island A, on the other hand on island B there is a reduction in the number of items X that can be purchased by local consumers. As a result and the incident, the price of item X on island A has a tendency to go down while on island B has a tendency to rise. The decrease in the price of goods X on island A, causes the number of goods X which island A consumers want and are able to afford to buy for consumption increases. The opposite happened on island B. As a result of the increase in the price of goods X on island B, the willingness of consumers to buy goods X decreased. For producers on the other hand, they will give a reaction that is the opposite of the reaction of consumers. As a result of the

decline in the price of goods X on island A, the producers of goods X on island A will reduce their production. Instead the producers on island B; see the market price of the goods produced increases, their willingness to produce X goods will increase.

As a result of increased consumption and reduced production of goods X on island A, there is an excess of consumption and production. On the other hand, on island B where there is an increase in production and a decrease in consumption there will be excess production above consumption. It is easy to understand that excess consumption of X goods on island A will be fulfilled and excess production shipments on island B. The process of change above, namely price changes, changes in the quantity produced and changes in the quantity consumed for goods X, both on island A and island B will continue and will cease only if the amount of excess production of goods X on island B has the same amount or quantity of excess consumption of goods X by residents of island A.

In the example picture: 1 the changes mentioned above are stopped at the height of prices both on island A and on island B for goods X per unit as high as OP because at the height of the price the amount of excess consumption of goods X on island A, which can also be called supply deficiency , lack of supply or excess demand for goods X of K equals the magnitude of the excess supply of goods X, which is also commonly called the excess supply or the surplus of goods X in country B, which is the same as L. It should be pointed out here that the similarity of the goods X equilibrium price in the area minus goods X island A with the price of equilibrium goods X in the area of surplus goods X island B is based on the assumption that to move goods X and island B to island A, or vice versa, altogether no expenditure on transportation costs is needed.

After we find the new goods X equilibrium price, which is as high as OP, both on island A and on island B, we will also be able to know the amount of production and consumption of goods X both at A and at B. On island A, the amount of equilibrium production item X is OX1A, and the amount of equilibrium consumption of item X is OX2A. On island B the amount of product equilibrium X is 0X1B units and the amount of equilibrium consumption for the same item is OX2b. Based on the example above, it can be explained that, at the OP price level on both islands namely A and B, things will happen as follows: (1) On Island A, production is minus (DA> SA), and this condition is utilized by producers on Island B by selling surplus production (SB> DB) to A. Island, (2) On Island B, production is surplus (SB> DB), and this condition is used by consumers on Island A by making purchases to meet consumption needs at a lower price than B. Island.

B. Theory of International Trade

In general there are four well-known International Trade Theories, namely: (1) Absolute Advantage Theory by Adam Smith. In the theory of absolute excellence, Adam Smith put forward the following ideas: (a) International Specialization and Production Efficiency, (b) The existence of the Division of Labor (Division of International Labor). (2) Comparative Advantage Theory by David Ricardo. The Comparative Theory of Excellence was announced by David Ricardo in an effort to improve Adam Smith's theory. Comparative advantage occurs if a country is superior to the two types of products produced, with labor costs being cheaper when compared to labor costs in other countries. If the two countries trade, both of them will benefit, by specializing one product. (3) Reciprocal Demand Theory by John Stuart Mill. The Reciprocal Demand Theory proposed by John Stuart Mill, who continues David Ricardo's Comparative Advantage Theory, is to find the exchange point of balance between two goods by two countries with their exchange ratio or by determining the Domestic Exchange Base (DTD). The aim of the Reciprocity Theory is to balance supply and demand, because supply and demand determine the amount of goods to be exported and imported. (4) International Trade Theory of Mercantilism. The theory of Mercantilism has the main principles, as follows: limiting imports and increasing exports, working on an active trade balance, expanding colonies, trading monopolies, looking for as many precious metals as possible. The focus of mercantilism is to increase exports over imports, and the excess of exports can be paid for with precious metals. Another mercantilist policy is to try to monopolize trade and obtain colonies to market industrial products. The pioneers of mercantilism theory were Jean Baptiste Colbert, Sir Josiah Child, Von Hornich, Jean Bodin and Thomas Mun.

