

Effect of Entrepreneurship on Rwandan Economic Growth, Evidence from Gicumbi District

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Abstract

The general objective of this study is to find out effect of entrepreneurship on economic growth of Rwanda. The study has used descriptive research design to describe effect of entrepreneurs on national consumption, investment, government and net export. The total population of Gicumbi district was distributed in four sectors namely Nyankenke, Miyove, Mukarange and Byumba. Nyankenke sector had 350 householders, Miyove sector was made of 420 householders, Mukarange was made of 809 householders, and the number of householders in Byumba sector was 600. The total population was 2179 and researcher selected 217 as a sample size. Data were collected using questionnaires and analyzed with multiple regression and coefficient of correlation. The findings highlighted that entrepreneurship has statistically positive effect on economic growth. It provides new products in the community and improves the quality of output. They revealed that entrepreneurs have effect on construction of new buildings, technology and equipment for promoting economic growth. The results revealed that Pearson coefficient is .765 and it is above .05. This means that when the value of entrepreneurship raises, public expenditures increases by 76% due to tax increment. Results about how entrepreneurial innovation, creativity and efficiency have an effect on the products exported outside the country of Rwanda indicate that the P value of entrepreneurial innovation is 0.039; creativity has the value of 0.047 and efficiency has P value of 0.049. The study recommends government of Rwanda to increase subsidies for entrepreneurial development because it has a significant effect on growth of the economy.

Keywords: effect; entrepreneurship; Rwandan economic growth; Gicumbi; district

Introduction

Over decades, African countries have perceived entrepreneurship development as a powerful tool for economic growth because above 80% of Africans lives under the poverty line and the level of standards of living is very low compared to European countries characterized by a rapid development. Entrepreneurship plays a significant role in poverty reduction and provides job to the business owners (Wright, 2017). In Eastern Africa, 60% of public revenue is made of tax paid by entrepreneurs and the investors. It was highlighted that a country with a large number of entrepreneurs should have a high economic growth than the one with low number of business starters (Acemogh, 2012).

Before the colonization, African continent depended on other continents such America, Europe and Asia but with the introduction of entrepreneurial culture, the life has radically changed because the continent got the independence of producing any kind of commodity which was useful for community without waiting for the support from external. To foster the culture of starting the business, Eastern African leaders have decided to teach the course of entrepreneurship from lower schools up to the University for preparing young generation to be capable of generating job for themselves regardless the support from government (Acs, 2010).

In Africa, the number of people who starts their own business is very low than private sector. Findings have highlighted

a significant positive relationship between education and economic growth. Sustainable economic development should be driven by education since it is one of the determinants of successful entrepreneurs. African continent has a lot of natural resources including forests, minerals and gas that require a high level of skills in order to exploit those resources for economic development (Adusei, 2016)

Currently, leaders have found out that the only way of reducing chronic poverty is creation of economic integration for instance, Eastern African community has the objective of protecting common interest of countries members and with this policy, the entrepreneurs have got the opportunities of selling their products over the rest of world to boost African economic growth (Alvarez, 2011). Furthermore, African countries are dominated by deficit in balance of payment because generally, the import exceeds the export. To promote economic growth, the country of Rwanda has eliminated all taxes paid by the exporters and it has increased the amount of charged on products imported. Additionally, it has created a policy named “Made in Rwanda” meaning that all products consumed in the country should be produced on Rwandan territory without any exception.

The government has invested much money in that project where 60 billion Rwandan francs were distributed to the entrepreneurs as a motivation for understanding that local products are better than products from outside. The competitions were organized with the purpose of aspiring young generation to create new products which are useful in the country. According to world report, Rwanda was ranked at the second position in Africa as a country that facilitates foreign investors to come inside the nation and inject much money in economic activities generating profit. The second policy initiated by Rwanda for promoting economic growth is called “one cow per family”, it consists of giving a cow to family members in order to reduce the poverty and increase the welfare (Aghion, 2017).

