∂ OPEN ACCESS

Saudi Journal of Economics and Finance

Abbreviated Key Title: Saudi J Econ Fin ISSN 2523-9414 (Print) |ISSN 2523-6563 (Online) Scholars Middle East Publishers, Dubai, United Arab Emirates Journal homepage: <u>http://saudijournals.com</u>

Original Research Article

The Impact of Fiscal Policy on Economic Growth in Lao PDR

Somwang Kidoikhammuan¹*, Khampheng Kingkhambang¹, Khammai Bounphone¹, Phuangmaly Siharath², Anousone Chanthilath³

¹School of Economics and Trad, Hunan University, 2 Lushan S Rd, Yuelu District, Changsha, Hunan, China, 410012
²Faculty of Natural Sciences, National University of Laos, 2JPP+Q2, Don Noun, Laos
³Faculty of Economics and Business Management, National University of Laos, 2JPP+Q2, Don Noun, Laos

DOI: 10.36348/sjef.2024.v08i06.002

| Received: 06.05.2024 | Accepted: 14.06.2024 | Published: 20.06.2024

*Corresponding author: Somwang Kidoikhammuan School of Economics and Trad, Hunan University, 2 Lushan S Rd, Yuelu District, Changsha, Hunan, China, 410012

Abstract

There has been various studies research on the Impact of the Fiscal Policy on Economic Growth by testing the Wagner's Law and Keynes theory. This study holds two objectives, the first objective is to review a performance of the implementation government expenditure, and second objective is to test on the government expenditure contributes to the economic growth in the Lao PDR. To reach these two objectives, this study applies two methodologies. The first methodology is descriptive approach to respond for the first objective, and second methodology is bound testing approach and vector error correction approach to respond for second. This study is applied for time series data in terms of annual data from 1981 to 2014 in all models. The source of the data is mostly the website of the Asia Development Bank (ADB) year 2016. The results of the first methodology shows that the performance of the government expenditure for salary and capital expenditure directly affected to real Gross Domestic Products growth. The results of the second methodology shows that the Keynes theory and Wagner's Law are significant and satisfied for the Lao economy in the long run. It meant that government expenditure has directly contributed RGDP, and vice versa. However, in the short run are not significant and unsatisfied in any lag.

Keywords: Fiscal Policy, Economic Growth, Government Expenditure, Exchange rate, Inflation.

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

I. INTRODUCTION

In the present era, it is seen that most countries in the world, whether developing or developed, have their own governments that are responsible for setting policies and carrying out various economic activities. Which is considered to be the main organization. To control the economic direction of each country. in managing the current economy, the government plays an important role in solving economic problems and ensuring stable economic growth and development through monetary and fiscal policy. The government implements fiscal policy through spending and taxation to improve the economy and income distribution. This is because government spending and taxation are part of the total cost of the production market. If there is a change in government spending and taxation, it will also result in a change in national income. According to the macroeconomic concept, the government has a higher role because it is closely related to the economic system. Government actions affect the economic growth of a country because they measure the economic growth of the country. Popular economists use the value of the gross domestic product. Gross domestic product (GDP) is a measure of economic performance. Government spending is a component of GDP. Fiscal policy is very important in developing countries because they are at the initial stage of socio-economic development, and it is necessary for the government to spend huge sums of money to invest in the construction of infrastructure and socio-economic basis. Conditions and investment in the country. However, the use of budget policy, especially expansionary budget policy, causes developing countries to face budget problems. This is because it is necessary to spend more than the country's ability to generate income. For the Lao People's Democratic Republic, the government has tried to develop the economy and society to bring the country out of underdevelopment by formulating several strategies using economic policies and the potential of available natural resources. Policies that have played an important role in stimulating the

Citation: Somwang Kidoikhammuan, Khampheng Kingkhambang, Khammai Bounphone, Phuangmaly Siharath, Anousone Chanthilath (2024). The Impact of Fiscal Policy on Economic Growth in Lao PDR. *Saudi J Econ Fin*, 8(6): 167-173.