Based on the results of research other researchers related to import problems here appear to be different but there are also little similarities with the results of this study. The similarity of research, among others, is viewed from the point of view of the occurrence of import activities between regions in Indonesia, namely between provinces as well as in other countries. Their research generally emphasizes the problem of the influence of changes in people's income where there is a measure of using economic growth in addition to being measured based on regional / regional and national income towards imports. Whereas in this study the emphasis is more on the degree of openness of Bali's regional imports, considering that Bali has been increasingly open to international trade lately when viewed from the increase in imports. In

addition to emphasizing this research also on the trend of regional imports of Bali, also see the nature of income elasticity (ηI) of imports. The regional imports of Bali discussed consisted of: (i) imports between provinces in Bali domestically (ii) imports of the province of Bali from abroad. The import commodities of Bali Province revolve around basic needs for the fulfillment of public consumption, most of which cannot be produced in the local area.

III. RESEARCH METHODS

The research area is the Province of Bali. Bali Province was chosen on the grounds of: (a) this region as a world tourism destination area, (b) the Balinese economy is open, namely the proportion of imports above 20 percent to GRDP, (c) the population of Bali has increased above 1.5 percent per year, so consumption needs of imported goods are expected to increase in the future.

Time series data is used in this study by taking the period 1990–2017 as a sample. During that period Bali Province experienced various economic disturbances, such as: economic crisis (1997/1998 and 2007/2008), Jimbaran Kuta bombings - Bali (2002 and 2004), global crises in Greece and the United States (2012) and erupting Mount Agung natural disasters 2017. The impact of this event, Bali's economy experienced a slowdown in foreign trade until recently.

Data Analysis Method: The open trend of import of Bali Province is estimated by: KI = bo + b1Sc + b2 Tr ... (1).

Description: KI = (M / PD) x 100%. KI = percentage of Bali Province's import against GRDP (a measure of the economic openness of Bali Province), bo = constant, b1Sc = economic shock coefficient, b2Tr = trend coefficient or tendency of economic openness in Bali Province. KI data is used to estimate how much exposure to Balinese imports. The results of the coefficient analysis of this trend indicate an estimate of the% change in people's income, which is used to meet the demand for imported Bali goods or how much the effect of the demonstration effect on regional economic conditions. If the percentage of changes in people's income is higher, the greater the import exposure of Bali Province. This means that the proportion of community income used as measured by the GDP of Bali Province is getting bigger for import payments. This is a sign that the demonstration effect is getting bigger and deeper into the consumption pattern of imported products.

Bali's economic growth is analyzed by the following equation:

PE = ao + a1KI + a2KU + a3IN + a4WS + a5SE + er ………………………………………………….2).

Description: PE = economic growth (GRDP) of Bali on the basis of current prices in percentage / year; KI = import openness in percentage; KU = IDR / US $, IN = inflation in percentage, SE = economic shock = dummy variable (i.e.: value 0 in normal year condition and value 1 condition of shock year), er = error term (error in regression model).

Community income elasticity of Bali imports, analyzed from the equation:

Log M = Logbo + b1LogPD + a2LogWs + a3LogPP + a4LogIN + a5 LogKU + a6LogSC + LogEr ... (3).

Where: M = total imports in million IDR; PD = Gross Regional Domestic Product at current prices, in million IDR, WS = number of foreign tourists to Bali in person, PP = Population (population) in person, IN = inflation in percent, and Er = error term (estimator error regression model). In equation (3) coefficient a1 = income elasticity (ηI) for import of Bali Province.

The coefficient ηI is calculated as follows: assume equal to zero (0): Log.ao; a2 Log. WS; a3 Log.IN; Log er. Equation (3) becomes:

Log M = a1 Log PD or: ηI = a1 = Log M / LogPD ………………………………… ……………………… (4).

In log differentials M = (1 / M) (ΔM) and Log PD = (1 / PD) (ΔPD). Then this result is substituted to equation (4). So the coefficient of income elasticity (ηI), is:

ηI = ((1 / M) / ΔM) / ((1 / PD) / ΔPD) or: ηI = (ΔPD / ΔM) (M / PD) …………………………… ... ... (5).