Rwandan economic growth is characterized by increasing in products used for consumption because the government has expanded agriculture sector. Besides, the firms producing products have increased from 20% to 40% and the expenditures for supporting poor families increased by 80%. Additionally, according to the national report, economic growth of 2018 has increased at the percentage of 7% and in 2019, Rwandan economic growth reached at the percentage of 7.7%. But even if the economy has continued to increase significantly from 2018 to 2019, the rate of Rwandan economic growth is too low (Wright, 2020).

The general objective of this study is to find out the effect of entrepreneurship on economic development of Rwanda.

Literature Review

Definition of Entrepreneurship

The entrepreneurship was conceived as the process of creating new products and selling them at the market in order to make the profit (Covin, 2012). It is the process of improving efficiency of producing the product by producing maximum level of output using less resource (Cullen, 2014). Entrepreneurial efficiency can be dynamic if it aims at increasing the level of production using innovation and technology (Dany, 2002). According to Joseph Schumpeter, innovation is the procedure of generating new product, new service, and new method of processing the resource and creating new organisation which is different from the existing one. The entrepreneurship was defined as the process of creating economic activity, discovering entrepreneurial opportunities and disseminating innovation (Sperry, 2005). The researchers have mentioned that entrepreneurship is based on economic activity that brings the profit to the business creator and after identification of activity; the entrepreneur must discover the opportunities available around the business environment such as physical, financial and human resource for transforming inputs into outputs. The entrepreneurship was defined as the process of undertaking a new organisation and accepting negative results from undertaken activity (Swanson, 2007). In the business, the risks are available and it is very difficult to avoid, what is possible is to identify the strategies of minimizing the risks. The entrepreneurship is the process of making innovation, creativity and expansion. Therefore, the entrepreneur is guided by the business idea which should be transformed in a tangible product (Wright, 2011).

Definition of Economic Growth

Economic growth was defined as increasing in output produced by all firms in the country (Torracco, 2005). Therefore, the economy grows when it produces a big amount of goods and services for satisfying the needs of citizens. Economic growth is an increase in goods available for consumption and it is measured by Gross Domestic Product (GDP), national income (Y) and Net National income (Wright, 2013). Economic growth is indicated by the quantity of goods and services produced in the country during a given period of time especially one year. In macroeconomics, national output should be equal to the total value of all goods and services produced by both nationals

and foreigners on the territory of the country (Wooldridge, 2013). Economic growth refers to an increase in national income and the standards of living and it is measured by per capita income which is average amount of money earned by one person in the country (Wright, 2006). When the factories and firms increase the production, they employ more factors of production and pay much money to the householders which leads to economic growth. Economic growth is a general increasing of aggregate demand and reduction of unemployment which is the situation where some people are not employed in the process of producing goods and services (Yu, 2001). Economic growth is concerned with the augmentation of firms that are in charges of producing goods and services (Wright, 2017). The economy grows when the country spends much money (G) in the society for enabling people to increase macroeconomic welfare. Economic growth concerns with increasing in export(X) and reduction of import (Acemoglu, 2012). People in a given country consume a large number of outputs and there is not any country which can produce all goods and services needed by the population. Therefore, it forced to engage in international trade in terms of export and import.

Theory of Economic Growth

This study was guided by economic theory of Swan model developed in 1956 suggesting the economic growth of the country is in function of entrepreneurship, human capital and technology (Acs, 2010). It said that there is a positive correlation between entrepreneurship and the development. It added that the entrepreneurship involves the skills of using capital and technology to get a large quantity of products and services. Mathematically, economic model is summarized in the following equation, $Q=F(E, K, L, A(t))$, where Q stands for the quantity of goods and services produced within the economy, E stands for entrepreneurship, that is the ability of combining the factors of production into final products used for consumption. Additionally, K stands for capital that is the amount of money used for buying resources, L represents the number of the employees that the firm uses in the process of production and A(t) which is the change in technology. The theory of economic growth said that change in technological level affect economy of the country positively. It significantly increases the national output even if other factors remain constant. The theory of economic growth refers to a general increasing in real gross domestic product. It helps to understand how the factors of production in the country including entrepreneurship, land, capital and labor lead to increase in national income (Adusei, 2016).