economy in the past include fiscal policy. In particular, expanding the budget by increasing government spending, which is the main source of income from taxes and subsidies, is used to build economic and social infrastructure. Create conditions and an environment suitable for trade and investment, as well as economic and social development. From 1981 to 1985, gross domestic product (GDP) increased by an average of 5.5 percent per year after economic reform. From a centralized economy to a market-oriented economy in 1986, gross domestic product (GDP) grew at an average rate of 4.5% per year. During the period 1986-1990, it was the beginning of economic reform. However, the economy continued to grow at an average annual rate of 6.4 percent from 1991 to 1995, increasing steadily to 8.5 percent per year in 2014 (World bank, 2015). Economic growth through fiscal policy through government spending and taxation is likely to increase through fiscal policy through government spending (normal administrative expenses and investment expenses). In 1981-1982, government expenditures amounted to 2 billion kip, increasing to 5.50 billion kip. In 1982–1983, government tax collection amounted to 1 billion kip, increased to 2.80 billion kip, and increased at the rate of economic growth in each period. In 1981-1982, government spending increased to 5.50 billion kip. In 1982-1983, tax collections increased to 2.80 billion kip and increased according to the economic growth rate in each period from 2013–2014. Government tax collection of 178.70 billion kip increased to 1,4665.70 billion kip in 2013–2014, while the gross domestic product of the country increased from 1,7682 billion kip in 2001-2002 to 94,568.1 billion kip. From 2013 to 2014, it can be seen that budget policy through government spending and taxation and gross domestic product will change in the same direction as budget policy through spending and taxation. Government taxes will affect the gross domestic product. (Bank of Lao PDR 2015 and Asian Development Bank 1988). Normal administrative expenses between 1981 and 1985 were Kip 19.8 billion, as this marked the beginning of economic reform. However, the economy is characterized by continuous growth, such as 6,928.70 billion kip, 7,890.30 billion kip, 9,406.50 billion kip, 15,907.10 billion kip, and 15,923.50 billion kip from 2010-2014, respectively. The reason for the high increase is the adjustment of salaries and allowances for civil servants to pay off internal debt (cost and interest). In the past, expenses related to salaries and allowances Expenses for adjustments and promotions Debt payment expenses administrative expenses: new purchases and interest expenses It is considered a main expense with a higher rate than normal administrative expenses. (Ministry of Finance, 2013 and Asian Development Bank 2015). Due to the problem of spending more than revenue, the current government has been running into deficits for many years in a row, even though it has multiple sources of revenue. Therefore, he became interested in researching the implementation of budget policy as well as government spending that affects economic growth. The use of budget policy

affects the economy. Studying the impacts resulting from the use of government policies will be useful in formulating economic policy and planning the country's economic development, which will lead to economic growth in the future.

II. LITERATURE REVIEW

Two main theories in the research study were reviewed: Wagner Law and Keynesian Law. To study and re-examine the impact of government spending on economic growth in Lao PDR, there are generally two main theories: 1) Economic growth will result in an increase in government spending under Wagner Law theory (1890) and 2) increased government spending will result in economic growth (Keynesian Law, 1949).

Pathoumthib Khounthalivong (2012) Study "The Effect of Public Investment on Economic Growth of the Lao PDR" The objective is to study the overall state of government spending in each economic sector of the Lao PDR and the relationship between government budget spending and the economic growth of the Lao PDR. The river study method uses OLS and multiple regression and uses data from 1995–2010 to analyze which results are in accordance with the hypothesis that investment in transportation increases GDP but not in industry and agriculture. That increases not according to the hypothesis.

Souliya Xayyasith (2015) Study "The relationship between government expenditures and economic growth," which aims to study the economic growth of the Lao PDR, study the GDP structure in the Lao PDR, and study the relationship between government spending and economic growth. The study method is ARDL, Granger causality, and uses time series data from 1985–2012 to analyze. The results of the study reveal that government expenditures determine GDP. The results of the study do not support the theory of Wagner (1967 and 1976), but they do support Keynesian theory.

Saveng Oudom (2012) Study "The impact of budget policy on economic growth and inflation in Lao PDR, 1996–2010," which aims to study the impact of government spending or budget policy on growth economics and the impact of government spending on inflation in the Lao PDR. The study method is a multiple regression method and uses data from 1991–2010 to analyze. The results of the study found that increased investment expenditures. Will increase GDP, but increased expenditures will increase inflation, according to the hypothesis. But administrative expenses will not have an impact. An increase in GDP, which is incorrect based on the assumption.