IV. ANALYSIS RESULTS AND DISCUSSION

A. Overview of the Population and Economy of the Province of Bali

Based on the results of research other researchers related to import problems here appear to be different but there are also little similarities with the results of this study. The similarity of research, among others, is viewed from the point of view of the occurrence of import activities the proportion of the population which is inversely proportional to the area, of course, results in the city of Denpasar being the most populous region in the province of Bali. Population density in this

region reaches 7,022 people / km2 or more than ten times the population density of Bali which reaches 745 people / km2. This density is also still much higher compared to the population density in Badung regency which reaches 1.505 people / km2. The region with the lowest population density in Bali is Jembrana Regency, where the density in 2016 is only around 325 people / km2 or only one-twentieth of the density in Denpasar City. According to Todaro (2000) traditionally population growth and labor force growth are considered as one of the positive factors that spur economic growth. A larger amount of labor will increase productive labor, while greater population growth will increase the size of the domestic market.

The economic growth of Bali Province seen through GRDP at current prices (cp) during 2017 grew by 5.59 percent, slower than the growth in 2016 which was recorded at 6.32 percent. The economy of Bali in 2017 measured by GRDP at current prices is IDR 215.36 trillion, while GDP at constant prices is recorded at 144.96 trillion IDR. With the projected total population of Bali in 2017 of 4.25 million, the per capita GRDP reaches IDR. 50.71 million IDR.When viewed from the production side, the highest growth was achieved by the business of providing accommodation and food and beverage by 9.25 percent. Followed by health services and social activities grew 8.44 percent, and information and communication grew by 8.14 percent. When viewed from the structure of the economy, the GDP of Bali Province according to business fields in 2017 was dominated by 3 (three) main business sectors, namely: provision of accommodation and food and beverage (23.33 percent); agriculture, forestry and fisheries (14.35 percent) and transportation and warehousing (9.45 percent). This means that the economy of Bali Province is dominated by the tourism sector.

The import of Bali Province covers various commodities, namely the type of machinery and production equipment with a value of 124.521 million US $ (2017) or a decline of 26.14 million US $ (17.35 percent) from the previous year which reached 150.66 million US $ (2016). At the end of 2017, there were as many as five countries which were the largest import origin. Among other things: Hong Kong (40.48 percent), Australia (13.17 percent), China (7.51 percent), Germany (6.26 percent), United States (5.46 percent).The import of various types of merchandise in addition to machinery and manufactured goods, is intended to be reprocessed into various types of commodities and souvenirs. This commodity is ready to be re-exported to foreign markets, and is able to provide far greater economic value. Such conditions are very beneficial and provide benefits to encourage economic growth, development and improve people's welfare in Bali.

Tourism is a variety of tourism activities and is supported by various facilities and services provided by the community, businessmen, government, and local government (Law No.10 / 2009). The development of tourism can be seen through its main indicators, namely the arrival of tourists. The arrival of tourists to Bali Province, throughout 2017 PT. Angkasa Pura I I Gusti Ngurah Rai Airport noted, the number of foreign tourist arrivals (tourists) in particular reached 5.960 million people, while in 2016 it was recorded at 5.076 million. This means that there will be an increase of 884 thousand foreign tourists in 2017. Profiling of foreign tourists in 2017 shows tourists from China are the most come to Bali, amounting to 1.38 million or growing 43.4 percent compared to the previous year. In contrast to China, foreign tourists from Australia experienced a slight decline, which in 2016 amounted to 1.08 million to 1.07 million people in 2017. While India which entered the third highest ranking experienced a very significant increase from 179 thousand to 266 thousand foreign tourists or grew almost 49 percent. This indicates that Bali's tourist destinations are still a favorite of foreign tourists to Indonesia.

B. Classical Assumption Test on Multiple Regression Models

Classic assumption test is a statistical requirement that must be fulfilled in multiple linear regression based on ordinary least square (OLS). There are at least five classic assumption tests that need to be done, so that the estimation model used in data analysis is valid. Some of the tests referred to, namely: normality, multicollinearity, autocorrelation, heteroscedasticity and linearity. This statistical test has been carried out on the data used in this study. The results obtained in accordance with the data analysis in Appendix 3, are summarized as follows: (1) Test for normality All variables used in data analysis are declared to be normally distributed, because they are in accordance with the value of Asymp. Sig. (2-tailed) using the Kolmogorov Smirnov method, showing results that are greater than specified, namely 0.05. (2) Mulitikolinearitas Test Partial correlation between independent variables as a whole has a value below the provisions of 0.90. This means that there are no multicollinearity problems between free varaibels. These results indicate that the data used in the analysis is classified as good for use in the estimation model. (3) Test of autocorrelation It is concluded here that the DW value of the test results is 1,1,279 which is located between: -2 and + 2. So that stated the data used in the analysis in this study did not occur autocorrelation. This means that the equation used for estimation is good, so that it can be used to estimate the data properly. (4) Heteroscedasticity Test Taking into account the presentation of scaterplot data in the discussion of the hiteroskedasticity test, it can be concluded, that the analyzed data has an irregular pattern, both in terms of narrowing, widening. and the shape of the data is bumpy. So that the scaterplot data