The neoclassical theory propounded by Solow in 1956 has mentioned that sustainable economic growth is in function of political stability, progress in technology, human capital, investment and per capita income. According to this theory a country with a high per capita income has economic power compared to the country with lower per capita income. It was defined as the amount of money earned by the nationals during the period of one year. It depends on the total number of population and national income level. The economists calculate per capita income by taking the national income divided by the total number of population and is indicator of good performance of the economy. It added that the entrepreneurs play a great role by investing money in the projects that increase productive capacity of the nation. Referring to this theory, the entrepreneurs serve an important role in the growth of economy by giving a connection between the factors of production and output by using new technology to increase the total value of goods and services. The authors highlighted that there is a positive change in the production process which is reflected by change in technology. High quality of products produced by domestic firms enables development of entrepreneurial activity (Agarwal, 2010).

Slow' theory of economic growth stated that the development of economy is in function of saving, the level of depreciation, progress of technology and population growth. The theory advanced the idea that saving is one of the drivers of economy strength and was defined as amount of money which is left after the consumption. Saving function(S) is positively linked with the investment because getting new equipment's, machines and buildings requires a large capital and the only way of acquiring long term asset is promoting the culture of saving. Slow' theory added that national economics is constrained by depreciation, that is value reduction of fixed assets and it has a negative impact on the economy since it does not increase the value of goods and service. Therefore, the depreciation and economic growth vary in different directions. Population is an additional determinant of economic growth of the country. It was argued that a rapid increasing in population has reduced the economy especially in African countries characterized by few resources. Therefore, several researchers advised African countries to elaborate the policy for controlling speed of population. The recent findings found out that progress in technology influences other variables of national economic growth by mentioning that even if the population growth is a challenge of African countries if technology increases with level of population, economic growth increases positively (Alvarez, 2011).

Effect of Entrepreneurship on Economic Growth

The researchers have found out that entrepreneurship has a positive and statistically effect on economic growth. The results revealed that individual attributes of entrepreneurs such as financial, human and physical resources change the wealth of nation. They added that financial resources are concerned with the amount of money used to acquire other factors of production and it should be properly utilized to raise national gross domestic. The capital is considered a lifeblood of the firms, currently 40% of the businesses have failed due to the lack of money for continuing the transactions and if the number of business failure increases, they should be reduction in economic growth of the Nations. The findings recommended to the governments to facilitate small and medium enterprise to find money for starting without having any issue. In Rwanda, the government has created an autonomous institution in charges of financing the entrepreneurs with small capital to grow. Addition, it has created saving and credit cooperatives enabling private sectors to find money for conducting economic activities. Entrepreneurial physical resources influence national gross domestic product in a positive way because 60% of Africans are poor and they do not have resources for eradicating the poverty. Thus, the entrepreneurship is solution for boosting the economy by acquiring new equipment, machines and buildings for expanding the business transactions (Aghion, 2017).

Self-employment is positively associated to economic growth according the recent study conducted in eight districts of Rwanda. It demonstrated that 17% of Rwandans are unemployed. The majority of population is very active but the chance of finding a job is low due to insufficient number of the industries that use a big percentage of the employees. It was highlighted that that entrepreneurship is a positive response to the unemployment problem and it is not easy that every person who has ability to work can get the job. Normally, the entrepreneurs use workers to get the things done in the business. Therefore, when the population gets the job from the entrepreneurs, the standards of citizens' increase and the life of all nationals changes considerably (Covin, 2012)

The study reported that entrepreneurship is statistically correlated with economic growth by promoting the export and import. The entrepreneurs improve the deficit resulted from international transaction. The researchers have indicated that there not any country that can be economically self-independent. The population of the country consumes a

large amount of goods and services that could not be only produced locally. One part of production from entrepreneurs is sold outside the country that is export and the left is consumed locally. When the total quantity of output cannot satisfy domestic market, the balance is bought from outside the country to cover the gap and that is import. The economists have highlighted that the objective of the country is to promote economic equilibrium whereby the import must be equal to export. When the exports are greater than imports, there is surplus in balance of payment and the economy in the country grows as quickly as possible but the situation in which the imports are greater than the export, there is the deficit in balance of payment and the only solution to reduce the deficit is to provide subsidies to the entrepreneurs in order to boost the economy. Therefore, it was concluded that the entrepreneurship has positive effect in economic growth especially in less developed countries (Dany, 2002).