Phetnakhone Thonesamay (2012) Study "The impact of the use of the government budget on the economic growth of the Lao PDR," which aims to study the use of the government budget in the Lao PDR, study

the economic growth of the Lao PDR, and study the impact of government budget expenditures on the economic growth of the Lao PDR. The study method is to use a model to explain, use OLS to test and use the Granger causality formula, and use time series data from 1990–2010 to analyze the results.

Matthew Abiodun Data and O.guntegbe Abraham Adewale (2013) The study is titled "Is Wagner's Law Theory True or False? A Case Study of Nigeria," which aims to study the impact of budgetary spending on economic growth related to exchange rates. interest rate and money supply the study method is to use Wagner's law theory in the VECM format and use time series data from 1961–2011 to analyze which study results are the long-term results of the Wagner relationship of GDP growth. Effects on government spending and, in the short term, Wagner's theory There is no relationship with government expenditures.

Okoro A. S. (2013) Study "Government Expenditure and Economic Growth in Nigeria," which aims to study the impact of government expenditure on economic growth. The study methods are OLS and Multiple Regression, Granger Causality, Johasen Comtegrehon, and VECM, using time series data from 1980–2011 to analyze. The results of the study are longterm. Government spending affects GDP growth.

Somphone (2011) Study fiscal policy and monetary policy for economic growth in the Lao PDR, which aims to study the implementation of budget policy and monetary policy in the Lao PDR. Study the impact of policies on GDP growth and inflation in the Lao PDR. The study method uses general descriptive research techniques such as mean, maximum, minimum, and percentage change. To describe the collected data, display it with tables and graphs, and use analytical techniques under the IS-LM model. The study found that the government used the income and expenditure budget as a tool for implementing budget policy. Overall, the government implemented an expansionary budget policy rather than a restrictive budget policy in order to stimulate the economy to grow as planned. From 1995 to 2003, expenditures decreased by an average of 60.3 percent. On the other hand, administrative expenses increased by an average of 54.8 percent during the period 2000-2008. The budget deficit rate tends to decrease in comparison. with gross domestic product, which demonstrates the government's ability to develop the economy and society by gradually reducing reliance on outside help.

Phoukhao Khentanon (2010) Studying "the state of implementation of fiscal policy, currency, and the impact on macroeconomic stability in the Lao PDR". The objective is to study the implementation of fiscal and monetary policy in the Lao PDR by studying various tools. of such policy and the impact of fiscal and monetary policy on macroeconomic stability. Which

researches the impact of such policies on the growth of gross domestic product (GDP) and inflation in the Lao PDR. The study method used general descriptive research techniques such as mean, maximum, minimum, and percentage change. To describe the data collected and display it in tables and graphs. In addition to research using the IS-LM model, the study found that the government has used the income and expenditure budget as a tool for implementing budget policy. which overall the government has pursued an expansionary budget policy rather than a restrictive budget policy to stimulate economic growth. According to the plan from 1995 to 2003, investment expenses covered 60.36 percent. On the other hand, administrative expenses increased and covered the period 2004-2008 by an average of 54.82 percent because of the policy of increasing the salary of civil servants and educational subsidies during 2019-96-1998, and from 1999-2001, the government implemented a policy of reducing the amount of money through a limited budget and monetary policy. Moreover, fiscal and monetary policy actions have a greater impact on changes in inflation than changes in exchange rates on economic growth rates.

III. METHODOLOGY

By using two study methods: 1) the descriptive analysis method and 2) the quantitative analysis method using a quantitative simulation model, we can analyze the effect of government spending on the economic growth of Lao PDR.