presented in the results of the analysis are believed not to have a problem of heterosdasticity. (5) Linearity Test By using the analysis results that are matched to the discussion of known linearity tests, the significance value of the calculated F is equal to sig. = 0.079. The value of F with sig, 0.079 turns out to be greater than the value of F table sig. 0.05, it is concluded that between independent variables with non-independent variables there is a linear relationship. In accordance with the results of the statistical tests described above (ie tests: normality, multicollinearity, autocorrelation, heteroscedasticity, and linearity), it can be stated, that the data used in estimating the log-linear multiple regression model is valid. Thus the results of the regression model estimation applied in the study are believed to be able to provide estimates of results classified as good statistically.

C. The estimated trend equation for total imports and openness of imports of Bali Province

1) Equation of Trend on Import Openness

Using the results of Annex 1.2 data analysis, the results of the estimation of the import openness trend coefficient are obtained: $KI = b_o + b_1 Sc + b_2 Tr$, as follows. Constant value: $b_o = + 20700.75$; economic sock variable coefficient (Sc), $b_1 = + 27.08$; trend year variable coefficient (Tr): $b_2 = - 10.26$. The equation of the openness trend of import of Bali Province with a significance level of 0.10 (or 10 percent), is arranged as follows.

$$M = 30700.75 \quad + 27.08 \ Sc - 10.26 \ Tr \ \ldots\ldots\ldots\ldots \ldots\ldots\ldots\ldots\ldots .. (1)$$

　　(sig 0.060) (not sig 0.761) (sig 0.61)

By using the estimation trend equation (1), then it can be explained the meaning of the trend coefficient, namely: significantly the estimated openness of imports in Bali Province has decreased by around 10.26 percent per year. The decline in the percentage of openness of imports in the Province of Bali is estimated to be caused by many factors, including: frequent economic shock that has a long-lasting impact on economic recovery to normal conditions, such as the repeated global economic crisis in Europe Thailand), the disruption of tourism security (such as the Bali bombing, the New York WTC bomb) and including natural disasters (such as the eruption of Mount Agung in Bali, etc.).

D. Hasil estimasi persamaan pertumbuhan ekonomi

The data in Appendix 2 shows the results of the multiple regression coefficient estimation of the economic growth equation, namely: $a_o = + 9,957$; $a_1 = + 0,000$; $a_2 = + 0,000$; $a_3 = - 0,125$; $a_4 = + 0.001$; $a_5 = - 0.290$. With this estimation coefficient, the following economic growth estimation equation is then compiled.

$$PE = 9.95 + 0.00 KI + 0.00 KU - 0.125 IN + 0.001 WS - 0.90 SE \ \ldots\ldots\ldots (2).$$

　　(sig 0,00) (note sig 0,90) (sig 0,00) (sig 0,00) (sig 0,00) (note 0,67)

The coefficient of estimation equation (2) can be explained as follows: (1) Coefficient of constant, $a_o = 9.95$; with assumptions other than constants declared equal to zero (0), economic growth is still positive because it is influenced by variables outside the regression model, (2) Coefficient of KI, $a_1 = 0.00$; with the assumption that besides the openness variable, imports are declared zero (0), an increase in openness of imports of one percent not (not) significantly affects economic growth, (3) Coefficient KU, $a_2 = 0.00$; with the assumption that in addition to the exchange rate variable of IDR. US $ stated as zero (0), an increase in the exchange rate of IDR. / US $ per one IDR significantly affects economic growth of below 0.00 percent per year, (4) Coefficient of IN, $a_3 = - 0.125$; assuming that besides the inflation variable zero (0), an increase in inflation of one percent significantly affects the decline in economic growth by 0.125 percent per year, (5) WS coefficient, $a_4 = 0.001$; with the assumption that in addition to the variable of foreign tourists declared equal to zero (0), the increase in the number of foreign tourists to Bali significantly affects economic growth by 0.001 percent per year, (6) SC coefficient, $a_5 = - 0.90$; with the assumption that in addition to the economic shock variable stated as zero (0), an increase in economic shock does not significantly affect economic growth, because there will always be economic recovery efforts from economic actors in the government in overcoming such conditions.