The innovation of new business stimulates economic growth as it was highlighted by Joseph Schumpeter that the first function of entrepreneur is to invent and sell new product at the market. Most of African entrepreneurs failed due to lack of innovative idea which is the tool of competition with other entrepreneurs all over the world. The entrepreneurship has significant effect on the performance of the country by introducing new technology for producing goods and services that is a new way of processing the factors of production. The country cannot exist regardless the intervention of entrepreneurs as they establish new form of business organization whereby citizens get the job and increase the standards of living. Joseph Schumpeter added that the profitability of the entrepreneur is based on the creation of new method of marketing that is the process of selling, advertising and distributing the product to the citizens. Marketing aspect is the most important determinant of economic growth of the nation. When the number of customers increases, the entrepreneurs get much money from the business transaction and pay much money as tax to the country. Therefore, whole economy grows due to the business creation (Sperry, 2005).

The studies have mostly reported a positive and significant association between entrepreneurship and national economic growth. They also differentiated between rich and poor countries based on entrepreneurial aspiration. Poor countries are characterized by high level of poverty due to absence of infrastructures, investment, overdependence on external sector, deficit in balance of payment and political instability but rich countries are dominated by entrepreneurs and the

citizens do not have the intention of looking for job from the government, they prefer to create their own job. The entrepreneurship development has a lot of advantages over all country because with the introduction of a new firm, citizens get goods and service near their families. Entrepreneurs increase the level of competition, as it is known, when the country has only one producer, the prices of commodities become expensive and citizen purchasing power reduces. In some countries, the entrepreneurs construct the infrastructures for transporting the items to the market easily. Additionally, the research conducted in Tanzania has mentioned that economic growth in 2015 has increased at the percentage of 9% due to the development in entrepreneurial sector. Tanzania is one of African countries with adequate natural resources and this is big opportunity for entrepreneurs to exploit the chance they have in order to stimulate economic growth (Wright, 2017).

The investigation has showed a significant effect of entrepreneurial aspiration on the development of the economy. The results have indicated that in Rwanda, the entrepreneurs have increased the national income at the percentage of 15%, total consumption increased at the percentage of 21% in 2010, the investment has raised by 30%, the public revenue increases at the percentage of 12% because tax is the main source of national revenue and it accounts for 60 % of total revenue a part from fines, penalties and money from external financial institutions such as world bank, international monetary fund and non-government organizations. In 2012, the government has got over 80 billion from the export. The economy of Rwanda is based on agricultural activity, above 95% of Rwandans are considered as cultivators. The findings have proved that majority of Rwandan entrepreneurs engage in agricultural activity and it is the most important source of income for females and young generation. The entrepreneurs have reduced the overdependence on foreign countries because after the genocide against Tutsi, the government has founded a lot of institutions in charges of supporting entrepreneurs to get the training, education and loan. Those institutions are business development fund (BDF), saving and credit cooperatives (SACCO) plus vision umurenge program (Adusei, 2016)

Entrepreneurship is significantly related to economic the gross domestic product of the country(GDP).An increase in national income should lead to the rise in the standards of living. Economic growth depends on entrepreneurial activities and it was defined as the total amount of money earned by the country during a specified period of one

year. When the entrepreneurs increase the production, it may lead to an augmentation of gross domestic product. The entrepreneurs collect the factors of production from householders to transform into products and make profit. In case, the entrepreneurs use local resources, the nationals obtain a part of income called revenue. The findings reported that that Kenyan economic growth has increased in 2016 because the government has established good policy for motivating entrepreneurs including protection of property right. The government of Kenya has elaborated rules and regulations punishing people who imitate the products invented by other people without prior permission from the business owner. Furthermore, the country of Kenya has created the policy of anti-corruption that has the purpose of punishing people who do not render good service to entrepreneurs because before starting economic activity, the entrepreneurs must get the authorization from government authority. The government of Kenya has designed programs to assist the industries to grow by rewarding the best entrepreneurs who are very successfully in the region of Eastern African community (Acemoglu, 2012)