- 1. The descriptive analysis method: It is a collection of data that was analyzed to find the facts by describing the results obtained regarding the implementation of government expenditure in contributing to the economic development of the Lao PDR from 1981–2014.
- 2. The quantitative analysis method: It is a data analysis using a statistical economic model to analyze the data to explain the effect of government spending on the economic growth of Lao PDR under Wegener and Keynes theory. By using data from 1981–2014 to find the correlation of the coefficient (cointegration test) in the long term and the correlation of the short term, as well as the coefficient of the equation (speed of adjustment) in adjustment and the balance value in the near term, this analysis is using the EViews 7.2 program for analysis.
 - Model: This research study uses the model of Matthew Abiodun Data and O.guntegbe Abraham Adewale (2013).
 - Real economic growth is a measure of total public expenditure, exchange rate, inflation, and money supply.

 $RGDP_t = f(AGEXP_t, EXCRATE_t, INFRATE_T, MS_t)$ $\dots \dots \dots \dots \dots \dots \dots (1)$

•	Total government expenditure is the true
	measure of economic growth. exchange
	rate, Inflation rate and money supply.
AGEX	$KP_t = f(RGDP_t, EXCRATE_t, INFRATE_t, MS_t) $ (2)
Convert ec L _n RG	puations (1) and (2) to linear equations as follows: $DP_{t-1} = a_0 + a_1 L_n AGEXP_{t-1} + a_2 L_n EXCRATE_{t-1} + a_3 L_n INTRATE_t + a_4 L_n MS_{t-1} + \varepsilon_t \dots \dots \dots \dots \dots (3)$
L_nAG	$EXP_{t-1} = b_0 + b_1 L_n RGDP_{t-1} + b_2 L_n EXCRATE_{t-1} + b_3 L_n INTRATE_{t-1} + b_4 L_n MS_{t-1} + \mu_t \dots \dots \dots (4)$

According to Pesana. M. Hashmen *et al.*, (2001b), bound testing will be used to find co-integration in the long term and error correction model to find short-term relationship along with finding the coefficient of the

equation (speed of adjustment) in adjustment and finding the balance value in the near term. So, equations (3) and (4) will change to:

 $\Delta L_n AGEXP_t = \sigma_0 + \delta ECM_{t-1} + \sum_{K=1}^{n-1} \hat{n}_{1,K} \Delta L_n A \, GEXP_{t-k} + \sum_{K=0}^{n-2} \hat{a}_{1,K} \Delta L_n \, RGDP_{t-k} + \sum_{K=0}^{n-3} \hat{b}_{2,K} \Delta L_n \, EXCRATE_{t-k} + \sum_{K=0}^{n-4} \hat{b}_{3,K} \Delta L_n \, INFRATE_{t-k} + \sum_{K=0}^{n-5} \hat{b}_{4,K} \Delta L_n \, MS_{t-k} + \omega_t$ (7)

Which δECM_{t-1} in equation (6) can be expanded in the form of the following equation: $ECM_{t-1} = \Phi_0 + nL_nAGEXP_{t-1} + b_1L_nRGDP_{t-1} + b_2L_n EXCRATE_{t-1} + b_3L_n INTRATE_{t-1} + b_4L_nMS_{t-1} + \varphi_t$ (8)

Which \emptyset and δ must be -1< \emptyset and δ <0

Table 1:	Variable	description	and	coefficients
----------	----------	-------------	-----	--------------

Variable	Description	Note		
RGDP	Gross real product	LAK		
AGEXP	Total government expenditure	LAK		
EXCRATE	Exchange rate	LAK		
INFRATE	Inflation rate	LAK		
MS	Amount of money	LAK		
L _n RGDP	The logarithm of the real gross product at time period t			
L _n AGEXP	The logarithm of total public sector expenditure in the period of year t			
L _n EXCRATE	The logarithm of the exchange rate at the time of year t			
L _n INFRATE	The logarithm of the inflation rate in time period t			
L _n MS	The logarithm of the amount of money in time period t			
m, a1, a2, a3, a4	Long-run correlation coefficients			
n, b1, b2, b3, b4				
$m^{\wedge}, a^{\wedge}_{1}, a^{\wedge}_{2}, a^{\wedge}_{3}, a^{\wedge}_{4}$	Short-run correlation coefficients			
n^, b^ ₁ , b^ ₂ , b^ ₃ , b^ ₄				
Ø and δ	The joint coefficient of the equation (speed of adjustment) in adjusting and finding the balance			
	value in the near term, or the coefficient of ECM _{t-1}			
$\varepsilon_t, \mu_t, \partial_t, \omega_t$	Expected value at random			
Ν	Natural number			
K	Total amount			

Hypothesis:

- 1. H₀: Government spending will not affect economic growth.
- 2. H₀: Economic growth will not affect increased government spending.