E. Estimated results of the import equation

1) Estimated results of the import equation coefficient

The results of the data analysis in Appendix 3 provide estimates: constants: $a_o = 40.37$; $a_1 = 2.49$; $a_2 = - 11.86$: $a_3 = + 1.32$; $a_4 = + 0.41$; $a_5 = - 2,46$ and $a_6 = - 0,10$. The results of this coefficient estimation are used to compile the following equation.

$$Log \ M = a_o + a_1 Log \ PD + a_2 \ Log \ PP + a_3 \ Logs \ WS + a_4 \ Log \ IN + a_5 Log \ KU + a_6 \ SC.$$

Page | 6

The equation for estimating the total import of Bali Province is:

LogM = 40,37 + 2,49LogPD – 11,86LogPP + 1,32LogWS + 0,41 Log-2.46 LogKU-0,10SC ... (3).

Economic explanation of the regression coefficient:

(1) Constants, ao = 40.37. Assuming all independent variables are declared zero, the need to fulfill imports continues to occur, namely 40, 37 (unit of imports). Fulfillment of the needs of these imported commodities must indeed be fulfilled because these imported commodities are not produced in the Province of Bali. Examples of commodities that are not produced in Bali, namely: fuel oil (BBM), sugar, cement, steel, and others. For the regional government of Bali Province, imports of such commodities must be provided annually. For this reason, the regional government must always prepare funds in the form of foreign exchange, to be able to import some of these commodities continuously or continuously. This indicates that the people in Bali have a high dependency on imported products, in the current era of globalization.

(2) The coefficient of PD, a1 = 2.49. With assumptions other than GRDP equal to zero, then every increase in 1 GRDP unit or community income of 1 billion IDR / year for example, then this will cause an increase in demand for imported commodities of 2.49 billion IDR per year. Economically, this means that the increasing income of the community per year, it causes an increase in import commodities every year in a larger proportion. This shows that the dependence of the Province of Bali on imported commodities is high, because the coefficient value of GDP for imports is elastic (or the value of elasticity is greater 1).

(3) PP coefficient, a2 = - 11.86. Assuming that the total population is equal to zero, every year there is an increase in the population of one million people, so that the imported commodities of Bali Province will not experience an increase, even the imported commodities may decrease by 11.86 billion IDR per year. These results indicate that the population in Bali Province is not a factor causing an increase in import commodities. Data shows that each increase in import commodities into the Province of Bali, is more dominant due to the increase in income (GRDP) of the community.

(4) WS coefficient, a3 = + 1.32. Assuming that the number of foreign tourists is equal to zero, every year there is an increase in the number of foreign tourists by one million, it is estimated that the increase in import commodities of Bali Province will increase by 1.32 billion IDR per year. These results indicate that the arrival of foreign tourists contributed to the increase in imported commodities to the Province of Bali. The reason is supportive, because the consumption needs of foreign tourists must be supported by various types of imported commodities. Examples of commodities to improve the quality of accommodation facilities such as hotels to consume food-drink in restaurants for foreign tourists, many of which must be imported from abroad. More clearly, the types of imported products to meet the consumption needs of foreign tourists are not produced in Bali.

(5) The coefficient of IN, a4 = + 0.41. Assuming that inflation is equal to zero, an increase in inflation of one percent per year is expected to cause an increase in import commodities of 0.41 billion IDR per year. Economically this result means that increases in prices in general in the Bali region will trigger an increase in imported commodities to the Province of Bali. Increasing prices in the area of Bali encouraged importers to market more products in Bali, hoping to get greater profits. Especially in the era of global trade, the presence of foreign products is free to enter and compete in Bali, especially products related to the needs of tourists in Bali.