Entrepreneurship affects the actual economic growth of the nation by increasing the output. It means that the economy provides more goods and service through entrepreneurship. The study demonstrated that the increase in aggregate demand would lead to the actual economic growth since the factories get more profit when the customers demand a big quantity of output. Economically, change real gross domestic product causes the increase of aggregate demand from one point to another. The consumption of the products is determined by different factors. The first driver of economic consumption is the availability of loan. The population uses a part of their to buy goods from the entrepreneurs and it was proved that when in the country there are many banks, the nationals get much money to use for consumption. It also depends on distribution of income. The findings illustrated that Rwandan income is not distributed equally because there are some areas which are less developed compared to other areas. In Rwanda, some people are very poor and characterized by low consumption to increase economic growth but other people are very rich and stimulate Rwandan economy. The consumption as a determinant of economic growth in eastern African community is associated with the interest rate. The authors have illustrated that the reduction in interest rate increases domestic consumption and stimulate the economy but the situation in which the interest rate increases, people consume less level of output and entrepreneurs obtained less profit (Acs, 2010).

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Entrepreneurship has a positive impact on investment of Rwandan economic growth. The institution in charges of statistics reported that the level of investment has changed based on business preference, the costs, income tax, and availability of the loan, interest rate and technology advancement. The costs have discouraged the entrepreneurs significantly due to the inflation which is considered as a general increasing in price level of product. From 1994, the inflation has changed the value of money that producers use for paying factors of production. A part from level of costs, economic growth in terms of investment is extremely influenced by tax. The investigation comparing the level of tax paid by the investors in Eastern African countries such as Rwanda, Uganda, Tanzania, Kenya and Southern Sudan has demonstrated that the Rwandan tax level is very compared to countries members of Eastern African countries as tax increases the cost of production. Additionally, the loan and interest have a positive and negative impact on the economy because the entrepreneurs do not get the production from nothing. It requires enough capital which is mostly collected from banks and other financial institutions even if there are many sources of capital. The change in interest rate reduces the effort of entrepreneurs to economic growth in Rwanda. Therefore, it is advisable to reduce the interest rate in order to boost national production (Adusei, 2016).

Entrepreneurship is the most important factor influencing economic growth in Africa. It is concerned with the production of goods and services in the economy. The government spends on goods produced by the entrepreneurs and when government expenditures increase, the society gets the employment and the entrepreneurs get profit for business growth. Public expenditures (G) are used based on the objective of the nation. When the government has the objective of constructing the infrastructures, public funds should be used for constructing schools and hospitals. The purpose of the government can be eradicating the poverty, in that case public resources would be used in different programs for increasing the welfare for instance in Rwanda there are various programs such as vision Umurenge program, one cow per family and business development fund. The government expenditures are positively associated with the performance of the entrepreneurs because the government normally uses two policies of expansionary policy and decreasing the expenditure. When it needs to promote economic growth, the expenditures on goods and services produced by the industries increase the capacity of entrepreneurs (Agarwal, 2010).

Entrepreneurs have a positive effect on economic growth

by innovation. The results have indicated that entrepreneurs do research and develop new products caused by change in customers' needs. Most of entrepreneurs use advanced technology to raise the quantity of products and compete with other businesses. Currently, most entrepreneurs engage in international trade and only way of remaining competitive at international market is using innovation as a driver of economic growth. Recent results have highlighted that entrepreneurial efficiency increased the economy at the percentage of 85% and the research recommended to business owners to promote the culture of promoting efficiency because it was noted that economic resources are rare and the objective of promoting economic growth cannot be achieved regardless the contribution of entrepreneurial efficiency. The research conducted in ten districts of Rwanda has showed that innovation, creativity and efficiency increase economic growth at the percentage of 80% and advancement in technology raises economic performance of the country by 70%. Therefore entrepreneurship has a positive significant effect on production growth (Alvarez, 2011).