Therefore, to reject this hypothesis Coefficients m, a1, a2, a3, a4, n, b1, b2, b3, $b4 \neq 0$ "must be different from zero (0)".

IV. RESULTS AND DISCUSSION

To test Keynes's theory that increased government spending would result in an increase in gross

domestic product. After testing, you can write it to show the multiplication by replacing the coefficients in the joint integration equation according to Equation (3) in Chapter 3 as follows:

(RGDP). From equation (3), it can be seen that the

coefficient (AGEXP) is equal to 1.166, which means that

when the total government expenditure, expenditure (A 1% change in AGEXP will likely result in a change in

real gross domestic product (RGDP) of 1.166 units (or

approximately 1.166 billion kip), the study results are

consistent with Keynesian theory. The long-term effects

of short-term adjustments are modeled with the relevant

periods examined using a lag variable equal to 2 as part

of the main correlation analysis that is introduced into the

structure of the VECM equations, which replaces the

coefficients of all relationships expected to change the

long-term equation and the short-term adjustment

gross product (RGDP) in the current period, which can

explain the change. was equal to 0.584 (but not

statistically significant) and 90%, and when considered

according to equation (5) are as follows:

 $L_n RGDP_{t-1} = 1.166^* \Box L_n AGEXP_{t-1} + 0.241^{**} L_n EXCRATE_{t-1} + 0.578^* \Box L_n INTRATE_t - 0.617^* L_n MS_{t-1}$(9)

Note: "***", "**," and "*" have statistical confidence of 99%, 95%, and 90%, respectively.

From the test of the long-term equilibrium relationship above, it was found that all real products have a long-term relationship with the four independent variables mentioned above. The test results showed that the t-test and p-value of the estimated coefficient of the four independent variables from the VECM model have confidence levels of 90% and 95%, as shown in Equation (3). Therefore, the pattern, direction, and relationship of each factor can be explained as follows: In terms of total government expenditure (AGEXP), it has the same relationship with the real gross government product

$$\begin{split} \Delta L_n RGDP_t &= -0.175 \ ECM_{t-1} - 0.066 \Delta L_n RGDP_{t-1} - 0.212 \Delta L_n RGDP_{t-2} - 0.584 \Delta L_n AGEXP_{t-1} - \\ 0.387 \Delta L_n AGEXP_{t-2} + 0.341 \Delta L_n EXCRATE_{t-1} - 1.317 \Delta L_n EXCRATE_{t-2} + 1.234 \Delta L_n INFRATE_{t-1} + \\ 1.423 \Delta L_n INFRATE_{t-2} + 0.04 \Delta L_n MS_{t-1} + 0.775 \Delta L_n MS_{t-2} \dots \dots \dots \dots \dots \dots \dots (10) \end{split}$$

The results found that the speed of adjustment of each variable or ECM coefficient was -0.175, which is the main variable in the study: real gross product (RGDP), which means the ability to adjust in the short term to the long-term balance is 17.5 percent per annum (which is calculated over a period of 5 years, 7 months, and 14 days). The relationship between the variables of the equation in the short run is determined by the change in each variable that affects the percentage change in the real gross domestic product (RGDP) of the previous year and the following year from the previous year. The equation (5) It can be said that the change in total government expenditure ($\triangle AGEXP$) when considered after one year has a negative effect on the change in real

after 2 years, it will have a negative effect on the change in real gross domestic product (RGDP) in the current period, which can be explained the change was 0.387 (but not statistically significant at both 95% and 90%). To test Wegener's theory that an increase in

gross domestic product would result in an increase in government spending. Passing the test can be written to express the multiplication by replacing the coefficients in the joint integral equation according to equation (4) as follows:

 $L_n AGEXP_{t-1} = 0.857^* L_n RGDP_{t-1} - 0.207^{**} L_n EXCRATE_{t-1} - 0.496^* L_n INFRATE_{t-1} + 0.529^{**} L_n MS_{t-1} + \mu_t$(11)

Note: "***", "**," and "*" have statistical confidence of 99%, 95%, and 90%, respectively.