(6) KU coefficient, a5 = - 2.46. Assuming that the exchange rate of IDR / US $ is equal to zero, every time the exchange rate increase of IDR / US $ by one unit of exchange per year, it is estimated that the increase in import commodities will decrease by 2.46 billion IDR per year. Increasing the exchange rate of IDR. US $ means that foreign exchange needs are also increasing, in order to be able to import various types of commodities needed in this area. This condition can occur because the exchange rate of IDR. US $ which rises has the same meaning as the increase in prices of imported commodities. Import commodity prices have risen to the point that the ability to import commodities from abroad has declined, so it must be supported by a greater increase in foreign exchange, (7) SC coefficient, a6 = - 0.10. Assuming that the dummy variable is zero, the incidence of economic shock (such as the global economic crisis, Bali bombing, etc.), is expected to affect the decline in import commodities by 0.10 billion IDR per year. It is understood that such an event could disrupt the stability of the Balinese economy, and trigger a decline in commodity imports from abroad. These economic disruptions can cause people's purchasing power to decline, tourism activities are characterized by a decline in the number of foreign tourist arrivals, so that demand for tourism and other commodities is also affected.

2) Coefficient of Public Income Elasticity on Imports

The estimation result of equation (3) is used to calculate the coefficient of elasticity of public income on imports.

Log M = 40,37 + 2,49LogPD – 11,86LogPP + 1,32LogWS + 0,41LogIN – 2,46LogKU-0,10SC ……. (3)

The coefficient of community income elasticity on total imports, calculated by the formula:

ηM = (dM⁄M) / (dPD⁄PD) = (dM⁄dPD) / (PD⁄M) …… (Description: M = import; dM = Import diffrential; PD = GRDP Provnsi Bali: dPD = diffrential GRDP Bali Province).

Using the estimation results of equation (3), we can know the coefficient $\boldsymbol{\eta}$M, which is the income elasticity of the community towards imports. Evidence of the results is shown through the following calculation. Assumption: besides the PD = 0 variable then equation (3): Log M = 40.37 + 2.49 Log PD …… (4). From equation (4) then diffrential is calculated from: (1) d (Log M) = d (40.37) + 2.49 d (Log P) or: d (Log M) = 0 + 2.49 d (lOg P). So: d (Log M) / d (Log P) = 2.49, (2) Calculated differential from Log M and obtained results: 1 / M (dM), (3) The differential of Log P is calculated and the result is 1 / P (dP), (4) So equations d (Log M) / d (Log P) = 2.49, and $\boldsymbol{\eta}$M: ηM = (dM⁄M) / (dP⁄P) = (dM⁄dP) / (P⁄M) = 2.49 Or: ηM = 2.49. Economically $\boldsymbol{\eta}$M = 2.49 means, that every increase in community income is 1 percent, it will cause an increase in total imports of 2.49 percent. Thus, the total import of Bali Province is declared elastic because $\boldsymbol{\eta}$M> 1.

V. CONCLUSIONS AND RECOMMENDATION

On the basis of the results of the discussion of the previous chapter, it can be concluded: (1). The import development of Bali Province in the future will continue to increase every year, in line with the development of tourism and the GDP of Bali Province. While the development of the openness of imports of Bali Province has decreased slightly as a result of the occurrence of various economic shocks in the area of Bali. (2). The openness of imports does not have a significant effect on Bali's economic growth, and the one that has a significant effect is the exchange rate of IDR. US $, inflation and the number of foreign tourists coming to Bali. (3). The import of Bali Province was positively influenced by the GDP variable, the number of foreign tourists to Bali and inflation, while it was negatively affected by population, exchange rate and economic shock. (4). The income elasticity of society towards the total import of Bali Province is elastic, because the elasticity coefficient is greater than one. On the basis of the three conclusions taken, it can be stated that Bali's economy is very open and the dependence on imported commodities is very high. This is because the types of products imported by Bali Province, most of which are products that are not produced in the area of Bali. Research recommendations: (1). Communities and together with local governments must continue to strive to improve the economy or income, through increasing tourism activities and other sectors. This needs attention, because the fulfillment of the needs of imported commodities must be supported by substantial foreign exchange. For this reason, it is necessary to ensure continuous local security issues in Bali so that tourism does not slow down in the future. (2). Communities and the government always think of anticipatory steps, namely trying to reduce imports. For this reason, it needs continuous socialization going forward, to consume local products, especially for imported products that can be produced in their own area.

REFERENCES

[1] Anne Booth dan Peter Mc Cawley, 1980, *Ekonomi Orde Baru,* Jakarta, Penerbit LP3ES.