Methodology

The research has used descriptive research design to describe the effect of entrepreneurs on national consumption, investment, government and net export. Descriptive research design was defined as the way of collecting the information related to the ideas, opinions and of a group of people. In this study the group of discussion is Gicumbi District situated in Northern Province of Rwanda. The study describes the information and the characteristics about the population under the study. It answers the questions such as who, where, what and how. In terms of the first question, this study involves the householders of Gicumbi District. For the second question, it is located in Rwanda and it discusses about the effect of entrepreneurship on economic growth. The research design is the most important of the methodology because it may help to collect data from a large number of the respondents. The study population was distributed in four sectors of Gicumbi District.

Table 1. Population of the study

Sectors	Target population	Size	Method of sampling
Nyanenke	350	35	Purposeful sampling
Miyove	420	42	Purposeful sampling
Mukarange	809	80	Purposeful sampling
Byumba	600	60	Purposeful sampling
Total	2179	217	

Source: researcher, 2020

Table indicates that that the total population of Gicumbi district was distributed in four sectors namely Nyankenke, Miyove, Mukarange and Byumba. Nyankenke sector had 350 householders, Miyove sector was constituted with 420 householders, Mukarange was made of 809 householders, and the number of householders in Byumba sector was 600. The total population was 2179. The country of Rwanda is very big; therefore it was very hard to collect the information from a very householder due to limited time and high cost. This led to the calculation of the sample size, according to Manzi(2018), the sample size should not be less than 10%. Therefore from the population of 350 in Nyankenke sector, the sample size was 35, from the population of 420 in Miyove sector, the sample size should be 42, in Mukarange sector and with the population of 600 in Byumba sector, the sample size was 60. The researcher has used purposive sampling method to select the householders of Gicumbi District because they hold the information regarding the level of consumption and investment. Data collection has been done using the questionnaire and interview. The questionnaire was employed because the respondents were scattered in various sectors and it was difficult to conduct interview for every respondent. The questionnaire is a good method of data collection and the respondent gets the time to think before completing the questionnaire. Even if there are many methods of collecting data, the questionnaire is very suitable to quantitatively analyze data. It saves the time and reduces the cost because this research has a macroeconomic aspect and the objective of the research could not be achieved without using the questionnaire. In this study, the researcher has used the interview to get additional information from the investors and entrepreneurs. It was used since the number of investors was low and the interview was used to get the deep information about the effect of entrepreneurship on economic growth. It has numerous advantages because when the interviewee gets confused with the questions, the researcher provides immediate clarification. Additionally, all population of Gicumbi district was not educated and to find the solution to such problem, the interview was used for those who were not able to write and to read English. After collecting the information, the researcher has checked whether the answers were properly given and assigned codes to facilitate the task of data analysis. The researcher analyzed data qualitatively and quantitatively. Qualitative research was used to analyze data from the interview and quantitative research was employed to analyze data from the questionnaires. Descriptive and inferential statistical

were used for analyzing quantitative data. The researcher has used tables for presenting the information and multiple regressions to examine the effect of entrepreneurship on economic growth of Rwanda with Pearson coefficient of correlation. To ensure that the research instrument is valid, content validity index was used because the experts in entrepreneurship and economics were asked to check if the questions asked in the questionnaire and interview guide were related to the topic under the study using Likert scale instrument with five levels: very unrelated, unrelated, related or unrelated, related and very related. Among 16 experts consulted, 13 people have accepted that the questions were much related to the research topic that is 0.81 meaning that the research instrument was valid. The research instrument should also possess the quality of reliability that is giving consistent results when it is administered several times. The research has used test and retest because 10 respondents were given the questionnaires advance to check if they are consistent. In terms of ethical consideration, the researcher has kept the confidentiality of the respondents because none was requested to indicate his name on the questionnaire and the research instrument was filled willingly.