From the test of the long-term equilibrium relationship above, it was found that the total government expenditure (AGEXP) has a long-term relationship with the four independent variables mentioned above. The results showed that the t-test and p-value of the estimated coefficients of the 4 independent variables from the VECM model showed confidence levels of 90% and 95%, as shown in Equation (4). Therefore, the directional pattern and the relationship of each factor can be explained as follows: In terms of whether the real gross product (RGDP) will have the

same relationship with the total government expenditure (AGEXP) or not, from equation (4), it can be seen that the coefficient of (RGDP) is equal to 0.857, which means that when the real gross product (RGDP) changes by 1%, there will be a tendency to affect the total government expenditure (AGEXP) by 0.857 units (or think about the value of 0.857 billion kip), and the study results are also in line with the theory of Wekner. The long-term effect model from the short-term adjustment with a related period, which was checked by using the Lag variable or the delay of each factor equal to 2, is part of the analysis of the main relationship that is introduced into the structure of the VECM equation, which replaces the coefficient of all the relationships expected to change the

© 2023 | Published by Scholars Middle East Publishers, Dubai, United Arab Emirates

long-term equation and the short-term adjustment according to equation (6) in Chapter 3 as follows:

 $\Delta L_n AGEXP_t = -0.748ECM_{t-1} + 0.167\Delta L_n AGEXP_{t-1} + 0.086\Delta L_n AGEXP_{t-2} - 0.418\Delta L_n RGDP_{t-1} - 0.283\Delta L_n RGDP_{t-2} + 0.163\Delta L_n EXCRATE_{t-1} - 0.464\Delta L_n EXCRATE_{t-2} + 0.175\Delta L_n INFRATE_{t-1} + 0.103\Delta L_n INFRATE_{t-2} - 0.088\Delta L_n MS_{t-1} + 0.003\Delta L_n MS_{t-2} \dots (12)$

The results found that the speed of adjustment of each variable, or the coefficient of ECM, is equal to -0.748, which is the main variable in the study, which is the aggregate government expenditure mass (AGEXP). This means that the ability to adjust the short-term into the long-term balance is 74.8 percent per year (which calculates the period equal to 1 year, 3 months, and 4 days). As for the relationship between the variables in the short-term equation, it can be considered from the change in each variable that affects the percentage change in total government expenditures (AGEXP) in the previous year and the following year from the previous year, according to the equation. (6) It can be said that the change in real GDP (\triangle RGDP) when considered after 1 year has a negative effect on the change in total government expenditure (AGEXP) in the current period. which can be explained as change is equal to 0.148 (but not statistically significant at 95% and 90%), and when considered after 2 years, it will have a negative effect on the change in aggregate government expenditures (AGEXP) during the current period, which can The explained change is 0.283 (but not statistically significant at both 95% and 90%).

V. CONCLUSION

Implementing budget expenditures in 1981, the government spent a total of 2.0 billion kip, but by 1985, total expenditures had increased to 19.7 billion kip, and in 1986, the government of Lao PDR transformed into a market economy mechanism, which we It sees government expenditure numbers increasing to 26.53 billion kip. In addition, in 1997, there was a financial crisis in the Asian region, which began to have an indirect impact, causing government expenditures to increase to 378.3 billion kip. In 2003, the value of government expenditures increased continuously. to 4.172.8 billion kip. In 2010–2014, the value of government expenditures continued to increase from 13,481.7 billion Kip to 15,087.40 billion Kip, 18,018.50 billion Kip, 24,765.9 billion Kip, and 25,408.9 billion Kip, respectively, resulting in an increase in the actual value of goods. The results of the analysis of the impact of government budget use on economic growth in Lao PDR found that total government expenditure (AGEXP) has a long-term relationship with real gross product (RGDP) at 1,166 units (or worth approximately 1,166 billion kip) and has 90% statistical confidence. The results of the study are also consistent with Keynesian theory. Real GDP (RGDP) has a long-term relationship with total government expenditure (AGEXP) at 0.857 units (or a value of approximately 0.857 billion kip) and has a statistical confidence of 90%. The results of the study are also consistent with Vekney Theory. In the

short term, it was found that the coefficients of the variables and the coefficients of ECM were not statistically significant at both 95% and 90%.