[2] Bayraktutan, Y.Bıdırdı, H., 2010, The Basic Determinants of Turkish Import (1989-2004), *Ege Academic Review,* 10 (1), pp.351-369.

[3] Bui Trinh, Pham Le Hoa and Bui Chau Giang, 2008, Import multiplier in input-output analysis, Depocen, Working Paper Series No. 2008/23, Vietnam, http://www.depocenwp.org

[4] Boedino, 1983, *Ekonomi Internasional*, Yogyakarta, Penerbit BKFE.Universitas Gadjahmada.

[5] Dewi C., 2014, Tinggi, Ketergantungan pada Alat Produksi Impor, Denpasar, *Antara,* 21/6/2014.

[6] Deliarnov, 2006, *Ekonomi Politik*. Jakarta, Penerbit Erlangga.

[7] Doroodian, K.R.K. Khosal dan S. Al-Muhanna, 1994, An Aximination on the Traditional Aggreagate import Demand Fucntion for Saudi Arabia. *Apllied Economic*s, 26, 909-915.

[8] Eko Atmadji, 2004, Analisis Impor Indonesia, Jurnal Ekonomi Pembangunan Kajian Ekonomi Negara Berkembang, Vol. 9 No. 1, Juni 2004, 33 – 46.

[9] Gerni, C.Emsen S.Deger K., 2008, İthalata Dayalı İhracat ve Ekonomik Büyüme: 1980-2006 Türkiye Deneyimi, 2. Ulusal İktisat Kongresi/20-22 Şubat 2008 / *DEÜ İİBF İktisat Bölümü / İzmir* -Türkiye

[10] Gujarati, Damodar N., 1980, *Dasar-Dasar-Ekonometrika,*Jakarta, Penerbit Salemba Empat.

[11] Hamdy Hady, 2001, *Ekonomi Internasional – Teori Dan Kebijakan Perdagangan Internasional*, Buku I- Edsi Revisi , Ghalia Indonesia, Jakarta.

[12] Halit Yanikkaya, 2002, Trade openness and economic growth: a cross-country empirical investigation, *Journal of Development Economics*, No. 72 ,2003, 57– 89.

[13] Hafeez UR Rehman, 2007, An Econometric Estimation Of Traditional Import Demand Function For Pakistan, *Pakistan Economic and Social Review*, Volume 45, No. 2 (Winter 2007), pp. 245-256.

[14] Leonard Cheng Mayumi Fukumoto, 2006, Estimation of China's Disaggregate Import Demand Functions, Hong Kong University of Science and Technology.

[15] Mangkoesoebroto ,Guritno, dan Algifari, 1992, Teori Ekonomi Makro,SekolahTinggi Ilmu Ekonomi YKPN Yogyakarta, Yogyakarta.

[16] Moazzami, B., and Wong, E. (1988), Income and price elasticities of China's trade, Asian Economic Review, 30, pp.218–230.

[17] Moran, C., 1989, Imports Under A Foreign Exchange Constrain, *The World Bank Economic Review*, Vol.3, No.2,pp.279–295.

[18] Ngurah Wisnu Murthi, 2017, Pengaruh Tingkat Inflasi Dan Pendapatan Nasional Terhadap Saldo Neraca Transaksi Berjalan Indonesia Periode Tahun 2005-2015, Majalah Ilmiah Universitas Tabanan, Vol.14 No.2 September 2017.

[19] Yılmaz Akyüz, 2011, Export – import Dependence and Sustainability of Growth in China, *China & World Economy*, 1 – 23, Vol. 19, No. 1.

[20] Yıldız, E. B., Berber M., 2011, Sustainability The Import-Led Growth: The Case Of Turkey (1989–2007), *İİBF Dergisi*, Cilt.25, Sempozyum Özel Sayısı, pp.165-181.

[21] Samsumbar Saleh, 2010, Asean Economic Integration: Trade Creation Or Trade Divertion For Import Of Indonesia Manufactures?, *Economic Journal Of Emergency Markets,* April 2010, 2 (1), 31-45.

[22] Riccardo Faini, Lant Pritchett,and Fernando Clavijo, 1988, Import Demand in Developing Countries Country Economic Department The World Bank, November 1988, WPS 122

[23] Sumitro, Djoyohadikusumo, 1982, *Perekonomian Indonesia Menjelang Akhir Pelita v Dan Perspektif Pembangunan Jangka PanjangTahap II,* Jakarta.