Results

Characteristics of the Participants

Table 2. Distribution of householders per sex

Gender	Frequency	Percentage
Male	157	78
Female	60	22
Total	217	100

Source: primary data, 2020

The above table indicates how the householders are distributed by sex and it shows that the majority of participants are males with the percentage of 78% and females account for 22%.

Table 3. Distribution of householders by location

Gender	Frequency	Percentage
Urban area	197	90
Rural area	20	10
Total	217	100

Source: primary data, 2020

Table shows how the householders are distributed based on location and it illustrates that a big number of householders is located in urban area with the percentage of 90% because there is electricity, power, roads, hospitals, schools and security.

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Table 4. Distribution of the householders' level by income

Monthly income	Frequency	Percentage
Less than 30,000	108	49
30,000-100,0000	62	28
100,000-200,000	27	12
Above 200,000	20	11
Total	217	100

Source: primary data, 2020

The above table showed that the majority of householders earn less than 30,000 with the percentage of 49%, followed by people who get monthly income between 30,000 and 100,000 with the percentage of 28%. At the third position, there is a category of people with the level of income between 100,000 and 200,000 with the percentage of 12% followed by those who get above 200,000 with the percentage of 11%.

Table 5. Distribution of householders by sector of activities

Activity	Frequency	Percentage
Agriculture	175	80
Manufacturing	17	7
Service	25	13
Total	217	100

Source: primary data, 2020

The table demonstrates that 80% of householders are cultivators followed by people who engage in service sector with the percentage with the percentage of 13% followed by those who engage in manufacturing sector with the percentage of 7%.

Effect of Entrepreneurship on Economic Growth

Economic growth is measured in terms of consumption(C), investment (I), public expenditures (G) and net export(X).

Table 6. Effect of entrepreneurship on consumption of householders

Variables	Standardize Coefficients Beta	Sig.
New products	.301	0.048
Costs reduction	.407	0.036
Improvement	.817	0.015
F Value	29.2	
R	.79	
R Square	.408	
Adjusted R Square	.427	

Source: Primary data, 2020

The above table shows the effect of entrepreneurs on the

consumers and it indicates that they provide new products in the community; entrepreneurs reduce the cost through competition and improve the quality of output. Statistically, the P value of new product equals to 0.048, the value of cost of production is 0.036, the value of improving goods and service is 0.015. Therefore since all P values are greater than 0.05, the entrepreneurship has a positive effect on householders consumption

Table 7. Correlation between entrepreneurship and consumption of householders

		Entrepreneurship	Consumption
Entrepreneurship	Pearson Correlation	1	.802**
	Sig. (2-tailed)		.039
	N	217	217
Consumption	Pearson Correlation	.802**	1
	Sig. (2-tailed)	.039	
	N	217	217

** . Correlation is significant at the 0.05 level (2-tailed).

Source: primary data, 2020

The results demonstrate that there is a positive correlation between entrepreneurial development and the consumption of householders in Rwanda. Pearson coefficient correlation is .802 and greater than 0.05. This means that when in the country there are many entrepreneurs, the consumption and people welfare increase significantly.

Table 8. Effect of entrepreneurship on investment

Variables	Standardize Coefficients Beta	Sig.
New buildings	.158	0.011
Technology	.393	0.026
Equipment	.168	0.012
F Value	15.2	
R	.72	
R Square	.524	
Adjusted R Square	.537	

Source: Primary data, 2020

The results revealed that entrepreneurs have effect on construction of new buildings, technology and equipment for promoting economic growth. P value of purchasing new machines is 0.011; construction of building has P value of 0.026 and acquiring new equipment has the value of 0.012. Therefore, the researcher concludes that there is a significant effect between entrepreneurship and economic development in terms of investment

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Table 9. Correlation between entrepreneurship and investment

		Entrepreneurship	Consumption
Entrepreneurship	Pearson Correlation	1	.723**
	Sig. (2-tailed)		.031
	N	217	217
Consumption	Pearson Correlation	.723**	1
	Sig. (2-tailed)	.031	
	N	217	217

** . Correlation is significant at the 0.05 level (2-tailed).

Source : primary data, 2020

The table examines whether there is a correlation between entrepreneurship and investment in terms of construction of new buildings, machines and equipment. Pearson coefficient of correlation is .723. It indicates that if the entrepreneurship is developed, the value of investment increases 72%.