REFERENCES

- Asian Development Bank. (1998). Key Indicators of Developing Asian and Pacific Countries (Lao People's Democratic Republic) 1981-1998.
- Asian Development Bank. (2015). Key Indicators of Developing Asian and Pacific Countries (Lao People's Democratic Republic) 1981-1998.
- Bank of the Lao PDR. (1999-2014). "Economic Report".
- Benvogelvang. (2005). "Econometrists Theory and Applications with EViews", ISBN: 978-0-273-68374-2.
- Dimitrios Asteerios and RStephen G. Hall (2007), "Applied Econometrists: A modern approach", ISBN: -10:0-230-50640-2.
- Federic, S. M. (2009). "The Economics of Money, Banking and Financial Market".
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal* of applied econometrics, 16(3), 289-326.
- Martin, Z., & Georg, D. (2003). "Fiscal Policy and Economic Growth" Vienna University of Economic & Business Administration and Free University of Bozen – Bolzano, *Journal of Economic Surveys*, 17(3).
- Ministry of Finance. (2011). "State Financial Statistics Report 2010-2011".
- Ministry of Finance. (2013). "State Financial Statistics Report 2012-2013".
- Dada, M. A., & Adewale, O. A. (2013). Is Wagner's law a myth or a reality? Empirical evidence from Nigeria. *International Journal of Development and Economic Sustainability*, *1*(1), 123-137.
- Nworji, I. D., Okwu, A. T., Obiwuru, T. C., & Nworji, L. O. (2012). Effects of public expenditure on economic growth in Nigeria: A disaggregated time series analysis. *International journal of management sciences and business research*, 1(7), 1-15.
- Chinweoke, N., Ray, N., & Paschal, N. (2014). Impact of government expenditure on Nigeria's economic growth (1992-2011). *The Macrotheme Review*, *3*(7), 79-87.
- Okoro, A. S. (2013). Government Spending and Economic Growth in Nigeria (1980-2011). *Global Journal of Management and Business Research Economics and Commerce*, 13(5).

- Phethnakhone, T. (2012). "Effects of using the public sector budget on the economic growth of the Lao PDR" Master's thesis in Economics (Monetary Economics and Public Sector Finance). Faculty of Economics and Business Administration, National University.
- Pathoumthib, K. (2012). "The impact of public sector investment on the economic growth of the Lao PDR" Master's thesis in Economics (Field of Monetary Economics and Public Finance). Faculty of Economics and Business Administration, National University.
- Phoukhao, K. (2010). Studied "Fiscal and Monetary Policy Implementation and Impact on Macroeconomic Stability in Lao PDR" Master's Thesis in Economics (Field of Monetary Economics and Public Finance). Faculty of Economics and Business Administration, National University.
- Rifki, I. (2011). Assenssing Economic Growth and Fiscal Policy in Indonesia. *East-West Journal of Economics and Business*, 14(1), 53-71.
- Verma, S., & Arora, R. (2010). Does the Indian Economy Support Wagner s Law? An Econometric

Analysis. Eurasian Journal of Business and Economics, 3(5), 77-91.

- Somphone, P. (2011). Studied "Fiscal Policy and Monetary Policy for Economic Growth in Lao PDR" Master's Thesis in Economics (Monetary Economics and Public Sector Finance). Faculty of Economics and Business Administration, National University.
- Souliya, X. (2015). Studied "The Relationship between Government Expenditures and Economic Growth" Master's Thesis in Economics (Monetary Economics and Public Finance). Faculty of Economics and Business Administration, National University.
- Saveang, O. (2012). Studied "The impact of the use of budget policy on economic growth and inflation in Lao PDR from 1996–2010" Master's Thesis in Economics (Field of Monetary Economics and Public Finance). Faculty of Economics and Business Administration, National University.
- Tajudeen, M., & Adedokun, A. (2012). Econometrics Analysis of the impact of fisc al stance on the economic growth in Nigeria 1970-2010. *Prosiding perkem VII*, *JILID*, 1, 488-508.