Table 10. Effect of entrepreneurship on government expenditures

Variables	Standardize Coefficients Beta	Sig.
GDP	.427	0.035
Tax	.301	0.028
Per capita	.163	0.017
F Value	25.0	
R	.88	
R Square	.124	
Adjusted R Square	.237	

Source: Primary data, 2020

This table shows how entrepreneurship affects gross domestic product, tax and per capita. Statistically the sigma value of gross domestic product is 0.035; per capita income has the value of 0.017 and national income with sigma value of 0.028. This proves that entrepreneurship development increases the production (GDP), individual income (per capita income), tax revenue and government spends much money from tax payment.

Table 11. Correlation between entrepreneurship and public expenditures

		Entrepreneurship	Public expenditures
Entrepreneurship	Pearson Correlation	1	.765**
	Sig. (2-tailed)		.018
	N	217	217
Public expenditures	Pearson Correlation	.765**	1
	Sig. (2-tailed)	.018	
	N	217	217

** . Correlation is significant at the 0.05 level (2-tailed).

Source: primary data, 2020

The table summarizes the relationship between entrepreneurship and public expenditures. It indicates that Pearson coefficient is .765 and it is above 0.05. This means that when the value of entrepreneurship raises, public expenditures increases 76% due to tax increment.

Table 12. Effect of entrepreneurship on net export

Variables	Standardize Coefficients Beta	Sig.
Innovation	.609	0.039
Creativity	.201	0.047
Efficiency	.327	0.049
F Value	15.8	
R	.62	
R Square	.524	
Adjusted R Square	.739	

Source: Primary data, 2020

The above table presents the information about how entrepreneurial innovation, creativity and efficiency have an effect on the products exported outside the country of Rwanda. Mathematically, the P value of entrepreneurial innovation is 0.039; creativity has the value of 0.047 and efficiency has P value of 0.049. This means that innovation, creativity and efficiency increase net export because all P values are less than 0.05.

Table 13. Correlation entrepreneurship and net export

		Entrepreneurship	Net export
Entrepreneurship	Pearson Correlation	1	.708**
	Sig. (2-tailed)		.033
	N	217	217
Net export	Pearson Correlation	.708**	1
	Sig. (2-tailed)	.033	
	N	217	217

** . Correlation is significant at the 0.05 level (2-tailed).

Source: primary data, 2020

The findings from the table highlight the correlation between entrepreneurship and net export. The coefficient of correlation is 0.708 and it is above 0.05. This is a positive correlation because the value of entrepreneurship changes with the value of net export and increases 70%.

Conclusion

The findings about the effect of entrepreneurship on economic growth of the country measured in terms of consumption,

investment, public expenditures and net export. In terms of consumption level, the entrepreneurship has a positive effect on householders' consumption, it provides new products in the community; entrepreneurship reduces the cost through competition and improves the quality of output. Regarding investment, the results revealed that entrepreneurs have effect on construction of new buildings, technology and equipment for promoting economic growth. P value of purchasing new machines is 0.011; construction of building has P value of 0.026 and acquiring new equipment has the value of 0.012. Therefore, the researcher concludes that there is a significant effect between entrepreneurship and economic development in terms of investment. In terms of public expenditures, the results revealed that Pearson coefficient is .765 and it is above 0.05. This means that when the value of entrepreneurship raises, public expenditures increases 76% due to tax increment. Finally, results about how entrepreneurial innovation, creativity and efficiency have an effect on the products exported outside the country of Rwanda indicate that the P value of entrepreneurial innovation is 0.039; creativity has the value of 0.047 and efficiency has P value of 0.049. This means that innovation, creativity and efficiency increase net export because all P values are less than 0.05. The study recommends the government of Rwanda to increase subsidies for entrepreneurial development.

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